

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 1

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

conjunction	-1899 Apr 25 j 15:16	18° $\Upsilon$ 06'58	-0°01'30			-1894 Jan 03 j 04:24	0° $\mathbb{M}$	
minimum elong	-1899 Apr 25 j 15:21	18° $\Upsilon$ 07'06	0°01'29	desc. node		-1894 Feb 14 j 04:13	29° $\mathbb{M}$ 39'48	
behind sun begin	-1899 Apr 24 j 17:21	17° $\Upsilon$ 30'03				-1894 Feb 14 j 15:37	0° $\mathcal{A}$	
behind sun end	-1899 Apr 26 j 13:22	18° $\Upsilon$ 44'07				-1894 Mar 29 j 08:30	0° $\mathcal{Z}$	
asc. node	-1899 Apr 28 j 02:55	19° $\Upsilon$ 47'16				-1894 May 14 j 01:30	0° $\approx$	
	-1899 May 13 j 10:19	0° $\mathcal{B}$		retrograde		-1894 Jul 25 j 15:51	27° $\approx$ 22'46	
max. Earth dist.	-1899 May 19 j 11:12	3° $\mathcal{B}$ 59'26	2.60045 AU	min. Earth dist.		-1894 Aug 22 j 00:14	22° $\approx$ 21'47	0.43822 AU
morning rise	-1899 Jun 15 j 18:44	21° $\mathcal{B}$ 48'16		opposition		-1894 Aug 29 j 22:50	19° $\approx$ 43'24	-5°17'55
	-1899 Jun 28 j 12:40	0° $\mathbb{I}$		greatest brilliancy		-1894 Aug 28 j 14:39	20° $\approx$ 10'16	-2.5m
	-1899 Aug 15 j 01:01	0° $\mathcal{E}$		direct		-1894 Sep 30 j 17:41	13° $\approx$ 28'50	
	-1899 Oct 03 j 00:16	0° $\mathcal{O}$				-1894 Nov 27 j 22:38	0° $\mathcal{H}$	
	-1899 Nov 23 j 21:14	0° $\mathbb{P}$		asc. node		-1894 Dec 18 j 23:22	10° $\mathcal{H}$ 32'19	
	-1898 Jan 27 j 18:56	0° $\mathcal{L}$				-1893 Jan 22 j 22:14	0° $\Upsilon$	
retrograde	-1898 Mar 03 j 04:36	6° $\mathcal{L}$ 11'30				-1893 Mar 14 j 11:28	0° $\mathcal{B}$	
	-1898 Apr 04 j 15:27	30° $\mathcal{R}$ $\mathbb{P}$				-1893 May 02 j 13:51	0° $\mathbb{I}$	
opposition	-1898 Apr 06 j 07:34	29° $\mathbb{P}$ 26'13	1°59'23			-1893 Jun 19 j 13:49	0° $\mathcal{E}$	
greatest brilliancy	-1898 Apr 07 j 00:45	29° $\mathbb{P}$ 11'39	-2.3m	evening set		-1893 Jul 05 j 05:55	9° $\mathcal{E}$ 58'57	
min. Earth dist.	-1898 Apr 14 j 18:37	26° $\mathbb{P}$ 34'47	0.47961 AU	max. Earth dist.		-1893 Jul 31 j 11:20	26° $\mathcal{E}$ 57'18	2.62305 AU
desc. node	-1898 May 12 j 04:34	21° $\mathbb{P}$ 10'47				-1893 Aug 05 j 02:50	0° $\mathcal{O}$	
direct	-1898 May 13 j 20:03	21° $\mathbb{P}$ 09'39						
	-1898 Jun 21 j 06:14	0° $\mathcal{L}$		conjunction		-1893 Aug 20 j 16:30	10° $\mathcal{O}$ 17'50	1°05'27
	-1898 Aug 13 j 18:48	0° $\mathbb{M}$		minimum elong		-1893 Aug 20 j 17:23	10° $\mathcal{O}$ 19'18	1°05'28
	-1898 Sep 25 j 13:54	0° $\mathcal{A}$				-1893 Sep 18 j 20:46	0° $\mathbb{P}$	
	-1898 Nov 05 j 02:57	0° $\mathcal{Z}$		morning rise		-1893 Oct 06 j 08:51	12° $\mathbb{P}$ 05'21	
	-1898 Dec 15 j 16:08	0° $\approx$				-1893 Oct 31 j 18:27	0° $\mathcal{L}$	
	-1897 Jan 26 j 08:15	0° $\mathcal{H}$				-1893 Dec 12 j 01:12	0° $\mathbb{M}$	
	-1897 Mar 10 j 16:10	0° $\Upsilon$		desc. node		-1892 Jan 02 j 03:04	15° $\mathbb{M}$ 41'07	
asc. node	-1897 Mar 16 j 01:54	3° $\Upsilon$ 39'26				-1892 Jan 21 j 03:37	0° $\mathcal{A}$	
evening set	-1897 Apr 18 j 17:31	26° $\Upsilon$ 04'07				-1892 Feb 29 j 17:05	0° $\mathcal{Z}$	
	-1897 Apr 24 j 17:16	0° $\mathcal{B}$				-1892 Apr 09 j 16:58	0° $\approx$	
						-1892 May 21 j 17:52	0° $\mathcal{H}$	
conjunction	-1897 Jun 07 j 04:35	28° $\mathcal{B}$ 08'43	0°43'56			-1892 Jul 08 j 20:58	0° $\Upsilon$	
minimum elong	-1897 Jun 07 j 03:16	28° $\mathcal{B}$ 06'37	0°43'57	retrograde		-1892 Sep 10 j 13:21	20° $\Upsilon$ 54'28	
	-1897 Jun 10 j 02:02	0° $\mathbb{I}$		min. Earth dist.		-1892 Oct 13 j 02:56	13° $\Upsilon$ 43'58	0.56350 AU
max. Earth dist.	-1897 Jun 14 j 07:13	2° $\mathbb{I}$ 41'57	2.66193 AU	opposition		-1892 Oct 19 j 13:08	11° $\Upsilon$ 13'46	-0°44'00
morning rise	-1897 Jul 23 j 12:28	27° $\mathbb{I}$ 42'15		greatest brilliancy		-1892 Oct 19 j 09:16	11° $\Upsilon$ 17'32	-1.9m
	-1897 Jul 27 j 03:05	0° $\mathcal{E}$		asc. node		-1892 Nov 04 j 22:50	5° $\Upsilon$ 38'10	
	-1897 Sep 12 j 06:52	0° $\mathcal{O}$		direct		-1892 Nov 24 j 17:31	3° $\Upsilon$ 00'42	
	-1897 Oct 29 j 08:49	0° $\mathbb{P}$				-1891 Feb 14 j 18:56	0° $\mathcal{B}$	
	-1897 Dec 15 j 18:26	0° $\mathcal{L}$				-1891 Apr 10 j 10:36	0° $\mathbb{I}$	
	-1896 Feb 02 j 20:37	0° $\mathbb{M}$				-1891 May 30 j 10:54	0° $\mathcal{E}$	
desc. node	-1896 Mar 29 j 03:50	29° $\mathbb{M}$ 11'07				-1891 Jul 16 j 15:23	0° $\mathcal{O}$	
	-1896 Mar 31 j 01:35	0° $\mathcal{A}$		evening set		-1891 Aug 13 j 00:02	18° $\mathcal{O}$ 11'25	
retrograde	-1896 May 15 j 03:53	10° $\mathcal{A}$ 53'07		max. Earth dist.		-1891 Aug 29 j 11:00	29° $\mathcal{O}$ 25'59	2.52736 AU
opposition	-1896 Jun 14 j 12:57	5° $\mathcal{A}$ 52'40	-5°03'44			-1891 Aug 30 j 06:43	0° $\mathbb{P}$	
greatest brilliancy	-1896 Jun 14 j 17:32	5° $\mathcal{A}$ 49'36	-2.9m					
min. Earth dist.	-1896 Jun 16 j 01:59	5° $\mathcal{A}$ 27'54	0.37806 AU	conjunction		-1891 Oct 01 j 16:22	22° $\mathbb{P}$ 50'08	0°30'44
direct	-1896 Jul 15 j 02:10	0° $\mathcal{A}$ 42'14		minimum elong		-1891 Oct 01 j 17:44	22° $\mathbb{P}$ 52'35	0°30'44
	-1896 Oct 01 j 03:42	0° $\mathcal{Z}$				-1891 Oct 11 j 14:16	0° $\mathcal{L}$	
	-1896 Nov 17 j 17:34	0° $\approx$		desc. node		-1891 Nov 19 j 01:31	28° $\mathcal{L}$ 31'59	
	-1895 Jan 02 j 04:36	0° $\mathcal{H}$				-1891 Nov 21 j 00:05	0° $\mathbb{M}$	
asc. node	-1895 Jan 31 j 00:50	18° $\mathcal{H}$ 58'58		morning rise		-1891 Nov 24 j 07:21	2° $\mathbb{M}$ 30'07	
	-1895 Feb 16 j 21:54	0° $\Upsilon$				-1891 Dec 30 j 02:55	0° $\mathcal{A}$	
	-1895 Apr 04 j 11:33	0° $\mathcal{B}$				-1890 Feb 06 j 16:35	0° $\mathcal{Z}$	
	-1895 May 21 j 16:22	0° $\mathbb{I}$				-1890 Mar 17 j 13:52	0° $\approx$	
evening set	-1895 May 28 j 08:06	4° $\mathbb{I}$ 13'08				-1890 Apr 26 j 18:41	0° $\mathcal{H}$	
max. Earth dist.	-1895 Jul 06 j 15:35	29° $\mathbb{I}$ 12'33	2.66930 AU			-1890 Jun 08 j 13:40	0° $\Upsilon$	
	-1895 Jul 07 j 21:19	0° $\mathcal{E}$				-1890 Jul 26 j 12:46	0° $\mathcal{B}$	
				asc. node		-1890 Sep 22 j 22:44	26° $\mathcal{B}$ 20'04	
conjunction	-1895 Jul 13 j 21:25	3° $\mathcal{E}$ 50'17	1°07'57			-1890 Oct 15 j 05:05	0° $\mathbb{I}$	
minimum elong	-1895 Jul 13 j 20:47	3° $\mathcal{E}$ 49'17	1°07'59	retrograde		-1890 Oct 18 j 01:26	0° $\mathbb{I}$ 03'11	
	-1895 Aug 23 j 10:12	0° $\mathcal{O}$				-1890 Oct 20 j 21:03	30° $\mathcal{R}$ $\mathcal{B}$	
morning rise	-1895 Aug 27 j 18:03	2° $\mathcal{O}$ 49'29		min. Earth dist.		-1890 Nov 24 j 06:42	21° $\mathcal{B}$ 15'15	0.64930 AU
	-1895 Oct 07 j 20:14	0° $\mathbb{P}$		opposition		-1890 Nov 27 j 02:42	20° $\mathcal{B}$ 06'54	2°25'35
	-1895 Nov 21 j 01:05	0° $\mathcal{L}$		greatest brilliancy		-1890 Nov 26 j 19:40	20° $\mathcal{B}$ 13'59	-1.4m

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 2

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

direct	-1889 Jan 05 j 07:01	10°♄47'09		conjunction	-1884 Apr 06 j 05:22	29°♄55'55	-0°22'46
	-1889 Mar 13 j 10:34	0°♄		minimum elong	-1884 Apr 06 j 06:39	29°♄58'09	0°22'46
	-1889 May 09 j 01:08	0°♄			-1884 Apr 06 j 07:43	0°♄	
	-1889 Jun 27 j 04:17	0°♄		max. Earth dist.	-1884 May 07 j 18:39	21°♄30'49	2.56177 AU
	-1889 Aug 11 j 08:15	0°♄		asc. node	-1884 May 14 j 19:45	26°♄14'05	
	-1889 Sep 22 j 13:26	0°♄			-1884 May 20 j 11:28	0°♄	
evening set	-1889 Sep 29 j 08:47	5°♄00'15		morning rise	-1884 May 30 j 11:54	6°♄37'20	
desc. node	-1889 Oct 07 j 01:07	10°♄42'05			-1884 Jul 05 j 14:14	0°♄	
max. Earth dist.	-1889 Oct 21 j 18:34	21°♄46'08	2.40322 AU		-1884 Aug 22 j 13:04	0°♄	
	-1889 Nov 01 j 13:56	0°♄			-1884 Oct 11 j 22:14	0°♄	
					-1884 Dec 07 j 20:28	0°♄	
conjunction	-1889 Nov 26 j 13:50	19°♄19'30	-0°33'20	retrograde	-1883 Feb 09 j 07:42	17°♄42'13	
minimum elong	-1889 Nov 26 j 11:31	19°♄15'00	0°33'20	opposition	-1883 Mar 16 j 23:33	10°♄13'35	3°26'48
	-1889 Dec 10 j 05:22	0°♄		greatest brilliancy	-1883 Mar 18 j 01:18	9°♄50'23	-2.0m
	-1888 Jan 17 j 08:35	0°♄		min. Earth dist.	-1883 Mar 25 j 00:36	7°♄20'08	0.53105 AU
morning rise	-1888 Feb 01 j 05:42	11°♄39'43		direct	-1883 Apr 25 j 06:48	1°♄06'20	
	-1888 Feb 24 j 21:06	0°♄		desc. node	-1883 May 28 j 21:07	7°♄48'04	
	-1888 Apr 04 j 15:41	0°♄			-1883 Jul 12 j 05:05	0°♄	
	-1888 May 16 j 11:36	0°♄			-1883 Aug 26 j 07:12	0°♄	
	-1888 Jun 30 j 06:16	0°♄			-1883 Oct 05 j 23:17	0°♄	
asc. node	-1888 Aug 09 j 21:02	24°♄54'25			-1883 Nov 14 j 10:06	0°♄	
	-1888 Aug 18 j 19:18	0°♄			-1883 Dec 24 j 04:41	0°♄	
	-1888 Oct 24 j 11:09	0°♄			-1882 Feb 03 j 05:55	0°♄	
retrograde	-1888 Nov 20 j 16:13	4°♄06'21			-1882 Mar 18 j 01:54	0°♄	
	-1888 Dec 15 j 18:19	30°♄		evening set	-1882 Apr 01 j 01:09	9°♄30'19	
opposition	-1888 Dec 30 j 11:23	24°♄33'30	4°13'53	asc. node	-1882 Apr 01 j 18:04	9°♄58'53	
greatest brilliancy	-1888 Dec 30 j 13:13	24°♄31'41	-1.3m		-1882 May 01 j 18:22	0°♄	
min. Earth dist.	-1888 Dec 31 j 11:11	24°♄09'46	0.67389 AU				
direct	-1887 Feb 09 j 09:18	14°♄39'09		conjunction	-1882 May 22 j 12:36	13°♄35'05	0°28'29
	-1887 Apr 08 j 11:46	0°♄		minimum elong	-1882 May 22 j 11:31	13°♄33'19	0°28'30
	-1887 Jun 04 j 00:07	0°♄		max. Earth dist.	-1882 Jun 04 j 18:05	22°♄09'03	2.64419 AU
	-1887 Jul 21 j 02:10	0°♄			-1882 Jun 16 j 22:49	0°♄	
desc. node	-1887 Aug 23 j 23:45	23°♄35'53		morning rise	-1882 Jul 09 j 06:51	14°♄16'15	
	-1887 Sep 01 j 20:14	0°♄			-1882 Aug 03 j 01:55	0°♄	
	-1887 Oct 11 j 21:50	0°♄			-1882 Sep 19 j 17:32	0°♄	
	-1887 Nov 19 j 10:43	0°♄			-1882 Nov 07 j 00:46	0°♄	
evening set	-1887 Nov 30 j 00:12	8°♄19'28			-1882 Dec 27 j 06:04	0°♄	
	-1887 Dec 27 j 11:42	0°♄			-1881 Feb 23 j 09:14	0°♄	
	-1886 Feb 03 j 23:52	0°♄		retrograde	-1881 Apr 14 j 11:19	12°♄23'27	
				desc. node	-1881 Apr 15 j 20:35	12°♄22'44	
conjunction	-1886 Feb 04 j 14:18	0°♄27'43	-1°05'11	opposition	-1881 May 15 j 18:28	6°♄55'57	-1°59'08
minimum elong	-1886 Feb 04 j 15:26	0°♄29'55	1°05'13	greatest brilliancy	-1881 May 16 j 04:35	6°♄48'38	-2.7m
	-1886 Mar 15 j 19:16	0°♄		min. Earth dist.	-1881 May 21 j 23:06	5°♄08'27	0.40474 AU
max. Earth dist.	-1886 Mar 26 j 15:42	7°♄57'00	2.43537 AU	direct	-1881 Jun 18 j 02:08	0°♄38'54	
morning rise	-1886 Apr 10 j 23:25	18°♄59'39			-1881 Sep 02 j 13:43	0°♄	
	-1886 Apr 26 j 13:01	0°♄			-1881 Oct 18 j 02:09	0°♄	
	-1886 Jun 09 j 15:08	0°♄			-1881 Nov 30 j 04:17	0°♄	
asc. node	-1886 Jun 27 j 19:57	11°♄53'48			-1880 Jan 12 j 12:13	0°♄	
	-1886 Jul 26 j 10:14	0°♄		asc. node	-1880 Feb 17 j 16:02	24°♄27'16	
	-1886 Sep 15 j 03:04	0°♄			-1880 Feb 25 j 23:50	0°♄	
	-1886 Nov 16 j 20:03	0°♄			-1880 Apr 11 j 19:30	0°♄	
retrograde	-1886 Dec 27 j 09:12	8°♄14'17		evening set	-1880 May 13 j 03:03	20°♄07'19	
	-1885 Feb 02 j 10:26	30°♄			-1880 May 28 j 14:25	0°♄	
opposition	-1885 Feb 03 j 19:51	29°♄27'45	4°47'06	max. Earth dist.	-1880 Jun 27 j 13:45	19°♄05'22	2.67292 AU
greatest brilliancy	-1885 Feb 04 j 14:08	29°♄10'03	-1.5m				
min. Earth dist.	-1885 Feb 08 j 16:02	27°♄35'11	0.63328 AU	conjunction	-1880 Jun 29 j 11:26	20°♄18'07	1°01'31
direct	-1885 Mar 17 j 01:17	19°♄28'43		minimum elong	-1880 Jun 29 j 10:22	20°♄16'26	1°01'33
	-1885 May 01 j 07:24	0°♄			-1880 Jul 14 j 16:24	0°♄	
	-1885 Jun 27 j 01:29	0°♄		morning rise	-1880 Aug 13 j 13:17	19°♄08'28	
desc. node	-1885 Jul 11 j 21:57	9°♄26'21			-1880 Aug 30 j 09:04	0°♄	
	-1885 Aug 11 j 03:07	0°♄			-1880 Oct 15 j 06:47	0°♄	
	-1885 Sep 21 j 00:12	0°♄			-1880 Nov 29 j 08:54	0°♄	
	-1885 Oct 29 j 22:03	0°♄			-1879 Jan 12 j 21:38	0°♄	
	-1885 Dec 07 j 05:51	0°♄			-1879 Feb 26 j 13:18	0°♄	
	-1884 Jan 15 j 01:44	0°♄		desc. node	-1879 Mar 02 j 19:52	2°♄50'03	
evening set	-1884 Feb 06 j 17:28	17°♄04'20			-1879 Apr 14 j 11:38	0°♄	
	-1884 Feb 24 j 06:01	0°♄		retrograde	-1879 Jul 01 j 07:20	29°♄44'53	

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 3

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

min. Earth dist.	-1879 Jul 28 j 01:22	25° $\text{Z}$ 15'50	0.39651 AU	evening set	-1874 Sep 09 j 12:52	15° $\text{M}$ 24'50	
greatest brilliancy	-1879 Aug 01 j 18:11	23° $\text{Z}$ 52'53	-2.8m	max. Earth dist.	-1874 Sep 25 j 03:06	26° $\text{M}$ 37'18	2.45197 AU
opposition	-1879 Aug 03 j 00:06	23° $\text{Z}$ 30'43	-6°38'13		-1874 Sep 29 j 18:27	0° $\text{A}$	
direct	-1879 Sep 02 j 05:59	18° $\text{Z}$ 08'53		desc. node	-1874 Oct 23 j 17:23	17° $\text{A}$ 44'40	
	-1879 Oct 19 j 03:46	0° $\approx$					
	-1879 Dec 14 j 17:34	0° $\text{H}$		conjunction	-1874 Nov 02 j 15:32	25° $\text{A}$ 13'52	-0°06'45
asc. node	-1878 Jan 04 j 15:04	12° $\text{H}$ 28'47		minimum elong	-1874 Nov 02 j 15:06	25° $\text{A}$ 13'02	0°06'46
	-1878 Feb 02 j 06:35	0° $\text{Y}$		behind sun begin	-1874 Nov 01 j 16:43	24° $\text{A}$ 30'38	
	-1878 Mar 22 j 16:58	0° $\text{B}$		behind sun end	-1874 Nov 03 j 13:29	25° $\text{A}$ 55'29	
	-1878 May 09 j 20:47	0° $\text{II}$			-1874 Nov 08 j 22:03	0° $\text{M}$	
evening set	-1878 Jun 20 j 12:57	26° $\text{II}$ 13'41			-1874 Dec 17 j 17:17	0° $\text{A}$	
	-1878 Jun 26 j 11:23	0° $\text{B}$		morning rise	-1873 Jan 03 j 01:48	12° $\text{A}$ 48'34	
max. Earth dist.	-1878 Jul 21 j 12:19	16° $\text{B}$ 02'47	2.64754 AU		-1873 Jan 24 j 23:47	0° $\text{Z}$	
					-1873 Mar 04 j 14:26	0° $\approx$	
conjunction	-1878 Aug 05 j 16:08	25° $\text{B}$ 53'10	1°09'55		-1873 Apr 13 j 10:47	0° $\text{H}$	
minimum elong	-1878 Aug 05 j 16:26	25° $\text{B}$ 53'38	1°09'56		-1873 May 25 j 11:11	0° $\text{Y}$	
	-1878 Aug 11 j 23:08	0° $\Omega$			-1873 Jul 09 j 21:44	0° $\text{B}$	
morning rise	-1878 Sep 20 j 04:11	26° $\Omega$ 06'24		asc. node	-1873 Aug 27 j 12:48	28° $\text{B}$ 06'07	
	-1878 Sep 25 j 21:55	0° $\text{M}$			-1873 Aug 31 j 05:59	0° $\text{II}$	
	-1878 Nov 08 j 05:24	0° $\text{A}$		retrograde	-1873 Nov 08 j 06:23	21° $\text{II}$ 18'27	
	-1878 Dec 20 j 01:27	0° $\text{M}$		opposition	-1873 Dec 18 j 06:48	11° $\text{II}$ 33'26	3°40'37
desc. node	-1877 Jan 18 j 20:26	21° $\text{M}$ 52'36		greatest brilliancy	-1873 Dec 18 j 03:39	11° $\text{II}$ 36'36	-1.3m
	-1877 Jan 29 j 19:26	0° $\text{A}$		min. Earth dist.	-1873 Dec 17 j 18:19	11° $\text{II}$ 45'58	0.67186 AU
	-1877 Mar 11 j 02:38	0° $\text{Z}$		direct	-1872 Jan 27 j 15:58	1° $\text{II}$ 49'21	
	-1877 Apr 21 j 02:51	0° $\approx$			-1872 Apr 21 j 15:33	0° $\text{B}$	
	-1877 Jun 04 j 09:17	0° $\text{H}$			-1872 Jun 12 j 20:59	0° $\Omega$	
	-1877 Aug 05 j 13:23	0° $\text{Y}$			-1872 Jul 28 j 23:04	0° $\text{M}$	
retrograde	-1877 Aug 25 j 19:16	2° $\text{Y}$ 44'27		desc. node	-1872 Sep 09 j 16:02	0° $\text{A}$ 10'43	
	-1877 Sep 14 j 04:06	30° $\text{R}$ $\text{H}$			-1872 Sep 09 j 10:10	0° $\text{A}$	
min. Earth dist.	-1877 Sep 25 j 05:28	26° $\text{H}$ 22'49	0.51652 AU		-1872 Oct 19 j 10:16	0° $\text{M}$	
opposition	-1877 Oct 02 j 18:49	23° $\text{H}$ 32'53	-2°23'39	evening set	-1872 Nov 03 j 14:45	11° $\text{M}$ 43'34	
greatest brilliancy	-1877 Oct 02 j 04:16	23° $\text{H}$ 46'34	-2.1m		-1872 Nov 26 j 23:17	0° $\text{A}$	
direct	-1877 Nov 06 j 10:26	15° $\text{H}$ 58'58			-1871 Jan 04 j 00:22	0° $\text{Z}$	
asc. node	-1877 Nov 22 j 13:58	17° $\text{H}$ 34'28					
	-1877 Dec 30 j 07:47	0° $\text{Y}$		conjunction	-1871 Jan 07 j 09:10	2° $\text{Z}$ 38'58	-1°03'21
	-1876 Feb 27 j 02:49	0° $\text{B}$		minimum elong	-1871 Jan 07 j 07:22	2° $\text{Z}$ 35'25	1°03'24
	-1876 Apr 18 j 17:51	0° $\text{II}$			-1871 Feb 11 j 11:45	0° $\approx$	
	-1876 Jun 06 j 18:15	0° $\text{B}$		max. Earth dist.	-1871 Feb 16 j 13:34	3° $\approx$ 53'52	2.38667 AU
	-1876 Jul 23 j 15:00	0° $\Omega$		morning rise	-1871 Mar 17 j 01:28	25° $\approx$ 25'26	
evening set	-1876 Jul 28 j 00:11	2° $\Omega$ 52'48			-1871 Mar 23 j 05:40	0° $\text{H}$	
max. Earth dist.	-1876 Aug 16 j 16:59	15° $\Omega$ 59'47	2.57040 AU		-1871 May 03 j 22:32	0° $\text{Y}$	
	-1876 Sep 06 j 06:30	0° $\text{M}$			-1871 Jun 17 j 03:26	0° $\text{B}$	
				asc. node	-1871 Jul 14 j 12:19	17° $\text{B}$ 36'38	
conjunction	-1876 Sep 13 j 21:21	5° $\text{M}$ 16'14	0°48'23		-1871 Aug 03 j 13:41	0° $\text{II}$	
minimum elong	-1876 Sep 13 j 22:51	5° $\text{M}$ 18'51	0°48'23		-1871 Sep 25 j 19:22	0° $\text{B}$	
	-1876 Oct 18 j 18:48	0° $\text{A}$		retrograde	-1871 Dec 12 j 13:36	24° $\text{B}$ 51'10	
morning rise	-1876 Nov 02 j 22:28	11° $\text{A}$ 01'59		opposition	-1870 Jan 20 j 16:05	15° $\text{B}$ 43'40	4°44'06
	-1876 Nov 28 j 11:36	0° $\text{M}$		greatest brilliancy	-1870 Jan 21 j 03:43	15° $\text{B}$ 32'13	-1.4m
desc. node	-1876 Dec 05 j 19:25	5° $\text{M}$ 30'56		min. Earth dist.	-1870 Jan 24 j 00:14	14° $\text{B}$ 24'51	0.65690 AU
	-1875 Jan 06 j 21:55	0° $\text{A}$		direct	-1870 Mar 02 j 23:01	5° $\text{B}$ 42'07	
	-1875 Feb 14 j 18:33	0° $\text{Z}$			-1870 May 17 j 07:09	0° $\Omega$	
	-1875 Mar 25 j 22:25	0° $\approx$			-1870 Jul 06 j 22:55	0° $\text{M}$	
	-1875 May 05 j 12:34	0° $\text{H}$		desc. node	-1870 Jul 28 j 15:10	14° $\text{M}$ 27'59	
	-1875 Jun 18 j 06:35	0° $\text{Y}$			-1870 Aug 19 j 18:05	0° $\text{A}$	
	-1875 Aug 09 j 05:22	0° $\text{B}$			-1870 Sep 29 j 04:27	0° $\text{M}$	
retrograde	-1875 Oct 04 j 04:13	16° $\text{B}$ 00'55			-1870 Nov 06 j 20:58	0° $\text{A}$	
asc. node	-1875 Oct 09 j 12:57	15° $\text{B}$ 48'58			-1870 Dec 15 j 00:37	0° $\text{Z}$	
min. Earth dist.	-1875 Nov 08 j 17:08	7° $\text{B}$ 46'45	0.62251 AU	evening set	-1869 Jan 12 j 03:56	21° $\text{Z}$ 55'24	
opposition	-1875 Nov 13 j 00:03	6° $\text{B}$ 03'44	1°23'08		-1869 Jan 22 j 15:58	0° $\approx$	
greatest brilliancy	-1875 Nov 12 j 18:06	6° $\text{B}$ 09'41	-1.6m		-1869 Mar 03 j 15:19	0° $\text{H}$	
	-1875 Nov 30 j 04:16	30° $\text{R}$ $\text{Y}$					
direct	-1875 Dec 21 j 03:48	27° $\text{Y}$ 05'22		conjunction	-1869 Mar 16 j 11:16	9° $\text{H}$ 21'02	-0°43'30
	-1874 Jan 13 j 00:15	0° $\text{B}$		minimum elong	-1869 Mar 16 j 13:39	9° $\text{H}$ 25'21	0°43'29
	-1874 Mar 25 j 13:43	0° $\text{II}$			-1869 Apr 14 j 12:30	0° $\text{Y}$	
	-1874 May 17 j 11:55	0° $\text{B}$		max. Earth dist.	-1869 Apr 25 j 07:48	7° $\text{Y}$ 29'57	2.51628 AU
	-1874 Jul 04 j 15:37	0° $\Omega$		morning rise	-1869 May 13 j 15:41	20° $\text{Y}$ 00'22	
	-1874 Aug 18 j 13:00	0° $\text{M}$			-1869 May 28 j 13:47	0° $\text{B}$	

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 4

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

asc. node	-1869 Jun 01 j 10:48	2°♄34'09		direct	-1864 Aug 01 j 11:52	18°♄39'29	
	-1869 Jul 13 j 19:44	0°♄			-1864 Sep 15 j 10:48	0°♄	
	-1869 Aug 31 j 11:03	0°♄			-1864 Nov 09 j 03:41	0°♄	
	-1869 Oct 23 j 04:09	0°♄			-1864 Dec 26 j 16:04	0°♄	
	-1868 Jan 06 j 09:56	0°♄		asc. node	-1863 Jan 21 j 05:48	16°♄26'14	
retrograde	-1868 Jan 22 j 07:58	1°♄26'30			-1863 Feb 11 j 08:58	0°♄	
	-1868 Feb 06 j 09:01	30°♄0			-1863 Mar 30 j 11:21	0°♄	
opposition	-1868 Feb 28 j 06:29	23°♄22'21	4°17'02		-1863 May 16 j 23:06	0°♄	
greatest brilliancy	-1868 Feb 29 j 08:21	22°♄58'08	-1.7m	evening set	-1863 Jun 05 j 21:00	12°♄34'57	
min. Earth dist.	-1868 Mar 06 j 05:57	20°♄45'48	0.57750 AU		-1863 Jul 03 j 07:06	0°♄	
direct	-1868 Apr 08 j 16:13	13°♄44'29		max. Earth dist.	-1863 Jul 12 j 00:23	5°♄34'28	2.66387 AU
	-1868 Jun 04 j 04:24	0°♄					
desc. node	-1868 Jun 14 j 13:19	5°♄22'11		conjunction	-1863 Jul 22 j 03:42	12°♄04'48	1°09'52
	-1868 Jul 25 j 00:12	0°♄		minimum elong	-1863 Jul 22 j 03:23	12°♄04'18	1°09'55
	-1868 Sep 05 j 12:56	0°♄			-1863 Aug 18 j 19:19	0°♄	
	-1868 Oct 15 j 05:03	0°♄		morning rise	-1863 Sep 05 j 01:58	11°♄20'56	
	-1868 Nov 23 j 01:12	0°♄			-1863 Oct 03 j 01:07	0°♄	
	-1867 Jan 01 j 07:48	0°♄			-1863 Nov 15 j 21:39	0°♄	
	-1867 Feb 10 j 22:16	0°♄			-1863 Dec 28 j 12:22	0°♄	
evening set	-1867 Mar 12 j 16:26	21°♄10'31		desc. node	-1862 Feb 04 j 12:56	27°♄19'24	
	-1867 Mar 25 j 09:04	0°♄			-1862 Feb 08 j 05:48	0°♄	
asc. node	-1867 Apr 18 j 09:56	16°♄23'43			-1862 Mar 21 j 19:24	0°♄	
					-1862 May 03 j 22:46	0°♄	
conjunction	-1867 May 05 j 19:10	28°♄01'22	0°10'11		-1862 Jun 24 j 07:27	0°♄	
minimum elong	-1867 May 05 j 18:41	28°♄00'35	0°10'11	retrograde	-1862 Aug 06 j 18:30	11°♄27'58	
behind sun begin	-1867 May 05 j 02:02	27°♄32'57		min. Earth dist.	-1862 Sep 04 j 00:52	5°♄59'52	0.46544 AU
behind sun end	-1867 May 06 j 11:21	28°♄28'12		greatest brilliancy	-1862 Sep 11 j 01:22	3°♄32'37	-2.3m
	-1867 May 08 j 18:46	0°♄		opposition	-1862 Sep 12 j 04:11	3°♄09'03	-4°15'29
max. Earth dist.	-1867 May 25 j 15:21	11°♄05'11	2.61823 AU		-1862 Sep 21 j 18:10	30°♄	
	-1867 Jun 23 j 20:46	0°♄		direct	-1862 Oct 15 j 00:54	26°♄24'19	
morning rise	-1867 Jun 24 j 13:16	0°♄26'26			-1862 Nov 08 j 16:50	0°♄	
	-1867 Aug 10 j 04:35	0°♄		asc. node	-1862 Dec 09 j 05:22	11°♄20'28	
	-1867 Sep 27 j 13:45	0°♄			-1861 Jan 15 j 06:01	0°♄	
	-1867 Nov 16 j 18:33	0°♄			-1861 Mar 08 j 16:50	0°♄	
	-1866 Jan 11 j 21:10	0°♄			-1861 Apr 27 j 12:48	0°♄	
retrograde	-1866 Mar 17 j 04:00	18°♄26'27			-1861 Jun 14 j 20:41	0°♄	
opposition	-1866 Apr 19 j 08:50	12°♄08'53	0°47'29	evening set	-1861 Jul 13 j 18:46	18°♄27'19	
greatest brilliancy	-1866 Apr 19 j 15:58	12°♄03'07	-2.5m		-1861 Jul 31 j 12:26	0°♄	
min. Earth dist.	-1866 Apr 27 j 14:38	9°♄30'07	0.45055 AU	max. Earth dist.	-1861 Aug 06 j 12:33	3°♄57'03	2.60637 AU
desc. node	-1866 May 02 j 12:56	8°♄02'06					
direct	-1866 May 25 j 13:00	4°♄31'00		conjunction	-1861 Aug 29 j 13:55	19°♄20'27	1°00'40
	-1866 Aug 03 j 17:56	0°♄		minimum elong	-1861 Aug 29 j 15:06	19°♄22'27	1°00'41
	-1866 Sep 18 j 04:16	0°♄			-1861 Sep 14 j 05:45	0°♄	
	-1866 Oct 29 j 18:49	0°♄		morning rise	-1861 Oct 16 j 04:51	22°♄17'54	
	-1866 Dec 09 j 23:17	0°♄			-1861 Oct 27 j 00:07	0°♄	
	-1865 Jan 21 j 02:05	0°♄			-1861 Dec 07 j 01:40	0°♄	
	-1865 Mar 05 j 17:47	0°♄		desc. node	-1861 Dec 23 j 11:44	12°♄16'43	
asc. node	-1865 Mar 06 j 08:04	0°♄24'04			-1860 Jan 15 j 21:41	0°♄	
	-1865 Apr 20 j 00:02	0°♄			-1860 Feb 24 j 04:11	0°♄	
evening set	-1865 Apr 28 j 05:49	5°♄21'56			-1860 Apr 03 j 18:52	0°♄	
	-1865 Jun 05 j 11:27	0°♄			-1860 May 15 j 02:26	0°♄	
					-1860 Jun 29 j 20:16	0°♄	
conjunction	-1865 Jun 15 j 19:21	6°♄36'09	0°51'23		-1860 Sep 08 j 20:42	0°♄	
minimum elong	-1865 Jun 15 j 18:03	6°♄34'05	0°51'25	retrograde	-1860 Sep 19 j 11:22	0°♄45'07	
max. Earth dist.	-1865 Jun 19 j 15:48	9°♄03'41	2.66823 AU		-1860 Sep 29 j 16:37	30°♄	
	-1865 Jul 22 j 12:14	0°♄		min. Earth dist.	-1860 Oct 23 j 03:30	23°♄10'05	0.58670 AU
morning rise	-1865 Jul 31 j 13:07	5°♄45'40		asc. node	-1860 Oct 26 j 05:34	21°♄57'07	
	-1865 Sep 07 j 11:15	0°♄		opposition	-1860 Oct 28 j 19:54	20°♄55'21	0°06'44
	-1865 Oct 24 j 01:36	0°♄		greatest brilliancy	-1860 Oct 28 j 19:19	20°♄55'55	-1.8m
	-1865 Dec 09 j 11:07	0°♄		direct	-1860 Dec 04 j 18:03	12°♄24'19	
	-1864 Jan 25 j 08:21	0°♄			-1859 Feb 05 j 17:54	0°♄	
	-1864 Mar 14 j 22:16	0°♄			-1859 Apr 04 j 12:12	0°♄	
desc. node	-1864 Mar 19 j 13:42	2°♄36'18			-1859 May 25 j 09:10	0°♄	
retrograde	-1864 Jun 02 j 06:12	28°♄45'05			-1859 Jul 11 j 21:26	0°♄	
min. Earth dist.	-1864 Jul 01 j 06:46	24°♄00'26	0.37587 AU	evening set	-1859 Aug 22 j 14:14	27°♄54'06	
opposition	-1864 Jul 02 j 19:03	23°♄36'20	-6°16'47		-1859 Aug 25 j 15:20	0°♄	
greatest brilliancy	-1864 Jul 02 j 10:29	23°♄42'01	-2.9m	max. Earth dist.	-1859 Sep 06 j 23:34	8°♄35'16	2.50161 AU

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 5

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1859 Oct 06 j 22:37	0°♊		asc. node	-1854 Jun 18 j 03:03	8°♊46'39	
					-1854 Jul 21 j 07:07	0°♊	
conjunction	-1859 Oct 12 j 13:59	4°♊07'05	0°18'19		-1854 Sep 09 j 00:12	0°♊	
minimum elong	-1859 Oct 12 j 14:57	4°♊08'50	0°18'19		-1854 Nov 05 j 04:11	0°♊	
desc. node	-1859 Nov 09 j 10:31	24°♊49'55		retrograde	-1853 Jan 05 j 08:50	16°♊38'43	
	-1859 Nov 16 j 06:29	0°♊		opposition	-1853 Feb 12 j 08:00	8°♊05'35	4°41'28
morning rise	-1859 Dec 07 j 16:33	16°♊23'08		greatest brilliancy	-1853 Feb 13 j 05:34	7°♊44'53	-1.5m
	-1859 Dec 25 j 06:26	0°♊		min. Earth dist.	-1853 Feb 17 j 23:06	5°♊55'56	0.61613 AU
	-1858 Feb 01 j 17:05	0°♊			-1853 Mar 08 j 20:03	30°♊	
	-1858 Mar 12 j 11:05	0°♊		direct	-1853 Mar 25 j 08:44	28°♊11'01	
	-1858 Apr 21 j 11:13	0°♊			-1853 Apr 11 j 17:31	0°♊	
	-1858 Jun 02 j 20:31	0°♊			-1853 Jun 19 j 21:52	0°♊	
	-1858 Jul 19 j 12:20	0°♊		desc. node	-1853 Jul 02 j 07:17	7°♊30'49	
asc. node	-1858 Sep 13 j 04:25	28°♊37'10			-1853 Aug 05 j 07:35	0°♊	
	-1858 Sep 16 j 18:15	0°♊			-1853 Sep 15 j 15:35	0°♊	
retrograde	-1858 Oct 25 j 21:13	8°♊14'22			-1853 Oct 24 j 18:20	0°♊	
	-1858 Nov 30 j 20:07	30°♊			-1853 Dec 02 j 05:17	0°♊	
min. Earth dist.	-1858 Dec 02 j 22:33	29°♊09'34	0.66001 AU		-1852 Jan 10 j 03:43	0°♊	
opposition	-1858 Dec 04 j 23:01	28°♊20'47	2°56'31		-1852 Feb 19 j 10:18	0°♊	
greatest brilliancy	-1858 Dec 04 j 16:39	28°♊27'12	-1.4m	evening set	-1852 Feb 20 j 03:32	0°♊31'23	
direct	-1857 Jan 13 j 14:40	18°♊51'14			-1852 Apr 01 j 14:08	0°♊	
	-1857 Mar 03 j 02:54	0°♊					
	-1857 May 02 j 23:35	0°♊		conjunction	-1852 Apr 17 j 13:23	10°♊59'54	-0°10'23
	-1857 Jun 22 j 00:27	0°♊		minimum elong	-1852 Apr 17 j 13:56	11°♊00'51	0°10'23
	-1857 Aug 06 j 11:56	0°♊		behind sun begin	-1852 Apr 16 j 20:29	10°♊31'05	
	-1857 Sep 17 j 19:36	0°♊		behind sun end	-1852 Apr 18 j 07:22	11°♊30'35	
desc. node	-1857 Sep 27 j 09:00	7°♊01'57		asc. node	-1852 May 05 j 00:53	22°♊49'32	
evening set	-1857 Oct 11 j 17:09	17°♊44'34		max. Earth dist.	-1852 May 14 j 17:14	29°♊17'26	2.58421 AU
	-1857 Oct 27 j 20:24	0°♊			-1852 May 15 j 18:52	0°♊	
max. Earth dist.	-1857 Nov 16 j 23:30	15°♊32'39	2.38192 AU	morning rise	-1852 Jun 08 j 23:31	15°♊53'47	
	-1857 Dec 05 j 11:07	0°♊			-1852 Jun 30 j 20:19	0°♊	
					-1852 Aug 17 j 11:55	0°♊	
conjunction	-1857 Dec 11 j 09:40	4°♊40'05	-0°47'02		-1852 Oct 05 j 23:05	0°♊	
minimum elong	-1857 Dec 11 j 06:44	4°♊34'18	0°47'02		-1852 Nov 28 j 10:52	0°♊	
	-1856 Jan 12 j 13:28	0°♊		retrograde	-1851 Feb 21 j 06:31	28°♊18'00	
morning rise	-1856 Feb 17 j 21:29	28°♊20'42		opposition	-1851 Mar 28 j 03:09	21°♊12'07	2°41'46
	-1856 Feb 20 j 01:02	0°♊		greatest brilliancy	-1851 Mar 29 j 01:09	20°♊52'51	-2.1m
	-1856 Mar 30 j 18:17	0°♊		min. Earth dist.	-1851 Apr 05 j 12:23	18°♊16'54	0.50308 AU
	-1856 May 11 j 11:36	0°♊		direct	-1851 May 05 j 12:38	12°♊30'07	
	-1856 Jun 24 j 22:32	0°♊		desc. node	-1851 May 19 j 06:05	13°♊44'30	
asc. node	-1856 Jul 31 j 03:31	22°♊43'02			-1851 Jul 01 j 14:27	0°♊	
	-1856 Aug 12 j 10:18	0°♊			-1851 Aug 19 j 02:00	0°♊	
	-1856 Oct 09 j 23:30	0°♊			-1851 Sep 29 j 18:31	0°♊	
retrograde	-1856 Nov 28 j 12:36	11°♊53'55			-1851 Nov 08 j 18:00	0°♊	
opposition	-1855 Jan 07 j 02:41	2°♊29'05	4°28'16		-1851 Dec 18 j 21:13	0°♊	
greatest brilliancy	-1855 Jan 07 j 07:50	2°♊23'59	-1.3m		-1850 Jan 29 j 04:53	0°♊	
min. Earth dist.	-1855 Jan 08 j 22:28	1°♊45'34	0.67058 AU		-1850 Mar 13 j 05:59	0°♊	
	-1855 Jan 13 j 09:58	30°♊		asc. node	-1850 Mar 22 j 23:19	6°♊36'19	
direct	-1855 Feb 17 j 05:08	22°♊30'46		evening set	-1850 Apr 11 j 08:07	19°♊35'28	
	-1855 Mar 27 j 11:38	0°♊			-1850 Apr 27 j 01:52	0°♊	
	-1855 May 28 j 16:01	0°♊					
	-1855 Jul 15 j 17:47	0°♊		conjunction	-1850 May 31 j 15:04	22°♊28'33	0°37'51
desc. node	-1855 Aug 14 j 07:39	20°♊19'37		minimum elong	-1850 May 31 j 13:48	22°♊26'31	0°37'52
	-1855 Aug 27 j 19:43	0°♊		max. Earth dist.	-1850 Jun 10 j 10:01	28°♊46'22	2.65509 AU
	-1855 Oct 07 j 00:13	0°♊			-1850 Jun 12 j 07:54	0°♊	
	-1855 Nov 14 j 14:08	0°♊		morning rise	-1850 Jul 17 j 12:21	22°♊27'31	
evening set	-1855 Dec 15 j 17:03	24°♊31'55			-1850 Jul 29 j 09:21	0°♊	
	-1855 Dec 22 j 15:47	0°♊			-1850 Sep 14 j 17:46	0°♊	
	-1854 Jan 30 j 04:35	0°♊			-1850 Nov 01 j 07:18	0°♊	
					-1850 Dec 19 j 17:30	0°♊	
conjunction	-1854 Feb 19 j 19:56	15°♊41'58	-0°59'56		-1849 Feb 09 j 09:43	0°♊	
minimum elong	-1854 Feb 19 j 22:11	15°♊46'13	0°59'57	desc. node	-1849 Apr 06 j 05:12	24°♊29'02	
	-1854 Mar 11 j 00:35	0°♊		retrograde	-1849 May 02 j 00:51	28°♊19'50	
max. Earth dist.	-1854 Apr 08 j 04:17	20°♊23'59	2.46513 AU	opposition	-1849 Jun 01 j 15:19	23°♊12'30	-3°46'58
	-1854 Apr 21 j 18:36	0°♊		greatest brilliancy	-1849 Jun 02 j 02:09	23°♊05'02	-2.9m
morning rise	-1854 Apr 23 j 14:35	1°♊16'54		min. Earth dist.	-1849 Jun 05 j 12:07	22°♊08'37	0.38672 AU
	-1854 Jun 04 j 18:56	0°♊		direct	-1849 Jul 03 j 07:34	17°♊37'10	

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Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1849 Aug 18 j 09:57	0°♊		minimum elong	-1844 Sep 23 j 21:31	15°♏32'26	0°38'51
	-1849 Oct 09 j 07:50	0°♊			-1844 Oct 14 j 02:08	0°♏	
	-1849 Nov 23 j 09:12	0°♏		morning rise	-1844 Nov 14 j 17:06	23°♏17'02	
	-1848 Jan 06 j 17:02	0°♏			-1844 Nov 23 j 15:50	0°♏	
asc. node	-1848 Feb 07 j 22:21	21°♏31'06		desc. node	-1844 Nov 26 j 02:47	1°♏51'11	
	-1848 Feb 20 j 18:55	0°♏			-1843 Jan 01 j 22:17	0°♏	
	-1848 Apr 06 j 23:03	0°♏			-1843 Feb 09 j 14:57	0°♏	
evening set	-1848 May 21 j 22:13	28°♏42'48			-1843 Mar 20 j 14:31	0°♏	
	-1848 May 23 j 22:47	0°♏			-1843 Apr 29 j 21:41	0°♏	
max. Earth dist.	-1848 Jul 02 j 22:19	25°♏25'43	2.67196 AU		-1843 Jun 11 j 23:07	0°♏	
					-1843 Jul 31 j 00:34	0°♏	
conjunction	-1848 Jul 07 j 18:51	28°♏31'29	1°05'43	asc. node	-1843 Sep 29 j 20:08	23°♏38'47	
minimum elong	-1848 Jul 07 j 18:01	28°♏30'09	1°05'45	retrograde	-1843 Oct 12 j 05:44	24°♏37'21	
	-1848 Jul 10 j 02:20	0°♏		min. Earth dist.	-1843 Nov 17 j 16:54	16°♏04'06	0.63847 AU
morning rise	-1848 Aug 21 j 16:10	27°♏22'43		opposition	-1843 Nov 21 j 04:49	14°♏39'48	2°01'02
	-1848 Aug 25 j 17:05	0°♏		greatest brilliancy	-1843 Nov 20 j 21:43	14°♏46'56	-1.5m
	-1848 Oct 10 j 08:41	0°♏		direct	-1843 Dec 29 j 22:22	5°♏29'08	
	-1848 Nov 23 j 22:43	0°♏			-1842 Mar 18 j 02:20	0°♏	
	-1847 Jan 06 j 15:41	0°♏			-1842 May 11 j 23:30	0°♏	
	-1847 Feb 18 j 22:13	0°♏			-1842 Jun 29 j 17:20	0°♏	
desc. node	-1847 Feb 21 j 05:28	1°♏35'32			-1842 Aug 13 j 19:51	0°♏	
	-1847 Apr 03 j 23:00	0°♏		evening set	-1842 Sep 20 j 12:15	26°♏39'41	
	-1847 May 23 j 09:43	0°♏			-1842 Sep 25 j 02:17	0°♏	
retrograde	-1847 Jul 15 j 14:31	16°♏17'28		max. Earth dist.	-1842 Oct 08 j 10:38	9°♏49'49	2.42426 AU
min. Earth dist.	-1847 Aug 11 j 10:06	11°♏35'13	0.41772 AU	desc. node	-1842 Oct 14 j 02:18	14°♏02'33	
greatest brilliancy	-1847 Aug 17 j 09:38	9°♏42'05	-2.6m		-1842 Nov 04 j 05:02	0°♏	
opposition	-1847 Aug 18 j 19:10	9°♏15'31	-6°00'17				
direct	-1847 Sep 18 j 18:47	3°♏25'52		conjunction	-1842 Nov 15 j 19:20	8°♏54'04	-0°21'59
	-1847 Dec 05 j 09:39	0°♏		minimum elong	-1842 Nov 15 j 17:49	8°♏51'08	0°21'59
asc. node	-1847 Dec 25 j 21:11	11°♏18'53			-1842 Dec 12 j 22:24	0°♏	
	-1846 Jan 26 j 20:14	0°♏		morning rise	-1841 Jan 19 j 07:57	29°♏22'50	
	-1846 Mar 17 j 08:10	0°♏			-1841 Jan 20 j 02:53	0°♏	
	-1846 May 04 j 23:54	0°♏			-1841 Feb 27 j 15:42	0°♏	
	-1846 Jun 21 j 19:52	0°♏			-1841 Apr 08 j 09:47	0°♏	
evening set	-1846 Jun 28 j 23:23	4°♏32'44			-1841 May 20 j 05:52	0°♏	
max. Earth dist.	-1846 Jul 27 j 06:09	22°♏44'40	2.63497 AU		-1841 Jul 04 j 04:12	0°♏	
	-1846 Aug 07 j 08:50	0°♏		asc. node	-1841 Aug 17 j 18:36	26°♏49'30	
					-1841 Aug 23 j 12:52	0°♏	
conjunction	-1846 Aug 14 j 05:13	4°♏30'12	1°07'52	retrograde	-1841 Nov 15 j 23:47	29°♏08'10	
minimum elong	-1846 Aug 14 j 05:51	4°♏31'15	1°07'54	opposition	-1841 Dec 25 j 21:12	19°♏29'24	4°01'13
	-1846 Sep 21 j 05:49	0°♏		greatest brilliancy	-1841 Dec 25 j 20:36	19°♏30'00	-1.3m
morning rise	-1846 Sep 29 j 06:41	5°♏30'11		min. Earth dist.	-1841 Dec 26 j 04:27	19°♏22'08	0.67430 AU
	-1846 Nov 03 j 08:32	0°♏		direct	-1840 Feb 04 j 13:36	9°♏39'13	
	-1846 Dec 14 j 21:46	0°♏			-1840 Apr 13 j 16:34	0°♏	
desc. node	-1845 Jan 09 j 04:36	18°♏42'24			-1840 Jun 07 j 04:24	0°♏	
	-1845 Jan 24 j 06:59	0°♏			-1840 Jul 23 j 21:21	0°♏	
	-1845 Mar 05 j 03:35	0°♏		desc. node	-1840 Aug 31 j 01:24	26°♏43'34	
	-1845 Apr 14 j 11:48	0°♏			-1840 Sep 04 j 13:40	0°♏	
	-1845 May 27 j 04:38	0°♏			-1840 Oct 14 j 15:37	0°♏	
	-1845 Jul 17 j 02:34	0°♏		evening set	-1840 Nov 18 j 04:59	26°♏51'31	
retrograde	-1845 Sep 04 j 14:37	13°♏49'40			-1840 Nov 22 j 04:51	0°♏	
min. Earth dist.	-1845 Oct 06 j 05:39	6°♏59'59	0.54310 AU		-1840 Dec 30 j 05:39	0°♏	
opposition	-1845 Oct 13 j 04:35	4°♏19'33	-1°24'27				
greatest brilliancy	-1845 Oct 12 j 20:33	4°♏27'17	-2.0m	conjunction	-1839 Jan 23 j 09:47	18°♏56'16	-1°06'14
	-1845 Oct 25 j 10:58	30°♏		minimum elong	-1839 Jan 23 j 09:40	18°♏56'04	1°06'16
asc. node	-1845 Nov 12 j 20:15	26°♏32'21			-1839 Feb 06 j 16:45	0°♏	
direct	-1845 Nov 17 j 16:27	26°♏22'57		max. Earth dist.	-1839 Mar 14 j 03:16	26°♏49'24	2.41200 AU
	-1845 Dec 12 j 21:45	0°♏			-1839 Mar 18 j 10:11	0°♏	
	-1844 Feb 20 j 01:59	0°♏		morning rise	-1839 Mar 31 j 14:38	9°♏39'54	
	-1844 Apr 13 j 07:00	0°♏			-1839 Apr 29 j 02:00	0°♏	
	-1844 Jun 01 j 21:05	0°♏			-1839 Jun 12 j 03:23	0°♏	
	-1844 Jul 18 j 22:59	0°♏		asc. node	-1839 Jul 04 j 17:19	14°♏41'15	
evening set	-1844 Aug 06 j 01:02	11°♏57'00			-1839 Jul 29 j 02:26	0°♏	
max. Earth dist.	-1844 Aug 23 j 21:28	23°♏59'52	2.54728 AU		-1839 Sep 18 j 14:01	0°♏	
	-1844 Sep 01 j 15:33	0°♏			-1839 Nov 28 j 00:19	0°♏	
				retrograde	-1839 Dec 20 j 23:21	2°♏55'02	
conjunction	-1844 Sep 23 j 20:01	15°♏29'48	0°38'52		-1838 Jan 11 j 06:25	30°♏	

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 7

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

opposition	-1838 Jan 28 j 17:09	23° $\overline{58}$ '35	4°47'15	asc. node	-1833 Feb 24 j 13:40	27° $\overline{13}$ '01	
greatest brilliancy	-1838 Jan 29 j 08:30	23° $\overline{54}$ '36	-1.4m		-1833 Feb 28 j 17:17	0° $\overline{0}$ '	
min. Earth dist.	-1838 Feb 01 j 20:55	22° $\overline{52}$ '09	0.64510 AU		-1833 Apr 15 j 05:38	0° $\overline{8}$ '	
direct	-1838 Mar 10 j 23:35	13° $\overline{57}$ '36		evening set	-1833 May 07 j 10:30	14° $\overline{8}$ '21'03	
	-1838 May 08 j 04:32	0° $\overline{0}$ '			-1833 May 31 j 20:33	0° $\overline{11}$ '	
	-1838 Jun 30 j 19:43	0° $\overline{10}$ '					
desc. node	-1838 Jul 18 j 23:34	11° $\overline{10}$ '48'24		conjunction	-1833 Jun 24 j 06:34	14° $\overline{11}$ '56'14	0°57'42
	-1838 Aug 14 j 08:19	0° $\overline{0}$ '		minimum elong	-1833 Jun 24 j 05:23	14° $\overline{11}$ '54'20	0°57'44
	-1838 Sep 24 j 01:32	0° $\overline{10}$ '		max. Earth dist.	-1833 Jun 24 j 23:19	15° $\overline{11}$ '22'55	2.67185 AU
	-1838 Nov 01 j 21:14	0° $\overline{17}$ '			-1833 Jul 17 j 21:40	0° $\overline{5}$ '	
	-1838 Dec 10 j 02:56	0° $\overline{3}$ '		morning rise	-1833 Aug 08 j 14:02	13° $\overline{55}$ '26	
	-1837 Jan 17 j 20:05	0° $\overline{35}$ '			-1833 Sep 02 j 17:06	0° $\overline{0}$ '	
evening set	-1837 Jan 26 j 21:22	6° $\overline{35}$ '53'30			-1833 Oct 18 j 21:59	0° $\overline{10}$ '	
	-1837 Feb 26 j 20:55	0° $\overline{17}$ '			-1833 Dec 03 j 12:43	0° $\overline{0}$ '	
					-1832 Jan 17 j 22:47	0° $\overline{10}$ '	
conjunction	-1837 Mar 29 j 03:18	21° $\overline{17}$ '48'18	-0°31'50		-1832 Mar 04 j 04:26	0° $\overline{17}$ '	
minimum elong	-1837 Mar 29 j 05:08	21° $\overline{17}$ '51'31	0°31'49	desc. node	-1832 Mar 09 j 21:22	3° $\overline{17}$ '35'22	
	-1837 Apr 09 j 19:11	0° $\overline{0}$ '			-1832 Apr 24 j 10:43	0° $\overline{3}$ '	
max. Earth dist.	-1837 May 03 j 10:02	16° $\overline{0}$ '16'03	2.54214 AU	retrograde	-1832 Jun 19 j 05:02	16° $\overline{3}$ '50'45	
asc. node	-1837 May 22 j 17:17	29° $\overline{0}$ '15'06		min. Earth dist.	-1832 Jul 16 j 13:05	12° $\overline{3}$ '22'20	0.38390 AU
	-1837 May 23 j 20:16	0° $\overline{8}$ '		opposition	-1832 Jul 20 j 18:25	11° $\overline{3}$ '11'40	-6°45'54
morning rise	-1837 May 24 j 01:34	0° $\overline{8}$ '08'49		greatest brilliancy	-1832 Jul 19 j 20:18	11° $\overline{3}$ '27'09	-2.8m
	-1837 Jul 08 j 22:58	0° $\overline{11}$ '		direct	-1832 Aug 19 j 14:23	6° $\overline{3}$ '06'55	
	-1837 Aug 26 j 02:53	0° $\overline{5}$ '			-1832 Oct 29 j 09:12	0° $\overline{35}$ '	
	-1837 Oct 16 j 06:51	0° $\overline{0}$ '			-1832 Dec 19 j 13:26	0° $\overline{17}$ '	
	-1837 Dec 16 j 01:26	0° $\overline{10}$ '		asc. node	-1831 Jan 11 j 12:56	14° $\overline{17}$ '16'08	
retrograde	-1836 Feb 01 j 19:40	10° $\overline{10}$ '55'33			-1831 Feb 05 j 14:57	0° $\overline{0}$ '	
opposition	-1836 Mar 09 j 02:04	3° $\overline{10}$ '09'55	3°51'29		-1831 Mar 25 j 09:15	0° $\overline{8}$ '	
greatest brilliancy	-1836 Mar 10 j 04:26	2° $\overline{10}$ '45'40	-1.8m		-1831 May 12 j 05:22	0° $\overline{11}$ '	
min. Earth dist.	-1836 Mar 16 j 16:35	0° $\overline{10}$ '22'33	0.55277 AU	evening set	-1831 Jun 14 j 06:56	20° $\overline{11}$ '50'31	
	-1836 Mar 17 j 17:53	30° $\overline{5}$ ' $\overline{0}$ '			-1831 Jun 28 j 17:03	0° $\overline{5}$ '	
direct	-1836 Apr 17 j 22:27	23° $\overline{0}$ '46'47		max. Earth dist.	-1831 Jul 17 j 10:45	11° $\overline{5}$ '59'19	2.65587 AU
	-1836 May 20 j 12:24	0° $\overline{10}$ '					
desc. node	-1836 Jun 04 j 22:13	6° $\overline{10}$ '16'01		conjunction	-1831 Jul 30 j 10:25	20° $\overline{5}$ '22'07	1°10'24
	-1836 Jul 17 j 13:47	0° $\overline{0}$ '		minimum elong	-1831 Jul 30 j 10:27	20° $\overline{5}$ '22'09	1°10'27
	-1836 Aug 30 j 09:06	0° $\overline{10}$ '			-1831 Aug 14 j 05:30	0° $\overline{0}$ '	
	-1836 Oct 09 j 13:32	0° $\overline{17}$ '		morning rise	-1831 Sep 13 j 14:33	20° $\overline{0}$ '05'27	
	-1836 Nov 17 j 16:50	0° $\overline{3}$ '			-1831 Sep 28 j 08:04	0° $\overline{10}$ '	
	-1836 Dec 27 j 04:59	0° $\overline{35}$ '			-1831 Nov 10 j 21:39	0° $\overline{0}$ '	
	-1835 Feb 05 j 23:59	0° $\overline{17}$ '			-1831 Dec 23 j 01:59	0° $\overline{10}$ '	
	-1835 Mar 20 j 14:32	0° $\overline{0}$ '		desc. node	-1830 Jan 25 j 21:34	24° $\overline{10}$ '36'56	
evening set	-1835 Mar 23 j 22:42	2° $\overline{0}$ '17'43			-1830 Feb 02 j 05:31	0° $\overline{17}$ '	
asc. node	-1835 Apr 08 j 15:48	12° $\overline{0}$ '15'38			-1830 Mar 14 j 23:59	0° $\overline{3}$ '	
	-1835 May 04 j 02:42	0° $\overline{8}$ '			-1830 Apr 25 j 16:48	0° $\overline{35}$ '	
					-1830 Jun 10 j 18:07	0° $\overline{17}$ '	
conjunction	-1835 May 15 j 12:42	7° $\overline{8}$ '30'51	0°21'07	retrograde	-1830 Aug 17 j 22:45	24° $\overline{17}$ '24'08	
minimum elong	-1835 May 15 j 11:49	7° $\overline{8}$ '29'24	0°21'07	min. Earth dist.	-1830 Sep 16 j 09:31	18° $\overline{17}$ '25'42	0.49397 AU
max. Earth dist.	-1835 May 31 j 13:29	17° $\overline{8}$ '58'00	2.63361 AU	greatest brilliancy	-1830 Sep 23 j 11:04	15° $\overline{17}$ '50'54	-2.2m
	-1835 Jun 19 j 05:07	0° $\overline{11}$ '		opposition	-1830 Sep 24 j 06:57	15° $\overline{17}$ '32'39	-3°10'36
morning rise	-1835 Jul 03 j 02:23	8° $\overline{11}$ '53'18		direct	-1830 Oct 28 j 04:14	8° $\overline{17}$ '19'21	
	-1835 Aug 05 j 09:23	0° $\overline{5}$ '		asc. node	-1830 Nov 29 j 12:00	14° $\overline{17}$ '08'59	
	-1835 Sep 22 j 07:35	0° $\overline{0}$ '			-1829 Jan 06 j 04:06	0° $\overline{0}$ '	
	-1835 Nov 10 j 07:43	0° $\overline{10}$ '			-1829 Mar 02 j 14:40	0° $\overline{8}$ '	
	-1834 Jan 01 j 10:10	0° $\overline{0}$ '			-1829 Apr 22 j 09:32	0° $\overline{11}$ '	
	-1834 Mar 14 j 17:24	0° $\overline{10}$ '			-1829 Jun 10 j 02:50	0° $\overline{5}$ '	
retrograde	-1834 Apr 01 j 13:18	1° $\overline{10}$ '50'17		evening set	-1829 Jul 22 j 09:48	27° $\overline{5}$ '02'48	
	-1834 Apr 18 j 19:27	30° $\overline{5}$ ' $\overline{0}$ '			-1829 Jul 26 j 22:12	0° $\overline{0}$ '	
desc. node	-1834 Apr 22 j 21:59	29° $\overline{0}$ '03'31		max. Earth dist.	-1829 Aug 12 j 21:10	11° $\overline{0}$ '12'21	2.58751 AU
opposition	-1834 May 03 j 16:16	26° $\overline{0}$ '01'08	-0°41'16				
greatest brilliancy	-1834 May 03 j 20:47	25° $\overline{0}$ '57'42	-2.6m	conjunction	-1829 Sep 07 j 17:28	28° $\overline{0}$ '40'46	0°54'13
min. Earth dist.	-1834 May 11 j 02:39	23° $\overline{0}$ '45'47	0.42380 AU	minimum elong	-1829 Sep 07 j 18:53	28° $\overline{0}$ '43'10	0°54'13
direct	-1834 Jun 07 j 08:40	19° $\overline{0}$ '06'51			-1829 Sep 09 j 15:40	0° $\overline{10}$ '	
	-1834 Jul 19 j 23:14	0° $\overline{10}$ '			-1829 Oct 22 j 07:34	0° $\overline{0}$ '	
	-1834 Sep 09 j 14:39	0° $\overline{17}$ '		morning rise	-1829 Oct 26 j 13:32	3° $\overline{0}$ '03'45	
	-1834 Oct 22 j 22:13	0° $\overline{3}$ '			-1829 Dec 02 j 04:58	0° $\overline{10}$ '	
	-1834 Dec 03 j 23:59	0° $\overline{35}$ '		desc. node	-1829 Dec 13 j 21:01	8° $\overline{10}$ '45'27	
	-1833 Jan 15 j 16:21	0° $\overline{17}$ '			-1828 Jan 10 j 19:46	0° $\overline{17}$ '	

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 8

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1828 Feb 18 j 20:18	0°☾		min. Earth dist.	-1823 Jan 17 j 12:02	9°☾27'12	0.66430 AU
	-1828 Mar 29 j 03:49	0°♊		direct	-1823 Feb 25 j 01:38	0°☾29'19	
	-1828 May 08 j 22:53	0°♋			-1823 May 21 j 16:20	0°♌	
	-1828 Jun 22 j 06:36	0°♍			-1823 Jul 10 j 04:21	0°♎	
	-1828 Aug 16 j 11:25	0°♎		desc. node	-1823 Aug 04 j 16:49	17°♎14'51	
retrograde	-1828 Sep 28 j 00:45	10°♏06'27			-1823 Aug 22 j 17:00	0°♏	
asc. node	-1828 Oct 16 j 10:38	7°♏41'48			-1823 Oct 02 j 01:43	0°♐	
min. Earth dist.	-1828 Nov 01 j 18:06	2°♏09'06	0.60762 AU		-1823 Nov 09 j 17:23	0°♑	
opposition	-1828 Nov 06 j 16:25	0°♏11'09	0°52'55		-1823 Dec 17 j 19:47	0°♒	
greatest brilliancy	-1828 Nov 06 j 12:05	0°♏15'28	-1.7m	evening set	-1823 Dec 31 j 07:38	10°♒34'26	
	-1828 Nov 07 j 03:36	30°♑♍			-1822 Jan 25 j 09:16	0°♓	
direct	-1828 Dec 14 j 07:22	21°♑24'18					
	-1827 Jan 24 j 17:42	0°♎		conjunction	-1822 Mar 06 j 03:17	29°♓55'06	-0°51'21
	-1827 Mar 29 j 04:20	0°♏		minimum elong	-1822 Mar 06 j 05:52	29°♓59'50	0°51'21
	-1827 May 20 j 04:31	0°☾			-1822 Mar 06 j 05:57	0°♋	
	-1827 Jul 07 j 02:27	0°♌			-1822 Apr 17 j 00:14	0°♍	
	-1827 Aug 20 j 23:39	0°♎		max. Earth dist.	-1822 Apr 18 j 16:15	1°♑09'58	2.49389 AU
evening set	-1827 Sep 01 j 14:14	8°♎03'58		morning rise	-1822 May 05 j 07:52	12°♑41'12	
max. Earth dist.	-1827 Sep 16 j 16:58	18°♎45'20	2.47452 AU		-1822 May 30 j 23:34	0°♎	
	-1827 Oct 02 j 07:00	0°♏		asc. node	-1822 Jun 08 j 08:39	5°♎32'47	
					-1822 Jul 16 j 06:23	0°♏	
conjunction	-1827 Oct 24 j 04:10	16°♏08'37	0°04'29		-1822 Sep 03 j 05:42	0°☾	
minimum elong	-1827 Oct 24 j 04:25	16°♏09'03	0°04'29		-1822 Oct 27 j 07:48	0°♌	
behind sun begin	-1827 Oct 23 j 05:42	15°♏26'41		retrograde	-1821 Jan 14 j 20:38	25°♌25'01	
behind sun end	-1827 Oct 25 j 03:07	16°♏51'28		opposition	-1821 Feb 21 j 06:29	17°♌07'05	4°29'34
desc. node	-1827 Oct 30 j 19:09	21°♏06'29		greatest brilliancy	-1821 Feb 22 j 06:39	16°♌44'09	-1.6m
	-1827 Nov 11 j 13:25	0°♐		min. Earth dist.	-1821 Feb 27 j 15:28	14°♌42'06	0.59587 AU
	-1827 Dec 20 j 11:11	0°♑		direct	-1821 Apr 02 j 23:35	7°♌20'22	
morning rise	-1827 Dec 22 j 03:05	1°♑17'46			-1821 Jun 11 j 11:08	0°♎	
	-1826 Jan 27 j 19:24	0°♒		desc. node	-1821 Jun 22 j 14:56	6°♎16'09	
	-1826 Mar 07 j 10:56	0°♓			-1821 Jul 30 j 01:07	0°♏	
	-1826 Apr 16 j 07:36	0°♋			-1821 Sep 10 j 01:00	0°♐	
	-1826 May 28 j 09:29	0°♍			-1821 Oct 19 j 11:14	0°♑	
	-1826 Jul 13 j 03:55	0°♎			-1821 Nov 27 j 02:44	0°♒	
asc. node	-1826 Sep 03 j 10:19	29°♎06'33			-1820 Jan 05 j 04:46	0°♓	
	-1826 Sep 05 j 07:30	0°♏			-1820 Feb 14 j 14:24	0°♋	
retrograde	-1826 Nov 02 j 14:51	16°♏15'16		evening set	-1820 Mar 03 j 15:39	12°♋59'25	
min. Earth dist.	-1826 Dec 11 j 11:06	6°♏54'56	0.66780 AU		-1820 Mar 27 j 20:34	0°♍	
opposition	-1826 Dec 12 j 16:05	6°♏25'47	3°23'36	asc. node	-1820 Apr 25 j 07:38	19°♑26'33	
greatest brilliancy	-1826 Dec 12 j 11:11	6°♏30'43	-1.3m				
	-1826 Dec 30 j 12:49	30°♑♎		conjunction	-1820 Apr 28 j 03:59	21°♑21'26	0°01'43
direct	-1825 Jan 21 j 17:44	26°♎47'50		minimum elong	-1820 Apr 28 j 03:51	21°♑21'13	0°01'44
	-1825 Feb 14 j 23:49	0°♏		behind sun begin	-1820 Apr 27 j 05:59	20°♑44'30	
	-1825 Apr 26 j 10:42	0°☾		behind sun end	-1820 Apr 29 j 01:44	21°♑57'54	
	-1825 Jun 16 j 17:22	0°♌			-1820 May 11 j 02:43	0°♎	
	-1825 Aug 01 j 14:33	0°♎		max. Earth dist.	-1820 May 21 j 04:09	6°♎38'56	2.60393 AU
	-1825 Sep 13 j 01:18	0°♏		morning rise	-1820 Jun 18 j 00:26	24°♎46'48	
desc. node	-1825 Sep 17 j 17:48	3°♏25'57			-1820 Jun 26 j 03:18	0°♏	
	-1825 Oct 23 j 02:39	0°♐			-1820 Aug 12 j 13:22	0°☾	
evening set	-1825 Oct 24 j 20:38	1°♐20'28			-1820 Sep 30 j 08:00	0°♌	
	-1825 Nov 30 j 16:47	0°♑			-1820 Nov 20 j 15:47	0°♎	
					-1819 Jan 20 j 22:15	0°♏	
conjunction	-1825 Dec 26 j 23:23	20°♑42'33	-0°57'51	retrograde	-1819 Mar 06 j 06:54	9°♏46'04	
minimum elong	-1825 Dec 26 j 20:42	20°♑37'16	0°57'51	opposition	-1819 Apr 09 j 06:48	3°♏06'05	1°42'29
	-1824 Jan 07 j 18:14	0°♒		greatest brilliancy	-1819 Apr 09 j 21:44	2°♏53'33	-2.3m
max. Earth dist.	-1824 Jan 07 j 22:06	0°♒07'37	2.37429 AU	min. Earth dist.	-1819 Apr 17 j 18:39	0°♏15'57	0.47377 AU
	-1824 Feb 15 j 05:07	0°♓			-1819 Apr 18 j 14:30	30°♑♎	
morning rise	-1824 Mar 05 j 02:46	14°♓26'29		desc. node	-1819 May 09 j 14:02	25°♎17'14	
	-1824 Mar 25 j 21:39	0°♋		direct	-1819 May 16 j 13:07	24°♎56'56	
	-1824 May 06 j 13:05	0°♍			-1819 Jun 13 j 21:17	0°♏	
	-1824 Jun 19 j 18:31	0°♎			-1819 Aug 10 j 13:27	0°♐	
asc. node	-1824 Jul 21 j 10:05	20°♎12'09			-1819 Sep 22 j 22:48	0°♑	
	-1824 Aug 06 j 11:52	0°♏			-1819 Nov 02 j 16:59	0°♒	
	-1824 Sep 30 j 05:50	0°☾			-1819 Dec 13 j 08:17	0°♓	
retrograde	-1824 Dec 06 j 13:02	19°☾45'43			-1818 Jan 24 j 00:55	0°♋	
opposition	-1823 Jan 14 j 20:34	10°☾29'58	4°38'42		-1818 Mar 08 j 08:32	0°♍	
greatest brilliancy	-1823 Jan 15 j 05:13	10°☾21'25	-1.3m	asc. node	-1818 Mar 13 j 05:59	3°♑18'50	



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Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

evening set	-1818 Apr 21 j 03:21	29°♄11'27			-1813 Feb 27 j 11:04	0°♄	
	-1818 Apr 22 j 08:58	0°♄			-1813 Apr 08 j 07:57	0°♄	
	-1818 Jun 07 j 17:09	0°♄			-1813 May 20 j 01:43	0°♄	
					-1813 Jul 06 j 04:48	0°♄	
conjunction	-1818 Jun 09 j 09:46	1°♄05'04	0°46'06	retrograde	-1813 Sep 13 j 20:45	24°♄09'36	
minimum elong	-1818 Jun 09 j 08:26	1°♄02'57	0°46'07	min. Earth dist.	-1813 Oct 16 j 15:32	16°♄54'00	0.56801 AU
max. Earth dist.	-1818 Jun 15 j 20:45	5°♄13'05	2.66343 AU	opposition	-1813 Oct 22 j 22:05	14°♄26'39	-0°29'52
	-1818 Jul 24 j 17:43	0°♄		greatest brilliancy	-1813 Oct 22 j 19:31	14°♄29'10	-1.8m
morning rise	-1818 Jul 25 j 14:07	0°♄32'27		asc. node	-1813 Nov 03 j 02:56	10°♄21'55	
	-1818 Sep 09 j 20:43	0°♄		direct	-1813 Nov 28 j 05:06	6°♄10'12	
	-1818 Oct 26 j 20:31	0°♄			-1812 Feb 12 j 01:52	0°♄	
	-1818 Dec 13 j 00:37	0°♄			-1812 Apr 07 j 14:10	0°♄	
	-1817 Jan 30 j 12:23	0°♄			-1812 May 27 j 21:39	0°♄	
	-1817 Mar 25 j 22:51	0°♄			-1812 Jul 14 j 06:28	0°♄	
desc. node	-1817 Mar 27 j 15:03	0°♄47'18		evening set	-1812 Aug 15 j 08:20	21°♄19'20	
retrograde	-1817 May 20 j 05:19	15°♄31'04			-1812 Aug 28 j 01:03	0°♄	
opposition	-1817 Jun 19 j 12:43	10°♄31'09	-5°23'44	max. Earth dist.	-1812 Aug 31 j 16:26	2°♄30'50	2.52280 AU
greatest brilliancy	-1817 Jun 19 j 15:16	10°♄29'27	-2.9m				
min. Earth dist.	-1817 Jun 20 j 12:15	10°♄15'33	0.37669 AU	conjunction	-1812 Oct 04 j 05:43	26°♄13'35	0°27'42
direct	-1817 Jul 19 j 18:42	5°♄25'22		minimum elong	-1812 Oct 04 j 07:00	26°♄15'53	0°27'40
	-1817 Sep 27 j 23:37	0°♄			-1812 Oct 09 j 10:55	0°♄	
	-1817 Nov 15 j 16:57	0°♄		desc. node	-1812 Nov 16 j 11:54	28°♄10'05	
	-1817 Dec 31 j 12:29	0°♄			-1812 Nov 18 j 22:07	0°♄	
asc. node	-1816 Jan 29 j 03:36	18°♄46'32		morning rise	-1812 Nov 27 j 06:55	6°♄20'44	
	-1816 Feb 15 j 09:13	0°♄			-1812 Dec 28 j 01:20	0°♄	
	-1816 Apr 02 j 00:25	0°♄			-1811 Feb 04 j 14:25	0°♄	
	-1816 May 19 j 06:17	0°♄			-1811 Mar 15 j 10:06	0°♄	
evening set	-1816 May 30 j 13:20	7°♄09'15			-1811 Apr 24 j 11:53	0°♄	
	-1816 Jul 05 j 12:14	0°♄			-1811 Jun 06 j 01:08	0°♄	
max. Earth dist.	-1816 Jul 08 j 05:24	1°♄43'59	2.66858 AU		-1811 Jul 23 j 09:25	0°♄	
				asc. node	-1811 Sep 20 j 01:57	27°♄48'00	
conjunction	-1816 Jul 16 j 00:53	6°♄43'41	1°08'36		-1811 Sep 27 j 19:32	0°♄	
minimum elong	-1816 Jul 16 j 00:20	6°♄42'49	1°08'38	retrograde	-1811 Oct 20 j 03:30	2°♄58'22	
	-1816 Aug 21 j 02:01	0°♄			-1811 Nov 09 j 22:53	30°♄	
morning rise	-1816 Aug 29 j 20:59	5°♄44'28		min. Earth dist.	-1811 Nov 26 j 11:55	24°♄07'22	0.65158 AU
	-1816 Oct 05 j 12:33	0°♄		opposition	-1811 Nov 29 j 04:35	23°♄02'16	2°34'53
	-1816 Nov 18 j 17:03	0°♄		greatest brilliancy	-1811 Nov 28 j 21:27	23°♄09'28	-1.4m
	-1816 Dec 31 j 18:54	0°♄		direct	-1810 Jan 07 j 10:54	13°♄40'44	
desc. node	-1815 Feb 11 j 14:24	29°♄37'44			-1810 Mar 09 j 06:21	0°♄	
	-1815 Feb 12 j 02:54	0°♄			-1810 May 06 j 03:50	0°♄	
	-1815 Mar 26 j 12:52	0°♄			-1810 Jun 24 j 16:05	0°♄	
	-1815 May 10 j 09:19	0°♄			-1810 Aug 09 j 01:04	0°♄	
	-1815 Jul 14 j 05:04	0°♄			-1810 Sep 20 j 09:31	0°♄	
retrograde	-1815 Jul 28 j 15:44	1°♄27'32		evening set	-1810 Oct 02 j 05:25	8°♄42'03	
	-1815 Aug 11 j 19:47	30°♄		desc. node	-1810 Oct 04 j 10:30	10°♄20'30	
min. Earth dist.	-1815 Aug 25 j 02:02	26°♄22'04	0.44305 AU	max. Earth dist.	-1810 Oct 25 j 23:13	26°♄32'20	2.39884 AU
greatest brilliancy	-1815 Aug 31 j 19:45	24°♄06'43	-2.5m		-1810 Oct 30 j 12:10	0°♄	
opposition	-1815 Sep 02 j 02:43	23°♄40'37	-5°03'51				
direct	-1815 Oct 04 j 03:29	17°♄20'19		conjunction	-1810 Nov 29 j 21:24	23°♄30'13	-0°36'49
	-1815 Nov 22 j 19:45	0°♄		minimum elong	-1810 Nov 29 j 18:53	23°♄25'18	0°36'49
asc. node	-1815 Dec 16 j 02:59	11°♄06'01			-1810 Dec 08 j 04:37	0°♄	
	-1814 Jan 19 j 18:41	0°♄			-1809 Jan 15 j 07:47	0°♄	
	-1814 Mar 11 j 18:11	0°♄		morning rise	-1809 Feb 04 j 23:26	16°♄30'41	
	-1814 Apr 30 j 00:55	0°♄			-1809 Feb 22 j 19:14	0°♄	
	-1814 Jun 17 j 03:42	0°♄			-1809 Apr 03 j 11:43	0°♄	
evening set	-1814 Jul 07 j 10:30	12°♄54'53			-1809 May 15 j 04:20	0°♄	
max. Earth dist.	-1814 Aug 02 j 02:47	29°♄33'23	2.62018 AU		-1809 Jun 28 j 17:36	0°♄	
	-1814 Aug 02 j 19:02	0°♄		asc. node	-1809 Aug 08 j 00:47	24°♄56'41	
					-1809 Aug 16 j 18:18	0°♄	
conjunction	-1814 Aug 22 j 21:56	13°♄18'33	1°04'17		-1809 Oct 18 j 10:48	0°♄	
minimum elong	-1814 Aug 22 j 22:54	13°♄20'10	1°04'18	retrograde	-1809 Nov 23 j 18:11	6°♄55'24	
	-1814 Sep 16 j 14:50	0°♄			-1809 Dec 26 j 20:23	30°♄	
morning rise	-1814 Oct 08 j 17:34	15°♄17'17		opposition	-1808 Jan 02 j 11:41	27°♄23'50	4°18'14
	-1814 Oct 29 j 13:42	0°♄		greatest brilliancy	-1808 Jan 02 j 14:07	27°♄21'24	-1.3m
	-1814 Dec 09 j 20:54	0°♄		min. Earth dist.	-1808 Jan 03 j 14:47	26°♄56'48	0.67348 AU
desc. node	-1814 Dec 30 j 13:01	15°♄23'03		direct	-1808 Feb 12 j 09:58	17°♄28'44	
	-1813 Jan 18 j 22:57	0°♄			-1808 Apr 03 j 22:55	0°♄	

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1808 Jun 01 j 03:34	0°♏		minimum elong	-1803 May 24 j 20:28	16°♌38'16	0°31'13
	-1808 Jul 18 j 15:48	0°♍		max. Earth dist.	-1803 Jun 06 j 08:11	24°♌42'51	2.64660 AU
desc. node	-1808 Aug 21 j 08:55	23°♍20'39			-1803 Jun 14 j 13:22	0°♐	
	-1808 Aug 30 j 14:44	0°♎		morning rise	-1803 Jul 11 j 10:51	17°♐11'08	
	-1808 Oct 09 j 18:58	0°♍			-1803 Jul 31 j 15:29	0°♌	
	-1808 Nov 17 j 09:04	0°♌			-1803 Sep 17 j 05:17	0°♏	
evening set	-1808 Dec 03 j 14:22	12°♌47'08			-1803 Nov 04 j 07:56	0°♍	
	-1808 Dec 25 j 10:11	0°♌			-1803 Dec 24 j 00:50	0°♎	
	-1807 Feb 01 j 21:37	0°♌			-1802 Feb 17 j 20:36	0°♍	
				desc. node	-1802 Apr 13 j 06:34	16°♍28'37	
conjunction	-1807 Feb 08 j 04:06	4°♌48'41	-1°04'14	retrograde	-1802 Apr 18 j 06:53	16°♍38'00	
minimum elong	-1807 Feb 08 j 05:37	4°♌51'34	1°04'15	opposition	-1802 May 19 j 10:27	11°♍14'50	-2°24'19
	-1807 Mar 13 j 15:31	0°♌		greatest brilliancy	-1802 May 19 j 21:41	11°♍06'44	-2.8m
max. Earth dist.	-1807 Mar 29 j 17:13	11°♌45'40	2.44120 AU	min. Earth dist.	-1802 May 25 j 04:48	9°♍35'27	0.40080 AU
morning rise	-1807 Apr 14 j 01:04	22°♌45'36		direct	-1802 Jun 21 j 11:00	5°♍05'59	
	-1807 Apr 24 j 07:03	0°♍			-1802 Aug 29 j 13:54	0°♌	
	-1807 Jun 07 j 06:11	0°♌			-1802 Oct 15 j 04:05	0°♌	
asc. node	-1807 Jun 25 j 00:41	11°♌39'33			-1802 Nov 27 j 14:19	0°♌	
	-1807 Jul 23 j 20:41	0°♐			-1801 Jan 10 j 01:21	0°♌	
	-1807 Sep 12 j 03:05	0°♌		asc. node	-1801 Feb 14 j 20:01	24°♌10'32	
	-1807 Nov 11 j 09:48	0°♏			-1801 Feb 23 j 13:56	0°♍	
retrograde	-1807 Dec 29 j 15:41	11°♏08'14			-1801 Apr 10 j 09:44	0°♌	
opposition	-1806 Feb 05 j 23:25	2°♏23'57	4°45'30	evening set	-1801 May 16 j 09:36	23°♌06'45	
greatest brilliancy	-1806 Feb 06 j 18:16	2°♏05'41	-1.5m		-1801 May 27 j 04:43	0°♐	
min. Earth dist.	-1806 Feb 10 j 22:27	0°♏28'40	0.63031 AU	max. Earth dist.	-1801 Jun 30 j 07:45	21°♐43'48	2.67299 AU
	-1806 Feb 12 j 04:25	30°♌					
direct	-1806 Mar 19 j 03:03	22°♌25'34		conjunction	-1801 Jul 02 j 15:22	23°♐12'22	1°02'49
	-1806 Apr 25 j 17:55	0°♏		minimum elong	-1801 Jul 02 j 14:22	23°♐10'46	1°02'50
	-1806 Jun 24 j 04:07	0°♍			-1801 Jul 13 j 07:02	0°♌	
desc. node	-1806 Jul 09 j 08:28	9°♍30'47		morning rise	-1801 Aug 16 j 15:36	22°♌01'20	
	-1806 Aug 08 j 17:31	0°♎			-1801 Aug 29 j 00:08	0°♏	
	-1806 Sep 18 j 19:20	0°♍			-1801 Oct 13 j 21:40	0°♍	
	-1806 Oct 27 j 19:07	0°♌			-1801 Nov 27 j 22:19	0°♎	
	-1806 Dec 05 j 03:15	0°♌			-1800 Jan 11 j 07:24	0°♍	
	-1805 Jan 12 j 22:26	0°♌			-1800 Feb 24 j 15:10	0°♌	
evening set	-1805 Feb 09 j 23:39	21°♌06'30		desc. node	-1800 Feb 29 j 06:48	3°♌07'10	
	-1805 Feb 22 j 01:20	0°♌			-1800 Apr 10 j 16:04	0°♌	
	-1805 Apr 05 j 01:16	0°♍			-1800 Jun 09 j 01:35	0°♌	
				retrograde	-1800 Jul 04 j 16:24	4°♌19'14	
conjunction	-1805 Apr 10 j 01:33	3°♍29'01	-0°19'29		-1800 Jul 30 j 18:27	30°♌	
minimum elong	-1805 Apr 10 j 02:38	3°♍30'54	0°19'28	min. Earth dist.	-1800 Jul 31 j 08:54	29°♌49'29	0.39996 AU
max. Earth dist.	-1805 May 10 j 19:41	24°♍26'59	2.56643 AU	greatest brilliancy	-1800 Aug 05 j 09:28	28°♌19'38	-2.7m
asc. node	-1805 May 12 j 22:47	25°♍52'33		opposition	-1800 Aug 06 j 16:41	27°♌56'14	-6°32'11
	-1805 May 19 j 03:08	0°♌		direct	-1800 Sep 05 j 23:41	22°♌29'50	
morning rise	-1805 Jun 02 j 22:13	9°♌46'38			-1800 Oct 12 j 07:34	0°♌	
	-1805 Jul 04 j 03:44	0°♐			-1800 Dec 11 j 08:46	0°♌	
	-1805 Aug 20 j 23:12	0°♌		asc. node	-1799 Jan 01 j 19:19	12°♌36'36	
	-1805 Oct 10 j 00:34	0°♏			-1799 Jan 30 j 11:43	0°♍	
	-1805 Dec 04 j 16:11	0°♍			-1799 Mar 20 j 03:05	0°♌	
retrograde	-1804 Feb 13 j 00:38	20°♍58'21			-1799 May 07 j 09:21	0°♐	
opposition	-1804 Mar 19 j 13:46	13°♍33'26	3°15'42	evening set	-1799 Jun 22 j 17:09	29°♐08'14	
greatest brilliancy	-1804 Mar 20 j 14:32	13°♍11'12	-2.0m		-1799 Jun 24 j 01:44	0°♌	
min. Earth dist.	-1804 Mar 27 j 16:34	10°♍39'26	0.52606 AU	max. Earth dist.	-1799 Jul 23 j 01:51	18°♌35'00	2.64534 AU
direct	-1804 Apr 27 j 16:42	4°♍30'32					
desc. node	-1804 May 26 j 07:25	9°♍29'15		conjunction	-1799 Aug 07 j 20:36	28°♌50'26	1°09'28
	-1804 Jul 08 j 18:22	0°♎		minimum elong	-1799 Aug 07 j 20:58	28°♌51'02	1°09'30
	-1804 Aug 23 j 16:51	0°♍			-1799 Aug 09 j 15:09	0°♏	
	-1804 Oct 03 j 15:20	0°♌		morning rise	-1799 Sep 22 j 10:31	29°♏11'09	
	-1804 Nov 12 j 04:26	0°♌			-1799 Sep 23 j 15:19	0°♍	
	-1804 Dec 21 j 23:22	0°♌			-1799 Nov 05 j 23:39	0°♎	
	-1803 Jan 31 j 23:53	0°♌			-1799 Dec 17 j 19:52	0°♍	
	-1803 Mar 15 j 18:39	0°♍		desc. node	-1798 Jan 16 j 06:04	21°♍37'08	
asc. node	-1803 Mar 29 j 20:47	9°♍35'52			-1798 Jan 27 j 13:08	0°♌	
evening set	-1803 Apr 03 j 15:51	12°♍50'08			-1798 Mar 08 j 18:13	0°♌	
	-1803 Apr 29 j 09:54	0°♌			-1798 Apr 18 j 13:25	0°♌	
					-1798 Jun 01 j 05:35	0°♌	
conjunction	-1803 May 24 j 21:37	16°♌40'08	0°31'12		-1798 Jul 27 j 20:53	0°♍	

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 11

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

retrograde	-1798 Aug 28 j 06:39	6° $\Upsilon$ 13'32			-1793 Oct 18 j 09:02	0° $\mathbb{M}$	
	-1798 Sep 27 j 07:21	30° $\mathbb{K}$		evening set	-1793 Nov 07 j 19:16	15° $\mathbb{M}$ 46'53	
min. Earth dist.	-1798 Sep 27 j 22:44	29° $\mathbb{K}$ 45'51	0.52152 AU		-1793 Nov 25 j 23:05	0° $\mathbb{X}$	
opposition	-1798 Oct 05 j 08:48	26° $\mathbb{K}$ 57'45	-2°08'05		-1792 Jan 02 j 23:57	0° $\mathbb{Z}$	
greatest brilliancy	-1798 Oct 04 j 19:54	27° $\mathbb{K}$ 09'57	-2.1m				
direct	-1798 Nov 09 j 03:25	19° $\mathbb{K}$ 19'25		conjunction	-1792 Jan 11 j 23:07	7° $\mathbb{Z}$ 03'15	-1°04'27
asc. node	-1798 Nov 19 j 17:59	20° $\mathbb{K}$ 01'42		minimum elong	-1792 Jan 11 j 21:39	7° $\mathbb{Z}$ 00'23	1°04'28
	-1798 Dec 25 j 03:00	0° $\Upsilon$			-1792 Feb 10 j 10:06	0° $\approx$	
	-1797 Feb 24 j 00:24	0° $\mathbb{B}$		max. Earth dist.	-1792 Feb 25 j 02:30	11° $\approx$ 14'45	2.39063 AU
	-1797 Apr 17 j 01:46	0° $\mathbb{I}$		morning rise	-1792 Mar 20 j 12:23	29° $\approx$ 34'52	
	-1797 Jun 05 j 06:56	0° $\mathbb{G}$			-1792 Mar 21 j 01:58	0° $\mathbb{K}$	
	-1797 Jul 22 j 06:54	0° $\Omega$			-1792 May 01 j 16:02	0° $\Upsilon$	
evening set	-1797 Jul 31 j 06:14	5° $\Omega$ 53'49			-1792 Jun 14 j 17:14	0° $\mathbb{B}$	
max. Earth dist.	-1797 Aug 19 j 15:54	18° $\Omega$ 50'48	2.56608 AU	asc. node	-1792 Jul 11 j 15:05	17° $\mathbb{B}$ 24'13	
	-1797 Sep 05 j 00:49	0° $\mathbb{P}$			-1792 Jul 31 j 21:07	0° $\mathbb{I}$	
					-1792 Sep 22 j 08:34	0° $\mathbb{G}$	
conjunction	-1797 Sep 17 j 07:34	8° $\mathbb{P}$ 30'10	0°46'00	retrograde	-1792 Dec 14 j 17:34	27° $\mathbb{G}$ 42'02	
minimum elong	-1797 Sep 17 j 09:05	8° $\mathbb{P}$ 32'48	0°46'00	opposition	-1791 Jan 22 j 17:51	18° $\mathbb{G}$ 36'24	4°44'58
	-1797 Oct 17 j 14:49	0° $\underline{\mathbb{A}}$		greatest brilliancy	-1791 Jan 23 j 06:10	18° $\mathbb{G}$ 24'17	-1.4m
morning rise	-1797 Nov 06 j 16:45	14° $\underline{\mathbb{A}}$ 38'20		min. Earth dist.	-1791 Jan 26 j 04:59	17° $\mathbb{G}$ 14'39	0.65501 AU
	-1797 Nov 27 j 08:35	0° $\mathbb{M}$		direct	-1791 Mar 05 j 00:09	8° $\mathbb{G}$ 34'58	
desc. node	-1797 Dec 04 j 04:22	5° $\mathbb{M}$ 08'01			-1791 May 13 j 16:32	0° $\Omega$	
	-1796 Jan 05 j 19:10	0° $\mathbb{X}$			-1791 Jul 04 j 07:52	0° $\mathbb{P}$	
	-1796 Feb 13 j 15:14	0° $\mathbb{Z}$		desc. node	-1791 Jul 26 j 01:16	14° $\mathbb{P}$ 22'08	
	-1796 Mar 23 j 17:27	0° $\approx$			-1791 Aug 17 j 10:55	0° $\underline{\mathbb{A}}$	
	-1796 May 03 j 04:06	0° $\mathbb{K}$			-1791 Sep 27 j 01:05	0° $\mathbb{M}$	
	-1796 Jun 15 j 14:01	0° $\Upsilon$			-1791 Nov 04 j 19:24	0° $\mathbb{X}$	
	-1796 Aug 05 j 06:18	0° $\mathbb{B}$			-1791 Dec 12 j 23:27	0° $\mathbb{Z}$	
retrograde	-1796 Oct 06 j 06:16	18° $\mathbb{B}$ 58'49		evening set	-1790 Jan 15 j 12:56	26° $\mathbb{Z}$ 07'12	
asc. node	-1796 Oct 06 j 17:38	18° $\mathbb{B}$ 58'43			-1790 Jan 20 j 14:08	0° $\approx$	
min. Earth dist.	-1796 Nov 10 j 22:57	10° $\mathbb{B}$ 41'20	0.62577 AU		-1790 Mar 01 j 11:57	0° $\mathbb{K}$	
opposition	-1796 Nov 15 j 02:52	9° $\mathbb{B}$ 01'13	1°34'09				
greatest brilliancy	-1796 Nov 14 j 20:21	9° $\mathbb{B}$ 07'45	-1.6m	conjunction	-1790 Mar 19 j 12:28	13° $\mathbb{K}$ 07'14	-0°40'38
direct	-1796 Dec 23 j 09:06	0° $\mathbb{B}$ 00'38		minimum elong	-1790 Mar 19 j 14:45	13° $\mathbb{K}$ 11'20	0°40'37
	-1795 Mar 22 j 06:25	0° $\mathbb{I}$			-1790 Apr 12 j 06:57	0° $\Upsilon$	
	-1795 May 14 j 19:56	0° $\mathbb{G}$		max. Earth dist.	-1790 Apr 27 j 15:40	10° $\Upsilon$ 39'33	2.52114 AU
	-1795 Jul 02 j 06:07	0° $\Omega$		morning rise	-1790 May 16 j 06:30	23° $\Upsilon$ 19'38	
	-1795 Aug 16 j 07:28	0° $\mathbb{P}$			-1790 May 26 j 05:39	0° $\mathbb{B}$	
evening set	-1795 Sep 12 j 02:14	18° $\mathbb{P}$ 46'45		asc. node	-1790 May 29 j 14:53	2° $\mathbb{B}$ 15'01	
	-1795 Sep 27 j 15:29	0° $\underline{\mathbb{A}}$			-1790 Jul 11 j 08:24	0° $\mathbb{I}$	
max. Earth dist.	-1795 Sep 27 j 22:35	0° $\underline{\mathbb{A}}$ 12'56	2.44650 AU		-1790 Aug 28 j 18:28	0° $\mathbb{G}$	
desc. node	-1795 Oct 21 j 03:50	17° $\underline{\mathbb{A}}$ 22'59			-1790 Oct 19 j 21:23	0° $\Omega$	
					-1790 Dec 26 j 15:33	0° $\mathbb{P}$	
conjunction	-1795 Nov 05 j 14:45	29° $\underline{\mathbb{A}}$ 03'20	-0°10'28	retrograde	-1789 Jan 24 j 19:25	4° $\mathbb{P}$ 31'20	
minimum elong	-1795 Nov 05 j 14:03	29° $\underline{\mathbb{A}}$ 02'01	0°10'28		-1789 Feb 20 j 16:33	30° $\mathbb{K}$ $\Omega$	
behind sun begin	-1795 Nov 04 j 18:56	28° $\underline{\mathbb{A}}$ 25'40		opposition	-1789 Mar 02 j 15:09	26° $\Omega$ 30'14	4°10'23
behind sun end	-1795 Nov 06 j 09:10	29° $\underline{\mathbb{A}}$ 38'23		greatest brilliancy	-1789 Mar 03 j 16:56	26° $\Omega$ 06'09	-1.7m
	-1795 Nov 06 j 20:32	0° $\mathbb{M}$		min. Earth dist.	-1789 Mar 09 j 17:03	23° $\Omega$ 51'53	0.57311 AU
	-1795 Dec 15 j 16:12	0° $\mathbb{X}$		direct	-1789 Apr 11 j 22:03	16° $\Omega$ 54'52	
morning rise	-1794 Jan 06 j 16:48	17° $\mathbb{X}$ 15'53			-1789 May 31 j 16:43	0° $\mathbb{P}$	
	-1794 Jan 22 j 22:13	0° $\mathbb{Z}$		desc. node	-1789 Jun 12 j 23:37	6° $\mathbb{P}$ 02'36	
	-1794 Mar 02 j 11:31	0° $\approx$			-1789 Jul 23 j 05:27	0° $\underline{\mathbb{A}}$	
	-1794 Apr 11 j 05:38	0° $\mathbb{K}$			-1789 Sep 04 j 03:49	0° $\mathbb{M}$	
	-1794 May 23 j 02:21	0° $\Upsilon$			-1789 Oct 13 j 23:40	0° $\mathbb{X}$	
	-1794 Jul 07 j 05:56	0° $\mathbb{B}$			-1789 Nov 21 j 21:05	0° $\mathbb{Z}$	
asc. node	-1794 Aug 24 j 16:40	28° $\mathbb{B}$ 25'33			-1789 Dec 31 j 03:35	0° $\approx$	
	-1794 Aug 27 j 16:31	0° $\mathbb{I}$			-1788 Feb 09 j 17:07	0° $\mathbb{K}$	
retrograde	-1794 Nov 10 j 07:29	24° $\mathbb{I}$ 07'20		evening set	-1788 Mar 15 j 10:38	24° $\mathbb{K}$ 40'46	
opposition	-1794 Dec 20 j 07:00	14° $\mathbb{I}$ 23'14	3°46'47		-1788 Mar 23 j 02:30	0° $\Upsilon$	
greatest brilliancy	-1794 Dec 20 j 04:14	14° $\mathbb{I}$ 26'01	-1.3m	asc. node	-1788 Apr 15 j 13:52	16° $\Upsilon$ 02'22	
min. Earth dist.	-1794 Dec 19 j 21:33	14° $\mathbb{I}$ 32'44	0.67271 AU		-1788 May 06 j 10:39	0° $\mathbb{B}$	
direct	-1793 Jan 29 j 17:21	4° $\mathbb{I}$ 38'11					
	-1793 Apr 19 j 05:13	0° $\mathbb{G}$		conjunction	-1788 May 08 j 06:17	1° $\mathbb{B}$ 12'15	0°13'13
	-1793 Jun 11 j 05:47	0° $\Omega$		minimum elong	-1788 May 08 j 05:40	1° $\mathbb{B}$ 11'15	0°13'14
	-1793 Jul 27 j 15:17	0° $\mathbb{P}$		behind sun begin	-1788 May 07 j 17:54	0° $\mathbb{B}$ 51'45	
desc. node	-1793 Sep 08 j 03:11	29° $\mathbb{P}$ 53'52		behind sun end	-1788 May 08 j 17:27	1° $\mathbb{B}$ 30'44	
	-1793 Sep 08 j 06:33	0° $\underline{\mathbb{A}}$		max. Earth dist.	-1788 May 27 j 07:07	13° $\mathbb{B}$ 42'48	2.62128 AU

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 12

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1788 Jun 21 j 11:04	0°♊		opposition	-1783 Sep 15 j 03:49	6°♋56'58	-3°59'31
morning rise	-1788 Jun 26 j 18:25	3°♊24'13		direct	-1783 Oct 18 j 05:59	0°♋06'06	
	-1788 Aug 07 j 16:57	0°♋		asc. node	-1783 Dec 06 j 09:56	12°♋22'44	
	-1788 Sep 24 j 22:36	0°♌			-1782 Jan 11 j 17:38	0°♌	
	-1788 Nov 13 j 18:37	0°♍			-1782 Mar 05 j 21:20	0°♍	
	-1787 Jan 07 j 12:03	0°♎			-1782 Apr 24 j 23:10	0°♎	
retrograde	-1787 Mar 20 j 13:13	22°♎11'56			-1782 Jun 12 j 10:22	0°♏	
opposition	-1787 Apr 22 j 12:41	15°♎59'49	0°27'08	evening set	-1782 Jul 15 j 22:43	21°♏22'37	
greatest brilliancy	-1787 Apr 22 j 16:49	15°♎56'31	-2.5m		-1782 Jul 29 j 04:45	0°♐	
desc. node	-1787 Apr 29 j 23:27	13°♎37'29		max. Earth dist.	-1782 Aug 08 j 05:09	6°♐35'22	2.60315 AU
min. Earth dist.	-1787 Apr 30 j 16:41	13°♎24'07	0.44539 AU				
direct	-1787 May 28 j 11:45	8°♏29'40		conjunction	-1782 Aug 31 j 19:32	22°♏22'29	0°59'04
	-1787 Jul 30 j 18:11	0°♐		minimum elong	-1782 Aug 31 j 20:46	22°♏24'35	0°59'05
	-1787 Sep 15 j 08:05	0°♑			-1782 Sep 12 j 00:16	0°♑	
	-1787 Oct 27 j 06:34	0°♒		morning rise	-1782 Oct 18 j 15:15	25°♑34'10	
	-1787 Dec 07 j 13:56	0°♓			-1782 Oct 24 j 20:16	0°♒	
	-1786 Jan 18 j 17:33	0°♈			-1782 Dec 04 j 22:36	0°♓	
asc. node	-1786 Mar 03 j 11:36	0°♉04'20		desc. node	-1782 Dec 20 j 22:19	11°♓57'06	
	-1786 Mar 03 j 09:02	0°♉			-1781 Jan 13 j 18:31	0°♑	
	-1786 Apr 17 j 14:48	0°♊			-1781 Feb 21 j 23:48	0°♒	
evening set	-1786 Apr 30 j 14:00	8°♊26'09			-1781 Apr 02 j 11:44	0°♓	
	-1786 Jun 03 j 01:52	0°♋			-1781 May 13 j 13:35	0°♈	
					-1781 Jun 27 j 16:14	0°♉	
conjunction	-1786 Jun 18 j 00:03	9°♋32'14	0°53'16		-1781 Aug 28 j 13:10	0°♊	
minimum elong	-1786 Jun 17 j 22:46	9°♋30'13	0°53'17	retrograde	-1781 Sep 22 j 16:40	3°♊56'16	
max. Earth dist.	-1786 Jun 21 j 05:56	11°♋36'29	2.66912 AU		-1781 Oct 16 j 07:27	30°♋♌	
	-1786 Jul 20 j 02:26	0°♌		asc. node	-1781 Oct 24 j 08:06	27°♌09'11	
morning rise	-1786 Aug 02 j 15:21	8°♌38'03		min. Earth dist.	-1781 Oct 26 j 13:51	26°♌17'04	0.59099 AU
	-1786 Sep 05 j 00:59	0°♍		opposition	-1781 Nov 01 j 03:28	24°♌04'44	0°20'06
	-1786 Oct 21 j 13:44	0°♎		greatest brilliancy	-1781 Nov 01 j 01:38	24°♌06'33	-1.7m
	-1786 Dec 06 j 19:20	0°♏		direct	-1781 Dec 08 j 04:46	15°♌30'38	
	-1785 Jan 22 j 07:49	0°♐			-1780 Feb 02 j 06:29	0°♍	
	-1785 Mar 11 j 21:42	0°♑			-1780 Apr 01 j 12:52	0°♎	
desc. node	-1785 Mar 17 j 22:56	3°♑30'59			-1780 May 22 j 19:14	0°♏	
	-1785 May 14 j 05:16	0°♒			-1780 Jul 09 j 12:26	0°♐	
retrograde	-1785 Jun 07 j 03:22	3°♒32'13			-1780 Aug 23 j 09:42	0°♑	
	-1785 Jul 01 j 10:18	30°♒♑		evening set	-1780 Aug 24 j 23:49	1°♑05'40	
min. Earth dist.	-1785 Jul 05 j 19:24	28°♒51'14	0.37684 AU	max. Earth dist.	-1780 Sep 09 j 09:33	11°♑49'37	2.49671 AU
opposition	-1785 Jul 07 j 19:42	28°♒18'52	-6°27'39		-1780 Oct 04 j 19:26	0°♒	
greatest brilliancy	-1785 Jul 07 j 08:39	28°♒26'17	-2.9m				
direct	-1785 Aug 06 j 13:41	23°♒21'36		conjunction	-1780 Oct 15 j 05:47	7°♒37'23	0°14'57
	-1785 Sep 08 j 22:22	0°♓		minimum elong	-1780 Oct 15 j 06:35	7°♒38'51	0°14'55
	-1785 Nov 06 j 16:37	0°♔		behind sun begin	-1780 Oct 14 j 21:22	7°♒21'56	
	-1785 Dec 24 j 20:43	0°♈		behind sun end	-1780 Oct 15 j 15:47	7°♒55'47	
asc. node	-1784 Jan 19 j 10:38	16°♈20'50		desc. node	-1780 Nov 06 j 20:43	24°♒27'23	
	-1784 Feb 09 j 18:59	0°♉			-1780 Nov 14 j 04:51	0°♓	
	-1784 Mar 27 j 23:35	0°♊		morning rise	-1780 Dec 10 j 20:38	20°♓24'41	
	-1784 May 14 j 12:38	0°♋			-1780 Dec 23 j 05:29	0°♑	
evening set	-1784 Jun 08 j 00:47	15°♋28'30			-1779 Jan 30 j 15:53	0°♒	
	-1784 Jun 30 j 21:53	0°♌			-1779 Mar 10 j 08:33	0°♓	
max. Earth dist.	-1784 Jul 13 j 13:45	8°♌05'26	2.66256 AU		-1779 Apr 19 j 06:02	0°♈	
					-1779 May 31 j 10:24	0°♉	
conjunction	-1784 Jul 24 j 06:42	14°♌57'57	1°10'09		-1779 Jul 16 j 15:15	0°♊	
minimum elong	-1784 Jul 24 j 06:28	14°♌57'35	1°10'10	asc. node	-1779 Sep 10 j 07:30	29°♊30'05	
	-1784 Aug 16 j 11:21	0°♍			-1779 Sep 11 j 12:00	0°♋	
morning rise	-1784 Sep 07 j 05:39	14°♍18'14		retrograde	-1779 Oct 27 j 22:14	11°♋07'12	
	-1784 Sep 30 j 17:56	0°♎		min. Earth dist.	-1779 Dec 05 j 02:40	1°♋59'50	0.66178 AU
	-1784 Nov 13 j 14:26	0°♏		opposition	-1779 Dec 07 j 00:11	1°♋14'03	3°04'47
	-1784 Dec 26 j 03:59	0°♐		greatest brilliancy	-1779 Dec 06 j 17:53	1°♋20'23	-1.4m
desc. node	-1783 Feb 01 j 22:31	27°♐12'23			-1779 Dec 10 j 02:11	30°♋♌	
	-1783 Feb 05 j 18:58	0°♑		direct	-1778 Jan 15 j 17:56	21°♌43'00	
	-1783 Mar 19 j 03:45	0°♒			-1778 Feb 25 j 16:01	0°♎	
	-1783 Apr 30 j 19:48	0°♓			-1778 Apr 29 j 23:17	0°♏	
	-1783 Jun 19 j 00:56	0°♈			-1778 Jun 19 j 11:54	0°♐	
retrograde	-1783 Aug 09 j 14:05	15°♈23'15			-1778 Aug 04 j 05:04	0°♑	
min. Earth dist.	-1783 Sep 07 j 02:06	9°♈48'16	0.47107 AU		-1778 Sep 15 j 16:09	0°♒	
greatest brilliancy	-1783 Sep 14 j 02:40	7°♈19'20	-2.3m	desc. node	-1778 Sep 24 j 19:05	6°♒41'35	

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 13

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

evening set	-1778 Oct 14 j 16:36	21°♌33'39		morning rise	-1773 Jun 12 j 06:46	18°♊56'10	
	-1778 Oct 25 j 18:56	0°♌			-1773 Jun 29 j 10:25	0°♌	
max. Earth dist.	-1778 Nov 24 j 01:40	22°♌39'38	2.37888 AU		-1773 Aug 15 j 23:18	0°♌	
	-1778 Dec 03 j 10:30	0°♌			-1773 Oct 04 j 04:42	0°♌	
					-1773 Nov 25 j 22:21	0°♌	
conjunction	-1778 Dec 14 j 20:55	8°♌59'26	-0°49'54		-1772 Feb 07 j 17:46	0°♌	
minimum elong	-1778 Dec 14 j 17:57	8°♌53'36	0°49'55	retrograde	-1772 Feb 25 j 04:36	1°♌45'12	
	-1777 Jan 10 j 12:43	0°♌			-1772 Mar 12 j 22:06	30°♌	
	-1777 Feb 17 j 23:16	0°♌		opposition	-1772 Mar 30 j 22:33	24°♌44'11	2°27'33
morning rise	-1777 Feb 21 j 14:42	2°♌48'21		greatest brilliancy	-1772 Mar 31 j 18:58	24°♌26'29	-2.2m
	-1777 Mar 29 j 14:39	0°♌		min. Earth dist.	-1772 Apr 08 j 09:52	21°♌48'53	0.49732 AU
	-1777 May 10 j 05:05	0°♌		direct	-1772 May 08 j 03:23	16°♌08'25	
	-1777 Jun 23 j 11:27	0°♌		desc. node	-1772 May 16 j 15:02	16°♌37'16	
asc. node	-1777 Jul 29 j 07:37	22°♌39'07			-1772 Jun 26 j 22:04	0°♌	
	-1777 Aug 10 j 13:46	0°♌			-1772 Aug 16 j 03:35	0°♌	
	-1777 Oct 06 j 10:01	0°♌			-1772 Sep 27 j 06:07	0°♌	
retrograde	-1777 Dec 01 j 15:13	14°♌43'46			-1772 Nov 06 j 09:32	0°♌	
opposition	-1776 Jan 10 j 03:31	5°♌20'24	4°31'24		-1772 Dec 16 j 14:13	0°♌	
greatest brilliancy	-1776 Jan 10 j 09:16	5°♌14'41	-1.3m		-1771 Jan 26 j 22:02	0°♌	
min. Earth dist.	-1776 Jan 12 j 02:15	4°♌33'58	0.66970 AU		-1771 Mar 10 j 22:31	0°♌	
	-1776 Jan 24 j 08:45	30°♌		asc. node	-1771 Mar 20 j 03:45	6°♌16'09	
direct	-1776 Feb 20 j 06:09	25°♌21'44		evening set	-1771 Apr 13 j 19:21	22°♌47'02	
	-1776 Mar 20 j 15:49	0°♌			-1771 Apr 24 j 17:30	0°♌	
	-1776 May 25 j 15:16	0°♌					
	-1776 Jul 13 j 06:37	0°♌		conjunction	-1771 Jun 02 j 21:12	25°♌27'33	0°40'14
desc. node	-1776 Aug 11 j 17:58	20°♌07'20		minimum elong	-1771 Jun 02 j 19:54	25°♌25'28	0°40'15
	-1776 Aug 25 j 14:32	0°♌			-1771 Jun 09 j 22:43	0°♌	
	-1776 Oct 04 j 22:06	0°♌		max. Earth dist.	-1771 Jun 11 j 21:33	1°♌15'10	2.65695 AU
	-1776 Nov 12 j 13:20	0°♌		morning rise	-1771 Jul 19 j 14:29	25°♌18'56	
evening set	-1776 Dec 19 j 05:34	28°♌54'16			-1771 Jul 26 j 23:27	0°♌	
	-1776 Dec 20 j 14:59	0°♌			-1771 Sep 12 j 06:40	0°♌	
	-1775 Jan 28 j 02:46	0°♌			-1771 Oct 29 j 17:11	0°♌	
					-1771 Dec 16 j 19:43	0°♌	
conjunction	-1775 Feb 23 j 04:33	19°♌48'47	-0°58'03		-1770 Feb 05 j 12:43	0°♌	
minimum elong	-1775 Feb 23 j 06:58	19°♌53'19	0°58'03	desc. node	-1770 Apr 03 j 16:09	26°♌56'41	
	-1775 Mar 08 j 21:02	0°♌			-1770 Apr 14 j 04:46	0°♌	
max. Earth dist.	-1775 Apr 11 j 02:32	24°♌03'17	2.47060 AU	retrograde	-1770 May 05 j 23:50	2°♌49'12	
	-1775 Apr 19 j 12:46	0°♌			-1770 May 27 j 21:03	30°♌	
morning rise	-1775 Apr 26 j 11:47	4°♌51'52		opposition	-1770 Jun 05 j 12:28	27°♌44'57	-4°11'05
	-1775 Jun 02 j 10:20	0°♌		greatest brilliancy	-1770 Jun 05 j 22:28	27°♌38'08	-2.9m
asc. node	-1775 Jun 15 j 06:24	8°♌28'29		min. Earth dist.	-1770 Jun 08 j 20:59	26°♌50'15	0.38389 AU
	-1775 Jul 18 j 18:36	0°♌		direct	-1770 Jul 06 j 19:20	22°♌17'01	
	-1775 Sep 06 j 03:43	0°♌			-1770 Aug 11 j 08:49	0°♌	
	-1775 Nov 01 j 01:13	0°♌			-1770 Oct 05 j 20:23	0°♌	
retrograde	-1774 Jan 07 j 18:00	19°♌38'32			-1770 Nov 20 j 13:10	0°♌	
opposition	-1774 Feb 14 j 14:17	11°♌08'04	4°38'09		-1769 Jan 04 j 02:43	0°♌	
greatest brilliancy	-1774 Feb 15 j 12:12	10°♌47'03	-1.6m	asc. node	-1769 Feb 05 j 01:32	21°♌17'13	
min. Earth dist.	-1774 Feb 20 j 07:59	8°♌56'10	0.61244 AU		-1769 Feb 18 j 06:58	0°♌	
direct	-1774 Mar 27 j 12:57	1°♌15'07			-1769 Apr 05 j 12:09	0°♌	
	-1774 Jun 16 j 15:54	0°♌			-1769 May 22 j 12:33	0°♌	
desc. node	-1774 Jun 29 j 16:27	7°♌43'55		evening set	-1769 May 25 j 03:38	1°♌40'12	
	-1774 Aug 02 j 18:57	0°♌		max. Earth dist.	-1769 Jul 05 j 14:03	28°♌00'46	2.67166 AU
	-1774 Sep 13 j 09:23	0°♌			-1769 Jul 08 j 16:50	0°♌	
	-1774 Oct 22 j 15:01	0°♌					
	-1774 Nov 30 j 02:55	0°♌		conjunction	-1769 Jul 10 j 21:48	1°♌24'31	1°06'38
	-1773 Jan 08 j 00:58	0°♌		minimum elong	-1769 Jul 10 j 21:03	1°♌23'19	1°06'40
	-1773 Feb 17 j 06:15	0°♌		morning rise	-1769 Aug 24 j 18:05	0°♌15'56	
evening set	-1773 Feb 23 j 03:23	4°♌16'42			-1769 Aug 24 j 08:16	0°♌	
	-1773 Mar 31 j 08:15	0°♌			-1769 Oct 09 j 00:05	0°♌	
					-1769 Nov 22 j 13:26	0°♌	
conjunction	-1773 Apr 21 j 04:23	14°♌20'27	-0°07'11		-1768 Jan 05 j 04:16	0°♌	
minimum elong	-1773 Apr 21 j 04:45	14°♌21'05	0°07'09		-1768 Feb 17 j 06:16	0°♌	
behind sun begin	-1773 Apr 20 j 08:17	13°♌46'16		desc. node	-1768 Feb 19 j 15:56	1°♌40'23	
behind sun end	-1773 Apr 22 j 01:13	14°♌55'51			-1768 Mar 31 j 20:28	0°♌	
asc. node	-1773 May 03 j 05:04	22°♌28'38			-1768 May 18 j 15:23	0°♌	
	-1773 May 14 j 11:01	0°♌		retrograde	-1768 Jul 18 j 19:32	20°♌35'48	
max. Earth dist.	-1773 May 17 j 15:13	2°♌06'31	2.58806 AU	min. Earth dist.	-1768 Aug 14 j 14:40	15°♌50'14	0.42204 AU

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 14

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

greatest brilliancy	-1768 Aug 20 j 19:25	13° $\approx$ 51'58	-2.6m		-1763 Nov 02 j 03:44	0° $\mathbb{M}$	
opposition	-1768 Aug 22 j 04:30	13° $\approx$ 25'28	-5°48'33				
direct	-1768 Sep 22 j 09:10	7° $\approx$ 30'18		conjunction	-1763 Nov 18 j 22:17	12° $\mathbb{M}$ 52'58	-0°25'38
	-1768 Dec 01 j 07:33	0° $\mathbb{H}$		minimum elong	-1763 Nov 18 j 20:30	12° $\mathbb{M}$ 49'33	0°25'38
asc. node	-1768 Dec 23 j 00:42	11° $\mathbb{H}$ 39'30			-1763 Dec 10 j 22:03	0° $\mathbb{Z}$	
	-1767 Jan 23 j 20:26	0° $\mathbb{Y}$			-1762 Jan 18 j 02:27	0° $\mathbb{Z}$	
	-1767 Mar 14 j 15:59	0° $\mathbb{B}$		morning rise	-1762 Jan 22 j 23:32	3° $\mathbb{Z}$ 49'48	
	-1767 May 02 j 11:17	0° $\mathbb{II}$			-1762 Feb 25 j 14:08	0° $\approx$	
	-1767 Jun 19 j 09:45	0° $\mathbb{E}$			-1762 Apr 06 j 06:01	0° $\mathbb{H}$	
evening set	-1767 Jul 01 j 03:21	7° $\mathbb{E}$ 27'34			-1762 May 17 j 22:40	0° $\mathbb{Y}$	
max. Earth dist.	-1767 Jul 28 j 18:30	25° $\mathbb{E}$ 15'30	2.63248 AU		-1762 Jul 01 j 15:04	0° $\mathbb{B}$	
	-1767 Aug 05 j 00:51	0° $\mathbb{Q}$		asc. node	-1762 Aug 14 j 22:37	26° $\mathbb{B}$ 57'19	
					-1762 Aug 20 j 08:42	0° $\mathbb{II}$	
conjunction	-1767 Aug 16 j 09:34	7° $\mathbb{Q}$ 28'20	1°07'02		-1762 Oct 30 j 18:48	0° $\mathbb{E}$	
minimum elong	-1767 Aug 16 j 10:17	7° $\mathbb{Q}$ 29'32	1°07'02	retrograde	-1762 Nov 18 j 00:30	1° $\mathbb{E}$ 56'29	
	-1767 Sep 18 j 23:30	0° $\mathbb{M}$			-1762 Dec 05 j 02:44	30° $\mathbb{R}$ $\mathbb{II}$	
morning rise	-1767 Oct 01 j 13:36	8° $\mathbb{M}$ 37'35		opposition	-1762 Dec 27 j 21:22	22° $\mathbb{II}$ 18'42	4°06'24
	-1767 Nov 01 j 03:16	0° $\mathbb{L}$		greatest brilliancy	-1762 Dec 27 j 21:16	22° $\mathbb{II}$ 18'48	-1.3m
	-1767 Dec 12 j 16:47	0° $\mathbb{M}$		min. Earth dist.	-1762 Dec 28 j 07:42	22° $\mathbb{II}$ 08'22	0.67438 AU
desc. node	-1766 Jan 06 j 14:22	18° $\mathbb{M}$ 25'31		direct	-1761 Feb 06 j 15:07	12° $\mathbb{II}$ 27'42	
	-1766 Jan 22 j 01:30	0° $\mathbb{Z}$			-1761 Apr 10 j 18:01	0° $\mathbb{E}$	
	-1766 Mar 02 j 20:33	0° $\mathbb{Z}$			-1761 Jun 05 j 10:21	0° $\mathbb{Q}$	
	-1766 Apr 12 j 01:09	0° $\approx$			-1761 Jul 22 j 12:04	0° $\mathbb{M}$	
	-1766 May 24 j 08:58	0° $\mathbb{H}$		desc. node	-1761 Aug 29 j 10:32	26° $\mathbb{M}$ 26'04	
	-1766 Jul 12 j 16:44	0° $\mathbb{Y}$			-1761 Sep 03 j 08:53	0° $\mathbb{L}$	
retrograde	-1766 Sep 06 j 22:33	17° $\mathbb{Y}$ 10'02			-1761 Oct 13 j 13:23	0° $\mathbb{M}$	
min. Earth dist.	-1766 Oct 08 j 19:16	10° $\mathbb{Y}$ 15'16	0.54786 AU		-1761 Nov 21 j 03:53	0° $\mathbb{Z}$	
opposition	-1766 Oct 15 j 15:11	7° $\mathbb{Y}$ 36'56	-1°09'40	evening set	-1761 Nov 22 j 16:07	1° $\mathbb{Z}$ 11'14	
greatest brilliancy	-1766 Oct 15 j 08:37	7° $\mathbb{Y}$ 43'16	-1.9m		-1761 Dec 29 j 04:54	0° $\mathbb{Z}$	
asc. node	-1766 Nov 10 j 00:22	0° $\mathbb{Y}$ 19'03					
	-1766 Nov 12 j 15:06	30° $\mathbb{R}$ $\mathbb{H}$		conjunction	-1760 Jan 28 j 00:30	23° $\mathbb{Z}$ 20'16	-1°06'09
direct	-1766 Nov 20 j 06:09	29° $\mathbb{H}$ 36'39		minimum elong	-1760 Jan 28 j 00:48	23° $\mathbb{Z}$ 20'50	1°06'11
	-1766 Nov 28 j 03:41	0° $\mathbb{Y}$			-1760 Feb 05 j 15:16	0° $\approx$	
	-1765 Feb 16 j 16:05	0° $\mathbb{B}$			-1760 Mar 16 j 07:09	0° $\mathbb{H}$	
	-1765 Apr 11 j 12:25	0° $\mathbb{II}$		max. Earth dist.	-1760 Mar 17 j 17:40	1° $\mathbb{H}$ 03'51	2.41753 AU
	-1765 May 31 j 08:39	0° $\mathbb{E}$		morning rise	-1760 Apr 03 j 19:18	13° $\mathbb{H}$ 32'59	
	-1765 Jul 17 j 14:32	0° $\mathbb{Q}$			-1760 Apr 26 j 20:40	0° $\mathbb{Y}$	
evening set	-1765 Aug 09 j 07:50	15° $\mathbb{Q}$ 00'34			-1760 Jun 09 j 18:51	0° $\mathbb{B}$	
max. Earth dist.	-1765 Aug 26 j 21:08	26° $\mathbb{Q}$ 53'09	2.54304 AU	asc. node	-1760 Jul 01 j 22:29	14° $\mathbb{B}$ 28'09	
	-1765 Aug 31 j 10:07	0° $\mathbb{M}$			-1760 Jul 26 j 12:44	0° $\mathbb{II}$	
					-1760 Sep 15 j 11:39	0° $\mathbb{E}$	
conjunction	-1765 Sep 27 j 07:00	18° $\mathbb{M}$ 46'36	0°36'07		-1760 Nov 19 j 22:42	0° $\mathbb{Q}$	
minimum elong	-1765 Sep 27 j 08:27	18° $\mathbb{M}$ 49'10	0°36'07	retrograde	-1760 Dec 23 j 03:30	5° $\mathbb{Q}$ 45'35	
	-1765 Oct 12 j 22:54	0° $\mathbb{L}$			-1759 Jan 22 j 10:28	30° $\mathbb{R}$ $\mathbb{E}$	
morning rise	-1765 Nov 18 j 12:59	26° $\mathbb{L}$ 58'00		opposition	-1759 Jan 30 j 19:11	26° $\mathbb{E}$ 51'03	4°46'46
	-1765 Nov 22 j 13:50	0° $\mathbb{M}$		greatest brilliancy	-1759 Jan 31 j 11:08	26° $\mathbb{E}$ 35'28	-1.4m
desc. node	-1765 Nov 24 j 13:29	1° $\mathbb{M}$ 29'46		min. Earth dist.	-1759 Feb 04 j 02:01	25° $\mathbb{E}$ 10'43	0.64261 AU
	-1765 Dec 31 j 20:33	0° $\mathbb{Z}$		direct	-1759 Mar 13 j 00:48	16° $\mathbb{E}$ 50'29	
	-1764 Feb 08 j 12:35	0° $\mathbb{Z}$			-1759 May 03 j 20:06	0° $\mathbb{Q}$	
	-1764 Mar 18 j 10:24	0° $\approx$			-1759 Jun 28 j 01:57	0° $\mathbb{M}$	
	-1764 Apr 27 j 14:20	0° $\mathbb{H}$		desc. node	-1759 Jul 16 j 09:47	11° $\mathbb{M}$ 46'51	
	-1764 Jun 09 j 09:14	0° $\mathbb{Y}$			-1759 Aug 12 j 00:12	0° $\mathbb{L}$	
	-1764 Jul 27 j 15:48	0° $\mathbb{B}$			-1759 Sep 21 j 21:31	0° $\mathbb{M}$	
asc. node	-1764 Sep 26 j 23:40	25° $\mathbb{B}$ 41'59			-1759 Oct 30 j 18:58	0° $\mathbb{Z}$	
retrograde	-1764 Oct 14 j 06:50	27° $\mathbb{B}$ 33'33			-1759 Dec 08 j 01:00	0° $\mathbb{Z}$	
min. Earth dist.	-1764 Nov 19 j 22:05	18° $\mathbb{B}$ 57'16	0.64121 AU		-1758 Jan 15 j 17:30	0° $\approx$	
opposition	-1764 Nov 23 j 07:03	17° $\mathbb{B}$ 35'55	2°11'07	evening set	-1758 Jan 30 j 06:30	11° $\approx$ 03'17	
greatest brilliancy	-1764 Nov 22 j 23:38	17° $\mathbb{B}$ 43'21	-1.5m		-1758 Feb 24 j 16:59	0° $\mathbb{H}$	
direct	-1763 Jan 01 j 03:35	8° $\mathbb{B}$ 23'13					
	-1763 Mar 14 j 08:44	0° $\mathbb{II}$		conjunction	-1758 Apr 01 j 02:19	25° $\mathbb{H}$ 27'44	-0°28'38
	-1763 May 09 j 04:34	0° $\mathbb{E}$		minimum elong	-1758 Apr 01 j 03:57	25° $\mathbb{H}$ 30'38	0°28'38
	-1763 Jun 27 j 06:18	0° $\mathbb{Q}$			-1758 Apr 07 j 13:30	0° $\mathbb{Y}$	
	-1763 Aug 11 j 13:25	0° $\mathbb{M}$		max. Earth dist.	-1758 May 05 j 14:45	19° $\mathbb{Y}$ 18'33	2.54713 AU
	-1763 Sep 22 j 22:59	0° $\mathbb{L}$		asc. node	-1758 May 19 j 20:52	28° $\mathbb{Y}$ 53'52	
evening set	-1763 Sep 23 j 05:28	0° $\mathbb{L}$ 11'47			-1758 May 21 j 12:32	0° $\mathbb{B}$	
desc. node	-1763 Oct 11 j 12:22	13° $\mathbb{L}$ 40'43		morning rise	-1758 May 26 j 13:34	3° $\mathbb{B}$ 21'12	
max. Earth dist.	-1763 Oct 11 j 16:53	13° $\mathbb{L}$ 49'08	2.41943 AU		-1758 Jul 06 j 12:45	0° $\mathbb{II}$	

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1758 Aug 23 j 12:39	0°☿			-1753 Oct 25 j 19:51	0°♊		
	-1758 Oct 13 j 06:50	0°♈			-1753 Dec 17 j 11:06	0°♋		
	-1758 Dec 11 j 00:41	0°♌		asc. node	-1752 Jan 09 j 17:11	14°♋17'36		
retrograde	-1757 Feb 04 j 09:02	14°♌04'45			-1752 Feb 03 j 21:55	0°♌		
opposition	-1757 Mar 12 j 13:11	6°♌22'27	3°42'25		-1752 Mar 22 j 19:49	0°♍		
greatest brilliancy	-1757 Mar 13 j 15:01	5°♌58'48	-1.9m		-1752 May 09 j 17:49	0°♎		
min. Earth dist.	-1757 Mar 20 j 06:24	3°♌33'35	0.54806 AU	evening set	-1752 Jun 16 j 11:30	23°♎46'18		
	-1757 Mar 31 j 09:00	30°♏♏			-1752 Jun 26 j 07:02	0°☿		
direct	-1757 Apr 21 j 06:34	27°♏02'51		max. Earth dist.	-1752 Jul 19 j 02:09	14°☿34'57	2.65405 AU	
	-1757 May 13 j 03:40	0°♐						
desc. node	-1757 Jun 03 j 09:07	7°♐24'09		conjunction	-1752 Aug 01 j 14:45	23°☿19'12	1°10'16	
	-1757 Jul 15 j 12:24	0°♑		minimum elong	-1752 Aug 01 j 14:52	23°☿19'25	1°10'17	
	-1757 Aug 28 j 21:58	0°♒			-1752 Aug 11 j 20:56	0°♑		
	-1757 Oct 08 j 07:18	0°♓		morning rise	-1752 Sep 15 j 20:07	23°♑08'17		
	-1757 Nov 16 j 12:17	0°♐			-1752 Sep 26 j 00:44	0°♒		
	-1757 Dec 26 j 00:26	0°♑			-1752 Nov 08 j 14:58	0°♓		
	-1756 Feb 04 j 18:28	0°♋			-1752 Dec 20 j 19:11	0°♒		
	-1756 Mar 18 j 07:38	0°♌		desc. node	-1751 Jan 23 j 07:23	24°♒24'59		
evening set	-1756 Mar 26 j 15:08	5°♌42'24			-1751 Jan 30 j 21:32	0°♓		
asc. node	-1756 Apr 05 j 18:44	12°♌36'44			-1751 Mar 12 j 13:10	0°♐		
	-1756 May 01 j 18:24	0°♍			-1751 Apr 22 j 23:09	0°♑		
					-1751 Jun 07 j 02:45	0°♋		
conjunction	-1756 May 17 j 22:36	10°♍38'22	0°23'59	retrograde	-1751 Aug 20 j 12:34	28°♋03'42		
minimum elong	-1756 May 17 j 21:38	10°♍36'47	0°24'01	min. Earth dist.	-1751 Sep 19 j 05:33	21°♋59'06	0.49907 AU	
max. Earth dist.	-1756 Jun 02 j 05:15	20°♍34'58	2.63637 AU	greatest brilliancy	-1751 Sep 26 j 06:15	19°♋23'38	-2.2m	
	-1756 Jun 16 j 19:37	0°♎		opposition	-1751 Sep 27 j 00:29	19°♋06'47	-2°54'40	
morning rise	-1756 Jul 05 j 06:39	11°♎48'56		direct	-1751 Oct 31 j 00:42	11°♋48'37		
	-1756 Aug 02 j 22:37	0°☿		asc. node	-1751 Nov 26 j 15:46	15°♋52'47		
	-1756 Sep 19 j 18:25	0°♏			-1750 Jan 01 j 22:18	0°♌		
	-1756 Nov 07 j 12:36	0°♐			-1750 Feb 27 j 14:50	0°♍		
	-1756 Dec 28 j 21:12	0°♑			-1750 Apr 19 j 17:50	0°♎		
	-1755 Mar 03 j 04:58	0°♒			-1750 Jun 07 j 15:14	0°☿		
retrograde	-1755 Apr 05 j 05:39	5°♒51'27		evening set	-1750 Jul 24 j 15:31	0°♏03'22		
desc. node	-1755 Apr 20 j 08:09	4°♒25'40			-1750 Jul 24 j 13:28	0°♏		
opposition	-1755 May 07 j 03:01	0°♒07'31	-1°04'56	max. Earth dist.	-1750 Aug 14 j 16:17	13°♏57'18	2.58351 AU	
greatest brilliancy	-1755 May 07 j 09:46	0°♒02'26	-2.7m		-1750 Sep 07 j 09:11	0°♐		
	-1755 May 07 j 12:59	30°♓♓						
min. Earth dist.	-1755 May 14 j 06:01	27°♓58'39	0.41909 AU	conjunction	-1750 Sep 10 j 02:16	1°♐51'44	0°52'09	
direct	-1755 Jun 10 j 12:59	23°♓21'34		minimum elong	-1750 Sep 10 j 03:41	1°♐54'11	0°52'09	
	-1755 Jul 12 j 22:40	0°♒			-1750 Oct 20 j 02:44	0°♑		
	-1755 Sep 06 j 07:08	0°♓		morning rise	-1750 Oct 29 j 05:00	6°♑33'44		
	-1755 Oct 20 j 05:22	0°♐			-1750 Nov 30 j 01:08	0°♒		
	-1755 Dec 01 j 12:24	0°♑		desc. node	-1750 Dec 11 j 05:49	8°♒23'44		
	-1754 Jan 13 j 06:38	0°♋			-1749 Jan 08 j 16:13	0°♓		
asc. node	-1754 Feb 21 j 17:52	26°♋55'30			-1749 Feb 16 j 16:11	0°♐		
	-1754 Feb 26 j 07:55	0°♌			-1749 Mar 27 j 21:55	0°♑		
	-1754 Apr 12 j 20:00	0°♍			-1749 May 07 j 12:56	0°♋		
evening set	-1754 May 09 j 17:55	17°♍23'00			-1749 Jun 20 j 10:37	0°♌		
	-1754 May 29 j 10:44	0°♎			-1749 Aug 12 j 14:40	0°♍		
				retrograde	-1749 Oct 01 j 03:20	13°♍09'04		
conjunction	-1754 Jun 26 j 10:53	17°♎51'35	0°59'15	asc. node	-1749 Oct 14 j 14:54	11°♍51'39		
minimum elong	-1754 Jun 26 j 09:44	17°♎49'47	0°59'17	min. Earth dist.	-1749 Nov 05 j 01:02	5°♍08'31	0.61125 AU	
max. Earth dist.	-1754 Jun 26 j 15:09	17°♎58'24	2.67235 AU	opposition	-1749 Nov 09 j 20:51	3°♍13'01	1°04'52	
	-1754 Jul 15 j 11:58	0°☿		greatest brilliancy	-1749 Nov 09 j 15:40	3°♍18'11	-1.6m	
morning rise	-1754 Aug 10 j 16:16	16°☿44'08			-1749 Nov 18 j 06:26	30°♌♌		
	-1754 Aug 31 j 07:31	0°♏		direct	-1749 Dec 17 j 15:07	24°♌23'38		
	-1754 Oct 16 j 11:49	0°♐			-1748 Jan 19 j 05:17	0°♍		
	-1754 Dec 01 j 00:18	0°♑			-1748 Mar 26 j 00:24	0°♎		
	-1753 Jan 15 j 05:08	0°♒			-1748 May 17 j 13:00	0°☿		
	-1753 Mar 01 j 22:42	0°♓			-1748 Jul 04 j 16:41	0°♏		
desc. node	-1753 Mar 08 j 08:06	4°♓05'31			-1748 Aug 18 j 17:36	0°♐		
	-1753 Apr 20 j 09:52	0°♐		evening set	-1748 Sep 04 j 02:04	11°♐22'07		
retrograde	-1753 Jun 23 j 18:29	21°♐34'01		max. Earth dist.	-1748 Sep 19 j 04:09	22°♐04'44	2.46907 AU	
min. Earth dist.	-1753 Jul 20 j 22:13	17°♐07'24	0.38623 AU		-1748 Sep 30 j 03:24	0°♑		
opposition	-1753 Jul 25 j 15:23	15°♐47'26	-6°46'36					
greatest brilliancy	-1753 Jul 24 j 14:50	16°♐04'50	-2.8m	conjunction	-1748 Oct 27 j 00:41	19°♑51'31	0°00'49	
direct	-1753 Aug 24 j 11:30	10°♐39'37		minimum elong	-1748 Oct 27 j 00:43	19°♑51'34	0°00'47	

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 16

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

behind sun begin	-1748 Oct 26 j 01:14	19° $\Omega$ 07'34				-1743 Oct 23 j 19:42	0° $\Omega$	
behind sun end	-1748 Oct 28 j 00:13	20° $\Omega$ 35'37		retrograde		-1742 Jan 17 j 05:55	28° $\Omega$ 26'16	
desc. node	-1748 Oct 28 j 05:01	20° $\Omega$ 44'37		opposition		-1742 Feb 23 j 13:49	20° $\Omega$ 11'05	4°24'26
	-1748 Nov 09 j 11:15	0° $\mathbb{M}$		greatest brilliancy		-1742 Feb 24 j 14:09	19° $\Omega$ 48'02	-1.6m
	-1748 Dec 18 j 09:29	0° $\mathbb{A}$		min. Earth dist.		-1742 Mar 02 j 01:52	17° $\Omega$ 43'43	0.59182 AU
morning rise	-1748 Dec 25 j 14:41	5° $\mathbb{A}$ 38'03		direct		-1742 Apr 05 j 05:10	10° $\Omega$ 26'27	
	-1747 Jan 25 j 17:18	0° $\mathbb{B}$				-1742 Jun 07 j 17:09	0° $\mathbb{M}$	
	-1747 Mar 05 j 07:36	0° $\approx$		desc. node		-1742 Jun 20 j 00:59	6° $\mathbb{M}$ 42'05	
	-1747 Apr 14 j 02:01	0° $\mathbb{H}$				-1742 Jul 27 j 09:46	0° $\Omega$	
	-1747 May 26 j 00:01	0° $\mathbb{Y}$				-1742 Sep 07 j 17:29	0° $\mathbb{M}$	
	-1747 Jul 10 j 10:24	0° $\mathbb{B}$				-1742 Oct 17 j 06:53	0° $\mathbb{A}$	
asc. node	-1747 Aug 31 j 14:25	29° $\mathbb{B}$ 37'36				-1742 Nov 24 j 23:28	0° $\mathbb{B}$	
	-1747 Sep 01 j 08:35	0° $\mathbb{II}$				-1741 Jan 03 j 01:22	0° $\approx$	
retrograde	-1747 Nov 04 j 14:54	19° $\mathbb{II}$ 05'07				-1741 Feb 12 j 09:59	0° $\mathbb{H}$	
opposition	-1747 Dec 14 j 16:22	9° $\mathbb{II}$ 16'27	3°30'37	evening set		-1741 Mar 07 j 12:27	16° $\mathbb{H}$ 36'00	
greatest brilliancy	-1747 Dec 14 j 11:43	9° $\mathbb{II}$ 21'07	-1.3m			-1741 Mar 26 j 14:39	0° $\mathbb{Y}$	
min. Earth dist.	-1747 Dec 13 j 14:18	9° $\mathbb{II}$ 42'38	0.66911 AU	asc. node		-1741 Apr 23 j 11:30	19° $\mathbb{Y}$ 04'26	
	-1746 Jan 16 j 02:50	30° $\mathbb{R}$ $\mathbb{B}$						
direct	-1746 Jan 23 j 20:26	29° $\mathbb{B}$ 37'17		conjunction		-1741 May 01 j 16:56	24° $\mathbb{Y}$ 36'09	0°04'53
	-1746 Jan 31 j 20:25	0° $\mathbb{II}$		minimum elong		-1741 May 01 j 16:42	24° $\mathbb{Y}$ 35'45	0°04'54
	-1746 Apr 23 j 05:07	0° $\mathbb{B}$		behind sun begin		-1741 Apr 30 j 19:41	24° $\mathbb{Y}$ 00'35	
	-1746 Jun 14 j 03:15	0° $\Omega$		behind sun end		-1741 May 02 j 13:43	25° $\mathbb{Y}$ 10'54	
	-1746 Jul 30 j 07:08	0° $\mathbb{M}$				-1741 May 09 j 19:05	0° $\mathbb{B}$	
	-1746 Sep 10 j 21:48	0° $\Omega$		max. Earth dist.		-1741 May 24 j 00:29	9° $\mathbb{B}$ 24'01	2.60736 AU
desc. node	-1746 Sep 15 j 04:22	3° $\Omega$ 07'11		morning rise		-1741 Jun 21 j 06:47	27° $\mathbb{B}$ 46'27	
	-1746 Oct 21 j 01:26	0° $\mathbb{M}$				-1741 Jun 24 j 17:52	0° $\mathbb{II}$	
evening set	-1746 Oct 27 j 22:47	5° $\mathbb{M}$ 17'09				-1741 Aug 11 j 01:39	0° $\mathbb{B}$	
	-1746 Nov 28 j 16:30	0° $\mathbb{A}$				-1741 Sep 28 j 16:01	0° $\Omega$	
						-1741 Nov 18 j 12:20	0° $\mathbb{M}$	
conjunction	-1746 Dec 30 j 13:14	25° $\mathbb{A}$ 07'18	-0°59'47			-1740 Jan 16 j 06:46	0° $\Omega$	
minimum elong	-1746 Dec 30 j 10:46	25° $\mathbb{A}$ 02'25	0°59'49	retrograde		-1740 Mar 09 j 10:19	13° $\Omega$ 20'13	
	-1745 Jan 05 j 17:44	0° $\mathbb{B}$		opposition		-1740 Apr 12 j 05:42	6° $\Omega$ 45'28	1°25'02
max. Earth dist.	-1745 Jan 22 j 10:13	13° $\mathbb{B}$ 06'35	2.37552 AU	greatest brilliancy		-1740 Apr 12 j 18:19	6° $\Omega$ 35'00	-2.3m
	-1745 Feb 13 j 03:23	0° $\approx$		min. Earth dist.		-1740 Apr 20 j 17:57	3° $\Omega$ 56'33	0.46842 AU
morning rise	-1745 Mar 09 j 17:58	18° $\approx$ 47'09				-1740 May 05 j 16:02	30° $\mathbb{R}$ $\mathbb{M}$	
	-1745 Mar 24 j 17:49	0° $\mathbb{H}$		desc. node		-1740 May 07 j 00:38	29° $\mathbb{M}$ 45'34	
	-1745 May 05 j 06:26	0° $\mathbb{Y}$		direct		-1740 May 19 j 08:10	28° $\mathbb{M}$ 42'58	
	-1745 Jun 18 j 07:51	0° $\mathbb{B}$				-1740 Jun 02 j 04:23	0° $\Omega$	
asc. node	-1745 Jul 19 j 12:48	20° $\mathbb{B}$ 02'11				-1740 Aug 07 j 05:51	0° $\mathbb{M}$	
	-1745 Aug 04 j 17:57	0° $\mathbb{II}$				-1740 Sep 20 j 07:34	0° $\mathbb{A}$	
	-1745 Sep 27 j 12:05	0° $\mathbb{B}$				-1740 Oct 31 j 07:09	0° $\mathbb{B}$	
retrograde	-1745 Dec 09 j 15:26	22° $\mathbb{B}$ 35'41				-1740 Dec 11 j 00:24	0° $\approx$	
opposition	-1744 Jan 17 j 21:50	13° $\mathbb{B}$ 21'31	4°40'34			-1739 Jan 21 j 17:21	0° $\mathbb{H}$	
greatest brilliancy	-1744 Jan 18 j 07:09	13° $\mathbb{B}$ 12'19	-1.3m			-1739 Mar 06 j 00:31	0° $\mathbb{Y}$	
min. Earth dist.	-1744 Jan 20 j 16:25	12° $\mathbb{B}$ 15'44	0.66291 AU	asc. node		-1739 Mar 10 j 09:26	2° $\mathbb{Y}$ 57'45	
direct	-1744 Feb 28 j 03:32	3° $\mathbb{B}$ 20'48				-1739 Apr 20 j 00:17	0° $\mathbb{B}$	
	-1744 May 18 j 08:49	0° $\Omega$		evening set		-1739 Apr 23 j 13:07	2° $\mathbb{B}$ 18'57	
	-1744 Jul 07 j 15:11	0° $\mathbb{M}$				-1739 Jun 05 j 07:56	0° $\mathbb{II}$	
desc. node	-1744 Aug 02 j 02:36	17° $\mathbb{M}$ 05'04						
	-1744 Aug 20 j 10:48	0° $\Omega$		conjunction		-1739 Jun 11 j 15:24	4° $\mathbb{II}$ 02'37	0°48'13
	-1744 Sep 29 j 23:03	0° $\mathbb{M}$		minimum elong		-1739 Jun 11 j 14:05	4° $\mathbb{II}$ 00'30	0°48'15
	-1744 Nov 07 j 16:22	0° $\mathbb{A}$		max. Earth dist.		-1739 Jun 17 j 08:30	7° $\mathbb{II}$ 41'54	2.66473 AU
greatest brilliancy	-1744 Nov 18 j 08:49	8° $\mathbb{A}$ 23'59	1.2m			-1739 Jul 22 j 08:02	0° $\mathbb{B}$	
	-1744 Dec 15 j 19:06	0° $\mathbb{B}$		morning rise		-1739 Jul 27 j 16:44	3° $\mathbb{B}$ 24'47	
evening set	-1743 Jan 03 j 18:25	14° $\mathbb{B}$ 51'21				-1739 Sep 07 j 10:09	0° $\Omega$	
	-1743 Jan 23 j 07:50	0° $\approx$				-1739 Oct 24 j 07:43	0° $\mathbb{M}$	
	-1743 Mar 04 j 02:51	0° $\mathbb{H}$				-1739 Dec 10 j 06:34	0° $\Omega$	
						-1738 Jan 27 j 05:39	0° $\mathbb{M}$	
conjunction	-1743 Mar 09 j 07:40	3° $\mathbb{H}$ 49'36	-0°48'50			-1738 Mar 20 j 16:13	0° $\mathbb{A}$	
minimum elong	-1743 Mar 09 j 10:14	3° $\mathbb{H}$ 54'19	0°48'48	desc. node		-1738 Mar 25 j 00:18	2° $\mathbb{A}$ 11'24	
	-1743 Apr 14 j 18:53	0° $\mathbb{Y}$		retrograde		-1738 May 24 j 07:20	20° $\mathbb{A}$ 12'58	
max. Earth dist.	-1743 Apr 21 j 06:08	4° $\mathbb{Y}$ 31'20	2.49902 AU	opposition		-1738 Jun 23 j 13:16	15° $\mathbb{A}$ 12'05	-5°41'57
morning rise	-1743 May 08 j 01:21	16° $\mathbb{Y}$ 06'34		greatest brilliancy		-1738 Jun 23 j 13:47	15° $\mathbb{A}$ 11'45	-2.9m
	-1743 May 28 j 15:30	0° $\mathbb{B}$		min. Earth dist.		-1738 Jun 24 j 00:33	15° $\mathbb{A}$ 04'38	0.37610 AU
asc. node	-1743 Jun 05 j 12:13	5° $\mathbb{B}$ 13'17		direct		-1738 Jul 23 j 16:27	10° $\mathbb{A}$ 09'23	
	-1743 Jul 13 j 18:53	0° $\mathbb{II}$				-1738 Sep 23 j 10:15	0° $\mathbb{B}$	
	-1743 Aug 31 j 12:06	0° $\mathbb{B}$				-1738 Nov 12 j 14:57	0° $\approx$	



Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1738 Dec 28 j 20:15	0° $\text{H}$				-1733 Nov 17 j 20:12	0° $\text{M}$	
asc. node	-1737 Jan 26 j 08:10	18° $\text{H}$ 37'03		morning rise		-1733 Dec 01 j 06:45	10° $\text{M}$ 12'16	
	-1737 Feb 12 j 20:35	0° $\text{Y}$				-1733 Dec 27 j 00:01	0° $\text{X}$	
	-1737 Mar 31 j 13:15	0° $\text{B}$				-1732 Feb 03 j 12:44	0° $\text{Z}$	
	-1737 May 17 j 20:01	0° $\text{II}$				-1732 Mar 13 j 06:56	0° $\approx$	
evening set	-1737 Jun 02 j 17:20	10° $\text{II}$ 03'31				-1732 Apr 22 j 05:45	0° $\text{H}$	
	-1737 Jul 04 j 02:56	0° $\text{E}$				-1732 Jun 03 j 13:25	0° $\text{Y}$	
max. Earth dist.	-1737 Jul 10 j 21:15	4° $\text{E}$ 18'58	2.66766 AU			-1732 Jul 20 j 08:18	0° $\text{B}$	
				asc. node		-1732 Sep 17 j 04:59	29° $\text{B}$ 04'54	
conjunction	-1737 Jul 19 j 03:27	9° $\text{E}$ 36'02	1°09'09			-1732 Sep 19 j 21:26	0° $\text{II}$	
minimum elong	-1737 Jul 19 j 03:00	9° $\text{E}$ 35'19	1°09'11	retrograde		-1732 Oct 22 j 03:44	5° $\text{II}$ 53'02	
	-1737 Aug 19 j 17:40	0° $\Omega$				-1732 Nov 20 j 22:11	30° $\text{R}$ $\text{B}$	
morning rise	-1737 Sep 01 j 23:45	8° $\Omega$ 39'39		min. Earth dist.		-1732 Nov 28 j 16:09	26° $\text{B}$ 59'24	0.65383 AU
	-1737 Oct 04 j 04:42	0° $\text{M}$		opposition		-1732 Dec 01 j 06:02	25° $\text{B}$ 57'11	2°43'56
	-1737 Nov 17 j 08:45	0° $\underline{\text{A}}$		greatest brilliancy		-1732 Nov 30 j 22:49	26° $\text{B}$ 04'26	-1.4m
	-1737 Dec 30 j 08:58	0° $\text{M}$		direct		-1731 Jan 09 j 15:33	16° $\text{B}$ 33'47	
desc. node	-1736 Feb 09 j 23:38	29° $\text{M}$ 34'58				-1731 Mar 04 j 18:27	0° $\text{II}$	
	-1736 Feb 10 j 13:39	0° $\text{X}$				-1731 May 03 j 05:50	0° $\text{E}$	
	-1736 Mar 23 j 17:02	0° $\text{Z}$				-1731 Jun 22 j 04:04	0° $\Omega$	
	-1736 May 06 j 20:01	0° $\approx$				-1731 Aug 06 j 18:12	0° $\text{M}$	
	-1736 Jul 02 j 10:42	0° $\text{H}$				-1731 Sep 18 j 05:50	0° $\underline{\text{A}}$	
retrograde	-1736 Jul 31 j 14:59	5° $\text{H}$ 34'44		desc. node		-1731 Oct 01 j 20:48	10° $\underline{\text{A}}$ 00'28	
min. Earth dist.	-1736 Aug 28 j 06:09	0° $\text{H}$ 22'47	0.44849 AU	evening set		-1731 Oct 05 j 01:14	12° $\underline{\text{A}}$ 22'20	
	-1736 Aug 29 j 09:38	30° $\text{R}$ $\approx$				-1731 Oct 28 j 10:24	0° $\text{M}$	
greatest brilliancy	-1736 Sep 04 j 01:18	28° $\approx$ 04'28	-2.4m	max. Earth dist.		-1731 Oct 31 j 04:10	2° $\text{M}$ 05'37	2.39438 AU
opposition	-1736 Sep 05 j 06:54	27° $\approx$ 39'09	-4°48'44					
direct	-1736 Oct 07 j 13:17	21° $\approx$ 12'26		conjunction		-1731 Dec 03 j 04:31	27° $\text{M}$ 40'34	-0°40'07
	-1736 Nov 16 j 19:19	0° $\text{H}$		minimum elong		-1731 Dec 03 j 01:51	27° $\text{M}$ 35'21	0°40'07
asc. node	-1736 Dec 13 j 07:42	11° $\text{H}$ 47'27				-1731 Dec 06 j 03:43	0° $\text{X}$	
	-1735 Jan 16 j 12:56	0° $\text{Y}$				-1730 Jan 13 j 06:49	0° $\text{Z}$	
	-1735 Mar 09 j 00:20	0° $\text{B}$		morning rise		-1730 Feb 08 j 16:38	20° $\text{Z}$ 40'44	
	-1735 Apr 27 j 11:46	0° $\text{II}$				-1730 Feb 20 j 17:19	0° $\approx$	
	-1735 Jun 14 j 17:26	0° $\text{E}$				-1730 Apr 01 j 07:54	0° $\text{H}$	
evening set	-1735 Jul 09 j 13:42	15° $\text{E}$ 48'41				-1730 May 12 j 21:30	0° $\text{Y}$	
	-1735 Jul 31 j 11:08	0° $\Omega$				-1730 Jun 26 j 05:43	0° $\text{B}$	
max. Earth dist.	-1735 Aug 03 j 16:03	2° $\Omega$ 06'00	2.61731 AU	asc. node		-1730 Aug 05 j 05:30	24° $\text{B}$ 58'09	
						-1730 Aug 13 j 19:12	0° $\text{II}$	
conjunction	-1735 Aug 25 j 02:16	16° $\Omega$ 17'35	1°03'01			-1730 Oct 12 j 18:08	0° $\text{E}$	
minimum elong	-1735 Aug 25 j 03:18	16° $\Omega$ 19'20	1°03'01	retrograde		-1730 Nov 25 j 19:02	9° $\text{E}$ 44'37	
	-1735 Sep 14 j 08:59	0° $\text{M}$		opposition		-1729 Jan 04 j 11:58	0° $\text{E}$ 14'16	4°22'12
morning rise	-1735 Oct 11 j 01:54	18° $\text{M}$ 28'31		greatest brilliancy		-1729 Jan 04 j 14:56	0° $\text{E}$ 11'19	-1.3m
	-1735 Oct 27 j 09:16	0° $\underline{\text{A}}$				-1729 Jan 05 j 02:16	30° $\text{R}$ $\text{II}$	
	-1735 Dec 07 j 17:05	0° $\text{M}$		min. Earth dist.		-1729 Jan 05 j 17:59	29° $\text{II}$ 44'21	0.67311 AU
desc. node	-1735 Dec 27 j 23:36	15° $\text{M}$ 05'11		direct		-1729 Feb 14 j 11:48	20° $\text{II}$ 18'36	
	-1734 Jan 16 j 18:46	0° $\text{X}$				-1729 Mar 30 j 21:55	0° $\text{E}$	
	-1734 Feb 25 j 05:26	0° $\text{Z}$				-1729 May 30 j 05:57	0° $\Omega$	
	-1734 Apr 05 j 23:08	0° $\approx$				-1729 Jul 17 j 05:37	0° $\text{M}$	
	-1734 May 17 j 10:01	0° $\text{H}$		desc. node		-1729 Aug 19 j 19:25	23° $\text{M}$ 06'50	
	-1734 Jul 02 j 16:22	0° $\text{Y}$				-1729 Aug 29 j 09:54	0° $\underline{\text{A}}$	
retrograde	-1734 Sep 16 j 02:33	27° $\text{Y}$ 25'50				-1729 Oct 08 j 17:00	0° $\text{M}$	
min. Earth dist.	-1734 Oct 19 j 02:45	20° $\text{Y}$ 06'08	0.57270 AU			-1729 Nov 16 j 08:19	0° $\text{X}$	
opposition	-1734 Oct 25 j 07:07	17° $\text{Y}$ 40'37	-0°15'47	evening set		-1729 Dec 08 j 01:43	17° $\text{X}$ 07'30	
greatest brilliancy	-1734 Oct 25 j 05:49	17° $\text{Y}$ 41'53	-1.8m			-1729 Dec 24 j 09:25	0° $\text{Z}$	
asc. node	-1734 Oct 31 j 05:46	15° $\text{Y}$ 24'37				-1728 Jan 31 j 19:52	0° $\approx$	
direct	-1734 Nov 30 j 17:58	9° $\text{Y}$ 20'41						
	-1733 Feb 08 j 03:43	0° $\text{B}$		conjunction		-1728 Feb 12 j 15:10	9° $\approx$ 02'57	-1°03'02
	-1733 Apr 05 j 16:47	0° $\text{II}$		minimum elong		-1728 Feb 12 j 16:57	9° $\approx$ 06'22	1°03'03
	-1733 May 26 j 08:09	0° $\text{E}$				-1728 Mar 11 j 12:03	0° $\text{H}$	
	-1733 Jul 12 j 21:24	0° $\Omega$		max. Earth dist.		-1728 Apr 02 j 02:58	15° $\text{H}$ 48'08	2.44675 AU
evening set	-1733 Aug 18 j 16:08	24° $\Omega$ 26'40		morning rise		-1728 Apr 17 j 01:22	26° $\text{H}$ 28'22	
	-1733 Aug 26 j 19:13	0° $\text{M}$				-1728 Apr 22 j 01:19	0° $\text{Y}$	
max. Earth dist.	-1733 Sep 03 j 19:42	5° $\text{M}$ 32'21	2.51821 AU			-1728 Jun 04 j 21:34	0° $\text{B}$	
				asc. node		-1728 Jun 22 j 04:27	11° $\text{B}$ 22'56	
conjunction	-1733 Oct 07 j 18:42	29° $\text{M}$ 36'56	0°24'35			-1728 Jul 21 j 07:45	0° $\text{II}$	
minimum elong	-1733 Oct 07 j 19:52	29° $\text{M}$ 39'02	0°24'34			-1728 Sep 09 j 04:40	0° $\text{E}$	
	-1733 Oct 08 j 07:27	0° $\underline{\text{A}}$				-1728 Nov 06 j 14:21	0° $\Omega$	
desc. node	-1733 Nov 14 j 22:30	27° $\underline{\text{A}}$ 48'37		retrograde		-1728 Dec 31 j 21:44	14° $\Omega$ 04'05	

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 18

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

opposition	-1727 Feb 08 j 03:38	5°Ω22'08	4°43'27	evening set	-1722 May 18 j 15:34	26°♂04'43	
greatest brilliancy	-1727 Feb 08 j 22:57	5°Ω03'27	-1.5m		-1722 May 24 j 19:13	0°♂	
min. Earth dist.	-1727 Feb 13 j 05:45	3°Ω24'09	0.62718 AU	max. Earth dist.	-1722 Jul 01 j 21:57	24°♂15'41	2.67308 AU
	-1727 Feb 22 j 16:42	30°♂					
direct	-1727 Mar 21 j 06:46	25°♂24'55		conjunction	-1722 Jul 04 j 18:21	26°♂04'39	1°03'59
	-1727 Apr 18 j 19:59	0°Ω		minimum elong	-1722 Jul 04 j 17:25	26°♂03'10	1°04'01
	-1727 Jun 21 j 04:04	0°♂			-1722 Jul 10 j 21:58	0°♂	
desc. node	-1727 Jul 06 j 18:10	9°♂36'46		morning rise	-1722 Aug 18 j 17:13	24°♂52'45	
	-1727 Aug 06 j 07:06	0°♂			-1722 Aug 26 j 15:27	0°Ω	
	-1727 Sep 16 j 14:28	0°♂			-1722 Oct 11 j 12:55	0°♂	
	-1727 Oct 25 j 16:48	0°♂			-1722 Nov 25 j 12:21	0°♂	
	-1727 Dec 03 j 01:41	0°♂			-1721 Jan 08 j 18:22	0°♂	
	-1726 Jan 10 j 20:23	0°♂			-1721 Feb 21 j 19:28	0°♂	
evening set	-1726 Feb 13 j 02:25	24°♂59'16		desc. node	-1721 Feb 26 j 17:23	3°♂19'35	
	-1726 Feb 19 j 21:54	0°♂			-1721 Apr 08 j 03:11	0°♂	
	-1726 Apr 02 j 19:56	0°♂			-1721 Jun 01 j 08:51	0°♂	
				retrograde	-1721 Jul 09 j 01:53	8°♂48'08	
conjunction	-1726 Apr 12 j 19:03	6°♂55'08	-0°16'15	min. Earth dist.	-1721 Aug 04 j 15:05	4°♂17'11	0.40346 AU
minimum elong	-1726 Apr 12 j 19:57	6°♂56'42	0°16'14	greatest brilliancy	-1721 Aug 09 j 23:01	2°♂41'04	-2.7m
asc. node	-1726 May 10 j 02:46	25°♂30'56		opposition	-1721 Aug 11 j 06:57	2°♂16'57	-6°24'44
max. Earth dist.	-1726 May 12 j 20:38	27°♂21'16	2.57060 AU		-1721 Aug 19 j 05:23	30°♂	
	-1726 May 16 j 19:42	0°♂		direct	-1721 Sep 10 j 17:15	26°♂45'53	
morning rise	-1726 Jun 05 j 07:02	12°♂51'54			-1721 Oct 03 j 18:56	0°♂	
	-1726 Jul 01 j 18:02	0°♂			-1721 Dec 08 j 20:01	0°♂	
	-1726 Aug 18 j 10:14	0°♂		asc. node	-1721 Dec 30 j 22:22	12°♂46'07	
	-1726 Oct 07 j 04:28	0°Ω			-1720 Jan 28 j 15:16	0°♂	
	-1726 Nov 30 j 18:29	0°♂			-1720 Mar 17 j 12:17	0°♂	
retrograde	-1725 Feb 15 j 19:07	24°♂17'29			-1720 May 04 j 21:27	0°♂	
opposition	-1725 Mar 23 j 05:39	16°♂56'59	3°03'50		-1720 Jun 21 j 15:58	0°♂	
greatest brilliancy	-1725 Mar 24 j 05:23	16°♂35'51	-2.0m	evening set	-1720 Jun 24 j 21:27	2°♂03'00	
min. Earth dist.	-1725 Mar 31 j 11:32	14°♂01'43	0.52053 AU	max. Earth dist.	-1720 Jul 24 j 15:24	21°♂07'08	2.64316 AU
direct	-1725 May 01 j 05:26	7°♂59'08			-1720 Aug 07 j 07:12	0°Ω	
desc. node	-1725 May 24 j 16:38	11°♂25'59					
	-1725 Jul 06 j 00:39	0°♂		conjunction	-1720 Aug 10 j 00:44	1°Ω47'11	1°08'55
	-1725 Aug 21 j 23:55	0°♂		minimum elong	-1720 Aug 10 j 01:13	1°Ω47'59	1°08'56
	-1725 Oct 02 j 05:56	0°♂			-1720 Sep 21 j 08:48	0°♂	
	-1725 Nov 10 j 22:03	0°♂		morning rise	-1720 Sep 24 j 16:33	2°♂15'28	
	-1725 Dec 20 j 18:00	0°♂			-1720 Nov 03 j 17:56	0°♂	
	-1724 Jan 30 j 18:18	0°♂			-1720 Dec 15 j 14:14	0°♂	
	-1724 Mar 13 j 12:09	0°♂		desc. node	-1719 Jan 13 j 15:43	21°♂21'48	
asc. node	-1724 Mar 27 j 01:52	9°♂15'28			-1719 Jan 25 j 06:45	0°♂	
evening set	-1724 Apr 06 j 04:07	16°♂04'10			-1719 Mar 06 j 09:53	0°♂	
	-1724 Apr 27 j 02:14	0°♂			-1719 Apr 16 j 00:37	0°♂	
					-1719 May 29 j 04:33	0°♂	
					-1719 Jul 21 j 13:30	0°♂	
conjunction	-1724 May 27 j 04:07	19°♂39'46	0°33'45	retrograde	-1719 Aug 30 j 16:05	9°♂41'05	
minimum elong	-1724 May 27 j 02:55	19°♂37'48	0°33'47	min. Earth dist.	-1719 Sep 30 j 14:08	3°♂08'30	0.52644 AU
max. Earth dist.	-1724 Jun 07 j 21:21	27°♂13'53	2.64874 AU	opposition	-1719 Oct 07 j 22:04	0°♂21'32	-1°52'41
	-1724 Jun 12 j 04:39	0°♂		greatest brilliancy	-1719 Oct 07 j 10:46	0°♂32'16	-2.0m
morning rise	-1724 Jul 13 j 13:03	20°♂02'04			-1719 Oct 08 j 20:51	30°♂	
	-1724 Jul 29 j 05:47	0°♂			-1719 Oct 08 j 20:51	30°♂	
	-1724 Sep 14 j 17:58	0°Ω		direct	-1719 Nov 11 j 19:55	22°♂39'10	
	-1724 Nov 01 j 16:38	0°♂		asc. node	-1719 Nov 16 j 21:58	22°♂49'03	
	-1724 Dec 20 j 22:50	0°♂			-1719 Dec 19 j 00:30	0°♂	
	-1723 Feb 13 j 01:06	0°♂			-1718 Feb 20 j 19:21	0°♂	
desc. node	-1723 Apr 10 j 17:18	20°♂07'16			-1718 Apr 14 j 08:23	0°♂	
retrograde	-1723 Apr 22 j 02:16	20°♂54'48			-1718 Jun 02 j 18:46	0°♂	
opposition	-1723 May 23 j 03:33	15°♂36'12	-2°49'35		-1718 Jul 19 j 22:17	0°Ω	
greatest brilliancy	-1723 May 23 j 15:30	15°♂27'42	-2.8m	evening set	-1718 Aug 02 j 12:19	8°Ω55'31	
min. Earth dist.	-1723 May 28 j 11:31	14°♂05'25	0.39678 AU	max. Earth dist.	-1718 Aug 21 j 10:52	21°Ω35'42	2.56205 AU
direct	-1723 Jun 24 j 18:13	9°♂36'14			-1718 Sep 02 j 18:59	0°♂	
	-1723 Aug 25 j 03:35	0°♂					
	-1723 Oct 12 j 02:35	0°♂		conjunction	-1718 Sep 19 j 16:51	11°♂42'54	0°43'34
	-1723 Nov 24 j 22:23	0°♂		minimum elong	-1718 Sep 19 j 18:21	11°♂45'31	0°43'33
	-1722 Jan 07 j 13:20	0°♂			-1718 Oct 15 j 10:58	0°♂	
asc. node	-1722 Feb 11 j 23:47	23°♂54'33		morning rise	-1718 Nov 09 j 09:41	18°♂12'21	
	-1722 Feb 21 j 03:28	0°♂			-1718 Nov 25 j 05:51	0°♂	
	-1722 Apr 07 j 23:52	0°♂		desc. node	-1718 Dec 01 j 14:51	4°♂47'30	

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1717 Jan 03 j 16:39	0°♂		direct	-1712 Mar 07 j 02:12	11°♂27'17	
	-1717 Feb 11 j 12:01	0°♂			-1712 May 09 j 21:04	0°♂	
	-1717 Mar 22 j 12:27	0°♂			-1712 Jul 01 j 15:42	0°♂	
	-1717 May 01 j 19:33	0°♂		desc. node	-1712 Jul 23 j 10:46	14°♂16'45	
	-1717 Jun 13 j 21:48	0°♂			-1712 Aug 15 j 03:01	0°♂	
	-1717 Aug 02 j 12:18	0°♂			-1712 Sep 24 j 20:55	0°♂	
asc. node	-1717 Oct 04 j 21:23	21°♂50'42			-1712 Nov 02 j 16:52	0°♂	
retrograde	-1717 Oct 09 j 07:49	21°♂58'39			-1712 Dec 10 j 21:13	0°♂	
min. Earth dist.	-1717 Nov 14 j 05:21	13°♂38'01	0.62895 AU		-1711 Jan 18 j 11:17	0°♂	
opposition	-1717 Nov 18 j 06:22	12°♂00'52	1°45'04	evening set	-1711 Jan 19 j 00:51	0°♂26'03	
greatest brilliancy	-1717 Nov 17 j 23:20	12°♂07'53	-1.5m		-1711 Feb 27 j 07:47	0°♂	
direct	-1717 Dec 26 j 16:22	2°♂57'58					
	-1716 Mar 18 j 18:42	0°♂		conjunction	-1711 Mar 22 j 14:28	16°♂55'26	-0°37'37
	-1716 May 12 j 01:46	0°♂		minimum elong	-1711 Mar 22 j 16:37	16°♂59'19	0°37'36
	-1716 Jun 29 j 18:58	0°♂			-1711 Apr 10 j 00:59	0°♂	
	-1716 Aug 14 j 00:40	0°♂		max. Earth dist.	-1711 Apr 29 j 22:01	13°♂46'51	2.52652 AU
evening set	-1716 Sep 14 j 17:04	22°♂13'14		morning rise	-1711 May 18 j 20:38	26°♂37'44	
	-1716 Sep 25 j 11:43	0°♂			-1711 May 23 j 21:32	0°♂	
max. Earth dist.	-1716 Sep 30 j 16:02	3°♂46'45	2.44152 AU	asc. node	-1711 May 26 j 18:43	1°♂55'16	
desc. node	-1716 Oct 18 j 13:49	17°♂01'29			-1711 Jul 08 j 21:32	0°♂	
	-1716 Nov 04 j 18:42	0°♂			-1711 Aug 26 j 02:54	0°♂	
					-1711 Oct 16 j 17:25	0°♂	
conjunction	-1716 Nov 08 j 14:22	2°♂54'36	-0°14'11		-1711 Dec 19 j 10:34	0°♂	
minimum elong	-1716 Nov 08 j 13:25	2°♂52'47	0°14'11	retrograde	-1710 Jan 27 j 06:28	7°♂36'34	
behind sun begin	-1716 Nov 08 j 00:58	2°♂29'01			-1710 Mar 04 j 01:08	30°♂	
behind sun end	-1716 Nov 09 j 01:53	3°♂16'33		opposition	-1710 Mar 05 j 00:20	29°♂38'30	4°03'07
	-1716 Dec 13 j 15:17	0°♂		greatest brilliancy	-1710 Mar 06 j 01:58	29°♂14'39	-1.8m
morning rise	-1715 Jan 10 j 06:08	21°♂39'26		min. Earth dist.	-1710 Mar 12 j 05:52	26°♂57'40	0.56870 AU
	-1715 Jan 20 j 21:07	0°♂		direct	-1710 Apr 14 j 05:39	20°♂05'51	
	-1715 Feb 28 j 09:15	0°♂			-1710 May 26 j 15:30	0°♂	
	-1715 Apr 09 j 01:07	0°♂		desc. node	-1710 Jun 10 j 10:36	6°♂49'09	
	-1715 May 20 j 18:08	0°♂			-1710 Jul 20 j 09:19	0°♂	
	-1715 Jul 04 j 14:58	0°♂			-1710 Sep 01 j 18:26	0°♂	
asc. node	-1715 Aug 21 j 20:21	28°♂41'42			-1710 Oct 11 j 18:16	0°♂	
	-1715 Aug 24 j 06:25	0°♂			-1710 Nov 19 j 16:57	0°♂	
retrograde	-1715 Nov 12 j 07:23	26°♂57'22			-1710 Dec 28 j 23:15	0°♂	
opposition	-1715 Dec 22 j 07:17	17°♂14'14	3°52'48		-1709 Feb 07 j 11:46	0°♂	
greatest brilliancy	-1715 Dec 22 j 04:56	17°♂16'36	-1.3m	evening set	-1709 Mar 19 j 05:49	28°♂12'44	
min. Earth dist.	-1715 Dec 22 j 01:07	17°♂20'24	0.67327 AU		-1709 Mar 21 j 19:40	0°♂	
direct	-1714 Jan 31 j 20:08	7°♂28'06		asc. node	-1709 Apr 13 j 16:25	15°♂38'58	
	-1714 Apr 15 j 14:08	0°♂			-1709 May 05 j 02:22	0°♂	
	-1714 Jun 08 j 12:31	0°♂					
	-1714 Jul 25 j 05:50	0°♂		conjunction	-1709 May 11 j 17:57	4°♂24'06	0°16'16
desc. node	-1714 Sep 05 j 11:45	29°♂35'16		minimum elong	-1709 May 11 j 17:13	4°♂22'54	0°16'16
	-1714 Sep 06 j 01:23	0°♂		max. Earth dist.	-1709 May 30 j 03:03	16°♂27'13	2.62451 AU
	-1714 Oct 16 j 06:26	0°♂			-1709 Jun 20 j 01:27	0°♂	
evening set	-1714 Nov 11 j 04:00	20°♂01'12		morning rise	-1709 Jun 29 j 23:45	6°♂22'03	
	-1714 Nov 23 j 21:48	0°♂			-1709 Aug 06 j 05:49	0°♂	
	-1714 Dec 31 j 22:54	0°♂			-1709 Sep 23 j 08:29	0°♂	
					-1709 Nov 11 j 20:49	0°♂	
conjunction	-1713 Jan 15 j 14:48	11°♂31'42	-1°05'17		-1708 Jan 04 j 11:18	0°♂	
minimum elong	-1713 Jan 15 j 13:46	11°♂29'40	1°05'19	retrograde	-1708 Mar 24 j 00:14	25°♂59'49	
	-1713 Feb 08 j 08:19	0°♂		opposition	-1708 Apr 25 j 17:44	19°♂53'03	0°06'06
max. Earth dist.	-1713 Mar 02 j 09:22	16°♂51'04	2.39549 AU	greatest brilliancy	-1707 Apr 29 j 18:55	9°♂27'53	1.7m
	-1713 Mar 19 j 22:32	0°♂		desc. node	-1708 Apr 27 j 09:29	19°♂21'33	
morning rise	-1713 Mar 24 j 21:07	3°♂39'17		min. Earth dist.	-1708 May 03 j 17:30	17°♂21'45	0.44025 AU
	-1713 Apr 30 j 10:06	0°♂		direct	-1708 May 31 j 11:17	12°♂30'30	
	-1713 Jun 13 j 07:45	0°♂			-1708 Jul 26 j 08:38	0°♂	
asc. node	-1713 Jul 09 j 20:03	17°♂13'43			-1708 Sep 12 j 09:49	0°♂	
	-1713 Jul 30 j 05:41	0°♂			-1708 Oct 24 j 17:35	0°♂	
	-1713 Sep 20 j 01:10	0°♂			-1708 Dec 05 j 04:24	0°♂	
	-1713 Dec 08 j 07:34	0°♂			-1707 Jan 16 j 09:06	0°♂	
retrograde	-1713 Dec 17 j 20:09	0°♂32'30		asc. node	-1707 Feb 28 j 15:28	29°♂44'47	
	-1713 Dec 27 j 00:21	30°♂			-1707 Mar 01 j 00:29	0°♂	
opposition	-1712 Jan 25 j 19:15	21°♂28'36	4°45'32		-1707 Apr 15 j 05:47	0°♂	
greatest brilliancy	-1712 Jan 26 j 08:13	21°♂15'52	-1.4m	evening set	-1707 May 02 j 22:59	11°♂31'03	
min. Earth dist.	-1712 Jan 29 j 09:53	20°♂03'36	0.65294 AU		-1707 May 31 j 16:29	0°♂	

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 20

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

conjunction	-1707 Jun 20 j 05:09	12° $\Pi$ 28'35	0°55'04		-1702 Aug 21 j 08:38	0° $\mathcal{B}$	
minimum elong	-1707 Jun 20 j 03:55	12° $\Pi$ 26'35	0°55'06	retrograde	-1702 Sep 24 j 19:49	7° $\mathcal{B}$ 01'48	
max. Earth dist.	-1707 Jun 22 j 18:52	14° $\Pi$ 07'00	2.67004 AU	asc. node	-1702 Oct 21 j 12:23	2° $\mathcal{B}$ 05'15	
	-1707 Jul 17 j 16:59	0° $\mathcal{E}$			-1702 Oct 27 j 03:57	30° $\mathcal{R}$ $\mathcal{Y}$	
morning rise	-1707 Aug 04 j 17:46	11° $\mathcal{E}$ 30'08		min. Earth dist.	-1702 Oct 28 j 21:48	29° $\mathcal{Y}$ 19'15	0.59496 AU
	-1707 Sep 02 j 15:21	0° $\Omega$		opposition	-1702 Nov 03 j 09:01	27° $\mathcal{Y}$ 09'18	0°32'48
	-1707 Oct 19 j 02:58	0° $\mathcal{M}$		greatest brilliancy	-1702 Nov 03 j 06:04	27° $\mathcal{Y}$ 12'13	-1.7m
	-1707 Dec 04 j 05:22	0° $\underline{\mathcal{A}}$		direct	-1702 Dec 10 j 14:29	18° $\mathcal{Y}$ 32'18	
	-1706 Jan 19 j 10:23	0° $\mathcal{M}$			-1701 Jan 28 j 09:39	0° $\mathcal{B}$	
	-1706 Mar 08 j 04:35	0° $\mathcal{A}$			-1701 Mar 30 j 12:23	0° $\Pi$	
desc. node	-1706 Mar 15 j 09:08	4° $\mathcal{A}$ 18'00			-1701 May 21 j 04:51	0° $\mathcal{E}$	
	-1706 May 04 j 06:16	0° $\mathcal{B}$			-1701 Jul 08 j 03:11	0° $\Omega$	
retrograde	-1706 Jun 10 j 21:39	8° $\mathcal{B}$ 18'39			-1701 Aug 22 j 03:51	0° $\mathcal{M}$	
min. Earth dist.	-1706 Jul 09 j 06:04	3° $\mathcal{B}$ 42'11	0.37780 AU	evening set	-1701 Aug 28 j 10:02	4° $\mathcal{M}$ 18'50	
opposition	-1706 Jul 11 j 19:54	3° $\mathcal{B}$ 00'16	-6°36'27	max. Earth dist.	-1701 Sep 12 j 13:18	14° $\mathcal{M}$ 53'45	2.49140 AU
greatest brilliancy	-1706 Jul 11 j 05:59	3° $\mathcal{B}$ 09'43	-2.9m		-1701 Oct 03 j 15:52	0° $\underline{\mathcal{A}}$	
	-1706 Jul 23 j 21:38	30° $\mathcal{R}$ $\mathcal{A}$					
direct	-1706 Aug 10 j 13:33	28° $\mathcal{A}$ 02'21		conjunction	-1701 Oct 18 j 23:31	11° $\underline{\mathcal{A}}$ 12'29	0°11'28
	-1706 Aug 28 j 00:31	0° $\mathcal{B}$		minimum elong	-1701 Oct 19 j 00:09	11° $\underline{\mathcal{A}}$ 13'39	0°11'27
	-1706 Nov 03 j 00:23	0° $\approx$		behind sun begin	-1701 Oct 18 j 07:38	10° $\underline{\mathcal{A}}$ 43'13	
	-1706 Dec 21 j 23:41	0° $\mathcal{H}$		behind sun end	-1701 Oct 19 j 16:40	11° $\underline{\mathcal{A}}$ 44'07	
asc. node	-1705 Jan 16 j 14:45	16° $\mathcal{H}$ 15'59		desc. node	-1701 Nov 05 j 06:26	24° $\underline{\mathcal{A}}$ 05'05	
	-1705 Feb 07 j 04:18	0° $\mathcal{Y}$			-1701 Nov 13 j 02:37	0° $\mathcal{M}$	
	-1705 Mar 26 j 11:28	0° $\mathcal{B}$		morning rise	-1701 Dec 15 j 04:02	24° $\mathcal{M}$ 34'43	
	-1705 May 13 j 01:53	0° $\Pi$			-1701 Dec 22 j 03:41	0° $\mathcal{A}$	
evening set	-1705 Jun 11 j 05:19	18° $\Pi$ 23'31			-1700 Jan 29 j 13:42	0° $\mathcal{B}$	
	-1705 Jun 29 j 12:22	0° $\mathcal{E}$			-1700 Mar 08 j 05:07	0° $\approx$	
max. Earth dist.	-1705 Jul 16 j 07:32	10° $\mathcal{E}$ 43'51	2.66119 AU		-1700 Apr 17 j 00:17	0° $\mathcal{H}$	
					-1700 May 29 j 00:23	0° $\mathcal{Y}$	
conjunction	-1705 Jul 27 j 10:13	17° $\mathcal{E}$ 52'29	1°10'17		-1700 Jul 13 j 19:46	0° $\mathcal{B}$	
minimum elong	-1705 Jul 27 j 10:06	17° $\mathcal{E}$ 52'17	1°10'20		-1700 Sep 06 j 21:35	0° $\Pi$	
	-1705 Aug 15 j 03:06	0° $\Omega$		asc. node	-1700 Sep 07 j 12:22	0° $\Pi$ 16'33	
morning rise	-1705 Sep 10 j 09:49	17° $\Omega$ 16'51		retrograde	-1700 Oct 29 j 21:25	13° $\Pi$ 57'15	
	-1705 Sep 29 j 10:44	0° $\mathcal{M}$		min. Earth dist.	-1700 Dec 07 j 06:06	4° $\Pi$ 47'22	0.66353 AU
	-1705 Nov 12 j 07:40	0° $\underline{\mathcal{A}}$		opposition	-1700 Dec 09 j 00:23	4° $\Pi$ 04'53	3°12'29
	-1705 Dec 24 j 20:42	0° $\mathcal{M}$		greatest brilliancy	-1700 Dec 08 j 18:15	4° $\Pi$ 11'02	-1.4m
desc. node	-1704 Jan 31 j 08:45	27° $\mathcal{M}$ 03'22			-1700 Dec 19 j 15:07	30° $\mathcal{R}$ $\mathcal{B}$	
	-1704 Feb 04 j 09:56	0° $\mathcal{A}$		direct	-1699 Jan 17 j 21:28	24° $\mathcal{B}$ 32'18	
	-1704 Mar 16 j 14:45	0° $\mathcal{B}$			-1699 Feb 19 j 06:15	0° $\Pi$	
	-1704 Apr 27 j 21:13	0° $\approx$			-1699 Apr 26 j 21:35	0° $\mathcal{E}$	
	-1704 Jun 14 j 12:23	0° $\mathcal{H}$			-1699 Jun 16 j 22:56	0° $\Omega$	
retrograde	-1704 Aug 12 j 06:35	19° $\mathcal{H}$ 12'58			-1699 Aug 01 j 22:02	0° $\mathcal{M}$	
min. Earth dist.	-1704 Sep 10 j 00:57	13° $\mathcal{H}$ 32'01	0.47622 AU		-1699 Sep 13 j 12:42	0° $\underline{\mathcal{A}}$	
greatest brilliancy	-1704 Sep 17 j 01:52	11° $\mathcal{H}$ 01'05	-2.3m	desc. node	-1699 Sep 22 j 05:52	6° $\underline{\mathcal{A}}$ 22'33	
opposition	-1704 Sep 18 j 01:29	10° $\mathcal{H}$ 39'53	-3°43'28	evening set	-1699 Oct 17 j 15:03	25° $\underline{\mathcal{A}}$ 21'12	
direct	-1704 Oct 21 j 06:32	3° $\mathcal{H}$ 43'45			-1699 Oct 23 j 17:33	0° $\mathcal{M}$	
asc. node	-1704 Dec 03 j 13:30	13° $\mathcal{H}$ 32'59			-1699 Dec 01 j 09:57	0° $\mathcal{A}$	
	-1703 Jan 08 j 01:07	0° $\mathcal{Y}$		max. Earth dist.	-1699 Dec 02 j 06:58	0° $\mathcal{A}$ 41'16	2.37606 AU
	-1703 Mar 03 j 00:31	0° $\mathcal{B}$					
	-1703 Apr 22 j 08:49	0° $\Pi$		conjunction	-1699 Dec 18 j 08:01	13° $\mathcal{A}$ 18'50	-0°52'33
	-1703 Jun 09 j 23:31	0° $\mathcal{E}$		minimum elong	-1699 Dec 18 j 05:06	13° $\mathcal{A}$ 13'04	0°52'33
evening set	-1703 Jul 18 j 03:45	24° $\mathcal{E}$ 20'28			-1698 Jan 08 j 11:52	0° $\mathcal{B}$	
	-1703 Jul 26 j 20:29	0° $\Omega$			-1698 Feb 15 j 21:10	0° $\approx$	
max. Earth dist.	-1703 Aug 09 j 21:09	9° $\Omega$ 13'40	2.59955 AU	morning rise	-1698 Feb 25 j 08:13	7° $\approx$ 16'49	
					-1698 Mar 27 j 10:30	0° $\mathcal{H}$	
conjunction	-1703 Sep 03 j 02:47	25° $\Omega$ 28'38	0°57'20		-1698 May 07 j 22:03	0° $\mathcal{Y}$	
minimum elong	-1703 Sep 03 j 04:05	25° $\Omega$ 30'50	0°57'20		-1698 Jun 21 j 00:09	0° $\mathcal{B}$	
	-1703 Sep 09 j 18:04	0° $\mathcal{M}$		asc. node	-1698 Jul 26 j 10:59	22° $\mathcal{B}$ 33'24	
morning rise	-1703 Oct 21 j 04:02	28° $\mathcal{M}$ 56'25			-1698 Aug 07 j 18:02	0° $\Pi$	
	-1703 Oct 22 j 15:38	0° $\underline{\mathcal{A}}$			-1698 Oct 02 j 05:37	0° $\mathcal{E}$	
	-1703 Dec 02 j 18:54	0° $\mathcal{M}$		retrograde	-1698 Dec 03 j 15:57	17° $\mathcal{E}$ 32'46	
desc. node	-1703 Dec 18 j 07:20	11° $\mathcal{M}$ 35'35		opposition	-1697 Jan 12 j 04:06	8° $\mathcal{E}$ 10'51	4°34'04
	-1702 Jan 11 j 15:02	0° $\mathcal{A}$		greatest brilliancy	-1697 Jan 12 j 10:29	8° $\mathcal{E}$ 04'32	-1.3m
	-1702 Feb 19 j 19:38	0° $\mathcal{B}$		min. Earth dist.	-1697 Jan 14 j 06:16	7° $\mathcal{E}$ 21'07	0.66884 AU
	-1702 Mar 31 j 05:31	0° $\approx$			-1697 Feb 05 j 15:37	30° $\mathcal{R}$ $\Pi$	
	-1702 May 11 j 02:37	0° $\mathcal{H}$		direct	-1697 Feb 22 j 08:30	28° $\Pi$ 11'55	
	-1702 Jun 24 j 16:28	0° $\mathcal{Y}$			-1697 Mar 12 j 02:23	0° $\mathcal{E}$	

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 21

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1697 May 23 j 12:23	0°♈	conjunction	-1692 Jun 05 j 03:09	28°♏26'30	0°42'33
	-1697 Jul 11 j 18:34	0°♍	minimum elong	-1692 Jun 05 j 01:50	28°♏24'23	0°42'34
desc. node	-1697 Aug 10 j 04:13	19°♍56'16		-1692 Jun 07 j 13:19	0°♐	
	-1697 Aug 24 j 08:45	0°♊	max. Earth dist.	-1692 Jun 13 j 10:09	3°♐45'57	2.65859 AU
	-1697 Oct 03 j 19:35	0°♌	morning rise	-1692 Jul 21 j 17:06	28°♐11'34	
	-1697 Nov 11 j 12:24	0°♎		-1692 Jul 24 j 13:20	0°♑	
	-1697 Dec 19 j 14:17	0°♏		-1692 Sep 09 j 19:20	0°♈	
evening set	-1697 Dec 23 j 16:27	3°♏13'06		-1692 Oct 27 j 02:57	0°♍	
	-1696 Jan 27 j 01:11	0°♎		-1692 Dec 13 j 22:30	0°♊	
				-1691 Feb 01 j 20:10	0°♌	
conjunction	-1696 Feb 27 j 11:42	23°♎51'57 -0°55'59	desc. node	-1691 Apr 01 j 01:38	29°♌05'11	
minimum elong	-1696 Feb 27 j 14:14	23°♎56'40 0°56'00		-1691 Apr 03 j 12:42	0°♎	
	-1696 Mar 06 j 17:43	0°♋	retrograde	-1691 May 10 j 01:17	7°♎20'36	
max. Earth dist.	-1696 Apr 13 j 23:01	27°♋38'52 2.47592 AU	opposition	-1691 Jun 09 j 10:14	2°♎18'18 -4°33'58	
	-1696 Apr 17 j 07:05	0°♐	greatest brilliancy	-1691 Jun 09 j 19:19	2°♎12'11 -2.9m	
morning rise	-1696 Apr 29 j 08:10	8°♐24'54	min. Earth dist.	-1691 Jun 12 j 07:32	1°♎31'43 0.38189 AU	
	-1696 May 31 j 01:48	0°♏		-1691 Jun 18 j 05:11	30°♌	
asc. node	-1696 Jun 12 j 09:50	8°♏10'14	direct	-1691 Jul 10 j 10:21	26°♌56'26	
	-1696 Jul 16 j 06:16	0°♐		-1691 Aug 01 j 06:04	0°♎	
	-1696 Sep 03 j 08:13	0°♑		-1691 Oct 02 j 06:04	0°♏	
	-1696 Oct 28 j 04:46	0°♈		-1691 Nov 17 j 17:09	0°♎	
retrograde	-1695 Jan 10 j 00:36	22°♈36'18		-1690 Jan 01 j 12:56	0°♋	
opposition	-1695 Feb 16 j 19:28	14°♈08'22 4°34'26	asc. node	-1690 Feb 02 j 06:03	21°♋04'41	
greatest brilliancy	-1695 Feb 17 j 17:47	13°♈47'02 -1.6m		-1690 Feb 15 j 19:33	0°♐	
min. Earth dist.	-1695 Feb 22 j 17:01	11°♈53'19 0.60885 AU		-1690 Apr 03 j 01:37	0°♏	
direct	-1695 Mar 29 j 17:44	4°♈16'55		-1690 May 20 j 02:35	0°♐	
	-1695 Jun 13 j 07:28	0°♍	evening set	-1690 May 27 j 08:17	4°♐35'43	
desc. node	-1695 Jun 27 j 02:37	8°♍00'17		-1690 Jul 06 j 07:34	0°♑	
	-1695 Jul 31 j 05:46	0°♊	max. Earth dist.	-1690 Jul 07 j 05:03	0°♑34'15 2.67111 AU	
	-1695 Sep 11 j 02:45	0°♌				
	-1695 Oct 20 j 11:14	0°♎	conjunction	-1690 Jul 13 j 00:31	4°♑16'50 1°07'27	
	-1695 Nov 28 j 00:06	0°♏	minimum elong	-1690 Jul 12 j 23:51	4°♑15'45 1°07'29	
	-1694 Jan 05 j 21:53	0°♎		-1690 Aug 21 j 23:41	0°♈	
	-1694 Feb 15 j 02:05	0°♋	morning rise	-1690 Aug 26 j 20:40	3°♈10'02	
evening set	-1694 Feb 26 j 02:44	8°♋00'42		-1690 Oct 06 j 15:40	0°♍	
	-1694 Mar 29 j 02:25	0°♐		-1690 Nov 20 j 04:12	0°♊	
				-1689 Jan 02 j 16:44	0°♌	
conjunction	-1694 Apr 23 j 19:17	17°♐40'26 -0°03'57		-1689 Feb 14 j 14:18	0°♎	
minimum elong	-1694 Apr 23 j 19:30	17°♐40'49 0°03'57	desc. node	-1689 Feb 17 j 00:45	1°♎42'22	
behind sun begin	-1694 Apr 22 j 21:35	17°♐03'38		-1689 Mar 29 j 19:08	0°♏	
behind sun end	-1694 Apr 24 j 17:26	18°♐17'58		-1689 May 15 j 07:27	0°♎	
asc. node	-1694 Apr 30 j 09:17	22°♐07'33	retrograde	-1689 Jul 22 j 22:13	24°♎53'11	
	-1694 May 12 j 03:15	0°♏	min. Earth dist.	-1689 Aug 18 j 20:53	20°♎02'07 0.42702 AU	
max. Earth dist.	-1694 May 19 j 13:58	4°♏56'43 2.59179 AU	greatest brilliancy	-1689 Aug 25 j 04:39	17°♎59'45 -2.6m	
morning rise	-1694 Jun 14 j 14:12	21°♏58'43	opposition	-1689 Aug 26 j 12:57	17°♎33'27 -5°35'39	
	-1694 Jun 27 j 00:33	0°♐	direct	-1689 Sep 26 j 23:51	11°♎31'53	
	-1694 Aug 13 j 10:44	0°♑		-1689 Nov 27 j 22:15	0°♋	
	-1694 Oct 01 j 10:54	0°♈	asc. node	-1689 Dec 21 j 05:25	12°♋04'34	
	-1694 Nov 22 j 13:14	0°♍		-1688 Jan 21 j 20:03	0°♐	
	-1693 Jan 27 j 23:07	0°♊		-1688 Mar 12 j 00:07	0°♏	
retrograde	-1693 Feb 28 j 03:18	5°♊10'21		-1688 Apr 29 j 23:08	0°♐	
	-1693 Mar 29 j 10:35	30°♌		-1688 Jun 17 j 00:05	0°♑	
opposition	-1693 Apr 03 j 17:05	28°♌14'10 2°12'46	evening set	-1688 Jul 03 j 06:43	10°♑20'32	
greatest brilliancy	-1693 Apr 04 j 11:53	27°♌58'01 -2.2m	max. Earth dist.	-1688 Jul 30 j 08:41	27°♑48'30 2.62986 AU	
min. Earth dist.	-1693 Apr 12 j 06:09	25°♌18'40 0.49198 AU		-1688 Aug 02 j 17:18	0°♈	
direct	-1693 May 11 j 18:55	19°♌43'47				
desc. node	-1693 May 15 j 02:05	19°♌48'14	conjunction	-1688 Aug 18 j 13:32	10°♈25'15 1°06'03	
	-1693 Jun 22 j 16:13	0°♊	minimum elong	-1688 Aug 18 j 14:21	10°♈26'36 1°06'05	
	-1693 Aug 14 j 04:36	0°♌		-1688 Sep 16 j 17:44	0°♍	
	-1693 Sep 25 j 18:04	0°♎	morning rise	-1688 Oct 03 j 20:52	11°♍44'53	
	-1693 Nov 05 j 01:23	0°♏		-1688 Oct 29 j 22:38	0°♊	
	-1693 Dec 15 j 07:18	0°♎		-1688 Dec 10 j 12:26	0°♌	
	-1692 Jan 25 j 15:02	0°♋	desc. node	-1687 Jan 04 j 00:49	18°♌08'49	
	-1692 Mar 08 j 14:47	0°♐		-1687 Jan 19 j 20:32	0°♎	
asc. node	-1692 Mar 17 j 07:44	5°♐55'39		-1687 Feb 28 j 13:49	0°♏	
evening set	-1692 Apr 16 j 06:04	25°♐57'47		-1687 Apr 09 j 14:43	0°♎	
	-1692 Apr 22 j 08:54	0°♏		-1687 May 21 j 14:06	0°♋	

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 22

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1687 Jul 08 j 15:02	0°♄			-1682 Sep 01 j 04:15	0°♑	
retrograde	-1687 Sep 09 j 05:57	20°♄31'29			-1682 Oct 11 j 11:22	0°♐	
min. Earth dist.	-1687 Oct 11 j 08:20	13°♄32'31	0.55290 AU		-1682 Nov 19 j 03:00	0°♏	
opposition	-1687 Oct 18 j 02:30	10°♄55'33	-0°54'46	evening set	-1682 Nov 26 j 02:43	5°♏29'51	
greatest brilliancy	-1687 Oct 17 j 21:24	11°♄00'29	-1.9m		-1682 Dec 27 j 03:59	0°♓	
asc. node	-1687 Nov 07 j 03:52	4°♄31'37					
direct	-1687 Nov 22 j 22:03	2°♄51'18		conjunction	-1681 Jan 31 j 14:39	27°♓43'21	-1°05'46
	-1686 Feb 13 j 03:13	0°♄		minimum elong	-1681 Jan 31 j 15:23	27°♓44'46	1°05'48
	-1686 Apr 08 j 17:23	0°♐			-1681 Feb 03 j 13:22	0°♏	
	-1686 May 28 j 20:09	0°♑			-1681 Mar 15 j 03:32	0°♏	
	-1686 Jul 15 j 05:59	0°♑		max. Earth dist.	-1681 Mar 22 j 20:59	5°♏42'23	2.42295 AU
evening set	-1686 Aug 11 j 14:29	18°♑04'03		morning rise	-1681 Apr 07 j 23:48	17°♏26'26	
max. Earth dist.	-1686 Aug 28 j 19:04	29°♑43'46	2.53867 AU		-1681 Apr 25 j 14:43	0°♄	
	-1686 Aug 29 j 04:33	0°♐			-1681 Jun 08 j 09:46	0°♄	
				asc. node	-1681 Jun 30 j 02:17	14°♄13'25	
conjunction	-1686 Sep 29 j 17:50	22°♐03'40	0°33'18		-1681 Jul 24 j 22:43	0°♐	
minimum elong	-1686 Sep 29 j 19:14	22°♐06'08	0°33'16		-1681 Sep 13 j 10:02	0°♑	
	-1686 Oct 10 j 19:34	0°♑			-1681 Nov 14 j 15:09	0°♑	
	-1686 Nov 20 j 11:57	0°♐		retrograde	-1681 Dec 26 j 07:40	8°♑39'57	
morning rise	-1686 Nov 21 j 09:19	0°♐40'13		opposition	-1680 Feb 02 j 22:23	29°♑47'34	4°45'48
desc. node	-1686 Nov 22 j 00:00	1°♐07'52			-1680 Feb 02 j 09:36	30°♐00	
	-1686 Dec 29 j 19:13	0°♏		greatest brilliancy	-1680 Feb 03 j 14:55	29°♑31'28	-1.4m
	-1685 Feb 06 j 10:48	0°♓		min. Earth dist.	-1680 Feb 07 j 08:52	28°♑04'01	0.63997 AU
	-1685 Mar 17 j 07:00	0°♏		direct	-1680 Mar 15 j 04:47	19°♑47'42	
	-1685 Apr 26 j 07:42	0°♏			-1680 Apr 28 j 21:14	0°♑	
	-1685 Jun 07 j 20:17	0°♄			-1680 Jun 25 j 05:26	0°♐	
	-1685 Jul 25 j 10:02	0°♄		desc. node	-1680 Jul 13 j 19:34	11°♐47'46	
asc. node	-1685 Sep 25 j 02:39	27°♄30'58			-1680 Aug 09 j 14:56	0°♑	
	-1685 Oct 08 j 11:58	0°♐			-1680 Sep 19 j 17:07	0°♐	
retrograde	-1685 Oct 17 j 07:52	0°♐30'26			-1680 Oct 28 j 16:46	0°♏	
	-1685 Oct 25 j 22:20	30°♐00			-1680 Dec 05 j 23:21	0°♓	
min. Earth dist.	-1685 Nov 23 j 03:45	21°♄51'10	0.64396 AU		-1679 Jan 13 j 15:10	0°♏	
opposition	-1685 Nov 26 j 09:42	20°♄32'57	2°20'58	evening set	-1679 Feb 02 j 12:28	15°♏05'56	
greatest brilliancy	-1685 Nov 26 j 02:05	20°♄40'36	-1.5m		-1679 Feb 22 j 13:09	0°♏	
direct	-1684 Jan 04 j 09:56	11°♄18'01					
	-1684 Mar 10 j 09:55	0°♐		conjunction	-1679 Apr 03 j 22:52	29°♏02'29	-0°25'27
	-1684 May 06 j 08:42	0°♑		minimum elong	-1679 Apr 04 j 00:20	29°♏05'04	0°25'25
	-1684 Jun 24 j 18:59	0°♑			-1679 Apr 05 j 07:40	0°♄	
	-1684 Aug 09 j 06:47	0°♐		max. Earth dist.	-1679 May 07 j 16:27	22°♄16'16	2.55174 AU
	-1684 Sep 20 j 19:24	0°♑		asc. node	-1679 May 17 j 00:19	28°♄32'47	
evening set	-1684 Sep 25 j 22:50	3°♑44'59			-1679 May 19 j 04:29	0°♄	
desc. node	-1684 Oct 08 j 22:10	13°♑19'12		morning rise	-1679 May 29 j 00:41	6°♄32'26	
max. Earth dist.	-1684 Oct 15 j 06:50	18°♑04'02	2.41440 AU		-1679 Jul 04 j 02:13	0°♐	
	-1684 Oct 31 j 02:00	0°♐			-1679 Aug 20 j 22:18	0°♑	
					-1679 Oct 10 j 07:29	0°♑	
conjunction	-1684 Nov 22 j 02:15	16°♐55'07	-0°29'14		-1679 Dec 06 j 10:15	0°♐	
minimum elong	-1684 Nov 22 j 00:14	16°♐51'13	0°29'14	retrograde	-1678 Feb 07 j 00:57	17°♐19'37	
	-1684 Dec 08 j 21:12	0°♏		opposition	-1678 Mar 15 j 02:48	9°♐41'24	3°32'39
	-1683 Jan 16 j 01:36	0°♓		greatest brilliancy	-1678 Mar 16 j 04:07	9°♐18'23	-1.9m
morning rise	-1683 Jan 26 j 16:34	8°♓20'22		min. Earth dist.	-1678 Mar 22 j 23:42	6°♐50'22	0.54283 AU
	-1683 Feb 23 j 12:21	0°♏		direct	-1678 Apr 23 j 18:10	0°♐25'48	
	-1683 Apr 04 j 02:19	0°♏		desc. node	-1678 May 31 j 18:08	8°♐44'12	
	-1683 May 15 j 15:45	0°♄			-1678 Jul 12 j 05:15	0°♑	
	-1683 Jun 29 j 02:28	0°♄			-1678 Aug 26 j 07:57	0°♐	
asc. node	-1683 Aug 12 j 03:01	27°♄03'37			-1678 Oct 05 j 23:15	0°♏	
	-1683 Aug 17 j 06:28	0°♐			-1678 Nov 14 j 06:41	0°♓	
	-1683 Oct 21 j 14:29	0°♑			-1678 Dec 23 j 19:27	0°♏	
retrograde	-1683 Nov 20 j 00:23	4°♑45'37			-1677 Feb 02 j 12:57	0°♏	
	-1683 Dec 17 j 01:49	30°♐00			-1677 Mar 17 j 00:56	0°♄	
opposition	-1683 Dec 29 j 21:31	25°♐09'05	4°11'11	evening set	-1677 Mar 30 j 05:37	9°♄02'57	
greatest brilliancy	-1683 Dec 29 j 21:56	25°♐08'40	-1.3m	asc. node	-1677 Apr 03 j 23:31	12°♄16'30	
min. Earth dist.	-1683 Dec 30 j 11:13	24°♐55'24	0.67447 AU		-1677 Apr 30 j 10:17	0°♄	
direct	-1682 Feb 08 j 17:45	15°♐17'11					
	-1682 Apr 06 j 11:57	0°♑		conjunction	-1677 May 21 j 06:34	13°♄42'18	0°26'45
	-1682 Jun 02 j 15:03	0°♑		minimum elong	-1677 May 21 j 05:31	13°♄40'35	0°26'45
	-1682 Jul 20 j 02:32	0°♐		max. Earth dist.	-1677 Jun 04 j 22:42	23°♄14'19	2.63891 AU
desc. node	-1682 Aug 26 j 20:30	26°♐10'03			-1677 Jun 15 j 10:16	0°♐	

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 23

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

morning rise	-1677 Jul 08 j 09:52	14° $\Pi$ 42'42		opposition	-1672 Sep 29 j 16:59	22° $\text{H}$ 38'02	-2°38'42
	-1677 Aug 01 j 12:02	0° $\text{☿}$		greatest brilliancy	-1672 Sep 29 j 00:25	22° $\text{H}$ 53'25	-2.2m
	-1677 Sep 18 j 05:42	0° $\Omega$		direct	-1672 Nov 02 j 20:50	15° $\text{H}$ 15'21	
	-1677 Nov 05 j 18:39	0° $\text{♄}$		asc. node	-1672 Nov 23 j 19:27	17° $\text{H}$ 50'38	
	-1677 Dec 26 j 11:58	0° $\text{♁}$			-1672 Dec 28 j 07:50	0° $\text{♁}$	
	-1676 Feb 24 j 15:22	0° $\text{♂}$			-1671 Feb 24 j 13:38	0° $\text{♂}$	
retrograde	-1676 Apr 08 j 20:49	9° $\text{♂}$ 56'32			-1671 Apr 17 j 01:49	0° $\text{♂}$	
desc. node	-1676 Apr 17 j 18:04	9° $\text{♂}$ 26'41			-1671 Jun 05 j 03:46	0° $\text{☿}$	
opposition	-1676 May 10 j 14:59	4° $\text{♂}$ 17'51	-1°29'03		-1671 Jul 22 j 05:15	0° $\Omega$	
greatest brilliancy	-1676 May 10 j 23:38	4° $\text{♂}$ 11'22	-2.7m	evening set	-1671 Jul 26 j 20:48	3° $\Omega$ 02'15	
min. Earth dist.	-1676 May 17 j 10:33	2° $\text{♂}$ 15'59	0.41419 AU	max. Earth dist.	-1671 Aug 16 j 07:42	16° $\Omega$ 34'57	2.57975 AU
	-1676 May 25 j 23:22	30° $\text{R}$ $\text{♁}$			-1671 Sep 05 j 03:32	0° $\text{♄}$	
direct	-1676 Jun 13 j 15:30	27° $\text{♁}$ 41'00					
	-1676 Jul 02 j 05:44	0° $\text{♂}$		conjunction	-1671 Sep 12 j 09:54	4° $\text{♄}$ 59'34	0°50'01
	-1676 Sep 02 j 17:19	0° $\text{♂}$		minimum elong	-1671 Sep 12 j 11:22	5° $\text{♄}$ 02'05	0°50'01
	-1676 Oct 17 j 09:22	0° $\text{♂}$			-1671 Oct 17 j 22:53	0° $\text{♁}$	
	-1676 Nov 28 j 22:47	0° $\approx$		morning rise	-1671 Oct 31 j 19:10	10° $\text{♁}$ 00'05	
	-1675 Jan 10 j 19:41	0° $\text{H}$			-1671 Nov 27 j 22:16	0° $\text{♂}$	
asc. node	-1675 Feb 18 j 21:47	26° $\text{H}$ 38'36		desc. node	-1671 Dec 08 j 16:13	8° $\text{♂}$ 03'18	
	-1675 Feb 23 j 21:57	0° $\text{♁}$			-1670 Jan 06 j 13:29	0° $\text{♂}$	
	-1675 Apr 10 j 10:15	0° $\text{♂}$			-1670 Feb 14 j 12:45	0° $\text{♂}$	
evening set	-1675 May 12 j 01:08	20° $\text{H}$ 24'12			-1670 Mar 25 j 16:37	0° $\approx$	
	-1675 May 27 j 01:04	0° $\text{♂}$			-1670 May 05 j 03:41	0° $\text{H}$	
					-1670 Jun 17 j 16:16	0° $\text{♁}$	
conjunction	-1675 Jun 28 j 14:23	20° $\text{♂}$ 45'22	1°00'41		-1670 Aug 08 j 06:20	0° $\text{♂}$	
minimum elong	-1675 Jun 28 j 13:18	20° $\text{♂}$ 43'37	1°00'43	retrograde	-1670 Oct 03 j 05:36	16° $\text{♂}$ 10'41	
max. Earth dist.	-1675 Jun 28 j 02:34	20° $\text{♂}$ 26'32	2.67281 AU	asc. node	-1670 Oct 11 j 19:11	15° $\text{♂}$ 39'54	
	-1675 Jul 13 j 02:29	0° $\text{☿}$		min. Earth dist.	-1670 Nov 07 j 08:26	8° $\text{♂}$ 06'38	0.61483 AU
morning rise	-1675 Aug 12 j 17:49	19° $\text{☿}$ 35'32		opposition	-1670 Nov 12 j 01:08	6° $\text{♂}$ 14'19	1°16'33
	-1675 Aug 28 j 22:09	0° $\Omega$		greatest brilliancy	-1670 Nov 11 j 19:13	6° $\text{♂}$ 20'12	-1.6m
	-1675 Oct 14 j 02:00	0° $\text{♄}$			-1670 Nov 29 j 23:57	30° $\text{R}$ $\text{♁}$	
	-1675 Nov 28 j 12:38	0° $\text{♁}$		direct	-1670 Dec 19 j 23:33	27° $\text{♁}$ 22'12	
	-1674 Jan 12 j 13:02	0° $\text{♂}$			-1669 Jan 10 j 13:13	0° $\text{♂}$	
	-1674 Feb 26 j 20:32	0° $\text{♂}$			-1669 Mar 23 j 18:12	0° $\text{♂}$	
desc. node	-1674 Mar 05 j 18:33	4° $\text{♂}$ 29'39			-1669 May 15 j 20:41	0° $\text{☿}$	
	-1674 Apr 15 j 23:26	0° $\text{♂}$			-1669 Jul 03 j 06:37	0° $\Omega$	
retrograde	-1674 Jun 27 j 09:21	26° $\text{♂}$ 13'28			-1669 Aug 17 j 11:36	0° $\text{♄}$	
min. Earth dist.	-1674 Jul 24 j 06:22	21° $\text{♂}$ 48'17	0.38864 AU	evening set	-1669 Sep 07 j 14:32	14° $\text{♄}$ 41'06	
greatest brilliancy	-1674 Jul 28 j 08:20	20° $\text{♂}$ 38'37	-2.8m	max. Earth dist.	-1669 Sep 22 j 12:55	25° $\text{♄}$ 19'24	2.46409 AU
opposition	-1674 Jul 29 j 10:46	20° $\text{♂}$ 19'46	-6°45'18		-1669 Sep 29 j 00:18	0° $\text{♁}$	
direct	-1674 Aug 28 j 06:54	15° $\text{♂}$ 08'52		desc. node	-1669 Oct 26 j 15:18	20° $\text{♁}$ 22'13	
	-1674 Oct 20 j 16:47	0° $\approx$					
	-1674 Dec 14 j 05:57	0° $\text{H}$		conjunction	-1669 Oct 30 j 20:48	23° $\text{♁}$ 32'40	-0°02'53
asc. node	-1673 Jan 06 j 19:50	14° $\text{H}$ 19'24		minimum elong	-1669 Oct 30 j 20:39	23° $\text{♁}$ 32'23	0°02'54
	-1673 Feb 01 j 03:40	0° $\text{♁}$		behind sun begin	-1669 Oct 29 j 21:06	22° $\text{♁}$ 48'07	
	-1673 Mar 21 j 05:49	0° $\text{♂}$		behind sun end	-1669 Oct 31 j 20:13	24° $\text{♁}$ 16'41	
	-1673 May 08 j 06:09	0° $\text{♂}$			-1669 Nov 08 j 09:57	0° $\text{♂}$	
evening set	-1673 Jun 19 j 15:41	26° $\text{♂}$ 41'00			-1669 Dec 17 j 08:55	0° $\text{♂}$	
	-1673 Jun 24 j 21:10	0° $\text{☿}$		morning rise	-1669 Dec 30 j 00:10	9° $\text{♂}$ 52'13	
max. Earth dist.	-1673 Jul 21 j 18:10	17° $\text{☿}$ 11'01	2.65229 AU		-1668 Jan 24 j 16:28	0° $\text{♂}$	
					-1668 Mar 03 j 05:30	0° $\approx$	
conjunction	-1673 Aug 04 j 18:01	26° $\text{☿}$ 14'12	1°10'00		-1668 Apr 11 j 21:32	0° $\text{H}$	
minimum elong	-1673 Aug 04 j 18:14	26° $\text{☿}$ 14'34	1°10'02		-1668 May 23 j 15:36	0° $\text{♁}$	
	-1673 Aug 10 j 12:41	0° $\Omega$			-1668 Jul 07 j 18:19	0° $\text{♂}$	
morning rise	-1673 Sep 19 j 00:43	26° $\Omega$ 09'10		asc. node	-1668 Aug 28 j 18:20	0° $\text{♂}$ 03'26	
	-1673 Sep 24 j 17:45	0° $\text{♄}$			-1668 Aug 28 j 15:39	0° $\text{♂}$	
	-1673 Nov 07 j 08:38	0° $\text{♁}$		retrograde	-1668 Nov 06 j 14:20	21° $\text{♂}$ 54'33	
	-1673 Dec 19 j 12:45	0° $\text{♂}$		opposition	-1668 Dec 16 j 16:40	12° $\text{♂}$ 06'52	3°37'19
desc. node	-1672 Jan 21 j 17:15	24° $\text{♂}$ 12'14		min. Earth dist.	-1668 Dec 15 j 18:25	12° $\text{♂}$ 29'11	0.67016 AU
	-1672 Jan 29 j 14:03	0° $\text{♂}$		greatest brilliancy	-1668 Dec 16 j 12:24	12° $\text{♂}$ 11'09	-1.3m
	-1672 Mar 10 j 03:12	0° $\text{♂}$		direct	-1667 Jan 25 j 23:34	2° $\text{♂}$ 26'14	
	-1672 Apr 20 j 07:18	0° $\approx$			-1667 Apr 19 j 20:43	0° $\text{☿}$	
	-1672 Jun 03 j 17:05	0° $\text{H}$			-1667 Jun 11 j 12:00	0° $\Omega$	
	-1672 Aug 07 j 13:17	0° $\text{♁}$			-1667 Jul 27 j 22:47	0° $\text{♄}$	
retrograde	-1672 Aug 23 j 00:13	1° $\text{♁}$ 39'47			-1667 Sep 08 j 17:27	0° $\text{♁}$	
	-1672 Sep 07 j 00:54	30° $\text{R}$ $\text{H}$		desc. node	-1667 Sep 12 j 13:24	2° $\text{♁}$ 47'13	
min. Earth dist.	-1672 Sep 21 j 23:12	25° $\text{H}$ 30'20	0.50414 AU		-1667 Oct 18 j 23:32	0° $\text{♂}$	

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 24

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

evening set	-1667 Oct 31 j 03:12	9°♌19'50		morning rise	-1662 Jun 23 j 12:50	0°♐45'59	
	-1667 Nov 26 j 15:52	0°♏			-1662 Aug 08 j 14:05	0°♏	
					-1662 Sep 26 j 00:39	0°♏	
conjunction	-1666 Jan 03 j 02:59	29°♏31'47	-1°01'30		-1662 Nov 15 j 10:56	0°♐	
minimum elong	-1666 Jan 03 j 00:47	29°♏27'27	1°01'30		-1661 Jan 11 j 08:13	0°♐	
	-1666 Jan 03 j 17:18	0°♏		retrograde	-1661 Mar 13 j 16:06	16°♐56'41	
max. Earth dist.	-1666 Feb 01 j 00:36	22°♏11'33	2.37819 AU	opposition	-1661 Apr 16 j 05:32	10°♐27'04	1°06'48
	-1666 Feb 11 j 02:11	0°♏		greatest brilliancy	-1661 Apr 16 j 15:36	10°♐18'47	-2.4m
morning rise	-1666 Mar 13 j 05:41	22°♏59'15		min. Earth dist.	-1661 Apr 24 j 15:37	7°♐40'52	0.46313 AU
	-1666 Mar 22 j 14:54	0°♏		desc. node	-1661 May 05 j 11:01	4°♐38'04	
	-1666 May 03 j 00:54	0°♐		direct	-1661 May 23 j 03:02	2°♐31'03	
	-1666 Jun 15 j 22:30	0°♏			-1661 Aug 04 j 17:35	0°♌	
asc. node	-1666 Jul 16 j 17:46	19°♏53'08			-1661 Sep 18 j 15:02	0°♏	
	-1666 Aug 02 j 01:50	0°♐			-1661 Oct 29 j 20:51	0°♏	
	-1666 Sep 23 j 23:37	0°♏			-1661 Dec 09 j 16:18	0°♏	
retrograde	-1666 Dec 11 j 16:36	25°♏24'04			-1660 Jan 20 j 09:35	0°♏	
opposition	-1665 Jan 19 j 22:36	16°♏11'34	4°42'00		-1660 Mar 03 j 16:13	0°♐	
greatest brilliancy	-1665 Jan 20 j 08:36	16°♏01'43	-1.3m	asc. node	-1660 Mar 07 j 13:29	2°♐38'09	
min. Earth dist.	-1665 Jan 22 j 21:06	15°♏02'06	0.66132 AU		-1660 Apr 17 j 15:11	0°♏	
direct	-1665 Mar 02 j 05:45	6°♏10'39		evening set	-1660 Apr 25 j 22:54	5°♏26'49	
	-1665 May 15 j 22:17	0°♏			-1660 Jun 02 j 22:16	0°♐	
	-1665 Jul 06 j 01:06	0°♐					
desc. node	-1665 Jul 31 j 12:03	16°♐56'09		conjunction	-1660 Jun 13 j 20:43	7°♐00'17	0°50'15
	-1665 Aug 19 j 03:51	0°♐		minimum elong	-1660 Jun 13 j 19:24	6°♐58'11	0°50'16
	-1665 Sep 28 j 19:31	0°♌		max. Earth dist.	-1660 Jun 18 j 21:34	10°♐13'27	2.66600 AU
	-1665 Nov 06 j 14:24	0°♏			-1660 Jul 19 j 22:05	0°♏	
	-1665 Dec 14 j 17:27	0°♏		morning rise	-1660 Jul 29 j 19:02	6°♏17'08	
evening set	-1664 Jan 08 j 07:37	19°♏14'18			-1660 Sep 04 j 23:40	0°♏	
	-1664 Jan 22 j 05:34	0°♏			-1660 Oct 21 j 19:32	0°♐	
	-1664 Mar 01 j 23:17	0°♏			-1660 Dec 07 j 13:52	0°♐	
					-1659 Jan 24 j 02:02	0°♌	
conjunction	-1664 Mar 12 j 12:17	7°♏44'43	-0°46'07		-1659 Mar 16 j 00:12	0°♏	
minimum elong	-1664 Mar 12 j 14:48	7°♏49'19	0°46'07	desc. node	-1659 Mar 22 j 10:10	3°♏25'17	
	-1664 Apr 12 j 13:29	0°♐		retrograde	-1659 May 28 j 05:28	24°♏57'22	
max. Earth dist.	-1664 Apr 23 j 13:05	7°♐40'27	2.50465 AU	opposition	-1659 Jun 27 j 14:18	19°♏54'33	-5°58'17
morning rise	-1664 May 10 j 17:41	19°♐29'21		min. Earth dist.	-1659 Jun 27 j 11:22	19°♏56'29	0.37566 AU
	-1664 May 26 j 07:48	0°♏		greatest brilliancy	-1659 Jun 27 j 12:20	19°♏55'51	-2.9m
asc. node	-1664 Jun 02 j 16:41	4°♏54'25		direct	-1659 Jul 27 j 15:43	14°♏54'09	
	-1664 Jul 11 j 08:08	0°♐			-1659 Sep 18 j 05:05	0°♏	
	-1664 Aug 28 j 19:50	0°♏			-1659 Nov 09 j 09:37	0°♏	
	-1664 Oct 20 j 11:32	0°♏			-1659 Dec 26 j 02:32	0°♏	
	-1663 Jan 03 j 19:18	0°♐		asc. node	-1658 Jan 23 j 12:35	18°♏28'59	
retrograde	-1663 Jan 19 j 14:00	1°♐26'00			-1658 Feb 10 j 07:08	0°♐	
	-1663 Feb 03 j 14:29	30°♏0			-1658 Mar 29 j 01:29	0°♏	
opposition	-1663 Feb 25 j 20:24	23°♏13'42	4°18'47		-1658 May 15 j 09:11	0°♐	
greatest brilliancy	-1663 Feb 26 j 20:54	22°♏50'36	-1.7m	evening set	-1658 Jun 04 j 22:12	12°♐59'46	
min. Earth dist.	-1663 Mar 04 j 12:45	20°♏43'03	0.58781 AU		-1658 Jul 01 j 17:03	0°♏	
direct	-1663 Apr 07 j 11:21	13°♏31'00		max. Earth dist.	-1658 Jul 12 j 14:25	6°♏56'54	2.66671 AU
	-1663 Jun 03 j 17:15	0°♐					
desc. node	-1663 Jun 17 j 12:07	7°♐12'43		conjunction	-1658 Jul 21 j 06:44	12°♏30'28	1°09'35
	-1663 Jul 24 j 17:38	0°♐		minimum elong	-1658 Jul 21 j 06:21	12°♏29'52	1°09'37
	-1663 Sep 05 j 09:49	0°♌			-1658 Aug 17 j 08:50	0°♏	
	-1663 Oct 15 j 02:28	0°♏		morning rise	-1658 Sep 04 j 03:17	11°♏36'56	
	-1663 Nov 22 j 20:02	0°♏			-1658 Oct 01 j 20:42	0°♐	
	-1663 Dec 31 j 21:36	0°♏			-1658 Nov 15 j 00:50	0°♐	
	-1662 Feb 10 j 05:04	0°♏			-1658 Dec 28 j 00:04	0°♌	
evening set	-1662 Mar 10 j 10:16	20°♏14'52		desc. node	-1657 Feb 07 j 10:04	29°♌31'07	
	-1662 Mar 24 j 08:12	0°♐			-1657 Feb 08 j 02:10	0°♏	
asc. node	-1662 Apr 20 j 14:25	18°♐41'26			-1657 Mar 22 j 00:04	0°♏	
					-1657 May 04 j 12:37	0°♏	
conjunction	-1662 May 04 j 06:16	27°♐52'05	0°08'03		-1657 Jun 26 j 04:35	0°♏	
minimum elong	-1662 May 04 j 05:52	27°♐51'25	0°08'04	retrograde	-1657 Aug 04 j 10:20	9°♏36'04	
behind sun begin	-1662 May 03 j 10:55	27°♐19'47		min. Earth dist.	-1657 Sep 01 j 07:44	4°♏18'25	0.45349 AU
behind sun end	-1662 May 05 j 00:49	28°♐23'01		greatest brilliancy	-1657 Sep 08 j 04:12	1°♏57'04	-2.4m
	-1662 May 07 j 11:01	0°♏		opposition	-1657 Sep 09 j 08:39	1°♏32'28	-4°33'26
max. Earth dist.	-1662 May 25 j 21:53	12°♏11'21	2.61098 AU		-1657 Sep 13 j 22:28	30°♏	
	-1662 Jun 22 j 08:14	0°♐		direct	-1657 Oct 11 j 18:20	25°♏00'07	



## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 25

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1657 Nov 10 j 05:11	0°♄				-1652 Dec 04 j 03:00	0°♄
asc. node	-1657 Dec 11 j 11:21	12°♄34'27					
	-1656 Jan 14 j 04:09	0°♄	conjunction	-1652 Dec 06 j 13:30	1°♄54'40	-0°43'19	
	-1656 Mar 06 j 05:14	0°♄	minimum elong	-1652 Dec 06 j 10:42	1°♄49'11	0°43'20	
	-1656 Apr 24 j 21:50	0°♄		-1651 Jan 11 j 05:49	0°♄		
	-1656 Jun 12 j 06:30	0°♄	morning rise	-1651 Feb 12 j 12:41	25°♄16'22		
evening set	-1656 Jul 11 j 18:44	18°♄46'23		-1651 Feb 18 j 15:10	0°♄		
	-1656 Jul 29 j 02:32	0°♄		-1651 Mar 30 j 03:46	0°♄		
max. Earth dist.	-1656 Aug 05 j 08:43	4°♄45'16	2.61402 AU	-1651 May 10 j 14:28	0°♄		
				-1651 Jun 23 j 18:05	0°♄		
conjunction	-1656 Aug 27 j 08:47	19°♄21'46	1°01'35	asc. node	-1651 Aug 02 j 08:48	24°♄55'39	
minimum elong	-1656 Aug 27 j 09:53	19°♄23'38	1°01'36		-1651 Aug 10 j 21:44	0°♄	
	-1656 Sep 12 j 02:19	0°♄			-1651 Oct 07 j 20:06	0°♄	
morning rise	-1656 Oct 13 j 12:50	21°♄46'07		retrograde	-1651 Nov 27 j 19:04	12°♄32'40	
	-1656 Oct 25 j 04:01	0°♄		opposition	-1650 Jan 06 j 12:17	3°♄03'50	4°25'42
	-1656 Dec 05 j 12:39	0°♄		greatest brilliancy	-1650 Jan 06 j 15:56	3°♄00'13	-1.3m
desc. node	-1656 Dec 25 j 08:55	14°♄45'43		min. Earth dist.	-1650 Jan 07 j 22:23	2°♄29'56	0.67272 AU
	-1655 Jan 14 j 14:25	0°♄			-1650 Jan 14 j 08:18	30°♄	
	-1655 Feb 23 j 00:14	0°♄		direct	-1650 Feb 16 j 14:15	23°♄07'29	
	-1655 Apr 03 j 15:32	0°♄			-1650 Mar 25 j 03:15	0°♄	
	-1655 May 14 j 20:38	0°♄			-1650 May 27 j 06:57	0°♄	
	-1655 Jun 29 j 09:52	0°♄			-1650 Jul 14 j 18:59	0°♄	
	-1655 Sep 08 j 20:34	0°♄		desc. node	-1650 Aug 17 j 05:37	22°♄53'00	
retrograde	-1655 Sep 18 j 07:36	0°♄36'45			-1650 Aug 27 j 04:56	0°♄	
	-1655 Sep 27 j 13:37	30°♄			-1650 Oct 06 j 15:08	0°♄	
min. Earth dist.	-1655 Oct 21 j 12:45	23°♄13'17	0.57700 AU		-1650 Nov 14 j 07:53	0°♄	
opposition	-1655 Oct 27 j 14:39	20°♄50'09	-0°02'09	evening set	-1650 Dec 11 j 13:11	21°♄27'20	
greatest brilliancy	-1654 Jun 15 j 15:45	14°♄09'55	1.7m		-1650 Dec 22 j 09:06	0°♄	
asc. node	-1655 Oct 28 j 10:17	20°♄30'57			-1649 Jan 29 j 18:36	0°♄	
direct	-1655 Dec 03 j 06:18	12°♄26'52					
	-1654 Feb 04 j 00:24	0°♄		conjunction	-1649 Feb 16 j 02:13	13°♄15'58	-1°01'36
	-1654 Apr 02 j 18:33	0°♄		minimum elong	-1649 Feb 16 j 04:17	13°♄19'54	1°01'37
	-1654 May 23 j 18:16	0°♄			-1649 Mar 10 j 08:56	0°♄	
	-1654 Jul 10 j 12:03	0°♄		max. Earth dist.	-1649 Apr 06 j 09:51	19°♄44'27	2.45214 AU
evening set	-1654 Aug 21 j 01:12	27°♄36'45			-1649 Apr 20 j 19:45	0°♄	
	-1654 Aug 24 j 13:00	0°♄		morning rise	-1649 Apr 21 j 01:43	0°♄10'31	
max. Earth dist.	-1654 Sep 05 j 18:56	8°♄27'42	2.51303 AU		-1649 Jun 03 j 13:00	0°♄	
	-1654 Oct 06 j 03:23	0°♄		asc. node	-1649 Jun 20 j 07:17	11°♄04'33	
					-1649 Jul 19 j 19:01	0°♄	
conjunction	-1654 Oct 10 j 10:10	3°♄06'12	0°21'20		-1649 Sep 07 j 07:25	0°♄	
minimum elong	-1654 Oct 10 j 11:13	3°♄08'07	0°21'18		-1649 Nov 03 j 05:41	0°♄	
desc. node	-1654 Nov 12 j 07:37	27°♄25'55		retrograde	-1648 Jan 04 j 02:55	16°♄59'11	
	-1654 Nov 15 j 17:27	0°♄		opposition	-1648 Feb 11 j 07:51	8°♄19'41	4°40'54
morning rise	-1654 Dec 04 j 10:24	14°♄13'22		greatest brilliancy	-1648 Feb 12 j 03:45	8°♄00'30	-1.5m
	-1654 Dec 24 j 21:47	0°♄		min. Earth dist.	-1648 Feb 16 j 14:30	6°♄17'50	0.62401 AU
	-1653 Feb 01 j 10:12	0°♄			-1648 Mar 07 j 19:46	30°♄	
	-1653 Mar 12 j 03:14	0°♄		direct	-1648 Mar 23 j 11:23	28°♄23'24	
	-1653 Apr 20 j 23:38	0°♄			-1648 Apr 08 j 20:33	0°♄	
	-1653 Jun 02 j 02:36	0°♄			-1648 Jun 18 j 02:09	0°♄	
	-1653 Jul 18 j 10:04	0°♄		desc. node	-1648 Jul 04 j 04:03	9°♄44'39	
	-1653 Sep 14 j 21:43	0°♄			-1648 Aug 03 j 20:02	0°♄	
asc. node	-1653 Sep 15 j 10:12	0°♄11'58			-1648 Sep 14 j 09:05	0°♄	
retrograde	-1653 Oct 25 j 03:38	8°♄44'42			-1648 Oct 23 j 13:55	0°♄	
	-1653 Dec 01 j 08:49	30°♄			-1648 Nov 30 j 23:36	0°♄	
min. Earth dist.	-1653 Dec 01 j 20:50	29°♄47'58	0.65602 AU		-1647 Jan 08 j 17:57	0°♄	
opposition	-1653 Dec 04 j 07:01	28°♄49'34	2°52'27	evening set	-1647 Feb 16 j 04:43	28°♄51'03	
greatest brilliancy	-1653 Dec 03 j 23:51	28°♄56'45	-1.4m		-1647 Feb 17 j 18:15	0°♄	
direct	-1652 Jan 12 j 19:49	19°♄24'13			-1647 Mar 31 j 14:28	0°♄	
	-1652 Feb 28 j 20:53	0°♄		conjunction	-1647 Apr 15 j 12:35	10°♄21'13	-0°12'59
	-1652 Apr 30 j 06:58	0°♄		minimum elong	-1647 Apr 15 j 13:18	10°♄22'27	0°12'58
	-1652 Jun 19 j 15:55	0°♄		behind sun begin	-1647 Apr 14 j 23:52	9°♄59'21	
	-1652 Aug 04 j 11:29	0°♄		behind sun end	-1647 Apr 16 j 02:43	10°♄45'33	
desc. node	-1652 Sep 29 j 07:01	9°♄39'47		asc. node	-1647 May 07 j 06:48	25°♄09'31	
evening set	-1652 Oct 07 j 21:19	16°♄02'57			-1647 May 14 j 12:09	0°♄	
	-1652 Oct 26 j 08:57	0°♄		max. Earth dist.	-1647 May 14 j 19:13	0°♄11'48	2.57474 AU
max. Earth dist.	-1652 Nov 05 j 11:20	7°♄43'56	2.38995 AU	morning rise	-1647 Jun 07 j 16:25	15°♄58'16	

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 26

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1647 Jun 29 j 08:12	0°♐			-1641 Jan 25 j 18:04	0°♑		
	-1647 Aug 15 j 21:16	0°♑			-1641 Mar 15 j 21:16	0°♒		
	-1647 Oct 04 j 09:04	0°♒			-1641 May 03 j 09:21	0°♐		
	-1647 Nov 27 j 01:51	0°♑			-1641 Jun 20 j 05:56	0°♑		
retrograde	-1646 Feb 18 j 14:32	27°♑36'01		evening set	-1641 Jun 28 j 00:36	4°♑56'07		
opposition	-1646 Mar 25 j 21:28	20°♑20'01	2°51'25	max. Earth dist.	-1641 Jul 27 j 07:53	23°♑44'14	2.64091 AU	
greatest brilliancy	-1646 Mar 26 j 20:12	19°♑59'56	-2.0m		-1641 Aug 05 j 23:05	0°♒		
min. Earth dist.	-1646 Apr 03 j 05:43	17°♑23'39	0.51529 AU					
direct	-1646 May 03 j 18:42	11°♑26'30		conjunction	-1641 Aug 13 j 03:53	4°♒42'45	1°08'15	
desc. node	-1646 May 22 j 03:17	13°♑37'08		minimum elong	-1641 Aug 13 j 04:27	4°♒43'41	1°08'17	
	-1646 Jul 02 j 01:23	0°♒			-1641 Sep 20 j 02:15	0°♑		
	-1646 Aug 19 j 06:17	0°♑		morning rise	-1641 Sep 27 j 22:24	5°♑19'47		
	-1646 Sep 29 j 20:16	0°♒			-1641 Nov 02 j 12:17	0°♒		
	-1646 Nov 08 j 15:18	0°♑			-1641 Dec 14 j 08:37	0°♑		
	-1646 Dec 18 j 12:01	0°♑		desc. node	-1640 Jan 12 j 02:06	21°♑07'58		
	-1645 Jan 28 j 11:58	0°♒			-1640 Jan 24 j 00:13	0°♒		
	-1645 Mar 12 j 04:53	0°♑			-1640 Mar 04 j 01:09	0°♑		
asc. node	-1645 Mar 25 j 05:35	8°♑53'55			-1640 Apr 13 j 11:24	0°♑		
evening set	-1645 Apr 09 j 16:57	19°♑19'55			-1640 May 26 j 04:16	0°♒		
	-1645 Apr 25 j 17:53	0°♒			-1640 Jul 16 j 05:56	0°♑		
				retrograde	-1640 Sep 02 j 02:00	13°♑10'30		
conjunction	-1645 May 30 j 11:28	22°♒41'40	0°36'18	min. Earth dist.	-1640 Oct 03 j 05:39	6°♑33'17	0.53184 AU	
minimum elong	-1645 May 30 j 10:13	22°♒39'39	0°36'19	opposition	-1640 Oct 10 j 12:06	3°♑47'16	-1°37'00	
	-1645 Jun 10 j 19:19	0°♐		greatest brilliancy	-1640 Oct 10 j 02:27	3°♑56'27	-2.0m	
max. Earth dist.	-1645 Jun 10 j 14:03	29°♒51'33	2.65080 AU		-1640 Oct 21 j 04:42	30°♒♒		
morning rise	-1645 Jul 16 j 16:34	22°♐56'12		direct	-1640 Nov 14 j 15:11	26°♒00'21		
	-1645 Jul 27 j 19:26	0°♑		asc. node	-1640 Nov 14 j 01:51	26°♒00'28		
	-1645 Sep 13 j 06:00	0°♒			-1640 Dec 11 j 04:29	0°♑		
	-1645 Oct 31 j 00:55	0°♑			-1639 Feb 17 j 11:58	0°♒		
	-1645 Dec 18 j 21:38	0°♒			-1639 Apr 11 j 14:28	0°♐		
	-1644 Feb 09 j 15:28	0°♑			-1639 May 31 j 06:26	0°♑		
desc. node	-1644 Apr 08 j 02:42	23°♑19'41			-1639 Jul 17 j 13:35	0°♒		
retrograde	-1644 Apr 25 j 23:08	25°♑13'07		evening set	-1639 Aug 04 j 17:52	11°♒56'23		
opposition	-1644 May 26 j 20:37	19°♑58'30	-3°14'14	max. Earth dist.	-1639 Aug 23 j 05:27	24°♒20'02	2.55798 AU	
greatest brilliancy	-1644 May 27 j 08:59	19°♑49'49	-2.8m		-1639 Aug 31 j 13:07	0°♑		
min. Earth dist.	-1644 May 31 j 20:05	18°♑35'01	0.39355 AU					
direct	-1644 Jun 28 j 02:37	14°♑06'35		conjunction	-1639 Sep 22 j 01:42	14°♑55'05	0°41'02	
	-1644 Aug 20 j 05:41	0°♒		minimum elong	-1639 Sep 22 j 03:11	14°♑57'41	0°41'02	
	-1644 Oct 08 j 23:34	0°♑			-1639 Oct 13 j 07:15	0°♒		
	-1644 Nov 22 j 06:11	0°♑		morning rise	-1639 Nov 12 j 02:45	21°♒46'39		
	-1643 Jan 05 j 01:11	0°♒			-1639 Nov 23 j 03:29	0°♑		
asc. node	-1643 Feb 09 j 03:43	23°♒39'13		desc. node	-1639 Nov 29 j 01:27	4°♑26'27		
	-1643 Feb 18 j 16:47	0°♑			-1638 Jan 01 j 14:43	0°♒		
	-1643 Apr 05 j 13:36	0°♒			-1638 Feb 09 j 09:29	0°♑		
evening set	-1643 May 20 j 21:39	29°♒03'21			-1638 Mar 20 j 08:08	0°♑		
	-1643 May 22 j 09:14	0°♐			-1638 Apr 29 j 11:37	0°♒		
max. Earth dist.	-1643 Jul 03 j 10:05	26°♐45'04	2.67289 AU		-1638 Jun 11 j 06:32	0°♑		
					-1638 Jul 29 j 22:50	0°♒		
conjunction	-1643 Jul 06 j 21:46	28°♐58'26	1°05'05	asc. node	-1638 Oct 02 j 00:28	24°♒23'57		
minimum elong	-1643 Jul 06 j 20:54	28°♐57'03	1°05'06	retrograde	-1638 Oct 11 j 10:02	24°♒58'36		
	-1643 Jul 08 j 12:23	0°♑		min. Earth dist.	-1638 Nov 16 j 12:16	16°♒34'27	0.63217 AU	
morning rise	-1643 Aug 20 j 19:46	27°♑46'41		opposition	-1638 Nov 20 j 09:53	15°♒00'48	1°55'48	
	-1643 Aug 24 j 06:15	0°♒		greatest brilliancy	-1638 Nov 20 j 02:28	15°♒08'13	-1.5m	
	-1643 Oct 09 j 03:28	0°♑		direct	-1638 Dec 28 j 23:36	5°♒55'12		
	-1643 Nov 23 j 01:31	0°♒			-1637 Mar 16 j 03:50	0°♐		
	-1642 Jan 06 j 04:24	0°♑			-1637 May 10 j 07:17	0°♑		
	-1642 Feb 18 j 23:18	0°♒			-1637 Jun 28 j 08:00	0°♒		
desc. node	-1642 Feb 24 j 01:53	3°♒29'16			-1637 Aug 12 j 18:07	0°♑		
	-1642 Apr 04 j 16:26	0°♑		evening set	-1637 Sep 18 j 07:49	25°♑39'24		
	-1642 May 25 j 20:25	0°♑			-1637 Sep 24 j 08:05	0°♒		
retrograde	-1642 Jul 12 j 10:10	13°♑17'58		max. Earth dist.	-1637 Oct 04 j 14:01	7°♒28'54	2.43633 AU	
min. Earth dist.	-1642 Aug 07 j 23:56	8°♑43'03	0.40772 AU	desc. node	-1637 Oct 16 j 23:38	16°♒39'34		
opposition	-1642 Aug 14 j 20:46	6°♑37'16	-6°15'26		-1637 Nov 03 j 16:56	0°♑		
greatest brilliancy	-1642 Aug 13 j 12:46	7°♑01'52	-2.7m					
direct	-1642 Sep 14 j 12:55	1°♑00'24		conjunction	-1637 Nov 12 j 14:35	6°♑47'13	-0°17'52	
	-1642 Dec 05 j 03:16	0°♒		minimum elong	-1637 Nov 12 j 13:23	6°♑44'56	0°17'52	
asc. node	-1642 Dec 28 j 02:51	13°♒00'09			-1637 Dec 12 j 14:24	0°♒		

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

morning rise	-1636 Jan 14 j 20:23	26° $\text{♁}$ 04'42			-1631 Mar 15 j 03:54	30° $\text{♁}$		
	-1636 Jan 19 j 20:11	0° $\text{♁}$		direct	-1631 Apr 16 j 14:59	23° $\text{♁}$ 20'40		
	-1636 Feb 27 j 07:20	0° $\text{♁}$			-1631 May 20 j 13:05	0° $\text{♁}$		
	-1636 Apr 06 j 21:08	0° $\text{♁}$		desc. node	-1631 Jun 07 j 19:44	7° $\text{♁}$ 42'13		
	-1636 May 18 j 10:36	0° $\text{♁}$			-1631 Jul 17 j 09:53	0° $\text{♁}$		
	-1636 Jul 02 j 01:04	0° $\text{♁}$			-1631 Aug 30 j 07:41	0° $\text{♁}$		
asc. node	-1636 Aug 19 j 00:35	28° $\text{♁}$ 55'02			-1631 Oct 09 j 12:27	0° $\text{♁}$		
	-1636 Aug 20 j 23:42	0° $\text{♁}$			-1631 Nov 17 j 13:06	0° $\text{♁}$		
retrograde	-1636 Nov 14 j 07:01	29° $\text{♁}$ 46'33			-1631 Dec 26 j 19:43	0° $\text{♁}$		
opposition	-1636 Dec 24 j 07:23	20° $\text{♁}$ 04'40	3°58'23		-1630 Feb 05 j 07:28	0° $\text{♁}$		
greatest brilliancy	-1636 Dec 24 j 05:32	20° $\text{♁}$ 06'31	-1.3m		-1630 Mar 19 j 13:57	0° $\text{♁}$		
min. Earth dist.	-1636 Dec 24 j 05:10	20° $\text{♁}$ 06'53	0.67383 AU	evening set	-1630 Mar 21 j 22:17	1° $\text{♁}$ 37'35		
direct	-1635 Feb 02 j 22:42	10° $\text{♁}$ 17'12		asc. node	-1630 Apr 10 j 21:26	15° $\text{♁}$ 17'54		
	-1635 Apr 11 j 19:20	0° $\text{♁}$			-1630 May 02 j 19:04	0° $\text{♁}$		
	-1635 Jun 05 j 19:17	0° $\text{♁}$						
	-1635 Jul 22 j 21:06	0° $\text{♁}$		conjunction	-1630 May 14 j 03:08	7° $\text{♁}$ 30'06	0°19'10	
desc. node	-1635 Sep 02 j 22:02	29° $\text{♁}$ 18'21		minimum elong	-1630 May 14 j 02:18	7° $\text{♁}$ 28'44	0°19'11	
	-1635 Sep 03 j 21:04	0° $\text{♁}$		max. Earth dist.	-1630 May 31 j 22:29	19° $\text{♁}$ 09'18	2.62738 AU	
	-1635 Oct 14 j 04:35	0° $\text{♁}$			-1630 Jun 17 j 16:40	0° $\text{♁}$		
evening set	-1635 Nov 14 j 11:17	24° $\text{♁}$ 11'42		morning rise	-1630 Jul 02 j 03:29	9° $\text{♁}$ 16'07		
	-1635 Nov 21 j 21:02	0° $\text{♁}$			-1630 Aug 03 j 19:27	0° $\text{♁}$		
	-1635 Dec 29 j 22:07	0° $\text{♁}$			-1630 Sep 20 j 19:23	0° $\text{♁}$		
					-1630 Nov 09 j 00:50	0° $\text{♁}$		
conjunction	-1634 Jan 19 j 05:21	15° $\text{♁}$ 57'12	-1°05'48		-1630 Dec 31 j 16:45	0° $\text{♁}$		
minimum elong	-1634 Jan 19 j 04:43	15° $\text{♁}$ 55'58	1°05'50	retrograde	-1629 Mar 28 j 11:36	29° $\text{♁}$ 51'57		
	-1634 Feb 06 j 06:38	0° $\text{♁}$		desc. node	-1629 Apr 25 j 19:04	25° $\text{♁}$ 08'36		
max. Earth dist.	-1634 Mar 07 j 09:12	22° $\text{♁}$ 12'40	2.40035 AU	opposition	-1629 Apr 30 j 00:34	23° $\text{♁}$ 50'40	-0°15'47	
	-1634 Mar 17 j 19:12	0° $\text{♁}$		greatest brilliancy	-1629 Apr 30 j 02:29	23° $\text{♁}$ 49'09	-2.6m	
morning rise	-1634 Mar 28 j 05:15	7° $\text{♁}$ 41'57		min. Earth dist.	-1629 May 07 j 19:11	21° $\text{♁}$ 24'45	0.43483 AU	
	-1634 Apr 28 j 04:23	0° $\text{♁}$		direct	-1629 Jun 04 j 09:18	16° $\text{♁}$ 36'38		
	-1634 Jun 10 j 22:44	0° $\text{♁}$			-1629 Jul 22 j 06:58	0° $\text{♁}$		
asc. node	-1634 Jul 07 j 00:10	17° $\text{♁}$ 00'42			-1629 Sep 10 j 07:32	0° $\text{♁}$		
	-1634 Jul 27 j 15:06	0° $\text{♁}$			-1629 Oct 23 j 02:26	0° $\text{♁}$		
	-1634 Sep 16 j 20:21	0° $\text{♁}$			-1629 Dec 03 j 17:38	0° $\text{♁}$		
	-1634 Nov 25 j 02:24	0° $\text{♁}$			-1628 Jan 15 j 00:04	0° $\text{♁}$		
retrograde	-1634 Dec 19 j 22:46	3° $\text{♁}$ 24'09		asc. node	-1628 Feb 26 j 20:11	29° $\text{♁}$ 26'48		
	-1633 Jan 11 j 23:59	30° $\text{♁}$			-1628 Feb 27 j 15:51	0° $\text{♁}$		
opposition	-1633 Jan 27 j 21:24	24° $\text{♁}$ 22'15	4°45'33		-1628 Apr 12 j 20:58	0° $\text{♁}$		
greatest brilliancy	-1633 Jan 28 j 11:04	24° $\text{♁}$ 08'53	-1.4m	evening set	-1628 May 05 j 06:26	14° $\text{♁}$ 32'39		
min. Earth dist.	-1633 Jan 31 j 16:12	22° $\text{♁}$ 53'28	0.65084 AU		-1628 May 29 j 07:26	0° $\text{♁}$		
direct	-1633 Mar 10 j 05:34	14° $\text{♁}$ 21'05						
	-1633 May 06 j 18:39	0° $\text{♁}$		conjunction	-1628 Jun 22 j 08:31	15° $\text{♁}$ 21'35	0°56'44	
	-1633 Jun 29 j 22:33	0° $\text{♁}$		minimum elong	-1628 Jun 22 j 07:19	15° $\text{♁}$ 19'39	0°56'46	
desc. node	-1633 Jul 21 j 21:09	14° $\text{♁}$ 13'28		max. Earth dist.	-1628 Jun 24 j 05:54	16° $\text{♁}$ 33'56	2.67082 AU	
	-1633 Aug 13 j 19:19	0° $\text{♁}$			-1628 Jul 15 j 07:51	0° $\text{♁}$		
	-1633 Sep 23 j 17:35	0° $\text{♁}$		morning rise	-1628 Aug 06 j 18:56	14° $\text{♁}$ 19'53		
	-1633 Nov 01 j 15:30	0° $\text{♁}$			-1628 Aug 31 j 06:05	0° $\text{♁}$		
	-1633 Dec 09 j 20:13	0° $\text{♁}$			-1628 Oct 16 j 16:46	0° $\text{♁}$		
	-1632 Jan 17 j 09:32	0° $\text{♁}$			-1628 Dec 01 j 16:25	0° $\text{♁}$		
evening set	-1632 Jan 23 j 08:59	4° $\text{♁}$ 34'50			-1627 Jan 16 j 15:01	0° $\text{♁}$		
	-1632 Feb 26 j 04:30	0° $\text{♁}$		desc. node	-1627 Mar 04 j 17:01	0° $\text{♁}$		
					-1627 Mar 12 j 19:44	4° $\text{♁}$ 58'11		
conjunction	-1632 Mar 25 j 13:50	20° $\text{♁}$ 36'59	-0°34'34		-1627 Apr 27 j 07:15	0° $\text{♁}$		
minimum elong	-1632 Mar 25 j 15:51	20° $\text{♁}$ 40'34	0°34'33	retrograde	-1627 Jun 14 j 16:33	13° $\text{♁}$ 03'08		
	-1632 Apr 07 j 19:41	0° $\text{♁}$		min. Earth dist.	-1627 Jul 12 j 14:54	8° $\text{♁}$ 31'35	0.37894 AU	
max. Earth dist.	-1632 May 01 j 23:27	16° $\text{♁}$ 44'33	2.53148 AU	opposition	-1627 Jul 15 j 19:01	7° $\text{♁}$ 39'44	-6°42'46	
morning rise	-1632 May 21 j 10:02	29° $\text{♁}$ 53'22		greatest brilliancy	-1627 Jul 15 j 02:14	7° $\text{♁}$ 51'11	-2.9m	
	-1632 May 21 j 14:00	0° $\text{♁}$		direct	-1627 Aug 14 j 09:48	2° $\text{♁}$ 41'02		
asc. node	-1632 May 23 j 22:15	1° $\text{♁}$ 33'57			-1627 Oct 30 j 01:32	0° $\text{♁}$		
	-1632 Jul 06 j 11:18	0° $\text{♁}$			-1627 Dec 19 j 00:20	0° $\text{♁}$		
	-1632 Aug 23 j 12:14	0° $\text{♁}$		asc. node	-1626 Jan 13 j 17:47	16° $\text{♁}$ 12'02		
	-1632 Oct 13 j 15:34	0° $\text{♁}$			-1626 Feb 04 j 12:23	0° $\text{♁}$		
	-1632 Dec 13 j 13:47	0° $\text{♁}$			-1626 Mar 23 j 22:42	0° $\text{♁}$		
retrograde	-1631 Jan 29 j 19:09	10° $\text{♁}$ 44'38			-1626 May 10 j 14:53	0° $\text{♁}$		
opposition	-1631 Mar 07 j 10:59	2° $\text{♁}$ 50'22	3°55'11	evening set	-1626 Jun 13 j 09:33	21° $\text{♁}$ 17'58		
greatest brilliancy	-1631 Mar 08 j 12:30	2° $\text{♁}$ 26'46	-1.8m		-1626 Jun 27 j 02:47	0° $\text{♁}$		
min. Earth dist.	-1631 Mar 14 j 20:24	0° $\text{♁}$ 06'47	0.56388 AU	max. Earth dist.	-1626 Jul 17 j 23:23	13° $\text{♁}$ 19'11	2.65983 AU	

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 28

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.


































































































































conjunction	-1626 Jul 29 j 13:03	20° $\mathfrak{D}$ 46'01	1°10'20		-1621 Jul 12 j 01:07	0° $\mathfrak{B}$	
minimum elong	-1626 Jul 29 j 13:01	20° $\mathfrak{D}$ 45'58	1°10'21		-1621 Sep 03 j 15:58	0° $\mathfrak{I}$	
	-1626 Aug 12 j 18:51	0° $\mathfrak{Q}$		asc. node	-1621 Sep 05 j 16:16	0° $\mathfrak{I}$ 56'54	
morning rise	-1626 Sep 12 j 13:35	20° $\mathfrak{Q}$ 15'03		retrograde	-1621 Nov 01 j 21:53	16° $\mathfrak{I}$ 49'03	
	-1626 Sep 27 j 03:29	0° $\mathfrak{P}$		min. Earth dist.	-1621 Dec 10 j 11:17	7° $\mathfrak{I}$ 35'48	0.66509 AU
	-1626 Nov 10 j 00:49	0° $\mathfrak{L}$		opposition	-1621 Dec 12 j 01:20	6° $\mathfrak{I}$ 57'38	3°20'03
	-1626 Dec 22 j 13:24	0° $\mathfrak{M}$		greatest brilliancy	-1621 Dec 11 j 19:31	7° $\mathfrak{I}$ 03'28	-1.4m
desc. node	-1625 Jan 28 j 18:51	26° $\mathfrak{M}$ 53'40			-1621 Dec 31 j 21:45	30° $\mathfrak{R}$ $\mathfrak{B}$	
	-1625 Feb 02 j 01:08	0° $\mathfrak{A}$		direct	-1620 Jan 21 j 00:48	27° $\mathfrak{B}$ 23'11	
	-1625 Mar 15 j 02:34	0° $\mathfrak{Z}$			-1620 Feb 11 j 16:52	0° $\mathfrak{I}$	
	-1625 Apr 26 j 00:56	0° $\mathfrak{A}$			-1620 Apr 23 j 16:39	0° $\mathfrak{D}$	
	-1625 Jun 11 j 10:52	0° $\mathfrak{H}$			-1620 Jun 14 j 08:09	0° $\mathfrak{Q}$	
retrograde	-1625 Aug 15 j 20:57	22° $\mathfrak{H}$ 58'14			-1620 Jul 30 j 13:35	0° $\mathfrak{P}$	
min. Earth dist.	-1625 Sep 13 j 20:57	17° $\mathfrak{H}$ 12'33	0.48127 AU		-1620 Sep 11 j 08:07	0° $\mathfrak{L}$	
opposition	-1625 Sep 21 j 21:17	14° $\mathfrak{H}$ 19'20	-3°27'28	desc. node	-1620 Sep 19 j 14:53	6° $\mathfrak{L}$ 02'21	
greatest brilliancy	-1625 Sep 20 j 23:13	14° $\mathfrak{H}$ 39'15	-2.3m	evening set	-1620 Oct 20 j 16:14	29° $\mathfrak{L}$ 15'56	
direct	-1625 Oct 25 j 06:12	7° $\mathfrak{H}$ 18'22			-1620 Oct 21 j 15:22	0° $\mathfrak{M}$	
asc. node	-1625 Dec 01 j 17:08	14° $\mathfrak{H}$ 53'54			-1620 Nov 29 j 09:03	0° $\mathfrak{A}$	
	-1624 Jan 05 j 03:16	0° $\mathfrak{Y}$		max. Earth dist.	-1620 Dec 13 j 03:01	10° $\mathfrak{A}$ 48'30	2.37457 AU
	-1624 Feb 29 j 02:08	0° $\mathfrak{B}$					
	-1624 Apr 19 j 17:41	0° $\mathfrak{I}$		conjunction	-1620 Dec 21 j 20:01	17° $\mathfrak{A}$ 40'28	-0°55'01
	-1624 Jun 07 j 12:17	0° $\mathfrak{D}$		minimum elong	-1620 Dec 21 j 17:11	17° $\mathfrak{A}$ 34'51	0°55'01
evening set	-1624 Jul 20 j 08:49	27° $\mathfrak{D}$ 18'27			-1619 Jan 06 j 11:10	0° $\mathfrak{Z}$	
	-1624 Jul 24 j 12:11	0° $\mathfrak{Q}$			-1619 Feb 13 j 19:37	0° $\mathfrak{A}$	
max. Earth dist.	-1624 Aug 11 j 12:53	11° $\mathfrak{Q}$ 51'26	2.59600 AU	morning rise	-1619 Feb 28 j 23:39	11° $\mathfrak{A}$ 39'36	
					-1619 Mar 25 j 07:11	0° $\mathfrak{H}$	
conjunction	-1624 Sep 05 j 09:31	28° $\mathfrak{Q}$ 33'55	0°55'31		-1619 May 05 j 15:56	0° $\mathfrak{Y}$	
minimum elong	-1624 Sep 05 j 10:51	28° $\mathfrak{Q}$ 36'12	0°55'31		-1619 Jun 18 j 13:52	0° $\mathfrak{B}$	
	-1624 Sep 07 j 12:02	0° $\mathfrak{P}$		asc. node	-1619 Jul 23 j 15:07	22° $\mathfrak{B}$ 26'45	
	-1624 Oct 20 j 11:09	0° $\mathfrak{L}$			-1619 Aug 04 j 23:50	0° $\mathfrak{I}$	
morning rise	-1624 Oct 23 j 16:01	2° $\mathfrak{L}$ 17'29			-1619 Sep 28 j 08:06	0° $\mathfrak{D}$	
	-1624 Nov 30 j 15:11	0° $\mathfrak{M}$		retrograde	-1619 Dec 05 j 16:47	20° $\mathfrak{D}$ 21'35	
desc. node	-1624 Dec 15 j 17:36	11° $\mathfrak{M}$ 16'32		opposition	-1618 Jan 14 j 04:43	11° $\mathfrak{D}$ 01'24	4°36'29
	-1623 Jan 09 j 11:22	0° $\mathfrak{A}$		greatest brilliancy	-1618 Jan 14 j 11:51	10° $\mathfrak{D}$ 54'20	-1.3m
	-1623 Feb 17 j 15:09	0° $\mathfrak{Z}$		min. Earth dist.	-1618 Jan 16 j 11:18	10° $\mathfrak{D}$ 07'26	0.66765 AU
	-1623 Mar 28 j 22:58	0° $\mathfrak{A}$		direct	-1618 Feb 24 j 10:38	1° $\mathfrak{D}$ 01'50	
	-1623 May 08 j 15:37	0° $\mathfrak{H}$			-1618 May 20 j 06:46	0° $\mathfrak{Q}$	
	-1623 Jun 21 j 18:09	0° $\mathfrak{Y}$			-1618 Jul 09 j 05:19	0° $\mathfrak{P}$	
	-1623 Aug 15 j 15:28	0° $\mathfrak{B}$		desc. node	-1618 Aug 07 j 13:16	19° $\mathfrak{P}$ 45'02	
retrograde	-1623 Sep 27 j 00:04	10° $\mathfrak{B}$ 07'46			-1618 Aug 22 j 01:57	0° $\mathfrak{L}$	
asc. node	-1623 Oct 18 j 17:15	6° $\mathfrak{B}$ 48'49			-1618 Oct 01 j 16:03	0° $\mathfrak{M}$	
min. Earth dist.	-1623 Oct 31 j 06:58	2° $\mathfrak{B}$ 21'16	0.59890 AU		-1618 Nov 09 j 10:27	0° $\mathfrak{A}$	
opposition	-1623 Nov 05 j 14:47	0° $\mathfrak{B}$ 14'41	0°45'22		-1618 Dec 17 j 12:41	0° $\mathfrak{Z}$	
greatest brilliancy	-1623 Nov 05 j 10:49	0° $\mathfrak{B}$ 18'37	-1.7m	evening set	-1618 Dec 27 j 07:15	7° $\mathfrak{Z}$ 41'06	
	-1623 Nov 06 j 05:38	30° $\mathfrak{R}$ $\mathfrak{Y}$			-1617 Jan 24 j 23:00	0° $\mathfrak{A}$	
direct	-1623 Dec 13 j 00:20	21° $\mathfrak{Y}$ 34'35					
	-1622 Jan 22 j 19:53	0° $\mathfrak{B}$		conjunction	-1617 Mar 02 j 19:55	27° $\mathfrak{A}$ 57'01	-0°53'44
	-1622 Mar 27 j 09:22	0° $\mathfrak{I}$		minimum elong	-1617 Mar 02 j 22:32	28° $\mathfrak{A}$ 01'53	0°53'44
	-1622 May 18 j 13:07	0° $\mathfrak{D}$			-1617 Mar 05 j 14:11	0° $\mathfrak{H}$	
	-1622 Jul 05 j 17:01	0° $\mathfrak{Q}$			-1617 Apr 16 j 01:34	0° $\mathfrak{Y}$	
	-1622 Aug 19 j 21:29	0° $\mathfrak{P}$		max. Earth dist.	-1617 Apr 17 j 08:10	0° $\mathfrak{Y}$ 53'54	2.48168 AU
evening set	-1622 Aug 30 j 20:31	7° $\mathfrak{P}$ 33'19		morning rise	-1617 May 03 j 03:25	11° $\mathfrak{Y}$ 55'07	
max. Earth dist.	-1622 Sep 14 j 17:11	17° $\mathfrak{P}$ 58'45	2.48648 AU		-1617 May 29 j 17:47	0° $\mathfrak{B}$	
	-1622 Oct 01 j 12:14	0° $\mathfrak{L}$		asc. node	-1617 Jun 10 j 14:28	7° $\mathfrak{B}$ 52'51	
					-1617 Jul 14 j 18:47	0° $\mathfrak{I}$	
conjunction	-1622 Oct 21 j 16:43	14° $\mathfrak{L}$ 46'50	0°08'00		-1617 Sep 01 j 14:13	0° $\mathfrak{D}$	
minimum elong	-1622 Oct 21 j 17:10	14° $\mathfrak{L}$ 47'40	0°07'59		-1617 Oct 25 j 13:43	0° $\mathfrak{Q}$	
behind sun begin	-1622 Oct 20 j 20:48	14° $\mathfrak{L}$ 09'59		retrograde	-1616 Jan 13 j 07:03	25° $\mathfrak{Q}$ 33'24	
behind sun end	-1622 Oct 22 j 13:33	15° $\mathfrak{L}$ 25'24		opposition	-1616 Feb 20 j 00:46	17° $\mathfrak{Q}$ 08'15	4°30'11
desc. node	-1622 Nov 02 j 16:36	23° $\mathfrak{L}$ 43'14		greatest brilliancy	-1616 Feb 20 j 23:31	16° $\mathfrak{Q}$ 46'35	-1.6m
	-1622 Nov 11 j 00:40	0° $\mathfrak{M}$		min. Earth dist.	-1616 Feb 26 j 03:00	14° $\mathfrak{Q}$ 49'19	0.60516 AU
morning rise	-1622 Dec 18 j 09:51	28° $\mathfrak{M}$ 41'12		direct	-1616 Mar 31 j 23:12	7° $\mathfrak{Q}$ 18'00	
	-1622 Dec 20 j 02:25	0° $\mathfrak{A}$			-1616 Jun 09 j 19:44	0° $\mathfrak{P}$	
	-1621 Jan 27 j 12:05	0° $\mathfrak{Z}$		desc. node	-1616 Jun 24 j 13:16	8° $\mathfrak{P}$ 19'24	
	-1621 Mar 07 j 02:09	0° $\mathfrak{A}$			-1616 Jul 28 j 16:09	0° $\mathfrak{L}$	
	-1621 Apr 15 j 18:51	0° $\mathfrak{H}$			-1616 Sep 08 j 20:04	0° $\mathfrak{M}$	
	-1621 May 27 j 14:38	0° $\mathfrak{Y}$			-1616 Oct 18 j 07:21	0° $\mathfrak{A}$	

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1616 Nov 25 j 20:59	0°☾			-1611 Aug 19 j 15:06	0°♈		
	-1615 Jan 03 j 18:20	0°♊		morning rise	-1611 Aug 28 j 23:43	6°♈05'00		
	-1615 Feb 12 j 21:23	0°♋			-1611 Oct 04 j 07:35	0°♏		
evening set	-1615 Mar 01 j 03:35	11°♋47'49			-1611 Nov 17 j 19:46	0°♐		
	-1615 Mar 26 j 20:09	0°♑			-1611 Dec 31 j 06:36	0°♑		
					-1610 Feb 12 j 00:28	0°♒		
conjunction	-1615 Apr 26 j 10:58	21°♑01'57	-0°00'39	desc. node	-1610 Feb 14 j 11:14	1°♒43'26		
minimum elong	-1615 Apr 26 j 10:59	21°♑01'58	0°00'38		-1610 Mar 26 j 21:14	0°♓		
behind sun begin	-1615 Apr 25 j 12:50	20°♑24'32			-1610 May 11 j 09:15	0°♊		
behind sun end	-1615 Apr 27 j 09:07	21°♑39'22		retrograde	-1610 Jul 25 j 22:21	29°♊07'31		
asc. node	-1615 Apr 27 j 12:22	21°♑44'51		min. Earth dist.	-1610 Aug 22 j 02:14	24°♊11'16	0.43169 AU	
	-1615 May 09 j 19:21	0°♋		opposition	-1610 Aug 29 j 20:13	21°♊38'40	-5°21'52	
max. Earth dist.	-1615 May 21 j 09:47	7°♋42'10	2.59590 AU	greatest brilliancy	-1610 Aug 28 j 12:31	22°♊04'51	-2.5m	
morning rise	-1615 Jun 16 j 21:49	25°♋01'24		direct	-1610 Sep 30 j 10:30	15°♊31'18		
	-1615 Jun 24 j 14:55	0°♌			-1610 Nov 23 j 00:42	0°♋		
	-1615 Aug 10 j 22:49	0°♍		asc. node	-1610 Dec 18 j 09:02	12°♋33'56		
	-1615 Sep 28 j 18:19	0°♎			-1609 Jan 18 j 17:10	0°♑		
	-1615 Nov 19 j 07:19	0°♏			-1609 Mar 10 j 07:03	0°♒		
	-1614 Jan 20 j 16:15	0°♐			-1609 Apr 28 j 10:05	0°♓		
retrograde	-1614 Mar 03 j 04:46	8°♐38'09			-1609 Jun 15 j 13:34	0°♑		
opposition	-1614 Apr 06 j 13:16	1°♐46'41	1°57'11	evening set	-1609 Jul 06 j 11:20	13°♑16'41		
greatest brilliancy	-1614 Apr 07 j 06:11	1°♐32'15	-2.2m		-1609 Aug 01 j 08:53	0°♒		
	-1614 Apr 11 j 17:41	30°♒♏		max. Earth dist.	-1609 Aug 02 j 03:43	0°♒30'43	2.62702 AU	
min. Earth dist.	-1614 Apr 15 j 01:36	28°♒52'35	0.48668 AU					
desc. node	-1614 May 12 j 12:18	23°♒23'13		conjunction	-1609 Aug 21 j 18:54	13°♒26'01	1°04'57	
direct	-1614 May 14 j 10:43	23°♒21'39		minimum elong	-1609 Aug 21 j 19:48	13°♒27'30	1°04'58	
	-1614 Jun 16 j 07:11	0°♐			-1609 Sep 15 j 11:05	0°♏		
	-1614 Aug 11 j 03:14	0°♑		morning rise	-1609 Oct 07 j 05:42	14°♏56'41		
	-1614 Sep 23 j 05:31	0°♒			-1609 Oct 28 j 17:20	0°♐		
	-1614 Nov 02 j 17:16	0°♓			-1609 Dec 09 j 07:47	0°♑		
	-1614 Dec 13 j 00:34	0°♊		desc. node	-1608 Jan 02 j 10:29	17°♑50'42		
	-1613 Jan 23 j 08:13	0°♋			-1608 Jan 18 j 15:47	0°♒		
	-1613 Mar 07 j 07:08	0°♑			-1608 Feb 27 j 07:54	0°♓		
asc. node	-1613 Mar 15 j 11:02	5°♑33'49			-1608 Apr 07 j 05:47	0°♊		
evening set	-1613 Apr 19 j 17:51	29°♑09'50			-1608 May 18 j 21:56	0°♋		
	-1613 Apr 21 j 00:18	0°♌			-1608 Jul 04 j 22:01	0°♑		
	-1613 Jun 06 j 04:00	0°♌		retrograde	-1608 Sep 11 j 13:41	23°♑48'41		
				min. Earth dist.	-1608 Oct 13 j 20:48	16°♑45'23	0.55759 AU	
conjunction	-1613 Jun 08 j 09:47	1°♌26'24	0°44'50	opposition	-1608 Oct 20 j 12:25	14°♑10'41	-0°40'16	
minimum elong	-1613 Jun 08 j 08:28	1°♌24'16	0°44'51	greatest brilliancy	-1608 Oct 20 j 08:45	14°♑14'14	-1.9m	
max. Earth dist.	-1613 Jun 16 j 02:51	6°♌23'04	2.66031 AU	asc. node	-1608 Nov 04 j 08:05	9°♑02'40		
	-1613 Jul 23 j 03:34	0°♍		direct	-1608 Nov 25 j 12:51	6°♑02'32		
morning rise	-1613 Jul 24 j 20:11	1°♍04'35			-1607 Feb 09 j 10:24	0°♌		
	-1613 Sep 08 j 08:42	0°♎			-1607 Apr 05 j 21:06	0°♌		
	-1613 Oct 25 j 13:54	0°♏			-1607 May 26 j 06:55	0°♍		
	-1613 Dec 12 j 03:21	0°♐			-1607 Jul 12 j 20:48	0°♎		
	-1612 Jan 30 j 08:35	0°♑		evening set	-1607 Aug 13 j 22:30	21°♎10'55		
	-1612 Mar 27 j 05:14	0°♒			-1607 Aug 26 j 22:15	0°♏		
desc. node	-1612 Mar 29 j 11:04	0°♒57'23		max. Earth dist.	-1607 Aug 30 j 16:16	2°♏34'22	2.53377 AU	
retrograde	-1612 May 14 j 02:54	11°♒55'57						
opposition	-1612 Jun 13 j 09:30	6°♒54'58	-4°55'58	conjunction	-1607 Oct 02 j 07:09	25°♏26'56	0°30'18	
greatest brilliancy	-1612 Jun 13 j 17:18	6°♒49'45	-2.9m	minimum elong	-1607 Oct 02 j 08:28	25°♏29'17	0°30'17	
min. Earth dist.	-1612 Jun 15 j 18:19	6°♒16'53	0.37999 AU		-1607 Oct 08 j 15:22	0°♐		
direct	-1612 Jul 14 j 05:53	1°♒38'30			-1607 Nov 18 j 09:00	0°♑		
	-1612 Sep 28 j 09:11	0°♓		desc. node	-1607 Nov 19 j 08:44	0°♑44'35		
	-1612 Nov 14 j 19:10	0°♊		morning rise	-1607 Nov 24 j 09:11	4°♑31'38		
	-1612 Dec 29 j 22:23	0°♋			-1607 Dec 27 j 16:48	0°♒		
asc. node	-1611 Jan 30 j 10:10	20°♋52'09			-1606 Feb 04 j 08:07	0°♓		
	-1611 Feb 13 j 07:50	0°♑			-1606 Mar 15 j 03:04	0°♊		
	-1611 Mar 31 j 14:58	0°♌			-1606 Apr 24 j 01:08	0°♋		
	-1611 May 17 j 16:30	0°♌			-1606 Jun 05 j 08:18	0°♑		
evening set	-1611 May 29 j 14:15	7°♌33'14			-1606 Jul 22 j 07:46	0°♌		
	-1611 Jul 03 j 22:11	0°♍		asc. node	-1606 Sep 22 j 07:53	29°♌06'08		
max. Earth dist.	-1611 Jul 08 j 19:08	3°♍06'27	2.67054 AU		-1606 Sep 25 j 12:45	0°♌		
				retrograde	-1606 Oct 19 j 08:54	3°♌24'08		
conjunction	-1611 Jul 15 j 04:08	7°♍10'47	1°08'11		-1606 Nov 10 j 16:51	30°♌♋		
minimum elong	-1611 Jul 15 j 03:33	7°♍09'51	1°08'12	min. Earth dist.	-1606 Nov 25 j 09:28	24°♌41'14	0.64655 AU	

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 30

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

opposition	-1606 Nov 28 j 11:13	23°  27'17	2°30'22	evening set	-1600 Feb 06 j 17:00	19°  04'55	
greatest brilliancy	-1606 Nov 28 j 03:30	23°  35'01	-1.5m		-1600 Feb 21 j 09:37	0° 	
direct	-1605 Jan 06 j 14:17	14°  10'05			-1600 Apr 03 j 02:13	0° 	
	-1605 Mar 07 j 05:18	0° 					
	-1605 May 04 j 11:50	0° 		conjunction	-1600 Apr 06 j 18:46	2°  35'07	-0°22'13
	-1605 Jun 23 j 07:21	0° 		minimum elong	-1600 Apr 06 j 20:03	2°  37'21	0°22'12
	-1605 Aug 08 j 00:06	0° 		max. Earth dist.	-1600 May 09 j 13:58	25°  06'15	2.55619 AU
	-1605 Sep 19 j 15:51	0° 		asc. node	-1600 May 14 j 04:41	28°  12'31	
evening set	-1605 Sep 29 j 16:26	7°  18'58			-1600 May 16 j 20:49	0° 	
desc. node	-1605 Oct 07 j 08:07	12°  58'00		morning rise	-1600 May 31 j 11:52	9°  43'09	
max. Earth dist.	-1605 Oct 20 j 09:02	22°  42'36	2.40917 AU		-1600 Jul 01 j 16:02	0° 	
	-1605 Oct 30 j 00:14	0° 			-1600 Aug 18 j 08:32	0° 	
					-1600 Oct 07 j 09:48	0° 	
conjunction	-1605 Nov 26 j 08:01	21°  11'36	-0°32'47		-1600 Dec 02 j 05:45	0° 	
minimum elong	-1605 Nov 26 j 05:48	20°  15'17	0°32'46	retrograde	-1599 Feb 09 j 17:00	20°  11'44	
	-1605 Dec 07 j 20:05	0° 		opposition	-1599 Mar 17 j 15:22	12°  11'40	3°22'21
	-1604 Jan 15 j 00:09	0° 		greatest brilliancy	-1599 Mar 18 j 16:11	12°  11'15	-1.9m
morning rise	-1604 Jan 31 j 12:03	12°  57'06		min. Earth dist.	-1599 Mar 25 j 15:04	10°  11'49	0.53778 AU
	-1604 Feb 22 j 09:42	0° 		direct	-1599 Apr 26 j 04:36	3°  11'24	
	-1604 Apr 01 j 21:41	0° 		desc. node	-1599 May 29 j 04:28	10°  11'07	
	-1604 May 13 j 08:05	0° 			-1599 Jul 08 j 19:53	0° 	
	-1604 Jun 26 j 13:44	0° 			-1599 Aug 23 j 17:54	0° 	
asc. node	-1604 Aug 09 j 06:42	27°  07'02			-1599 Oct 03 j 15:22	0° 	
	-1604 Aug 14 j 05:57	0° 			-1599 Nov 12 j 01:09	0° 	
	-1604 Oct 15 j 00:25	0° 			-1599 Dec 21 j 14:24	0° 	
retrograde	-1604 Nov 22 j 00:25	7°  33'44			-1598 Jan 31 j 07:23	0° 	
	-1604 Dec 26 j 18:50	30°  11'11			-1598 Mar 14 j 18:16	0° 	
opposition	-1604 Dec 31 j 21:37	27°  11'58'49	4°15'33	evening set	-1598 Apr 01 j 20:07	12°  11'22'56	
greatest brilliancy	-1604 Dec 31 j 22:43	27°  11'57'44	-1.3m	asc. node	-1598 Apr 01 j 03:46	11°  11'55'12	
min. Earth dist.	-1603 Jan 01 j 15:53	27°  11'40'38	0.67454 AU		-1598 Apr 28 j 02:20	0° 	
direct	-1603 Feb 10 j 19:37	18°  11'05'53					
	-1603 Apr 01 j 21:00	0° 		conjunction	-1598 May 23 j 14:46	16°  11'46'15	0°29'28
	-1603 May 30 j 18:28	0° 		minimum elong	-1598 May 23 j 13:38	16°  11'44'24	0°29'28
	-1603 Jul 17 j 16:30	0° 		max. Earth dist.	-1598 Jun 06 j 17:20	25°  11'55'19	2.64132 AU
desc. node	-1603 Aug 24 j 07:17	25°  11'55'59			-1598 Jun 13 j 01:04	0° 	
	-1603 Aug 29 j 23:26	0° 		morning rise	-1598 Jul 10 j 13:31	17°  11'37'05	
	-1603 Oct 09 j 09:25	0° 			-1598 Jul 30 j 01:32	0° 	
	-1603 Nov 17 j 02:23	0° 			-1598 Sep 15 j 17:06	0° 	
evening set	-1603 Nov 29 j 12:03	9°  11'45'35			-1598 Nov 03 j 01:14	0° 	
	-1603 Dec 25 j 03:25	0° 			-1598 Dec 23 j 05:30	0° 	
	-1602 Feb 01 j 11:46	0° 			-1597 Feb 18 j 15:14	0° 	
				retrograde	-1597 Apr 13 j 11:39	14°  11'00'43	
conjunction	-1602 Feb 04 j 03:45	2°  11'03'34	-1°05'07	desc. node	-1597 Apr 16 j 04:02	13°  11'58'02	
minimum elong	-1602 Feb 04 j 04:50	2°  11'05'41	1°05'08	opposition	-1597 May 15 j 02:34	8°  11'26'55	-1°53'07
	-1602 Mar 13 j 00:03	0° 		greatest brilliancy	-1597 May 15 j 12:52	8°  11'19'19	-2.7m
max. Earth dist.	-1602 Mar 26 j 21:21	10°  11'14'33	2.42822 AU	min. Earth dist.	-1597 May 21 j 16:07	6°  11'31'16	0.41000 AU
morning rise	-1602 Apr 11 j 03:55	21°  11'18'44		direct	-1597 Jun 17 j 18:04	1°  11'18'48	
	-1602 Apr 23 j 08:43	0° 			-1597 Aug 31 j 00:20	0° 	
	-1602 Jun 06 j 00:35	0° 			-1597 Oct 15 j 13:32	0° 	
asc. node	-1602 Jun 27 j 05:01	13°  11'56'55			-1597 Nov 27 j 09:50	0° 	
	-1602 Jul 22 j 08:54	0° 			-1596 Jan 09 j 09:19	0° 	
	-1602 Sep 10 j 09:59	0° 		asc. node	-1596 Feb 17 j 01:54	26°  11'18'21'22	
	-1602 Nov 09 j 07:27	0° 			-1596 Feb 22 j 12:21	0° 	
retrograde	-1602 Dec 28 j 11:39	11°  11'03'33'17			-1596 Apr 08 j 00:43	0° 	
opposition	-1601 Feb 05 j 01:32	2°  11'43'16	4°44'23	evening set	-1596 May 14 j 07:29	23°  11'18'23'24	
greatest brilliancy	-1601 Feb 05 j 18:47	2°  11'26'31	-1.4m		-1596 May 24 j 15:33	0° 	
min. Earth dist.	-1601 Feb 09 j 16:49	0° 	0.63731 AU				
	-1601 Feb 12 j 02:53	30°  11'18'58		conjunction	-1596 Jun 30 j 17:46	23°  11'38'35	1°02'02
direct	-1601 Mar 18 j 08:26	22°  11'43'48		minimum elong	-1596 Jun 30 j 16:44	23°  11'36'57	1°02'04
	-1601 Apr 24 j 04:59	0° 		max. Earth dist.	-1596 Jun 29 j 13:39	22°  11'53'47	2.67299 AU
	-1601 Jun 23 j 07:25	0° 			-1596 Jul 10 j 17:11	0° 	
desc. node	-1601 Jul 12 j 05:37	11°  11'11'50'37		morning rise	-1596 Aug 14 j 19:59	22°  11'48'27'50	
	-1601 Aug 08 j 05:03	0° 			-1596 Aug 26 j 12:57	0° 	
	-1601 Sep 18 j 12:18	0° 			-1596 Oct 11 j 16:11	0° 	
	-1601 Oct 27 j 14:18	0° 			-1596 Nov 26 j 00:50	0° 	
	-1601 Dec 04 j 21:36	0° 			-1595 Jan 09 j 20:55	0° 	
	-1600 Jan 12 j 12:58	0° 			-1595 Feb 23 j 19:27	0° 	

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

desc. node	-1595 Mar 03 j 03:16	4° $\text{♁}$ 49'14		-1590 May 13 j 03:51	0° $\text{♁}$	
	-1595 Apr 11 j 20:59	0° $\text{♁}$		-1590 Jun 30 j 20:18	0° $\text{♁}$	
	-1595 Jun 19 j 16:35	0° $\text{♁}$		-1590 Aug 15 j 05:19	0° $\text{♁}$	
retrograde	-1595 Jun 30 j 23:13	0° $\text{♁}$ 51'35	evening set	-1590 Sep 10 j 02:46	18° $\text{♁}$ 00'27	
	-1595 Jul 12 j 02:28	30° $\text{♁}$ 3	max. Earth dist.	-1590 Sep 25 j 02:29	28° $\text{♁}$ 43'32	2.45893 AU
min. Earth dist.	-1595 Jul 27 j 16:12	26° $\text{♁}$ 25'03		-1590 Sep 26 j 20:49	0° $\text{♁}$	
greatest brilliancy	-1595 Aug 01 j 01:36	25° $\text{♁}$ 09'20	desc. node	-1590 Oct 24 j 01:04	19° $\text{♁}$ 59'38	
opposition	-1595 Aug 02 j 05:15	24° $\text{♁}$ 49'21				
direct	-1595 Sep 01 j 05:59	19° $\text{♁}$ 33'52	conjunction	-1590 Nov 02 j 17:26	27° $\text{♁}$ 15'51	-0°06'32
	-1595 Oct 14 j 19:03	0° $\text{♁}$	minimum elong	-1590 Nov 02 j 17:02	27° $\text{♁}$ 15'05	0°06'32
	-1595 Dec 10 j 23:47	0° $\text{♁}$	behind sun begin	-1590 Nov 01 j 18:42	26° $\text{♁}$ 33'01	
asc. node	-1594 Jan 04 j 00:44	14° $\text{♁}$ 24'32	behind sun end	-1590 Nov 03 j 15:21	27° $\text{♁}$ 57'12	
	-1594 Jan 29 j 09:56	0° $\text{♁}$		-1590 Nov 06 j 08:17	0° $\text{♁}$	
	-1594 Mar 18 j 16:33	0° $\text{♁}$		-1590 Dec 15 j 08:07	0° $\text{♁}$	
	-1594 May 05 j 19:05	0° $\text{♁}$	morning rise	-1589 Jan 02 j 10:59	14° $\text{♁}$ 09'39	
evening set	-1594 Jun 21 j 18:45	29° $\text{♁}$ 32'55		-1589 Jan 22 j 15:38	0° $\text{♁}$	
	-1594 Jun 22 j 11:50	0° $\text{♁}$		-1589 Mar 02 j 03:34	0° $\text{♁}$	
max. Earth dist.	-1594 Jul 23 j 10:48	19° $\text{♁}$ 47'11		-1589 Apr 10 j 17:20	0° $\text{♁}$	
				-1589 May 22 j 07:34	0° $\text{♁}$	
conjunction	-1594 Aug 06 j 20:45	29° $\text{♁}$ 07'32		-1589 Jul 06 j 02:59	0° $\text{♁}$	
minimum elong	-1594 Aug 06 j 21:05	29° $\text{♁}$ 08'04	asc. node	-1589 Aug 26 j 22:04	0° $\text{♁}$ 25'25	
	-1594 Aug 08 j 04:59	0° $\text{♁}$		-1589 Aug 26 j 02:44	0° $\text{♁}$	
morning rise	-1594 Sep 21 j 05:40	29° $\text{♁}$ 09'57	retrograde	-1589 Nov 09 j 14:51	24° $\text{♁}$ 44'51	
	-1594 Sep 22 j 11:21	0° $\text{♁}$	opposition	-1589 Dec 19 j 17:12	14° $\text{♁}$ 58'21	3°43'46
	-1594 Nov 05 j 02:49	0° $\text{♁}$	min. Earth dist.	-1589 Dec 18 j 23:18	15° $\text{♁}$ 16'16	0.67121 AU
	-1594 Dec 17 j 06:37	0° $\text{♁}$	greatest brilliancy	-1589 Dec 19 j 13:22	15° $\text{♁}$ 02'11	-1.3m
desc. node	-1593 Jan 19 j 03:18	23° $\text{♁}$ 59'39	direct	-1588 Jan 29 j 02:02	5° $\text{♁}$ 16'02	
	-1593 Jan 27 j 06:36	0° $\text{♁}$		-1588 Apr 16 j 08:57	0° $\text{♁}$	
	-1593 Mar 08 j 17:03	0° $\text{♁}$		-1588 Jun 08 j 20:04	0° $\text{♁}$	
	-1593 Apr 18 j 15:31	0° $\text{♁}$		-1588 Jul 25 j 14:21	0° $\text{♁}$	
	-1593 Jun 01 j 09:58	0° $\text{♁}$		-1588 Sep 06 j 13:07	0° $\text{♁}$	
	-1593 Jul 29 j 01:06	0° $\text{♁}$	desc. node	-1588 Sep 09 j 23:27	2° $\text{♁}$ 29'12	
retrograde	-1593 Aug 26 j 12:38	5° $\text{♁}$ 15'37		-1588 Oct 16 j 21:32	0° $\text{♁}$	
	-1593 Sep 22 j 23:08	30° $\text{♁}$ 8	evening set	-1588 Nov 03 j 07:41	13° $\text{♁}$ 23'15	
min. Earth dist.	-1593 Sep 25 j 16:49	29° $\text{♁}$ 01'19		-1588 Nov 24 j 14:56	0° $\text{♁}$	
opposition	-1593 Oct 03 j 09:37	26° $\text{♁}$ 09'17		-1587 Jan 01 j 16:26	0° $\text{♁}$	
greatest brilliancy	-1593 Oct 02 j 18:49	26° $\text{♁}$ 23'04				
direct	-1593 Nov 06 j 19:04	18° $\text{♁}$ 41'34	conjunction	-1587 Jan 06 j 17:34	3° $\text{♁}$ 58'37	-1°02'55
asc. node	-1593 Nov 22 j 00:02	20° $\text{♁}$ 06'04	minimum elong	-1587 Jan 06 j 15:41	3° $\text{♁}$ 54'55	1°02'57
	-1593 Dec 24 j 05:00	0° $\text{♁}$		-1587 Feb 09 j 00:28	0° $\text{♁}$	
	-1592 Feb 22 j 11:28	0° $\text{♁}$	max. Earth dist.	-1587 Feb 11 j 18:39	2° $\text{♁}$ 07'56	2.38150 AU
	-1592 Apr 14 j 09:54	0° $\text{♁}$	morning rise	-1587 Mar 16 j 18:19	27° $\text{♁}$ 13'32	
	-1592 Jun 02 j 16:34	0° $\text{♁}$		-1587 Mar 20 j 11:31	0° $\text{♁}$	
	-1592 Jul 19 j 21:16	0° $\text{♁}$		-1587 Apr 30 j 19:03	0° $\text{♁}$	
evening set	-1592 Jul 29 j 01:39	5° $\text{♁}$ 59'57		-1587 Jun 13 j 12:58	0° $\text{♁}$	
max. Earth dist.	-1592 Aug 18 j 02:09	19° $\text{♁}$ 17'11	asc. node	-1587 Jul 13 j 21:44	19° $\text{♁}$ 42'24	
	-1592 Sep 02 j 22:07	0° $\text{♁}$		-1587 Jul 30 j 09:52	0° $\text{♁}$	
				-1587 Sep 20 j 13:33	0° $\text{♁}$	
conjunction	-1592 Sep 14 j 17:19	8° $\text{♁}$ 06'44	retrograde	-1587 Dec 13 j 18:41	28° $\text{♁}$ 15'03	
minimum elong	-1592 Sep 14 j 18:47	8° $\text{♁}$ 09'16	opposition	-1586 Jan 22 j 00:10	19° $\text{♁}$ 04'37	4°43'04
	-1592 Oct 15 j 19:24	0° $\text{♁}$	greatest brilliancy	-1586 Jan 22 j 10:57	18° $\text{♁}$ 54'02	-1.3m
morning rise	-1592 Nov 03 j 09:19	13° $\text{♁}$ 26'13	min. Earth dist.	-1586 Jan 25 j 03:13	17° $\text{♁}$ 50'52	0.65966 AU
	-1592 Nov 25 j 19:55	0° $\text{♁}$	direct	-1586 Mar 04 j 08:19	9° $\text{♁}$ 03'24	
desc. node	-1592 Dec 06 j 02:52	7° $\text{♁}$ 42'24		-1586 May 12 j 06:23	0° $\text{♁}$	
	-1591 Jan 04 j 11:20	0° $\text{♁}$		-1586 Jul 03 j 09:41	0° $\text{♁}$	
	-1591 Feb 12 j 09:50	0° $\text{♁}$	desc. node	-1586 Jul 28 j 22:30	16° $\text{♁}$ 50'05	
	-1591 Mar 23 j 11:40	0° $\text{♁}$		-1586 Aug 16 j 20:40	0° $\text{♁}$	
	-1591 May 02 j 18:46	0° $\text{♁}$		-1586 Sep 26 j 16:18	0° $\text{♁}$	
	-1591 Jun 14 j 22:45	0° $\text{♁}$		-1586 Nov 04 j 12:56	0° $\text{♁}$	
	-1591 Aug 04 j 05:39	0° $\text{♁}$		-1586 Dec 12 j 16:17	0° $\text{♁}$	
retrograde	-1591 Oct 05 j 09:44	19° $\text{♁}$ 13'34	evening set	-1585 Jan 11 j 18:35	23° $\text{♁}$ 31'43	
asc. node	-1591 Oct 08 j 22:38	19° $\text{♁}$ 08'24		-1585 Jan 20 j 03:34	0° $\text{♁}$	
min. Earth dist.	-1591 Nov 09 j 17:15	11° $\text{♁}$ 05'19		-1585 Feb 28 j 19:38	0° $\text{♁}$	
opposition	-1591 Nov 14 j 06:02	9° $\text{♁}$ 16'52				
greatest brilliancy	-1591 Nov 13 j 23:28	9° $\text{♁}$ 23'24	conjunction	-1585 Mar 16 j 15:21	11° $\text{♁}$ 36'39	-0°43'19
direct	-1591 Dec 22 j 07:47	0° $\text{♁}$ 21'45	minimum elong	-1585 Mar 16 j 17:48	11° $\text{♁}$ 41'06	0°43'18
	-1590 Mar 20 j 09:34	0° $\text{♁}$		-1585 Apr 11 j 07:44	0° $\text{♁}$	

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 32

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

max. Earth dist.	-1585 Apr 26 j 16:25	10° $\Upsilon$ 43'49	2.50985 AU	opposition	-1580 Jul 01 j 15:23	24° $\text{X}$ 37'48	-6°12'49
morning rise	-1585 May 14 j 09:46	22° $\Upsilon$ 52'14		greatest brilliancy	-1580 Jul 01 j 10:31	24° $\text{X}$ 41'03	-2.9m
	-1585 May 24 j 23:36	0° $\text{B}$		min. Earth dist.	-1580 Jun 30 j 21:06	24° $\text{X}$ 49'59	0.37525 AU
asc. node	-1585 May 31 j 20:15	4° $\text{B}$ 34'48		direct	-1580 Jul 31 j 12:26	19° $\text{X}$ 39'40	
	-1585 Jul 09 j 20:53	0° $\text{II}$			-1580 Sep 11 j 22:36	0° $\text{Z}$	
	-1585 Aug 27 j 03:21	0° $\text{D}$			-1580 Nov 05 j 23:53	0° $\approx$	
	-1585 Oct 18 j 04:44	0° $\Omega$			-1580 Dec 23 j 06:56	0° $\text{H}$	
	-1585 Dec 24 j 23:01	0° $\text{M}$		asc. node	-1579 Jan 20 j 15:36	18° $\text{H}$ 20'38	
retrograde	-1584 Jan 23 j 01:01	4° $\text{M}$ 31'10			-1579 Feb 07 j 16:50	0° $\Upsilon$	
	-1584 Feb 18 j 23:16	30° $\text{R}$ $\Omega$			-1579 Mar 26 j 13:30	0° $\text{B}$	
opposition	-1584 Feb 29 j 05:17	26° $\Omega$ 22'26	4°12'29		-1579 May 12 j 22:33	0° $\text{II}$	
greatest brilliancy	-1584 Mar 01 j 06:01	25° $\Omega$ 59'15	-1.7m	evening set	-1579 Jun 07 j 03:13	15° $\text{II}$ 55'35	
min. Earth dist.	-1584 Mar 07 j 01:38	23° $\Omega$ 48'36	0.58336 AU		-1579 Jun 29 j 07:32	0° $\text{D}$	
direct	-1584 Apr 09 j 19:08	16° $\Omega$ 41'52		max. Earth dist.	-1579 Jul 14 j 03:21	9° $\text{D}$ 27'26	2.66571 AU
	-1584 May 30 j 04:58	0° $\text{M}$					
desc. node	-1584 Jun 14 j 21:04	7° $\text{M}$ 48'32		conjunction	-1579 Jul 23 j 09:39	15° $\text{D}$ 23'43	1°09'54
	-1584 Jul 21 j 22:17	0° $\text{L}$		minimum elong	-1579 Jul 23 j 09:23	15° $\text{D}$ 23'17	1°09'56
	-1584 Sep 03 j 00:34	0° $\text{M}$			-1579 Aug 15 j 00:22	0° $\Omega$	
	-1584 Oct 12 j 21:21	0° $\text{X}$		morning rise	-1579 Sep 06 j 06:17	14° $\Omega$ 32'57	
	-1584 Nov 20 j 16:32	0° $\text{Z}$			-1579 Sep 29 j 13:03	0° $\text{M}$	
	-1584 Dec 29 j 18:07	0° $\approx$			-1579 Nov 12 j 17:19	0° $\text{L}$	
	-1583 Feb 08 j 00:35	0° $\text{H}$			-1579 Dec 25 j 15:45	0° $\text{M}$	
evening set	-1583 Mar 13 j 05:18	23° $\text{H}$ 47'30		desc. node	-1578 Feb 04 j 20:15	29° $\text{M}$ 25'01	
	-1583 Mar 22 j 02:08	0° $\Upsilon$			-1578 Feb 05 j 15:41	0° $\text{X}$	
asc. node	-1583 Apr 17 j 19:12	18° $\Upsilon$ 21'01			-1578 Mar 19 j 08:54	0° $\text{Z}$	
	-1583 May 05 j 03:11	0° $\text{B}$			-1578 May 01 j 09:26	0° $\approx$	
					-1578 Jun 20 j 12:18	0° $\text{H}$	
conjunction	-1583 May 06 j 17:31	1° $\text{B}$ 03'51	0°11'07	retrograde	-1578 Aug 07 j 04:53	13° $\text{H}$ 33'27	
minimum elong	-1583 May 06 j 17:00	1° $\text{B}$ 02'59	0°11'07	min. Earth dist.	-1578 Sep 04 j 07:03	8° $\text{H}$ 11'24	0.45839 AU
behind sun begin	-1583 May 06 j 01:26	0° $\text{B}$ 37'05		greatest brilliancy	-1578 Sep 11 j 06:10	5° $\text{H}$ 46'26	-2.4m
behind sun end	-1583 May 07 j 08:33	1° $\text{B}$ 28'52		opposition	-1578 Sep 12 j 09:19	5° $\text{H}$ 22'48	-4°17'40
max. Earth dist.	-1583 May 27 j 16:13	14° $\text{B}$ 53'22	2.61426 AU		-1578 Oct 01 j 10:24	30° $\text{R}$ $\approx$	
	-1583 Jun 19 j 22:45	0° $\text{II}$		direct	-1578 Oct 14 j 22:19	28° $\approx$ 45'17	
morning rise	-1583 Jun 25 j 18:02	3° $\text{II}$ 43'56			-1578 Oct 29 j 02:03	0° $\text{H}$	
	-1583 Aug 06 j 02:42	0° $\text{D}$		asc. node	-1578 Dec 08 j 14:39	13° $\text{H}$ 28'34	
	-1583 Sep 23 j 09:45	0° $\Omega$			-1577 Jan 10 j 16:09	0° $\Upsilon$	
	-1583 Nov 12 j 10:57	0° $\text{M}$			-1577 Mar 04 j 09:16	0° $\text{B}$	
	-1582 Jan 06 j 20:01	0° $\text{L}$			-1577 Apr 23 j 07:41	0° $\text{II}$	
retrograde	-1582 Mar 16 j 23:40	20° $\text{L}$ 40'15			-1577 Jun 10 j 19:44	0° $\text{D}$	
opposition	-1582 Apr 19 j 08:20	14° $\text{L}$ 15'54	0°47'33	evening set	-1577 Jul 14 j 23:15	21° $\text{D}$ 42'30	
greatest brilliancy	-1582 Apr 19 j 15:33	14° $\text{L}$ 09'59	-2.4m		-1577 Jul 27 j 18:24	0° $\Omega$	
min. Earth dist.	-1582 Apr 27 j 15:23	11° $\text{L}$ 33'26	0.45743 AU	max. Earth dist.	-1577 Aug 08 j 02:35	7° $\Omega$ 25'35	2.61086 AU
desc. node	-1582 May 02 j 19:53	9° $\text{L}$ 59'39					
direct	-1582 May 25 j 22:04	6° $\text{L}$ 27'27		conjunction	-1577 Aug 30 j 14:22	22° $\Omega$ 23'32	1°00'05
	-1582 Jul 31 j 20:36	0° $\text{M}$		minimum elong	-1577 Aug 30 j 15:33	22° $\Omega$ 25'31	1°00'05
	-1582 Sep 15 j 18:53	0° $\text{X}$			-1577 Sep 10 j 20:18	0° $\text{M}$	
	-1582 Oct 27 j 08:23	0° $\text{Z}$		morning rise	-1577 Oct 16 j 22:40	25° $\text{M}$ 01'07	
	-1582 Dec 07 j 06:59	0° $\approx$			-1577 Oct 23 j 23:25	0° $\text{L}$	
	-1581 Jan 18 j 01:20	0° $\text{H}$			-1577 Dec 04 j 08:44	0° $\text{M}$	
	-1581 Mar 02 j 07:56	0° $\Upsilon$		desc. node	-1577 Dec 23 j 18:52	14° $\text{M}$ 26'37	
asc. node	-1581 Mar 05 j 18:02	2° $\Upsilon$ 19'20			-1576 Jan 13 j 10:27	0° $\text{X}$	
	-1581 Apr 16 j 06:22	0° $\text{B}$			-1576 Feb 21 j 19:20	0° $\text{Z}$	
evening set	-1581 Apr 29 j 07:45	8° $\text{B}$ 32'17			-1576 Apr 01 j 08:20	0° $\approx$	
	-1581 Jun 01 j 12:58	0° $\text{II}$			-1576 May 12 j 08:11	0° $\text{H}$	
					-1576 Jun 26 j 06:41	0° $\Upsilon$	
conjunction	-1581 Jun 17 j 01:05	9° $\text{II}$ 55'46	0°52'10		-1576 Aug 27 j 02:36	0° $\text{B}$	
minimum elong	-1581 Jun 16 j 23:47	9° $\text{II}$ 53'41	0°52'11	retrograde	-1576 Sep 20 j 14:00	3° $\text{B}$ 46'55	
max. Earth dist.	-1581 Jun 21 j 12:10	12° $\text{II}$ 46'46	2.66717 AU		-1576 Oct 13 j 16:56	30° $\text{R}$ $\Upsilon$	
	-1581 Jul 18 j 12:31	0° $\text{D}$		min. Earth dist.	-1576 Oct 23 j 23:52	26° $\Upsilon$ 18'52	0.58133 AU
morning rise	-1581 Aug 01 j 20:45	9° $\text{D}$ 08'02		asc. node	-1576 Oct 25 j 14:54	25° $\Upsilon$ 40'46	
	-1581 Sep 03 j 13:42	0° $\Omega$		opposition	-1576 Oct 29 j 22:05	23° $\Upsilon$ 59'09	0°11'15
	-1581 Oct 20 j 08:09	0° $\text{M}$		greatest brilliancy	-1576 Oct 29 j 21:02	24° $\Upsilon$ 00'11	-1.8m
	-1581 Dec 05 j 22:37	0° $\text{L}$		direct	-1576 Dec 05 j 17:28	15° $\Upsilon$ 32'16	
	-1580 Jan 22 j 01:25	0° $\text{M}$			-1575 Jan 30 j 12:58	0° $\text{B}$	
	-1580 Mar 11 j 19:01	0° $\text{X}$			-1575 Mar 30 j 18:54	0° $\text{II}$	
desc. node	-1580 Mar 19 j 20:39	4° $\text{X}$ 29'31			-1575 May 21 j 03:56	0° $\text{D}$	
retrograde	-1580 Jun 01 j 03:38	29° $\text{X}$ 42'36			-1575 Jul 08 j 02:43	0° $\Omega$	



Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1575 Aug 22 j 07:13	0°൬			-1570 Apr 18 j 14:35	0°൬	
evening set	-1575 Aug 23 j 10:05	0°൬45'55		morning rise	-1570 Apr 23 j 23:45	3°൬47'29	
max. Earth dist.	-1575 Sep 07 j 19:58	11°൬25'17	2.50829 AU		-1570 Jun 01 j 05:05	0°8	
	-1575 Oct 04 j 00:10	0°൧		asc. node	-1570 Jun 17 j 12:23	10°848'35	
					-1570 Jul 17 j 07:12	0°II	
conjunction	-1575 Oct 13 j 00:49	6°൧32'44	0°18'03		-1570 Sep 04 j 11:52	0°൧	
minimum elong	-1575 Oct 13 j 01:44	6°൧34'24	0°18'03		-1570 Oct 30 j 05:12	0°ൠ	
desc. node	-1575 Nov 09 j 17:37	27°ൠ02'55		retrograde	-1569 Jan 06 j 08:03	19°ൠ53'17	
	-1575 Nov 13 j 15:49	0°൬		opposition	-1569 Feb 13 j 11:44	11°ൠ16'28	4°37'58
morning rise	-1575 Dec 07 j 12:27	18°൬09'43		greatest brilliancy	-1569 Feb 14 j 08:16	10°ൠ56'44	-1.5m
	-1575 Dec 22 j 20:41	0°𐄂		min. Earth dist.	-1569 Feb 18 j 22:56	9°ൠ10'32	0.62074 AU
	-1574 Jan 30 j 08:42	0°𐄂		direct	-1569 Mar 26 j 15:16	1°ൠ20'46	
	-1574 Mar 10 j 00:22	0°≈			-1569 Jun 15 j 21:43	0°൬	
	-1574 Apr 18 j 18:07	0°𐄂		desc. node	-1569 Jul 02 j 14:20	9°൬55'21	
	-1574 May 30 j 16:22	0°൬			-1569 Aug 02 j 08:10	0°൧	
	-1574 Jul 15 j 13:16	0°8			-1569 Sep 13 j 03:07	0°൬	
	-1574 Sep 09 j 19:03	0°II			-1569 Oct 22 j 10:23	0°𐄂	
asc. node	-1574 Sep 12 j 14:02	1°II09'58			-1569 Nov 29 j 20:44	0°𐄂	
retrograde	-1574 Oct 27 j 05:06	11°II37'13			-1568 Jan 07 j 14:39	0°≈	
min. Earth dist.	-1574 Dec 04 j 02:44	2°II36'44	0.65802 AU		-1568 Feb 16 j 13:46	0°𐄂	
opposition	-1574 Dec 06 j 08:22	1°II42'54	3°00'49	evening set	-1568 Feb 20 j 08:07	2°𐄂45'46	
greatest brilliancy	-1574 Dec 06 j 01:22	1°II49'56	-1.4m		-1568 Mar 29 j 08:27	0°൬	
	-1574 Dec 10 j 15:46	30°R8					
direct	-1573 Jan 14 j 22:57	22°815'29		conjunction	-1568 Apr 18 j 06:15	13°൬48'01	-0°09'40
	-1573 Feb 23 j 06:16	0°II		minimum elong	-1568 Apr 18 j 06:46	13°൬48'54	0°09'40
	-1573 Apr 28 j 05:49	0°൧		behind sun begin	-1568 Apr 17 j 12:20	13°൬17'18	
	-1573 Jun 18 j 02:34	0°ൠ		behind sun end	-1568 Apr 19 j 01:12	14°൬20'28	
	-1573 Aug 03 j 03:58	0°൬		asc. node	-1568 May 04 j 10:42	24°൬48'14	
	-1573 Sep 14 j 22:35	0°൧			-1568 May 12 j 04:23	0°8	
desc. node	-1573 Sep 27 j 16:18	9°൧18'09		max. Earth dist.	-1568 May 16 j 12:53	2°854'29	2.57923 AU
evening set	-1573 Oct 11 j 19:10	19°൧47'47		morning rise	-1568 Jun 10 j 01:15	19°803'48	
	-1573 Oct 25 j 07:26	0°൬			-1568 Jun 26 j 22:30	0°II	
max. Earth dist.	-1573 Nov 11 j 12:32	13°൬12'01	2.38627 AU		-1568 Aug 13 j 08:49	0°൧	
	-1573 Dec 03 j 02:38	0°𐄂			-1568 Oct 01 j 14:50	0°ൠ	
					-1568 Nov 23 j 13:31	0°൬	
conjunction	-1573 Dec 10 j 22:09	6°𐄂07'48	-0°46'22		-1567 Feb 08 j 20:23	0°൧	
minimum elong	-1573 Dec 10 j 19:18	6°𐄂02'10	0°46'20	retrograde	-1567 Feb 21 j 11:38	0°൧55'29	
	-1572 Jan 10 j 05:32	0°𐄂			-1567 Mar 05 j 14:19	30°R൬	
morning rise	-1572 Feb 17 j 05:03	29°𐄂42'49		opposition	-1567 Mar 28 j 13:29	23°൬43'51	2°38'19
	-1572 Feb 17 j 13:56	0°≈		greatest brilliancy	-1567 Mar 29 j 10:57	23°൬24'59	-2.1m
	-1572 Mar 28 j 00:36	0°𐄂		min. Earth dist.	-1567 Apr 05 j 22:16	20°൬47'38	0.51008 AU
	-1572 May 08 j 08:22	0°൬		direct	-1567 May 06 j 06:52	14°൬54'40	
	-1572 Jun 21 j 07:26	0°8		desc. node	-1567 May 19 j 13:36	16°൬05'05	
asc. node	-1572 Jul 30 j 12:40	24°851'46			-1567 Jun 27 j 16:59	0°൧	
	-1572 Aug 08 j 01:55	0°II			-1567 Aug 16 j 11:07	0°൬	
	-1572 Oct 03 j 09:47	0°൧			-1567 Sep 27 j 10:11	0°𐄂	
retrograde	-1572 Nov 29 j 20:01	15°൧20'46			-1567 Nov 06 j 08:27	0°𐄂	
opposition	-1571 Jan 08 j 12:48	5°൧53'43	4°29'00		-1567 Dec 16 j 06:02	0°≈	
greatest brilliancy	-1571 Jan 08 j 17:12	5°൧49'21	-1.3m		-1566 Jan 26 j 05:32	0°𐄂	
min. Earth dist.	-1571 Jan 10 j 03:33	5°൧15'16	0.67195 AU		-1566 Mar 09 j 21:24	0°൬	
	-1571 Jan 24 j 11:10	30°RII		asc. node	-1566 Mar 22 j 08:55	8°൬32'08	
direct	-1571 Feb 18 j 15:48	25°II56'27		evening set	-1566 Apr 12 j 06:15	22°൬36'27	
	-1571 Mar 17 j 23:32	0°൧			-1566 Apr 23 j 09:14	0°8	
	-1571 May 24 j 05:33	0°ൠ					
	-1571 Jul 12 j 06:58	0°൬		conjunction	-1566 Jun 01 j 18:44	25°843'45	0°38'47
desc. node	-1571 Aug 14 j 14:45	22°൬39'39		minimum elong	-1566 Jun 01 j 17:26	25°841'39	0°38'48
	-1571 Aug 24 j 22:42	0°൧			-1566 Jun 08 j 09:45	0°II	
	-1571 Oct 04 j 12:01	0°൬		max. Earth dist.	-1566 Jun 12 j 08:28	2°II32'15	2.65293 AU
	-1571 Nov 12 j 06:20	0°𐄂		morning rise	-1566 Jul 18 j 19:28	25°II49'32	
evening set	-1571 Dec 15 j 02:57	25°𐄂53'32			-1566 Jul 25 j 09:07	0°൧	
	-1571 Dec 20 j 07:57	0°𐄂			-1566 Sep 10 j 18:25	0°ൠ	
	-1570 Jan 27 j 16:54	0°≈			-1566 Oct 28 j 10:06	0°൬	
					-1566 Dec 15 j 22:29	0°൧	
conjunction	-1570 Feb 19 j 12:45	17°≈27'53	-0°59'57		-1565 Feb 05 j 13:57	0°൬	
minimum elong	-1570 Feb 19 j 15:02	17°≈32'11	0°59'58	desc. node	-1565 Apr 06 j 12:27	26°൬10'03	
	-1570 Mar 08 j 05:51	0°𐄂		retrograde	-1565 Apr 30 j 23:32	29°൬36'00	
max. Earth dist.	-1570 Apr 08 j 23:57	23°𐄂09'52	2.45792 AU	opposition	-1565 May 31 j 15:35	24°൬25'07	-3°38'45

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 34

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

greatest brilliancy	-1565 Jun 01 j 04:10	24° $\mathbb{M}$ 16'23	-2.8m			-1560 Aug 29 j 06:53	0° $\mathbb{M}$	
min. Earth dist.	-1565 Jun 05 j 05:11	23° $\mathbb{M}$ 09'16	0.39038 AU					
direct	-1565 Jul 02 j 15:31	18° $\mathbb{M}$ 40'55		conjunction	-1560 Sep 24 j 13:04	18° $\mathbb{M}$ 12'43	0°38'20	
	-1565 Aug 15 j 10:19	0° $\mathbb{A}$		minimum elong	-1560 Sep 24 j 14:31	18° $\mathbb{M}$ 15'16	0°38'19	
	-1565 Oct 06 j 16:59	0° $\mathbb{B}$			-1560 Oct 11 j 02:57	0° $\mathbb{A}$		
	-1565 Nov 20 j 12:41	0° $\mathbb{A}$		morning rise	-1560 Nov 14 j 22:44	25° $\mathbb{A}$ 28'10		
	-1564 Jan 03 j 12:30	0° $\mathbb{H}$			-1560 Nov 21 j 00:25	0° $\mathbb{M}$		
asc. node	-1564 Feb 07 j 08:08	23° $\mathbb{H}$ 25'14		desc. node	-1560 Nov 26 j 10:07	4° $\mathbb{M}$ 03'09		
	-1564 Feb 17 j 05:49	0° $\mathbb{Y}$			-1560 Dec 30 j 12:11	0° $\mathbb{A}$		
	-1564 Apr 03 j 03:09	0° $\mathbb{B}$			-1559 Feb 07 j 06:40	0° $\mathbb{B}$		
	-1564 May 19 j 23:03	0° $\mathbb{II}$			-1559 Mar 18 j 04:02	0° $\mathbb{A}$		
evening set	-1564 May 23 j 03:36	2° $\mathbb{II}$ 01'49			-1559 Apr 27 j 04:39	0° $\mathbb{H}$		
max. Earth dist.	-1564 Jul 04 j 22:02	29° $\mathbb{II}$ 14'21	2.67272 AU		-1559 Jun 08 j 17:19	0° $\mathbb{Y}$		
	-1564 Jul 06 j 02:41	0° $\mathbb{B}$			-1559 Jul 26 j 15:12	0° $\mathbb{B}$		
				asc. node	-1559 Sep 29 j 05:44	26° $\mathbb{B}$ 36'58		
conjunction	-1564 Jul 09 j 01:05	1° $\mathbb{B}$ 52'12	1°06'04	retrograde	-1559 Oct 13 j 12:24	27° $\mathbb{B}$ 54'29		
minimum elong	-1564 Jul 09 j 00:17	1° $\mathbb{B}$ 50'56	1°06'06	min. Earth dist.	-1559 Nov 18 j 19:15	19° $\mathbb{B}$ 26'11	0.63511 AU	
	-1564 Aug 21 j 21:10	0° $\mathbb{Q}$		opposition	-1559 Nov 22 j 12:21	17° $\mathbb{B}$ 56'56	2°06'00	
morning rise	-1564 Aug 22 j 22:02	0° $\mathbb{Q}$ 40'12		greatest brilliancy	-1559 Nov 22 j 04:38	18° $\mathbb{B}$ 04'41	-1.5m	
	-1564 Oct 06 j 18:36	0° $\mathbb{M}$		direct	-1559 Dec 31 j 04:16	8° $\mathbb{B}$ 48'53		
	-1564 Nov 20 j 15:47	0° $\mathbb{A}$			-1558 Mar 12 j 09:58	0° $\mathbb{II}$		
	-1563 Jan 03 j 16:08	0° $\mathbb{M}$			-1558 May 07 j 12:31	0° $\mathbb{B}$		
	-1563 Feb 16 j 05:38	0° $\mathbb{A}$			-1558 Jun 25 j 21:08	0° $\mathbb{Q}$		
desc. node	-1563 Feb 21 j 12:32	3° $\mathbb{A}$ 38'15			-1558 Aug 10 j 11:46	0° $\mathbb{M}$		
	-1563 Apr 01 j 10:23	0° $\mathbb{B}$		evening set	-1558 Sep 20 j 22:55	29° $\mathbb{M}$ 06'16		
	-1563 May 20 j 11:46	0° $\mathbb{A}$			-1558 Sep 22 j 04:38	0° $\mathbb{A}$		
retrograde	-1563 Jul 15 j 14:44	17° $\mathbb{A}$ 44'56		max. Earth dist.	-1558 Oct 07 j 20:03	11° $\mathbb{A}$ 26'03	2.43081 AU	
min. Earth dist.	-1563 Aug 11 j 07:52	13° $\mathbb{A}$ 06'03	0.41186 AU	desc. node	-1558 Oct 14 j 09:19	16° $\mathbb{A}$ 17'21		
greatest brilliancy	-1563 Aug 17 j 00:57	11° $\mathbb{A}$ 19'47	-2.7m		-1558 Nov 01 j 15:12	0° $\mathbb{M}$		
opposition	-1563 Aug 18 j 09:10	10° $\mathbb{A}$ 54'34	-6°04'51					
direct	-1563 Sep 18 j 05:32	5° $\mathbb{A}$ 11'58		conjunction	-1558 Nov 15 j 16:54	10° $\mathbb{M}$ 44'32	-0°21'34	
	-1563 Dec 01 j 04:31	0° $\mathbb{H}$		minimum elong	-1558 Nov 15 j 15:27	10° $\mathbb{M}$ 41'45	0°21'34	
asc. node	-1563 Dec 25 j 07:10	13° $\mathbb{H}$ 17'52			-1558 Dec 10 j 13:19	0° $\mathbb{A}$		
	-1562 Jan 22 j 19:16	0° $\mathbb{Y}$			-1557 Jan 17 j 18:50	0° $\mathbb{B}$		
	-1562 Mar 13 j 05:34	0° $\mathbb{B}$		morning rise	-1557 Jan 18 j 14:07	0° $\mathbb{B}$ 37'54		
	-1562 Apr 30 j 20:49	0° $\mathbb{II}$			-1557 Feb 25 j 04:53	0° $\mathbb{A}$		
	-1562 Jun 17 j 19:31	0° $\mathbb{B}$			-1557 Apr 05 j 16:43	0° $\mathbb{H}$		
evening set	-1562 Jun 30 j 04:47	7° $\mathbb{B}$ 51'18			-1557 May 17 j 03:03	0° $\mathbb{Y}$		
max. Earth dist.	-1562 Jul 29 j 03:08	26° $\mathbb{B}$ 26'25	2.63852 AU		-1557 Jun 30 j 11:57	0° $\mathbb{B}$		
	-1562 Aug 03 j 14:33	0° $\mathbb{Q}$		asc. node	-1557 Aug 17 j 04:38	29° $\mathbb{B}$ 04'21		
					-1557 Aug 18 j 20:14	0° $\mathbb{II}$		
conjunction	-1562 Aug 15 j 08:22	7° $\mathbb{Q}$ 41'10	1°07'28		-1557 Oct 27 j 06:41	0° $\mathbb{B}$		
minimum elong	-1562 Aug 15 j 09:02	7° $\mathbb{Q}$ 42'15	1°07'30	retrograde	-1557 Nov 17 j 07:29	2° $\mathbb{B}$ 34'08		
	-1562 Sep 17 j 19:24	0° $\mathbb{M}$			-1557 Dec 07 j 01:06	30° $\mathbb{B}$ II		
morning rise	-1562 Sep 30 j 05:34	8° $\mathbb{M}$ 27'10		opposition	-1557 Dec 27 j 07:26	22° $\mathbb{II}$ 53'44	4°03'31	
	-1562 Oct 31 j 06:38	0° $\mathbb{A}$		greatest brilliancy	-1557 Dec 27 j 06:12	22° $\mathbb{II}$ 54'58	-1.3m	
	-1562 Dec 12 j 03:27	0° $\mathbb{M}$		min. Earth dist.	-1557 Dec 27 j 09:56	22° $\mathbb{II}$ 51'14	0.67436 AU	
desc. node	-1561 Jan 09 j 12:02	20° $\mathbb{M}$ 51'45		direct	-1556 Feb 05 j 23:53	13° $\mathbb{II}$ 04'55		
	-1561 Jan 21 j 18:39	0° $\mathbb{A}$			-1556 Apr 07 j 19:35	0° $\mathbb{B}$		
	-1561 Mar 02 j 18:01	0° $\mathbb{B}$			-1556 Jun 03 j 01:17	0° $\mathbb{Q}$		
	-1561 Apr 12 j 00:30	0° $\mathbb{A}$			-1556 Jul 20 j 12:13	0° $\mathbb{M}$		
	-1561 May 24 j 07:51	0° $\mathbb{H}$		desc. node	-1556 Aug 31 j 08:49	29° $\mathbb{M}$ 02'11		
	-1561 Jul 12 j 16:47	0° $\mathbb{Y}$			-1556 Sep 01 j 16:56	0° $\mathbb{A}$		
retrograde	-1561 Sep 05 j 12:04	16° $\mathbb{Y}$ 34'25			-1556 Oct 12 j 03:09	0° $\mathbb{M}$		
min. Earth dist.	-1561 Oct 06 j 20:10	9° $\mathbb{Y}$ 52'29	0.53678 AU	evening set	-1556 Nov 17 j 18:36	28° $\mathbb{M}$ 21'32		
opposition	-1561 Oct 14 j 00:19	7° $\mathbb{Y}$ 08'14	-1°21'44		-1556 Nov 19 j 20:49	0° $\mathbb{A}$		
greatest brilliancy	-1561 Oct 13 j 16:19	7° $\mathbb{Y}$ 15'52	-2.0m		-1556 Dec 27 j 21:52	0° $\mathbb{B}$		
	-1561 Nov 07 j 23:12	30° $\mathbb{B}$ II						
asc. node	-1561 Nov 12 j 06:07	29° $\mathbb{H}$ 31'37		conjunction	-1555 Jan 22 j 20:30	20° $\mathbb{B}$ 22'46	-1°06'02	
direct	-1561 Nov 18 j 08:26	29° $\mathbb{H}$ 16'54		minimum elong	-1555 Jan 22 j 20:19	20° $\mathbb{B}$ 22'25	1°06'04	
	-1561 Nov 29 j 02:32	0° $\mathbb{Y}$			-1555 Feb 04 j 05:22	0° $\mathbb{A}$		
	-1560 Feb 15 j 02:19	0° $\mathbb{B}$		max. Earth dist.	-1555 Mar 12 j 21:51	27° $\mathbb{A}$ 56'28	2.40517 AU	
	-1560 Apr 08 j 20:01	0° $\mathbb{II}$			-1555 Mar 15 j 16:04	0° $\mathbb{H}$		
	-1560 May 28 j 17:54	0° $\mathbb{B}$		morning rise	-1555 Mar 31 j 14:12	11° $\mathbb{H}$ 45'21		
	-1560 Jul 15 j 04:41	0° $\mathbb{Q}$			-1555 Apr 25 j 22:41	0° $\mathbb{Y}$		
evening set	-1560 Aug 07 j 01:01	15° $\mathbb{Q}$ 00'18			-1555 Jun 08 j 13:42	0° $\mathbb{B}$		
max. Earth dist.	-1560 Aug 25 j 02:57	27° $\mathbb{Q}$ 09'50	2.55334 AU	asc. node	-1555 Jul 04 j 02:45	16° $\mathbb{B}$ 44'53		

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1555 Jul 25 j 00:52	0°♐				-1550 Jul 16 j 08:42	0°♐		
	-1555 Sep 13 j 17:39	0°♑				-1550 Sep 07 j 03:16	0°♑		
	-1555 Nov 17 j 10:22	0°♒				-1550 Oct 20 j 10:47	0°♒		
retrograde	-1555 Dec 22 j 02:13	6°♒15'21				-1550 Dec 01 j 06:29	0°♑		
	-1554 Jan 22 j 19:11	30°♑				-1549 Jan 12 j 14:31	0°♑		
opposition	-1554 Jan 29 j 23:50	27°♑15'49	4°45'13	asc. node		-1549 Feb 23 j 23:40	29°♑07'55		
greatest brilliancy	-1554 Jan 30 j 14:17	27°♑01'42	-1.4m			-1549 Feb 25 j 06:30	0°♑		
min. Earth dist.	-1554 Feb 02 j 23:23	25°♑42'34	0.64860 AU			-1549 Apr 11 j 11:23	0°♑		
direct	-1554 Mar 12 j 08:11	17°♑14'38		evening set		-1549 May 08 j 14:10	17°♑35'36		
	-1554 May 02 j 07:41	0°♒				-1549 May 27 j 21:39	0°♐		
	-1554 Jun 27 j 03:58	0°♑							
desc. node	-1554 Jul 19 j 07:06	14°♑11'07		conjunction		-1549 Jun 25 j 12:56	18°♐17'18	0°58'21	
	-1554 Aug 11 j 10:53	0°♑		minimum elong		-1549 Jun 25 j 11:46	18°♐15'25	0°58'22	
	-1554 Sep 21 j 13:44	0°♐		max. Earth dist.		-1549 Jun 26 j 19:59	19°♐06'45	2.67140 AU	
	-1554 Oct 30 j 13:50	0°♑				-1549 Jul 13 j 22:02	0°♑		
	-1554 Dec 07 j 19:10	0°♒		morning rise		-1549 Aug 09 j 21:33	17°♑13'15		
	-1553 Jan 15 j 07:55	0°♑				-1549 Aug 29 j 20:04	0°♒		
evening set	-1553 Jan 26 j 16:36	8°♑41'45				-1549 Oct 15 j 05:44	0°♑		
	-1553 Feb 24 j 01:25	0°♑				-1549 Nov 30 j 02:38	0°♑		
						-1548 Jan 14 j 19:18	0°♐		
conjunction	-1553 Mar 29 j 12:49	24°♑17'11	-0°31'27			-1548 Mar 01 j 07:32	0°♑		
minimum elong	-1553 Mar 29 j 14:40	24°♑20'28	0°31'25	desc. node		-1548 Mar 10 j 04:34	5°♑32'52		
	-1553 Apr 06 j 14:30	0°♑				-1548 Apr 21 j 13:54	0°♒		
max. Earth dist.	-1553 May 04 j 22:42	19°♑38'27	2.53615 AU	retrograde		-1548 Jun 18 j 12:13	17°♒47'52		
	-1553 May 20 j 06:24	0°♑		min. Earth dist.		-1548 Jul 16 j 01:38	13°♒18'27	0.38091 AU	
asc. node	-1553 May 22 j 02:34	1°♑13'57		opposition		-1548 Jul 19 j 17:30	12°♒18'19	-6°46'34	
morning rise	-1553 May 24 j 23:17	3°♑08'47		greatest brilliancy		-1548 Jul 18 j 22:28	12°♒31'22	-2.9m	
	-1553 Jul 05 j 00:54	0°♐		direct		-1548 Aug 18 j 08:48	7°♒17'31		
	-1553 Aug 21 j 21:40	0°♑				-1548 Oct 25 j 19:54	0°♑		
	-1553 Oct 11 j 15:10	0°♒				-1548 Dec 15 j 23:54	0°♑		
	-1553 Dec 09 j 12:15	0°♑		asc. node		-1547 Jan 10 j 22:25	16°♑11'21		
retrograde	-1552 Feb 02 j 09:26	13°♑52'09				-1547 Feb 01 j 20:15	0°♑		
opposition	-1552 Mar 09 j 21:32	6°♑01'47	3°46'49			-1547 Mar 21 j 09:47	0°♑		
greatest brilliancy	-1552 Mar 10 j 22:56	5°♑38'23	-1.8m			-1547 May 08 j 03:38	0°♐		
min. Earth dist.	-1552 Mar 17 j 10:04	3°♑15'49	0.55906 AU	evening set		-1547 Jun 15 j 13:21	24°♐11'59		
	-1552 Mar 27 j 06:36	30°♑				-1547 Jun 24 j 16:54	0°♑		
direct	-1552 Apr 18 j 23:25	26°♒34'41		max. Earth dist.		-1547 Jul 19 j 13:22	15°♑51'55	2.65825 AU	
	-1552 May 12 j 14:38	0°♑							
desc. node	-1552 Jun 05 j 05:30	8°♑42'21		conjunction		-1547 Jul 31 j 15:56	23°♑40'02	1°10'16	
	-1552 Jul 14 j 08:23	0°♑		minimum elong		-1547 Jul 31 j 16:00	23°♑40'09	1°10'17	
	-1552 Aug 27 j 20:07	0°♐				-1547 Aug 10 j 10:20	0°♒		
	-1552 Oct 07 j 05:52	0°♑		morning rise		-1547 Sep 14 j 17:45	23°♒14'38		
	-1552 Nov 15 j 08:22	0°♒				-1547 Sep 24 j 20:00	0°♑		
	-1552 Dec 24 j 15:17	0°♑				-1547 Nov 07 j 17:38	0°♑		
	-1551 Feb 03 j 02:21	0°♑				-1547 Dec 20 j 05:35	0°♐		
	-1551 Mar 17 j 07:35	0°♑		desc. node		-1546 Jan 26 j 04:12	26°♐43'54		
evening set	-1551 Mar 24 j 14:57	5°♑03'22				-1546 Jan 30 j 15:36	0°♑		
asc. node	-1551 Apr 08 j 01:47	14°♑56'37				-1546 Mar 12 j 13:37	0°♒		
	-1551 Apr 30 j 11:13	0°♑				-1546 Apr 23 j 04:34	0°♑		
						-1546 Jun 07 j 14:38	0°♑		
conjunction	-1551 May 16 j 13:02	10°♑38'02	0°22'05	retrograde		-1546 Aug 18 j 12:58	26°♑44'52		
minimum elong	-1551 May 16 j 12:06	10°♑36'30	0°22'05	min. Earth dist.		-1546 Sep 16 j 17:27	20°♑54'20	0.48692 AU	
max. Earth dist.	-1551 Jun 02 j 15:30	21°♑48'23	2.63020 AU	opposition		-1546 Sep 24 j 17:47	18°♑00'15	-3°10'53	
	-1551 Jun 15 j 07:19	0°♐		greatest brilliancy		-1546 Sep 23 j 21:33	18°♑18'37	-2.2m	
morning rise	-1551 Jul 04 j 08:10	12°♐12'43		direct		-1546 Oct 28 j 08:23	10°♑53'47		
	-1551 Aug 01 j 08:29	0°♑		asc. node		-1546 Nov 28 j 21:52	16°♑28'47		
	-1551 Sep 18 j 05:46	0°♒				-1546 Dec 31 j 22:52	0°♑		
	-1551 Nov 06 j 05:02	0°♑				-1545 Feb 26 j 02:40	0°♑		
	-1551 Dec 28 j 02:07	0°♑				-1545 Apr 18 j 02:12	0°♐		
	-1550 Mar 05 j 23:33	0°♐				-1545 Jun 06 j 00:50	0°♑		
retrograde	-1550 Mar 31 j 20:45	3°♐44'40		evening set		-1545 Jul 23 j 12:50	0°♒14'49		
desc. node	-1550 Apr 23 j 05:10	0°♐43'35				-1545 Jul 23 j 03:43	0°♒		
	-1550 Apr 25 j 22:18	30°♑		max. Earth dist.		-1545 Aug 14 j 08:51	14°♒36'16	2.59252 AU	
opposition	-1550 May 03 j 07:13	27°♑48'26	-0°37'52			-1545 Sep 06 j 06:00	0°♑		
greatest brilliancy	-1550 May 03 j 11:31	27°♑45'05	-2.6m						
min. Earth dist.	-1550 May 10 j 22:29	25°♑27'05	0.43000 AU	conjunction		-1545 Sep 08 j 15:36	1°♑38'10	0°53'36	
direct	-1550 Jun 07 j 07:41	20°♑42'52		minimum elong		-1545 Sep 08 j 16:59	1°♑40'32	0°53'36	

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 36

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1545 Oct 19 j 06:58	0°♄		retrograde	-1540 Dec 07 j 18:42	23°♄10'55	
morning rise	-1545 Oct 27 j 03:44	5°♄38'00		opposition	-1539 Jan 16 j 05:48	13°♄52'42	4°38'26
	-1545 Nov 29 j 11:59	0°♍		greatest brilliancy	-1539 Jan 16 j 13:43	13°♄44'53	-1.3m
desc. node	-1545 Dec 14 j 03:59	10°♍56'42		min. Earth dist.	-1539 Jan 18 j 16:56	12°♄54'18	0.66643 AU
	-1544 Jan 08 j 08:15	0°♊		direct	-1539 Feb 26 j 12:14	3°♄52'30	
	-1544 Feb 16 j 11:04	0°♋			-1539 May 16 j 22:33	0°♌	
	-1544 Mar 26 j 16:39	0°♌			-1539 Jul 06 j 16:00	0°♍	
	-1544 May 06 j 04:48	0°♍		desc. node	-1539 Aug 04 j 23:53	19°♍35'48	
	-1544 Jun 18 j 20:49	0°♎			-1539 Aug 19 j 19:47	0°♎	
	-1544 Aug 10 j 16:24	0°♏			-1539 Sep 29 j 13:27	0°♏	
retrograde	-1544 Sep 29 j 05:50	13°♏15'23			-1539 Nov 07 j 09:29	0°♐	
asc. node	-1544 Oct 15 j 20:25	11°♏18'03			-1539 Dec 15 j 11:56	0°♑	
min. Earth dist.	-1544 Nov 02 j 17:32	5°♏23'56	0.60305 AU	evening set	-1539 Dec 30 j 19:09	12°♑01'29	
opposition	-1544 Nov 07 j 21:02	3°♏21'22	0°57'50		-1538 Jan 22 j 21:26	0°♒	
greatest brilliancy	-1544 Nov 07 j 16:08	3°♏26'14	-1.7m		-1538 Mar 03 j 11:04	0°♓	
	-1544 Nov 16 j 16:23	30°♑♑					
direct	-1544 Dec 15 j 09:33	24°♑37'53		conjunction	-1538 Mar 06 j 02:11	1°♓57'01	-0°51'19
	-1543 Jan 16 j 02:44	0°♒		minimum elong	-1538 Mar 06 j 04:49	2°♓01'53	0°51'18
	-1543 Mar 24 j 04:41	0°♓			-1538 Apr 13 j 20:21	0°♑	
	-1543 May 15 j 21:07	0°♄		max. Earth dist.	-1538 Apr 19 j 15:41	4°♑05'23	2.48711 AU
	-1543 Jul 03 j 06:51	0°♌		morning rise	-1538 May 05 j 22:09	15°♑23'41	
	-1543 Aug 17 j 15:08	0°♍			-1538 May 27 j 10:03	0°♎	
evening set	-1543 Sep 02 j 06:50	10°♍47'37		asc. node	-1538 Jun 07 j 18:25	7°♎33'45	
max. Earth dist.	-1543 Sep 17 j 01:51	21°♍12'17	2.48149 AU		-1538 Jul 12 j 07:42	0°♏	
	-1543 Sep 29 j 08:38	0°♎			-1538 Aug 29 j 21:04	0°♄	
					-1538 Oct 22 j 02:08	0°♌	
conjunction	-1543 Oct 24 j 10:20	18°♎22'07	0°04'29	retrograde	-1537 Jan 15 j 16:21	28°♌33'32	
minimum elong	-1543 Oct 24 j 10:35	18°♎22'33	0°04'28	opposition	-1537 Feb 22 j 07:33	20°♌11'36	4°25'21
behind sun begin	-1543 Oct 23 j 12:04	17°♎40'46		greatest brilliancy	-1537 Feb 23 j 06:43	19°♌49'36	-1.6m
behind sun end	-1543 Oct 25 j 09:06	19°♎04'23		min. Earth dist.	-1537 Feb 28 j 13:33	17°♌49'21	0.60122 AU
desc. node	-1543 Oct 31 j 02:17	23°♎20'21		direct	-1537 Apr 04 j 04:38	10°♌22'42	
	-1543 Nov 08 j 22:54	0°♏			-1537 Jun 07 j 01:24	0°♍	
	-1543 Dec 18 j 01:33	0°♊		desc. node	-1537 Jun 22 j 22:25	8°♍41'29	
morning rise	-1543 Dec 21 j 16:48	2°♊49'34			-1537 Jul 27 j 00:45	0°♎	
	-1542 Jan 25 j 11:07	0°♋			-1537 Sep 07 j 12:52	0°♏	
	-1542 Mar 04 j 24:00	0°♌			-1537 Oct 17 j 03:41	0°♐	
	-1542 Apr 13 j 14:15	0°♍			-1537 Nov 24 j 18:35	0°♑	
	-1542 May 25 j 05:46	0°♎			-1536 Jan 02 j 15:46	0°♒	
	-1542 Jul 09 j 07:49	0°♏			-1536 Feb 11 j 17:43	0°♓	
	-1542 Aug 30 j 17:41	0°♐		evening set	-1536 Mar 04 j 01:00	15°♓26'19	
asc. node	-1542 Sep 02 j 19:27	1°♐30'44			-1536 Mar 24 j 14:49	0°♑	
retrograde	-1542 Nov 03 j 23:05	19°♐40'37		asc. node	-1536 Apr 24 j 17:07	21°♑23'33	
min. Earth dist.	-1542 Dec 12 j 16:35	10°♐23'51	0.66658 AU				
opposition	-1542 Dec 14 j 02:11	9°♐50'08	3°27'18	conjunction	-1536 Apr 29 j 00:09	24°♑17'34	0°02'35
greatest brilliancy	-1542 Dec 13 j 20:41	9°♐55'39	-1.3m	minimum elong	-1536 Apr 29 j 00:01	24°♑17'20	0°02'36
direct	-1541 Jan 23 j 03:08	0°♐13'50		behind sun begin	-1536 Apr 28 j 02:06	23°♑40'24	
	-1541 Apr 21 j 10:05	0°♄		behind sun end	-1536 Apr 29 j 21:56	24°♑54'15	
	-1541 Jun 12 j 17:32	0°♌			-1536 May 07 j 12:12	0°♎	
	-1541 Jul 29 j 05:42	0°♍		max. Earth dist.	-1536 May 23 j 02:12	10°♎20'47	2.59956 AU
	-1541 Sep 10 j 04:05	0°♎		morning rise	-1536 Jun 19 j 04:11	28°♎00'59	
desc. node	-1541 Sep 18 j 00:47	5°♎42'56			-1536 Jun 22 j 05:57	0°♏	
	-1541 Oct 20 j 13:35	0°♏			-1536 Aug 08 j 11:36	0°♄	
evening set	-1541 Oct 24 j 17:38	3°♏10'41			-1536 Sep 26 j 02:44	0°♌	
	-1541 Nov 28 j 08:20	0°♊			-1536 Nov 16 j 03:48	0°♍	
					-1535 Jan 14 j 18:10	0°♎	
conjunction	-1541 Dec 26 j 08:28	22°♊02'46	-0°57'15	retrograde	-1535 Mar 06 j 07:51	12°♎10'53	
minimum elong	-1541 Dec 26 j 05:46	21°♊57'27	0°57'15	opposition	-1535 Apr 09 j 11:24	5°♎24'27	1°40'39
max. Earth dist.	-1541 Dec 25 j 21:00	21°♊40'09	2.37360 AU	greatest brilliancy	-1535 Apr 10 j 02:06	5°♎11'58	-2.3m
	-1540 Jan 05 j 10:30	0°♑		min. Earth dist.	-1535 Apr 17 j 22:27	2°♎32'30	0.48091 AU
	-1540 Feb 12 j 18:08	0°♒			-1535 Apr 26 j 09:15	30°♑♑	
morning rise	-1540 Mar 04 j 14:44	16°♒01'05		desc. node	-1535 May 09 j 20:55	27°♑27'54	
	-1540 Mar 23 j 04:03	0°♓		direct	-1535 May 17 j 01:55	27°♑05'57	
	-1540 May 03 j 10:12	0°♑			-1535 Jun 07 j 05:05	0°♎	
	-1540 Jun 16 j 04:12	0°♒			-1535 Aug 07 j 20:27	0°♏	
asc. node	-1540 Jul 20 j 19:25	22°♒18'44			-1535 Sep 20 j 14:20	0°♐	
	-1540 Aug 02 j 06:49	0°♓			-1535 Oct 31 j 07:42	0°♑	
	-1540 Sep 24 j 15:48	0°♄			-1535 Dec 10 j 17:14	0°♒	

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Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1534 Jan 21 j 01:27	0° $\text{H}$				-1530 Dec 07 j 03:10	0° $\text{M}$		
	-1534 Mar 04 j 23:55	0° $\text{Y}$		desc. node		-1530 Dec 30 j 20:13	17° $\text{M}$ 32'43		
asc. node	-1534 Mar 12 j 16:01	5° $\text{Y}$ 14'00				-1529 Jan 16 j 10:59	0° $\text{Z}$		
	-1534 Apr 18 j 16:15	0° $\text{B}$				-1529 Feb 25 j 01:58	0° $\text{Z}$		
evening set	-1534 Apr 22 j 03:31	2° $\text{B}$ 17'05				-1529 Apr 05 j 21:07	0° $\approx$		
	-1534 Jun 03 j 19:11	0° $\text{II}$				-1529 May 17 j 06:49	0° $\text{H}$		
						-1529 Jul 02 j 10:16	0° $\text{Y}$		
conjunction	-1534 Jun 10 j 14:21	4° $\text{II}$ 21'59	0°46'57	retrograde		-1529 Sep 14 j 21:47	27° $\text{Y}$ 04'22		
minimum elong	-1534 Jun 10 j 13:01	4° $\text{II}$ 19'50	0°46'58	min. Earth dist.		-1529 Oct 17 j 09:33	19° $\text{Y}$ 55'55	0.56214 AU	
max. Earth dist.	-1534 Jun 17 j 19:53	8° $\text{II}$ 59'54	2.66184 AU	opposition		-1529 Oct 23 j 21:22	17° $\text{Y}$ 24'25	-0°26'01	
	-1534 Jul 20 j 18:13	0° $\text{B}$		greatest brilliancy		-1529 Oct 23 j 19:04	17° $\text{Y}$ 26'39	-1.9m	
morning rise	-1534 Jul 26 j 21:25	3° $\text{B}$ 54'06		asc. node		-1529 Nov 02 j 12:39	13° $\text{Y}$ 51'17		
	-1534 Sep 05 j 22:35	0° $\text{Q}$		direct		-1529 Nov 29 j 01:24	9° $\text{Y}$ 12'22		
	-1534 Oct 23 j 01:44	0° $\text{M}$				-1528 Feb 06 j 12:23	0° $\text{B}$		
	-1534 Dec 09 j 09:51	0° $\text{B}$				-1528 Apr 02 j 23:26	0° $\text{II}$		
	-1533 Jan 27 j 01:08	0° $\text{M}$				-1528 May 23 j 17:03	0° $\text{B}$		
	-1533 Mar 22 j 08:20	0° $\text{Z}$				-1528 Jul 10 j 11:27	0° $\text{Q}$		
desc. node	-1533 Mar 27 j 21:52	2° $\text{Z}$ 36'26		evening set		-1528 Aug 16 j 06:00	24° $\text{Q}$ 16'53		
retrograde	-1533 May 19 j 01:56	16° $\text{Z}$ 34'21				-1528 Aug 24 j 16:08	0° $\text{M}$		
opposition	-1533 Jun 18 j 09:35	11° $\text{Z}$ 34'29	-5°16'48	max. Earth dist.		-1528 Sep 01 j 16:38	5° $\text{M}$ 30'05	2.52918 AU	
greatest brilliancy	-1533 Jun 18 j 15:28	11° $\text{Z}$ 30'32	-2.9m						
min. Earth dist.	-1533 Jun 20 j 03:26	11° $\text{Z}$ 06'28	0.37802 AU	conjunction		-1528 Oct 04 j 19:19	28° $\text{M}$ 47'41	0°27'18	
direct	-1533 Jul 19 j 00:08	6° $\text{Z}$ 23'25		minimum elong		-1528 Oct 04 j 20:33	28° $\text{M}$ 49'53	0°27'17	
	-1533 Sep 25 j 02:29	0° $\text{Z}$				-1528 Oct 06 j 11:36	0° $\text{B}$		
	-1533 Nov 12 j 17:40	0° $\approx$		desc. node		-1528 Nov 16 j 18:58	0° $\text{M}$ 23'08		
	-1533 Dec 28 j 05:56	0° $\text{H}$				-1528 Nov 16 j 06:39	0° $\text{M}$		
asc. node	-1532 Jan 28 j 13:50	20° $\text{H}$ 41'03		morning rise		-1528 Nov 27 j 07:03	8° $\text{M}$ 18'42		
	-1532 Feb 11 j 19:04	0° $\text{Y}$				-1528 Dec 25 j 14:56	0° $\text{Z}$		
	-1532 Mar 29 j 03:49	0° $\text{B}$				-1527 Feb 02 j 05:49	0° $\text{Z}$		
	-1532 May 15 j 06:15	0° $\text{II}$				-1527 Mar 12 j 23:20	0° $\approx$		
evening set	-1532 May 31 j 18:55	10° $\text{II}$ 28'37				-1527 Apr 21 j 18:41	0° $\text{H}$		
	-1532 Jul 01 j 12:47	0° $\text{B}$				-1527 Jun 02 j 20:36	0° $\text{Y}$		
max. Earth dist.	-1532 Jul 10 j 05:44	5° $\text{B}$ 33'03	2.66995 AU			-1527 Jul 19 j 07:13	0° $\text{B}$		
						-1527 Sep 18 j 00:19	0° $\text{II}$		
conjunction	-1532 Jul 17 j 06:32	10° $\text{B}$ 02'42	1°08'46	asc. node		-1527 Sep 19 j 12:03	0° $\text{II}$ 30'06		
minimum elong	-1532 Jul 17 j 06:01	10° $\text{B}$ 01'53	1°08'47	retrograde		-1527 Oct 21 j 11:21	6° $\text{II}$ 19'08		
	-1532 Aug 17 j 06:34	0° $\text{Q}$				-1527 Nov 21 j 08:26	30° $\text{R}$ 8		
morning rise	-1532 Aug 31 j 01:39	8° $\text{Q}$ 58'22		min. Earth dist.		-1527 Nov 27 j 15:51	27° $\text{B}$ 32'21	0.64894 AU	
	-1532 Oct 01 j 23:34	0° $\text{M}$		opposition		-1527 Nov 30 j 13:09	26° $\text{B}$ 22'46	2°39'31	
	-1532 Nov 15 j 11:34	0° $\text{B}$		greatest brilliancy		-1527 Nov 30 j 05:25	26° $\text{B}$ 30'33	-1.4m	
	-1532 Dec 28 j 21:02	0° $\text{M}$		direct		-1526 Jan 08 j 17:36	17° $\text{B}$ 03'26		
	-1531 Feb 09 j 11:48	0° $\text{Z}$				-1526 Mar 02 j 15:13	0° $\text{II}$		
desc. node	-1531 Feb 11 j 21:47	1° $\text{Z}$ 42'30				-1526 May 01 j 12:48	0° $\text{B}$		
	-1531 Mar 24 j 01:44	0° $\text{Z}$				-1526 Jun 20 j 18:24	0° $\text{Q}$		
	-1531 May 07 j 18:16	0° $\approx$				-1526 Aug 05 j 16:31	0° $\text{M}$		
	-1531 Jul 06 j 23:26	0° $\text{H}$				-1526 Sep 17 j 11:49	0° $\text{B}$		
retrograde	-1531 Jul 28 j 20:25	3° $\text{H}$ 16'51		evening set		-1526 Oct 02 j 10:47	10° $\text{B}$ 55'19		
	-1531 Aug 19 j 12:54	30° $\text{R}$ $\approx$		desc. node		-1526 Oct 04 j 17:55	12° $\text{B}$ 37'08		
min. Earth dist.	-1531 Aug 25 j 04:05	28° $\approx$ 16'55	0.43627 AU	max. Earth dist.		-1526 Oct 24 j 11:33	27° $\text{B}$ 22'54	2.40470 AU	
greatest brilliancy	-1531 Aug 31 j 18:22	26° $\approx$ 05'44	-2.5m			-1526 Oct 27 j 22:28	0° $\text{M}$		
opposition	-1531 Sep 02 j 01:22	25° $\approx$ 39'54	-5°07'31						
direct	-1531 Oct 03 j 18:30	19° $\approx$ 27'11		conjunction		-1526 Nov 29 j 12:50	25° $\text{M}$ 06'04	-0°36'10	
	-1531 Nov 17 j 09:41	0° $\text{H}$		minimum elong		-1526 Nov 29 j 10:25	25° $\text{M}$ 01'22	0°36'09	
asc. node	-1531 Dec 15 j 12:34	13° $\text{H}$ 09'14				-1526 Dec 05 j 19:28	0° $\text{Z}$		
	-1530 Jan 15 j 11:36	0° $\text{Y}$				-1525 Jan 12 j 23:34	0° $\text{Z}$		
	-1530 Mar 07 j 12:49	0° $\text{B}$		morning rise		-1525 Feb 04 j 04:11	17° $\text{Z}$ 25'16		
	-1530 Apr 25 j 20:29	0° $\text{II}$				-1525 Feb 20 j 08:06	0° $\approx$		
	-1530 Jun 13 j 02:51	0° $\text{B}$				-1525 Mar 31 j 18:05	0° $\text{H}$		
evening set	-1530 Jul 08 j 15:14	16° $\text{B}$ 11'40				-1525 May 12 j 01:23	0° $\text{Y}$		
	-1530 Jul 30 j 00:31	0° $\text{Q}$				-1525 Jun 25 j 02:03	0° $\text{B}$		
max. Earth dist.	-1530 Aug 03 j 21:46	3° $\text{Q}$ 11'11	2.62428 AU	asc. node		-1525 Aug 07 j 10:28	27° $\text{B}$ 08'02		
						-1525 Aug 12 j 07:25	0° $\text{II}$		
conjunction	-1530 Aug 23 j 23:30	16° $\text{Q}$ 25'24	1°03'45			-1525 Oct 10 j 13:15	0° $\text{B}$		
minimum elong	-1530 Aug 24 j 00:28	16° $\text{Q}$ 27'02	1°03'47	retrograde		-1525 Nov 25 j 01:40	10° $\text{B}$ 22'17		
	-1530 Sep 13 j 04:36	0° $\text{M}$		opposition		-1524 Jan 03 j 21:55	0° $\text{B}$ 48'57	4°19'38	
morning rise	-1530 Oct 09 j 13:40	18° $\text{M}$ 07'09		greatest brilliancy		-1524 Jan 03 j 23:44	0° $\text{B}$ 47'09	-1.3m	
	-1530 Oct 26 j 12:09	0° $\text{B}$		min. Earth dist.		-1524 Jan 04 j 20:43	0° $\text{B}$ 26'15	0.67425 AU	

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 38

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1524 Jan 05 j 23:04	30° $\text{R}\text{II}$			-1519 Apr 25 j 18:12	0° $\text{B}$	
direct	-1524 Feb 13 j 20:29	20° $\text{II}54'51$					
	-1524 Mar 27 j 16:34	0° $\text{G}$		conjunction	-1519 May 25 j 23:38	19° $\text{B}51'10$	0°32'10
	-1524 May 27 j 19:48	0° $\text{Q}$		minimum elong	-1519 May 25 j 22:26	19° $\text{B}49'14$	0°32'10
	-1524 Jul 15 j 05:11	0° $\text{M}$		max. Earth dist.	-1519 Jun 08 j 10:00	28° $\text{B}33'07$	2.64391 AU
desc. node	-1524 Aug 21 j 16:14	25° $\text{M}40'51$			-1519 Jun 10 j 15:53	0° $\text{II}$	
	-1524 Aug 27 j 17:28	0° $\text{L}$		morning rise	-1519 Jul 12 j 17:11	20° $\text{II}31'19$	
	-1524 Oct 07 j 06:29	0° $\text{M}$			-1519 Jul 27 j 15:21	0° $\text{G}$	
	-1524 Nov 15 j 01:03	0° $\text{J}$			-1519 Sep 13 j 05:10	0° $\text{Q}$	
evening set	-1524 Dec 03 j 00:23	14° $\text{J}08'36$			-1519 Oct 31 j 09:05	0° $\text{M}$	
	-1524 Dec 23 j 02:34	0° $\text{Z}$			-1519 Dec 20 j 01:55	0° $\text{L}$	
	-1523 Jan 30 j 10:22	0° $\approx$			-1518 Feb 13 j 11:17	0° $\text{M}$	
				desc. node	-1518 Apr 13 j 13:46	18° $\text{M}04'13$	
conjunction	-1523 Feb 07 j 16:49	6° $\approx$ 22'50 -1°04'13		retrograde	-1518 Apr 17 j 07:06	18° $\text{M}09'16$	
minimum elong	-1523 Feb 07 j 18:18	6° $\approx$ 25'39 1°04'14		opposition	-1518 May 18 j 16:19	12° $\text{M}40'25$	-2°17'31
	-1523 Mar 10 j 21:15	0° $\text{H}$		greatest brilliancy	-1518 May 19 j 04:04	12° $\text{M}31'52$	-2.7m
max. Earth dist.	-1523 Mar 30 j 00:04	14° $\text{H}05'08$ 2.43390 AU		min. Earth dist.	-1518 May 24 j 23:30	10° $\text{M}50'53$	0.40591 AU
morning rise	-1523 Apr 14 j 05:45	25° $\text{H}04'49$		direct	-1518 Jun 21 j 00:53	6° $\text{M}21'01$	
	-1523 Apr 21 j 03:42	0° $\text{Y}$			-1518 Aug 26 j 23:43	0° $\text{J}$	
	-1523 Jun 03 j 16:35	0° $\text{B}$			-1518 Oct 12 j 15:39	0° $\text{Z}$	
asc. node	-1523 Jun 24 j 10:13	13° $\text{B}42'13$			-1518 Nov 24 j 20:04	0° $\approx$	
	-1523 Jul 19 j 20:28	0° $\text{II}$			-1517 Jan 06 j 22:34	0° $\text{H}$	
	-1523 Sep 07 j 12:17	0° $\text{G}$		asc. node	-1517 Feb 14 j 05:42	26° $\text{H}04'02$	
	-1523 Nov 04 j 15:06	0° $\text{Q}$			-1517 Feb 20 j 02:31	0° $\text{Y}$	
retrograde	-1523 Dec 30 j 16:14	14° $\text{Q}25'24$			-1517 Apr 06 j 14:57	0° $\text{B}$	
opposition	-1522 Feb 07 j 04:28	5° $\text{Q}37'55$ 4°42'35		evening set	-1517 May 17 j 14:35	26° $\text{B}23'55$	
greatest brilliancy	-1522 Feb 07 j 22:27	5° $\text{Q}20'29$ -1.5m			-1517 May 23 j 05:49	0° $\text{II}$	
min. Earth dist.	-1522 Feb 11 j 24:00	3° $\text{Q}46'02$ 0.63438 AU		max. Earth dist.	-1517 Jul 02 j 03:53	25° $\text{II}26'14$	2.67322 AU
	-1522 Feb 22 j 11:20	30° $\text{R}\text{G}$					
direct	-1522 Mar 20 j 10:59	25° $\text{G}38'36$		conjunction	-1517 Jul 03 j 21:58	26° $\text{II}33'15$	1°03'18
	-1522 Apr 17 j 06:10	0° $\text{Q}$		minimum elong	-1517 Jul 03 j 20:59	26° $\text{II}31'41$	1°03'19
	-1522 Jun 20 j 07:53	0° $\text{M}$			-1517 Jul 09 j 07:47	0° $\text{G}$	
desc. node	-1522 Jul 09 j 15:23	11° $\text{M}54'21$		morning rise	-1517 Aug 17 j 22:29	25° $\text{G}20'45$	
	-1522 Aug 05 j 18:40	0° $\text{L}$			-1517 Aug 25 j 03:55	0° $\text{Q}$	
	-1522 Sep 16 j 07:04	0° $\text{M}$			-1517 Oct 10 j 06:58	0° $\text{M}$	
	-1522 Oct 25 j 11:18	0° $\text{J}$			-1517 Nov 24 j 14:06	0° $\text{L}$	
	-1522 Dec 02 j 19:14	0° $\text{Z}$			-1516 Jan 08 j 06:29	0° $\text{M}$	
	-1521 Jan 10 j 10:09	0° $\approx$			-1516 Feb 21 j 21:09	0° $\text{J}$	
evening set	-1521 Feb 09 j 23:36	23° $\approx$ 08'07		desc. node	-1516 Feb 29 j 13:33	5° $\text{J}06'50$	
	-1521 Feb 19 j 05:38	0° $\text{H}$			-1516 Apr 08 j 01:52	0° $\text{Z}$	
	-1521 Apr 01 j 20:38	0° $\text{Y}$			-1516 Jun 05 j 01:56	0° $\approx$	
				retrograde	-1516 Jul 04 j 09:47	5° $\approx$ 29'55	
conjunction	-1521 Apr 10 j 14:49	6° $\text{Y}07'49$ -0°18'55		min. Earth dist.	-1516 Jul 31 j 03:04	1° $\approx$ 01'16	0.39518 AU
minimum elong	-1521 Apr 10 j 15:54	6° $\text{Y}09'43$ 0°18'54			-1516 Aug 03 j 15:06	30° $\text{R}\text{Z}$	
max. Earth dist.	-1521 May 12 j 08:23	27° $\text{Y}50'44$ 2.56094 AU		opposition	-1516 Aug 05 j 23:18	29° $\text{Z}18'34$	-6°36'08
asc. node	-1521 May 12 j 09:05	27° $\text{Y}51'55$		greatest brilliancy	-1516 Aug 04 j 18:29	29° $\text{Z}39'49$	-2.8m
	-1521 May 15 j 13:21	0° $\text{B}$		direct	-1516 Sep 05 j 04:09	23° $\text{Z}58'22$	
morning rise	-1521 Jun 03 j 21:59	12° $\text{B}51'34$			-1516 Oct 07 j 05:11	0° $\approx$	
	-1521 Jun 30 j 06:23	0° $\text{II}$			-1516 Dec 07 j 13:22	0° $\text{H}$	
	-1521 Aug 16 j 19:40	0° $\text{G}$		asc. node	-1515 Jan 01 j 05:06	14° $\text{H}32'38$	
	-1521 Oct 05 j 13:52	0° $\text{Q}$			-1515 Jan 26 j 14:28	0° $\text{Y}$	
	-1521 Nov 29 j 08:26	0° $\text{M}$			-1515 Mar 16 j 02:13	0° $\text{B}$	
retrograde	-1520 Feb 13 j 10:57	23° $\text{M}44'30$			-1515 May 03 j 07:09	0° $\text{II}$	
opposition	-1520 Mar 20 j 04:34	16° $\text{M}14'26$ 3°11'29			-1515 Jun 20 j 01:37	0° $\text{G}$	
greatest brilliancy	-1520 Mar 21 j 04:36	15° $\text{M}52'46$ -2.0m		evening set	-1515 Jun 23 j 23:15	2° $\text{G}28'21$	
min. Earth dist.	-1520 Mar 28 j 05:30	13° $\text{M}20'53$ 0.53274 AU		max. Earth dist.	-1515 Jul 25 j 03:07	22° $\text{G}24'15$	2.64841 AU
direct	-1520 Apr 28 j 13:58	7° $\text{M}05'37$			-1515 Aug 05 j 20:23	0° $\text{Q}$	
desc. node	-1520 May 26 j 14:48	11° $\text{M}53'16$					
	-1520 Jul 05 j 06:21	0° $\text{L}$		conjunction	-1515 Aug 09 j 00:54	2° $\text{Q}04'34$	1°09'10
	-1520 Aug 21 j 03:10	0° $\text{M}$		minimum elong	-1515 Aug 09 j 01:18	2° $\text{Q}05'14$	1°09'11
	-1520 Oct 01 j 07:23	0° $\text{J}$			-1515 Sep 20 j 04:14	0° $\text{M}$	
	-1520 Nov 09 j 19:37	0° $\text{Z}$		morning rise	-1515 Sep 23 j 11:26	2° $\text{M}13'42$	
	-1520 Dec 19 j 09:19	0° $\approx$			-1515 Nov 02 j 20:42	0° $\text{L}$	
	-1519 Jan 29 j 01:40	0° $\text{H}$			-1515 Dec 15 j 00:43	0° $\text{M}$	
	-1519 Mar 12 j 11:23	0° $\text{Y}$		desc. node	-1514 Jan 16 j 13:06	23° $\text{M}45'14$	
asc. node	-1519 Mar 29 j 06:45	11° $\text{Y}32'01$			-1514 Jan 24 j 23:59	0° $\text{J}$	
evening set	-1519 Apr 04 j 11:33	15° $\text{Y}44'21$			-1514 Mar 06 j 08:21	0° $\text{Z}$	

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1514 Apr 16 j 01:55	0°♊			-1509 Jul 24 j 05:37	0°♎	
	-1514 May 29 j 07:11	0°♋			-1509 Sep 05 j 08:49	0°♏	
	-1514 Jul 22 j 03:41	0°♌	desc. node		-1509 Sep 08 j 10:04	2°♏12'16	
retrograde	-1514 Aug 29 j 02:08	8°♌49'02			-1509 Oct 15 j 19:43	0°♐	
min. Earth dist.	-1514 Sep 28 j 10:30	2°♌29'35	0.51485 AU	evening set	-1509 Nov 07 j 12:29	17°♐27'14	
greatest brilliancy	-1514 Oct 05 j 12:23	29°♋50'47	-2.1m		-1509 Nov 23 j 14:12	0°♑	
	-1514 Oct 05 j 02:34	30°♋			-1509 Dec 31 j 15:36	0°♒	
opposition	-1514 Oct 06 j 01:21	29°♋38'37	-2°06'28				
direct	-1514 Nov 09 j 16:01	22°♋06'02		conjunction	-1508 Jan 11 j 08:47	8°♑26'40	-1°04'05
asc. node	-1514 Nov 19 j 03:56	22°♋40'13		minimum elong	-1508 Jan 11 j 07:17	8°♑23'41	1°04'05
	-1514 Dec 18 j 05:25	0°♌			-1508 Feb 07 j 22:34	0°♊	
	-1513 Feb 19 j 06:25	0°♍	max. Earth dist.		-1508 Feb 20 j 00:36	9°♊19'29	2.38506 AU
	-1513 Apr 12 j 16:23	0°♎			-1508 Mar 18 j 07:44	0°♋	
	-1513 Jun 01 j 04:04	0°♏	morning rise		-1508 Mar 20 j 06:58	1°♋28'04	
	-1513 Jul 18 j 12:02	0°♐			-1508 Apr 28 j 12:42	0°♌	
evening set	-1513 Aug 01 j 07:53	9°♐01'58			-1508 Jun 11 j 03:07	0°♍	
max. Earth dist.	-1513 Aug 21 j 01:23	22°♐09'34	2.57169 AU	asc. node	-1508 Jul 11 j 00:47	19°♍30'04	
	-1513 Sep 01 j 15:24	0°♎			-1508 Jul 27 j 18:13	0°♎	
					-1508 Sep 17 j 06:27	0°♏	
conjunction	-1513 Sep 18 j 03:03	11°♎20'23	0°45'24		-1508 Dec 02 j 06:25	0°♐	
minimum elong	-1513 Sep 18 j 04:32	11°♎22'56	0°45'24	retrograde	-1508 Dec 15 j 21:58	1°♐05'24	
	-1513 Oct 14 j 14:35	0°♏			-1508 Dec 28 j 23:18	30°♐	
morning rise	-1513 Nov 07 j 02:12	17°♏00'12		opposition	-1507 Jan 24 j 01:55	21°♏57'10	4°43'40
	-1513 Nov 24 j 16:19	0°♐		greatest brilliancy	-1507 Jan 24 j 13:30	21°♏45'48	-1.4m
desc. node	-1513 Dec 04 j 11:19	7°♐19'33		min. Earth dist.	-1507 Jan 27 j 09:17	20°♏39'13	0.65788 AU
	-1512 Jan 03 j 08:15	0°♑		direct	-1507 Mar 06 j 09:51	11°♏55'41	
	-1512 Feb 11 j 06:27	0°♒			-1507 May 08 j 09:29	0°♑	
	-1512 Mar 21 j 06:51	0°♊			-1507 Jun 30 j 17:10	0°♒	
	-1512 Apr 30 j 10:41	0°♋	desc. node		-1507 Jul 26 j 08:36	16°♒44'45	
	-1512 Jun 12 j 07:13	0°♌			-1507 Aug 14 j 12:54	0°♏	
	-1512 Jul 31 j 12:44	0°♍			-1507 Sep 24 j 12:44	0°♐	
asc. node	-1512 Oct 06 j 03:12	22°♍12'34			-1507 Nov 02 j 11:23	0°♑	
retrograde	-1512 Oct 07 j 13:16	22°♍13'23			-1507 Dec 10 j 15:17	0°♒	
min. Earth dist.	-1512 Nov 12 j 01:07	14°♍00'43	0.62182 AU	evening set	-1506 Jan 15 j 04:14	27°♒45'28	
opposition	-1512 Nov 16 j 09:26	12°♍16'28	1°39'16		-1506 Jan 18 j 01:56	0°♊	
greatest brilliancy	-1512 Nov 16 j 02:19	12°♍23'34	-1.6m		-1506 Feb 26 j 16:27	0°♋	
direct	-1512 Dec 24 j 13:07	3°♍18'43					
	-1511 Mar 16 j 21:55	0°♎		conjunction	-1506 Mar 19 j 17:29	15°♋25'37	-0°40'24
	-1511 May 10 j 09:56	0°♏		minimum elong	-1506 Mar 19 j 19:49	15°♋29'50	0°40'23
	-1511 Jun 28 j 09:18	0°♐			-1506 Apr 09 j 02:24	0°♌	
	-1511 Aug 12 j 22:28	0°♎	max. Earth dist.		-1506 Apr 28 j 20:05	13°♌47'03	2.51478 AU
evening set	-1511 Sep 12 j 16:08	21°♎23'07		morning rise	-1506 May 17 j 01:17	26°♌13'30	
	-1511 Sep 24 j 16:43	0°♏			-1506 May 22 j 15:43	0°♍	
max. Earth dist.	-1511 Sep 27 j 23:10	2°♏21'51	2.45335 AU	asc. node	-1506 May 29 j 00:22	4°♍15'29	
desc. node	-1511 Oct 21 j 10:15	19°♏37'22			-1506 Jul 07 j 10:00	0°♎	
	-1511 Nov 04 j 05:51	0°♐			-1506 Aug 24 j 11:41	0°♏	
					-1506 Oct 15 j 00:47	0°♐	
conjunction	-1511 Nov 05 j 16:54	1°♐06'20	-0°10'15		-1506 Dec 17 j 18:49	0°♑	
minimum elong	-1511 Nov 05 j 16:15	1°♐05'05	0°10'16	retrograde	-1505 Jan 25 j 12:58	7°♑34'05	
behind sun begin	-1511 Nov 04 j 21:05	0°♐28'50			-1505 Mar 02 j 03:51	30°♑	
behind sun end	-1511 Nov 06 j 11:24	1°♐41'22		opposition	-1505 Mar 03 j 13:26	29°♑28'46	4°05'45
	-1511 Dec 13 j 06:23	0°♑		greatest brilliancy	-1505 Mar 04 j 14:16	29°♑05'32	-1.7m
morning rise	-1510 Jan 06 j 02:02	18°♑37'49		min. Earth dist.	-1505 Mar 10 j 12:47	26°♑52'22	0.57897 AU
	-1510 Jan 20 j 13:42	0°♒		direct	-1505 Apr 13 j 00:58	19°♑50'05	
	-1510 Feb 28 j 00:35	0°♊			-1505 May 26 j 05:06	0°♒	
	-1510 Apr 08 j 12:22	0°♋	desc. node		-1505 Jun 13 j 06:38	8°♒28'37	
	-1510 May 19 j 23:14	0°♌			-1505 Jul 20 j 01:56	0°♏	
	-1510 Jul 03 j 12:16	0°♍			-1505 Sep 01 j 14:58	0°♐	
	-1510 Aug 22 j 17:49	0°♎			-1505 Oct 11 j 15:53	0°♑	
asc. node	-1510 Aug 24 j 02:30	0°♎44'06			-1505 Nov 19 j 12:39	0°♒	
retrograde	-1510 Nov 11 j 15:47	27°♎33'38			-1505 Dec 28 j 14:24	0°♊	
opposition	-1510 Dec 21 j 17:08	17°♎48'22	3°49'44		-1504 Feb 06 j 20:05	0°♋	
min. Earth dist.	-1510 Dec 21 j 03:38	18°♎01'54	0.67216 AU	evening set	-1504 Mar 16 j 00:05	27°♋18'48	
greatest brilliancy	-1510 Dec 21 j 13:48	17°♎51'43	-1.3m		-1504 Mar 19 j 20:19	0°♌	
direct	-1509 Jan 31 j 02:45	8°♎04'38		asc. node	-1504 Apr 14 j 23:46	17°♌59'34	
	-1509 Apr 13 j 17:34	0°♏			-1504 May 02 j 19:45	0°♍	
	-1509 Jun 07 j 03:17	0°♐					

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

conjunction	-1504 May 09 j 05:02	4°♄15'12	0°14'09		-1499 Apr 28 j 07:53	0°♁	
minimum elong	-1504 May 09 j 04:22	4°♄14'07	0°14'10		-1499 Jun 15 j 15:01	0°♁	
behind sun begin	-1504 May 08 j 18:50	3°♄58'16		retrograde	-1499 Aug 09 j 23:39	17°♁28'12	
behind sun end	-1504 May 09 j 13:55	4°♄29'57		min. Earth dist.	-1499 Sep 07 j 05:39	12°♁01'23	0.46392 AU
max. Earth dist.	-1504 May 29 j 06:57	17°♄28'49	2.61745 AU	greatest brilliancy	-1499 Sep 14 j 07:30	9°♁33'06	-2.4m
	-1504 Jun 17 j 13:41	0°♂		opposition	-1499 Sep 15 j 09:02	9°♁10'43	-4°01'29
morning rise	-1504 Jun 27 j 23:27	6°♂41'44		direct	-1499 Oct 18 j 04:02	2°♁27'22	
	-1504 Aug 03 j 15:43	0°♄		asc. node	-1499 Dec 05 j 19:57	14°♁32'08	
	-1504 Sep 20 j 19:31	0°♂			-1498 Jan 07 j 01:21	0°♂	
	-1504 Nov 09 j 12:51	0°♍			-1498 Mar 01 j 13:09	0°♄	
	-1503 Jan 02 j 17:31	0°♊			-1498 Apr 20 j 17:45	0°♂	
retrograde	-1503 Mar 20 j 03:46	24°♊20'17			-1498 Jun 08 j 09:12	0°♄	
opposition	-1503 Apr 22 j 09:36	18°♊00'53	0°28'03	evening set	-1498 Jul 17 j 02:24	24°♄35'57	
greatest brilliancy	-1503 Apr 22 j 13:54	17°♊57'24	-2.4m		-1498 Jul 25 j 10:30	0°♂	
desc. node	-1503 Apr 30 j 06:22	15°♊28'23		max. Earth dist.	-1498 Aug 09 j 22:18	10°♂08'27	2.60775 AU
min. Earth dist.	-1503 Apr 30 j 15:20	15°♊21'22	0.45221 AU				
direct	-1503 May 28 j 15:49	10°♊20'06		conjunction	-1498 Sep 01 j 19:17	25°♂23'40	0°58'29
	-1503 Jul 27 j 18:25	0°♍		minimum elong	-1498 Sep 01 j 20:30	25°♂25'44	0°58'29
	-1503 Sep 12 j 22:33	0°♁			-1498 Sep 08 j 14:38	0°♍	
	-1503 Oct 24 j 20:16	0°♄		morning rise	-1498 Oct 19 j 08:16	28°♍15'16	
	-1503 Dec 04 j 21:57	0°♁			-1498 Oct 21 j 19:21	0°♊	
	-1502 Jan 15 j 17:12	0°♁			-1498 Dec 02 j 05:27	0°♍	
	-1502 Feb 27 j 23:41	0°♂		desc. node	-1498 Dec 21 j 05:08	14°♍07'02	
asc. node	-1502 Mar 02 j 21:41	1°♂58'52			-1497 Jan 11 j 06:58	0°♁	
	-1502 Apr 13 j 21:36	0°♄			-1497 Feb 19 j 14:42	0°♄	
evening set	-1502 May 01 j 16:09	11°♄36'35			-1497 Mar 31 j 01:09	0°♁	
	-1502 May 30 j 03:47	0°♂			-1497 May 10 j 19:48	0°♁	
					-1497 Jun 24 j 05:03	0°♂	
conjunction	-1502 Jun 19 j 05:35	12°♂51'06	0°54'00		-1497 Aug 20 j 15:41	0°♄	
minimum elong	-1502 Jun 19 j 04:18	12°♂49'05	0°54'01	retrograde	-1497 Sep 23 j 20:45	6°♄57'55	
max. Earth dist.	-1502 Jun 23 j 04:28	15°♂22'32	2.66816 AU	asc. node	-1497 Oct 23 j 18:28	0°♄49'28	
	-1502 Jul 16 j 03:03	0°♄			-1497 Oct 25 j 22:49	30°♁♂	
morning rise	-1502 Aug 03 j 22:41	11°♄59'22		min. Earth dist.	-1497 Oct 27 j 11:37	29°♂24'25	0.58582 AU
	-1502 Sep 01 j 03:43	0°♂		opposition	-1497 Nov 02 j 05:27	27°♂08'29	0°24'36
	-1502 Oct 17 j 20:45	0°♍		greatest brilliancy	-1497 Nov 02 j 03:07	27°♂10'46	-1.8m
	-1502 Dec 03 j 07:36	0°♊		direct	-1497 Dec 09 j 03:38	18°♂38'01	
	-1501 Jan 19 j 02:11	0°♍			-1496 Jan 26 j 14:26	0°♄	
	-1501 Mar 08 j 21:06	0°♁			-1496 Mar 27 j 18:01	0°♂	
desc. node	-1501 Mar 18 j 06:12	5°♁24'19			-1496 May 18 j 13:18	0°♄	
	-1501 May 10 j 02:49	0°♄			-1496 Jul 05 j 17:10	0°♂	
retrograde	-1501 Jun 06 j 02:01	4°♄25'04			-1496 Aug 20 j 01:10	0°♍	
	-1501 Jul 03 j 22:49	30°♁♁		evening set	-1496 Aug 25 j 18:27	3°♍54'49	
min. Earth dist.	-1501 Jul 05 j 06:44	29°♁38'51	0.37567 AU	max. Earth dist.	-1496 Sep 10 j 02:29	14°♍32'57	2.50347 AU
opposition	-1501 Jul 06 j 15:07	29°♁17'19	-6°24'33		-1496 Oct 01 j 20:40	0°♊	
greatest brilliancy	-1501 Jul 06 j 07:34	29°♁22'21	-2.9m				
direct	-1501 Aug 05 j 07:54	24°♁20'20		conjunction	-1496 Oct 15 j 15:09	9°♄59'29	0°14'45
	-1501 Sep 04 j 22:26	0°♄		minimum elong	-1496 Oct 15 j 15:55	10°♄00'53	0°14'44
	-1501 Nov 03 j 12:09	0°♁		behind sun begin	-1496 Oct 15 j 06:14	9°♄43'12	
	-1501 Dec 21 j 11:31	0°♁		behind sun end	-1496 Oct 16 j 01:36	10°♄18'35	
asc. node	-1500 Jan 18 j 20:24	18°♁14'32		desc. node	-1496 Nov 07 j 03:55	26°♄40'49	
	-1500 Feb 06 j 03:00	0°♂			-1496 Nov 11 j 14:02	0°♍	
	-1500 Mar 24 j 01:54	0°♄		morning rise	-1496 Dec 10 j 14:36	22°♍06'42	
	-1500 May 10 j 12:11	0°♂			-1496 Dec 20 j 19:42	0°♁	
evening set	-1500 Jun 09 j 06:48	18°♂48'30			-1495 Jan 28 j 07:32	0°♄	
	-1500 Jun 26 j 22:18	0°♄			-1495 Mar 07 j 21:55	0°♁	
max. Earth dist.	-1500 Jul 15 j 14:21	11°♄54'22	2.66450 AU		-1495 Apr 16 j 13:03	0°♁	
					-1495 May 28 j 06:39	0°♂	
conjunction	-1500 Jul 25 j 12:10	18°♄15'46	1°10'08		-1495 Jul 12 j 17:39	0°♄	
minimum elong	-1500 Jul 25 j 11:59	18°♄15'28	1°10'09		-1495 Sep 05 j 05:18	0°♂	
	-1500 Aug 12 j 16:15	0°♂		asc. node	-1495 Sep 09 j 17:17	2°♂00'30	
morning rise	-1500 Sep 08 j 09:26	17°♂29'01		retrograde	-1495 Oct 29 j 07:03	14°♂30'27	
	-1500 Sep 27 j 05:40	0°♍		min. Earth dist.	-1495 Dec 06 j 08:09	5°♂26'28	0.65994 AU
	-1500 Nov 10 j 09:54	0°♊		opposition	-1495 Dec 08 j 09:40	4°♂36'41	3°08'55
	-1500 Dec 23 j 07:18	0°♍		greatest brilliancy	-1495 Dec 08 j 02:49	4°♂43'35	-1.4m
desc. node	-1499 Feb 02 j 05:15	29°♍17'16			-1495 Dec 20 j 12:42	30°♁♄	
	-1499 Feb 03 j 04:56	0°♁		direct	-1494 Jan 17 j 01:37	25°♄07'25	
	-1499 Mar 16 j 17:44	0°♄			-1494 Feb 16 j 11:40	0°♂	



## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 41

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1494 Apr 25 j 02:53	0°☿	behind sun begin	-1489 Apr 21 j 00:51	16°♊34'40	
	-1494 Jun 15 j 12:43	0°♈	behind sun end	-1489 Apr 22 j 19:04	17°♊46'46	
	-1494 Jul 31 j 20:08	0°♉	asc. node	-1489 May 02 j 15:04	24°♊27'29	
	-1494 Sep 12 j 18:22	0°♊		-1489 May 10 j 20:41	0°♋	
desc. node	-1494 Sep 25 j 02:21	8°♊58'46	max. Earth dist.	-1489 May 19 j 06:37	5°♋37'08	2.58318 AU
evening set	-1494 Oct 14 j 16:51	23°♊33'28	morning rise	-1489 Jun 13 j 08:52	22°♋07'22	
	-1494 Oct 23 j 05:25	0°♋		-1489 Jun 25 j 12:46	0°♌	
max. Earth dist.	-1494 Nov 18 j 04:18	19°♋56'49		-1489 Aug 11 j 20:24	0°☿	
	-1494 Dec 01 j 01:43	0°♌		-1489 Sep 29 j 21:03	0°♈	
				-1489 Nov 21 j 03:45	0°♉	
conjunction	-1494 Dec 14 j 07:18	10°♌23'07 -0°49'12		-1488 Jan 27 j 23:03	0°♊	
minimum elong	-1494 Dec 14 j 04:23	10°♌17'23 0°49'12	retrograde	-1488 Feb 25 j 10:47	4°♊21'24	
	-1493 Jan 08 j 04:44	0°♋		-1488 Mar 23 j 00:46	30°♋♈	
	-1493 Feb 15 j 12:20	0°♌	opposition	-1488 Mar 31 j 08:13	27°♈14'22	2°24'18
morning rise	-1493 Feb 20 j 21:42	4°♌10'08	greatest brilliancy	-1488 Apr 01 j 04:05	26°♈56'58	-2.1m
	-1493 Mar 26 j 21:16	0°♈	min. Earth dist.	-1488 Apr 08 j 16:50	24°♈19'12	0.50443 AU
	-1493 May 07 j 02:18	0°♊	direct	-1488 May 08 j 19:16	18°♈30'43	
	-1493 Jun 19 j 21:00	0°♋	desc. node	-1488 May 16 j 22:05	18°♈57'26	
asc. node	-1493 Jul 28 j 17:22	24°♋48'08		-1488 Jun 22 j 15:26	0°♊	
	-1493 Aug 06 j 06:57	0°♌		-1488 Aug 13 j 11:54	0°♋	
	-1493 Sep 30 j 07:04	0°☿		-1488 Sep 24 j 22:00	0°♌	
retrograde	-1493 Dec 02 j 21:53	18°☿09'47		-1488 Nov 04 j 00:30	0°♋	
opposition	-1492 Jan 11 j 13:10	8°☿44'29 4°31'51		-1488 Dec 13 j 23:41	0°♌	
greatest brilliancy	-1492 Jan 11 j 18:18	8°☿39'22 -1.3m		-1487 Jan 23 j 23:17	0°♈	
min. Earth dist.	-1492 Jan 13 j 08:07	8°☿01'50 0.67121 AU		-1487 Mar 07 j 14:24	0°♊	
	-1492 Feb 07 j 21:29	30°♋♌	asc. node	-1487 Mar 19 j 13:52	8°♊12'07	
direct	-1492 Feb 21 j 16:17	28°♌46'22	evening set	-1487 Apr 14 j 17:27	25°♊48'09	
	-1492 Mar 07 j 04:16	0°☿		-1487 Apr 21 j 01:10	0°♋	
	-1492 May 21 j 01:53	0°♈				
	-1492 Jul 09 j 18:35	0°♉	conjunction	-1487 Jun 04 j 00:32	28°♋42'22	0°41'08
desc. node	-1492 Aug 12 j 01:07	22°♉28'27	minimum elong	-1487 Jun 03 j 23:13	28°♋40'15	0°41'09
	-1492 Aug 22 j 16:40	0°♊		-1487 Jun 06 j 00:43	0°♌	
	-1492 Oct 02 j 09:16	0°♋	max. Earth dist.	-1487 Jun 14 j 00:22	5°♌08'05	2.65484 AU
	-1492 Nov 10 j 05:04	0°♌	morning rise	-1487 Jul 20 j 21:18	28°♌40'33	
evening set	-1492 Dec 18 j 15:16	0°♋16'27		-1487 Jul 22 j 23:17	0°☿	
	-1492 Dec 18 j 06:55	0°♋		-1487 Sep 08 j 07:26	0°♈	
	-1491 Jan 25 j 15:06	0°♌		-1487 Oct 25 j 20:18	0°♉	
				-1487 Dec 13 j 01:23	0°♊	
conjunction	-1491 Feb 22 j 22:38	21°♌38'17 -0°58'05		-1486 Feb 01 j 18:58	0°♋	
minimum elong	-1491 Feb 23 j 01:06	21°♌42'55 0°58'05	desc. node	-1486 Apr 03 j 22:44	28°♋40'50	
	-1491 Mar 06 j 02:28	0°♈		-1486 Apr 08 j 07:02	0°♌	
max. Earth dist.	-1491 Apr 11 j 14:24	26°♈36'14 2.46350 AU	retrograde	-1486 May 04 j 23:16	4°♌04'10	
	-1491 Apr 16 j 09:05	0°♊		-1486 May 31 j 15:20	30°♋♌	
morning rise	-1491 Apr 26 j 22:00	7°♊25'02	opposition	-1486 Jun 04 j 12:33	28°♌56'47	-4°03'02
	-1491 May 29 j 20:52	0°♋	greatest brilliancy	-1486 Jun 05 j 00:48	28°♌48'20	-2.9m
asc. node	-1491 Jun 14 j 16:35	10°♋31'27	min. Earth dist.	-1486 Jun 08 j 13:46	27°♌49'50	0.38709 AU
	-1491 Jul 14 j 19:12	0°♌	direct	-1486 Jul 06 j 06:21	23°♌20'11	
	-1491 Sep 01 j 16:34	0°☿		-1486 Aug 07 j 22:20	0°♌	
	-1491 Oct 26 j 09:06	0°♈		-1486 Oct 03 j 04:42	0°♋	
retrograde	-1490 Jan 08 j 16:14	22°♈51'10		-1486 Nov 17 j 16:35	0°♌	
opposition	-1490 Feb 15 j 16:55	14°♈17'13 4°34'26		-1486 Dec 31 j 22:26	0°♈	
greatest brilliancy	-1490 Feb 16 j 13:58	13°♈57'01 -1.5m	asc. node	-1485 Feb 04 j 11:52	23°♈11'22	
min. Earth dist.	-1490 Feb 21 j 07:35	12°♈08'05 0.61726 AU		-1485 Feb 14 j 18:16	0°♊	
direct	-1490 Mar 28 j 18:50	4°♈22'24		-1485 Apr 01 j 16:39	0°♋	
	-1490 Jun 12 j 12:34	0°♉		-1485 May 18 j 13:09	0°♌	
desc. node	-1490 Jun 29 j 23:48	10°♉09'00	evening set	-1485 May 26 j 09:03	4°♌58'46	
	-1490 Jul 30 j 18:51	0°♊		-1485 Jul 04 j 17:23	0°☿	
	-1490 Sep 10 j 20:48	0°♋	max. Earth dist.	-1485 Jul 07 j 10:48	1°☿44'12	2.67249 AU
	-1490 Oct 20 j 07:08	0°♌				
	-1490 Nov 27 j 18:29	0°♋	conjunction	-1485 Jul 12 j 04:05	4°☿44'46	1°06'56
	-1489 Jan 05 j 12:03	0°♌	minimum elong	-1485 Jul 12 j 03:23	4°☿43'38	1°06'57
	-1489 Feb 14 j 09:52	0°♈		-1485 Aug 20 j 12:31	0°♈	
evening set	-1489 Feb 23 j 08:26	6°♈33'11	morning rise	-1485 Aug 25 j 23:58	3°♈32'45	
	-1489 Mar 28 j 02:44	0°♊		-1485 Oct 05 j 10:14	0°♉	
				-1485 Nov 19 j 06:46	0°♊	
conjunction	-1489 Apr 21 j 21:36	17°♊10'08 -0°06'26		-1484 Jan 02 j 05:02	0°♋	
minimum elong	-1489 Apr 21 j 21:57	17°♊10'44 0°06'25		-1484 Feb 14 j 14:00	0°♌	

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Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

desc. node	-1484 Feb 19 j 22:53	3°♄43'06		-1479 Aug 08 j 04:41	0°♐	
	-1484 Mar 29 j 08:23	0°♄		-1479 Sep 20 j 00:54	0°♌	
	-1484 May 15 j 20:41	0°♊	evening set	-1479 Sep 23 j 14:47	2°♌35'21	
retrograde	-1484 Jul 18 j 17:55	22°♊07'39	max. Earth dist.	-1479 Oct 11 j 07:23	15°♌33'44	2.42595 AU
min. Earth dist.	-1484 Aug 14 j 13:18	17°♊26'01	0.41586 AU	desc. node	-1479 Oct 11 j 19:09	15°♌55'34
greatest brilliancy	-1484 Aug 20 j 11:40	15°♊34'03	-2.6m		-1479 Oct 30 j 13:38	0°♌
opposition	-1484 Aug 21 j 20:04	15°♊08'25	-5°53'07			
direct	-1484 Sep 21 j 18:14	9°♊20'38		conjunction	-1479 Nov 18 j 18:37	14°♌40'35 -0°25'10
	-1484 Nov 26 j 22:05	0°♋		minimum elong	-1479 Nov 18 j 16:56	14°♌37'20 0°25'09
asc. node	-1484 Dec 22 j 10:30	13°♋38'39			-1479 Dec 08 j 12:47	0°♋
	-1483 Jan 19 j 18:35	0°♐			-1478 Jan 15 j 18:14	0°♄
	-1483 Mar 10 j 13:11	0°♈	morning rise	-1478 Jan 22 j 05:12	5°♄04'32	
	-1483 Apr 28 j 08:08	0°♊		-1478 Feb 23 j 03:13	0°♊	
	-1483 Jun 15 j 09:15	0°♍		-1478 Apr 03 j 12:57	0°♋	
evening set	-1483 Jul 02 j 08:49	10°♍45'49		-1478 May 14 j 19:59	0°♐	
max. Earth dist.	-1483 Jul 30 j 18:40	29°♍02'04	2.63612 AU		-1478 Jun 27 j 23:22	0°♈
	-1483 Aug 01 j 06:18	0°♎		asc. node	-1478 Aug 14 j 08:23	29°♈11'08
					-1478 Aug 15 j 18:33	0°♊
conjunction	-1483 Aug 17 j 12:30	10°♎38'34	1°06'35		-1478 Oct 18 j 23:09	0°♍
minimum elong	-1483 Aug 17 j 13:15	10°♎39'48	1°06'35	retrograde	-1478 Nov 19 j 09:06	5°♍22'58
	-1483 Sep 15 j 12:50	0°♐			-1478 Dec 18 j 04:26	30°♐♊
morning rise	-1483 Oct 02 j 12:04	11°♐33'22		opposition	-1478 Dec 29 j 07:37	25°♐43'54 4°08'30
	-1483 Oct 29 j 01:09	0°♌		greatest brilliancy	-1478 Dec 29 j 06:59	25°♐44'32 -1.3m
	-1483 Dec 09 j 22:27	0°♌		min. Earth dist.	-1478 Dec 29 j 14:09	25°♐37'21 0.67454 AU
desc. node	-1482 Jan 06 j 21:14	20°♌33'51		direct	-1477 Feb 08 j 00:29	15°♐53'54
	-1482 Jan 19 j 13:20	0°♋			-1477 Apr 04 j 11:29	0°♍
	-1482 Feb 28 j 11:20	0°♄			-1477 Jun 01 j 04:59	0°♎
	-1482 Apr 09 j 14:33	0°♊			-1477 Jul 19 j 01:42	0°♐
	-1482 May 21 j 13:38	0°♋		desc. node	-1477 Aug 29 j 17:31	28°♐45'01
	-1482 Jul 08 j 14:39	0°♐			-1477 Aug 31 j 11:21	0°♌
retrograde	-1482 Sep 07 j 22:40	19°♐56'49			-1477 Oct 11 j 00:27	0°♌
min. Earth dist.	-1482 Oct 09 j 11:36	13°♐09'11	0.54156 AU		-1477 Nov 18 j 19:38	0°♋
opposition	-1482 Oct 16 j 11:59	10°♐27'42	-1°06'36	evening set	-1477 Nov 22 j 04:32	2°♋38'42
greatest brilliancy	-1482 Oct 16 j 05:34	10°♐33'52	-2.0m		-1477 Dec 26 j 21:06	0°♄
asc. node	-1482 Nov 09 j 10:12	3°♐26'04				
direct	-1482 Nov 20 j 23:34	2°♐32'11		conjunction	-1476 Jan 27 j 10:36	24°♄46'29 -1°06'01
	-1481 Feb 11 j 13:12	0°♈		minimum elong	-1476 Jan 27 j 10:50	24°♄46'56 1°06'01
	-1481 Apr 07 j 00:28	0°♊			-1476 Feb 03 j 04:00	0°♊
	-1481 May 27 j 04:55	0°♍			-1476 Mar 13 j 13:10	0°♋
	-1481 Jul 13 j 19:43	0°♎		max. Earth dist.	-1476 Mar 17 j 04:41	2°♋43'02 2.41049 AU
evening set	-1481 Aug 10 j 07:26	18°♎02'51		morning rise	-1476 Apr 03 j 19:24	15°♋40'44
max. Earth dist.	-1481 Aug 28 j 03:30	0°♐04'20	2.54901 AU		-1476 Apr 23 j 17:27	0°♐
	-1481 Aug 28 j 00:58	0°♐			-1476 Jun 06 j 05:17	0°♈
				asc. node	-1476 Jul 01 j 08:04	16°♈32'12
conjunction	-1481 Sep 27 j 23:32	21°♐28'14	0°35'36		-1476 Jul 22 j 11:31	0°♊
minimum elong	-1481 Sep 28 j 00:56	21°♐30'42	0°35'35		-1476 Sep 10 j 17:06	0°♍
	-1481 Oct 09 j 23:10	0°♌			-1476 Nov 11 j 09:56	0°♎
morning rise	-1481 Nov 18 j 17:33	29°♌06'58		retrograde	-1476 Dec 24 j 06:40	9°♌06'22
	-1481 Nov 19 j 21:56	0°♌		opposition	-1475 Feb 01 j 02:03	0°♌09'07 4°44'31
desc. node	-1481 Nov 24 j 20:03	3°♌41'12			-1475 Feb 01 j 11:24	30°♐♍
	-1481 Dec 29 j 10:06	0°♋		greatest brilliancy	-1475 Feb 01 j 17:17	29°♍54'16 -1.4m
	-1480 Feb 06 j 04:07	0°♄		min. Earth dist.	-1475 Feb 05 j 05:22	28°♍32'11 0.64607 AU
	-1480 Mar 16 j 00:05	0°♊		direct	-1475 Mar 14 j 09:29	20°♍07'56
	-1480 Apr 24 j 21:49	0°♋			-1475 Apr 27 j 08:32	0°♎
	-1480 Jun 06 j 04:37	0°♐			-1475 Jun 24 j 07:29	0°♐
	-1480 Jul 23 j 10:19	0°♈		desc. node	-1475 Jul 16 j 16:23	14°♐10'03
asc. node	-1480 Sep 26 j 09:45	28°♈34'47			-1475 Aug 09 j 01:12	0°♌
	-1480 Oct 04 j 01:30	0°♊			-1475 Sep 19 j 08:39	0°♌
retrograde	-1480 Oct 15 j 15:35	0°♊51'16			-1475 Oct 28 j 10:49	0°♋
	-1480 Oct 26 j 18:05	30°♐♈			-1475 Dec 05 j 16:45	0°♄
min. Earth dist.	-1480 Nov 21 j 01:51	22°♈19'07	0.63793 AU		-1474 Jan 13 j 05:07	0°♊
opposition	-1480 Nov 24 j 14:50	20°♈53'49	2°16'02	evening set	-1474 Jan 30 j 01:56	12°♊53'35
greatest brilliancy	-1480 Nov 24 j 06:50	21°♈01'51	-1.5m		-1474 Feb 21 j 21:27	0°♋
direct	-1479 Jan 02 j 08:15	11°♈43'36				
	-1479 Mar 08 j 09:53	0°♊		conjunction	-1474 Apr 01 j 11:31	27°♋57'26 -0°28'15
	-1479 May 04 j 15:50	0°♍		minimum elong	-1474 Apr 01 j 13:11	28°♋00'22 0°28'14
	-1479 Jun 23 j 09:06	0°♎			-1474 Apr 04 j 08:51	0°♐

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Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

max. Earth dist.	-1474 May 06 j 21:09	22° $\Upsilon$ 31'16	2.54120 AU	retrograde	-1469 Jun 23 j 05:20	22° $\text{Z}$ 32'39	
	-1474 May 17 j 22:44	0° $\text{B}$		min. Earth dist.	-1469 Jul 20 j 13:22	18° $\text{Z}$ 04'11	0.38294 AU
asc. node	-1474 May 19 j 07:14	0° $\text{B}$ 54'34		opposition	-1469 Jul 24 j 15:40	16° $\text{Z}$ 56'04	-6°48'09
morning rise	-1474 May 27 j 10:58	6° $\text{B}$ 21'34		greatest brilliancy	-1469 Jul 23 j 18:33	17° $\text{Z}$ 10'46	-2.9m
	-1474 Jul 02 j 14:47	0° $\text{II}$		direct	-1469 Aug 23 j 10:12	11° $\text{Z}$ 52'34	
	-1474 Aug 19 j 07:47	0° $\text{D}$			-1469 Oct 22 j 03:14	0° $\approx$	
	-1474 Oct 08 j 16:35	0° $\Omega$			-1469 Dec 13 j 21:09	0° $\text{H}$	
	-1474 Dec 04 j 23:30	0° $\text{M}$		asc. node	-1468 Jan 09 j 03:14	16° $\text{H}$ 12'59	
retrograde	-1473 Feb 04 j 23:31	16° $\text{M}$ 59'14			-1468 Jan 31 j 03:16	0° $\Upsilon$	
opposition	-1473 Mar 13 j 07:32	9° $\text{M}$ 12'20	3°37'51		-1468 Mar 18 j 20:30	0° $\text{B}$	
greatest brilliancy	-1473 Mar 14 j 08:32	8° $\text{M}$ 49'21	-1.8m		-1468 May 05 j 16:11	0° $\text{II}$	
min. Earth dist.	-1473 Mar 20 j 21:42	6° $\text{M}$ 25'07	0.55438 AU	evening set	-1468 Jun 17 j 17:24	27° $\text{II}$ 06'30	
	-1473 Apr 16 j 19:22	30° $\text{R}$ $\Omega$			-1468 Jun 22 j 06:54	0° $\text{D}$	
direct	-1473 Apr 22 j 05:41	29° $\Omega$ 47'54		max. Earth dist.	-1468 Jul 21 j 02:01	18° $\text{D}$ 22'38	2.65668 AU
	-1473 Apr 27 j 17:50	0° $\text{M}$					
desc. node	-1473 Jun 03 j 16:02	9° $\text{M}$ 50'34		conjunction	-1468 Aug 02 j 19:19	26° $\text{D}$ 34'58	1°10'05
	-1473 Jul 12 j 04:27	0° $\text{D}$		minimum elong	-1468 Aug 02 j 19:29	26° $\text{D}$ 35'14	1°10'05
	-1473 Aug 26 j 07:55	0° $\text{M}$			-1468 Aug 08 j 01:49	0° $\Omega$	
	-1473 Oct 05 j 22:56	0° $\text{A}$		morning rise	-1468 Sep 16 j 21:59	26° $\Omega$ 14'19	
	-1473 Nov 14 j 03:16	0° $\text{Z}$			-1468 Sep 22 j 12:46	0° $\text{M}$	
	-1473 Dec 23 j 10:21	0° $\approx$			-1468 Nov 05 j 11:11	0° $\text{D}$	
	-1472 Feb 01 j 20:38	0° $\text{H}$			-1468 Dec 17 j 23:03	0° $\text{M}$	
	-1472 Mar 15 j 00:37	0° $\Upsilon$		desc. node	-1467 Jan 23 j 14:17	26° $\text{M}$ 32'09	
evening set	-1472 Mar 27 j 08:37	8° $\Upsilon$ 31'16			-1467 Jan 28 j 07:56	0° $\text{A}$	
asc. node	-1472 Apr 05 j 04:43	14° $\Upsilon$ 33'43			-1467 Mar 10 j 03:08	0° $\text{Z}$	
	-1472 Apr 28 j 02:58	0° $\text{B}$			-1467 Apr 20 j 11:38	0° $\approx$	
					-1467 Jun 04 j 02:08	0° $\text{H}$	
conjunction	-1472 May 18 j 23:25	13° $\text{B}$ 46'57	0°24'57		-1467 Aug 13 j 07:58	0° $\Upsilon$	
minimum elong	-1472 May 18 j 22:23	13° $\text{B}$ 45'17	0°24'58	retrograde	-1467 Aug 21 j 04:58	0° $\Upsilon$ 26'24	
max. Earth dist.	-1472 Jun 04 j 05:29	24° $\text{B}$ 22'51	2.63323 AU		-1467 Aug 28 j 22:18	30° $\text{R}$ $\text{H}$	
	-1472 Jun 12 j 21:53	0° $\text{II}$		min. Earth dist.	-1467 Sep 19 j 13:37	24° $\text{H}$ 30'14	0.49213 AU
morning rise	-1472 Jul 06 j 12:22	15° $\text{II}$ 08'36		opposition	-1467 Sep 27 j 12:22	21° $\text{H}$ 36'26	-2°54'32
	-1472 Jul 29 j 21:45	0° $\text{D}$		greatest brilliancy	-1467 Sep 26 j 17:58	21° $\text{H}$ 53'17	-2.2m
	-1472 Sep 15 j 16:45	0° $\Omega$		direct	-1467 Oct 31 j 08:34	14° $\text{H}$ 24'38	
	-1472 Nov 03 j 10:33	0° $\text{M}$		asc. node	-1467 Nov 26 j 02:04	18° $\text{H}$ 15'39	
	-1472 Dec 24 j 15:37	0° $\text{D}$			-1467 Dec 27 j 10:19	0° $\Upsilon$	
	-1471 Feb 25 j 02:18	0° $\text{M}$			-1466 Feb 23 j 01:52	0° $\text{B}$	
retrograde	-1471 Apr 04 j 09:39	7° $\text{M}$ 39'13			-1466 Apr 15 j 10:16	0° $\text{II}$	
desc. node	-1471 Apr 20 j 15:14	6° $\text{M}$ 01'56			-1466 Jun 03 j 13:07	0° $\text{D}$	
opposition	-1471 May 06 j 14:50	1° $\text{M}$ 48'22	-1°00'31		-1466 Jul 20 j 18:57	0° $\Omega$	
greatest brilliancy	-1471 May 06 j 21:25	1° $\text{M}$ 43'20	-2.6m	evening set	-1466 Jul 25 j 18:02	3° $\Omega$ 13'37	
	-1471 May 12 j 12:33	30° $\text{R}$ $\text{D}$		max. Earth dist.	-1466 Aug 16 j 07:24	17° $\Omega$ 25'55	2.58874 AU
min. Earth dist.	-1471 May 14 j 02:35	29° $\text{D}$ 31'33	0.42527 AU		-1466 Sep 03 j 23:36	0° $\text{M}$	
direct	-1471 Jun 10 j 08:25	24° $\text{D}$ 51'22					
	-1471 Jul 08 j 16:27	0° $\text{M}$		conjunction	-1466 Sep 10 j 23:42	4° $\text{M}$ 46'40	0°51'32
	-1471 Sep 03 j 19:34	0° $\text{A}$		minimum elong	-1466 Sep 11 j 01:06	4° $\text{M}$ 49'04	0°51'31
	-1471 Oct 17 j 18:07	0° $\text{Z}$			-1466 Oct 17 j 02:23	0° $\text{D}$	
	-1471 Nov 28 j 19:01	0° $\approx$		morning rise	-1466 Oct 29 j 17:39	9° $\text{D}$ 03'35	
	-1470 Jan 10 j 04:53	0° $\text{H}$			-1466 Nov 27 j 08:34	0° $\text{M}$	
asc. node	-1470 Feb 21 j 03:29	28° $\text{H}$ 49'40		desc. node	-1466 Dec 11 j 12:49	10° $\text{M}$ 34'12	
	-1470 Feb 22 j 21:08	0° $\Upsilon$			-1465 Jan 06 j 05:17	0° $\text{A}$	
	-1470 Apr 09 j 01:43	0° $\text{B}$			-1465 Feb 14 j 07:40	0° $\text{Z}$	
evening set	-1470 May 10 j 21:46	20° $\text{B}$ 38'14			-1465 Mar 25 j 11:38	0° $\approx$	
	-1470 May 25 j 11:46	0° $\text{II}$			-1465 May 04 j 20:02	0° $\text{H}$	
					-1465 Jun 17 j 03:00	0° $\Upsilon$	
conjunction	-1470 Jun 27 j 17:03	21° $\text{II}$ 12'24	0°59'51		-1465 Aug 07 j 08:54	0° $\text{B}$	
minimum elong	-1470 Jun 27 j 15:56	21° $\text{II}$ 10'37	0°59'52	retrograde	-1465 Oct 02 j 09:50	16° $\text{B}$ 17'40	
max. Earth dist.	-1470 Jun 28 j 12:43	21° $\text{II}$ 43'43	2.67206 AU	asc. node	-1465 Oct 14 j 00:58	15° $\text{B}$ 19'57	
	-1470 Jul 11 j 12:16	0° $\text{D}$		min. Earth dist.	-1465 Nov 06 j 01:47	8° $\text{B}$ 21'45	0.60669 AU
morning rise	-1470 Aug 11 j 23:13	20° $\text{D}$ 04'57		opposition	-1465 Nov 11 j 01:17	6° $\text{B}$ 22'45	1°09'48
	-1470 Aug 27 j 10:27	0° $\Omega$		greatest brilliancy	-1465 Nov 10 j 19:33	6° $\text{B}$ 28'29	-1.7m
	-1470 Oct 12 j 19:32	0° $\text{M}$			-1465 Nov 29 j 16:55	30° $\text{R}$ $\Upsilon$	
	-1470 Nov 27 j 14:15	0° $\text{D}$		direct	-1465 Dec 18 j 15:50	27° $\Upsilon$ 36'30	
	-1469 Jan 12 j 01:47	0° $\text{M}$			-1464 Jan 08 j 04:13	0° $\text{B}$	
	-1469 Feb 27 j 02:11	0° $\text{A}$			-1464 Mar 20 j 22:45	0° $\text{II}$	
desc. node	-1469 Mar 08 j 14:52	6° $\text{A}$ 03'32			-1464 May 13 j 05:03	0° $\text{D}$	
	-1469 Apr 17 j 15:35	0° $\text{Z}$			-1464 Jun 30 j 20:47	0° $\Omega$	

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 44

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1464 Aug 15 j 08:47	0°♎		morning rise	-1459 May 08 j 16:44	18°♊51'51	
evening set	-1464 Sep 04 j 18:11	14°♎04'05			-1459 May 25 j 02:14	0°♊	
max. Earth dist.	-1464 Sep 19 j 17:26	24°♎38'34	2.47597 AU	asc. node	-1459 Jun 04 j 22:05	7°♊14'15	
	-1464 Sep 27 j 04:48	0°♏			-1459 Jul 09 j 20:31	0°♊	
					-1459 Aug 27 j 04:17	0°♋	
conjunction	-1464 Oct 27 j 06:12	22°♏02'48	0°00'50		-1459 Oct 18 j 17:35	0°♋	
minimum elong	-1464 Oct 27 j 06:12	22°♏02'47	0°00'49		-1458 Jan 01 j 13:29	0°♎	
behind sun begin	-1464 Oct 26 j 06:57	21°♏19'28		retrograde	-1458 Jan 18 j 02:29	1°♎33'07	
behind sun end	-1464 Oct 28 j 05:27	22°♏46'10			-1458 Feb 02 j 17:03	30°♋♏	
desc. node	-1464 Oct 28 j 11:37	22°♏57'41		opposition	-1458 Feb 24 j 14:00	23°♏14'14	4°20'06
	-1464 Nov 06 j 20:36	0°♌		greatest brilliancy	-1458 Feb 25 j 13:27	22°♏51'59	-1.6m
	-1464 Dec 15 j 23:59	0°♌		min. Earth dist.	-1458 Mar 02 j 22:43	20°♏49'31	0.59724 AU
morning rise	-1464 Dec 25 j 03:11	7°♌06'30		direct	-1458 Apr 06 j 08:38	13°♏26'50	
	-1463 Jan 23 j 09:24	0°♌			-1458 Jun 03 j 00:49	0°♎	
greatest brilliancy	-1463 Feb 09 j 06:18	13°♌11'54	1.2m	desc. node	-1458 Jun 20 j 07:59	9°♎07'41	
	-1463 Mar 02 j 21:21	0°♍			-1458 Jul 24 j 07:59	0°♏	
	-1463 Apr 11 j 09:39	0°♍			-1458 Sep 05 j 04:47	0°♌	
	-1463 May 22 j 21:35	0°♍			-1458 Oct 14 j 23:12	0°♌	
	-1463 Jul 06 j 16:25	0°♌			-1458 Nov 22 j 15:26	0°♌	
	-1463 Aug 27 j 02:31	0°♊			-1458 Dec 31 j 12:35	0°♍	
asc. node	-1463 Aug 31 j 00:44	2°♊00'02			-1457 Feb 09 j 13:34	0°♍	
retrograde	-1463 Nov 06 j 00:18	22°♊29'09		evening set	-1457 Mar 07 j 22:06	19°♍04'25	
min. Earth dist.	-1463 Dec 14 j 20:19	13°♊09'29	0.66793 AU		-1457 Mar 23 j 09:05	0°♍	
opposition	-1463 Dec 16 j 02:08	12°♊39'31	3°34'05	asc. node	-1457 Apr 22 j 21:40	21°♍02'30	
greatest brilliancy	-1463 Dec 15 j 20:57	12°♊44'45	-1.3m				
direct	-1462 Jan 25 j 03:52	3°♊01'49		conjunction	-1457 May 02 j 13:19	27°♍33'34	0°05'45
	-1462 Apr 18 j 01:34	0°♋		minimum elong	-1457 May 02 j 13:01	27°♍33'05	0°05'46
	-1462 Jun 10 j 02:39	0°♏		behind sun begin	-1457 May 01 j 16:15	26°♍58'10	
	-1462 Jul 26 j 21:53	0°♎		behind sun end	-1457 May 03 j 09:48	28°♍07'57	
	-1462 Sep 08 j 00:17	0°♏			-1457 May 06 j 04:38	0°♊	
desc. node	-1462 Sep 15 j 11:23	5°♏24'28		max. Earth dist.	-1457 May 25 j 18:12	12°♊59'28	2.60301 AU
	-1462 Oct 18 j 12:05	0°♌			-1457 Jun 20 j 20:27	0°♊	
evening set	-1462 Oct 27 j 18:59	7°♌05'10		morning rise	-1457 Jun 22 j 10:30	1°♊01'25	
	-1462 Nov 26 j 07:50	0°♌			-1457 Aug 06 j 23:51	0°♋	
					-1457 Sep 24 j 11:01	0°♏	
conjunction	-1462 Dec 29 j 22:13	26°♌27'39	-0°59'15		-1457 Nov 14 j 01:49	0°♎	
minimum elong	-1462 Dec 29 j 19:43	26°♌22'43	0°59'16		-1456 Jan 10 j 15:54	0°♏	
	-1461 Jan 03 j 09:52	0°♌		retrograde	-1456 Mar 09 j 07:57	15°♏42'38	
max. Earth dist.	-1461 Jan 08 j 19:21	4°♌15'18	2.37347 AU	opposition	-1456 Apr 12 j 08:50	9°♏00'53	1°23'46
	-1461 Feb 10 j 16:27	0°♍		greatest brilliancy	-1456 Apr 12 j 21:12	8°♏50'28	-2.3m
morning rise	-1461 Mar 09 j 06:47	20°♍24'35		min. Earth dist.	-1456 Apr 20 j 20:04	6°♏10'30	0.47551 AU
	-1461 Mar 22 j 00:32	0°♍		desc. node	-1456 May 07 j 07:25	1°♏53'44	
	-1461 May 02 j 04:07	0°♍		direct	-1456 May 19 j 16:57	0°♏49'08	
	-1461 Jun 14 j 18:29	0°♊			-1456 Aug 04 j 10:42	0°♌	
asc. node	-1461 Jul 18 j 23:11	22°♊09'00			-1456 Sep 17 j 22:22	0°♌	
	-1461 Jul 31 j 14:35	0°♊			-1456 Oct 28 j 21:31	0°♌	
	-1461 Sep 22 j 03:58	0°♋			-1456 Dec 08 j 09:07	0°♍	
retrograde	-1461 Dec 10 j 21:29	25°♋59'09			-1455 Jan 18 j 17:46	0°♍	
opposition	-1460 Jan 19 j 06:32	16°♋42'53	4°40'00		-1455 Mar 02 j 15:46	0°♍	
greatest brilliancy	-1460 Jan 19 j 15:12	16°♋34'19	-1.3m	asc. node	-1455 Mar 09 j 19:46	4°♍53'38	
min. Earth dist.	-1460 Jan 21 j 21:24	15°♋40'46	0.66515 AU		-1455 Apr 16 j 07:22	0°♊	
direct	-1460 Feb 29 j 12:27	6°♋42'17		evening set	-1455 Apr 24 j 13:19	5°♊25'39	
	-1460 May 13 j 10:59	0°♏			-1455 Jun 01 j 09:36	0°♊	
	-1460 Jul 04 j 01:45	0°♎					
desc. node	-1460 Aug 02 j 09:59	19°♎26'49		conjunction	-1455 Jun 12 j 19:54	7°♊20'16	0°49'02
	-1460 Aug 17 j 13:08	0°♏		minimum elong	-1455 Jun 12 j 18:34	7°♊18'08	0°49'03
	-1460 Sep 27 j 10:38	0°♌		max. Earth dist.	-1455 Jun 19 j 11:09	11°♊35'09	2.66324 AU
	-1460 Nov 05 j 08:32	0°♌			-1455 Jul 18 j 08:02	0°♋	
	-1460 Dec 13 j 11:25	0°♌		morning rise	-1455 Jul 28 j 23:47	6°♋46'55	
evening set	-1459 Jan 03 j 06:33	16°♌19'59			-1455 Sep 03 j 11:35	0°♏	
	-1459 Jan 20 j 20:12	0°♍			-1455 Oct 20 j 12:42	0°♎	
	-1459 Mar 01 j 08:12	0°♍			-1455 Dec 06 j 16:00	0°♏	
					-1454 Jan 23 j 19:25	0°♌	
conjunction	-1459 Mar 09 j 08:07	5°♍55'27	-0°48'45		-1454 Mar 17 j 06:35	0°♌	
minimum elong	-1459 Mar 09 j 10:45	6°♍00'18	0°48'43	desc. node	-1454 Mar 25 j 07:22	4°♌01'50	
	-1459 Apr 11 j 15:13	0°♍		retrograde	-1454 May 23 j 00:19	21°♌11'11	
max. Earth dist.	-1459 Apr 22 j 02:21	7°♍22'07	2.49224 AU	opposition	-1454 Jun 22 j 08:10	16°♌11'26	-5°35'26

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

greatest brilliancy	-1454 Jun 22 j 11:54	16° $\text{♁}$ 08'57	-2.9m			-1449 Aug 23 j 09:56	0° $\text{♁}$	
min. Earth dist.	-1454 Jun 23 j 11:59	15° $\text{♁}$ 52'56	0.37694 AU	max. Earth dist.		-1449 Sep 04 j 21:20	8° $\text{♁}$ 33'23	2.52462 AU
direct	-1454 Jul 22 j 16:05	11° $\text{♁}$ 04'33				-1449 Oct 05 j 07:54	0° $\text{♁}$	
	-1454 Sep 20 j 10:51	0° $\text{♁}$						
	-1454 Nov 09 j 14:56	0° $\text{♁}$		conjunction		-1449 Oct 08 j 07:30	2° $\text{♁}$ 08'39	0°24'13
	-1454 Dec 25 j 13:09	0° $\text{♁}$		minimum elong		-1449 Oct 08 j 08:37	2° $\text{♁}$ 10'41	0°24'12
asc. node	-1453 Jan 25 j 18:12	20° $\text{♁}$ 31'37		desc. node		-1449 Nov 15 j 05:14	0° $\text{♁}$ 01'15	
	-1453 Feb 09 j 05:59	0° $\text{♁}$				-1449 Nov 15 j 04:34	0° $\text{♁}$	
	-1453 Mar 27 j 16:15	0° $\text{♁}$		morning rise		-1449 Dec 01 j 05:43	12° $\text{♁}$ 07'08	
	-1453 May 13 j 19:32	0° $\text{♁}$				-1449 Dec 24 j 13:34	0° $\text{♁}$	
evening set	-1453 Jun 03 j 23:25	13° $\text{♁}$ 24'19				-1448 Feb 01 j 04:11	0° $\text{♁}$	
	-1453 Jun 30 j 02:57	0° $\text{♁}$				-1448 Mar 10 j 20:19	0° $\text{♁}$	
max. Earth dist.	-1453 Jul 12 j 17:58	8° $\text{♁}$ 02'52	2.66906 AU			-1448 Apr 19 j 12:54	0° $\text{♁}$	
						-1448 May 31 j 09:41	0° $\text{♁}$	
conjunction	-1453 Jul 20 j 09:47	12° $\text{♁}$ 56'38	1°09'16			-1448 Jul 16 j 08:31	0° $\text{♁}$	
minimum elong	-1453 Jul 20 j 09:22	12° $\text{♁}$ 55'59	1°09'17			-1448 Sep 12 j 02:35	0° $\text{♁}$	
	-1453 Aug 15 j 21:35	0° $\text{♁}$		asc. node		-1448 Sep 16 j 14:51	1° $\text{♁}$ 42'51	
morning rise	-1453 Sep 03 j 04:52	11° $\text{♁}$ 54'49		retrograde		-1448 Oct 23 j 13:34	9° $\text{♁}$ 14'25	
	-1453 Sep 30 j 15:02	0° $\text{♁}$		min. Earth dist.		-1448 Nov 29 j 21:24	0° $\text{♁}$ 24'09	0.65136 AU
	-1453 Nov 14 j 02:38	0° $\text{♁}$				-1448 Nov 30 j 21:26	30° $\text{♁}$	
	-1453 Dec 27 j 10:32	0° $\text{♁}$		opposition		-1448 Dec 02 j 14:59	29° $\text{♁}$ 18'10	2°48'28
	-1452 Feb 07 j 22:14	0° $\text{♁}$		greatest brilliancy		-1448 Dec 02 j 07:11	29° $\text{♁}$ 26'01	-1.4m
desc. node	-1452 Feb 10 j 06:03	1° $\text{♁}$ 39'06		direct		-1447 Jan 10 j 21:11	19° $\text{♁}$ 56'53	
	-1452 Mar 21 j 06:04	0° $\text{♁}$				-1447 Feb 25 j 13:39	0° $\text{♁}$	
	-1452 May 04 j 06:35	0° $\text{♁}$				-1447 Apr 28 j 12:56	0° $\text{♁}$	
	-1452 Jun 27 j 20:45	0° $\text{♁}$				-1447 Jun 18 j 05:31	0° $\text{♁}$	
retrograde	-1452 Jul 31 j 19:34	7° $\text{♁}$ 24'17				-1447 Aug 03 j 09:05	0° $\text{♁}$	
min. Earth dist.	-1452 Aug 28 j 05:46	2° $\text{♁}$ 19'53	0.44150 AU			-1447 Sep 15 j 07:50	0° $\text{♁}$	
greatest brilliancy	-1452 Sep 03 j 23:59	0° $\text{♁}$ 04'18	-2.5m	desc. node		-1447 Oct 02 j 03:35	12° $\text{♁}$ 16'08	
	-1452 Sep 04 j 05:06	30° $\text{♁}$		evening set		-1447 Oct 05 j 05:47	14° $\text{♁}$ 33'10	
opposition	-1452 Sep 05 j 05:47	29° $\text{♁}$ 39'16	-4°52'15			-1447 Oct 25 j 20:39	0° $\text{♁}$	
direct	-1452 Oct 07 j 04:28	23° $\text{♁}$ 20'32		max. Earth dist.		-1447 Oct 28 j 10:36	1° $\text{♁}$ 57'34	2.40014 AU
	-1452 Nov 10 j 14:35	0° $\text{♁}$						
asc. node	-1452 Dec 12 j 17:53	13° $\text{♁}$ 51'44		conjunction		-1447 Dec 02 j 19:03	29° $\text{♁}$ 13'42	-0°39'28
	-1451 Jan 12 j 04:14	0° $\text{♁}$		minimum elong		-1447 Dec 02 j 16:29	29° $\text{♁}$ 08'40	0°39'28
	-1451 Mar 04 j 18:20	0° $\text{♁}$				-1447 Dec 03 j 18:47	0° $\text{♁}$	
	-1451 Apr 23 j 06:50	0° $\text{♁}$				-1446 Jan 10 j 23:01	0° $\text{♁}$	
	-1451 Jun 10 j 16:04	0° $\text{♁}$		morning rise		-1446 Feb 07 j 21:43	21° $\text{♁}$ 55'41	
evening set	-1451 Jul 10 j 18:19	19° $\text{♁}$ 05'22				-1446 Feb 18 j 06:44	0° $\text{♁}$	
	-1451 Jul 27 j 16:05	0° $\text{♁}$				-1446 Mar 29 j 14:55	0° $\text{♁}$	
max. Earth dist.	-1451 Aug 05 j 14:29	5° $\text{♁}$ 49'30	2.62144 AU			-1446 May 09 j 19:16	0° $\text{♁}$	
						-1446 Jun 22 j 15:09	0° $\text{♁}$	
conjunction	-1451 Aug 26 j 03:50	19° $\text{♁}$ 24'25	1°02'28	asc. node		-1446 Aug 04 j 15:05	27° $\text{♁}$ 08'08	
minimum elong	-1451 Aug 26 j 04:53	19° $\text{♁}$ 26'10	1°02'28			-1446 Aug 09 j 10:30	0° $\text{♁}$	
	-1451 Sep 10 j 22:10	0° $\text{♁}$				-1446 Oct 05 j 18:09	0° $\text{♁}$	
morning rise	-1451 Oct 11 j 21:48	21° $\text{♁}$ 18'03		retrograde		-1446 Nov 27 j 03:31	13° $\text{♁}$ 10'41	
	-1451 Oct 24 j 07:07	0° $\text{♁}$		opposition		-1445 Jan 05 j 21:58	3° $\text{♁}$ 38'43	4°23'23
	-1451 Dec 04 j 22:41	0° $\text{♁}$		greatest brilliancy		-1445 Jan 06 j 00:24	3° $\text{♁}$ 36'17	-1.3m
desc. node	-1451 Dec 28 j 05:55	17° $\text{♁}$ 14'34		min. Earth dist.		-1445 Jan 07 j 00:25	3° $\text{♁}$ 12'20	0.67400 AU
	-1450 Jan 14 j 06:11	0° $\text{♁}$				-1445 Jan 15 j 06:39	30° $\text{♁}$	
	-1450 Feb 22 j 19:49	0° $\text{♁}$		direct		-1445 Feb 15 j 20:37	23° $\text{♁}$ 43'41	
	-1450 Apr 03 j 12:07	0° $\text{♁}$				-1445 Mar 22 j 16:15	0° $\text{♁}$	
	-1450 May 14 j 15:40	0° $\text{♁}$				-1445 May 25 j 20:17	0° $\text{♁}$	
	-1450 Jun 29 j 01:15	0° $\text{♁}$				-1445 Jul 13 j 18:17	0° $\text{♁}$	
	-1450 Sep 09 j 23:40	0° $\text{♁}$		desc. node		-1445 Aug 20 j 02:06	25° $\text{♁}$ 26'11	
retrograde	-1450 Sep 17 j 05:55	0° $\text{♁}$ 21'45				-1445 Aug 26 j 12:14	0° $\text{♁}$	
	-1450 Sep 24 j 07:51	30° $\text{♁}$				-1445 Oct 06 j 04:12	0° $\text{♁}$	
min. Earth dist.	-1450 Oct 19 j 23:11	23° $\text{♁}$ 07'35	0.56702 AU			-1445 Nov 14 j 00:08	0° $\text{♁}$	
opposition	-1450 Oct 26 j 06:57	20° $\text{♁}$ 39'15	-0°11'48	evening set		-1445 Dec 07 j 11:52	18° $\text{♁}$ 29'29	
greatest brilliancy	-1450 Nov 21 j 20:25	13° $\text{♁}$ 01'23	-2.0m			-1445 Dec 22 j 01:48	0° $\text{♁}$	
asc. node	-1450 Oct 30 j 16:22	18° $\text{♁}$ 57'54				-1444 Jan 29 j 08:49	0° $\text{♁}$	
direct	-1450 Dec 01 j 13:47	12° $\text{♁}$ 23'22						
	-1449 Feb 02 j 08:14	0° $\text{♁}$		conjunction		-1444 Feb 12 j 05:20	10° $\text{♁}$ 40'42	-1°03'03
	-1449 Apr 01 j 00:51	0° $\text{♁}$		minimum elong		-1444 Feb 12 j 07:06	10° $\text{♁}$ 44'06	1°03'04
	-1449 May 22 j 02:56	0° $\text{♁}$				-1444 Mar 08 j 18:12	0° $\text{♁}$	
	-1449 Jul 09 j 01:56	0° $\text{♁}$		max. Earth dist.		-1444 Apr 02 j 00:08	17° $\text{♁}$ 50'49	2.43954 AU
evening set	-1449 Aug 19 j 12:59	27° $\text{♁}$ 22'12		morning rise		-1444 Apr 17 j 07:29	28° $\text{♁}$ 50'36	

## Planetary Phenomena of Mars from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 46

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1444 Apr 18 j 22:31	0°♄		min. Earth dist.	-1439 May 28 j 06:07	15°♌18'07	0.40157 AU
	-1444 Jun 01 j 08:36	0°♄		direct	-1439 Jun 24 j 10:21	10°♌49'24	
asc. node	-1444 Jun 21 j 14:37	13°♄25'54			-1439 Aug 22 j 10:34	0°♄	
	-1444 Jul 17 j 08:21	0°♄			-1439 Oct 09 j 13:36	0°♄	
	-1444 Sep 04 j 15:37	0°♄			-1439 Nov 22 j 04:00	0°♄	
	-1444 Oct 31 j 07:41	0°♄			-1438 Jan 04 j 10:34	0°♄	
retrograde	-1443 Jan 01 j 23:22	17°♄20'08		asc. node	-1438 Feb 11 j 10:09	25°♄48'55	
opposition	-1443 Feb 09 j 08:27	8°♄35'06	4°40'18		-1438 Feb 17 j 16:06	0°♄	
greatest brilliancy	-1443 Feb 10 j 03:00	8°♄17'09	-1.5m		-1438 Apr 04 j 05:01	0°♄	
min. Earth dist.	-1443 Feb 14 j 07:02	6°♄40'18	0.63142 AU	evening set	-1438 May 19 j 20:06	29°♄21'42	
	-1443 Mar 08 j 00:46	30°♄			-1438 May 20 j 20:05	0°♄	
direct	-1443 Mar 22 j 13:06	28°♄36'25		max. Earth dist.	-1438 Jul 03 j 19:24	28°♄00'38	2.67338 AU
	-1443 Apr 06 j 18:31	0°♄					
	-1443 Jun 17 j 05:34	0°♄		conjunction	-1438 Jul 06 j 00:34	29°♄25'17	1°04'25
desc. node	-1443 Jul 07 j 01:09	12°♄00'26		minimum elong	-1438 Jul 05 j 23:39	29°♄23'50	1°04'27
	-1443 Aug 03 j 07:42	0°♄			-1438 Jul 06 j 22:22	0°♄	
	-1443 Sep 14 j 02:03	0°♄		morning rise	-1438 Aug 19 j 23:24	28°♄11'19	
	-1443 Oct 23 j 08:56	0°♄			-1438 Aug 22 j 18:53	0°♄	
	-1443 Nov 30 j 17:40	0°♄			-1438 Oct 07 j 21:54	0°♄	
	-1442 Jan 08 j 08:04	0°♄			-1438 Nov 22 j 03:56	0°♄	
evening set	-1442 Feb 13 j 03:05	27°♄03'48			-1437 Jan 05 j 17:14	0°♄	
	-1442 Feb 17 j 02:12	0°♄			-1437 Feb 19 j 01:14	0°♄	
	-1442 Mar 30 j 15:19	0°♄		desc. node	-1437 Feb 27 j 00:14	5°♄20'55	
					-1437 Apr 05 j 12:58	0°♄	
conjunction	-1442 Apr 13 j 08:57	9°♄36'21	-0°15'39		-1437 May 29 j 01:20	0°♄	
minimum elong	-1442 Apr 13 j 09:50	9°♄37'54	0°15'38	retrograde	-1437 Jul 08 j 18:17	10°♄04'46	
behind sun begin	-1442 Apr 13 j 06:23	9°♄31'54		min. Earth dist.	-1437 Aug 04 j 10:56	5°♄35'20	0.39832 AU
behind sun end	-1442 Apr 13 j 13:18	9°♄43'54		greatest brilliancy	-1437 Aug 09 j 09:33	4°♄07'15	-2.8m
asc. node	-1442 May 09 j 12:46	27°♄29'52		opposition	-1437 Aug 10 j 15:41	3°♄44'44	-6°29'01
	-1442 May 13 j 05:58	0°♄			-1437 Aug 25 j 00:32	30°♄	
max. Earth dist.	-1442 May 14 j 07:03	0°♄42'05	2.56528 AU	direct	-1437 Sep 09 j 22:04	28°♄20'08	
morning rise	-1442 Jun 06 j 07:21	15°♄58'34			-1437 Sep 26 j 02:55	0°♄	
	-1442 Jun 27 j 20:48	0°♄			-1437 Dec 04 j 21:56	0°♄	
	-1442 Aug 14 j 07:02	0°♄		asc. node	-1437 Dec 30 j 08:37	14°♄43'40	
	-1442 Oct 02 j 18:41	0°♄			-1436 Jan 24 j 17:03	0°♄	
	-1442 Nov 25 j 15:23	0°♄			-1436 Mar 13 j 10:54	0°♄	
retrograde	-1441 Feb 16 j 05:37	27°♄02'11			-1436 Apr 30 j 18:47	0°♄	
opposition	-1441 Mar 23 j 19:27	19°♄36'10	2°59'43		-1436 Jun 17 j 15:19	0°♄	
greatest brilliancy	-1441 Mar 24 j 18:24	19°♄15'33	-2.0m	evening set	-1436 Jun 26 j 02:46	5°♄22'12	
min. Earth dist.	-1441 Mar 31 j 21:22	16°♄42'33	0.52744 AU	max. Earth dist.	-1436 Jul 26 j 15:06	24°♄54'15	2.64640 AU
direct	-1441 May 01 j 23:36	10°♄31'52			-1436 Aug 03 j 11:51	0°♄	
desc. node	-1441 May 24 j 23:30	13°♄49'43					
	-1441 Jul 02 j 08:17	0°♄		conjunction	-1436 Aug 11 j 04:09	5°♄00'06	1°08'34
	-1441 Aug 19 j 09:36	0°♄		minimum elong	-1436 Aug 11 j 04:40	5°♄00'56	1°08'35
	-1441 Sep 29 j 22:00	0°♄			-1436 Sep 17 j 21:09	0°♄	
	-1441 Nov 08 j 13:29	0°♄		morning rise	-1436 Sep 25 j 16:16	5°♄16'03	
	-1441 Dec 18 j 04:13	0°♄			-1436 Oct 31 j 14:35	0°♄	
	-1440 Jan 27 j 20:20	0°♄			-1436 Dec 12 j 18:54	0°♄	
	-1440 Mar 10 j 05:02	0°♄		desc. node	-1435 Jan 13 j 22:38	23°♄29'55	
asc. node	-1440 Mar 26 j 11:42	11°♄11'10			-1435 Jan 22 j 17:38	0°♄	
evening set	-1440 Apr 07 j 00:37	19°♄00'27			-1435 Mar 04 j 00:16	0°♄	
	-1440 Apr 23 j 10:35	0°♄			-1435 Apr 13 j 13:39	0°♄	
					-1435 May 26 j 07:45	0°♄	
conjunction	-1440 May 28 j 06:45	22°♄52'21	0°34'43		-1435 Jul 16 j 16:22	0°♄	
minimum elong	-1440 May 28 j 05:31	22°♄50'20	0°34'44	retrograde	-1435 Aug 31 j 14:11	12°♄18'42	
	-1440 Jun 08 j 07:06	0°♄		min. Earth dist.	-1435 Oct 01 j 03:49	5°♄53'10	0.51977 AU
max. Earth dist.	-1440 Jun 09 j 23:19	1°♄04'51	2.64619 AU	opposition	-1435 Oct 08 j 15:09	3°♄04'18	-1°50'45
morning rise	-1440 Jul 14 j 19:33	23°♄23'01		greatest brilliancy	-1435 Oct 08 j 03:53	3°♄14'57	-2.1m
	-1440 Jul 25 j 05:31	0°♄			-1435 Oct 17 j 04:50	30°♄	
	-1440 Sep 10 j 17:42	0°♄		direct	-1435 Nov 12 j 09:08	25°♄27'13	
	-1440 Oct 28 j 17:49	0°♄		asc. node	-1435 Nov 16 j 08:00	25°♄33'19	
	-1440 Dec 17 j 00:35	0°♄			-1435 Dec 10 j 18:29	0°♄	
	-1439 Feb 08 j 20:19	0°♄			-1434 Feb 15 j 22:59	0°♄	
desc. node	-1439 Apr 10 j 23:37	21°♄46'10			-1434 Apr 09 j 22:06	0°♄	
retrograde	-1439 Apr 21 j 05:01	22°♄23'52			-1434 May 29 j 15:22	0°♄	
opposition	-1439 May 22 j 08:18	17°♄00'04	-2°42'27		-1434 Jul 16 j 03:00	0°♄	
greatest brilliancy	-1439 May 22 j 21:14	16°♄50'46	-2.8m	evening set	-1434 Aug 03 j 13:11	12°♄01'59	

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Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

max. Earth dist.	-1434 Aug 22 j 24:00	25°00'08	2.56769 AU		-1429 Apr 27 j 07:38	0°♄	
	-1434 Aug 30 j 09:10	0°♍			-1429 Jun 09 j 18:40	0°♄	
				asc. node	-1429 Jul 09 j 06:04	19°♄18'40	
conjunction	-1434 Sep 20 j 11:46	14°♍31'29	0°42'59		-1429 Jul 26 j 04:17	0°♄	
minimum elong	-1434 Sep 20 j 13:13	14°♍34'01	0°42'57		-1429 Sep 15 j 02:49	0°♄	
	-1434 Oct 12 j 10:22	0°♄			-1429 Nov 22 j 06:10	0°♄	
morning rise	-1434 Nov 09 j 17:56	20°♄31'32		retrograde	-1429 Dec 19 j 01:39	3°♄54'35	
	-1434 Nov 22 j 13:16	0°♍			-1428 Jan 12 j 17:50	30°♄	
desc. node	-1434 Dec 01 j 21:27	6°♍58'59		opposition	-1428 Jan 27 j 03:07	24°♄48'18	4°44'00
	-1433 Jan 01 j 05:31	0°♄		greatest brilliancy	-1428 Jan 27 j 15:25	24°♄36'13	-1.4m
	-1433 Feb 09 j 03:15	0°♄		min. Earth dist.	-1428 Jan 30 j 13:53	23°♄26'57	0.65581 AU
	-1433 Mar 20 j 02:07	0°♄		direct	-1428 Mar 08 j 10:01	14°♄46'40	
	-1433 Apr 29 j 02:49	0°♄			-1428 May 04 j 06:32	0°♄	
	-1433 Jun 10 j 16:33	0°♄			-1428 Jun 27 j 23:32	0°♍	
	-1433 Jul 29 j 00:39	0°♄		desc. node	-1428 Jul 23 j 17:26	16°♍38'44	
asc. node	-1433 Oct 04 j 07:47	24°♄56'42			-1428 Aug 12 j 04:24	0°♄	
retrograde	-1433 Oct 10 j 16:15	25°♄12'43			-1428 Sep 22 j 08:26	0°♍	
min. Earth dist.	-1433 Nov 15 j 07:41	16°♄56'16	0.62500 AU		-1428 Oct 31 j 09:05	0°♄	
opposition	-1433 Nov 19 j 12:23	15°♄15'23	1°50'02		-1428 Dec 08 j 13:39	0°♄	
greatest brilliancy	-1433 Nov 19 j 04:45	15°♄23'01	-1.6m		-1427 Jan 15 j 23:56	0°♄	
direct	-1433 Dec 27 j 18:06	6°♄15'20		evening set	-1427 Jan 18 j 16:03	2°♄03'38	
	-1432 Mar 13 j 06:29	0°♄			-1427 Feb 24 j 13:17	0°♄	
	-1432 May 07 j 14:57	0°♄					
	-1432 Jun 25 j 21:51	0°♄		conjunction	-1427 Mar 22 j 19:16	19°♄13'03	-0°37'24
	-1432 Aug 10 j 15:33	0°♍		minimum elong	-1427 Mar 22 j 21:28	19°♄17'01	0°37'23
evening set	-1432 Sep 15 j 05:08	24°♍44'57			-1427 Apr 06 j 21:30	0°♄	
	-1432 Sep 22 j 12:58	0°♄		max. Earth dist.	-1427 May 01 j 00:27	16°♄50'16	2.52002 AU
max. Earth dist.	-1432 Sep 30 j 22:02	6°♄03'55	2.44834 AU	morning rise	-1427 May 19 j 15:02	29°♄30'25	
desc. node	-1432 Oct 18 j 20:43	19°♄16'30			-1427 May 20 j 08:36	0°♄	
	-1432 Nov 02 j 04:07	0°♍		asc. node	-1427 May 26 j 05:15	3°♄56'00	
					-1427 Jul 05 j 00:07	0°♄	
conjunction	-1432 Nov 08 j 14:26	4°♍52'21	-0°13'52		-1427 Aug 21 j 21:24	0°♄	
minimum elong	-1432 Nov 08 j 13:32	4°♍50'39	0°13'52		-1427 Oct 11 j 23:40	0°♄	
behind sun begin	-1432 Nov 08 j 00:26	4°♍25'47			-1427 Dec 12 j 00:31	0°♍	
behind sun end	-1432 Nov 09 j 02:37	5°♍15'31		retrograde	-1426 Jan 28 j 00:16	10°♍36'11	
	-1432 Dec 11 j 05:34	0°♄		opposition	-1426 Mar 05 j 21:16	2°♍33'55	3°58'33
morning rise	-1431 Jan 09 j 13:33	22°♄57'29		greatest brilliancy	-1426 Mar 06 j 22:01	2°♍10'47	-1.7m
	-1431 Jan 18 j 12:47	0°♄			-1426 Mar 12 j 18:07	30°♄	
	-1431 Feb 25 j 22:34	0°♄		min. Earth dist.	-1426 Mar 12 j 22:37	29°♄55'52	0.57462 AU
	-1431 Apr 06 j 08:14	0°♄		direct	-1426 Apr 15 j 05:26	22°♄57'20	
	-1431 May 17 j 15:41	0°♄			-1426 May 20 j 10:10	0°♍	
	-1431 Jun 30 j 22:34	0°♄		desc. node	-1426 Jun 10 j 17:20	9°♍14'24	
	-1431 Aug 19 j 11:57	0°♄			-1426 Jul 17 j 04:29	0°♄	
asc. node	-1431 Aug 21 j 06:46	0°♄59'06			-1426 Aug 30 j 05:16	0°♍	
	-1431 Nov 05 j 20:17	0°♄			-1426 Oct 09 j 10:27	0°♄	
retrograde	-1431 Nov 13 j 17:13	0°♄22'59			-1426 Nov 17 j 08:40	0°♄	
	-1431 Nov 21 j 08:14	30°♄			-1426 Dec 26 j 10:22	0°♄	
opposition	-1431 Dec 23 j 17:17	20°♄38'39	3°55'29		-1425 Feb 04 j 15:09	0°♄	
min. Earth dist.	-1431 Dec 23 j 07:15	20°♄48'42	0.67282 AU		-1425 Mar 18 j 14:03	0°♄	
greatest brilliancy	-1431 Dec 23 j 14:23	20°♄41'33	-1.3m	evening set	-1425 Mar 19 j 19:52	0°♄52'02	
direct	-1430 Feb 02 j 03:35	10°♄53'45		asc. node	-1425 Apr 13 j 02:54	17°♄36'12	
	-1430 Apr 09 j 21:03	0°♄			-1425 May 01 j 12:03	0°♄	
	-1430 Jun 04 j 08:54	0°♄					
	-1430 Jul 21 j 19:49	0°♍		conjunction	-1425 May 12 j 16:43	7°♄26'54	0°17'12
	-1430 Sep 03 j 03:41	0°♄		minimum elong	-1425 May 12 j 15:56	7°♄25'37	0°17'12
desc. node	-1430 Sep 05 j 19:02	1°♄53'58		max. Earth dist.	-1425 May 31 j 21:20	20°♄03'54	2.62081 AU
	-1430 Oct 13 j 17:24	0°♍			-1425 Jun 16 j 04:37	0°♄	
evening set	-1430 Nov 10 j 18:39	21°♍34'44		morning rise	-1425 Jul 01 j 04:16	9°♄38'28	
	-1430 Nov 21 j 13:23	0°♄			-1425 Aug 02 j 05:03	0°♄	
	-1430 Dec 29 j 15:11	0°♄			-1425 Sep 19 j 06:00	0°♄	
					-1425 Nov 07 j 16:18	0°♍	
conjunction	-1429 Jan 14 j 22:24	12°♄50'27	-1°04'57		-1425 Dec 30 j 21:18	0°♄	
minimum elong	-1429 Jan 14 j 21:17	12°♄48'14	1°04'59	retrograde	-1424 Mar 23 j 10:43	28°♄03'14	
	-1429 Feb 05 j 21:29	0°♄		opposition	-1424 Apr 25 j 12:35	21°♄49'09	0°07'48
max. Earth dist.	-1429 Feb 27 j 01:29	16°♄17'24	2.38927 AU	greatest brilliancy	-1423 Aug 26 j 03:29	27°♄41'47	1.8m
	-1429 Mar 17 j 05:04	0°♄		desc. node	-1424 Apr 27 j 16:32	21°♄07'26	
morning rise	-1429 Mar 24 j 15:35	5°♄32'27		min. Earth dist.	-1424 May 03 j 17:06	19°♄12'31	0.44709 AU

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Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

direct	-1424 May 31 j 13:00	14°♄16'15		conjunction	-1419 Sep 04 j 02:17	28°♄29'43	0°56'43
	-1424 Jul 23 j 05:30	0°♍		minimum elong	-1419 Sep 04 j 03:34	28°♄31'54	0°56'43
	-1424 Sep 10 j 00:19	0°♎			-1419 Sep 06 j 07:38	0°♎	
	-1424 Oct 22 j 07:34	0°♏			-1419 Oct 19 j 14:02	0°♐	
	-1424 Dec 02 j 12:41	0°♑		morning rise	-1419 Oct 21 j 19:59	1°♐35'43	
	-1423 Jan 13 j 08:54	0°♒			-1419 Nov 30 j 01:14	0°♑	
	-1423 Feb 25 j 15:12	0°♓		desc. node	-1419 Dec 18 j 14:05	13°♑46'17	
asc. node	-1423 Feb 28 j 01:27	1°♓38'59			-1418 Jan 09 j 03:05	0°♒	
	-1423 Apr 11 j 12:32	0°♈			-1418 Feb 17 j 10:15	0°♓	
evening set	-1423 May 04 j 01:03	14°♈41'56			-1418 Mar 28 j 18:47	0°♑	
	-1423 May 27 j 18:18	0°♉			-1418 May 08 j 08:56	0°♒	
					-1418 Jun 21 j 06:38	0°♓	
conjunction	-1423 Jun 21 j 10:33	15°♉47'32	0°55'46		-1418 Aug 14 j 21:10	0°♈	
minimum elong	-1423 Jun 21 j 09:18	15°♉45'33	0°55'47	retrograde	-1418 Sep 26 j 01:55	10°♈06'36	
max. Earth dist.	-1423 Jun 24 j 20:48	17°♉58'44	2.66923 AU	asc. node	-1418 Oct 20 j 22:37	5°♈45'22	
	-1423 Jul 13 j 17:25	0°♊		min. Earth dist.	-1418 Oct 29 j 21:17	2°♈28'43	0.58987 AU
morning rise	-1423 Aug 06 j 00:40	14°♊51'01		opposition	-1418 Nov 04 j 11:48	0°♈15'35	0°37'29
	-1423 Aug 29 j 17:52	0°♋		greatest brilliancy	-1418 Nov 04 j 08:20	0°♈19'01	-1.7m
	-1423 Oct 15 j 09:49	0°♌			-1418 Nov 05 j 03:34	30°♌♐	
	-1423 Nov 30 j 17:31	0°♍		direct	-1418 Dec 11 j 12:24	21°♐42'11	
	-1422 Jan 16 j 04:47	0°♎			-1417 Jan 20 j 23:23	0°♈	
	-1422 Mar 05 j 04:41	0°♎			-1417 Mar 25 j 14:55	0°♉	
desc. node	-1422 Mar 15 j 15:44	6°♎12'17			-1417 May 16 j 21:26	0°♊	
	-1422 Apr 30 j 22:30	0°♏			-1417 Jul 04 j 06:38	0°♋	
retrograde	-1422 Jun 10 j 01:17	9°♏10'50			-1417 Aug 18 j 18:08	0°♌	
min. Earth dist.	-1422 Jul 08 j 18:55	4°♏28'57	0.37636 AU	evening set	-1417 Aug 29 j 04:31	7°♌08'29	
opposition	-1422 Jul 10 j 15:34	3°♏59'10	-6°34'17	max. Earth dist.	-1417 Sep 13 j 13:35	17°♌50'39	2.49815 AU
greatest brilliancy	-1422 Jul 10 j 05:31	4°♏05'53	-2.9m		-1417 Sep 30 j 16:03	0°♍	
	-1422 Jul 28 j 03:16	30°♌♎					
direct	-1422 Aug 09 j 08:14	29°♎02'23		conjunction	-1417 Oct 19 j 08:34	13°♍34'29	0°11'18
	-1422 Aug 21 j 12:57	0°♏		minimum elong	-1417 Oct 19 j 09:10	13°♍35'35	0°11'16
	-1422 Oct 30 j 18:44	0°♑		behind sun begin	-1417 Oct 18 j 16:35	13°♍05'10	
	-1422 Dec 18 j 14:05	0°♒		behind sun end	-1417 Oct 20 j 01:44	14°♍06'01	
asc. node	-1421 Jan 16 j 01:06	18°♒10'29		desc. node	-1417 Nov 05 j 12:44	26°♍18'24	
	-1421 Feb 03 j 12:03	0°♓			-1417 Nov 10 j 10:58	0°♎	
	-1421 Mar 22 j 13:30	0°♈		morning rise	-1417 Dec 14 j 21:18	26°♎15'36	
	-1421 May 09 j 01:07	0°♉			-1417 Dec 19 j 17:21	0°♎	
evening set	-1421 Jun 12 j 11:30	21°♉44'10			-1416 Jan 27 j 05:09	0°♏	
	-1421 Jun 25 j 12:23	0°♊			-1416 Mar 05 j 18:37	0°♑	
max. Earth dist.	-1421 Jul 18 j 03:38	14°♊25'55	2.66327 AU		-1416 Apr 14 j 07:42	0°♒	
					-1416 May 25 j 21:23	0°♓	
conjunction	-1421 Jul 28 j 15:54	21°♊10'46	1°10'14		-1416 Jul 09 j 23:49	0°♈	
minimum elong	-1421 Jul 28 j 15:49	21°♊10'38	1°10'16		-1416 Sep 01 j 02:11	0°♉	
	-1421 Aug 11 j 07:34	0°♋		asc. node	-1416 Sep 06 j 22:28	2°♉44'56	
morning rise	-1421 Sep 11 j 13:17	20°♋27'11		retrograde	-1416 Oct 31 j 08:03	17°♉21'24	
	-1421 Sep 25 j 22:01	0°♌		min. Earth dist.	-1416 Dec 08 j 11:37	8°♉14'43	0.66172 AU
	-1421 Nov 09 j 02:38	0°♍		opposition	-1416 Dec 10 j 09:54	7°♉28'09	3°16'30
	-1421 Dec 21 j 23:28	0°♎		greatest brilliancy	-1416 Dec 10 j 03:11	7°♉34'54	-1.4m
desc. node	-1420 Jan 31 j 15:09	29°♎09'08			-1415 Jan 01 j 10:30	30°♌♎	
	-1420 Feb 01 j 19:16	0°♎		direct	-1415 Jan 19 j 03:14	27°♎57'23	
	-1420 Mar 14 j 04:12	0°♏			-1415 Feb 07 j 05:45	0°♉	
	-1420 Apr 25 j 09:12	0°♑			-1415 Apr 21 j 22:05	0°♊	
	-1420 Jun 11 j 06:40	0°♒			-1415 Jun 12 j 22:19	0°♋	
retrograde	-1420 Aug 12 j 19:36	21°♒21'51			-1415 Jul 29 j 12:07	0°♌	
min. Earth dist.	-1420 Sep 10 j 05:18	15°♒49'13	0.46917 AU		-1415 Sep 10 j 14:07	0°♍	
greatest brilliancy	-1420 Sep 17 j 08:18	13°♒18'38	-2.3m	desc. node	-1415 Sep 22 j 12:16	8°♍39'18	
opposition	-1420 Sep 18 j 08:04	12°♒57'35	-3°44'59	evening set	-1415 Oct 17 j 15:48	27°♍21'54	
direct	-1420 Oct 21 j 08:47	6°♒08'27			-1415 Oct 21 j 03:23	0°♎	
asc. node	-1420 Dec 03 j 00:07	15°♒45'36		max. Earth dist.	-1415 Nov 25 j 18:08	27°♎26'41	2.37917 AU
	-1419 Jan 03 j 04:38	0°♓			-1415 Nov 29 j 00:35	0°♎	
	-1419 Feb 26 j 14:57	0°♈					
	-1419 Apr 18 j 02:25	0°♉		conjunction	-1415 Dec 17 j 19:35	14°♎45'29	-0°51'56
	-1419 Jun 05 j 21:24	0°♊		minimum elong	-1415 Dec 17 j 16:42	14°♎39'48	0°51'56
evening set	-1419 Jul 19 j 07:15	27°♊34'11			-1414 Jan 06 j 03:28	0°♋	
	-1419 Jul 23 j 01:18	0°♋			-1414 Feb 13 j 10:03	0°♌	
max. Earth dist.	-1419 Aug 11 j 17:36	12°♋52'49	2.60435 AU	morning rise	-1414 Feb 24 j 17:12	8°♌44'05	
					-1414 Mar 24 j 17:09	0°♍	



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Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

	-1414 May 04 j 19:33	0°♈				-1409 Jun 17 j 19:33	0°♊		
	-1414 Jun 17 j 10:20	0°♉				-1409 Aug 11 j 11:46	0°♌		
asc. node	-1414 Jul 25 j 21:20	24°♉42'27				-1409 Sep 23 j 09:47	0°♍		
	-1414 Aug 03 j 12:46	0°♊				-1409 Nov 02 j 16:30	0°♎		
	-1414 Sep 26 j 10:54	0°♋				-1409 Dec 12 j 17:10	0°♏		
retrograde	-1414 Dec 05 j 00:07	20°♋58'08				-1408 Jan 22 j 16:50	0°♐		
opposition	-1413 Jan 13 j 13:23	11°♋34'21	4°34'16			-1408 Mar 05 j 07:20	0°♑		
greatest brilliancy	-1413 Jan 13 j 19:10	11°♋28'36	-1.3m		asc. node	-1408 Mar 16 j 17:57	7°♑50'39		
min. Earth dist.	-1413 Jan 15 j 11:33	10°♋48'30	0.67044 AU		evening set	-1408 Apr 17 j 04:58	28°♑59'58		
direct	-1413 Feb 23 j 16:23	1°♋35'44				-1408 Apr 18 j 17:10	0°♒		
	-1413 May 18 j 19:58	0°♌				-1408 Jun 03 j 15:50	0°♊		
	-1413 Jul 08 j 05:40	0°♍							
desc. node	-1413 Aug 10 j 11:07	22°♍17'01			conjunction	-1408 Jun 06 j 07:11	1°♊42'02	0°43'27	
	-1413 Aug 21 j 10:31	0°♎			minimum elong	-1408 Jun 06 j 05:51	1°♊39'53	0°43'27	
	-1413 Oct 01 j 06:40	0°♏			max. Earth dist.	-1408 Jun 15 j 12:57	7°♊38'23	2.65662 AU	
	-1413 Nov 09 j 04:07	0°♐				-1408 Jul 20 j 13:33	0°♋		
	-1413 Dec 17 j 06:16	0°♑			morning rise	-1408 Jul 22 j 23:59	1°♋32'54		
evening set	-1413 Dec 23 j 03:13	4°♑37'43				-1408 Sep 05 j 20:29	0°♌		
	-1412 Jan 24 j 13:38	0°♒				-1408 Oct 23 j 06:43	0°♍		
						-1408 Dec 10 j 05:23	0°♎		
conjunction	-1412 Feb 27 j 08:07	25°♒47'00	-0°55'59			-1407 Jan 29 j 05:08	0°♏		
minimum elong	-1412 Feb 27 j 10:42	25°♒51'50	0°55'59			-1407 Mar 30 j 03:30	0°♐		
	-1412 Mar 03 j 23:17	0°♑			desc. node	-1407 Apr 01 j 08:29	0°♑49'40		
max. Earth dist.	-1412 Apr 14 j 11:06	0°♑13'19	2.46886 AU		retrograde	-1407 May 08 j 18:33	8°♑28'56		
	-1412 Apr 14 j 03:36	0°♑			opposition	-1407 Jun 08 j 07:41	3°♑24'00	-4°25'50	
morning rise	-1412 Apr 29 j 20:06	11°♑02'08			greatest brilliancy	-1407 Jun 08 j 19:06	3°♑16'11	-2.9m	
	-1412 May 27 j 12:38	0°♒			min. Earth dist.	-1407 Jun 11 j 20:12	2°♑26'18	0.38461 AU	
asc. node	-1412 Jun 11 j 19:41	10°♒12'21				-1407 Jun 21 j 15:26	30°♒♌		
	-1412 Jul 12 j 07:25	0°♊			direct	-1407 Jul 09 j 17:21	27°♌53'59		
	-1412 Aug 29 j 22:18	0°♋				-1407 Jul 27 j 12:55	0°♍		
	-1412 Oct 22 j 18:10	0°♌				-1407 Sep 29 j 13:56	0°♎		
retrograde	-1411 Jan 11 j 00:32	25°♌48'17				-1407 Nov 14 j 20:31	0°♏		
opposition	-1411 Feb 17 j 22:11	17°♌16'56	4°30'31			-1407 Dec 29 j 08:42	0°♐		
greatest brilliancy	-1411 Feb 18 j 19:36	16°♌56'23	-1.5m		asc. node	-1406 Feb 01 j 16:16	22°♐58'13		
min. Earth dist.	-1411 Feb 23 j 15:24	15°♌05'25	0.61376 AU			-1406 Feb 12 j 06:56	0°♑		
direct	-1411 Mar 30 j 21:51	7°♌23'19				-1406 Mar 30 j 06:11	0°♒		
	-1411 Jun 09 j 00:01	0°♍				-1406 May 16 j 03:13	0°♊		
desc. node	-1411 Jun 27 j 09:25	10°♍25'02			evening set	-1406 May 28 j 13:46	7°♊54'27		
	-1411 Jul 28 j 04:47	0°♎				-1406 Jul 02 j 08:03	0°♋		
	-1411 Sep 08 j 14:05	0°♏			max. Earth dist.	-1406 Jul 09 j 01:42	4°♋17'24	2.67200 AU	
	-1411 Oct 18 j 03:35	0°♐							
	-1411 Nov 25 j 16:07	0°♑			conjunction	-1406 Jul 14 j 07:01	7°♋37'13	1°07'42	
	-1410 Jan 03 j 09:32	0°♒			minimum elong	-1406 Jul 14 j 06:23	7°♋36'12	1°07'44	
	-1410 Feb 12 j 06:14	0°♑				-1406 Aug 18 j 03:46	0°♌		
evening set	-1410 Feb 26 j 08:26	10°♑18'50			morning rise	-1406 Aug 28 j 02:15	6°♌26'13		
	-1410 Mar 25 j 21:24	0°♑				-1406 Oct 03 j 01:37	0°♍		
						-1406 Nov 16 j 21:22	0°♎		
conjunction	-1410 Apr 24 j 13:08	20°♑31'34	-0°03'11			-1406 Dec 30 j 17:30	0°♏		
minimum elong	-1410 Apr 24 j 13:18	20°♑31'50	0°03'10			-1405 Feb 11 j 22:14	0°♐		
behind sun begin	-1410 Apr 23 j 14:58	19°♑53'49			desc. node	-1405 Feb 17 j 07:21	3°♑44'48		
behind sun end	-1410 Apr 25 j 11:38	21°♑09'49				-1405 Mar 27 j 07:45	0°♑		
asc. node	-1410 Apr 29 j 19:12	24°♑05'36				-1405 May 12 j 15:54	0°♒		
	-1410 May 08 j 13:21	0°♒			retrograde	-1405 Jul 22 j 21:18	26°♒25'45		
max. Earth dist.	-1410 May 21 j 03:27	8°♒24'15	2.58700 AU		min. Earth dist.	-1405 Aug 18 j 17:03	21°♒40'58	0.42056 AU	
morning rise	-1410 Jun 15 j 16:43	25°♒10'42			greatest brilliancy	-1405 Aug 24 j 21:18	19°♒43'17	-2.6m	
	-1410 Jun 23 j 03:23	0°♊			opposition	-1405 Aug 26 j 05:19	19°♒17'43	-5°40'12	
	-1410 Aug 09 j 08:29	0°♋			direct	-1405 Sep 26 j 08:02	13°♒24'08		
	-1410 Sep 27 j 04:24	0°♌				-1405 Nov 23 j 07:35	0°♍		
	-1410 Nov 17 j 21:41	0°♍			asc. node	-1405 Dec 20 j 15:51	14°♍04'36		
	-1409 Jan 20 j 06:34	0°♎				-1404 Jan 17 j 17:16	0°♏		
retrograde	-1409 Feb 28 j 06:48	7°♎43'49				-1404 Mar 07 j 20:55	0°♐		
opposition	-1409 Apr 04 j 01:30	0°♎41'05	2°09'54			-1404 Apr 25 j 19:39	0°♑		
greatest brilliancy	-1409 Apr 04 j 19:39	0°♎25'18	-2.1m			-1404 Jun 12 j 23:10	0°♒		
	-1409 Apr 06 j 00:38	30°♎♍			evening set	-1404 Jul 04 j 11:29	13°♋37'46		
min. Earth dist.	-1409 Apr 12 j 11:55	27°♍45'54	0.49909 AU			-1404 Jul 29 j 22:17	0°♌		
direct	-1409 May 12 j 07:44	22°♍03'03			max. Earth dist.	-1404 Aug 01 j 07:14	1°♌32'33	2.63361 AU	
desc. node	-1409 May 15 j 08:30	22°♍06'48							

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

conjunction	-1404 Aug 19 j 16:00	13°♌34'33	1°05'35		-1399 Oct 12 j 16:02	0°♊	
minimum elong	-1404 Aug 19 j 16:50	13°♌35'55	1°05'36	retrograde	-1399 Nov 21 j 10:24	8°♊12'11	
	-1404 Sep 13 j 06:33	0°♎			-1399 Dec 27 j 17:15	30°♎	
morning rise	-1404 Oct 04 j 18:34	14°♎39'21		opposition	-1399 Dec 31 j 07:32	28°♎34'05	4°13'01
	-1404 Oct 26 j 19:59	0°♏		greatest brilliancy	-1399 Dec 31 j 07:23	28°♎34'13	-1.3m
	-1404 Dec 07 j 17:35	0°♐		min. Earth dist.	-1399 Dec 31 j 17:10	28°♎24'27	0.67477 AU
desc. node	-1403 Jan 04 j 07:01	20°♐17'00					
	-1403 Jan 17 j 07:53	0°♑					
	-1403 Feb 26 j 04:17	0°♑					
	-1403 Apr 07 j 04:11	0°♒					
	-1403 May 18 j 19:40	0°♒					
	-1403 Jul 04 j 18:43	0°♓					
retrograde	-1403 Sep 10 j 07:20	23°♓18'56					
min. Earth dist.	-1403 Oct 12 j 02:18	16°♓25'32	0.54670 AU				
opposition	-1403 Oct 18 j 23:09	13°♓46'28	-0°51'37				
greatest brilliancy	-1403 Oct 18 j 18:14	13°♓51'13	-1.9m				
asc. node	-1403 Nov 06 j 14:36	7°♓43'52					
direct	-1403 Nov 23 j 13:34	5°♓46'53					
	-1402 Feb 07 j 20:34	0°♈					
	-1402 Apr 04 j 04:19	0°♈					
	-1402 May 24 j 15:45	0°♈					
	-1402 Jul 11 j 10:40	0°♈					
evening set	-1402 Aug 12 j 13:01	21°♈04'08					
	-1402 Aug 25 j 19:01	0°♈					
max. Earth dist.	-1402 Aug 30 j 04:35	2°♈59'46	2.54478 AU				
conjunction	-1402 Sep 30 j 09:30	24°♈42'57	0°32'49				
minimum elong	-1402 Sep 30 j 10:50	24°♈45'20	0°32'47				
	-1402 Oct 07 j 19:33	0°♉					
	-1402 Nov 17 j 19:48	0°♉					
morning rise	-1402 Nov 21 j 12:33	2°♉45'57					
desc. node	-1402 Nov 22 j 06:44	3°♉20'02					
	-1402 Dec 27 j 08:29	0°♊					
	-1401 Feb 04 j 02:02	0°♊					
	-1401 Mar 14 j 20:27	0°♊					
	-1401 Apr 23 j 15:08	0°♊					
	-1401 Jun 04 j 16:09	0°♋					
	-1401 Jul 21 j 07:17	0°♋					
	-1401 Sep 23 j 09:29	0°♋					
asc. node	-1401 Sep 24 j 13:01	0°♋18'59					
retrograde	-1401 Oct 18 j 17:18	3°♋48'45					
	-1401 Nov 11 j 06:17	30°♋					
min. Earth dist.	-1401 Nov 24 j 07:25	25°♋13'13	0.64082 AU				
opposition	-1401 Nov 27 j 17:11	23°♋51'02	2°25'44				
greatest brilliancy	-1401 Nov 27 j 08:57	23°♋59'20	-1.5m				
direct	-1400 Jan 05 j 13:04	14°♋38'43					
	-1400 Mar 04 j 03:10	0°♌					
	-1400 May 01 j 18:14	0°♌					
	-1400 Jun 20 j 20:48	0°♌					
	-1400 Aug 05 j 21:21	0°♌					
	-1400 Sep 17 j 20:48	0°♌					
evening set	-1400 Sep 26 j 06:25	6°♌04'51					
desc. node	-1400 Oct 09 j 05:10	15°♌34'56					
max. Earth dist.	-1400 Oct 14 j 13:30	19°♌33'05	2.42103 AU				
	-1400 Oct 28 j 11:40	0°♍					
conjunction	-1400 Nov 21 j 20:16	18°♍37'39	-0°28'41				
minimum elong	-1400 Nov 21 j 18:21	18°♍33'56	0°28'40				
	-1400 Dec 06 j 11:55	0°♍					
	-1399 Jan 13 j 17:29	0°♍					
morning rise	-1399 Jan 25 j 20:32	9°♍31'50					
	-1399 Feb 21 j 01:38	0°♎					
	-1399 Apr 01 j 09:27	0°♎					
	-1399 May 12 j 13:19	0°♎					
	-1399 Jun 25 j 11:20	0°♎					
asc. node	-1399 Aug 11 j 13:06	29°♎17'14					
	-1399 Aug 12 j 18:33	0°♎					