

Planetary Phenomena of Pluto 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.

conjunction	-900 Feb 17 j 05:33	19°33'57	-15°-45'-1	minimum elong	-892 Feb 26 j 04:16	28°26'57	16°29'37
minimum elong	-900 Feb 17 j 05:28	19°33'57	15°45'01	max. Earth dist.	-892 Feb 28 j 16:19	28°30'39	47.26305 AU
max. Earth dist.	-900 Feb 20 j 00:41	19°38'12	45.95988 AU		-892 May 21 j 01:59	0°✕	
retrograde	-900 May 30 j 18:34	21°13'35		retrograde	-892 Jun 08 j 12:27	0°✕03'45	
min. Earth dist.	-900 Aug 19 j 20:31	20°12'42	44.12839 AU		-892 Jun 27 j 03:15	30°R	
opposition	-900 Aug 22 j 14:15	20°09'24	-16°-31'-1	min. Earth dist.	-892 Aug 29 j 03:02	29°03'34	45.42218 AU
direct	-900 Nov 11 j 09:15	19°06'48		opposition	-892 Aug 31 j 12:00	29°00'45	-17°-14'-44
				direct	-892 Nov 20 j 10:37	27°59'15	
conjunction	-899 Feb 17 j 14:52	20°41'51	-15°-51'-53				
minimum elong	-899 Feb 17 j 14:48	20°41'50	15°51'55	conjunction	-891 Feb 26 j 12:33	29°31'36	-16°-33'-35
max. Earth dist.	-899 Feb 20 j 10:24	20°46'06	46.13715 AU	minimum elong	-891 Feb 26 j 12:31	29°31'36	16°33'36
retrograde	-899 Jun 01 j 02:43	22°21'06		max. Earth dist.	-891 Mar 01 j 00:21	29°35'16	47.40694 AU
min. Earth dist.	-899 Aug 21 j 07:27	21°20'20	44.30526 AU		-891 Mar 18 j 03:00	0°✕	
opposition	-899 Aug 23 j 23:29	21°17'07	-16°-37'-48	retrograde	-891 Jun 09 j 18:49	1°08'03	
direct	-899 Nov 12 j 18:52	20°14'42		min. Earth dist.	-891 Aug 30 j 11:09	0°07'57	45.56508 AU
				opposition	-891 Sep 01 j 19:42	0°05'10	-17°-18'-33
conjunction	-898 Feb 19 j 00:05	21°49'25	-15°-58'-21		-891 Sep 06 j 04:29	30°R	
minimum elong	-898 Feb 19 j 00:01	21°49'24	15°58'22	direct	-891 Nov 21 j 20:33	29°03'46	
max. Earth dist.	-898 Feb 21 j 18:16	21°53'34	46.31134 AU		-890 Feb 02 j 19:12	0°✕	
retrograde	-898 Jun 02 j 10:11	23°28'19					
min. Earth dist.	-898 Aug 22 j 16:26	22°27'44	44.47861 AU	conjunction	-890 Feb 27 j 20:30	0°35'47	-16°-37'-12
opposition	-898 Aug 25 j 08:34	22°24'31	-16°-44'-11	minimum elong	-890 Feb 27 j 20:30	0°35'47	16°37'13
direct	-898 Nov 14 j 04:41	21°22'16		max. Earth dist.	-890 Mar 02 j 06:40	0°39'20	47.54773 AU
				retrograde	-890 Jun 11 j 04:36	2°11'55	
conjunction	-897 Feb 20 j 08:59	22°56'39	-16°-4'-27	min. Earth dist.	-890 Aug 31 j 19:31	1°11'54	45.70514 AU
minimum elong	-897 Feb 20 j 08:55	22°56'39	16°04'29	opposition	-890 Sep 03 j 03:29	1°09'09	-17°-22'00
max. Earth dist.	-897 Feb 23 j 02:14	23°00'45	46.48157 AU	direct	-890 Nov 23 j 02:53	0°07'52	
retrograde	-897 Jun 03 j 18:45	24°35'14					
min. Earth dist.	-897 Aug 24 j 03:23	23°34'43	44.64781 AU	conjunction	-889 Mar 01 j 04:16	1°39'35	-16°-40'-27
opposition	-897 Aug 26 j 17:40	23°31'37	-16°-50'-10	minimum elong	-889 Mar 01 j 04:15	1°39'35	16°40'28
direct	-897 Nov 15 j 15:00	22°29'32		max. Earth dist.	-889 Mar 03 j 14:48	1°43'09	47.68573 AU
				retrograde	-889 Jun 12 j 12:53	3°15'24	
conjunction	-896 Feb 21 j 18:04	24°03'34	-16°-10'-10	min. Earth dist.	-889 Sep 02 j 04:26	2°15'27	45.84226 AU
minimum elong	-896 Feb 21 j 18:01	24°03'34	16°10'11	opposition	-889 Sep 04 j 11:08	2°12'46	-17°-25'-4
max. Earth dist.	-896 Feb 24 j 10:56	24°07'37	46.64749 AU	direct	-889 Nov 24 j 09:47	1°11'36	
retrograde	-896 Jun 04 j 03:14	25°41'49					
min. Earth dist.	-896 Aug 24 j 13:00	24°41'24	44.81217 AU	conjunction	-888 Mar 01 j 12:00	2°43'03	-16°-43'-21
opposition	-896 Aug 27 j 02:27	24°38'21	-16°-55'-48	minimum elong	-888 Mar 01 j 12:01	2°43'04	16°43'23
direct	-896 Nov 16 j 01:12	23°36'25		max. Earth dist.	-888 Mar 03 j 21:05	2°46'31	47.82105 AU
				retrograde	-888 Jun 12 j 21:05	4°18'35	
conjunction	-895 Feb 22 j 02:53	25°10'07	-16°-15'-33	min. Earth dist.	-888 Sep 02 j 11:37	3°18'46	45.97657 AU
minimum elong	-895 Feb 22 j 02:50	25°10'06	16°15'35	opposition	-888 Sep 04 j 18:30	3°16'05	-17°-27'-47
max. Earth dist.	-895 Feb 24 j 17:29	25°14'00	46.80845 AU	direct	-888 Nov 24 j 15:52	2°15'03	
retrograde	-895 Jun 05 j 15:29	26°47'59					
min. Earth dist.	-895 Aug 25 j 22:35	25°47'41	44.97155 AU	conjunction	-887 Mar 02 j 19:37	3°46'15	-16°-45'-54
opposition	-895 Aug 28 j 11:11	25°44'40	-17°-1'-4	minimum elong	-887 Mar 02 j 19:37	3°46'15	16°45'56
direct	-895 Nov 17 j 06:53	24°42'52		max. Earth dist.	-887 Mar 05 j 04:05	3°49'40	47.95330 AU
				retrograde	-887 Jun 14 j 03:21	5°21'31	
conjunction	-894 Feb 23 j 11:39	26°16'13	-16°-20'-35	min. Earth dist.	-887 Sep 03 j 20:54	4°21'45	46.10763 AU
minimum elong	-894 Feb 23 j 11:38	26°16'13	16°20'36	opposition	-887 Sep 06 j 01:54	4°19'10	-17°-30'-8
max. Earth dist.	-894 Feb 26 j 02:05	26°20'05	46.96439 AU	direct	-887 Nov 26 j 00:12	3°18'16	
retrograde	-894 Jun 07 j 00:22	27°53'44					
min. Earth dist.	-894 Aug 27 j 08:58	26°53'26	45.12590 AU	conjunction	-886 Mar 04 j 03:14	4°49'13	-16°-48'-7
opposition	-894 Aug 29 j 19:35	26°50'32	-17°-5'-59	minimum elong	-886 Mar 04 j 03:16	4°49'13	16°48'09
direct	-894 Nov 18 j 15:05	25°48'50		max. Earth dist.	-886 Mar 06 j 11:17	4°52'36	48.08219 AU
				retrograde	-886 Jun 15 j 08:45	6°24'14	
conjunction	-893 Feb 24 j 20:08	27°21'50	-16°-25'-16	min. Earth dist.	-886 Sep 05 j 04:21	5°24'36	46.23485 AU
minimum elong	-893 Feb 24 j 20:05	27°21'50	16°25'18	opposition	-886 Sep 07 j 08:55	5°22'02	-17°-32'-9
max. Earth dist.	-893 Feb 27 j 08:57	27°25'36	47.11578 AU	direct	-886 Nov 27 j 09:43	4°21'16	
retrograde	-893 Jun 08 j 06:30	28°58'59					
min. Earth dist.	-893 Aug 28 j 17:10	27°58'47	45.27592 AU	conjunction	-885 Mar 05 j 10:40	5°52'00	-16°-50'-1
opposition	-893 Aug 31 j 03:49	27°55'54	-17°-10'-33	minimum elong	-885 Mar 05 j 10:41	5°52'00	16°50'02
direct	-893 Nov 20 j 00:19	26°54'17		max. Earth dist.	-885 Mar 07 j 16:37	5°55'15	48.20701 AU
				retrograde	-885 Jun 16 j 18:56	7°26'46	
conjunction	-892 Feb 26 j 04:17	28°26'57	-16°-29'-36	min. Earth dist.	-885 Sep 06 j 12:40	6°27'13	46.35783 AU

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Attention, astronomical year style is used: The year -885 in astronomical counting style is the year 886 BCE in historical counting style.

opposition	-885 Sep 08 j 16:01	6° ✕ 24'43	-17°-33'-51	conjunction	-876 Mar 14 j 01:28	15° ✕ 04'48	-16°-53'-48
direct	-885 Nov 28 j 15:00	5° ✕ 24'05		minimum elong	-876 Mar 14 j 01:32	15° ✕ 04'49	16°53'49
				max. Earth dist.	-876 Mar 15 j 22:47	15° ✕ 07'28	49.12807 AU
conjunction	-884 Mar 05 j 18:06	6° ✕ 54'35	-16°-51'-37	retrograde	-876 Jun 25 j 04:00	16° ✕ 37'22	
minimum elong	-884 Mar 05 j 18:08	6° ✕ 54'35	16°51'38	min. Earth dist.	-876 Sep 15 j 07:24	15° ✕ 38'12	47.26148 AU
max. Earth dist.	-884 Mar 07 j 23:55	6° ✕ 57'49	48.32724 AU	opposition	-876 Sep 17 j 01:38	15° ✕ 36'10	-17°-35'-32
retrograde	-884 Jun 17 j 03:27	8° ✕ 29'07		direct	-876 Dec 07 j 03:41	14° ✕ 36'17	
min. Earth dist.	-884 Sep 06 j 21:33	7° ✕ 29'36	46.47573 AU				
opposition	-884 Sep 08 j 23:01	7° ✕ 27'12	-17°-35'-14	conjunction	-875 Mar 15 j 07:55	16° ✕ 04'50	-16°-52'-42
direct	-884 Nov 28 j 21:14	6° ✕ 26'41		minimum elong	-875 Mar 15 j 08:00	16° ✕ 04'50	16°52'43
				max. Earth dist.	-875 Mar 17 j 03:28	16° ✕ 07'23	49.21349 AU
conjunction	-883 Mar 07 j 01:33	7° ✕ 56'57	-16°-52'-55	retrograde	-875 Jun 26 j 10:33	17° ✕ 37'12	
minimum elong	-883 Mar 07 j 01:36	7° ✕ 56'58	16°52'55	min. Earth dist.	-875 Sep 16 j 14:29	16° ✕ 38'05	47.34516 AU
max. Earth dist.	-883 Mar 09 j 05:10	8° ✕ 00'03	48.44236 AU	opposition	-875 Sep 18 j 07:24	16° ✕ 36'07	-17°-34'-9
retrograde	-883 Jun 18 j 10:52	9° ✕ 31'13		direct	-875 Dec 08 j 10:19	15° ✕ 36'19	
min. Earth dist.	-883 Sep 08 j 04:40	8° ✕ 31'48	46.58841 AU				
opposition	-883 Sep 10 j 05:43	8° ✕ 29'25	-17°-36'-21	conjunction	-874 Mar 16 j 14:25	17° ✕ 04'42	-16°-51'-19
direct	-883 Nov 30 j 02:49	7° ✕ 29'00		minimum elong	-874 Mar 16 j 14:30	17° ✕ 04'42	16°51'19
				max. Earth dist.	-874 Mar 18 j 10:04	17° ✕ 07'15	49.29568 AU
conjunction	-882 Mar 08 j 08:50	8° ✕ 59'03	-16°-53'-56	retrograde	-874 Jun 27 j 17:34	18° ✕ 36'53	
minimum elong	-882 Mar 08 j 08:52	8° ✕ 59'03	16°53'58	min. Earth dist.	-874 Sep 17 j 21:35	17° ✕ 37'48	47.42517 AU
max. Earth dist.	-882 Mar 10 j 11:18	9° ✕ 02'04	48.55217 AU	opposition	-874 Sep 19 j 13:09	17° ✕ 35'54	-17°-32'-29
retrograde	-882 Jun 19 j 15:34	10° ✕ 33'03		direct	-874 Dec 09 j 16:10	16° ✕ 36'13	
min. Earth dist.	-882 Sep 09 j 13:41	9° ✕ 33'37	46.69589 AU				
opposition	-882 Sep 11 j 12:30	9° ✕ 31'20	-17°-37'-9	conjunction	-873 Mar 17 j 20:38	18° ✕ 04'26	-16°-49'-38
direct	-882 Dec 01 j 11:34	8° ✕ 31'01		minimum elong	-873 Mar 17 j 20:44	18° ✕ 04'26	16°49'40
				max. Earth dist.	-873 Mar 19 j 14:22	18° ✕ 06'52	49.37407 AU
conjunction	-881 Mar 09 j 15:52	10° ✕ 00'49	-16°-54'-41	retrograde	-873 Jun 29 j 02:01	19° ✕ 36'26	
minimum elong	-881 Mar 09 j 15:55	10° ✕ 00'49	16°54'41	min. Earth dist.	-873 Sep 19 j 03:44	18° ✕ 37'26	47.50108 AU
max. Earth dist.	-881 Mar 11 j 17:34	10° ✕ 03'47	48.65719 AU	opposition	-873 Sep 20 j 18:52	18° ✕ 35'34	-17°-30'-32
retrograde	-881 Jun 20 j 19:32	11° ✕ 34'33		direct	-873 Dec 10 j 19:31	17° ✕ 35'57	
min. Earth dist.	-881 Sep 10 j 20:33	10° ✕ 35'11	46.79867 AU				
opposition	-881 Sep 12 j 19:00	10° ✕ 32'56	-17°-37'-40	conjunction	-872 Mar 18 j 03:04	19° ✕ 04'02	-16°-47'-42
direct	-881 Dec 02 j 21:03	9° ✕ 32'40		minimum elong	-872 Mar 18 j 03:10	19° ✕ 04'02	16°47'42
				max. Earth dist.	-872 Mar 19 j 19:45	19° ✕ 06'24	49.44787 AU
conjunction	-880 Mar 09 j 22:46	11° ✕ 02'14	-16°-55'-7	retrograde	-872 Jun 29 j 07:39	20° ✕ 35'51	
minimum elong	-880 Mar 09 j 22:48	11° ✕ 02'15	16°55'09	min. Earth dist.	-872 Sep 19 j 11:41	19° ✕ 36'50	47.57209 AU
max. Earth dist.	-880 Mar 11 j 22:35	11° ✕ 05'05	48.75785 AU	opposition	-872 Sep 21 j 00:30	19° ✕ 35'04	-17°-28'-19
retrograde	-880 Jun 21 j 03:23	12° ✕ 35'44		direct	-872 Dec 11 j 01:15	18° ✕ 35'32	
min. Earth dist.	-880 Sep 11 j 04:15	11° ✕ 36'22	46.89757 AU				
opposition	-880 Sep 13 j 01:23	11° ✕ 34'11	-17°-37'-53	conjunction	-871 Mar 19 j 09:34	20° ✕ 03'28	-16°-45'-30
direct	-880 Dec 03 j 03:19	10° ✕ 34'00		minimum elong	-871 Mar 19 j 09:40	20° ✕ 03'28	16°45'32
				max. Earth dist.	-871 Mar 21 j 01:03	20° ✕ 05'45	49.51671 AU
conjunction	-879 Mar 11 j 05:43	12° ✕ 03'20	-16°-55'-15	retrograde	-871 Jun 30 j 11:07	21° ✕ 35'06	
minimum elong	-879 Mar 11 j 05:47	12° ✕ 03'20	16°55'16	min. Earth dist.	-871 Sep 20 j 17:48	20° ✕ 36'08	47.63776 AU
max. Earth dist.	-879 Mar 13 j 05:39	12° ✕ 06'10	48.85487 AU	opposition	-871 Sep 22 j 06:01	20° ✕ 34'24	-17°-25'-51
retrograde	-879 Jun 22 j 10:56	13° ✕ 36'34		direct	-871 Dec 12 j 08:49	19° ✕ 34'55	
min. Earth dist.	-879 Sep 12 j 11:41	12° ✕ 37'14	46.99288 AU				
opposition	-879 Sep 14 j 07:38	12° ✕ 35'06	-17°-37'-47	conjunction	-870 Mar 20 j 15:45	21° ✕ 02'41	-16°-43'-4
direct	-879 Dec 04 j 09:30	11° ✕ 34'59		minimum elong	-870 Mar 20 j 15:52	21° ✕ 02'42	16°43'04
				max. Earth dist.	-870 Mar 22 j 04:58	21° ✕ 04'51	49.58014 AU
conjunction	-878 Mar 12 j 12:23	13° ✕ 04'06	-16°-55'-5	retrograde	-870 Jul 01 j 17:11	22° ✕ 34'09	
minimum elong	-878 Mar 12 j 12:26	13° ✕ 04'06	16°55'06	min. Earth dist.	-870 Sep 22 j 01:02	21° ✕ 35'09	47.69823 AU
max. Earth dist.	-878 Mar 14 j 10:33	13° ✕ 06'49	48.94872 AU	opposition	-870 Sep 23 j 11:30	21° ✕ 33'31	-17°-23'-8
retrograde	-878 Jun 23 j 19:44	14° ✕ 37'05		direct	-870 Dec 13 j 15:00	20° ✕ 34'04	
min. Earth dist.	-878 Sep 13 j 17:42	13° ✕ 37'50	47.08523 AU				
opposition	-878 Sep 15 j 13:38	13° ✕ 35'43	-17°-37'-21	conjunction	-869 Mar 21 j 22:00	22° ✕ 01'41	-16°-40'-23
direct	-878 Dec 05 j 12:43	12° ✕ 35'39		minimum elong	-869 Mar 21 j 22:07	22° ✕ 01'41	16°40'25
				max. Earth dist.	-869 Mar 23 j 10:53	22° ✕ 03'49	49.63860 AU
conjunction	-877 Mar 13 j 18:58	14° ✕ 04'35	-16°-54'-36	retrograde	-869 Jul 02 j 22:36	23° ✕ 32'58	
minimum elong	-877 Mar 13 j 19:03	14° ✕ 04'35	16°54'37	min. Earth dist.	-869 Sep 23 j 07:42	22° ✕ 33'58	47.75380 AU
max. Earth dist.	-877 Mar 15 j 16:46	14° ✕ 07'16	49.03969 AU	opposition	-869 Sep 24 j 16:48	22° ✕ 32'23	-17°-20'-9
retrograde	-877 Jun 25 j 01:27	15° ✕ 37'20		direct	-869 Dec 14 j 21:40	21° ✕ 32'59	
min. Earth dist.	-877 Sep 15 j 01:34	14° ✕ 38'05	47.17478 AU				
opposition	-877 Sep 16 j 19:45	14° ✕ 36'03	-17°-36'-36	conjunction	-868 Mar 22 j 04:01	23° ✕ 00'27	-16°-37'-27
direct	-877 Dec 06 j 18:21	13° ✕ 36'05		minimum elong	-868 Mar 22 j 04:09	23° ✕ 00'27	16°37'27
				max. Earth dist.	-868 Mar 23 j 14:49	23° ✕ 02'27	49.69261 AU

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Attention, astronomical year style is used: The year -868 in astronomical counting style is the year 869 BCE in historical counting style.

retrograde	-868 Jul 03 j 06:51	24° ✕ 31'32		minimum elong	-860 Mar 30 j 02:54	0° ☿ 45'34	16°04'17
opposition	-868 Sep 24 j 22:01	23° ✕ 31'01	-17°-16'-55	max. Earth dist.	-860 Mar 31 j 04:47	0° ☿ 47'03	50.00140 AU
min. Earth dist.	-868 Sep 23 j 13:22	23° ✕ 32'34	47.80521 AU	retrograde	-860 Jul 11 j 00:52	2° ☿ 15'43	
direct	-868 Dec 15 j 00:25	22° ✕ 31'39		opposition	-860 Oct 02 j 13:32	1° ☿ 15'46	-16°-41'-3
				min. Earth dist.	-860 Oct 01 j 14:06	1° ☿ 16'53	48.09358 AU
conjunction	-867 Mar 23 j 10:05	23° ✕ 58'59	-16°-34'-14	direct	-860 Dec 22 j 18:41	0° ☿ 16'51	
minimum elong	-867 Mar 23 j 10:11	23° ✕ 58'59	16°34'15				
max. Earth dist.	-867 Mar 24 j 20:12	24° ✕ 00'57	49.74256 AU	conjunction	-859 Mar 31 j 08:46	1° ☿ 43'31	-15°-58'-59
retrograde	-867 Jul 04 j 12:59	25° ✕ 29'54		minimum elong	-859 Mar 31 j 08:55	1° ☿ 43'32	15°58'58
min. Earth dist.	-867 Sep 24 j 20:31	24° ✕ 30'53	47.85284 AU	max. Earth dist.	-859 Apr 01 j 10:09	1° ☿ 44'58	50.02191 AU
opposition	-867 Sep 26 j 03:06	24° ✕ 29'26	-17°-13'-24	retrograde	-859 Jul 12 j 05:01	3° ☿ 13'35	
direct	-867 Dec 16 j 04:35	23° ✕ 30'06		opposition	-859 Oct 03 j 18:13	2° ☿ 13'41	-16°-35'-26
				min. Earth dist.	-859 Oct 02 j 20:10	2° ☿ 14'44	48.11035 AU
conjunction	-866 Mar 24 j 16:05	24° ✕ 57'18	-16°-30'-46	direct	-859 Dec 24 j 01:38	1° ☿ 14'48	
minimum elong	-866 Mar 24 j 16:13	24° ✕ 57'19	16°30'47				
max. Earth dist.	-866 Mar 26 j 01:28	24° ✕ 59'14	49.78919 AU	conjunction	-858 Apr 01 j 14:33	2° ☿ 41'24	-15°-53'-28
retrograde	-866 Jul 05 j 15:23	26° ✕ 28'05		minimum elong	-858 Apr 01 j 14:42	2° ☿ 41'24	15°53'29
min. Earth dist.	-866 Sep 26 j 01:26	25° ✕ 29'08	47.89722 AU	max. Earth dist.	-858 Apr 02 j 13:25	2° ☿ 42'42	50.03694 AU
opposition	-866 Sep 27 j 08:06	25° ✕ 27'40	-17°-9'-36	retrograde	-858 Jul 13 j 13:27	4° ☿ 11'21	
direct	-866 Dec 17 j 12:13	24° ✕ 28'23		opposition	-858 Oct 04 j 22:58	3° ☿ 11'29	-16°-29'-35
				min. Earth dist.	-858 Oct 04 j 01:52	3° ☿ 12'29	48.12173 AU
conjunction	-865 Mar 25 j 21:43	25° ✕ 55'29	-16°-27'-1	direct	-858 Dec 25 j 04:07	2° ☿ 12'36	
minimum elong	-865 Mar 25 j 21:50	25° ✕ 55'29	16°27'02				
max. Earth dist.	-865 Mar 27 j 05:21	25° ✕ 57'18	49.83269 AU	conjunction	-857 Apr 02 j 20:09	3° ☿ 39'07	-15°-47'-45
retrograde	-865 Jul 06 j 20:14	27° ✕ 26'07		minimum elong	-857 Apr 02 j 20:20	3° ☿ 39'08	15°47'45
min. Earth dist.	-865 Sep 27 j 07:55	26° ✕ 27'10	47.93866 AU	max. Earth dist.	-857 Apr 03 j 18:02	3° ☿ 40'22	50.04658 AU
opposition	-865 Sep 28 j 13:14	26° ✕ 25'47	-17°-5'-32	retrograde	-857 Jul 14 j 20:56	5° ☿ 08'58	
direct	-865 Dec 18 j 18:47	25° ✕ 26'33		min. Earth dist.	-857 Oct 05 j 08:52	4° ☿ 10'00	48.12790 AU
				opposition	-857 Oct 06 j 03:45	4° ☿ 09'07	-16°-23'-31
conjunction	-864 Mar 26 j 03:39	26° ✕ 53'33	-16°-23'00	direct	-857 Dec 26 j 06:59	3° ☿ 10'13	
minimum elong	-864 Mar 26 j 03:48	26° ✕ 53'33	16°23'01				
max. Earth dist.	-864 Mar 27 j 11:30	26° ✕ 55'23	49.87333 AU	conjunction	-856 Apr 03 j 01:55	4° ☿ 36'40	-15°-41'-48
retrograde	-864 Jul 07 j 02:16	28° ✕ 24'05		minimum elong	-856 Apr 03 j 02:04	4° ☿ 36'40	15°41'49
opposition	-864 Sep 28 j 18:06	27° ✕ 23'49	-17°-1'-10	max. Earth dist.	-856 Apr 03 j 22:38	4° ☿ 37'50	50.05148 AU
min. Earth dist.	-864 Sep 27 j 13:48	27° ✕ 25'10	47.97704 AU	retrograde	-856 Jul 14 j 23:49	6° ☿ 06'23	
direct	-864 Dec 19 j 00:14	26° ✕ 24'39		opposition	-856 Oct 06 j 08:11	5° ☿ 06'32	-16°-17'-11
				min. Earth dist.	-856 Oct 05 j 13:36	5° ☿ 07'25	48.12952 AU
conjunction	-863 Mar 27 j 09:27	27° ✕ 51'34	-16°-18'-42	direct	-856 Dec 26 j 13:01	4° ☿ 07'37	
minimum elong	-863 Mar 27 j 09:34	27° ✕ 51'34	16°18'43				
max. Earth dist.	-863 Mar 28 j 15:21	27° ✕ 53'17	49.91101 AU	conjunction	-855 Apr 04 j 07:31	5° ☿ 34'00	-15°-35'-36
retrograde	-863 Jul 08 j 10:47	29° ✕ 21'59		minimum elong	-855 Apr 04 j 07:42	5° ☿ 34'01	15°35'37
opposition	-863 Sep 29 j 23:00	28° ✕ 21'49	-16°-56'-31	max. Earth dist.	-855 Apr 05 j 02:12	5° ☿ 35'04	50.05204 AU
min. Earth dist.	-863 Sep 28 j 19:03	28° ✕ 23'08	48.01233 AU	retrograde	-855 Jul 16 j 02:50	7° ☿ 03'37	
direct	-863 Dec 20 j 02:25	27° ✕ 22'43		opposition	-855 Oct 07 j 12:47	6° ☿ 03'47	-16°-10'-37
				min. Earth dist.	-855 Oct 06 j 19:56	6° ☿ 04'34	48.12719 AU
conjunction	-862 Mar 28 j 15:10	28° ✕ 49'34	-16°-14'-8	direct	-855 Dec 27 j 19:53	5° ☿ 04'51	
minimum elong	-862 Mar 28 j 15:20	28° ✕ 49'34	16°14'10				
max. Earth dist.	-862 Mar 29 j 20:24	28° ✕ 51'14	49.94522 AU	conjunction	-854 Apr 05 j 13:05	6° ☿ 31'10	-15°-29'-10
retrograde	-862 May 26 j 07:57	0° ☿		minimum elong	-854 Apr 05 j 13:14	6° ☿ 31'10	15°29'10
min. Earth dist.	-862 Jul 09 j 16:22	0° ☿ 19'53		max. Earth dist.	-854 Apr 06 j 07:46	6° ☿ 32'14	50.04889 AU
opposition	-862 Aug 23 j 08:27	30° ☿		retrograde	-854 Jul 17 j 06:09	8° ☿ 00'42	
direct	-862 Sep 30 j 02:00	29° ✕ 21'01	48.04388 AU	opposition	-854 Oct 08 j 17:13	7° ☿ 00'51	-16°-3'-48
	-862 Oct 01 j 03:54	29° ✕ 19'48	-16°-51'-37	min. Earth dist.	-854 Oct 08 j 01:17	7° ☿ 01'37	48.12126 AU
conjunction	-861 Mar 29 j 21:01	29° ✕ 47'34	-16°-9'-19	direct	-854 Dec 29 j 02:59	6° ☿ 01'55	
minimum elong	-861 Mar 29 j 21:09	29° ✕ 47'34	16°09'20				
max. Earth dist.	-861 Mar 31 j 01:16	29° ✕ 49'11	49.97566 AU	conjunction	-853 Apr 06 j 18:32	7° ☿ 28'11	-15°-22'-28
retrograde	-861 Apr 07 j 22:55	0° ☿		minimum elong	-853 Apr 06 j 18:43	7° ☿ 28'12	15°22'29
min. Earth dist.	-861 Jul 10 j 19:44	1° ☿ 17'48		max. Earth dist.	-853 Apr 07 j 11:18	7° ☿ 29'08	50.04257 AU
opposition	-861 Oct 01 j 07:08	0° ☿ 19'00	48.07121 AU	retrograde	-853 Jul 18 j 13:29	8° ☿ 57'39	
direct	-861 Oct 02 j 08:38	0° ☿ 17'47	-16°-46'-27	opposition	-853 Oct 09 j 21:37	7° ☿ 57'49	-15°-56'-42
	-861 Oct 18 j 05:50	30° ☿		min. Earth dist.	-853 Oct 09 j 06:02	7° ☿ 58'34	48.11237 AU
conjunction	-860 Mar 30 j 02:45	0° ☿ 45'34	-16°-4'-15	direct	-853 Dec 30 j 05:42	6° ☿ 58'53	
				conjunction	-852 Apr 07 j 00:02	8° ☿ 25'07	-15°-15'-31
				minimum elong	-852 Apr 07 j 00:12	8° ☿ 25'07	15°15'31
				max. Earth dist.	-852 Apr 07 j 16:09	8° ☿ 26'02	50.03322 AU
				retrograde	-852 Jul 18 j 19:27	9° ☿ 54'31	

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Attention, astronomical year style is used: The year -852 in astronomical counting style is the year 853 BCE in historical counting style.

opposition	-852 Oct 10 j 02:07	8°V54'43	-15°-49'-21	conjunction	-843 Apr 16 j 02:38	16°V58'54	-14°-2'-10
min. Earth dist.	-852 Oct 09 j 12:21	8°V55'22	48.10041 AU	minimum elong	-843 Apr 16 j 02:49	16°V58'54	14°02'11
direct	-852 Dec 30 j 09:13	7°V55'47		max. Earth dist.	-843 Apr 16 j 06:04	16°V59'05	49.76947 AU
				retrograde	-843 Jul 27 j 17:10	18°V28'11	
conjunction	-851 Apr 08 j 05:39	9°V22'00	-15°-8'-18	opposition	-843 Oct 18 j 17:24	17°V28'32	-14°-32'-11
minimum elong	-851 Apr 08 j 05:50	9°V22'01	15°08'19	min. Earth dist.	-843 Oct 18 j 14:11	17°V28'41	47.80545 AU
max. Earth dist.	-851 Apr 08 j 21:02	9°V22'53	50.02099 AU	direct	-842 Jan 08 j 04:20	16°V29'31	
retrograde	-851 Jul 19 j 23:34	10°V51'21					
opposition	-851 Oct 11 j 06:21	9°V51'36	-15°-41'-43	conjunction	-842 Apr 17 j 08:15	17°V56'00	-13°-52'-53
min. Earth dist.	-851 Oct 10 j 16:41	9°V52'15	48.08536 AU	minimum elong	-842 Apr 17 j 08:28	17°V56'00	13°52'53
direct	-851 Dec 31 j 14:04	8°V52'41		max. Earth dist.	-842 Apr 17 j 11:01	17°V56'09	49.71783 AU
				retrograde	-842 Jul 28 j 23:38	19°V25'17	
conjunction	-850 Apr 09 j 11:06	10°V18'55	-15°00'-50	opposition	-842 Oct 19 j 21:48	18°V25'37	-14°-22'-25
minimum elong	-850 Apr 09 j 11:16	10°V18'56	15°00'51	min. Earth dist.	-842 Oct 19 j 20:21	18°V25'41	47.75085 AU
max. Earth dist.	-850 Apr 10 j 00:32	10°V19'41	50.00548 AU	direct	-841 Jan 09 j 07:21	17°V26'33	
retrograde	-850 Jul 21 j 04:13	11°V48'15					
opposition	-850 Oct 12 j 10:50	10°V48'32	-15°-33'-51	conjunction	-841 Apr 18 j 13:45	18°V53'05	-13°-43'-20
min. Earth dist.	-850 Oct 11 j 22:54	10°V49'06	48.06695 AU	minimum elong	-841 Apr 18 j 13:56	18°V53'05	13°43'20
direct	-849 Jan 01 j 19:15	9°V49'39		max. Earth dist.	-841 Apr 18 j 15:48	18°V53'12	49.66319 AU
				retrograde	-841 Jul 30 j 04:34	20°V22'23	
conjunction	-849 Apr 10 j 16:37	11°V15'54	-14°-53'-7	opposition	-841 Oct 21 j 02:07	19°V22'41	-14°-12'-24
minimum elong	-849 Apr 10 j 16:49	11°V15'55	14°53'09	min. Earth dist.	-841 Oct 21 j 00:38	19°V22'45	47.69331 AU
max. Earth dist.	-849 Apr 11 j 05:54	11°V16'40	49.98633 AU	direct	-840 Jan 10 j 11:45	18°V23'35	
retrograde	-849 Jul 22 j 07:57	12°V45'15					
opposition	-849 Oct 13 j 15:14	11°V45'34	-15°-25'-43	conjunction	-840 Apr 18 j 19:20	19°V50'11	-13°-33'-32
min. Earth dist.	-849 Oct 13 j 04:24	11°V46'05	48.04439 AU	minimum elong	-840 Apr 18 j 19:33	19°V50'12	13°33'33
direct	-848 Jan 03 j 01:38	10°V46'42		max. Earth dist.	-840 Apr 18 j 19:31	19°V50'12	49.60561 AU
				retrograde	-840 Jul 30 j 08:40	21°V19'31	
conjunction	-848 Apr 10 j 22:16	12°V12'59	-14°-45'-11	opposition	-840 Oct 21 j 06:27	20°V19'48	-14°-2'-6
minimum elong	-848 Apr 10 j 22:27	12°V13'00	14°45'11	min. Earth dist.	-840 Oct 21 j 06:38	20°V19'48	47.63299 AU
max. Earth dist.	-848 Apr 11 j 09:12	12°V13'37	49.96280 AU	direct	-839 Jan 10 j 17:01	19°V20'40	
retrograde	-848 Jul 22 j 15:53	13°V42'19					
opposition	-848 Oct 13 j 19:33	12°V42'42	-15°-17'-22	conjunction	-839 Apr 20 j 01:08	20°V47'21	-13°-23'-29
min. Earth dist.	-848 Oct 13 j 09:46	12°V43'09	48.01719 AU	minimum elong	-839 Apr 20 j 01:20	20°V47'22	13°23'29
direct	-847 Jan 03 j 04:06	11°V43'49		max. Earth dist.	-839 Apr 20 j 01:18	20°V47'22	49.54529 AU
				retrograde	-839 Jul 31 j 11:32	22°V16'44	
conjunction	-847 Apr 12 j 04:04	13°V10'10	-14°-37'-1	opposition	-839 Oct 22 j 10:51	21°V17'01	-13°-51'-33
minimum elong	-847 Apr 12 j 04:15	13°V10'10	14°37'02	min. Earth dist.	-839 Oct 22 j 11:41	21°V16'58	47.56971 AU
max. Earth dist.	-847 Apr 12 j 13:46	13°V10'42	49.93417 AU	direct	-838 Jan 12 j 00:01	20°V17'51	
retrograde	-847 Jul 23 j 23:35	14°V39'29					
opposition	-847 Oct 15 j 00:05	13°V39'53	-15°-8'-47	conjunction	-838 Apr 21 j 06:39	21°V44'37	-13°-13'-10
min. Earth dist.	-847 Oct 14 j 16:38	13°V40'14	47.98465 AU	minimum elong	-838 Apr 21 j 06:52	21°V44'38	13°13'12
direct	-846 Jan 04 j 06:35	12°V41'00		max. Earth dist.	-838 Apr 21 j 04:56	21°V44'31	49.48200 AU
				retrograde	-838 Aug 01 j 18:04	23°V14'04	
conjunction	-846 Apr 13 j 09:42	14°V07'22	-14°-28'-39	opposition	-838 Oct 23 j 15:14	22°V14'21	-13°-40'-45
minimum elong	-846 Apr 13 j 09:54	14°V07'23	14°28'39	min. Earth dist.	-838 Oct 23 j 16:51	22°V14'17	47.50331 AU
max. Earth dist.	-846 Apr 13 j 18:01	14°V07'51	49.90031 AU	direct	-837 Jan 13 j 03:53	21°V15'10	
retrograde	-846 Jul 25 j 04:02	15°V36'41					
opposition	-846 Oct 16 j 04:27	14°V37'05	-14°-59'-59	conjunction	-837 Apr 22 j 12:28	22°V42'02	-13°-2'-37
min. Earth dist.	-846 Oct 15 j 21:21	14°V37'25	47.94678 AU	minimum elong	-837 Apr 22 j 12:40	22°V42'03	13°02'38
direct	-845 Jan 05 j 11:08	13°V38'11		max. Earth dist.	-837 Apr 22 j 09:52	22°V41'54	49.41517 AU
				retrograde	-837 Aug 03 j 01:55	24°V11'34	
conjunction	-845 Apr 14 j 15:18	15°V04'35	-14°-20'-3	opposition	-837 Oct 24 j 19:42	23°V11'51	-13°-29'-41
minimum elong	-845 Apr 14 j 15:29	15°V04'35	14°20'04	min. Earth dist.	-837 Oct 24 j 23:20	23°V11'40	47.43303 AU
max. Earth dist.	-845 Apr 14 j 21:18	15°V04'55	49.86122 AU	direct	-836 Jan 14 j 06:27	22°V12'38	
retrograde	-845 Jul 26 j 07:13	16°V33'53					
opposition	-845 Oct 17 j 08:52	15°V34'16	-14°-50'-57	conjunction	-836 Apr 22 j 18:27	23°V39'38	-12°-51'-50
min. Earth dist.	-845 Oct 17 j 03:54	15°V34'30	47.90400 AU	minimum elong	-836 Apr 22 j 18:39	23°V39'38	12°51'51
direct	-844 Jan 06 j 17:49	14°V35'20		max. Earth dist.	-836 Apr 22 j 14:36	23°V39'24	49.34426 AU
				retrograde	-836 Aug 03 j 08:57	25°V09'13	
conjunction	-844 Apr 14 j 21:02	16°V01'45	-14°-11'-14	opposition	-836 Oct 25 j 00:08	24°V09'29	-13°-18'-23
minimum elong	-844 Apr 14 j 21:15	16°V01'46	14°11'14	min. Earth dist.	-836 Oct 25 j 04:13	24°V09'18	47.35819 AU
max. Earth dist.	-844 Apr 15 j 02:44	16°V02'05	49.81744 AU	direct	-835 Jan 14 j 09:24	23°V10'13	
retrograde	-844 Jul 26 j 09:51	17°V31'03					
opposition	-844 Oct 17 j 13:12	16°V31'25	-14°-41'-41	conjunction	-835 Apr 24 j 00:27	24°V37'21	-12°-40'-49
min. Earth dist.	-844 Oct 17 j 09:15	16°V31'36	47.85663 AU	minimum elong	-835 Apr 24 j 00:39	24°V37'22	12°40'49
direct	-843 Jan 07 j 01:34	15°V32'27		max. Earth dist.	-835 Apr 23 j 18:10	24°V37'00	49.26831 AU

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Attention, astronomical year style is used: The year -835 in astronomical counting style is the year 836 BCE in historical counting style.

retrograde	-835 Aug 04 j 13:31	26° Υ 07'01		conjunction	-827 May 02 j 02:00	2° C 22'26	-11°-4'-22
opposition	-835 Oct 26 j 04:44	25° Υ 07'16	-13°-6'-51	minimum elong	-827 May 02 j 02:13	2° C 22'26	11°04'23
min. Earth dist.	-835 Oct 26 j 11:06	25° Υ 06'58	47.27820 AU	retrograde	-827 Aug 12 j 09:50	3° C 52'56	
direct	-834 Jan 15 j 15:10	24° Υ 07'57		opposition	-827 Nov 02 j 18:34	2° C 52'46	-11°-25'-53
				min. Earth dist.	-827 Nov 03 j 10:15	2° C 52'00	46.47974 AU
conjunction	-834 Apr 25 j 06:38	25° Υ 35'12	-12°-29'-35	direct	-826 Jan 23 j 08:36	1° C 52'48	
minimum elong	-834 Apr 25 j 06:50	25° Υ 35'12	12°29'36				
max. Earth dist.	-834 Apr 24 j 23:43	25° Υ 34'48	49.18716 AU	conjunction	-826 May 03 j 08:28	3° C 21'18	-10°-51'-11
retrograde	-834 Aug 05 j 15:44	27° Υ 04'56		minimum elong	-826 May 03 j 08:39	3° C 21'18	10°51'11
opposition	-834 Oct 27 j 09:22	26° Υ 05'08	-12°-55'-6	max. Earth dist.	-826 May 02 j 15:14	3° C 20'18	48.38610 AU
min. Earth dist.	-834 Oct 27 j 16:50	26° Υ 04'47	47.19284 AU	retrograde	-826 Aug 13 j 18:47	4° C 51'58	
direct	-833 Jan 16 j 23:17	25° Υ 05'45		opposition	-826 Nov 03 j 23:29	3° C 51'46	-11°-12'-4
				min. Earth dist.	-826 Nov 04 j 15:15	3° C 51'01	46.36508 AU
conjunction	-833 Apr 26 j 12:33	26° Υ 33'06	-12°-18'-8	direct	-825 Jan 24 j 10:53	2° C 51'44	
minimum elong	-833 Apr 26 j 12:46	26° Υ 33'07	12°18'08				
max. Earth dist.	-833 Apr 26 j 03:09	26° Υ 32'34	49.10084 AU	conjunction	-825 May 04 j 14:54	4° C 20'29	-10°-37'-45
retrograde	-833 Aug 06 j 22:25	28° Υ 02'55		minimum elong	-825 May 04 j 15:06	4° C 20'29	10°37'45
opposition	-833 Oct 28 j 14:01	27° Υ 03'05	-12°-43'-7	max. Earth dist.	-825 May 03 j 19:41	4° C 19'22	48.27117 AU
min. Earth dist.	-833 Oct 28 j 22:33	27° Υ 02'40	47.10249 AU	retrograde	-825 Aug 15 j 00:59	5° C 51'21	
direct	-832 Jan 18 j 03:26	26° Υ 03'36		opposition	-825 Nov 05 j 04:40	4° C 51'06	-10°-58'00
				min. Earth dist.	-825 Nov 05 j 22:37	4° C 50'14	46.24669 AU
conjunction	-832 Apr 26 j 18:48	27° Υ 31'05	-12°-6'-27	direct	-824 Jan 25 j 16:08	3° C 50'59	
minimum elong	-832 Apr 26 j 19:00	27° Υ 31'05	12°06'28				
max. Earth dist.	-832 Apr 26 j 08:18	27° Υ 30'29	49.00954 AU	conjunction	-824 May 04 j 21:49	5° C 19'59	-10°-24'-3
retrograde	-832 Aug 07 j 05:04	29° Υ 00'58		minimum elong	-824 May 04 j 22:01	5° C 20'00	10°24'03
opposition	-832 Oct 28 j 18:38	28° Υ 01'04	-12°-30'-53	max. Earth dist.	-824 May 04 j 02:07	5° C 18'51	48.15214 AU
min. Earth dist.	-832 Oct 29 j 05:19	28° Υ 00'34	47.00742 AU	retrograde	-824 Aug 15 j 03:41	6° C 51'02	
direct	-831 Jan 18 j 07:23	27° Υ 01'30		opposition	-824 Nov 05 j 09:45	5° C 50'45	-10°-43'-41
				min. Earth dist.	-824 Nov 06 j 04:39	5° C 49'50	46.12375 AU
conjunction	-831 Apr 28 j 01:02	28° Υ 29'07	-11°-54'-32	direct	-823 Jan 26 j 01:05	4° C 50'33	
minimum elong	-831 Apr 28 j 01:15	28° Υ 29'07	11°54'32	max. Earth dist.	-823 May 05 j 06:22	6° C 18'30	48.02832 AU
max. Earth dist.	-831 Apr 27 j 13:28	28° Υ 28'27	48.91398 AU				
retrograde	-831 Aug 08 j 11:07	29° Υ 59'05		conjunction	-823 May 06 j 04:42	6° C 19'48	-10°-10'-8
opposition	-831 Oct 29 j 23:16	28° Υ 59'07	-12°-18'-25	minimum elong	-823 May 06 j 04:53	6° C 19'48	10°10'09
min. Earth dist.	-831 Oct 30 j 10:10	28° Υ 58'36	46.90832 AU	retrograde	-823 Aug 16 j 10:13	7° C 51'03	
direct	-830 Jan 19 j 11:53	27° Υ 59'28		opposition	-823 Nov 06 j 15:04	6° C 50'41	-10°-29'-7
				min. Earth dist.	-823 Nov 07 j 11:19	6° C 49'42	45.99587 AU
conjunction	-830 Apr 29 j 07:02	29° Υ 27'13	-11°-42'-22	direct	-822 Jan 27 j 06:46	5° C 50'23	
minimum elong	-830 Apr 29 j 07:13	29° Υ 27'14	11°42'23				
max. Earth dist.	-830 Apr 28 j 17:24	29° Υ 26'27	48.81450 AU	conjunction	-822 May 07 j 11:37	7° C 19'52	-9°-55'-59
	-830 May 23 j 17:00	0° C		minimum elong	-822 May 07 j 11:49	7° C 19'52	9°55'58
retrograde	-830 Aug 09 j 16:23	0° C 57'18		max. Earth dist.	-822 May 06 j 12:11	7° C 18'30	47.89923 AU
	-830 Oct 28 j 19:08	30° R Υ		retrograde	-822 Aug 17 j 17:19	8° C 51'19	
opposition	-830 Oct 31 j 04:04	29° Υ 57'16	-12°-5'-41	opposition	-822 Nov 07 j 20:36	7° C 50'52	-10°-14'-18
min. Earth dist.	-830 Oct 31 j 16:47	29° Υ 56'40	46.80570 AU	min. Earth dist.	-822 Nov 08 j 18:52	7° C 49'47	45.86265 AU
direct	-829 Jan 20 j 17:14	28° Υ 57'32		direct	-821 Jan 28 j 11:44	6° C 50'27	
	-829 Apr 11 j 18:31	0° C					
conjunction	-829 Apr 30 j 13:20	0° C 25'27	-11°-29'-58	conjunction	-821 May 08 j 18:44	8° C 20'09	-9°-41'-35
minimum elong	-829 Apr 30 j 13:33	0° C 25'28	11°29'58	minimum elong	-821 May 08 j 18:55	8° C 20'10	9°41'36
max. Earth dist.	-829 Apr 29 j 23:43	0° C 24'40	48.71179 AU	max. Earth dist.	-821 May 07 j 17:50	8° C 18'42	47.76509 AU
retrograde	-829 Aug 10 j 19:35	1° C 55'39		retrograde	-821 Aug 19 j 01:28	9° C 51'47	
opposition	-829 Nov 01 j 08:46	0° C 55'34	-11°-52'-41	opposition	-821 Nov 09 j 01:54	8° C 51'14	-9°-59'-15
min. Earth dist.	-829 Nov 01 j 22:02	0° C 54'55	46.69991 AU	min. Earth dist.	-821 Nov 10 j 00:43	8° C 50'08	45.72448 AU
	-828 Jan 02 j 04:40	30° R Υ		direct	-820 Jan 29 j 15:54	7° C 50'40	
direct	-828 Jan 22 j 00:45	29° Υ 55'44		max. Earth dist.	-820 May 07 j 22:39	9° C 19'01	47.62603 AU
	-828 Feb 10 j 15:54	0° C					
conjunction	-828 Apr 30 j 19:35	1° C 23'50	-11°-17'-17	conjunction	-820 May 09 j 01:55	9° C 20'37	-9°-26'-56
minimum elong	-828 Apr 30 j 19:46	1° C 23'50	11°17'18	minimum elong	-820 May 09 j 02:06	9° C 20'37	9°26'57
max. Earth dist.	-828 Apr 30 j 03:57	1° C 22'56	48.60614 AU	retrograde	-820 Aug 19 j 09:33	10° C 52'25	
retrograde	-828 Aug 11 j 02:07	2° C 54'10		opposition	-820 Nov 09 j 07:30	9° C 51'45	-9°-43'-55
opposition	-828 Nov 01 j 13:37	1° C 54'02	-11°-39'-25	min. Earth dist.	-820 Nov 10 j 08:29	9° C 50'32	45.58173 AU
min. Earth dist.	-828 Nov 02 j 03:41	1° C 53'22	46.59132 AU	direct	-819 Jan 29 j 21:03	8° C 51'02	
direct	-827 Jan 22 j 05:13	0° C 54'08		max. Earth dist.	-819 May 09 j 05:42	10° C 19'37	47.48267 AU
max. Earth dist.	-827 May 01 j 09:40	2° C 21'29	48.49754 AU				
				conjunction	-819 May 10 j 09:15	10° C 21'14	-9°-12'-3
				minimum elong	-819 May 10 j 09:25	10° C 21'14	9°12'04
				retrograde	-819 Aug 20 j 13:38	11° C 53'13	

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Attention, astronomical year style is used: The year -819 in astronomical counting style is the year 820 BCE in historical counting style.

opposition	-819 Nov 10 j 13:02	10°♃52'25	-9°-28'-21	minimum elong	-811 May 18 j 23:41	18°♃35'31	7°03'23
min. Earth dist.	-819 Nov 11 j 14:37	10°♃51'10	45.43492 AU	retrograde	-811 Aug 29 j 01:31	20°♃09'44	
direct	-818 Jan 31 j 05:44	9°♃51'32		opposition	-811 Nov 18 j 14:08	19°♃08'03	-7°-13'-31
max. Earth dist.	-818 May 10 j 10:47	11°♃20'15	47.33564 AU	min. Earth dist.	-811 Nov 19 j 23:57	19°♃06'22	44.15475 AU
				direct	-810 Feb 08 j 06:19	18°♃05'59	
conjunction	-818 May 11 j 16:28	11°♃21'59	-8°-56'-55	max. Earth dist.	-810 May 18 j 16:24	19°♃36'49	46.05326 AU
minimum elong	-818 May 11 j 16:39	11°♃22'00	8°56'55				
retrograde	-818 Aug 21 j 19:35	12°♃54'11		conjunction	-810 May 20 j 08:07	19°♃39'12	-6°-46'-7
opposition	-818 Nov 11 j 18:41	11°♃53'16	-9°-12'-29	minimum elong	-810 May 20 j 08:16	19°♃39'12	6°46'08
min. Earth dist.	-818 Nov 12 j 21:21	11°♃51'57	45.28488 AU	retrograde	-810 Aug 30 j 12:02	21°♃13'46	
direct	-817 Feb 01 j 11:58	10°♃52'13		opposition	-810 Nov 19 j 21:05	20°♃11'56	-6°-55'-24
				min. Earth dist.	-810 Nov 21 j 09:10	20°♃10'08	43.97809 AU
conjunction	-817 May 12 j 23:51	12°♃22'55	-8°-41'-31	direct	-809 Feb 09 j 11:46	19°♃09'42	
minimum elong	-817 May 13 j 00:01	12°♃22'56	8°41'31	max. Earth dist.	-809 May 20 j 00:42	20°♃40'54	45.87555 AU
max. Earth dist.	-817 May 11 j 17:32	12°♃21'09	47.18544 AU				
retrograde	-817 Aug 23 j 01:41	13°♃55'22		conjunction	-809 May 21 j 16:55	20°♃43'19	-6°-28'-35
opposition	-817 Nov 13 j 00:35	12°♃54'18	-8°-56'-21	minimum elong	-809 May 21 j 17:04	20°♃43'20	6°28'35
min. Earth dist.	-817 Nov 14 j 04:40	12°♃52'55	45.13184 AU	retrograde	-809 Aug 31 j 19:39	22°♃18'13	
direct	-816 Feb 02 j 18:41	11°♃53'06		opposition	-809 Nov 21 j 04:06	21°♃16'15	-6°-37'00
max. Earth dist.	-816 May 12 j 00:11	13°♃22'15	47.03262 AU	min. Earth dist.	-809 Nov 22 j 16:46	21°♃14'25	43.79675 AU
				direct	-808 Feb 10 j 20:55	20°♃13'49	
conjunction	-816 May 13 j 07:26	13°♃24'05	-8°-25'-50	max. Earth dist.	-808 May 20 j 07:02	21°♃45'16	45.69330 AU
minimum elong	-816 May 13 j 07:37	13°♃24'06	8°25'50				
retrograde	-816 Aug 23 j 11:05	14°♃56'46		conjunction	-808 May 22 j 01:50	21°♃47'52	-6°-10'-47
opposition	-816 Nov 13 j 06:21	13°♃55'35	-8°-39'-55	minimum elong	-808 May 22 j 01:59	21°♃47'52	6°10'48
min. Earth dist.	-816 Nov 14 j 10:26	13°♃54'12	44.97632 AU	retrograde	-808 Sep 01 j 03:50	23°♃23'07	
direct	-815 Feb 02 j 22:25	12°♃54'13		opposition	-808 Nov 21 j 11:10	22°♃20'59	-6°-18'-20
max. Earth dist.	-815 May 13 j 06:08	14°♃23'36	46.87725 AU	min. Earth dist.	-808 Nov 23 j 01:29	22°♃19'03	43.61127 AU
				direct	-807 Feb 11 j 04:26	21°♃18'21	
conjunction	-815 May 14 j 15:06	14°♃25'33	-8°-9'-53	max. Earth dist.	-807 May 21 j 15:34	22°♃50'09	45.50700 AU
minimum elong	-815 May 14 j 15:16	14°♃25'33	8°09'54				
retrograde	-815 Jun 08 j 12:07	15°♃		conjunction	-807 May 23 j 11:02	22°♃52'48	-5°-52'-43
	-815 Aug 24 j 19:46	15°♃58'29		minimum elong	-807 May 23 j 11:11	22°♃52'48	5°52'43
	-815 Nov 12 j 03:38	15°♃		retrograde	-807 Sep 02 j 09:33	24°♃28'25	
opposition	-815 Nov 14 j 12:32	14°♃57'12	-8°-23'-12	opposition	-807 Nov 22 j 18:34	23°♃26'07	-5°-59'-22
min. Earth dist.	-815 Nov 15 j 18:28	14°♃55'43	44.81840 AU	min. Earth dist.	-807 Nov 24 j 10:12	23°♃24'07	43.42202 AU
direct	-814 Feb 04 j 02:57	13°♃55'42		direct	-806 Feb 12 j 13:58	22°♃23'16	
	-814 Apr 26 j 09:38	15°♃		max. Earth dist.	-806 May 22 j 23:21	23°♃55'24	45.31737 AU
conjunction	-814 May 15 j 22:51	15°♃27'21	-7°-53'-40	conjunction	-806 May 24 j 20:03	23°♃58'08	-5°-34'-23
minimum elong	-814 May 15 j 23:01	15°♃27'22	7°53'41	minimum elong	-806 May 24 j 20:11	23°♃58'09	5°34'23
max. Earth dist.	-814 May 14 j 13:54	15°♃25'24	46.71947 AU	retrograde	-806 Sep 03 j 19:50	25°♃34'08	
retrograde	-814 Aug 26 j 01:10	17°♃00'35		opposition	-806 Nov 24 j 01:58	24°♃31'39	-5°-40'-7
opposition	-814 Nov 15 j 18:43	15°♃59'12	-8°-6'-12	min. Earth dist.	-806 Nov 25 j 17:52	24°♃29'38	43.22979 AU
min. Earth dist.	-814 Nov 17 j 00:55	15°♃57'42	44.65783 AU	direct	-805 Feb 13 j 19:31	23°♃28'35	
	-813 Jan 21 j 18:13	15°♃		max. Earth dist.	-805 May 24 j 07:13	25°♃01'04	45.12479 AU
direct	-813 Feb 05 j 11:47	14°♃57'34					
	-813 Feb 20 j 04:13	15°♃		conjunction	-805 May 26 j 05:28	25°♃03'54	-5°-15'-46
max. Earth dist.	-813 May 15 j 19:38	16°♃27'30	46.55887 AU	minimum elong	-805 May 26 j 05:36	25°♃03'54	5°15'46
				retrograde	-805 Sep 05 j 07:04	26°♃40'17	
conjunction	-813 May 17 j 06:46	16°♃29'36	-7°-37'-11	opposition	-805 Nov 25 j 09:37	25°♃37'37	-5°-20'-34
minimum elong	-813 May 17 j 06:56	16°♃29'36	7°37'11	min. Earth dist.	-805 Nov 27 j 03:26	25°♃35'30	43.03499 AU
retrograde	-813 Aug 27 j 08:23	18°♃03'08		direct	-804 Feb 14 j 23:59	24°♃34'19	
opposition	-813 Nov 17 j 00:57	17°♃01'40	-7°-48'-55	max. Earth dist.	-804 May 24 j 16:48	26°♃07'16	44.92991 AU
min. Earth dist.	-813 Nov 18 j 08:27	17°♃00'06	44.49425 AU				
direct	-812 Feb 06 j 18:42	15°♃59'53		conjunction	-804 May 26 j 15:12	26°♃10'07	-4°-56'-52
max. Earth dist.	-812 May 16 j 03:15	17°♃30'10	46.39468 AU	minimum elong	-804 May 26 j 15:19	26°♃10'07	4°56'53
				retrograde	-804 Sep 05 j 16:01	27°♃46'54	
conjunction	-812 May 17 j 15:08	17°♃32'18	-7°-20'-25	opposition	-804 Nov 25 j 17:27	26°♃44'04	-5°00'-43
minimum elong	-812 May 17 j 15:18	17°♃32'19	7°20'26	min. Earth dist.	-804 Nov 27 j 11:14	26°♃41'56	42.83800 AU
retrograde	-812 Aug 27 j 15:42	19°♃06'12		direct	-803 Feb 15 j 09:49	25°♃40'33	
opposition	-812 Nov 17 j 07:32	18°♃04'37	-7°-31'-21	max. Earth dist.	-803 May 26 j 00:28	27°♃13'51	44.73293 AU
min. Earth dist.	-812 Nov 18 j 16:49	18°♃02'57	44.32670 AU				
direct	-811 Feb 07 j 01:25	17°♃02'42		conjunction	-803 May 28 j 00:53	27°♃16'51	-4°-37'-42
max. Earth dist.	-811 May 17 j 10:05	18°♃33'16	46.22634 AU	minimum elong	-803 May 28 j 01:01	27°♃16'51	4°37'42
				retrograde	-803 Sep 07 j 01:32	28°♃54'03	
conjunction	-811 May 18 j 23:31	18°♃35'31	-7°-3'-24	opposition	-803 Nov 27 j 01:32	27°♃51'03	-4°-40'-34

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Attention, astronomical year style is used: The year -803 in astronomical counting style is the year 804 BCE in historical counting style.

min. Earth dist.	-803 Nov 28 j 20:33	27° ♄ 48'51	42.63914 AU	retrograde	-795 Sep 16 j 14:54	8° ♂ 14'55	
direct	-802 Feb 16 j 18:55	26° ♄ 47'19		opposition	-795 Dec 06 j 03:21	7° ♂ 10'18	-1°-48'-35
max. Earth dist.	-802 May 27 j 10:31	28° ♄ 21'08	44.53394 AU	min. Earth dist.	-795 Dec 08 j 08:19	7° ♂ 07'30	40.93370 AU
				direct	-794 Feb 25 j 19:58	6° ♂ 04'34	
conjunction	-802 May 29 j 11:02	28° ♄ 24'08	-4°-18'-14	max. Earth dist.	-794 Jun 05 j 18:33	7° ♂ 42'18	42.81978 AU
minimum elong	-802 May 29 j 11:08	28° ♄ 24'09	4°18'15				
	-802 Aug 27 j 01:13	0° ♂		conjunction	-794 Jun 08 j 05:54	7° ♂ 46'08	-1°-32'-37
retrograde	-802 Sep 08 j 09:16	0° ♂ 01'49		minimum elong	-794 Jun 08 j 05:56	7° ♂ 46'08	1°32'37
	-802 Sep 20 j 20:35	30° ♂		retrograde	-794 Sep 18 j 03:46	9° ♂ 28'00	
opposition	-802 Nov 28 j 09:52	28° ♄ 58'38	-4°-20'-7	opposition	-794 Dec 07 j 13:37	8° ♂ 23'07	-1°-25'-46
min. Earth dist.	-802 Nov 30 j 05:52	28° ♄ 56'22	42.43814 AU	min. Earth dist.	-794 Dec 09 j 18:37	8° ♂ 20'19	40.70465 AU
direct	-801 Feb 18 j 05:08	27° ♄ 54'42		direct	-793 Feb 27 j 06:04	7° ♂ 17'05	
max. Earth dist.	-801 May 28 j 19:19	29° ♄ 28'57	44.33275 AU	max. Earth dist.	-793 Jun 07 j 04:57	8° ♂ 55'19	42.58987 AU
conjunction	-801 May 30 j 21:16	29° ♄ 32'04	-3°-58'-30	conjunction	-793 Jun 09 j 18:23	8° ♂ 59'19	-1°-10'-42
minimum elong	-801 May 30 j 21:22	29° ♄ 32'04	3°58'30	minimum elong	-793 Jun 09 j 18:25	8° ♂ 59'19	1°10'42
	-801 Jun 18 j 19:17	0° ♂		retrograde	-793 Sep 19 j 18:27	10° ♂ 41'46	
retrograde	-801 Sep 09 j 19:24	1° ♂ 10'13		opposition	-793 Dec 09 j 00:23	9° ♂ 36'38	-1°-2'-38
opposition	-801 Nov 29 j 18:21	0° ♂ 06'53	-3°-59'-21	min. Earth dist.	-793 Dec 11 j 07:03	9° ♂ 33'44	40.47347 AU
min. Earth dist.	-801 Dec 01 j 14:51	0° ♂ 04'35	42.23467 AU	direct	-792 Feb 28 j 15:48	8° ♂ 30'17	
	-801 Dec 05 j 08:06	30° ♂		max. Earth dist.	-792 Jun 07 j 18:08	10° ♂ 09'14	42.35799 AU
direct	-800 Feb 19 j 12:53	29° ♄ 02'44					
	-800 May 03 j 10:27	0° ♂		conjunction	-792 Jun 10 j 07:22	10° ♂ 13'14	0°-48'-30
max. Earth dist.	-800 May 29 j 04:24	0° ♂ 37'26	44.12844 AU	minimum elong	-792 Jun 10 j 07:23	10° ♂ 13'14	0°48'29
				retrograde	-792 Sep 20 j 06:22	11° ♂ 56'18	
conjunction	-800 May 31 j 08:00	0° ♂ 40'39	-3°-38'-28	opposition	-792 Dec 09 j 11:22	10° ♂ 50'55	0°-39'-13
minimum elong	-800 May 31 j 08:06	0° ♂ 40'40	3°38'28	min. Earth dist.	-792 Dec 11 j 18:21	10° ♂ 47'59	40.24061 AU
retrograde	-800 Sep 10 j 07:11	2° ♂ 19'19		direct	-791 Mar 01 j 04:56	9° ♂ 44'16	
opposition	-800 Nov 30 j 03:10	1° ♂ 15'49	-3°-38'-18	max. Earth dist.	-791 Jun 09 j 05:33	11° ♂ 23'48	42.12471 AU
min. Earth dist.	-800 Dec 02 j 01:49	1° ♂ 13'24	42.02786 AU				
direct	-799 Feb 19 j 19:33	0° ♂ 11'27		conjunction	-791 Jun 11 j 20:28	11° ♂ 27'57	0°-26'-2
max. Earth dist.	-799 May 30 j 14:52	1° ♂ 46'40	43.92055 AU	minimum elong	-791 Jun 11 j 20:29	11° ♂ 27'57	0°26'03
				retrograde	-791 Sep 21 j 19:16	13° ♂ 11'40	
conjunction	-799 Jun 01 j 19:03	1° ♂ 49'57	-3°-18'-11	opposition	-791 Dec 10 j 22:44	12° ♂ 06'03	0°-15'-30
minimum elong	-799 Jun 01 j 19:08	1° ♂ 49'57	3°18'11	min. Earth dist.	-791 Dec 13 j 06:20	12° ♂ 03'03	40.00666 AU
retrograde	-799 Sep 11 j 20:01	3° ♂ 29'07		direct	-790 Mar 02 j 15:58	10° ♂ 59'06	
opposition	-799 Dec 01 j 12:17	2° ♂ 25'26	-3°-16'-56	max. Earth dist.	-790 Jun 10 j 18:29	12° ♂ 39'20	41.89014 AU
min. Earth dist.	-799 Dec 03 j 11:17	2° ♂ 22'59	41.81716 AU				
direct	-798 Feb 21 j 03:38	1° ♂ 20'49		conjunction	-790 Jun 13 j 09:55	12° ♂ 43'32	0°-3'-22
max. Earth dist.	-798 May 31 j 23:20	2° ♂ 56'27	43.70845 AU	minimum elong	-790 Jun 13 j 09:55	12° ♂ 43'32	0°03'22
				behind sun begin	-790 Jun 13 j 03:25	12° ♂ 43'08	
conjunction	-798 Jun 03 j 06:06	2° ♂ 59'55	-2°-57'-37	behind sun end	-790 Jun 13 j 16:24	12° ♂ 43'57	
minimum elong	-798 Jun 03 j 06:10	2° ♂ 59'55	2°57'36	asc. node	-790 Aug 05 j 08:55	13° ♂ 59'15	
retrograde	-798 Sep 13 j 08:01	4° ♂ 39'36		retrograde	-790 Sep 23 j 06:33	14° ♂ 27'58	
opposition	-798 Dec 02 j 21:43	3° ♂ 35'42	-2°-55'-18	opposition	-790 Dec 12 j 10:32	13° ♂ 22'06	0°08'29
min. Earth dist.	-798 Dec 04 j 22:46	3° ♂ 33'09	41.60228 AU	min. Earth dist.	-790 Dec 14 j 19:24	13° ♂ 19'02	39.77141 AU
direct	-797 Feb 22 j 12:24	2° ♂ 30'50		direct	-789 Mar 04 j 03:42	12° ♂ 14'52	
max. Earth dist.	-797 Jun 02 j 10:22	4° ♂ 07'01	43.49200 AU	max. Earth dist.	-789 Jun 12 j 07:48	13° ♂ 55'50	41.65429 AU
conjunction	-797 Jun 04 j 17:46	4° ♂ 10'32	-2°-36'-46	conjunction	-789 Jun 14 j 23:50	14° ♂ 00'06	0°19'43
minimum elong	-797 Jun 04 j 17:50	4° ♂ 10'32	2°36'48	minimum elong	-789 Jun 14 j 23:50	14° ♂ 00'06	0°19'43
retrograde	-797 Sep 14 j 16:41	5° ♂ 50'44		retrograde	-789 Sep 24 j 21:30	15° ♂ 45'16	
opposition	-797 Dec 04 j 07:18	4° ♂ 46'36	-2°-33'-21	opposition	-789 Dec 13 j 22:24	14° ♂ 39'10	0°32'46
min. Earth dist.	-797 Dec 06 j 09:28	4° ♂ 43'59	41.38308 AU	min. Earth dist.	-789 Dec 16 j 07:18	14° ♂ 36'04	39.53473 AU
direct	-796 Feb 24 j 01:01	3° ♂ 41'28		direct	-788 Mar 04 j 13:11	13° ♂ 31'38	
max. Earth dist.	-796 Jun 02 j 20:06	5° ♂ 18'06	43.27149 AU	max. Earth dist.	-788 Jun 12 j 20:21	15° ♂ 13'17	41.41643 AU
conjunction	-796 Jun 05 j 05:34	5° ♂ 21'46	-2°-15'-40	conjunction	-788 Jun 15 j 14:15	15° ♂ 17'43	0°42'57
minimum elong	-796 Jun 05 j 05:38	5° ♂ 21'46	2°15'40	minimum elong	-788 Jun 15 j 14:13	15° ♂ 17'42	0°42'58
retrograde	-796 Sep 15 j 03:39	7° ♂ 02'30		retrograde	-788 Sep 25 j 13:41	17° ♂ 03'37	
opposition	-796 Dec 04 j 17:08	5° ♂ 58'08	-2°-11'-7	opposition	-788 Dec 14 j 10:55	15° ♂ 57'17	0°57'21
min. Earth dist.	-796 Dec 06 j 20:10	5° ♂ 55'27	41.16011 AU	min. Earth dist.	-788 Dec 16 j 21:55	15° ♂ 54'04	39.29594 AU
direct	-795 Feb 24 j 11:12	4° ♂ 52'42		direct	-787 Mar 05 j 22:37	14° ♂ 49'27	
max. Earth dist.	-795 Jun 04 j 06:50	6° ♂ 29'51	43.04713 AU	max. Earth dist.	-787 Jun 14 j 10:59	16° ♂ 31'55	41.17610 AU
conjunction	-795 Jun 06 j 17:36	6° ♂ 33'38	-1°-54'-17	conjunction	-787 Jun 17 j 05:01	16° ♂ 36'22	1°06'27
minimum elong	-795 Jun 06 j 17:39	6° ♂ 33'38	1°54'18	minimum elong	-787 Jun 17 j 04:59	16° ♂ 36'22	1°06'28

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Attention, astronomical year style is used: The year -787 in astronomical counting style is the year 788 BCE in historical counting style.

retrograde	-787 Sep 27 j 05:17	18°II23'03		direct	-778 Mar 18 j 11:04	27°II15'15	
opposition	-787 Dec 15 j 23:47	17°II16'27	1°22'11	max. Earth dist.	-778 Jun 27 j 10:05	29°II05'16	38.90977 AU
min. Earth dist.	-787 Dec 18 j 11:06	17°II13'12	39.05443 AU				
direct	-786 Mar 07 j 13:07	16°II08'17		conjunction	-778 Jun 30 j 13:03	29°II10'42	4°48'03
max. Earth dist.	-786 Jun 15 j 23:44	17°II51'27	40.93284 AU	minimum elong	-778 Jun 30 j 12:53	29°II10'41	4°48'03
					-778 Jul 29 j 18:39	0°☾	
conjunction	-786 Jun 18 j 20:10	17°II56'06	1°30'12	retrograde	-778 Oct 10 j 12:48	1°☾05'00	
minimum elong	-786 Jun 18 j 20:07	17°II56'06	1°30'12		-778 Dec 25 j 06:49	30°RII	
retrograde	-786 Sep 28 j 22:12	19°II43'32		opposition	-778 Dec 28 j 14:42	29°II55'23	5°16'58
opposition	-786 Dec 17 j 13:00	18°II36'39	1°47'19	min. Earth dist.	-778 Dec 31 j 09:44	29°II51'31	36.78971 AU
min. Earth dist.	-786 Dec 20 j 01:46	18°II33'18	38.81006 AU	direct	-777 Mar 20 j 03:17	28°II43'40	
direct	-785 Mar 09 j 03:01	17°II28'09			-777 Jun 08 j 22:00	0°☾	
max. Earth dist.	-785 Jun 17 j 14:55	19°II12'07	40.68642 AU	max. Earth dist.	-777 Jun 29 j 05:10	0°☾34'44	38.65510 AU
conjunction	-785 Jun 20 j 11:55	19°II16'51	1°54'11	conjunction	-777 Jul 02 j 08:18	0°☾40'13	5°13'35
minimum elong	-785 Jun 20 j 11:52	19°II16'51	1°54'12	minimum elong	-777 Jul 02 j 08:07	0°☾40'13	5°13'36
retrograde	-785 Sep 30 j 12:22	21°II05'04		retrograde	-777 Oct 12 j 08:00	2°☾35'32	
opposition	-785 Dec 19 j 02:47	19°II57'53	2°12'42	opposition	-777 Dec 30 j 08:04	1°☾25'36	5°44'03
min. Earth dist.	-785 Dec 21 j 16:53	19°II54'26	38.56257 AU	min. Earth dist.	-776 Jan 02 j 02:46	1°☾21'43	36.53654 AU
direct	-784 Mar 09 j 18:08	18°II49'01		direct	-776 Mar 20 j 19:33	0°☾13'30	
max. Earth dist.	-784 Jun 18 j 05:30	20°II33'43	40.43710 AU	max. Earth dist.	-776 Jun 29 j 23:33	2°☾05'34	38.40038 AU
conjunction	-784 Jun 21 j 03:58	20°II38'36	2°18'25	conjunction	-776 Jul 03 j 04:08	2°☾11'12	5°39'13
minimum elong	-784 Jun 21 j 03:53	20°II38'36	2°18'25	minimum elong	-776 Jul 03 j 03:57	2°☾11'12	5°39'14
retrograde	-784 Oct 01 j 02:42	22°II27'37		retrograde	-776 Oct 13 j 05:24	4°☾07'34	
opposition	-784 Dec 19 j 16:45	21°II20'06	2°38'20	opposition	-776 Dec 31 j 02:06	2°☾57'19	6°11'16
min. Earth dist.	-784 Dec 22 j 07:18	21°II16'37	38.31251 AU	min. Earth dist.	-775 Jan 02 j 22:26	2°☾53'19	36.28332 AU
direct	-783 Mar 11 j 08:08	20°II10'51		direct	-775 Mar 22 j 10:05	1°☾44'49	
max. Earth dist.	-783 Jun 19 j 20:26	21°II56'19	40.18516 AU	max. Earth dist.	-775 Jul 01 j 20:25	3°☾38'03	38.14530 AU
conjunction	-783 Jun 22 j 20:28	22°II01'20	2°42'52	conjunction	-775 Jul 05 j 00:39	3°☾43'43	6°04'58
minimum elong	-783 Jun 22 j 20:23	22°II01'20	2°42'53	minimum elong	-775 Jul 05 j 00:27	3°☾43'42	6°05'00
retrograde	-783 Oct 02 j 18:35	23°II51'10		retrograde	-775 Oct 15 j 02:30	5°☾41'10	
opposition	-783 Dec 21 j 07:22	22°II43'19	3°04'14	opposition	-774 Jan 01 j 20:48	4°☾30'35	6°38'37
min. Earth dist.	-783 Dec 23 j 23:43	22°II39'42	38.06030 AU	min. Earth dist.	-774 Jan 04 j 17:00	4°☾26'34	36.02955 AU
direct	-782 Mar 12 j 20:28	21°II33'39		direct	-774 Mar 24 j 04:27	3°☾17'41	
max. Earth dist.	-782 Jun 21 j 13:10	23°II20'00	39.93141 AU	max. Earth dist.	-774 Jul 03 j 15:29	5°☾11'57	37.88939 AU
conjunction	-782 Jun 24 j 13:11	23°II25'03	3°07'32	conjunction	-774 Jul 06 j 21:32	5°☾17'48	6°30'49
minimum elong	-782 Jun 24 j 13:05	23°II25'03	3°07'32	minimum elong	-774 Jul 06 j 21:19	5°☾17'47	6°30'49
retrograde	-782 Oct 04 j 11:58	25°II15'43		retrograde	-774 Oct 17 j 02:17	7°☾16'21	
opposition	-782 Dec 22 j 22:15	24°II07'31	3°30'22	opposition	-773 Jan 03 j 16:04	6°☾05'24	7°06'05
min. Earth dist.	-782 Dec 25 j 14:24	24°II03'54	37.80662 AU	min. Earth dist.	-773 Jan 06 j 13:29	6°☾01'18	35.77498 AU
direct	-781 Mar 14 j 10:12	22°II57'26		direct	-773 Mar 25 j 23:00	4°☾52'05	
max. Earth dist.	-781 Jun 23 j 04:34	24°II44'34	39.67633 AU	max. Earth dist.	-773 Jul 05 j 13:18	6°☾47'33	37.63234 AU
conjunction	-781 Jun 26 j 06:27	24°II49'47	3°32'24	conjunction	-773 Jul 08 j 19:23	6°☾53'27	6°56'44
minimum elong	-781 Jun 26 j 06:20	24°II49'47	3°32'25	minimum elong	-773 Jul 08 j 19:09	6°☾53'26	6°56'45
retrograde	-781 Oct 06 j 06:44	26°II41'19		retrograde	-773 Oct 19 j 00:02	8°☾53'07	
opposition	-781 Dec 24 j 13:32	25°II32'44	3°56'43	opposition	-772 Jan 05 j 11:58	7°☾41'48	7°33'38
min. Earth dist.	-781 Dec 27 j 07:10	25°II29'01	37.55219 AU	min. Earth dist.	-772 Jan 08 j 10:17	7°☾37'37	35.51936 AU
direct	-780 Mar 15 j 00:28	24°II22'14		direct	-772 Mar 26 j 20:25	6°☾28'03	
max. Earth dist.	-780 Jun 23 j 22:47	26°II10'21	39.42064 AU	max. Earth dist.	-772 Jul 06 j 10:22	8°☾24'36	37.37444 AU
conjunction	-780 Jun 27 j 00:18	26°II15'35	3°57'27	conjunction	-772 Jul 09 j 17:43	8°☾30'40	7°22'42
minimum elong	-780 Jun 27 j 00:10	26°II15'35	3°57'27	minimum elong	-772 Jul 09 j 17:28	8°☾30'39	7°22'42
retrograde	-780 Oct 07 j 00:24	28°II07'59		retrograde	-772 Oct 19 j 23:40	10°☾31'27	
opposition	-780 Dec 25 j 05:28	26°II59'04	4°23'17	opposition	-771 Jan 06 j 08:29	9°☾19'46	8°01'15
min. Earth dist.	-780 Dec 27 j 23:17	26°II55'19	37.29753 AU	min. Earth dist.	-771 Jan 09 j 06:54	9°☾15'33	35.26320 AU
direct	-779 Mar 16 j 18:36	25°II48'09		direct	-771 Mar 28 j 16:40	8°☾05'34	
max. Earth dist.	-779 Jun 25 j 15:33	27°II37'09	39.16502 AU	max. Earth dist.	-771 Jul 08 j 08:32	10°☾03'16	37.11588 AU
conjunction	-779 Jun 28 j 18:18	27°II42'31	4°22'41	conjunction	-771 Jul 11 j 16:36	10°☾09'27	7°48'41
minimum elong	-779 Jun 28 j 18:09	27°II42'31	4°22'42	minimum elong	-771 Jul 11 j 16:20	10°☾09'26	7°48'42
retrograde	-779 Oct 08 j 19:56	29°II35'51		retrograde	-771 Oct 21 j 20:25	12°☾11'24	
opposition	-779 Dec 26 j 21:48	28°II26'35	4°50'02	opposition	-770 Jan 08 j 05:45	10°☾59'18	8°28'53
min. Earth dist.	-779 Dec 29 j 15:44	28°II22'47	37.04335 AU	min. Earth dist.	-770 Jan 11 j 05:33	10°☾54'58	35.00681 AU

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Attention, astronomical year style is used: The year -770 in astronomical counting style is the year 771 BCE in historical counting style.

direct	-770 Mar 30 j 12:24	9° \mathcal{E} 44'38		conjunction	-762 Jul 28 j 12:56	26° \mathcal{E} 15'09	11°36'57
max. Earth dist.	-770 Jul 10 j 08:15	11° \mathcal{E} 43'35	36.85748 AU	minimum elong	-762 Jul 28 j 12:34	26° \mathcal{E} 15'07	11°36'57
				retrograde	-762 Nov 08 j 00:25	28° \mathcal{E} 28'39	
conjunction	-770 Jul 13 j 16:07	11° \mathcal{E} 49'48	8°14'40	opposition	-761 Jan 24 j 12:40	27° \mathcal{E} 12'55	12°31'39
minimum elong	-770 Jul 13 j 15:51	11° \mathcal{E} 49'47	8°14'40	min. Earth dist.	-761 Jan 27 j 13:02	27° \mathcal{E} 08'17	32.78724 AU
retrograde	-770 Oct 23 j 19:43	13° \mathcal{E} 52'55		direct	-761 Apr 15 j 08:24	25° \mathcal{E} 54'02	
opposition	-769 Jan 10 j 03:24	12° \mathcal{E} 40'25	8°56'31	max. Earth dist.	-761 Jul 27 j 11:50	28° \mathcal{E} 05'22	34.62350 AU
min. Earth dist.	-769 Jan 13 j 02:41	12° \mathcal{E} 36'05	34.75097 AU				
direct	-769 Apr 01 j 08:46	11° \mathcal{E} 25'15		conjunction	-761 Jul 30 j 19:09	28° \mathcal{E} 12'07	12°00'53
max. Earth dist.	-769 Jul 12 j 07:06	13° \mathcal{E} 25'22	36.59970 AU	minimum elong	-761 Jul 30 j 18:45	28° \mathcal{E} 12'05	12°00'54
					-761 Sep 29 j 13:08	0° \mathcal{R}	
conjunction	-769 Jul 15 j 16:18	13° \mathcal{E} 31'45	8°40'35	retrograde	-761 Nov 10 j 06:55	0° \mathcal{R} 27'00	
minimum elong	-769 Jul 15 j 16:01	13° \mathcal{E} 31'43	8°40'37		-761 Dec 23 j 02:48	30° \mathcal{R} \mathcal{E}	
retrograde	-769 Oct 25 j 20:58	15° \mathcal{E} 36'04		opposition	-760 Jan 26 j 17:35	29° \mathcal{E} 10'51	12°57'06
opposition	-768 Jan 12 j 01:56	14° \mathcal{E} 23'08	9°24'05	min. Earth dist.	-760 Jan 29 j 17:17	29° \mathcal{E} 06'14	32.55318 AU
min. Earth dist.	-768 Jan 15 j 02:28	14° \mathcal{E} 18'42	34.49633 AU	direct	-760 Apr 16 j 12:59	27° \mathcal{E} 51'30	
direct	-768 Apr 02 j 03:46	13° \mathcal{E} 07'28			-760 Jul 26 j 16:42	0° \mathcal{R}	
max. Earth dist.	-768 Jul 13 j 08:56	15° \mathcal{E} 08'57	36.34338 AU	max. Earth dist.	-760 Jul 28 j 17:39	0° \mathcal{R} 04'12	34.38751 AU
conjunction	-768 Jul 16 j 17:08	15° \mathcal{E} 15'19	9°06'25	conjunction	-760 Aug 01 j 01:58	0° \mathcal{R} 11'06	12°24'22
minimum elong	-768 Jul 16 j 16:50	15° \mathcal{E} 15'17	9°06'26	minimum elong	-760 Aug 01 j 01:35	0° \mathcal{R} 11'04	12°24'22
retrograde	-768 Oct 26 j 22:20	17° \mathcal{E} 20'51		retrograde	-760 Nov 11 j 16:00	2° \mathcal{R} 27'23	
opposition	-767 Jan 13 j 01:08	16° \mathcal{E} 07'30	9°51'34	opposition	-759 Jan 27 j 23:21	1° \mathcal{R} 10'48	13°22'03
min. Earth dist.	-767 Jan 16 j 01:01	16° \mathcal{E} 03'04	34.24357 AU	min. Earth dist.	-759 Jan 30 j 23:19	1° \mathcal{R} 06'09	32.32164 AU
direct	-767 Apr 04 j 03:39	14° \mathcal{E} 51'21			-759 Mar 25 j 00:41	30° \mathcal{R} \mathcal{E}	
max. Earth dist.	-767 Jul 15 j 09:19	16° \mathcal{E} 54'04	36.08931 AU	direct	-759 Apr 18 j 16:50	29° \mathcal{E} 50'58	
					-759 May 13 j 05:58	0° \mathcal{R}	
conjunction	-767 Jul 18 j 18:31	17° \mathcal{E} 00'34	9°32'07	max. Earth dist.	-759 Jul 31 j 02:38	2° \mathcal{R} 05'14	34.15415 AU
minimum elong	-767 Jul 18 j 18:11	17° \mathcal{E} 00'32	9°32'08				
retrograde	-767 Oct 29 j 03:15	19° \mathcal{E} 07'21		conjunction	-759 Aug 03 j 09:44	2° \mathcal{R} 12'05	12°47'19
opposition	-766 Jan 15 j 01:04	17° \mathcal{E} 53'35	10°18'54	minimum elong	-759 Aug 03 j 09:19	2° \mathcal{R} 12'03	12°47'20
min. Earth dist.	-766 Jan 18 j 01:04	17° \mathcal{E} 49'07	33.99361 AU	retrograde	-759 Nov 14 j 00:00	4° \mathcal{R} 29'46	
direct	-766 Apr 06 j 03:12	16° \mathcal{E} 36'58		opposition	-758 Jan 30 j 05:59	3° \mathcal{R} 12'44	13°46'26
max. Earth dist.	-766 Jul 17 j 12:32	18° \mathcal{E} 41'06	35.83804 AU	min. Earth dist.	-758 Feb 02 j 05:43	3° \mathcal{R} 08'04	32.09295 AU
				direct	-758 Apr 20 j 23:09	1° \mathcal{R} 52'25	
conjunction	-766 Jul 20 j 20:40	18° \mathcal{E} 47'35	9°57'38	max. Earth dist.	-758 Aug 02 j 10:43	4° \mathcal{R} 08'06	33.92408 AU
minimum elong	-766 Jul 20 j 20:20	18° \mathcal{E} 47'34	9°57'38				
retrograde	-766 Oct 31 j 05:44	20° \mathcal{E} 55'40		conjunction	-758 Aug 05 j 18:00	4° \mathcal{R} 15'03	13°09'41
opposition	-765 Jan 17 j 01:51	19° \mathcal{E} 41'29	10°46'02	minimum elong	-758 Aug 05 j 17:37	4° \mathcal{R} 15'01	13°09'41
min. Earth dist.	-765 Jan 20 j 01:56	19° \mathcal{E} 36'59	33.74658 AU	retrograde	-758 Nov 16 j 11:18	6° \mathcal{R} 34'07	
direct	-765 Apr 08 j 04:10	18° \mathcal{E} 24'25		opposition	-757 Feb 01 j 13:23	5° \mathcal{R} 16'39	14°10'10
max. Earth dist.	-765 Jul 19 j 15:09	20° \mathcal{E} 29'55	35.58990 AU	min. Earth dist.	-757 Feb 04 j 12:20	5° \mathcal{R} 11'59	31.86787 AU
				direct	-757 Apr 23 j 06:54	3° \mathcal{R} 55'50	
conjunction	-765 Jul 22 j 23:32	20° \mathcal{E} 36'29	10°22'54	max. Earth dist.	-757 Aug 04 j 21:03	6° \mathcal{R} 13'04	33.69779 AU
minimum elong	-765 Jul 22 j 23:11	20° \mathcal{E} 36'27	10°22'55				
retrograde	-765 Nov 02 j 10:01	22° \mathcal{E} 45'52		conjunction	-757 Aug 08 j 03:18	6° \mathcal{R} 19'59	13°31'23
opposition	-764 Jan 19 j 03:10	21° \mathcal{E} 31'18	11°12'55	minimum elong	-757 Aug 08 j 02:54	6° \mathcal{R} 19'57	13°31'24
min. Earth dist.	-764 Jan 22 j 02:37	21° \mathcal{E} 26'50	33.50278 AU	retrograde	-757 Nov 18 j 20:54	8° \mathcal{R} 40'26	
direct	-764 Apr 09 j 05:07	20° \mathcal{E} 13'47		opposition	-756 Feb 03 j 21:43	7° \mathcal{R} 22'31	14°33'10
max. Earth dist.	-764 Jul 20 j 19:02	22° \mathcal{E} 20'43	35.34460 AU	min. Earth dist.	-756 Feb 06 j 20:54	7° \mathcal{R} 17'49	31.64702 AU
				direct	-756 Apr 24 j 14:33	6° \mathcal{R} 01'13	
conjunction	-764 Jul 24 j 03:19	22° \mathcal{E} 27'21	10°47'55	max. Earth dist.	-756 Aug 06 j 07:56	8° \mathcal{R} 19'59	33.47640 AU
minimum elong	-764 Jul 24 j 02:59	22° \mathcal{E} 27'19	10°47'55				
retrograde	-764 Nov 03 j 13:28	24° \mathcal{E} 38'05		conjunction	-756 Aug 09 j 13:10	8° \mathcal{R} 26'53	13°52'20
opposition	-763 Jan 20 j 05:36	23° \mathcal{E} 23'08	11°39'30	minimum elong	-756 Aug 09 j 12:47	8° \mathcal{R} 26'51	13°52'21
min. Earth dist.	-763 Jan 23 j 05:53	23° \mathcal{E} 18'34	33.26181 AU	retrograde	-756 Nov 20 j 07:50	10° \mathcal{R} 48'43	
direct	-763 Apr 11 j 05:42	22° \mathcal{E} 05'10		opposition	-755 Feb 05 j 06:53	9° \mathcal{R} 30'22	14°55'20
max. Earth dist.	-763 Jul 23 j 00:01	24° \mathcal{E} 13'34	35.10204 AU	min. Earth dist.	-755 Feb 08 j 04:13	9° \mathcal{R} 25'46	31.43147 AU
				direct	-755 Apr 26 j 23:29	8° \mathcal{R} 08'36	
conjunction	-763 Jul 26 j 07:38	24° \mathcal{E} 20'13	11°12'36	max. Earth dist.	-755 Aug 08 j 19:15	10° \mathcal{R} 28'52	33.26063 AU
minimum elong	-763 Jul 26 j 07:15	24° \mathcal{E} 20'11	11°12'37				
retrograde	-763 Nov 05 j 18:53	26° \mathcal{E} 32'20		conjunction	-755 Aug 11 j 23:42	10° \mathcal{R} 35'46	14°12'27
opposition	-762 Jan 22 j 08:43	25° \mathcal{E} 17'00	12°05'46	minimum elong	-755 Aug 11 j 23:18	10° \mathcal{R} 35'44	14°12'28
min. Earth dist.	-762 Jan 25 j 07:59	25° \mathcal{E} 12'28	33.02339 AU	retrograde	-755 Nov 22 j 18:26	12° \mathcal{R} 59'00	
direct	-762 Apr 13 j 07:15	23° \mathcal{E} 58'35		opposition	-754 Feb 07 j 17:04	11° \mathcal{R} 40'14	15°16'35
max. Earth dist.	-762 Jul 25 j 04:33	26° \mathcal{E} 08'22	34.86168 AU	min. Earth dist.	-754 Feb 10 j 14:18	11° \mathcal{R} 35'36	31.22202 AU
				direct	-754 Apr 29 j 06:59	10° \mathcal{R} 18'01	

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Attention, astronomical year style is used: The year -754 in astronomical counting style is the year 755 BCE in historical counting style.

max. Earth dist.	-754 Aug 11 j 08:52	12°Ω39'55	33.05152 AU	opposition	-746 Feb 26 j 09:48	0°♃14'05	17°23'11
				min. Earth dist.	-746 Feb 28 j 19:15	0°♃10'06	29.79654 AU
conjunction	-754 Aug 14 j 11:06	12°Ω46'41	14°31'39		-746 Mar 06 j 21:46	30°♃Ω	
minimum elong	-754 Aug 14 j 10:44	12°Ω46'39	14°31'39	direct	-746 May 17 j 14:54	28°Ω49'07	
	-754 Oct 30 j 08:04	15°Ω			-746 Jul 24 j 03:22	0°♃	
retrograde	-754 Nov 25 j 06:37	15°Ω11'18		max. Earth dist.	-746 Aug 30 j 20:27	1°♃22'42	31.63517 AU
	-754 Dec 21 j 15:24	15°♃Ω					
opposition	-753 Feb 10 j 03:52	13°Ω52'09	15°36'49	conjunction	-746 Sep 02 j 09:47	1°♃28'40	16°22'53
min. Earth dist.	-753 Feb 12 j 22:56	13°Ω47'39	31.01934 AU	minimum elong	-746 Sep 02 j 09:34	1°♃28'39	16°22'53
direct	-753 May 01 j 16:20	12°Ω29'31		retrograde	-746 Dec 14 j 16:42	4°♃03'28	
max. Earth dist.	-753 Aug 13 j 21:37	14°Ω52'54	32.84948 AU	opposition	-745 Mar 01 j 03:36	2°♃41'43	17°32'25
				min. Earth dist.	-745 Mar 03 j 12:20	2°♃37'46	29.65000 AU
conjunction	-753 Aug 16 j 23:20	14°Ω59'42	14°49'50	direct	-745 May 20 j 07:25	1°♃16'28	
minimum elong	-753 Aug 16 j 22:57	14°Ω59'40	14°49'50	max. Earth dist.	-745 Sep 02 j 16:46	3°♃51'17	31.49134 AU
	-753 Aug 17 j 02:39	15°Ω					
retrograde	-753 Nov 27 j 19:42	17°Ω25'43		conjunction	-745 Sep 05 j 03:35	3°♃57'03	16°30'27
opposition	-752 Feb 12 j 15:46	16°Ω06'12	15°55'56	minimum elong	-745 Sep 05 j 03:23	3°♃57'02	16°30'27
min. Earth dist.	-752 Feb 15 j 10:22	16°Ω01'42	30.82388 AU	retrograde	-745 Dec 17 j 11:46	6°♃32'51	
	-752 Mar 30 j 22:07	15°♃Ω		opposition	-744 Mar 02 j 22:08	5°♃10'47	17°39'56
direct	-752 May 03 j 01:12	14°Ω43'12		min. Earth dist.	-744 Mar 05 j 03:53	5°♃07'02	29.51163 AU
	-752 Jun 04 j 17:56	15°Ω		direct	-744 May 22 j 02:18	3°♃45'15	
max. Earth dist.	-752 Aug 15 j 13:22	17°Ω08'15	32.65480 AU	max. Earth dist.	-744 Sep 04 j 12:49	6°♃21'10	31.35626 AU
conjunction	-752 Aug 18 j 12:18	17°Ω14'51	15°06'56	conjunction	-744 Sep 06 j 21:42	6°♃26'47	16°36'21
minimum elong	-752 Aug 18 j 11:58	17°Ω14'49	15°06'56	minimum elong	-744 Sep 06 j 21:33	6°♃26'46	16°36'21
retrograde	-752 Nov 29 j 09:04	19°Ω42'15		retrograde	-744 Dec 19 j 05:38	9°♃03'30	
opposition	-751 Feb 14 j 04:36	18°Ω22'24	16°13'53	opposition	-743 Mar 05 j 17:25	7°♃41'09	17°45'37
min. Earth dist.	-751 Feb 16 j 21:22	18°Ω18'01	30.63551 AU	min. Earth dist.	-743 Mar 07 j 21:48	7°♃37'29	29.38231 AU
direct	-751 May 05 j 13:32	16°Ω59'03		direct	-743 May 24 j 19:39	6°♃15'21	
max. Earth dist.	-751 Aug 18 j 03:31	19°Ω25'34	32.46738 AU	max. Earth dist.	-743 Sep 07 j 11:05	8°♃52'27	31.23100 AU
conjunction	-751 Aug 21 j 02:00	19°Ω32'10	15°22'52	conjunction	-743 Sep 09 j 16:20	8°♃57'44	16°40'31
minimum elong	-751 Aug 21 j 01:39	19°Ω32'08	15°22'53	minimum elong	-743 Sep 09 j 16:12	8°♃57'44	16°40'32
retrograde	-751 Dec 02 j 01:16	22°Ω00'56		retrograde	-743 Dec 22 j 00:35	11°♃35'17	
opposition	-750 Feb 16 j 18:10	20°Ω40'46	16°30'33	opposition	-742 Mar 08 j 13:08	10°♃12'40	17°49'24
min. Earth dist.	-750 Feb 19 j 09:48	20°Ω36'26	30.45428 AU	min. Earth dist.	-742 Mar 10 j 14:23	10°♃09'12	29.26280 AU
direct	-750 May 08 j 00:50	19°Ω17'04		direct	-742 May 27 j 15:16	8°♃46'39	
max. Earth dist.	-750 Aug 20 j 20:44	21°Ω45'12	32.28696 AU	max. Earth dist.	-742 Sep 10 j 07:59	11°♃24'41	31.11627 AU
conjunction	-750 Aug 23 j 16:36	21°Ω51'37	15°37'35	conjunction	-742 Sep 12 j 11:17	11°♃29'48	16°42'53
minimum elong	-750 Aug 23 j 16:17	21°Ω51'35	15°37'36	minimum elong	-742 Sep 12 j 11:12	11°♃29'48	16°42'52
retrograde	-750 Dec 04 j 16:33	24°Ω21'43		retrograde	-742 Dec 24 j 20:35	14°♃08'08	
opposition	-749 Feb 19 j 08:51	23°Ω01'14	16°45'54	opposition	-741 Mar 11 j 09:32	12°♃45'17	17°51'12
min. Earth dist.	-749 Feb 21 j 23:24	22°Ω56'57	30.27965 AU	min. Earth dist.	-741 Mar 13 j 08:25	12°♃41'59	29.15397 AU
direct	-749 May 10 j 14:18	21°Ω37'13		direct	-741 May 30 j 09:07	11°♃19'05	
max. Earth dist.	-749 Aug 23 j 12:44	24°Ω06'43	32.11341 AU	max. Earth dist.	-741 Sep 13 j 07:33	13°♃58'12	31.01280 AU
conjunction	-749 Aug 26 j 07:50	24°Ω13'07	15°51'01	conjunction	-741 Sep 15 j 06:41	14°♃02'55	16°43'23
minimum elong	-749 Aug 26 j 07:31	24°Ω13'05	15°51'02	minimum elong	-741 Sep 15 j 06:38	14°♃02'55	16°43'23
retrograde	-749 Dec 07 j 11:13	26°Ω44'29		retrograde	-741 Dec 27 j 15:14	16°♃41'57	
opposition	-748 Feb 22 j 00:15	25°Ω23'41	16°59'50	opposition	-740 Mar 13 j 06:30	15°♃18'55	17°50'58
min. Earth dist.	-748 Feb 24 j 12:57	25°Ω19'31	30.11175 AU	min. Earth dist.	-740 Mar 15 j 02:22	15°♃15'50	29.05614 AU
direct	-748 May 12 j 06:09	23°Ω59'21		direct	-740 Jun 01 j 06:08	13°♃52'37	
max. Earth dist.	-748 Aug 25 j 07:11	26°Ω30'20	31.94668 AU	max. Earth dist.	-740 Sep 15 j 05:17	16°♃32'30	30.92096 AU
conjunction	-748 Aug 27 j 23:58	26°Ω36'33	16°03'06	conjunction	-740 Sep 17 j 02:18	16°♃37'02	16°41'58
minimum elong	-748 Aug 27 j 23:42	26°Ω36'31	16°03'06	minimum elong	-740 Sep 17 j 02:18	16°♃37'02	16°41'57
retrograde	-748 Dec 09 j 03:33	29°Ω09'08		retrograde	-740 Dec 29 j 12:38	19°♃16'42	
opposition	-747 Feb 23 j 16:45	27°Ω48'01	17°12'17	opposition	-739 Mar 16 j 03:52	17°♃53'32	17°48'40
min. Earth dist.	-747 Feb 26 j 04:46	27°Ω43'52	29.95058 AU	min. Earth dist.	-739 Mar 17 j 20:34	17°♃50'40	28.96973 AU
direct	-747 May 14 j 21:44	26°Ω23'22		direct	-739 Jun 04 j 01:53	16°♃27'10	
max. Earth dist.	-747 Aug 28 j 01:14	28°Ω55'40	31.78722 AU	max. Earth dist.	-739 Sep 18 j 05:30	19°♃07'58	30.84066 AU
conjunction	-747 Aug 30 j 16:27	29°Ω01'47	16°13'45	conjunction	-739 Sep 19 j 22:13	19°♃12'05	16°38'37
minimum elong	-747 Aug 30 j 16:11	29°Ω01'45	16°13'45	minimum elong	-739 Sep 19 j 22:15	19°♃12'05	16°38'38
	-747 Sep 25 j 07:57	0°♃		retrograde	-738 Jan 01 j 08:30	21°♃52'17	
retrograde	-747 Dec 11 j 22:28	1°♃35'31		opposition	-738 Mar 19 j 01:45	20°♃29'02	17°44'16

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Attention, astronomical year style is used: The year -738 in astronomical counting style is the year 739 BCE in historical counting style.

min. Earth dist.	-738 Mar 20 j 16:08	20° \mathbb{M} 26'19	28.89425 AU	min. Earth dist.	-730 Apr 10 j 05:43	11° \mathbb{A} 22'59	28.66360 AU
direct	-738 Jun 06 j 22:22	19° \mathbb{M} 02'39		direct	-730 Jun 28 j 12:51	9° \mathbb{A} 58'14	
max. Earth dist.	-738 Sep 21 j 03:52	21° \mathbb{M} 44'03	30.77162 AU				
conjunction	-738 Sep 22 j 18:20	21° \mathbb{M} 47'57	16°33'21	conjunction	-730 Oct 13 j 11:25	12° \mathbb{A} 42'11	14°43'28
minimum elong	-738 Sep 22 j 18:24	21° \mathbb{M} 47'57	16°33'20	minimum elong	-730 Oct 13 j 11:44	12° \mathbb{A} 42'13	14°43'27
retrograde	-737 Jan 04 j 06:52	24° \mathbb{M} 28'37		max. Earth dist.	-730 Oct 12 j 23:51	12° \mathbb{A} 41'00	30.60162 AU
opposition	-737 Mar 21 j 23:46	23° \mathbb{M} 05'17	17°37'47	retrograde	-729 Jan 25 j 03:57	15° \mathbb{A} 22'28	
min. Earth dist.	-737 Mar 23 j 10:37	23° \mathbb{M} 02'49	28.82957 AU	opposition	-729 Apr 12 j 13:48	13° \mathbb{A} 59'07	15°33'11
direct	-737 Jun 09 j 20:26	21° \mathbb{M} 38'55		min. Earth dist.	-729 Apr 13 j 00:20	13° \mathbb{A} 58'23	28.68311 AU
max. Earth dist.	-737 Sep 24 j 04:16	24° \mathbb{M} 21'00	30.71338 AU	direct	-729 Jul 01 j 12:46	12° \mathbb{A} 33'33	
conjunction	-737 Sep 25 j 14:48	24° \mathbb{M} 24'30	16°26'09	conjunction	-729 Oct 16 j 06:15	15° \mathbb{A} 16'48	14°21'44
minimum elong	-737 Sep 25 j 14:55	24° \mathbb{M} 24'31	16°26'09	minimum elong	-729 Oct 16 j 06:37	15° \mathbb{A} 16'50	14°21'44
retrograde	-736 Jan 07 j 03:24	27° \mathbb{M} 05'31		max. Earth dist.	-729 Oct 15 j 21:24	15° \mathbb{A} 15'55	30.63067 AU
opposition	-736 Mar 23 j 22:27	25° \mathbb{M} 42'08	17°29'13	retrograde	-728 Jan 27 j 23:10	17° \mathbb{A} 56'35	
min. Earth dist.	-736 Mar 25 j 07:23	25° \mathbb{M} 39'49	28.77523 AU	opposition	-728 Apr 14 j 11:56	16° \mathbb{A} 33'20	15°09'03
direct	-736 Jun 11 j 18:42	24° \mathbb{M} 15'49		min. Earth dist.	-728 Apr 14 j 18:38	16° \mathbb{A} 32'52	28.71490 AU
max. Earth dist.	-736 Sep 26 j 03:08	26° \mathbb{M} 58'18	30.66583 AU	direct	-728 Jul 03 j 09:43	15° \mathbb{A} 07'59	
conjunction	-736 Sep 27 j 11:05	27° \mathbb{M} 01'33	16°17'01	conjunction	-728 Oct 18 j 00:44	17° \mathbb{A} 50'28	13°58'24
minimum elong	-736 Sep 27 j 11:14	27° \mathbb{M} 01'33	16°17'01	minimum elong	-728 Oct 18 j 01:06	17° \mathbb{A} 50'30	13°58'23
retrograde	-735 Jan 09 j 01:51	29° \mathbb{M} 42'48		max. Earth dist.	-728 Oct 17 j 20:41	17° \mathbb{A} 50'04	30.67216 AU
opposition	-735 Mar 26 j 21:13	28° \mathbb{M} 19'23	17°18'36	retrograde	-727 Jan 29 j 16:47	20° \mathbb{A} 29'41	
min. Earth dist.	-735 Mar 28 j 02:09	28° \mathbb{M} 17'21	28.73109 AU	opposition	-727 Apr 17 j 09:45	19° \mathbb{A} 06'34	14°43'13
direct	-735 Jun 14 j 17:47	26° \mathbb{M} 53'07		min. Earth dist.	-727 Apr 17 j 13:18	19° \mathbb{A} 06'20	28.75879 AU
max. Earth dist.	-735 Sep 29 j 03:05	29° \mathbb{M} 35'59	30.62858 AU	direct	-727 Jul 06 j 07:23	17° \mathbb{A} 41'28	
conjunction	-735 Sep 30 j 07:39	29° \mathbb{M} 38'53	16°06'00	conjunction	-727 Oct 20 j 18:42	20° \mathbb{A} 23'07	13°33'31
minimum elong	-735 Sep 30 j 07:51	29° \mathbb{M} 38'54	16°06'01	minimum elong	-727 Oct 20 j 19:06	20° \mathbb{A} 23'09	13°33'31
retrograde	-735 Oct 08 j 23:38	0° \mathbb{A}		max. Earth dist.	-727 Oct 20 j 17:15	20° \mathbb{A} 22'58	30.72587 AU
opposition	-734 Jan 11 j 22:58	2° \mathbb{A} 20'15		retrograde	-726 Feb 01 j 11:13	23° \mathbb{A} 01'41	
min. Earth dist.	-734 Mar 29 j 20:06	0° \mathbb{A} 56'50	17°05'56	opposition	-726 Apr 20 j 06:52	21° \mathbb{A} 38'45	14°15'47
direct	-734 Mar 30 j 23:15	0° \mathbb{A} 54'55	28.69698 AU	min. Earth dist.	-726 Apr 20 j 06:14	21° \mathbb{A} 38'48	28.81464 AU
retrograde	-734 May 05 j 12:11	30° \mathbb{R} \mathbb{M}		direct	-726 Jul 09 j 04:20	20° \mathbb{A} 13'56	
direct	-734 Jun 17 j 16:02	29° \mathbb{M} 30'38		conjunction	-726 Oct 23 j 12:21	22° \mathbb{A} 54'40	13°07'14
max. Earth dist.	-734 Jul 29 j 09:13	0° \mathbb{A}		minimum elong	-726 Oct 23 j 12:44	22° \mathbb{A} 54'42	13°07'13
conjunction	-734 Oct 02 j 02:31	2° \mathbb{A} 13'41	30.60177 AU	max. Earth dist.	-726 Oct 23 j 15:22	22° \mathbb{A} 54'58	30.79126 AU
minimum elong	-734 Oct 03 j 04:07	2° \mathbb{A} 16'17	15°53'07	retrograde	-725 Feb 04 j 03:27	25° \mathbb{A} 32'32	
retrograde	-734 Oct 03 j 04:20	2° \mathbb{A} 16'19	15°53'06	opposition	-725 Apr 23 j 03:55	24° \mathbb{A} 09'48	13°46'52
opposition	-733 Jan 14 j 21:17	4° \mathbb{A} 57'40		min. Earth dist.	-725 Apr 23 j 00:46	24° \mathbb{A} 10'01	28.88175 AU
min. Earth dist.	-733 Apr 01 j 19:02	3° \mathbb{A} 34'14	16°51'16	direct	-725 Jul 12 j 01:18	22° \mathbb{A} 45'19	
direct	-733 Apr 02 j 18:14	3° \mathbb{A} 32'36	28.67284 AU	conjunction	-725 Oct 26 j 05:14	25° \mathbb{A} 25'03	12°39'36
max. Earth dist.	-733 Jun 20 j 16:45	2° \mathbb{A} 08'07		minimum elong	-725 Oct 26 j 05:38	25° \mathbb{A} 25'05	12°39'36
conjunction	-733 Oct 05 j 01:48	4° \mathbb{A} 51'15	30.58520 AU	max. Earth dist.	-725 Oct 26 j 10:48	25° \mathbb{A} 25'36	30.86775 AU
minimum elong	-733 Oct 06 j 00:23	4° \mathbb{A} 53'32	15°38'23	retrograde	-724 Feb 06 j 21:47	28° \mathbb{A} 02'09	
retrograde	-733 Oct 06 j 00:38	4° \mathbb{A} 53'34	15°38'23	opposition	-724 Apr 25 j 00:23	26° \mathbb{A} 39'37	13°16'34
opposition	-732 Jan 17 j 17:08	7° \mathbb{A} 34'49		min. Earth dist.	-724 Apr 24 j 16:54	26° \mathbb{A} 40'08	28.95957 AU
min. Earth dist.	-732 Apr 03 j 18:05	6° \mathbb{A} 11'22	16°34'37	direct	-724 Jul 13 j 21:26	25° \mathbb{A} 15'28	
direct	-732 Apr 04 j 15:09	6° \mathbb{A} 09'53	28.65897 AU	conjunction	-724 Oct 27 j 21:48	27° \mathbb{A} 54'09	12°10'46
conjunction	-732 Oct 07 j 20:27	7° \mathbb{A} 30'24	15°21'50	minimum elong	-724 Oct 27 j 22:11	27° \mathbb{A} 54'11	12°10'46
minimum elong	-732 Oct 07 j 20:43	7° \mathbb{A} 30'26	15°21'50	max. Earth dist.	-724 Oct 28 j 07:11	27° \mathbb{A} 55'04	30.95456 AU
max. Earth dist.	-732 Oct 07 j 01:40	7° \mathbb{A} 28'30	30.57943 AU	retrograde	-724 Dec 28 j 11:28	0° \mathbb{M}	
retrograde	-731 Jan 19 j 13:47	10° \mathbb{A} 11'26		retrograde	-723 Feb 08 j 13:51	0° \mathbb{M} 30'25	
opposition	-731 Apr 06 j 16:52	8° \mathbb{A} 48'01	16°16'01	retrograde	-723 Mar 24 j 15:21	30° \mathbb{R} \mathbb{A}	
min. Earth dist.	-731 Apr 07 j 10:01	8° \mathbb{A} 46'49	28.65567 AU	opposition	-723 Apr 27 j 20:25	29° \mathbb{A} 08'07	12°45'01
direct	-731 Jun 25 j 15:10	7° \mathbb{A} 22'08		min. Earth dist.	-723 Apr 27 j 10:53	29° \mathbb{A} 08'46	29.04749 AU
conjunction	-731 Oct 10 j 16:02	10° \mathbb{A} 06'40	15°03'31	direct	-723 Jul 16 j 17:33	27° \mathbb{A} 44'19	
minimum elong	-731 Oct 10 j 16:21	10° \mathbb{A} 06'42	15°03'31	retrograde	-723 Oct 21 j 06:51	0° \mathbb{M}	
max. Earth dist.	-731 Oct 10 j 00:04	10° \mathbb{A} 05'03	30.58468 AU	conjunction	-723 Oct 30 j 13:41	0° \mathbb{M} 21'52	11°40'49
retrograde	-730 Jan 22 j 10:19	12° \mathbb{A} 47'23		minimum elong	-723 Oct 30 j 14:06	0° \mathbb{M} 21'54	11°40'49
opposition	-730 Apr 09 j 15:30	11° \mathbb{A} 23'59	15°55'31	max. Earth dist.	-723 Oct 31 j 01:44	0° \mathbb{M} 23'03	31.05122 AU
				retrograde	-722 Feb 11 j 07:03	2° \mathbb{M} 57'14	
				opposition	-722 Apr 30 j 15:45	1° \mathbb{M} 35'10	12°12'21

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Attention, astronomical year style is used: The year -722 in astronomical counting style is the year 723 BCE in historical counting style.

min. Earth dist.	-722 Apr 30 j 02:18	1°M.36'04	29.14479 AU	opposition	-714 May 20 j 02:01	20°M.08'54	7°22'57
direct	-722 Jul 19 j 14:51	0°M.11'43		direct	-714 Aug 08 j 06:55	18°M.48'26	
conjunction	-722 Nov 02 j 05:01	2°M.48'05	11°09'52	conjunction	-714 Nov 20 j 05:31	21°M.14'07	6°37'41
minimum elong	-722 Nov 02 j 05:25	2°M.48'07	11°09'51	minimum elong	-714 Nov 20 j 05:46	21°M.14'08	6°37'40
max. Earth dist.	-722 Nov 02 j 20:04	2°M.49'33	31.15684 AU	max. Earth dist.	-714 Nov 21 j 19:11	21°M.17'36	32.31600 AU
retrograde	-721 Feb 13 j 22:22	5°M.22'30		retrograde	-713 Mar 03 j 19:41	23°M.39'37	
opposition	-721 May 03 j 10:36	4°M.00'40	11°38'39	min. Earth dist.	-713 May 20 j 23:00	22°M.22'34	30.41904 AU
min. Earth dist.	-721 May 02 j 19:02	4°M.01'43	29.25105 AU	opposition	-713 May 22 j 14:49	22°M.19'59	6°44'46
direct	-721 Jul 22 j 09:27	2°M.37'34		direct	-713 Aug 10 j 19:33	20°M.59'57	
conjunction	-721 Nov 04 j 19:47	5°M.12'42	10°38'01	conjunction	-713 Nov 22 j 14:18	23°M.24'17	6°01'56
minimum elong	-721 Nov 04 j 20:11	5°M.12'44	10°38'01	minimum elong	-713 Nov 22 j 14:33	23°M.24'18	6°01'55
max. Earth dist.	-721 Nov 05 j 13:53	5°M.14'27	31.27128 AU	max. Earth dist.	-713 Nov 24 j 06:59	23°M.28'01	32.49987 AU
retrograde	-720 Feb 16 j 13:03	7°M.46'05		retrograde	-712 Mar 05 j 04:47	25°M.48'40	
min. Earth dist.	-720 May 04 j 09:43	6°M.25'46	29.36587 AU	min. Earth dist.	-712 May 22 j 09:33	24°M.32'02	30.60432 AU
opposition	-720 May 05 j 04:47	6°M.24'29	11°04'02	opposition	-712 May 24 j 03:05	24°M.29'22	6°06'28
direct	-720 Jul 24 j 05:57	5°M.01'44		direct	-712 Aug 12 j 06:13	23°M.09'47	
conjunction	-720 Nov 06 j 09:38	7°M.35'35	10°05'22	conjunction	-712 Nov 23 j 22:21	25°M.32'46	5°26'05
minimum elong	-720 Nov 06 j 10:01	7°M.35'37	10°05'22	minimum elong	-712 Nov 23 j 22:34	25°M.32'47	5°26'05
max. Earth dist.	-720 Nov 07 j 06:01	7°M.37'33	31.39408 AU	max. Earth dist.	-712 Nov 25 j 17:27	25°M.36'41	32.69101 AU
retrograde	-719 Feb 18 j 04:03	10°M.07'55		retrograde	-711 Mar 07 j 13:37	27°M.55'59	
opposition	-719 May 07 j 22:17	8°M.46'32	10°28'38	min. Earth dist.	-711 May 24 j 18:01	26°M.39'53	30.79646 AU
min. Earth dist.	-719 May 07 j 00:34	8°M.48'00	29.48931 AU	opposition	-711 May 26 j 14:27	26°M.37'03	5°28'08
direct	-719 Jul 27 j 00:02	7°M.24'08		direct	-711 Aug 14 j 20:04	25°M.17'55	
conjunction	-719 Nov 08 j 22:58	9°M.56'39	9°32'00	conjunction	-711 Nov 26 j 05:47	27°M.39'33	4°50'14
minimum elong	-719 Nov 08 j 23:20	9°M.56'42	9°32'00	minimum elong	-711 Nov 26 j 05:59	27°M.39'34	4°50'13
max. Earth dist.	-719 Nov 09 j 22:54	9°M.58'57	31.52540 AU	max. Earth dist.	-711 Nov 28 j 02:37	27°M.43'36	32.88828 AU
retrograde	-718 Feb 20 j 15:37	12°M.27'52		retrograde	-710 Feb 27 j 18:37	0° 2	
opposition	-718 May 10 j 14:49	11°M.06'45	9°52'31	retrograde	-710 Mar 09 j 23:15	0° 2 01'36	
min. Earth dist.	-718 May 09 j 14:26	11°M.08'22	29.62129 AU		-710 Mar 20 j 01:29	30°R.M.	
direct	-718 Jul 29 j 18:57	9°M.44'41		min. Earth dist.	-710 May 27 j 02:40	28°M.45'58	30.99480 AU
conjunction	-718 Nov 11 j 11:21	12°M.15'51	8°58'02	opposition	-710 May 29 j 01:04	28°M.43'01	4°49'51
minimum elong	-718 Nov 11 j 11:41	12°M.15'53	8°58'01	direct	-710 Aug 17 j 06:53	27°M.24'19	
max. Earth dist.	-718 Nov 12 j 13:15	12°M.18'19	31.66534 AU	conjunction	-710 Nov 28 j 12:41	29°M.44'37	4°14'26
retrograde	-717 Feb 23 j 03:47	14°M.45'56		minimum elong	-710 Nov 28 j 12:51	29°M.44'38	4°14'26
min. Earth dist.	-717 May 12 j 02:55	13°M.26'54	29.76243 AU	max. Earth dist.	-710 Nov 30 j 12:09	29°M.48'52	33.09114 AU
opposition	-717 May 13 j 06:47	13°M.25'03	9°15'48		-710 Dec 05 j 16:35	0° 2	
direct	-717 Aug 01 j 10:54	12°M.03'22		retrograde	-709 Mar 12 j 04:44	2° 2 05'31	
conjunction	-717 Nov 13 j 23:00	14°M.33'09	8°23'31	min. Earth dist.	-709 May 29 j 11:00	0° 2 50'18	31.19839 AU
minimum elong	-717 Nov 13 j 23:20	14°M.33'11	8°23'30	opposition	-709 May 31 j 11:06	0° 2 47'16	4°11'42
max. Earth dist.	-717 Nov 15 j 05:01	14°M.36'00	31.81435 AU		-709 Jul 03 j 19:26	30°R.M.	
retrograde	-717 Nov 25 j 20:13	15°M.		direct	-709 Aug 19 j 18:45	29°M.29'00	
retrograde	-716 Feb 25 j 13:14	17°M.02'06			-709 Oct 03 j 18:37	0° 2	
opposition	-716 May 14 j 22:04	15°M.41'29	8°38'34	conjunction	-709 Nov 30 j 18:40	1° 2 47'56	3°38'46
min. Earth dist.	-716 May 13 j 15:51	15°M.43'29	29.91283 AU	minimum elong	-709 Nov 30 j 18:49	1° 2 47'57	3°38'46
direct	-716 Jun 11 j 09:26	15°R.M.		max. Earth dist.	-709 Dec 02 j 19:04	1° 2 52'14	33.29872 AU
	-716 Aug 03 j 03:09	14°M.20'11		retrograde	-708 Mar 13 j 10:58	4° 2 07'40	
	-716 Sep 22 j 06:06	15°M.		min. Earth dist.	-708 May 30 j 17:48	2° 2 52'55	31.40683 AU
conjunction	-716 Nov 15 j 09:53	16°M.48'35	7°48'34	opposition	-708 Jun 01 j 20:27	2° 2 49'44	3°33'45
minimum elong	-716 Nov 15 j 10:11	16°M.48'37	7°48'34	direct	-708 Aug 21 j 04:43	1° 2 31'52	
max. Earth dist.	-716 Nov 16 j 17:49	16°M.51'35	31.97262 AU	conjunction	-708 Dec 02 j 00:17	3° 2 49'28	3°03'18
retrograde	-715 Feb 27 j 00:50	19°M.16'23		minimum elong	-708 Dec 02 j 00:24	3° 2 49'28	3°03'18
min. Earth dist.	-715 May 16 j 02:04	17°M.58'20	30.07272 AU	max. Earth dist.	-708 Dec 04 j 03:28	3° 2 53'59	33.51062 AU
opposition	-715 May 17 j 12:19	17°M.56'05	8°00'55	retrograde	-707 Mar 15 j 14:09	6° 2 08'00	
direct	-715 Aug 05 j 17:07	16°M.35'11		min. Earth dist.	-707 Jun 02 j 01:23	4° 2 53'37	31.61957 AU
conjunction	-715 Nov 17 j 20:08	19°M.02'13	7°13'15	opposition	-707 Jun 04 j 04:53	4° 2 50'23	2°56'03
minimum elong	-715 Nov 17 j 20:25	19°M.02'15	7°13'15	direct	-707 Aug 23 j 15:24	3° 2 32'55	
max. Earth dist.	-715 Nov 19 j 07:48	19°M.05'33	32.13998 AU	conjunction	-707 Dec 04 j 04:59	5° 2 49'09	2°28'03
retrograde	-714 Mar 01 j 09:25	21°M.28'53		minimum elong	-707 Dec 04 j 05:05	5° 2 49'09	2°28'03
min. Earth dist.	-714 May 18 j 13:56	20°M.11'15	30.24164 AU	max. Earth dist.	-707 Dec 06 j 08:51	5° 2 53'41	33.72660 AU

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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.

retrograde	-706 Mar 17 j 18:55	8° $\overline{\text{A}}$ 06'31		retrograde	-698 Apr 01 j 07:03	22° $\overline{\text{A}}$ 54'03	
min. Earth dist.	-706 Jun 04 j 06:10	6° $\overline{\text{A}}$ 52'35	31.83663 AU	min. Earth dist.	-698 Jun 19 j 06:24	21° $\overline{\text{A}}$ 43'21	33.73857 AU
opposition	-706 Jun 06 j 12:33	6° $\overline{\text{A}}$ 49'12	2°18'40	opposition	-698 Jun 22 j 01:00	21° $\overline{\text{A}}$ 39'23	-2°-24'-3
direct	-706 Aug 25 j 23:36	5° $\overline{\text{A}}$ 32'05		direct	-698 Sep 10 j 15:03	20° $\overline{\text{A}}$ 25'29	
conjunction	-706 Dec 06 j 08:56	7° $\overline{\text{A}}$ 46'59	1°53'06	conjunction	-698 Dec 20 j 18:28	22° $\overline{\text{A}}$ 30'49	-2°-31'-25
minimum elong	-706 Dec 06 j 09:01	7° $\overline{\text{A}}$ 46'59	1°53'06	minimum elong	-698 Dec 20 j 18:23	22° $\overline{\text{A}}$ 30'49	2°31'27
max. Earth dist.	-706 Dec 08 j 15:24	7° $\overline{\text{A}}$ 51'42	33.94667 AU	max. Earth dist.	-698 Dec 23 j 12:59	22° $\overline{\text{A}}$ 36'15	35.86337 AU
retrograde	-705 Mar 19 j 21:01	10° $\overline{\text{A}}$ 03'11		retrograde	-697 Apr 03 j 06:41	24° $\overline{\text{A}}$ 38'37	
min. Earth dist.	-705 Jun 06 j 12:26	8° $\overline{\text{A}}$ 49'34	32.05826 AU	min. Earth dist.	-697 Jun 21 j 06:14	23° $\overline{\text{A}}$ 28'22	33.99069 AU
opposition	-705 Jun 08 j 19:38	8° $\overline{\text{A}}$ 46'09	1°41'38	opposition	-697 Jun 24 j 02:42	23° $\overline{\text{A}}$ 24'18	-2°-56'-50
direct	-705 Aug 28 j 06:56	7° $\overline{\text{A}}$ 29'25		direct	-697 Sep 12 j 16:13	22° $\overline{\text{A}}$ 10'48	
conjunction	-705 Dec 08 j 12:16	9° $\overline{\text{A}}$ 42'59	1°18'29	conjunction	-697 Dec 22 j 17:17	24° $\overline{\text{A}}$ 15'04	-3°-2'-9
minimum elong	-705 Dec 08 j 12:19	9° $\overline{\text{A}}$ 42'59	1°18'28	minimum elong	-697 Dec 22 j 17:11	24° $\overline{\text{A}}$ 15'03	3°02'10
max. Earth dist.	-705 Dec 10 j 20:07	9° $\overline{\text{A}}$ 47'47	34.17139 AU	max. Earth dist.	-697 Dec 25 j 12:46	24° $\overline{\text{A}}$ 20'31	36.11501 AU
retrograde	-704 Mar 21 j 00:30	11° $\overline{\text{A}}$ 58'02		retrograde	-696 Apr 04 j 06:41	26° $\overline{\text{A}}$ 21'54	
min. Earth dist.	-704 Jun 07 j 15:51	10° $\overline{\text{A}}$ 44'52	32.28484 AU	min. Earth dist.	-696 Jun 22 j 07:17	25° $\overline{\text{A}}$ 11'58	34.24376 AU
opposition	-704 Jun 10 j 01:48	10° $\overline{\text{A}}$ 41'18	1°05'00	opposition	-696 Jun 25 j 03:56	25° $\overline{\text{A}}$ 07'56	-3°-28'-59
direct	-704 Aug 29 j 13:07	9° $\overline{\text{A}}$ 24'55		direct	-696 Sep 13 j 16:24	23° $\overline{\text{A}}$ 54'48	
conjunction	-704 Dec 09 j 14:50	11° $\overline{\text{A}}$ 37'12	0°44'15	conjunction	-696 Dec 23 j 15:43	25° $\overline{\text{A}}$ 58'00	-3°-32'-18
minimum elong	-704 Dec 09 j 14:51	11° $\overline{\text{A}}$ 37'13	0°44'14	minimum elong	-696 Dec 23 j 15:36	25° $\overline{\text{A}}$ 58'00	3°32'20
max. Earth dist.	-704 Dec 12 j 00:41	11° $\overline{\text{A}}$ 42'09	34.40085 AU	max. Earth dist.	-696 Dec 26 j 12:15	26° $\overline{\text{A}}$ 03'30	36.36717 AU
retrograde	-703 Mar 23 j 03:55	13° $\overline{\text{A}}$ 51'09		retrograde	-695 Apr 06 j 06:01	28° $\overline{\text{A}}$ 03'53	
min. Earth dist.	-703 Jun 09 j 19:59	12° $\overline{\text{A}}$ 38'21	32.51659 AU	min. Earth dist.	-695 Jun 24 j 07:00	26° $\overline{\text{A}}$ 54'17	34.49700 AU
opposition	-703 Jun 12 j 07:23	12° $\overline{\text{A}}$ 34'43	0°28'50	opposition	-695 Jun 27 j 04:27	26° $\overline{\text{A}}$ 50'13	-4°00'-30
direct	-703 Aug 31 j 17:16	11° $\overline{\text{A}}$ 18'44		direct	-695 Sep 15 j 17:24	25° $\overline{\text{A}}$ 37'26	
conjunction	-703 Dec 11 j 16:57	13° $\overline{\text{A}}$ 29'46	0°10'27	conjunction	-695 Dec 25 j 13:27	27° $\overline{\text{A}}$ 39'36	-4°-1'-52
minimum elong	-703 Dec 11 j 16:57	13° $\overline{\text{A}}$ 29'46	0°10'26	minimum elong	-695 Dec 25 j 13:19	27° $\overline{\text{A}}$ 39'35	4°01'53
behind sun begin	-703 Dec 11 j 11:55	13° $\overline{\text{A}}$ 29'22		max. Earth dist.	-695 Dec 28 j 09:53	27° $\overline{\text{A}}$ 45'03	36.61926 AU
behind sun end	-703 Dec 11 j 22:00	13° $\overline{\text{A}}$ 30'11		retrograde	-694 Apr 08 j 05:41	29° $\overline{\text{A}}$ 44'31	
max. Earth dist.	-703 Dec 14 j 04:58	13° $\overline{\text{A}}$ 34'51	34.63526 AU	min. Earth dist.	-694 Jun 26 j 05:49	28° $\overline{\text{A}}$ 35'15	34.75051 AU
retrograde	-702 Mar 25 j 05:33	15° $\overline{\text{A}}$ 42'36		opposition	-694 Jun 29 j 04:22	28° $\overline{\text{A}}$ 31'08	-4°-31'-21
desc. node	-702 Apr 04 j 13:10	15° $\overline{\text{A}}$ 41'03		direct	-694 Sep 17 j 16:23	27° $\overline{\text{A}}$ 18'42	
min. Earth dist.	-702 Jun 11 j 22:42	14° $\overline{\text{A}}$ 30'15	32.75317 AU	conjunction	-694 Dec 27 j 10:48	29° $\overline{\text{A}}$ 19'49	-4°-30'-49
opposition	-702 Jun 14 j 12:02	14° $\overline{\text{A}}$ 26'31	0°-6'-50	minimum elong	-694 Dec 27 j 10:40	29° $\overline{\text{A}}$ 19'48	4°30'52
direct	-702 Sep 03 j 00:06	13° $\overline{\text{A}}$ 10'56		max. Earth dist.	-694 Dec 30 j 08:58	29° $\overline{\text{A}}$ 25'21	36.87160 AU
conjunction	-702 Dec 13 j 18:18	15° $\overline{\text{A}}$ 20'46	0°-22'-59	-693 Jan 18 j 00:30	0° $\overline{\text{C}}$		
minimum elong	-702 Dec 13 j 18:17	15° $\overline{\text{A}}$ 20'46	0°23'00	retrograde	-693 Apr 10 j 00:40	1° $\overline{\text{C}}$ 23'47	
max. Earth dist.	-702 Dec 16 j 07:15	15° $\overline{\text{A}}$ 25'53	34.87420 AU	min. Earth dist.	-693 Jun 28 j 05:19	0° $\overline{\text{C}}$ 14'46	35.00442 AU
retrograde	-701 Mar 27 j 08:39	17° $\overline{\text{A}}$ 32'33		opposition	-693 Jul 01 j 03:50	0° $\overline{\text{C}}$ 10'41	-5°-1'-31
min. Earth dist.	-701 Jun 14 j 00:48	16° $\overline{\text{A}}$ 20'38	32.99445 AU	-693 Jul 08 j 20:22	30° $\overline{\text{R}}$ $\overline{\text{A}}$		
opposition	-701 Jun 16 j 16:16	16° $\overline{\text{A}}$ 16'48	0°-42'00	direct	-693 Sep 19 j 18:05	28° $\overline{\text{A}}$ 58'33	
direct	-701 Sep 05 j 04:12	15° $\overline{\text{A}}$ 01'38		-693 Nov 26 j 19:11	0° $\overline{\text{C}}$		
conjunction	-701 Dec 15 j 19:08	17° $\overline{\text{A}}$ 10'19	0°-55'-52	conjunction	-693 Dec 29 j 07:23	0° $\overline{\text{C}}$ 58'38	-4°-59'-10
minimum elong	-701 Dec 15 j 19:06	17° $\overline{\text{A}}$ 10'19	0°55'54	minimum elong	-693 Dec 29 j 07:13	0° $\overline{\text{C}}$ 58'38	4°59'11
max. Earth dist.	-701 Dec 18 j 10:42	17° $\overline{\text{A}}$ 15'36	35.11728 AU	max. Earth dist.	-692 Jan 01 j 05:23	1° $\overline{\text{C}}$ 04'08	37.12449 AU
retrograde	-700 Mar 28 j 08:30	19° $\overline{\text{A}}$ 21'03		retrograde	-692 Apr 10 j 20:06	3° $\overline{\text{C}}$ 01'40	
min. Earth dist.	-700 Jun 15 j 03:41	18° $\overline{\text{A}}$ 09'32	33.23957 AU	min. Earth dist.	-692 Jun 29 j 02:17	1° $\overline{\text{C}}$ 53'01	35.25931 AU
opposition	-700 Jun 17 j 19:53	18° $\overline{\text{A}}$ 05'40	-1°-16'-36	opposition	-692 Jul 02 j 02:38	1° $\overline{\text{C}}$ 48'50	-5°-31'-1
direct	-700 Sep 06 j 09:17	16° $\overline{\text{A}}$ 50'56		direct	-692 Sep 20 j 18:44	0° $\overline{\text{C}}$ 37'01	
conjunction	-700 Dec 16 j 19:24	18° $\overline{\text{A}}$ 58'28	-1°-28'-15	conjunction	-692 Dec 30 j 03:40	2° $\overline{\text{C}}$ 36'07	-5°-26'-52
minimum elong	-700 Dec 16 j 19:21	18° $\overline{\text{A}}$ 58'28	1°28'17	minimum elong	-692 Dec 30 j 03:30	2° $\overline{\text{C}}$ 36'06	5°26'54
max. Earth dist.	-700 Dec 19 j 11:23	19° $\overline{\text{A}}$ 03'45	35.36371 AU	max. Earth dist.	-691 Jan 02 j 03:29	2° $\overline{\text{C}}$ 41'43	37.37834 AU
retrograde	-699 Mar 30 j 08:29	21° $\overline{\text{A}}$ 08'12		retrograde	-691 Apr 12 j 14:39	4° $\overline{\text{C}}$ 38'14	
min. Earth dist.	-699 Jun 17 j 04:06	19° $\overline{\text{A}}$ 57'10	33.48792 AU	min. Earth dist.	-691 Jul 01 j 00:39	3° $\overline{\text{C}}$ 29'50	35.51547 AU
opposition	-699 Jun 19 j 22:37	19° $\overline{\text{A}}$ 53'11	-1°-50'-38	opposition	-691 Jul 04 j 00:49	3° $\overline{\text{C}}$ 25'40	-5°-59'-49
direct	-699 Sep 08 j 12:18	18° $\overline{\text{A}}$ 38'52		direct	-691 Sep 22 j 18:12	2° $\overline{\text{C}}$ 14'11	
conjunction	-699 Dec 18 j 19:15	20° $\overline{\text{A}}$ 45'17	-2°00'-7	conjunction	-691 Dec 31 j 23:27	4° $\overline{\text{C}}$ 12'18	-5°-53'-57
minimum elong	-699 Dec 18 j 19:11	20° $\overline{\text{A}}$ 45'17	2°00'08	minimum elong	-691 Dec 31 j 23:16	4° $\overline{\text{C}}$ 12'17	5°53'57
max. Earth dist.	-699 Dec 21 j 13:22	20° $\overline{\text{A}}$ 50'43	35.61265 AU	max. Earth dist.	-690 Jan 03 j 23:39	4° $\overline{\text{C}}$ 17'53	37.63356 AU

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Attention, astronomical year style is used: The year -690 in astronomical counting style is the year 691 BCE in historical counting style.

retrograde	-690 Apr 14 j 09:55	6°☾13'33		direct	-682 Oct 07 j 03:29	15°☾59'14	
min. Earth dist.	-690 Jul 02 j 20:30	5°☾05'30	35.77298 AU				
opposition	-690 Jul 05 j 22:26	5°☾01'16	-6°-27'-55	conjunction	-681 Jan 14 j 15:21	17°☾49'48	-9°-29'-2
direct	-690 Sep 24 j 16:15	3°☾50'05		minimum elong	-681 Jan 14 j 15:07	17°☾49'47	9°29'04
				max. Earth dist.	-681 Jan 17 j 19:17	17°☾55'19	39.92900 AU
conjunction	-689 Jan 02 j 18:33	5°☾47'16	-6°-20'-22	retrograde	-681 Apr 28 j 05:08	19°☾44'04	
minimum elong	-689 Jan 02 j 18:23	5°☾47'15	6°20'24	min. Earth dist.	-681 Jul 17 j 01:50	18°☾38'25	38.08207 AU
max. Earth dist.	-689 Jan 05 j 19:37	5°☾52'53	37.88994 AU	opposition	-681 Jul 20 j 05:15	18°☾34'16	-10°-10'00
retrograde	-689 Apr 16 j 06:53	7°☾47'41		direct	-681 Oct 08 j 21:43	17°☾25'50	
min. Earth dist.	-689 Jul 04 j 17:27	6°☾39'55	36.03182 AU				
opposition	-689 Jul 07 j 19:48	6°☾35'41	-6°-55'-20	conjunction	-680 Jan 16 j 07:13	19°☾15'37	-9°-49'-52
direct	-689 Sep 26 j 11:48	5°☾24'50		minimum elong	-680 Jan 16 j 07:00	19°☾15'36	9°49'53
				max. Earth dist.	-680 Jan 19 j 10:18	19°☾21'03	40.17575 AU
conjunction	-688 Jan 04 j 13:31	7°☾21'07	-6°-46'-10	retrograde	-680 Apr 28 j 21:07	21°☾09'09	
minimum elong	-688 Jan 04 j 13:19	7°☾21'06	6°46'10	min. Earth dist.	-680 Jul 17 j 18:02	20°☾03'46	38.33032 AU
max. Earth dist.	-688 Jan 07 j 15:52	7°☾26'47	38.14748 AU	opposition	-680 Jul 20 j 22:23	19°☾59'35	-10°-31'-23
retrograde	-688 Apr 17 j 02:43	9°☾20'41		direct	-680 Oct 09 j 14:52	18°☾51'23	
min. Earth dist.	-688 Jul 05 j 13:32	8°☾13'14	36.29145 AU				
opposition	-688 Jul 08 j 16:26	8°☾09'00	-7°-22'-2	conjunction	-679 Jan 16 j 22:46	20°☾40'27	-10°-10'-5
direct	-688 Sep 27 j 07:47	6°☾58'29		minimum elong	-679 Jan 16 j 22:32	20°☾40'26	10°10'06
				max. Earth dist.	-679 Jan 20 j 03:04	20°☾45'56	40.42116 AU
conjunction	-687 Jan 05 j 07:53	8°☾53'53	-7°-11'-18	retrograde	-679 Apr 30 j 09:59	22°☾33'17	
minimum elong	-687 Jan 05 j 07:42	8°☾53'52	7°11'20	min. Earth dist.	-679 Jul 19 j 11:40	21°☾28'04	38.57745 AU
max. Earth dist.	-687 Jan 08 j 10:03	8°☾59'30	38.40545 AU	opposition	-679 Jul 22 j 15:12	21°☾23'56	-10°-52'-6
retrograde	-687 Apr 18 j 22:47	10°☾52'40		direct	-679 Oct 11 j 10:20	20°☾16'00	
min. Earth dist.	-687 Jul 07 j 08:43	9°☾45'33	36.55144 AU				
opposition	-687 Jul 10 j 12:43	9°☾41'16	-7°-48'-2	conjunction	-678 Jan 18 j 13:54	22°☾04'20	-10°-29'-41
direct	-687 Sep 29 j 02:48	8°☾31'05		minimum elong	-678 Jan 18 j 13:42	22°☾04'19	10°29'43
				max. Earth dist.	-678 Jan 21 j 17:48	22°☾09'46	40.66575 AU
conjunction	-686 Jan 07 j 02:01	10°☾25'39	-7°-35'-48	retrograde	-678 May 01 j 23:53	23°☾56'30	
minimum elong	-686 Jan 07 j 01:49	10°☾25'38	7°35'50	min. Earth dist.	-678 Jul 21 j 02:45	22°☾51'34	38.82384 AU
max. Earth dist.	-686 Jan 10 j 05:42	10°☾31'20	38.66329 AU	opposition	-678 Jul 24 j 07:28	22°☾47'23	-11°-12'-11
retrograde	-686 Apr 20 j 15:02	12°☾23'38		direct	-678 Oct 13 j 03:47	21°☾39'42	
min. Earth dist.	-686 Jul 09 j 05:06	11°☾16'46	36.81092 AU				
opposition	-686 Jul 12 j 08:31	11°☾12'32	-8°-13'-21	conjunction	-677 Jan 20 j 04:41	23°☾27'21	-10°-48'-41
direct	-686 Oct 01 j 00:51	10°☾02'41		minimum elong	-677 Jan 20 j 04:28	23°☾27'20	10°48'42
				max. Earth dist.	-677 Jan 23 j 09:00	23°☾32'46	40.90968 AU
conjunction	-685 Jan 08 j 19:46	11°☾56'25	-7°-59'-41	retrograde	-677 May 03 j 15:31	25°☾18'53	
minimum elong	-685 Jan 08 j 19:33	11°☾56'24	7°59'43	min. Earth dist.	-677 Jul 22 j 19:18	24°☾14'09	39.06975 AU
max. Earth dist.	-685 Jan 11 j 22:45	12°☾02'02	38.92038 AU	opposition	-677 Jul 25 j 23:36	24°☾10'01	-11°-31'-36
retrograde	-685 Apr 22 j 08:27	13°☾53'39		direct	-677 Oct 14 j 19:17	23°☾02'35	
min. Earth dist.	-685 Jul 10 j 23:20	12°☾47'08	37.06939 AU				
opposition	-685 Jul 14 j 03:55	12°☾42'51	-8°-38'00	conjunction	-676 Jan 21 j 19:14	24°☾49'34	-11°-7'-4
direct	-685 Oct 02 j 21:05	11°☾33'19		minimum elong	-676 Jan 21 j 19:03	24°☾49'33	11°07'06
				max. Earth dist.	-676 Jan 25 j 00:20	24°☾55'01	41.15309 AU
conjunction	-684 Jan 10 j 13:09	13°☾26'14	-8°-22'-56	retrograde	-676 May 04 j 07:04	26°☾40'28	
minimum elong	-684 Jan 10 j 12:56	13°☾26'13	8°22'57	min. Earth dist.	-676 Jul 23 j 10:39	25°☾35'59	39.31475 AU
max. Earth dist.	-684 Jan 13 j 16:55	13°☾31'52	39.17589 AU	opposition	-676 Jul 26 j 15:14	25°☾31'52	-11°-50'-23
retrograde	-684 Apr 23 j 01:17	15°☾22'43		direct	-676 Oct 15 j 10:18	24°☾24'42	
min. Earth dist.	-684 Jul 11 j 19:24	14°☾16'24	37.32608 AU				
opposition	-684 Jul 14 j 23:01	14°☾12'12	-9°-1'-59	conjunction	-675 Jan 22 j 09:27	26°☾11'03	-11°-24'-53
direct	-684 Oct 03 j 16:41	13°☾02'58		minimum elong	-675 Jan 22 j 09:14	26°☾11'02	11°24'54
				max. Earth dist.	-675 Jan 25 j 13:44	26°☾16'24	41.39544 AU
conjunction	-683 Jan 11 j 06:23	14°☾55'05	-8°-45'-34	retrograde	-675 May 06 j 00:36	28°☾01'20	
minimum elong	-683 Jan 11 j 06:10	14°☾55'04	8°45'36	min. Earth dist.	-675 Jul 25 j 01:27	26°☾57'07	39.55868 AU
max. Earth dist.	-683 Jan 14 j 10:00	15°☾00'40	39.42938 AU	opposition	-675 Jul 28 j 06:26	26°☾52'59	-12°-8'-33
retrograde	-683 Apr 24 j 18:02	16°☾50'49		direct	-675 Oct 16 j 22:16	25°☾46'06	
min. Earth dist.	-683 Jul 13 j 13:16	15°☾44'47	37.58038 AU				
opposition	-683 Jul 16 j 17:22	15°☾40'34	-9°-25'-18	conjunction	-674 Jan 23 j 23:29	27°☾31'50	-11°-42'-6
direct	-683 Oct 05 j 11:36	14°☾31'36		minimum elong	-674 Jan 23 j 23:17	27°☾31'49	11°42'08
				max. Earth dist.	-674 Jan 27 j 04:49	27°☾37'14	41.63643 AU
conjunction	-682 Jan 12 j 23:04	16°☾22'57	-9°-7'-36	retrograde	-674 May 07 j 13:54	29°☾21'32	
minimum elong	-682 Jan 12 j 22:52	16°☾22'56	9°07'37	min. Earth dist.	-674 Jul 26 j 17:32	28°☾17'30	39.80082 AU
max. Earth dist.	-682 Jan 16 j 02:08	16°☾28'27	39.68032 AU	opposition	-674 Jul 29 j 21:29	28°☾13'27	-12°-26'-7
retrograde	-682 Apr 26 j 13:15	18°☾17'57		direct	-674 Oct 18 j 13:51	27°☾06'50	
min. Earth dist.	-682 Jul 15 j 07:38	17°☾12'07	37.83235 AU				
opposition	-682 Jul 18 j 11:34	17°☾07'56	-9°-47'-58	conjunction	-673 Jan 25 j 13:04	28°☾51'57	-11°-58'-45

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Attention, astronomical year style is used: The year -673 in astronomical counting style is the year 674 BCE in historical counting style.

minimum elong	-673 Jan 25 j 12:51	28° $\overline{3}$ 51'56	11°58'46	conjunction	-665 Feb 04 j 17:46	9° $\overline{0}$ 07'02	-13°-53'-10
max. Earth dist.	-673 Jan 28 j 17:23	28° $\overline{3}$ 57'15	41.87545 AU	minimum elong	-665 Feb 04 j 17:37	9° $\overline{0}$ 07'01	13°53'11
	-673 Mar 10 j 15:42	0° $\overline{0}$		max. Earth dist.	-665 Feb 07 j 19:24	9° $\overline{0}$ 11'56	43.67475 AU
retrograde	-673 May 09 j 01:59	0° $\overline{0}$ 41'05		retrograde	-665 May 19 j 04:37	10° $\overline{0}$ 51'42	
	-673 Jul 09 j 23:42	30° \overline{R} 3		min. Earth dist.	-665 Aug 07 j 21:58	9° $\overline{0}$ 49'11	41.84432 AU
min. Earth dist.	-673 Jul 28 j 07:31	29° $\overline{3}$ 37'19	40.04069 AU	opposition	-665 Aug 10 j 22:35	9° $\overline{0}$ 45'25	-14°-39'-4
opposition	-673 Jul 31 j 12:11	29° $\overline{3}$ 33'14	-12°-43'-5	direct	-665 Oct 30 j 19:24	8° $\overline{0}$ 40'41	
direct	-673 Oct 20 j 06:00	28° $\overline{3}$ 26'53					
	-672 Jan 20 j 05:17	0° $\overline{0}$		conjunction	-664 Feb 06 j 05:18	10° $\overline{0}$ 20'41	-14°-5'-10
				minimum elong	-664 Feb 06 j 05:08	10° $\overline{0}$ 20'41	14°05'11
conjunction	-672 Jan 27 j 02:36	0° $\overline{0}$ 11'25	-12°-14'-52	max. Earth dist.	-664 Feb 09 j 07:28	10° $\overline{0}$ 25'36	43.88866 AU
minimum elong	-672 Jan 27 j 02:25	0° $\overline{0}$ 11'24	12°14'54	retrograde	-664 May 19 j 15:48	12° $\overline{0}$ 04'53	
max. Earth dist.	-672 Jan 30 j 07:12	0° $\overline{0}$ 16'43	42.11172 AU	min. Earth dist.	-664 Aug 08 j 10:13	11° $\overline{0}$ 02'32	42.05896 AU
retrograde	-672 May 09 j 14:08	1° $\overline{0}$ 59'58		opposition	-664 Aug 11 j 10:23	10° $\overline{0}$ 58'48	-14°-51'-9
min. Earth dist.	-672 Jul 28 j 23:22	0° $\overline{0}$ 56'22	40.27756 AU	direct	-664 Oct 31 j 07:32	9° $\overline{0}$ 54'17	
opposition	-672 Aug 01 j 02:35	0° $\overline{0}$ 52'22	-12°-59'-28				
	-672 Sep 17 j 08:44	30° \overline{R} 3		conjunction	-663 Feb 06 j 16:29	11° $\overline{0}$ 33'49	-14°-16'-40
direct	-672 Oct 20 j 22:00	29° $\overline{3}$ 46'16		minimum elong	-663 Feb 06 j 16:21	11° $\overline{0}$ 33'48	14°16'41
	-672 Nov 22 j 15:20	0° $\overline{0}$		max. Earth dist.	-663 Feb 09 j 17:20	11° $\overline{0}$ 38'37	44.10061 AU
				retrograde	-663 May 21 j 05:19	13° $\overline{0}$ 17'32	
conjunction	-671 Jan 27 j 16:01	1° $\overline{0}$ 30'12	-12°-30'-27	min. Earth dist.	-663 Aug 09 j 21:44	12° $\overline{0}$ 15'24	42.27153 AU
minimum elong	-671 Jan 27 j 15:50	1° $\overline{0}$ 30'11	12°30'28	opposition	-663 Aug 12 j 22:06	12° $\overline{0}$ 11'40	-15°-2'-42
max. Earth dist.	-671 Jan 30 j 20:01	1° $\overline{0}$ 35'26	42.34481 AU	direct	-663 Nov 01 j 16:43	11° $\overline{0}$ 07'22	
retrograde	-671 May 11 j 02:42	3° $\overline{0}$ 18'12					
min. Earth dist.	-671 Jul 30 j 13:23	2° $\overline{0}$ 14'48	40.51076 AU	conjunction	-662 Feb 08 j 03:26	12° $\overline{0}$ 46'27	-14°-27'-40
opposition	-671 Aug 02 j 16:36	2° $\overline{0}$ 10'49	-13°-15'-19	minimum elong	-662 Feb 08 j 03:17	12° $\overline{0}$ 46'27	14°27'42
direct	-671 Oct 22 j 13:10	1° $\overline{0}$ 04'55		max. Earth dist.	-662 Feb 11 j 05:00	12° $\overline{0}$ 51'17	44.31020 AU
				retrograde	-662 May 22 j 15:42	14° $\overline{0}$ 29'44	
conjunction	-670 Jan 29 j 04:56	2° $\overline{0}$ 48'16	-12°-45'-31	min. Earth dist.	-662 Aug 11 j 10:43	13° $\overline{0}$ 27'44	42.48143 AU
minimum elong	-670 Jan 29 j 04:45	2° $\overline{0}$ 48'15	12°45'33	opposition	-662 Aug 14 j 09:39	13° $\overline{0}$ 24'05	-15°-13'-46
max. Earth dist.	-670 Feb 01 j 07:49	2° $\overline{0}$ 53'23	42.57405 AU	direct	-662 Nov 03 j 04:40	12° $\overline{0}$ 20'01	
retrograde	-670 May 12 j 17:38	4° $\overline{0}$ 35'41					
min. Earth dist.	-670 Aug 01 j 03:57	3° $\overline{0}$ 32'26	40.74024 AU	conjunction	-661 Feb 09 j 14:20	13° $\overline{0}$ 58'40	-14°-38'-13
opposition	-670 Aug 04 j 06:29	3° $\overline{0}$ 28'30	-13°-30'-38	minimum elong	-661 Feb 09 j 14:13	13° $\overline{0}$ 58'39	14°38'15
direct	-670 Oct 24 j 01:34	2° $\overline{0}$ 22'50		max. Earth dist.	-661 Feb 12 j 14:45	14° $\overline{0}$ 03'24	44.51706 AU
					-661 Mar 23 j 11:50	15° $\overline{0}$	
conjunction	-669 Jan 30 j 17:47	4° $\overline{0}$ 05'34	-13°00'-4	retrograde	-661 May 24 j 01:26	15° $\overline{0}$ 41'30	
minimum elong	-669 Jan 30 j 17:36	4° $\overline{0}$ 05'34	13°00'05		-661 Jul 26 j 23:13	15° $\overline{0}$ R $\overline{0}$	
max. Earth dist.	-669 Feb 02 j 21:09	4° $\overline{0}$ 10'42	42.79971 AU	min. Earth dist.	-661 Aug 12 j 21:35	14° $\overline{0}$ 39'45	42.68820 AU
retrograde	-669 May 14 j 06:55	5° $\overline{0}$ 52'25		opposition	-661 Aug 15 j 20:51	14° $\overline{0}$ 36'05	-15°-24'-21
min. Earth dist.	-669 Aug 02 j 18:24	4° $\overline{0}$ 49'16	40.96609 AU	direct	-661 Nov 04 j 16:21	13° $\overline{0}$ 32'14	
opposition	-669 Aug 05 j 19:57	4° $\overline{0}$ 45'25	-13°-45'-24		-660 Feb 04 j 08:16	15° $\overline{0}$	
direct	-669 Oct 25 j 14:33	3° $\overline{0}$ 39'55					
				conjunction	-660 Feb 11 j 01:02	15° $\overline{0}$ 10'27	-14°-48'-19
conjunction	-668 Feb 01 j 06:09	5° $\overline{0}$ 22'05	-13°-14'-7	minimum elong	-660 Feb 11 j 00:53	15° $\overline{0}$ 10'27	14°48'20
minimum elong	-668 Feb 01 j 05:58	5° $\overline{0}$ 22'04	13°14'09	max. Earth dist.	-660 Feb 14 j 00:45	15° $\overline{0}$ 15'08	44.72035 AU
max. Earth dist.	-668 Feb 04 j 08:07	5° $\overline{0}$ 27'05	43.02208 AU	retrograde	-660 May 24 j 11:45	16° $\overline{0}$ 52'53	
retrograde	-668 May 14 j 20:50	7° $\overline{0}$ 08'21		min. Earth dist.	-660 Aug 13 j 10:26	15° $\overline{0}$ 51'14	42.89112 AU
min. Earth dist.	-668 Aug 03 j 07:04	6° $\overline{0}$ 05'23	41.18898 AU	opposition	-660 Aug 16 j 08:01	15° $\overline{0}$ 47'41	-15°-34'-29
opposition	-668 Aug 06 j 09:04	6° $\overline{0}$ 01'31	-13°-59'-37		-660 Sep 29 j 02:28	15° $\overline{0}$ R $\overline{0}$	
direct	-668 Oct 26 j 02:20	4° $\overline{0}$ 56'12		direct	-660 Nov 05 j 04:48	14° $\overline{0}$ 44'02	
					-660 Dec 11 j 09:49	15° $\overline{0}$	
conjunction	-667 Feb 01 j 18:22	6° $\overline{0}$ 37'48	-13°-27'-39				
minimum elong	-667 Feb 01 j 18:12	6° $\overline{0}$ 37'47	13°27'40	conjunction	-659 Feb 11 j 11:47	16° $\overline{0}$ 21'50	-14°-57'-59
max. Earth dist.	-667 Feb 04 j 20:50	6° $\overline{0}$ 42'48	43.24166 AU	minimum elong	-659 Feb 11 j 11:41	16° $\overline{0}$ 21'49	14°58'00
retrograde	-667 May 16 j 06:04	8° $\overline{0}$ 23'30		max. Earth dist.	-659 Feb 14 j 11:11	16° $\overline{0}$ 26'28	44.91955 AU
min. Earth dist.	-667 Aug 04 j 21:12	7° $\overline{0}$ 20'38	41.40936 AU	retrograde	-659 May 25 j 22:46	18° $\overline{0}$ 03'50	
opposition	-667 Aug 07 j 21:47	7° $\overline{0}$ 16'50	-14°-13'-19	min. Earth dist.	-659 Aug 14 j 21:52	17° $\overline{0}$ 02'21	43.08946 AU
direct	-667 Oct 27 j 17:14	6° $\overline{0}$ 11'43		opposition	-659 Aug 17 j 18:43	16° $\overline{0}$ 58'50	-15°-44'-10
				direct	-659 Nov 06 j 15:57	15° $\overline{0}$ 55'23	
conjunction	-666 Feb 03 j 06:18	7° $\overline{0}$ 52'45	-13°-40'-40				
minimum elong	-666 Feb 03 j 06:08	7° $\overline{0}$ 52'44	13°40'41	conjunction	-658 Feb 12 j 22:10	17° $\overline{0}$ 32'45	-15°-7'-14
max. Earth dist.	-666 Feb 06 j 08:16	7° $\overline{0}$ 57'43	43.45917 AU	minimum elong	-658 Feb 12 j 22:02	17° $\overline{0}$ 32'45	15°07'15
retrograde	-666 May 17 j 15:43	9° $\overline{0}$ 37'55		max. Earth dist.	-658 Feb 15 j 19:37	17° $\overline{0}$ 37'14	45.11410 AU
min. Earth dist.	-666 Aug 06 j 09:01	8° $\overline{0}$ 35'16	41.62771 AU	retrograde	-658 May 27 j 12:11	19° $\overline{0}$ 14'20	
opposition	-666 Aug 09 j 10:14	8° $\overline{0}$ 31'27	-14°-26'-27	min. Earth dist.	-658 Aug 16 j 09:10	18° $\overline{0}$ 12'58	43.28319 AU
direct	-666 Oct 29 j 07:46	7° $\overline{0}$ 26'31		opposition	-658 Aug 19 j 05:26	18° $\overline{0}$ 09'30	-15°-53'-26

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Attention, astronomical year style is used: The year -658 in astronomical counting style is the year 659 BCE in historical counting style.

direct	-658 Nov 07 j 23:36	17°06'13		minimum elong	-649 Feb 23 j 10:41	27°47'18	16°12'00
				max. Earth dist.	-649 Feb 26 j 03:14	27°51'20	46.70433 AU
conjunction	-657 Feb 14 j 08:20	18°43'10	-15°-16'-5	retrograde	-649 Jun 06 j 18:19	29°25'19	
minimum elong	-657 Feb 14 j 08:14	18°43'09	15°16'06	min. Earth dist.	-649 Aug 27 j 05:05	28°24'55	44.86930 AU
max. Earth dist.	-657 Feb 17 j 05:56	18°47'38	45.30403 AU	opposition	-649 Aug 29 j 18:47	28°21'51	-16°-57'-32
retrograde	-657 May 28 j 21:40	20°24'18		direct	-649 Nov 18 j 17:55	27°19'54	
min. Earth dist.	-657 Aug 17 j 21:23	19°23'00	43.47223 AU				
opposition	-657 Aug 20 j 15:53	19°19'38	-16°-2'-16	conjunction	-648 Feb 24 j 19:26	28°53'25	-16°-17'-10
direct	-657 Nov 09 j 10:36	18°16'30		minimum elong	-648 Feb 24 j 19:24	28°53'25	16°17'11
				max. Earth dist.	-648 Feb 27 j 10:17	28°57'20	46.86561 AU
conjunction	-656 Feb 15 j 18:22	19°53'01	-15°-24'-31				
minimum elong	-656 Feb 15 j 18:15	19°53'00	15°24'31	retrograde	-648 Apr 14 j 00:48	0°	
max. Earth dist.	-656 Feb 18 j 14:20	19°57'22	45.48969 AU		-648 Jun 07 j 04:36	0°	31'06
retrograde	-656 May 29 j 05:54	21°33'42			-648 Aug 01 j 17:20	30°	
min. Earth dist.	-656 Aug 18 j 07:15	20°32'33	43.65726 AU	min. Earth dist.	-648 Aug 27 j 14:52	29°30'48	45.02941 AU
opposition	-656 Aug 21 j 01:51	20°29'11	-16°-10'-41	opposition	-648 Aug 30 j 03:17	29°27'48	-17°-2'-36
direct	-656 Nov 09 j 21:31	19°26'11		direct	-648 Nov 19 j 01:42	28°26'00	
conjunction	-655 Feb 16 j 04:07	21°02'17	-15°-32'-32	conjunction	-647 Feb 25 j 04:09	29°59'12	-16°-22'-1
minimum elong	-655 Feb 16 j 04:02	21°02'16	15°32'34	minimum elong	-647 Feb 25 j 04:06	29°59'12	16°22'02
max. Earth dist.	-655 Feb 18 j 23:45	21°06'36	45.67152 AU		-647 Feb 25 j 17:02	0°	
retrograde	-655 May 30 j 13:37	22°42'33		max. Earth dist.	-647 Feb 27 j 18:49	0°	03'05
min. Earth dist.	-655 Aug 19 j 18:50	21°41'26	43.83881 AU	retrograde	-647 Jun 08 j 13:12	1°	36'33
opposition	-655 Aug 22 j 11:49	21°38'09	-16°-18'-40	min. Earth dist.	-647 Aug 29 j 00:47	0°	36'19
direct	-655 Nov 11 j 09:07	20°35'18		opposition	-647 Aug 31 j 11:40	0°	33'24
					-647 Sep 30 j 02:54	30°	
conjunction	-654 Feb 17 j 13:37	22°10'58	-15°-40'-8	direct	-647 Nov 20 j 10:32	29°31'45	
minimum elong	-654 Feb 17 j 13:31	22°10'58	15°40'09		-646 Jan 09 j 08:05	0°	
max. Earth dist.	-654 Feb 20 j 09:00	22°15'15	45.85030 AU	conjunction	-646 Feb 26 j 12:30	1°	04'38
retrograde	-654 May 31 j 21:21	23°50'50		minimum elong	-646 Feb 26 j 12:29	1°	04'38
min. Earth dist.	-654 Aug 21 j 04:23	22°49'52	44.01732 AU	max. Earth dist.	-646 Mar 01 j 01:03	1°	08'21
opposition	-654 Aug 23 j 21:26	22°46'35	-16°-26'-12	retrograde	-646 Jun 09 j 23:05	2°	41'38
direct	-654 Nov 12 j 20:52	21°43'52		min. Earth dist.	-646 Aug 30 j 09:27	1°	41'30
				opposition	-646 Sep 01 j 19:58	1°	38'37
conjunction	-653 Feb 18 j 22:54	23°19'08	-15°-47'-19	direct	-646 Nov 21 j 16:46	0°	37'05
minimum elong	-653 Feb 18 j 22:49	23°19'08	15°47'21				
max. Earth dist.	-653 Feb 21 j 16:58	23°23'19	46.02631 AU	conjunction	-645 Feb 27 j 20:52	2°	09'39
retrograde	-653 Jun 02 j 08:55	24°58'36		minimum elong	-645 Feb 27 j 20:50	2°	09'39
min. Earth dist.	-653 Aug 22 j 14:29	23°57'44	44.19335 AU	max. Earth dist.	-645 Mar 02 j 08:53	2°	13'20
opposition	-653 Aug 25 j 06:56	23°54'29	-16°-33'-18	retrograde	-645 Jun 11 j 06:21	3°	46'20
direct	-653 Nov 14 j 05:03	22°51'55		min. Earth dist.	-645 Aug 31 j 19:43	2°	46'12
				opposition	-645 Sep 03 j 04:06	2°	43'25
conjunction	-652 Feb 20 j 08:10	24°26'48	-15°-54'-5	direct	-645 Nov 23 j 01:24	1°	42'00
minimum elong	-652 Feb 20 j 08:06	24°26'48	15°54'06				
max. Earth dist.	-652 Feb 23 j 02:50	24°31'00	46.19990 AU	conjunction	-644 Feb 29 j 05:06	3°	14'15
retrograde	-652 Jun 02 j 19:22	26°05'53		minimum elong	-644 Feb 29 j 05:05	3°	14'15
min. Earth dist.	-652 Aug 23 j 00:51	25°05'06	44.36670 AU	max. Earth dist.	-644 Mar 02 j 16:01	3°	17'51
opposition	-652 Aug 25 j 16:12	25°01'56	-16°-39'-59	retrograde	-644 Jun 11 j 11:47	4°	50'35
direct	-652 Nov 14 j 13:03	23°59'30		min. Earth dist.	-644 Sep 01 j 03:39	3°	50'34
				opposition	-644 Sep 03 j 11:55	3°	47'48
conjunction	-651 Feb 20 j 17:11	25°34'02	-16°00'-27	direct	-644 Nov 23 j 11:27	2°	46'28
minimum elong	-651 Feb 20 j 17:07	25°34'02	16°00'28				
max. Earth dist.	-651 Feb 23 j 10:20	25°38'07	46.37093 AU	conjunction	-643 Mar 01 j 13:00	4°	18'24
retrograde	-651 Jun 04 j 05:44	27°12'44		minimum elong	-643 Mar 01 j 12:59	4°	18'24
min. Earth dist.	-651 Aug 24 j 09:29	26°12'07	44.53741 AU	max. Earth dist.	-643 Mar 03 j 22:23	4°	21'55
opposition	-651 Aug 27 j 01:08	26°08'56	-16°-46'-14	retrograde	-643 Jun 12 j 19:40	5°	54'26
direct	-651 Nov 15 j 20:03	25°06'40		min. Earth dist.	-643 Sep 02 j 12:42	4°	54'27
				opposition	-643 Sep 04 j 19:34	4°	51'45
conjunction	-650 Feb 22 j 02:02	26°40'51	-16°-6'-24	direct	-643 Nov 24 j 20:03	3°	50'32
minimum elong	-650 Feb 22 j 01:59	26°40'51	16°06'25				
max. Earth dist.	-650 Feb 24 j 19:02	26°44'55	46.53916 AU	conjunction	-642 Mar 02 j 20:52	5°	22'10
retrograde	-650 Jun 05 j 12:00	28°19'12		minimum elong	-642 Mar 02 j 20:52	5°	22'10
min. Earth dist.	-650 Aug 25 j 20:10	27°18'39	44.70513 AU	max. Earth dist.	-642 Mar 05 j 06:35	5°	25'40
opposition	-650 Aug 28 j 10:07	27°15'34	-16°-52'-5	retrograde	-642 Jun 14 j 04:07	6°	57'53
direct	-650 Nov 17 j 06:52	26°13'28		min. Earth dist.	-642 Sep 03 j 21:05	5°	57'57
				opposition	-642 Sep 06 j 03:04	5°	55'18
conjunction	-649 Feb 23 j 10:45	27°47'18	-16°-11'-58	direct	-642 Nov 26 j 03:23	4°	54'11

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Attention, astronomical year style is used: The year -641 in astronomical counting style is the year 642 BCE in historical counting style.

conjunction	-641 Mar 04 j 04:23	6° ✕ 25'32	-16°-44'-1	retrograde	-633 Jun 23 j 19:22	16° ✕ 16'58	
minimum elong	-641 Mar 04 j 04:23	6° ✕ 25'32	16°44'01	min. Earth dist.	-633 Sep 13 j 19:54	15° ✕ 17'41	46.94910 AU
max. Earth dist.	-641 Mar 06 j 12:22	6° ✕ 28'56	47.86919 AU	opposition	-633 Sep 15 j 16:54	15° ✕ 15'31	-17°-37'-10
retrograde	-641 Jun 15 j 14:31	8° ✕ 00'57		direct	-633 Dec 05 j 17:27	14° ✕ 15'25	
min. Earth dist.	-641 Sep 05 j 04:24	7° ✕ 01'09	46.02327 AU				
opposition	-641 Sep 07 j 10:26	6° ✕ 58'30	-17°-28'-22	conjunction	-632 Mar 12 j 21:19	15° ✕ 44'41	-16°-54'-33
direct	-641 Nov 27 j 07:50	5° ✕ 57'30		minimum elong	-632 Mar 12 j 21:22	15° ✕ 44'41	16°54'33
				max. Earth dist.	-632 Mar 14 j 21:04	15° ✕ 47'30	48.90653 AU
conjunction	-640 Mar 04 j 11:59	7° ✕ 28'36	-16°-46'-29	retrograde	-632 Jun 24 j 00:22	17° ✕ 17'50	
minimum elong	-640 Mar 04 j 11:59	7° ✕ 28'36	16°46'30	min. Earth dist.	-632 Sep 14 j 03:03	16° ✕ 18'35	47.04403 AU
max. Earth dist.	-640 Mar 06 j 19:58	7° ✕ 31'58	47.99843 AU	opposition	-632 Sep 15 j 22:59	16° ✕ 16'27	-17°-36'-56
retrograde	-640 Jun 15 j 20:18	9° ✕ 03'44		direct	-632 Dec 06 j 02:17	15° ✕ 16'25	
min. Earth dist.	-640 Sep 05 j 13:18	8° ✕ 03'57	46.15162 AU				
opposition	-640 Sep 07 j 17:35	8° ✕ 01'24	-17°-30'-38	conjunction	-631 Mar 14 j 04:01	16° ✕ 45'27	-16°-54'-16
direct	-640 Nov 27 j 15:31	7° ✕ 00'32		minimum elong	-631 Mar 14 j 04:06	16° ✕ 45'27	16°54'17
				max. Earth dist.	-631 Mar 16 j 01:36	16° ✕ 48'08	48.99941 AU
conjunction	-639 Mar 05 j 19:27	8° ✕ 31'22	-16°-48'-35	retrograde	-631 Jun 25 j 09:23	18° ✕ 18'21	
minimum elong	-639 Mar 05 j 19:29	8° ✕ 31'22	16°48'35	min. Earth dist.	-631 Sep 15 j 09:48	17° ✕ 19'07	47.13486 AU
max. Earth dist.	-639 Mar 08 j 02:38	8° ✕ 34'42	48.12516 AU	opposition	-631 Sep 17 j 05:07	17° ✕ 17'02	-17°-36'-24
retrograde	-639 Jun 17 j 00:39	10° ✕ 06'14		direct	-631 Dec 07 j 06:30	16° ✕ 17'03	
min. Earth dist.	-639 Sep 06 j 20:06	9° ✕ 06'36	46.27724 AU				
opposition	-639 Sep 09 j 00:37	9° ✕ 04'03	-17°-32'-31	conjunction	-630 Mar 15 j 10:32	17° ✕ 45'51	-16°-53'-41
direct	-639 Nov 29 j 00:38	8° ✕ 03'18		minimum elong	-630 Mar 15 j 10:35	17° ✕ 45'51	16°53'42
				max. Earth dist.	-630 Mar 17 j 07:58	17° ✕ 48'31	49.08838 AU
conjunction	-638 Mar 07 j 02:33	9° ✕ 33'54	-16°-50'-21	retrograde	-630 Jun 26 j 15:54	19° ✕ 18'31	
minimum elong	-638 Mar 07 j 02:34	9° ✕ 33'54	16°50'23	min. Earth dist.	-630 Sep 16 j 17:38	18° ✕ 19'16	47.22198 AU
max. Earth dist.	-638 Mar 09 j 08:33	9° ✕ 37'09	48.24901 AU	opposition	-630 Sep 18 j 11:12	18° ✕ 17'16	-17°-35'-34
retrograde	-638 Jun 18 j 07:52	11° ✕ 08'31		direct	-630 Dec 08 j 12:18	17° ✕ 17'21	
min. Earth dist.	-638 Sep 08 j 04:34	10° ✕ 08'58	46.39993 AU				
opposition	-638 Sep 10 j 07:42	10° ✕ 06'29	-17°-34'-4	conjunction	-629 Mar 16 j 17:06	18° ✕ 45'57	-16°-52'-48
direct	-638 Nov 30 j 08:37	9° ✕ 05'52		minimum elong	-629 Mar 16 j 17:11	18° ✕ 45'57	16°52'50
				max. Earth dist.	-629 Mar 18 j 13:28	18° ✕ 48'33	49.17411 AU
conjunction	-637 Mar 08 j 09:53	10° ✕ 36'14	-16°-51'-47	retrograde	-629 Jun 27 j 20:44	20° ✕ 18'22	
minimum elong	-637 Mar 08 j 09:56	10° ✕ 36'14	16°51'48	min. Earth dist.	-629 Sep 17 j 23:21	19° ✕ 19'12	47.30594 AU
max. Earth dist.	-637 Mar 10 j 15:57	10° ✕ 39'29	48.36979 AU	opposition	-629 Sep 19 j 16:58	19° ✕ 17'12	-17°-34'-25
retrograde	-637 Jun 19 j 14:41	12° ✕ 10'38		direct	-629 Dec 09 j 18:32	18° ✕ 17'21	
min. Earth dist.	-637 Sep 09 j 12:17	11° ✕ 11'10	46.51906 AU				
opposition	-637 Sep 11 j 14:28	11° ✕ 08'43	-17°-35'-17	conjunction	-628 Mar 16 j 23:32	19° ✕ 45'45	-16°-51'-38
direct	-637 Dec 01 j 16:27	10° ✕ 08'15		minimum elong	-628 Mar 16 j 23:37	19° ✕ 45'46	16°51'38
				max. Earth dist.	-628 Mar 18 j 18:35	19° ✕ 48'17	49.25672 AU
conjunction	-636 Mar 08 j 17:05	11° ✕ 38'24	-16°-52'-55	retrograde	-628 Jun 28 j 01:46	21° ✕ 17'58	
minimum elong	-636 Mar 08 j 17:06	11° ✕ 38'24	16°52'56	min. Earth dist.	-628 Sep 18 j 06:48	20° ✕ 18'49	47.38693 AU
max. Earth dist.	-636 Mar 10 j 21:02	11° ✕ 41'30	48.48680 AU	opposition	-628 Sep 19 j 22:52	20° ✕ 16'53	-17°-32'-57
retrograde	-636 Jun 20 j 01:11	13° ✕ 12'33		direct	-628 Dec 10 j 01:29	19° ✕ 17'07	
min. Earth dist.	-636 Sep 09 j 19:45	12° ✕ 13'11	46.63412 AU				
opposition	-636 Sep 11 j 21:13	12° ✕ 10'47	-17°-36'-11	conjunction	-627 Mar 18 j 05:56	20° ✕ 45'21	-16°-50'-9
direct	-636 Dec 01 j 20:15	11° ✕ 10'25		minimum elong	-627 Mar 18 j 06:02	20° ✕ 45'21	16°50'11
				max. Earth dist.	-627 Mar 20 j 00:59	20° ✕ 47'52	49.33648 AU
conjunction	-635 Mar 10 j 00:16	12° ✕ 40'22	-16°-53'-44	retrograde	-627 Jun 29 j 06:20	22° ✕ 17'23	
minimum elong	-635 Mar 10 j 00:20	12° ✕ 40'22	16°53'45	min. Earth dist.	-627 Sep 19 j 12:58	21° ✕ 18'18	47.46483 AU
max. Earth dist.	-635 Mar 12 j 03:48	12° ✕ 43'26	48.59926 AU	opposition	-627 Sep 21 j 04:29	21° ✕ 16'24	-17°-31'-12
retrograde	-635 Jun 21 j 09:22	14° ✕ 14'16		direct	-627 Dec 11 j 09:07	20° ✕ 16'42	
min. Earth dist.	-635 Sep 11 j 04:33	13° ✕ 14'55	46.74427 AU				
opposition	-635 Sep 13 j 03:51	13° ✕ 12'38	-17°-36'-48	conjunction	-626 Mar 19 j 12:08	21° ✕ 44'47	-16°-48'-23
direct	-635 Dec 03 j 01:33	12° ✕ 12'23		minimum elong	-626 Mar 19 j 12:15	21° ✕ 44'47	16°48'24
				max. Earth dist.	-626 Mar 21 j 05:17	21° ✕ 47'11	49.41325 AU
conjunction	-634 Mar 11 j 07:25	13° ✕ 42'06	-16°-54'-17	retrograde	-626 Jun 30 j 15:01	23° ✕ 16'39	
minimum elong	-634 Mar 11 j 07:27	13° ✕ 42'07	16°54'18	min. Earth dist.	-626 Sep 20 j 19:16	22° ✕ 17'38	47.53969 AU
max. Earth dist.	-634 Mar 13 j 09:17	13° ✕ 45'04	48.70684 AU	opposition	-626 Sep 22 j 10:09	22° ✕ 15'47	-17°-29'-8
retrograde	-634 Jun 22 j 14:41	15° ✕ 15'46		direct	-626 Dec 12 j 12:55	21° ✕ 16'11	
min. Earth dist.	-634 Sep 12 j 11:20	14° ✕ 16'30	46.84927 AU				
opposition	-634 Sep 14 j 10:22	14° ✕ 14'14	-17°-37'-7	conjunction	-625 Mar 20 j 18:22	22° ✕ 44'07	-16°-46'-20
direct	-634 Dec 04 j 08:24	13° ✕ 14'04		minimum elong	-625 Mar 20 j 18:28	22° ✕ 44'08	16°46'21
				max. Earth dist.	-625 Mar 22 j 11:24	22° ✕ 46'30	49.48666 AU
conjunction	-633 Mar 12 j 14:18	14° ✕ 43'33	-16°-54'-33	retrograde	-625 Jul 01 j 22:40	24° ✕ 15'50	
minimum elong	-633 Mar 12 j 14:22	14° ✕ 43'34	16°54'34	min. Earth dist.	-625 Sep 22 j 02:47	23° ✕ 16'50	47.61080 AU
max. Earth dist.	-633 Mar 14 j 14:26	14° ✕ 46'25	48.80915 AU	opposition	-625 Sep 23 j 15:46	23° ✕ 15'04	-17°-26'-47

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Attention, astronomical year style is used: The year -625 in astronomical counting style is the year 626 BCE in historical counting style.

direct	-625 Dec 13 j 16:58	22° \mathring{K} 15'35		min. Earth dist.	-617 Sep 30 j 05:48	1° \mathring{V} 06'13	48.00548 AU
				opposition	-617 Oct 01 j 09:28	1° \mathring{V} 04'55	-16°-58'-50
conjunction	-624 Mar 21 j 00:42	23° \mathring{K} 43'24	-16°-44'00	direct	-617 Dec 21 j 16:15	0° \mathring{V} 05'47	
minimum elong	-624 Mar 21 j 00:49	23° \mathring{K} 43'24	16°44'00				
max. Earth dist.	-624 Mar 22 j 16:09	23° \mathring{K} 45'41	49.55621 AU	conjunction	-616 Mar 29 j 00:44	1° \mathring{V} 32'37	-16°-16'-28
retrograde	-624 Jul 02 j 05:00	25° \mathring{K} 14'57		minimum elong	-616 Mar 29 j 00:53	1° \mathring{V} 32'37	16°16'29
min. Earth dist.	-624 Sep 22 j 08:22	24° \mathring{K} 16'04	47.67763 AU	max. Earth dist.	-616 Mar 30 j 05:28	1° \mathring{V} 34'15	49.93762 AU
opposition	-624 Sep 23 j 21:04	24° \mathring{K} 14'19	-17°-24'-10	retrograde	-616 Jul 09 j 22:16	3° \mathring{V} 02'56	
direct	-624 Dec 13 j 21:04	23° \mathring{K} 14'54		min. Earth dist.	-616 Sep 30 j 11:27	2° \mathring{V} 04'02	48.03651 AU
				opposition	-616 Oct 01 j 14:13	2° \mathring{V} 02'45	-16°-54'-10
conjunction	-623 Mar 22 j 06:56	24° \mathring{K} 42'37	-16°-41'-25	direct	-616 Dec 21 j 20:53	1° \mathring{V} 03'40	
minimum elong	-623 Mar 22 j 07:01	24° \mathring{K} 42'37	16°41'26				
max. Earth dist.	-623 Mar 23 j 20:39	24° \mathring{K} 44'48	49.62102 AU	conjunction	-615 Mar 30 j 06:28	2° \mathring{V} 30'23	-16°-11'-52
retrograde	-623 Jul 03 j 09:20	26° \mathring{K} 14'01		minimum elong	-615 Mar 30 j 06:37	2° \mathring{V} 30'24	16°11'52
min. Earth dist.	-623 Sep 23 j 16:13	25° \mathring{K} 15'07	47.73951 AU	max. Earth dist.	-615 Mar 31 j 11:07	2° \mathring{V} 32'01	49.96790 AU
opposition	-623 Sep 25 j 02:38	25° \mathring{K} 13'29	-17°-21'-18	retrograde	-615 Jul 11 j 05:22	4° \mathring{V} 00'36	
direct	-623 Dec 15 j 04:29	24° \mathring{K} 14'10		opposition	-615 Oct 02 j 19:04	3° \mathring{V} 00'28	-16°-49'-13
				min. Earth dist.	-615 Oct 01 j 17:43	3° \mathring{V} 01'40	48.06453 AU
conjunction	-622 Mar 23 j 13:07	25° \mathring{K} 41'45	-16°-38'-35	direct	-615 Dec 23 j 00:40	2° \mathring{V} 01'25	
minimum elong	-622 Mar 23 j 13:15	25° \mathring{K} 41'45	16°38'36				
max. Earth dist.	-622 Mar 25 j 02:17	25° \mathring{K} 43'54	49.68072 AU	conjunction	-614 Mar 31 j 11:59	3° \mathring{V} 28'03	-16°-6'-59
retrograde	-622 Jul 04 j 12:58	27° \mathring{K} 13'01		minimum elong	-614 Mar 31 j 12:07	3° \mathring{V} 28'03	16°07'00
min. Earth dist.	-622 Sep 24 j 22:35	26° \mathring{K} 14'09	47.79588 AU	max. Earth dist.	-614 Apr 01 j 15:21	3° \mathring{V} 29'37	49.99538 AU
opposition	-622 Sep 26 j 08:02	26° \mathring{K} 12'33	-17°-18'-11	retrograde	-614 Jul 12 j 12:55	4° \mathring{V} 58'08	
direct	-622 Dec 16 j 12:59	25° \mathring{K} 13'18		opposition	-614 Oct 03 j 23:49	3° \mathring{V} 58'04	-16°-43'-59
				min. Earth dist.	-614 Oct 02 j 22:26	3° \mathring{V} 59'16	48.08957 AU
conjunction	-621 Mar 24 j 19:15	26° \mathring{K} 40'45	-16°-35'-31	direct	-614 Dec 24 j 02:47	2° \mathring{V} 59'03	
minimum elong	-621 Mar 24 j 19:22	26° \mathring{K} 40'45	16°35'32				
max. Earth dist.	-621 Mar 26 j 05:46	26° \mathring{K} 42'45	49.73495 AU	conjunction	-613 Apr 01 j 17:37	4° \mathring{V} 25'38	-16°-1'-51
retrograde	-621 Jul 05 j 21:34	28° \mathring{K} 11'51		minimum elong	-613 Apr 01 j 17:47	4° \mathring{V} 25'38	16°01'51
min. Earth dist.	-621 Sep 26 j 05:04	27° \mathring{K} 13'00	47.84689 AU	max. Earth dist.	-613 Apr 02 j 19:42	4° \mathring{V} 27'07	50.01961 AU
opposition	-621 Sep 27 j 13:19	27° \mathring{K} 11'28	-17°-14'-49	retrograde	-613 Jul 13 j 17:06	5° \mathring{V} 55'37	
direct	-621 Dec 17 j 16:36	26° \mathring{K} 12'15		min. Earth dist.	-613 Oct 04 j 05:12	4° \mathring{V} 56'43	48.11121 AU
				opposition	-613 Oct 05 j 04:31	4° \mathring{V} 55'37	-16°-38'-29
conjunction	-620 Mar 25 j 01:27	27° \mathring{K} 39'34	-16°-32'-13	direct	-613 Dec 25 j 08:10	3° \mathring{V} 56'39	
minimum elong	-620 Mar 25 j 01:35	27° \mathring{K} 39'35	16°32'14				
max. Earth dist.	-620 Mar 26 j 11:22	27° \mathring{K} 41'31	49.78386 AU	conjunction	-612 Apr 01 j 23:27	5° \mathring{V} 23'10	-15°-56'-27
retrograde	-620 Jul 06 j 04:23	29° \mathring{K} 10'31		minimum elong	-612 Apr 01 j 23:35	5° \mathring{V} 23'10	15°56'29
opposition	-620 Sep 27 j 18:34	28° \mathring{K} 10'11	-17°-11'-13	max. Earth dist.	-612 Apr 03 j 01:07	5° \mathring{V} 24'38	50.04024 AU
min. Earth dist.	-620 Sep 26 j 12:22	28° \mathring{K} 11'37	47.89268 AU	retrograde	-612 Jul 13 j 19:03	6° \mathring{V} 53'04	
direct	-620 Dec 17 j 21:22	27° \mathring{K} 11'00		min. Earth dist.	-612 Oct 04 j 10:34	5° \mathring{V} 54'12	48.12873 AU
				opposition	-612 Oct 05 j 09:09	5° \mathring{V} 53'08	-16°-32'-44
conjunction	-619 Mar 26 j 07:22	28° \mathring{K} 38'10	-16°-28'-40	direct	-612 Dec 25 j 16:13	4° \mathring{V} 54'12	
minimum elong	-619 Mar 26 j 07:29	28° \mathring{K} 38'11	16°28'41				
max. Earth dist.	-619 Mar 27 j 15:43	28° \mathring{K} 40'02	49.82802 AU	conjunction	-611 Apr 03 j 05:01	6° \mathring{V} 20'40	-15°-50'-49
	-619 Jun 08 j 00:13	0° \mathring{V}		minimum elong	-611 Apr 03 j 05:11	6° \mathring{V} 20'41	15°50'50
retrograde	-619 Jul 07 j 09:23	0° \mathring{V} 08'56		max. Earth dist.	-611 Apr 04 j 04:13	6° \mathring{V} 22'00	50.05645 AU
	-619 Aug 05 j 20:13	30° \mathring{R} \mathring{K}		retrograde	-611 Jul 15 j 01:40	7° \mathring{V} 50'30	
opposition	-619 Sep 28 j 23:33	29° \mathring{K} 08'39	-17°-7'-22	opposition	-611 Oct 06 j 13:49	6° \mathring{V} 50'37	-16°-26'-44
min. Earth dist.	-619 Sep 27 j 17:35	29° \mathring{K} 10'04	47.93399 AU	min. Earth dist.	-611 Oct 05 j 16:30	6° \mathring{V} 51'37	48.14162 AU
direct	-619 Dec 19 j 01:56	28° \mathring{K} 09'29		direct	-611 Dec 26 j 20:41	5° \mathring{V} 51'43	
conjunction	-618 Mar 27 j 13:11	29° \mathring{K} 36'32	-16°-24'-52	conjunction	-610 Apr 04 j 10:48	7° \mathring{V} 18'08	-15°-44'-58
minimum elong	-618 Mar 27 j 13:19	29° \mathring{K} 36'33	16°24'53	minimum elong	-610 Apr 04 j 10:57	7° \mathring{V} 18'09	15°44'59
max. Earth dist.	-618 Mar 28 j 20:04	29° \mathring{K} 38'19	49.86794 AU	max. Earth dist.	-610 Apr 05 j 09:21	7° \mathring{V} 19'25	50.06768 AU
	-618 Apr 13 j 17:54	0° \mathring{V}		retrograde	-610 Jul 16 j 08:01	8° \mathring{V} 47'54	
retrograde	-618 Jul 08 j 13:02	1° \mathring{V} 07'09		opposition	-610 Oct 07 j 18:31	7° \mathring{V} 48'03	-16°-20'-31
min. Earth dist.	-618 Sep 29 j 00:30	0° \mathring{V} 08'13	47.97148 AU	min. Earth dist.	-610 Oct 06 j 23:15	7° \mathring{V} 48'58	48.14923 AU
opposition	-618 Sep 30 j 04:36	0° \mathring{V} 06'53	-17°-3'-14	direct	-610 Dec 28 j 01:13	6° \mathring{V} 49'11	
	-618 Oct 06 j 05:52	30° \mathring{R} \mathring{K}					
direct	-618 Dec 20 j 08:11	29° \mathring{K} 07'44		conjunction	-609 Apr 05 j 16:30	8° \mathring{V} 15'32	-15°-38'-53
	-617 Mar 02 j 22:02	0° \mathring{V}		minimum elong	-609 Apr 05 j 16:41	8° \mathring{V} 15'33	15°38'53
				max. Earth dist.	-609 Apr 06 j 13:11	8° \mathring{V} 16'43	50.07374 AU
conjunction	-617 Mar 28 j 19:00	0° \mathring{V} 34'41	-16°-20'-48	retrograde	-609 Jul 17 j 14:10	9° \mathring{V} 45'12	
minimum elong	-617 Mar 28 j 19:08	0° \mathring{V} 34'41	16°20'48	opposition	-609 Oct 08 j 23:05	8° \mathring{V} 45'23	-16°-14'-5
max. Earth dist.	-617 Mar 30 j 01:44	0° \mathring{V} 36'26	49.90440 AU	min. Earth dist.	-609 Oct 08 j 04:18	8° \mathring{V} 46'16	48.15155 AU
retrograde	-617 Jul 09 j 15:41	2° \mathring{V} 05'08		direct	-609 Dec 29 j 04:31	7° \mathring{V} 46'31	

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Attention, astronomical year style is used: The year -608 in astronomical counting style is the year 609 BCE in historical counting style.

conjunction	-608 Apr 05 j 22:10	9°♃12'50	-15°-32'-35	retrograde	-600 Jul 25 j 10:41	18°♃17'58	
minimum elong	-608 Apr 05 j 22:19	9°♃12'50	15°32'35	opposition	-600 Oct 16 j 14:34	17°♃18'23	-15°-4'-56
max. Earth dist.	-608 Apr 06 j 16:55	9°♃13'54	50.07447 AU	min. Earth dist.	-600 Oct 16 j 06:20	17°♃18'46	47.99757 AU
retrograde	-608 Jul 17 j 18:34	10°♃42'24		direct	-599 Jan 06 j 00:13	16°♃19'33	
min. Earth dist.	-608 Oct 08 j 11:05	9°♃43'23	48.14883 AU				
opposition	-608 Oct 09 j 03:37	9°♃42'36	-16°-7'-25	conjunction	-599 Apr 14 j 23:43	17°♃45'52	-14°-24'-53
direct	-608 Dec 29 j 09:47	8°♃43'44		minimum elong	-599 Apr 14 j 23:54	17°♃45'52	14°24'54
				max. Earth dist.	-599 Apr 15 j 08:32	17°♃46'22	49.91511 AU
conjunction	-607 Apr 07 j 03:50	10°♃10'00	-15°-26'-3	retrograde	-599 Jul 26 j 18:02	19°♃15'09	
minimum elong	-607 Apr 07 j 04:01	10°♃10'00	15°26'04	opposition	-599 Oct 17 j 18:54	18°♃15'36	-14°-55'-59
max. Earth dist.	-607 Apr 07 j 22:09	10°♃11'02	50.07054 AU	min. Earth dist.	-599 Oct 17 j 11:10	18°♃15'58	47.96236 AU
retrograde	-607 Jul 18 j 20:45	11°♃39'29		direct	-598 Jan 07 j 02:06	17°♃16'47	
opposition	-607 Oct 10 j 08:03	10°♃39'42	-16°00'-30				
min. Earth dist.	-607 Oct 09 j 16:07	10°♃40'27	48.14158 AU	conjunction	-598 Apr 16 j 05:15	18°♃43'08	-14°-16'-9
direct	-607 Dec 30 j 17:17	9°♃40'49		minimum elong	-598 Apr 16 j 05:27	18°♃43'09	14°16'09
				max. Earth dist.	-598 Apr 16 j 12:10	18°♃43'32	49.87859 AU
conjunction	-606 Apr 08 j 09:08	11°♃07'02	-15°-19'-17	retrograde	-598 Jul 27 j 23:40	20°♃12'26	
minimum elong	-606 Apr 08 j 09:18	11°♃07'02	15°19'17	opposition	-598 Oct 18 j 23:27	19°♃12'53	-14°-46'-49
max. Earth dist.	-606 Apr 09 j 01:17	11°♃07'57	50.06244 AU	min. Earth dist.	-598 Oct 18 j 18:05	19°♃13'09	47.92190 AU
retrograde	-606 Jul 20 j 02:36	12°♃36'27		direct	-597 Jan 08 j 06:26	18°♃14'03	
opposition	-606 Oct 11 j 12:32	11°♃36'41	-15°-53'-21				
min. Earth dist.	-606 Oct 10 j 21:45	11°♃37'23	48.13055 AU	conjunction	-597 Apr 17 j 11:07	19°♃40'27	-14°-7'-12
direct	-606 Dec 31 j 21:44	10°♃37'48		minimum elong	-597 Apr 17 j 11:18	19°♃40'28	14°07'13
				max. Earth dist.	-597 Apr 17 j 17:15	19°♃40'48	49.83678 AU
conjunction	-605 Apr 09 j 14:44	12°♃03'59	-15°-12'-16	retrograde	-597 Jul 29 j 01:40	21°♃09'44	
minimum elong	-605 Apr 09 j 14:55	12°♃03'59	15°12'17	opposition	-597 Oct 20 j 03:45	20°♃10'11	-14°-37'-26
max. Earth dist.	-605 Apr 10 j 06:38	12°♃04'53	50.05070 AU	min. Earth dist.	-597 Oct 19 j 23:14	20°♃10'24	47.87594 AU
retrograde	-605 Jul 21 j 08:46	13°♃33'21		direct	-596 Jan 09 j 13:50	19°♃11'19	
opposition	-605 Oct 12 j 16:52	12°♃33'35	-15°-45'-56				
min. Earth dist.	-605 Oct 12 j 03:34	12°♃34'13	48.11604 AU	conjunction	-596 Apr 17 j 16:50	20°♃37'45	-13°-58'-3
direct	-604 Jan 02 j 01:50	11°♃34'42		minimum elong	-596 Apr 17 j 17:02	20°♃37'46	13°58'04
				max. Earth dist.	-596 Apr 17 j 20:18	20°♃37'57	49.78959 AU
conjunction	-604 Apr 09 j 20:15	13°♃00'52	-15°-5'00	retrograde	-596 Jul 29 j 06:48	22°♃07'02	
minimum elong	-604 Apr 09 j 20:25	13°♃00'53	15°05'00	opposition	-596 Oct 20 j 08:12	21°♃07'27	-14°-27'-50
max. Earth dist.	-604 Apr 10 j 10:45	13°♃01'41	50.03589 AU	min. Earth dist.	-596 Oct 20 j 05:16	21°♃07'36	47.82484 AU
retrograde	-604 Jul 21 j 16:22	14°♃30'11		direct	-595 Jan 09 j 18:57	20°♃08'32	
opposition	-604 Oct 12 j 21:12	13°♃30'27	-15°-38'-15				
min. Earth dist.	-604 Oct 12 j 07:53	13°♃31'05	48.09854 AU	conjunction	-595 Apr 18 j 22:29	21°♃34'59	-13°-48'-40
direct	-603 Jan 02 j 03:28	12°♃31'34		minimum elong	-595 Apr 18 j 22:40	21°♃35'00	13°48'41
				max. Earth dist.	-595 Apr 19 j 01:19	21°♃35'09	49.73735 AU
conjunction	-603 Apr 11 j 01:33	13°♃57'44	-14°-57'-29	retrograde	-595 Jul 30 j 11:25	23°♃04'16	
minimum elong	-603 Apr 11 j 01:44	13°♃57'45	14°57'30	opposition	-595 Oct 21 j 12:37	22°♃04'40	-14°-18'00
max. Earth dist.	-603 Apr 11 j 14:50	13°♃58'29	50.01804 AU	min. Earth dist.	-595 Oct 21 j 11:18	22°♃04'43	47.76891 AU
retrograde	-603 Jul 22 j 21:07	15°♃27'01		direct	-594 Jan 11 j 00:55	21°♃05'41	
opposition	-603 Oct 14 j 01:39	14°♃27'19	-15°-30'-18				
min. Earth dist.	-603 Oct 13 j 14:11	14°♃27'51	48.07815 AU	conjunction	-594 Apr 20 j 04:08	22°♃32'10	-13°-39'-4
direct	-602 Jan 03 j 07:27	13°♃28'27		minimum elong	-594 Apr 20 j 04:21	22°♃32'10	13°39'05
				max. Earth dist.	-594 Apr 20 j 05:24	22°♃32'14	49.68081 AU
conjunction	-602 Apr 12 j 07:04	14°♃54'38	-14°-49'-42	retrograde	-594 Jul 31 j 19:08	24°♃01'26	
minimum elong	-602 Apr 12 j 07:15	14°♃54'39	14°49'43	opposition	-594 Oct 22 j 16:52	23°♃01'48	-14°-7'-55
max. Earth dist.	-602 Apr 12 j 20:12	14°♃55'23	49.99749 AU	min. Earth dist.	-594 Oct 22 j 15:55	23°♃01'50	47.70894 AU
retrograde	-602 Jul 23 j 22:29	16°♃23'54		direct	-593 Jan 12 j 03:02	22°♃02'45	
opposition	-602 Oct 15 j 05:55	15°♃24'14	-15°-22'-6				
min. Earth dist.	-602 Oct 14 j 18:41	15°♃24'46	48.05480 AU	conjunction	-593 Apr 21 j 09:48	23°♃29'17	-13°-29'-13
direct	-601 Jan 04 j 15:21	14°♃25'23		minimum elong	-593 Apr 21 j 10:00	23°♃29'18	13°29'13
				max. Earth dist.	-593 Apr 21 j 09:31	23°♃29'16	49.62029 AU
conjunction	-601 Apr 13 j 12:27	15°♃51'36	-14°-41'-40	retrograde	-593 Aug 02 j 01:38	24°♃58'34	
minimum elong	-601 Apr 13 j 12:38	15°♃51'36	14°41'41	opposition	-593 Oct 23 j 21:19	23°♃58'53	-13°-57'-35
max. Earth dist.	-601 Apr 13 j 23:24	15°♃52'13	49.97387 AU	min. Earth dist.	-593 Oct 23 j 22:26	23°♃58'50	47.64529 AU
retrograde	-601 Jul 25 j 04:09	17°♃20'52		direct	-592 Jan 13 j 05:59	22°♃59'46	
opposition	-601 Oct 16 j 10:17	16°♃21'15	-15°-13'-38				
min. Earth dist.	-601 Oct 16 j 00:16	16°♃21'43	48.02822 AU	conjunction	-592 Apr 21 j 15:35	24°♃26'22	-13°-19'-8
direct	-600 Jan 05 j 20:18	15°♃22'25		minimum elong	-592 Apr 21 j 15:47	24°♃26'23	13°19'09
				max. Earth dist.	-592 Apr 21 j 14:59	24°♃26'20	49.55640 AU
conjunction	-600 Apr 13 j 18:06	16°♃48'40	-14°-33'-23	retrograde	-592 Aug 02 j 03:36	25°♃55'40	
minimum elong	-600 Apr 13 j 18:18	16°♃48'41	14°33'24	opposition	-592 Oct 24 j 01:34	24°♃55'57	-13°-47'00
max. Earth dist.	-600 Apr 14 j 04:43	16°♃49'16	49.94659 AU	min. Earth dist.	-592 Oct 24 j 02:54	24°♃55'54	47.57833 AU

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Attention, astronomical year style is used: The year -591 in astronomical counting style is the year 592 BCE in historical counting style.

direct	-591 Jan 13 j 13:25	23° Υ 56'47		opposition	-584 Oct 31 j 14:07	2° C 37'47	-12°-13'-16
				min. Earth dist.	-584 Nov 01 j 01:10	2° C 37'16	46.90976 AU
conjunction	-591 Apr 22 j 21:12	25° Υ 23'28	-13°-8'-48	direct	-583 Jan 21 j 02:28	1° C 38'14	
minimum elong	-591 Apr 22 j 21:24	25° Υ 23'29	13°08'47				
max. Earth dist.	-591 Apr 22 j 18:29	25° Υ 23'19	49.48942 AU	conjunction	-583 Apr 30 j 21:20	3° C 06'01	-11°-37'-24
retrograde	-591 Aug 03 j 08:02	26° Υ 52'49		minimum elong	-583 Apr 30 j 21:33	3° C 06'02	11°37'25
opposition	-591 Oct 25 j 06:02	25° Υ 53'05	-13°-36'-9	max. Earth dist.	-583 Apr 30 j 07:33	3° C 05'14	48.81559 AU
min. Earth dist.	-591 Oct 25 j 08:27	25° Υ 52'58	47.50850 AU	retrograde	-583 Aug 11 j 10:20	4° C 36'10	
direct	-590 Jan 14 j 18:55	24° Υ 53'52		opposition	-583 Nov 01 j 18:56	3° C 36'13	-12°00'-28
				min. Earth dist.	-583 Nov 02 j 08:14	3° C 35'35	46.80493 AU
conjunction	-590 Apr 24 j 02:53	26° Υ 20'39	-12°-58'-12	direct	-582 Jan 22 j 04:45	2° C 36'33	
minimum elong	-590 Apr 24 j 03:04	26° Υ 20'40	12°58'13				
max. Earth dist.	-590 Apr 24 j 00:03	26° Υ 20'29	49.41950 AU	conjunction	-582 May 02 j 03:34	4° C 04'30	-11°-24'-57
retrograde	-590 Aug 04 j 13:34	27° Υ 50'05		minimum elong	-582 May 02 j 03:46	4° C 04'31	11°24'56
opposition	-590 Oct 26 j 10:35	26° Υ 50'19	-13°-25'-3	max. Earth dist.	-582 May 01 j 13:18	4° C 03'41	48.71024 AU
min. Earth dist.	-590 Oct 26 j 14:22	26° Υ 50'08	47.43556 AU	retrograde	-582 Aug 12 j 13:27	5° C 34'45	
direct	-589 Jan 15 j 23:49	25° Υ 51'05		opposition	-582 Nov 02 j 23:41	4° C 34'43	-11°-47'-26
				min. Earth dist.	-582 Nov 03 j 13:16	4° C 34'04	46.69601 AU
conjunction	-589 Apr 25 j 08:43	27° Υ 17'58	-12°-47'-21	direct	-581 Jan 23 j 12:17	3° C 34'57	
minimum elong	-589 Apr 25 j 08:55	27° Υ 17'59	12°47'22				
max. Earth dist.	-589 Apr 25 j 04:23	27° Υ 17'43	49.34658 AU	conjunction	-581 May 03 j 09:51	5° C 03'03	-11°-12'-14
retrograde	-589 Aug 05 j 21:14	28° Υ 47'29		minimum elong	-581 May 03 j 10:04	5° C 03'04	11°12'15
opposition	-589 Oct 27 j 14:55	27° Υ 47'44	-13°-13'-41	max. Earth dist.	-581 May 02 j 17:20	5° C 02'06	48.60105 AU
min. Earth dist.	-589 Oct 27 j 18:58	27° Υ 47'32	47.35940 AU	retrograde	-581 Aug 13 j 17:08	6° C 33'25	
direct	-588 Jan 17 j 01:56	26° Υ 48'27		opposition	-581 Nov 04 j 04:26	5° C 33'18	-11°-34'-8
				min. Earth dist.	-581 Nov 04 j 19:30	5° C 32'35	46.58366 AU
conjunction	-588 Apr 25 j 14:38	28° Υ 15'29	-12°-36'-16	direct	-580 Jan 24 j 19:15	4° C 33'26	
minimum elong	-588 Apr 25 j 14:50	28° Υ 15'30	12°36'17				
max. Earth dist.	-588 Apr 25 j 08:39	28° Υ 15'09	49.26999 AU	conjunction	-580 May 03 j 16:21	6° C 01'43	-10°-59'-17
retrograde	-588 Aug 06 j 03:40	29° Υ 45'06		minimum elong	-580 May 03 j 16:32	6° C 01'43	10°59'17
opposition	-588 Oct 27 j 19:32	28° Υ 45'20	-13°-2'-4	max. Earth dist.	-580 May 02 j 23:36	6° C 00'45	48.48856 AU
min. Earth dist.	-588 Oct 28 j 01:49	28° Υ 45'02	47.27935 AU	retrograde	-580 Aug 13 j 21:35	7° C 32'12	
direct	-587 Jan 17 j 05:51	27° Υ 46'03		opposition	-580 Nov 04 j 09:23	6° C 32'01	-11°-20'-34
				min. Earth dist.	-580 Nov 05 j 01:37	6° C 31'14	46.46818 AU
conjunction	-587 Apr 26 j 20:35	29° Υ 13'14	-12°-24'-57	direct	-579 Jan 25 j 02:08	5° C 32'02	
minimum elong	-587 Apr 26 j 20:48	29° Υ 13'15	12°24'57				
max. Earth dist.	-587 Apr 26 j 14:09	29° Υ 12'52	49.18927 AU	conjunction	-579 May 04 j 22:34	7° C 00'29	-10°-46'-4
retrograde	-587 Jun 01 j 19:15	0° C		minimum elong	-579 May 04 j 22:46	7° C 00'30	10°46'05
opposition	-587 Aug 07 j 06:56	0° C 42'57		max. Earth dist.	-579 May 04 j 04:26	6° C 59'27	48.37333 AU
min. Earth dist.	-587 Oct 14 j 02:11	30° R Υ		retrograde	-579 Aug 15 j 05:33	8° C 31'08	
direct	-587 Oct 29 j 00:07	29° Υ 43'11	-12°-50'-13	opposition	-579 Nov 05 j 14:19	7° C 30'52	-11°-6'-44
				min. Earth dist.	-579 Nov 06 j 06:38	7° C 30'05	46.35011 AU
conjunction	-586 Jan 18 j 12:44	28° Υ 43'50		direct	-578 Jan 26 j 05:10	6° C 30'47	
minimum elong	-586 Apr 19 j 21:49	0° C		max. Earth dist.	-578 May 05 j 09:37	7° C 58'19	48.25540 AU
conjunction	-586 Apr 28 j 02:36	0° C 11'11	-12°-13'-24	conjunction	-578 May 06 j 05:04	7° C 59'27	-10°-32'-36
minimum elong	-586 Apr 28 j 02:48	0° C 11'12	12°13'25	minimum elong	-578 May 06 j 05:16	7° C 59'27	10°32'36
max. Earth dist.	-586 Apr 27 j 17:27	0° C 10'40	49.10368 AU	retrograde	-578 Aug 16 j 13:17	9° C 30'15	
retrograde	-586 Aug 08 j 12:45	1° C 41'01		opposition	-578 Nov 06 j 19:23	8° C 29'56	-10°-52'-37
opposition	-586 Oct 30 j 04:44	0° C 41'14	-12°-38'-8	min. Earth dist.	-578 Nov 07 j 13:33	8° C 29'03	46.22940 AU
min. Earth dist.	-586 Oct 30 j 13:24	0° C 40'49	47.10508 AU	direct	-577 Jan 27 j 08:34	7° C 29'45	
direct	-586 Dec 08 j 23:34	30° R Υ					
				conjunction	-577 May 07 j 11:47	8° C 58'38	-10°-18'-51
conjunction	-585 Jan 19 j 17:49	29° Υ 41'50		minimum elong	-577 May 07 j 11:58	8° C 58'38	10°18'53
minimum elong	-585 Mar 02 j 02:10	0° C		max. Earth dist.	-577 May 06 j 16:06	8° C 57'30	48.13490 AU
				retrograde	-577 Aug 17 j 19:04	10° C 29'36	
conjunction	-585 Apr 29 j 08:54	1° C 09'20	-12°-1'-37	opposition	-577 Nov 08 j 00:28	9° C 29'13	-10°-38'-14
minimum elong	-585 Apr 29 j 09:06	1° C 09'21	12°01'38	min. Earth dist.	-577 Nov 08 j 18:51	9° C 28'20	46.10581 AU
max. Earth dist.	-585 Apr 28 j 22:52	1° C 08'46	49.01281 AU	direct	-576 Jan 28 j 14:40	8° C 28'57	
retrograde	-585 Aug 09 j 17:36	2° C 39'17					
opposition	-585 Oct 31 j 09:31	1° C 39'27	-12°-25'-49	conjunction	-576 May 07 j 18:27	9° C 58'05	-10°-4'-51
min. Earth dist.	-585 Oct 31 j 19:53	1° C 38'57	47.00996 AU	minimum elong	-576 May 07 j 18:39	9° C 58'06	10°04'51
direct	-584 Jan 21 j 00:05	0° C 39'59		max. Earth dist.	-576 May 06 j 20:28	9° C 56'49	48.01123 AU
				retrograde	-576 Aug 18 j 01:19	11° C 29'15	
conjunction	-584 Apr 29 j 15:07	2° C 07'37	-11°-49'-37	opposition	-576 Nov 08 j 05:38	10° C 28'49	-10°-23'-35
minimum elong	-584 Apr 29 j 15:19	2° C 07'38	11°49'38	min. Earth dist.	-576 Nov 09 j 01:37	10° C 27'51	45.97889 AU
max. Earth dist.	-584 Apr 29 j 03:09	2° C 06'56	48.91670 AU	direct	-575 Jan 28 j 20:28	9° C 28'27	
retrograde	-584 Aug 10 j 01:57	3° C 37'40					

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Attention, astronomical year style is used: The year -575 in astronomical counting style is the year 576 BCE in historical counting style.

max. Earth dist.	-575 May 08 j 02:57	10°♃56'32	47.88380 AU	min. Earth dist.	-568 Nov 17 j 09:40	18°♃33'57	44.80292 AU
				direct	-567 Feb 05 j 18:44	17°♃33'58	
conjunction	-575 May 09 j 01:26	10°♃57'51	-9°-50'-36	max. Earth dist.	-567 May 16 j 03:33	19°♃03'40	46.70321 AU
minimum elong	-575 May 09 j 01:36	10°♃57'51	9°50'37				
retrograde	-575 Aug 19 j 05:34	12°♃29'14		conjunction	-567 May 17 j 12:55	19°♃05'38	-7°-47'-44
opposition	-575 Nov 09 j 11:00	11°♃28'43	-10°-8'-40	minimum elong	-567 May 17 j 13:05	19°♃05'39	7°47'44
min. Earth dist.	-575 Nov 10 j 08:24	11°♃27'41	45.84781 AU	retrograde	-567 Aug 27 j 16:49	20°♃38'55	
direct	-574 Jan 30 j 03:47	10°♃28'16		opposition	-567 Nov 17 j 09:26	19°♃37'32	-7°-59'-59
max. Earth dist.	-574 May 09 j 08:02	11°♃56'29	47.75204 AU	min. Earth dist.	-567 Nov 18 j 15:45	19°♃36'02	44.63986 AU
				direct	-566 Feb 07 j 01:08	18°♃35'54	
conjunction	-574 May 10 j 08:22	11°♃57'54	-9°-36'-7	max. Earth dist.	-566 May 17 j 09:15	20°♃05'50	46.54031 AU
minimum elong	-574 May 10 j 08:34	11°♃57'55	9°36'07				
retrograde	-574 Aug 20 j 13:39	13°♃29'31		conjunction	-566 May 18 j 20:45	20°♃07'57	-7°-31'-11
opposition	-574 Nov 10 j 16:27	12°♃28'56	-9°-53'-30	minimum elong	-566 May 18 j 20:54	20°♃07'57	7°31'12
min. Earth dist.	-574 Nov 11 j 14:38	12°♃27'51	45.71210 AU	retrograde	-566 Aug 29 j 00:55	21°♃41'32	
direct	-573 Jan 31 j 08:09	11°♃28'21		opposition	-566 Nov 18 j 15:51	20°♃40'02	-7°-42'-39
				min. Earth dist.	-566 Nov 19 j 23:40	20°♃38'27	44.47444 AU
conjunction	-573 May 11 j 15:40	12°♃58'16	-9°-21'-23	direct	-565 Feb 08 j 07:54	19°♃38'16	
minimum elong	-573 May 11 j 15:50	12°♃58'16	9°21'23	max. Earth dist.	-565 May 18 j 17:27	21°♃08'34	46.37490 AU
max. Earth dist.	-573 May 10 j 13:19	12°♃56'44	47.61520 AU				
retrograde	-573 Aug 21 j 23:05	14°♃30'05		conjunction	-565 May 20 j 05:03	21°♃10'41	-7°-14'-23
opposition	-573 Nov 11 j 22:03	13°♃29'24	-9°-38'-5	minimum elong	-565 May 20 j 05:13	21°♃10'42	7°14'23
min. Earth dist.	-573 Nov 12 j 22:39	13°♃28'12	45.57127 AU	retrograde	-565 Aug 30 j 06:17	22°♃44'36	
direct	-572 Feb 01 j 11:25	12°♃28'42		opposition	-565 Nov 19 j 22:18	21°♃43'01	-7°-25'-1
				min. Earth dist.	-565 Nov 21 j 06:59	21°♃41'23	44.30631 AU
conjunction	-572 May 11 j 23:05	13°♃58'52	-9°-6'-24	direct	-564 Feb 09 j 16:26	20°♃41'06	
minimum elong	-572 May 11 j 23:16	13°♃58'53	9°06'25	max. Earth dist.	-564 May 19 j 00:05	22°♃11'41	46.20673 AU
max. Earth dist.	-572 May 10 j 19:55	13°♃57'17	47.47342 AU				
retrograde	-572 Jun 28 j 11:34	15°♃		conjunction	-564 May 20 j 13:23	22°♃13'56	-6°-57'-18
				minimum elong	-564 May 20 j 13:32	22°♃13'56	6°57'19
retrograde	-572 Aug 22 j 05:19	15°♃30'54		retrograde	-564 Aug 30 j 14:26	23°♃48'12	
				opposition	-564 Nov 20 j 04:57	22°♃46'30	-7°-7'-6
opposition	-572 Nov 12 j 03:43	14°♃30'07	-9°-22'-24	min. Earth dist.	-564 Nov 21 j 14:22	22°♃44'50	44.13523 AU
min. Earth dist.	-572 Nov 13 j 04:43	14°♃28'54	45.42551 AU	direct	-563 Feb 09 j 22:40	21°♃44'27	
direct	-571 Feb 01 j 18:04	13°♃29'16		max. Earth dist.	-563 May 20 j 07:10	23°♃15'22	46.03499 AU
max. Earth dist.	-571 May 12 j 00:36	14°♃57'59	47.32684 AU				
				conjunction	-563 May 21 j 21:51	23°♃17'42	-6°-39'-57
conjunction	-571 May 13 j 06:15	14°♃59'43	-8°-51'-11	minimum elong	-563 May 21 j 22:00	23°♃17'42	6°39'57
minimum elong	-571 May 13 j 06:25	14°♃59'44	8°51'11	retrograde	-563 Sep 01 j 01:01	24°♃52'20	
				opposition	-563 Nov 21 j 11:56	23°♃50'32	-6°-48'-54
retrograde	-571 Aug 23 j 11:20	16°♃31'58		min. Earth dist.	-563 Nov 22 j 23:27	23°♃48'45	43.96028 AU
opposition	-571 Nov 13 j 09:32	15°♃31'04	-9°-6'-28	direct	-562 Feb 11 j 02:51	22°♃48'20	
min. Earth dist.	-571 Nov 14 j 12:21	15°♃29'45	45.27531 AU	max. Earth dist.	-562 May 21 j 15:08	24°♃19'36	45.85918 AU
direct	-571 Dec 11 j 02:43	15°♃		conjunction	-562 May 23 j 06:43	24°♃21'59	-6°-22'-19
				minimum elong	-562 May 23 j 06:52	24°♃22'00	6°22'20
max. Earth dist.	-570 Mar 28 j 08:49	15°♃		retrograde	-562 Sep 02 j 11:11	25°♃57'00	
				opposition	-562 Nov 22 j 18:51	24°♃55'04	-6°-30'-26
conjunction	-570 May 14 j 13:49	16°♃00'48	-8°-35'-43	min. Earth dist.	-562 Nov 24 j 06:49	24°♃53'16	43.78089 AU
minimum elong	-570 May 14 j 14:00	16°♃00'48	8°35'44	direct	-561 Feb 12 j 08:17	23°♃52'41	
retrograde	-570 Aug 24 j 15:44	17°♃33'16		max. Earth dist.	-561 May 22 j 21:31	25°♃24'14	45.67856 AU
opposition	-570 Nov 14 j 15:19	16°♃32'15	-8°-50'-16				
min. Earth dist.	-570 Nov 15 j 19:23	16°♃30'52	45.12106 AU	conjunction	-561 May 24 j 15:47	25°♃26'47	-6°-4'-27
direct	-569 Feb 04 j 09:36	15°♃31'05		minimum elong	-561 May 24 j 15:55	25°♃26'48	6°04'27
				retrograde	-561 Sep 03 j 20:28	27°♃02'09	
conjunction	-569 May 15 j 21:24	17°♃02'07	-8°-19'-59	opposition	-561 Nov 24 j 02:12	26°♃00'04	-6°-11'-40
minimum elong	-569 May 15 j 21:34	17°♃02'07	8°19'59	min. Earth dist.	-561 Nov 25 j 16:21	25°♃58'09	43.59668 AU
max. Earth dist.	-569 May 14 j 13:33	17°♃00'14	47.02147 AU	direct	-560 Feb 13 j 16:09	24°♃57'30	
retrograde	-569 Aug 26 j 00:01	18°♃34'50		max. Earth dist.	-560 May 23 j 06:12	26°♃29'26	45.49303 AU
opposition	-569 Nov 15 j 21:11	17°♃33'42	-8°-33'-47				
min. Earth dist.	-569 Nov 17 j 01:42	17°♃32'17	44.96349 AU	conjunction	-560 May 25 j 01:04	26°♃32'02	-5°-46'-19
direct	-568 Feb 05 j 14:17	16°♃32'22		minimum elong	-560 May 25 j 01:12	26°♃32'02	5°46'19
max. Earth dist.	-568 May 14 j 19:57	18°♃01'45	46.86364 AU	retrograde	-560 Sep 04 j 02:06	28°♃07'45	
				opposition	-560 Nov 24 j 09:38	27°♃05'30	-5°-52'-38
conjunction	-568 May 16 j 05:04	18°♃03'43	-8°-3'-59	min. Earth dist.	-560 Nov 26 j 00:54	27°♃03'31	43.40759 AU
minimum elong	-568 May 16 j 05:14	18°♃03'43	8°04'00	direct	-559 Feb 14 j 03:22	26°♃02'43	
retrograde	-568 Aug 26 j 08:38	19°♃36'43		max. Earth dist.	-559 May 24 j 13:15	27°♃34'56	45.30293 AU
opposition	-568 Nov 16 j 03:18	18°♃35'26	-8°-17'-2				

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Attention, astronomical year style is used: The year -559 in astronomical counting style is the year 560 BCE in historical counting style.

conjunction	-559 May 26 j 10:22	27°♃37'41	-5°-27'-54	max. Earth dist.	-551 Jun 02 j 14:10	6°♁35'50	43.67123 AU
minimum elong	-559 May 26 j 10:31	27°♃37'41	5°27'55				
retrograde	-559 Sep 05 j 10:42	29°♃13'46		conjunction	-551 Jun 04 j 20:30	6°♁39'16	-2°-50'-48
opposition	-559 Nov 25 j 17:08	28°♃11'20	-5°-33'-20	minimum elong	-551 Jun 04 j 20:35	6°♁39'16	2°50'49
min. Earth dist.	-559 Nov 27 j 09:21	28°♃09'18	43.21426 AU	retrograde	-551 Sep 14 j 21:24	8°♁19'01	
direct	-558 Feb 15 j 11:21	27°♃08'19		opposition	-551 Dec 04 j 13:04	7°♁15'02	-2°-48'-8
max. Earth dist.	-558 May 25 j 21:32	28°♃40'52	45.10856 AU	min. Earth dist.	-551 Dec 06 j 13:53	7°♁12'30	41.56521 AU
				direct	-550 Feb 24 j 03:23	6°♁10'08	
conjunction	-558 May 27 j 19:56	28°♃43'43	-5°-9'-14	max. Earth dist.	-550 Jun 04 j 01:27	7°♁46'24	43.45568 AU
minimum elong	-558 May 27 j 20:03	28°♃43'43	5°09'15				
	-558 Jul 26 j 08:51	0°♁		conjunction	-550 Jun 06 j 08:05	7°♁49'52	-2°-29'-55
retrograde	-558 Sep 06 j 19:16	0°♁20'11		minimum elong	-550 Jun 06 j 08:09	7°♁49'52	2°29'54
	-558 Oct 19 j 16:21	30°♁♂		retrograde	-550 Sep 16 j 08:43	9°♁30'10	
opposition	-558 Nov 27 j 00:59	29°♃17'33	-5°-13'-43	opposition	-550 Dec 05 j 22:43	8°♁26'00	-2°-26'-8
min. Earth dist.	-558 Nov 28 j 19:10	29°♃15'24	43.01694 AU	min. Earth dist.	-550 Dec 08 j 00:10	8°♁23'25	41.34714 AU
direct	-557 Feb 16 j 18:52	28°♃14'17		direct	-549 Feb 25 j 14:59	7°♁20'51	
max. Earth dist.	-557 May 27 j 06:36	29°♃47'14	44.91062 AU	max. Earth dist.	-549 Jun 05 j 10:42	8°♁57'36	43.23624 AU
conjunction	-557 May 29 j 05:44	29°♃50'08	-4°-50'-18	conjunction	-549 Jun 07 j 19:55	9°♁01'15	-2°-8'-45
minimum elong	-557 May 29 j 05:51	29°♃50'08	4°50'19	minimum elong	-549 Jun 07 j 19:58	9°♁01'16	2°08'45
	-557 Jun 04 j 22:17	0°♁		retrograde	-549 Sep 17 j 21:05	10°♁42'07	
retrograde	-557 Sep 08 j 05:58	1°♁26'59		opposition	-549 Dec 07 j 08:35	9°♁37'45	-2°-3'-51
opposition	-557 Nov 28 j 08:45	0°♁24'09	-4°-53'-50	min. Earth dist.	-549 Dec 09 j 11:30	9°♁35'05	41.12522 AU
min. Earth dist.	-557 Nov 30 j 03:07	0°♁21'59	42.81638 AU	direct	-548 Feb 27 j 01:24	8°♁32'20	
	-557 Dec 18 j 14:18	30°♁♂		max. Earth dist.	-548 Jun 05 j 22:04	10°♁09'39	43.01270 AU
direct	-556 Feb 18 j 01:52	29°♃20'38					
	-556 Apr 18 j 13:32	0°♁		conjunction	-548 Jun 08 j 08:11	10°♁13'24	-1°-47'-19
max. Earth dist.	-556 May 27 j 14:19	0°♁53'55	44.70957 AU	minimum elong	-548 Jun 08 j 08:14	10°♁13'24	1°47'19
				retrograde	-548 Sep 18 j 06:32	11°♁54'51	
conjunction	-556 May 29 j 15:37	0°♁56'57	-4°-31'-5	opposition	-548 Dec 07 j 18:57	10°♁50'15	-1°-41'-15
minimum elong	-556 May 29 j 15:43	0°♁56'58	4°31'05	min. Earth dist.	-548 Dec 09 j 23:25	10°♁47'29	40.89929 AU
retrograde	-556 Sep 08 j 18:00	2°♁34'13		direct	-547 Feb 27 j 12:45	9°♁44'33	
opposition	-556 Nov 28 j 16:58	1°♁31'10	-4°-33'-38	max. Earth dist.	-547 Jun 07 j 09:02	11°♁22'25	42.78544 AU
min. Earth dist.	-556 Nov 30 j 13:04	1°♁28'55	42.61318 AU				
direct	-555 Feb 18 j 08:31	0°♁27'25		conjunction	-547 Jun 09 j 20:25	11°♁26'16	-1°-25'-37
max. Earth dist.	-555 May 29 j 00:29	2°♁01'11	44.50609 AU	minimum elong	-547 Jun 09 j 20:27	11°♁26'16	1°25'37
				retrograde	-547 Sep 19 j 18:42	13°♁08'19	
conjunction	-555 May 31 j 01:37	2°♁04'14	-4°-11'-35	opposition	-547 Dec 09 j 05:23	12°♁03'28	-1°-18'-23
minimum elong	-555 May 31 j 01:44	2°♁04'14	4°11'36	min. Earth dist.	-547 Dec 11 j 10:18	12°♁00'40	40.66986 AU
retrograde	-555 Sep 10 j 02:03	3°♁41'56		direct	-546 Feb 28 j 22:11	10°♁57'28	
opposition	-555 Nov 30 j 01:22	2°♁38'40	-4°-13'-8	max. Earth dist.	-546 Jun 08 j 19:47	12°♁35'52	42.55463 AU
min. Earth dist.	-555 Dec 01 j 21:45	2°♁36'24	42.40772 AU				
direct	-554 Feb 19 j 18:53	1°♁34'40		conjunction	-546 Jun 11 j 09:10	12°♁39'52	-1°-3'-38
max. Earth dist.	-554 May 30 j 08:59	3°♁08'50	44.30059 AU	minimum elong	-546 Jun 11 j 09:11	12°♁39'52	1°03'39
				retrograde	-546 Sep 21 j 09:27	14°♁22'31	
conjunction	-554 Jun 01 j 11:53	3°♁12'01	-3°-51'-49	opposition	-546 Dec 10 j 16:08	13°♁17'24	0°-55'-12
minimum elong	-554 Jun 01 j 11:58	3°♁12'01	3°51'49	min. Earth dist.	-546 Dec 12 j 23:08	13°♁14'28	40.43733 AU
retrograde	-554 Sep 11 j 11:04	4°♁50'10		direct	-545 Mar 02 j 05:43	12°♁11'04	
opposition	-554 Dec 01 j 09:49	3°♁46'44	-3°-52'-21	max. Earth dist.	-545 Jun 10 j 08:43	13°♁50'09	42.32101 AU
min. Earth dist.	-554 Dec 03 j 07:00	3°♁44'24	42.20047 AU				
direct	-553 Feb 21 j 04:06	2°♁42'29		conjunction	-545 Jun 12 j 22:15	13°♁54'10	0°-41'-24
max. Earth dist.	-553 May 31 j 18:57	4°♁17'09	44.09308 AU	minimum elong	-545 Jun 12 j 22:16	13°♁54'10	0°41'25
				retrograde	-545 Sep 22 j 22:23	15°♁37'26	
conjunction	-553 Jun 02 j 22:35	4°♁20'24	-3°-31'-45	opposition	-545 Dec 12 j 03:11	14°♁32'03	0°-31'-44
minimum elong	-553 Jun 02 j 22:40	4°♁20'24	3°31'47	min. Earth dist.	-545 Dec 14 j 10:14	14°♁29'06	40.20229 AU
retrograde	-553 Sep 12 j 20:29	5°♁59'03		direct	-544 Mar 02 j 17:13	13°♁25'24	
opposition	-553 Dec 02 j 18:44	4°♁55'26	-3°-31'-14	max. Earth dist.	-544 Jun 10 j 19:51	15°♁05'02	42.08509 AU
min. Earth dist.	-553 Dec 04 j 17:23	4°♁53'01	41.99117 AU				
direct	-552 Feb 22 j 12:46	3°♁50'58		conjunction	-544 Jun 13 j 11:22	15°♁09'13	0°-18'-54
max. Earth dist.	-552 Jun 01 j 05:01	5°♁26'09	43.88352 AU	minimum elong	-544 Jun 13 j 11:22	15°♁09'13	0°18'55
				retrograde	-544 Sep 23 j 12:28	16°♁53'07	
conjunction	-552 Jun 03 j 09:22	5°♁29'27	-3°-11'-25	opposition	-544 Dec 12 j 14:33	15°♁47'27	0°-7'-59
minimum elong	-552 Jun 03 j 09:27	5°♁29'27	3°11'25	min. Earth dist.	-544 Dec 14 j 22:55	15°♁44'25	39.96549 AU
retrograde	-552 Sep 13 j 08:33	7°♁08'39		direct	-543 Mar 04 j 05:08	14°♁40'28	
opposition	-552 Dec 03 j 03:42	6°♁04'51	-3°-9'-50	asc. node	-543 Apr 14 j 01:12	15°♁00'16	
min. Earth dist.	-552 Dec 05 j 02:23	6°♁02'25	41.77962 AU	max. Earth dist.	-543 Jun 12 j 09:29	16°♁20'49	41.84753 AU
direct	-551 Feb 22 j 19:33	5°♁00'10					

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

conjunction	-543 Jun 15 j 01:01	16°II25'02	0°03'57	minimum elong	-535 Jun 26 j 04:19	27°II06'42	3°14'51
minimum elong	-543 Jun 15 j 01:00	16°II25'02	0°03'57	retrograde	-535 Oct 06 j 04:06	28°II57'34	
behind sun begin	-543 Jun 14 j 18:33	16°II24'38		opposition	-535 Dec 24 j 14:33	27°II49'21	3°38'05
behind sun end	-543 Jun 15 j 07:28	16°II25'26		min. Earth dist.	-535 Dec 27 j 06:15	27°II45'45	37.77202 AU
retrograde	-543 Sep 24 j 23:33	18°II09'35		direct	-534 Mar 16 j 03:07	26°II39'16	
opposition	-543 Dec 14 j 02:17	17°II03'39	0°16'03	max. Earth dist.	-534 Jun 24 j 20:21	28°II26'37	39.64174 AU
min. Earth dist.	-543 Dec 16 j 11:23	17°II00'33	39.72737 AU				
direct	-542 Mar 05 j 19:39	15°II56'19		conjunction	-534 Jun 27 j 21:56	28°II31'49	3°39'43
max. Earth dist.	-542 Jun 13 j 22:09	17°II37'20	41.60897 AU	minimum elong	-534 Jun 27 j 21:49	28°II31'49	3°39'43
					-534 Aug 26 j 07:03	0°☾	
conjunction	-542 Jun 16 j 14:52	17°II41'40	0°26'55	retrograde	-534 Oct 07 j 22:34	0°☾23'34	
minimum elong	-542 Jun 16 j 14:51	17°II41'40	0°26'55		-534 Nov 20 j 04:00	30°RII	
retrograde	-542 Sep 26 j 13:21	19°II26'55		opposition	-534 Dec 26 j 06:10	29°II15'00	4°04'27
opposition	-542 Dec 15 j 14:19	18°II20'42	0°40'22	min. Earth dist.	-534 Dec 28 j 23:44	29°II11'17	37.51787 AU
min. Earth dist.	-542 Dec 17 j 23:28	18°II17'35	39.48846 AU	direct	-533 Mar 17 j 16:46	28°II04'31	
direct	-541 Mar 07 j 07:30	17°II13'03		max. Earth dist.	-533 Jun 26 j 14:34	29°II52'50	39.38576 AU
max. Earth dist.	-541 Jun 15 j 11:30	18°II54'47	41.36939 AU				
				conjunction	-533 Jun 29 j 15:58	29°II58'04	4°04'47
conjunction	-541 Jun 18 j 05:15	18°II59'12	0°50'11	minimum elong	-533 Jun 29 j 15:50	29°II58'04	4°04'48
minimum elong	-541 Jun 18 j 05:14	18°II59'12	0°50'12		-533 Jun 30 j 18:57	0°☾	
retrograde	-541 Sep 28 j 02:43	20°II45'11		retrograde	-533 Oct 09 j 17:34	1°☾50'43	
opposition	-541 Dec 17 j 02:50	19°II38'42	1°04'58	opposition	-533 Dec 27 j 22:07	0°☾41'48	4°31'02
min. Earth dist.	-541 Dec 19 j 13:33	19°II35'29	39.24869 AU	min. Earth dist.	-533 Dec 30 j 15:47	0°☾38'03	37.26229 AU
direct	-540 Mar 07 j 18:12	18°II30'44			-532 Jan 29 j 12:43	30°RII	
max. Earth dist.	-540 Jun 16 j 02:18	20°II13'16	41.12899 AU	direct	-532 Mar 18 j 09:21	29°II30'53	
					-532 May 05 j 13:32	0°☾	
conjunction	-540 Jun 18 j 20:00	20°II17'43	1°13'42	max. Earth dist.	-532 Jun 27 j 07:03	1°☾20'05	39.12864 AU
minimum elong	-540 Jun 18 j 19:58	20°II17'43	1°13'42				
retrograde	-540 Sep 28 j 18:52	22°II04'28		conjunction	-532 Jun 30 j 10:17	1°☾25'29	4°30'01
opposition	-540 Dec 17 j 15:40	20°II57'43	1°29'51	minimum elong	-532 Jun 30 j 10:09	1°☾25'28	4°30'01
min. Earth dist.	-540 Dec 20 j 02:13	20°II54'30	39.00796 AU	retrograde	-532 Oct 10 j 13:39	3°☾19'04	
direct	-539 Mar 09 j 05:35	19°II49'26		opposition	-532 Dec 28 j 14:37	2°☾09'47	4°57'48
max. Earth dist.	-539 Jun 17 j 15:15	21°II32'41	40.88718 AU	min. Earth dist.	-532 Dec 31 j 09:15	2°☾05'57	37.00619 AU
				direct	-531 Mar 20 j 00:49	0°☾58'27	
conjunction	-539 Jun 20 j 10:58	21°II37'18	1°37'28	max. Earth dist.	-531 Jun 29 j 02:03	2°☾48'40	38.87102 AU
minimum elong	-539 Jun 20 j 10:55	21°II37'18	1°37'29				
retrograde	-539 Sep 30 j 12:54	23°II24'50		conjunction	-531 Jul 02 j 05:07	2°☾54'07	4°55'25
opposition	-539 Dec 19 j 04:59	22°II17'49	1°54'59	minimum elong	-531 Jul 02 j 04:57	2°☾54'06	4°55'26
min. Earth dist.	-539 Dec 21 j 17:15	22°II14'30	38.76569 AU	retrograde	-531 Oct 12 j 07:00	4°☾48'39	
direct	-538 Mar 10 j 16:31	21°II09'13		opposition	-531 Dec 30 j 07:44	3°☾39'01	5°24'45
max. Earth dist.	-538 Jun 19 j 06:56	22°II53'20	40.64333 AU	min. Earth dist.	-530 Jan 02 j 02:56	3°☾35'08	36.74994 AU
				direct	-530 Mar 21 j 19:22	2°☾27'16	
conjunction	-538 Jun 22 j 02:44	22°II57'59	2°01'29	max. Earth dist.	-530 Jun 30 j 20:39	4°☾18'29	38.61364 AU
minimum elong	-538 Jun 22 j 02:40	22°II57'59	2°01'29				
retrograde	-538 Oct 02 j 03:48	24°II46'20		conjunction	-530 Jul 04 j 00:28	4°☾24'02	5°20'57
opposition	-538 Dec 20 j 18:39	23°II39'02	2°20'23	minimum elong	-530 Jul 04 j 00:18	4°☾24'01	5°20'56
min. Earth dist.	-538 Dec 23 j 07:37	23°II35'40	38.52112 AU	retrograde	-530 Oct 14 j 02:20	6°☾19'34	
direct	-537 Mar 12 j 07:26	22°II30'06		opposition	-529 Jan 01 j 01:09	5°☾09'35	5°51'50
max. Earth dist.	-537 Jun 20 j 21:05	24°II14'57	40.39697 AU	min. Earth dist.	-529 Jan 03 j 20:11	5°☾05'41	36.49431 AU
				direct	-529 Mar 23 j 12:41	3°☾57'25	
conjunction	-537 Jun 23 j 18:51	24°II19'47	2°25'43	max. Earth dist.	-529 Jul 02 j 15:58	5°☾49'41	38.35673 AU
minimum elong	-537 Jun 23 j 18:47	24°II19'47	2°25'44				
retrograde	-537 Oct 03 j 20:16	26°II08'57		conjunction	-529 Jul 05 j 20:31	5°☾55'20	5°46'35
opposition	-537 Dec 22 j 08:51	25°II01'22	2°46'02	minimum elong	-529 Jul 05 j 20:19	5°☾55'19	5°46'36
min. Earth dist.	-537 Dec 24 j 22:47	24°II57'55	38.27404 AU	retrograde	-529 Oct 15 j 21:43	7°☾51'55	
direct	-536 Mar 12 j 22:27	23°II52'04		opposition	-528 Jan 02 j 19:25	6°☾41'35	6°19'04
max. Earth dist.	-536 Jun 21 j 12:39	25°II37'46	40.14771 AU	min. Earth dist.	-528 Jan 05 j 15:47	6°☾37'35	36.23944 AU
				direct	-528 Mar 24 j 03:54	5°☾29'01	
conjunction	-536 Jun 24 j 11:25	25°II42'42	2°50'10	max. Earth dist.	-528 Jul 03 j 12:44	7°☾22'26	38.10065 AU
minimum elong	-536 Jun 24 j 11:19	25°II42'41	2°50'10				
retrograde	-536 Oct 04 j 11:20	27°II32'42		conjunction	-528 Jul 06 j 16:55	7°☾28'07	6°12'19
opposition	-536 Dec 22 j 23:37	26°II24'49	3°11'57	minimum elong	-528 Jul 06 j 16:43	7°☾28'06	6°12'19
min. Earth dist.	-536 Dec 25 j 15:14	26°II21'14	38.02418 AU	retrograde	-528 Oct 16 j 18:38	9°☾25'47	
direct	-535 Mar 14 j 13:03	25°II15'08		opposition	-527 Jan 03 j 14:07	8°☾15'07	6°46'24
max. Earth dist.	-535 Jun 23 j 04:47	27°II01'40	39.89592 AU	min. Earth dist.	-527 Jan 06 j 09:52	8°☾11'08	35.98534 AU
				direct	-527 Mar 25 j 21:56	7°☾02'10	
conjunction	-535 Jun 26 j 04:26	27°II06'42	3°14'51	max. Earth dist.	-527 Jul 05 j 08:15	8°☾56'38	37.84499 AU

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Attention, astronomical year style is used: The year -527 in astronomical counting style is the year 528 BCE in historical counting style.

conjunction	-527 Jul 08 j 14:01	9° \mathcal{E} 02'29	6°38'08	opposition	-518 Jan 18 j 20:31	23° \mathcal{E} 30'14	10°53'18
minimum elong	-527 Jul 08 j 13:47	9° \mathcal{E} 02'28	6°38'09	min. Earth dist.	-518 Jan 21 j 20:53	23° \mathcal{E} 25'43	33.70183 AU
retrograde	-527 Oct 18 j 18:37	11° \mathcal{E} 01'16		direct	-518 Apr 09 j 20:41	22° \mathcal{E} 13'02	
opposition	-526 Jan 05 j 09:23	9° \mathcal{E} 50'16	7°13'49	max. Earth dist.	-518 Jul 21 j 08:30	24° \mathcal{E} 18'40	35.54285 AU
min. Earth dist.	-526 Jan 08 j 06:34	9° \mathcal{E} 46'10	35.73168 AU				
direct	-526 Mar 27 j 14:24	8° \mathcal{E} 36'54		conjunction	-518 Jul 24 j 17:43	24° \mathcal{E} 25'18	10°29'42
max. Earth dist.	-526 Jul 07 j 06:39	10° \mathcal{E} 32'37	37.58934 AU	minimum elong	-518 Jul 24 j 17:23	24° \mathcal{E} 25'17	10°29'42
				retrograde	-518 Nov 04 j 04:19	26° \mathcal{E} 34'56	
conjunction	-526 Jul 10 j 11:55	10° \mathcal{E} 38'29	7°04'00	opposition	-517 Jan 20 j 22:07	25° \mathcal{E} 20'12	11°20'07
minimum elong	-526 Jul 10 j 11:41	10° \mathcal{E} 38'28	7°04'01	min. Earth dist.	-517 Jan 23 j 22:15	25° \mathcal{E} 15'40	33.45505 AU
retrograde	-526 Oct 20 j 17:29	12° \mathcal{E} 38'25		direct	-517 Apr 11 j 22:09	24° \mathcal{E} 02'30	
opposition	-525 Jan 07 j 05:26	11° \mathcal{E} 27'03	7°41'19	max. Earth dist.	-517 Jul 23 j 13:17	26° \mathcal{E} 09'36	35.29483 AU
min. Earth dist.	-525 Jan 10 j 02:50	11° \mathcal{E} 22'55	35.47777 AU				
direct	-525 Mar 29 j 10:47	10° \mathcal{E} 13'16		conjunction	-517 Jul 26 j 21:33	26° \mathcal{E} 16'14	10°54'38
max. Earth dist.	-525 Jul 09 j 03:24	12° \mathcal{E} 10'06	37.33320 AU	minimum elong	-517 Jul 26 j 21:11	26° \mathcal{E} 16'13	10°54'38
				retrograde	-517 Nov 06 j 08:41	28° \mathcal{E} 27'12	
conjunction	-525 Jul 12 j 10:19	12° \mathcal{E} 16'08	7°29'55	opposition	-516 Jan 23 j 00:38	27° \mathcal{E} 12'02	11°46'38
minimum elong	-525 Jul 12 j 10:04	12° \mathcal{E} 16'07	7°29'56	min. Earth dist.	-516 Jan 26 j 00:55	27° \mathcal{E} 07'28	33.21189 AU
retrograde	-525 Oct 22 j 17:59	14° \mathcal{E} 17'13		direct	-516 Apr 13 j 00:42	25° \mathcal{E} 53'52	
opposition	-524 Jan 09 j 02:05	13° \mathcal{E} 05'30	8°08'52	max. Earth dist.	-516 Jul 24 j 18:02	28° \mathcal{E} 02'25	35.05080 AU
min. Earth dist.	-524 Jan 12 j 00:16	13° \mathcal{E} 01'18	35.22347 AU				
direct	-524 Mar 30 j 06:32	11° \mathcal{E} 51'16		conjunction	-516 Jul 28 j 02:01	28° \mathcal{E} 09'06	11°19'13
max. Earth dist.	-524 Jul 10 j 02:22	13° \mathcal{E} 49'20	37.07634 AU	minimum elong	-516 Jul 28 j 01:39	28° \mathcal{E} 09'04	11°19'14
					-516 Oct 01 j 03:41	0° Ω	
conjunction	-524 Jul 13 j 09:32	13° \mathcal{E} 55'27	7°55'50	retrograde	-516 Nov 07 j 14:48	0° Ω 21'25	
minimum elong	-524 Jul 13 j 09:17	13° \mathcal{E} 55'25	7°55'50		-516 Dec 15 j 15:31	30° \mathcal{R} \mathcal{E}	
retrograde	-524 Oct 23 j 16:32	15° \mathcal{E} 57'41		opposition	-515 Jan 24 j 03:46	29° \mathcal{E} 05'52	12°12'46
opposition	-523 Jan 09 j 23:34	14° \mathcal{E} 45'35	8°36'26	min. Earth dist.	-515 Jan 27 j 02:53	29° \mathcal{E} 01'20	32.97284 AU
min. Earth dist.	-523 Jan 12 j 22:46	14° \mathcal{E} 41'17	34.96857 AU	direct	-515 Apr 15 j 03:13	27° \mathcal{E} 47'14	
direct	-523 Apr 01 j 05:10	13° \mathcal{E} 30'54		max. Earth dist.	-515 Jul 26 j 23:25	29° \mathcal{E} 57'15	34.81057 AU
max. Earth dist.	-523 Jul 12 j 01:17	15° \mathcal{E} 30'08	36.81908 AU		-515 Jul 28 j 08:00	0° Ω	
				conjunction	-515 Jul 30 j 07:18	0° Ω 04'00	11°43'25
conjunction	-523 Jul 15 j 09:09	15° \mathcal{E} 36'22	8°21'44	minimum elong	-515 Jul 30 j 06:55	0° Ω 03'58	11°43'25
minimum elong	-523 Jul 15 j 08:52	15° \mathcal{E} 36'21	8°21'45	retrograde	-515 Nov 09 j 19:39	2° Ω 17'43	
retrograde	-523 Oct 25 j 17:31	17° \mathcal{E} 39'47		opposition	-514 Jan 26 j 07:54	1° Ω 01'46	12°38'29
opposition	-522 Jan 11 j 21:33	16° \mathcal{E} 27'16	9°03'59	min. Earth dist.	-514 Jan 29 j 07:45	0° Ω 57'10	32.73753 AU
min. Earth dist.	-522 Jan 14 j 20:32	16° \mathcal{E} 22'57	34.71346 AU		-514 Mar 13 j 10:22	30° \mathcal{R} \mathcal{E}	
direct	-522 Apr 03 j 02:59	15° \mathcal{E} 12'07		direct	-514 Apr 17 j 04:49	29° \mathcal{E} 42'43	
max. Earth dist.	-522 Jul 14 j 00:45	17° \mathcal{E} 12'31	36.56149 AU		-514 May 21 j 10:45	0° Ω	
				max. Earth dist.	-514 Jul 29 j 06:44	1° Ω 54'18	34.57399 AU
conjunction	-522 Jul 17 j 09:39	17° \mathcal{E} 18'54	8°47'36				
minimum elong	-522 Jul 17 j 09:22	17° \mathcal{E} 18'53	8°47'36	conjunction	-514 Aug 01 j 13:29	2° Ω 01'01	12°07'10
retrograde	-522 Oct 27 j 16:23	19° \mathcal{E} 23'31		minimum elong	-514 Aug 01 j 13:06	2° Ω 00'59	12°07'11
opposition	-521 Jan 13 j 20:14	18° \mathcal{E} 10'34	9°31'30	retrograde	-514 Nov 12 j 02:23	4° Ω 16'09	
min. Earth dist.	-521 Jan 16 j 20:47	18° \mathcal{E} 06'08	34.45848 AU	opposition	-513 Jan 28 j 12:44	2° Ω 59'50	13°03'43
direct	-521 Apr 04 j 23:28	16° \mathcal{E} 54'55		min. Earth dist.	-513 Jan 31 j 11:28	2° Ω 55'16	32.50567 AU
max. Earth dist.	-521 Jul 16 j 02:21	18° \mathcal{E} 56'38	36.30437 AU	direct	-513 Apr 19 j 08:09	1° Ω 40'21	
				max. Earth dist.	-513 Jul 31 j 13:05	3° Ω 53'22	34.34062 AU
conjunction	-521 Jul 19 j 10:46	19° \mathcal{E} 03'02	9°13'22				
minimum elong	-521 Jul 19 j 10:27	19° \mathcal{E} 03'01	9°13'22	conjunction	-513 Aug 03 j 20:29	4° Ω 00'12	12°30'26
retrograde	-521 Oct 29 j 16:55	21° \mathcal{E} 08'52		minimum elong	-513 Aug 03 j 20:05	4° Ω 00'10	12°30'26
opposition	-520 Jan 15 j 19:38	19° \mathcal{E} 55'29	9°58'56	retrograde	-513 Nov 14 j 10:44	6° Ω 16'46	
min. Earth dist.	-520 Jan 18 j 19:34	19° \mathcal{E} 51'03	34.20434 AU	opposition	-512 Jan 30 j 18:41	5° Ω 00'04	13°28'25
direct	-520 Apr 05 j 22:34	18° \mathcal{E} 39'19		min. Earth dist.	-512 Feb 02 j 18:06	4° Ω 55'26	32.27710 AU
max. Earth dist.	-520 Jul 17 j 02:37	20° \mathcal{E} 42'14	36.04831 AU	direct	-512 Apr 20 j 10:22	3° Ω 40'08	
				max. Earth dist.	-512 Aug 01 j 22:18	5° Ω 54'46	34.11042 AU
conjunction	-520 Jul 20 j 12:18	20° \mathcal{E} 48'47	9°39'01				
minimum elong	-520 Jul 20 j 11:59	20° \mathcal{E} 48'46	9°39'01	conjunction	-512 Aug 05 j 04:13	6° Ω 01'33	12°53'09
retrograde	-520 Oct 30 j 20:09	22° \mathcal{E} 55'52		minimum elong	-512 Aug 05 j 03:50	6° Ω 01'31	12°53'09
opposition	-519 Jan 16 j 19:46	21° \mathcal{E} 42'01	10°26'13	retrograde	-512 Nov 15 j 19:08	8° Ω 19'33	
min. Earth dist.	-519 Jan 19 j 20:34	21° \mathcal{E} 37'30	33.95190 AU	opposition	-511 Feb 01 j 01:29	7° Ω 02'27	13°52'32
direct	-519 Apr 07 j 19:57	20° \mathcal{E} 25'19		min. Earth dist.	-511 Feb 04 j 00:04	6° Ω 57'51	32.05160 AU
max. Earth dist.	-519 Jul 19 j 06:11	22° \mathcal{E} 29'40	35.79419 AU	direct	-511 Apr 22 j 17:09	5° Ω 42'05	
				max. Earth dist.	-511 Aug 04 j 06:08	7° Ω 58'08	33.88346 AU
conjunction	-519 Jul 22 j 14:42	22° \mathcal{E} 36'11	10°04'28				
minimum elong	-519 Jul 22 j 14:22	22° \mathcal{E} 36'10	10°04'28	conjunction	-511 Aug 07 j 12:48	8° Ω 05'02	13°15'15
retrograde	-519 Nov 01 j 22:25	24° \mathcal{E} 44'31					

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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.

minimum elong	-511 Aug 07 j 12:23	8°Ω05'00	13°15'15	minimum elong	-503 Aug 25 j 12:28	25°Ω45'30	15°40'55
retrograde	-511 Nov 18 j 06:37	10°Ω24'28		retrograde	-503 Dec 06 j 12:51	28°Ω15'48	
opposition	-510 Feb 03 j 08:57	9°Ω06'57	14°16'00	opposition	-502 Feb 21 j 05:34	26°Ω55'09	16°49'19
min. Earth dist.	-510 Feb 06 j 07:27	9°Ω02'20	31.82954 AU	min. Earth dist.	-502 Feb 23 j 19:00	26°Ω50'56	30.24782 AU
direct	-510 Apr 24 j 23:38	7°Ω46'07		direct	-502 May 12 j 11:51	25°Ω31'00	
max. Earth dist.	-510 Aug 06 j 17:09	10°Ω03'47	33.65997 AU	max. Earth dist.	-502 Aug 25 j 09:47	28°Ω00'42	32.08272 AU
conjunction	-510 Aug 09 j 22:23	10°Ω10'38	13°36'41	conjunction	-502 Aug 28 j 04:06	28°Ω07'02	15°53'57
minimum elong	-510 Aug 09 j 22:00	10°Ω10'36	13°36'42	minimum elong	-502 Aug 28 j 03:49	28°Ω07'00	15°53'57
retrograde	-510 Nov 20 j 16:03	12°Ω31'28		retrograde	-502 Oct 22 j 13:04	0°♄	
opposition	-509 Feb 05 j 17:34	11°Ω13'32	14°38'43	retrograde	-502 Dec 09 j 06:27	0°♄38'33	
min. Earth dist.	-509 Feb 08 j 15:52	11°Ω08'54	31.61108 AU		-501 Jan 27 j 21:26	30°♄	
direct	-509 Apr 27 j 07:33	9°Ω52'14		opposition	-501 Feb 23 j 21:05	29°Ω17'37	17°02'47
max. Earth dist.	-509 Aug 09 j 03:21	12°Ω11'22	33.44059 AU	min. Earth dist.	-501 Feb 26 j 09:00	29°Ω13'29	30.08345 AU
conjunction	-509 Aug 12 j 08:26	12°Ω18'16	13°57'23	direct	-501 May 15 j 01:18	27°Ω53'10	
minimum elong	-509 Aug 12 j 08:01	12°Ω18'14	13°57'23		-501 Aug 17 j 12:49	0°♄	
retrograde	-509 Nov 23 j 05:04	14°Ω40'29		max. Earth dist.	-501 Aug 28 j 04:49	0°♄24'24	31.92009 AU
opposition	-508 Feb 08 j 02:54	13°Ω22'08	15°00'36	conjunction	-501 Aug 30 j 20:10	0°♄30'30	16°05'35
min. Earth dist.	-508 Feb 11 j 00:01	13°Ω17'33	31.39707 AU	minimum elong	-501 Aug 30 j 19:53	0°♄30'28	16°05'35
direct	-508 Apr 28 j 17:07	12°Ω00'23		retrograde	-501 Dec 11 j 22:52	3°♄03'14	
max. Earth dist.	-508 Aug 10 j 15:35	14°Ω21'04	33.22590 AU	opposition	-500 Feb 26 j 13:37	1°♄42'01	17°14'44
conjunction	-508 Aug 13 j 19:26	14°Ω27'55	14°17'14	min. Earth dist.	-500 Feb 29 j 00:11	1°♄37'58	29.92664 AU
minimum elong	-508 Aug 13 j 19:03	14°Ω27'53	14°17'14	direct	-500 May 16 j 16:16	0°♄17'17	
retrograde	-508 Aug 28 j 16:27	15°Ω		max. Earth dist.	-500 Aug 29 j 22:40	2°♄49'49	31.76533 AU
retrograde	-508 Nov 24 j 17:01	16°Ω51'31		conjunction	-500 Sep 01 j 12:50	2°♄55'50	16°15'44
opposition	-507 Feb 09 j 13:12	15°Ω32'44	15°21'35	minimum elong	-500 Sep 01 j 12:37	2°♄55'49	16°15'45
min. Earth dist.	-507 Feb 12 j 10:21	15°Ω28'07	31.18816 AU	retrograde	-500 Dec 13 j 18:32	5°♄29'44	
direct	-507 Mar 02 j 12:18	15°♄		opposition	-499 Feb 28 j 06:43	4°♄08'14	17°25'05
direct	-507 May 01 j 02:42	14°Ω10'31		min. Earth dist.	-499 Mar 02 j 15:08	4°♄04'19	29.77747 AU
max. Earth dist.	-507 Jun 27 j 11:33	15°Ω		direct	-499 May 19 j 09:22	2°♄43'15	
	-507 Aug 13 j 04:25	16°Ω32'43	33.01695 AU	max. Earth dist.	-499 Sep 01 j 18:42	5°♄17'08	31.61824 AU
conjunction	-507 Aug 16 j 06:57	16°Ω39'31	14°36'10	conjunction	-499 Sep 04 j 06:20	5°♄22'57	16°24'23
minimum elong	-507 Aug 16 j 06:34	16°Ω39'29	14°36'11	minimum elong	-499 Sep 04 j 06:06	5°♄22'55	16°24'23
retrograde	-507 Nov 27 j 05:53	19°Ω04'29		retrograde	-499 Dec 16 j 12:27	7°♄57'56	
opposition	-506 Feb 12 j 00:14	17°Ω45'17	15°41'33	opposition	-498 Mar 03 j 00:51	6°♄36'09	17°33'46
min. Earth dist.	-506 Feb 14 j 19:17	17°Ω40'46	30.98522 AU	min. Earth dist.	-498 Mar 05 j 08:23	6°♄32'18	29.63568 AU
direct	-506 May 03 j 13:46	16°Ω22'37		direct	-498 May 22 j 02:52	5°♄10'56	
max. Earth dist.	-506 Aug 15 j 17:46	18°Ω46'18	32.81433 AU	max. Earth dist.	-498 Sep 04 j 14:22	7°♄45'59	31.47905 AU
conjunction	-506 Aug 18 j 19:20	18°Ω53'05	14°54'06	conjunction	-498 Sep 07 j 00:16	7°♄51'40	16°31'26
minimum elong	-506 Aug 18 j 18:59	18°Ω53'03	14°54'06	minimum elong	-498 Sep 07 j 00:06	7°♄51'39	16°31'26
retrograde	-506 Nov 29 j 17:47	21°Ω19'23		retrograde	-498 Dec 19 j 08:36	10°♄27'40	
opposition	-505 Feb 14 j 12:18	19°Ω59'47	16°00'24	opposition	-497 Mar 05 j 19:32	9°♄05'38	17°40'44
min. Earth dist.	-505 Feb 17 j 07:04	19°Ω55'16	30.78910 AU	min. Earth dist.	-497 Mar 08 j 00:14	9°♄01'58	29.50161 AU
direct	-505 May 05 j 23:26	18°Ω36'41		direct	-497 May 24 j 21:52	7°♄40'10	
max. Earth dist.	-505 Aug 18 j 09:26	21°Ω01'58	32.61921 AU	max. Earth dist.	-497 Sep 07 j 11:07	10°♄16'23	31.34793 AU
conjunction	-505 Aug 21 j 08:27	21°Ω08'35	15°10'56	conjunction	-497 Sep 09 j 18:50	10°♄21'53	16°36'50
minimum elong	-505 Aug 21 j 08:05	21°Ω08'33	15°10'56	minimum elong	-497 Sep 09 j 18:40	10°♄21'52	16°36'50
retrograde	-505 Dec 02 j 07:44	23°Ω36'13		retrograde	-497 Dec 22 j 03:54	12°♄58'48	
opposition	-504 Feb 17 j 01:14	22°Ω16'14	16°18'03	opposition	-496 Mar 07 j 15:05	11°♄36'30	17°45'53
min. Earth dist.	-504 Feb 19 j 17:32	22°Ω11'52	30.60059 AU	min. Earth dist.	-496 Mar 09 j 18:46	11°♄32'53	29.37564 AU
direct	-504 May 07 j 11:08	20°Ω52'45		direct	-496 May 26 j 15:56	10°♄10'49	
max. Earth dist.	-504 Aug 20 j 00:02	23°Ω19'29	32.43207 AU	max. Earth dist.	-496 Sep 09 j 08:40	12°♄48'07	31.22558 AU
conjunction	-504 Aug 22 j 22:07	23°Ω26'03	15°26'34	conjunction	-496 Sep 11 j 13:37	12°♄53'23	16°40'31
minimum elong	-504 Aug 22 j 21:48	23°Ω26'02	15°26'34	minimum elong	-496 Sep 11 j 13:31	12°♄53'22	16°40'31
retrograde	-504 Dec 03 j 22:28	25°Ω55'01		retrograde	-496 Dec 24 j 00:43	15°♄31'08	
opposition	-503 Feb 18 j 15:02	24°Ω34'42	16°34'22	opposition	-495 Mar 10 j 11:01	14°♄08'36	17°49'10
min. Earth dist.	-503 Feb 21 j 06:28	24°Ω30'21	30.42020 AU	min. Earth dist.	-495 Mar 12 j 11:32	14°♄05'12	29.25824 AU
direct	-503 May 09 j 21:32	23°Ω10'51		direct	-495 May 29 j 12:30	12°♄42'43	
max. Earth dist.	-503 Aug 22 j 17:40	25°Ω39'11	32.25329 AU	max. Earth dist.	-495 Sep 12 j 06:01	15°♄20'57	31.11235 AU
conjunction	-503 Aug 25 j 12:48	25°Ω45'32	15°40'56	conjunction	-495 Sep 14 j 08:55	15°♄26'02	16°42'26

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Attention, astronomical year style is used: The year -495 in astronomical counting style is the year 496 BCE in historical counting style.

minimum elong	-495 Sep 14 j 08:50	15° \mathring{M} 26'01	16°42'26	minimum elong	-487 Oct 05 j 01:50	6° \mathring{A} 13'15	15°49'06
retrograde	-495 Dec 26 j 19:36	18° \mathring{M} 04'32		retrograde	-486 Jan 16 j 16:54	8° \mathring{A} 54'31	
opposition	-494 Mar 13 j 07:28	16° \mathring{M} 41'46	17°50'31	opposition	-486 Apr 03 j 16:45	7° \mathring{A} 31'08	16°46'42
min. Earth dist.	-494 Mar 15 j 06:34	16° \mathring{M} 38'27	29.15018 AU	min. Earth dist.	-486 Apr 04 j 14:59	7° \mathring{A} 29'34	28.68090 AU
direct	-494 Jun 01 j 07:15	15° \mathring{M} 15'42		direct	-486 Jun 22 j 11:37	6° \mathring{A} 05'06	
max. Earth dist.	-494 Sep 15 j 05:22	17° \mathring{M} 54'56	31.00924 AU				
conjunction	-494 Sep 17 j 04:31	17° \mathring{M} 59'40	16°42'31	conjunction	-486 Oct 07 j 21:57	8° \mathring{A} 50'24	15°33'52
minimum elong	-494 Sep 17 j 04:30	17° \mathring{M} 59'39	16°42'30	minimum elong	-486 Oct 07 j 22:13	8° \mathring{A} 50'25	15°33'51
retrograde	-494 Dec 29 j 15:28	20° \mathring{M} 38'49		max. Earth dist.	-486 Oct 07 j 00:41	8° \mathring{A} 48'14	30.59598 AU
opposition	-493 Mar 16 j 04:32	19° \mathring{M} 15'52	17°49'51	retrograde	-485 Jan 19 j 13:18	11° \mathring{A} 31'35	
min. Earth dist.	-493 Mar 18 j 00:14	19° \mathring{M} 12'46	29.05219 AU	opposition	-485 Apr 06 j 15:50	10° \mathring{A} 08'13	16°29'31
direct	-493 Jun 04 j 04:43	17° \mathring{M} 49'38		min. Earth dist.	-485 Apr 07 j 12:03	10° \mathring{A} 06'48	28.67087 AU
max. Earth dist.	-493 Sep 18 j 03:13	20° \mathring{M} 29'37	30.91693 AU	direct	-485 Jun 25 j 10:18	8° \mathring{A} 42'19	
conjunction	-493 Sep 20 j 00:10	20° \mathring{M} 34'09	16°40'42	conjunction	-485 Oct 10 j 17:52	11° \mathring{A} 27'14	15°16'51
minimum elong	-493 Sep 20 j 00:09	20° \mathring{M} 34'09	16°40'43	minimum elong	-485 Oct 10 j 18:09	11° \mathring{A} 27'15	15°16'51
retrograde	-492 Jan 01 j 12:23	23° \mathring{M} 13'53		max. Earth dist.	-485 Oct 09 j 23:35	11° \mathring{A} 25'22	30.59392 AU
opposition	-492 Mar 18 j 02:04	21° \mathring{M} 50'45	17°47'07	retrograde	-484 Jan 22 j 10:58	14° \mathring{A} 08'10	
min. Earth dist.	-492 Mar 19 j 19:14	21° \mathring{M} 47'51	28.96522 AU	opposition	-484 Apr 08 j 14:37	12° \mathring{A} 44'50	16°10'25
direct	-492 Jun 05 j 23:36	20° \mathring{M} 24'26		min. Earth dist.	-484 Apr 09 j 06:49	12° \mathring{A} 43'42	28.67093 AU
max. Earth dist.	-492 Sep 20 j 03:36	23° \mathring{M} 05'17	30.83627 AU	direct	-484 Jun 27 j 11:16	11° \mathring{A} 19'04	
conjunction	-492 Sep 21 j 20:13	23° \mathring{M} 09'23	16°36'58	conjunction	-484 Oct 12 j 13:41	14° \mathring{A} 03'29	14°58'05
minimum elong	-492 Sep 21 j 20:17	23° \mathring{M} 09'23	16°36'57	minimum elong	-484 Oct 12 j 14:00	14° \mathring{A} 03'31	14°58'05
retrograde	-491 Jan 03 j 07:33	25° \mathring{M} 49'37		max. Earth dist.	-484 Oct 11 j 22:34	14° \mathring{A} 01'57	30.60213 AU
opposition	-491 Mar 20 j 23:48	24° \mathring{M} 26'22	17°42'17	retrograde	-483 Jan 24 j 06:19	16° \mathring{A} 44'05	
min. Earth dist.	-491 Mar 22 j 13:44	24° \mathring{M} 23'41	28.88960 AU	opposition	-483 Apr 11 j 13:09	15° \mathring{A} 20'47	15°49'29
direct	-491 Jun 08 j 21:32	23° \mathring{M} 00'00		min. Earth dist.	-483 Apr 12 j 03:13	15° \mathring{A} 19'48	28.68123 AU
max. Earth dist.	-491 Sep 23 j 01:55	25° \mathring{M} 41'24	30.76756 AU	direct	-483 Jun 30 j 09:24	13° \mathring{A} 55'09	
conjunction	-491 Sep 24 j 16:21	25° \mathring{M} 45'17	16°31'16	conjunction	-483 Oct 15 j 09:08	16° \mathring{A} 38'57	14°37'39
minimum elong	-491 Sep 24 j 16:25	25° \mathring{M} 45'18	16°31'16	minimum elong	-483 Oct 15 j 09:29	16° \mathring{A} 38'59	14°37'39
retrograde	-490 Jan 06 j 04:47	28° \mathring{M} 25'56		max. Earth dist.	-483 Oct 14 j 21:35	16° \mathring{A} 37'47	30.62094 AU
opposition	-490 Mar 23 j 21:56	27° \mathring{M} 02'36	17°35'20	retrograde	-482 Jan 27 j 02:03	19° \mathring{A} 19'05	
min. Earth dist.	-490 Mar 25 j 08:39	27° \mathring{M} 00'09	28.82570 AU	opposition	-482 Apr 14 j 11:28	17° \mathring{A} 55'51	15°26'45
direct	-490 Jun 11 j 18:11	25° \mathring{M} 36'14		min. Earth dist.	-482 Apr 14 j 21:37	17° \mathring{A} 55'08	28.70188 AU
max. Earth dist.	-490 Sep 26 j 02:46	28° \mathring{M} 18'20	30.71073 AU	direct	-482 Jul 03 j 09:41	16° \mathring{A} 30'22	
conjunction	-490 Sep 27 j 12:40	28° \mathring{M} 21'47	16°23'37	conjunction	-482 Oct 18 j 03:58	19° \mathring{A} 13'27	14°15'35
minimum elong	-490 Sep 27 j 12:48	28° \mathring{M} 21'47	16°23'36	minimum elong	-482 Oct 18 j 04:19	19° \mathring{A} 13'29	14°15'34
retrograde	-490 Nov 09 j 19:08	0° \mathring{A}		max. Earth dist.	-482 Oct 17 j 19:16	19° \mathring{A} 12'34	30.65046 AU
opposition	-489 Jan 09 j 00:52	1° \mathring{A} 02'44		retrograde	-481 Jan 29 j 21:51	21° \mathring{A} 53'02	
min. Earth dist.	-489 Mar 14 j 12:59	30° \mathring{R} \mathring{M}		opposition	-481 Apr 17 j 09:33	20° \mathring{A} 29'51	15°02'17
direct	-489 Mar 26 j 20:28	29° \mathring{M} 39'22	17°26'17	min. Earth dist.	-481 Apr 17 j 16:44	20° \mathring{A} 29'21	28.73355 AU
max. Earth dist.	-489 Jun 14 j 15:27	28° \mathring{M} 13'03	28.77313 AU	direct	-481 Jul 06 j 07:44	19° \mathring{A} 04'33	
conjunction	-489 Sep 05 j 17:41	0° \mathring{A}		conjunction	-481 Oct 20 j 22:26	21° \mathring{A} 46'48	13°51'56
opposition	-489 Sep 29 j 01:25	0° \mathring{A} 55'30	30.66557 AU	minimum elong	-481 Oct 20 j 22:49	21° \mathring{A} 46'51	13°51'57
conjunction	-489 Sep 30 j 08:57	0° \mathring{A} 58'42	16°14'01	max. Earth dist.	-481 Oct 20 j 18:04	21° \mathring{A} 46'22	30.69144 AU
minimum elong	-489 Sep 30 j 09:06	0° \mathring{A} 58'43	16°14'01	retrograde	-480 Feb 01 j 14:49	24° \mathring{A} 25'46	
retrograde	-488 Jan 11 j 22:53	3° \mathring{A} 39'54		opposition	-480 Apr 19 j 07:09	23° \mathring{A} 02'41	14°36'09
opposition	-488 Mar 28 j 19:06	2° \mathring{A} 16'30	17°15'07	min. Earth dist.	-480 Apr 19 j 10:40	23° \mathring{A} 02'26	28.77663 AU
min. Earth dist.	-488 Mar 29 j 23:27	2° \mathring{A} 14'30	28.73182 AU	direct	-480 Jul 08 j 07:01	21° \mathring{A} 37'36	
direct	-488 Jun 16 j 13:30	0° \mathring{A} 50'15		conjunction	-480 Oct 22 j 16:12	24° \mathring{A} 18'56	13°26'49
max. Earth dist.	-488 Oct 01 j 02:00	3° \mathring{A} 33'08	30.63162 AU	minimum elong	-480 Oct 22 j 16:35	24° \mathring{A} 18'59	13°26'48
conjunction	-488 Oct 02 j 05:19	3° \mathring{A} 35'55	16°02'30	max. Earth dist.	-480 Oct 22 j 14:31	24° \mathring{A} 18'46	30.74421 AU
minimum elong	-488 Oct 02 j 05:32	3° \mathring{A} 35'56	16°02'29	retrograde	-479 Feb 03 j 08:49	26° \mathring{A} 57'13	
retrograde	-487 Jan 13 j 19:00	6° \mathring{A} 17'13		opposition	-479 Apr 22 j 04:17	25° \mathring{A} 34'15	14°08'27
opposition	-487 Mar 31 j 18:00	4° \mathring{A} 53'49	17°01'55	min. Earth dist.	-479 Apr 22 j 04:02	25° \mathring{A} 34'16	28.83170 AU
min. Earth dist.	-487 Apr 01 j 20:12	4° \mathring{A} 51'59	28.70115 AU	direct	-479 Jul 11 j 03:33	24° \mathring{A} 09'25	
direct	-487 Jun 19 j 12:36	3° \mathring{A} 27'41		conjunction	-479 Oct 25 j 09:38	26° \mathring{A} 49'49	13°00'16
max. Earth dist.	-487 Oct 04 j 00:43	6° \mathring{A} 10'41	30.60856 AU	minimum elong	-479 Oct 25 j 10:02	26° \mathring{A} 49'52	13°00'15
conjunction	-487 Oct 05 j 01:37	6° \mathring{A} 13'13	15°49'06	max. Earth dist.	-479 Oct 25 j 12:38	26° \mathring{A} 50'07	30.80908 AU
				retrograde	-478 Feb 06 j 00:46	29° \mathring{A} 27'21	
				opposition	-478 Apr 25 j 00:58	28° \mathring{A} 04'34	13°39'16

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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.

min. Earth dist.	-478 Apr 24 j 21:37	28°♁04'47	28.89863 AU	max. Earth dist.	-471 Nov 14 j 09:29	16°♁09'16	31.70865 AU
direct	-478 Jul 14 j 00:44	26°♁40'02		retrograde	-470 Feb 25 j 00:25	18°♁36'36	
conjunction	-478 Oct 28 j 02:23	29°♁19'25	12°32'23	min. Earth dist.	-470 May 13 j 21:48	17°♁17'45	29.80626 AU
minimum elong	-478 Oct 28 j 02:46	29°♁19'27	12°32'22	opposition	-470 May 15 j 01:51	17°♁15'54	9°06'20
max. Earth dist.	-478 Oct 28 j 07:55	29°♁19'58	30.88594 AU	direct	-470 Aug 03 j 04:59	15°♁54'23	
	-478 Nov 14 j 07:45	0°♁		conjunction	-470 Nov 15 j 18:35	18°♁23'58	8°14'39
retrograde	-477 Feb 08 j 18:22	1°♁56'09		minimum elong	-470 Nov 15 j 18:54	18°♁24'00	8°14'38
opposition	-477 Apr 27 j 21:09	0°♁33'35	13°08'42	max. Earth dist.	-470 Nov 17 j 00:36	18°♁26'48	31.86003 AU
min. Earth dist.	-477 Apr 27 j 13:27	0°♁34'07	28.97744 AU	retrograde	-469 Feb 27 j 11:00	20°♁52'39	
	-477 May 18 j 20:28	30°♁		min. Earth dist.	-469 May 16 j 10:23	19°♁34'14	29.95832 AU
direct	-477 Jul 16 j 20:20	29°♁09'23		opposition	-469 May 17 j 16:55	19°♁32'13	8°29'01
	-477 Sep 10 j 16:20	0°♁		direct	-469 Aug 05 j 22:42	18°♁11'05	
conjunction	-477 Oct 30 j 18:34	1°♁47'42	12°03'18	conjunction	-469 Nov 18 j 05:14	20°♁39'14	7°39'38
minimum elong	-477 Oct 30 j 18:59	1°♁47'45	12°03'18	minimum elong	-469 Nov 18 j 05:33	20°♁39'16	7°39'38
max. Earth dist.	-477 Oct 31 j 04:39	1°♁48'42	30.97432 AU	max. Earth dist.	-469 Nov 19 j 13:06	20°♁42'14	32.01927 AU
retrograde	-476 Feb 11 j 08:58	4°♁23'37		retrograde	-468 Feb 29 j 21:27	23°♁06'45	
opposition	-476 Apr 29 j 16:54	3°♁01'17	12°36'53	min. Earth dist.	-468 May 17 j 21:15	21°♁48'49	30.11874 AU
min. Earth dist.	-476 Apr 29 j 06:45	3°♁01'59	29.06740 AU	opposition	-468 May 19 j 07:10	21°♁46'35	7°51'20
direct	-476 Jul 18 j 16:14	1°♁37'28		direct	-468 Aug 07 j 12:58	20°♁25'49	
conjunction	-476 Nov 01 j 10:11	4°♁14'40	11°33'05	conjunction	-468 Nov 19 j 15:23	22°♁52'34	7°04'17
minimum elong	-476 Nov 01 j 10:34	4°♁14'42	11°33'05	minimum elong	-468 Nov 19 j 15:40	22°♁52'36	7°04'16
max. Earth dist.	-476 Nov 01 j 22:34	4°♁15'53	31.07361 AU	max. Earth dist.	-468 Nov 21 j 03:03	22°♁55'54	32.18673 AU
retrograde	-475 Feb 13 j 01:36	6°♁49'41		retrograde	-467 Mar 03 j 04:37	25°♁18'53	
opposition	-475 May 02 j 11:45	5°♁27'37	12°03'56	min. Earth dist.	-467 May 20 j 08:37	24°♁01'21	30.28761 AU
min. Earth dist.	-475 May 01 j 21:25	5°♁28'35	29.16792 AU	opposition	-467 May 21 j 20:31	23°♁59'00	7°13'21
direct	-475 Jul 21 j 10:49	4°♁04'10		direct	-467 Aug 10 j 04:02	22°♁38'37	
conjunction	-475 Nov 04 j 01:17	6°♁40'13	11°01'53	conjunction	-467 Nov 22 j 00:39	25°♁03'59	6°28'42
minimum elong	-475 Nov 04 j 01:42	6°♁40'15	11°01'54	minimum elong	-467 Nov 22 j 00:55	25°♁04'00	6°28'42
max. Earth dist.	-475 Nov 04 j 17:29	6°♁41'48	31.18295 AU	max. Earth dist.	-467 Nov 23 j 14:01	25°♁07'26	32.36263 AU
retrograde	-474 Feb 15 j 16:05	9°♁14'18		retrograde	-466 Mar 05 j 14:31	27°♁29'06	
opposition	-474 May 05 j 06:22	7°♁52'31	11°29'58	min. Earth dist.	-466 May 22 j 17:23	26°♁12'07	30.46519 AU
min. Earth dist.	-474 May 04 j 14:06	7°♁53'37	29.27827 AU	opposition	-466 May 24 j 09:11	26°♁09'32	6°35'11
direct	-474 Jul 24 j 04:43	6°♁29'28		direct	-466 Aug 12 j 16:34	24°♁49'33	
conjunction	-474 Nov 06 j 15:37	9°♁04'18	10°29'48	conjunction	-466 Nov 24 j 09:11	27°♁13'31	5°52'58
minimum elong	-474 Nov 06 j 15:59	9°♁04'20	10°29'47	minimum elong	-466 Nov 24 j 09:25	27°♁13'32	5°52'57
max. Earth dist.	-474 Nov 07 j 10:22	9°♁06'07	31.30179 AU	max. Earth dist.	-466 Nov 26 j 02:07	27°♁17'16	32.54683 AU
retrograde	-473 Feb 18 j 07:50	11°♁37'24		retrograde	-465 Mar 07 j 21:21	29°♁37'29	
min. Earth dist.	-473 May 07 j 04:04	10°♁17'14	29.39777 AU	min. Earth dist.	-465 May 25 j 03:47	28°♁20'54	30.65115 AU
opposition	-473 May 08 j 00:17	10°♁15'53	10°55'06	opposition	-465 May 26 j 21:16	28°♁18'13	5°56'54
direct	-473 Jul 27 j 00:45	8°♁53'14		direct	-465 Aug 15 j 04:37	26°♁58'40	
conjunction	-473 Nov 09 j 05:26	11°♁26'49	9°56'56	conjunction	-465 Nov 26 j 17:05	29°♁21'15	5°17'08
minimum elong	-473 Nov 09 j 05:48	11°♁26'51	9°56'56	minimum elong	-465 Nov 26 j 17:18	29°♁21'17	5°17'08
max. Earth dist.	-473 Nov 10 j 03:10	11°♁28'54	31.42929 AU	max. Earth dist.	-465 Nov 28 j 11:57	29°♁25'10	32.73906 AU
retrograde	-472 Feb 20 j 22:19	13°♁58'53			-465 Dec 14 j 16:37	0°♁	
opposition	-472 May 09 j 17:32	12°♁37'38	10°19'29	retrograde	-464 Mar 09 j 05:42	1°♁44'03	
min. Earth dist.	-472 May 08 j 19:17	12°♁39'08	29.52595 AU	min. Earth dist.	-464 May 26 j 11:20	0°♁28'01	30.84493 AU
direct	-472 Jul 28 j 17:44	11°♁15'22		opposition	-464 May 28 j 08:16	0°♁25'09	5°18'35
					-464 Jun 13 j 23:46	30°♁	
conjunction	-472 Nov 10 j 18:34	13°♁47'40	9°23'23	direct	-464 Aug 16 j 15:53	29°♁06'02	
minimum elong	-472 Nov 10 j 18:55	13°♁47'42	9°23'23		-464 Oct 15 j 11:51	0°♁	
max. Earth dist.	-472 Nov 11 j 19:06	13°♁50'01	31.56513 AU	conjunction	-464 Nov 28 j 00:16	1°♁27'16	4°41'18
	-472 Dec 13 j 13:30	15°♁		minimum elong	-464 Nov 28 j 00:27	1°♁27'17	4°41'18
retrograde	-471 Feb 22 j 10:57	16°♁18'38		max. Earth dist.	-464 Nov 29 j 21:47	1°♁31'22	32.93841 AU
	-471 May 10 j 23:11	15°♁		retrograde	-463 Mar 11 j 13:39	3°♁48'54	
min. Earth dist.	-471 May 11 j 08:31	14°♁59'23	29.66211 AU	min. Earth dist.	-463 May 28 j 20:11	2°♁33'19	31.04582 AU
opposition	-471 May 12 j 10:01	14°♁57'41	9°43'11	opposition	-463 May 30 j 18:47	2°♁30'21	4°40'21
direct	-471 Jul 31 j 12:15	13°♁35'48		direct	-463 Aug 19 j 00:42	1°♁11'41	
	-471 Oct 13 j 23:43	15°♁					
conjunction	-471 Nov 13 j 06:53	16°♁06'45	8°49'16	conjunction	-463 Nov 30 j 06:46	3°♁31'35	4°05'32
minimum elong	-471 Nov 13 j 07:14	16°♁06'47	8°49'16	minimum elong	-463 Nov 30 j 06:56	3°♁31'36	4°05'32

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Attention, astronomical year style is used: The year -463 in astronomical counting style is the year 464 BCE in historical counting style.

max. Earth dist.	-463 Dec 02 j 06:37	3°♂35'52	33.14424 AU	max. Earth dist.	-455 Dec 18 j 00:21	19°♂10'57	34.94063 AU
retrograde	-462 Mar 13 j 20:08	5°♂52'04		retrograde	-454 Mar 29 j 01:45	21°♂17'23	
min. Earth dist.	-462 May 31 j 03:20	4°♂36'59	31.25282 AU	min. Earth dist.	-454 Jun 15 j 18:26	20°♂05'34	33.05982 AU
opposition	-462 Jun 02 j 04:29	4°♂33'53	4°02'14	opposition	-454 Jun 18 j 08:51	20°♂01'48	0°-50'-37
direct	-462 Aug 21 j 12:24	3°♂15'40		direct	-454 Sep 06 j 19:33	18°♂46'45	
conjunction	-462 Dec 02 j 12:36	5°♂34'14	3°29'55	conjunction	-454 Dec 17 j 12:38	20°♂55'12	-1°-3'-56
minimum elong	-462 Dec 02 j 12:44	5°♂34'15	3°29'54	minimum elong	-454 Dec 17 j 12:35	20°♂55'12	1°03'58
max. Earth dist.	-462 Dec 04 j 13:54	5°♂38'36	33.35553 AU	max. Earth dist.	-454 Dec 20 j 03:23	21°♂00'25	35.18146 AU
retrograde	-461 Mar 16 j 03:56	7°♂53'35		retrograde	-453 Mar 31 j 01:20	23°♂05'40	
min. Earth dist.	-461 Jun 02 j 10:27	6°♂38'57	31.46537 AU	min. Earth dist.	-453 Jun 17 j 20:23	21°♂54'14	33.30288 AU
opposition	-461 Jun 04 j 13:36	6°♂35'45	3°24'20	opposition	-453 Jun 20 j 12:11	21°♂50'24	-1°-25'-4
direct	-461 Aug 23 j 21:32	5°♂17'58		direct	-453 Sep 09 j 00:35	20°♂35'45	
conjunction	-461 Dec 04 j 17:56	7°♂35'14	2°54'29	conjunction	-453 Dec 19 j 12:40	22°♂43'03	-1°-36'-11
minimum elong	-461 Dec 04 j 18:04	7°♂35'15	2°54'29	minimum elong	-453 Dec 19 j 12:37	22°♂43'03	1°36'12
max. Earth dist.	-461 Dec 06 j 21:50	7°♂39'48	33.57163 AU	max. Earth dist.	-453 Dec 22 j 04:00	22°♂48'16	35.42603 AU
retrograde	-460 Mar 17 j 08:26	9°♂53'26		retrograde	-452 Apr 01 j 02:20	24°♂52'29	
min. Earth dist.	-460 Jun 03 j 17:33	8°♂39'14	31.68232 AU	min. Earth dist.	-452 Jun 18 j 20:58	23°♂41'30	33.54979 AU
opposition	-460 Jun 05 j 21:56	8°♂35'57	2°46'42	opposition	-452 Jun 21 j 14:55	23°♂37'34	-1°-58'-56
direct	-460 Aug 25 j 08:05	7°♂18'36		direct	-452 Sep 10 j 04:02	22°♂23'18	
conjunction	-460 Dec 05 j 22:33	9°♂34'34	2°19'19	conjunction	-452 Dec 20 j 12:20	24°♂29'30	-2°-7'-53
minimum elong	-460 Dec 05 j 22:39	9°♂34'35	2°19'18	minimum elong	-452 Dec 20 j 12:16	24°♂29'29	2°07'55
max. Earth dist.	-460 Dec 08 j 03:01	9°♂39'09	33.79158 AU	max. Earth dist.	-452 Dec 23 j 06:08	24°♂34'53	35.67391 AU
retrograde	-459 Mar 19 j 13:13	11°♂51'38		retrograde	-451 Apr 03 j 00:33	26°♂37'56	
min. Earth dist.	-459 Jun 05 j 22:36	10°♂37'55	31.90319 AU	min. Earth dist.	-451 Jun 20 j 22:40	25°♂27'18	33.79980 AU
opposition	-459 Jun 08 j 05:25	10°♂34'30	2°09'24	opposition	-451 Jun 23 j 17:00	25°♂23'21	-2°-32'-11
direct	-459 Aug 27 j 15:42	9°♂17'34		direct	-451 Sep 12 j 08:11	24°♂09'30	
conjunction	-459 Dec 08 j 02:42	11°♂32'14	1°44'27	conjunction	-451 Dec 22 j 11:22	26°♂14'35	-2°-39'-2
minimum elong	-459 Dec 08 j 02:46	11°♂32'15	1°44'27	minimum elong	-451 Dec 22 j 11:17	26°♂14'35	2°39'03
max. Earth dist.	-459 Dec 10 j 09:42	11°♂37'00	34.01490 AU	max. Earth dist.	-451 Dec 25 j 05:29	26°♂19'58	35.92455 AU
retrograde	-458 Mar 21 j 14:47	13°♂48'10		retrograde	-450 Apr 04 j 23:24	28°♂22'03	
min. Earth dist.	-458 Jun 08 j 05:03	12°♂34'47	32.12739 AU	min. Earth dist.	-450 Jun 22 j 21:54	27°♂11'53	34.05241 AU
opposition	-458 Jun 10 j 12:28	12°♂31'22	1°32'29	opposition	-450 Jun 25 j 18:32	27°♂07'50	-3°-4'-48
direct	-458 Aug 30 j 00:25	11°♂14'49		direct	-450 Sep 14 j 09:55	25°♂54'22	
conjunction	-458 Dec 10 j 05:55	13°♂28'12	1°09'56	conjunction	-450 Dec 24 j 09:53	27°♂58'23	-3°-9'-37
minimum elong	-458 Dec 10 j 05:58	13°♂28'12	1°09'56	minimum elong	-450 Dec 24 j 09:46	27°♂58'23	3°09'39
max. Earth dist.	-458 Dec 12 j 13:28	13°♂32'59	34.24135 AU	max. Earth dist.	-450 Dec 27 j 05:49	28°♂03'52	36.17710 AU
retrograde	-457 Mar 23 j 18:02	15°♂43'00		retrograde	-449 Mar 19 j 05:51	0°♂	
min. Earth dist.	-457 Jun 10 j 08:38	14°♂30'04	32.35491 AU	retrograde	-449 Apr 06 j 20:56	0°♂04'55	
opposition	-457 Jun 12 j 18:38	14°♂26'31	0°55'59	retrograde	-449 Apr 25 j 21:39	30°R♂	
direct	-457 Sep 01 j 06:45	13°♂10'21		min. Earth dist.	-449 Jun 24 j 23:02	28°♂55'04	34.30679 AU
conjunction	-457 Dec 12 j 08:37	15°♂22'27	0°35'48	opposition	-449 Jun 27 j 19:39	28°♂51'01	-3°-36'-47
minimum elong	-457 Dec 12 j 08:38	15°♂22'27	0°35'49	direct	-449 Sep 16 j 11:04	27°♂37'57	
max. Earth dist.	-457 Dec 14 j 18:18	15°♂27'22	34.47085 AU	conjunction	-449 Dec 26 j 08:06	29°♂40'55	-3°-39'-36
retrograde	-456 Mar 24 j 19:57	17°♂36'08		minimum elong	-449 Dec 26 j 07:59	29°♂40'54	3°39'37
min. Earth dist.	-456 Jun 11 j 13:30	16°♂23'31	32.58597 AU	max. Earth dist.	-449 Dec 29 j 04:34	29°♂46'24	36.43096 AU
opposition	-456 Jun 14 j 00:03	16°♂19'56	0°19'56	retrograde	-448 Jan 05 j 07:07	0°♂	
direct	-456 Sep 02 j 11:58	15°♂04'09		retrograde	-448 Apr 07 j 19:34	1°♂46'30	
conjunction	-456 Dec 13 j 10:38	17°♂14'59	0°02'09	min. Earth dist.	-448 Jun 25 j 21:53	0°♂37'02	34.56208 AU
minimum elong	-456 Dec 13 j 10:38	17°♂14'59	0°02'08	opposition	-448 Jun 28 j 19:51	0°♂32'56	-4°-8'-6
behind sun begin	-456 Dec 13 j 04:17	17°♂14'29		direct	-448 Jul 23 j 03:23	30°R♂	
behind sun end	-456 Dec 13 j 16:59	17°♂15'30		direct	-448 Sep 17 j 10:43	29°♂20'14	
max. Earth dist.	-456 Dec 15 j 21:41	17°♂19'59	34.70391 AU	direct	-448 Nov 09 j 23:49	0°♂	
desc. node	-455 Jan 05 j 07:00	18°♂00'25		conjunction	-448 Dec 27 j 05:45	1°♂22'10	-4°-9'00
retrograde	-455 Mar 26 j 22:24	19°♂27'34		minimum elong	-448 Dec 27 j 05:37	1°♂22'10	4°09'01
min. Earth dist.	-455 Jun 13 j 15:51	18°♂15'23	32.82079 AU	max. Earth dist.	-448 Dec 30 j 02:42	1°♂27'39	36.68515 AU
opposition	-455 Jun 16 j 04:41	18°♂11'41	0°-15'-36	retrograde	-447 Apr 09 j 18:37	3°♂26'50	
direct	-455 Sep 04 j 17:11	16°♂56'15		min. Earth dist.	-447 Jun 27 j 21:25	2°♂17'40	34.81771 AU
conjunction	-455 Dec 15 j 11:48	19°♂05'53	0°-31'-10	opposition	-447 Jun 30 j 19:47	2°♂13'35	-4°-38'-45
minimum elong	-455 Dec 15 j 11:47	19°♂05'53	0°31'11	direct	-447 Sep 19 j 09:01	1°♂01'14	

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Attention, astronomical year style is used: The year -447 in astronomical counting style is the year 448 BCE in historical counting style.

conjunction	-447 Dec 29 j 02:58	3°☾02'08	-4°-37'-47	retrograde	-438 Apr 24 j 00:32	17°☾32'30	
minimum elong	-447 Dec 29 j 02:49	3°☾02'07	4°37'47	min. Earth dist.	-438 Jul 12 j 13:28	16°☾26'00	37.12678 AU
max. Earth dist.	-446 Jan 01 j 01:11	3°☾07'40	36.93928 AU	opposition	-438 Jul 15 j 18:08	16°☾21'43	-8°-43'-53
retrograde	-446 Apr 11 j 15:44	5°☾05'52		direct	-438 Oct 04 j 10:35	15°☾12'10	
min. Earth dist.	-446 Jun 29 j 20:24	3°☾56'59	35.07299 AU				
opposition	-446 Jul 02 j 19:09	3°☾52'54	-5°-8'-45	conjunction	-437 Jan 12 j 04:15	17°☾04'53	-8°-28'-29
direct	-446 Sep 21 j 09:58	2°☾40'52		minimum elong	-437 Jan 12 j 04:02	17°☾04'53	8°28'30
				max. Earth dist.	-437 Jan 15 j 08:24	17°☾10'32	39.23356 AU
conjunction	-446 Dec 30 j 23:39	4°☾40'46	-5°-5'-57	retrograde	-437 Apr 25 j 15:32	19°☾01'06	
minimum elong	-446 Dec 30 j 23:30	4°☾40'46	5°05'59	min. Earth dist.	-437 Jul 14 j 09:07	17°☾54'51	37.38521 AU
max. Earth dist.	-445 Jan 02 j 21:23	4°☾46'14	37.19291 AU	opposition	-437 Jul 17 j 12:56	17°☾50'38	-9°-7'-40
retrograde	-445 Apr 13 j 13:52	6°☾43'34		direct	-437 Oct 06 j 06:58	16°☾41'25	
min. Earth dist.	-445 Jul 01 j 17:55	5°☾35'00	35.32803 AU				
opposition	-445 Jul 04 j 17:52	5°☾30'52	-5°-38'-4	conjunction	-436 Jan 13 j 21:08	18°☾33'22	-8°-50'-55
direct	-445 Sep 23 j 08:38	4°☾19'08		minimum elong	-436 Jan 13 j 20:56	18°☾33'21	8°50'56
				max. Earth dist.	-436 Jan 17 j 00:52	18°☾38'57	39.48942 AU
conjunction	-444 Jan 01 j 19:54	6°☾18'03	-5°-33'-30	retrograde	-436 Apr 26 j 07:27	20°☾28'52	
minimum elong	-444 Jan 01 j 19:44	6°☾18'02	5°33'31	min. Earth dist.	-436 Jul 15 j 02:25	19°☾22'57	37.64240 AU
max. Earth dist.	-444 Jan 04 j 19:15	6°☾23'36	37.44619 AU	opposition	-436 Jul 18 j 07:14	19°☾18'42	-9°-30'-46
retrograde	-444 Apr 14 j 08:20	8°☾19'55		direct	-436 Oct 07 j 02:30	18°☾09'48	
min. Earth dist.	-444 Jul 02 j 16:35	7°☾11'35	35.58284 AU				
opposition	-444 Jul 05 j 16:04	7°☾07'28	-6°-6'-42	conjunction	-435 Jan 14 j 13:37	20°☾01'00	-9°-12'-45
direct	-444 Sep 24 j 08:31	5°☾56'03		minimum elong	-435 Jan 14 j 13:24	20°☾00'59	9°12'46
				max. Earth dist.	-435 Jan 17 j 17:36	20°☾06'34	39.74352 AU
conjunction	-443 Jan 02 j 15:32	7°☾53'58	-6°00'-26	retrograde	-435 Apr 28 j 01:21	21°☾55'49	
minimum elong	-443 Jan 02 j 15:21	7°☾53'57	6°00'28	min. Earth dist.	-435 Jul 16 j 21:07	20°☾50'07	37.89773 AU
max. Earth dist.	-443 Jan 05 j 14:42	7°☾59'28	37.69944 AU	opposition	-435 Jul 20 j 01:17	20°☾45'55	-9°-53'-13
retrograde	-443 Apr 16 j 02:09	9°☾54'56		direct	-435 Oct 08 j 19:16	19°☾37'20	
min. Earth dist.	-443 Jul 04 j 12:18	8°☾46'56	35.83799 AU				
opposition	-443 Jul 07 j 13:31	8°☾42'44	-6°-34'-39	conjunction	-434 Jan 16 j 05:59	21°☾27'47	-9°-33'-58
direct	-443 Sep 26 j 07:39	7°☾31'36		minimum elong	-434 Jan 16 j 05:47	21°☾27'46	9°33'59
				max. Earth dist.	-434 Jan 19 j 10:14	21°☾33'20	39.99554 AU
conjunction	-442 Jan 04 j 10:41	9°☾28'34	-6°-26'-43	retrograde	-434 Apr 29 j 17:31	23°☾21'55	
minimum elong	-442 Jan 04 j 10:31	9°☾28'33	6°26'44	min. Earth dist.	-434 Jul 18 j 14:44	22°☾16'28	38.15054 AU
max. Earth dist.	-442 Jan 07 j 11:14	9°☾34'08	37.95315 AU	opposition	-434 Jul 21 j 18:53	22°☾12'17	-10°-15'-2
retrograde	-442 Apr 17 j 20:38	11°☾28'40		direct	-434 Oct 10 j 13:09	21°☾03'59	
min. Earth dist.	-442 Jul 06 j 09:31	10°☾20'54	36.09406 AU				
opposition	-442 Jul 09 j 10:44	10°☾16'44	-7°-1'-54	conjunction	-433 Jan 17 j 21:48	22°☾53'41	-9°-54'-36
direct	-442 Sep 28 j 05:08	9°☾05'53		minimum elong	-433 Jan 17 j 21:35	22°☾53'40	9°54'37
				max. Earth dist.	-433 Jan 21 j 01:03	22°☾59'08	40.24487 AU
conjunction	-441 Jan 06 j 05:25	11°☾01'56	-6°-52'-22	retrograde	-433 May 01 j 12:03	24°☾47'07	
minimum elong	-441 Jan 06 j 05:13	11°☾01'55	6°52'24	min. Earth dist.	-433 Jul 20 j 07:52	23°☾41'53	38.40075 AU
max. Earth dist.	-441 Jan 09 j 06:42	11°☾07'31	38.20791 AU	opposition	-433 Jul 23 j 12:11	23°☾37'44	-10°-36'-12
retrograde	-441 Apr 19 j 15:16	13°☾01'12		direct	-433 Oct 12 j 04:23	22°☾29'41	
min. Earth dist.	-441 Jul 08 j 04:48	11°☾53'45	36.35109 AU				
opposition	-441 Jul 11 j 07:16	11°☾49'32	-7°-28'-27	conjunction	-432 Jan 19 j 13:29	24°☾18'40	-10°-14'-38
direct	-441 Sep 30 j 01:36	10°☾39'00		minimum elong	-432 Jan 19 j 13:17	24°☾18'39	10°14'40
				max. Earth dist.	-432 Jan 22 j 17:42	24°☾24'08	40.49157 AU
conjunction	-440 Jan 07 j 23:42	12°☾34'09	-7°-17'-21	retrograde	-432 May 02 j 03:00	26°☾11'22	
minimum elong	-440 Jan 07 j 23:31	12°☾34'08	7°17'22	min. Earth dist.	-432 Jul 21 j 01:34	25°☾06'18	38.64836 AU
max. Earth dist.	-440 Jan 11 j 01:17	12°☾39'43	38.46354 AU	opposition	-432 Jul 24 j 04:51	25°☾02'13	-10°-56'-45
retrograde	-440 Apr 20 j 11:21	14°☾32'37		direct	-432 Oct 12 j 22:08	23°☾54'24	
min. Earth dist.	-440 Jul 09 j 00:08	13°☾25'28	36.60921 AU				
opposition	-440 Jul 12 j 03:15	13°☾21'14	-7°-54'-18	conjunction	-431 Jan 20 j 04:37	25°☾42'39	-10°-34'-5
direct	-440 Sep 30 j 20:09	12°☾11'01		minimum elong	-431 Jan 20 j 04:24	25°☾42'38	10°34'06
				max. Earth dist.	-431 Jan 23 j 07:51	25°☾48'02	40.73600 AU
conjunction	-439 Jan 08 j 17:42	14°☾05'21	-7°-41'-42	retrograde	-431 May 03 j 17:41	27°☾34'40	
minimum elong	-439 Jan 08 j 17:30	14°☾05'20	7°41'44	min. Earth dist.	-431 Jul 22 j 16:50	26°☾29'52	38.89403 AU
max. Earth dist.	-439 Jan 11 j 20:51	14°☾10'59	38.72005 AU	opposition	-431 Jul 25 j 21:11	26°☾25'43	-11°-16'-40
retrograde	-439 Apr 22 j 05:17	16°☾03'01		direct	-431 Oct 14 j 14:35	25°☾18'09	
min. Earth dist.	-439 Jul 10 j 19:38	14°☾56'10	36.86786 AU				
opposition	-439 Jul 13 j 22:53	14°☾51'56	-8°-19'-26	conjunction	-430 Jan 21 j 19:16	27°☾05'41	-10°-52'-57
direct	-439 Oct 02 j 16:15	13°☾42'04		minimum elong	-430 Jan 21 j 19:04	27°☾05'40	10°52'59
				max. Earth dist.	-430 Jan 24 j 23:20	27°☾11'05	40.97865 AU
conjunction	-438 Jan 10 j 11:02	15°☾35'34	-8°-5'-24	retrograde	-430 May 05 j 05:35	28°☾57'02	
minimum elong	-438 Jan 10 j 10:50	15°☾35'33	8°05'25	min. Earth dist.	-430 Jul 24 j 09:51	27°☾52'22	39.13828 AU
max. Earth dist.	-438 Jan 13 j 13:46	15°☾41'08	38.97690 AU	opposition	-430 Jul 27 j 13:17	27°☾48'17	-11°-35'-57

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Attention, astronomical year style is used: The year -430 in astronomical counting style is the year 431 BCE in historical counting style.

direct	-430 Oct 16 j 09:21	26°☾40'57		min. Earth dist.	-422 Aug 04 j 06:58	8°☾25'02	41.03653 AU
				opposition	-422 Aug 07 j 08:54	8°☾21'09	-13°-48'-26
conjunction	-429 Jan 23 j 09:49	28°☾27'47	-11°-11'-13	direct	-422 Oct 27 j 04:43	7°☾15'46	
minimum elong	-429 Jan 23 j 09:36	28°☾27'46	11°11'13				
max. Earth dist.	-429 Jan 26 j 13:55	28°☾33'10	41.22021 AU	conjunction	-421 Feb 02 j 19:59	8°☾57'50	-13°-17'00
	-429 Mar 28 j 23:12	0°☾		minimum elong	-421 Feb 02 j 19:49	8°☾57'50	13°17'00
retrograde	-429 May 06 j 19:02	0°☾18'29		max. Earth dist.	-421 Feb 05 j 21:53	9°☾02'50	43.09270 AU
	-429 Jun 15 j 17:39	30°☾R☾		retrograde	-421 May 17 j 09:38	10°☾43'59	
min. Earth dist.	-429 Jul 26 j 00:32	29°☾14'04	39.38142 AU	min. Earth dist.	-421 Aug 05 j 20:19	9°☾41'09	41.26028 AU
opposition	-429 Jul 29 j 04:43	29°☾09'57	-11°-54'-36	opposition	-421 Aug 08 j 22:00	9°☾37'19	-14°-2'-30
direct	-429 Oct 18 j 02:06	28°☾02'51		direct	-421 Oct 28 j 15:59	8°☾32'08	
conjunction	-428 Jan 24 j 23:56	29°☾49'01	-11°-28'-53	conjunction	-420 Feb 04 j 08:19	10°☾13'39	-13°-30'-23
minimum elong	-428 Jan 24 j 23:44	29°☾49'00	11°28'55	minimum elong	-420 Feb 04 j 08:08	10°☾13'38	13°30'25
max. Earth dist.	-428 Jan 28 j 03:48	29°☾54'20	41.46070 AU	max. Earth dist.	-420 Feb 07 j 10:33	10°☾18'38	43.31242 AU
	-428 Jan 31 j 12:39	0°☾		retrograde	-420 May 17 j 20:30	11°☾59'15	
retrograde	-428 May 07 j 11:07	1°☾39'05		min. Earth dist.	-420 Aug 06 j 10:45	10°☾56'32	41.47991 AU
min. Earth dist.	-428 Jul 26 j 15:51	0°☾34'52	39.62365 AU	opposition	-420 Aug 09 j 10:53	10°☾52'46	-14°-16'-3
opposition	-428 Jul 29 j 19:59	0°☾30'47	-12°-12'-38	direct	-420 Oct 29 j 05:56	9°☾47'47	
	-428 Aug 23 j 15:15	30°☾R☾					
direct	-428 Oct 18 j 15:24	29°☾23'55		conjunction	-419 Feb 04 j 20:09	11°☾28'46	-13°-43'-18
	-428 Dec 11 j 09:07	0°☾		minimum elong	-419 Feb 04 j 20:00	11°☾28'45	13°43'19
				max. Earth dist.	-419 Feb 07 j 21:03	11°☾33'39	43.52843 AU
conjunction	-427 Jan 25 j 13:47	1°☾09'27	-11°-45'-59	retrograde	-419 May 19 j 06:56	13°☾13'50	
minimum elong	-427 Jan 25 j 13:35	1°☾09'26	11°46'00	min. Earth dist.	-419 Aug 07 j 22:46	12°☾11'18	41.69607 AU
max. Earth dist.	-427 Jan 28 j 18:38	1°☾14'48	41.70024 AU	opposition	-419 Aug 10 j 23:21	12°☾07'31	-14°-29'-6
retrograde	-427 May 09 j 00:57	2°☾58'54		direct	-419 Oct 30 j 19:31	11°☾02'43	
min. Earth dist.	-427 Jul 28 j 06:59	1°☾54'54	39.86464 AU				
opposition	-427 Jul 31 j 10:50	1°☾50'50	-12°-30'-3	conjunction	-418 Feb 06 j 07:47	12°☾43'10	-13°-55'-43
direct	-427 Oct 20 j 06:36	0°☾44'14		minimum elong	-418 Feb 06 j 07:37	12°☾43'09	13°55'44
				max. Earth dist.	-418 Feb 09 j 08:42	12°☾48'01	43.74123 AU
conjunction	-426 Jan 27 j 03:20	2°☾29'08	-12°-2'-30	retrograde	-418 May 20 j 17:27	14°☾27'44	
minimum elong	-426 Jan 27 j 03:08	2°☾29'07	12°02'32	min. Earth dist.	-418 Aug 09 j 12:25	13°☾25'17	41.90945 AU
max. Earth dist.	-426 Jan 30 j 07:10	2°☾34'23	41.93856 AU	opposition	-418 Aug 12 j 11:40	13°☾21'35	-14°-41'-38
retrograde	-426 May 10 j 16:16	4°☾18'00		direct	-418 Nov 01 j 09:03	12°☾16'58	
min. Earth dist.	-426 Jul 29 j 20:54	3°☾14'15	40.10432 AU				
opposition	-426 Aug 02 j 01:26	3°☾10'11	-12°-46'-51	conjunction	-417 Feb 07 j 19:14	13°☾56'54	-14°-7'-38
direct	-426 Oct 21 j 19:25	2°☾03'49		minimum elong	-417 Feb 07 j 19:06	13°☾56'53	14°07'40
				max. Earth dist.	-417 Feb 10 j 20:11	14°☾01'44	43.95162 AU
conjunction	-425 Jan 28 j 16:40	3°☾48'08	-12°-18'-27		-417 Mar 22 j 11:33	15°☾	
minimum elong	-425 Jan 28 j 16:29	3°☾48'07	12°18'28	retrograde	-417 May 22 j 03:51	15°☾40'58	
max. Earth dist.	-425 Jan 31 j 21:26	3°☾53'26	42.17521 AU		-417 Jul 24 j 07:15	15°☾R☾	
retrograde	-425 May 12 j 05:02	5°☾36'26		min. Earth dist.	-417 Aug 11 j 00:06	14°☾38'42	42.12035 AU
min. Earth dist.	-425 Jul 31 j 12:33	4°☾32'50	40.34197 AU	opposition	-417 Aug 13 j 23:33	14°☾35'00	-14°-53'-38
opposition	-425 Aug 03 j 15:48	4°☾28'51	-13°-3'-5	direct	-417 Nov 02 j 22:23	13°☾30'34	
direct	-425 Oct 23 j 10:21	3°☾22'45			-416 Feb 02 j 22:26	15°☾	
conjunction	-424 Jan 30 j 05:53	5°☾06'29	-12°-33'-52	conjunction	-416 Feb 09 j 06:22	15°☾10'00	-14°-19'-4
minimum elong	-424 Jan 30 j 05:41	5°☾06'28	12°33'53	minimum elong	-416 Feb 09 j 06:12	15°☾10'00	14°19'05
max. Earth dist.	-424 Feb 02 j 09:50	5°☾11'42	42.40962 AU	max. Earth dist.	-416 Feb 12 j 06:10	15°☾14'44	44.15971 AU
retrograde	-424 May 12 j 16:27	6°☾54'14		retrograde	-416 May 22 j 18:06	16°☾53'35	
min. Earth dist.	-424 Aug 01 j 01:51	5°☾50'54	40.57696 AU	min. Earth dist.	-416 Aug 11 j 11:57	15°☾51'29	42.32922 AU
opposition	-424 Aug 04 j 05:35	5°☾46'54	-13°-18'-44	opposition	-416 Aug 14 j 11:08	15°☾47'49	-15°-5'-8
direct	-424 Oct 24 j 01:39	4°☾41'03			-416 Sep 26 j 21:21	15°☾R☾	
				direct	-416 Nov 03 j 07:21	14°☾43'34	
conjunction	-423 Jan 30 j 18:46	6°☾24'13	-12°-48'-45		-416 Dec 09 j 22:46	15°☾	
minimum elong	-423 Jan 30 j 18:35	6°☾24'13	12°48'45				
max. Earth dist.	-423 Feb 02 j 22:14	6°☾29'23	42.64099 AU	conjunction	-415 Feb 09 j 17:22	16°☾22'32	-14°-30'-1
retrograde	-423 May 14 j 05:48	8°☾11'26		minimum elong	-415 Feb 09 j 17:14	16°☾22'32	14°30'02
min. Earth dist.	-423 Aug 02 j 16:51	7°☾08'16	40.80873 AU	max. Earth dist.	-415 Feb 12 j 18:00	16°☾27'18	44.36586 AU
opposition	-423 Aug 05 j 19:25	7°☾04'20	-13°-33'-51	retrograde	-415 May 24 j 06:00	18°☾05'40	
direct	-423 Oct 25 j 15:36	5°☾58'44		min. Earth dist.	-415 Aug 13 j 00:22	17°☾03'41	42.53594 AU
				opposition	-415 Aug 15 j 22:34	17°☾00'05	-15°-16'-7
conjunction	-422 Feb 01 j 07:29	7°☾41'21	-13°-3'-7	direct	-415 Nov 04 j 17:42	15°☾56'02	
minimum elong	-422 Feb 01 j 07:18	7°☾41'20	13°03'08				
max. Earth dist.	-422 Feb 04 j 10:59	7°☾46'29	42.86889 AU	conjunction	-414 Feb 11 j 03:56	17°☾34'33	-14°-40'-28
retrograde	-422 May 15 j 19:06	9°☾28'02		minimum elong	-414 Feb 11 j 03:48	17°☾34'32	14°40'29

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Attention, astronomical year style is used: The year -414 in astronomical counting style is the year 415 BCE in historical counting style.

max. Earth dist.	-414 Feb 14 j 03:22	17°39'13	44.56997 AU	opposition	-406 Aug 26 j 19:16	27°28'35	-16°-34'-33
retrograde	-414 May 25 j 16:44	19°17'13		direct	-406 Nov 15 j 18:34	26°26'02	
min. Earth dist.	-414 Aug 14 j 10:56	18°15'28	42.74049 AU				
opposition	-414 Aug 17 j 09:46	18°11'50	-15°-26'-37	conjunction	-405 Feb 21 j 21:06	28°00'47	-15°-55'-18
direct	-414 Nov 06 j 04:00	17°08'00		minimum elong	-405 Feb 21 j 21:01	28°00'47	15°55'19
				max. Earth dist.	-405 Feb 24 j 14:56	28°04'56	46.24999 AU
conjunction	-413 Feb 12 j 14:30	18°46'04	-14°-50'-28	retrograde	-405 Jun 05 j 04:53	29°39'42	
minimum elong	-413 Feb 12 j 14:23	18°46'04	14°50'30	min. Earth dist.	-405 Aug 25 j 13:32	28°38'54	44.41566 AU
max. Earth dist.	-413 Feb 15 j 14:09	18°50'44	44.77165 AU	opposition	-405 Aug 28 j 04:17	28°35'45	-16°-41'-10
retrograde	-413 May 27 j 00:45	20°28'19		direct	-405 Nov 17 j 04:17	27°33'19	
min. Earth dist.	-413 Aug 15 j 23:26	19°26'40	42.94240 AU				
opposition	-413 Aug 18 j 20:40	19°23'08	-15°-36'-37	conjunction	-404 Feb 23 j 06:01	29°07'42	-16°-1'-36
direct	-413 Nov 07 j 17:12	18°19'29		minimum elong	-404 Feb 23 j 05:58	29°07'42	16°01'36
				max. Earth dist.	-404 Feb 25 j 22:19	29°11'43	46.41847 AU
conjunction	-412 Feb 14 j 00:58	19°57'08	-15°00'-1		-404 Mar 30 j 22:20	0°✿	
minimum elong	-412 Feb 14 j 00:51	19°57'08	15°00'02	retrograde	-404 Jun 05 j 15:49	0°✿46'13	
max. Earth dist.	-412 Feb 16 j 23:58	20°01'45	44.97060 AU		-404 Aug 13 j 16:43	30°R	
retrograde	-412 May 27 j 09:16	21°38'58		min. Earth dist.	-404 Aug 25 j 22:26	29°45'34	44.58399 AU
min. Earth dist.	-412 Aug 16 j 10:04	20°37'30	43.14109 AU	opposition	-404 Aug 28 j 13:17	29°42'25	-16°-47'-21
opposition	-412 Aug 19 j 07:17	20°33'59	-15°-46'-10	direct	-404 Nov 17 j 11:12	28°40'09	
direct	-412 Nov 08 j 05:50	19°30'32			-403 Feb 14 j 03:09	0°✿	
				conjunction	-403 Feb 23 j 14:42	0°✿14'10	-16°-7'-29
conjunction	-411 Feb 14 j 11:04	21°07'46	-15°-9'-7	minimum elong	-403 Feb 23 j 14:38	0°✿14'09	16°07'30
minimum elong	-411 Feb 14 j 10:57	21°07'46	15°09'09	max. Earth dist.	-403 Feb 26 j 07:24	0°✿18'12	46.58449 AU
max. Earth dist.	-411 Feb 17 j 08:53	21°12'17	45.16599 AU	retrograde	-403 Jun 06 j 23:40	1°✿52'20	
retrograde	-411 May 28 j 21:00	22°49'11		min. Earth dist.	-403 Aug 27 j 08:44	0°✿51'44	44.74980 AU
min. Earth dist.	-411 Aug 17 j 21:47	21°47'51	43.33607 AU	opposition	-403 Aug 29 j 22:11	0°✿48'41	-16°-53'-7
opposition	-411 Aug 20 j 17:54	21°44'24	-15°-55'-16		-403 Oct 15 j 12:09	30°R	
direct	-411 Nov 09 j 15:40	20°41'08		direct	-403 Nov 18 j 20:08	29°46'33	
					-403 Dec 22 j 16:26	0°✿	
conjunction	-410 Feb 15 j 21:18	22°17'57	-15°-17'-49	conjunction	-402 Feb 24 j 23:22	1°✿20'14	-16°-12'-58
minimum elong	-410 Feb 15 j 21:12	22°17'57	15°17'49	minimum elong	-402 Feb 24 j 23:20	1°✿20'14	16°12'59
max. Earth dist.	-410 Feb 18 j 19:12	22°22'27	45.35742 AU	max. Earth dist.	-402 Feb 27 j 15:07	1°✿24'12	46.74824 AU
retrograde	-410 May 30 j 07:52	23°58'58		retrograde	-402 Jun 08 j 06:40	2°✿58'04	
min. Earth dist.	-410 Aug 19 j 09:18	22°57'44	43.52662 AU	min. Earth dist.	-402 Aug 28 j 16:56	1°✿57'39	44.91311 AU
opposition	-410 Aug 22 j 04:11	22°54'20	-16°-3'-57	opposition	-402 Aug 31 j 06:43	1°✿54'35	-16°-58'-28
direct	-410 Nov 11 j 01:51	21°51'15		direct	-402 Nov 20 j 05:16	0°✿52'37	
				conjunction	-401 Feb 26 j 07:50	2°✿26'00	-16°-18'-4
conjunction	-409 Feb 17 j 07:16	23°27'39	-15°-26'-6	minimum elong	-401 Feb 26 j 07:47	2°✿25'59	16°18'05
minimum elong	-409 Feb 17 j 07:10	23°27'39	15°26'08	max. Earth dist.	-401 Feb 28 j 22:48	2°✿29'54	46.90928 AU
max. Earth dist.	-409 Feb 20 j 03:05	23°31'59	45.54436 AU	retrograde	-401 Jun 09 j 15:06	4°✿03'30	
retrograde	-409 May 31 j 20:11	25°08'13		min. Earth dist.	-401 Aug 30 j 02:59	3°✿03'11	45.07359 AU
min. Earth dist.	-409 Aug 20 j 19:42	24°07'07	43.71254 AU	opposition	-401 Sep 01 j 15:18	3°✿00'12	-17°-3'-26
opposition	-409 Aug 23 j 14:19	24°03'46	-16°-12'-13	direct	-401 Nov 21 j 14:36	1°✿58'25	
direct	-409 Nov 12 j 09:29	23°00'49					
				conjunction	-400 Feb 27 j 16:19	3°✿31'28	-16°-22'-47
conjunction	-408 Feb 18 j 17:07	24°36'49	-15°-34'00	minimum elong	-400 Feb 27 j 16:18	3°✿31'28	16°22'49
minimum elong	-408 Feb 18 j 17:02	24°36'48	15°34'00	max. Earth dist.	-400 Mar 01 j 07:18	3°✿35'22	47.06731 AU
max. Earth dist.	-408 Feb 21 j 12:44	24°41'07	45.72658 AU	retrograde	-400 Jun 09 j 23:00	5°✿08'41	
retrograde	-408 Jun 01 j 05:01	26°16'57		min. Earth dist.	-400 Aug 30 j 11:49	4°✿08'31	45.23055 AU
min. Earth dist.	-408 Aug 21 j 07:34	25°15'53	43.89381 AU	opposition	-400 Sep 01 j 23:27	4°✿05'34	-17°-8'-1
opposition	-408 Aug 24 j 00:10	25°12'37	-16°-20'-4	direct	-400 Nov 22 j 00:03	3°✿03'57	
direct	-408 Nov 12 j 19:37	24°09'49					
				conjunction	-407 Feb 19 j 02:42	25°45'23	-15°-41'-30
conjunction	-407 Feb 19 j 02:36	25°45'22	15°41'31	minimum elong	-407 Feb 19 j 02:36	25°45'22	15°41'31
max. Earth dist.	-407 Feb 21 j 21:16	25°49'36	45.90460 AU	max. Earth dist.	-407 Feb 21 j 21:16	25°49'36	45.90460 AU
retrograde	-407 Jun 02 j 11:10	27°25'06		retrograde	-407 Jun 02 j 11:10	27°25'06	
min. Earth dist.	-407 Aug 22 j 17:02	26°24'09	44.07102 AU	min. Earth dist.	-407 Aug 22 j 17:02	26°24'09	44.07102 AU
opposition	-407 Aug 25 j 09:45	26°20'54	-16°-27'-31	opposition	-407 Aug 25 j 09:45	26°20'54	-16°-27'-31
direct	-407 Nov 14 j 07:58	25°18'13		direct	-407 Nov 14 j 07:58	25°18'13	
conjunction	-406 Feb 20 j 11:51	26°53'22	-15°-48'-36	conjunction	-406 Feb 20 j 11:47	26°53'21	15°48'37
minimum elong	-406 Feb 20 j 11:47	26°53'21	15°48'37	max. Earth dist.	-406 Feb 23 j 05:23	26°57'30	46.07881 AU
max. Earth dist.	-406 Feb 23 j 05:23	26°57'30	46.07881 AU	retrograde	-406 Jun 03 j 20:02	28°32'40	
retrograde	-406 Jun 03 j 20:02	28°32'40		min. Earth dist.	-406 Aug 24 j 03:45	27°31'47	44.24485 AU
min. Earth dist.	-406 Aug 24 j 03:45	27°31'47	44.24485 AU				