

Planetary Phenomena of Pluto from -1900 through -1400 (UT), Astrodienst AG 14-Nov-2015 16:09, page 1

Attention, astronomical year style is used: The year -1900 in astronomical counting style is the year 1901 BCE in historical counting style.

conjunction	-1900 Jan 24 j 19:47	19°♁09'48	-13°-17'-4	minimum elong	-1892 Feb 03 j 14:40	28°♁57'03	14°50'48
minimum elong	-1900 Jan 24 j 19:37	19°♁09'47	13°17'07	max. Earth dist.	-1892 Feb 06 j 14:07	29°♁01'42	44.78280 AU
max. Earth dist.	-1900 Jan 27 j 23:40	19°♁14'56	43.09882 AU		-1892 Mar 18 j 03:00	0°≈	
retrograde	-1900 May 07 j 10:36	20°♁55'58		retrograde	-1892 May 17 j 07:13	0°≈39'24	
min. Earth dist.	-1900 Jul 27 j 00:58	19°♁53'02	41.26573 AU		-1892 Jul 18 j 09:28	30°R♁	
opposition	-1900 Jul 30 j 03:21	19°♁49'08	-14°-2'-37	min. Earth dist.	-1892 Aug 06 j 03:13	29°♁37'45	42.95151 AU
direct	-1900 Oct 18 j 20:51	18°♁43'56		opposition	-1892 Aug 09 j 01:09	29°♁34'11	-15°-36'-59
				direct	-1892 Oct 28 j 16:49	28°♁30'35	
conjunction	-1899 Jan 25 j 07:45	20°♁25'13	-13°-30'-31		-1891 Jan 29 j 19:28	0°≈	
minimum elong	-1899 Jan 25 j 07:34	20°♁25'13	13°30'35	conjunction	-1891 Feb 04 j 01:24	0°≈08'09	-15°00'-26
max. Earth dist.	-1899 Jan 28 j 10:45	20°♁30'15	43.31763 AU	minimum elong	-1891 Feb 04 j 01:16	0°≈08'08	15°00'28
retrograde	-1899 May 09 j 00:30	22°♁10'52		max. Earth dist.	-1891 Feb 07 j 00:34	0°≈12'45	44.97692 AU
min. Earth dist.	-1899 Jul 28 j 13:47	21°♁08'05	41.48564 AU	retrograde	-1891 May 18 j 15:16	1°≈50'02	
opposition	-1899 Jul 31 j 16:02	21°♁04'12	-14°-16'-12	min. Earth dist.	-1891 Aug 07 j 15:58	0°≈48'27	43.14485 AU
direct	-1899 Oct 20 j 07:45	19°♁59'13		opposition	-1891 Aug 10 j 11:56	0°≈44'59	-15°-46'-41
conjunction	-1898 Jan 26 j 19:43	21°♁39'59	-13°-43'-26		-1891 Sep 20 j 04:48	30°R♁	
minimum elong	-1898 Jan 26 j 19:34	21°♁39'58	13°43'28	direct	-1891 Oct 30 j 06:04	29°♁41'32	
max. Earth dist.	-1898 Jan 29 j 23:34	21°♁45'02	43.53472 AU		-1891 Dec 08 j 09:24	0°≈	
retrograde	-1898 May 10 j 11:28	23°♁25'05		conjunction	-1890 Feb 05 j 11:52	1°≈18'40	-15°-9'-41
min. Earth dist.	-1898 Jul 30 j 02:53	22°♁22'27	41.70360 AU	minimum elong	-1890 Feb 05 j 11:46	1°≈18'40	15°09'44
opposition	-1898 Aug 02 j 04:13	22°♁18'38	-14°-29'-14	max. Earth dist.	-1890 Feb 08 j 09:48	1°≈23'11	45.16665 AU
direct	-1898 Oct 21 j 20:28	21°♁13'51		retrograde	-1890 May 19 j 23:55	3°≈00'07	
conjunction	-1897 Jan 28 j 07:19	22°♁54'07	-13°-55'-50	min. Earth dist.	-1890 Aug 09 j 02:13	1°≈58'40	43.33391 AU
minimum elong	-1897 Jan 28 j 07:09	22°♁54'06	13°55'54	opposition	-1890 Aug 11 j 22:09	1°≈55'12	-15°-55'-57
max. Earth dist.	-1897 Jan 31 j 09:52	22°♁59'04	43.74998 AU	direct	-1890 Oct 31 j 18:05	0°≈51'55	
retrograde	-1897 May 11 j 22:54	24°♁38'43		conjunction	-1889 Feb 06 j 21:55	2°≈28'37	-15°-18'-31
min. Earth dist.	-1897 Jul 31 j 14:18	23°♁36'19	41.91962 AU	minimum elong	-1889 Feb 06 j 21:48	2°≈28'36	15°18'33
opposition	-1897 Aug 03 j 16:16	23°♁32'29	-14°-41'-45	max. Earth dist.	-1889 Feb 09 j 18:50	2°≈33'02	45.35239 AU
direct	-1897 Oct 23 j 08:26	22°♁27'54		retrograde	-1889 May 21 j 11:00	4°≈09'38	
conjunction	-1896 Jan 29 j 18:35	24°♁07'41	-14°-7'-45	min. Earth dist.	-1889 Aug 10 j 13:47	3°≈08'15	43.51944 AU
minimum elong	-1896 Jan 29 j 18:26	24°♁07'41	14°07'48	opposition	-1889 Aug 13 j 08:26	3°≈04'52	-16°-4'-46
max. Earth dist.	-1896 Feb 01 j 21:31	24°♁12'39	43.96305 AU	direct	-1889 Nov 02 j 03:50	2°≈01'44	
retrograde	-1896 May 12 j 08:46	25°♁51'50		conjunction	-1888 Feb 08 j 07:46	3°≈38'00	-15°-26'-55
min. Earth dist.	-1896 Aug 01 j 03:46	24°♁49'33	42.13323 AU	minimum elong	-1888 Feb 08 j 07:41	3°≈38'00	15°26'59
opposition	-1896 Aug 04 j 04:13	24°♁45'48	-14°-53'-45	max. Earth dist.	-1888 Feb 11 j 05:03	3°≈42'25	45.53498 AU
direct	-1896 Oct 23 j 21:39	23°♁41'26		retrograde	-1888 May 21 j 21:30	5°≈18'36	
conjunction	-1895 Jan 30 j 05:56	25°♁20'45	-14°-19'-11	min. Earth dist.	-1888 Aug 11 j 00:17	4°≈17'20	43.70185 AU
minimum elong	-1895 Jan 30 j 05:47	25°♁20'44	14°19'14	opposition	-1888 Aug 13 j 18:21	4°≈13'59	-16°-13'-8
max. Earth dist.	-1895 Feb 02 j 08:23	25°♁25'40	44.17359 AU	direct	-1888 Nov 02 j 13:17	3°≈10'59	
retrograde	-1895 May 13 j 19:13	27°♁04'26		conjunction	-1887 Feb 08 j 17:27	4°≈46'52	-15°-34'-54
min. Earth dist.	-1895 Aug 02 j 15:09	26°♁02'22	42.34383 AU	minimum elong	-1887 Feb 08 j 17:21	4°≈46'51	15°34'56
opposition	-1895 Aug 05 j 15:38	25°♁58'37	-15°-5'-15	max. Earth dist.	-1887 Feb 11 j 13:05	4°≈51'10	45.71479 AU
direct	-1895 Oct 25 j 10:18	24°♁54'28		retrograde	-1887 May 23 j 09:25	6°≈27'02	
conjunction	-1894 Jan 31 j 17:00	26°♁33'20	-14°-30'-9	min. Earth dist.	-1887 Aug 12 j 09:53	5°≈25'55	43.88175 AU
minimum elong	-1894 Jan 31 j 16:52	26°♁33'19	14°30'12	opposition	-1887 Aug 15 j 03:58	5°≈22'35	-16°-21'-4
max. Earth dist.	-1894 Feb 03 j 18:12	26°♁38'08	44.38075 AU	direct	-1887 Nov 03 j 20:21	4°≈19'44	
retrograde	-1894 May 15 j 09:13	28°♁16'34		conjunction	-1886 Feb 10 j 03:03	5°≈55'15	-15°-42'-27
min. Earth dist.	-1894 Aug 04 j 03:38	27°♁14'38	42.55085 AU	minimum elong	-1886 Feb 10 j 02:58	5°≈55'14	15°42'30
opposition	-1894 Aug 07 j 03:03	27°♁10'58	-15°-16'-17	max. Earth dist.	-1886 Feb 12 j 23:06	5°≈59'33	45.89213 AU
direct	-1894 Oct 26 j 19:22	26°♁07'00		retrograde	-1886 May 24 j 17:18	7°≈35'02	
conjunction	-1893 Feb 02 j 04:00	27°♁45'27	-14°-40'-40	min. Earth dist.	-1886 Aug 13 j 20:59	6°≈34'00	44.05910 AU
minimum elong	-1893 Feb 02 j 03:51	27°♁45'26	14°40'43	opposition	-1886 Aug 16 j 13:31	6°≈30'45	-16°-28'-32
max. Earth dist.	-1893 Feb 05 j 05:16	27°♁50'13	44.58399 AU	direct	-1886 Nov 05 j 06:37	5°≈28'03	
retrograde	-1893 May 16 j 20:12	29°♁28'14		conjunction	-1885 Feb 11 j 12:18	7°≈03'11	-15°-49'-34
min. Earth dist.	-1893 Aug 05 j 16:05	28°♁26'25	42.75345 AU	minimum elong	-1885 Feb 11 j 12:14	7°≈03'11	15°49'37
opposition	-1893 Aug 08 j 14:11	28°♁22'50	-15°-26'-51	max. Earth dist.	-1885 Feb 14 j 07:23	7°≈07'26	46.06714 AU
direct	-1893 Oct 28 j 06:28	27°♁19'04		retrograde	-1885 May 25 j 23:31	8°≈42'36	
conjunction	-1892 Feb 03 j 14:47	28°♁57'04	-14°-50'-45	min. Earth dist.	-1885 Aug 15 j 05:45	7°≈41'46	44.23396 AU

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Attention, astronomical year style is used: The year -1885 in astronomical counting style is the year 1886 BCE in historical counting style.

opposition	-1885 Aug 17 j 22:46	7°38'29	-16°-35'-35	retrograde	-1877 Jun 03 j 22:25	17°30'10	
direct	-1885 Nov 06 j 18:32	6°35'58		min. Earth dist.	-1877 Aug 24 j 10:20	16°30'00	45.49570 AU
				opposition	-1877 Aug 26 j 18:59	16°27'12	-17°-17'-56
conjunction	-1884 Feb 12 j 21:26	8°10'45	-15°-56'-17	direct	-1877 Nov 15 j 15:12	15°25'44	
minimum elong	-1884 Feb 12 j 21:21	8°10'45	15°56'20				
max. Earth dist.	-1884 Feb 15 j 15:51	8°14'56	46.23955 AU	conjunction	-1876 Feb 21 j 18:40	16°57'54	-16°-36'-38
retrograde	-1884 May 26 j 09:03	9°49'49		minimum elong	-1876 Feb 21 j 18:38	16°57'54	16°36'41
min. Earth dist.	-1884 Aug 15 j 16:23	8°49'04	44.40616 AU	max. Earth dist.	-1876 Feb 24 j 05:57	17°01'31	47.47784 AU
opposition	-1884 Aug 18 j 07:59	8°45'52	-16°-42'-12	retrograde	-1876 Jun 04 j 06:16	18°34'11	
direct	-1884 Nov 07 j 04:26	7°43'31		min. Earth dist.	-1876 Aug 24 j 19:32	17°34'03	45.63452 AU
				opposition	-1876 Aug 27 j 02:42	17°31'20	-17°-21'-35
conjunction	-1883 Feb 13 j 06:35	9°17'58	-16°-2'-35	direct	-1876 Nov 15 j 23:04	16°29'57	
minimum elong	-1883 Feb 13 j 06:32	9°17'58	16°02'38				
max. Earth dist.	-1883 Feb 16 j 00:58	9°22'08	46.40918 AU	conjunction	-1875 Feb 22 j 02:37	18°01'49	-16°-40'-6
retrograde	-1883 May 27 j 18:32	10°56'42		minimum elong	-1875 Feb 22 j 02:38	18°01'49	16°40'09
min. Earth dist.	-1883 Aug 17 j 01:55	9°56'05	44.57503 AU	max. Earth dist.	-1875 Feb 24 j 12:28	18°05'20	47.61463 AU
opposition	-1883 Aug 19 j 16:53	9°52'55	-16°-48'-25	retrograde	-1875 Jun 05 j 12:38	19°37'47	
direct	-1883 Nov 08 j 13:17	8°50'44		min. Earth dist.	-1875 Aug 26 j 02:51	18°37'46	45.77044 AU
				opposition	-1875 Aug 28 j 10:13	18°35'02	-17°-24'-53
conjunction	-1882 Feb 14 j 15:31	10°24'51	-16°-8'-30	direct	-1875 Nov 17 j 07:01	17°33'46	
minimum elong	-1882 Feb 14 j 15:27	10°24'51	16°08'34				
max. Earth dist.	-1882 Feb 17 j 08:02	10°28'53	46.57524 AU	conjunction	-1874 Feb 23 j 10:27	19°05'21	-16°-43'-12
retrograde	-1882 May 29 j 06:00	12°03'14		minimum elong	-1874 Feb 23 j 10:27	19°05'21	16°43'14
min. Earth dist.	-1882 Aug 18 j 11:23	11°02'45	44.74015 AU	max. Earth dist.	-1874 Feb 25 j 19:43	19°08'49	47.74853 AU
opposition	-1882 Aug 21 j 01:34	10°59'39	-16°-54'-14	retrograde	-1874 Jun 06 j 18:26	20°41'01	
direct	-1882 Nov 09 j 19:37	9°57'37		min. Earth dist.	-1874 Aug 27 j 11:51	19°41'02	45.90361 AU
				opposition	-1874 Aug 29 j 17:36	19°38'24	-17°-27'-48
conjunction	-1881 Feb 16 j 00:28	11°31'25	-16°-14'-4	direct	-1874 Nov 18 j 16:18	18°37'14	
minimum elong	-1881 Feb 16 j 00:26	11°31'25	16°14'06				
max. Earth dist.	-1881 Feb 18 j 16:59	11°35'25	46.73719 AU	conjunction	-1873 Feb 24 j 18:12	20°08'33	-16°-45'-57
retrograde	-1881 May 30 j 14:12	13°09'27		minimum elong	-1873 Feb 24 j 18:13	20°08'33	16°46'00
min. Earth dist.	-1881 Aug 19 j 21:54	12°09'01	44.90074 AU	max. Earth dist.	-1873 Feb 27 j 03:11	20°12'00	47.87996 AU
opposition	-1881 Aug 22 j 10:16	12°06'01	-16°-59'-41	retrograde	-1873 Jun 08 j 01:05	21°43'57	
direct	-1881 Nov 11 j 04:20	11°04'07		min. Earth dist.	-1873 Aug 28 j 19:11	20°44'06	46.03406 AU
				opposition	-1873 Aug 31 j 00:50	20°41'28	-17°-30'-21
conjunction	-1880 Feb 17 j 09:09	12°37'36	-16°-19'-16	direct	-1873 Nov 20 j 00:54	19°40'26	
minimum elong	-1880 Feb 17 j 09:06	12°37'36	16°19'18				
max. Earth dist.	-1880 Feb 19 j 23:47	12°41'29	46.89456 AU	conjunction	-1872 Feb 26 j 01:36	21°11'30	-16°-48'-21
retrograde	-1880 May 30 j 21:44	14°15'17		minimum elong	-1872 Feb 26 j 01:37	21°11'30	16°48'22
min. Earth dist.	-1880 Aug 20 j 06:33	13°14'59	45.05648 AU	max. Earth dist.	-1872 Feb 28 j 09:02	21°14'51	48.00863 AU
opposition	-1880 Aug 22 j 18:44	13°12'00	-17°-4'-46	retrograde	-1872 Jun 08 j 10:54	22°46'38	
direct	-1880 Nov 11 j 13:13	12°10'13		min. Earth dist.	-1872 Aug 29 j 03:20	21°46'53	46.16171 AU
				opposition	-1872 Aug 31 j 08:05	21°44'18	-17°-32'-32
conjunction	-1879 Feb 17 j 17:48	13°43'23	-16°-24'-7	direct	-1872 Nov 20 j 06:15	20°43'25	
minimum elong	-1879 Feb 17 j 17:47	13°43'23	16°24'10				
max. Earth dist.	-1879 Feb 20 j 07:22	13°47'11	47.04693 AU	conjunction	-1871 Feb 26 j 09:14	22°14'15	-16°-50'-24
	-1879 Apr 18 j 07:44	15°		minimum elong	-1871 Feb 26 j 09:15	22°14'16	16°50'27
retrograde	-1879 Jun 01 j 04:32	15°20'43		max. Earth dist.	-1871 Feb 28 j 16:52	22°17'36	48.13427 AU
	-1879 Jul 15 j 20:57	15°R		retrograde	-1871 Jun 09 j 19:08	23°49'08	
min. Earth dist.	-1879 Aug 21 j 16:59	14°20'25	45.20729 AU	min. Earth dist.	-1871 Aug 30 j 11:46	22°49'28	46.28590 AU
opposition	-1879 Aug 24 j 03:01	14°17'33	-17°-9'-30	opposition	-1871 Sep 01 j 15:00	22°46'58	-17°-34'-23
direct	-1879 Nov 12 j 23:35	13°15'53		direct	-1871 Nov 21 j 12:09	21°46'13	
conjunction	-1878 Feb 19 j 02:24	14°48'42	-16°-28'-38	conjunction	-1870 Feb 27 j 16:43	23°16'51	-16°-52'-8
minimum elong	-1878 Feb 19 j 02:22	14°48'42	16°28'41	minimum elong	-1870 Feb 27 j 16:45	23°16'51	16°52'10
max. Earth dist.	-1878 Feb 21 j 15:22	14°52'27	47.19465 AU	max. Earth dist.	-1870 Mar 01 j 22:24	23°20'04	48.25635 AU
	-1878 Feb 26 j 18:16	15°		retrograde	-1870 Jun 11 j 03:26	24°51'29	
retrograde	-1878 Jun 02 j 11:34	16°25'41		min. Earth dist.	-1870 Aug 31 j 18:52	23°51'57	46.40618 AU
min. Earth dist.	-1878 Aug 23 j 01:35	15°25'28	45.35344 AU	opposition	-1870 Sep 02 j 21:53	23°49'28	-17°-35'-55
opposition	-1878 Aug 25 j 11:02	15°22'37	-17°-13'-54	direct	-1870 Nov 22 j 17:38	22°48'51	
	-1878 Sep 13 j 22:25	15°R					
direct	-1878 Nov 14 j 09:37	14°21'03		conjunction	-1869 Mar 01 j 00:00	24°19'17	-16°-53'-34
	-1877 Jan 12 j 17:41	15°		minimum elong	-1869 Mar 01 j 00:02	24°19'17	16°53'36
				max. Earth dist.	-1869 Mar 03 j 04:52	24°22'27	48.37404 AU
conjunction	-1877 Feb 20 j 10:28	15°53'32	-16°-32'-49	retrograde	-1869 Jun 12 j 08:48	25°53'41	
minimum elong	-1877 Feb 20 j 10:28	15°53'32	16°32'52	min. Earth dist.	-1869 Sep 02 j 04:08	24°54'11	46.52179 AU
max. Earth dist.	-1877 Feb 22 j 21:33	15°57'09	47.33803 AU	opposition	-1869 Sep 04 j 04:50	24°51'49	-17°-37'-8

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Attention, astronomical year style is used: The year -1869 in astronomical counting style is the year 1870 BCE in historical counting style.

direct	-1869 Nov 24 j 01:57	23° \approx 51'19		min. Earth dist.	-1861 Sep 10 j 14:35	3° \times 02'34	47.28084 AU
				opposition	-1861 Sep 12 j 06:52	3° \times 00'38	-17°-36'-13
conjunction	-1868 Mar 01 j 07:29	25° \approx 21'32	-16°-54'-41	direct	-1861 Dec 02 j 08:39	2° \times 00'43	
minimum elong	-1868 Mar 01 j 07:33	25° \approx 21'32	16°54'43				
max. Earth dist.	-1868 Mar 03 j 11:21	25° \approx 24'38	48.48698 AU	conjunction	-1860 Mar 09 j 14:19	3° \times 29'16	-16°-53'-19
retrograde	-1868 Jun 12 j 13:44	26° \approx 55'43		minimum elong	-1860 Mar 09 j 14:25	3° \times 29'17	16°53'21
min. Earth dist.	-1868 Sep 02 j 11:20	25° \approx 56'18	46.63223 AU	max. Earth dist.	-1860 Mar 11 j 08:46	3° \times 31'45	49.23055 AU
opposition	-1868 Sep 04 j 11:28	25° \approx 53'57	-17°-38'-3	retrograde	-1860 Jun 20 j 21:27	5° \times 01'34	
direct	-1868 Nov 24 j 11:31	24° \approx 53'34		min. Earth dist.	-1860 Sep 10 j 20:34	4° \times 02'26	47.36005 AU
				opposition	-1860 Sep 12 j 12:34	4° \times 00'31	-17°-34'-43
conjunction	-1867 Mar 02 j 14:45	26° \approx 23'33	-16°-55'-32	direct	-1860 Dec 02 j 11:32	3° \times 00'41	
minimum elong	-1867 Mar 02 j 14:47	26° \approx 23'34	16°55'35				
max. Earth dist.	-1867 Mar 04 j 16:15	26° \approx 26'31	48.59463 AU	conjunction	-1859 Mar 10 j 20:52	4° \times 29'05	-16°-51'-48
retrograde	-1867 Jun 13 j 23:30	27° \approx 57'30		minimum elong	-1859 Mar 10 j 20:58	4° \times 29'06	16°51'49
min. Earth dist.	-1867 Sep 03 j 19:38	26° \approx 58'06	46.73743 AU	max. Earth dist.	-1859 Mar 12 j 14:45	4° \times 31'32	49.30827 AU
opposition	-1867 Sep 05 j 18:10	26° \approx 55'51	-17°-38'-42	retrograde	-1859 Jun 22 j 03:15	6° \times 01'12	
direct	-1867 Nov 25 j 16:52	25° \approx 55'32		min. Earth dist.	-1859 Sep 12 j 04:25	5° \times 02'04	47.43567 AU
				opposition	-1859 Sep 13 j 18:21	5° \times 00'15	-17°-32'-55
conjunction	-1866 Mar 03 j 22:01	27° \approx 25'19	-16°-56'-7	direct	-1859 Dec 03 j 17:10	4° \times 00'30	
minimum elong	-1866 Mar 03 j 22:05	27° \approx 25'19	16°56'09				
max. Earth dist.	-1866 Mar 05 j 23:15	27° \approx 28'14	48.69711 AU	conjunction	-1858 Mar 12 j 03:22	5° \times 28'46	-16°-50'00
retrograde	-1866 Jun 15 j 07:08	28° \approx 59'00		minimum elong	-1858 Mar 12 j 03:28	5° \times 28'46	16°50'02
min. Earth dist.	-1866 Sep 05 j 03:39	27° \approx 59'37	46.83747 AU	max. Earth dist.	-1858 Mar 13 j 20:18	5° \times 31'09	49.38230 AU
opposition	-1866 Sep 07 j 00:33	27° \approx 57'26	-17°-39'-3	retrograde	-1858 Jun 23 j 06:16	7° \times 00'42	
direct	-1866 Nov 26 j 22:52	26° \approx 57'12		min. Earth dist.	-1858 Sep 13 j 10:15	6° \times 01'39	47.50717 AU
				opposition	-1858 Sep 14 j 23:49	5° \times 59'51	-17°-30'-50
conjunction	-1865 Mar 05 j 04:58	28° \approx 26'45	-16°-56'-24	direct	-1858 Dec 05 j 01:37	5° \times 00'12	
minimum elong	-1865 Mar 05 j 05:01	28° \approx 26'45	16°56'26				
max. Earth dist.	-1865 Mar 07 j 04:09	28° \approx 29'32	48.79492 AU	conjunction	-1857 Mar 13 j 09:45	6° \times 28'19	-16°-47'-56
	-1865 Jun 12 j 14:03	0° \times		minimum elong	-1857 Mar 13 j 09:51	6° \times 28'19	16°47'57
retrograde	-1865 Jun 16 j 14:21	0° \times 00'10		max. Earth dist.	-1857 Mar 15 j 00:32	6° \times 30'34	49.45189 AU
	-1865 Jun 20 j 12:50	30° \approx R \approx		retrograde	-1857 Jun 24 j 13:01	8° \times 00'06	
min. Earth dist.	-1865 Sep 06 j 10:14	29° \approx 00'51	46.93318 AU	min. Earth dist.	-1857 Sep 14 j 17:41	7° \times 01'03	47.57404 AU
opposition	-1865 Sep 08 j 06:50	28° \approx 58'42	-17°-39'-6	opposition	-1857 Sep 16 j 05:27	6° \times 59'21	-17°-28'-29
direct	-1865 Nov 28 j 03:50	27° \approx 58'31		direct	-1857 Dec 06 j 07:38	5° \times 59'46	
conjunction	-1864 Mar 05 j 11:44	29° \approx 27'51	-16°-56'-23	conjunction	-1856 Mar 13 j 16:13	7° \times 27'45	-16°-45'-36
minimum elong	-1864 Mar 05 j 11:49	29° \approx 27'51	16°56'25	minimum elong	-1856 Mar 13 j 16:19	7° \times 27'45	16°45'38
max. Earth dist.	-1864 Mar 07 j 10:18	29° \approx 30'36	48.88856 AU	max. Earth dist.	-1856 Mar 15 j 06:36	7° \times 29'58	49.51654 AU
	-1864 Mar 28 j 15:23	0° \times		retrograde	-1856 Jun 24 j 19:41	8° \times 59'22	
retrograde	-1864 Jun 16 j 18:26	1° \times 01'01		min. Earth dist.	-1856 Sep 15 j 00:49	8° \times 00'20	47.63551 AU
min. Earth dist.	-1864 Sep 06 j 18:28	0° \times 01'40	47.02496 AU	opposition	-1856 Sep 16 j 11:00	7° \times 58'42	-17°-25'-53
opposition	-1864 Sep 08 j 13:06	29° \approx 59'36	-17°-38'-51	direct	-1856 Dec 06 j 13:14	6° \times 59'10	
	-1864 Sep 08 j 04:59	30° \approx R \approx					
direct	-1864 Nov 28 j 12:12	28° \approx 59'30		conjunction	-1855 Mar 14 j 22:38	8° \times 27'01	-16°-43'-2
	-1863 Feb 14 j 04:46	0° \times		minimum elong	-1855 Mar 14 j 22:46	8° \times 27'01	16°43'03
				max. Earth dist.	-1855 Mar 16 j 10:32	8° \times 29'06	49.57581 AU
conjunction	-1863 Mar 06 j 18:39	0° \times 28'37	-16°-56'-4	retrograde	-1855 Jun 26 j 03:39	9° \times 58'27	
minimum elong	-1863 Mar 06 j 18:43	0° \times 28'37	16°56'06	min. Earth dist.	-1855 Sep 16 j 06:56	8° \times 59'27	47.69159 AU
max. Earth dist.	-1863 Mar 08 j 16:26	0° \times 31'19	48.97870 AU	opposition	-1855 Sep 17 j 16:18	8° \times 57'52	-17°-23'-2
retrograde	-1863 Jun 17 j 21:56	2° \times 01'32		direct	-1855 Dec 07 j 16:43	7° \times 58'23	
min. Earth dist.	-1863 Sep 08 j 00:27	1° \times 02'16	47.11331 AU				
opposition	-1863 Sep 09 j 18:57	1° \times 00'13	-17°-38'-17	conjunction	-1854 Mar 16 j 04:58	9° \times 26'05	-16°-40'-14
direct	-1863 Nov 29 j 20:53	0° \times 00'10		minimum elong	-1854 Mar 16 j 05:04	9° \times 26'06	16°40'16
				max. Earth dist.	-1854 Mar 17 j 15:46	9° \times 28'06	49.62968 AU
conjunction	-1862 Mar 08 j 01:17	1° \times 29'05	-16°-55'-28	retrograde	-1854 Jun 27 j 08:10	10° \times 57'21	
minimum elong	-1862 Mar 08 j 01:22	1° \times 29'05	16°55'30	opposition	-1854 Sep 18 j 21:43	9° \times 56'49	-17°-19'-57
max. Earth dist.	-1862 Mar 09 j 21:24	1° \times 31'40	49.06558 AU	min. Earth dist.	-1854 Sep 17 j 14:37	9° \times 58'18	47.74243 AU
retrograde	-1862 Jun 19 j 05:20	3° \times 01'47		direct	-1854 Dec 08 j 23:13	8° \times 57'22	
min. Earth dist.	-1862 Sep 09 j 07:45	2° \times 02'32	47.19863 AU				
opposition	-1862 Sep 11 j 00:58	2° \times 00'33	-17°-37'-24	conjunction	-1853 Mar 17 j 11:03	10° \times 24'57	-16°-37'-10
direct	-1862 Dec 01 j 02:50	1° \times 00'34		minimum elong	-1853 Mar 17 j 11:12	10° \times 24'57	16°37'12
				max. Earth dist.	-1853 Mar 18 j 20:48	10° \times 26'54	49.67875 AU
conjunction	-1861 Mar 09 j 07:49	2° \times 29'17	-16°-54'-32	retrograde	-1853 Jun 28 j 11:04	11° \times 56'02	
minimum elong	-1861 Mar 09 j 07:54	2° \times 29'17	16°54'34	min. Earth dist.	-1853 Sep 18 j 20:04	10° \times 57'01	47.78864 AU
max. Earth dist.	-1861 Mar 11 j 04:07	2° \times 31'53	49.14952 AU	opposition	-1853 Sep 20 j 02:54	10° \times 55'32	-17°-16'-36
retrograde	-1861 Jun 20 j 12:30	4° \times 01'47		direct	-1853 Dec 10 j 06:52	9° \times 56'07	

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Attention, astronomical year style is used: The year -1852 in astronomical counting style is the year 1853 BCE in historical counting style.

conjunction	-1852 Mar 17 j 17:06	11° K 23'34	-16°-33'-51	retrograde	-1844 Jul 06 j 16:18	20° K 38'14	
minimum elong	-1852 Mar 17 j 17:12	11° K 23'34	16°33'53	opposition	-1844 Sep 27 j 22:39	19° K 38'18	-16°-34'00
max. Earth dist.	-1852 Mar 19 j 00:55	11° K 25'24	49.72347 AU	min. Earth dist.	-1844 Sep 27 j 02:33	19° K 39'15	48.04910 AU
retrograde	-1852 Jun 28 j 17:03	12° K 54'30		direct	-1844 Dec 18 j 01:58	18° K 39'15	
min. Earth dist.	-1852 Sep 19 j 02:55	11° K 55'27	47.83093 AU				
opposition	-1852 Sep 20 j 08:00	11° K 54'03	-17°-12'-58	conjunction	-1843 Mar 26 j 22:07	20° K 06'01	-15°-51'-58
direct	-1852 Dec 10 j 12:41	10° K 54'40		minimum elong	-1843 Mar 26 j 22:16	20° K 06'02	15°52'00
				max. Earth dist.	-1843 Mar 27 j 20:02	20° K 07'16	49.97422 AU
conjunction	-1851 Mar 18 j 23:15	12° K 21'59	-16°-30'-17	retrograde	-1843 Jul 07 j 19:42	21° K 35'59	
minimum elong	-1851 Mar 18 j 23:23	12° K 22'00	16°30'19	min. Earth dist.	-1843 Sep 28 j 07:46	20° K 37'00	48.05698 AU
max. Earth dist.	-1851 Mar 20 j 07:01	12° K 23'49	49.76455 AU	opposition	-1843 Sep 29 j 03:18	20° K 36'05	-16°-28'00
retrograde	-1851 Jun 29 j 22:47	13° K 52'47		direct	-1843 Dec 19 j 08:21	19° K 37'02	
min. Earth dist.	-1851 Sep 20 j 08:50	12° K 53'43	47.86964 AU				
opposition	-1851 Sep 21 j 13:01	12° K 52'23	-17°-9'-4	conjunction	-1842 Mar 28 j 03:51	21° K 03'45	-15°-46'-5
direct	-1851 Dec 11 j 18:35	11° K 53'02		minimum elong	-1842 Mar 28 j 04:02	21° K 03'46	15°46'07
				max. Earth dist.	-1842 Mar 28 j 23:31	21° K 04'52	49.98041 AU
conjunction	-1850 Mar 20 j 05:05	13° K 20'14	-16°-26'-25	retrograde	-1842 Jul 09 j 00:04	22° K 33'37	
minimum elong	-1850 Mar 20 j 05:13	13° K 20'14	16°26'26	opposition	-1842 Sep 30 j 08:00	21° K 33'44	-16°-21'-46
max. Earth dist.	-1850 Mar 21 j 10:53	13° K 21'57	49.80240 AU	min. Earth dist.	-1842 Sep 29 j 14:31	21° K 34'33	48.05969 AU
retrograde	-1850 Jul 01 j 07:19	14° K 50'53		direct	-1842 Dec 20 j 14:32	20° K 34'41	
opposition	-1850 Sep 22 j 17:53	13° K 50'32	-17°-4'-53				
min. Earth dist.	-1850 Sep 21 j 14:02	13° K 51'52	47.90535 AU	conjunction	-1841 Mar 29 j 09:43	22° K 01'19	-15°-39'-59
direct	-1850 Dec 12 j 20:17	12° K 51'13		minimum elong	-1841 Mar 29 j 09:52	22° K 01'20	15°40'00
				max. Earth dist.	-1841 Mar 30 j 04:55	22° K 02'25	49.98174 AU
conjunction	-1849 Mar 21 j 10:57	14° K 18'21	-16°-22'-17	retrograde	-1841 Jul 10 j 03:45	23° K 31'06	
minimum elong	-1849 Mar 21 j 11:06	14° K 18'21	16°22'19	opposition	-1841 Oct 01 j 12:31	22° K 31'13	-16°-15'-17
max. Earth dist.	-1849 Mar 22 j 16:23	14° K 20'02	49.83731 AU	min. Earth dist.	-1841 Sep 30 j 20:06	22° K 31'59	48.05767 AU
retrograde	-1849 Jul 02 j 13:36	15° K 48'52		direct	-1841 Dec 21 j 21:20	21° K 32'09	
opposition	-1849 Sep 23 j 22:52	14° K 48'36	-17°00'-24				
min. Earth dist.	-1849 Sep 22 j 20:49	14° K 49'50	47.93815 AU	conjunction	-1840 Mar 29 j 15:19	22° K 58'43	-15°-33'-38
direct	-1849 Dec 14 j 00:00	13° K 49'19		minimum elong	-1840 Mar 29 j 15:31	22° K 58'44	15°33'39
				max. Earth dist.	-1840 Mar 30 j 08:21	22° K 59'41	49.97872 AU
conjunction	-1848 Mar 21 j 16:45	15° K 16'22	-16°-17'-53	retrograde	-1840 Jul 10 j 11:39	24° K 28'24	
minimum elong	-1848 Mar 21 j 16:54	15° K 16'22	16°17'53	opposition	-1840 Oct 01 j 17:01	23° K 28'31	-16°-8'-34
max. Earth dist.	-1848 Mar 22 j 21:22	15° K 18'00	49.86953 AU	min. Earth dist.	-1840 Oct 01 j 01:22	23° K 29'16	48.05160 AU
retrograde	-1848 Jul 02 j 15:43	16° K 46'47		direct	-1840 Dec 21 j 23:51	22° K 29'26	
min. Earth dist.	-1848 Sep 23 j 01:30	15° K 47'49	47.96803 AU				
opposition	-1848 Sep 24 j 03:39	15° K 46'34	-16°-55'-39	conjunction	-1839 Mar 30 j 21:05	23° K 55'58	-15°-27'-2
direct	-1848 Dec 14 j 07:36	14° K 47'21		minimum elong	-1839 Mar 30 j 21:15	23° K 55'58	15°27'03
				max. Earth dist.	-1839 Mar 31 j 13:25	23° K 56'53	49.97177 AU
conjunction	-1847 Mar 22 j 22:33	16° K 14'20	-16°-13'-12	retrograde	-1839 Jul 11 j 18:16	25° K 25'33	
minimum elong	-1847 Mar 22 j 22:41	16° K 14'20	16°13'13	opposition	-1839 Oct 02 j 21:27	24° K 25'41	-16°-1'-35
max. Earth dist.	-1847 Mar 24 j 01:19	16° K 15'52	49.89863 AU	min. Earth dist.	-1839 Oct 02 j 07:44	24° K 26'20	48.04185 AU
retrograde	-1847 Jul 03 j 20:14	17° K 44'39		direct	-1839 Dec 23 j 03:08	23° K 26'35	
min. Earth dist.	-1847 Sep 24 j 08:00	16° K 45'41	47.99468 AU				
opposition	-1847 Sep 25 j 08:23	16° K 44'31	-16°-50'-37	conjunction	-1838 Apr 01 j 02:45	24° K 53'05	-15°-20'-12
direct	-1847 Dec 15 j 14:07	15° K 45'22		minimum elong	-1838 Apr 01 j 02:56	24° K 53'05	15°20'13
				max. Earth dist.	-1838 Apr 01 j 18:10	24° K 53'57	49.96158 AU
conjunction	-1846 Mar 24 j 04:29	17° K 12'17	-16°-8'-15	retrograde	-1838 Jul 12 j 21:26	26° K 22'35	
minimum elong	-1846 Mar 24 j 04:39	17° K 12'18	16°08'16	opposition	-1838 Oct 04 j 01:50	25° K 22'44	-15°-54'-20
max. Earth dist.	-1846 Mar 25 j 07:13	17° K 13'49	49.92430 AU	min. Earth dist.	-1838 Oct 03 j 12:02	25° K 23'23	48.02895 AU
retrograde	-1846 Jul 05 j 02:14	18° K 42'32		direct	-1838 Dec 24 j 08:50	24° K 23'38	
opposition	-1846 Sep 26 j 13:08	17° K 42'28	-16°-45'-19				
min. Earth dist.	-1846 Sep 25 j 13:52	17° K 43'35	48.01746 AU	conjunction	-1837 Apr 02 j 08:08	25° K 50'06	-15°-13'-5
direct	-1846 Dec 16 j 19:22	16° K 43'22		minimum elong	-1837 Apr 02 j 08:19	25° K 50'07	15°13'05
				max. Earth dist.	-1837 Apr 02 j 21:49	25° K 50'53	49.94830 AU
conjunction	-1845 Mar 25 j 10:08	18° K 10'14	-16°-3'-3	retrograde	-1837 Jul 14 j 01:10	27° K 19'34	
minimum elong	-1845 Mar 25 j 10:17	18° K 10'14	16°03'05	opposition	-1837 Oct 05 j 06:23	26° K 19'44	-15°-46'-49
max. Earth dist.	-1845 Mar 26 j 10:37	18° K 11'38	49.94588 AU	min. Earth dist.	-1837 Oct 04 j 18:11	26° K 20'19	48.01315 AU
retrograde	-1845 Jul 06 j 10:39	19° K 40'24		direct	-1837 Dec 25 j 15:04	25° K 20'39	
opposition	-1845 Sep 27 j 17:54	18° K 40'24	-16°-39'-47				
min. Earth dist.	-1845 Sep 26 j 19:30	18° K 41'28	48.03586 AU	conjunction	-1836 Apr 02 j 13:53	26° K 47'07	-15°-5'-43
direct	-1845 Dec 17 j 21:36	17° K 41'20		minimum elong	-1836 Apr 02 j 14:04	26° K 47'08	15°05'45
				max. Earth dist.	-1836 Apr 03 j 03:39	26° K 47'54	49.93220 AU
conjunction	-1844 Mar 25 j 16:06	19° K 08'10	-15°-57'-38	retrograde	-1836 Jul 14 j 05:42	28° K 16'34	
minimum elong	-1844 Mar 25 j 16:17	19° K 08'10	15°57'38	opposition	-1836 Oct 05 j 10:44	27° K 16'46	-15°-39'-2
max. Earth dist.	-1844 Mar 26 j 15:31	19° K 09'30	49.96262 AU	min. Earth dist.	-1836 Oct 04 j 23:20	27° K 17'18	47.99430 AU

Planetary Phenomena of Pluto from -1900 through -1400 (UT), Astrodienst AG 14-Nov-2015 16:09, page 5

Attention, astronomical year style is used: The year -1836 in astronomical counting style is the year 1837 BCE in historical counting style.

direct	-1836 Dec 25 j 20:51	26° \mathring{K} 17'41		opposition	-1828 Oct 12 j 22:06	4° \mathring{V} 55'53	-14°-28'-3
				min. Earth dist.	-1828 Oct 12 j 20:55	4° \mathring{V} 55'56	47.68601 AU
conjunction	-1835 Apr 03 j 19:30	27° \mathring{K} 44'11	-14°-58'-5	direct	-1827 Jan 02 j 05:55	3° \mathring{V} 56'42	
minimum elong	-1835 Apr 03 j 19:41	27° \mathring{K} 44'11	14°58'06				
max. Earth dist.	-1835 Apr 04 j 07:09	27° \mathring{K} 44'50	49.91309 AU	conjunction	-1827 Apr 11 j 17:52	5° \mathring{V} 23'33	-13°-48'-45
retrograde	-1835 Jul 15 j 13:52	29° \mathring{K} 13'37		minimum elong	-1827 Apr 11 j 18:05	5° \mathring{V} 23'34	13°48'46
opposition	-1835 Oct 06 j 15:09	28° \mathring{K} 13'52	-15°-30'-59	max. Earth dist.	-1827 Apr 11 j 17:36	5° \mathring{V} 23'32	49.59660 AU
min. Earth dist.	-1835 Oct 06 j 04:25	28° \mathring{K} 14'22	47.97230 AU	retrograde	-1827 Jul 23 j 07:25	6° \mathring{V} 53'00	
direct	-1835 Dec 26 j 22:41	27° \mathring{K} 14'49		opposition	-1827 Oct 14 j 02:36	5° \mathring{V} 53'17	-14°-18'-8
				min. Earth dist.	-1827 Oct 14 j 03:22	5° \mathring{V} 53'15	47.62641 AU
conjunction	-1834 Apr 05 j 01:08	28° \mathring{K} 41'20	-14°-50'-13	direct	-1826 Jan 03 j 13:04	4° \mathring{V} 54'04	
minimum elong	-1834 Apr 05 j 01:19	28° \mathring{K} 41'21	14°50'15				
max. Earth dist.	-1834 Apr 05 j 12:04	28° \mathring{K} 41'57	49.89040 AU	conjunction	-1826 Apr 12 j 23:40	6° \mathring{V} 20'57	-13°-39'-2
	-1834 Jun 14 j 11:12	0° \mathring{V}		minimum elong	-1826 Apr 12 j 23:51	6° \mathring{V} 20'58	13°39'02
retrograde	-1834 Jul 16 j 19:49	0° \mathring{V} 10'47		max. Earth dist.	-1826 Apr 12 j 23:20	6° \mathring{V} 20'56	49.53664 AU
	-1834 Aug 18 j 04:51	30° \mathring{R} \mathring{K}		retrograde	-1826 Jul 24 j 09:48	7° \mathring{V} 50'25	
opposition	-1834 Oct 07 j 19:37	29° \mathring{K} 11'04	-15°-22'-41	opposition	-1826 Oct 15 j 06:59	6° \mathring{V} 50'41	-14°-7'-56
min. Earth dist.	-1834 Oct 07 j 10:55	29° \mathring{K} 11'29	47.94640 AU	min. Earth dist.	-1826 Oct 15 j 08:22	6° \mathring{V} 50'37	47.56338 AU
direct	-1834 Dec 28 j 02:15	28° \mathring{K} 12'03		direct	-1825 Jan 04 j 20:48	5° \mathring{V} 51'24	
conjunction	-1833 Apr 06 j 06:53	29° \mathring{K} 38'38	-14°-42'-6	conjunction	-1825 Apr 14 j 05:23	7° \mathring{V} 18'21	-13°-29'-5
minimum elong	-1833 Apr 06 j 07:05	29° \mathring{K} 38'38	14°42'07	minimum elong	-1825 Apr 14 j 05:35	7° \mathring{V} 18'22	13°29'06
max. Earth dist.	-1833 Apr 06 j 16:39	29° \mathring{K} 39'11	49.86373 AU	max. Earth dist.	-1825 Apr 14 j 02:58	7° \mathring{V} 18'13	49.47358 AU
	-1833 Apr 22 j 03:09	0° \mathring{V}		retrograde	-1825 Jul 25 j 17:14	8° \mathring{V} 47'51	
retrograde	-1833 Jul 18 j 00:01	1° \mathring{V} 08'04		opposition	-1825 Oct 16 j 11:22	7° \mathring{V} 48'05	-13°-57'-29
opposition	-1833 Oct 08 j 23:55	0° \mathring{V} 08'25	-15°-14'-9	min. Earth dist.	-1825 Oct 16 j 13:25	7° \mathring{V} 47'59	47.49747 AU
min. Earth dist.	-1833 Oct 08 j 15:42	0° \mathring{V} 08'48	47.91609 AU	direct	-1824 Jan 05 j 23:30	6° \mathring{V} 48'44	
	-1833 Oct 16 j 09:56	30° \mathring{R} \mathring{K}					
direct	-1833 Dec 29 j 07:43	29° \mathring{K} 09'24		conjunction	-1824 Apr 14 j 11:15	8° \mathring{V} 15'46	-13°-18'-52
	-1832 Mar 10 j 05:42	0° \mathring{V}		minimum elong	-1824 Apr 14 j 11:27	8° \mathring{V} 15'47	13°18'52
				max. Earth dist.	-1824 Apr 14 j 08:16	8° \mathring{V} 15'36	49.40758 AU
conjunction	-1832 Apr 06 j 12:37	0° \mathring{V} 36'03	-14°-33'-46	retrograde	-1824 Jul 25 j 23:56	9° \mathring{V} 45'19	
minimum elong	-1832 Apr 06 j 12:48	0° \mathring{V} 36'03	14°33'47	opposition	-1824 Oct 16 j 15:55	8° \mathring{V} 45'32	-13°-46'-46
max. Earth dist.	-1832 Apr 06 j 19:59	0° \mathring{V} 36'28	49.83215 AU	min. Earth dist.	-1824 Oct 16 j 19:39	8° \mathring{V} 45'21	47.42853 AU
retrograde	-1832 Jul 18 j 04:34	2° \mathring{V} 05'30		direct	-1823 Jan 06 j 02:55	7° \mathring{V} 46'09	
opposition	-1832 Oct 09 j 04:29	1° \mathring{V} 05'52	-15°-5'-23				
min. Earth dist.	-1832 Oct 08 j 22:33	1° \mathring{V} 06'09	47.88063 AU	conjunction	-1823 Apr 15 j 17:12	9° \mathring{V} 13'17	-13°-8'-23
direct	-1832 Dec 29 j 13:36	0° \mathring{V} 06'51		minimum elong	-1823 Apr 15 j 17:24	9° \mathring{V} 13'17	13°08'24
				max. Earth dist.	-1823 Apr 15 j 13:16	9° \mathring{V} 13'03	49.33868 AU
conjunction	-1831 Apr 07 j 18:38	1° \mathring{V} 33'32	-14°-25'-12	retrograde	-1823 Jul 27 j 05:37	10° \mathring{V} 42'52	
minimum elong	-1831 Apr 07 j 18:51	1° \mathring{V} 33'33	14°25'12	opposition	-1823 Oct 17 j 20:14	9° \mathring{V} 43'04	-13°-35'-47
max. Earth dist.	-1831 Apr 08 j 01:17	1° \mathring{V} 33'55	49.79522 AU	min. Earth dist.	-1823 Oct 18 j 00:09	9° \mathring{V} 42'53	47.35651 AU
retrograde	-1831 Jul 19 j 08:17	3° \mathring{V} 03'00		direct	-1822 Jan 07 j 07:15	8° \mathring{V} 43'39	
opposition	-1831 Oct 10 j 08:51	2° \mathring{V} 03'23	-14°-56'-23				
min. Earth dist.	-1831 Oct 10 j 04:06	2° \mathring{V} 03'37	47.83954 AU	conjunction	-1822 Apr 16 j 23:06	10° \mathring{V} 10'55	-12°-57'-40
direct	-1831 Dec 30 j 20:12	1° \mathring{V} 04'21		minimum elong	-1822 Apr 16 j 23:18	10° \mathring{V} 10'55	12°57'40
				max. Earth dist.	-1822 Apr 16 j 17:11	10° \mathring{V} 10'34	49.26642 AU
conjunction	-1830 Apr 09 j 00:26	2° \mathring{V} 31'05	-14°-16'-26	retrograde	-1822 Jul 28 j 10:30	11° \mathring{V} 40'34	
minimum elong	-1830 Apr 09 j 00:37	2° \mathring{V} 31'05	14°16'26	opposition	-1822 Oct 19 j 00:51	10° \mathring{V} 40'46	-13°-24'-32
max. Earth dist.	-1830 Apr 09 j 04:29	2° \mathring{V} 31'18	49.75285 AU	min. Earth dist.	-1822 Oct 19 j 06:43	10° \mathring{V} 40'29	47.28098 AU
retrograde	-1830 Jul 20 j 16:22	4° \mathring{V} 00'33		direct	-1821 Jan 08 j 12:32	9° \mathring{V} 41'18	
opposition	-1830 Oct 11 j 13:20	3° \mathring{V} 00'55	-14°-47'-11				
min. Earth dist.	-1830 Oct 11 j 09:45	3° \mathring{V} 01'05	47.79318 AU	conjunction	-1821 Apr 18 j 05:06	11° \mathring{V} 08'41	-12°-46'-42
direct	-1830 Dec 31 j 22:39	2° \mathring{V} 01'51		minimum elong	-1821 Apr 18 j 05:18	11° \mathring{V} 08'42	12°46'42
				max. Earth dist.	-1821 Apr 17 j 22:54	11° \mathring{V} 08'20	49.19036 AU
conjunction	-1829 Apr 10 j 06:10	3° \mathring{V} 28'37	-14°-7'-26	retrograde	-1821 Jul 29 j 13:55	12° \mathring{V} 38'27	
minimum elong	-1829 Apr 10 j 06:23	3° \mathring{V} 28'37	14°07'27	opposition	-1821 Oct 20 j 05:26	11° \mathring{V} 38'38	-13°-13'-3
max. Earth dist.	-1829 Apr 10 j 09:15	3° \mathring{V} 28'47	49.70522 AU	min. Earth dist.	-1821 Oct 20 j 12:15	11° \mathring{V} 38'18	47.20114 AU
retrograde	-1829 Jul 21 j 23:59	4° \mathring{V} 58'04		direct	-1820 Jan 09 j 19:33	10° \mathring{V} 39'08	
opposition	-1829 Oct 12 j 17:52	3° \mathring{V} 58'25	-14°-37'-44				
min. Earth dist.	-1829 Oct 12 j 16:25	3° \mathring{V} 58'30	47.74177 AU	conjunction	-1820 Apr 18 j 11:15	12° \mathring{V} 06'38	-12°-35'-29
direct	-1828 Jan 02 j 01:21	2° \mathring{V} 59'19		minimum elong	-1820 Apr 18 j 11:28	12° \mathring{V} 06'39	12°35'29
				max. Earth dist.	-1820 Apr 18 j 02:33	12° \mathring{V} 06'08	49.10971 AU
conjunction	-1828 Apr 10 j 12:03	4° \mathring{V} 26'06	-13°-58'-12	retrograde	-1820 Jul 29 j 20:57	13° \mathring{V} 36'30	
minimum elong	-1828 Apr 10 j 12:14	4° \mathring{V} 26'07	13°58'13	opposition	-1820 Oct 20 j 10:00	12° \mathring{V} 36'39	-13°-1'-19
max. Earth dist.	-1828 Apr 10 j 13:48	4° \mathring{V} 26'12	49.65302 AU	min. Earth dist.	-1820 Oct 20 j 18:10	12° \mathring{V} 36'15	47.11651 AU
retrograde	-1828 Jul 22 j 04:37	5° \mathring{V} 55'33		direct	-1819 Jan 09 j 23:19	11° \mathring{V} 37'05	

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Attention, astronomical year style is used: The year -1819 in astronomical counting style is the year 1820 BCE in historical counting style.

conjunction	-1819 Apr 19 j 17:37	13°V04'44	-12°-24'-4	retrograde	-1811 Aug 08 j 00:39	22°V24'29	
minimum elong	-1819 Apr 19 j 17:49	13°V04'45	12°24'04	opposition	-1811 Oct 29 j 05:37	21°V24'07	-11°-4'-35
max. Earth dist.	-1819 Apr 19 j 07:41	13°V04'10	49.02387 AU	min. Earth dist.	-1811 Oct 30 j 00:06	21°V23'13	46.15953 AU
retrograde	-1819 Jul 31 j 04:27	14°V34'41		direct	-1810 Jan 18 j 22:48	20°V23'46	
opposition	-1819 Oct 21 j 14:50	13°V34'48	-12°-49'-22	max. Earth dist.	-1810 Apr 28 j 05:40	21°V51'45	48.06449 AU
min. Earth dist.	-1819 Oct 22 j 01:09	13°V34'18	47.02652 AU				
direct	-1818 Jan 11 j 02:50	12°V35'10		conjunction	-1810 Apr 29 j 03:26	21°V53'01	-10°-30'-19
				minimum elong	-1810 Apr 29 j 03:38	21°V53'38	10°30'20
conjunction	-1818 Apr 20 j 23:48	14°V02'57	-12°-12'-24	retrograde	-1810 Aug 09 j 07:25	23°V24'09	
minimum elong	-1818 Apr 21 j 00:01	14°V02'58	12°12'25	opposition	-1810 Oct 30 j 10:47	22°V23'45	-10°-50'-16
max. Earth dist.	-1818 Apr 20 j 12:22	14°V02'18	48.93287 AU	min. Earth dist.	-1810 Oct 31 j 06:26	22°V22'48	46.03734 AU
retrograde	-1818 Aug 01 j 11:08	15°V32'59		direct	-1809 Jan 20 j 03:29	21°V23'20	
opposition	-1818 Oct 22 j 19:30	14°V33'03	-12°-37'-10	max. Earth dist.	-1809 Apr 29 j 11:51	22°V51'31	47.94191 AU
min. Earth dist.	-1818 Oct 23 j 06:12	14°V32'32	46.93138 AU				
direct	-1817 Jan 12 j 06:47	13°V33'20		conjunction	-1809 Apr 30 j 10:24	22°V52'49	-10°-16'-23
				minimum elong	-1809 Apr 30 j 10:37	22°V52'50	10°16'23
conjunction	-1817 Apr 22 j 06:03	15°V01'15	-12°00'-31	retrograde	-1809 Aug 10 j 15:33	24°V24'10	
minimum elong	-1817 Apr 22 j 06:15	15°V01'16	12°00'32	opposition	-1809 Oct 31 j 16:04	23°V23'43	-10°-35'-41
max. Earth dist.	-1817 Apr 21 j 16:21	15°V00'28	48.83680 AU	min. Earth dist.	-1809 Nov 01 j 13:34	23°V22'40	45.91121 AU
retrograde	-1817 Aug 02 j 15:29	16°V31'23		direct	-1808 Jan 21 j 07:18	22°V23'13	
opposition	-1817 Oct 24 j 00:16	15°V31'23	-12°-24'-44				
min. Earth dist.	-1817 Oct 24 j 13:14	15°V30'45	46.83152 AU	conjunction	-1808 Apr 30 j 17:31	23°V52'58	-10°-2'-13
direct	-1816 Jan 13 j 13:11	14°V31'34		minimum elong	-1808 Apr 30 j 17:42	23°V52'58	10°02'13
				max. Earth dist.	-1808 Apr 29 j 17:25	23°V51'34	47.81519 AU
conjunction	-1816 Apr 22 j 12:29	15°V59'38	-11°-48'-24	retrograde	-1808 Aug 11 j 01:26	25°V24'31	
minimum elong	-1816 Apr 22 j 12:42	15°V59'39	11°48'25	opposition	-1808 Oct 31 j 21:25	24°V24'00	-10°-20'-51
max. Earth dist.	-1816 Apr 21 j 22:25	15°V58'50	48.73628 AU	min. Earth dist.	-1808 Nov 01 j 19:26	24°V22'55	45.78053 AU
retrograde	-1816 Aug 02 j 18:05	17°V29'52		direct	-1807 Jan 21 j 10:05	23°V23'23	
opposition	-1816 Oct 24 j 05:00	16°V29'48	-12°-12'-3	max. Earth dist.	-1807 Apr 30 j 22:20	24°V51'52	47.68346 AU
min. Earth dist.	-1816 Oct 24 j 18:43	16°V29'08	46.72732 AU				
direct	-1815 Jan 13 j 21:26	15°V29'53		conjunction	-1807 May 02 j 00:44	24°V53'24	-9°-47'-47
				minimum elong	-1807 May 02 j 00:56	24°V53'25	9°47'47
conjunction	-1815 Apr 23 j 18:47	16°V58'07	-11°-36'-2	retrograde	-1807 Aug 12 j 07:51	26°V25'09	
minimum elong	-1815 Apr 23 j 18:58	16°V58'07	11°36'02	opposition	-1807 Nov 02 j 03:00	25°V24'33	-10°-5'-46
max. Earth dist.	-1815 Apr 23 j 02:23	16°V57'10	48.63178 AU	min. Earth dist.	-1807 Nov 03 j 03:25	25°V23'22	45.64480 AU
retrograde	-1815 Aug 04 j 01:22	18°V28'27		direct	-1806 Jan 22 j 16:07	24°V23'49	
opposition	-1815 Oct 25 j 09:41	17°V28'19	-11°-59'-6	max. Earth dist.	-1806 May 02 j 05:04	25°V52'31	47.54673 AU
min. Earth dist.	-1815 Oct 26 j 00:23	17°V27'36	46.61956 AU				
direct	-1814 Jan 15 j 00:59	16°V28'18		conjunction	-1806 May 03 j 08:08	25°V54'06	-9°-33'-7
max. Earth dist.	-1814 Apr 24 j 08:17	17°V55'43	48.52383 AU	minimum elong	-1806 May 03 j 08:19	25°V54'06	9°33'07
				retrograde	-1806 Aug 13 j 11:06	27°V26'03	
conjunction	-1814 Apr 25 j 01:14	17°V56'42	-11°-23'-25	opposition	-1806 Nov 03 j 08:36	26°V25'20	-9°-50'-25
minimum elong	-1814 Apr 25 j 01:27	17°V56'42	11°23'26	min. Earth dist.	-1806 Nov 04 j 09:48	26°V24'07	45.50402 AU
retrograde	-1814 Aug 05 j 08:23	19°V27'10		direct	-1805 Jan 24 j 01:40	25°V24'28	
opposition	-1814 Oct 26 j 14:38	18°V26'57	-11°-45'-53	max. Earth dist.	-1805 May 03 j 09:43	26°V53'16	47.40512 AU
min. Earth dist.	-1814 Oct 27 j 06:55	18°V26'10	46.50860 AU				
direct	-1813 Jan 16 j 04:43	17°V26'52		conjunction	-1805 May 04 j 15:22	26°V55'00	-9°-18'-13
				minimum elong	-1805 May 04 j 15:34	26°V55'01	9°18'13
conjunction	-1813 Apr 26 j 07:33	18°V55'26	-11°-10'-33	retrograde	-1805 Aug 14 j 17:31	28°V27'09	
minimum elong	-1813 Apr 26 j 07:45	18°V55'26	11°10'32	opposition	-1805 Nov 04 j 14:20	27°V26'20	-9°-34'-48
max. Earth dist.	-1813 Apr 25 j 13:43	18°V54'24	48.41309 AU	min. Earth dist.	-1805 Nov 05 j 16:56	27°V25'02	45.35858 AU
retrograde	-1813 Aug 06 j 15:09	20°V26'02		direct	-1804 Jan 25 j 08:05	26°V25'18	
opposition	-1813 Oct 27 j 19:31	19°V25'46	-11°-32'-24				
min. Earth dist.	-1813 Oct 28 j 11:47	19°V24'59	46.39493 AU	conjunction	-1804 May 04 j 23:01	27°V56'05	-9°-3'-3
direct	-1812 Jan 17 j 09:16	18°V25'35		minimum elong	-1804 May 04 j 23:11	27°V56'06	9°03'03
				max. Earth dist.	-1804 May 03 j 16:31	27°V54'18	47.25889 AU
conjunction	-1812 Apr 26 j 14:07	19°V54'22	-10°-57'-24	retrograde	-1804 Aug 15 j 00:10	29°V28'27	
minimum elong	-1812 Apr 26 j 14:19	19°V54'23	10°57'25	opposition	-1804 Nov 04 j 20:05	28°V27'30	-9°-18'-56
max. Earth dist.	-1812 Apr 25 j 18:25	19°V53'14	48.29959 AU	min. Earth dist.	-1804 Nov 06 j 00:29	28°V26'07	45.20880 AU
retrograde	-1812 Aug 06 j 20:56	21°V25'07		direct	-1803 Jan 25 j 14:05	27°V26'19	
opposition	-1812 Oct 28 j 00:31	20°V24'48	-11°-18'-38	max. Earth dist.	-1803 May 04 j 22:49	28°V55'30	47.10876 AU
min. Earth dist.	-1812 Oct 28 j 18:36	20°V23'56	46.27864 AU				
direct	-1811 Jan 17 j 14:59	19°V24'32		conjunction	-1803 May 06 j 06:38	28°V57'22	-8°-47'-38
				minimum elong	-1803 May 06 j 06:49	28°V57'22	8°47'38
conjunction	-1811 Apr 27 j 20:53	20°V53'33	-10°-43'-59				
minimum elong	-1811 Apr 27 j 21:06	20°V53'33	10°43'59	retrograde	-1803 Jun 23 j 20:20	0°R	
max. Earth dist.	-1811 Apr 27 j 01:11	20°V52'24	48.18351 AU				
					-1803 Aug 16 j 08:55	0°R29'57	
					-1803 Oct 09 j 09:25	30°R	

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Attention, astronomical year style is used: The year -1803 in astronomical counting style is the year 1804 BCE in historical counting style.

opposition	-1803 Nov 06 j 01:55	29° Υ 28'52	-9°-2'-47	opposition	-1795 Nov 14 j 06:04	7° Υ 52'36	-6°-43'-13
min. Earth dist.	-1803 Nov 07 j 06:35	29° Υ 27'27	45.05539 AU	min. Earth dist.	-1795 Nov 15 j 20:14	7° Υ 50'41	43.71944 AU
direct	-1802 Jan 26 j 18:40	28° Υ 27'31		direct	-1794 Feb 04 j 00:54	6° Υ 50'03	
max. Earth dist.	-1802 May 06 j 04:31	29° Υ 56'52	46.95507 AU	max. Earth dist.	-1794 May 14 j 14:13	8° Υ 21'49	45.61583 AU
conjunction	-1802 May 07 j 14:08	29° Υ 58'51	-8°-31'-57	conjunction	-1794 May 16 j 09:33	8° Υ 24'26	-6°-16'-39
minimum elong	-1802 May 07 j 14:18	29° Υ 58'51	8°31'57	minimum elong	-1794 May 16 j 09:42	8° Υ 24'27	6°16'38
	-1802 May 08 j 09:44	0° Υ		retrograde	-1794 Aug 26 j 06:50	9° Υ 59'52	
retrograde	-1802 Aug 17 j 17:22	1° Υ 31'40		opposition	-1794 Nov 15 j 13:27	8° Υ 57'44	-6°-24'-29
opposition	-1802 Nov 07 j 08:01	0° Υ 30'27	-8°-46'-21	min. Earth dist.	-1794 Nov 17 j 05:12	8° Υ 55'43	43.53446 AU
min. Earth dist.	-1802 Nov 08 j 14:33	0° Υ 28'57	44.89882 AU	direct	-1793 Feb 05 j 09:03	7° Υ 54'58	
	-1802 Dec 04 j 04:58	30° Υ		max. Earth dist.	-1793 May 15 j 21:37	9° Υ 27'02	45.42986 AU
direct	-1801 Jan 28 j 00:17	29° Υ 28'56					
	-1801 Mar 23 j 07:48	0° Υ		conjunction	-1793 May 17 j 18:48	9° Υ 29'47	-5°-58'-32
conjunction	-1801 May 08 j 21:59	1° Υ 00'35	-8°-16'00	minimum elong	-1793 May 17 j 18:57	9° Υ 29'47	5°58'32
minimum elong	-1801 May 08 j 22:09	1° Υ 00'35	8°16'00	retrograde	-1793 Aug 27 j 17:19	11° Υ 05'34	
max. Earth dist.	-1801 May 07 j 12:20	0° Υ 58'35	46.79852 AU	opposition	-1793 Nov 16 j 20:44	10° Υ 03'16	-6°-5'-28
retrograde	-1801 Aug 18 j 22:35	2° Υ 33'38		min. Earth dist.	-1793 Nov 18 j 13:12	10° Υ 01'13	43.34506 AU
opposition	-1801 Nov 08 j 14:02	1° Υ 32'18	-8°-29'-38	direct	-1792 Feb 06 j 14:40	9° Υ 00'18	
min. Earth dist.	-1801 Nov 09 j 20:47	1° Υ 30'47	44.73948 AU	max. Earth dist.	-1792 May 16 j 05:12	10° Υ 32'40	45.23943 AU
direct	-1800 Jan 29 j 08:56	0° Υ 30'38		conjunction	-1792 May 18 j 04:20	10° Υ 35'32	-5°-40'-9
max. Earth dist.	-1800 May 07 j 18:05	2° Υ 00'29	46.63935 AU	minimum elong	-1792 May 18 j 04:29	10° Υ 35'33	5°40'09
				retrograde	-1792 Aug 28 j 04:39	12° Υ 11'42	
conjunction	-1800 May 09 j 05:51	2° Υ 02'36	-7°-59'-46	opposition	-1792 Nov 17 j 04:26	11° Υ 09'13	-5°-46'-10
minimum elong	-1800 May 09 j 06:02	2° Υ 02'37	7°59'45	min. Earth dist.	-1792 Nov 18 j 23:02	11° Υ 07'03	43.15155 AU
retrograde	-1800 Aug 19 j 05:50	3° Υ 35'57		direct	-1791 Feb 06 j 20:52	10° Υ 06'01	
opposition	-1800 Nov 08 j 20:19	2° Υ 34'30	-8°-12'-37	max. Earth dist.	-1791 May 17 j 14:28	11° Υ 38'48	45.04525 AU
min. Earth dist.	-1800 Nov 10 j 04:14	2° Υ 32'55	44.57769 AU				
direct	-1799 Jan 29 j 15:12	1° Υ 32'41		conjunction	-1791 May 19 j 13:58	11° Υ 41'43	-5°-21'-29
max. Earth dist.	-1799 May 09 j 01:50	3° Υ 02'51	46.47755 AU	minimum elong	-1791 May 19 j 14:06	11° Υ 41'43	5°21'28
				retrograde	-1791 Aug 29 j 14:00	13° Υ 18'14	
conjunction	-1799 May 10 j 14:02	3° Υ 05'00	-7°-43'-16	opposition	-1791 Nov 18 j 12:06	12° Υ 15'34	-5°-26'-34
minimum elong	-1799 May 10 j 14:12	3° Υ 05'01	7°43'16	min. Earth dist.	-1791 Nov 20 j 06:54	12° Υ 13'23	42.95458 AU
retrograde	-1799 Aug 20 j 12:56	4° Υ 38'40		direct	-1790 Feb 08 j 06:09	11° Υ 12'07	
opposition	-1799 Nov 10 j 02:45	3° Υ 37'07	-7°-55'-19	max. Earth dist.	-1790 May 18 j 21:56	12° Υ 45'13	44.84787 AU
min. Earth dist.	-1799 Nov 11 j 11:57	3° Υ 35'28	44.41318 AU				
direct	-1798 Jan 30 j 21:45	2° Υ 35'10		conjunction	-1790 May 20 j 23:39	12° Υ 48'17	-5°-2'-32
max. Earth dist.	-1798 May 10 j 08:49	4° Υ 05'38	46.31314 AU	minimum elong	-1790 May 20 j 23:47	12° Υ 48'18	5°02'32
				retrograde	-1790 Aug 30 j 22:41	14° Υ 25'13	
conjunction	-1798 May 11 j 22:15	4° Υ 07'52	-7°-26'-29	opposition	-1790 Nov 19 j 20:03	13° Υ 22'20	-5°-6'-40
minimum elong	-1798 May 11 j 22:25	4° Υ 07'52	7°26'28	min. Earth dist.	-1790 Nov 21 j 16:23	13° Υ 20'04	42.75491 AU
retrograde	-1798 Aug 21 j 23:43	5° Υ 41'51		direct	-1789 Feb 09 j 14:34	12° Υ 18'39	
opposition	-1798 Nov 11 j 09:14	4° Υ 40'12	-7°-37'-43	max. Earth dist.	-1789 May 20 j 07:44	13° Υ 52'12	44.64791 AU
min. Earth dist.	-1798 Nov 12 j 18:41	4° Υ 38'32	44.24584 AU				
direct	-1797 Feb 01 j 01:30	3° Υ 38'07		conjunction	-1789 May 22 j 09:37	13° Υ 55'17	-4°-43'-19
max. Earth dist.	-1797 May 11 j 15:27	5° Υ 08'53	46.14534 AU	minimum elong	-1789 May 22 j 09:43	13° Υ 55'18	4°43'18
					-1789 Jul 08 j 21:14	15° Υ	
conjunction	-1797 May 13 j 06:40	5° Υ 11'14	-7°-9'-25	retrograde	-1789 Sep 01 j 04:35	15° Υ 32'38	
minimum elong	-1797 May 13 j 06:49	5° Υ 11'14	7°09'25		-1789 Oct 26 j 08:16	15° Υ	
retrograde	-1797 Aug 23 j 09:19	6° Υ 45'34		opposition	-1789 Nov 21 j 04:16	14° Υ 29'34	-4°-46'-28
opposition	-1797 Nov 12 j 16:04	5° Υ 43'49	-7°-19'-50	min. Earth dist.	-1789 Nov 23 j 01:25	14° Υ 27'14	42.55281 AU
min. Earth dist.	-1797 Nov 14 j 03:51	5° Υ 42'02	44.07484 AU	direct	-1788 Feb 11 j 01:38	13° Υ 25'39	
direct	-1796 Feb 02 j 06:50	4° Υ 41'35			-1788 May 20 j 23:10	15° Υ	
max. Earth dist.	-1796 May 11 j 23:42	6° Υ 12'44	45.97357 AU	max. Earth dist.	-1788 May 20 j 16:27	14° Υ 59'35	44.44584 AU
conjunction	-1796 May 13 j 15:32	6° Υ 15'07	-6°-52'-6	conjunction	-1788 May 22 j 19:46	15° Υ 02'47	-4°-23'-48
minimum elong	-1796 May 13 j 15:41	6° Υ 15'08	6°52'05	minimum elong	-1788 May 22 j 19:53	15° Υ 02'47	4°23'48
retrograde	-1796 Aug 23 j 15:51	7° Υ 49'49		retrograde	-1788 Sep 01 j 15:11	16° Υ 40'33	
opposition	-1796 Nov 12 j 22:52	6° Υ 47'58	-7°-1'-40	opposition	-1788 Nov 21 j 12:31	15° Υ 37'18	-4°-25'-57
min. Earth dist.	-1796 Nov 14 j 11:17	6° Υ 46'08	43.89948 AU	min. Earth dist.	-1788 Nov 23 j 09:57	15° Υ 34'57	42.34886 AU
direct	-1795 Feb 02 j 16:43	5° Υ 45'34			-1788 Dec 23 j 17:13	15° Υ	
max. Earth dist.	-1795 May 13 j 05:52	7° Υ 16'58	45.79716 AU	direct	-1787 Feb 11 j 08:23	14° Υ 33'08	
					-1787 Apr 01 j 10:32	15° Υ	
conjunction	-1795 May 15 j 00:28	7° Υ 19'33	-6°-34'-30	max. Earth dist.	-1787 May 22 j 01:49	16° Υ 07'32	44.24176 AU
minimum elong	-1795 May 15 j 00:37	7° Υ 19'33	6°34'30				
retrograde	-1795 Aug 24 j 23:37	8° Υ 54'35		conjunction	-1787 May 24 j 06:15	16° Υ 10'48	-4°-4'-1

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Attention, astronomical year style is used: The year -1787 in astronomical counting style is the year 1788 BCE in historical counting style.

minimum elong	-1787 May 24 j 06:21	16°♃10'48	4°04'00	min. Earth dist.	-1779 Dec 04 j 11:35	26°♃13'53	40.38429 AU
retrograde	-1787 Sep 03 j 02:47	17°♃49'03		direct	-1778 Feb 21 j 23:32	25°♃10'20	
opposition	-1787 Nov 22 j 21:17	16°♃45'36	-4°-5'-8	max. Earth dist.	-1778 Jun 02 j 00:48	26°♃49'28	42.26837 AU
min. Earth dist.	-1787 Nov 24 j 20:26	16°♃43'10	42.14299 AU				
direct	-1786 Feb 12 j 14:12	15°♃41'14		conjunction	-1778 Jun 04 j 16:47	26°♃53'40	0°-53'-12
max. Earth dist.	-1786 May 23 j 12:08	17°♃16'08	44.03581 AU	minimum elong	-1778 Jun 04 j 16:48	26°♃53'40	0°53'11
				retrograde	-1778 Sep 14 j 11:23	28°♃36'54	
conjunction	-1786 May 25 j 16:46	17°♃19'26	-3°-43'-55	opposition	-1778 Dec 03 j 14:52	27°♃31'27	0°-44'-7
minimum elong	-1786 May 25 j 16:51	17°♃19'26	3°43'56	min. Earth dist.	-1778 Dec 05 j 23:29	27°♃28'24	40.15058 AU
retrograde	-1786 Sep 04 j 13:59	18°♃58'11		direct	-1777 Feb 23 j 10:50	26°♃24'37	
opposition	-1786 Nov 24 j 06:04	17°♃54'33	-3°-44'00	max. Earth dist.	-1777 Jun 03 j 13:44	28°♃04'24	42.03387 AU
min. Earth dist.	-1786 Nov 26 j 05:13	17°♃52'06	41.93503 AU				
direct	-1785 Feb 13 j 23:57	16°♃49'57		conjunction	-1777 Jun 06 j 06:11	28°♃08'39	0°-30'-38
max. Earth dist.	-1785 May 24 j 20:48	18°♃25'18	43.82736 AU	minimum elong	-1777 Jun 06 j 06:12	28°♃08'39	0°30'37
				retrograde	-1777 Sep 15 j 23:07	29°♃52'32	
conjunction	-1785 May 27 j 03:40	18°♃28'45	-3°-23'-33	opposition	-1777 Dec 05 j 02:16	28°♃46'50	0°-20'-17
minimum elong	-1785 May 27 j 03:45	18°♃28'45	3°23'32	min. Earth dist.	-1777 Dec 07 j 12:13	28°♃43'42	39.91525 AU
retrograde	-1785 Sep 06 j 01:55	20°♃08'00		direct	-1776 Feb 24 j 21:37	27°♃39'41	
opposition	-1785 Nov 25 j 15:07	19°♃04'11	-3°-22'-34	max. Earth dist.	-1776 Jun 04 j 02:43	29°♃20'09	41.79811 AU
min. Earth dist.	-1785 Nov 27 j 16:06	19°♃01'39	41.72443 AU				
direct	-1784 Feb 15 j 09:13	17°♃59'22		conjunction	-1776 Jun 06 j 19:50	29°♃24'28	0°-7'-49
max. Earth dist.	-1784 May 25 j 07:57	19°♃35'17	43.61578 AU	minimum elong	-1776 Jun 06 j 19:50	29°♃24'28	0°07'48
				behind sun begin	-1776 Jun 06 j 13:59	29°♃24'06	
conjunction	-1784 May 27 j 15:06	19°♃38'46	-3°-2'-54	behind sun end	-1776 Jun 07 j 01:42	29°♃24'50	
minimum elong	-1784 May 27 j 15:11	19°♃38'47	3°02'54		-1776 Jun 29 j 12:33	0°♂	
retrograde	-1784 Sep 06 j 11:13	21°♃18'33		retrograde	-1776 Sep 16 j 13:50	1°♂09'02	
opposition	-1784 Nov 26 j 00:34	20°♃14'33	-3°00'-50	asc. node	-1776 Oct 08 j 16:56	1°♂02'57	
min. Earth dist.	-1784 Nov 28 j 02:35	20°♃11'56	41.51034 AU	opposition	-1776 Dec 05 j 14:00	0°♂03'04	0°03'50
direct	-1783 Feb 15 j 20:43	19°♃09'29			-1776 Dec 07 j 22:39	30°♂	
max. Earth dist.	-1783 May 26 j 17:19	20°♃45'52	43.40051 AU	min. Earth dist.	-1776 Dec 07 j 23:46	29°♃59'56	39.67892 AU
				direct	-1775 Feb 25 j 07:56	28°♃55'36	
conjunction	-1783 May 29 j 02:35	20°♃49'31	-2°-41'-59		-1775 May 13 j 00:37	0°♂	
minimum elong	-1783 May 29 j 02:39	20°♃49'31	2°41'57	max. Earth dist.	-1775 Jun 05 j 15:06	0°♂36'44	41.56122 AU
retrograde	-1783 Sep 07 j 22:10	22°♃29'50					
opposition	-1783 Nov 27 j 10:13	21°♃25'38	-2°-38'-47	conjunction	-1775 Jun 08 j 09:46	0°♂41'11	0°15'21
min. Earth dist.	-1783 Nov 29 j 13:14	21°♃22'57	41.29248 AU	minimum elong	-1775 Jun 08 j 09:45	0°♂41'11	0°15'23
direct	-1782 Feb 17 j 05:51	20°♃20'18		behind sun begin	-1775 Jun 08 j 08:20	0°♂41'06	
max. Earth dist.	-1782 May 28 j 03:48	21°♃57'11	43.18114 AU	behind sun end	-1775 Jun 08 j 11:10	0°♂41'17	
				retrograde	-1775 Sep 18 j 06:35	2°♂26'28	
conjunction	-1782 May 30 j 14:32	22°♃00'57	-2°-20'-46	opposition	-1775 Dec 07 j 02:14	1°♂20'15	0°28'15
minimum elong	-1782 May 30 j 14:36	22°♃00'57	2°20'46	min. Earth dist.	-1775 Dec 09 j 13:33	1°♂17'01	39.44169 AU
retrograde	-1782 Sep 09 j 09:52	23°♃41'51		direct	-1774 Feb 26 j 17:50	0°♂12'29	
opposition	-1782 Nov 28 j 20:16	22°♃37'25	-2°-16'-27	max. Earth dist.	-1774 Jun 07 j 05:50	1°♂54'26	41.32345 AU
min. Earth dist.	-1782 Dec 01 j 01:16	22°♃34'37	41.07060 AU				
direct	-1781 Feb 18 j 14:31	21°♃31'48		conjunction	-1774 Jun 10 j 00:11	1°♂58'54	0°38'43
max. Earth dist.	-1781 May 29 j 15:03	23°♃09'15	42.95794 AU	minimum elong	-1774 Jun 10 j 00:09	1°♂58'54	0°38'44
				retrograde	-1774 Sep 19 j 21:27	3°♂44'55	
conjunction	-1781 Jun 01 j 02:41	23°♃13'05	-1°-59'-17	opposition	-1774 Dec 08 j 14:41	2°♂38'27	0°52'57
minimum elong	-1781 Jun 01 j 02:44	23°♃13'05	1°59'16	min. Earth dist.	-1774 Dec 11 j 01:58	2°♂35'13	39.20346 AU
retrograde	-1781 Sep 10 j 23:37	24°♃54'32		direct	-1773 Feb 28 j 07:21	1°♂30'23	
opposition	-1781 Nov 30 j 06:28	23°♃49'52	-1°-53'-49	max. Earth dist.	-1773 Jun 08 j 18:35	3°♂13'02	41.08437 AU
min. Earth dist.	-1781 Dec 02 j 11:43	23°♃47'03	40.84497 AU				
direct	-1780 Feb 19 j 23:42	22°♃43'58		conjunction	-1773 Jun 11 j 14:53	3°♂17'40	1°02'20
max. Earth dist.	-1780 May 30 j 01:12	24°♃21'54	42.73097 AU	minimum elong	-1773 Jun 11 j 14:51	3°♂17'40	1°02'22
				retrograde	-1773 Sep 21 j 12:38	5°♂04'27	
conjunction	-1780 Jun 01 j 15:11	24°♃25'55	-1°-37'-32	opposition	-1773 Dec 10 j 03:36	3°♂57'44	1°17'55
minimum elong	-1780 Jun 01 j 15:13	24°♃25'55	1°37'31	min. Earth dist.	-1773 Dec 12 j 16:15	3°♂54'25	38.96377 AU
retrograde	-1780 Sep 11 j 12:34	26°♃07'56		direct	-1772 Feb 29 j 19:55	2°♂49'23	
opposition	-1780 Nov 30 j 16:57	25°♃03'01	-1°-30'-53	max. Earth dist.	-1772 Jun 09 j 09:37	4°♂32'51	40.84323 AU
min. Earth dist.	-1780 Dec 03 j 00:19	25°♃00'04	40.61602 AU				
direct	-1779 Feb 20 j 09:43	23°♃56'48		conjunction	-1772 Jun 12 j 06:18	4°♂37'33	1°26'12
max. Earth dist.	-1779 May 31 j 13:55	25°♃35'23	42.50090 AU	minimum elong	-1772 Jun 12 j 06:15	4°♂37'33	1°26'15
				retrograde	-1772 Sep 22 j 01:08	6°♂25'07	
conjunction	-1779 Jun 03 j 04:01	25°♃39'26	-1°-15'-30	opposition	-1772 Dec 10 j 16:58	5°♂18'09	1°43'10
minimum elong	-1779 Jun 03 j 04:04	25°♃39'26	1°15'29	min. Earth dist.	-1772 Dec 13 j 06:52	5°♂14'44	38.72179 AU
retrograde	-1779 Sep 12 j 23:04	27°♃22'02		direct	-1771 Mar 02 j 11:00	4°♂09'28	
opposition	-1779 Dec 02 j 03:47	26°♃16'51	-1°-7'-39	max. Earth dist.	-1771 Jun 10 j 23:49	5°♂53'42	40.59963 AU

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Attention, astronomical year style is used: The year -1771 in astronomical counting style is the year 1772 BCE in historical counting style.

conjunction	-1771 Jun 13 j 21:59	5°II58'32	1°50'19	opposition	-1763 Dec 23 j 13:52	18°II11'07	5°41'24
minimum elong	-1771 Jun 13 j 21:56	5°II58'32	1°50'21	min. Earth dist.	-1763 Dec 26 j 11:11	18°II07'05	36.45161 AU
retrograde	-1771 Sep 23 j 17:07	7°II46'55		direct	-1762 Mar 15 j 01:20	16°II58'49	
opposition	-1771 Dec 12 j 06:47	6°II39'41	2°08'42	max. Earth dist.	-1762 Jun 24 j 10:35	18°II51'13	38.31495 AU
min. Earth dist.	-1771 Dec 14 j 21:04	6°II36'13	38.47726 AU				
direct	-1770 Mar 03 j 23:08	5°II30'39		conjunction	-1762 Jun 27 j 15:44	18°II56'55	5°36'47
max. Earth dist.	-1770 Jun 12 j 14:23	7°II15'40	40.35303 AU	minimum elong	-1762 Jun 27 j 15:32	18°II56'54	5°36'49
				retrograde	-1762 Oct 07 j 14:09	20°II53'27	
conjunction	-1770 Jun 15 j 14:04	7°II20'38	2°14'41	opposition	-1762 Dec 25 j 08:04	19°II43'06	6°08'49
minimum elong	-1770 Jun 15 j 14:00	7°II20'37	2°14'43	min. Earth dist.	-1762 Dec 28 j 05:03	19°II39'03	36.19747 AU
retrograde	-1770 Sep 25 j 09:25	9°II09'51		direct	-1761 Mar 16 j 20:14	18°II30'24	
opposition	-1770 Dec 13 j 21:11	8°II02'18	2°34'29	max. Earth dist.	-1761 Jun 26 j 05:27	20°II23'50	38.05947 AU
min. Earth dist.	-1770 Dec 16 j 13:32	7°II58'42	38.22980 AU				
direct	-1769 Mar 05 j 11:00	6°II52'54		conjunction	-1761 Jun 29 j 12:14	20°II29'42	6°02'42
max. Earth dist.	-1769 Jun 14 j 06:37	8°II38'46	40.10359 AU	minimum elong	-1761 Jun 29 j 12:02	20°II29'41	6°02'43
				retrograde	-1761 Oct 09 j 13:00	22°II27'18	
conjunction	-1769 Jun 17 j 06:45	8°II43'48	2°39'16	opposition	-1761 Dec 27 j 02:43	21°II16'37	6°36'21
minimum elong	-1769 Jun 17 j 06:40	8°II43'47	2°39'17	min. Earth dist.	-1761 Dec 30 j 00:42	21°II12'30	35.94383 AU
retrograde	-1769 Sep 27 j 03:15	10°II33'50		direct	-1760 Mar 17 j 13:59	20°II03'32	
opposition	-1769 Dec 15 j 11:44	9°II25'58	3°00'31	max. Earth dist.	-1760 Jun 27 j 03:00	21°II58'10	37.80399 AU
min. Earth dist.	-1769 Dec 18 j 04:15	9°II22'21	37.97962 AU				
direct	-1768 Mar 06 j 02:05	8°II16'11		conjunction	-1760 Jun 30 j 09:34	22°II04'04	6°28'43
max. Earth dist.	-1768 Jun 14 j 21:21	10°II02'48	39.85142 AU	minimum elong	-1760 Jun 30 j 09:20	22°II04'03	6°28'45
				retrograde	-1760 Oct 10 j 09:09	24°II02'47	
conjunction	-1768 Jun 17 j 23:50	10°II08'02	3°04'04	opposition	-1760 Dec 27 j 22:15	22°II51'46	7°04'00
minimum elong	-1768 Jun 17 j 23:44	10°II08'01	3°04'07	min. Earth dist.	-1760 Dec 30 j 20:57	22°II47'35	35.69001 AU
retrograde	-1768 Sep 27 j 22:55	11°II58'54		direct	-1759 Mar 19 j 09:58	21°II38'17	
opposition	-1768 Dec 16 j 02:55	10°II50'41	3°26'49	max. Earth dist.	-1759 Jun 28 j 23:37	23°II34'01	37.54814 AU
min. Earth dist.	-1768 Dec 18 j 21:11	10°II46'57	37.72716 AU				
direct	-1767 Mar 07 j 16:38	9°II40'30		conjunction	-1759 Jul 02 j 07:12	23°II40'04	6°54'48
max. Earth dist.	-1767 Jun 16 j 14:58	11°II28'03	39.59704 AU	minimum elong	-1759 Jul 02 j 06:59	23°II40'03	6°54'50
				retrograde	-1759 Oct 12 j 07:14	25°II39'55	
conjunction	-1767 Jun 19 j 17:20	11°II33'19	3°29'06	opposition	-1759 Dec 29 j 18:18	24°II28'34	7°31'43
minimum elong	-1767 Jun 19 j 17:13	11°II33'18	3°29'07	min. Earth dist.	-1758 Jan 01 j 17:09	24°II24'20	35.43582 AU
retrograde	-1767 Sep 29 j 14:53	13°II25'02		direct	-1758 Mar 21 j 05:09	23°II14'39	
opposition	-1767 Dec 17 j 18:32	12°II16'28	3°53'20	max. Earth dist.	-1758 Jun 30 j 21:17	25°II11'33	37.29149 AU
min. Earth dist.	-1767 Dec 20 j 13:16	12°II12'41	37.47285 AU				
direct	-1766 Mar 09 j 09:48	11°II05'52		conjunction	-1758 Jul 04 j 05:44	25°II17'43	7°20'56
max. Earth dist.	-1766 Jun 18 j 07:15	12°II54'14	39.34120 AU	minimum elong	-1758 Jul 04 j 05:28	25°II17'42	7°20'58
				retrograde	-1758 Oct 14 j 05:09	27°II18'44	
conjunction	-1766 Jun 21 j 11:09	12°II59'39	3°54'18	opposition	-1758 Dec 31 j 15:04	26°II07'00	7°59'31
minimum elong	-1766 Jun 21 j 11:02	12°II59'39	3°54'21	min. Earth dist.	-1757 Jan 03 j 15:32	26°II02'39	35.18094 AU
retrograde	-1766 Oct 01 j 08:15	14°II52'16		direct	-1757 Mar 22 j 22:52	24°II52'39	
opposition	-1766 Dec 19 j 10:27	13°II43'20	4°20'04	max. Earth dist.	-1757 Jul 02 j 20:13	26°II50'45	37.03425 AU
min. Earth dist.	-1766 Dec 22 j 05:47	13°II39'29	37.21762 AU				
direct	-1765 Mar 11 j 02:11	12°II32'18		conjunction	-1757 Jul 06 j 04:51	26°II57'00	7°47'06
max. Earth dist.	-1765 Jun 20 j 01:13	14°II21'36	39.08442 AU	minimum elong	-1757 Jul 06 j 04:36	26°II56'59	7°47'08
				retrograde	-1757 Oct 16 j 04:47	28°II59'11	
conjunction	-1765 Jun 23 j 05:37	14°II27'07	4°19'42	opposition	-1756 Jan 02 j 12:27	27°II47'04	8°27'20
minimum elong	-1765 Jun 23 j 05:28	14°II27'06	4°19'44	min. Earth dist.	-1756 Jan 05 j 12:32	27°II42'42	34.92556 AU
retrograde	-1765 Oct 03 j 00:54	16°II20'39		direct	-1756 Mar 23 j 19:41	26°II32'15	
opposition	-1765 Dec 21 j 03:07	15°II11'21	4°47'00	max. Earth dist.	-1756 Jul 03 j 18:21	28°II31'29	36.77643 AU
min. Earth dist.	-1765 Dec 23 j 23:39	15°II07'24	36.96188 AU				
direct	-1764 Mar 11 j 18:09	13°II59'53		conjunction	-1756 Jul 07 j 04:35	28°II37'54	8°13'15
max. Earth dist.	-1764 Jun 20 j 19:48	15°II50'10	38.82751 AU	minimum elong	-1756 Jul 07 j 04:18	28°II37'53	8°13'17
					-1756 Aug 23 j 19:33	0°☾	
conjunction	-1764 Jun 24 j 00:28	15°II55'44	4°45'15	retrograde	-1756 Oct 17 j 06:25	0°☾41'17	
minimum elong	-1764 Jun 24 j 00:18	15°II55'44	4°45'18		-1756 Dec 12 j 06:18	30°RII	
retrograde	-1764 Oct 03 j 20:01	17°II50'13		opposition	-1755 Jan 03 j 10:34	29°II28'44	8°55'10
opposition	-1764 Dec 21 j 20:07	16°II40'34	5°14'07	min. Earth dist.	-1755 Jan 06 j 12:05	29°II24'17	34.67007 AU
min. Earth dist.	-1764 Dec 24 j 16:07	16°II36'38	36.70641 AU	direct	-1755 Mar 25 j 15:58	28°II13'27	
direct	-1763 Mar 13 j 09:37	15°II28'41			-1755 Jun 28 j 08:50	0°☾	
max. Earth dist.	-1763 Jun 22 j 14:01	17°II19'56	38.57088 AU	max. Earth dist.	-1755 Jul 05 j 19:32	0°☾14'00	36.51872 AU
conjunction	-1763 Jun 25 j 19:53	17°II25'38	5°10'57	conjunction	-1755 Jul 09 j 05:01	0°☾20'26	8°39'22
minimum elong	-1763 Jun 25 j 19:42	17°II25'37	5°10'59	minimum elong	-1755 Jul 09 j 04:44	0°☾20'25	8°39'24
retrograde	-1763 Oct 05 j 16:42	19°II21'08		retrograde	-1755 Oct 19 j 07:54	2°☾25'00	

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Attention, astronomical year style is used: The year -1754 in astronomical counting style is the year 1755 BCE in historical counting style.

opposition	-1754 Jan 05 j 09:21	1°♄12'02	9°22'57	min. Earth dist.	-1746 Jan 23 j 03:02	15°♄57'37	32.46994 AU
min. Earth dist.	-1754 Jan 08 j 10:36	1°♄07'34	34.41507 AU	direct	-1746 Apr 10 j 23:57	14°♄42'43	
	-1754 Mar 11 j 06:55	30°♀♂		max. Earth dist.	-1746 Jul 23 j 07:42	16°♄55'55	34.30558 AU
direct	-1754 Mar 27 j 15:41	29°♂♂56'15					
	-1754 Apr 12 j 22:28	0°♄		conjunction	-1746 Jul 26 j 15:09	17°♄02'46	12°24'47
max. Earth dist.	-1754 Jul 07 j 19:01	1°♄58'00	36.26179 AU	minimum elong	-1746 Jul 26 j 14:45	17°♄02'44	12°24'49
				retrograde	-1746 Nov 06 j 02:13	19°♄19'17	
conjunction	-1754 Jul 11 j 05:47	2°♄04'35	9°05'23	opposition	-1745 Jan 22 j 08:37	18°♄02'35	13°22'39
minimum elong	-1754 Jul 11 j 05:28	2°♄04'33	9°05'26	min. Earth dist.	-1745 Jan 25 j 09:02	17°♄57'54	32.24144 AU
retrograde	-1754 Oct 21 j 10:24	4°♄10'22		direct	-1745 Apr 13 j 06:29	16°♄42'34	
opposition	-1753 Jan 07 j 08:44	2°♄56'58	9°50'39	max. Earth dist.	-1745 Jul 25 j 15:02	18°♄57'12	34.07549 AU
min. Earth dist.	-1753 Jan 10 j 10:30	2°♄52'26	34.16139 AU				
direct	-1753 Mar 29 j 13:56	1°♄40'41		conjunction	-1745 Jul 28 j 22:53	19°♄04'09	12°47'51
max. Earth dist.	-1753 Jul 09 j 21:26	3°♄43'47	36.00627 AU	minimum elong	-1745 Jul 28 j 22:30	19°♄04'07	12°47'52
				retrograde	-1745 Nov 08 j 12:10	21°♄22'05	
conjunction	-1753 Jul 13 j 07:30	3°♄50'22	9°31'18	opposition	-1744 Jan 24 j 15:21	20°♄04'58	13°47'09
minimum elong	-1753 Jul 13 j 07:11	3°♄50'21	9°31'20	min. Earth dist.	-1744 Jan 27 j 15:04	20°♄00'18	32.01606 AU
retrograde	-1753 Oct 23 j 11:28	5°♄57'24		direct	-1744 Apr 14 j 12:38	18°♄44'29	
opposition	-1752 Jan 09 j 08:53	4°♄43'33	10°18'12	max. Earth dist.	-1744 Jul 27 j 00:26	21°♄00'39	33.84845 AU
min. Earth dist.	-1752 Jan 12 j 10:54	4°♄38'58	33.90961 AU				
direct	-1752 Mar 30 j 15:32	3°♄26'46		conjunction	-1744 Jul 30 j 07:35	21°♄07'37	13°10'19
max. Earth dist.	-1752 Jul 10 j 23:26	5°♄31'10	35.75316 AU	minimum elong	-1744 Jul 30 j 07:10	21°♄07'35	13°10'20
				retrograde	-1744 Nov 09 j 20:26	23°♄26'57	
conjunction	-1752 Jul 14 j 09:44	5°♄37'51	9°57'01	opposition	-1743 Jan 25 j 23:16	22°♄09'26	14°10'59
minimum elong	-1752 Jul 14 j 09:23	5°♄37'49	9°57'03	min. Earth dist.	-1743 Jan 28 j 23:21	22°♄04'42	31.79396 AU
retrograde	-1752 Oct 24 j 15:30	7°♄46'08		direct	-1743 Apr 16 j 19:07	20°♄48'29	
opposition	-1751 Jan 10 j 09:46	6°♄31'52	10°45'34	max. Earth dist.	-1743 Jul 29 j 10:27	23°♄06'10	33.62516 AU
min. Earth dist.	-1751 Jan 13 j 10:57	6°♄27'17	33.66076 AU				
direct	-1751 Apr 01 j 15:59	5°♄14'34		conjunction	-1743 Aug 01 j 16:45	23°♄13'08	13°32'07
max. Earth dist.	-1751 Jul 13 j 02:40	7°♄20'21	35.50303 AU	minimum elong	-1743 Aug 01 j 16:22	23°♄13'06	13°32'09
				retrograde	-1743 Nov 12 j 07:19	25°♄33'52	
conjunction	-1751 Jul 16 j 12:38	7°♄27'05	10°22'31	opposition	-1742 Jan 28 j 07:51	24°♄15'55	14°34'06
minimum elong	-1751 Jul 16 j 12:17	7°♄27'03	10°22'33	min. Earth dist.	-1742 Jan 31 j 06:26	24°♄11'15	31.57582 AU
retrograde	-1751 Oct 26 j 17:14	9°♄36'41		direct	-1742 Apr 19 j 02:49	22°♄54'30	
opposition	-1750 Jan 12 j 11:36	8°♄21'58	11°12'41	max. Earth dist.	-1742 Jul 31 j 20:55	25°♄13'40	33.40603 AU
min. Earth dist.	-1750 Jan 15 j 13:23	8°♄17'20	33.41531 AU				
direct	-1750 Apr 03 j 15:20	7°♄04'13		conjunction	-1742 Aug 04 j 02:53	25°♄20'40	13°53'11
max. Earth dist.	-1750 Jul 15 j 07:19	9°♄11'27	35.25663 AU	minimum elong	-1742 Aug 04 j 02:28	25°♄20'37	13°53'12
				retrograde	-1742 Nov 14 j 17:15	27°♄42'48	
conjunction	-1750 Jul 18 j 16:19	9°♄18'10	10°47'44	opposition	-1741 Jan 30 j 17:17	26°♄24'25	14°56'24
minimum elong	-1750 Jul 18 j 15:57	9°♄18'08	10°47'45	min. Earth dist.	-1741 Feb 02 j 16:16	26°♄19'42	31.36228 AU
retrograde	-1750 Oct 28 j 20:54	11°♄29'06		direct	-1741 Apr 21 j 08:59	25°♄02'32	
opposition	-1749 Jan 14 j 13:54	10°♄13'59	11°39'30	max. Earth dist.	-1741 Aug 03 j 09:41	27°♄23'18	33.19201 AU
min. Earth dist.	-1749 Jan 17 j 14:26	10°♄09'24	33.17369 AU				
direct	-1749 Apr 05 j 16:54	8°♄55'46		conjunction	-1741 Aug 06 j 13:45	27°♄30'12	14°13'25
max. Earth dist.	-1749 Jul 17 j 11:18	11°♄04'23	35.01388 AU	minimum elong	-1741 Aug 06 j 13:22	27°♄30'10	14°13'27
				retrograde	-1741 Nov 17 j 04:15	29°♄53'43	
conjunction	-1749 Jul 20 j 20:50	11°♄11'13	11°12'36	opposition	-1740 Feb 02 j 03:39	28°♄34'56	15°17'47
minimum elong	-1749 Jul 20 j 20:29	11°♄11'11	11°12'38	min. Earth dist.	-1740 Feb 05 j 00:47	28°♄30'18	31.15411 AU
retrograde	-1749 Oct 31 j 02:47	13°♄23'31		direct	-1740 Apr 22 j 19:34	27°♄12'35	
opposition	-1748 Jan 16 j 17:16	12°♄08'00	12°05'57	max. Earth dist.	-1740 Aug 04 j 21:27	29°♄34'48	32.98382 AU
min. Earth dist.	-1748 Jan 19 j 18:29	12°♄03'21	32.93580 AU				
direct	-1748 Apr 06 j 16:37	10°♄49'20		conjunction	-1740 Aug 08 j 01:13	29°♄41'44	14°32'44
max. Earth dist.	-1748 Jul 18 j 18:06	12°♄59'32	34.77466 AU	minimum elong	-1740 Aug 08 j 00:49	29°♄41'42	14°32'46
					-1740 Aug 16 j 09:16	0°♂	
conjunction	-1748 Jul 22 j 02:10	13°♄06'18	11°37'06	retrograde	-1740 Nov 18 j 17:17	2°♂06'39	
minimum elong	-1748 Jul 22 j 01:46	13°♄06'16	11°37'09	opposition	-1739 Feb 03 j 14:59	0°♂47'26	15°38'09
retrograde	-1748 Nov 01 j 08:54	15°♄20'00		min. Earth dist.	-1739 Feb 06 j 11:33	0°♂42'50	30.95230 AU
opposition	-1747 Jan 17 j 21:28	14°♄04'06	12°32'00		-1739 Mar 06 j 22:03	30°♂♂	
min. Earth dist.	-1747 Jan 20 j 21:46	13°♄59'28	32.70124 AU	direct	-1739 Apr 25 j 04:11	29°♄24'39	
direct	-1747 Apr 08 j 20:14	12°♄44'59			-1739 Jun 12 j 04:06	0°♂	
max. Earth dist.	-1747 Jul 20 j 23:27	14°♄56'35	34.53865 AU	max. Earth dist.	-1739 Aug 07 j 12:31	1°♂48'32	32.78249 AU
conjunction	-1747 Jul 24 j 08:13	15°♄03'29	12°01'11	conjunction	-1739 Aug 10 j 13:32	1°♂55'17	14°51'02
minimum elong	-1747 Jul 24 j 07:50	15°♄03'27	12°01'13	minimum elong	-1739 Aug 10 j 13:10	1°♂55'15	14°51'04
retrograde	-1747 Nov 03 j 18:10	17°♄18'35		retrograde	-1739 Nov 21 j 06:05	4°♂21'34	
opposition	-1746 Jan 20 j 02:32	16°♄02'17	12°57'35	opposition	-1738 Feb 06 j 03:11	3°♂01'58	15°57'24

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Attention, astronomical year style is used: The year -1738 in astronomical counting style is the year 1739 BCE in historical counting style.

min. Earth dist.	-1738 Feb 08 j 21:53	2°Ω57'28	30.75754 AU	min. Earth dist.	-1730 Feb 27 j 18:21	22°Ω06'33	29.47168 AU
direct	-1738 Apr 27 j 15:21	1°Ω38'48		direct	-1730 May 16 j 14:46	20°Ω44'47	
max. Earth dist.	-1738 Aug 10 j 02:06	4°Ω04'08	32.58875 AU	max. Earth dist.	-1730 Aug 30 j 05:07	23°Ω21'13	31.31761 AU
conjunction	-1738 Aug 13 j 02:25	4°Ω10'52	15°08'14	conjunction	-1730 Sep 01 j 12:29	23°Ω26'42	16°37'35
minimum elong	-1738 Aug 13 j 02:03	4°Ω10'50	15°08'16	minimum elong	-1730 Sep 01 j 12:18	23°Ω26'41	16°37'36
retrograde	-1738 Nov 23 j 22:17	6°Ω38'32		retrograde	-1730 Dec 13 j 18:20	26°Ω03'43	
opposition	-1737 Feb 08 j 16:14	5°Ω18'34	16°15'26	opposition	-1729 Feb 28 j 07:54	24°Ω41'25	17°46'59
min. Earth dist.	-1737 Feb 11 j 09:28	5°Ω14'08	30.57049 AU	min. Earth dist.	-1729 Mar 02 j 11:16	24°Ω37'49	29.34514 AU
direct	-1737 Apr 30 j 03:15	3°Ω55'01		direct	-1729 May 19 j 10:32	23°Ω15'38	
max. Earth dist.	-1737 Aug 12 j 18:50	6°Ω22'01	32.40285 AU	max. Earth dist.	-1729 Sep 02 j 01:23	25°Ω53'01	31.19468 AU
conjunction	-1737 Aug 15 j 16:19	6°Ω28'33	15°24'15	conjunction	-1729 Sep 04 j 07:14	25°Ω58'23	16°41'43
minimum elong	-1737 Aug 15 j 15:59	6°Ω28'31	15°24'17	minimum elong	-1729 Sep 04 j 07:07	25°Ω58'22	16°41'44
retrograde	-1737 Nov 26 j 13:18	8°Ω57'33		retrograde	-1729 Dec 16 j 13:57	28°Ω36'14	
opposition	-1736 Feb 11 j 06:13	7°Ω37'16	16°32'11	opposition	-1728 Mar 02 j 04:05	27°Ω13'40	17°50'44
min. Earth dist.	-1736 Feb 13 j 22:16	7°Ω32'54	30.39111 AU	min. Earth dist.	-1728 Mar 04 j 05:27	27°Ω10'12	29.22756 AU
direct	-1736 May 01 j 17:15	6°Ω13'24		direct	-1728 May 21 j 05:13	25°Ω47'40	
max. Earth dist.	-1736 Aug 14 j 10:27	8°Ω41'50	32.22496 AU	max. Earth dist.	-1728 Sep 04 j 00:34	28°Ω26'09	31.08139 AU
conjunction	-1736 Aug 17 j 06:47	8°Ω48'19	15°39'01	conjunction	-1728 Sep 06 j 02:27	28°Ω31'08	16°44'03
minimum elong	-1736 Aug 17 j 06:27	8°Ω48'17	15°39'03	minimum elong	-1728 Sep 06 j 02:22	28°Ω31'08	16°44'05
retrograde	-1736 Nov 28 j 06:35	11°Ω18'39		retrograde	-1728 Oct 15 j 06:40	0°♄	
opposition	-1735 Feb 12 j 21:05	9°Ω58'03	16°47'33	retrograde	-1728 Dec 18 j 09:00	1°♄09'45	
min. Earth dist.	-1735 Feb 15 j 10:52	9°Ω53'50	30.21955 AU	retrograde	-1727 Feb 25 j 06:16	30°♁	
direct	-1735 May 04 j 07:06	8°Ω33'53		opposition	-1727 Mar 05 j 00:58	29°Ω46'56	17°52'32
max. Earth dist.	-1735 Aug 17 j 04:05	11°Ω03'52	32.05475 AU	min. Earth dist.	-1727 Mar 06 j 23:44	29°Ω43'38	29.11961 AU
conjunction	-1735 Aug 19 j 22:02	11°Ω10'10	15°52'28	direct	-1727 May 24 j 01:44	28°Ω20'45	
minimum elong	-1735 Aug 19 j 21:45	11°Ω10'08	15°52'29	direct	-1727 Aug 12 j 05:22	0°♄	
retrograde	-1735 Nov 30 j 23:01	13°Ω41'47		max. Earth dist.	-1727 Sep 06 j 21:54	1°♄00'02	30.97856 AU
opposition	-1734 Feb 15 j 12:58	12°Ω20'54	17°01'29	conjunction	-1727 Sep 08 j 21:41	1°♄04'50	16°44'33
min. Earth dist.	-1734 Feb 18 j 02:03	12°Ω16'42	30.05535 AU	minimum elong	-1727 Sep 08 j 21:39	1°♄04'50	16°44'33
direct	-1734 May 06 j 21:25	10°Ω56'27		retrograde	-1727 Dec 21 j 06:19	3°♄44'08	
max. Earth dist.	-1734 Aug 19 j 21:47	13°Ω27'50	31.89217 AU	opposition	-1726 Mar 07 j 22:11	2°♄21'06	17°52'17
conjunction	-1734 Aug 22 j 14:01	13°Ω34'01	16°04'31	min. Earth dist.	-1726 Mar 09 j 17:45	2°♄18'02	29.02228 AU
minimum elong	-1734 Aug 22 j 13:43	13°Ω33'59	16°04'33	direct	-1726 May 26 j 21:38	0°♄54'45	
retrograde	-1734 Sep 30 j 22:17	15°Ω		max. Earth dist.	-1726 Sep 09 j 21:53	3°♄35'00	30.88691 AU
retrograde	-1734 Dec 03 j 18:15	16°Ω06'51		conjunction	-1726 Sep 11 j 17:29	3°♄39'24	16°43'08
retrograde	-1733 Feb 09 j 13:03	15°♁		minimum elong	-1726 Sep 11 j 17:28	3°♄39'24	16°43'09
opposition	-1733 Feb 18 j 05:25	14°Ω45'41	17°13'54	retrograde	-1726 Dec 24 j 02:16	6°♄19'17	
min. Earth dist.	-1733 Feb 20 j 15:58	14°Ω41'38	29.89843 AU	opposition	-1725 Mar 10 j 19:51	4°♄56'04	17°49'59
direct	-1733 May 09 j 13:37	13°Ω20'57		min. Earth dist.	-1725 Mar 12 j 13:00	4°♄53'10	28.93601 AU
direct	-1733 Jul 29 j 23:20	15°Ω		direct	-1725 May 29 j 19:41	3°♄29'39	
max. Earth dist.	-1733 Aug 22 j 16:21	15°Ω53'41	31.73689 AU	max. Earth dist.	-1725 Sep 12 j 20:17	6°♄10'35	30.80706 AU
conjunction	-1733 Aug 25 j 06:50	15°Ω59'45	16°15'08	conjunction	-1725 Sep 14 j 13:23	6°♄14'44	16°39'46
minimum elong	-1733 Aug 25 j 06:36	15°Ω59'43	16°15'09	minimum elong	-1725 Sep 14 j 13:26	6°♄14'45	16°39'46
retrograde	-1733 Dec 06 j 10:53	18°Ω33'45		retrograde	-1725 Dec 27 j 00:28	8°♄55'08	
opposition	-1732 Feb 20 j 23:02	17°Ω12'17	17°24'44	opposition	-1724 Mar 12 j 17:55	7°♄31'48	17°45'33
min. Earth dist.	-1732 Feb 23 j 09:01	17°Ω08'16	29.74870 AU	min. Earth dist.	-1724 Mar 14 j 07:03	7°♄29'11	28.86130 AU
direct	-1732 May 11 j 04:38	15°Ω47'17		direct	-1724 May 31 j 17:37	6°♄05'20	
max. Earth dist.	-1732 Aug 24 j 12:11	18°Ω21'21	31.58921 AU	max. Earth dist.	-1724 Sep 14 j 20:26	8°♄47'02	30.73900 AU
conjunction	-1732 Aug 27 j 00:07	18°Ω27'12	16°24'13	conjunction	-1724 Sep 16 j 09:29	8°♄50'47	16°34'27
minimum elong	-1732 Aug 26 j 23:53	18°Ω27'11	16°24'14	minimum elong	-1724 Sep 16 j 09:33	8°♄50'48	16°34'28
retrograde	-1732 Dec 08 j 05:04	21°Ω02'18		retrograde	-1724 Dec 28 j 21:09	11°♄31'38	
opposition	-1731 Feb 22 j 17:20	19°Ω40'33	17°33'54	opposition	-1723 Mar 15 j 16:30	10°♄08'12	17°39'00
min. Earth dist.	-1731 Feb 25 j 00:31	19°Ω36'43	29.60629 AU	min. Earth dist.	-1723 Mar 17 j 03:28	10°♄05'44	28.79799 AU
direct	-1731 May 13 j 22:57	18°Ω15'17		direct	-1723 Jun 03 j 14:53	8°♄41'46	
max. Earth dist.	-1731 Aug 27 j 07:30	20°Ω50'29	31.44925 AU	max. Earth dist.	-1723 Sep 17 j 19:41	11°♄24'00	30.68274 AU
conjunction	-1731 Aug 29 j 18:03	20°Ω56'15	16°31'44	conjunction	-1723 Sep 19 j 05:41	11°♄27'27	16°27'10
minimum elong	-1731 Aug 29 j 17:52	20°Ω56'14	16°31'44	minimum elong	-1723 Sep 19 j 05:49	11°♄27'28	16°27'10
retrograde	-1731 Dec 11 j 00:08	23°Ω32'21		retrograde	-1723 Dec 31 j 20:16	14°♄08'37	
opposition	-1730 Feb 25 j 12:17	22°Ω10'19	17°41'21	opposition	-1722 Mar 18 j 15:01	12°♄45'09	17°30'19

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Attention, astronomical year style is used: The year -1722 in astronomical counting style is the year 1723 BCE in historical counting style.

min. Earth dist.	-1722 Mar 19 j 21:56	12° \mathring{M} 42'58	28.74591 AU	min. Earth dist.	-1714 Apr 09 j 12:23	3° \mathring{A} 37'11	28.70532 AU
direct	-1722 Jun 06 j 14:10	11° \mathring{M} 18'46		direct	-1714 Jun 28 j 03:07	2° \mathring{A} 12'16	
max. Earth dist.	-1722 Sep 20 j 19:30	14° \mathring{M} 01'29	30.63767 AU				
conjunction	-1722 Sep 22 j 02:04	14° \mathring{M} 04'35	16°17'56	conjunction	-1714 Oct 12 j 14:56	4° \mathring{A} 54'37	13°58'23
minimum elong	-1722 Sep 22 j 02:13	14° \mathring{M} 04'36	16°17'58	minimum elong	-1714 Oct 12 j 15:19	4° \mathring{A} 54'40	13°58'23
retrograde	-1721 Jan 03 j 17:14	16° \mathring{M} 46'00		max. Earth dist.	-1714 Oct 12 j 10:56	4° \mathring{A} 54'13	30.66275 AU
opposition	-1721 Mar 21 j 14:03	15° \mathring{M} 22'31	17°19'34	retrograde	-1713 Jan 24 j 07:51	7° \mathring{A} 33'56	
min. Earth dist.	-1721 Mar 22 j 19:00	15° \mathring{M} 20'28	28.70459 AU	opposition	-1713 Apr 12 j 03:58	6° \mathring{A} 10'43	14°43'11
direct	-1721 Jun 09 j 11:50	13° \mathring{M} 56'12		min. Earth dist.	-1713 Apr 12 j 05:42	6° \mathring{A} 10'36	28.74949 AU
				direct	-1713 Jul 01 j 00:36	4° \mathring{A} 45'36	
conjunction	-1721 Sep 24 j 22:22	16° \mathring{M} 42'02	16°06'47	conjunction	-1713 Oct 15 j 08:48	7° \mathring{A} 27'04	13°33'27
minimum elong	-1721 Sep 24 j 22:34	16° \mathring{M} 42'03	16°06'47	minimum elong	-1713 Oct 15 j 09:11	7° \mathring{A} 27'06	13°33'26
max. Earth dist.	-1721 Sep 23 j 19:15	16° \mathring{M} 39'16	30.60361 AU	max. Earth dist.	-1713 Oct 15 j 09:28	7° \mathring{A} 27'08	30.71666 AU
retrograde	-1720 Jan 06 j 14:42	19° \mathring{M} 23'33		retrograde	-1712 Jan 27 j 00:44	10° \mathring{A} 05'43	
opposition	-1720 Mar 23 j 13:09	18° \mathring{M} 00'04	17°06'45	opposition	-1712 Apr 14 j 01:31	8° \mathring{A} 42'38	14°15'41
min. Earth dist.	-1720 Mar 24 j 14:02	17° \mathring{M} 58'19	28.67368 AU	min. Earth dist.	-1712 Apr 14 j 00:27	8° \mathring{A} 42'43	28.80573 AU
direct	-1720 Jun 11 j 11:42	16° \mathring{M} 33'52		direct	-1712 Jul 02 j 21:25	7° \mathring{A} 17'47	
conjunction	-1720 Sep 26 j 18:42	19° \mathring{M} 19'34	15°53'46	conjunction	-1712 Oct 17 j 02:06	9° \mathring{A} 58'17	13°07'06
minimum elong	-1720 Sep 26 j 18:56	19° \mathring{M} 19'36	15°53'46	minimum elong	-1712 Oct 17 j 02:31	9° \mathring{A} 58'20	13°07'06
max. Earth dist.	-1720 Sep 25 j 18:25	19° \mathring{M} 17'06	30.58009 AU	max. Earth dist.	-1712 Oct 17 j 05:45	9° \mathring{A} 58'39	30.78290 AU
retrograde	-1719 Jan 08 j 12:29	22° \mathring{M} 01'07		retrograde	-1711 Jan 28 j 19:47	12° \mathring{A} 36'12	
opposition	-1719 Mar 26 j 12:26	20° \mathring{M} 37'38	16°51'55	opposition	-1711 Apr 16 j 22:20	11° \mathring{A} 13'18	13°46'41
min. Earth dist.	-1719 Mar 27 j 11:01	20° \mathring{M} 36'03	28.65311 AU	min. Earth dist.	-1711 Apr 16 j 16:36	11° \mathring{A} 13'42	28.87406 AU
direct	-1719 Jun 14 j 09:14	19° \mathring{M} 11'32		direct	-1711 Jul 05 j 19:51	9° \mathring{A} 48'45	
conjunction	-1719 Sep 29 j 14:51	21° \mathring{M} 56'59	15°38'53	conjunction	-1711 Oct 19 j 18:53	12° \mathring{A} 28'15	12°39'24
minimum elong	-1719 Sep 29 j 15:06	21° \mathring{M} 57'01	15°38'52	minimum elong	-1711 Oct 19 j 19:16	12° \mathring{A} 28'17	12°39'23
max. Earth dist.	-1719 Sep 28 j 18:23	21° \mathring{M} 54'54	30.56715 AU	max. Earth dist.	-1711 Oct 20 j 02:40	12° \mathring{A} 29'01	30.86095 AU
retrograde	-1718 Jan 11 j 08:39	24° \mathring{M} 38'25		retrograde	-1710 Jan 31 j 12:42	15° \mathring{A} 05'22	
opposition	-1718 Mar 29 j 11:35	23° \mathring{M} 14'58	16°35'06	opposition	-1710 Apr 19 j 18:50	13° \mathring{A} 42'40	13°16'17
min. Earth dist.	-1718 Mar 30 j 06:29	23° \mathring{M} 13'38	28.64255 AU	min. Earth dist.	-1710 Apr 19 j 10:35	13° \mathring{A} 43'14	28.95392 AU
direct	-1718 Jun 17 j 09:08	21° \mathring{M} 49'00		direct	-1710 Jul 08 j 16:01	12° \mathring{A} 18'29	
conjunction	-1718 Oct 02 j 10:49	24° \mathring{M} 34'03	15°22'11	conjunction	-1710 Oct 22 j 11:05	14° \mathring{A} 56'53	12°10'28
minimum elong	-1718 Oct 02 j 11:06	24° \mathring{M} 34'05	15°22'12	minimum elong	-1710 Oct 22 j 11:30	14° \mathring{A} 56'56	12°10'27
max. Earth dist.	-1718 Oct 01 j 16:45	24° \mathring{M} 32'13	30.56447 AU	max. Earth dist.	-1710 Oct 22 j 22:03	14° \mathring{A} 57'58	30.95031 AU
retrograde	-1717 Jan 14 j 04:29	27° \mathring{M} 15'16		retrograde	-1709 Feb 03 j 05:52	17° \mathring{A} 33'09	
opposition	-1717 Apr 01 j 10:33	25° \mathring{M} 51'50	16°16'21	opposition	-1709 Apr 22 j 14:34	16° \mathring{A} 10'42	12°44'38
min. Earth dist.	-1717 Apr 02 j 02:42	25° \mathring{M} 50'42	28.64221 AU	min. Earth dist.	-1709 Apr 22 j 02:03	16° \mathring{A} 11'34	29.04461 AU
direct	-1717 Jun 20 j 07:11	24° \mathring{M} 26'00		direct	-1709 Jul 11 j 13:09	14° \mathring{A} 46'52	
conjunction	-1717 Oct 05 j 06:37	27° \mathring{M} 10'33	15°03'45	conjunction	-1709 Oct 25 j 02:45	17° \mathring{A} 24'09	11°40'25
minimum elong	-1717 Oct 05 j 06:55	27° \mathring{M} 10'35	15°03'44	minimum elong	-1709 Oct 25 j 03:08	17° \mathring{A} 24'12	11°40'24
max. Earth dist.	-1717 Oct 04 j 16:51	27° \mathring{M} 09'09	30.57236 AU	max. Earth dist.	-1709 Oct 25 j 16:55	17° \mathring{A} 25'33	31.05013 AU
retrograde	-1716 Jan 16 j 23:15	29° \mathring{M} 51'26		retrograde	-1708 Feb 05 j 22:34	19° \mathring{A} 59'32	
opposition	-1716 Apr 03 j 09:28	28° \mathring{M} 28'02	15°55'44	opposition	-1708 Apr 24 j 10:04	18° \mathring{A} 37'20	12°11'50
min. Earth dist.	-1716 Apr 03 j 22:21	28° \mathring{M} 27'08	28.65217 AU	min. Earth dist.	-1708 Apr 23 j 19:01	18° \mathring{A} 38'21	29.14564 AU
direct	-1716 Jun 22 j 06:22	27° \mathring{M} 02'20		direct	-1708 Jul 13 j 08:31	17° \mathring{A} 13'53	
conjunction	-1716 Oct 07 j 01:43	29° \mathring{M} 46'15	14°43'35	conjunction	-1708 Oct 26 j 17:47	19° \mathring{A} 49'58	11°09'21
minimum elong	-1716 Oct 07 j 02:04	29° \mathring{M} 46'18	14°43'36	minimum elong	-1708 Oct 26 j 18:12	19° \mathring{A} 50'01	11°09'20
max. Earth dist.	-1716 Oct 06 j 14:27	29° \mathring{M} 45'07	30.59101 AU	max. Earth dist.	-1708 Oct 27 j 11:26	19° \mathring{A} 51'42	31.15989 AU
retrograde	-1716 Oct 12 j 17:25	0° \mathring{A}		retrograde	-1707 Feb 07 j 14:09	22° \mathring{A} 24'24	
retrograde	-1715 Jan 18 j 19:27	2° \mathring{A} 26'43		min. Earth dist.	-1707 Apr 26 j 10:18	21° \mathring{A} 03'42	29.25610 AU
opposition	-1715 Apr 06 j 08:03	1° \mathring{A} 03'21	15°33'17	opposition	-1707 Apr 27 j 04:48	21° \mathring{A} 02'27	11°38'00
min. Earth dist.	-1715 Apr 06 j 17:14	1° \mathring{A} 02'42	28.67310 AU	direct	-1707 Jul 16 j 05:20	19° \mathring{A} 39'24	
direct	-1715 May 18 j 20:57	30° \mathring{R} \mathring{M}		conjunction	-1707 Oct 29 j 08:13	22° \mathring{A} 14'15	10°37'24
direct	-1715 Jun 25 j 03:54	29° \mathring{M} 37'48		minimum elong	-1707 Oct 29 j 08:36	22° \mathring{A} 14'18	10°37'23
direct	-1715 Jul 31 j 09:31	0° \mathring{A}		max. Earth dist.	-1707 Oct 30 j 04:10	22° \mathring{A} 16'12	31.27867 AU
conjunction	-1715 Oct 09 j 20:39	2° \mathring{A} 20'59	14°21'47	retrograde	-1706 Feb 10 j 04:33	24° \mathring{A} 47'41	
minimum elong	-1715 Oct 09 j 21:00	2° \mathring{A} 21'02	14°21'46	opposition	-1706 Apr 29 j 22:47	23° \mathring{A} 26'01	11°03'17
max. Earth dist.	-1715 Oct 09 j 14:02	2° \mathring{A} 20'19	30.62097 AU	min. Earth dist.	-1706 Apr 29 j 01:32	23° \mathring{A} 27'26	29.37555 AU
retrograde	-1714 Jan 21 j 12:23	5° \mathring{A} 00'54		direct	-1706 Jul 18 j 22:40	22° \mathring{A} 03'20	
opposition	-1714 Apr 09 j 06:11	3° \mathring{A} 37'37	15°09'05				

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Attention, astronomical year style is used: The year -1706 in astronomical counting style is the year 1707 BCE in historical counting style.

conjunction	-1706 Oct 31 j 22:11	24°♁36'55	10°04'39	conjunction	-1698 Nov 18 j 09:47	12°♁32'28	5°25'12
minimum elong	-1706 Oct 31 j 22:35	24°♁36'57	10°04'38	minimum elong	-1698 Nov 18 j 10:01	12°♁32'29	5°25'11
max. Earth dist.	-1706 Nov 01 j 21:46	24°♁39'12	31.40604 AU	max. Earth dist.	-1698 Nov 20 j 06:22	12°♁36'31	32.71804 AU
retrograde	-1705 Feb 12 j 16:48	27°♁09'17		retrograde	-1697 Mar 02 j 05:30	14°♁55'38	
opposition	-1705 May 02 j 16:15	25°♁47'54	10°27'46	min. Earth dist.	-1697 May 19 j 09:49	13°♁39'35	30.82459 AU
min. Earth dist.	-1705 May 01 j 16:23	25°♁49'30	29.50326 AU	opposition	-1697 May 21 j 08:14	13°♁36'37	5°27'10
direct	-1705 Jul 21 j 17:47	24°♁25'36		direct	-1697 Aug 09 j 11:46	12°♁17'35	
conjunction	-1705 Nov 03 j 11:09	26°♁57'52	9°31'12	conjunction	-1697 Nov 20 j 17:00	14°♁38'49	4°49'22
minimum elong	-1705 Nov 03 j 11:31	26°♁57'54	9°31'12	minimum elong	-1697 Nov 20 j 17:12	14°♁38'50	4°49'20
max. Earth dist.	-1705 Nov 04 j 12:27	27°♁00'17	31.54143 AU	max. Earth dist.	-1697 Nov 22 j 16:44	14°♁43'08	32.91756 AU
retrograde	-1704 Feb 15 j 06:46	29°♁29'09			-1697 Nov 30 j 12:21	15°♁	
min. Earth dist.	-1704 May 03 j 05:43	28°♁09'50	29.63916 AU	retrograde	-1696 Mar 03 j 11:39	17°♁00'50	
opposition	-1704 May 04 j 09:00	28°♁08'01	9°51'35	min. Earth dist.	-1696 May 20 j 18:25	15°♁45'16	31.02526 AU
direct	-1704 Jul 23 j 09:50	26°♁46'06		opposition	-1696 May 22 j 18:54	15°♁42'11	4°48'54
conjunction	-1704 Nov 04 j 23:38	29°♁17'00	8°57'10		-1696 Jun 20 j 21:36	15°♁	
minimum elong	-1704 Nov 04 j 23:59	29°♁17'02	8°57'10	direct	-1696 Aug 11 j 01:08	14°♁23'36	
max. Earth dist.	-1704 Nov 06 j 04:40	29°♁19'46	31.68478 AU		-1696 Sep 28 j 16:37	15°♁	
retrograde	-1704 Nov 24 j 01:09	0°♁		conjunction	-1696 Nov 21 j 23:33	16°♁43'30	4°13'35
min. Earth dist.	-1703 Feb 16 j 16:57	1°♁47'09		minimum elong	-1696 Nov 21 j 23:44	16°♁43'31	4°13'34
opposition	-1703 May 05 j 19:46	0°♁28'13	29.78307 AU	max. Earth dist.	-1696 Nov 24 j 00:28	16°♁47'53	33.12305 AU
direct	-1703 May 07 j 00:58	0°♁26'17	9°14'48	retrograde	-1695 Mar 05 j 19:32	19°♁04'22	
conjunction	-1703 May 23 j 20:35	30°♁		min. Earth dist.	-1695 May 23 j 01:28	17°♁49'18	31.23190 AU
minimum elong	-1703 Jul 26 j 02:56	29°♁04'45		opposition	-1695 May 25 j 04:40	17°♁46'03	4°10'45
max. Earth dist.	-1703 Sep 23 j 11:27	0°♁		direct	-1695 Aug 13 j 10:46	16°♁27'56	
retrograde	-1703 Nov 07 j 11:08	1°♁34'15	8°22'37	conjunction	-1695 Nov 24 j 05:37	18°♁46'29	3°37'56
minimum elong	-1703 Nov 07 j 11:27	1°♁34'16	8°22'36	minimum elong	-1695 Nov 24 j 05:45	18°♁46'30	3°37'54
max. Earth dist.	-1703 Nov 08 j 17:53	1°♁37'09	31.83613 AU	max. Earth dist.	-1695 Nov 26 j 09:23	18°♁51'05	33.33374 AU
retrograde	-1702 Feb 19 j 04:54	4°♁03'15		retrograde	-1694 Mar 07 j 22:59	21°♁06'12	
min. Earth dist.	-1702 May 08 j 07:03	2°♁44'49	29.93531 AU	min. Earth dist.	-1694 May 25 j 09:45	19°♁51'32	31.44342 AU
opposition	-1702 May 09 j 16:03	2°♁42'38	8°37'33	opposition	-1694 May 27 j 13:51	19°♁48'15	3°32'49
direct	-1702 Jul 28 j 17:51	1°♁21'28		direct	-1694 Aug 15 j 21:06	18°♁30'33	
conjunction	-1702 Nov 09 j 21:56	3°♁49'35	7°47'39	conjunction	-1694 Nov 26 j 10:51	20°♁47'46	3°02'28
minimum elong	-1702 Nov 09 j 22:15	3°♁49'37	7°47'38	minimum elong	-1694 Nov 26 j 10:59	20°♁47'47	3°02'26
max. Earth dist.	-1702 Nov 11 j 08:26	3°♁52'49	31.99564 AU	max. Earth dist.	-1694 Nov 28 j 15:20	20°♁52'24	33.54876 AU
retrograde	-1701 Feb 21 j 14:33	6°♁17'25		retrograde	-1693 Mar 10 j 04:15	23°♁06'20	
min. Earth dist.	-1701 May 10 j 19:38	4°♁59'22	30.09611 AU	min. Earth dist.	-1693 May 27 j 15:21	21°♁52'09	31.65921 AU
opposition	-1701 May 12 j 06:29	4°♁57'05	7°59'54	opposition	-1693 May 29 j 22:14	21°♁48'43	2°55'08
direct	-1701 Jul 31 j 07:22	3°♁36'19		direct	-1693 Aug 18 j 05:08	20°♁31'26	
conjunction	-1701 Nov 12 j 07:58	6°♁03'01	7°12'21	conjunction	-1693 Nov 28 j 15:38	22°♁47'20	2°27'15
minimum elong	-1701 Nov 12 j 08:16	6°♁03'02	7°12'19	minimum elong	-1693 Nov 28 j 15:43	22°♁47'20	2°27'13
max. Earth dist.	-1701 Nov 13 j 20:43	6°♁06'26	32.16381 AU	max. Earth dist.	-1693 Nov 30 j 22:30	22°♁52'08	33.76746 AU
retrograde	-1700 Feb 24 j 01:33	8°♁29'41		retrograde	-1692 Mar 11 j 08:19	25°♁04'45	
min. Earth dist.	-1700 May 12 j 05:11	7°♁12'11	30.26574 AU	min. Earth dist.	-1692 May 28 j 22:33	23°♁50'54	31.87876 AU
opposition	-1700 May 13 j 20:04	7°♁09'39	7°21'56	opposition	-1692 May 31 j 06:03	23°♁47'26	2°17'47
direct	-1700 Aug 01 j 22:09	5°♁49'17		direct	-1692 Aug 19 j 11:55	22°♁30'33	
conjunction	-1700 Nov 13 j 17:13	8°♁14'36	6°36'47	conjunction	-1692 Nov 29 j 19:38	24°♁45'07	1°52'20
minimum elong	-1700 Nov 13 j 17:30	8°♁14'38	6°36'45	minimum elong	-1692 Nov 29 j 19:43	24°♁45'07	1°52'18
max. Earth dist.	-1700 Nov 15 j 09:04	8°♁18'17	32.34047 AU	max. Earth dist.	-1692 Dec 02 j 03:37	24°♁49'58	33.98961 AU
retrograde	-1699 Feb 25 j 12:06	10°♁40'07		retrograde	-1691 Mar 13 j 12:41	27°♁01'22	
min. Earth dist.	-1699 May 14 j 16:03	9°♁23'02	30.44409 AU	min. Earth dist.	-1691 May 31 j 02:59	25°♁47'57	32.10171 AU
opposition	-1699 May 16 j 08:59	9°♁20'23	6°43'46	opposition	-1691 Jun 02 j 12:56	25°♁44'22	1°40'47
direct	-1699 Aug 04 j 11:17	8°♁00'27		direct	-1691 Aug 21 j 20:02	24°♁27'51	
conjunction	-1699 Nov 16 j 01:55	10°♁24'24	6°01'02	conjunction	-1691 Dec 01 j 22:58	26°♁41'06	1°17'45
minimum elong	-1699 Nov 16 j 02:09	10°♁24'25	6°01'01	minimum elong	-1691 Dec 01 j 23:01	26°♁41'06	1°17'42
max. Earth dist.	-1699 Nov 17 j 20:24	10°♁28'18	32.52549 AU	max. Earth dist.	-1691 Dec 04 j 08:26	26°♁46'02	34.21487 AU
retrograde	-1698 Feb 27 j 21:18	12°♁48'44		retrograde	-1690 Mar 15 j 17:09	28°♁56'12	
min. Earth dist.	-1698 May 17 j 00:48	11°♁32'11	30.63053 AU	min. Earth dist.	-1690 Jun 02 j 08:04	27°♁43'07	32.32831 AU
opposition	-1698 May 18 j 20:50	11°♁29'21	6°05'29	opposition	-1690 Jun 04 j 19:03	27°♁39'29	1°04'12
direct	-1698 Aug 07 j 00:54	10°♁09'52		direct	-1690 Aug 24 j 02:04	26°♁23'20	

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Attention, astronomical year style is used: The year -1657 in astronomical counting style is the year 1658 BCE in historical counting style.

minimum elong	-1657 Jan 22 j 00:12	18°☾20'05	12°30'39	retrograde	-1649 May 15 j 15:25	0°☾07'14	
max. Earth dist.	-1657 Jan 25 j 05:17	18°☾25'23	42.37451 AU		-1649 Jun 09 j 20:46	30°☾☽	
retrograde	-1657 May 05 j 17:50	20°☾08'06		min. Earth dist.	-1649 Aug 04 j 10:59	29°☾04'59	42.28552 AU
min. Earth dist.	-1657 Jul 25 j 01:14	19°☾04'42	40.54097 AU	opposition	-1649 Aug 07 j 10:22	29°☾01'18	-15°-3'-13
opposition	-1657 Jul 28 j 05:24	19°☾00'41	-13°-15'-26	direct	-1649 Oct 27 j 03:56	27°☾57'00	
direct	-1657 Oct 16 j 19:50	17°☾54'53					
				conjunction	-1648 Feb 02 j 12:28	29°☾35'56	-14°-28'-12
conjunction	-1656 Jan 23 j 13:31	19°☾38'03	-12°-45'-39	minimum elong	-1648 Feb 02 j 12:21	29°☾35'56	14°28'15
minimum elong	-1656 Jan 23 j 13:20	19°☾38'02	12°45'41	max. Earth dist.	-1648 Feb 05 j 13:32	29°☾40'44	44.32252 AU
max. Earth dist.	-1656 Jan 26 j 18:43	19°☾43'19	42.60452 AU		-1648 Feb 17 j 22:20	0°☾☽	
retrograde	-1656 May 06 j 06:23	21°☾25'30		retrograde	-1648 May 16 j 00:43	1°☾19'12	
min. Earth dist.	-1656 Jul 25 j 16:00	20°☾22'15	40.77102 AU	min. Earth dist.	-1648 Aug 04 j 21:43	0°☾17'10	42.49244 AU
opposition	-1656 Jul 28 j 19:06	20°☾18'18	-13°-30'-44	opposition	-1648 Aug 07 j 21:41	0°☾13'28	-15°-14'-21
direct	-1656 Oct 17 j 10:27	19°☾12'43			-1648 Aug 18 j 21:02	30°☾☽	
				direct	-1648 Oct 27 j 16:49	29°☾09'22	
conjunction	-1655 Jan 24 j 02:23	20°☾55'20	-13°00'-12		-1647 Jan 02 j 03:16	0°☾☽	
minimum elong	-1655 Jan 24 j 02:11	20°☾55'19	13°00'15	conjunction	-1647 Feb 02 j 23:17	0°☾47'53	-14°-38'-48
max. Earth dist.	-1655 Jan 27 j 05:48	21°☾00'27	42.83060 AU	minimum elong	-1647 Feb 02 j 23:09	0°☾47'52	14°38'50
retrograde	-1655 May 07 j 19:20	22°☾42'12		max. Earth dist.	-1647 Feb 06 j 00:10	0°☾52'38	44.52664 AU
min. Earth dist.	-1655 Jul 27 j 05:17	21°☾39'09	40.99708 AU	retrograde	-1647 May 17 j 11:54	2°☾30'42	
opposition	-1655 Jul 30 j 08:22	21°☾35'13	-13°-45'-31	min. Earth dist.	-1647 Aug 06 j 10:08	1°☾28'49	42.69703 AU
direct	-1655 Oct 18 j 23:28	20°☾29'50		opposition	-1647 Aug 09 j 08:46	1°☾25'11	-15°-24'-59
				direct	-1647 Oct 29 j 04:16	0°☾21'18	
conjunction	-1654 Jan 25 j 14:59	22°☾11'53	-13°-14'-16				
minimum elong	-1654 Jan 25 j 14:49	22°☾11'52	13°14'18	conjunction	-1646 Feb 04 j 10:01	1°☾59'23	-14°-48'-56
max. Earth dist.	-1654 Jan 28 j 18:40	22°☾17'00	43.05258 AU	minimum elong	-1646 Feb 04 j 09:54	1°☾59'22	14°48'59
retrograde	-1654 May 09 j 05:51	23°☾58'12		max. Earth dist.	-1646 Feb 07 j 10:50	2°☾04'07	44.72834 AU
min. Earth dist.	-1654 Jul 28 j 20:09	22°☾55'14	41.21904 AU	retrograde	-1646 May 18 j 22:36	3°☾41'47	
opposition	-1654 Jul 31 j 21:34	22°☾51'23	-13°-59'-46	min. Earth dist.	-1646 Aug 07 j 21:14	2°☾40'06	42.89871 AU
direct	-1654 Oct 20 j 14:32	21°☾46'11		opposition	-1646 Aug 10 j 19:38	2°☾36'29	-15°-35'-9
				direct	-1646 Oct 30 j 15:13	1°☾32'49	
conjunction	-1653 Jan 27 j 03:09	23°☾27'40	-13°-27'-50				
minimum elong	-1653 Jan 27 j 02:58	23°☾27'39	13°27'52	conjunction	-1645 Feb 05 j 20:18	3°☾10'29	-14°-58'-37
max. Earth dist.	-1653 Jan 30 j 05:51	23°☾32'42	43.27082 AU	minimum elong	-1645 Feb 05 j 20:11	3°☾10'29	14°58'39
retrograde	-1653 May 10 j 16:24	25°☾13'26		max. Earth dist.	-1645 Feb 08 j 19:37	3°☾15'06	44.92688 AU
min. Earth dist.	-1653 Jul 30 j 08:31	24°☾10'39	41.43739 AU	retrograde	-1645 May 20 j 12:23	4°☾52'29	
opposition	-1653 Aug 02 j 10:18	24°☾06'47	-14°-13'-30	min. Earth dist.	-1645 Aug 09 j 08:39	3°☾50'57	43.09704 AU
direct	-1653 Oct 22 j 04:51	23°☾01'45		opposition	-1645 Aug 12 j 06:24	3°☾47'24	-15°-44'-51
				direct	-1645 Oct 31 j 22:50	2°☾43'56	
conjunction	-1652 Jan 28 j 15:05	24°☾42'41	-13°-40'-54				
minimum elong	-1652 Jan 28 j 14:56	24°☾42'40	13°40'56	conjunction	-1644 Feb 07 j 06:48	4°☾21'12	-15°-7'-53
max. Earth dist.	-1652 Jan 31 j 17:12	24°☾47'39	43.48568 AU	minimum elong	-1644 Feb 07 j 06:42	4°☾21'12	15°07'56
retrograde	-1652 May 11 j 04:59	26°☾27'55		max. Earth dist.	-1644 Feb 10 j 06:25	4°☾25'49	45.12168 AU
min. Earth dist.	-1652 Jul 30 j 22:05	25°☾25'13	41.65281 AU	retrograde	-1644 May 20 j 22:57	6°☾02'47	
opposition	-1652 Aug 02 j 22:45	25°☾21'26	-14°-26'-43	min. Earth dist.	-1644 Aug 09 j 20:49	5°☾01'21	43.29116 AU
direct	-1652 Oct 22 j 17:12	24°☾16'34		opposition	-1644 Aug 12 j 16:50	4°☾57'53	-15°-54'-6
				direct	-1644 Nov 01 j 09:03	3°☾54'36	
conjunction	-1651 Jan 29 j 02:55	25°☾56'58	-13°-53'-28				
minimum elong	-1651 Jan 29 j 02:44	25°☾56'57	13°53'31	conjunction	-1643 Feb 07 j 17:05	5°☾31'29	-15°-16'-43
max. Earth dist.	-1651 Feb 01 j 05:24	26°☾01'55	43.69797 AU	minimum elong	-1643 Feb 07 j 16:59	5°☾31'28	15°16'45
retrograde	-1651 May 12 j 17:12	27°☾41'40		max. Earth dist.	-1643 Feb 10 j 14:47	5°☾35'57	45.31219 AU
min. Earth dist.	-1651 Aug 01 j 10:33	26°☾39'06	41.86568 AU	retrograde	-1643 May 22 j 08:22	7°☾12'39	
opposition	-1651 Aug 04 j 10:50	26°☾35'21	-14°-39'-25	min. Earth dist.	-1643 Aug 11 j 07:00	6°☾11'23	43.48075 AU
direct	-1651 Oct 24 j 04:49	25°☾30'40		opposition	-1643 Aug 14 j 03:04	6°☾07'56	-16°-2'-57
				direct	-1643 Nov 02 j 19:13	5°☾04'49	
conjunction	-1650 Jan 30 j 14:13	27°☾10'33	-14°-5'-33				
minimum elong	-1650 Jan 30 j 14:04	27°☾10'33	14°05'35	conjunction	-1642 Feb 09 j 03:02	6°☾41'17	-15°-25'-10
max. Earth dist.	-1650 Feb 02 j 15:29	27°☾15'24	43.90799 AU	minimum elong	-1642 Feb 09 j 02:56	6°☾41'16	15°25'13
retrograde	-1650 May 14 j 06:31	28°☾54'45		max. Earth dist.	-1642 Feb 12 j 00:08	6°☾45'42	45.49798 AU
min. Earth dist.	-1650 Aug 02 j 22:06	27°☾52'22	42.07657 AU	retrograde	-1642 May 23 j 15:23	8°☾22'02	
opposition	-1650 Aug 05 j 22:43	27°☾48'37	-14°-51'-34	min. Earth dist.	-1642 Aug 12 j 19:08	7°☾20'49	43.66567 AU
direct	-1650 Oct 25 j 14:39	26°☾44'07		opposition	-1642 Aug 15 j 13:14	7°☾17'28	-16°-11'-22
				direct	-1642 Nov 04 j 08:32	6°☾14'30	
conjunction	-1649 Feb 01 j 01:29	28°☾23'31	-14°-17'-7				
minimum elong	-1649 Feb 01 j 01:19	28°☾23'31	14°17'10	conjunction	-1641 Feb 10 j 12:57	7°☾50'33	-15°-33'-13
max. Earth dist.	-1649 Feb 04 j 03:30	28°☾28'24	44.11615 AU	minimum elong	-1641 Feb 10 j 12:52	7°☾50'33	15°33'15
	-1649 Apr 20 j 16:09	0°☾☽					

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Attention, astronomical year style is used: The year -1641 in astronomical counting style is the year 1642 BCE in historical counting style.

max. Earth dist.	-1641 Feb 13 j 09:23	7°54'55	45.67948 AU	conjunction	-1633 Feb 19 j 12:57	16°46'34	-16°-22'-59
retrograde	-1641 May 25 j 00:15	9°30'53		minimum elong	-1633 Feb 19 j 12:56	16°46'34	16°23'02
min. Earth dist.	-1641 Aug 14 j 05:10	8°29'47	43.84631 AU	max. Earth dist.	-1633 Feb 22 j 03:30	16°50'26	47.02022 AU
opposition	-1641 Aug 16 j 22:58	8°26'27	-16°-19'-23	retrograde	-1633 Jun 03 j 02:45	18°23'55	
direct	-1641 Nov 05 j 20:03	7°23'38		min. Earth dist.	-1633 Aug 23 j 09:52	17°23'42	45.18319 AU
				opposition	-1633 Aug 25 j 22:07	17°20'43	-17°-8'-20
conjunction	-1640 Feb 11 j 22:29	8°59'15	-15°-40'-51	direct	-1633 Nov 14 j 16:08	16°19'02	
minimum elong	-1640 Feb 11 j 22:23	8°59'15	15°40'54				
max. Earth dist.	-1640 Feb 14 j 17:27	9°03'30	45.85696 AU	conjunction	-1632 Feb 20 j 21:29	17°51'54	-16°-27'-29
retrograde	-1640 May 25 j 11:59	10°39'10		minimum elong	-1632 Feb 20 j 21:27	17°51'54	16°27'31
min. Earth dist.	-1640 Aug 14 j 15:43	9°38'09	44.02334 AU	max. Earth dist.	-1632 Feb 23 j 11:36	17°55'44	47.17361 AU
opposition	-1640 Aug 17 j 08:37	9°34'53	-16°-26'-58	retrograde	-1632 Jun 03 j 08:59	19°28'57	
direct	-1640 Nov 06 j 03:47	8°32'11		min. Earth dist.	-1632 Aug 23 j 20:19	18°28'47	45.33503 AU
				opposition	-1632 Aug 26 j 06:23	18°25'55	-17°-12'-42
conjunction	-1639 Feb 12 j 08:01	10°07'24	-15°-48'-5	direct	-1632 Nov 15 j 02:06	17°24'23	
minimum elong	-1639 Feb 12 j 07:57	10°07'24	15°48'07				
max. Earth dist.	-1639 Feb 15 j 03:18	10°11'39	46.03111 AU	conjunction	-1631 Feb 21 j 06:00	18°56'58	-16°-31'-39
retrograde	-1639 May 26 j 21:02	11°46'54		minimum elong	-1631 Feb 21 j 05:59	18°56'58	16°31'41
min. Earth dist.	-1639 Aug 16 j 02:03	10°45'57	44.19712 AU	max. Earth dist.	-1631 Feb 23 j 18:43	19°00'42	47.32228 AU
opposition	-1639 Aug 18 j 17:50	10°42'45	-16°-34'-8	retrograde	-1631 Jun 04 j 15:03	20°33'42	
direct	-1639 Nov 07 j 13:25	9°40'10		min. Earth dist.	-1631 Aug 25 j 04:37	19°33'39	45.48178 AU
				opposition	-1631 Aug 27 j 14:16	19°30'48	-17°-16'-43
conjunction	-1638 Feb 13 j 17:12	11°15'00	-15°-54'-54	direct	-1631 Nov 16 j 12:11	18°29'24	
minimum elong	-1638 Feb 13 j 17:07	11°15'00	15°54'57				
max. Earth dist.	-1638 Feb 16 j 10:55	11°19'08	46.20246 AU	conjunction	-1630 Feb 22 j 14:13	20°01'42	-16°-35'-29
retrograde	-1638 May 28 j 06:13	12°54'05		minimum elong	-1630 Feb 22 j 14:12	20°01'41	16°35'30
min. Earth dist.	-1638 Aug 17 j 10:55	11°53'17	44.36833 AU	max. Earth dist.	-1630 Feb 25 j 01:12	20°05'18	47.46577 AU
opposition	-1638 Aug 20 j 02:58	11°50'05	-16°-40'-52	retrograde	-1630 Jun 06 j 00:17	21°38'07	
direct	-1638 Nov 08 j 21:33	10°47'38		min. Earth dist.	-1630 Aug 26 j 14:20	20°38'07	45.62345 AU
				opposition	-1630 Aug 28 j 22:17	20°35'21	-17°-20'-25
conjunction	-1637 Feb 15 j 02:07	12°22'06	-16°-1'-19	direct	-1630 Nov 17 j 19:59	19°34'04	
minimum elong	-1637 Feb 15 j 02:05	12°22'06	16°01'21				
max. Earth dist.	-1637 Feb 17 j 20:02	12°26'14	46.37128 AU	conjunction	-1629 Feb 23 j 22:20	21°06'04	-16°-39'00
retrograde	-1637 May 29 j 13:31	14°00'49		minimum elong	-1629 Feb 23 j 22:19	21°06'04	16°39'02
min. Earth dist.	-1637 Aug 18 j 21:33	13°00'04	44.53703 AU	max. Earth dist.	-1629 Feb 26 j 09:03	21°09'39	47.60434 AU
opposition	-1637 Aug 21 j 12:03	12°56'56	-16°-47'-10	retrograde	-1629 Jun 07 j 08:05	22°42'11	
direct	-1637 Nov 10 j 07:38	11°54'38		min. Earth dist.	-1629 Aug 27 j 23:13	21°42'14	45.76012 AU
				opposition	-1629 Aug 30 j 05:59	21°39'32	-17°-23'-47
conjunction	-1636 Feb 16 j 11:07	13°28'45	-16°-7'-19	direct	-1629 Nov 19 j 04:19	20°38'21	
minimum elong	-1636 Feb 16 j 11:03	13°28'45	16°07'21				
max. Earth dist.	-1636 Feb 19 j 04:26	13°32'50	46.53780 AU	conjunction	-1628 Feb 25 j 06:16	22°10'03	-16°-42'-11
	-1636 May 04 j 15:19	15°		minimum elong	-1628 Feb 25 j 06:16	22°10'03	16°42'13
retrograde	-1636 May 29 j 20:19	15°07'06		max. Earth dist.	-1628 Feb 27 j 14:50	22°13'29	47.73828 AU
	-1636 Jun 24 j 11:03	15°R		retrograde	-1628 Jun 07 j 17:57	23°45'51	
min. Earth dist.	-1636 Aug 19 j 05:58	14°06'31	44.70319 AU	min. Earth dist.	-1628 Aug 28 j 07:09	22°45'58	45.89254 AU
opposition	-1636 Aug 21 j 20:40	14°03'23	-16°-53'-3	opposition	-1628 Aug 30 j 13:23	22°43'19	-17°-26'-48
direct	-1636 Nov 10 j 18:24	13°01'14		direct	-1628 Nov 19 j 09:13	21°42'14	
conjunction	-1635 Feb 16 j 19:50	14°35'01	-16°-12'-55	conjunction	-1627 Feb 25 j 14:07	23°13'39	-16°-45'-3
minimum elong	-1635 Feb 16 j 19:48	14°35'01	16°12'58	minimum elong	-1627 Feb 25 j 14:07	23°13'39	16°45'06
max. Earth dist.	-1635 Feb 19 j 11:54	14°39'00	46.70167 AU	max. Earth dist.	-1627 Feb 27 j 22:36	23°17'04	47.86816 AU
	-1635 Mar 05 j 17:46	15°		retrograde	-1627 Jun 09 j 00:50	24°49'08	
retrograde	-1635 May 31 j 06:35	16°13'01		min. Earth dist.	-1627 Aug 29 j 16:25	23°49'16	46.02112 AU
min. Earth dist.	-1635 Aug 20 j 15:45	15°12'33	44.86665 AU	opposition	-1627 Aug 31 j 20:46	23°46'42	-17°-29'-29
opposition	-1635 Aug 23 j 05:22	15°09'28	-16°-58'-32	direct	-1627 Nov 20 j 16:52	22°45'43	
	-1635 Aug 31 j 04:06	15°R					
direct	-1635 Nov 12 j 02:28	14°07'29		conjunction	-1626 Feb 26 j 21:40	24°16'52	-16°-47'-34
	-1634 Jan 20 j 17:55	15°		minimum elong	-1626 Feb 26 j 21:41	24°16'52	16°47'36
				max. Earth dist.	-1626 Mar 01 j 05:03	24°20'13	47.99468 AU
conjunction	-1634 Feb 18 j 04:26	15°40'56	-16°-18'-9	retrograde	-1626 Jun 10 j 05:28	25°52'04	
minimum elong	-1634 Feb 18 j 04:23	15°40'56	16°18'11	min. Earth dist.	-1626 Aug 30 j 23:16	24°52'19	46.14644 AU
max. Earth dist.	-1634 Feb 20 j 20:50	15°44'56	46.86266 AU	opposition	-1626 Sep 02 j 03:54	24°49'45	-17°-31'-49
retrograde	-1634 Jun 01 j 16:14	17°18'37		direct	-1626 Nov 22 j 01:54	23°48'52	
min. Earth dist.	-1634 Aug 22 j 01:18	16°18'15	45.02677 AU				
opposition	-1634 Aug 24 j 13:50	16°15'14	-17°-3'-38	conjunction	-1625 Feb 28 j 05:07	25°19'45	-16°-49'-45
direct	-1634 Nov 13 j 10:00	15°13'24		minimum elong	-1625 Feb 28 j 05:08	25°19'45	16°49'47
				max. Earth dist.	-1625 Mar 02 j 11:20	25°23'01	48.11809 AU

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Attention, astronomical year style is used: The year -1625 in astronomical counting style is the year 1626 BCE in historical counting style.

retrograde	-1625 Jun 11 j 12:07	26° \approx 54'40		minimum elong	-1617 Mar 08 j 14:29	3° \times 33'59	16°55'45
min. Earth dist.	-1625 Sep 01 j 07:54	25° \approx 54'58	46.26887 AU	max. Earth dist.	-1617 Mar 10 j 12:29	3° \times 36'41	48.97871 AU
opposition	-1625 Sep 03 j 11:00	25° \approx 52'28	-17°-33'-47	retrograde	-1617 Jun 19 j 22:27	5° \times 06'57	
direct	-1625 Nov 23 j 10:44	24° \approx 51'42		min. Earth dist.	-1617 Sep 09 j 21:29	4° \times 07'39	47.11338 AU
				opposition	-1617 Sep 11 j 15:15	4° \times 05'39	-17°-37'-58
conjunction	-1624 Feb 29 j 12:39	26° \approx 22'20	-16°-51'-35	direct	-1617 Dec 01 j 14:01	3° \times 05'37	
minimum elong	-1624 Feb 29 j 12:42	26° \approx 22'20	16°51'37				
max. Earth dist.	-1624 Mar 02 j 19:01	26° \approx 25'36	48.23876 AU	conjunction	-1616 Mar 08 j 21:13	4° \times 34'33	-16°-55'-11
retrograde	-1624 Jun 11 j 20:14	27° \approx 56'59		minimum elong	-1616 Mar 08 j 21:18	4° \times 34'33	16°55'14
min. Earth dist.	-1624 Sep 01 j 15:25	26° \approx 57'23	46.38828 AU	max. Earth dist.	-1616 Mar 10 j 17:36	4° \times 37'09	49.06546 AU
opposition	-1624 Sep 03 j 17:54	26° \approx 54'55	-17°-35'-25	retrograde	-1616 Jun 20 j 03:49	6° \times 07'16	
direct	-1624 Nov 23 j 17:49	25° \approx 54'15		min. Earth dist.	-1616 Sep 10 j 03:36	5° \times 08'02	47.19777 AU
				opposition	-1616 Sep 11 j 21:12	5° \times 06'02	-17°-37'-11
conjunction	-1623 Mar 01 j 19:54	27° \approx 24'39	-16°-53'-6	direct	-1616 Dec 01 j 20:09	4° \times 06'03	
minimum elong	-1623 Mar 01 j 19:55	27° \approx 24'39	16°53'07				
max. Earth dist.	-1623 Mar 04 j 00:20	27° \approx 27'47	48.35646 AU	conjunction	-1615 Mar 10 j 03:48	5° \times 34'46	-16°-54'-22
retrograde	-1623 Jun 13 j 06:26	28° \approx 59'03		minimum elong	-1615 Mar 10 j 03:53	5° \times 34'46	16°54'24
min. Earth dist.	-1623 Sep 02 j 22:34	27° \approx 59'33	46.50473 AU	max. Earth dist.	-1615 Mar 11 j 22:50	5° \times 37'17	49.14790 AU
opposition	-1623 Sep 05 j 00:37	27° \approx 57'07	-17°-36'-41	retrograde	-1615 Jun 21 j 07:45	7° \times 07'15	
direct	-1623 Nov 24 j 21:34	26° \approx 56'34		min. Earth dist.	-1615 Sep 11 j 11:22	6° \times 07'59	47.27826 AU
				opposition	-1615 Sep 13 j 03:05	6° \times 06'04	-17°-36'-6
conjunction	-1622 Mar 03 j 03:09	28° \approx 26'45	-16°-54'-16	direct	-1615 Dec 03 j 04:36	5° \times 06'09	
minimum elong	-1622 Mar 03 j 03:12	28° \approx 26'45	16°54'18				
max. Earth dist.	-1622 Mar 05 j 07:34	28° \approx 29'53	48.47103 AU	conjunction	-1614 Mar 11 j 10:23	6° \times 34'40	-16°-53'-16
	-1622 Jun 05 j 06:31	0° \times		minimum elong	-1614 Mar 11 j 10:27	6° \times 34'40	16°53'18
retrograde	-1622 Jun 14 j 12:48	0° \times 00'55		max. Earth dist.	-1614 Mar 13 j 05:19	6° \times 37'11	49.22689 AU
	-1622 Jun 23 j 15:14	30° \times		retrograde	-1614 Jun 22 j 12:30	8° \times 06'56	
min. Earth dist.	-1622 Sep 04 j 07:07	29° \approx 01'27	46.61772 AU	min. Earth dist.	-1614 Sep 12 j 17:32	7° \times 07'43	47.35537 AU
opposition	-1622 Sep 06 j 07:22	28° \approx 59'06	-17°-37'-38	opposition	-1614 Sep 14 j 08:47	7° \times 05'49	-17°-34'-43
direct	-1622 Nov 26 j 04:14	27° \approx 58'40		direct	-1614 Dec 04 j 12:27	6° \times 05'57	
conjunction	-1621 Mar 04 j 10:14	29° \approx 28'39	-16°-55'-8	conjunction	-1613 Mar 12 j 16:38	7° \times 34'17	-16°-51'-51
minimum elong	-1621 Mar 04 j 10:16	29° \approx 28'39	16°55'09	minimum elong	-1613 Mar 12 j 16:44	7° \times 34'17	16°51'52
max. Earth dist.	-1621 Mar 06 j 13:18	29° \approx 31'42	48.58208 AU	max. Earth dist.	-1613 Mar 14 j 09:39	7° \times 36'41	49.30278 AU
	-1621 Mar 26 j 18:53	0° \times		retrograde	-1613 Jun 23 j 21:15	9° \times 06'21	
retrograde	-1621 Jun 15 j 17:42	1° \times 02'34		min. Earth dist.	-1613 Sep 13 j 23:51	8° \times 07'10	47.42960 AU
min. Earth dist.	-1621 Sep 05 j 13:52	0° \times 03'13	46.72678 AU	opposition	-1613 Sep 15 j 14:29	8° \times 05'19	-17°-33'-2
opposition	-1621 Sep 07 j 13:54	0° \times 00'53	-17°-38'-17	direct	-1613 Dec 05 j 15:56	7° \times 05'31	
	-1621 Sep 08 j 08:16	30° \times					
direct	-1621 Nov 27 j 12:11	29° \approx 00'34		conjunction	-1612 Mar 12 j 23:04	8° \times 33'41	-16°-50'-9
	-1620 Feb 12 j 00:48	0° \times		minimum elong	-1612 Mar 12 j 23:10	8° \times 33'41	16°50'10
				max. Earth dist.	-1612 Mar 14 j 16:05	8° \times 36'04	49.37582 AU
conjunction	-1620 Mar 04 j 17:24	0° \times 30'21	-16°-55'-42	retrograde	-1612 Jun 24 j 03:33	10° \times 05'34	
minimum elong	-1620 Mar 04 j 17:28	0° \times 30'21	16°55'43	min. Earth dist.	-1612 Sep 14 j 06:55	9° \times 06'24	47.50089 AU
max. Earth dist.	-1620 Mar 06 j 18:59	0° \times 33'18	48.68876 AU	opposition	-1612 Sep 15 j 19:58	9° \times 04'38	-17°-31'-2
retrograde	-1620 Jun 15 j 23:41	2° \times 04'03		direct	-1612 Dec 05 j 21:09	8° \times 04'54	
min. Earth dist.	-1620 Sep 05 j 22:28	1° \times 04'42	46.83126 AU				
opposition	-1620 Sep 07 j 20:21	1° \times 02'29	-17°-38'-37	conjunction	-1611 Mar 14 j 05:22	9° \times 32'56	-16°-48'-9
direct	-1620 Nov 27 j 20:04	0° \times 02'16		minimum elong	-1611 Mar 14 j 05:30	9° \times 32'56	16°48'10
				max. Earth dist.	-1611 Mar 15 j 21:04	9° \times 35'14	49.44614 AU
conjunction	-1619 Mar 06 j 00:38	1° \times 31'50	-16°-55'-59	retrograde	-1611 Jun 25 j 08:39	11° \times 04'38	
minimum elong	-1619 Mar 06 j 00:41	1° \times 31'50	16°56'00	min. Earth dist.	-1611 Sep 15 j 12:16	10° \times 05'35	47.56933 AU
max. Earth dist.	-1619 Mar 08 j 01:32	1° \times 34'44	48.79065 AU	opposition	-1611 Sep 17 j 01:24	10° \times 03'48	-17°-28'-44
retrograde	-1619 Jun 17 j 05:28	3° \times 05'18		direct	-1611 Dec 07 j 02:36	9° \times 04'09	
min. Earth dist.	-1619 Sep 07 j 05:49	2° \times 06'01	46.93049 AU				
opposition	-1619 Sep 09 j 02:44	2° \times 03'50	-17°-38'-40	conjunction	-1610 Mar 15 j 11:23	10° \times 32'04	-16°-45'-51
direct	-1619 Nov 29 j 04:12	1° \times 03'42		minimum elong	-1610 Mar 15 j 11:28	10° \times 32'04	16°45'53
				max. Earth dist.	-1610 Mar 17 j 02:00	10° \times 34'19	49.51339 AU
conjunction	-1618 Mar 07 j 07:27	2° \times 33'03	-16°-55'-59	retrograde	-1610 Jun 26 j 13:19	12° \times 03'38	
minimum elong	-1618 Mar 07 j 07:31	2° \times 33'04	16°56'01	min. Earth dist.	-1610 Sep 16 j 19:40	11° \times 04'35	47.63456 AU
max. Earth dist.	-1618 Mar 09 j 05:57	2° \times 35'48	48.88727 AU	opposition	-1610 Sep 18 j 06:57	11° \times 02'54	-17°-26'-8
retrograde	-1618 Jun 18 j 15:00	4° \times 06'17		direct	-1610 Dec 08 j 09:18	10° \times 03'21	
min. Earth dist.	-1618 Sep 08 j 13:17	3° \times 07'02	47.02449 AU				
opposition	-1618 Sep 10 j 09:06	3° \times 04'55	-17°-38'-27	conjunction	-1609 Mar 16 j 17:42	11° \times 31'09	-16°-43'-16
direct	-1618 Nov 30 j 08:32	2° \times 04'50		minimum elong	-1609 Mar 16 j 17:50	11° \times 31'09	16°43'18
				max. Earth dist.	-1609 Mar 18 j 07:59	11° \times 33'22	49.57733 AU
conjunction	-1617 Mar 08 j 14:25	3° \times 33'58	-16°-55'-44	retrograde	-1609 Jun 27 j 18:00	13° \times 02'35	

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Attention, astronomical year style is used: The year -1609 in astronomical counting style is the year 1610 BCE in historical counting style.

min. Earth dist.	-1609 Sep 18 j 01:31	12°♆03'37	47.69597 AU	conjunction	-1600 Mar 24 j 23:52	20°♆17'33	-16°-8'-49
opposition	-1609 Sep 19 j 12:10	12°♆01'58	-17°-23'-16	minimum elong	-1600 Mar 25 j 00:01	20°♆17'33	16°08'50
direct	-1609 Dec 09 j 16:33	11°♆02'30		max. Earth dist.	-1600 Mar 26 j 01:54	20°♆19'02	49.94581 AU
				retrograde	-1600 Jul 05 j 22:43	21°♆47'41	
conjunction	-1608 Mar 16 j 23:55	12°♆30'11	-16°-40'-26	min. Earth dist.	-1600 Sep 26 j 10:06	20°♆48'41	48.03924 AU
minimum elong	-1608 Mar 17 j 00:01	12°♆30'12	16°40'27	opposition	-1600 Sep 27 j 09:24	20°♆47'35	-16°-45'-56
max. Earth dist.	-1608 Mar 18 j 11:50	12°♆32'16	49.63714 AU	direct	-1600 Dec 17 j 13:36	19°♆48'26	
retrograde	-1608 Jun 28 j 02:50	14°♆01'30					
min. Earth dist.	-1608 Sep 18 j 08:14	13°♆02'34	47.75301 AU	conjunction	-1599 Mar 26 j 05:37	21°♆15'10	-16°-3'-42
opposition	-1608 Sep 19 j 17:30	13°♆00'59	-17°-20'-8	minimum elong	-1599 Mar 26 j 05:46	21°♆15'11	16°03'43
direct	-1608 Dec 09 j 20:09	12°♆01'36		max. Earth dist.	-1599 Mar 27 j 07:22	21°♆16'39	49.96790 AU
				retrograde	-1599 Jul 07 j 01:24	22°♆45'13	
conjunction	-1607 Mar 18 j 06:12	13°♆29'11	-16°-37'-20	opposition	-1599 Sep 28 j 14:02	21°♆45'09	-16°-40'-27
minimum elong	-1607 Mar 18 j 06:20	13°♆29'12	16°37'22	min. Earth dist.	-1599 Sep 27 j 14:59	21°♆46'15	48.05883 AU
max. Earth dist.	-1607 Mar 19 j 17:40	13°♆31'14	49.69211 AU	direct	-1599 Dec 18 j 20:57	20°♆46'03	
retrograde	-1607 Jun 29 j 10:33	15°♆00'21					
opposition	-1607 Sep 20 j 22:45	13°♆59'56	-17°-16'-44	conjunction	-1598 Mar 27 j 11:13	22°♆12'44	-15°-58'-18
min. Earth dist.	-1607 Sep 19 j 15:28	14°♆01'25	47.80483 AU	minimum elong	-1598 Mar 27 j 11:24	22°♆12'44	15°58'20
direct	-1607 Dec 10 j 23:45	13°♆00'37		max. Earth dist.	-1598 Mar 28 j 10:59	22°♆14'05	49.98689 AU
				retrograde	-1598 Jul 08 j 07:58	23°♆42'41	
conjunction	-1606 Mar 19 j 12:23	14°♆28'06	-16°-34'00	opposition	-1598 Sep 29 j 18:44	22°♆42'42	-16°-34'-42
minimum elong	-1606 Mar 19 j 12:30	14°♆28'06	16°34'01	min. Earth dist.	-1598 Sep 28 j 20:53	22°♆43'44	48.07527 AU
max. Earth dist.	-1606 Mar 20 j 21:44	14°♆30'01	49.74199 AU	direct	-1598 Dec 20 j 01:14	21°♆43'38	
retrograde	-1606 Jun 30 j 17:31	15°♆59'06					
min. Earth dist.	-1606 Sep 20 j 21:02	15°♆00'13	47.85142 AU	conjunction	-1597 Mar 28 j 16:58	23°♆10'16	-15°-52'-40
opposition	-1606 Sep 22 j 03:55	14°♆58'45	-17°-13'-6	minimum elong	-1597 Mar 28 j 17:07	23°♆10'16	15°52'41
direct	-1606 Dec 12 j 03:14	13°♆59'29		max. Earth dist.	-1597 Mar 29 j 16:30	23°♆11'36	50.00238 AU
				retrograde	-1597 Jul 09 j 14:49	24°♆40'09	
conjunction	-1605 Mar 20 j 18:25	15°♆26'51	-16°-30'-26	opposition	-1597 Sep 30 j 23:25	23°♆40'13	-16°-28'-41
minimum elong	-1605 Mar 20 j 18:33	15°♆26'52	16°30'28	min. Earth dist.	-1597 Sep 30 j 03:16	23°♆41'11	48.08774 AU
max. Earth dist.	-1605 Mar 22 j 02:10	15°♆28'41	49.78653 AU	direct	-1597 Dec 21 j 05:10	22°♆41'13	
retrograde	-1605 Jul 01 j 20:20	16°♆57'43					
min. Earth dist.	-1605 Sep 22 j 04:38	15°♆58'46	47.89279 AU	conjunction	-1596 Mar 28 j 22:47	24°♆07'48	-15°-46'-46
opposition	-1605 Sep 23 j 09:09	15°♆57'24	-17°-9'-14	minimum elong	-1596 Mar 28 j 22:58	24°♆07'49	15°46'47
direct	-1605 Dec 13 j 11:14	14°♆58'10		max. Earth dist.	-1596 Mar 29 j 20:22	24°♆09'02	50.01373 AU
				retrograde	-1596 Jul 09 j 22:31	25°♆37'37	
conjunction	-1604 Mar 21 j 00:36	16°♆25'24	-16°-26'-38	min. Earth dist.	-1596 Sep 30 j 08:15	24°♆38'41	48.09571 AU
minimum elong	-1604 Mar 21 j 00:44	16°♆25'25	16°26'38	opposition	-1596 Oct 01 j 03:52	24°♆37'45	-16°-22'-26
max. Earth dist.	-1604 Mar 22 j 07:42	16°♆27'12	49.82618 AU	direct	-1596 Dec 21 j 07:24	23°♆38'47	
retrograde	-1604 Jul 01 j 22:41	17°♆56'07					
min. Earth dist.	-1604 Sep 22 j 10:09	16°♆57'11	47.92938 AU	conjunction	-1595 Mar 30 j 04:35	25°♆05'21	-15°-40'-39
opposition	-1604 Sep 23 j 13:59	16°♆55'51	-17°-5'-7	minimum elong	-1595 Mar 30 j 04:45	25°♆05'22	15°40'40
direct	-1604 Dec 13 j 19:53	15°♆56'38		max. Earth dist.	-1595 Mar 31 j 00:29	25°♆06'29	50.02010 AU
				retrograde	-1595 Jul 11 j 02:43	26°♆35'06	
conjunction	-1603 Mar 22 j 06:29	17°♆23'45	-16°-22'-34	opposition	-1595 Oct 02 j 08:37	25°♆35'18	-16°-15'-57
minimum elong	-1603 Mar 22 j 06:37	17°♆23'45	16°22'36	min. Earth dist.	-1595 Oct 01 j 15:28	25°♆36'06	48.09847 AU
max. Earth dist.	-1603 Mar 23 j 11:16	17°♆25'24	49.86136 AU	direct	-1595 Dec 22 j 13:02	24°♆36'21	
retrograde	-1603 Jul 03 j 06:19	18°♆54'18					
opposition	-1603 Sep 24 j 18:57	17°♆54'04	-17°00'-43	conjunction	-1594 Mar 31 j 10:22	26°♆02'53	-15°-34'-19
min. Earth dist.	-1603 Sep 23 j 16:16	17°♆55'21	47.96193 AU	minimum elong	-1594 Mar 31 j 10:33	26°♆02'54	15°34'20
direct	-1603 Dec 14 j 23:49	16°♆54'52		max. Earth dist.	-1594 Apr 01 j 05:25	26°♆03'58	50.02120 AU
				retrograde	-1594 Jul 12 j 04:58	27°♆32'35	
conjunction	-1602 Mar 23 j 12:15	18°♆21'52	-16°-18'-15	opposition	-1594 Oct 03 j 13:14	26°♆32'48	-16°-9'-15
minimum elong	-1602 Mar 23 j 12:24	18°♆21'53	16°18'16	min. Earth dist.	-1594 Oct 02 j 20:49	26°♆33'35	48.09565 AU
max. Earth dist.	-1602 Mar 24 j 16:57	18°♆23'31	49.89273 AU	direct	-1594 Dec 23 j 20:59	25°♆33'51	
retrograde	-1602 Jul 04 j 12:28	19°♆52'17					
opposition	-1602 Sep 25 j 23:52	18°♆52'05	-16°-56'-4	conjunction	-1593 Apr 01 j 16:07	27°♆00'22	-15°-27'-46
min. Earth dist.	-1602 Sep 24 j 22:39	18°♆53'17	47.99079 AU	minimum elong	-1593 Apr 01 j 16:17	27°♆00'23	15°27'46
direct	-1602 Dec 16 j 04:42	17°♆52'54		max. Earth dist.	-1593 Apr 02 j 08:25	27°♆01'18	50.01676 AU
				retrograde	-1593 Jul 13 j 11:41	28°♆30'00	
conjunction	-1601 Mar 24 j 18:04	19°♆19'47	-16°-13'-40	opposition	-1593 Oct 04 j 17:45	27°♆30'14	-16°-2'-19
minimum elong	-1601 Mar 24 j 18:13	19°♆19'48	16°13'42	min. Earth dist.	-1593 Oct 04 j 03:00	27°♆30'56	48.08750 AU
max. Earth dist.	-1601 Mar 25 j 21:18	19°♆21'21	49.92083 AU	direct	-1593 Dec 25 j 01:11	26°♆31'17	
retrograde	-1601 Jul 05 j 18:27	20°♆50'03					
min. Earth dist.	-1601 Sep 26 j 03:27	19°♆51'06	48.01653 AU	conjunction	-1592 Apr 01 j 22:01	27°♆57'46	-15°-20'-59
opposition	-1601 Sep 27 j 04:32	19°♆49'54	-16°-51'-8	minimum elong	-1592 Apr 01 j 22:12	27°♆57'47	15°21'01
direct	-1601 Dec 17 j 08:02	18°♆50'44		max. Earth dist.	-1592 Apr 02 j 13:46	27°♆58'40	50.00708 AU

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Attention, astronomical year style is used: The year -1592 in astronomical counting style is the year 1593 BCE in historical counting style.

retrograde	-1592 Jul 13 j 17:36	29° R 27'20		minimum elong	-1584 Apr 09 j 19:13	5° V 35'08	14°17'56
opposition	-1592 Oct 04 j 22:18	28° R 27'35	-15°-55'-10	max. Earth dist.	-1584 Apr 10 j 01:31	5° V 35'30	49.79597 AU
min. Earth dist.	-1592 Oct 04 j 09:20	28° R 28'12	48.07422 AU	retrograde	-1584 Jul 21 j 09:39	7° V 04'29	
direct	-1592 Dec 25 j 05:47	27° R 28'37		opposition	-1584 Oct 12 j 09:14	6° V 04'52	-14°-48'-43
				min. Earth dist.	-1584 Oct 12 j 04:18	6° V 05'06	47.83893 AU
conjunction	-1591 Apr 03 j 03:37	28° R 55'04	-15°-13'-58	direct	-1583 Jan 01 j 18:58	5° V 05'51	
minimum elong	-1591 Apr 03 j 03:48	28° R 55'05	15°13'59				
max. Earth dist.	-1591 Apr 03 j 17:32	28° R 55'51	49.99275 AU	conjunction	-1583 Apr 11 j 00:39	6° V 32'30	-14°-8'-57
	-1591 May 26 j 09:33	0° V		minimum elong	-1583 Apr 11 j 00:52	6° V 32'30	14°08'57
retrograde	-1591 Jul 14 j 23:49	0° V 24'33		max. Earth dist.	-1583 Apr 11 j 04:34	6° V 32'43	49.75321 AU
	-1591 Sep 02 j 22:31	30° R		retrograde	-1583 Jul 22 j 14:36	8° V 01'53	
opposition	-1591 Oct 06 j 02:40	29° R 24'49	-15°-47'-46	opposition	-1583 Oct 13 j 13:41	7° V 02'16	-14°-39'-17
min. Earth dist.	-1591 Oct 05 j 14:03	29° R 25'25	48.05661 AU	min. Earth dist.	-1583 Oct 13 j 10:28	7° V 02'25	47.79237 AU
direct	-1591 Dec 26 j 08:41	28° R 25'50		direct	-1582 Jan 03 j 00:31	6° V 03'14	
conjunction	-1590 Apr 04 j 09:14	29° R 52'16	-15°-6'-43	conjunction	-1582 Apr 12 j 06:34	7° V 29'55	-13°-59'-44
minimum elong	-1590 Apr 04 j 09:24	29° R 52'17	15°06'45	minimum elong	-1582 Apr 12 j 06:45	7° V 29'56	13°59'44
max. Earth dist.	-1590 Apr 04 j 21:44	29° R 52'59	49.97427 AU	max. Earth dist.	-1582 Apr 12 j 09:50	7° V 30'06	49.70535 AU
	-1590 Apr 10 j 01:44	0° V		retrograde	-1582 Jul 23 j 20:09	8° V 59'20	
retrograde	-1590 Jul 16 j 03:58	1° V 21'42		opposition	-1582 Oct 14 j 18:09	7° V 59'42	-14°-29'-37
opposition	-1590 Oct 07 j 07:07	0° V 21'58	-15°-40'-7	min. Earth dist.	-1582 Oct 14 j 16:41	7° V 59'46	47.74047 AU
min. Earth dist.	-1590 Oct 06 j 20:32	0° V 22'28	48.03521 AU	direct	-1581 Jan 04 j 05:29	7° V 00'37	
	-1590 Oct 27 j 01:39	30° R					
direct	-1590 Dec 27 j 14:04	29° R 22'58		conjunction	-1581 Apr 13 j 12:22	8° V 27'21	-13°-50'-19
	-1589 Feb 26 j 00:51	0° V		minimum elong	-1581 Apr 13 j 12:34	8° V 27'22	13°50'20
				max. Earth dist.	-1581 Apr 13 j 13:29	8° V 27'25	49.65230 AU
conjunction	-1589 Apr 05 j 14:53	0° V 49'24	-14°-59'-14	retrograde	-1581 Jul 25 j 03:35	9° V 56'45	
minimum elong	-1589 Apr 05 j 15:04	0° V 49'25	14°59'14	opposition	-1581 Oct 15 j 22:33	8° V 57'07	-14°-19'-44
max. Earth dist.	-1589 Apr 06 j 03:02	0° V 50'05	49.95238 AU	min. Earth dist.	-1581 Oct 15 j 21:46	8° V 57'09	47.68337 AU
retrograde	-1589 Jul 17 j 06:00	2° V 18'47		direct	-1580 Jan 05 j 08:02	7° V 57'58	
opposition	-1589 Oct 08 j 11:27	1° V 19'03	-15°-32'-12				
min. Earth dist.	-1589 Oct 08 j 01:03	1° V 19'33	48.01041 AU	conjunction	-1580 Apr 13 j 18:14	9° V 24'45	-13°-40'-40
direct	-1589 Dec 28 j 21:33	0° V 20'03		minimum elong	-1580 Apr 13 j 18:25	9° V 24'46	13°40'40
				max. Earth dist.	-1580 Apr 13 j 17:34	9° V 24'43	49.59404 AU
conjunction	-1588 Apr 05 j 20:26	1° V 46'28	-14°-51'-29	retrograde	-1580 Jul 25 j 09:07	10° V 54'09	
minimum elong	-1588 Apr 05 j 20:37	1° V 46'29	14°51'29	opposition	-1580 Oct 16 j 02:58	9° V 54'28	-14°-9'-38
max. Earth dist.	-1588 Apr 06 j 06:30	1° V 47'03	49.92726 AU	min. Earth dist.	-1580 Oct 16 j 04:27	9° V 54'24	47.62136 AU
retrograde	-1588 Jul 17 j 11:42	3° V 15'50		direct	-1579 Jan 05 j 12:33	8° V 55'16	
opposition	-1588 Oct 08 j 15:46	2° V 16'07	-15°-24'-1				
min. Earth dist.	-1588 Oct 08 j 06:40	2° V 16'33	47.98265 AU	conjunction	-1579 Apr 15 j 00:06	10° V 22'06	-13°-30'-47
direct	-1588 Dec 29 j 02:00	1° V 17'06		minimum elong	-1579 Apr 15 j 00:18	10° V 22'07	13°30'48
				max. Earth dist.	-1579 Apr 14 j 22:52	10° V 22'02	49.53130 AU
conjunction	-1587 Apr 07 j 02:06	2° V 43'33	-14°-43'-28	retrograde	-1579 Jul 26 j 11:35	11° V 51'30	
minimum elong	-1587 Apr 07 j 02:18	2° V 43'33	14°43'29	opposition	-1579 Oct 17 j 07:18	10° V 51'47	-13°-59'-16
max. Earth dist.	-1587 Apr 07 j 12:05	2° V 44'06	49.89922 AU	min. Earth dist.	-1579 Oct 17 j 09:11	10° V 51'41	47.55505 AU
retrograde	-1587 Jul 18 j 18:02	4° V 12'54		direct	-1578 Jan 06 j 19:33	9° V 52'30	
opposition	-1587 Oct 09 j 20:11	3° V 13'12	-15°-15'-35				
min. Earth dist.	-1587 Oct 09 j 12:14	3° V 13'35	47.95186 AU	conjunction	-1578 Apr 16 j 05:41	11° V 19'24	-13°-20'-40
direct	-1587 Dec 30 j 06:02	2° V 14'11		minimum elong	-1578 Apr 16 j 05:53	11° V 19'24	13°20'40
				max. Earth dist.	-1578 Apr 16 j 02:14	11° V 19'12	49.46454 AU
conjunction	-1586 Apr 08 j 07:30	3° V 40'39	-14°-35'-12	retrograde	-1578 Jul 27 j 16:41	12° V 48'50	
minimum elong	-1586 Apr 08 j 07:41	3° V 40'40	14°35'13	opposition	-1578 Oct 18 j 11:45	11° V 49'03	-13°-48'-40
max. Earth dist.	-1586 Apr 08 j 15:56	3° V 41'08	49.86833 AU	min. Earth dist.	-1578 Oct 18 j 15:06	11° V 48'54	47.48512 AU
retrograde	-1586 Jul 20 j 02:42	5° V 10'00		direct	-1577 Jan 08 j 00:36	10° V 49'43	
opposition	-1586 Oct 11 j 00:32	4° V 10'20	-15°-6'-52				
min. Earth dist.	-1586 Oct 10 j 16:48	4° V 10'42	47.91806 AU	conjunction	-1577 Apr 17 j 11:39	12° V 16'40	-13°-10'-19
direct	-1586 Dec 31 j 07:05	3° V 11'19		minimum elong	-1577 Apr 17 j 11:50	12° V 16'41	13°10'19
				max. Earth dist.	-1577 Apr 17 j 07:57	12° V 16'28	49.39430 AU
conjunction	-1585 Apr 09 j 13:10	4° V 37'51	-14°-26'-41	retrograde	-1577 Jul 28 j 21:19	13° V 46'09	
minimum elong	-1585 Apr 09 j 13:23	4° V 37'51	14°26'42	opposition	-1577 Oct 19 j 16:06	12° V 46'20	-13°-37'-48
max. Earth dist.	-1585 Apr 09 j 20:22	4° V 38'15	49.83405 AU	min. Earth dist.	-1577 Oct 19 j 20:39	12° V 46'07	47.41184 AU
retrograde	-1585 Jul 21 j 08:02	6° V 07'12		direct	-1576 Jan 09 j 06:15	11° V 46'56	
opposition	-1585 Oct 12 j 04:54	5° V 07'33	-14°-57'-55				
min. Earth dist.	-1585 Oct 11 j 23:24	5° V 07'49	47.88064 AU	conjunction	-1576 Apr 17 j 17:31	13° V 13'59	-12°-59'-42
direct	-1584 Jan 01 j 10:50	4° V 08'33		minimum elong	-1576 Apr 17 j 17:44	13° V 13'59	12°59'42
				max. Earth dist.	-1576 Apr 17 j 12:14	13° V 13'41	49.32111 AU
conjunction	-1584 Apr 09 j 19:02	5° V 35'08	-14°-17'-56	retrograde	-1576 Jul 29 j 05:23	14° V 43'30	

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Attention, astronomical year style is used: The year -1576 in astronomical counting style is the year 1577 BCE in historical counting style.

opposition	-1576 Oct 19 j 20:32	13°V43'40	-13°-26'-40	max. Earth dist.	-1567 Apr 26 j 08:11	21°V57'02	48.49831 AU
min. Earth dist.	-1576 Oct 20 j 01:16	13°V43'26	47.33576 AU				
direct	-1575 Jan 09 j 08:13	12°V44'12		conjunction	-1567 Apr 27 j 01:31	21°V58'01	-11°-13'-3
				minimum elong	-1567 Apr 27 j 01:43	21°V58'02	11°13'03
conjunction	-1575 Apr 18 j 23:18	14°V11'23	-12°-48'-49	retrograde	-1567 Aug 07 j 06:28	23°V28'35	
minimum elong	-1575 Apr 18 j 23:29	14°V11'23	12°48'50	opposition	-1567 Oct 28 j 15:06	22°V28'28	-11°-35'-1
max. Earth dist.	-1575 Apr 18 j 16:53	14°V11'01	49.24501 AU	min. Earth dist.	-1567 Oct 29 j 07:49	22°V27'39	46.48019 AU
retrograde	-1575 Jul 30 j 12:03	15°V40'59		direct	-1566 Jan 18 j 07:51	21°V28'27	
opposition	-1575 Oct 21 j 01:07	14°V41'07	-13°-15'-16				
min. Earth dist.	-1575 Oct 21 j 07:44	14°V40'48	47.25687 AU	conjunction	-1566 Apr 28 j 08:00	22°V57'05	-11°00'-1
direct	-1574 Jan 10 j 11:17	13°V41'37		minimum elong	-1566 Apr 28 j 08:12	22°V57'06	11°00'02
				max. Earth dist.	-1566 Apr 27 j 12:51	22°V55'59	48.38410 AU
conjunction	-1574 Apr 20 j 05:17	15°V08'56	-12°-37'-42	retrograde	-1566 Aug 08 j 15:01	24°V27'46	
minimum elong	-1574 Apr 20 j 05:30	15°V08'56	12°37'42	opposition	-1566 Oct 29 j 19:56	23°V27'34	-11°-21'-22
max. Earth dist.	-1574 Apr 19 j 22:32	15°V08'32	49.16629 AU	min. Earth dist.	-1566 Oct 30 j 13:16	23°V26'43	46.36257 AU
retrograde	-1574 Jul 31 j 14:48	16°V38'37		direct	-1565 Jan 19 j 10:35	22°V27'25	
opposition	-1574 Oct 22 j 05:33	15°V38'45	-13°-3'-36				
min. Earth dist.	-1574 Oct 22 j 12:16	15°V38'26	47.17510 AU	conjunction	-1565 Apr 29 j 14:39	23°V56'15	-10°-46'-44
direct	-1573 Jan 11 j 18:33	14°V39'13		minimum elong	-1565 Apr 29 j 14:51	23°V56'16	10°46'43
				max. Earth dist.	-1565 Apr 28 j 18:11	23°V55'04	48.26615 AU
conjunction	-1573 Apr 21 j 11:14	16°V06'41	-12°-26'-19	retrograde	-1565 Aug 09 j 23:55	25°V27'04	
minimum elong	-1573 Apr 21 j 11:26	16°V06'42	12°26'19	opposition	-1565 Oct 31 j 01:06	24°V26'46	-11°-7'-28
max. Earth dist.	-1573 Apr 21 j 02:14	16°V06'10	49.08448 AU	min. Earth dist.	-1565 Oct 31 j 20:23	24°V25'50	46.24149 AU
retrograde	-1573 Aug 01 j 19:55	17°V36'30		direct	-1564 Jan 20 j 13:09	23°V26'31	
opposition	-1573 Oct 23 j 10:10	16°V36'38	-12°-51'-40				
min. Earth dist.	-1573 Oct 23 j 18:29	16°V36'14	47.09004 AU	conjunction	-1564 Apr 29 j 21:22	24°V55'33	-10°-33'-11
direct	-1572 Jan 13 j 00:09	15°V37'04		minimum elong	-1564 Apr 29 j 21:33	24°V55'33	10°33'11
				max. Earth dist.	-1564 Apr 29 j 00:24	24°V54'20	48.14508 AU
conjunction	-1572 Apr 21 j 17:30	17°V04'42	-12°-14'-41	retrograde	-1564 Aug 10 j 04:06	26°V26'30	
minimum elong	-1572 Apr 21 j 17:43	17°V04'43	12°14'41	opposition	-1564 Oct 31 j 06:05	25°V26'07	-10°-53'-17
max. Earth dist.	-1572 Apr 21 j 08:11	17°V04'10	48.99891 AU	min. Earth dist.	-1564 Nov 01 j 01:24	25°V25'11	46.11738 AU
retrograde	-1572 Aug 02 j 01:47	18°V34'39		direct	-1563 Jan 20 j 20:20	24°V25'45	
opposition	-1572 Oct 23 j 14:46	17°V34'46	-12°-39'-30	max. Earth dist.	-1563 Apr 30 j 04:59	25°V53'40	48.02112 AU
min. Earth dist.	-1572 Oct 24 j 00:37	17°V34'18	47.00079 AU				
direct	-1571 Jan 13 j 05:00	16°V35'11		conjunction	-1563 May 01 j 04:02	25°V55'00	-10°-19'-23
				minimum elong	-1563 May 01 j 04:14	25°V55'00	10°19'23
conjunction	-1571 Apr 22 j 23:44	18°V02'58	-12°-2'-49	retrograde	-1563 Aug 11 j 08:50	27°V26'08	
minimum elong	-1571 Apr 22 j 23:55	18°V02'59	12°02'48	opposition	-1563 Nov 01 j 11:22	26°V25'40	-10°-38'-49
max. Earth dist.	-1571 Apr 22 j 12:18	18°V02'19	48.90901 AU	min. Earth dist.	-1563 Nov 02 j 08:07	26°V24'39	45.99059 AU
retrograde	-1571 Aug 03 j 10:20	19°V33'03		direct	-1562 Jan 22 j 03:12	25°V25'11	
opposition	-1571 Oct 24 j 19:28	18°V33'10	-12°-27'-4	max. Earth dist.	-1562 May 01 j 11:47	26°V53'19	47.89442 AU
min. Earth dist.	-1571 Oct 25 j 06:03	18°V32'40	46.90693 AU				
direct	-1570 Jan 14 j 07:03	17°V33'31		conjunction	-1562 May 02 j 10:52	26°V54'40	-10°-5'-19
				minimum elong	-1562 May 02 j 11:03	26°V54'40	10°05'19
conjunction	-1570 Apr 24 j 05:59	19°V01'30	-11°-50'-43	retrograde	-1562 Aug 12 j 13:19	28°V25'59	
minimum elong	-1570 Apr 24 j 06:11	19°V01'30	11°50'43	opposition	-1562 Nov 02 j 16:44	27°V25'27	-10°-24'-5
max. Earth dist.	-1570 Apr 23 j 16:46	19°V00'44	48.81402 AU	min. Earth dist.	-1562 Nov 03 j 14:30	27°V24'23	45.86085 AU
retrograde	-1570 Aug 04 j 17:15	20°V31'42		direct	-1561 Jan 23 j 10:36	26°V24'52	
opposition	-1570 Oct 26 j 00:26	19°V31'46	-12°-14'-25				
min. Earth dist.	-1570 Oct 26 j 13:23	19°V31'09	46.80779 AU	conjunction	-1561 May 03 j 17:52	27°V54'36	-9°-50'-58
direct	-1569 Jan 15 j 11:28	18°V32'04		minimum elong	-1561 May 03 j 18:04	27°V54'37	9°50'59
				max. Earth dist.	-1561 May 02 j 16:58	27°V53'09	47.76477 AU
conjunction	-1569 Apr 25 j 12:33	20°V00'13	-11°-38'-23	retrograde	-1561 Aug 13 j 21:41	29°V26'08	
minimum elong	-1569 Apr 25 j 12:44	20°V00'13	11°38'23	opposition	-1561 Nov 03 j 21:59	28°V25'32	-10°-9'-4
max. Earth dist.	-1569 Apr 24 j 22:24	19°V59'24	48.71384 AU	min. Earth dist.	-1561 Nov 04 j 20:22	28°V24'27	45.72796 AU
retrograde	-1569 Aug 05 j 21:14	21°V30'31		direct	-1560 Jan 24 j 14:14	27°V24'51	
opposition	-1569 Oct 27 j 05:10	20°V30'33	-12°-1'-31	max. Earth dist.	-1560 May 02 j 22:47	28°V53'19	47.63145 AU
min. Earth dist.	-1569 Oct 27 j 18:45	20°V29'54	46.70337 AU				
direct	-1568 Jan 16 j 18:39	19°V30'44		conjunction	-1560 May 04 j 01:08	28°V54'51	-9°-36'-23
				minimum elong	-1560 May 04 j 01:19	28°V54'52	9°36'23
conjunction	-1568 Apr 25 j 19:01	20°V59'04	-11°-25'-50	retrograde	-1560 Jun 24 j 15:48	0°R	
minimum elong	-1568 Apr 25 j 19:14	20°V59'05	11°25'51	opposition	-1560 Aug 14 j 06:06	0°R26'37	
max. Earth dist.	-1568 Apr 25 j 02:11	20°V58'06	48.60845 AU				
retrograde	-1568 Aug 06 j 02:41	22°V29'30		conjunction	-1560 Oct 04 j 05:19	30°R	
opposition	-1568 Oct 27 j 10:08	21°V29'27	-11°-48'-23	min. Earth dist.	-1560 Nov 05 j 04:12	29°V24'45	45.59114 AU
min. Earth dist.	-1568 Oct 28 j 01:38	21°V28'42	46.59406 AU	direct	-1559 Jan 24 j 18:22	28°V25'10	
direct	-1567 Jan 17 j 00:39	20°V29'33		max. Earth dist.	-1559 May 04 j 05:18	29°V53'52	47.49397 AU

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Attention, astronomical year style is used: The year -1559 in astronomical counting style is the year 1560 BCE in historical counting style.

conjunction	-1559 May 05 j 08:23	29°Υ55'27	-9°-21'-32	conjunction	-1551 May 13 j 23:18	8°♄11'00	-7°-13'-39
minimum elong	-1559 May 05 j 08:35	29°Υ55'28	9°21'32	minimum elong	-1551 May 13 j 23:27	8°♄11'00	7°13'39
	-1559 May 08 j 14:14	0°♄		retrograde	-1551 Aug 23 j 21:56	9°♄45'07	
retrograde	-1559 Aug 15 j 13:13	1°♄27'27		opposition	-1551 Nov 13 j 10:29	8°♄43'23	-7°-24'-16
opposition	-1559 Nov 05 j 09:14	0°♄26'42	-9°-38'-15	min. Earth dist.	-1551 Nov 14 j 21:02	8°♄41'39	44.16125 AU
min. Earth dist.	-1559 Nov 06 j 10:18	0°♄25'29	45.44977 AU	direct	-1550 Feb 03 j 05:43	7°♄41'12	
	-1559 Nov 28 j 22:21	30°♁Υ		max. Earth dist.	-1550 May 13 j 16:02	9°♄12'02	46.05972 AU
direct	-1558 Jan 26 j 00:46	29°Υ25'48					
	-1558 Mar 24 j 09:29	0°♄		conjunction	-1550 May 15 j 07:47	9°♄14'25	-6°-56'-27
max. Earth dist.	-1558 May 05 j 10:00	0°♄54'39	47.35161 AU	minimum elong	-1550 May 15 j 07:57	9°♄14'25	6°56'27
				retrograde	-1550 Aug 25 j 07:17	10°♄48'53	
conjunction	-1558 May 06 j 15:50	0°♄56'23	-9°-6'-26	opposition	-1550 Nov 14 j 17:16	9°♄47'01	-7°-6'-14
minimum elong	-1558 May 06 j 16:00	0°♄56'24	9°06'26	min. Earth dist.	-1550 Nov 16 j 05:27	9°♄45'13	43.98667 AU
retrograde	-1558 Aug 16 j 20:15	2°♄28'37		direct	-1549 Feb 04 j 10:43	8°♄44'41	
opposition	-1558 Nov 06 j 15:01	1°♄27'47	-9°-22'-27	max. Earth dist.	-1549 May 15 j 00:08	10°♄15'53	45.88528 AU
min. Earth dist.	-1558 Nov 07 j 18:14	1°♄26'27	45.30346 AU				
direct	-1557 Jan 27 j 07:10	0°♄26'45		conjunction	-1549 May 16 j 16:29	10°♄18'19	-6°-38'-58
				minimum elong	-1549 May 16 j 16:38	10°♄18'19	6°38'59
conjunction	-1557 May 07 j 23:36	1°♄57'38	-8°-51'-6	retrograde	-1549 Aug 26 j 17:52	11°♄53'08	
minimum elong	-1557 May 07 j 23:47	1°♄57'38	8°51'07	opposition	-1549 Nov 16 j 00:06	10°♄51'09	-6°-47'-53
max. Earth dist.	-1557 May 06 j 17:02	1°♄55'50	47.20416 AU	min. Earth dist.	-1549 Nov 17 j 12:26	10°♄49'20	43.80953 AU
retrograde	-1557 Aug 18 j 00:49	3°♄30'06		direct	-1548 Feb 05 j 16:37	9°♄48'39	
opposition	-1557 Nov 07 j 20:58	2°♄29'09	-9°-6'-24	max. Earth dist.	-1548 May 15 j 06:44	11°♄20'10	45.70781 AU
min. Earth dist.	-1557 Nov 09 j 01:25	2°♄27'45	45.15192 AU				
direct	-1556 Jan 28 j 15:27	1°♄27'59		conjunction	-1548 May 17 j 01:16	11°♄22'44	-6°-21'-13
max. Earth dist.	-1556 May 06 j 22:29	2°♄57'13	47.05172 AU	minimum elong	-1548 May 17 j 01:25	11°♄22'45	6°21'12
				retrograde	-1548 Aug 27 j 03:58	12°♄57'55	
conjunction	-1556 May 08 j 07:17	2°♄59'09	-8°-35'-31	opposition	-1548 Nov 16 j 07:13	11°♄55'49	-6°-29'-16
minimum elong	-1556 May 08 j 07:27	2°♄59'10	8°35'30	min. Earth dist.	-1548 Nov 17 j 21:34	11°♄53'54	43.62922 AU
retrograde	-1556 Aug 18 j 09:15	4°♄31'52		direct	-1547 Feb 05 j 23:22	10°♄53'10	
opposition	-1556 Nov 08 j 02:51	3°♄30'48	-8°-50'-4	max. Earth dist.	-1547 May 16 j 15:35	12°♄25'06	45.52683 AU
min. Earth dist.	-1556 Nov 09 j 08:17	3°♄29'21	44.99567 AU				
direct	-1555 Jan 28 j 20:12	2°♄29'28		conjunction	-1547 May 18 j 10:27	12°♄27'42	-6°-3'-11
max. Earth dist.	-1555 May 08 j 04:53	3°♄58'55	46.89461 AU	minimum elong	-1547 May 18 j 10:35	12°♄27'42	6°03'11
				retrograde	-1547 Aug 28 j 10:00	14°♄03'16	
conjunction	-1555 May 09 j 15:08	4°♄00'56	-8°-19'-40	opposition	-1547 Nov 17 j 14:31	13°♄01'02	-6°-10'-20
minimum elong	-1555 May 09 j 15:18	4°♄00'57	8°19'41	min. Earth dist.	-1547 Nov 19 j 05:41	12°♄59'04	43.44502 AU
retrograde	-1555 Aug 19 j 18:51	5°♄33'55		direct	-1546 Feb 07 j 09:05	11°♄58'12	
opposition	-1555 Nov 09 j 09:00	4°♄32'43	-8°-33'-29	max. Earth dist.	-1546 May 17 j 22:28	13°♄30'25	45.34171 AU
min. Earth dist.	-1555 Nov 10 j 16:32	4°♄31'09	44.83511 AU				
direct	-1554 Jan 30 j 00:02	3°♄31'13		conjunction	-1546 May 19 j 19:39	13°♄33'11	-5°-44'-53
max. Earth dist.	-1554 May 09 j 11:59	5°♄00'56	46.73363 AU	minimum elong	-1546 May 19 j 19:48	13°♄33'11	5°44'53
					-1546 Aug 01 j 11:24	15°♄	
conjunction	-1554 May 10 j 22:58	5°♄03'00	-8°-3'-34	retrograde	-1546 Aug 29 j 17:53	15°♄09'08	
minimum elong	-1554 May 10 j 23:08	5°♄03'00	8°03'33		-1546 Sep 27 j 05:27	15°♁♄	
retrograde	-1554 Aug 21 j 02:07	6°♄36'13		opposition	-1546 Nov 18 j 22:03	14°♄06'46	-5°-51'-8
opposition	-1554 Nov 10 j 15:08	5°♄34'53	-8°-16'-37	min. Earth dist.	-1546 Nov 20 j 14:30	14°♄04'43	43.25650 AU
min. Earth dist.	-1554 Nov 11 j 22:46	5°♄33'20	44.67086 AU	direct	-1545 Feb 08 j 17:16	13°♄03'43	
direct	-1553 Jan 31 j 06:50	4°♄33'13		max. Earth dist.	-1545 May 19 j 06:49	14°♄36'18	45.15191 AU
max. Earth dist.	-1553 May 10 j 17:48	6°♄03'08	46.56911 AU				
				conjunction	-1545 May 21 j 05:23	14°♄39'09	-5°-26'-19
conjunction	-1553 May 12 j 06:59	6°♄05'20	-7°-47'-12	minimum elong	-1545 May 21 j 05:30	14°♄39'10	5°26'18
minimum elong	-1553 May 12 j 07:09	6°♄05'21	7°47'12		-1545 Jun 04 j 12:25	15°♄	
retrograde	-1553 Aug 22 j 08:43	7°♄38'50		retrograde	-1545 Aug 31 j 03:17	16°♄15'31	
opposition	-1553 Nov 11 j 21:24	6°♄37'22	-7°-59'-28	opposition	-1545 Nov 20 j 05:48	15°♄12'57	-5°-31'-38
min. Earth dist.	-1553 Nov 13 j 06:51	6°♄35'42	44.50353 AU	min. Earth dist.	-1545 Nov 22 j 00:18	15°♄10'48	43.06331 AU
direct	-1552 Feb 01 j 14:43	5°♄35'31			-1545 Nov 30 j 22:34	15°♁♄	
max. Earth dist.	-1552 May 11 j 02:06	7°♄05'46	46.40170 AU	direct	-1544 Feb 09 j 23:56	14°♄09'42	
					-1544 Apr 19 j 09:57	15°♄	
conjunction	-1552 May 12 j 15:15	7°♄07'59	-7°-30'-34	max. Earth dist.	-1544 May 19 j 15:22	15°♄42'39	44.95769 AU
minimum elong	-1552 May 12 j 15:25	7°♄08'00	7°30'33				
retrograde	-1552 Aug 22 j 13:17	8°♄41'47		conjunction	-1544 May 21 j 15:11	15°♄45'35	-5°-7'-29
opposition	-1552 Nov 12 j 03:54	7°♄40'11	-7°-42'-1	minimum elong	-1544 May 21 j 15:19	15°♄45'36	5°07'29
min. Earth dist.	-1552 Nov 13 j 13:58	7°♄38'29	44.33349 AU	retrograde	-1544 Aug 31 j 14:10	17°♄22'20	
direct	-1551 Feb 02 j 00:17	6°♄38'09		opposition	-1544 Nov 20 j 13:41	16°♄19'36	-5°-11'-51
max. Earth dist.	-1551 May 12 j 08:23	8°♄08'40	46.23188 AU	min. Earth dist.	-1544 Nov 22 j 08:30	16°♄17'25	42.86585 AU
				direct	-1543 Feb 10 j 06:16	15°♄16'06	

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Attention, astronomical year style is used: The year -1543 in astronomical counting style is the year 1544 BCE in historical counting style.

max. Earth dist.	-1543 May 20 j 22:57	16°♄49'22	44.75920 AU	minimum elong	-1535 Jun 01 j 16:48	26°♄06'48	2°05'23
				retrograde	-1535 Sep 11 j 11:50	27°♄48'00	
conjunction	-1543 May 23 j 00:58	16°♄52'27	-4°-48'-22	opposition	-1535 Nov 30 j 22:53	26°♄43'29	-2°00'-16
minimum elong	-1543 May 23 j 01:05	16°♄52'27	4°48'22	min. Earth dist.	-1535 Dec 03 j 03:23	26°♄40'42	40.96508 AU
retrograde	-1543 Sep 02 j 00:42	18°♄29'36		direct	-1534 Feb 20 j 18:04	25°♄37'48	
opposition	-1543 Nov 21 j 21:52	17°♄26'39	-4°-51'-47	max. Earth dist.	-1534 May 31 j 17:28	27°♄15'35	42.85339 AU
min. Earth dist.	-1543 Nov 23 j 18:46	17°♄24'21	42.66451 AU	conjunction	-1534 Jun 03 j 05:03	27°♄19'27	-1°-43'-46
direct	-1542 Feb 11 j 14:35	16°♄22'55		minimum elong	-1534 Jun 03 j 05:06	27°♄19'27	1°43'46
max. Earth dist.	-1542 May 22 j 09:00	17°♄56'38	44.55710 AU	retrograde	-1534 Sep 13 j 00:55	29°♄01'15	
conjunction	-1542 May 24 j 11:12	17°♄59'45	-4°-28'-59	opposition	-1534 Dec 02 j 09:09	27°♄56'32	-1°-37'-28
minimum elong	-1542 May 24 j 11:19	17°♄59'45	4°29'00	min. Earth dist.	-1534 Dec 04 j 14:16	27°♄53'43	40.74072 AU
retrograde	-1542 Sep 03 j 08:31	19°♄37'18		direct	-1533 Feb 22 j 02:20	26°♄50'36	
opposition	-1542 Nov 23 j 06:01	18°♄34'09	-4°-31'-25	max. Earth dist.	-1533 Jun 02 j 04:16	28°♄28'56	42.62732 AU
min. Earth dist.	-1542 Nov 25 j 03:29	18°♄31'49	42.45982 AU	conjunction	-1533 Jun 04 j 17:50	28°♄32'56	-1°-21'-51
direct	-1541 Feb 13 j 01:53	17°♄30'09		minimum elong	-1533 Jun 04 j 17:52	28°♄32'56	1°21'51
max. Earth dist.	-1541 May 23 j 17:07	19°♄04'14	44.35193 AU		-1533 Aug 09 j 22:40	0°♄	
conjunction	-1541 May 25 j 21:30	19°♄07'29	-4°-9'-20	retrograde	-1533 Sep 14 j 14:56	0°♄15'22	
minimum elong	-1541 May 25 j 21:37	19°♄07'30	4°09'19		-1533 Oct 20 j 13:28	30°♄	
retrograde	-1541 Sep 04 j 18:30	20°♄45'29		opposition	-1533 Dec 03 j 20:04	29°♄10'25	-1°-14'-22
opposition	-1541 Nov 24 j 14:29	19°♄42'07	-4°-10'-44	min. Earth dist.	-1533 Dec 06 j 03:24	29°♄07'28	40.51233 AU
min. Earth dist.	-1541 Nov 26 j 12:59	19°♄39'43	42.25247 AU	direct	-1532 Feb 23 j 11:29	28°♄04'12	
direct	-1540 Feb 14 j 10:38	18°♄37'51		max. Earth dist.	-1532 Jun 02 j 16:45	29°♄43'10	42.39731 AU
max. Earth dist.	-1540 May 24 j 03:10	20°♄12'24	44.14412 AU	conjunction	-1532 Jun 05 j 06:49	29°♄47'14	0°-59'-41
conjunction	-1540 May 26 j 08:05	20°♄15'43	-3°-49'-23	minimum elong	-1532 Jun 05 j 06:50	29°♄47'14	0°59'40
minimum elong	-1540 May 26 j 08:10	20°♄15'43	3°49'23		-1532 Jun 13 j 10:14	0°♄	
retrograde	-1540 Sep 05 j 02:55	21°♄54'10		retrograde	-1532 Sep 15 j 05:20	1°♄30'17	
opposition	-1540 Nov 24 j 23:15	20°♄50'36	-3°-49'-46	opposition	-1532 Dec 04 j 07:04	0°♄25'05	0°-50'-58
min. Earth dist.	-1540 Nov 26 j 23:02	20°♄48'07	42.04280 AU	min. Earth dist.	-1532 Dec 06 j 14:45	0°♄22'06	40.28012 AU
direct	-1539 Feb 14 j 19:46	19°♄46'05			-1532 Dec 24 j 07:57	30°♄	
max. Earth dist.	-1539 May 25 j 13:07	21°♄21'07	43.93440 AU	direct	-1531 Feb 23 j 23:19	29°♄18'33	
conjunction	-1539 May 27 j 18:48	21°♄24'30	-3°-29'-9		-1531 Apr 25 j 12:42	0°♄	
minimum elong	-1539 May 27 j 18:53	21°♄24'30	3°29'08	max. Earth dist.	-1531 Jun 04 j 03:27	0°♄58'04	42.16360 AU
retrograde	-1539 Sep 06 j 14:56	23°♄03'27		conjunction	-1531 Jun 06 j 20:02	1°♄02'18	0°-37'-14
opposition	-1539 Nov 26 j 08:08	21°♄59'40	-3°-28'-28	minimum elong	-1531 Jun 06 j 20:03	1°♄02'18	0°37'14
min. Earth dist.	-1539 Nov 28 j 07:51	21°♄57'11	41.83144 AU	retrograde	-1531 Sep 16 j 19:48	2°♄45'59	
direct	-1538 Feb 16 j 02:58	20°♄54'55		opposition	-1531 Dec 05 j 18:23	1°♄40'31	0°-27'-17
max. Earth dist.	-1538 May 26 j 22:25	22°♄30'25	43.72286 AU	min. Earth dist.	-1531 Dec 08 j 03:51	1°♄37'26	40.04465 AU
conjunction	-1538 May 29 j 05:46	22°♄33'55	-3°-8'-38	direct	-1530 Feb 25 j 10:48	0°♄33'39	
minimum elong	-1538 May 29 j 05:51	22°♄33'55	3°08'38	max. Earth dist.	-1530 Jun 05 j 16:50	2°♄13'51	41.92668 AU
retrograde	-1538 Sep 08 j 04:31	24°♄13'23		conjunction	-1530 Jun 08 j 09:43	2°♄18'08	0°-14'-32
opposition	-1538 Nov 27 j 17:28	23°♄09'25	-3°-6'-53	minimum elong	-1530 Jun 08 j 09:43	2°♄18'08	0°14'31
min. Earth dist.	-1538 Nov 29 j 18:57	23°♄06'50	41.61835 AU	behind sun begin	-1530 Jun 08 j 07:07	2°♄17'59	
direct	-1537 Feb 17 j 09:58	22°♄04'26		behind sun end	-1530 Jun 08 j 12:20	2°♄18'18	
max. Earth dist.	-1537 May 28 j 09:53	23°♄40'33	43.50952 AU	retrograde	-1530 Sep 18 j 06:10	4°♄02'28	
conjunction	-1537 May 30 j 17:12	23°♄44'03	-2°-47'-50	opposition	-1530 Dec 07 j 06:06	2°♄56'42	0°-3'-18
minimum elong	-1537 May 30 j 17:17	23°♄44'04	2°47'50	min. Earth dist.	-1530 Dec 09 j 16:26	2°♄53'33	39.80623 AU
retrograde	-1537 Sep 09 j 14:42	25°♄24'04		asc. node	-1529 Jan 26 j 11:19	2°♄01'23	
opposition	-1537 Nov 29 j 02:51	24°♄19'56	-2°-44'-59	direct	-1529 Feb 27 j 00:44	1°♄49'30	
min. Earth dist.	-1537 Dec 01 j 04:29	24°♄17'20	41.40326 AU	max. Earth dist.	-1529 Jun 07 j 05:09	3°♄30'18	41.68718 AU
direct	-1536 Feb 18 j 20:58	23°♄14'43		conjunction	-1529 Jun 09 j 23:36	3°♄34'44	0°08'31
max. Earth dist.	-1536 May 28 j 19:23	24°♄51'20	43.29393 AU	minimum elong	-1529 Jun 09 j 23:36	3°♄34'44	0°08'32
conjunction	-1536 May 31 j 04:49	24°♄55'00	-2°-26'-46	behind sun begin	-1529 Jun 09 j 17:56	3°♄34'23	
minimum elong	-1536 May 31 j 04:52	24°♄55'00	2°26'45	behind sun end	-1529 Jun 10 j 05:16	3°♄35'06	
retrograde	-1536 Sep 10 j 01:55	26°♄35'36		retrograde	-1529 Sep 19 j 18:33	5°♄19'43	
opposition	-1536 Nov 29 j 12:41	25°♄31'16	-2°-22'-46	opposition	-1529 Dec 08 j 17:58	4°♄13'41	0°20'58
min. Earth dist.	-1536 Dec 01 j 15:44	25°♄28'35	41.18580 AU	min. Earth dist.	-1529 Dec 11 j 04:52	4°♄10'29	39.56571 AU
direct	-1535 Feb 19 j 07:14	24°♄25'50		direct	-1528 Feb 28 j 12:54	3°♄06'07	
max. Earth dist.	-1535 May 30 j 06:51	26°♄03'04	43.07539 AU	max. Earth dist.	-1528 Jun 07 j 18:28	4°♄47'36	41.44561 AU
conjunction	-1535 Jun 01 j 16:44	26°♄06'48	-2°-5'-24	conjunction	-1528 Jun 10 j 13:56	4°♄52'08	0°31'43
				minimum elong	-1528 Jun 10 j 13:55	4°♄52'07	0°31'45

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Attention, astronomical year style is used: The year -1528 in astronomical counting style is the year 1529 BCE in historical counting style.

retrograde	-1528 Sep 20 j 08:17	6°II37'48		direct	-1519 Mar 11 j 13:30	15°II20'01	
opposition	-1528 Dec 09 j 06:28	5°II31'27	0°45'31	max. Earth dist.	-1519 Jun 20 j 12:42	17°II08'53	39.21142 AU
min. Earth dist.	-1528 Dec 11 j 18:55	5°II28'09	39.32361 AU				
direct	-1527 Feb 28 j 22:56	4°II23'33		conjunction	-1519 Jun 23 j 17:06	17°II14'22	4°11'33
max. Earth dist.	-1527 Jun 09 j 08:45	6°II05'46	41.20283 AU	minimum elong	-1519 Jun 23 j 16:58	17°II14'22	4°11'35
				retrograde	-1519 Oct 03 j 16:51	19°II07'33	
conjunction	-1527 Jun 12 j 04:22	6°II10'20	0°55'13	opposition	-1519 Dec 21 j 16:50	17°II58'28	4°38'19
minimum elong	-1527 Jun 12 j 04:20	6°II10'20	0°55'14	min. Earth dist.	-1519 Dec 24 j 12:39	17°II54'35	37.08814 AU
retrograde	-1527 Sep 21 j 23:35	7°II56'44		direct	-1518 Mar 13 j 06:05	16°II47'16	
opposition	-1527 Dec 10 j 19:10	6°II50'06	1°10'22	max. Earth dist.	-1518 Jun 22 j 07:34	18°II37'09	38.95348 AU
min. Earth dist.	-1527 Dec 13 j 07:14	6°II46'48	39.08055 AU				
direct	-1526 Mar 02 j 10:52	5°II41'50		conjunction	-1518 Jun 25 j 11:59	18°II42'41	4°37'01
max. Earth dist.	-1526 Jun 10 j 21:58	7°II24'45	40.95907 AU	minimum elong	-1518 Jun 25 j 11:49	18°II42'40	4°37'03
				retrograde	-1518 Oct 05 j 10:35	20°II36'48	
conjunction	-1526 Jun 13 j 19:20	7°II29'28	1°18'57	opposition	-1518 Dec 23 j 09:39	19°II27'21	5°05'20
minimum elong	-1526 Jun 13 j 19:18	7°II29'27	1°18'59	min. Earth dist.	-1518 Dec 26 j 06:20	19°II23'23	36.83081 AU
retrograde	-1526 Sep 23 j 16:45	9°II16'36		direct	-1517 Mar 15 j 00:23	18°II15'44	
opposition	-1526 Dec 12 j 08:15	8°II09'40	1°35'28	max. Earth dist.	-1517 Jun 24 j 01:32	20°II06'33	38.69450 AU
min. Earth dist.	-1526 Dec 14 j 21:50	8°II06'17	38.83683 AU				
direct	-1525 Mar 03 j 23:05	7°II01'04		conjunction	-1517 Jun 27 j 07:10	20°II12'13	5°02'38
max. Earth dist.	-1525 Jun 12 j 13:52	8°II44'51	40.71457 AU	minimum elong	-1517 Jun 27 j 07:00	20°II12'12	5°02'39
				retrograde	-1517 Oct 07 j 05:21	22°II07'18	
conjunction	-1525 Jun 15 j 10:53	8°II49'35	1°42'57	opposition	-1517 Dec 25 j 02:57	20°II57'29	5°32'32
minimum elong	-1525 Jun 15 j 10:50	8°II49'34	1°42'57	min. Earth dist.	-1517 Dec 27 j 23:48	20°II53'29	36.57296 AU
retrograde	-1525 Sep 25 j 08:07	10°II37'30		direct	-1516 Mar 15 j 17:15	19°II45'25	
opposition	-1525 Dec 13 j 21:49	9°II30'17	2°00'51	max. Earth dist.	-1516 Jun 24 j 20:30	21°II37'14	38.43500 AU
min. Earth dist.	-1525 Dec 16 j 11:39	9°II26'52	38.59228 AU				
direct	-1524 Mar 04 j 14:40	8°II21'21		conjunction	-1516 Jun 28 j 02:47	21°II43'00	5°28'23
max. Earth dist.	-1524 Jun 13 j 03:51	10°II05'53	40.46911 AU	minimum elong	-1516 Jun 28 j 02:36	21°II43'00	5°28'25
				retrograde	-1516 Oct 07 j 23:35	23°II39'06	
conjunction	-1524 Jun 16 j 02:34	10°II10'46	2°07'10	opposition	-1516 Dec 25 j 20:59	22°II28'54	5°59'52
minimum elong	-1524 Jun 16 j 02:30	10°II10'46	2°07'12	min. Earth dist.	-1516 Dec 28 j 19:03	22°II24'49	36.31515 AU
retrograde	-1524 Sep 26 j 00:50	11°II59'31		direct	-1515 Mar 17 j 09:22	21°II16'24	
opposition	-1524 Dec 14 j 11:44	10°II52'01	2°26'30	max. Earth dist.	-1515 Jun 26 j 16:57	23°II09'20	38.17597 AU
min. Earth dist.	-1524 Dec 17 j 02:23	10°II48'32	38.34674 AU				
direct	-1523 Mar 06 j 04:04	9°II42'45		conjunction	-1515 Jun 29 j 22:58	23°II15'07	5°54'15
max. Earth dist.	-1523 Jun 14 j 19:41	11°II28'09	40.22208 AU	minimum elong	-1515 Jun 29 j 22:46	23°II15'07	5°54'16
				retrograde	-1515 Oct 09 j 20:32	25°II12'15	
conjunction	-1523 Jun 17 j 18:58	11°II33'07	2°31'37	opposition	-1515 Dec 27 j 15:19	24°II01'41	6°27'20
minimum elong	-1523 Jun 17 j 18:53	11°II33'06	2°31'38	min. Earth dist.	-1515 Dec 30 j 12:42	23°II57'36	36.05820 AU
retrograde	-1523 Sep 27 j 14:42	13°II22'42		direct	-1514 Mar 19 j 01:45	22°II48'44	
opposition	-1523 Dec 16 j 02:11	12°II14'56	2°52'23	max. Earth dist.	-1514 Jun 28 j 12:25	24°II42'42	37.91783 AU
min. Earth dist.	-1523 Dec 18 j 18:17	12°II11'20	38.09946 AU				
direct	-1522 Mar 07 j 18:30	11°II05'18		conjunction	-1514 Jul 01 j 19:44	24°II48'38	6°20'12
max. Earth dist.	-1522 Jun 16 j 11:33	12°II51'34	39.97311 AU	minimum elong	-1514 Jul 01 j 19:30	24°II48'37	6°20'13
				retrograde	-1514 Oct 11 j 18:59	26°II46'51	
conjunction	-1522 Jun 19 j 11:46	12°II56'38	2°56'18	opposition	-1514 Dec 29 j 10:27	25°II35'54	6°54'54
minimum elong	-1522 Jun 19 j 11:40	12°II56'38	2°56'20	min. Earth dist.	-1513 Jan 01 j 09:02	25°II31'44	35.80253 AU
retrograde	-1522 Sep 29 j 07:58	14°II47'06		direct	-1513 Mar 20 j 18:27	24°II22'32	
opposition	-1522 Dec 17 j 17:04	13°II39'01	3°18'32	max. Earth dist.	-1513 Jun 30 j 10:43	26°II17'44	37.66097 AU
min. Earth dist.	-1522 Dec 20 j 09:22	13°II35'24	37.85004 AU				
direct	-1521 Mar 09 j 07:55	12°II29'02		conjunction	-1513 Jul 03 j 17:12	26°II23'40	6°46'12
max. Earth dist.	-1521 Jun 18 j 03:01	14°II16'07	39.72154 AU	minimum elong	-1513 Jul 03 j 16:58	26°II23'39	6°46'14
				retrograde	-1513 Oct 13 j 17:41	28°II22'59	
conjunction	-1521 Jun 21 j 05:09	14°II21'21	3°21'11	opposition	-1513 Dec 31 j 06:08	27°II11'41	7°22'32
minimum elong	-1521 Jun 21 j 05:03	14°II21'21	3°21'12	min. Earth dist.	-1512 Jan 03 j 04:23	27°II07'31	35.54820 AU
retrograde	-1521 Oct 01 j 02:31	16°II12'43		direct	-1512 Mar 21 j 15:39	25°II57'54	
opposition	-1521 Dec 19 j 08:32	15°II04'19	3°44'54	max. Earth dist.	-1512 Jul 01 j 07:21	27°II54'13	37.40543 AU
min. Earth dist.	-1521 Dec 22 j 02:55	15°II00'33	37.59818 AU				
direct	-1520 Mar 09 j 20:21	13°II53'56		conjunction	-1512 Jul 04 j 15:08	28°II00'18	7°12'15
max. Earth dist.	-1520 Jun 18 j 20:45	15°II41'59	39.46758 AU	minimum elong	-1512 Jul 04 j 14:53	28°II00'17	7°12'17
					-1512 Oct 07 j 09:38	0°☾	
conjunction	-1520 Jun 21 j 23:02	15°II47'16	3°46'17	retrograde	-1512 Oct 14 j 18:40	0°☾00'46	
minimum elong	-1520 Jun 21 j 22:55	15°II47'15	3°46'19		-1512 Oct 21 j 23:30	30°RII	
retrograde	-1520 Oct 01 j 20:43	17°II39'31		opposition	-1511 Jan 01 j 02:27	28°II49'07	7°50'13
opposition	-1520 Dec 20 j 00:28	16°II30'48	4°11'30	min. Earth dist.	-1511 Jan 04 j 01:08	28°II44'53	35.29527 AU
min. Earth dist.	-1520 Dec 22 j 18:55	16°II27'01	37.34406 AU	direct	-1511 Mar 23 j 11:51	27°II34'55	

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Attention, astronomical year style is used: The year -1511 in astronomical counting style is the year 1512 BCE in historical counting style.

max. Earth dist.	-1511 Jul	03 j 06:23	29°II32'31	37.15075 AU	max. Earth dist.	-1503 Jul	17 j 18:27	13°☾40'34	35.13232 AU
conjunction	-1511 Jul	06 j 13:47	29°II38'37	7°38'19	conjunction	-1503 Jul	21 j 04:04	13°☾47'22	11°03'48
minimum elong	-1511 Jul	06 j 13:32	29°II38'36	7°38'21	minimum elong	-1503 Jul	21 j 03:43	13°☾47'20	11°03'50
	-1511 Jul	18 j 04:14	0°☾		retrograde	-1503 Oct	31 j 12:13	15°☾59'02	
retrograde	-1511 Oct	16 j 16:38	1°☾40'16		opposition	-1502 Jan	17 j 01:55	14°☾43'41	11°56'33
opposition	-1510 Jan	02 j 23:34	0°☾28'16	8°17'56	min. Earth dist.	-1502 Jan	20 j 02:42	14°☾39'03	33.05093 AU
min. Earth dist.	-1510 Jan	05 j 23:04	0°☾23'57	35.04301 AU	direct	-1502 Apr	08 j 04:37	13°☾25'11	
	-1510 Jan	23 j 00:44	30°RII		max. Earth dist.	-1502 Jul	19 j 23:45	15°☾34'34	34.88886 AU
direct	-1510 Mar	25 j 08:51	29°II13'39		conjunction	-1502 Jul	23 j 09:04	15°☾41'25	11°28'26
	-1510 May	23 j 22:16	0°☾		minimum elong	-1502 Jul	23 j 08:41	15°☾41'23	11°28'27
max. Earth dist.	-1510 Jul	05 j 05:03	1°☾12'26	36.89657 AU	retrograde	-1502 Nov	02 j 16:57	17°☾54'26	
conjunction	-1510 Jul	08 j 13:09	1°☾18'40	8°04'23	opposition	-1501 Jan	19 j 05:42	16°☾38'40	12°22'44
minimum elong	-1510 Jul	08 j 12:52	1°☾18'39	8°04'24	min. Earth dist.	-1501 Jan	22 j 07:04	16°☾33'58	32.81264 AU
retrograde	-1510 Oct	18 j 15:43	3°☾21'30		direct	-1501 Apr	10 j 05:30	15°☾19'42	
opposition	-1509 Jan	04 j 21:08	2°☾09'09	8°45'39	max. Earth dist.	-1501 Jul	22 j 06:40	17°☾30'37	34.64974 AU
min. Earth dist.	-1509 Jan	07 j 20:33	2°☾04'49	34.79119 AU	conjunction	-1501 Jul	25 j 14:47	17°☾37'26	11°52'39
direct	-1509 Mar	27 j 05:44	0°☾54'05		minimum elong	-1501 Jul	25 j 14:25	17°☾37'24	11°52'40
max. Earth dist.	-1509 Jul	07 j 04:19	2°☾54'06	36.64235 AU	retrograde	-1501 Nov	04 j 22:59	19°☾51'51	
conjunction	-1509 Jul	10 j 13:21	3°☾00'28	8°30'25	opposition	-1500 Jan	21 j 10:22	18°☾35'41	12°48'28
minimum elong	-1509 Jul	10 j 13:04	3°☾00'26	8°30'26	min. Earth dist.	-1500 Jan	24 j 10:11	18°☾31'03	32.57880 AU
retrograde	-1509 Oct	20 j 15:21	5°☾04'31		direct	-1500 Apr	11 j 09:34	17°☾16'16	
opposition	-1508 Jan	06 j 19:45	3°☾51'46	9°13'21	max. Earth dist.	-1500 Jul	23 j 12:46	19°☾28'38	34.41503 AU
min. Earth dist.	-1508 Jan	09 j 20:39	3°☾47'19	34.53943 AU	conjunction	-1500 Jul	26 j 21:07	19°☾35'32	12°16'23
direct	-1508 Mar	28 j 01:17	2°☾36'15		minimum elong	-1500 Jul	26 j 20:43	19°☾35'30	12°16'24
max. Earth dist.	-1508 Jul	08 j 05:15	4°☾37'34	36.38825 AU	retrograde	-1500 Nov	06 j 06:55	21°☾51'23	
conjunction	-1508 Jul	11 j 14:01	4°☾43'58	8°56'22	opposition	-1499 Jan	22 j 15:55	20°☾34'49	13°13'39
minimum elong	-1508 Jul	11 j 13:43	4°☾43'57	8°56'23	min. Earth dist.	-1499 Jan	25 j 16:05	20°☾30'09	32.34950 AU
retrograde	-1508 Oct	21 j 16:31	6°☾49'15		direct	-1499 Apr	13 j 11:46	19°☾14'59	
opposition	-1507 Jan	07 j 18:56	5°☾36'06	9°40'58	max. Earth dist.	-1499 Jul	25 j 21:54	21°☾29'00	34.18472 AU
min. Earth dist.	-1507 Jan	10 j 19:14	5°☾31'40	34.28788 AU	conjunction	-1499 Jul	29 j 04:27	21°☾35'49	12°39'34
direct	-1507 Mar	29 j 23:13	4°☾20'07		minimum elong	-1499 Jul	29 j 04:04	21°☾35'47	12°39'36
max. Earth dist.	-1507 Jul	10 j 05:15	6°☾22'37	36.13434 AU	retrograde	-1499 Nov	08 j 15:07	23°☾53'06	
conjunction	-1507 Jul	13 j 15:28	6°☾29'12	9°22'14	opposition	-1498 Jan	24 j 22:13	22°☾36'10	13°38'17
minimum elong	-1507 Jul	13 j 15:09	6°☾29'10	9°22'16	min. Earth dist.	-1498 Jan	27 j 21:23	22°☾31'33	32.12436 AU
retrograde	-1507 Oct	23 j 19:35	8°☾35'44		direct	-1498 Apr	15 j 17:19	21°☾15'54	
opposition	-1506 Jan	09 j 18:46	7°☾22'09	10°08'30	max. Earth dist.	-1498 Jul	28 j 05:32	23°☾31'24	33.95845 AU
min. Earth dist.	-1506 Jan	12 j 20:22	7°☾17'36	34.03694 AU	conjunction	-1498 Jul	31 j 12:36	23°☾38'19	13°02'10
direct	-1506 Mar	31 j 21:25	6°☾05'40		minimum elong	-1498 Jul	31 j 12:12	23°☾38'17	13°02'11
max. Earth dist.	-1506 Jul	12 j 08:19	8°☾09'33	35.88114 AU	retrograde	-1498 Nov	11 j 02:16	25°☾57'04	
conjunction	-1506 Jul	15 j 17:44	8°☾16'08	9°47'58	opposition	-1497 Jan	27 j 05:33	24°☾39'45	14°02'15
minimum elong	-1506 Jul	15 j 17:23	8°☾16'06	9°47'59	min. Earth dist.	-1497 Jan	30 j 04:40	24°☾35'07	31.90323 AU
retrograde	-1506 Oct	25 j 22:53	10°☾23'55		direct	-1497 Apr	17 j 22:34	23°☾19'04	
opposition	-1505 Jan	11 j 19:26	9°☾09'54	10°35'53	max. Earth dist.	-1497 Jul	30 j 16:10	25°☾36'13	33.73591 AU
min. Earth dist.	-1505 Jan	14 j 20:51	9°☾05'20	33.78695 AU	conjunction	-1497 Aug	02 j 21:40	25°☾43'04	13°24'07
direct	-1505 Apr	02 j 23:11	7°☾52'55		minimum elong	-1497 Aug	02 j 21:17	25°☾43'02	13°24'09
max. Earth dist.	-1505 Jul	14 j 09:56	9°☾58'03	35.62920 AU	retrograde	-1497 Nov	13 j 12:54	28°☾03'15	
conjunction	-1505 Jul	17 j 20:29	10°☾04'47	10°13'30	opposition	-1496 Jan	29 j 13:56	26°☾45'34	14°25'32
minimum elong	-1505 Jul	17 j 20:08	10°☾04'45	10°13'32	min. Earth dist.	-1496 Feb	01 j 12:47	26°☾40'54	31.68571 AU
retrograde	-1505 Oct	28 j 03:34	12°☾13'51		direct	-1496 Apr	19 j 07:40	25°☾24'27	
opposition	-1504 Jan	13 j 20:46	10°☾59'22	11°03'03	max. Earth dist.	-1496 Aug	01 j 01:49	27°☾43'04	33.51724 AU
min. Earth dist.	-1504 Jan	16 j 22:22	10°☾54'46	33.53881 AU	conjunction	-1496 Aug	04 j 07:27	27°☾50'00	13°45'22
direct	-1504 Apr	03 j 23:45	9°☾41'53		minimum elong	-1496 Aug	04 j 07:02	27°☾49'58	13°45'23
max. Earth dist.	-1504 Jul	15 j 14:19	11°☾48'26	35.37926 AU		-1496 Oct	19 j 10:09	0°♁	
conjunction	-1504 Jul	19 j 00:04	11°☾55'11	10°38'48	retrograde	-1496 Nov	15 j 01:31	0°♁11'37	
minimum elong	-1504 Jul	18 j 23:42	11°☾55'09	10°38'50		-1496 Dec	11 j 22:50	30°R☾	
retrograde	-1504 Oct	29 j 06:39	14°☾05'32		opposition	-1495 Jan	30 j 23:04	28°☾53'32	14°48'02
opposition	-1503 Jan	14 j 23:01	12°☾50'37	11°29'58	min. Earth dist.	-1495 Feb	02 j 20:51	28°☾48'55	31.47214 AU
min. Earth dist.	-1503 Jan	18 j 00:48	12°☾45'58	33.29316 AU	direct	-1495 Apr	21 j 16:16	27°☾32'00	
direct	-1503 Apr	06 j 02:08	11°☾32'37		max. Earth dist.	-1495 Aug	03 j 13:34	29°☾52'10	33.30245 AU

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Attention, astronomical year style is used: The year -1495 in astronomical counting style is the year 1496 BCE in historical counting style.

conjunction	-1495 Aug 06 j 18:07	29° 5 59'05	14°05'50	direct	-1487 May 09 j 15:12	15° 0 43'41	
minimum elong	-1495 Aug 06 j 17:44	29° 5 59'03	14°05'52	max. Earth dist.	-1487 Aug 22 j 17:29	18° 0 15'39	31.80397 AU
	-1495 Aug 07 j 04:21	0° 0					
retrograde	-1495 Nov 17 j 12:00	2° 0 22'06		conjunction	-1487 Aug 25 j 08:59	18° 0 21'47	16°11'22
opposition	-1494 Feb 02 j 09:16	1° 0 03'37	15°09'41	minimum elong	-1487 Aug 25 j 08:44	18° 0 21'46	16°11'24
min. Earth dist.	-1494 Feb 05 j 07:16	0° 0 58'58	31.26253 AU	retrograde	-1487 Dec 06 j 11:12	20° 0 55'10	
	-1494 Mar 19 j 22:50	30° R		opposition	-1486 Feb 21 j 01:03	19° 0 33'42	17°20'52
direct	-1494 Apr 24 j 01:06	29° 5 41'39		min. Earth dist.	-1486 Feb 23 j 10:35	19° 0 29'43	29.81371 AU
	-1494 May 28 j 10:03	0° 0		direct	-1486 May 12 j 07:02	18° 0 08'41	
max. Earth dist.	-1494 Aug 06 j 01:53	2° 0 03'20	33.09209 AU	max. Earth dist.	-1486 Aug 25 j 13:24	20° 0 42'05	31.65370 AU
conjunction	-1494 Aug 09 j 05:32	2° 0 10'14	14°25'27	conjunction	-1486 Aug 28 j 02:00	20° 0 47'59	16°21'00
minimum elong	-1494 Aug 09 j 05:08	2° 0 10'12	14°25'27	minimum elong	-1486 Aug 28 j 01:46	20° 0 47'58	16°21'00
retrograde	-1494 Nov 20 j 01:11	4° 0 34'38		retrograde	-1486 Dec 09 j 05:12	23° 0 22'30	
opposition	-1493 Feb 04 j 20:06	3° 0 15'45	15°30'24	opposition	-1485 Feb 23 j 18:53	22° 0 00'46	17°30'36
min. Earth dist.	-1493 Feb 07 j 16:28	3° 0 11'10	31.05750 AU	min. Earth dist.	-1485 Feb 26 j 03:14	21° 0 56'52	29.66938 AU
direct	-1493 Apr 26 j 11:37	1° 0 53'19		direct	-1485 May 14 j 23:44	20° 0 35'32	
max. Earth dist.	-1493 Aug 08 j 14:50	4° 0 16'30	32.88657 AU	max. Earth dist.	-1485 Aug 28 j 08:50	23° 0 10'11	31.51223 AU
conjunction	-1493 Aug 11 j 17:46	4° 0 23'23	14°44'07	conjunction	-1485 Aug 30 j 19:30	23° 0 15'56	16°29'01
minimum elong	-1493 Aug 11 j 17:24	4° 0 23'21	14°44'09	minimum elong	-1485 Aug 30 j 19:18	23° 0 15'55	16°29'02
retrograde	-1493 Nov 22 j 13:44	6° 0 49'09		retrograde	-1485 Dec 12 j 01:57	25° 0 51'31	
opposition	-1492 Feb 07 j 08:05	5° 0 29'51	15°50'05	opposition	-1484 Feb 26 j 13:25	24° 0 29'33	17°38'37
min. Earth dist.	-1492 Feb 10 j 04:33	5° 0 25'14	30.85774 AU	min. Earth dist.	-1484 Feb 28 j 18:51	24° 0 25'49	29.53350 AU
direct	-1492 Apr 27 j 20:14	4° 0 06'59		direct	-1484 May 16 j 18:20	23° 0 04'05	
max. Earth dist.	-1492 Aug 10 j 05:41	6° 0 31'42	32.68692 AU	max. Earth dist.	-1484 Aug 30 j 05:21	25° 0 39'59	31.37923 AU
conjunction	-1492 Aug 13 j 06:30	6° 0 38'28	15°01'46	conjunction	-1484 Sep 01 j 13:33	25° 0 45'31	16°35'25
minimum elong	-1492 Aug 13 j 06:07	6° 0 38'26	15°01'47	minimum elong	-1484 Sep 01 j 13:22	25° 0 45'30	16°35'25
retrograde	-1492 Nov 24 j 02:12	9° 0 05'34		retrograde	-1484 Dec 13 j 20:33	28° 0 22'07	
opposition	-1491 Feb 08 j 20:47	7° 0 45'52	16°08'38	opposition	-1483 Feb 28 j 08:49	26° 0 59'54	17°44'50
min. Earth dist.	-1491 Feb 11 j 15:02	7° 0 41'22	30.66403 AU	min. Earth dist.	-1483 Mar 02 j 13:17	26° 0 56'14	29.40583 AU
direct	-1491 Apr 30 j 09:16	6° 0 22'33		direct	-1483 May 19 j 11:45	25° 0 34'14	
max. Earth dist.	-1491 Aug 12 j 19:51	8° 0 48'40	32.49383 AU	max. Earth dist.	-1483 Sep 02 j 02:35	28° 0 11'16	31.25489 AU
conjunction	-1491 Aug 15 j 20:01	8° 0 55'26	15°18'18	conjunction	-1483 Sep 04 j 08:12	28° 0 16'35	16°40'07
minimum elong	-1491 Aug 15 j 19:41	8° 0 55'24	15°18'19	minimum elong	-1483 Sep 04 j 08:05	28° 0 16'35	16°40'07
retrograde	-1491 Nov 26 j 16:18	11° 0 23'51		retrograde	-1483 Oct 21 j 12:30	0° 0	
opposition	-1490 Feb 11 j 10:14	10° 0 03'43	16°25'57	retrograde	-1483 Dec 16 j 16:34	0° 0 54'05	
min. Earth dist.	-1490 Feb 14 j 03:52	9° 0 59'15	30.47736 AU		-1482 Feb 13 j 23:40	30° R	
direct	-1490 May 02 j 19:54	8° 0 40'00		opposition	-1482 Mar 03 j 04:35	29° 0 31'39	17°49'13
max. Earth dist.	-1490 Aug 15 j 13:08	11° 0 07'43	32.30835 AU	min. Earth dist.	-1482 Mar 05 j 05:58	29° 0 28'12	29.28645 AU
				direct	-1482 May 22 j 07:51	28° 0 05'48	
conjunction	-1490 Aug 18 j 10:21	11° 0 14'15	15°33'37		-1482 Aug 17 j 08:29	0° 0	
minimum elong	-1490 Aug 18 j 10:00	11° 0 14'13	15°33'37	max. Earth dist.	-1482 Sep 04 j 23:40	0° 0 43'50	31.13916 AU
retrograde	-1490 Nov 29 j 06:55	13° 0 43'57					
opposition	-1489 Feb 14 j 00:45	12° 0 23'26	16°41'56	conjunction	-1482 Sep 07 j 03:22	0° 0 48'59	16°43'04
min. Earth dist.	-1489 Feb 16 j 16:09	12° 0 19'06	30.29841 AU	minimum elong	-1482 Sep 07 j 03:15	0° 0 48'59	16°43'05
direct	-1489 May 05 j 09:30	10° 0 59'20		retrograde	-1482 Dec 19 j 12:54	3° 0 27'18	
max. Earth dist.	-1489 Aug 18 j 04:59	13° 0 28'25	32.13122 AU	opposition	-1481 Mar 06 j 01:15	2° 0 04'39	17°51'41
				min. Earth dist.	-1481 Mar 08 j 01:16	2° 0 01'17	29.17565 AU
conjunction	-1489 Aug 21 j 01:08	13° 0 34'54	15°47'37	direct	-1481 May 25 j 01:56	0° 0 38'38	
minimum elong	-1489 Aug 21 j 00:50	13° 0 34'52	15°47'38	max. Earth dist.	-1481 Sep 07 j 22:28	3° 0 17'41	31.03259 AU
	-1489 Sep 29 j 11:13	15° 0					
retrograde	-1489 Dec 01 j 23:53	16° 0 05'52		conjunction	-1481 Sep 09 j 22:46	3° 0 22'31	16°44'14
	-1488 Feb 07 j 12:36	15° R		minimum elong	-1481 Sep 09 j 22:43	3° 0 22'31	16°44'14
opposition	-1488 Feb 16 j 16:04	14° 0 45'00	16°56'28	retrograde	-1481 Dec 22 j 08:31	6° 0 01'34	
min. Earth dist.	-1488 Feb 19 j 05:47	14° 0 40'46	30.12807 AU	opposition	-1480 Mar 07 j 22:22	4° 0 38'43	17°52'13
direct	-1488 May 06 j 23:00	13° 0 20'33		min. Earth dist.	-1480 Mar 09 j 19:08	4° 0 35'33	29.07375 AU
	-1488 Jul 28 j 03:41	15° 0		direct	-1480 May 26 j 23:05	3° 0 12'33	
max. Earth dist.	-1488 Aug 19 j 23:58	15° 0 51'11	31.96303 AU	max. Earth dist.	-1480 Sep 09 j 20:04	5° 0 52'20	30.93553 AU
conjunction	-1488 Aug 22 j 16:50	15° 0 57'25	16°00'14	conjunction	-1480 Sep 11 j 18:28	5° 0 57'01	16°43'33
minimum elong	-1488 Aug 22 j 16:32	15° 0 57'23	16°00'15	minimum elong	-1480 Sep 11 j 18:26	5° 0 57'00	16°43'34
retrograde	-1488 Dec 03 j 16:20	18° 0 29'36		retrograde	-1480 Dec 24 j 04:31	8° 0 36'40	
opposition	-1487 Feb 18 j 08:11	17° 0 08'25	17°09'28	opposition	-1479 Mar 10 j 19:48	7° 0 13'37	17°50'43
min. Earth dist.	-1487 Feb 20 j 20:09	17° 0 04'17	29.96647 AU	min. Earth dist.	-1479 Mar 12 j 14:32	7° 0 10'37	28.98152 AU

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Attention, astronomical year style is used: The year -1479 in astronomical counting style is the year 1480 BCE in historical counting style.

direct	-1479 May 29 j 18:51	5° <u>♃</u> 47'19		minimum elong	-1471 Oct 05 j 07:15	29° <u>♃</u> 25'50	15°10'38
max. Earth dist.	-1479 Sep 12 j 20:11	8° <u>♃</u> 27'59	30.84878 AU	max. Earth dist.	-1471 Oct 04 j 15:57	29° <u>♃</u> 24'17	30.57918 AU
					-1471 Oct 19 j 09:43	0° <u>♄</u>	
conjunction	-1479 Sep 14 j 14:26	8° <u>♃</u> 32'16	16°40'59	retrograde	-1470 Jan 17 j 01:12	2° <u>♄</u> 06'46	
minimum elong	-1479 Sep 14 j 14:28	8° <u>♃</u> 32'16	16°40'59	opposition	-1470 Apr 04 j 07:50	0° <u>♄</u> 43'23	16°03'23
retrograde	-1479 Dec 27 j 00:09	11° <u>♃</u> 12'27		min. Earth dist.	-1470 Apr 04 j 21:47	0° <u>♄</u> 42'24	28.65983 AU
opposition	-1478 Mar 13 j 17:43	9° <u>♃</u> 49'13	17°47'10		-1470 May 01 j 09:25	30° <u>♃</u>	
min. Earth dist.	-1478 Mar 15 j 09:24	9° <u>♃</u> 46'25	28.89943 AU	direct	-1470 Jun 23 j 04:17	29° <u>♃</u> 17'41	
direct	-1478 Jun 01 j 16:30	8° <u>♃</u> 22'49			-1470 Aug 12 j 12:32	0° <u>♄</u>	
max. Earth dist.	-1478 Sep 15 j 18:21	11° <u>♃</u> 04'03	30.77295 AU				
				conjunction	-1470 Oct 08 j 02:25	2° <u>♄</u> 01'52	14°51'03
conjunction	-1478 Sep 17 j 10:23	11° <u>♃</u> 08'07	16°36'29	minimum elong	-1470 Oct 08 j 02:45	2° <u>♄</u> 01'54	14°51'04
minimum elong	-1478 Sep 17 j 10:25	11° <u>♃</u> 08'07	16°36'29	max. Earth dist.	-1470 Oct 07 j 14:55	2° <u>♄</u> 00'42	30.59684 AU
retrograde	-1478 Dec 29 j 21:33	13° <u>♃</u> 48'44		retrograde	-1469 Jan 19 j 21:22	4° <u>♄</u> 42'27	
opposition	-1477 Mar 16 j 15:56	12° <u>♃</u> 25'21	17°41'31	opposition	-1469 Apr 07 j 06:32	3° <u>♄</u> 19'09	15°41'32
min. Earth dist.	-1477 Mar 18 j 04:25	12° <u>♃</u> 22'47	28.82850 AU	min. Earth dist.	-1469 Apr 07 j 16:34	3° <u>♄</u> 18'27	28.67927 AU
direct	-1477 Jun 04 j 12:48	10° <u>♃</u> 58'53		direct	-1469 Jun 26 j 04:39	1° <u>♄</u> 53'39	
max. Earth dist.	-1477 Sep 18 j 19:12	13° <u>♃</u> 40'50	30.70893 AU				
				conjunction	-1469 Oct 10 j 21:36	4° <u>♄</u> 37'10	14°29'49
conjunction	-1477 Sep 20 j 06:36	13° <u>♃</u> 44'26	16°30'01	minimum elong	-1469 Oct 10 j 21:57	4° <u>♄</u> 37'12	14°29'48
minimum elong	-1477 Sep 20 j 06:43	13° <u>♃</u> 44'26	16°30'01	max. Earth dist.	-1469 Oct 10 j 12:50	4° <u>♄</u> 36'16	30.62473 AU
retrograde	-1476 Jan 01 j 17:12	16° <u>♃</u> 25'23		retrograde	-1468 Jan 22 j 16:25	7° <u>♄</u> 17'16	
opposition	-1476 Mar 18 j 14:33	15° <u>♃</u> 01'54	17°33'44	opposition	-1468 Apr 09 j 05:02	5° <u>♄</u> 54'04	15°17'57
min. Earth dist.	-1476 Mar 20 j 00:00	14° <u>♃</u> 59'32	28.76924 AU	min. Earth dist.	-1468 Apr 09 j 12:25	5° <u>♄</u> 53'33	28.70890 AU
direct	-1476 Jun 06 j 11:54	13° <u>♃</u> 35'25		direct	-1468 Jun 28 j 02:01	4° <u>♄</u> 28'46	
max. Earth dist.	-1476 Sep 20 j 17:45	16° <u>♃</u> 17'45	30.65728 AU				
				conjunction	-1468 Oct 12 j 16:21	7° <u>♄</u> 11'30	14°06'59
conjunction	-1476 Sep 22 j 02:38	16° <u>♃</u> 21'06	16°21'35	minimum elong	-1468 Oct 12 j 16:43	7° <u>♄</u> 11'33	14°07'00
minimum elong	-1476 Sep 22 j 02:45	16° <u>♃</u> 21'07	16°21'36	max. Earth dist.	-1468 Oct 12 j 11:36	7° <u>♄</u> 11'02	30.66297 AU
retrograde	-1475 Jan 03 j 15:19	19° <u>♃</u> 02'18		retrograde	-1467 Jan 24 j 10:44	9° <u>♄</u> 51'02	
opposition	-1475 Mar 21 j 13:10	17° <u>♃</u> 38'45	17°23'49	opposition	-1467 Apr 12 j 03:04	8° <u>♄</u> 27'56	14°52'42
min. Earth dist.	-1475 Mar 22 j 18:35	17° <u>♃</u> 36'41	28.72215 AU	min. Earth dist.	-1467 Apr 12 j 07:03	8° <u>♄</u> 27'39	28.74851 AU
direct	-1475 Jun 09 j 09:56	16° <u>♃</u> 12'19		direct	-1467 Jul 01 j 01:32	7° <u>♄</u> 02'50	
conjunction	-1475 Sep 24 j 22:57	18° <u>♃</u> 58'02	16°11'11	conjunction	-1467 Oct 15 j 10:31	9° <u>♄</u> 44'42	13°42'40
minimum elong	-1475 Sep 24 j 23:08	18° <u>♃</u> 58'03	16°11'11	minimum elong	-1467 Oct 15 j 10:54	9° <u>♄</u> 44'45	13°42'38
max. Earth dist.	-1475 Sep 23 j 18:33	18° <u>♃</u> 55'09	30.61802 AU	max. Earth dist.	-1467 Oct 15 j 08:10	9° <u>♄</u> 44'28	30.71144 AU
retrograde	-1474 Jan 06 j 11:24	21° <u>♃</u> 39'24		retrograde	-1466 Jan 27 j 05:19	12° <u>♄</u> 23'35	
opposition	-1474 Mar 24 j 11:59	20° <u>♃</u> 15'50	17°11'47	opposition	-1466 Apr 15 j 00:38	11° <u>♄</u> 00'34	14°25'51
min. Earth dist.	-1474 Mar 25 j 14:55	20° <u>♃</u> 13'56	28.68701 AU	min. Earth dist.	-1466 Apr 15 j 01:13	11° <u>♄</u> 00'32	28.79857 AU
direct	-1474 Jun 12 j 07:34	18° <u>♃</u> 49'29		direct	-1466 Jul 03 j 22:19	9° <u>♄</u> 35'42	
conjunction	-1474 Sep 27 j 19:05	21° <u>♃</u> 35'08	15°58'51	conjunction	-1466 Oct 18 j 04:17	12° <u>♄</u> 16'37	13°16'54
minimum elong	-1474 Sep 27 j 19:18	21° <u>♃</u> 35'09	15°58'51	minimum elong	-1466 Oct 18 j 04:40	12° <u>♄</u> 16'39	13°16'54
max. Earth dist.	-1474 Sep 26 j 17:33	21° <u>♃</u> 32'32	30.59108 AU	max. Earth dist.	-1466 Oct 18 j 06:24	12° <u>♄</u> 16'49	30.77064 AU
retrograde	-1473 Jan 09 j 10:16	24° <u>♃</u> 16'33		retrograde	-1465 Jan 29 j 21:01	14° <u>♄</u> 54'44	
opposition	-1473 Mar 27 j 10:55	22° <u>♃</u> 53'00	16°57'40	opposition	-1465 Apr 17 j 21:54	13° <u>♄</u> 31'52	13°57'30
min. Earth dist.	-1473 Mar 28 j 09:35	22° <u>♃</u> 51'25	28.66369 AU	min. Earth dist.	-1465 Apr 17 j 19:23	13° <u>♄</u> 32'02	28.85938 AU
direct	-1473 Jun 15 j 07:43	21° <u>♃</u> 26'47		direct	-1465 Jul 06 j 20:48	12° <u>♄</u> 07'15	
conjunction	-1473 Sep 30 j 15:09	24° <u>♃</u> 12'15	15°44'36	conjunction	-1465 Oct 20 j 21:09	14° <u>♄</u> 47'07	12°49'47
minimum elong	-1473 Sep 30 j 15:24	24° <u>♃</u> 12'16	15°44'36	minimum elong	-1465 Oct 20 j 21:33	14° <u>♄</u> 47'09	12°49'45
max. Earth dist.	-1473 Sep 29 j 17:45	24° <u>♃</u> 10'04	30.57587 AU	max. Earth dist.	-1465 Oct 21 j 01:47	14° <u>♄</u> 47'35	30.84098 AU
retrograde	-1472 Jan 12 j 06:31	26° <u>♃</u> 53'37		retrograde	-1464 Feb 01 j 14:39	17° <u>♄</u> 24'27	
opposition	-1472 Mar 29 j 10:05	25° <u>♃</u> 30'07	16°41'31	opposition	-1464 Apr 19 j 18:32	16° <u>♄</u> 01'43	13°27'43
min. Earth dist.	-1472 Mar 30 j 06:30	25° <u>♃</u> 28'41	28.65166 AU	min. Earth dist.	-1464 Apr 19 j 11:47	16° <u>♄</u> 02'11	28.93160 AU
direct	-1472 Jun 17 j 06:11	24° <u>♃</u> 04'03		direct	-1464 Jul 08 j 16:39	14° <u>♄</u> 37'23	
conjunction	-1472 Oct 02 j 11:06	26° <u>♃</u> 49'12	15°28'31	conjunction	-1464 Oct 22 j 13:44	17° <u>♄</u> 16'11	12°21'23
minimum elong	-1472 Oct 02 j 11:22	26° <u>♃</u> 49'13	15°28'31	minimum elong	-1464 Oct 22 j 14:09	17° <u>♄</u> 16'13	12°21'23
max. Earth dist.	-1472 Oct 01 j 16:50	26° <u>♃</u> 47'20	30.57213 AU	max. Earth dist.	-1464 Oct 22 j 22:58	17° <u>♄</u> 17'06	30.92279 AU
retrograde	-1471 Jan 14 j 04:14	29° <u>♃</u> 30'25		retrograde	-1463 Feb 03 j 05:47	19° <u>♄</u> 52'40	
opposition	-1471 Apr 01 j 08:52	28° <u>♃</u> 06'58	16°23'24	opposition	-1463 Apr 22 j 14:32	18° <u>♄</u> 30'08	12°56'37
min. Earth dist.	-1471 Apr 02 j 01:05	28° <u>♃</u> 05'50	28.65051 AU	min. Earth dist.	-1463 Apr 22 j 05:10	18° <u>♄</u> 30'46	29.01525 AU
direct	-1471 Jun 20 j 05:49	26° <u>♃</u> 41'05		direct	-1463 Jul 11 j 12:15	17° <u>♄</u> 06'08	
conjunction	-1471 Oct 05 j 06:57	29° <u>♃</u> 25'48	15°10'39	conjunction	-1463 Oct 25 j 05:34	19° <u>♄</u> 43'47	11°51'49

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Attention, astronomical year style is used: The year -1463 in astronomical counting style is the year 1464 BCE in historical counting style.

minimum elong	-1463 Oct 25 j 05:58	19°♄43'50	11°51'47	minimum elong	-1455 Nov 12 j 13:34	8°♁29'00	7°25'35
max. Earth dist.	-1463 Oct 25 j 17:22	19°♄44'57	31.01618 AU	max. Earth dist.	-1455 Nov 14 j 00:46	8°♁32'18	32.10825 AU
retrograde	-1462 Feb 05 j 22:50	22°♄19'24		retrograde	-1454 Feb 24 j 06:42	10°♁56'07	
opposition	-1462 Apr 25 j 09:58	20°♄57'05	12°24'17	min. Earth dist.	-1454 May 13 j 10:36	9°♁38'27	30.20841 AU
min. Earth dist.	-1462 Apr 24 j 20:02	20°♄58'02	29.11035 AU	opposition	-1454 May 14 j 22:21	9°♁36'07	7°36'12
direct	-1462 Jul 14 j 08:24	19°♄33'27		direct	-1454 Aug 03 j 03:07	8°♁15'41	
conjunction	-1462 Oct 27 j 20:47	22°♄09'57	11°21'10	conjunction	-1454 Nov 14 j 22:52	10°♁41'39	6°50'09
minimum elong	-1462 Oct 27 j 21:11	22°♄09'59	11°21'10	minimum elong	-1454 Nov 14 j 23:09	10°♁41'40	6°50'09
max. Earth dist.	-1462 Oct 28 j 12:50	22°♄11'31	31.12069 AU	max. Earth dist.	-1454 Nov 16 j 11:52	10°♁45'05	32.27901 AU
retrograde	-1461 Feb 08 j 13:55	24°♄44'39		retrograde	-1453 Feb 26 j 15:49	13°♁07'36	
opposition	-1461 Apr 28 j 05:01	23°♄22'35	11°50'52	min. Earth dist.	-1453 May 15 j 20:16	11°♁50'24	30.38004 AU
min. Earth dist.	-1461 Apr 27 j 12:42	23°♄23'42	29.21639 AU	opposition	-1453 May 17 j 11:33	11°♁47'51	6°58'09
direct	-1461 Jul 17 j 03:09	21°♄59'20		direct	-1453 Aug 05 j 16:13	10°♁27'47	
conjunction	-1461 Oct 30 j 11:22	24°♄34'39	10°49'33	conjunction	-1453 Nov 17 j 07:53	12°♁52'19	6°14'31
minimum elong	-1461 Oct 30 j 11:45	24°♄34'41	10°49'32	minimum elong	-1453 Nov 17 j 08:08	12°♁52'21	6°14'30
max. Earth dist.	-1461 Oct 31 j 06:09	24°♄36'29	31.23591 AU	max. Earth dist.	-1453 Nov 19 j 00:24	12°♁56'03	32.45684 AU
retrograde	-1460 Feb 11 j 05:42	27°♄08'22		retrograde	-1452 Jan 27 j 07:33	15°♁	
opposition	-1460 Apr 29 j 23:09	25°♄46'37	11°16'28	retrograde	-1452 Feb 28 j 23:14	15°♁17'04	
min. Earth dist.	-1460 Apr 29 j 02:36	25°♄48'00	29.33277 AU	min. Earth dist.	-1452 Apr 02 j 18:47	15°♁	
direct	-1460 Jul 18 j 21:54	24°♄23'46		opposition	-1452 May 17 j 07:04	14°♁00'13	30.55918 AU
conjunction	-1460 Nov 01 j 01:17	26°♄57'50	10°17'04	direct	-1452 May 18 j 23:56	13°♁57'35	6°19'56
minimum elong	-1460 Nov 01 j 01:41	26°♄57'53	10°17'04	direct	-1452 Aug 07 j 04:08	12°♁37'54	
max. Earth dist.	-1460 Nov 01 j 23:21	26°♄59'58	31.36087 AU	conjunction	-1452 Nov 18 j 16:03	15°♁01'01	5°38'45
retrograde	-1459 Feb 12 j 20:28	29°♄30'34		minimum elong	-1452 Nov 18 j 16:17	15°♁01'02	5°38'44
opposition	-1459 May 02 j 16:51	28°♄09'06	10°41'13	retrograde	-1452 Nov 20 j 04:59	15°♁	
min. Earth dist.	-1459 May 01 j 18:09	28°♄10'37	29.45873 AU	max. Earth dist.	-1452 Nov 18 j 10:25	15°♁04'53	32.64220 AU
direct	-1459 Jul 21 j 15:47	26°♄46'41		retrograde	-1451 Mar 02 j 07:51	17°♁24'33	
conjunction	-1459 Nov 03 j 14:38	29°♄19'29	9°43'52	min. Earth dist.	-1451 May 19 j 14:52	16°♁08'13	30.74603 AU
minimum elong	-1459 Nov 03 j 14:59	29°♄19'31	9°43'50	opposition	-1451 May 21 j 11:26	16°♁05'22	5°41'40
max. Earth dist.	-1459 Nov 04 j 15:40	29°♄21'53	31.49496 AU	retrograde	-1451 Jul 10 j 04:19	15°♁	
retrograde	-1459 Nov 21 j 08:52	0°♁		direct	-1451 Aug 09 j 16:06	14°♁46'03	
retrograde	-1458 Feb 15 j 11:08	1°♁51'10		retrograde	-1451 Sep 08 j 10:38	15°♁	
min. Earth dist.	-1458 May 04 j 07:37	0°♁31'45	29.59338 AU	conjunction	-1451 Nov 20 j 23:27	17°♁07'47	5°02'56
opposition	-1458 May 05 j 09:43	0°♁30'00	10°05'15	minimum elong	-1451 Nov 20 j 23:39	17°♁07'48	5°02'54
retrograde	-1458 May 24 j 14:24	30°♁		max. Earth dist.	-1451 Nov 22 j 20:41	17°♁11'52	32.83495 AU
direct	-1458 Jul 24 j 11:10	29°♄08'00		retrograde	-1450 Mar 04 j 15:47	19°♁30'08	
retrograde	-1458 Sep 19 j 17:12	0°♁		min. Earth dist.	-1450 May 21 j 23:56	18°♁14'12	30.94062 AU
conjunction	-1458 Nov 06 j 03:17	1°♁39'30	9°10'01	opposition	-1450 May 23 j 22:19	18°♁11'15	5°03'24
minimum elong	-1458 Nov 06 j 03:39	1°♁39'32	9°10'00	direct	-1450 Aug 12 j 03:11	16°♁52'22	
max. Earth dist.	-1458 Nov 07 j 06:39	1°♁42'07	31.63725 AU	conjunction	-1450 Nov 23 j 06:16	19°♁12'42	4°27'08
retrograde	-1457 Feb 17 j 23:50	4°♁10'07		minimum elong	-1450 Nov 23 j 06:27	19°♁12'43	4°27'07
min. Earth dist.	-1457 May 06 j 21:30	2°♁51'09	29.73628 AU	max. Earth dist.	-1450 Nov 25 j 05:57	19°♁16'59	33.03522 AU
opposition	-1457 May 08 j 02:06	2°♁49'15	9°28'39	retrograde	-1449 Mar 06 j 23:28	21°♁33'53	
direct	-1457 Jul 27 j 02:52	1°♁27'40		min. Earth dist.	-1449 May 24 j 07:00	20°♁18'28	31.14256 AU
conjunction	-1457 Nov 08 j 15:18	3°♁57'49	8°35'37	opposition	-1449 May 26 j 08:21	20°♁15'20	4°25'13
minimum elong	-1457 Nov 08 j 15:38	3°♁57'51	8°35'36	direct	-1449 Aug 14 j 14:32	18°♁56'52	
max. Earth dist.	-1457 Nov 09 j 21:59	4°♁00'44	31.78729 AU	conjunction	-1449 Nov 25 j 12:13	21°♁15'52	3°51'26
retrograde	-1456 Feb 20 j 10:33	6°♁27'18		minimum elong	-1449 Nov 25 j 12:22	21°♁15'53	3°51'24
min. Earth dist.	-1456 May 08 j 10:33	5°♁08'48	29.88656 AU	max. Earth dist.	-1449 Nov 27 j 13:52	21°♁20'17	33.24227 AU
opposition	-1456 May 09 j 17:41	5°♁06'44	8°51'33	retrograde	-1448 Mar 08 j 06:05	23°♁35'54	
direct	-1456 Jul 28 j 20:44	3°♁45'33		min. Earth dist.	-1448 May 25 j 14:09	22°♁20'56	31.35136 AU
conjunction	-1456 Nov 10 j 02:36	6°♁14'21	8°00'47	opposition	-1448 May 27 j 17:44	22°♁17'41	3°47'12
minimum elong	-1456 Nov 10 j 02:55	6°♁14'22	8°00'47	direct	-1448 Aug 15 j 23:18	20°♁59'40	
max. Earth dist.	-1456 Nov 11 j 10:43	6°♁17'22	31.94434 AU	conjunction	-1448 Nov 26 j 17:45	23°♁17'21	3°15'53
retrograde	-1455 Feb 21 j 22:23	8°♁42'40		minimum elong	-1448 Nov 26 j 17:53	23°♁17'21	3°15'53
min. Earth dist.	-1455 May 10 j 22:14	7°♁24'37	30.04404 AU	max. Earth dist.	-1448 Nov 28 j 22:16	23°♁21'59	33.45553 AU
opposition	-1455 May 12 j 08:17	7°♁22'23	8°14'02	retrograde	-1447 Mar 10 j 10:17	25°♁36'13	
direct	-1455 Jul 31 j 11:29	6°♁01'35		min. Earth dist.	-1447 May 27 j 20:51	24°♁21'43	31.56603 AU
conjunction	-1455 Nov 12 j 13:16	8°♁28'59	7°25'37	opposition	-1447 May 30 j 02:09	24°♁18'22	3°09'24
				direct	-1447 Aug 18 j 10:23	23°♁00'48	

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Attention, astronomical year style is used: The year -1447 in astronomical counting style is the year 1448 BCE in historical counting style.

conjunction	-1447 Nov 28 j 22:29	25° \mathbb{M} 17'11	2°40'34	opposition	-1439 Jun 14 j 21:43	9° \mathbb{Z} 25'55	-1°-38'-30
minimum elong	-1447 Nov 28 j 22:35	25° \mathbb{M} 17'11	2°40'32	direct	-1439 Sep 03 j 07:57	8° \mathbb{Z} 11'30	
max. Earth dist.	-1447 Dec 01 j 03:56	25° \mathbb{M} 21'52	33.67409 AU				
retrograde	-1446 Mar 12 j 16:00	27° \mathbb{M} 34'55		conjunction	-1439 Dec 13 j 14:40	10° \mathbb{Z} 18'02	-1°-48'-44
min. Earth dist.	-1446 May 30 j 02:10	26° \mathbb{M} 20'56	31.78601 AU	minimum elong	-1439 Dec 13 j 14:36	10° \mathbb{Z} 18'02	1°48'47
opposition	-1446 Jun 01 j 10:05	26° \mathbb{M} 17'26	2°31'54	max. Earth dist.	-1439 Dec 16 j 08:55	10° \mathbb{Z} 23'29	35.54407 AU
direct	-1446 Aug 20 j 18:23	25° \mathbb{M} 00'18		retrograde	-1438 Mar 27 j 05:15	12° \mathbb{Z} 27'06	
				min. Earth dist.	-1438 Jun 14 j 05:15	11° \mathbb{Z} 16'11	33.66803 AU
conjunction	-1446 Dec 01 j 02:39	27° \mathbb{M} 15'24	2°05'31	opposition	-1438 Jun 17 j 00:07	11° \mathbb{Z} 12'11	-2°-12'-7
minimum elong	-1446 Dec 01 j 02:44	27° \mathbb{M} 15'25	2°05'30	direct	-1438 Sep 05 j 12:57	9° \mathbb{Z} 58'09	
max. Earth dist.	-1446 Dec 03 j 10:55	27° \mathbb{M} 20'18	33.89719 AU				
retrograde	-1445 Mar 14 j 18:29	29° \mathbb{M} 32'03		conjunction	-1438 Dec 15 j 13:47	12° \mathbb{Z} 03'34	-2°-20'-13
min. Earth dist.	-1445 Jun 01 j 08:47	28° \mathbb{M} 18'26	32.01029 AU	minimum elong	-1438 Dec 15 j 13:42	12° \mathbb{Z} 03'33	2°20'15
opposition	-1445 Jun 03 j 17:25	28° \mathbb{M} 14'55	1°54'45	max. Earth dist.	-1438 Dec 18 j 08:27	12° \mathbb{Z} 09'00	35.79172 AU
direct	-1445 Aug 23 j 02:48	26° \mathbb{M} 58'14		retrograde	-1437 Mar 29 j 04:07	14° \mathbb{Z} 11'37	
				min. Earth dist.	-1437 Jun 16 j 04:30	13° \mathbb{Z} 01'09	33.91809 AU
conjunction	-1445 Dec 03 j 06:15	29° \mathbb{M} 12'03	1°30'47	opposition	-1437 Jun 19 j 01:50	12° \mathbb{Z} 57'02	-2°-45'-7
minimum elong	-1445 Dec 03 j 06:18	29° \mathbb{M} 12'03	1°30'45	direct	-1437 Sep 07 j 15:05	11° \mathbb{Z} 43'23	
max. Earth dist.	-1445 Dec 05 j 15:06	29° \mathbb{M} 16'57	34.12407 AU				
	-1445 Dec 26 j 22:30	0° \mathbb{Z}		conjunction	-1437 Dec 17 j 12:35	13° \mathbb{Z} 47'42	-2°-51'-8
retrograde	-1444 Mar 15 j 22:08	1° \mathbb{Z} 27'35		minimum elong	-1437 Dec 17 j 12:30	13° \mathbb{Z} 47'41	2°51'11
min. Earth dist.	-1444 Jun 02 j 12:34	0° \mathbb{Z} 14'27	32.23823 AU	max. Earth dist.	-1437 Dec 20 j 09:26	13° \mathbb{Z} 53'16	36.04246 AU
opposition	-1444 Jun 04 j 23:45	0° \mathbb{Z} 10'48	1°17'59	retrograde	-1436 Mar 30 j 02:12	15° \mathbb{Z} 54'47	
	-1444 Jun 12 j 07:37	30° \mathbb{R} \mathbb{M}		min. Earth dist.	-1436 Jun 17 j 05:23	14° \mathbb{Z} 44'39	34.17122 AU
direct	-1444 Aug 24 j 08:51	28° \mathbb{M} 54'31		opposition	-1436 Jun 20 j 02:54	14° \mathbb{Z} 40'32	-3°-17'-28
	-1444 Oct 31 j 02:53	0° \mathbb{Z}		direct	-1436 Sep 08 j 15:57	13° \mathbb{Z} 27'16	
conjunction	-1444 Dec 04 j 09:18	1° \mathbb{Z} 07'06	0°56'25	conjunction	-1436 Dec 18 j 10:52	15° \mathbb{Z} 30'31	-3°-21'-29
minimum elong	-1444 Dec 04 j 09:20	1° \mathbb{Z} 07'06	0°56'24	minimum elong	-1436 Dec 18 j 10:45	15° \mathbb{Z} 30'31	3°21'30
max. Earth dist.	-1444 Dec 06 j 20:15	1° \mathbb{Z} 12'09	34.35393 AU	max. Earth dist.	-1436 Dec 21 j 08:28	15° \mathbb{Z} 36'07	36.29591 AU
retrograde	-1443 Mar 18 j 01:02	3° \mathbb{Z} 21'32		retrograde	-1435 Apr 01 j 01:05	17° \mathbb{Z} 36'40	
min. Earth dist.	-1443 Jun 04 j 18:01	2° \mathbb{Z} 08'45	32.46914 AU	min. Earth dist.	-1435 Jun 19 j 03:53	16° \mathbb{Z} 26'57	34.42672 AU
opposition	-1443 Jun 07 j 05:39	2° \mathbb{Z} 05'06	0°41'40	opposition	-1435 Jun 22 j 03:22	16° \mathbb{Z} 22'45	-3°-49'-10
direct	-1443 Aug 26 j 13:35	0° \mathbb{Z} 49'13		direct	-1435 Sep 10 j 16:11	15° \mathbb{Z} 09'52	
conjunction	-1443 Dec 06 j 11:37	3° \mathbb{Z} 00'32	0°22'27	conjunction	-1435 Dec 20 j 08:27	17° \mathbb{Z} 12'06	-3°-51'-13
minimum elong	-1443 Dec 06 j 11:38	3° \mathbb{Z} 00'32	0°22'26	minimum elong	-1435 Dec 20 j 08:19	17° \mathbb{Z} 12'05	3°51'16
max. Earth dist.	-1443 Dec 08 j 23:31	3° \mathbb{Z} 05'37	34.58645 AU	max. Earth dist.	-1435 Dec 23 j 07:06	17° \mathbb{Z} 17'44	36.55115 AU
retrograde	-1442 Mar 20 j 03:37	5° \mathbb{Z} 13'52		retrograde	-1434 Apr 03 j 01:35	19° \mathbb{Z} 17'19	
min. Earth dist.	-1442 Jun 06 j 20:54	4° \mathbb{Z} 01'31	32.70266 AU	min. Earth dist.	-1434 Jun 21 j 03:28	18° \mathbb{Z} 07'56	34.68401 AU
opposition	-1442 Jun 09 j 10:43	3° \mathbb{Z} 57'45	0°05'49	opposition	-1434 Jun 24 j 03:31	18° \mathbb{Z} 03'44	-4°-20'-13
desc. node	-1442 Aug 08 j 13:30	2° \mathbb{Z} 48'13		direct	-1434 Sep 12 j 13:57	16° \mathbb{Z} 51'15	
direct	-1442 Aug 28 j 18:58	2° \mathbb{Z} 42'15					
conjunction	-1442 Dec 08 j 13:18	4° \mathbb{Z} 52'21	0°-11'-7	conjunction	-1434 Dec 22 j 05:52	18° \mathbb{Z} 52'28	-4°-20'-21
minimum elong	-1442 Dec 08 j 13:17	4° \mathbb{Z} 52'21	0°11'09	minimum elong	-1434 Dec 22 j 05:44	18° \mathbb{Z} 52'27	4°20'22
behind sun begin	-1442 Dec 08 j 08:30	4° \mathbb{Z} 51'58		max. Earth dist.	-1434 Dec 25 j 05:52	18° \mathbb{Z} 58'09	36.80771 AU
behind sun end	-1442 Dec 08 j 18:05	4° \mathbb{Z} 52'44		retrograde	-1433 Apr 04 j 22:56	20° \mathbb{Z} 56'46	
max. Earth dist.	-1442 Dec 11 j 02:25	4° \mathbb{Z} 57'29	34.82138 AU	min. Earth dist.	-1433 Jun 23 j 02:20	19° \mathbb{Z} 47'44	34.94216 AU
retrograde	-1441 Mar 22 j 06:33	7° \mathbb{Z} 04'35		opposition	-1433 Jun 26 j 02:57	19° \mathbb{Z} 43'31	-4°-50'-35
min. Earth dist.	-1441 Jun 09 j 00:25	5° \mathbb{Z} 52'34	32.93911 AU	direct	-1433 Sep 14 j 13:53	18° \mathbb{Z} 31'24	
opposition	-1441 Jun 11 j 15:12	5° \mathbb{Z} 48'46	0°-29'-30				
direct	-1441 Aug 30 j 23:31	4° \mathbb{Z} 33'38		conjunction	-1433 Dec 24 j 02:42	20° \mathbb{Z} 31'37	-4°-48'-52
				minimum elong	-1433 Dec 24 j 02:32	20° \mathbb{Z} 31'37	4°48'55
				max. Earth dist.	-1433 Dec 27 j 02:29	20° \mathbb{Z} 37'16	37.06460 AU
conjunction	-1441 Dec 10 j 14:23	6° \mathbb{Z} 42'30	0°-44'-9	retrograde	-1432 Apr 05 j 20:44	22° \mathbb{Z} 35'01	
minimum elong	-1441 Dec 10 j 14:21	6° \mathbb{Z} 42'30	0°44'12	min. Earth dist.	-1432 Jun 24 j 00:15	21° \mathbb{Z} 26'21	35.20054 AU
max. Earth dist.	-1441 Dec 13 j 05:28	6° \mathbb{Z} 47'46	35.05915 AU	opposition	-1432 Jun 27 j 01:57	21° \mathbb{Z} 22'06	-5°-20'-17
retrograde	-1440 Mar 23 j 07:30	8° \mathbb{Z} 53'39		direct	-1432 Sep 15 j 12:52	20° \mathbb{Z} 10'20	
min. Earth dist.	-1440 Jun 10 j 02:42	7° \mathbb{Z} 42'00	33.17854 AU				
opposition	-1440 Jun 12 j 18:50	7° \mathbb{Z} 38'08	-1°-4'-17	conjunction	-1432 Dec 24 j 23:17	22° \mathbb{Z} 09'35	-5°-16'-46
direct	-1440 Sep 01 j 05:21	6° \mathbb{Z} 23'21		minimum elong	-1432 Dec 24 j 23:08	22° \mathbb{Z} 09'34	5°16'48
				max. Earth dist.	-1432 Dec 28 j 00:36	22° \mathbb{Z} 15'18	37.32114 AU
				retrograde	-1431 Apr 07 j 14:53	24° \mathbb{Z} 12'05	
conjunction	-1440 Dec 11 j 14:43	8° \mathbb{Z} 31'03	-1°-16'-42	min. Earth dist.	-1431 Jun 25 j 23:08	23° \mathbb{Z} 03'41	35.45827 AU
minimum elong	-1440 Dec 11 j 14:41	8° \mathbb{Z} 31'03	1°16'44	opposition	-1431 Jun 29 j 00:21	22° \mathbb{Z} 59'28	-5°-49'-18
max. Earth dist.	-1440 Dec 14 j 06:28	8° \mathbb{Z} 36'20	35.29989 AU	direct	-1431 Sep 17 j 14:06	21° \mathbb{Z} 48'02	
retrograde	-1439 Mar 25 j 08:33	10° \mathbb{Z} 41'08					
min. Earth dist.	-1439 Jun 12 j 03:32	9° \mathbb{Z} 29'53	33.42150 AU				

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Attention, astronomical year style is used: The year -1431 in astronomical counting style is the year 1432 BCE in historical counting style.

conjunction	-1431 Dec 26 j 19:20	23° 2 46'19	-5°-44'-3	direct	-1423 Sep 30 j 10:05	4° 3 06'23	
minimum elong	-1431 Dec 26 j 19:10	23° 2 46'19	5°44'06				
max. Earth dist.	-1431 Dec 29 j 20:00	23° 2 51'57	37.57688 AU	conjunction	-1422 Jan 07 j 19:24	5° 3 57'47	-8°-59'-38
retrograde	-1430 Apr 09 j 10:47	25° 2 47'56		minimum elong	-1422 Jan 07 j 19:11	5° 3 57'46	8°59'40
min. Earth dist.	-1430 Jun 27 j 19:37	24° 2 39'52	35.71518 AU	max. Earth dist.	-1422 Jan 11 j 00:44	6° 3 03'28	39.61028 AU
opposition	-1430 Jun 30 j 22:18	24° 2 35'36	-6°-17'-39	retrograde	-1422 Apr 21 j 09:51	7° 3 53'03	
direct	-1430 Sep 19 j 12:37	23° 2 24'28		min. Earth dist.	-1422 Jul 10 j 06:13	6° 3 47'10	37.76375 AU
				opposition	-1422 Jul 13 j 11:37	6° 3 42'53	-9°-39'-44
conjunction	-1430 Dec 28 j 14:51	25° 2 21'48	-6°-10'-43	direct	-1422 Oct 02 j 03:25	5° 3 34'11	
minimum elong	-1430 Dec 28 j 14:40	25° 2 21'48	6°10'45				
max. Earth dist.	-1430 Dec 31 j 16:37	25° 2 27'29	37.83157 AU	conjunction	-1421 Jan 09 j 11:46	7° 3 24'50	-9°-21'-13
retrograde	-1429 Apr 11 j 05:16	27° 2 22'33		minimum elong	-1421 Jan 09 j 11:34	7° 3 24'49	9°21'16
min. Earth dist.	-1429 Jun 29 j 17:49	26° 2 14'41	35.97126 AU	max. Earth dist.	-1421 Jan 12 j 17:33	7° 3 30'31	39.86357 AU
opposition	-1429 Jul 02 j 19:50	26° 2 10'28	-6°-45'-20	retrograde	-1421 Apr 23 j 03:56	9° 3 19'25	
direct	-1429 Sep 21 j 10:40	24° 2 59'38		min. Earth dist.	-1421 Jul 11 j 23:35	8° 3 13'49	38.01832 AU
				opposition	-1421 Jul 15 j 05:16	8° 3 09'32	-10°-1'-56
conjunction	-1429 Dec 30 j 10:02	26° 2 56'02	-6°-36'-46	direct	-1421 Oct 03 j 19:41	7° 3 01'08	
minimum elong	-1429 Dec 30 j 09:51	26° 2 56'01	6°36'49				
max. Earth dist.	-1428 Jan 02 j 12:03	27° 2 01'41	38.08557 AU	conjunction	-1420 Jan 11 j 03:49	8° 3 51'05	-9°-42'-13
retrograde	-1428 Apr 12 j 00:26	28° 2 55'54		minimum elong	-1420 Jan 11 j 03:36	8° 3 51'04	9°42'15
min. Earth dist.	-1428 Jun 30 j 13:24	27° 2 48'20	36.22677 AU	max. Earth dist.	-1420 Jan 14 j 08:54	8° 3 56'40	40.11506 AU
opposition	-1428 Jul 03 j 16:28	27° 2 44'04	-7°-12'-19	retrograde	-1420 Apr 23 j 22:13	10° 3 44'59	
direct	-1428 Sep 22 j 07:28	26° 2 33'31		min. Earth dist.	-1420 Jul 12 j 16:46	9° 3 39'38	38.27099 AU
				opposition	-1420 Jul 15 j 22:30	9° 3 35'24	-10°-23'-30
conjunction	-1428 Dec 31 j 04:35	28° 2 29'01	-7°-2'-10	direct	-1420 Oct 04 j 10:40	8° 3 27'17	
minimum elong	-1428 Dec 31 j 04:24	28° 2 29'00	7°02'13				
max. Earth dist.	-1427 Jan 03 j 06:54	28° 2 34'39	38.33910 AU	conjunction	-1419 Jan 11 j 19:43	10° 3 16'32	-10°-2'-37
	-1427 Feb 26 j 06:00	0° 3		minimum elong	-1419 Jan 11 j 19:30	10° 3 16'31	10°02'40
retrograde	-1427 Apr 13 j 21:12	0° 3 28'02		max. Earth dist.	-1419 Jan 15 j 01:36	10° 3 22'08	40.36423 AU
	-1427 Jun 01 j 00:24	30° R		retrograde	-1419 Apr 25 j 12:32	12° 3 09'45	
min. Earth dist.	-1427 Jul 02 j 09:25	29° 2 20'43	36.48236 AU	min. Earth dist.	-1419 Jul 14 j 10:43	11° 3 04'36	38.52089 AU
opposition	-1427 Jul 05 j 12:52	29° 2 16'28	-7°-38'-37	opposition	-1419 Jul 17 j 15:28	11° 3 00'25	-10°-44'-26
direct	-1427 Sep 24 j 01:35	28° 2 06'12		direct	-1419 Oct 06 j 05:33	9° 3 52'35	
conjunction	-1426 Jan 01 j 22:43	0° 3 00'48	-7°-26'-57	conjunction	-1418 Jan 13 j 11:03	11° 3 41'08	-10°-22'-26
minimum elong	-1426 Jan 01 j 22:31	0° 3 00'47	7°26'59	minimum elong	-1418 Jan 13 j 10:50	11° 3 41'07	10°22'28
	-1426 Jan 01 j 12:02	0° 3		max. Earth dist.	-1418 Jan 16 j 15:35	11° 3 46'37	40.61052 AU
max. Earth dist.	-1426 Jan 05 j 02:25	0° 3 06'30	38.59286 AU	retrograde	-1418 Apr 27 j 03:04	13° 3 33'40	
retrograde	-1426 Apr 15 j 14:09	1° 3 59'01		min. Earth dist.	-1418 Jul 16 j 02:41	12° 3 28'47	38.76785 AU
min. Earth dist.	-1426 Jul 04 j 04:58	0° 3 51'58	36.73820 AU	opposition	-1418 Jul 19 j 08:06	12° 3 24'34	-11°-4'-44
opposition	-1426 Jul 07 j 08:44	0° 3 47'42	-8°-4'-13	direct	-1418 Oct 07 j 23:28	11° 3 16'59	
	-1426 Aug 15 j 02:50	30° R					
direct	-1426 Sep 25 j 22:57	29° 2 37'44		conjunction	-1417 Jan 15 j 02:14	13° 3 04'50	-10°-41'-40
	-1426 Nov 05 j 12:53	0° 3		minimum elong	-1417 Jan 15 j 02:02	13° 3 04'49	10°41'43
				max. Earth dist.	-1417 Jan 18 j 07:22	13° 3 10'19	40.85372 AU
conjunction	-1425 Jan 03 j 16:25	1° 3 31'30	-7°-51'-4	retrograde	-1417 Apr 28 j 16:26	14° 3 56'41	
minimum elong	-1425 Jan 03 j 16:13	1° 3 31'29	7°51'06	min. Earth dist.	-1417 Jul 17 j 20:19	13° 3 51'56	39.01179 AU
max. Earth dist.	-1425 Jan 06 j 19:45	1° 3 37'08	38.84699 AU	opposition	-1417 Jul 21 j 00:20	13° 3 47'49	-11°-24'-27
retrograde	-1425 Apr 17 j 08:06	3° 3 28'55		direct	-1417 Oct 09 j 17:17	12° 3 40'27	
min. Earth dist.	-1425 Jul 05 j 23:00	2° 3 22'12	36.99464 AU				
opposition	-1425 Jul 09 j 04:04	2° 3 17'53	-8°-29'-7	conjunction	-1416 Jan 16 j 17:04	14° 3 27'35	-11°00'-21
direct	-1425 Sep 27 j 18:31	1° 3 08'13		minimum elong	-1416 Jan 16 j 16:51	14° 3 27'34	11°00'22
				max. Earth dist.	-1416 Jan 19 j 21:40	14° 3 33'01	41.09417 AU
conjunction	-1424 Jan 05 j 09:50	3° 3 01'10	-8°-14'-33	retrograde	-1416 Apr 29 j 06:07	16° 3 18'47	
minimum elong	-1424 Jan 05 j 09:37	3° 3 01'10	8°14'36	min. Earth dist.	-1416 Jul 18 j 11:23	15° 3 14'15	39.25307 AU
max. Earth dist.	-1424 Jan 08 j 14:48	3° 3 06'54	39.10152 AU	opposition	-1416 Jul 21 j 16:01	15° 3 10'06	-11°-43'-32
retrograde	-1424 Apr 17 j 23:43	4° 3 57'51		direct	-1416 Oct 10 j 10:15	14° 3 02'57	
min. Earth dist.	-1424 Jul 06 j 18:29	3° 3 51'22	37.25128 AU				
opposition	-1424 Jul 09 j 23:02	3° 3 47'06	-8°-53'-20	conjunction	-1415 Jan 17 j 07:21	15° 3 49'23	-11°-18'-26
direct	-1424 Sep 28 j 15:20	2° 3 37'45		minimum elong	-1415 Jan 17 j 07:08	15° 3 49'22	11°18'30
				max. Earth dist.	-1415 Jan 20 j 11:38	15° 3 54'45	41.33214 AU
conjunction	-1423 Jan 06 j 02:48	4° 3 29'55	-8°-37'-24	retrograde	-1415 Apr 30 j 22:22	17° 3 39'55	
minimum elong	-1423 Jan 06 j 02:36	4° 3 29'54	8°37'27	min. Earth dist.	-1415 Jul 20 j 03:19	16° 3 35'32	39.49238 AU
max. Earth dist.	-1423 Jan 09 j 07:27	4° 3 35'35	39.35612 AU	opposition	-1415 Jul 23 j 07:27	16° 3 31'26	-12°-2'-1
retrograde	-1423 Apr 19 j 16:17	6° 3 25'52		direct	-1415 Oct 12 j 00:12	15° 3 24'30	
min. Earth dist.	-1423 Jul 08 j 11:24	5° 3 19'45	37.50779 AU				
opposition	-1423 Jul 11 j 17:23	5° 3 15'25	-9°-16'-52	conjunction	-1414 Jan 18 j 21:30	17° 3 10'16	-11°-35'-57

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Attention, astronomical year style is used: The year -1414 in astronomical counting style is the year 1415 BCE in historical counting style.

minimum elong	-1414 Jan 18 j 21:18	17°☾10'15	11°36'00	min. Earth dist.	-1406 Aug 01 j 09:13	28°☾13'37	41.56987 AU
max. Earth dist.	-1414 Jan 22 j 02:35	17°☾15'39	41.56853 AU	opposition	-1406 Aug 04 j 11:14	28°☾09'46	-14°-21'-49
retrograde	-1414 May 02 j 12:50	19°☾00'09		direct	-1406 Oct 24 j 04:03	27°☾04'54	
min. Earth dist.	-1414 Jul 21 j 18:29	17°☾55'56	39.73017 AU				
opposition	-1414 Jul 24 j 22:27	17°☾51'52	-12°-19'-53	conjunction	-1405 Jan 30 j 16:25	28°☾45'36	-13°-48'-47
direct	-1414 Oct 13 j 14:37	16°☾45'08		minimum elong	-1405 Jan 30 j 16:15	28°☾45'36	13°48'49
				max. Earth dist.	-1405 Feb 02 j 18:51	28°☾50'35	43.61722 AU
conjunction	-1413 Jan 20 j 11:09	18°☾30'15	-11°-52'-54		-1405 Mar 23 j 09:32	0°≈	
minimum elong	-1413 Jan 20 j 10:56	18°☾30'14	11°52'57	retrograde	-1405 May 14 j 05:23	0°≈30'35	
max. Earth dist.	-1413 Jan 23 j 15:24	18°☾35'33	41.80363 AU		-1405 Jul 06 j 17:20	30°R☾	
retrograde	-1413 May 04 j 03:35	20°☾19'31		min. Earth dist.	-1405 Aug 02 j 23:24	29°☾28'03	41.78539 AU
min. Earth dist.	-1413 Jul 23 j 08:28	19°☾15'31	39.96688 AU	opposition	-1405 Aug 05 j 23:41	29°☾24'18	-14°-34'-41
opposition	-1413 Jul 26 j 13:09	19°☾11'26	-12°-37'-9	direct	-1405 Oct 25 j 18:37	28°☾19'38	
direct	-1413 Oct 15 j 04:21	18°☾04'56					
				conjunction	-1404 Feb 01 j 04:13	29°☾59'49	-14°-1'-2
conjunction	-1412 Jan 22 j 00:43	19°☾49'25	-12°-9'-16	minimum elong	-1404 Feb 01 j 04:05	29°☾59'48	14°01'04
minimum elong	-1412 Jan 22 j 00:31	19°☾49'25	12°09'17		-1404 Feb 01 j 06:58	0°≈	
max. Earth dist.	-1412 Jan 25 j 06:01	19°☾54'46	42.03761 AU	max. Earth dist.	-1404 Feb 04 j 05:58	0°≈04'43	43.82903 AU
retrograde	-1412 May 04 j 14:25	21°☾38'05		retrograde	-1404 May 14 j 16:36	1°≈44'17	
min. Earth dist.	-1412 Jul 23 j 23:41	20°☾34'15	40.20236 AU	min. Earth dist.	-1404 Aug 03 j 11:21	0°≈41'55	41.99704 AU
opposition	-1412 Jul 27 j 03:22	20°☾30'13	-12°-53'-48	opposition	-1404 Aug 06 j 11:32	0°≈38'11	-14°-47'-2
direct	-1412 Oct 15 j 20:53	19°☾23'57			-1404 Sep 08 j 05:58	30°R☾	
				direct	-1404 Oct 26 j 07:27	29°☾33'41	
conjunction	-1411 Jan 22 j 13:55	21°☾07'51	-12°-25'-4		-1404 Dec 11 j 19:17	0°≈	
minimum elong	-1411 Jan 22 j 13:43	21°☾07'50	12°25'06	conjunction	-1403 Feb 01 j 15:31	1°≈13'22	-14°-12'-48
max. Earth dist.	-1411 Jan 25 j 18:29	21°☾13'07	42.27048 AU	minimum elong	-1403 Feb 01 j 15:21	1°≈13'22	14°12'50
retrograde	-1411 May 06 j 02:22	22°☾55'56		max. Earth dist.	-1403 Feb 04 j 16:10	1°≈18'10	44.03726 AU
min. Earth dist.	-1411 Jul 25 j 12:46	21°☾52'22	40.43654 AU	retrograde	-1403 May 16 j 05:42	2°≈57'20	
opposition	-1411 Jul 28 j 17:20	21°☾48'18	-13°-9'-51	min. Earth dist.	-1403 Aug 04 j 23:52	1°≈55'06	42.20561 AU
direct	-1411 Oct 17 j 11:53	20°☾42'16		opposition	-1403 Aug 07 j 23:22	1°≈51'24	-14°-58'-54
				direct	-1403 Oct 27 j 17:37	0°≈47'05	
conjunction	-1410 Jan 24 j 02:40	22°☾25'36	-12°-40'-19				
minimum elong	-1410 Jan 24 j 02:30	22°☾25'35	12°40'20	conjunction	-1402 Feb 03 j 02:36	2°≈26'16	-14°-24'-6
max. Earth dist.	-1410 Jan 27 j 07:29	22°☾30'51	42.50181 AU	minimum elong	-1402 Feb 03 j 02:28	2°≈26'16	14°24'09
retrograde	-1410 May 07 j 15:50	24°☾13'08		max. Earth dist.	-1402 Feb 06 j 03:57	2°≈31'06	44.24269 AU
min. Earth dist.	-1410 Jul 27 j 03:35	23°☾09'45	40.66906 AU	retrograde	-1402 May 17 j 17:01	4°≈09'45	
opposition	-1410 Jul 30 j 07:12	23°☾05'45	-13°-25'-20	min. Earth dist.	-1402 Aug 06 j 12:12	3°≈07'38	42.41144 AU
direct	-1410 Oct 19 j 01:36	21°☾59'58		opposition	-1402 Aug 09 j 10:53	3°≈03'59	-15°-10'-15
				direct	-1402 Oct 29 j 04:42	1°≈59'50	
conjunction	-1409 Jan 25 j 15:30	23°☾42'44	-12°-55'-1				
minimum elong	-1409 Jan 25 j 15:19	23°☾42'43	12°55'03	conjunction	-1401 Feb 04 j 13:29	3°≈38'34	-14°-34'-55
max. Earth dist.	-1409 Jan 28 j 20:33	23°☾47'59	42.73130 AU	minimum elong	-1401 Feb 04 j 13:21	3°≈38'33	14°34'56
retrograde	-1409 May 09 j 04:55	25°☾29'45		max. Earth dist.	-1401 Feb 07 j 13:25	3°≈43'16	44.44577 AU
min. Earth dist.	-1409 Jul 28 j 17:00	24°☾26'34	40.89925 AU	retrograde	-1401 May 19 j 04:47	5°≈21'33	
opposition	-1409 Jul 31 j 20:30	24°☾22'36	-13°-40'-15	min. Earth dist.	-1401 Aug 07 j 22:51	4°≈19'37	42.61511 AU
direct	-1409 Oct 20 j 14:54	23°☾17'03		opposition	-1401 Aug 10 j 21:59	4°≈15'58	-15°-21'-7
				direct	-1401 Oct 30 j 14:42	3°≈12'00	
conjunction	-1408 Jan 27 j 04:00	24°☾59'18	-13°-9'-12				
minimum elong	-1408 Jan 27 j 03:50	24°☾59'17	13°09'14	conjunction	-1400 Feb 06 j 00:14	4°≈50'16	-14°-45'-15
max. Earth dist.	-1408 Jan 30 j 07:44	25°☾04'26	42.95814 AU	minimum elong	-1400 Feb 06 j 00:06	4°≈50'16	14°45'18
retrograde	-1408 May 09 j 20:27	26°☾45'47		max. Earth dist.	-1400 Feb 09 j 00:36	4°≈54'59	44.64670 AU
min. Earth dist.	-1408 Jul 29 j 06:29	25°☾42'49	41.12658 AU	retrograde	-1400 May 19 j 13:15	6°≈32'48	
opposition	-1408 Aug 01 j 09:41	25°☾38'53	-13°-54'-37	min. Earth dist.	-1400 Aug 08 j 11:23	5°≈30'59	42.81661 AU
direct	-1408 Oct 21 j 01:11	24°☾33'35		opposition	-1400 Aug 11 j 09:02	5°≈27'25	-15°-31'-28
				direct	-1400 Oct 31 j 03:00	4°≈23'38	
conjunction	-1407 Jan 27 j 16:21	26°☾15'19	-13°-22'-53				
minimum elong	-1407 Jan 27 j 16:10	26°☾15'18	13°22'56				
max. Earth dist.	-1407 Jan 30 j 20:35	26°☾20'27	43.18172 AU				
retrograde	-1407 May 11 j 08:28	28°☾01'18					
min. Earth dist.	-1407 Jul 30 j 20:53	26°☾58'28	41.35019 AU				
opposition	-1407 Aug 02 j 22:36	26°☾54'37	-14°-8'-28				
direct	-1407 Oct 22 j 14:29	25°☾49'32					
conjunction	-1406 Jan 29 j 04:32	27°☾30'46	-13°-36'-4				
minimum elong	-1406 Jan 29 j 04:23	27°☾30'45	13°36'07				
max. Earth dist.	-1406 Feb 01 j 07:11	27°☾35'46	43.40154 AU				
retrograde	-1406 May 12 j 19:09	29°☾16'14					