Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. -11899 May 14 j 22:30 26°≈59'12 0°38'23 -11894 Jan 15 i 05:04 0∘**⊽** conjunction -11899 May 14 j 20:55 26°≈56'28 0°37'58 -11894 Mar 01 j 00:34 minimum elong oom. -11899 May 19 j 07:07 0°**₩** 0°×7 -11894 Apr 18 j 11:15 -11899 Jun 30 j 14:51 $0^{\circ}\Upsilon$ -11894 Jun 13 j 20:58 ೧೦೯ -11899 Jul 04 j 07:17 2°Y40'28 morning rise retrograde -11894 Aug 12 j 03:23 16°**⋜**09'15 -11899 Aug 10 j 06:02 ್0°႘ opposition -11894 Sep 20 j 01:51 6°る54'31 -1°45'19 greatest brilliancy -11899 Sep 18 j 18:15 $0^{\circ}\Pi$ -11894 Sep 20 j 06:21 6°る50'02 -1.4m -11899 Oct 27 j 21:55 0ಂತಾ min. Earth dist. -11894 Sep 22 j 16:45 5°₹51'49 0.65297 AU -11899 Dec 06 j 15:42 0 $^{\circ}\Omega$ -11894 Oct 09 j 07:38 30°R ⊀ -11898 Jan 17 j 05:51 0° m direct -11894 Oct 30 j 18:13 26° ₹ 57'05 desc. node -11898 Jan 28 j 14:49 7° m/48'53 asc. node -11894 Nov 02 j 11:04 26° ₹ 59'52 -11898 Mar 04 j 00:03 0∘**⊽** -11894 Nov 22 j 21:48 0°궁 -11898 May 04 j 04:41 0°M -11893 Jan 30 j 00:39 retrograde -11898 Jun 02 j 06:55 5°ML02'08 -11893 Mar 19 j 12:04 0°**)**€ -11898 Jun 29 j 08:10 30°R ₽ -11893 May 01 j 17:02 $0^{\circ}\Upsilon$ min. Earth dist. -11898 Jul 07 j 01:09 27°**2**06'37 0.60586 AU -11893 Jun 11 j 01:38 0°8 opposition -11898 Jul 11 j 22:19 25°**2**10'18 -5°23'18 -11893 Jul 19 j 21:50 $0^{\circ}\Pi$ greatest brilliancy -11898 Jul 11 j 01:21 25°**2**31'09 -11893 Aug 27 j 07:51 direct -11898 Aug 18 j 06:15 16° **2**28'36 evening set -11893 Sep 06 j 16:39 8°903'07 -11898 Oct 10 j 18:20 0°M desc. node -11893 Sep 19 i 20:54 18°513'35 -11898 Dec 08 j 23:27 0°**∡**7 -11893 Oct 05 j 06:37 asc. node -11897 Jan 27 i 23:21 29° ₹ 29'52 -11897 Jan 28 i 18:58 0°₹ conjunction -11893 Nov 06 j 15:42 $24^{\circ}\Omega$ 13'15 -0°34'14 -11897 Mar 17 i 00:52 0°**≈** minimum elong -11893 Nov 06 j 13:20 $24^{\circ}\Omega 08'54$ 0°33'46 -11897 Apr 30 j 11:41 0°**∀** -11893 Nov 14 j 13:02 0° m -11897 May 10 j 05:00 6° **\(48'03** -11893 Dec 17 j 11:11 23° m 33'22 2.49386 AU evening set max Earth dist -11897 May 26 j 17:05 18° **X** 32'24 2.46744 AU -11893 Dec 26 j 16:49 max Earth dist 0∘⊽ -11897 Jun 11 j 12:00 0°**Υ**° -11892 Jan 04 j 04:39 5°£51'59 morning rise -11892 Feb 09 j 00:40 o°m. -11892 Mar 26 j 15:08 -11897 Jul 03 j 11:08 16°**Υ**17'13 1°12'33 conjunction 00 🛂 -11892 May 14 j 21:46 -11897 Jul 03 j 10:18 16°**Υ**°15'40 1°12'42 0°궁 minimum elong -11892 Jul 08 j 14:48 0°**≈** -11897 Jul 21 j 14:17 0°**8** -11897 Aug 29 j 11:23 0°**Ⅱ** -11892 Sep 19 j 13:18 22°≈42'46 asc. node -11897 Aug 30 j 18:42 1°**Д**00'59 -11892 Sep 20 j 01:51 22°≈42'53 morning rise retrograde -11897 Oct 06 j 23:21 0°95 -11892 Oct 27 j 00:27 14°≈27'56 1°41'13 opposition -11897 Nov 14 j 23:31 0°**Ω** -11892 Oct 27 j 08:27 14°≈20'18 -1.7m greatest brilliancy desc. node -11897 Dec 16 j 07:25 23° Ω 22'38 min. Earth dist. -11892 Nov 02 j 03:00 12°≈08'13 0.58562 AU -11897 Dec 25 j 09:37 0° M direct -11892 Dec 06 j 06:42 4°≈44'41 -11896 Feb 06 j 05:55 0°**♀** -11891 Feb 18 j 04:23 0°**米** -11896 Mar 24 j 02:29 0°M -11891 Apr 06 j 23:45 $0^{\circ}\Upsilon$ -11896 May 20 j 03:42 0° ₹ -11891 May 18 j 23:50 0° 8 -11896 Jul 07 j 13:19 11°**尽** 50'12 -11891 Jun 27 j 17:05 retrograde -11896 Aug 15 j 06:47 2°**尽**28'54 0.66025 AU -11891 Aug 05 j 18:46 min. Earth dist. -11896 Aug 16 j 09:38 2°**₹**01'48 -4°10'52 -11891 Aug 06 j 21:27 opposition desc. node 0°951'06 -11896 Aug 16 j 06:26 2° ₹ 05'01 -1.4m -11891 Sep 14 j 07:27 greatest brilliancy $0^{\circ}\Omega$ -11896 Aug 21 i 11:37 30°RML -11891 Oct 25 i 02:21 direct -11896 Sep 24 j 23:24 22° M28'27 evening set -11891 Nov 04 i 01:34 7° m 08'51 -11896 Nov 02 i 07:33 0° ₹ -11891 Dec 06 j 15:38 asc. node -11896 Dec 15 j 05:18 19° ₹01'47 -11895 Jan 04 i 14:26 0° ₹ -11891 Dec 28 j 09:08 14° \(\Omega\)49'20 -1°13'20 conjunction -11895 Feb 23 j 15:50 0°≈ -11891 Dec 28 j 08:12 14° **2**47'44 1°13'29 minimum elong -11895 Apr 09 j 23:37 0°**₩** -11890 Jan 20 j 02:24 o°m. -11895 May 22 j 04:01 $0^{\circ}\Upsilon$ max. Earth dist. -11890 Jan 20 j 22:25 0°M33'06 2.59837 AU -11895 Jul 01 j 03:30 0°8 morning rise -11890 Feb 18 j 00:27 18°ML55'08 -11890 Mar 07 j 05:32 -11895 Jul 03 j 12:50 1°849'54 00×7 evening set -11895 Aug 08 j 19:27 $0^{\circ}\Pi$ -11890 Apr 23 j 15:55 0°궁 -11890 Jun 11 j 08:15 0°≈ -11895 Sep 02 j 20:34 19°**Д**38'21 0°43'21 0°**)**€ conjunction -11890 Aug 01 j 12:26 -11895 Sep 02 j 23:50 19°**Ⅲ**44'46 minimum elong 0°43'58 asc. node -11890 Aug 07 j 10:15 3°**₩**16'38 -11895 Sep 16 j 02:10 $0^{\circ}\Upsilon$ 0ಂತಾ -11890 Oct 02 j 14:28 -11895 Sep 18 j 05:11 8°**Y**04'52 max. Earth dist. 1°939'36 2.38458 AU retrograde -11890 Nov 11 j 01:03 -11895 Oct 24 j 21:25 0° Ω -11890 Dec 14 j 16:59 1°**Y**29'04 5°49'05 opposition desc. node -11895 Nov 02 j 00:22 6°**Ω**10′18 greatest brilliancy -11890 Dec 16 j 05:06 0°**Y**58'49 -2.3m morning rise -11895 Nov 06 j 12:05 9°**£**33'41 -11890 Dec 19 j 03:16 30°R₩

min. Earth dist.

-11890 Dec 22 j 17:58 28° **★**48'35 0.47220 AU

-11895 Dec 04 j 00:50

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. direct -11889 Jan 20 j 17:04 23° \(26'30 \) conjunction -11884 Apr 28 j 04:42 10°≈50'29 0°18'49 -11889 Feb 22 j 09:32 $0^{\circ}\Upsilon$ -11884 Apr 28 j 03:55 10°≈49'10 0°18'16 minimum elong -11889 Apr 19 j 14:45 -11884 May 26 j 08:41 0°**₩** 0°8 -11889 Jun 02 j 08:59 -11884 Jun 15 j 20:26 14°**升** 16'37 $0^{\circ}\Pi$ morning rise 0°Υ -11889 Jun 25 j 02:36 16°**Ⅲ**25'38 -11884 Jul 07 j 22:50 desc. node -11884 Aug 17 j 22:49 -11889 Jul 13 j 16:23 0ಂತಾ 0°8 -11889 Aug 23 j 19:45 0° Ω -11884 Sep 26 j 21:13 Π $^{\circ}$ 0 0° M -11889 Oct 04 j 20:39 -11884 Nov 05 j 12:00 0ಂತಾ -11889 Nov 17 j 08:28 0∘**⊽** -11884 Dec 15 j 20:16 0 $^{\circ}\Omega$ evening set -11889 Dec 21 j 21:18 23°**♀**05'01 -11883 Jan 27 j 13:56 0° m -11883 Feb 14 j 09:21 11° **m** 34'01 -11888 Jan 01 j 09:33 0°M desc. node -11883 Mar 18 j 03:01 0∘**⊽** -11888 Feb 09 j 17:06 25°MJ31'23 -1°06'23 conjunction retrograde -11883 May 17 j 21:39 18°**♀**58'18 minimum elong -11888 Feb 09 j 18:28 25°M 33'34 1°06'55 min. Earth dist. -11883 Jun 19 j 18:45 11°**♀**45'36 0.56886 AU -11888 Feb 16 j 16:10 0°**∡**¹ greatest brilliancy -11883 Jun 24 j 21:38 9°**£**46'22 -1.8m max. Earth dist. -11888 Feb 16 j 22:03 0°**₹**09'26 2.65532 AU opposition -11883 Jun 26 j 01:03 9° 219'42 -5°20'54 morning rise -11888 Mar 28 j 15:49 26° **₹** 14'08 direct -11883 Aug 01 j 04:45 1°**≏**07'31 -11888 Apr 03 j 13:16 -11883 Oct 25 j 09:01 -11888 May 20 j 10:22 -11883 Dec 18 j 00:56 asc. node -11888 Jun 24 j 02:51 22°≈18'36 -11882 Feb 05 j 11:02 0°궁 5°**ප**05'11 -11888 Jul 06 j 01:15 0°**∀** asc. node -11882 Feb 13 j 13:38 -11888 Aug 21 j 17:40 -11882 Mar 24 i 05:58 0°≈ -11888 Oct 08 j 18:55 0°8 evening set -11882 Apr 21 i 20:16 19°≈09'11 -11888 Dec 02 i 14:01 0°**Ⅱ** -11882 May 07 j 14:41 0°) -11887 Jan 22 j 21:16 13°**Ⅲ**43'06 max. Earth dist. -11882 May 09 j 05:40 1°**)**€07'46 2.51424 AU retrograde opposition -11887 Feb 22 j 16:48 8°**Д**33'41 5°36'39 -11887 Feb 23 j 02:10 8°**Д**27'25 -11882 Jun 12 j 20:03 25° \ 43'13 1°03'53 greatest brilliancy -2.8m conjunction -11887 Feb 23 j 15:17 8° **II** 18'38 0.38528 AU -11882 Jun 12 j 18:10 25° **)** 39'48 min. Earth dist. minimum elong -11887 Mar 25 j 10:50 3°**Д**20'49 -11882 Jun 18 j 17:11 0°**Υ** direct -11887 May 12 j 09:11 15°**Д**58'05 -11882 Jul 28 j 23:38 0°8 desc. node -11887 Jun 08 j 07:48 0°ഇ -11882 Aug 06 j 10:32 6°**8**25'56 morning rise -11887 Jul 27 j 02:49 -11882 Sep 06 j 01:30 0 $^{\circ}\Omega$ $0^{\circ}\Pi$ -11887 Sep 11 j 00:44 -11882 Oct 14 j 17:55 0° m 0ಂತಾ -11887 Oct 26 j 19:37 -11882 Nov 22 j 22:30 0°**Ω** 0∘**⊽** -11887 Dec 12 j 05:30 0°M -11881 Jan 02 j 04:07 29°**Ω**40'32 desc. node -11886 Jan 28 j 04:40 0° **尽** -11881 Jan 02 j 14:58 0° Mp -11881 Feb 15 j 02:00 0°₽ evening set -11886 Jan 31 j 00:54 1° ₹ 48'43 max. Earth dist. -11886 Mar 12 j 08:49 27°**尽** 34'28 2.65921 AU -11881 Apr 05 j 00:01 0°M -11886 Mar 16 j 03:31 0°る retrograde -11881 Jun 24 j 19:55 28°ML17'13 min. Earth dist. -11881 Aug 01 j 03:26 19°M25'45 0.64629 AU conjunction -11886 Mar 20 j 03:22 2°♂33'58 -0°30'53 -11881 Aug 03 j 18:03 18°ML22'39 -4°49'24 opposition -11886 Mar 20 j 04:32 2°₹35'51 0°31'34 -11881 Aug 03 j 08:27 18°M 32'20 -1.4m minimum elong greatest brilliancy -11886 May 01 j 09:32 0°≈ -11881 Sep 11 j 13:58 9°**ጤ**05'57 direct -11886 May 06 j 01:45 3°≈04'24 -11881 Nov 20 j 14:55 0° ⊀ morning rise -11886 May 11 j 18:12 6°≈49'18 -11880 Jan 01 j 18:41 22° ₹ 20'00 asc. node asc. node -11886 Jun 15 j 10:58 0°**米** -11880 Jan 15 i 00:35 0°る -11886 Jul 29 i 04:53 0°Υ -11880 Mar 03 j 14:33 0°≈ -11886 Sep 09 j 20:53 0°8 -11880 Apr 17 j 11:31 0°**)**€ -11880 May 29 j 13:10 -11886 Oct 21 i 23:38 0°II -11886 Dec 03 i 15:15 0°5 -11880 Jun 10 i 11:13 8°Y48'14 evening set -11885 Jan 18 j 18:07 0°Ω -11880 Jul 08 j 12:59 0°8 desc. node -11885 Mar 30 j 11:37 $26^{\circ}\Omega 46'43$ max. Earth dist. -11880 Jul 10 j 15:16 1°**8**36'15 2.39866 AU -11885 Apr 01 j 09:46 26°**Ω**48'16 retrograde min. Earth dist. -11885 Apr 29 j 09:02 21° **Ω**38'51 0.44932 AU conjunction -11880 Aug 08 j 04:09 23°**8**41'07 1°04'43 greatest brilliancy -11885 May 06 j 11:52 $19^{\circ}\Omega$ 16'57 minimum elong -11880 Aug 08 j 06:43 23°846'08 1°05'15 -2.5m -11880 Aug 16 j 06:15 opposition $0^{\circ}\Pi$ direct -11885 Jun 08 j 17:31 12°**Ω**37'40 -11880 Sep 23 j 14:08 0ಂತಾ -11885 Aug 07 j 21:33 -11880 Oct 10 j 19:25 13°523'22 0° m morning rise -11885 Oct 02 j 08:18 -11880 Nov 01 j 10:10 $0^{\circ}\Omega$ 0∘**⊽** -11885 Nov 21 j 10:24 0°M -11880 Nov 18 j 20:09 13°**Ω**09'47 desc. node -11884 Jan 09 j 02:03 0°**⊼** -11880 Dec 11 j 14:30 0° M -11884 Feb 25 j 16:48 0°ಕ -11879 Jan 22 j 21:43 0∘**⊽** evening set -11884 Mar 10 j 12:23 8°**る**51'37 -11879 Mar 09 j 04:17 0°M asc. node -11884 Mar 28 j 13:09 20°♂33'24 -11879 Apr 28 j 06:27 0°**∡**

-11879 Jul 06 j 05:37

-11879 Jul 29 j 02:23

-11879 Aug 19 j 05:45 30°R ⊀

retrograde

0°궁

2°る59'00

max. Earth dist.

-11884 Apr 06 j 11:51 26°♂25'20 2.61044 AU

-11884 Apr 11 j 22:00 0°≈

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. -11879 Sep 06 j 12:27 23°₹28'03 -2°49'00 -11874 Sep 01 i 07:28 $0^{\circ}\Omega$ opposition -11879 Sep 06 j 15:49 23° ₹24'40 -11874 Oct 12 j 16:54 greatest brilliancy 0° m min. Earth dist. -11879 Sep 07 j 16:14 23° ₹ 00'08 -11874 Nov 24 j 17:06 0∘**⊽** 0.66335 AU -11879 Oct 16 j 22:07 13° ₹36'35 direct -11874 Dec 04 j 08:52 6°**£**34'18 evening set -11879 Nov 19 j 01:24 19° ₹27'13 -11873 Jan 08 j 10:34 asc. node 0°M -11879 Dec 15 j 17:59 0°궁 -11878 Feb 09 j 06:43 0°≈ conjunction -11873 Jan 24 j 14:52 10°M 36'25 -1°13'21 -11878 Mar 28 j 00:50 0°**∀** minimum elong -11873 Jan 24 j 15:36 10°M 37'38 1°13'46 $0^{\circ}\Upsilon$ -11878 May 09 j 16:45 max. Earth dist. -11873 Feb 06 j 23:33 19°ML17'26 2.63912 AU -11878 Jun 18 j 20:03 0° 8 -11873 Feb 23 j 14:00 0°**∡**¹ -11878 Jul 27 j 13:18 Π $^{\circ}$ 0 morning rise -11873 Mar 14 j 16:20 12° ₹ 14'09 evening set -11878 Aug 12 j 00:20 12°**Ⅲ**06'42 -11873 Apr 11 j 13:56 0°ಕ -11878 Sep 03 j 20:43 0°ഇ -11873 May 28 j 23:01 desc. node -11878 Oct 06 j 14:19 25°\$20'22 asc. node -11873 Jul 11 j 21:27 27°≈36'30 -11878 Oct 12 j 16:47 $0^{\circ}\Omega$ -11873 Jul 15 j 17:37 0°**)**€ -11873 Sep 03 j 00:02 $0^{\circ}\Upsilon$ conjunction -11878 Oct 13 j 13:21 0°Ω39'06 -0°05'18 -11873 Oct 28 j 17:33 0°8 minimum elong -11878 Oct 13 j 12:55 0°**Ω**38'18 0°04'41 retrograde -11873 Dec 23 j 21:59 15°820'46 behind sun begin -11878 Oct 12 j 11:18 29°549'33 opposition -11872 Jan 24 j 03:42 9°**8**56'14 7°01'47 behind sun end -11878 Oct 14 j 14:32 1°**Ω**27′00 greatest brilliancy -11872 Jan 25 j 12:23 9°**8**32'44 -2.7m -11878 Nov 21 j 20:44 0° m min. Earth dist. -11872 Jan 29 j 12:59 8°**8**23'36 0.40607 AU max. Earth dist. -11878 Nov 26 i 20:19 3°m 37'54 2.44519 AU direct -11872 Feb 26 i 05:08 3°**8**49'49 morning rise -11878 Dec 14 i 06:40 16° m 09'55 -11872 May 08 i 11:09 $0^{\circ}\Pi$ -11877 Jan 02 j 22:58 desc. node -11872 May 28 j 23:55 12°**Ⅲ**34'54 -11877 Feb 16 i 08:41 0°M -11872 Jun 24 j 13:04 0ಂಣ -11877 Apr 04 i 09:42 0°×7 -11872 Aug 07 j 11:18 $0^{\circ}\Omega$ -11877 May 25 j 05:05 0°ಕ -11872 Sep 20 j 05:21 O° m -11877 Jul 26 j 20:21 -11872 Nov 03 j 19:36 0°≈≈ 0∘ଫ -11877 Sep 04 j 15:41 -11872 Dec 19 j 13:04 8°≈04'44 o°m. retrograde -11877 Oct 07 j 04:45 1°≈24'56 -11871 Jan 15 j 11:39 17° ML23'18 evening set asc. node -11877 Oct 10 j 22:09 30°R 궁 -11871 Feb 04 j 03:37 0° ₹ -11877 Oct 12 j 12:38 29°**중**22'37 0°13'54 -11871 Mar 03 j 00:36 17° ₹ 11'42 2.66394 AU opposition max. Earth dist. -11877 Oct 12 j 13:32 29°₹21'45 greatest brilliancy -1.6m min. Earth dist. -11877 Oct 17 j 07:33 27°る30'29 0.61896 AU -11871 Mar 04 j 23:36 18° ₹ 26'53 -0°47'06 conjunction -11877 Nov 22 j 04:37 19°♂27'21 -11871 Mar 05 j 01:07 18° ₹29'18 0°47'44 direct minimum elong -11876 Jan 06 j 04:01 0°≈ -11871 Mar 23 j 00:12 0°る -11876 Mar 02 j 15:04 0°**米** morning rise -11871 Apr 21 j 00:36 18°₹41'46 -11876 Apr 16 j 17:18 0°**Υ** -11871 May 08 j 10:16 0°≈ -11876 May 27 j 19:40 0°**8** asc. node -11871 May 28 j 13:19 13°≈11'00 -11876 Jul 06 j 01:34 0°**Ц** -11871 Jun 22 j 22:44 0°**米** -11876 Aug 13 j 18:42 0°ഇ -11871 Aug 06 j 12:21 $0^{\circ}\Upsilon$ -11876 Aug 23 j 15:01 7°535'44 -11871 Sep 19 j 11:00 0°8 desc. node -11876 Sep 21 j 23:46 0°**Ω** -11871 Nov 02 j 13:58 0°**Ц** -11876 Oct 13 j 10:22 16° **Ω**01'53 -11871 Dec 19 j 03:45 0°5 evening set -11876 Nov 01 j 11:51 0° Mp -11870 Feb 27 j 11:07 0°**Ω** -11870 Mar 08 j 19:13 $0^{\circ}\Omega$ 35'58 retrograde -11876 Dec 09 i 08:14 26° m 53'48 -1°04'32 conjunction -11870 Mar 18 i 03:47 30°R 55 -11876 Dec 09 i 06:07 26° m 50'07 1°04'27 minimum elong min. Earth dist. -11870 Apr 05 i 07:33 25°55'16 0.40766 AU -11876 Dec 13 i 19:32 0°₽ opposition -11870 Apr 11 j 09:30 24°506'03 0°21'31 max. Earth dist. -11875 Jan 08 j 23:08 17° **2**51'38 2.56228 AU greatest brilliancy -11870 Apr 11 j 07:53 24°507'15 -2.8m -11875 Jan 27 j 03:22 0°M desc. node -11870 Apr 16 j 04:32 22°541'54 -11875 Feb 01 j 07:26 3°M24'58 direct -11870 May 12 j 07:20 18°531'45 morning rise -11875 Mar 14 j 08:16 0° **₹** -11870 Jun 27 j 21:18 0 $^{\circ}\Omega$ -11870 Aug 23 j 23:09 -11875 May 01 j 06:01 0°₹ -11875 Jun 20 j 08:13 0°22 -11870 Oct 12 j 10:20 0∘∙თ -11875 Aug 15 j 07:27 0°**∀** -11870 Nov 29 j 13:45 asc. node -11875 Aug 24 j 03:31 4°**)**€02'55 -11869 Jan 16 j 09:13 -11875 Oct 19 j 16:06 18° ¥ 56'14 -11869 Feb 24 j 02:07 24° ₹31'13 retrograde evening set -11875 Nov 23 j 18:53 11° **★** 35'50 -11869 Mar 04 j 15:48 0°궁 opposition 4°13'32 -11875 Nov 24 j 20:01 11°**米** 13'17 -11869 Mar 27 j 21:38 14°**⋜**59'19 2.63557 AU greatest brilliancy -2.0m max. Earth dist. -11875 Dec 01 j 11:36 min. Earth dist. 8°**)** 50'49 0.52002 AU direct -11874 Jan 01 j 13:02 2°**)** 38'47 conjunction -11869 Apr 13 j 06:25 25°₹40'27 -0°01'16 $0^{\circ}\Upsilon$ -11874 Mar 17 j 20:13 minimum elong -11869 Apr 13 j 06:27 25°₹40'31 0°01'54 -11874 May 02 j 15:45 0°8 behind sun begin -11869 Apr 12 j 10:40 25°**⋜**08'02 -11874 Jun 12 j 23:19 $0^{\circ}\Pi$ behind sun end -11869 Apr 14 j 02:15 26° ₹13'00 desc. node -11874 Jul 11 j 18:50 21°**Д**33'25 -11869 Apr 15 j 06:41 26° ₹59'44 asc. node

-11869 Apr 19 j 20:06 0°≈

-11874 Jul 23 j 00:43 0°ഇ

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 4

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Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style.
                                                                            opposition
                     -11869 May 30 j 20:41 27°≈32'18
                                                                                                 -11864 Aug 24 j 04:02 10° ₹ 10'14 -3°43'31
morning rise
                     -11869 Jun 03 j 11:02
                                                                                                -11864 Aug 24 j 03:43 10° ₹ 10'33 -1.4m
                                             0°¥
                                                                            greatest brilliancy
                                                                                                 -11864 Aug 23 j 20:24 10°

√17'55
                     -11869 Jul 16 j 09:50
                                             0^{\circ}\Upsilon
                                                                            min. Earth dist.
                                                                                                                                     0.66406 AU
                                                                                                                         0°х 29′19
                     -11869 Aug 26 j 21:45
                                             0°8
                                                                            direct
                                                                                                 -11864 Oct 03 j 02:07
                     -11869 Oct 06 j 10:43
                                             0^{\circ}\Pi
                                                                            asc. node
                                                                                                 -11864 Dec 05 j 14:37 18° ₹24'35
                     -11869 Nov 15 j 18:56
                                             0ಂತಾ
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                     -11869 Dec 27 j 04:46
                                             0°\Omega
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                     -11868 Feb 10 j 08:52
                                             0° m
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                                                                                                                         0^{\circ}\Upsilon
desc. node
                     -11868 Mar 03 j 04:51 12° m 30'14
                                                                                                 -11863 May 17 j 08:59
                     -11868 Apr 18 j 23:49
                                             0∘⊽
                                                                                                 -11863 Jun 26 j 10:00
                                                                                                                         0°8
retrograde
                     -11868 May 01 j 02:36
                                             0°Ω59'44
                                                                            evening set
                                                                                                 -11863 Jul 17 j 09:23 16°810'50
                     -11868 May 12 j 19:13 30°R M
                                                                                                 -11863 Aug 04 j 02:33
                                                                                                                         0^{\circ}\Pi
min. Earth dist.
                     -11868 May 31 j 22:55 24° m 34'58
                                                         0.52444 AU
                                                                                                 -11863 Sep 11 j 09:16
                                                                                                                         0ಂತಾ
greatest brilliancy
                     -11868 Jun 07 j 02:17 22° m 17'35
opposition
                     -11868 Jun 08 j 08:50 21° Mp 48'57
                                                         -4°50'06
                                                                            conjunction
                                                                                                 -11863 Sep 17 j 15:34
                                                                                                                         4°953'18
                                                                                                                                     0°26'52
direct
                     -11868 Jul 13 j 04:21 14° Mp 13'25
                                                                             minimum elong
                                                                                                 -11863 Sep 17 j 17:57
                                                                                                                         4°957'58
                                                                                                                                     0°27'30
                     -11868 Sep 08 j 22:30
                                             0∘⊽
                                                                                                 -11863 Oct 20 j 04:10
                                                                                                                         0^{\circ}\Omega
                     -11868 Nov 05 j 09:09
                                                                            desc. node
                                                                                                 -11863 Oct 23 j 11:09
                                                                                                                         2°Ω30'24
                     -11868 Dec 26 j 07:44
                                                                            max. Earth dist.
                                                                                                 -11863 Oct 23 j 13:11
                                                                                                                         2°Ω34'16
                                                                                                                                     2.39994 AU
                     -11867 Feb 12 j 20:13
                                             0°궁
                                                                            morning rise
                                                                                                 -11863 Nov 20 j 18:58 23° Ω45'21
asc. node
                     -11867 Mar 02 j 05:28 11°る03'38
                                                                                                 -11863 Nov 29 j 06:49
                                                                                                                         0°m
                     -11867 Mar 31 j 08:12
                                                                                                 -11862 Jan 10 j 08:47
                                                                                                                         0°Ω
                                             0°≈
evening set
                     -11867 Apr 04 i 16:37
                                             2°≈52'46
                                                                                                 -11862 Feb 23 i 22:37
                                                                                                                         0°M
max. Earth dist.
                     -11867 Apr 25 j 01:21 16°≈32'01
                                                         2.55684 AU
                                                                                                 -11862 Apr 12 j 16:33
                                                                                                                         0°×7
                     -11867 May 14 j 16:43
                                             0°∀
                                                                                                 -11862 Jun 05 j 04:32
                                                                                                                         0°궁
                                                                                                 -11862 Aug 20 j 11:24 24°る16'24
                                                                            retrograde
                     -11867 May 25 j 00:02
                                                                            opposition
                                                                                                 -11862 Sep 28 j 01:57 15° ₹ 11'59 -1°04'11
conjunction
                                             7°\dagger 11'09 0°48'46
                     -11867 May 24 j 22:09
                                                                                                 -11862 Sep 28 j 05:33 15° ₹ 08'24 -1.5m
 minimum elong
                                             7°\07'50
                                                        0°48'26
                                                                            greatest brilliancy
                     -11867 Jun 25 j 22:48
                                             0^{\circ}\Upsilon
                                                                                                 -11862 Oct 01 j 11:21 13°궁51'18 0.64344 AU
                                                                            min. Earth dist.
                     -11867 Jul 15 j 15:47 14°Υ27'38
                                                                                                 -11862 Oct 23 j 19:39 6°정43'48
                                                                            asc. node
morning rise
                     -11867 Aug 05 j 10:39
                                                                                                 -11862 Nov 07 j 20:01
                                             0^{\circ}8
                                                                            direct
                                                                                                                         5°る13'26
                     -11867 Sep 13 j 18:43
                                             0^{\circ}\Pi
                                                                                                 -11861 Jan 22 j 10:34
                                                                                                                         0°≈
                     -11867 Oct 22 j 17:25
                                                                                                 -11861 Mar 13 j 17:19
                                                                                                                         0°₩
                                             0ಂಲ
                     -11867 Dec 01 j 04:55
                                                                                                 -11861 Apr 26 j 11:29
                                                                                                                         0^{\circ}\Upsilon
                                             0^{\circ}\Omega
                     -11866 Jan 11 j 08:25
                                                                                                 -11861 Jun 06 j 01:28
                                             0° m
                                                                                                                         0°8
desc. node
                     -11866 Jan 18 j 23:19
                                             5° m 20'51
                                                                                                 -11861 Jul 15 j 00:37
                                                                                                                         0^{\circ}\Pi
                     -11866 Feb 24 j 22:18
                                             0∘⊽
                                                                                                 -11861 Aug 22 j 12:32
                     -11866 Apr 19 j 12:35 0°M
                                                                            desc. node
                                                                                                 -11861 Sep 10 j 07:58 14°533'21
retrograde
                     -11866 Jun 10 j 16:53 14°ML03'40
                                                                                                 -11861 Sep 20 j 19:09 22°535'16
                                                                            evening set
min. Earth dist.
                     -11866 Jul 16 j 10:17 5°M.46'50
                                                        0.62293 AU
                                                                                                 -11861 Sep 30 j 12:43
                     -11866 Jul 20 j 12:29
                                             4°ML08'39 -5°15'27
                                                                                                 -11861 Nov 09 j 20:19
opposition
                     -11866 Jul 19 j 19:34 4°M25'34 -1.5m
greatest brilliancy
                     -11866 Jul 31 j 12:24 30°R ₽
                                                                                                 -11861 Nov 19 j 10:06
                                                                                                                         6^{\circ} Mp 56'22 -0^{\circ}47'35
                                                                            conjunction
                     -11866 Aug 27 j 10:18 25°♀13'07
                                                                                                 -11861 Nov 19 j 07:26
                                                                                                                         6° Mp 51'34 0°47'16
direct
                                                                             minimum elong
                     -11866 Sep 26 j 02:50 0°M
                                                                                                 -11861 Dec 22 j 00:23
                     -11866 Dec 02 i 10:49 0° ₹
                                                                            max. Earth dist.
                                                                                                 -11861 Dec 26 j 21:35 3° \(\Omega\) 2.51970 AU
asc. node
                     -11865 Jan 18 i 08:50 26° ₹ 53'24
                                                                            morning rise
                                                                                                 -11860 Jan 15 i 05:32 16° △35'11
                     -11865 Jan 23 j 12:29
                                                                                                 -11860 Feb 04 i 06:59
                     -11865 Mar 12 i 04:52
                                                                                                 -11860 Mar 21 i 16:08
                                                                                                                         0° ₹
                     -11865 Apr 25 j 19:33
                                             0°₩
                                                                                                 -11860 May 09 i 07:16
                                                                                                                         0°궁
                     -11865 May 21 j 07:49 18°\mathcal{H} 00'12
                                                                                                 -11860 Jun 30 j 17:24
evening set
                     -11865 Jun 06 j 20:52
                                             0^{\circ}\Upsilon
                                                                                                 -11860 Sep 09 j 20:18 29°≈41'26
                                                                            asc node
max. Earth dist.
                     -11865 Jun 08 j 01:38
                                             0°Υ52'43 2.44145 AU
                                                                                                 -11860 Sep 11 j 07:18
                                                                                                                         0° H
                                                                            retrograde
                                                                                                 -11860 Sep 30 j 04:33
                                                                                                                         2° H 02'47
conjunction
                     -11865 Jul 16 j 01:20 29°Υ 19'35 1°13'14
                                                                                                 -11860 Oct 17 j 22:06 30°R≈
 minimum elong
                     -11865 Jul 16 j 01:38 29°Y20′09 1°13′32
                                                                            opposition
                                                                                                 -11860 Nov 05 j 13:10 24°≈05'09
                                                                                                                                     2°35'09
                     -11865 Jul 16 j 22:31
                                             0^{\circ}8
                                                                            greatest brilliancy
                                                                                                 -11860 Nov 06 j 02:41 23°≈52'28
                                                                                                                                     -1.8m
                     -11865 Aug 24 j 18:13
                                                                                                 -11860 Nov 12 j 07:06 21°≈33'32
                                             0^{\circ}\Pi
                                                                            min. Earth dist.
                                                                                                                                     0.56423 AU
                     -11865 Sep 14 j 12:44 16°Д13'36
                                                                                                 -11860 Dec 15 j 10:07 14°≈33'46
morning rise
                                                                            direct
                     -11865 Oct 02 j 04:12
                                                                                                                         0°)€
                                             0ಂತಾ
                                                                                                 -11859 Feb 07 j 23:25
                                                                                                                         0^{\circ}\Upsilon
                     -11865 Nov 10 j 01:51
                                             0^{\circ}\Omega
                                                                                                 -11859 Mar 31 j 05:50
desc. node
                     -11865 Dec 06 j 17:25 20^{\circ}\Omega00'18
                                                                                                 -11859 May 13 j 03:50
                                                                                                                         0°8
                     -11865 Dec 20 j 08:26
                                             0° m
                                                                                                 -11859 Jun 22 j 07:22
                                                                                                                         0^{\circ}II
                     -11864 Jan 31 j 21:27
                                             0∘⊽
                                                                            desc. node
                                                                                                 -11859 Jul 28 j 10:21 27°Ⅲ33'06
                     -11864 Mar 17 j 22:50
                                             0°M
                                                                                                 -11859 Jul 31 j 15:23
                                                                                                                         0\circ\odot
                     -11864 May 10 j 04:38
                                                                                                 -11859 Sep 09 j 08:40
                                                                                                                         0^{\circ}\Omega
                     -11864 Jul 15 j 10:16 19° ₹753'38
                                                                                                 -11859 Oct 20 j 07:13
retrograde
```

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. -11859 Nov 15 j 12:31 18° m 35'42 -11854 Oct 15 j 17:41 $\Pi^{\circ}0$ evening set -11859 Dec 01 j 22:57 0°₽ -11854 Nov 26 j 06:28 0ംഉ -11853 Jan 08 j 19:20 $0^{\circ}\Omega$ -11858 Jan 07 j 14:48 24°**2**47'52 -1°15'06 conjunction -11853 Mar 02 j 13:16 0° m -11858 Jan 07 j 14:33 24°**-**247'26 minimum elong 1°15'22 desc. node -11853 Mar 20 j 22:31 6° m 49'58 -11858 Jan 15 j 11:02 0° M retrograde -11853 Apr 13 j 08:31 10° m 25'14 -11858 Jan 27 j 09:55 max. Earth dist. 7°**ጤ**52'14 2.61505 AU min. Earth dist. -11853 May 12 j 04:34 4° Mp 50'29 0.47582 AU -11858 Feb 27 j 04:59 27°ML51'12 greatest brilliancy morning rise -11853 May 19 j 02:59 2°**m**25'10 -2.3m -11858 Mar 02 j 13:12 0°**∡** opposition -11853 May 20 j 05:23 2°m01'57 -3°37'18 -11858 Apr 18 j 18:35 0°궁 -11853 May 26 j 04:35 30°RΩ -11858 Jun 05 j 20:58 0°≈ direct -11853 Jun 22 j 13:45 25°**Ω**10'50 -11858 Jul 25 j 10:39 0°**)**€ -11853 Jul 21 j 13:40 0° M asc. node -11858 Jul 28 j 16:25 1°**)** 54'03 -11853 Sep 24 j 21:59 0∘**⊽** -11858 Sep 18 j 00:35 $0^{\circ}\Upsilon$ -11853 Nov 15 j 18:27 0°M retrograde -11858 Nov 25 j 11:44 20° γ 46'21 -11852 Jan 04 j 02:09 0°**⊼** opposition -11858 Dec 28 j 04:44 14° \begin{pmatrix} \gamma 37'37 \end{pmatrix} 6°32'57 -11852 Feb 20 j 23:50 0°궁 greatest brilliancy -11858 Dec 29 j 20:15 14°**Υ**06'13 asc. node -11852 Mar 18 j 20:51 17°**궁**16'01 min. Earth dist. -11857 Jan 04 j 21:05 12°**Υ**11'52 0.44630 AU evening set -11852 Mar 19 j 12:53 17°₹42'03 direct -11857 Feb 01 j 23:11 7°**Υ**14'12 -11852 Apr 07 j 07:29 0°**≈** -11857 Apr 08 j 22:53 0°8 max. Earth dist. -11852 Apr 12 j 23:13 3°**≈**44'49 2.59336 AU -11857 May 25 j 20:22 $0^{\circ}\Pi$ desc. node -11857 Jun 15 j 15:53 14°**Д**31'30 conjunction -11852 May 07 j 15:40 20°≈20'38 0°30'13 -11857 Jul 07 i 09:07 0ಂತಾ minimum elong -11852 May 07 j 14:24 20°≈18'29 0°29'44 -11857 Aug 18 i 05:04 $0^{\circ}\Omega$ -11852 May 21 i 17:35 0°**)**€ -11857 Sep 29 j 16:55 0° m morning rise -11852 Jun 26 i 03:36 24° ¥ 55'15 -11857 Nov 12 j 11:42 -11852 Jul 03 j 05:10 $0^{\circ}\Upsilon$ 0∘⊽ -11857 Dec 27 j 17:10 -11852 Aug 13 j 00:49 0°8 o°M. -11857 Dec 31 j 09:57 -11852 Sep 21 j 17:48 2°M-25'02 0°П evening set -11856 Feb 12 j 01:37 -11852 Oct 31 j 01:57 0ಂತಾ -11852 Dec 10 j 00:31 $0^{\circ}\Omega$ -11856 Feb 18 j 15:49 4° ₹ 13'45 -1°00'21 -11851 Jan 20 j 23:07 conjunction 0° m -11856 Feb 18 j 17:21 -11851 Feb 04 j 20:50 10° Mg 03'38 minimum elong 4°**₹**16'11 1°00'57 desc. node -11856 Feb 22 j 14:02 6° ₹ 44'43 2.66068 AU max. Earth dist. -11851 Mar 08 j 18:36 0°**♀** -11856 Mar 29 j 21:59 0°る -11851 May 26 j 20:58 28°**♀**47'10 retrograde -11856 Apr 06 j 04:15 4°₹39'01 -11851 Jun 29 j 19:27 21°**⊆**10'29 0.59019 AU morning rise min. Earth dist. -11856 May 15 j 14:30 0°≈ -11851 Jul 04 j 08:08 19°**2**23'31 -1.7m greatest brilliancy -11856 Jun 14 j 08:57 19°≈18'21 -11851 Jul 05 j 08:19 18°**2**59'42 -5°25'18 asc. node opposition -11856 Jun 30 j 18:16 0°**米** direct -11851 Aug 11 j 03:55 10°**♀**30'37 -11856 Aug 15 j 12:19 $0^{\circ}\Upsilon$ -11851 Oct 16 j 18:53 0°M -11856 Sep 30 j 13:34 0°8 -11851 Dec 12 j 05:04 0°**∡**7 -11856 Nov 18 j 00:51 0°**Ц** -11850 Jan 31 j 10:07 0°궁 -11855 Jan 26 j 12:19 0°ഇ -11850 Feb 03 j 22:21 asc. node -11855 Feb 09 j 05:39 1°512'16 -11850 Mar 19 j 12:21 retrograde -11855 Feb 22 j 20:32 30°R II -11850 May 02 j 03:30 29°≈25'33 evening set min. Earth dist. -11855 Mar 10 j 15:52 26°**I**I18'40 0.38555 AU -11850 May 02 j 23:22 0°**米** -11855 Mar 12 j 13:45 25° **II** 47'27 3°53'46 opposition max. Earth dist. -11850 May 18 j 13:51 10° ¥ 56'13 2.48875 AU greatest brilliancy -11855 Mar 12 j 11:47 25° **1**48'48 -2.9m -11850 Jun 14 i 01:48 direct -11855 Apr 11 j 23:56 20° **1** 40′27 -11850 Jun 24 i 07:09 desc. node -11855 May 02 j 20:11 23°**Ⅲ**22'16 conjunction 7°**Υ**'30'52 1°09'49 -11855 May 22 j 17:11 0°5 minimum elong -11850 Jun 24 i 05:43 7°**Υ**28'13 1°09'53 -11855 Jul 18 j 14:36 -11850 Jul 24 j 06:36 0°8 $0^{\circ}\Omega$ -11855 Sep 04 j 15:34 -11850 Aug 19 j 21:06 20°**8**24'34 0° m morning rise -11855 Oct 21 j 09:21 -11850 Sep 01 j 06:09 0°**П** 0∘ଫ 0°M -11855 Dec 07 j 07:04 -11850 Oct 09 j 19:58 000 -11850 Nov 17 j 21:16 -11854 Jan 23 j 12:06 0° **√** $0^{\circ}\Omega$ -11854 Feb 08 j 19:51 10° ₹22'28 desc. node -11850 Dec 23 j 13:43 26° € 31'35 evening set -11854 Mar 11 j 13:17 0°₹ -11850 Dec 28 j 08:46 0° m max. Earth dist. -11854 Mar 18 j 00:27 4°**궁**09'18 2.65314 AU -11849 Feb 09 j 08:42 0∘ଫ 0°M -11849 Mar 28 j 19:39 -11854 Mar 28 j 20:26 11°♂08'30 -0°20'30 0°**∡**7 conjunction -11849 May 29 j 06:14 -11854 Mar 28 j 21:16 11°♂09'50 0°21'10 minimum elong retrograde -11849 Jul 02 j 18:34 6°**х** 34′24 -11854 Apr 26 j 18:41 -11849 Aug 03 j 09:16 30°RM asc. node -11854 May 02 j 01:06 3°≈28'13 min. Earth dist. -11849 Aug 09 j 21:12 27°ML26'11 0.65515 AU morning rise -11854 May 14 j 21:14 11°≈58'52 opposition -11849 Aug 11 j 16:27 26°M-42'32 -4°28'24 -11854 Jun 10 j 16:18 0°**∀** greatest brilliancy -11849 Aug 11 j 10:32 26°ML48'31 -1.4m -11854 Jul 24 j 03:00 $0^{\circ}\Upsilon$ -11849 Sep 19 j 22:48 17° ML16'15 direct -11854 Sep 04 j 07:29 0°8 -11849 Nov 10 j 20:33

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 6

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Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style.
asc. node
                    -11849 Dec 23 j 03:45 20° ₹35'57
                                                                         conjunction
                                                                                              -11844 Dec 20 i 09:54
                                                                                                                     7°-44'34 -1°10'29
                    -11848 Jan 09 j 00:45 0°る
                                                                          minimum elong
                                                                                              -11844 Dec 20 j 08:25
                                                                                                                    7°£42'03 1°10'31
                    -11848 Feb 27 j 11:27
                                                                         max. Earth dist.
                                                                                              -11843 Jan 16 j 02:30 25° 245'21 2.58310 AU
                                            0°≈≈
                    -11848 Apr 12 j 15:47
                                                                                              -11843 Jan 22 j 11:50
                                            0°∀
                                                                                                                     o°m.
                                           0^{\circ}\Upsilon
                    -11848 May 24 j 20:18
                                                                                              -11843 Feb 11 j 00:30 12°M 50'05
                                                                         morning rise
                    -11848 Jun 23 j 06:32 21°Y56'07
evening set
                                                                                              -11843 Mar 09 j 14:29
                                                                                                                      0°×7
                    -11848 Jul 03 j 20:42
                                           0^{\circ}8
                                                                                              -11843 Apr 26 j 04:40
                                                                                                                      0°궁
                    -11848 Aug 11 j 13:34
                                            0^{\circ}\Pi
                                                                                              -11843 Jun 14 j 09:10
                                                                                                                     0°≈
max. Earth dist.
                    -11848 Aug 12 j 06:16
                                            0°Ⅲ32'39
                                                       2.38440 AU
                                                                                              -11843 Aug 06 j 02:32
                                                                                                                     0°)
                                                                         asc. node
                                                                                              -11843 Aug 14 j 10:48
                                                                                                                     4°)€21'08
conjunction
                    -11848 Aug 22 j 12:38
                                            8°Ⅱ35′09
                                                       0°54'04
                                                                         retrograde
                                                                                              -11843 Oct 31 j 21:37 29° ¥ 52'27
                    -11848 Aug 22 j 15:57
 minimum elong
                                            8°Ⅱ41'38
                                                      0°54'40
                                                                         opposition
                                                                                              -11843 Dec 05 j 06:22 22° ★55'51
                                                                                                                                 5°08'54
                    -11848 Sep 18 j 20:36
                                            0ംខ
                                                                         greatest brilliancy
                                                                                              -11843 Dec 06 j 14:13 22° ★28'16
                                                                                                                                 -2.1m
morning rise
                    -11848 Oct 26 j 01:33 28°547'46
                                                                         min. Earth dist.
                                                                                              -11843 Dec 13 j 07:07 20° ★ 09'53
                                                                                                                                 0.49380 AU
                    -11848 Oct 27 j 15:23
                                            0^{\circ}\Omega
                                                                         direct
                                                                                              -11842 Jan 12 j 03:57 14° ¥ 26'06
desc. node
                    -11848 Nov 09 j 06:10
                                            9°Ω34'14
                                                                                              -11842 Mar 06 j 10:58
                                                                                                                     0^{\circ}\Upsilon
                    -11848 Dec 06 j 18:01
                                                                                              -11842 Apr 25 j 04:52
                                                                                                                      0°8
                    -11847 Jan 17 j 21:51
                                                                                              -11842 Jun 06 j 16:02
                                                                                                                      0^{\circ}\Pi
                    -11847 Mar 03 j 19:42
                                            0°M
                                                                         desc. node
                                                                                              -11842 Jul 02 j 06:22 18°Ц49'59
                    -11847 Apr 21 j 18:00
                                            0° ₹
                                                                                              -11842 Jul 17 j 08:04
                    -11847 Jun 20 j 01:18 0°る
                                                                                              -11842 Aug 27 j 00:28
                                                                                                                     0^{\circ}\Omega
retrograde
                    -11847 Aug 06 j 03:30 10°る58'19
                                                                                              -11842 Oct 07 i 17:00
                                                                                                                     0° m
opposition
                    -11847 Sep 14 i 07:33
                                           1°る35'47 -2°13'04
                                                                                              -11842 Nov 19 i 22:15
                                                                                                                     0∘⊽
greatest brilliancy
                    -11847 Sep 14 j 11:50
                                            1°る31'30 -1.4m
                                                                                              -11842 Dec 14 i 13:30 16° △36'11
                                                                         evening set
min. Earth dist.
                    -11847 Sep 16 j 06:24 0° ₹ 48'53 0.65877 AU
                                                                                              -11841 Jan 03 j 18:53
                    -11847 Sep 18 j 07:31 30°R ✓
direct
                    -11847 Oct 24 j 21:25 21° ₹ 40'33
                                                                                              -11841 Feb 02 j 23:16 19°ML40'50 -1°09'52
                                                                         conjunction
                    -11847 Nov 09 j 09:32 23° ₹05'16
                                                                                              -11841 Feb 03 j 00:24 19°ML42'41 1°10'21
asc. node
                                                                          minimum elong
                    -11847 Dec 04 j 02:56 0°♂
                                                                         max. Earth dist.
                                                                                              -11841 Feb 12 j 19:31 26°ML02'13 2.64921 AU
                    -11846 Feb 02 j 22:07 0°≈
                                                                                              -11841 Feb 18 j 23:16 0° ₹
                    -11846 Mar 22 j 15:41 0°米
                                                                                              -11841 Mar 23 j 08:25 20° ₹ 43'55
                                                                         morning rise
                    -11846 May 04 j 16:12 0°Υ
                                                                                              -11841 Apr 06 j 21:15 0°ਰ
                                                                                              -11841 May 23 j 23:09 0°≈
                    -11846 Jun 13 j 23:14 0°8
                    -11846 Jul 22 j 18:31 0°Ⅱ
                                                                                              -11841 Jul 02 j 03:58 24°≈59'11
                                                                         asc. node
                    -11846 Aug 26 j 14:03 27°Ⅲ13'53
                                                                                              -11841 Jul 10 j 01:02 0°米
evening set
                    -11846 Aug 30 j 03:11 0°ഇ
                                                                                              -11841 Aug 26 j 16:23 0°Υ
                    -11846 Sep 27 j 02:06 21°539'21
                                                                                              -11841 Oct 16 j 00:34 0°8
desc. node
                    -11846 Oct 07 j 23:54 0° Ω
                                                                                              -11841 Dec 26 j 14:32 0°П
                                                                         retrograde
                                                                                              -11840 Jan 10 j 03:52 1°Ⅲ17'55
conjunction
                    -11846 Oct 27 j 10:33 14°\Omega40'21 -0°22'26
                                                                                              -11840 Jan 24 j 17:22 30°R
 minimum elong
                    -11846 Oct 27 j 08:48 14°\Omega37'05 0°21'54
                                                                         opposition
                                                                                              -11840 Feb 10 j 00:05 26°807'31 6°30'06
                    -11846 Nov 17 j 04:04 0° Mp
                                                                         greatest brilliancy
                                                                                             -11840 Feb 10 j 20:53 25°853'18
max. Earth dist.
                    -11846 Dec 09 j 10:48 16° Mp 04'37 2.47209 AU
                                                                         min. Earth dist.
                                                                                              -11840 Feb 13 j 04:03 25°815'43 0.39148 AU
                    -11846 Dec 26 j 10:42 28° Mg 03'20
                                                                         direct
                                                                                              -11840 Mar 12 j 14:08 20°836'25
morning rise
                    -11846 Dec 29 j 05:41 0°♀
                                                                                              -11840 Apr 21 j 18:18 0°П
                    -11845 Feb 11 i 12:43 0°M
                                                                         desc. node
                                                                                              -11840 May 19 і 13:02 13°Д49'29
                    -11845 Mar 30 j 05:42 0° ₹
                                                                                              -11840 Jun 15 j 16:13 0°5
                    -11845 May 19 i 00:18
                                                                                              -11840 Jul 31 i 17:36
                                                                                                                     0^{\circ}\Omega
                    -11845 Jul 14 i 22:28 0°≈
                                                                                              -11840 Sep 14 j 12:06
                                                                                                                      0° m
                    -11845 Sep 13 j 21:12 16°≈45'50
                                                                                              -11840 Oct 29 j 16:06
retrograde
                    -11845 Sep 27 j 12:46 15°≈32'38
                                                                                              -11840 Dec 14 j 17:27
asc node
                    -11845 Oct 21 j 06:30
                                                      1°03'07
                                                                                              -11839 Jan 24 j 11:49 26° ML09'29
opposition
                                           8°≈17'58
                                                                         evening set
greatest brilliancy
                    -11845 Oct 21 j 10:59
                                                                                              -11839 Jan 30 j 12:07 0° ⊀
                                            8°≈13'38
                                                      -1 7m
min. Earth dist.
                    -11845 Oct 26 j 19:04
                                            6°≈10'08 0.60153 AU
                                                                         max. Earth dist.
                                                                                              -11839 Mar 08 j 14:08 23°х 41'55 2.66242 AU
                    -11845 Nov 15 j 17:55 30°R ₹
                                                                                              -11839 Mar 13 j 17:15 26°尽 59'09 -0°38'00
direct
                    -11845 Nov 30 j 18:03 28°궁28'11
                                                                         conjunction
                                                                                              -11839 Mar 13 j 18:36 27°尽01'19
                    -11845 Dec 16 j 13:16
                                                                          minimum elong
                                                                                                                                0°38'40
                                            0°≈
                    -11844 Feb 24 j 06:52
                                            0°)€
                                                                                              -11839 Mar 18 j 10:01
                                                                                                                    0°る
                                            0^{\circ}\Upsilon
                    -11844 Apr 10 j 18:56
                                                                                              -11839 Apr 29 j 15:14 27°⋜18'31
                                                                         morning rise
                    -11844 May 22 j 09:20
                                            0°8
                                                                                              -11839 May 03 j 18:06
                                                                                                                     0°≈
                    -11844 Jun 30 j 21:33
                                            \Pi^{\circ}0
                                                                         asc. node
                                                                                              -11839 May 18 j 19:17
                                                                                                                      9°≈53'06
                    -11844 Aug 08 j 19:05
                                            0\circ\odot
                                                                                              -11839 Jun 18 j 00:45
                                                                                                                      0°)€
                                                                                                                      0^{\circ}\Upsilon
desc. node
                    -11844 Aug 14 j 02:16
                                            4°904'37
                                                                                              -11839 Aug 01 j 03:21
                    -11844 Sep 17 j 03:28
                                            0°\Omega
                                                                                              -11839 Sep 13 j 07:46
                                                                                                                      0^{\circ}8
evening set
                    -11844 Oct 25 j 23:32 28° Ω42'40
                                                                                              -11839 Oct 26 j 04:31
                                                                                                                      \Pi^{\circ}0
                    -11844 Oct 27 j 18:14
                                                                                              -11839 Dec 09 j 01:55
                                                                                                                      0ಂತಾ
                    -11844 Dec 09 j 03:41
                                                                                              -11838 Jan 27 j 19:43
                                                                                                                     0^{\circ}\Omega
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Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:22,
Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style.
retrograde
                    -11838 Mar 22 j 16:20 16^{\circ}\Omega16'10
                                                                                            -11833 Apr 21 j 01:23
                                                                                                                   0°∀
desc. node
                    -11838 Apr 06 j 16:44 14° Ω42'03
                                                                                            -11833 Jun 02 j 02:44 29°\$57'30
                                                                        evening set
min. Earth dist.
                    -11838 Apr 19 j 04:04 11° Ω23'20 0.42909 AU
                                                                                            -11833 Jun 02 j 04:06 0°Υ
                    -11838 Apr 26 j 13:13 9°Ω02'48 -1°23'48
                                                                                            -11833 Jun 24 j 03:42 16°Υ18'29 2.41629 AU
                                                                        max. Earth dist.
opposition
                    -11838 Apr 26 j 02:48
                                                                                            -11833 Jul 12 j 05:32
greatest brilliancy
                                          9°Ω11'06
                                                     -2.6m
                                                                                                                   0°8
                    -11838 May 28 j 06:36
direct
                                           3°Ω02'11
                                                                                            -11833 Jul 29 j 11:05 13°814'48 1°10'01
                    -11838 Aug 14 j 23:06
                                           0° M
                                                                        conjunction
                    -11838 Oct 06 j 03:57
                                                                         minimum elong
                                                                                            -11833 Jul 29 j 12:44 13°817'58
                                           0∘⊽
                                                                                                                              1°10'27
                    -11838 Nov 24 j 06:56
                                           0°M
                                                                                            -11833 Aug 20 j 00:14
                                                                                                                   0^{\circ}\Pi
                    -11837 Jan 11 j 12:57
                                           0°∡¹
                                                                                            -11833 Sep 27 j 09:01
                                                                                                                    0ಂತಾ
                                                                                                                    1°956'44
                    -11837 Feb 28 j 00:23
                                           0°る
                                                                        morning rise
                                                                                            -11833 Sep 29 j 20:54
                    -11837 Mar 04 j 22:18
evening set
                                           3°る08'45
                                                                                            -11833 Nov 05 j 05:07
                                                                                                                   0^{\circ}\Omega
max. Earth dist.
                    -11837 Apr 02 j 22:38 21°궁55'09
                                                       2.62274 AU
                                                                        desc. node
                                                                                            -11833 Nov 27 j 02:50 16° Ω31'14
asc. node
                    -11837 Apr 05 j 13:21 23°♂37'45
                                                                                            -11833 Dec 15 j 09:12
                                                                                                                   0° m
                    -11837 Apr 15 j 05:54
                                                                                            -11832 Jan 26 j 17:09
                                                                                                                    0∘⊽
                                                                                            -11832 Mar 12 j 04:29
                                                                                                                   0°M
conjunction
                    -11837 Apr 22 j 07:49
                                           4°≈41'13 0°10'19
                                                                                            -11832 May 02 j 04:47
                                                                                                                   0°∡7
 minimum elong
                    -11837 Apr 22 j 07:24
                                           4°≈40'31
                                                       0°09'45
                                                                        retrograde
                                                                                            -11832 Jul 23 j 06:38 27°х 51'47
 behind sun begin
                    -11837 Apr 21 j 15:13
                                           4°≈13'40
                                                                        opposition
                                                                                            -11832 Aug 31 j 20:56 18° ₹ 14'39 -3°12'58
 behind sun end
                    -11837 Apr 22 j 23:34
                                           5°≈07'22
                                                                        greatest brilliancy
                                                                                            -11832 Aug 31 j 22:53 18° ₹ 12'41 -1.4m
                    -11837 May 29 j 19:22
                                           0°∀
                                                                        min. Earth dist.
                                                                                            -11832 Sep 01 j 08:31 18° ₹ 02'59
                                                                                                                               0.66486 AU
morning rise
                    -11837 Jun 09 j 10:00
                                           7°) 19'39
                                                                        direct
                                                                                            -11832 Oct 11 i 02:16 8° ₹27'30
                    -11837 Jul 11 j 14:09
                                           0^{\circ}
                                                                        asc. node
                                                                                            -11832 Nov 26 j 00:07 18° ₹ 50'28
                    -11837 Aug 21 i 19:48
                                           0°8
                                                                                            -11832 Dec 20 j 22:47
                                                                                                                   0°궁
                    -11837 Oct 01 j 00:26
                                           0^{\circ}\Pi
                                                                                            -11831 Feb 12 j 13:30
                                                                                                                   0°≈
                    -11837 Nov 09 j 22:02
                                           0ಂತಾ
                                                                                            -11831 Mar 30 j 22:18
                                                                                                                   0°₩
                    -11837 Dec 20 j 14:46
                                                                                            -11831 May 12 j 12:10
                                                                                                                   0^{\circ}\Upsilon
                                           \Omega^{\circ}\Omega
                    -11836 Feb 02 j 02:06 0° Mp
                                                                                            -11831 Jun 21 j 15:10
                                                                                                                   0°8
                    -11836 Feb 22 j 15:18 12° m 50'45
                                                                                            -11831 Jul 30 j 08:17
desc node
                                                                                                                   0°П
                                                                                            -11831 Jul 31 j 18:43
                    -11836 Mar 25 j 21:17 0°♀
                                                                        evening set
                                                                                                                    1°∏07'22
                    -11836 May 10 j 22:02 11° △56'39
                                                                                            -11831 Sep 06 j 15:12
retrograde
                    -11836 Jun 11 j 21:50 5°204'53 0.54973 AU
min. Earth dist.
                                                                                            -11831 Oct 02 j 11:15 20°504'05 0°08'41
                    -11836 Jun 17 j 12:02 2°⊆56'34 -1.9m
greatest brilliancy
                                                                        conjunction
                    -11836 Jun 18 j 17:35 2°228'13 -5°12'10
                                                                                            -11831 Oct 02 j 12:06 20°505'42 0°09'19
opposition
                                                                         minimum elong
                                                                                            -11831 Oct 01 j 13:44 19°522'36
                    -11836 Jun 25 j 09:56 30°R Mp
                                                                         behind sun begin
                    -11836 Jul 24 j 07:00 24° m 31'39
                                                                                            -11831 Oct 03 j 10:28 20°548'46
direct
                                                                         behind sun end
                    -11836 Aug 24 j 20:39 0°♀
                                                                                            -11831 Oct 13 j 20:09 28°547'42
                                                                        desc. node
                    -11836 Oct 29 j 13:14 0°M
                                                                                            -11831 Oct 15 j 10:01 0°Ω
                    -11836 Dec 20 j 22:03 0° ⊀
                                                                        max. Earth dist.
                                                                                            -11831 Nov 14 j 17:36 22°Ω48'05 2.42374 AU
                    -11835 Feb 07 j 22:59 0°る
                                                                                            -11831 Nov 24 j 12:14 0° M
                    -11835 Feb 20 j 13:09 7°궁56'47
                                                                        morning rise
                                                                                            -11831 Dec 04 j 10:53
                                                                                                                  7° Mp 14'11
asc. node
                    -11835 Mar 26 j 15:48 0°≈
                                                                                            -11830 Jan 05 j 13:01
                    -11835 Apr 14 j 09:16 12°≈27'52
                                                                                            -11830 Feb 18 j 22:42
evening set
max. Earth dist.
                    -11835 May 02 j 21:45 25°≈03'23 2.53410 AU
                                                                                            -11830 Apr 07 j 04:30
                    -11835 May 10 j 01:35 0°米
                                                                                            -11830 May 28 j 20:14 0°ਰ
                                                                                            -11830 Aug 07 i 21:39
                    -11835 Jun 04 j 12:57 17° ¥55'34 0°58'01
                                                                                            -11830 Aug 29 i 01:14 2°≈32'20
conjunction
                                                                        retrograde
                    -11835 Jun 04 j 10:58 17° ¥ 52'02 0°57'49
 minimum elong
                                                                                            -11830 Sep 17 i 16:47 30°Rる
                                                                                            -11830 Oct 06 i 06:49 23°る39'29 -0°20'11
                    -11835 Jun 21 j 06:52 0°Υ
                                                                        opposition
                    -11835 Jul 27 j 16:51 26° Υ 59'28
                                                                        greatest brilliancy
                                                                                            -11830 Oct 06 j 08:18 23°₹38'00 -1.5m
morning rise
                    -11835 Jul 31 j 16:30 0°8
                                                                        min. Earth dist.
                                                                                            -11830 Oct 10 j 10:37 22°る01'22 0.63116 AU
                    -11835 Sep 08 j 21:25
                                                                        asc. node
                                                                                            -11830 Oct 14 j 04:13 20°る35'08
                                           0°П
                    -11835 Oct 17 j 16:27
                                                                        direct
                                                                                            -11830 Nov 16 j 00:36 13°⋜41'54
                                           0ಂತಾ
                    -11835 Nov 25 j 23:04
                                          0^{\circ}\Omega
                                                                                            -11829 Jan 13 j 07:07
                    -11834 Jan 05 j 18:23
                                           0° m
                                                                                            -11829 Mar 07 j 13:14
                                                                                                                   0°)
desc. node
                    -11834 Jan 09 j 10:17
                                           2° m 36'30
                                                                                            -11829 Apr 21 j 01:32
                                                                                                                    0^{\circ}
                    -11834 Feb 18 j 12:59
                                           0∘⊽
                                                                                            -11829 May 31 j 22:57
                                                                                                                    0°8
                    -11834 Apr 09 j 18:02
                                           0°M
                                                                                            -11829 Jul 10 j 01:53
                                                                                                                   0^{\circ}\Pi
retrograde
                    -11834 Jun 18 j 21:27 22°M 45'55
                                                                                            -11829 Aug 17 j 16:20
                                                                                                                   0ಂತಾ
                    -11834 Jul 25 j 12:27 14°ML09'40
                                                                                            -11829 Aug 31 j 19:55 10°556'28
min. Earth dist.
                                                     0.63695 AU
                                                                        desc. node
                    -11834 Jul 28 j 19:32 12°M 50'13 -5°02'09
opposition
                                                                                            -11829 Sep 25 j 18:17
                                                                                                                   0^{\circ}\Omega
greatest brilliancy
                    -11834 Jul 28 j 06:42 13°ML03'07
                                                      -1.5m
                                                                        evening set
                                                                                            -11829 Oct 04 j 10:19
                                                                                                                    6°£32′29
direct
                    -11834 Sep 05 j 06:25
                                           3°M42'30
                                                                                            -11829 Nov 05 j 03:04
                                                                                                                   0° M
                    -11834 Nov 25 j 04:10
                                           0°∡
asc. node
                    -11833 Jan 08 j 17:34 24° ₹31'04
                                                                        conjunction
                                                                                            -11829 Dec 01 j 14:20 18° m 59'07 -0°58'17
                    -11833 Jan 18 j 00:33
                                           0°る
                                                                                            -11829 Dec 01 j 11:51 18° m 54'44 0°58'07
                                                                         minimum elong
                    -11833 Mar 07 j 05:59
                                                                                            -11829 Dec 17 j 07:49
```

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. max. Earth dist. -11828 Jan 04 j 10:58 12°**2**27'51 2.54395 AU min. Earth dist. -11823 Mar 25 j 06:42 13°544'44 0.39453 AU opposition morning rise -11828 Jan 25 j 18:48 26°**♀**49'17 -11823 Mar 29 j 18:22 12°527'57 1°53'18 -11828 Jan 30 j 13:38 0°**M**ե greatest brilliancy -11823 Mar 29 j 13:02 12°531'46 -2.8m a g d e c g

	-11828 Jan 30 j 13:38	0° M ₊		greatest brilliancy	-11823 Mar 29 j 13:02	12° © 31'46	-2.8m
	-11828 Mar 16 j 19:03	0° ∡ ¹		desc. node	-11823 Apr 23 j 08:54	7° 5 24'22	
	-11828 May 03 j 22:33	ರ∘ರ		direct	-11823 Apr 29 j 06:31	7° © 10'35	
	-11828 Jun 23 j 19:42	0° ≈			-11823 Jul 07 j 22:26	$0^{\circ}\Omega$	
	-11828 Aug 22 j 11:08	0° ∀			-11823 Aug 28 j 16:03	0° m)	
asc. node	-11828 Aug 31 j 03:56	3°) 22′59			-11823 Oct 15 j 17:37	0∘ <u>⊽</u>	
retrograde	-11828 Oct 10 j 22:35				-11823 Dec 02 j 06:09	0°M₊	
opposition	-11828 Nov 15 j 16:04	4°) 13′11	3°30'47		-11822 Jan 18 j 18:38	0° ∡ 7	
greatest brilliancy	-11828 Nov 16 j 11:57	3°) 54'57	-1.9m	evening set	-11822 Feb 17 j 14:29		
		1° ¥ 32′20	0.54059 AU	evening set			
min. Earth dist.	-11828 Nov 23 j 00:06		0.54059 AU	n d r	-11822 Mar 06 j 22:56	0°る	0.64407.411
	-11828 Nov 27 j 10:33			max. Earth dist.	-11822 Mar 23 j 18:03	10°548'41	2.6443 / AU
direct	-11828 Dec 25 j 00:10					_	
	-11827 Jan 22 j 21:28	0° ∀		conjunction	-11822 Apr 06 j 16:12		
	-11827 Mar 23 j 13:44	0 ° Υ		minimum elong	-11822 Apr 06 j 16:37	19° る 51'28	0°10'10
	-11827 May 06 j 21:58	9° 8		behind sun begin	-11822 Apr 06 j 01:09	19° る 26'17	
	-11827 Jun 16 j 15:44	Π $^{\circ}0$		behind sun end	-11822 Apr 07 j 08:05	20° ප 16'41	
desc. node	-11827 Jul 18 j 23:25	24° Ⅲ 25′06		asc. node	-11822 Apr 22 j 07:04	0° ≈ 04'52	
	-11827 Jul 26 j 08:28	0° ©			-11822 Apr 22 j 04:07	0° ≈	
	-11827 Sep 04 j 07:59	$0^{\circ}\Omega$		morning rise	-11822 May 23 j 23:03	21° ≈ 11'19	
	-11827 Oct 15 j 11:05	0° m)		•	-11822 Jun 05 j 22:43	0°) {	
evening set	-11827 Nov 26 j 11:07				-11822 Jul 19 j 03:13	0°Υ	
e venning see	-11827 Nov 27 j 06:06	0∘ ʊ			-11822 Aug 29 j 22:39	0°8	
	-11826 Jan 10 j 19:49	0° m .			-11822 Oct 09 j 20:19	0°II	
	-11020 Jan 10 j 19.49	O IIG			-11822 Oct 09 j 20:19 -11822 Nov 19 j 15:20	0ಂ ತಾ	
	11006 1 17:11.55	40 m 22140	1014145		,		
conjunction	-11826 Jan 17 j 11:55	4°M23'48			-11822 Dec 31 j 17:39	0° N	
minimum elong	-11826 Jan 17 j 12:16	4°M24'22			-11821 Feb 16 j 19:55	0° m/y	
max. Earth dist.	-11826 Feb 02 j 15:56		2.62927 AU	desc. node	-11821 Mar 11 j 10:26		
	-11826 Feb 25 j 21:44	0° ∡ ¹		retrograde	-11821 Apr 24 j 07:48	-•	
morning rise	-11826 Mar 08 j 04:30	6° ∡ ³35'47		min. Earth dist.	-11821 May 24 j 06:22	16° m 50'08	0.50287 AU
	-11826 Apr 13 j 23:24	0°ಕ		greatest brilliancy	-11821 May 30 j 18:48	14° m 27'49	-2.1m
	-11826 May 31 j 15:05	0° ≈		opposition	-11821 Jun 01 j 00:51	14°M)00'18	-4°25'17
asc. node	-11826 Jul 18 j 22:34	29° ≈ 54'59		direct	-11821 Jul 05 j 04:14	6° Mp 43′49	
	-11826 Jul 19 j 01:52	0°) €			-11821 Sep 16 j 06:51	0∘ ত	
	-11826 Sep 08 j 01:51	0° Y			-11821 Nov 09 j 19:29	0° M ₊	
	-11826 Nov 12 j 12:43	0°8			-11821 Dec 29 j 23:52	0° ∡ ¹	
retrograde	-11826 Dec 11 j 02:04	4° 8 32'38			-11820 Feb 16 j 06:09	0° ろ	
remograde	-11825 Jan 07 j 22:25			asc. node	-11820 Mar 09 j 04:49		
opposition	-11825 Jan 11 j 21:18		6°59'25	evening set	-11820 Mar 28 j 17:02		
greatest brilliancy	-11825 Jan 13 j 11:33		-2.6m	evening set	-11820 Mar 28 j 17:02 -11820 Apr 02 j 16:55	20° ≈	
	-			Fauth diet			2 57207 ATT
min. Earth dist.	-11825 Jan 18 j 13:45		0.42242 AU	max. Earth dist.	-11820 Apr 19 j 17:30	11°≈19'49	2.5/39/ AU
direct	-11825 Feb 15 j 04:41						
	-11825 Mar 23 j 00:25	0°8		conjunction	-11820 May 17 j 10:03	0°) 11′56	
	-11825 May 16 j 23:05	Π $^{\circ}0$		minimum elong	-11820 May 17 j 08:23	0°) €09'04	0°40'45
desc. node	-11825 Jun 06 j 04:10				-11820 May 17 j 03:09	0° ∀	
	-11825 Jun 30 j 11:12	0			-11820 Jun 28 j 12:27	0° Y	
	-11825 Aug 12 j 06:58	0 $^{\circ}\Omega$		morning rise	-11820 Jul 07 j 00:18	6° Y 10′22	
	-11825 Sep 24 j 09:05	0° ™			-11820 Aug 08 j 04:22	$0^{\circ}B$	
	-11825 Nov 07 j 13:05	0∘ ত			-11820 Sep 16 j 16:24	$\Pi^{\circ}0$	
	-11825 Dec 22 j 23:55	0° M			-11820 Oct 25 j 18:53	0 \circ \odot	
evening set	-11824 Jan 09 j 17:21	11°M30'12			-11820 Dec 04 j 10:07	$0^{\circ}\Omega$	
Ç	-11824 Feb 07 j 11:02	0° ∡ ¹			-11819 Jan 14 j 19:13	0° m	
		• •		desc. node	-11819 Jan 26 j 05:28	7° m 54'43	
conjunction	-11824 Feb 27 j 12:24	120 7 501/49	-0°53'03	desc. node	-11819 Mar 01 j 00:53	0∘ ত	
minimum elong	-11824 Feb 27 j 13:58				-11819 Apr 27 j 15:24	0° m	
_				ratra arada			
max. Earth dist.	-11824 Feb 28 j 04:57		2.00349 AU	retrograde	-11819 Jun 04 j 11:59	8°M07'13	0.60042.441
	-11824 Mar 25 j 07:19	0°ਰ 120 ਰ		min. Earth dist.	-11819 Jul 09 j 10:48	0°M08'03	0.60943 AU
morning rise	-11824 Apr 14 j 17:20				-11819 Jul 09 j 18:57		
	-11824 May 10 j 20:12	0° ≈		greatest brilliancy	-11819 Jul 13 j 08:55		
asc. node	-11824 Jun 04 j 14:25			opposition	-11819 Jul 14 j 05:12		-5°22'01
	-11824 Jun 25 j 15:29	0° ∀		direct	-11819 Aug 20 j 16:07	19° ≏ 30'07	
	-11824 Aug 09 j 16:50	0 ° Υ			-11819 Oct 05 j 19:20	0° M	
	-11824 Sep 23 j 10:46	9° 8			-11819 Dec 06 j 00:22	0° ∡ 7	
	-11824 Nov 08 j 00:08	Π $^{\circ}0$		asc. node	-11818 Jan 25 j 07:50	29° ∡ ¹25'49	
	-11824 Dec 28 j 09:19	0°©			-11818 Jan 26 j 06:13	8°0	
retrograde	-11823 Feb 25 j 06:01	18° © 24'22			-11818 Mar 14 j 17:20	0° ≈	
-	J .				J .		

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. -11818 Apr 28 i 07:44 0°**** -11814 Dec 24 j 12:40 0∘**⊽** -11818 May 12 j 20:21 10°\mathcal{H}09'48 -11813 Jan 06 j 23:18 evening set 9° 16'54 morning rise max. Earth dist. -11818 May 29 j 05:48 21° + 51'54 2.46270 AU -11813 Feb 06 j 17:48 o°m. -11818 Jun 09 j 10:40 0°**℃** -11813 Mar 25 j 04:38 0°×7 0°궁 -11813 May 13 j 04:35 -11818 Jul 06 j 08:19 19°**Υ**57'46 1°13'01 conjunction -11813 Jul 06 j 00:15 0°≈ -11818 Jul 06 j 07:44 19°**Υ**56'39 minimum elong 1°13'13 asc. node -11813 Sep 17 j 20:08 25°≈34'45 -11818 Jul 19 j 14:34 0° 8 retrograde -11813 Sep 23 j 12:49 25°≈46'46 1°54'57 -11818 Aug 27 j 12:09 $0^{\circ}\Pi$ opposition -11813 Oct 30 j 09:44 17°≈34'39 morning rise -11818 Sep 03 j 01:59 5°**Ⅱ**07'22 greatest brilliancy -11813 Oct 30 j 18:55 17°≈25'54 -1.7m -11818 Oct 04 j 23:33 0ಂತಾ min. Earth dist. -11813 Nov 05 j 15:05 15°≈12'52 0.58199 AU -11818 Nov 12 j 21:59 $0^{\circ}\Omega$ direct -11813 Dec 09 j 14:54 7°≈53'32 desc. node -11818 Dec 13 j 23:09 23° Ω 14'15 -11812 Feb 15 j 16:04 0°**)**€ -11818 Dec 23 j 05:08 -11812 Apr 04 j 10:58 $0^{\circ}\Upsilon$ -11817 Feb 03 j 20:35 0∘**⊽** -11812 May 16 j 18:28 0°8 -11817 Mar 22 j 07:18 0°M -11812 Jun 25 j 14:46 $0^{\circ}\Pi$ -11817 May 16 j 15:08 0°⊀ -11812 Aug 03 j 17:26 0ಂತಾ retrograde -11817 Jul 10 j 15:44 14° **₹** 43'30 desc. node -11812 Aug 04 j 14:43 0°9540'46 opposition -11817 Aug 19 j 12:19 4°**∡**155'40 -4°03'31 -11812 Sep 12 j 05:46 $0^{\circ}\Omega$ greatest brilliancy -11817 Aug 19 j 09:41 4°**≯**58'20 -1.4m -11812 Oct 22 j 23:28 0° m min. Earth dist. -11817 Aug 18 j 12:24 5°**∡**19'48 0.66136 AU evening set -11812 Nov 06 j 21:43 10° m 41'33 -11817 Sep 01 i 12:11 30°RML -11812 Dec 04 i 11:06 direct -11817 Sep 28 j 04:27 25° ML 20'52 -11817 Oct 27 i 12:57 conjunction -11812 Dec 31 i 00:07 18° \(\Omega\) 05'33 -1°13'57 0° **√** asc. node -11817 Dec 13 j 12:59 19° ₹25'57 minimum elong -11812 Dec 30 j 23:22 18°**♀**04'16 1°14'07 -11816 Jan 02 j 13:42 0°る -11811 Jan 17 j 20:06 o°m. -11816 Feb 22 j 04:06 max. Earth dist. -11811 Jan 22 j 20:56 3°ML19'44 2.60167 AU 0°≈≈ -11816 Apr 07 j 17:51 -11811 Feb 20 j 10:29 21°ML58'45 0°¥ morning rise -11811 Mar 04 j 21:27 -11816 May 20 j 01:52 0°**Υ**° 0°×7 -11816 Jun 29 j 03:36 0°**႘** -11811 Apr 21 j 05:34 0°궁 -11816 Jul 06 j 16:06 -11811 Jun 08 j 17:27 5°**8**46'11 0°≈ evening set -11816 Aug 06 j 20:38 0°**П** -11811 Jul 29 j 09:16 0°₩ -11811 Aug 04 j 16:59 3°**)** 34'06 asc. node -11816 Sep 06 j 05:07 23°**I**47'46 0°39'44 -11811 Sep 26 j 11:54 0°**Υ** conjunction -11816 Sep 06 j 08:16 23°**Д**53'57 -11811 Nov 14 j 08:28 11°**Υ**44'28 minimum elong 0°40'22 retrograde 5°59'49 -11816 Sep 14 j 03:22 0°ഇ -11811 Dec 17 j 19:30 5° **Y**13'51 opposition -11816 Sep 27 j 03:04 10°507'40 -11811 Dec 19 j 08:54 4° \(\gamma \) 42'53 max. Earth dist. 2.38645 AU greatest brilliancy -2.3m -11816 Oct 22 j 21:32 0°Ω min. Earth dist. -11811 Dec 25 j 19:59 2°**Υ**35'10 0.46734 AU desc. node -11816 Oct 30 j 17:07 5° **Ω**57'02 -11810 Jan 03 j 14:55 30°R ₩ morning rise -11816 Nov 09 j 20:51 13° **Ω**36'56 direct -11810 Jan 23 j 15:51 27° **∺** 18'07 -11816 Dec 01 j 22:49 0° M -11810 Feb 12 j 23:26 0°**Υ** -11815 Jan 12 j 23:57 -11810 Apr 16 j 08:36 0°8 -11815 Feb 26 j 14:52 0°M -11810 May 30 j 19:12 0°**П** -11815 Apr 15 j 17:06 0° ₹ -11810 Jun 22 j 19:48 16°**Д**31'20 desc. node -11815 Jun 09 j 20:41 0°ਰ -11810 Jul 11 j 08:25 0°€ retrograde -11815 Aug 14 i 07:20 19°る01'18 -11810 Aug 21 i 14:03 $0^{\circ}\Omega$ opposition -11815 Sep 22 i 04:48 9°₹48'06 -1°34'08 -11810 Oct 02 j 15:23 greatest brilliancy -11815 Sep 22 i 09:02 9°**る**43'53 -1.4m -11810 Nov 15 i 02:40 0°**♀** min. Earth dist. -11815 Sep 24 j 22:29 8°정42'43 0.65155 AU -11810 Dec 24 j 08:07 26° **△**11'52 evening set -11815 Oct 27 j 22:54 30°R ⊀ -11810 Dec 30 j 02:54 0° M asc. node -11815 Oct 30 j 18:17 29° ₹ 52'13 direct -11815 Nov 01 j 22:07 29° ₹ 50'26 -11809 Feb 12 j 01:30 28° ML31'00 -1°04'50 conjunction -11815 Nov 06 j 23:49 0°る -11809 Feb 12 j 02:55 28°M 33'16 1°05'23 minimum elong -11814 Jan 26 j 22:21 0°22 -11809 Feb 14 j 08:52 0°×7 -11814 Mar 17 j 01:26 0°₩ max. Earth dist. -11809 Feb 18 j 13:29 2°**∡**41'37 2.65658 AU -11814 Apr 29 j 12:40 $0^{\circ}\Upsilon$ -11809 Mar 31 j 22:04 29°**尽** 09'43 morning rise -11814 Jun 09 j 00:24 0° 8 -11809 Apr 02 j 05:33 0°궁 -11814 Jul 17 j 21:59 $0^{\circ}\Pi$ -11809 May 19 j 01:58 0°≈ -11814 Aug 25 j 08:12 -11809 Jun 22 j 09:46 22°≈06'42 asc. node -11814 Sep 09 j 23:35 12°508'29 0°**)**€ evening set -11809 Jul 04 j 14:50 -11814 Sep 17 j 13:16 17°558'58 $0^{\circ}\Upsilon$ desc. node -11809 Aug 20 j 02:01 -11814 Oct 03 j 06:10 0°**Ω** -11809 Oct 06 j 13:54 0° 8 -11809 Nov 28 j 03:04 Π $^{\circ}$ 0 conjunction -11814 Nov 09 j 17:39 28°**Ω**00'23 -0°37'41 retrograde -11808 Jan 27 j 23:25 18°**Ⅲ**22'37 minimum elong -11814 Nov 09 j 15:08 27°**Ω**55'47 0°37'15 opposition -11808 Feb 27 j 18:29 13°**Ⅱ**11'45 5°15'22 -11814 Nov 12 j 11:02 0° M greatest brilliancy -11808 Feb 28 j 01:21 13°**Д**07'09

min. Earth dist.

-11808 Feb 28 j 04:46 13°**Д**04'52 0.38455 AU

max. Earth dist.

-11814 Dec 20 j 02:52 26° m 55'32 2.49879 AU

•	omena of Mars from		•				age 10
direct	-11808 Mar 29 j 11:21	-	in astronomical ex	conjunction	-11803 Jun 15 j 13:01		
desc. node	-11808 May 10 j 00:34			minimum elong	-11803 Jun 15 j 11:14		1°05'30
	-11808 Jun 04 j 00:35	0ಂಣ		8	-11803 Jun 16 j 15:32	0° Υ	
	-11808 Jul 24 j 03:36	$0^{\circ}\Omega$			-11803 Jul 26 j 23:17	0°8	
	-11808 Sep 08 j 10:58	0° m/		morning rise	-11803 Aug 09 j 11:45	10° 8 17'54	
	-11808 Oct 24 j 09:27	0∘ ত			-11803 Sep 04 j 01:31	Π $^{\circ}0$	
	-11808 Dec 09 j 20:40	0°M₊			-11803 Oct 12 j 17:24	0	
	-11807 Jan 25 j 20:34	0° ∡			-11803 Nov 20 j 20:21	$0^{\circ}\Omega$	
evening set	-11807 Feb 02 j 08:01	4° ∡ 745'49		desc. node	-11803 Dec 30 j 20:10		
P. d. F.	-11807 Mar 13 j 20:14	0°る	2 (502(11)		-11803 Dec 31 j 09:37	0° m	
max. Earth dist.	-11807 Mar 14 j 04:29	0°013'14	2.65836 AU		-11802 Feb 12 j 14:31	0₀ ル 0∘ಹ	
conjunction	-11807 Mar 22 j 09:34	5° る 29'52	0°28'07		-11802 Apr 01 j 20:18 -11802 Jun 13 j 00:50	0° 水 7	
minimum elong	-11807 Mar 22 j 10:39	5° る 31'36		retrograde	-11802 Jun 26 j 22:10	1° × ⁷ 12'30	
minimum clong	-11807 Apr 29 j 03:14	0°≈	0 20 47	retrograde	-11802 Jul 10 j 04:27		
morning rise	-11807 May 08 j 07:44	6°≈02'28		min. Earth dist.	-11802 Aug 03 j 09:32		0.64814 AU
asc. node	-11807 May 09 j 01:51	6°≈32'21		opposition	-11802 Aug 05 j 21:12		
	-11807 Jun 13 j 05:28	0° ∀		greatest brilliancy	-11802 Aug 05 j 12:19	21°M27'13	-1.4m
	-11807 Jul 26 j 23:21	0° Υ		direct	-11802 Sep 13 j 19:50	11°M59'50	
	-11807 Sep 07 j 14:01	9° 8			-11802 Nov 16 j 16:52	0° ∡ ¹	
	-11807 Oct 19 j 13:24	Π $^{\circ}$ 0		asc. node	-11802 Dec 30 j 02:32	22° ≯ ¹28'20	
	-11807 Nov 30 j 21:34	0			-11801 Jan 12 j 06:16	5°0	
	-11806 Jan 15 j 02:39	$0^{\circ}\Omega$			-11801 Mar 02 j 05:00	0° ≈	
	-11806 Mar 24 j 09:23	0° m			-11801 Apr 16 j 06:53	0° ∀	
desc. node	-11806 Mar 28 j 03:19	0° m/28'09			-11801 May 28 j 11:43	0°Υ	
retrograde	-11806 Apr 04 j 11:00	0° m/50'36		evening set	-11801 Jun 14 j 09:51		
i. Fauth diet	-11806 Apr 15 j 06:07		0.45412.411	Fauth diat	-11801 Jul 07 j 13:25	0°8	2 20517 ATT
min. Earth dist.	-11806 May 02 j 13:05			max. Earth dist.	-11801 Jul 16 j 22:15	/°0110/	2.39517 AU
opposition greatest brilliancy	-11806 May 10 j 11:43 -11806 May 09 j 14:35			conjunction	-11801 Aug 12 j 09:28	270 12126	1°02'37
direct	-11806 Jun 12 j 02:54		-2.4111	minimum elong	-11801 Aug 12 j 09.28 -11801 Aug 12 j 12:16		1°03'08
direct	-11806 Aug 02 j 23:52	0° m		minimum clong	-11801 Aug 12 j 12:10 -11801 Aug 15 j 07:22	0°II	1 05 00
	-11806 Sep 29 j 07:16	0∘ ⊽			-11801 Sep 22 j 14:53	0 . ಲ	
	-11806 Nov 18 j 19:22	0°M		morning rise	-11801 Oct 15 j 06:41		
	-11805 Jan 06 j 15:11	0° ∡ 7		Ü	-11801 Oct 31 j 09:34		
	-11805 Feb 23 j 08:33	5°0		desc. node	-11801 Nov 17 j 12:29	12° Ω 58'13	
evening set	-11805 Mar 13 j 20:09	11° る 50'58			-11801 Dec 10 j 11:35	0° m	
asc. node	-11805 Mar 26 j 20:59				-11800 Jan 21 j 15:24	0∘ ⊽	
max. Earth dist.	-11805 Apr 09 j 04:50		2.60752 AU		-11800 Mar 06 j 16:24	0°M₊	
	-11805 Apr 10 j 15:55	0° ≈			-11800 Apr 25 j 05:36	0° ∡ ¹	
					-11800 Jun 28 j 08:19	0°る	
conjunction	-11805 May 01 j 13:35		0°21'49	retrograde	-11800 Jul 31 j 05:29	5°る50'22	
minimum elong	-11805 May 01 j 12:40		0°21'19	opposition	-11800 Aug 30 j 05:11		2020111
morning rise	-11805 May 25 j 04:32 -11805 Jun 19 j 08:11			greatest brilliancy	-11800 Sep 08 j 14:54 -11800 Sep 08 j 18:24		
morning risc	-11805 Jul 19 J 08:11 -11805 Jul 06 j 20:07	0° Υ		min. Earth dist.	-11800 Sep 08 j 18:24 -11800 Sep 09 j 21:43		0.66268 AU
	-11805 Aug 16 j 20:51	0°8		direct	-11800 Oct 19 j 01:58		0.00200710
	-11805 Sep 25 j 19:05	0°II		asc. node	-11800 Nov 16 j 08:18		
	-11805 Nov 04 j 08:30	0°9			-11800 Dec 11 j 09:47	0°ਰ	
	-11805 Dec 14 j 13:20	$0^{\circ}\Omega$			-11799 Feb 06 j 12:01	0°≈	
	-11804 Jan 25 j 22:55	0° m p			-11799 Mar 25 j 16:11	0°) €	
desc. node	-11804 Feb 13 j 02:43	11° m 57'19			-11799 May 07 j 13:11	$0^{\circ}\mathbf{\Upsilon}$	
	-11804 Mar 14 j 08:21	0∘ ত			-11799 Jun 16 j 19:26	8° 0	
retrograde	-11804 May 20 j 05:18				-11799 Jul 25 j 14:07	$\Pi^{\circ}0$	
min. Earth dist.	-11804 Jun 22 j 07:18			evening set	-11799 Aug 15 j 07:44		
greatest brilliancy	-11804 Jun 27 j 08:12				-11799 Sep 01 j 21:43	0°9	
opposition	-11804 Jun 28 j 11:15		-5°23′17	desc. node	-11799 Oct 04 j 07:56		
direct	-11804 Aug 03 j 17:52	4° £ 16'56			-11799 Oct 10 j 16:52	0 ° Ω	
	-11804 Oct 21 j 20:35	0° M 0° ∡ ′		conjunction	11700 Oat 16: 10:40	4° Ω 37'36	0.000.25
	-11804 Dec 15 j 07:15 -11803 Feb 03 j 00:08	0°X' 0°る		conjunction minimum elong	-11799 Oct 16 j 18:49 -11799 Oct 16 j 18:03	4° £ 3736 4° £ 36'09	
asc. node	-11803 Feb 03 j 00:08 -11803 Feb 10 j 21:37	0 る 4°る55'54		behind sun begin	-11799 Oct 10 j 18:03 -11799 Oct 15 j 19:38	3° Ω 53'37	0 00 00
	-11803 New 10 j 21:37	0°≈		behind sun end	-11799 Oct 17 j 16:27	5° Ω 18'39	
evening set	-11803 Apr 24 j 09:01				-11799 Nov 19 j 18:56	0° m/y	
	-11803 May 05 j 10:53	0° ∀		max. Earth dist.	-11799 Nov 30 j 00:22		2.44998 AU
max. Earth dist.	-11803 May 11 j 09:18	4°) €07'40	2.50963 AU	morning rise	-11799 Dec 17 j 05:22	-	
					-11799 Dec 31 j 18:37	0∘ ত	

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Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:22,
Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style.
                   -11798 Feb 14 i 01:06
                                          0°M
                                                                                           -11793 Jun 22 j 15:37
                                                                                                                  0ಂತಾ
                   -11798 Apr 01 j 21:23
                                                                                           -11793 Aug 05 j 22:34
                                          0°×7
                                                                                                                  0^{\circ}\Omega
                   -11798 May 22 j 06:16
                                          0°₹
                                                                                           -11793 Sep 18 j 19:58
                                                                                                                  O° m
                   -11798 Jul 21 j 10:02
                                                                                           -11793 Nov 02 j 11:20
                                                                                                                  0∘ଫ
                                          0°≈≈
                   -11798 Sep 06 j 23:09 11°≈01'44
retrograde
                                                                                           -11793 Dec 18 j 05:03
                                                                                                                  0°M
asc. node
                   -11798 Oct 04 j 12:17
                                           6°≈09'12
                                                                       evening set
                                                                                           -11792 Jan 18 j 20:37 20°M24'34
opposition
                   -11798 Oct 14 j 18:25
                                           2°≈22'00
                                                      0°26'46
                                                                                           -11792 Feb 02 j 19:49
                                                                                                                 0°∡
greatest brilliancy
                   -11798 Oct 14 j 20:08
                                           2°≈20'20
                                                     -1.6m
                                                                       max. Earth dist.
                                                                                           -11792 Mar 04 j 18:34 19° ₹ 47'43 2.66403 AU
min. Earth dist.
                   -11798 Oct 19 j 16:35
                                           0°≈27'03
                                                      0.61586 AU
                   -11798 Oct 20 j 20:46 30°R♂
                                                                       conjunction
                                                                                           -11792 Mar 07 j 06:54 21° ₹24'15 -0°44'40
direct
                   -11798 Nov 24 j 10:08 22°る27'46
                                                                        minimum elong
                                                                                           -11792 Mar 07 j 08:22 21°х 26'36
                                                                                                                            0°45'19
                   -11798 Dec 31 j 14:28
                                           0°≈
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                   -11797 Feb 28 j 18:05
                                           0°)€
                                                                       morning rise
                                                                                           -11792 Apr 23 j 06:34 21°♂38'17
                   -11797 Apr 15 j 08:10
                                           0^{\circ}\Upsilon
                                                                                           -11792 May 06 j 03:20
                   -11797 May 26 j 15:31
                                           0°8
                                                                       asc. node
                                                                                           -11792 May 25 j 20:24 12°≈54'26
                   -11797 Jul 04 j 23:48
                                           0^{\circ}II
                                                                                           -11792 Jun 20 j 15:44
                                                                                                                  0°)€
                   -11797 Aug 12 j 17:47
                                           0ಂತಾ
                                                                                           -11792 Aug 04 j 04:04
desc. node
                   -11797 Aug 22 j 07:23
                                           7°522'43
                                                                                           -11792 Sep 16 j 23:25
                                                                                                                  0°8
                   -11797 Sep 20 j 22:38
                                          0^{\circ}\Omega
                                                                                           -11792 Oct 30 j 19:09
                                                                                                                  0^{\circ}\Pi
evening set
                   -11797 Oct 17 j 11:25 19°\Omega48'34
                                                                                           -11792 Dec 15 j 13:21
                   -11797 Oct 31 j 09:35
                                                                                           -11791 Feb 12 j 08:48
                                                                                                                  0^{\circ}\Omega
                   -11797 Dec 12 j 15:34
                                                                                           -11791 Mar 12 j 03:38
                                                                                                                  4°Ω55'16
                                                                       retrograde
                                                                       min. Earth dist.
                                                                                           -11791 Apr 08 j 12:46 0^{\circ}\Omega13'39
                                                                                                                            0.41130 AU
conjunction
                   -11797 Dec 13 j 02:40 0° 2 19'14 -1°06'13
                                                                                           -11791 Apr 09 j 07:08 30°R$
                   -11797 Dec 13 j 00:41 0° 215'49 1°06'11
                                                                       desc. node
                                                                                           -11791 Apr 13 j 21:37 28°536'34
 minimum elong
max. Earth dist.
                   -11796 Jan 12 j 01:59 20° 246'48 2.56637 AU
                                                                                           -11791 Apr 14 j 22:41 28°517'36 -0°04'38
                                                                       opposition
                   -11796 Jan 25 j 21:19
                                                                       greatest brilliancy
                                                                                           -11791 Apr 14 j 22:16 28°517'55
                                          o°m.
                                                                                                                            -2.7m
                   -11796 Feb 04 j 19:18
                                                                                           -11791 May 16 j 00:14 22°538'43
morning rise
                                           6°M,33'03
                                                                       direct
                   -11796 Mar 11 j 23:52
                                                                                           -11791 Jun 21 j 06:17 0°Ω
                                          0°×7
                   -11796 Apr 28 j 18:17
                                          0°ರ
                                                                                           -11791 Aug 20 j 17:43
                                                                                                                  0° m
                                                                                           -11791 Oct 09 j 18:05
                   -11796 Jun 17 j 13:05 0°≈
                                                                                                                  0∘ಹ
                   -11796 Aug 11 j 08:18 0°米
                                                                                           -11791 Nov 27 j 02:03 0°M
                   -11796 Aug 21 j 11:23 4° ★51'01
                                                                                           -11790 Jan 13 j 23:45 0° ⊀
asc. node
                   -11796 Oct 22 j 10:51 22° ★ 14'02
                                                                                           -11790 Feb 26 j 09:40 27°尽29'07
retrograde
                                                                       evening set
                   -11790 Mar 02 j 08:07 0°궁
opposition
                   -11796 Nov 27 j 14:08 14° ★ 34'08 -2.0m
greatest brilliancy
                                                                       max. Earth dist.
                                                                                           -11790 Mar 29 j 15:15 17°₹35'44 2.63349 AU
min. Earth dist.
                   -11796 Dec 04 j 07:18 12° ★11'24 0.51517 AU
                                                                       asc. node
                                                                                           -11790 Apr 12 j 13:40 26° ₹ 41'45
direct
                   -11795 Jan 04 j 03:04 6° ₭ 05'34
                   -11795 Mar 14 j 07:41 0°Υ
                                                                       conjunction
                                                                                           -11790 Apr 15 j 14:24 28°₹41'16 0°01'53
                   -11795 Apr 30 j 01:11 0°8
                                                                        minimum elong
                                                                                           -11790 Apr 15 j 14:21 28°₹41'11
                   -11795 Jun 10 j 15:30 0°Ⅱ
                                                                        behind sun begin
                                                                                           -11790 Apr 14 j 18:32 28° 궁08'36
                   -11795 Jul 09 j 10:30 21°Д28'25
                                                                                           -11790 Apr 16 j 10:11 29° 궁13'47
desc. node
                                                                        behind sun end
                   -11795 Jul 20 j 19:33 0°ഇ
                                                                                           -11790 Apr 17 j 14:14 0°≈
                   -11795 Aug 30 j 03:08 0°Ω
                                                                                           -11790 Jun 01 j 06:47
                   -11795 Oct 10 j 12:17 0° Mp
                                                                                           morning rise
                                                                                           -11790 Jul 14 j 06:32 0°Υ
                   -11795 Nov 22 j 11:38 0°♀
                   -11795 Dec 06 j 23:34
                                          9°£51'19
                                                                                           -11790 Aug 24 i 18:32 0°8
evening set
                   -11794 Jan 06 i 04:03 0°M
                                                                                           -11790 Oct 04 i 06:26
                                                                                                                  0°П
                                                                                           -11790 Nov 13 j 12:02
                                                                                                                  0ಂತಾ
                   -11794 Jan 27 j 01:19 13°ML41'06 -1°12'32
                                                                                           -11790 Dec 24 j 16:07
                                                                                                                  0^{\circ}\Omega
conjunction
                   -11794 Jan 27 j 02:10 13°ML42'30 1°12'57
                                                                                           -11789 Feb 07 j 04:27
 minimum elong
max. Earth dist.
                   -11794 Feb 08 j 14:32 21°ML49'51 2.64136 AU
                                                                                           -11789 Mar 01 j 20:57 13° m 23'32
                                                                       desc node
                   -11794 Feb 21 i 06:31 0° ₹
                                                                                           -11789 Apr 08 j 02:13
morning rise
                   -11794 Mar 16 j 23:03 15° ₹ 10'43
                                                                       retrograde
                                                                                           -11789 May 04 j 14:12
                                                                                                                  4°£27'18
                   -11794 Apr 09 j 05:30
                                         0°궁
                                                                                           -11789 May 29 j 20:35 30°R M
                   -11794 May 26 j 12:57
                                                                       min. Earth dist.
                                                                                           -11789 Jun 04 j 16:18 27° m 57'30 0.52932 AU
                                          0°≈
asc. node
                   -11794 Jul 09 j 05:06 27°≈32'05
                                                                       greatest brilliancy
                                                                                           -11789 Jun 10 j 17:20 25° Mp 41'25
                                                                                                                            -2.0m
                   -11794 Jul 13 j 03:37
                                          0°∀
                                                                                           -11789 Jun 12 j 00:07 25° Mp 12'26 -4°57'24
                                                                       opposition
                                           0^{\circ}\Upsilon
                   -11794 Aug 30 j 23:20
                                                                                           -11789 Jul 16 j 22:26 17° M 32'54
                                                                       direct
                   -11794 Oct 23 j 21:02
                                          _0°႘
                                                                                           -11789 Sep 05 j 04:03
                                                                                                                  0∘⊽
                   -11794 Dec 27 j 14:48 19°831'27
retrograde
                                                                                           -11789 Nov 03 j 09:43
                                                                                                                  0°M
                   -11793 Jan 27 j 19:30 14°810'16
                                                                                           -11789 Dec 24 j 17:43
                                                                                                                  0°∡7
opposition
                                                      6°57'26
greatest brilliancy
                   -11793 Jan 29 j 02:15 13°848'23
                                                                                           -11788 Feb 11 j 10:33
                                                                                                                  0°궁
min. Earth dist.
                   -11793 Feb 01 j 20:14 12°844'49
                                                      0.40285 AU
                                                                       asc. node
                                                                                           -11788 Feb 28 j 12:34 10°♂50'08
direct
                   -11793 Mar 01 j 12:25
                                           8°811'13
                                                                                           -11788 Mar 29 j 01:36
                                                                                                                  0°≈
                   -11793 May 05 j 08:00 0°Ⅱ
                                                                                           -11788 Apr 07 j 03:52
                                                                                                                  6°≈01'04
                                                                       evening set
```

max. Earth dist.

-11788 Apr 27 j 01:23 19°≈23'30 2.55281 AU

desc. node

-11793 May 27 j 17:00 13°**Д**15'50

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 12

Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. -11788 May 12 j 12:43 0°**米** -11783 Jun 01 j 18:15 0°ಕ -11783 Aug 22 j 15:53 27°る09'15 retrograde -11788 May 27 j 13:57 10°\(\mathbf{X}\) 30'07 0°51'15 -11783 Sep 30 j 05:29 18° ₹ 06'41 -0°52'22 conjunction opposition -11783 Sep 30 j 08:34 18°**ठ**03'37 -1.5m -11788 May 27 j 12:02 10° **€** 26'44 0°50'58 minimum elong greatest brilliancy -11788 Jun 23 j 20:50 0°**Υ** -11783 Oct 03 j 18:04 16°₹43'03 min. Earth dist. 0.64154 AU -11788 Jul 18 j 11:20 18°**Y**04'07 -11783 Oct 21 j 03:11 10°₹46'00 morning rise asc. node -11783 Nov 10 j 00:20 8°**る**08'20 -11788 Aug 03 j 09:59 0° 8 direct -11788 Sep 11 j 18:25 $0^{\circ}\Pi$ -11782 Jan 18 j 22:21 0°≈ -11788 Oct 20 j 16:22 0ಂತಾ -11782 Mar 11 j 04:09 0°**)**€ $0^{\circ}\Upsilon$ -11788 Nov 29 j 01:46 0 $^{\circ}\Omega$ -11782 Apr 24 j 06:05 -11787 Jan 09 j 01:01 0° m -11782 Jun 03 j 23:47 0°8 -11787 Jan 16 j 16:13 $0^{\circ}II$ desc. node 5° m 23'22 -11782 Jul 13 j 00:33 -11787 Feb 22 j 05:36 0∘**⊽** -11782 Aug 20 j 12:37 0ಂತಾ -11787 Apr 15 j 07:51 desc. node -11782 Sep 08 j 00:41 14°519'48 retrograde -11787 Jun 12 j 20:35 17° ML04'14 evening set -11782 Sep 24 j 01:02 26°536'44 min. Earth dist. -11787 Jul 18 j 18:31 8°M44'10 0.62574 AU -11782 Sep 28 j 11:52 $0^{\circ}\Omega$ opposition -11787 Jul 22 j 17:52 7°M08'51 -5°12'32 -11782 Nov 07 j 17:42 greatest brilliancy -11787 Jul 22 j 01:43 7°M24'59 -11787 Aug 13 j 06:12 30°R ₽ conjunction -11782 Nov 22 j 10:45 10° m 39'11 -0° 50'29 direct -11787 Aug 29 j 19:08 28°**£**11'02 minimum elong -11782 Nov 22 j 08:04 10° m 34'22 0°50'12 -11787 Sep 16 j 11:08 -11782 Dec 19 j 19:33 0∘**⊽** -11787 Nov 29 i 06:15 0°**∡**7 max. Earth dist. -11782 Dec 29 j 12:27 6°**£**42'55 2.52440 AU asc. node -11786 Jan 15 j 16:14 26° ₹ 51'40 morning rise -11781 Jan 17 i 22:57 19° **△**57'11 -11786 Jan 20 i 21:56 0°궁 -11781 Feb 01 i 23:41 0°M -11786 Mar 09 j 20:17 0°≈ -11781 Mar 20 i 05:52 0° **₹** -11786 Apr 23 j 14:44 0°**₩** -11781 May 07 j 16:02 0°궁 -11786 May 24 j 03:58 21° **H** 34'18 -11781 Jun 28 j 12:31 0°≈ evening set -11786 Jun 04 j 18:40 0°**Υ**° -11781 Sep 02 j 16:22 0°**₩** -11786 Jun 11 j 08:33 4°**Υ**49'41 2.43647 AU -11781 Sep 08 j 04:01 max Earth dist 1°**)**€33'33 asc node -11786 Jul 14 j 22:01 -11781 Oct 03 j 18:04 5°\mathbf{H}11'42 0° 8 retrograde -11781 Nov 01 j 12:05 30°R≈ -11786 Jul 19 j 04:22 3°815'18 1°12'49 -11781 Nov 09 j 01:04 27°≈17'32 2°49'00 conjunction opposition -11786 Jul 19 j 04:58 3°**8**16'27 1°13'09 greatest brilliancy -11781 Nov 09 j 16:00 27°≈03'37 minimum elong -1.8m -11786 Aug 22 j 18:30 0°**П** min. Earth dist. -11781 Nov 15 j 22:29 24°≈43'40 0.56004 AU -11786 Sep 18 j 00:52 20°**Ⅲ**31'11 -11781 Dec 18 j 20:39 17°≈49'18 morning rise direct -11786 Sep 30 j 04:18 0°ഇ -11780 Feb 04 j 08:15 0°**光** -11786 Nov 08 j 00:47 0°**Ω** -11780 Mar 28 j 11:18 0°**Υ** desc. node -11786 Dec 04 j 09:09 19° Ω 49'34 -11780 May 10 j 19:39 0°**8** -11786 Dec 18 j 05:02 0° M -11780 Jun 20 j 03:23 0°**П** -11785 Jan 29 j 14:06 0∘**⊽** desc. node -11780 Jul 26 j 03:41 27°**Ⅲ**25'04 -11785 Mar 16 j 07:53 0° M -11780 Jul 29 j 13:01 0°5 -11785 May 07 j 13:47 0° **✗**¹ -11780 Sep 07 j 06:23 0°**Ω** -11785 Jul 18 j 11:38 22° ₹ 43'58 -11780 Oct 18 j 03:58 retrograde -11785 Aug 27 j 05:46 13°**∡**701'33 -3°35'15 -11780 Nov 18 j 06:25 22° m 02'04 opposition evening set -11785 Aug 27 j 05:54 13° ₹ 01'25 -1.4m -11780 Nov 29 j 18:07 greatest brilliancy -11785 Aug 27 i 01:22 13°**尽** 05'59 min. Earth dist. 0.66448 AU -11785 Oct 06 i 06:23 3° ₹ 19'29 -11779 Jan 10 i 04:27 28° \(\Omega\) 00'37 -1°15'08 direct conjunction -11785 Dec 03 j 22:23 19° ₹03'20 -11779 Jan 10 j 04:22 28° **2**00'30 1°15'25 asc. node minimum elong -11785 Dec 26 i 10:38 0°る -11779 Jan 13 i 04:28 0° M -11784 Feb 16 i 16:18 max. Earth dist. -11779 Jan 29 i 08:21 10°ML38'26 2.61781 AU 0°≈≈ -11784 Apr 02 j 17:52 0°**₩** -11779 Feb 28 j 04:59 0° ₹ -11784 May 15 j 06:15 $0^{\circ}\Upsilon$ morning rise -11779 Mar 01 j 14:21 0°**х** 53′35 -11784 Jun 24 j 09:26 0°8 -11779 Apr 16 j 08:40 0°궁 -11784 Jul 20 j 17:25 20°819'34 evening set -11779 Jun 03 j 08:04 0°28 -11784 Aug 02 j 02:52 $0^{\circ}\Pi$ -11779 Jul 22 j 14:00 0°**)** -11784 Sep 09 j 09:26 0°© asc. node -11779 Jul 25 j 23:16 2°\mathcal{H}00'29 -11779 Sep 13 j 23:13 -11784 Sep 21 j 03:44 9°510'39 0°22'35 retrograde -11779 Nov 28 j 23:24 24°**Υ**35'18 conjunction -11784 Sep 21 j 05:49 9°514'40 0°23'13 -11779 Dec 31 j 11:29 18°**Y**31'40 6°40'06 minimum elong opposition -11784 Oct 18 j 03:18 $0^{\circ}\Omega$ -11778 Jan 02 j 03:24 18°**Υ**00'11 greatest brilliancy -2.4m desc. node -11784 Oct 21 j 02:05 -11778 Jan 07 j 23:45 16°**Υ**10'07 2°**Ω**15′02 min. Earth dist. 0.44156 AU max. Earth dist. -11784 Oct 29 j 18:05 8°**Ω**49'45 2.40413 AU direct -11778 Feb 05 j 00:10 11°**Υ**15'47 morning rise -11784 Nov 24 j 03:19 $27^{\circ}\Omega 46'23$ -11778 Apr 04 j 16:43 0°8 -11784 Nov 27 j 04:04 0° m -11778 May 22 j 23:17 $0^{\circ}II$ -11783 Jan 08 j 03:26 0∘**⊽** desc. node -11778 Jun 13 j 08:13 14°**II**45'15 -11783 Feb 21 j 13:34 0°M -11778 Jul 04 j 21:17 0ಂತಾ -11783 Apr 10 j 01:03 -11778 Aug 15 j 20:55 $0^{\circ}\Omega$

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. -11778 Sep 27 j 10:05 0° Mp morning rise -11773 Jun 29 j 18:32 28° + 18'50 -11778 Nov 10 j 04:55 -11773 Jul 02 j 02:45 $0^{\circ}\Upsilon$ 0∘⊽ -11778 Dec 25 j 09:54 0°M -11773 Aug 11 j 23:00 0°8 -11777 Jan 02 j 20:21 5°M30'27 -11773 Sep 20 j 15:43 $0^{\circ}\Pi$ evening set -11777 Feb 09 j 17:54 0°×7 -11773 Oct 29 j 22:36 0ಂತಾ -11773 Dec 08 j 18:26 $0^{\circ}\Omega$ -11777 Feb 21 j 00:28 conjunction 7°**х** 13′56 -0°58′25 -11772 Jan 19 j 11:13 0° m -11777 Feb 21 j 02:00 minimum elong 7°**х** 16′24 0°59′00 desc. node -11772 Feb 03 j 11:44 10° Mp 14'05 -11777 Feb 24 j 05:46 max. Earth dist. 9°**҂**17'47 2.66142 AU -11772 Mar 05 j 14:32 0∘ಹ -11777 Mar 28 j 14:02 0°ಕ -11772 May 11 j 21:18 0°M morning rise -11777 Apr 09 j 11:14 7°**궁**36'47 retrograde -11772 May 29 j 02:36 1°M54'34 -11777 May 14 j 06:17 0°≈ -11772 Jun 14 j 13:28 30°R € -11777 Jun 12 j 15:07 19°≈03'29 asc. node min. Earth dist. -11772 Jul 02 j 06:07 24°**2**14'04 0.59417 AU -11777 Jun 29 j 09:02 0°**)**€ opposition -11772 Jul 07 j 16:16 22°**♀**05'55 -5°25'24 -11777 Aug 14 j 00:05 $0^{\circ}\Upsilon$ greatest brilliancy -11772 Jul 06 j 16:47 22°**♀**29'03 -11777 Sep 28 j 18:06 0°8 direct -11772 Aug 13 j 15:40 13°**♀**33'54 -11777 Nov 15 j 09:03 $\Pi^{\circ}0$ -11772 Oct 12 j 16:09 0°M -11776 Jan 13 j 23:15 -11772 Dec 09 j 09:05 retrograde -11776 Feb 13 j 20:49 5°9545'14 -11771 Jan 28 j 22:39 0°정 0°955'53 min. Earth dist. -11776 Mar 14 j 00:22 0.38639 AU asc. node -11771 Feb 01 j 06:54 2°る03'46 opposition -11776 Mar 16 j 10:51 0°9515'42 3°27'21 -11771 Mar 17 j 05:33 greatest brilliancy -11776 Mar 16 j 07:33 0°517'58 -2.9m -11771 Apr 30 i 19:56 0°) -11776 Mar 17 i 09:44 30°R **I**I evening set -11771 May 04 i 17:05 2°**)**(41'32 direct -11776 Apr 15 j 20:04 25° **Ⅲ**07'57 max. Earth dist. -11771 May 20 j 20:16 14° **米** 01'50 2.48408 AU desc. node -11776 Apr 30 j 13:07 26° **II** 30'33 -11771 Jun 12 j 00:50 -11776 May 14 j 09:39 0ംഉ -11776 Jul 15 j 04:37 -11771 Jun 27 j 02:05 11° Υ 04'20 1°10'52 $\Omega^{\circ}\Omega$ conjunction -11776 Sep 01 j 21:57 -11771 Jun 27 j 00:50 11°**Υ**'02'01 1°10'57 0° m minimum elong -11776 Oct 18 j 21:14 -11771 Jul 22 j 07:06 0°8 0∘⊽ -11776 Dec 04 j 21:10 0°M -11771 Aug 23 j 01:44 24°**8**23'59 morning rise -11771 Aug 30 j 07:03 0°**Ⅱ** -11775 Jan 21 j 03:25 0° **尽** -11771 Oct 07 j 20:07 0°95 evening set -11775 Feb 11 j 03:15 13°**尽**20'10 -11775 Mar 09 j 05:38 0°る -11771 Nov 15 j 19:35 0°**Ω** -11775 Mar 19 j 20:04 6° ₹ 48'41 2.65160 AU -11771 Dec 21 j 05:04 $26^{\circ}\Omega$ 23'44 max. Earth dist. desc. node -11771 Dec 26 j 03:58 0° Mp -11775 Mar 31 j 03:51 14°**⋜**07'26 -0°17'33 -11770 Feb 06 j 22:34 0°**♀** conjunction -11775 Mar 31 j 04:34 14°**⋜**08'36 0°18'12 -11770 Mar 25 j 21:51 0° M minimum elong -11775 Apr 24 j 12:09 0°≈ -11770 May 23 j 11:55 0° ₹ asc. node -11775 Apr 29 j 07:40 3°≈10'05 retrograde -11770 Jul 04 j 20:28 9° ₹27'56 -11775 May 17 j 05:29 15°≈02'46 min. Earth dist. -11770 Aug 12 j 03:19 0° **₹** 16'55 0.65674 AU morning rise -11775 Jun 08 j 10:38 0°**米** -11770 Aug 12 j 20:07 30°RM -11775 Jul 21 j 21:35 0°Υ -11770 Aug 13 j 19:20 29°M36'37 -4°21'49 opposition -11775 Sep 02 j 01:25 0°8 -11770 Aug 13 j 14:06 29°M 41'53 -1.4m greatest brilliancy -11775 Oct 13 j 09:40 0°**П** -11770 Sep 22 j 04:55 20° ML08'34 direct -11775 Nov 23 j 18:06 0°ഇ -11770 Nov 05 j 21:26 0° ₹ -11770 Dec 20 j 11:44 20° ₹ 51'59 -11774 Jan 05 i 19:48 0°Ω asc. node -11774 Feb 25 i 06:54 0° m -11769 Jan 06 i 03:22 0°る desc. node -11774 Mar 18 j 15:40 8° m 59'23 -11769 Feb 25 i 00:56 0°≈ retrograde -11774 Apr 16 j 01:59 14° m 09'28 -11769 Apr 11 j 10:41 0°**)** min. Earth dist. -11774 May 15 j 03:50 8° m 29'09 0.48085 AU -11769 May 23 i 18:37 -11774 May 21 j 23:32 6° m 04'41 -2.3m -11769 Jun 27 j 07:16 25°**Y**44'59 greatest brilliancy evening set -11774 May 23 j 03:18 5° mp 40'00 -3°51'08 -11769 Jul 02 j 21:08 0°8 opposition -11774 Jun 11 j 21:57 30°RΩ $0^{\circ}\Pi$ -11769 Aug 10 j 15:02 -11774 Jun 25 j 13:51 28° **Ω**44'07 direct max. Earth dist. -11769 Aug 21 j 18:15 8°**Д**43'08 2.38340 AU -11774 Jul 09 j 20:49 0° m -11774 Sep 21 j 14:00 -11769 Aug 26 j 19:24 12°**II**40'40 0°51'04 0∘**⊽** conjunction -11774 Nov 13 j 01:40 0°M minimum elong -11769 Aug 26 j 22:45 12°**Д**47'14 0°51'39 0°**∡**¹ -11773 Jan 01 j 14:44 -11769 Sep 17 j 21:57 0 \circ \odot -11773 Feb 18 j 15:30 0°る -11769 Oct 26 j 15:32 0° Ω -11773 Mar 17 j 04:33 17°**⋜**00'44 -11769 Oct 30 j 11:18 asc. node morning rise 2°**Ω**55'04 -11773 Mar 22 j 20:58 20°₹42'12 evening set desc. node -11769 Nov 07 j 23:28 9°**£**22′23 -11773 Apr 06 j 01:37 0°≈ -11769 Dec 05 j 15:57 0° m max. Earth dist. -11773 Apr 15 j 16:14 6°**≈**21'56 2.58984 AU -11768 Jan 16 j 16:27 0∘**⊽** -11768 Mar 01 j 09:21 0°M conjunction -11773 May 11 j 01:59 23°≈29'14 0°33'06 -11768 Apr 18 j 21:45 0°**∡**

-11768 Jun 15 j 08:52

retrograde

-11768 Aug 08 j 06:13 13°**⋜**49'33

0°정

-11773 May 11 j 00:36 23°≈26'53 0°32'40

-11773 May 20 j 13:46 0°**米**

minimum elong

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. -11768 Sep 16 j 10:10 4°중28'28 -2°02'24 -11763 Oct 05 i 12:13 opposition -11768 Sep 16 j 14:22 4°る24'16 -1.4m -11763 Nov 17 j 16:35 greatest brilliancy 0∘ଫ min. Earth dist. -11768 Sep 18 j 12:15 3°る38'27 0.65778 AU -11763 Dec 17 j 01:02 19° **△**45'56 evening set -11768 Sep 28 j 01:12 30°R ⊀ -11762 Jan 01 j 12:08 o°m. -11768 Oct 27 j 02:03 24° ₹32'45 direct -11768 Nov 06 j 17:15 25° ₹ 13'40 -11762 Feb 05 j 07:48 22°M41'48 -1°08'36 asc. node conjunction -11768 Nov 27 j 19:56 0°정 -11762 Feb 05 j 09:01 22°ML43'47 1°09'06 minimum elong -11762 Feb 14 j 10:49 28°MJ35'02 2.65076 AU -11767 Jan 30 j 23:46 0°≈ max. Earth dist. 0°**)**€ -11767 Mar 20 j 06:06 -11762 Feb 16 j 15:37 0°**∡** $0^{\circ}\Upsilon$ -11767 May 02 j 12:12 morning rise -11762 Mar 25 j 14:33 23°**尽** 39'50 -11767 Jun 11 j 22:10 0° 8 -11762 Apr 04 j 12:55 0°궁 -11767 Jul 20 j 18:50 -11762 May 21 j 13:45 $0^{\circ}\Pi$ 0°≈ -11767 Aug 28 j 03:42 0ಂತಾ asc. node -11762 Jun 29 j 10:48 24°≈50'14 evening set -11767 Aug 29 j 21:10 1°520'52 -11762 Jul 07 j 12:48 0°**)**€ desc. node -11767 Sep 24 j 19:05 21°525'45 -11762 Aug 23 j 20:58 $0^{\circ}\Upsilon$ -11767 Oct 05 j 23:39 -11762 Oct 12 j 08:24 0°8 -11762 Dec 13 j 03:37 $0^{\circ}II$ 5°**Ⅱ**50'40 conjunction -11767 Oct 30 j 14:02 18° Ω 32'44 -0°26'15 retrograde -11761 Jan 14 j 06:43 minimum elong -11767 Oct 30 j 12:03 $18^{\circ}\Omega$ 29'02 $0^{\circ}25'45$ opposition -11761 Feb 14 i 00:08 0°**Ⅱ**41'38 -11767 Nov 15 j 02:13 0° Mp greatest brilliancy -11761 Feb 14 j 18:20 0°**Д**29'19 -2.8m max. Earth dist. -11767 Dec 12 j 09:44 19° mp 41'31 2.47708 AU -11761 Feb 16 j 13:42 30°R8 -11767 Dec 27 j 01:30 0∘**⊽** min. Earth dist. -11761 Feb 16 j 17:02 29°**8**57'46 0.38947 AU morning rise -11767 Dec 29 i 06:58 1°**2**33′03 direct -11761 Mar 17 j 09:08 25° \$\frac{16}{04}\$ -11766 Feb 09 i 05:37 0°M -11761 Apr 14 j 02:57 $0^{\circ}\Pi$ -11766 Mar 27 i 18:29 0°×7 desc. node -11761 May 18 j 05:10 15°**耳**03'19 -11766 May 16 j 05:06 0°₹ -11761 Jun 13 j 04:21 0ಂತಾ -11766 Jul 10 j 21:24 -11761 Jul 29 j 23:36 $0^{\circ}\Omega$ 0°≈≈ -11766 Sep 16 j 05:28 19°≈45'51 -11761 Sep 13 j 00:30 0° m retrograde -11766 Sep 24 j 20:01 19°≈17'03 -11761 Oct 28 j 06:54 0∘ଫ asc. node 0°M opposition -11766 Oct 23 j 13:36 11°≈20'35 1°16'26 -11761 Dec 13 j 09:05 -11766 Oct 23 j 19:08 11°≈15'15 -1.7m -11760 Jan 27 j 18:53 29° ML06'52 greatest brilliancy evening set -11766 Oct 29 j 05:39 9°≈09'57 0.59830 AU -11760 Jan 29 j 04:10 0° **尽** min. Earth dist. -11760 Mar 10 j 08:30 26° ₹ 18'34 2.66197 AU -11766 Dec 03 j 01:15 1°**≈**32'15 max. Earth dist. direct -11765 Feb 21 j 03:03 0°**米** -11765 Apr 09 j 08:17 0°**Υ** -11760 Mar 15 j 23:09 29° ₹ 54'22 -0°35'23 conjunction -11765 May 21 j 04:49 0°**8** -11760 Mar 16 j 00:25 29° ₹ 56'25 0°36'02 minimum elong -11765 Jun 29 j 19:40 0°**Ⅱ** -11760 Mar 16 j 02:39 0°궁 -11765 Aug 07 j 17:57 0ಂತಾ morning rise -11760 May 01 j 20:46 0°≈15'06 desc. node -11765 Aug 12 j 19:18 3°953'24 -11760 May 01 j 11:32 0°**≈** -11765 Sep 16 j 01:55 $0^{\circ}\Omega$ asc. node -11760 May 16 j 02:46 9°≈36'22 -11765 Oct 26 j 15:27 -11760 Jun 15 j 18:38 0°**)**€ -11765 Oct 29 j 21:34 -11760 Jul 29 j 20:46 $0^{\circ}\Upsilon$ evening set -11765 Dec 07 j 23:11 -11760 Sep 10 j 23:06 0°8 -11760 Oct 23 j 15:07 0°**Ⅱ** -11765 Dec 24 j 02:27 11°**2**05'15 -1°11'32 -11760 Dec 06 j 01:36 0°5 conjunction -11765 Dec 24 i 01:09 11° \(\Omega\) 03'03 1°11'38 -11759 Jan 23 i 03:17 $0^{\circ}\Omega$ minimum elong -11764 Jan 19 i 04:39 28° **△**38'57 2.58676 AU -11759 Mar 25 j 21:09 $20^{\circ}\Omega$ 29'35 max. Earth dist. retrograde -11764 Jan 21 i 05:27 0°M desc. node $-11759 \text{ Apr } 04 \text{ j } 08:00 \quad 19^{\circ} \Omega 51'14$ -11759 Apr 22 j 10:15 15° Ω 32'52 0.43356 AU morning rise -11764 Feb 14 i 11:34 15° ML56'21 min. Earth dist. opposition -11764 Mar 07 j 06:02 0° ⊀ -11759 Apr 29 j 22:45 $13^{\circ}\Omega$ 07'51 -1°46'33 -11764 Apr 23 j 17:27 0°₹ -11759 Apr 29 j 09:28 13° **Ω**18'36 -2.6m greatest brilliancy -11764 Jun 11 j 16:20 direct -11759 May 31 j 21:14 7°Ω01'43 0°≈≈ -11764 Aug 02 j 16:47 0°**₩** -11759 Aug 11 j 00:32 0° m -11764 Aug 11 j 17:38 4°**){**49'57 -11759 Oct 03 j 07:03 0∘∙თ asc. node $0^{\circ}\Upsilon$ -11764 Oct 10 j 11:09 -11759 Nov 21 j 17:29 o°m. retrograde -11764 Nov 04 j 00:18 3°**Y**23′05 -11758 Jan 09 j 02:50 0° 🗸 -11764 Nov 27 j 05:41 30°R € -11758 Feb 25 j 16:28 0°궁 -11764 Dec 08 j 04:25 26° ₭ 31'23 5°21'14 -11758 Mar 07 j 05:36 6°**ප**06'30 opposition evening set -11764 Dec 09 j 13:49 26° **₭**02'43 -11758 Apr 02 j 21:22 23°₹21'59 greatest brilliancy -2.2m asc. node min. Earth dist. -11764 Dec 16 j 06:08 23° \times 45'49 0.48895 AU max. Earth dist. -11758 Apr 04 j 16:58 24°る33'17 2.62018 AU -11763 Jan 14 j 23:10 18° **₭** 07'22 -11758 Apr 12 j 23:59 direct 0°≈ $0^{\circ}\Upsilon$ -11763 Mar 01 j 11:42 -11763 Apr 22 j 07:16 0°8 conjunction -11758 Apr 24 j 15:52 7°**≈**43'21 0°13'22 -11763 Jun 04 j 05:34 $0^{\circ}\Pi$ minimum elong -11758 Apr 24 j 15:19 7°≈42'27 0°12'48 desc. node -11763 Jun 29 j 23:52 18°**Ⅲ**51'38 behind sun begin -11758 Apr 24 j 03:06 7°≈22'08 -11763 Jul 15 j 01:51 0ಂತಾ behind sun end -11758 Apr 25 j 03:32 8°≈02'46

-11758 May 27 j 15:14

0°**)**€

-11763 Aug 24 j 19:43

 $0^{\circ}\Omega$

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 15

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Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style.
                    -11758 Jun 11 j 20:26 10° ¥ 30'55
                                                                          greatest brilliancy
                                                                                              -11753 Sep 04 j 01:32 21° ₹ 04'41 -1.4m
morning rise
                                                                          min. Earth dist.
                    -11758 Jul 09 j 11:21
                                            0^{\circ}\Upsilon
                                                                                              -11753 Sep 04 j 14:22 20° ₹ 51'48 0.66467 AU
                    -11758 Aug 19 j 17:33
                                                                                              -11753 Oct 14 j 06:49 11° ₹ 18'56
                                            0°8
                                                                          direct
                    -11758 Sep 28 j 21:47
                                                                                              -11753 Nov 24 j 06:45 19° ₹ 51'11
                                            0^{\circ}\Pi
                                                                          asc. node
                    -11758 Nov 07 j 17:35
                                                                                              -11753 Dec 18 j 03:35
                                            0ಂತಾ
                                                                                                                      ೧ಂತ
                    -11758 Dec 18 j 06:07
                                            0^{\circ}\Omega
                                                                                              -11752 Feb 10 j 21:11
                                                                                                                      0°22
                    -11757 Jan 30 j 07:08
                                            0° m
                                                                                              -11752 Mar 28 j 14:43
                                                                                                                      0°)€
                                                                                                                      0^{\circ}\Upsilon
desc. node
                    -11757 Feb 20 j 08:12 13° m 23'54
                                                                                              -11752 May 10 j 09:18
                    -11757 Mar 22 j 05:07
                                            0∘<u>ଫ</u>
                                                                                              -11752 Jun 19 j 15:05
                                                                                                                      0°8
retrograde
                    -11757 May 14 j 07:08 15°△16'38
                                                                                              -11752 Jul 28 j 09:34
                                                                                                                      0^{\circ}\Pi
min. Earth dist.
                    -11757 Jun 15 j 11:55
                                            8°ഫ20'59
                                                        0.55413 AU
                                                                          evening set
                                                                                              -11752 Aug 04 j 01:59
                                                                                                                      5°Ⅱ13'49
                    -11757 Jun 21 j 00:39
greatest brilliancy
                                            6°£13'46
                                                       -1.9m
                                                                                              -11752 Sep 04 j 16:34
                                                                                                                      0ಂತಾ
                    -11757 Jun 22 j 06:02
opposition
                                            5°Ω45'33 -5°16'34
                    -11757 Jul 09 j 17:31 30°R M
                                                                          conjunction
                                                                                              -11752 Oct 05 j 18:54 24°508'22
                                                                                                                                  0°04'26
direct
                    -11757 Jul 27 j 23:06 27° m 45'26
                                                                           minimum elong
                                                                                              -11752 Oct 05 j 19:22 24°509'16
                                                                                                                                  0°05'03
                    -11757 Aug 16 j 11:55
                                            0∘⊽
                                                                           behind sun begin
                                                                                              -11752 Oct 04 j 17:38 23°519'47
                    -11757 Oct 27 j 07:22
                                            0^{\circ}M
                                                                           behind sun end
                                                                                              -11752 Oct 06 j 21:07 24°958'43
                    -11757 Dec 19 j 06:19
                                                                          desc. node
                                                                                              -11752 Oct 11 j 13:41 28°534'34
                    -11756 Feb 06 j 12:58
                                            0°る
                                                                                              -11752 Oct 13 j 10:21
                                                                                                                      0^{\circ}\Omega
asc. node
                    -11756 Feb 18 j 20:54
                                            7°る45'10
                                                                          max. Earth dist.
                                                                                              -11752 Nov 18 j 08:20 26^{\circ}\Omega59'16 2.42826 AU
                    -11756 Mar 24 j 09:25
                                            0°≈
                                                                                              -11752 Nov 22 j 10:36
                                                                                                                      0° m
evening set
                    -11756 Apr 16 j 20:55 15°≈37'36
                                                                          morning rise
                                                                                              -11752 Dec 07 i 12:50 10° m 58'42
max. Earth dist.
                    -11756 May 04 j 21:40 27°≈55'14 2.52965 AU
                                                                                              -11751 Jan 03 i 08:40
                                                                                                                      0∘∙თ
                    -11756 May 07 j 21:56
                                           0°∀
                                                                                              -11751 Feb 16 i 14:50
                                                                                                                      0°M
                                                                                              -11751 Apr 04 j 15:11
                                                                                                                      0° ₹
                    -11756 Jun 07 j 03:56 21° ★ 18'09 1°00'03
                                                                                              -11751 May 25 j 17:51
                                                                                                                      0°궁
conjunction
                    -11756 Jun 07 j 01:59 21° ** 14'38 0°59'55
                                                                                              -11751 Jul 30 j 08:40
 minimum elong
                                                                                                                      0°≈≈
                    -11756 Jun 19 j 05:14 0°Υ
                                                                                              -11751 Aug 31 j 07:23
                                                                                                                      5°≈27'53
                                                                          retrograde
                    -11756 Jul 29 j 16:07
                                                                                              -11751 Sep 29 j 12:56 30°R 궁
                                            0°8
                    -11756 Jul 30 j 14:59
                                                                                              -11751 Oct 08 j 11:55 26° ₹37'21 -0°07'37
morning rise
                                            0°843'12
                                                                          opposition
                    -11756 Sep 06 j 21:26
                                                                          greatest brilliancy
                                                                                              -11751 Oct 08 j 12:35 26°₹36'42
                                            0^{\circ}\Pi
                    -11756 Oct 15 j 15:56
                                                                                              -11751 Oct 11 j 11:17 25° ₹27'19
                                           0ಂತಾ
                                                                          asc. node
                    -11756 Nov 23 j 20:51
                                           0^{\circ}\Omega
                                                                          min. Earth dist.
                                                                                              -11751 Oct 12 j 19:25 24°궁55'57
                                                                                                                                  0.62844 AU
                    -11755 Jan 03 j 12:45 0° Mp
                                                                                              -11751 Nov 18 j 06:31 16°⋜40'25
                                                                          direct
                    -11755 Jan 07 j 02:34 2° m 33'33
                                                                                              -11750 Jan 08 j 22:32 0°≈
desc. node
                    -11755 Feb 16 j 00:13 0°♀
                                                                                              -11750 Mar 04 j 19:26
                                                                                                                      0°)€
                    -11755 Apr 06 j 08:04 0°M
                                                                                              -11750 Apr 18 j 17:40
                                                                                                                      0^{\circ}\Upsilon
retrograde
                    -11755 Jun 21 j 00:24 25° ML42'54
                                                                                              -11750 May 29 j 19:34 0°8
min. Earth dist.
                    -11755 Jul 27 j 19:52 17° ML03'35 0.63924 AU
                                                                                              -11750 Jul 08 j 00:42 0°П
opposition
                    -11755 Jul 30 j 23:44 15°ML47'27 -4°57'44
                                                                                              -11750 Aug 15 j 15:54 0°5
greatest brilliancy
                    -11755 Jul 30 j 11:44 15°M 59'30 -1.5m
                                                                                              -11750 Aug 29 j 12:22 10°542'49
                                                                          desc. node
                    -11755 Sep 07 j 13:51 6°MJ37'40
                                                                                              -11750 Sep 23 j 17:27 0°Ω
direct
                    -11755 Nov 21 j 15:12 0° ₹
                                                                                              -11750 Oct 07 j 13:25 10° Ω25'26
                                                                          evening set
                    -11754 Jan 06 j 01:05 24° ₹33'52
                                                                                              -11750 Nov 03 j 00:58
asc. node
                    -11754 Jan 15 j 08:16 0°ਰ
                    -11754 Mar 04 i 21:18 0°≈
                                                                          conjunction
                                                                                              -11750 Dec 04 i 10:37 22° m 30'07 -1°00'29
                    -11754 Apr 18 j 21:10 0° ₩
                                                                           minimum elong
                                                                                              -11750 Dec 04 i 08:13 22° m 25'53 1°00'20
                    -11754 May 31 i 02:53 0°Υ
                                                                                              -11750 Dec 15 i 03:46 0° €
evening set
                    -11754 Jun 04 j 23:13 3°Υ'33'07
                                                                          max. Earth dist.
                                                                                              -11749 Jan 06 j 17:10 15° 230'07 2.54830 AU
max. Earth dist.
                    -11754 Jun 28 j 14:40 21°Υ09'59 2.41192 AU
                                                                          morning rise
                                                                                              -11749 Jan 28 i 08:06 0° ML01'20
                    -11754 Jul 10 j 06:04 0°8
                                                                                              -11749 Jan 28 j 07:18
                                                                                                                      0°M
                                                                                              -11749 Mar 15 j 10:03
                                                                                                                      0°∡7
                    -11754 Aug 01 j 14:32 17°811'45 1°08'39
                                                                                                                      0°궁
conjunction
                                                                                              -11749 May 02 j 09:36
 minimum elong
                    -11754 Aug 01 j 16:28 17°815'28 1°09'06
                                                                                              -11749 Jun 21 j 21:21
                                                                                                                      0°28
                    -11754 Aug 18 j 01:26
                                            0^{\circ}\Pi
                                                                                              -11749 Aug 18 j 15:26
                                                                                                                      0°)
                    -11754 Sep 25 j 09:50
                                            0ಂಣ
                                                                          asc. node
                                                                                              -11749 Aug 29 j 11:30
                                                                                                                      4°) 32′50
morning rise
                    -11754 Oct 03 j 08:29
                                            6°9511'43
                                                                                              -11749 Oct 14 j 15:32 15°米04'59
                                                                          retrograde
                    -11754 Nov 03 j 04:35
                                            0^{\circ}\Omega
                                                                                              -11749 Nov 19 j 06:34
                                                                                                                      7°升31′04 3°44′31
                                                                          opposition
desc. node
                    -11754 Nov 24 j 18:44 16° Ω19'13
                                                                                              -11749 Nov 20 j 04:06
                                                                          greatest brilliancy
                                                                                                                      7°∺11'28
                                                                                                                                 -1.9m
                    -11754 Dec 13 j 06:23
                                            0° m
                                                                          min. Earth dist.
                                                                                              -11749 Nov 26 j 18:25
                                                                                                                      4°¥47'52 0.53584 AU
                    -11753 Jan 24 j 10:45
                                            0∘⊽
                                                                                              -11749 Dec 12 j 22:59 30°R≈
                    -11753 Mar 10 j 15:54
                                            0°M
                                                                          direct
                                                                                              -11749 Dec 28 j 13:10 28°≈20'18
                    -11753 Apr 30 j 00:07
                                            0°∡
                                                                                              -11748 Jan 13 j 15:04
                                                                                                                      0°)€
                    -11753 Jul 15 j 15:22
                                            0°궁
                                                                                              -11748 Mar 20 j 10:31
                                                                                                                      0^{\circ}\Upsilon
retrograde
                    -11753 Jul 26 j 09:01
                                            0°る42'41
                                                                                              -11748 May 04 j 09:55
                                                                                                                      0°8
                    -11753 Aug 05 j 17:14 30°R ⊀
                                                                                              -11748 Jun 14 j 09:02
                                                                                                                      0^{\circ}\Pi
                    -11753 Sep 03 j 23:16 21°х 06'57 -3°03'40
                                                                          desc. node
                                                                                              -11748 Jul 16 j 14:32 24°Ⅲ17'22
opposition
```

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. -11748 Jul 24 i 03:56 0°€ -11743 Apr 19 j 21:42 -11748 Sep 02 j 03:59 -11743 May 26 j 07:20 24°≈16'25 $0^{\circ}\Omega$ morning rise -11748 Oct 13 j 06:40 0° m -11743 Jun 03 j 17:42 0°)(-11748 Nov 25 j 00:40 $0^{\circ}\Upsilon$ 0∘⊽ -11743 Jul 16 j 22:58 -11748 Nov 29 j 03:35 0°8 evening set 2°**₽**49'40 -11743 Aug 27 j 18:11 -11747 Jan 08 j 13:08 -11743 Oct 07 j 14:27 $0^{\circ}\Pi$ -11743 Nov 17 j 06:13 0ಂತಾ -11747 Jan 19 j 23:38 conjunction 7°M32'04 -1°14'17 -11743 Dec 29 j 01:05 $0^{\circ}\Omega$ -11747 Jan 20 j 00:09 minimum elong 7°M32'55 1°14'39 -11742 Feb 13 j 03:38 0° m max. Earth dist. -11747 Feb 04 j 10:40 17° M 37'49 2.63185 AU desc. node -11742 Mar 09 j 02:26 12° m 55'40 -11747 Feb 23 j 13:48 0°**∡**¹ retrograde -11742 Apr 26 j 21:34 26° m 28'43 -11747 Mar 10 j 12:06 9°**∡**³34'38 morning rise min. Earth dist. -11742 May 27 j 01:54 20° m 21'26 0.50793 AU -11747 Apr 11 j 14:12 0°궁 opposition -11742 Jun 03 j 19:25 17° M 31'22 -4°35'15 -11747 May 29 j 03:44 greatest brilliancy -11742 Jun 02 j 12:38 17° **m** 59'41 asc. node -11747 Jul 16 j 05:45 29°≈54'30 direct -11742 Jul 08 j 01:52 10° m 10'30 -11747 Jul 16 j 09:20 0°**)**€ -11742 Sep 12 j 07:21 0∘**⊽** -11747 Sep 04 j 17:50 $0^{\circ}\Upsilon$ -11742 Nov 06 j 22:41 -11747 Nov 04 j 08:15 0°8 -11742 Dec 27 j 10:31 retrograde -11747 Dec 14 j 14:49 8°833'00 -11741 Feb 13 j 20:37 opposition -11746 Jan 15 j 08:36 2°**8**54'37 7°00'55 asc. node -11741 Mar 07 j 12:08 13°₹47'21 greatest brilliancy -11746 Jan 16 j 21:53 2°**8**26'49 -2.6m evening set -11741 Apr 01 j 03:06 29°る48'10 min. Earth dist. -11746 Jan 21 i 18:59 1°800'12 0.41841 AU -11741 Apr 01 i 10:18 0°≈ -11746 Jan 25 i 08:30 30° R**Y** max. Earth dist. -11741 Apr 22 j 14:44 14°≈05'43 2.57032 AU direct $-11746 \text{ Feb} 18 \text{ j } 07:45 26^{\circ} \Upsilon 21'50$ -11741 May 15 j 23:02 0°**∀** -11746 Mar 14 i 02:29 0°8 -11746 May 13 j 13:55 0°**Ⅱ** -11741 May 20 j 22:12 3°**¥**26′09 0°43'50 conjunction -11746 Jun 03 j 20:41 13°**Ⅱ**46'21 -11741 May 20 j 20:27 3°**¥**23′08 0°43'29 desc node minimum elong -11746 Jun 27 j 18:29 -11741 Jun 27 j 10:21 $0^{\circ}\Upsilon$ 0ಂತಿ -11746 Aug 09 j 20:00 -11741 Jul 10 j 17:04 9°Y39'36 $0^{\circ}\Omega$ morning rise 0°8 -11746 Sep 22 j 00:19 -11741 Aug 07 j 03:27 0° m -11746 Nov 05 j 04:53 -11741 Sep 15 j 15:44 $\Pi^{\circ}0$ 0∘<u>თ</u> -11746 Dec 20 j 15:45 0°M -11741 Oct 24 j 17:21 0ಂತಾ -11745 Jan 12 j 03:33 14°M 34'59 -11741 Dec 03 j 06:13 $0^{\circ}\Omega$ evening set -11745 Feb 05 j 02:52 0° ₹ -11740 Jan 13 j 10:30 0° m -11740 Jan 24 j 22:12 desc. node 8° m 00'43 -11745 Mar 01 j 20:29 15° ₹ 50'16 -0°50'49 -11740 Feb 27 j 04:45 conjunction 0∘**⊽** -11745 Mar 01 j 22:02 15° ₹ 52'45 0°51'26 -11740 Apr 22 j 07:17 0° M minimum elong max. Earth dist. -11745 Mar 01 j 19:55 15° ₹749'22 2.66401 AU retrograde -11740 Jun 06 j 16:37 11°ML10'46 -11745 Mar 23 j 23:23 0°る min. Earth dist. -11740 Jul 11 j 20:24 3°ML07'54 0.61270 AU morning rise -11745 Apr 17 j 23:43 16°**⋜**04'24 opposition -11740 Jul 16 j 11:41 1°ML17'21 -5°20'20 -11745 May 09 j 12:27 0°≈ greatest brilliancy -11740 Jul 15 j 16:14 1°M 36'40 -1.6m asc. node -11745 Jun 02 j 21:10 15°≈53'38 -11740 Jul 19 j 18:20 30°R € -11745 Jun 24 j 07:16 0°**米** direct -11740 Aug 23 j 02:32 22°**♀**30'18 -11745 Aug 08 j 06:41 0°**Υ** -11740 Sep 30 j 02:43 0°M -11745 Sep 21 j 19:59 0°8 -11740 Dec 02 j 23:37 0° ⊀ -11745 Nov 05 i 22:35 0°**Ⅱ** -11739 Jan 22 i 14:55 29° ₹20'46 asc. node -11739 Jan 23 j 16:46 0°る -11745 Dec 24 i 18:23 0°5 -11744 Feb 29 j 18:46 22°\$52'54 retrograde -11739 Mar 12 j 09:14 0°≈ min. Earth dist. -11744 Mar 28 i 13:35 18°514'31 0.39711 AU -11739 Apr 26 i 03:11 0°**)**€ -11744 Apr 02 j 11:59 16°549'32 1°25'23 -11739 May 15 j 14:28 13° + 37'40 opposition evening set -11744 Apr 02 j 07:22 16°552'50 max. Earth dist. -11739 Jun 01 j 01:52 25° + 25'57 2.45772 AU greatest brilliancy -2.8m desc. node -11744 Apr 21 j 02:12 12°524'42 -11739 Jun 07 j 08:44 0°**Υ** direct -11744 May 03 j 00:47 11°528'54 -11744 Jul 03 j 11:37 $0^{\circ}\Omega$ conjunction -11739 Jul 09 j 08:40 23°**Y**45'36 1°13'18 -11739 Jul 09 j 08:21 23°**Y**'45'01 1°13'32 -11744 Aug 25 j 16:23 0° m minimum elong -11744 Oct 13 j 02:57 0∘**⊽** -11739 Jul 17 j 14:20 0°8 -11739 Aug 25 j 12:44 -11744 Nov 29 j 18:50 0°M $0^{\circ}II$ -11743 Jan 16 j 09:03 -11739 Sep 06 j 11:32 9°**Ⅱ**18'40 0° **√** morning rise -11743 Feb 19 j 22:09 21° **₹** 53'41 -11739 Oct 02 j 23:57 0ಂಣ evening set -11743 Mar 04 j 14:54 0°**⋜** -11739 Nov 10 j 21:08 $0^{\circ}\Omega$ -11743 Mar 25 j 14:21 13°**♂**29'50 2.64267 AU -11739 Dec 11 j 15:37 23°**Ω**05'17 max. Earth dist. desc. node -11739 Dec 21 j 01:47 0° m conjunction -11743 Apr 08 j 23:39 22°♂50'46 -0°06'29 -11738 Feb 01 j 12:53 0∘**⊽** minimum elong -11743 Apr 08 j 23:57 22°♂51'14 0°07'07 -11738 Mar 19 j 14:45 0°M

-11738 May 12 j 13:38

retrograde

opposition

-11738 Jul 12 j 16:54 17° **₹** 33'44

-11738 Aug 21 j 14:08 7° **₹** 46'51 -3°55'57

0°**∡**

behind sun begin

behind sun end

asc. node

-11743 Apr 08 j 05:58 22°♂21'55

-11743 Apr 09 j 17:55 23°₹20'34

-11743 Apr 19 j 14:08 29°₹47'34

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 17 Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style.

Attention, astronom	ical year style is used: The	e year -11899	in astronomical co	unting style is the yea	r 11900 BCE in historical	counting sty	le.
min. Earth dist.	-11738 Aug 20 j 17:59	8° ₰ 07'09	0.66219 AU		-11733 Dec 03 j 06:51	0∘ ⊽	
greatest brilliancy	-11738 Aug 21 j 12:08	7° ∡¹ 48'52	-1.4m				
	-11738 Sep 13 j 16:22			conjunction	-11732 Jan 03 j 15:07		
direct	-11738 Sep 30 j 09:06			minimum elong	-11732 Jan 03 j 14:32		1°14'37
	-11738 Oct 18 j 03:19	0° ⊼ ¹			-11732 Jan 16 j 13:57	0°M	
asc. node	-11738 Dec 10 j 20:56			max. Earth dist.	-11732 Jan 25 j 22:41		2.60480 AU
	-11738 Dec 30 j 11:36	0° ට		morning rise	-11732 Feb 23 j 20:38		
	-11737 Feb 19 j 16:13	0° ≈			-11732 Mar 02 j 13:28	0° ∡	
	-11737 Apr 06 j 12:04	0°) €			-11732 Apr 18 j 19:30	0° ට	
	-11737 May 18 j 23:36	0°Υ			-11732 Jun 06 j 03:32	0° ≈	
evening set	-11737 Jun 28 j 03:20 -11737 Jul 10 j 22:12	0° と 9° と 48'58		asc. node	-11732 Jul 26 j 08:58 -11732 Aug 02 j 00:06	0° ∺ 3° ∺ 47'56	
evening set	-11737 Aug 05 j 21:14	9 ○ 48 38		asc. node	-11732 Aug 02 j 00.06 -11732 Sep 21 j 08:56	3 χ 4/30 0° Υ	
	-11/3/ Aug 03 J 21.14	υщ		retrograde	-11732 Sep 21 j 08:30 -11732 Nov 17 j 16:02		
conjunction	-11737 Sep 10 j 16:36	28°π04'03	0°35'51	opposition	-11732 Nov 17 j 10:02 -11732 Dec 20 j 21:40	8° Υ 57'32	6°09'49
minimum elong	-11737 Sep 10 j 10:36			greatest brilliancy	-11732 Dec 20 j 21:40	8° Υ 25'57	
minimum crong	-11737 Sep 13 j 03:53		0 30 20	min. Earth dist.	-11732 Dec 28 j 20:05	6° Υ 21'32	0.46236 AU
max. Earth dist.	-11737 Oct 05 j 19:15		2.38890 AU	direct	-11731 Jan 26 j 12:42	1° Υ 08'38	0.10230110
	-11737 Oct 21 j 21:03	0°N			-11731 Apr 12 j 22:05	0°8	
desc. node	-11737 Oct 29 j 08:30	5° Ω 42'06			-11731 May 28 j 03:40	0°II	
morning rise	-11737 Nov 14 j 06:55			desc. node	-11731 Jun 20 j 12:33		
C	-11737 Nov 30 j 20:33	0° m			-11731 Jul 08 j 23:21	0°€	
	-11736 Jan 11 j 19:01	0∘ ⊽			-11731 Aug 19 j 07:35	$0^{\circ}\Omega$	
	-11736 Feb 25 j 05:58	0° M			-11731 Sep 30 j 09:37	0° m	
	-11736 Apr 13 j 00:47	0° ∡ ¹			-11731 Nov 12 j 20:32	0∘ ⊽	
	-11736 Jun 06 j 03:33	5°0		evening set	-11731 Dec 26 j 18:55	29° ≙ 18'51	
retrograde	-11736 Aug 16 j 10:34	21° ප 51'40			-11731 Dec 27 j 19:58	0° M	
opposition	-11736 Sep 24 j 07:38	12° る 40'15	-1°22'49		-11730 Feb 12 j 01:11	0°⊀	
greatest brilliancy	-11736 Sep 24 j 11:33	12° る 36'21	-1.4m				
min. Earth dist.	-11736 Sep 27 j 05:02	11° る 31'22	0.65007 AU	conjunction	-11730 Feb 14 j 09:54	1° ∡ ³31′09	-1°03'11
asc. node	-11736 Oct 28 j 02:25	3° ⋜ 01′26		minimum elong	-11730 Feb 14 j 11:22	1° ∡ ³33'31	
direct	-11736 Nov 04 j 02:28	2° る 42'23		max. Earth dist.	-11730 Feb 20 j 04:32		2.65765 AU
	-11735 Jan 23 j 17:45	0° ≈			-11730 Mar 30 j 21:25	0°₹	
	-11735 Mar 14 j 14:26	0° \		morning rise	-11730 Apr 03 j 04:30	2° පි 06'23	
	-11735 Apr 27 j 08:23	0° Υ			-11730 May 16 j 17:15	0° ≈	
	-11735 Jun 06 j 23:24	0° B		asc. node	-11730 Jun 19 j 16:12		
	-11735 Jul 15 j 22:26	0°II			-11730 Jul 02 j 04:35	0° \	
	-11735 Aug 23 j 08:45	0°9			-11730 Aug 17 j 11:34		
evening set	-11735 Sep 13 j 06:52 -11735 Sep 15 j 05:46				-11730 Oct 03 j 12:42 -11730 Nov 23 j 11:11		
desc. node	-11735 Sep 15 J 05:46 -11735 Oct 01 j 05:44	17° 9 44 24 0° Ω		retrograde	-11730 Nov 23 j 11:11 -11729 Jan 31 j 18:23		
	-11735 Nov 10 j 08:52	0° m)		opposition	-11729 Mar 03 j 17:08		4°53'10
	-11/33 NOV 10 J 08.32	V III		greatest brilliancy	-11729 Mar 03 j 21:35		-2.9m
conjunction	-11735 Nov 12 j 20:23	1° Mp 48'46	-0°41'03	min. Earth dist.	-11729 Mar 03 j 21:33		0.38398 AU
minimum elong	-11735 Nov 12 j 20:25	1° Mp 44'00		direct	-11729 Apr 03 j 08:05		0.30370 AC
minimum crong	-11735 Nev 12 j 17:10	0∘ ಹ	0 10 11	desc. node	-11729 May 08 j 17:35		
max. Earth dist.	-11735 Dec 22 j 21:17	0° £ 22'38	2.50378 AU	dese. Hode	-11729 May 31 j 07:03	0.ತ	
morning rise	-11734 Jan 09 j 18:22	12° £ 42'41			-11729 Jul 22 j 02:11	$0^{\circ}\Omega$	
Ç	-11734 Feb 04 j 10:53	0° M ₊			-11729 Sep 06 j 20:02	0° m)	
	-11734 Mar 22 j 18:29	0° ∡ ¹			-11729 Oct 22 j 22:25	0∘ ⊽	
	-11734 May 10 j 12:36	8°0			-11729 Dec 08 j 11:12	0°M₊	
	-11734 Jul 02 j 14:21	0° ≈			-11728 Jan 24 j 11:55	0° ∡ ¹	
asc. node	-11734 Sep 15 j 04:03	28° ≈ 07'33		evening set	-11728 Feb 05 j 15:25	7° ∡¹ 43'56	
retrograde	-11734 Sep 25 j 23:42	28° ≈ 49'55			-11728 Mar 11 j 12:23	0°ප	
opposition	-11734 Nov 01 j 19:03	20° ≈ 41′04	2°08'35	max. Earth dist.	-11728 Mar 15 j 23:15	2° る 51'24	2.65725 AU
greatest brilliancy	-11734 Nov 02 j 05:33	20° ≈ 31′09	-1.8m				
min. Earth dist.	-11734 Nov 08 j 04:27		0.57820 AU	conjunction	-11728 Mar 24 j 16:36	8° 궁 28'07	
direct	-11734 Dec 11 j 23:47			minimum elong	-11728 Mar 24 j 17:35	8° る 29'43	0°25'56
	-11733 Feb 11 j 21:56	0°) (-11728 Apr 26 j 20:14	0° ≈	
	-11733 Apr 02 j 20:39	0° Υ		asc. node	-11728 May 06 j 08:36	6°≈15'10	
	-11733 May 15 j 12:22	0°8		morning rise	-11728 May 10 j 15:14	9°≈04'29	
	-11733 Jun 24 j 12:09	0°II			-11728 Jun 10 j 23:07	0°) €	
1 1	-11733 Aug 02 j 16:07	0.00 0.00			-11728 Jul 24 j 17:00	$^{\circ \gamma}$	
desc. node	-11733 Aug 03 j 08:02	0°930'29			-11728 Sep 05 j 06:39	0° Β	
	-11733 Sep 11 j 04:19	0° Ω			-11728 Oct 17 j 03:22	0° ∏	
evening set	-11733 Oct 21 j 20:55 -11733 Nov 10 j 17:27	0° ™) 14° ™ 12'34			-11728 Nov 28 j 05:32 -11727 Jan 11 j 17:34	$0 _{\circ}$ ಬ $_{\circ}$	
evening set	-11/33 INOV 10 J 1/.2/	17 IV 12 34			-11/2/ Jan 11 J 1/.34	0 06	

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. -11727 Mar 11 j 05:19 0° Mp -11722 Apr 14 j 01:53 0°**)**€ 3° m 40'05 -11727 Mar 25 j 20:38 -11722 May 26 j 10:02 $0^{\circ}\Upsilon$ desc. node 4° m/44'19 -11727 Apr 07 j 06:45 -11722 Jun 17 j 08:11 16° Υ 12'42 retrograde evening set -11727 May 03 j 19:15 30°RΩ -11722 Jul 05 j 13:51 0°႘ -11727 May 05 j 14:14 $29^{\circ}\Omega 25$ '01 $0.45893~{\rm AU}$ -11722 Jul 22 j 03:57 12°**8**44'23 2.39213 AU min. Earth dist. max. Earth dist. -11727 May 13 j 13:04 $26^{\circ}\Omega$ 42'34 -3°05'45 opposition -11722 Aug 13 j 08:47 $0^{\circ}\Pi$ -11727 May 12 j 13:54 $27^{\circ}\Omega$ 02'24 greatest brilliancy -2.4m direct -11727 Jun 15 j 06:46 20°**Ω**08'39 conjunction -11722 Aug 15 j 14:35 1°**Ⅱ**45′09 1°00'17 1°00'50 -11727 Jul 28 j 11:09 0° m minimum elong -11722 Aug 15 j 17:34 1°**I**I50′59 -11727 Sep 26 j 04:54 0∘**⊽** -11722 Sep 20 j 16:09 0ಂತಾ -11727 Nov 16 j 03:53 0°M morning rise -11722 Oct 18 j 17:40 21°548'41 -11726 Jan 04 j 03:59 -11722 Oct 29 j 09:35 0°**∡**7 $0^{\circ}\Omega$ -11726 Feb 21 j 00:02 0°ಕ desc. node -11722 Nov 15 j 05:36 $12^{\circ}\Omega$ 46'53 evening set -11726 Mar 16 j 03:52 14°**⋜**50'28 -11722 Dec 08 j 09:17 0° m asc. node -11726 Mar 24 j 04:34 20° ₹ 02'41 -11721 Jan 19 j 09:38 0∘**⊽** -11726 Apr 08 j 09:38 -11721 Mar 05 j 05:10 0°M max. Earth dist. -11726 Apr 10 j 22:52 1°**≈**40'56 2.60429 AU -11721 Apr 23 j 06:36 0°**∡**™ -11721 Jun 23 j 06:37 0°정 conjunction -11726 May 03 j 23:11 17°≈02'12 0°24'50 retrograde -11721 Aug 03 j 07:42 8°**る**41'10 minimum elong -11726 May 03 j 22:09 17°≈00'28 0°24'20 -11721 Sep 09 j 18:19 30°R ⊀ -11726 May 23 j 00:07 0°**)**€ opposition -11721 Sep 11 j 17:17 29° ₹ 13'04 -2°29'04 morning rise -11726 Jun 21 j 21:38 20° ¥ 52'06 greatest brilliancy -11721 Sep 11 j 20:56 29° ₹09'25 -1.4m -11726 Jul 04 i 16:56 $0^{\circ}\Upsilon$ min. Earth dist. -11721 Sep 13 j 04:02 28° ₹38'17 0.66212 AU -11726 Aug 14 i 18:10 0°8 direct -11721 Oct 22 j 06:41 19° ₹20'08 -11726 Sep 23 i 16:00 0°**Ⅱ** asc. node -11721 Nov 14 j 15:50 22° ₹25'40 -11726 Nov 02 j 04:00 0°ഇ -11721 Dec 07 j 15:50 0°₹ -11726 Dec 12 j 05:44 0°Ω -11720 Feb 04 j 16:42 0°≈≈ -11725 Jan 23 j 08:20 0° Mp -11720 Mar 23 j 07:36 0°**₩** -11725 Feb 10 j 17:55 12° m 15'33 -11720 May 05 j 09:41 $0^{\circ}\Upsilon$ desc node -11725 Mar 11 j 19:17 0°₽ -11720 Jun 14 j 18:46 0°8 -11725 May 23 j 12:21 25°**£**24'38 -11720 Jul 23 j 14:50 0°**Ⅱ** retrograde -11720 Aug 18 j 15:35 20°**Д**22'39 -11725 Jun 25 j 19:30 18°**2**03'49 0.57720 AU min. Earth dist. evening set -11725 Jul 01 j 20:41 15°**£**42'25 -5°25'02 -11720 Aug 30 j 22:42 0°5 opposition -11725 Jun 30 j 18:15 16°**2**08'12 -1.7m -11720 Oct 02 j 00:49 24°553'08 greatest brilliancy desc. node -11725 Aug 07 j 07:45 7°**≙**23'50 -11720 Oct 08 j 17:05 $0^{\circ}\Omega$ direct -11725 Oct 19 j 04:50 0°M -11720 Oct 20 j 00:43 8° Ω36'19 -0°13'32 -11725 Dec 13 j 13:05 0° ₹ conjunction -11724 Feb 01 j 13:05 0°궁 minimum elong -11720 Oct 19 j 23:36 8° **Q**34'13 0°12'58 -11724 Feb 09 j 05:51 4°る47'17 behind sun begin -11720 Oct 19 j 07:45 8°**Ω**04'13 asc. node -11724 Mar 19 j 16:15 0°≈ behind sun end -11720 Oct 20 j 15:28 9°**Ω**04'12 evening set -11724 Apr 26 j 21:08 25°≈35'04 -11720 Nov 17 j 17:28 0° M -11724 May 03 j 07:06 0°**米** max. Earth dist. -11720 Dec 03 j 08:03 11° m 21'15 2.45493 AU max. Earth dist. -11724 May 13 j 11:41 7°**₭**05'22 2.50498 AU -11720 Dec 20 j 04:21 23° Mp 22'36 morning rise -11724 Jun 14 j 14:03 $0^{\circ}\Upsilon$ -11720 Dec 29 j 14:43 0°**♀** -11719 Feb 11 j 17:57 -11724 Jun 18 i 05:50 2°**Υ**39'57 1°07'04 -11719 Mar 30 i 09:37 conjunction 0°×7 -11724 Jun 18 i 04:08 2°**Y**36'51 -11719 May 19 j 08:53 minimum elong 1°07'04 -11724 Jul 24 i 23:09 0°8 -11719 Jul 16 i 15:29 morning rise -11724 Aug 12 j 13:31 14°**8**10'59 retrograde -11719 Sep 09 i 05:58 13°≈58'52 -11724 Sep 02 j 01:41 0°**П** asc. node -11719 Oct 01 j 19:17 10°≈41'11 -11724 Oct 10 j 16:50 0ಂತಾ -11719 Oct 17 j 00:24 5°≈21'37 0°39'50 opposition -11724 Nov 18 j 17:55 $0^{\circ}\Omega$ -11719 Oct 17 j 02:59 5°≈19'07 -1.6m greatest brilliancy desc. node -11724 Dec 28 j 11:14 29°**\O2**9'47 min. Earth dist. -11719 Oct 22 j 02:38 3°≈23'10 0.61297 AU -11724 Dec 29 j 03:55 0° Mp -11719 Oct 31 j 11:21 30°R 궁 -11723 Feb 10 j 02:57 $0 \circ \sigma$ direct -11719 Nov 26 j 16:50 25°**⋜**28'10 -11723 Mar 29 j 18:24 0°M -11719 Dec 24 j 18:26 0°≈ -11723 Jun 02 j 09:48 0° **₹** -11718 Feb 25 j 20:09 0°**)** -11723 Jun 29 j 00:52 4°**₮**07'54 -11718 Apr 12 j 23:32 $0^{\circ}\Upsilon$ retrograde -11723 Jul 23 j 18:18 30°RM -11718 May 24 j 12:08 0°8 -11723 Aug 05 j 16:58 25°ML10'20 0.65019 AU -11718 Jul 02 j 22:39 $0^{\circ}\Pi$ min. Earth dist. opposition -11723 Aug 08 j 00:50 24°ML14'09 -4°38'21 -11718 Aug 10 j 17:15 0ಂತಾ greatest brilliancy -11723 Aug 07 j 16:47 24°M22'14 -1.4m desc. node -11718 Aug 19 j 23:52 7°909'21 direct -11723 Sep 16 j 02:44 14°ML53'35 -11718 Sep 18 j 21:34 0 $^{\circ}\Omega$ -11723 Nov 12 j 12:24 0°**∡**¹ evening set -11718 Oct 20 j 11:40 23°**\O**33'18 asc. node -11723 Dec 27 j 10:16 22° ₹38'09 -11718 Oct 29 j 07:13 0° M -11722 Jan 09 j 11:00 -11718 Dec 10 j 11:26 0∘**⊽**

-11722 Feb 27 j 19:00 0°≈

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 19

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Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style.
                    -11718 Dec 15 j 20:58 3°244'24 -1°07'46
                                                                          min. Earth dist.
                                                                                              -11712 Apr 11 j 21:44
                                                                                                                      4°Ω36'51 0.41514 AU
conjunction
                    -11718 Dec 15 j 19:09 3°241'16 1°07'46
                                                                                              -11712 Apr 18 j 13:43
                                                                                                                      2°Ω34'40 -0°31'01
 minimum elong
                                                                          opposition
max. Earth dist.
                    -11717 Jan 14 j 05:24 23° 243'05 2.57040 AU
                                                                                              -11712 Apr 18 j 10:08 2^{\circ} \Omega 37'25 -2.7m
                                                                          greatest brilliancy
                    -11717 Jan 23 j 15:09
                                                                                              -11712 Apr 27 j 10:28 30°Rூ
                                            0°M
                                                                                              -11712 May 19 j 20:11 26°$50'43
                    -11717 Feb 07 j 07:42
morning rise
                                            9°M-42'07
                                                                          direct
                    -11717 Mar 10 j 15:25
                                            0°×7
                                                                                              -11712 Jun 11 j 17:00
                                                                                                                      0^{\circ}\Omega
                    -11717 Apr 27 j 06:34
                                            0°궁
                                                                                              -11712 Aug 17 j 07:11
                                                                                                                      0° m
                    -11717 Jun 15 j 18:24
                                            0°≈
                                                                                              -11712 Oct 07 j 00:03
                                                                                                                      0∘ಹ
                    -11717 Aug 08 j 13:42
                                            0°∀
                                                                                              -11712 Nov 24 j 13:33
                                                                                                                      0°M
asc. node
                    -11717 Aug 19 j 17:43
                                           5°) 33′09
                                                                                              -11711 Jan 11 j 13:50
                                                                                                                      0°∡7
retrograde
                    -11717 Oct 26 j 10:09 25° ₩ 37'11
                                                                          evening set
                                                                                              -11711 Feb 28 j 16:49
                                                                                                                      0°る26'46
                    -11717 Nov 30 j 06:19 18°) €25'42
opposition
                                                        4°40'03
                                                                                              -11711 Feb 28 j 00:03
                                                                                                                      0°궁
                    -11717 Dec 01 j 10:47 18°米00'33
                                                                                              -11711 Mar 31 j 12:15 20°정18'14 2.63131 AU
greatest brilliancy
                                                        -2.1m
                                                                          max. Earth dist.
min. Earth dist.
                    -11717 Dec 08 j 03:52 15° ∺ 38'39
                                                        0.51044 AU
                                                                          asc. node
                                                                                              -11711 Apr 09 j 21:41 26° ₹ 26'12
direct
                    -11716 Jan 07 j 19:34
                                            9°₩37'56
                                                                                              -11711 Apr 15 j 07:54
                    -11716 Mar 10 j 12:13
                                            0^{\circ}\Upsilon
                    -11716 Apr 27 j 09:21
                                            0^{\circ}8
                                                                          conjunction
                                                                                              -11711 Apr 17 j 21:41
                                                                                                                      1°≈41'44
                                                                                                                                  0°04'56
                    -11716 Jun 08 j 07:45 0°Ц
                                                                           minimum elong
                                                                                              -11711 Apr 17 j 21:31
                                                                                                                      1°≈41'28
                                                                                                                                  0°04'22
desc. node
                    -11716 Jul 07 j 03:44 21°Д25'31
                                                                           behind sun begin
                                                                                              -11711 Apr 17 j 02:09
                                                                                                                      1°≈09'33
                                                                                                                      2°≈13'24
                    -11716 Jul 18 j 14:57
                                                                           behind sun end
                                                                                              -11711 Apr 18 j 16:54
                    -11716 Aug 27 j 23:27
                                            0^{\circ}\Omega
                                                                                              -11711 May 30 j 02:08
                                                                                                                      0°)€
                    -11716 Oct 08 i 08:12
                                            0° m
                                                                          morning rise
                                                                                              -11711 Jun 04 i 15:07
                                                                                                                      3°) 47'46
                    -11716 Nov 20 j 06:28
                                           0∘⊽
                                                                                              -11711 Jul 12 j 03:03
                                                                                                                      0^{\circ}
evening set
                    -11716 Dec 09 i 12:57 13° 205'21
                                                                                              -11711 Aug 22 j 15:26
                                                                                                                      0°8
                    -11715 Jan 03 j 21:37 0°M
                                                                                              -11711 Oct 02 j 02:36
                                                                                                                      \Pi^{\circ}0
                                                                                              -11711 Nov 11 j 05:54
                                                                                                                      0ಂತಾ
                    -11715 Jan 29 j 11:12 16°M 44'45 -1°11'34
                                                                                              -11711 Dec 22 j 04:41
                                                                                                                      0^{\circ}\Omega
conjunction
                    -11715 Jan 29 j 12:10 16°M 46'20 1°12'02
                                                                                              -11710 Feb 04 i 03:00
 minimum elong
                                                                                                                      0° m
max. Earth dist.
                    -11715 Feb 10 j 09:49 24°M29'11 2.64327 AU
                                                                                              -11710 Feb 27 j 13:21 14° Mp 12'08
                                                                          desc node
                    -11715 Feb 18 j 23:00 0° ⊀
                                                                                              -11710 Mar 31 j 19:22 0°♀
                    -11715 Mar 19 j 06:09 18° ₹ 08'03
                                                                                              -11710 May 07 j 02:11
morning rise
                                                                          retrograde
                                                                                                                      7°£55'36
                    -11715 Apr 06 j 21:01 0°궁
                                                                          min. Earth dist.
                                                                                              -11710 Jun 07 j 09:01 1°⊆21'48
                                                                                                                                 0.53405 AU
                    -11715 May 24 j 02:54 0°≈
                                                                                              -11710 Jun 11 j 00:17 30°R M
                    -11715 Jul 06 j 11:21 27°≈25'08
                                                                                              -11710 Jun 13 j 08:46 29° M 06'31 -2.0m
asc. node
                                                                          greatest brilliancy
                    -11715 Jul 10 j 13:49 0°₩
                                                                                              -11710 Jun 14 j 15:43 28° m 37'20 -5°04'01
                                                                          opposition
                    -11715 Aug 27 j 23:35 0°Υ
                                                                                              -11710 Jul 19 j 18:16 20° m 53'52
                                                                          direct
                    -11715 Oct 19 j 09:50 0°8
                                                                                              -11710 Aug 30 j 15:38 0°♀
retrograde
                    -11715 Dec 31 j 14:46 23°852'59
                                                                                              -11710 Oct 31 j 07:39
                                                                                                                      0^{\circ}M
opposition
                    -11714 Jan 31 j 15:40 18°\begin{align*} 335'15 6°50'41 \end{align*}
                                                                                              -11710 Dec 22 j 02:40 0° ⊀
greatest brilliancy
                    -11714 Feb 01 j 20:23 18°815'08 -2.7m
                                                                                              -11709 Feb 09 j 00:27 0°궁
min. Earth dist.
                    -11714 Feb 05 j 07:57 17°816'53 0.39978 AU
                                                                                              -11709 Feb 25 j 20:11 10°₹38'03
                                                                          asc. node
direct
                    -11714 Mar 05 j 01:33 12°843'49
                                                                                              -11709 Mar 27 j 18:49 0°≈
                    -11714 Apr 30 j 14:15 0°П
                                                                          evening set
                                                                                              -11709 Apr 10 j 14:29 9°≈08'35
desc. node
                    -11714 May 25 j 09:26 14°Д04'16
                                                                          max. Earth dist.
                                                                                              -11709 Apr 29 j 23:52 22°≈12'37 2.54865 AU
                    -11714 Jun 19 j 14:32 0°ഇ
                                                                                              -11709 May 11 j 08:32
                    -11714 Aug 03 i 08:32 0°Ω
                                                                                              -11709 May 31 j 03:21 13° \(\frac{1}{4}\)8'46 0°53'36
                    -11714 Sep 16 i 10:11 0° Mp
                                                                          conjunction
                                                                                              -11709 May 31 i 01:24 13° \(\frac{1}{4}\)5'20
                    -11714 Oct 31 i 03:05 0° €
                                                                           minimum elong
                                                                                                                                 0°53'21
                                                                                              -11709 Jun 22 j 18:36 0°Υ
                    -11714 Dec 15 i 21:09 0°M
                    -11713 Jan 21 j 04:45 23°M24'03
                                                                                              -11709 Jul 22 i 06:45 21° Υ 41'24
evening set
                                                                          morning rise
                    -11713 Jan 31 j 12:04 0° ₹
                                                                                              -11709 Aug 02 j 09:01 0°8
max. Earth dist.
                    -11713 Mar 07 j 10:00 22° ₹ 19'38 2.66394 AU
                                                                                              -11709 Sep 10 j 17:51
                                                                                                                      0^{\circ}\Pi
                                                                                              -11709 Oct 19 j 15:15
                                                                                                                      0ಂತಾ
                                                                                              -11709 Nov 27 j 22:50
conjunction
                    -11713 Mar 10 j 13:31 24° ₹20'29 -0°42'12
                                                                                                                      0^{\circ}\Omega
 minimum elong
                    -11713 Mar 10 j 14:57 24° ₹ 22'46 0°42'50
                                                                                              -11708 Jan 07 j 18:11
                    -11713 Mar 19 j 09:28 0°궁
                                                                                              -11708 Jan 15 j 08:56
                                                                                                                      5° m 24'24
                                                                          desc. node
                                                                                              -11708 Feb 20 j 14:19
morning rise
                    -11713 Apr 26 j 12:27 24°♂34'45
                                                                                                                      0∘⊽
                    -11713 May 04 j 20:28
                                                                                              -11708 Apr 11 j 10:59
                                                                                                                      0°M
                                           0°≈
                    -11713 May 24 j 03:20 12°≈37'27
                                                                          retrograde
                                                                                              -11708 Jun 15 j 00:46 20° ML04'14
asc. node
                    -11713 Jun 19 j 08:57
                                            0°)€
                                                                                              -11708 Jul 21 j 03:04 11°ML40'39
                                                                          min. Earth dist.
                                                                                                                                  0.62844 AU
                                            0^{\circ}\Upsilon
                    -11713 Aug 02 j 20:10
                                                                                              -11708 Jul 24 j 22:50 10°ML08'58 -5°09'13
                                                                          opposition
                    -11713 Sep 15 j 12:26
                                            0^{\circ}8
                                                                          greatest brilliancy
                                                                                              -11708 Jul 24 j 07:36 10°M24'12
                                                                                                                                  -1.5m
                    -11713 Oct 29 j 01:21
                                            0^{\circ}\Pi
                                                                          direct
                                                                                              -11708 Sep 01 j 03:21
                                                                                                                      1°ML08'38
                    -11713 Dec 13 j 02:24
                                            0\circ\odot
                                                                                              -11708 Nov 25 j 22:44
                                                                                                                      0°∡
                    -11712 Feb 05 j 03:38
                                            0°\Omega
                                                                          asc. node
                                                                                              -11707 Jan 12 j 23:34 26° ₹ 51'13
                    -11712 Mar 15 j 13:53
                                            9°Ω20'58
                                                                                              -11707 Jan 18 j 06:35
                                                                                                                      0°정
retrograde
                    -11712 Apr 11 j 12:37 4° Ω43'38
                                                                                              -11707 Mar 07 j 11:38
desc. node
```

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Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:22,
Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style.
                    -11707 Apr 21 j 10:17 0°₩
                                                                                             -11702 Jan 30 j 17:31
                                                                                                                     0°M
                    -11707 May 26 j 22:39 25° H 05'08
                                                                                             -11702 Mar 17 j 20:50
                                                                                                                     0°×7
evening set
                    -11707 Jun 02 j 17:03
                                            0^{\circ}\Upsilon
                                                                                             -11702 May 05 j 02:23
                                                                                                                     0°궁
                    -11707 Jun 14 j 21:02
                                            8°Υ56'15 2.43166 AU
max. Earth dist.
                                                                                             -11702 Jun 25 j 10:55
                                                                                                                     0°≈≈
                    -11707 Jul 12 j 22:07
                                                                                                                     0°)€
                                            0°8
                                                                                             -11702 Aug 26 j 22:46
                                                                         asc. node
                                                                                             -11702 Sep 05 j 11:32
                                                                                                                     3°) 11′12
                    -11707 Jul 22 j 05:50
                                                                                                                     8°¥19′23
conjunction
                                            7°807'20 1°12'11
                                                                         retrograde
                                                                                             -11702 Oct 06 j 08:17
                    -11707 Jul 22 j 06:45
 minimum elong
                                            7°809'07 1°12'33
                                                                         opposition
                                                                                             -11702 Nov 11 j 12:44
                                                                                                                     0°∺29'07
                                                                                                                                 3°02'48
                    -11707 Aug 20 j 19:13
                                            0^{\circ}\Pi
                                                                         greatest brilliancy
                                                                                             -11702 Nov 12 j 05:15
                                                                                                                     0°) 13′49
                                                                                                                                 -1.8m
morning rise
                    -11707 Sep 21 j 11:37 24°Д45'37
                                                                                             -11702 Nov 12 j 20:07 30°R≈
                    -11707 Sep 28 j 04:37
                                            0ಂತಾ
                                                                         min. Earth dist.
                                                                                             -11702 Nov 18 j 14:06 27°≈52'21
                                                                                                                                 0.55554 AU
                    -11707 Nov 05 j 23:47
                                                                                             -11702 Dec 21 j 07:19 21°≈03'38
                                            0^{\circ}\Omega
                                                                         direct
desc. node
                    -11707 Dec 02 j 01:12 19°\Omega39'19
                                                                                             -11701 Jan 30 j 01:26
                                                                                                                     0°)€
                    -11707 Dec 16 j 01:39
                                                                                             -11701 Mar 26 j 14:35
                                                                                                                     0^{\circ}\Upsilon
                    -11706 Jan 27 j 06:54
                                            0∘⊽
                                                                                             -11701 May 09 j 10:09
                                                                                                                     0°8
                    -11706 Mar 13 j 17:36
                                            0°M
                                                                                             -11701 Jun 18 j 22:15
                                                                                                                     0^{\circ}II
                    -11706 May 04 j 02:52
                                            0°∡¹
                                                                         desc. node
                                                                                             -11701 Jul 24 j 18:55 27°Ⅲ14'54
retrograde
                    -11706 Jul 20 j 13:48 25° ₹ 35'12
                                                                                             -11701 Jul 28 j 09:41
opposition
                    -11706 Aug 29 j 07:54 15° ₹ 54'08 -3°26'41
                                                                                             -11701 Sep 06 j 03:30
greatest brilliancy
                    -11706 Aug 29 j 08:31 15° ₹ 53'31
                                                                                             -11701 Oct 17 j 00:34
min. Earth dist.
                    -11706 Aug 29 j 07:29 15° x 54'33
                                                       0.66474 AU
                                                                         evening set
                                                                                             -11701 Nov 22 j 00:22 25° m 27'47
direct
                    -11706 Oct 08 i 10:43 6° ₹ 10'44
                                                                                             -11701 Nov 28 j 13:37
                                                                                                                     0°Ω
asc. node
                    -11706 Dec 01 i 05:31 19° ₹ 47'41
                                                                                             -11700 Jan 11 j 22:32
                    -11706 Dec 22 j 23:21
                                           0°ਤ
                    -11705 Feb 14 i 01:35
                                           0°≈
                                                                         conjunction
                                                                                             -11700 Jan 13 j 17:01
                                                                                                                     1°M10'24 -1°15'03
                    -11705 Apr 01 j 10:53
                                            0°₩
                                                                                             -11700 Jan 13 j 17:06
                                                                                                                     1°M10'31 1°15'22
                                                                          minimum elong
                    -11705 May 14 j 03:38 0°Υ
                                                                         max. Earth dist.
                                                                                             -11700 Feb 01 j 06:04 13°ML22'14 2.62074 AU
                    -11705 Jun 23 j 09:25 0°8
                                                                                             -11700 Feb 26 j 21:38 0° ⊀
                    -11705 Jul 24 j 23:08 24°822'27
                                                                                             -11700 Mar 03 j 22:15
                                                                                                                     3°х 52′20
evening set
                                                                         morning rise
                    -11705 Aug 01 j 04:03 0°Ⅱ
                                                                                             -11700 Apr 13 j 23:40
                                                                                                                     0°ಕ
                    -11705 Sep 08 j 10:37
                                                                                             -11700 May 31 j 20:20
                                                                                                                     0°≈
                                                                                             -11700 Jul 19 j 19:30
                                                                                                                     0°₩
                                                                                             -11700 Jul 23 j 06:39
conjunction
                    -11705 Sep 25 j 11:53 13°$17'59 0°18'26
                                                                                                                     2°) 04'27
                                                                         asc. node
                    -11705 Sep 25 j 13:36 13°521'19 0°19'03
                                                                                             -11700 Sep 10 j 05:25 0°Υ
 minimum elong
                    -11705 Oct 17 j 03:23 0°Ω
                                                                                             -11700 Dec 02 j 08:24 28^{\circ} Y 23'17
                                                                         retrograde
                    -11705 Oct 19 j 19:35 2° Ω02'41
                                                                                             -11699 Jan 03 j 17:46 22°Y24'16 6°46'10
desc. node
                                                                         opposition
                    -11705 Nov 04 j 07:15 13^{\circ}\Omega47'19
                                                                                             -11699 Jan 05 j 09:35 21^{\circ} \Upsilon 53'05 -2.5m
max. Earth dist.
                                                      2.40811 AU
                                                                         greatest brilliancy
                    -11705 Nov 26 j 02:10 0° Mp
                                                                         min. Earth dist.
                                                                                             -11699 Jan 11 j 02:15 20°Y07'04 0.43700 AU
morning rise
                    -11705 Nov 28 j 07:40
                                           1° Mp 38'13
                                                                         direct
                                                                                             -11699 Feb 07 j 22:26 15°Υ16'05
                    -11704 Jan 06 j 22:47 0°♀
                                                                                             -11699 Mar 30 j 23:41 0°8
                    -11704 Feb 20 j 05:12 0°M
                                                                                             -11699 May 20 j 00:27 0°Ц
                    -11704 Apr 07 j 10:35 0° ₹
                                                                                             -11699 Jun 11 j 00:38 15°耳00'45
                                                                         desc. node
                    -11704 May 29 j 11:18 0°る
                                                                                             -11699 Jul 02 j 08:41 0°95
                    -11704 Aug 22 j 00:28 0°≈
                                                                                             -11699 Aug 13 j 12:15
                    -11704 Aug 24 j 20:55 0°≈03'04
                                                                                             -11699 Sep 25 j 02:49
retrograde
                    -11704 Aug 27 i 16:43 30°R♂
                                                                                             -11699 Nov 07 i 21:51
                    -11704 Oct 02 j 09:49 21°る02'44 -0°40'18
opposition
                                                                                             -11699 Dec 23 i 02:34
                    -11704 Oct 02 j 12:20 21°る00'15 -1.5m
greatest brilliancy
                                                                         evening set
                                                                                             -11698 Jan 05 i 06:48
                                                                                                                     8°MJ35'40
min. Earth dist.
                    -11704 Oct 06 j 02:32 19°₹35'19 0.63925 AU
                                                                                             -11698 Feb 07 j 10:22
                                                                                                                     0°×7
asc. node
                    -11704 Oct 18 j 10:31 15° ₹ 07'01
direct
                    -11704 Nov 12 j 05:49 11°る04'32
                                                                                             -11698 Feb 23 i 08:08 10° ₹ 12'08 -0°56'26
                                                                         conjunction
                    -11703 Jan 15 i 04:08 0°≈
                                                                          minimum elong
                                                                                             -11698 Feb 23 j 09:42 10° ₹ 14'38 0°57'02
                    -11703 Mar 08 j 12:54
                                                                         max. Earth dist.
                                                                                             -11698 Feb 25 j 19:22 11° ₹ 46'59 2.66228 AU
                                            0°¥
                                            0^{\circ}\Upsilon
                    -11703 Apr 21 j 23:17
                                                                                             -11698 Mar 26 j 06:29
                                                                                                                     0°ಕ
                    -11703 Jun 01 j 21:08
                                            0°8
                                                                         morning rise
                                                                                             -11698 Apr 11 j 16:52 10°궁31'48
                    -11703 Jul 10 j 23:59
                                            0^{\circ}\Pi
                                                                                             -11698 May 11 j 22:39
                    -11703 Aug 18 j 12:43
                                           0ಂತಾ
                                                                                             -11698 Jun 09 j 22:30 18°≈49'32
                                                                         asc. node
                    -11703 Sep 05 j 17:32 14°505'57
                                                                                             -11698 Jun 27 j 00:30
                                                                                                                     0° <del>)(</del>
desc. node
                                                                                                                     0^{\circ}\Upsilon
                    -11703 Sep 26 j 11:32
                                            0^{\circ}\Omega
                                                                                             -11698 Aug 11 j 12:49
                    -11703 Sep 27 j 05:28
                                            0°Ω34'06
                                                                                                                     0°B
evening set
                                                                                             -11698 Sep 26 j 00:20
                    -11703 Nov 05 j 15:59
                                            0° M
                                                                                             -11698 Nov 11 j 22:16
                                                                                                                     0^{\circ}\Pi
                                                                                             -11697 Jan 06 j 02:10
                                                                                                                     0ಂತಾ
conjunction
                    -11703 Nov 25 j 08:38 14° m 14'51 -0°53'08
                                                                         retrograde
                                                                                             -11697 Feb 17 j 12:53 10°517'07
 minimum elong
                    -11703 Nov 25 j 05:58 14° Mp 10'06
                                                      0°52'54
                                                                         min. Earth dist.
                                                                                             -11697 Mar 18 j 07:41
                                                                                                                     5°©31'54
                                                                                                                                 0.38770 AU
                    -11703 Dec 17 j 15:48
                                            0∘⊽
                                                                         opposition
                                                                                             -11697 Mar 21 j 07:26
                                                                                                                     4°9542'25
                                                                                                                                 3°00'05
max. Earth dist.
                    -11703 Dec 31 j 19:27
                                           9°247'26 2.52900 AU
                                                                                             -11697 Mar 21 j 03:15
                                                                                                                     4°9545'19
                                                                         greatest brilliancy
                    -11702 Jan 20 j 13:34 23° 212'25
                                                                                             -11697 Apr 12 j 09:27 30°R II
morning rise
```

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. direct -11697 Apr 20 j 14:41 29°**Д**33'26 max. Earth dist. -11692 May 23 j 10:25 17° **★**23'35 2.47918 AU -11697 Apr 28 j 22:12 -11692 Jun 09 j 22:37 $0^{\circ}\Upsilon$ 0ಂತಾ -11697 Apr 29 j 06:52 0°902'19 desc. node -11697 Jul 12 j 14:27 -11692 Jun 29 j 23:31 14°**Υ**'44'53 1°11'44 $0^{\circ}\Omega$ conjunction -11697 Aug 31 j 03:13 -11692 Jun 29 j 22:27 14°**Y**42'54 0° m minimum elong 1°11'52 -11692 Jul 20 j 06:35 -11697 Oct 17 j 08:41 0∘**⊽** 0°8 0° M -11697 Dec 03 j 11:03 morning rise -11692 Aug 26 j 07:59 28°**8**28'05 -11696 Jan 19 j 18:39 0°**∡**¹ -11692 Aug 28 j 07:21 $0^{\circ}\Pi$ 0ಂತಾ evening set -11696 Feb 14 j 10:48 16° ₹ 17'50 -11692 Oct 05 j 20:14 -11696 Mar 06 j 22:08 0°る -11692 Nov 13 j 18:23 $0^{\circ}\Omega$ max. Earth dist. -11696 Mar 21 j 15:34 9°る27'30 2.65030 AU desc. node -11692 Dec 18 j 22:12 $26^{\circ}\Omega$ 17'33 -11692 Dec 24 j 00:03 0°m -11696 Apr 02 j 10:46 17° ₹ 05'14 -0°14'35 conjunction -11691 Feb 04 j 13:45 0∘**⊽** minimum elong -11696 Apr 02 j 11:23 17°**⋜**06'13 0°15'13 -11691 Mar 23 j 02:27 0°M behind sun begin -11696 Apr 02 j 05:48 16°**궁**57'11 -11691 May 18 j 13:53 0°**∡**™ behind sun end -11696 Apr 02 j 16:57 17°♂15'16 retrograde -11691 Jul 06 j 22:43 12°**尽** 20'12 -11696 Apr 22 j 06:00 min. Earth dist. -11691 Aug 14 j 09:59 3°**х** 05′49 0.65797 AU asc. node -11696 Apr 26 j 15:01 2°≈52'33 opposition -11691 Aug 15 j 21:48 2°**х** 29'47 -4°15'02 morning rise -11696 May 19 j 12:48 18°≈04'28 greatest brilliancy -11691 Aug 15 j 17:19 2°**∡**34'17 -11696 Jun 06 j 05:37 0°**)**€ -11691 Aug 22 j 05:02 30°RM -11696 Jul 19 j 17:01 $0^{\circ}\Upsilon$ direct -11691 Sep 24 j 09:45 22°M59'51 -11696 Aug 30 j 20:17 0°8 -11691 Oct 31 i 04:06 0°**∡**7 -11696 Oct 11 i 02:38 $0^{\circ}\Pi$ asc. node -11691 Dec 17 j 19:17 21° ₹ 10'38 -11696 Nov 21 i 06:53 0ಂತಾ -11690 Jan 03 i 04:00 0°ಕ -11695 Jan 02 j 22:34 $0^{\circ}\Omega$ -11690 Feb 22 j 13:20 0°≈ -11695 Feb 20 i 16:37 0° mg -11690 Apr 09 j 04:37 0°**₩** -11695 Mar 16 j 07:52 10° m 54'02 -11690 May 21 j 15:53 $0^{\circ}\Upsilon$ desc. node -11695 Apr 18 j 17:52 17° mp 52'26 -11690 Jun 30 j 11:17 29°**Y**42'38 retrograde evening set -11695 May 18 j 01:05 12° m 07'35 0.48592 AU -11690 Jun 30 j 20:24 min. Earth dist. 0°8 -11695 May 24 j 19:32 9° m 43'03 -2.2m -11690 Aug 08 j 15:14 greatest brilliancy -11695 May 26 j 00:35 9° m 17'08 -4° 04'03 opposition -11695 Jun 28 j 14:30 2° Mp 16'35 -11690 Aug 30 j 05:57 16°**Д**56'06 0°47'44 direct conjunction -11695 Sep 18 j 02:04 0°**♀** -11690 Aug 30 j 09:18 17°**Д**02'40 0°48'20 minimum elong -11690 Aug 31 j 01:15 17°**II**33'55 2.38291 AU -11695 Nov 10 j 07:31 0°M max. Earth dist. -11695 Dec 30 j 02:27 0° ₹ -11690 Sep 15 j 22:06 0°ഇ -11690 Oct 24 j 14:46 0°**Ω** -11694 Feb 16j06:31 0°る -11690 Nov 02 j 23:25 asc. node -11694 Mar 14 j 11:57 16° ₹ 45'56 morning rise $7^{\circ}\Omega 08'09$ -11694 Mar 25 j 06:13 23°₹44'57 desc. node -11690 Nov 05 j 14:49 9°**Ω**08′22 evening set -11694 Apr 03 j 19:18 0°≈ -11690 Dec 03 j 13:23 0° m max. Earth dist. -11694 Apr 17 j 13:56 9°≈07'24 2.58651 AU -11689 Jan 14 j 11:05 0∘**⊽** -11689 Feb 27 j 23:36 0°M -11694 May 13 j 12:52 26°≈39'22 0°35'57 -11689 Apr 17 j 03:13 0° ⊀ conjunction -11694 May 13 j 11:24 26°≈36'51 0°35'33 -11689 Jun 12 j 03:18 0°궁 minimum elong -11694 May 18 j 09:48 0°**ℋ** -11689 Aug 11 j 08:55 16°**⋜**39'35 retrograde -11694 Jun 30 j 00:35 0°**Υ**° -11689 Sep 19 j 12:23 7°**궁**20'19 -1°51'39 opposition -11694 Jul 02 i 09:06 1°**Ƴ**41'49 -11689 Sep 19 j 16:31 7°**3**16'12 -1.4m morning rise greatest brilliancy -11694 Aug 09 j 21:51 0°8 -11689 Sep 21 j 18:43 6°**♂**26'13 0.65668 AU min. Earth dist. -11694 Sep 18 i 14:36 0°**Ⅱ** -11689 Oct 10 j 08:14 30°R 🗷 -11694 Oct 27 j 20:20 0°5 direct -11689 Oct 30 i 05:50 27° ₹23'54 -11694 Dec 06 i 13:29 $0^{\circ}\Omega$ asc. node -11689 Nov 05 i 01:12 27° ₹36'28 -11693 Jan 17 i 00:38 0° Mb -11689 Nov 20 j 11:45 0°る desc. node -11693 Feb 01 j 04:14 10° m 24'50 -11688 Jan 28 j 23:26 0°≈≈ -11688 Mar 17 j 19:56 -11693 Mar 03 j 13:26 0°**♀** 0°**₩** $0^{\circ}\Upsilon$ -11693 May 03 j 11:16 -11688 Apr 30 j 07:58 -11688 Jun 09 j 21:00 retrograde -11693 Jun 01 j 09:00 5°M01'49 0°8 -11688 Jul 18 j 19:01 -11693 Jun 28 j 10:54 30°R Ω $\Pi^{\circ}0$ min. Earth dist. -11693 Jul 05 j 17:24 27°**2**17'03 0.59784 AU -11688 Aug 26 j 03:55 0.00 -11693 Jul 10 j 01:26 25°**-**34'34 -1.6m 5°532'22 greatest brilliancy evening set -11688 Sep 02 j 06:24 -11693 Jul 11 j 00:06 25° **2**12'13 -5°25'05 opposition desc. node -11688 Sep 22 j 10:46 21°510'29 -11693 Aug 17 j 03:22 16°**♀**37'01 -11688 Oct 03 j 22:54 direct $0^{\circ}\Omega$ -11693 Oct 09 j 04:09 0°M -11693 Dec 07 j 11:07 0°**∡**¹ conjunction -11688 Nov 02 j 19:48 22°**\O2**9'59 -0°30'04 -11692 Jan 27 j 09:53 0°ಕ minimum elong -11688 Nov 02 j 17:35 $22^{\circ}\Omega 25'52$ 0°29'37 asc. node -11692 Jan 30 j 13:40 1°**ප**56'16 -11688 Nov 12 j 23:44 0° m -11692 Mar 14 j 21:29 0°≈ max. Earth dist. -11688 Dec 15 j 08:41 23° m 19'15 2.48227 AU

-11688 Dec 24 j 20:45

-11687 Jan 01 j 04:40

5°**₽**05'59

morning rise

-11692 Apr 28 j 15:13

-11692 May 07 j 09:08

evening set

0°**)**€

6°**)**€04'12

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Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23,
Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style.
                    -11687 Feb 06 i 22:09
                                           0°M
                                                                                               -11682 Mar 26 i 11:11
                                                                                                                       0^{\circ}\Pi
                    -11687 Mar 25 j 07:21
                                                                                               -11682 May 15 j 21:46 16°Д24'58
                                            0°×7
                                                                          desc node
                    -11687 May 13 j 10:56
                                            0°궁
                                                                                               -11682 Jun 09 j 12:06
                                                                                                                       0ಂತಾ
                    -11687 Jul 07 j 02:35
                                                                                               -11682 Jul 27 j 04:08
                                                                                                                       0^{\circ}\Omega
                                            0°≈≈
                                                                                               -11682 Sep 10 j 12:02
                    -11687 Sep 18 j 14:48 22°≈46'26
retrograde
                                                                                                                       0° m
                    -11687 Sep 22 j 03:24 22°≈41'42
asc. node
                                                                                               -11682 Oct 25 j 21:10
                                                                                                                       0∘ಹ
opposition
                    -11687 Oct 25 j 21:25 14°≈24'13
                                                        1°29'51
                                                                                               -11682 Dec 11 j 00:24
                                                                                                                       0°M
greatest brilliancy
                    -11687 Oct 26 j 04:05 14°≈17'50
                                                        -1.7m
                                                                                               -11681 Jan 26 j 20:01
                                                                                                                       0°×7
min. Earth dist.
                    -11687 Oct 31 j 17:44 12°≈10'04
                                                        0.59487 AU
                                                                          evening set
                                                                                               -11681 Jan 30 j 03:21
                                                                                                                       2°х 06'33
direct
                    -11687 Dec 05 j 09:08
                                            4°≈37'15
                                                                          max. Earth dist.
                                                                                               -11681 Mar 13 j 00:27 28° ₹ 51'44 2.66125 AU
                    -11686 Feb 17 j 19:25
                                            0°)€
                                                                                               -11681 Mar 14 j 19:02
                                                                                                                       0°ಕ
                                            0^{\circ}\Upsilon
                    -11686 Apr 06 j 20:30
                                                                                                                       2°る52'57 -0°32'39
                    -11686 May 18 j 23:51
                                            0^{\circ}8
                                                                          conjunction
                                                                                               -11681 Mar 19 j 06:51
                    -11686 Jun 27 j 17:42
                                            0^{\circ}II
                                                                           minimum elong
                                                                                               -11681 Mar 19 j 08:03
                                                                                                                       2°る54'54 0°33'18
                    -11686 Aug 05 j 16:56
                                             0ಂತಾ
                                                                                               -11681 Apr 30 j 04:34
desc. node
                    -11686 Aug 10 j 12:19
                                             3°9541'54
                                                                          morning rise
                                                                                               -11681 May 05 j 04:19
                                                                                                                       3°≈15'52
                    -11686 Sep 14 j 00:33
                                             0^{\circ}\Omega
                                                                          asc. node
                                                                                               -11681 May 14 j 09:05
                                                                                                                       9°≈18'26
                    -11686 Oct 24 j 12:48
                                                                                               -11681 Jun 14 j 12:03
                                                                                                                       0°)
evening set
                    -11686 Nov 01 j 19:27
                                             5° m 59'07
                                                                                               -11681 Jul 28 j 13:51
                                                                                                                       0^{\circ}\Upsilon
                    -11686 Dec 05 j 18:40
                                                                                               -11681 Sep 09 j 14:35
                                                                                                                       0°8
                                                                                               -11681 Oct 22 j 02:54
                                                                                                                       0^{\circ}\Pi
conjunction
                    -11686 Dec 26 j 19:09 14° \(\Omega\) 26'08 -1°12'27
                                                                                               -11681 Dec 04 i 04:42
                                                                                                                       0ಂತಾ
 minimum elong
                    -11686 Dec 26 j 18:02 14° \(\Omega\)24'15 1°12'34
                                                                                               -11680 Jan 20 i 00:44
                                                                                                                      0^{\circ}\Omega
                    -11685 Jan 18 j 22:57
                                            0°M
                                                                          retrograde
                                                                                               -11680 Mar 28 j 21:04 24^{\circ}\Omega34'00
max. Earth dist.
                    -11685 Jan 21 i 07:19
                                             1°M233'37 2.59031 AU
                                                                          desc. node
                                                                                               -11680 Apr 02 j 01:13 24^{\circ}\Omega 26'26
                    -11685 Feb 16 j 23:03 19°ML03'31
                                                                          min. Earth dist.
                                                                                               -11680 Apr 25 j 14:25 19° Q32'59 0.43796 AU
morning rise
                    -11685 Mar 05 j 21:32 0° ₹
                                                                                               -11680 May 03 j 04:53 17^{\circ}\Omega04'19 -2^{\circ}07'35
                                                                          opposition
                    -11685 Apr 22 j 06:30
                                            0°₹
                                                                          greatest brilliancy
                                                                                               -11680 May 02 j 12:52 17^{\circ}\Omega17'26
                    -11685 Jun 10 j 00:37
                                                                                               -11680 Jun 04 j 05:50 10° Ω 53'08
                                            0°≈≈
                                                                          direct
                    -11685 Jul 31 j 10:55
                                            0°∀
                                                                                               -11680 Aug 06 j 20:04 0° Mp
                    -11685 Aug 10 j 00:24
                                                                                               -11680 Sep 30 j 09:14
                                            5°) 13'29
                                                                                                                      0∘ಹ
asc. node
                    -11685 Oct 02 j 22:00 0°Υ
                                                                                               -11680 Nov 19 j 03:39
                                                                                                                       0°M
                                                                                               -11679 Jan 06 j 16:23
                    -11685 Nov 08 j 04:18 6°Υ54'21
                                                                                                                      0°×7
retrograde
                    -11685 Dec 12 j 03:20 0^{\circ} \( \gamma \) 07'32
                                                                                               -11679 Feb 23 j 08:16 0°궁
opposition
                                                       5°32'59
                    -11685 Dec 12 j 12:12 30°R €
                                                                                               -11679 Mar 09 j 13:15 9°⋜05'09
                                                                          evening set
                    -11685 Dec 13 j 14:08 29° ★ 37'51
                                                                                               -11679 Mar 31 j 04:26 23°♂05'12
greatest brilliancy
                                                       -2.2m
                                                                          asc. node
                    -11685 Dec 20 j 04:04 27° ★23'37 0.48393 AU
                                                                          max. Earth dist.
min. Earth dist.
                                                                                               -11679 Apr 06 j 13:40 27° 국15'42 2.61727 AU
direct
                    -11684 Jan 18 j 16:58 21°\ 49'25
                                                                                               -11679 Apr 10 j 17:45 0°≈
                    -11684 Feb 24 j 14:30 0°℃
                    -11684 Apr 19 j 06:48 0°8
                                                                          conjunction
                                                                                               -11679 Apr 27 j 00:52 10°≈47'48 0°16'26
                    -11684 Jun 01 j 17:44 0°Ⅱ
                                                                                               -11679 Apr 27 j 00:11 10°≈46'40
                                                                           minimum elong
                                                                                                                                  0°15'55
                    -11684 Jun 27 j 16:41 18°Д53'50
                                                                           behind sun begin
                                                                                              -11679 Apr 26 j 22:40 10°≈44'08
desc. node
                    -11684 Jul 12 j 18:46 0°ഇ
                                                                           behind sun end
                                                                                               -11679 Apr 27 j 01:43 10°≈49'12
                    -11684 Aug 22 j 14:29 0°Ω
                                                                                               -11679 May 25 j 10:38 0°米
                    -11684 Oct 03 j 07:14 0° Mp
                                                                                               -11679 Jun 14 j 08:29 13°) 46′25
                                                                          morning rise
                                                                                               -11679 Jul 07 i 07:52 0°Υ
                    -11684 Nov 15 i 10:55 0°♀
                    -11684 Dec 19 i 13:25 22° \simes 56'43
                                                                                               -11679 Aug 17 j 14:26
                                                                                                                       0°8
evening set
                                                                                               -11679 Sep 26 j 18:12
                    -11684 Dec 30 j 05:26 0°M
                                                                                                                       0^{\circ}II
                                                                                               -11679 Nov 05 j 12:22
                    -11683 Feb 07 i 17:14 25° ML44'10 -1°07'13
                                                                                               -11679 Dec 15 j 21:18
                                                                                                                       0^{\circ}\Omega
conjunction
                    -11683 Feb 07 i 18:32 25°ML46'16 1°07'44
                                                                                               -11678 Jan 27 j 13:34
 minimum elong
                    -11683 Feb 14 i 07:58 0° ₹
                                                                                               -11678 Feb 17 j 23:44 13° m 51'23
                                                                          desc node
max. Earth dist.
                    -11683 Feb 16 j 05:30
                                                                                               -11678 Mar 18 j 01:01
                                           1°∡13'15 2.65219 AU
                                                                                                                      0∘⊽
morning rise
                    -11683 Mar 27 j 21:39 26° ₹37'27
                                                                          retrograde
                                                                                               -11678 May 16 j 16:49 18° 233'37
                                                                                               -11678 Jun 18 j 02:27 11°233'25 0.55875 AU
                    -11683 Apr 02 j 04:35
                                            0°₹
                                                                          min. Earth dist.
                    -11683 May 19 j 04:35
                                                                          opposition
                                                                                               -11678 Jun 24 j 17:46
                                                                                                                      9°Ω00'24 -5°20'04
                                            0°≈
asc. node
                    -11683 Jun 26 j 16:52 24°≈38'49
                                                                          greatest brilliancy
                                                                                               -11678 Jun 23 j 12:52
                                                                                                                       9°Ω28'13 -1.8m
                    -11683 Jul 05 j 01:26
                                            0°∀
                                                                                               -11678 Jul 30 j 15:20
                                                                                                                       0°£56'32
                                                                          direct
                                            0^{\circ}\Upsilon
                    -11683 Aug 21 j 03:46
                                                                                                                       0°M
                                                                                               -11678 Oct 23 j 23:08
                    -11683 Oct 08 j 22:42
                                                                                                                       0°∡7
                                            0°8
                                                                                               -11678 Dec 16 j 13:56
                                                                                                                       0°정
                    -11683 Dec 05 j 08:08
                                            \Pi^{\circ}0
                                                                                               -11677 Feb 04 j 02:35
retrograde
                    -11682 Jan 18 j 05:19 10° II 18'12
                                                                                               -11677 Feb 16 j 04:41
                                                                                                                       7°る34'15
                                                                          asc. node
opposition
                    -11682 Feb 17 j 21:56
                                           5°Ⅱ09'56
                                                        6°00'16
                                                                                               -11677 Mar 23 j 02:49
                                                                                                                       0°≈
greatest brilliancy
                    -11682 Feb 18 j 13:32
                                            4°Ⅱ59'23
                                                        -2.8m
                                                                          evening set
                                                                                               -11677 Apr 20 j 08:03
                                                                                                                      18°≈46'42
min. Earth dist.
                    -11682 Feb 20 j 03:04
                                           4°Ⅲ34'01
                                                        0.38757 AU
                                                                                               -11677 May 06 j 18:12
                                                                                                                       0°)€
                    -11682 Mar 15 j 20:21 30°R8
                                                                          max. Earth dist.
                                                                                               -11677 May 07 j 22:21
                                                                                                                      0°)48'37 2.52512 AU
```

-11682 Mar 21 j 04:10 29°848'54

direct

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. -11677 Jun 10 j 19:20 24° **X** 41'47 1°01'59 -11672 May 22 j 17:11 0°궁 conjunction -11677 Jun 10 j 17:26 24° ★38'20 1°01'52 -11672 Jul 23 j 23:44 minimum elong 0°≈≈ -11677 Jun 18 j 03:36 $0^{\circ}\Upsilon$ -11672 Sep 02 j 13:15 8°23'04 retrograde -11677 Jul 28 j 15:40 0°8 -11672 Oct 08 j 18:43 0°≈19'47 asc. node -11672 Oct 09 j 15:06 30°R궁 -11677 Aug 03 j 14:28 4°**8**30'06 morning rise -11677 Sep 05 j 21:14 $0^{\circ}\Pi$ opposition -11672 Oct 10 j 16:49 29°₹34'56 0°04'56 -11677 Oct 14 j 14:57 0ಂತಾ greatest brilliancy -11672 Oct 10 j 17:09 29°**궁**34'37 -1.6m -11677 Nov 22 j 17:58 min. Earth dist. 0 $^{\circ}\Omega$ -11672 Oct 15 j 04:42 27°정49'34 0.62594 AU -11676 Jan 02 j 06:26 0° m direct -11672 Nov 20 j 12:09 19°♂38'12 desc. node -11676 Jan 05 j 17:22 2° m 29'04 -11671 Jan 04 j 03:02 -11676 Feb 14 j 11:18 0∘**⊽** -11671 Mar 02 j 00:59 0°\ -11676 Apr 03 j 00:57 $0^{\circ}\Upsilon$ -11671 Apr 16 j 09:59 retrograde -11676 Jun 23 j 04:13 28°M 39'43 -11671 May 27 j 16:25 0°8 min. Earth dist. -11676 Jul 30 j 04:23 19°M 56'22 0.64171 AU -11671 Jul 05 j 23:37 $0^{\circ}\Pi$ opposition -11676 Aug 02 j 03:51 18°M 44'40 -4°52'56 -11671 Aug 13 j 15:19 0ಂತಾ greatest brilliancy -11676 Aug 01 j 16:46 18°**M**55'47 desc. node -11671 Aug 27 j 04:43 10°529'24 direct -11676 Sep 09 j 20:46 9°M32'27 -11671 Sep 21 j 16:18 $0^{\circ}\Omega$ -11676 Nov 17 j 21:54 0°*⊼* evening set -11671 Oct 10 j 15:36 14° **Ω**16'47 asc. node -11675 Jan 03 j 08:47 24° ₹38'41 -11671 Oct 31 j 22:30 -11675 Jan 12 j 14:53 -11675 Mar 02 j 11:56 conjunction -11671 Dec 07 j 06:37 26° m 00'44 -1°02'30 -11675 Apr 16 j 16:26 0°**∀** minimum elong -11671 Dec 07 i 04:20 25° m 56'45 1°02'25 -11675 May 29 i 01:19 $0^{\circ}\Upsilon$ -11671 Dec 12 i 23:28 0∘**⊽** evening set -11675 Jun 07 j 19:36 7°**Υ**'09'27 max. Earth dist. -11670 Jan 08 j 19:28 18° **2**26'04 2.55269 AU max. Earth dist. -11675 Jul 02 j 20:30 25°**Υ**53'01 2.40792 AU -11670 Jan 26 i 00:52 0°M -11675 Jul 08 j 06:31 0°8 -11670 Jan 30 j 21:45 3°ML14'03 morning rise -11670 Mar 13 j 01:04 0°**∡**7 -11670 Apr 29 j 20:50 -11675 Aug 04 j 18:02 21°809'05 1°07'04 0°궁 conjunction -11675 Aug 04 j 20:14 21°**8**13'23 1°07'32 -11670 Jun 18 j 23:58 0°≈ minimum elong -11675 Aug 16 j 02:46 0°**Ц** -11670 Aug 14 j 06:04 0°**)**€ -11675 Sep 23 j 10:53 0°5 -11670 Aug 26 j 17:52 5° **∺**34'02 asc. node -11675 Oct 06 j 19:55 10°525'59 -11670 Oct 17 j 10:31 18°¥20'41 morning rise retrograde -11675 Nov 01 j 04:15 0°**Ω** -11670 Nov 21 j 21:36 10° **★**50'55 3°58'05 opposition -11670 Nov 22 j 20:50 10°**米**29'53 -2.0m -11675 Nov 22 j 11:38 16° **Ω**08'47 desc. node greatest brilliancy -11675 Dec 11 j 03:35 0° M -11670 Nov 29 j 11:25 8° **★**06'32 0.53137 AU min. Earth dist. -11674 Jan 22 j 04:14 0°**♀** -11670 Dec 31 j 02:00 1° ★ 43'35 direct -11674 Mar 08 j 03:21 0°M -11669 Mar 18 j 04:17 0°**Υ** -11674 Apr 26 j 21:12 0° ₹ -11669 May 02 j 21:45 0°**8** -11674 Jul 03 j 11:11 0°궁 -11669 Jun 13 j 02:58 0°**П** retrograde -11674 Jul 28 j 11:18 3°**궁**33'29 desc. node -11669 Jul 15 j 07:53 24°**Ⅲ**12'18 -11674 Aug 20 j 15:50 30°R ⊀ -11669 Jul 23 j 00:14 0°5 -11674 Sep 06 j 01:27 23°**₹** 59'13 -2°54'13 -11669 Sep 01 j 00:48 opposition -11674 Sep 06 j 04:03 23° ₹ 56'37 -1.4m -11669 Oct 12 j 02:53 greatest brilliancy min. Earth dist. -11674 Sep 06 j 21:00 23° ₹39'37 0.66455 AU -11669 Nov 23 j 19:38 direct -11674 Oct 16 j 10:55 14° ₹ 09'51 -11669 Dec 02 j 18:42 6°**₽**08'33 evening set -11674 Nov 21 j 14:44 21° ₹00'29 -11668 Jan 07 i 06:43 asc. node -11674 Dec 14 i 02:36 0°る -11668 Jan 23 j 10:32 10°M 38'31 -1°13'40 -11673 Feb 08 i 04:00 0°≈ conjunction -11673 Mar 27 i 06:42 0°₩ minimum elong -11668 Jan 23 j 11:10 10°M 39'33 1°14'04 -11673 May 09 i 05:57 max. Earth dist. -11668 Feb 07 j 08:47 20° ML22'23 2.63416 AU -11673 Jun 18 j 14:22 0°8 -11668 Feb 22 j 06:06 0° ₹ -11673 Jul 27 j 10:12 $0^{\circ}\Pi$ -11668 Mar 12 j 19:31 12° ₹32'58 morning rise -11673 Aug 08 j 09:03 9°**Ⅲ**21′09 -11668 Apr 09 j 05:14 evening set -11673 Sep 03 j 17:26 0ಂತಾ -11668 May 26 j 16:42 -11668 Jul 13 j 12:22 29°≈52'20 asc. node conjunction -11673 Oct 10 j 02:03 28°\$12'05 0°00'10 -11668 Jul 13 j 17:20 0°**)**€ -11673 Oct 10 j 02:04 28°512'08 0°00'45 -11668 Sep 01 j 11:56 $0^{\circ}\Upsilon$ minimum elong -11673 Oct 08 j 23:30 27°521'12 -11668 Oct 28 j 22:50 0°8 behind sun begin -11673 Oct 11 j 04:38 29°503'02 -11668 Dec 18 j 08:52 12°841'30 behind sun end retrograde -11673 Oct 10 j 07:05 28°521'42 7°00'47 desc. node opposition -11667 Jan 18 j 23:22 7°**8**07'35 -11673 Oct 12 j 10:23 0 $^{\circ}\Omega$ greatest brilliancy -11667 Jan 20 j 11:28 6°**8**41'04 -2.6m -11673 Nov 21 j 08:55 min. Earth dist. -11667 Jan 25 j 04:08 5°**8**19'00 0.41456 AU max. Earth dist. -11673 Nov 23 j 06:17 1° m 23'18 2.43304 AU direct -11667 Feb 21 j 14:25 0°**8**43'17 morning rise -11673 Dec 11 j 14:09 14° Mp 41'51 -11667 May 09 j 22:39 $0^{\circ}\Pi$ -11672 Jan 02 j 04:24 0∘**⊽** desc. node -11667 Jun 01 j 13:51 14°**Ⅱ**18′18 -11672 Feb 15 j 07:08 -11667 Jun 25 j 00:14 0ಂತಾ

-11667 Aug 07 j 08:57

 $0^{\circ}\Omega$

-11672 Apr 02 j 02:15 0° ₹

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. -11667 Sep 19 j 16:06 0° Mp -11662 Jun 25 i 08:27 -11667 Nov 02 j 21:27 -11662 Jul 13 j 09:57 13°**Υ**09'11 0∘ଫ morning rise -11667 Dec 18 j 08:16 o∘m. -11662 Aug 05 j 02:41 0°X -11666 Jan 14 j 11:42 17° ML35'05 -11662 Sep 13 j 15:18 $0^{\circ}\Pi$ evening set -11662 Oct 22 j 16:15 0ಂತಾ -11666 Feb 02 j 19:16 0° **₹** -11662 Dec 01 j 03:04 max. Earth dist. -11666 Mar 03 j 09:44 18°**又** 18'44 2.66424 AU $0^{\circ}\Omega$ -11661 Jan 11 j 02:57 0° m conjunction -11666 Mar 04 j 02:42 18°**₹**45'51 -0°48'32 desc. node -11661 Jan 22 j 15:21 8° Mp 05'10 minimum elong -11666 Mar 04 j 04:13 18°**х** 48'18 0°49'11 -11661 Feb 24 j 10:59 0ಂಹ -11666 Mar 21 j 15:58 0°₹ -11661 Apr 18 j 16:19 0°M morning rise -11666 Apr 20 j 04:54 18°₹59'11 retrograde -11661 Jun 09 j 22:25 14°M12'52 -11666 May 07 j 05:18 min. Earth dist. -11661 Jul 15 j 06:28 6°M05'47 0.61575 AU asc. node -11666 May 31 j 04:35 15°≈38'14 opposition -11661 Jul 19 j 17:41 4°M19'13 -5°18'10 -11666 Jun 21 j 23:48 0°**)**€ greatest brilliancy -11661 Jul 18 j 23:09 4°**™**37'39 -11666 Aug 05 j 21:29 $0^{\circ}\Upsilon$ -11661 Jul 31 j 07:08 30°R € -11666 Sep 19 j 06:23 0°8 direct -11661 Aug 26 j 11:20 25°**♀**29'21 -11666 Nov 02 j 23:05 $\Pi^{\circ}0$ -11661 Sep 24 j 03:00 -11666 Dec 20 j 12:43 -11661 Nov 30 j 21:09 0°×7 retrograde -11665 Mar 05 j 10:25 27°527'17 asc. node -11660 Jan 20 j 22:14 29° ₹16'27 min. Earth dist. -11665 Apr 01 j 23:48 22°548'44 0.40005 AU -11660 Jan 22 j 03:07 0°궁 opposition -11665 Apr 07 j 07:41 21°516'02 0°56'41 -11660 Mar 10 j 01:25 greatest brilliancy -11665 Apr 07 i 04:15 21°5518'32 -2.8m -11660 Apr 23 j 23:08 0°**)** desc. node -11665 Apr 19 j 17:34 17°558'11 -11660 May 18 j 07:03 17° + 02'08 evening set direct -11665 May 08 j 00:52 15°551'25 max. Earth dist. -11660 Jun 04 j 02:42 29° **米** 07'58 2.45275 AU -11665 Jun 29 i 09:12 0°Ω -11660 Jun 05 j 07:19 -11665 Aug 23 j 14:07 0° m -11665 Oct 11 j 11:47 -11660 Jul 12 j 07:28 27° Υ 30'07 1°13'21 0∘⊽ conjunction -11665 Nov 28 j 07:47 -11660 Jul 12 j 07:24 27° Υ 30'01 1°13'37 o°m. minimum elong -11660 Jul 15 j 14:30 0°**8** -11664 Jan 14 j 24:00 0° **尽** -11664 Feb 23 j 04:51 24° **₹** 49'41 -11660 Aug 23 j 13:32 0°**П** evening set -11660 Sep 09 j 20:13 13°**Ц**28'14 -11664 Mar 02 j 07:23 0°る morning rise -11660 Oct 01 j 00:26 0°5 max. Earth dist. -11664 Mar 27 j 10:48 16°♂10'19 2.64090 AU -11660 Nov 08 j 20:18 0°**Ω** -11664 Apr 11 j 06:11 25°₹48'27 -0°03'30 -11660 Dec 09 j 07:54 22° Ω 55'46 conjunction desc. node -11664 Apr 11 j 06:19 25°₹48'40 0°04'06 -11660 Dec 18 j 22:33 0° M minimum elong -11664 Apr 10 j 10:59 25°♂17'06 -11659 Jan 30 j 05:31 0°₽ behind sun begin behind sun end -11664 Apr 12j01:39 26°る20'16 -11659 Mar 16 j 23:15 0°M asc. node -11664 Apr 16 j 22:20 29°**궁**31'24 -11659 May 08 j 18:30 0° **尽** -11664 Apr 17 j 15:46 0°≈ retrograde -11659 Jul 14 j 19:47 20° ₹25'05 morning rise -11664 May 28 j 15:03 27°≈19'59 -11659 Aug 23 j 16:31 10°**х** 39'28 -3°48'04 opposition -11664 Jun 01 j 13:13 0°**米** min. Earth dist. -11659 Aug 23 j 00:39 10°**х** 55'26 0.66288 AU -11664 Jul 14 j 19:28 0°**Υ** -11659 Aug 23 j 15:07 10°**х** 40'53 greatest brilliancy -11664 Aug 25 j 14:46 0°8 -11659 Oct 02 j 13:05 1° ₹ 01'29 direct -11664 Oct 05 j 09:55 0°**Ⅱ** -11659 Dec 08 j 04:06 20° ₹ 24'05 asc. node -11664 Nov 14 j 22:42 0°ഇ -11659 Dec 27 j 06:12 0°궁 -11664 Dec 26 i 10:45 0°Ω -11658 Feb 17 i 03:07 0°≈ -11663 Feb 09 i 17:12 0° m -11658 Apr 04 i 05:49 0°**)**€ desc. node -11663 Mar 06 j 18:30 14° m 05'10 -11658 May 16 j 21:26 -11663 Apr 26 j 15:56 0° **⊆** -11658 Jun 26 i 03:34 0°8 -11663 Apr 29 j 12:03 0°**△**03'25 -11658 Jul 14 j 02:12 13°**8**46'48 retrograde evening set -11663 May 02 j 07:50 30°R M -11658 Aug 03 j 22:33 $0^{\circ}\Pi$ min. Earth dist. -11663 May 29 j 20:34 23° m 52'04 0.51286 AU -11658 Sep 11 j 05:06 0ಂತಾ -11663 Jun 05 j 06:18 21° Mp 30'43 -2.1m greatest brilliancy opposition -11663 Jun 06 j 13:37 21° m 01'49 -4°44'28 conjunction -11658 Sep 14 j 01:02 2°9512'52 0°31'58 direct -11663 Jul 11 j 00:43 13° M 36'35 minimum elong -11658 Sep 14 j 03:47 2°518'14 0°32'36 -11663 Sep 07 j 23:54 0°**♀** max. Earth dist. -11658 Oct 13 j 23:16 25°527'36 2.39156 AU -11663 Nov 04 j 00:41 -11658 Oct 19 j 21:09 0 $^{\circ}\Omega$ -11663 Dec 24 j 21:09 0° **₹** desc. node -11658 Oct 27 j 01:20 $5^{\circ}\Omega$ 28'55 -11662 Feb 11 j 11:29 0°궁 morning rise -11658 Nov 17 j 14:17 21° Ω42'55 asc. node -11662 Mar 04 j 19:49 13°る33'29 -11658 Nov 28 j 18:39 0° m -11662 Mar 30 j 04:09 -11657 Jan 09 j 14:18 0∘**⊽** evening set -11662 Apr 03 j 12:46 2°≈52'05 -11657 Feb 22 j 21:16 0°M max. Earth dist. -11662 Apr 24 j 14:03 16°≈54'22 2.56645 AU -11657 Apr 11 j 09:02 0°**∡** -11662 May 13 j 19:17 0°**∀** -11657 Jun 03 j 14:19 0°궁 retrograde -11657 Aug 19 j 15:07 24°♂44'14 -11662 May 23 j 10:13 6° **★** 39'42 0°46'25 -11657 Sep 27 j 11:15 15° ₹35'07 -1°11'16 conjunction opposition

-11657 Sep 27 j 14:51 15°♂31'33 -1.5m

greatest brilliancy

-11662 May 23 j 08:25 6° **★** 36'35 0°46'07

minimum elong

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 25

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Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style.
                    -11657 Sep 30 i 13:03 14° ₹22'00 0.64818 AU
                                                                                               -11651 Feb 09 j 17:10
                                                                                                                       0° ₹
min. Earth dist.
                    -11657 Oct 26 j 09:17
                                            6°ප32'40
asc node
                    -11657 Nov 07 j 06:58
                                            5°る36'55
                                                                                               -11651 Feb 16 j 18:26
                                                                                                                       4° ₹ 32'02 -1°01'25
direct
                                                                          conjunction
                    -11656 Jan 21 j 08:04
                                                                                               -11651 Feb 16 j 19:56
                                                                           minimum elong
                                                                                                                       4°∡°34'26 1°01'59
                                            0°≈≈
                                                                                                                       7°∡¹49'10 2.65886 AU
                    -11656 Mar 12 j 01:03
                                            0°∀
                                                                                               -11651 Feb 21 j 21:19
                                                                          max. Earth dist.
                                            0^{\circ}\Upsilon
                    -11656 Apr 25 j 02:26
                                                                                               -11651 Mar 28 j 13:08
                                                                                                                       0°궁
                    -11656 Jun 04 j 21:18
                                            0^{\circ}8
                                                                          morning rise
                                                                                               -11651 Apr 05 j 10:39
                                                                                                                       5°る02'58
                    -11656 Jul 13 j 22:18
                                            0^{\circ}\Pi
                                                                                               -11651 May 14 j 08:34
                                                                                                                       0°≈
                    -11656 Aug 21 j 09:12
                                            0ಂತಾ
                                                                          asc. node
                                                                                               -11651 Jun 16 j 23:20 21°≈42'02
desc. node
                    -11656 Sep 12 j 22:35 17°530'06
                                                                                               -11651 Jun 29 j 18:30
                                                                                                                       0°₩
                                                                                                                       0^{\circ}\Upsilon
evening set
                    -11656 Sep 16 j 13:13 20°516'56
                                                                                               -11651 Aug 14 j 21:43
                    -11656 Sep 29 j 05:36
                                                                                                                       0^{\circ}8
                                             0^{\circ}\Omega
                                                                                               -11651 Sep 30 j 13:28
                    -11656 Nov 08 j 07:11
                                             0° M
                                                                                               -11651 Nov 19 j 05:51
                                                                                                                       0^{\circ}\Pi
                                                                          retrograde
                                                                                               -11650 Feb 04 j 12:27 27°Д28'15
conjunction
                    -11656 Nov 15 j 20:47
                                             5° m 31'34 -0°44'12
                                                                          opposition
                                                                                               -11650 Mar 07 j 14:57 22°Ц12'35
                                                                                                                                   4°29'34
 minimum elong
                    -11656 Nov 15 j 18:05
                                             5° m 26'40 0°43'51
                                                                          min. Earth dist.
                                                                                               -11650 Mar 06 j 22:02 22°Ⅲ24'00
                                                                                                                                   0.38391 AU
                    -11656 Dec 20 j 04:24
                                             0∘⊽
                                                                          greatest brilliancy
                                                                                               -11650 Mar 07 j 17:08 22°Ⅱ11'07
max. Earth dist.
                    -11656 Dec 25 j 05:55
                                             3°₽31'46
                                                        2.50851 AU
                                                                          direct
                                                                                               -11650 Apr 07 j 02:05 17°Д05'23
morning rise
                    -11655 Jan 12 j 11:08 16° 203'31
                                                                          desc. node
                                                                                               -11650 May 06 j 10:56 22° II 15'11
                    -11655 Feb 02 j 04:19
                                                                                               -11650 May 25 j 21:03
                    -11655 Mar 20 j 08:38
                                            0° ₹
                                                                                               -11650 Jul 18 j 22:11
                                                                                                                       0^{\circ}\Omega
                    -11655 May 07 j 21:13
                                            0°궁
                                                                                               -11650 Sep 04 i 04:02
                                                                                                                       0° m
                    -11655 Jun 29 i 07:15
                                            0°≈
                                                                                               -11650 Oct 20 j 10:46
                                                                                                                       0∘⊽
                    -11655 Sep 10 i 07:40
                                            0°∀
                                                                                               -11650 Dec 06 i 01:17
                                                                                                                       0°M
                    -11655 Sep 12 j 10:56
                                            0°)(24'24
                                                                                               -11649 Jan 22 j 03:01
                                                                                                                       0° ₹
asc. node
                    -11655 Sep 28 j 12:26
                                                                                               -11649 Feb 07 j 23:56 10° ₹ 43'54
retrograde
                                            1° # 54'55
                                                                          evening set
                    -11655 Oct 15 j 18:16 30°R≈
                                                                                               -11649 Mar 10 j 04:32
                                                                                                                       ೧೦೯
                    -11655 Nov 04 j 05:06 23°≈49'44 2°22'19
                                                                                               -11649 Mar 18 j 15:35
                                                                                                                       5°る25'39
opposition
                                                                          max. Earth dist.
                                                                                                                                  2.65629 AU
                    -11655 Nov 04 j 17:01 23°≈38'31
greatest brilliancy
                                                        -1 8m
min. Earth dist.
                    -11655 Nov 10 j 18:17 21°≈21'48
                                                                                               -11649 Mar 28 j 00:06 11°る27'01 -0°22'23
                                                       0.57399 AU
                                                                          conjunction
                    -11655 Dec 14 j 08:51 14°≈12'47
                                                                                               -11649 Mar 28 j 00:59 11°₹28'27
direct
                                                                           minimum elong
                                                                                                                                  0°23'02
                                                                                               -11649 Apr 25 j 13:30 0°≈
                    -11654 Feb 07 j 19:07 0°米
                                                                          asc. node
                                                                                               -11649 May 04 j 15:23
                    -11654 Mar 31 j 03:37 0°Υ
                                                                                                                       5°≈57'32
                    -11654 May 13 j 04:15 0°8
                                                                                               -11649 May 13 j 22:25 12°≈05'42
                                                                          morning rise
                    -11654 Jun 22 j 07:45 0°Ⅱ
                                                                                               -11649 Jun 09 j 17:13 0°米
                    -11654 Jul 31 j 23:30 0°519'37
                                                                                               -11649 Jul 23 j 11:13
                                                                                                                       0^{\circ}\Upsilon
desc. node
                                                                                               -11649 Sep 03 j 23:52 0°8
                    -11654 Jul 31 j 13:15 0°5
                    -11654 Sep 09 j 01:40 0°Ω
                                                                                               -11649 Oct 15 j 18:01
                                                                                                                       \Pi^{\circ}0
                    -11654 Oct 19 j 17:33 0° M
                                                                                               -11649 Nov 26 j 14:38 0°ഇ
evening set
                    -11654 Nov 13 j 13:01 17° m 43'55
                                                                                               -11648 Jan 09 j 12:01
                                                                                                                       0^{\circ}\Omega
                    -11654 Dec 01 j 02:09
                                                                                               -11648 Mar 03 j 15:10
                                                                                                                       0° m
                                                                          desc. node
                                                                                               -11648 Mar 23 j 12:53
                                                                                                                       6° m 31'36
                    -11653 Jan 06 j 04:52 24°235'10 -1°14'44
                                                                                               -11648 Apr 10 j 02:10 8° Mp 37'37
conjunction
                                                                          retrograde
                    -11653 Jan 06 j 04:28 24°234'30 1°14'58
                                                                                               -11648 May 08 j 14:11
                                                                                                                       3° m/14'12 0.46389 AU
 minimum elong
                                                                          min. Earth dist.
                    -11653 Jan 14 j 07:37 0° M
                                                                                               -11648 May 16 j 14:29
                                                                                                                       0° m/29'03 -3°22'09
                                                                          opposition
                    -11653 Jan 27 j 20:32 8°ML56'56 2.60808 AU
                                                                                               -11648 May 15 j 13:23 0° m 50'40 -2.4m
max. Earth dist.
                                                                          greatest brilliancy
                    -11653 Feb 26 i 05:29 28°ML04'05
morning rise
                                                                                               -11648 May 18 j 00:28 30°RΩ
                    -11653 Mar 01 i 05:27 0° ₹
                                                                          direct
                                                                                               -11648 Jun 18 j 11:06 23^{\circ}\Omega50'13
                    -11653 Apr 17 j 09:32
                                                                                               -11648 Jul 21 i 16:27
                                                                                                                       0° m
                    -11653 Jun 04 i 14:05
                                                                                               -11648 Sep 22 j 23:54
                                            0°≈≈
                                                                                                                       0∘ଫ
                    -11653 Jul 24 j 10:23
                                            0°₩
                                                                                               -11648 Nov 13 j 11:27
                                                                                                                       0°M
                    -11653 Jul 31 j 07:03
                                            3°¥58'57
                                                                                               -11647 Jan 01 j 16:14
                                                                                                                       0°∡7
asc node
                                                                                               -11647 Feb 18 j 15:08
                    -11653 Sep 17 j 19:30
                                            0^{\circ}\Upsilon
retrograde
                    -11653 Nov 21 j 21:54 19°Υ03'22
                                                                          evening set
                                                                                               -11647 Mar 18 j 12:35 17° ₹51'54
                    -11653 Dec 25 j 00:22 12^{\circ} \cdot \cdot 42'34
                                                        6°18'56
                                                                                               -11647 Mar 21 j 11:27 19°₹46'39
opposition
                                                                          asc. node
greatest brilliancy
                    -11653 Dec 26 j 15:26 12°Υ10'38
                                                        -2.3m
                                                                                               -11647 Apr 06 j 03:11
                                                                                                                       0°≈
min. Earth dist.
                    -11652 Jan 01 j 20:36 10°Y09'39
                                                        0.45748 AU
                                                                          max. Earth dist.
                                                                                               -11647 Apr 12 j 22:28
                                                                                                                                  2.60129 AU
                                                                                                                       4°≈29'04
                    -11652 Jan 30 j 08:01
                                            5°Y00'45
direct
                    -11652 Apr 09 j 06:00
                                            0°8
                                                                                               -11647 May 06 j 09:06 20°≈09'36 0°27'48
                                                                          conjunction
                    -11652 May 25 j 10:07
                                             \Pi°0
                                                                           minimum elong
                                                                                               -11647 May 06 j 07:57 20°≈07'39
                                                                                                                                  0°27'20
desc. node
                    -11652 Jun 18 j 04:25 16°Ⅲ47'02
                                                                                               -11647 May 20 j 19:51
                                                                                                                       0°∀
                    -11652 Jul 06 j 12:49
                                             0\circ\odot
                                                                          morning rise
                                                                                               -11647 Jun 24 j 10:27 24° ∺ 10'24
                                                                                                                       0^{\circ}\Upsilon
                    -11652 Aug 16 j 23:48
                                             0°\Omega
                                                                                               -11647 Jul 02 j 14:21
                    -11652 Sep 28 j 02:40
                                            0° m
                                                                                               -11647 Aug 12 j 16:25
                                                                                                                       0°8
                    -11652 Nov 10 j 13:28
                                             0∘⊽
                                                                                               -11647 Sep 21 j 14:06
                                                                                                                       0^{\circ}\Pi
                    -11652 Dec 25 j 12:23
                                             0°M
                                                                                               -11647 Oct 31 j 00:47
                                                                                                                       0ಂತಾ
                    -11652 Dec 29 j 06:45
                                            2°M28'14
                                                                                               -11647 Dec 09 j 23:25
                                                                                                                       0^{\circ}\Omega
evening set
```

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Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23,
Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style.
                    -11646 Jan 20 j 19:21 0° Mp
                                                                                             -11641 Mar 21 j 22:52
                                                                                                                     0°∀
                    -11646 Feb 08 j 09:55 12° m 32'09
                                                                                             -11641 May 04 j 06:10
                                                                                                                     0^{\circ}\Upsilon
desc node
                    -11646 Mar 08 j 10:49 0°♀
                                                                                             -11641 Jun 13 j 17:58
                                                                                                                     0°8
                                                                                             -11641 Jul 22 j 15:12 0°П
                    -11646 May 25 j 21:12 28°♀36'57
retrograde
                                                                                             -11641 Aug 23 j 01:22 24°Д35'53
                    -11646 Jun 28 j 09:05 21° 211'13 0.58134 AU
min. Earth dist.
                                                                         evening set
                    -11646 Jul 03 j 04:57 19°£18'12 -1.7m
greatest brilliancy
                                                                                             -11641 Aug 29 j 23:04
                                                                                                                     0ಂಲ
opposition
                    -11646 Jul 04 j 06:35 18°♀53'08 -5°26'11
                                                                         desc. node
                                                                                             -11641 Sep 30 j 15:57 24°536'44
                                                                                             -11641 Oct 07 j 16:32
direct
                    -11646 Aug 09 j 21:10 10°△30'53
                                                                                                                     0^{\circ}\Omega
                    -11646 Oct 15 j 07:33
                                           0°M₊
                    -11646 Dec 10 j 17:27
                                            0° ₹
                                                                         conjunction
                                                                                             -11641 Oct 24 j 08:42 12°\Omega39'59 -0°17'42
                    -11645 Jan 30 j 01:09
                                           0°ರ
                                                                          minimum elong
                                                                                             -11641 Oct 24 j 07:16 12°\Omega37'16 0°17'11
asc. node
                    -11645 Feb 06 j 12:21
                                           4°る37'22
                                                                                             -11641 Nov 16 j 15:13
                                                                                                                    0° m/y
                    -11645 Mar 18 j 08:36
                                           0°≈
                                                                         max. Earth dist.
                                                                                             -11641 Dec 07 j 15:41 15° Mp 16'27
                                                                                                                                2.46030 AU
evening set
                    -11645 Apr 30 j 11:43 28°≈53'02
                                                                         morning rise
                                                                                             -11641 Dec 24 j 04:37 27° m 01'43
                    -11645 May 02 j 02:37
                                            0°)€
                                                                                             -11641 Dec 28 j 10:15
                                                                                                                     0∘⊽
max. Earth dist.
                    -11645 May 16 j 23:07 10° ∺ 20'08 2.50026 AU
                                                                                             -11640 Feb 10 j 10:41
                                                                                                                     0°M
                    -11645 Jun 13 j 12:01
                                           0^{\circ}\Upsilon
                                                                                             -11640 Mar 27 j 22:18
                                                                                                                     0°⊼
                                                                                             -11640 May 16 j 13:09
                                                                                                                     0°정
conjunction
                    -11645 Jun 22 j 01:07
                                            6°Y13'55
                                                      1°08'28
                                                                                             -11640 Jul 12 j 08:12
 minimum elong
                    -11645 Jun 21 j 23:34
                                            6°Υ11'04
                                                       1°08'30
                                                                         retrograde
                                                                                             -11640 Sep 11 j 14:07 16°≈55'47
                    -11645 Jul 23 j 22:49
                                           0°႘
                                                                         asc. node
                                                                                             -11640 Sep 29 j 02:53 14°≈56'18
morning rise
                    -11645 Aug 16 j 17:01 18°807'43
                                                                         opposition
                                                                                             -11640 Oct 19 i 06:45
                                                                                                                     8°≈21'24
                                                                                                                                 0°52'49
                    -11645 Sep 01 i 02:07
                                           0^{\circ}\Pi
                                                                         greatest brilliancy
                                                                                             -11640 Oct 19 j 10:17
                                                                                                                     8°≈17'59
                                                                                                                                 -1.6m
                    -11645 Oct 09 i 17:02
                                           0°©
                                                                         min. Earth dist.
                                                                                             -11640 Oct 24 i 12:59
                                                                                                                     6°≈19'22
                                                                                                                                 0.60997 AU
                    -11645 Nov 17 i 16:42 0°Ω
                                                                                             -11640 Nov 13 j 20:53 30°R ₹
desc. node
                    -11645 Dec 27 j 04:26 29^{\circ}\Omega24'51
                                                                                             -11640 Nov 28 j 23:08 28°る28'40
                                                                         direct
                    -11645 Dec 27 j 23:47 0° Mg
                                                                                             -11640 Dec 14 j 16:09
                                                                                                                     0°≈≈
                    -11644 Feb 08 j 17:21
                                                                                             -11639 Feb 22 j 19:41
                                           0∘⊽
                                                                                                                     0° <del>)(</del>
                    -11644 Mar 26 j 19:58
                                                                                             -11639 Apr 10 j 14:03
                                           o°m.
                                                                                                                     0^{\circ}\Upsilon
                    -11644 May 26 j 11:48 0° ₹
                                                                                             -11639 May 22 j 08:25
                                                                                                                     0°8
                                                                                             -11639 Jun 30 j 21:27
                    -11644 Jul 01 j 04:13 7°尽 01'23
                                                                                                                     0^{\circ}\Pi
retrograde
                                                                                             -11639 Aug 08 j 16:47
                    -11644 Aug 02 j 23:07 30°RML
                                                                                                                     0ಂತಾ
min. Earth dist.
                    -11644 Aug 08 j 00:31 27°ML59'58 0.65182 AU
                                                                                             -11639 Aug 17 j 16:51
                                                                                                                     6°956'47
                                                                         desc. node
                    -11644 Aug 10 j 03:51 27° ML08'19 -4°32'20
                                                                                             -11639 Sep 16 j 20:34 0°Ω
opposition
                    -11644 Aug 09 j 20:39 27°M 15'34 -1.4m
                                                                                             -11639 Oct 23 j 11:48 27° Ω17'30
greatest brilliancy
                                                                         evening set
                    -11644 Sep 18 j 07:28 17° ML45'37
direct
                                                                                             -11639 Oct 27 j 04:46 0° Th
                                                                                             -11639 Dec 08 j 07:04
                    -11644 Nov 07 j 23:25 0° ₹
asc. node
                    -11644 Dec 24 j 17:34 22° ₹ 49'20
                    -11643 Jan 06 j 14:34 0°₹
                                                                         conjunction
                                                                                             -11639 Dec 18 j 15:31
                                                                                                                     7°210'11 -1°09'09
                    -11643 Feb 25 j 08:27 0°≈
                                                                          minimum elong
                                                                                             -11639 Dec 18 j 13:53
                                                                                                                    7°207'21 1°09'12
                    -11643 Apr 11 j 20:21 0°米
                                                                         max. Earth dist.
                                                                                             -11638 Jan 16 j 06:50 26°236'33 2.57440 AU
                    -11643 May 24 j 07:40 0°Υ
                                                                                             -11638 Jan 21 j 08:42 0°M
                    -11643 Jun 20 j 10:25 20°Υ'04'01
                                                                                             -11638 Feb 09 j 20:31 12°M 52'15
evening set
                                                                         morning rise
                    -11643 Jul 03 j 13:28 0°8
                                                                                             -11638 Mar 08 j 06:52 0° ⊀
max. Earth dist.
                    -11643 Jul 29 j 18:07 20°809'35 2.38921 AU
                                                                                             -11638 Apr 24 j 19:11 0°ਰ
                    -11643 Aug 11 i 09:19 0°Ⅱ
                                                                                             -11638 Jun 13 i 01:04 0°≈
                                                                                             -11638 Aug 05 j 00:41
conjunction
                    -11643 Aug 18 i 23:58
                                            5°II57'03 0°57'38
                                                                         asc. node
                                                                                             -11638 Aug 17 i 00:47 6° \(\psi\) 09'25
                                                                                             -11638 Oct 29 j 09:29 28°升59'48
 minimum elong
                    -11643 Aug 19 i 03:07
                                           6°Д03'13 0°58'11
                                                                         retrograde
                    -11643 Sep 18 j 16:41 0°5
                                                                                             -11638 Dec 03 j 01:00 21° \( \frac{1}{52} \) 52'50 4°52'48
                                                                         opposition
                    -11643 Oct 22 j 07:06 26°505'47
                                                                                             -11638 Dec 04 i 07:02 21° \( \frac{1}{2} \) -2.1m
morning rise
                                                                         greatest brilliancy
                                                                         min. Earth dist.
                    -11643 Oct 27 j 09:11 0°Ω
                                                                                             -11638 Dec 10 j 22:43 19° \( \) 06'19
                                                                                                                                0.50558 AU
desc. node
                    -11643 Nov 12 j 21:07 12° Ω32'54
                                                                         direct
                                                                                             -11637 Jan 10 j 09:42 13°¥ 09'53
                    -11643 Dec 06 j 07:00 0° Mp
                                                                                             -11637 Mar 07 j 08:28
                                                                                                                     0^{\circ}\Upsilon
                    -11642 Jan 17 j 04:24
                                           0∘⊽
                                                                                             -11637 Apr 25 j 15:23
                                                                                                                     0°8
                    -11642 Mar 02 j 19:04
                                           0°M
                                                                                             -11637 Jun 06 j 22:47
                                                                                                                     \Pi^{\circ}0
                    -11642 Apr 20 j 10:07
                                           0° ₹
                                                                                             -11637 Jul 05 j 21:05 21°Ⅲ24'29
                                                                         desc. node
                    -11642 Jun 18 j 04:25 0°♂
                                                                                             -11637 Jul 17 j 09:33
                                                                                                                     0ಂತಾ
                    -11642 Aug 05 j 10:18 11°⋜29'47
                                                                                                                     0^{\circ}\Omega
retrograde
                                                                                             -11637 Aug 26 j 19:19
                    -11642 Sep 13 j 19:05
opposition
                                           2°る03'28 -2°18'53
                                                                                             -11637 Oct 07 j 03:55
                                                                                                                     0° m
greatest brilliancy
                    -11642 Sep 13 j 22:51
                                            1°る59'42 -1.4m
                                                                                             -11637 Nov 19 j 01:14
                                                                                                                     0∘ଫ
                                                                         evening set
min. Earth dist.
                    -11642 Sep 15 j 10:18
                                            1°る24'16 0.66139 AU
                                                                                             -11637 Dec 13 j 02:49 16°△19'58
                    -11642 Sep 18 j 23:17 30°R ✓
                                                                                             -11636 Jan 02 j 15:04
direct
                    -11642 Oct 24 j 09:35 22°尽 09'26
asc. node
                    -11642 Nov 12 j 00:08 24° ₹ 10'26
                                                                         conjunction
                                                                                             -11636 Feb 01 j 21:24 19°ML49'06 -1°10'30
                    -11642 Dec 02 j 07:18
                                                                                             -11636 Feb 01 j 22:28 19°M 50'51 1°10'58
                                                                          minimum elong
                    -11641 Feb 01 j 20:21 0°≈
                                                                         max. Earth dist.
                                                                                             -11636 Feb 13 j 07:30 27°ML12'38 2.64508 AU
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Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 27

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Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style.
                    -11636 Feb 17 i 15:18 0° ₹
                                                                        min. Earth dist.
                                                                                            -11631 Jun 10 i 01:02
                                                                                                                    4°239'13 0.53885 AU
                                                                                                                    2°225'46 -1.9m
                    -11636 Mar 21 j 13:16 21° ₹05'53
                                                                                            -11631 Jun 15 j 22:30
                                                                        greatest brilliancy
morning rise
                    -11636 Apr 04 j 12:22
                                           0°궁
                                                                                             -11631 Jun 17 j 05:09
                                                                                                                    1°£56'43 -5°09'40
                                                                        opposition
                    -11636 May 21 j 16:59
                                                                                             -11631 Jun 22 j 11:30 30°R M
                                           0°≈≈
                    -11636 Jul 03 j 18:05 27°≈17'40
                                                                                             -11631 Jul 22 j 12:13 24° m 09'07
asc. node
                                                                        direct
                    -11636 Jul 08 j 00:53
                                           0°₩
                                                                                             -11631 Aug 24 j 03:08
                                                                                                                    0∘ಹ
                                           0^{\circ}\Upsilon
                    -11636 Aug 25 j 02:32
                                                                                             -11631 Oct 28 j 04:35
                                                                                                                    0°M
                    -11636 Oct 15 j 09:33
                                                                                                                    0° ₹
                                           0^{\circ}8
                                                                                             -11631 Dec 19 j 11:37
retrograde
                    -11635 Jan 04 j 13:12 28°810'49
                                                                                             -11630 Feb 06 j 14:32
                                                                                                                    0°궁
opposition
                    -11635 Feb 04 j 10:09 22°856'10
                                                       6°42'24
                                                                        asc. node
                                                                                             -11630 Feb 23 j 03:53 10°る25'50
greatest brilliancy
                    -11635 Feb 05 j 12:57 22°837'34
                                                       -2.7m
                                                                                             -11630 Mar 25 j 12:17
                                                                                                                    0°≈
                    -11635 Feb 08 j 17:24 21°844'36
min. Earth dist.
                                                       0.39675 AU
                                                                        evening set
                                                                                             -11630 Apr 13 j 00:40 12°≈14'54
direct
                    -11635 Mar 08 j 15:28 17°811'30
                                                                        max. Earth dist.
                                                                                             -11630 May 02 j 00:25 25°≈04'42 2.54429 AU
                    -11635 Apr 25 j 04:39
                                           0^{\circ}II
                                                                                             -11630 May 09 j 04:41
                                                                                                                    0°)€
desc. node
                    -11635 May 23 j 02:11 14°Д58'27
                    -11635 Jun 16 j 10:38
                                           0ಂತಾ
                                                                        conjunction
                                                                                             -11630 Jun 02 j 17:22 17°米08'09
                                                                                                                                0°55'51
                    -11635 Jul 31 j 17:05
                                            0^{\circ}\Omega
                                                                          minimum elong
                                                                                             -11630 Jun 02 j 15:25 17°米04'41
                                                                                                                               0°55'40
                    -11635 Sep 13 j 23:27
                                                                                             -11630 Jun 20 j 16:40
                                                                                                                    0^{\circ}\Upsilon
                    -11635 Oct 28 j 18:08
                                                                        morning rise
                                                                                             -11630 Jul 25 j 03:36 25°Y21'33
                    -11635 Dec 13 j 12:42
                                           0°M
                                                                                             -11630 Jul 31 j 08:08
                                                                                                                    0°8
evening set
                    -11634 Jan 23 j 13:04 26°M24'25
                                                                                             -11630 Sep 08 j 17:03
                                                                                                                    0^{\circ}\Pi
                    -11634 Jan 29 i 03:48 0° ₹
                                                                                             -11630 Oct 17 i 13:38
                                                                                                                    0ಂಣ
max. Earth dist.
                    -11634 Mar 08 j 23:56 24° ₹ 50'02 2.66360 AU
                                                                                             -11630 Nov 25 i 19:17
                                                                                                                    0^{\circ}\Omega
                                                                                             -11629 Jan 05 i 10:57
                                                                                                                    0° m
conjunction
                    -11634 Mar 12 j 20:39 27° ₹ 18'28 -0°39'38
                                                                                             -11629 Jan 12 j 23:51
                                                                                                                    5° m 22'48
                                                                        desc. node
                    -11634 Mar 12 j 22:02 27° ₹20'40 0°40'17
                                                                                             -11629 Feb 17 j 23:34
                                                                                                                    0∘⊽
 minimum elong
                    -11634 Mar 17 j 01:31 0°る
                                                                                             -11629 Apr 08 j 19:58
                                                                                                                    o°m.
                    -11634 Apr 28 j 18:59 27°る33'35
                                                                                             -11629 Jun 18 j 05:38 23° ML02'48
                                                                        retrograde
morning rise
                    -11634 May 02 j 12:57 0°≈
                                                                                             -11629 Jul 24 j 12:39 14°MJ34'36 0.63126 AU
                                                                        min. Earth dist.
                    -11634 May 21 j 10:13 12°≈21'26
                                                                                             -11629 Jul 28 j 03:35 13°ML07'37 -5°05'25
asc. node
                                                                        opposition
                    -11634 Jun 17 j 01:38 0°米
                                                                                             -11629 Jul 27 j 13:20 13°M21'54 -1.5m
                                                                        greatest brilliancy
                    -11634 Jul 31 j 12:07 0°Υ
                                                                                             -11629 Sep 04 j 10:14 4°ML04'42
                                                                        direct
                                                                                             -11629 Nov 23 j 13:00 0°⊀
                    -11634 Sep 13 j 02:03 0°8
                    -11634 Oct 26 j 09:39 0°Ⅱ
                                                                                             -11628 Jan 11 j 07:32 26° ₹ 52'08
                                                                        asc. node
                    -11634 Dec 09 j 21:18 0°5
                                                                                             -11628 Jan 16 j 14:59 0°궁
                    -11633 Jan 30 j 02:49 0°Ω
                                                                                             -11628 Mar 05 j 02:59 0°≈
                    -11633 Mar 19 j 17:49 13°Ω36'01
retrograde
                                                                                             -11628 Apr 19 j 05:54 0°米
desc. node
                    -11633 Apr 10 j 06:03 10°Ω30'21
                                                                        evening set
                                                                                             -11628 May 29 j 16:32 28° ∺ 34'24
min. Earth dist.
                    -11633 Apr 16 j 03:51 8° Ω 49'00 0.41893 AU
                                                                                             -11628 May 31 j 15:39 0°Υ
opposition
                    -11633 Apr 23 j 00:23 6°Ω41'25 -0°55'30
                                                                        max. Earth dist.
                                                                                             -11628 Jun 18 j 13:06 13°Υ09'29 2.42716 AU
greatest brilliancy
                    -11633 Apr 22 j 17:46 6° Ω46'35 -2.7m
                                                                                             -11628 Jul 10 j 22:38
                                                                                                                   0°8
                    -11633 May 24 j 09:52 0° Ω52'36
direct
                    -11633 Aug 14 j 17:38
                                                                                             -11628 Jul 25 j 06:40 10°857'43 1°11'20
                                                                        conjunction
                    -11633 Oct 05 j 05:14 0°♀
                                                                                             -11628 Jul 25 j 07:53 11°800'03 1°11'44
                                                                          minimum elong
                    -11633 Nov 23 j 00:38 0°M
                                                                                             -11628 Aug 18 j 20:31 0°Ⅱ
                                                                                             -11628 Sep 24 i 22:12 28°Д58'41
                    -11632 Jan 10 i 03:39 0° ₹
                                                                        morning rise
                    -11632 Feb 26 i 15:46 0°る
                                                                                             -11628 Sep 26 j 05:36 0°5
evening set
                    -11632 Mar 03 j 00:06 3°る24'49
                                                                                             -11628 Nov 03 i 23:21
                                                                                             -11628 Nov 29 i 17:49 19°\Omega29'13
max. Earth dist.
                    -11632 Apr 02 j 08:40 23°る00'07 2.62879 AU
                                                                        desc. node
asc. node
                    -11632 Apr 07 j 04:38 26°る09'23
                                                                                             -11628 Dec 13 i 22:41
                                                                                                                    0° m
                    -11632 Apr 13 j 01:20
                                                                                             -11627 Jan 25 j 00:01
                                                                                                                    0∘⊽
                                                                                             -11627 Mar 11 j 03:59
                                                                                                                    0°M
                                                                                             -11627 Apr 30 j 19:21
                    -11632 Apr 20 j 05:59
                                          4°≈44'24 0°08'01
conjunction
                                                                                                                    0°×7
 minimum elong
                    -11632 Apr 20 j 05:40
                                           4°≈43'51
                                                       0°07'27
                                                                        retrograde
                                                                                             -11627 Jul 22 j 16:43 28° ₹26'00
 behind sun begin
                    -11632 Apr 19 j 11:42
                                           4°≈14'13
                                                                        opposition
                                                                                             -11627 Aug 31 j 10:14 18°х 46'13 -3°17'48
 behind sun end
                    -11632 Apr 20 j 23:37
                                            5°≈13'30
                                                                        greatest brilliancy
                                                                                             -11627 Aug 31 j 11:21 18°х 45′06 -1.4m
                    -11632 May 27 j 21:02
                                           0°)€
                                                                        min. Earth dist.
                                                                                             -11627 Aug 31 j 14:25 18° ₹ 42'01
                                                                                                                                0.66506 AU
                    -11632 Jun 07 j 01:44
                                            6°¥59'35
                                                                                             -11627 Oct 10 j 14:17
                                                                                                                    9°х 01′14
morning rise
                                                                        direct
                                           0°Υ
                    -11632 Jul 09 j 22:55
                                                                                             -11627 Nov 28 j 13:22 20° ₹37'36
                                                                        asc. node
                    -11632 Aug 20 j 11:34
                                           0°8
                                                                                                                    0°궁
                                                                                             -11627 Dec 19 j 08:47
                    -11632 Sep 29 j 22:05
                                           0^{\circ}\Pi
                                                                                             -11626 Feb 11 j 10:28
                                                                                                                    0°≈
                    -11632 Nov 08 j 23:30
                                           0\circ\odot
                                                                                             -11626 Mar 30 j 03:48
                                                                                                                    0°)€
                    -11632 Dec 19 j 17:55
                                           0°\Omega
                                                                                             -11626 May 12 j 00:52
                                                                                                                    0^{\circ}\Upsilon
                    -11631 Feb 01 j 04:45
                                           0° m
                                                                                             -11626 Jun 21 j 09:15
                                                                                                                    0°8
desc. node
                    -11631 Feb 25 j 05:39 14° m 53'40
                                                                        evening set
                                                                                             -11626 Jul 28 j 04:53 28°825'39
                    -11631 Mar 26 j 04:42 0°♀
                                                                                             -11626 Jul 30 j 05:12
                                                                                                                    0^{\circ}\Pi
                    -11631 May 09 j 13:47 11°♀17'48
                                                                                             -11626 Sep 06 j 11:57
                                                                                                                    0ಂಪ
retrograde
```

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. -11626 Sep 28 j 19:54 17°524'21 0°14'13 -11621 May 30 j 08:20 0°≈ conjunction -11626 Sep 28 j 21:15 17°526'58 -11621 Jul 18 j 00:57 0°**₩** minimum elong -11626 Sep 28 j 10:09 17°505'28 -11621 Jul 21 j 12:52 2° \(\frac{1}{2}\) 06'44 behind sun begin asc. node -11626 Sep 29 j 08:21 17°5548'28 $0^{\circ}\Upsilon$ behind sun end -11621 Sep 07 j 14:25 -11626 Oct 15 j 03:54 0°8 $0^{\circ}\Omega$ -11621 Nov 16 j 19:52 -11626 Oct 17 j 12:21 desc. node 1°**Ω**48′01 retrograde -11621 Dec 06 j 21:13 2°**8**21'07 max. Earth dist. -11626 Nov 08 j 18:37 18°**Ω**39'39 2.41237 AU -11621 Dec 26 j 10:59 30°R**Y** 6°50'52 -11626 Nov 24 j 00:53 0° m opposition -11620 Jan 08 j 04:08 26° **Y**26'55 greatest brilliancy morning rise -11626 Dec 01 j 11:57 5° m 28'29 -11620 Jan 09 j 19:41 25°**Υ**56'23 -2.5m -11625 Jan 04 j 18:49 0∘**⊽** min. Earth dist. -11620 Jan 15 j 09:14 24°**Υ**14'17 0.43265 AU -11625 Feb 17 j 21:33 0°M direct -11620 Feb 12 j 01:17 19°**Υ**27'13 -11625 Apr 05 j 21:04 0°**∡**¹ -11620 Mar 25 j 08:06 0°8 -11625 May 27 j 07:14 0°궁 -11620 May 16 j 21:53 $0^{\circ}\Pi$ -11625 Aug 05 j 08:10 desc. node -11620 Jun 08 j 17:52 15°**Ⅲ**20'52 retrograde -11625 Aug 28 j 02:20 2°≈55'57 -11620 Jun 29 j 18:59 0ಂತಾ -11625 Sep 18 j 07:24 30°R궁 -11620 Aug 11 j 03:25 $0^{\circ}\Omega$ opposition -11625 Oct 05 j 13:51 23°₹57'58 -0°28'08 -11620 Sep 22 j 19:44 0° m greatest brilliancy -11625 Oct 05 j 15:44 23°る56'07 -11620 Nov 05 j 14:58 min. Earth dist. -11625 Oct 09 j 10:57 22°る26'22 0.63708 AU -11620 Dec 20 j 19:15 asc. node -11625 Oct 16 j 17:40 19°る41'03 evening set -11619 Jan 07 j 16:05 11°ML38'40 direct -11625 Nov 15 j 10:13 13°る59'29 -11619 Feb 05 j 02:40 -11624 Jan 12 i 04:48 0°**≈** -11624 Mar 05 j 21:35 0°**∀** conjunction -11619 Feb 25 i 15:14 13° ₹ 09'39 -0°54'21 -11624 Apr 19 j 16:56 $0^{\circ}\Upsilon$ minimum elong -11619 Feb 25 i 16:48 13° ₹ 12'09 0°54'57 -11624 May 30 j 18:53 0°8 max. Earth dist. -11619 Feb 27 j 12:01 14° ₹21'20 2.66283 AU -11624 Jul 08 j 23:36 -11619 Mar 23 j 22:42 0°る 0°Π -11624 Aug 16 j 12:50 0°ഇ -11619 Apr 13 j 22:39 13°る27'37 morning rise -11624 Sep 03 j 09:46 13°551'03 -11619 May 09 j 14:49 0°≈ desc node -11624 Sep 24 j 11:05 0°**Ω** -11619 Jun 07 j 05:19 18°≈34'51 asc node -11624 Sep 30 j 10:00 4° **Ω**31'18 -11619 Jun 24 j 15:52 0°**)**€ evening set -11624 Nov 03 j 14:10 0° M -11619 Aug 09 j 01:33 $0^{\circ}\Upsilon$ -11619 Sep 23 j 06:50 0°8 -11619 Nov 08 j 13:32 -11624 Nov 28 j 06:56 17° m 51'01 -0°55'41 conjunction $0^{\circ}\Pi$ -11624 Nov 28 j 04:20 17° Mp 46'22 0°55'28 -11619 Dec 30 j 19:56 0°ഇ minimum elong -11624 Dec 15 j 12:03 0°**♀** -11618 Feb 21 j 09:23 14°558'09 retrograde -11623 Jan 02 j 21:12 12°**2**42'54 2.53358 AU -11618 Mar 21 j 19:08 10°515'32 max. Earth dist. min. Earth dist. 0.38947 AU morning rise -11623 Jan 23 j 04:56 26°**£**28'42 opposition -11618 Mar 25 j 06:57 9°517'27 2°31'14 -11623 Jan 28 j 11:24 0°M greatest brilliancy -11618 Mar 25 j 02:20 9°520'39 -2.9m -11623 Mar 15 j 11:50 0° ₹ direct -11618 Apr 24 j 15:24 4°506'29 -11623 May 02 j 12:53 0°る desc. node -11618 Apr 26 j 22:01 4°9508'28 -11623 Jun 22 j 10:35 0°≈ -11618 Jul 08 j 16:06 $0^{\circ}\Omega$ -11623 Aug 21 j 08:45 0°**米** -11618 Aug 28 j 06:03 -11623 Sep 02 j 17:30 4°**)** 37'28 -11618 Oct 14 j 19:12 asc. node -11623 Oct 09 j 00:42 11°**米**29'31 -11618 Dec 01 j 00:33 retrograde -11623 Nov 14 j 01:17 3°**米**43′00 3°16′28 -11617 Jan 17 j 09:38 0° ⊀ opposition greatest brilliancy -11623 Nov 14 i 19:22 3° ★26'17 -1.9m evening set -11617 Feb 16 j 18:04 19° ₹ 15'16 min. Earth dist. -11623 Nov 21 i 04:53 1° + 04'32 0.55133 AU -11617 Mar 05 j 14:20 0°る -11623 Nov 24 i 05:14 30°R≈ max. Earth dist. -11617 Mar 24 j 08:50 12°중03'13 2.64885 AU direct -11623 Dec 23 j 17:39 24°≈20'02 -11622 Jan 23 j 14:43 0°**)** conjunction -11617 Apr 05 j 17:32 20°る03'16 -0°11'37 -11622 Mar 23 j 16:22 $0^{\circ}\Upsilon$ -11617 Apr 05 j 18:02 20°る04'04 0°12'14 minimum elong -11622 May 07 j 00:57 -11617 Apr 05 j 05:15 19°₹43'20 0°X behind sun begin -11622 Jun 16 j 17:50 0°**Ⅱ** behind sun end -11617 Apr 06 j 06:48 20°♂24'47 -11622 Jul 22 j 12:14 27°**Ⅲ**07'24 desc. node -11617 Apr 20 j 23:32 -11622 Jul 26 j 07:02 0ಂತಾ asc. node -11617 Apr 24 j 22:21 2°≈35'37 -11622 Sep 04 j 01:01 0° Ω morning rise -11617 May 22 j 20:02 21°≈06'50 -11622 Oct 14 j 21:13 -11617 Jun 05 j 00:21 0°**)** -11622 Nov 24 j 17:12 28° m 51'23 $0^{\circ}\Upsilon$ evening set -11617 Jul 18 j 12:24 -11622 Nov 26 j 08:53 0∘<u>ଫ</u> 0°8 -11617 Aug 29 j 15:21 -11621 Jan 09 j 16:16 0°M $0^{\circ}\Pi$ -11617 Oct 09 j 19:59 -11617 Nov 19 j 20:17 0ಂತಾ conjunction -11621 Jan 16 j 05:14 4°M20'00 -1°14'49 -11616 Jan 01 j 02:46 0 $^{\circ}\Omega$ minimum elong -11621 Jan 16 j 05:29 4°M20'25 1°15'09 -11616 Feb 17 j 11:58 0° m max. Earth dist. -11621 Feb 03 j 03:45 16°ML06'33 2.62348 AU desc. node -11616 Mar 13 j 23:14 12° m 37'39 -11621 Feb 24 j 13:56 0°**∡**¹ retrograde -11616 Apr 21 j 12:10 21° Mp 38'05 -11621 Mar 07 j 06:41 6°**х** 52'34 -11616 May 20 j 22:46 15° Mp 49'19 0.49102 AU morning rise min. Earth dist.

opposition

-11616 May 28 j 22:54 12° m 57'30 -4°16'22

-11621 Apr 12 j 14:23

-11616 Dec 27 j 13:25 0° \$\frac{1}{8}\$ desc. node -11611 Not 03 j 07:07 desc. node -11615 Feb 13 j 21:04 0° \$\frac{1}{8}\$ desc. node -11611 Nov 03 j 07:07 desc. node -11615 Mar 11 j 19:08 16° \$\frac{1}{8}\$1'33 morning rise -11611 Dec 01 j 11:09 -11615 Apr 01 j 12:33 0° \$\frac{1}{8}\$ 11° \$\frac{1}{8}\$5'58 2.58298 AU -11610 Jan 12 j 05:55 max. Earth dist. -11615 May 15 j 23:43 29° \$\frac{1}{8}\$5'58 2.58298 AU -11610 Apr 14 j 09:40 -11615 May 15 j 23:43 29° \$\frac{1}{8}\$5'723 0°38'44 -11610 Jun 08 j 04:43 minimum elong -11615 May 15 j 22:09 29° \$\frac{1}{8}\$4'741 0°38'22 retrograde -11610 Aug 13 j 13:22 -11615 Jun 27 j 21:53 0° \$\frac{1}{8}\$ morning rise -11615 Jun 27 j 21:53 0° \$\frac{1}{8}\$ minimum elong -11615 Jun 27 j 21:53 0° \$\frac{1}{8}\$ direct -11610 Nov 01 j 09:22 -11615 Aug 07 j 20:16 0° \$\frac{1}{8}\$ direct -11610 Nov 01 j 09:24 -11615 Dec 04 j 08:57 0° \$\frac{1}{8}\$ desc. node -11614 Jan 14 j 14:55 0° \$\frac{1}{1}\$ 0° \$\frac{1}{8}\$ desc. node -11614 Jan 29 j 21:12 10° \$\frac{1}{8}\$ 23' 43' 5° \$\frac{1}{8}\$ 1160 Sep 25 j 04:47 -11610 Sep 25 j 04:47 -11	21° II 12'15 27° II 13'44 0° © 0° \(\Omega\) 8° \(\Omega\) 55'07 11° \(\Omega\) 15'55 0° IV 0° \(\Omega\) 0° \(\Omega\) 0° \(\Omega\) 0° \(\Omega\) 19° \(\Omega\) 31'11 10° \(\Omega\) 10'04 9° \(\Omega\) 15'39 0° \(\Omega\) 17'00 0° \(\Omega\) 17'21 0° \(\omega\) 20° \(\Omega\) 56'06 0° \(\Omega\) 26° \(\Omega\) 19'04 26° \(\Omega\) 14'39 0° \(\Omega\)	-1°40'35 -1.4m 0.65522 AU -0°33'39 0°33'14
11616 Sep 14 j 08:11 0°	27° \$\Pi\$13'44 0°\$\text{0}\$\text{0}\$\text{0}\$\text{0}\$\text{8}\$\text{\$\alpha\$55'07}\$ 11° \$\alpha\$15'55 0° \$\mathbf{m}\$ 0° \$\mathbf{m}\$ 0° \$\mathbf{m}\$ 0° \$\mathbf{m}\$ 19° \$ 3 \$1'11 10° \$ 3 \$1'404 10° \$ 3 \$1'004 9° \$ 3 \$17'00 0° \$ 3 \$17'00 0° \$ 3 \$17'21 0°\$\infty\$ 0° \$\mathbf{M}\$ 20° \$ 3 \$5'05 0° \$\mathbf{M}\$ 26° \$\mathbf{M}\$14'39 0° \$\mathbf{M}\$ 26° \$\mathbf{M}\$35'35 0° \$\mathbf{A}\$ 8° \$\mathbf{A}\$32'30 0° \$\mathbf{M}\$.	-1°40'35 -1.4m 0.65522 AU -0°33'39 0°33'14
-11616 Nov ∇7 J 11:37 O°M -11611 Sep 13 J 23:05 -11616 Dec 27 J 13:25 O°A -11611 Nov 03 J 07:07 -11615 Feb 13 J 21:04 O°A -11611 Nov 03 J 07:07 -11615 Mar 1 J 13:21:08 16°B 31'33 morning rise -11611 Nov 03 J 07:07 -11615 Mar 1 J 13:21:08 26°B 47'46 -11611 Nov 03 J 07:07 -11615 Mar 1 J 13:21:08 26°B 47'46 -11611 Nov 03 J 07:07 -11615 Mar 1 J 13:21:08 26°B 47'46 -11611 Nov 03 J 07:07 -11615 Mar 1 J 13:21:08 26°B 47'46 -11610 Mar 12 J 05:55 -11615 Mar 1 J 13:21:33 1°∞ -11610 Mar 12 J 05:55 -11615 Mar 1 J 13:22:09 29°S 47'41 0°38'22 retrograde -11610 Mar 14 J 09:40 -11615 Mar 1 J 13:22:09 29°S 47'41 0°38'22 retrograde -11610 Mar 14 J 09:40 -11615 Mar 1 J 13:22:09 29°S 47'41 0°38'22 retrograde -11610 Sep 21 J 13:30 -11615 Mar 1 J 13:22:09 29°S 47'41 0°38'22 retrograde -11610 Sep 21 J 19:31 -11615 Mar 1 J 13:22:09 29°S 47'41 0°38'22 retrograde -11610 Sep 21 J 19:31 -11615 Mar 1 J 13:22:09 29°S 47'41 0°38'22 retrograde -11610 Sep 21 J 19:31 -11615 Mar 1 J 13:21:09 0°P	0°\$ 0°\$ 0°\$ 11°\$\O15'55 0°\$ 0°\$\D0 0°\$\D0 0°\$\D0 19°\$\S11'11 10°\$\S14'04 10°\$\S10'04 9°\$\S15'39 0°\$\S17'00 0°\$\S17'21 0°\$\D0	-1°40'35 -1.4m 0.65522 AU -0°33'39 0°33'14
1-1616 Dec 27 13:25 0°	0° \(\Omega\) 8° \(\Omega\) 55'07 11° \(\Omega\) 15'55 0° \(\mathbf{m}\) 0° \(\Omega\) 0° \(\mathbf{m}\) 0° \(\ST\) 19° \(\ST\) 31'11 10° \(\ST\) 14'04 10° \(\ST\) 15'39 0° \(\ST\) 17'21 0° \(\ST\) 0° \(\ST\) 17'21 0° \(\ST\) 26° \(\Omega\) 14'39 0° \(\mathbf{m}\) 26° \(\Omega\) 35'35 0° \(\Omega\) 8° \(\ST\) 32'30 0° \(\mathbf{m}\)	-0°33'39 0°33'14
asc. node	8° \$\alpha 55'07 11° \$\alpha 15'55 0° \$\text{m}\$ 0° \$\text{m}\$ 0° \$\text{m}\$ 0° \$\text{m}\$ 0° \$\text{m}\$ 0° \$\text{m}\$ 19° \$\text{3}1'11 10° \$\text{3}1'04 10° \$\text{3}1'04 9° \$\text{3}17'21 0° \$\text{m}\$ 0° \$\te	-0°33'39 0°33'14
asc. node	11° Д15'55 0° ™ 0° ₾ 0° ™ 0° ₾ 0° ™ 0° ♂ 19° ♂ 31'11 10° ♂ 14'04 10° ♂ 17'00 0° ♂ 17'21 0° ≈ 0° ጕ	-0°33'39 0°33'14
evening set	0° ነነ 0° ነነ 0° ነነ 0° ነነ 0° ነነ 0° ነነ 19° ነነ 110° ነነ 110° ነ	-0°33'39 0°33'14
max. Earth dist11615 Apr 19 j 14:53 11°≈58′58 2.58298 AU -11610 Feb 25 j 14:09 -11610 Apr 19 j 14:53 11°≈58′58 2.58298 AU -11610 Feb 25 j 14:09 -11610 Apr 14 j 09:40 0 -11615 May 15 j 23:43 29°≈50′23 0°38′24 retrograde -11610 Aug 13 j 13:22 -11615 May 15 j 22:09 29°≈47′41 0°38′22 retrograde -11610 Aug 13 j 13:22 -11615 May 16 j 05:19 0°β yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy	0° ው 0° \mathrm{0} \cdot \mathrm{0} \cdot \mathrm{0} \cdot \mathrm{0} \cdot \mathrm{3} \cdot \mathrm{1} \c	-0°33'39 0°33'14
max. Earth dist. -11615 Apr 19 j 14:53 11 ∞858'58 2.58298 AU -11610 Feb 25 j 14:90 conjunction -11615 May 15 j 23:43 29 ∞ 50'23 0°38'44 -11610 Jun 08 j 04:43 minimum elong -11615 May 15 j 22:09 29 ∞ 47'41 0°38'22 retrograde -11610 Jun 08 j 04:43 -11615 May 16 j 05:19 0° ★ opposition -11610 Sep 21 j 15:30 morning rise -11615 Jun 27 j 21:53 0° ♥ direct -11610 Sep 21 j 19:31 morning rise -11615 Jun 07 j 20:16 0° ₺ direct -11610 Nov 01 j 09:22 -11615 Dec 15 j 13:16 0° ₺ direct -11610 Nov 01 j 09:22 -11615 Dec 15 j 18:09 0° ₺ direct -11610 Nov 01 j 09:22 -11615 Dec 25 j 18:09 0° ₺ direct -11610 Nov 01 j 09:22 -11615 Dec 25 j 18:09 0° ₺ direct -11610 Nov 01 j 09:22 -11615 Dec 25 j 18:09 0° ₺ direct -11609 Mar 16 j 08:23 -11614 Jun 10 3 j 16:54 0° ₺ -11609 Mar 16 j 08:23 -11614 Jun 10 3 j 16:54 0° ₺ -11609 Mar 16 j 08:23	0°M. 0°水 0°ろ 19°ろ31'11 10°ろ14'04 10°ろ15'39 0°ろ17'21 0°≈ 0°分	-0°33'39 0°33'14
conjunction origination conjunction inimum elong inimum	0°ズ 0°云 19°云31'11 10°云14'04 10°云15'39 0°云17'21 0°云 0°云17'21 0°云 0°子 0°子 0°子 0°子 0°子 0°子 0°子 0°子 0°子 0°子	-0°33'39 0°33'14
conjunction -11615 May 15 j 23:43 29°≈50'23 0°38'44 -11610 Jun 08 j 04:43 minimum elong -11615 May 16 j 32:20 29°≈50'741 0°38'22 retrograde -11610 Aug 13 j 13:22 1-1615 Jun 27 j 21:53 0°° y greatest brilliancy -11610 Sep 21 j 15:30 morning rise -11615 Aug 07 j 20:16 0° direct -11610 Nov 01 j 09:22 -11615 Sul 04 j 23:57 5°°0'06'43 min. Earth dist. -11610 Nov 01 j 09:22 -11615 Sul 04 j 23:57 5°°0'06'43 min. Earth dist. -11610 Nov 02 j 08:08 -11615 Sul 05 l 31:31:6 0° I direct -11610 Nov 02 j 08:08 -11615 Dec 04 j 08:57 0° I -11609 Mar 16 j 08:23 -11609 Mar 16 j 08:23 -11614 Jan 14 j 14:55 0° 0° -11609 Mar 16 j 08:23 -11609 Mar 16 j 08:23 retrograde -11614 Jan 29 j 21:12 10° 34:34:35 -11609 Mar 16 j 08:23 retrograde -11614 Jul 30 j 3j 16:54 8° 10° 4 -11609 Mar 16 j 08:23 retrograde -11614 Jul 08 j 05:33 0° 10°	0°云 19°云31'11 10°云14'04 10°云15'39 0°云17'00 0°云17'21 0°≈ 0°升 0°分 0°円 0°의 9°의38'05 20°의56'06 0°凡 26°凡14'39 0°順 26°阶35'35 0°丘 8°요32'30 0°爪	-0°33'39 0°33'14
minimum elong -11615 May 16 j 02:19 0°	19°331'11 10°314'04 10°310'04 9°315'39 0°317'00 0°317'21 0°≈ 0°¥ 0°Y 0°\$ 0°I 0°\$ 9°\$38'05 20°\$56'06 0°\$ 26°\$13'39 0°¶ 26°\$135'35 0°\$ 8°\$32'30 0°¶	-0°33'39 0°33'14
Proposition File File Proposition File File Proposition	10°云14'04 10°云10'04 9°云15'39 0°云17'00 0°云17'21 0°≈ 0°升 0°分 0°升 0°分 0°ゴ 0°が	-0°33'39 0°33'14
morning rise	10°云10'04 9°云15'39 0°云17'20 0°云17'21 0°≈ 0°升 0°升 0°分 0°沿 0°3 9°338'05 20°356'06 0°Д 26°Д19'04 26°Д14'39 0°顶 26°Щ35'35 0°丘 8°至32'30 0°爪	-0°33'39 0°33'14
morning rise	9°€15′39 0°€17′00 0°€17′21 0°≈ 0°¥ 0°¥ 0°¥ 0°°¥ 0°°\$ 9°€38′05 20°€56′06 0°\$ 26°\$\Omega\$14′39 0°\$ 0°\$ 0°\$ 26°\$\Omega\$14′39 0°\$ 0°\$ 26°\$\Omega\$14′39 0°\$ 0°\$ 26°\$\Omega\$14′39	-0°33'39 0°33'14
-11615 Sep 16 13:16 0°	0°\delta 17'21 0°\delta 26°\delta 14'39 0°\delta 26°\delta 35'35 0°\delta 8°\delta 32'30 0°\delta	0°33'14
-11615 Oct 25 j 18:09 0°Φ -11609 Jan 25 j 19:48 1-11609 Jan 16 j 08:23 1-11614 Jan 14 j 14:55 0° M -11609 Mar 16 j 08:23 1-11609 Mar 16 j 08:24 1-11609 Mar 16	0°≈ 0°Y 0°Y 0°8 0°¶ 0°\$ 9°\$38'05 20°\$56'06 0°\$ 26°\$14'39 0°\$ 0°\$ 26°\$\$15'35 0°\$ 8°\$\$232'30 0°\$ 10°\$\$1	0°33'14
11615 Dec 04 j 08:57 0°\$Ω -11609 Mar 16 j 08:23 -11614 Jan 14 j 14:55 0° m⟩ -11609 Apr 29 j 03:01 -11609 Apr 25 j 04:47 -11609 Apr 25 j 03:47 -11609 Apr 2	0°¥ 0°Y 0°B 0°B 0°B 9°S38'05 20°S56'06 0°A 26°A14'39 0°M 26°M35'35 0°£ 8°£32'30 0°M	0°33'14
Conjunction 11614 Jan 14 j 14:55 0° m Conjunction Conjunct	0°Y 0°B 0°II 0°S 9°S38'05 20°S56'06 0°A 26°A14'39 0°M 26°M35'35 0°A 8°A32'30 0°IL	0°33'14
desc. node	0°8 0°11 0°9 9°938'05 20°956'06 0°0 26°014'39 0°10 26°1035'35 0°0 8°032'30 0°11.	0°33'14
-11614 Feb 28 j 14:48 0° Ω - 11609 Jul 17 j 19:26 c 11609 Jul 17 j 19:26 c 11614 Apr 26 j 20:57 0° M - 11609 Aug 25 j 04:47 c 11609 Aug 25 j 03:47 c 11609 Aug	0°II 0°S 9°S38'05 20°S56'06 0°A 26°A19'04 26°A14'39 0°IV 26°IV35'35 0°Ω 8°Ω32'30 0°IL	0°33'14
-11614 Apr 26 j 20:57 0°M -11609 Aug 25 j 04:47 retrograde	0°\$-9°\$38'05 20°\$56'06 0°\$\Omega\$ 19'04 26°\$\Omega\$ 14'39 0°\$\Omega\$ 26°\$\Omega\$ 35'35 0°\$\Omega\$ 8°\$\Omega\$ 32'30 0°\$\Omega\$	0°33'14
evening set -11614 Jun 03 j 16:54 8° 10:09'29 evening set -11609 Sep 06 j 13:32 min. Earth dist11614 Jul 08 j 05:33 0° 10:19'51 0.60137 AU desc. node -11609 Sep 21 j 03:47 i -11614 Jul 09 j 01:46 30° 10:40 desc. node -11609 Oct 02 j 23:05 greatest brilliancy opposition -11614 Jul 12 j 10:07 28° 10:40'32 -1.6m opposition -11614 Jul 13 j 07:53 28° 18'59 -5° 24'12 conjunction -11609 Nov 06 j 22:27 direct -11614 Aug 19 j 13:34 19° 10:40'39 minimum elong -11609 Nov 06 j 20:03 i -11614 Oct 04 j 03:01 0° 10:10 max. Earth dist11609 Nov 11 j 22:18 max. Earth dist11613 Jan 24 j 20:39 0° 10:10 morning rise -11608 May 10 j 18:18 max. Earth dist11613 May 11 j 00:22 9° 10:10 max. Earth dist11608 May 10 j 18:18 max. Earth dist11613 Jun 08 j 20:39 0° 10:10 max. Earth dist11608 Sep 19 j 10:24 retrograde opposition -11608 Oct 28 j 05:57	9°\$38'05 20°\$56'06 0°\$\Omega\$ 26°\$\Omega\$19'04 26°\$\Omega\$32'35 0°\$\Omega\$ 8°\$\Omega\$32'30 0°\$\Omega\$	0°33'14
min. Earth dist. -11614 Jul 08 j 05:33 0° 11.9′51 0.60137 AU desc. node -11609 Sep 21 j 03:47 -11609 Oct 02 j 23:05 greatest brilliancy opposition -11614 Jul 12 j 10:07 28° 40′32 -1.6m opposition -11614 Jul 13 j 07:53 28° 40′32 -1.6m opposition -11614 Aug 19 j 13:34 19° 40′39 minimum elong -11609 Nov 06 j 22:27 direct -11614 Oct 04 j 03:01 0° 11. -11614 Dec 04 j 11:20 0° ₹ max. Earth dist. -11613 Jan 24 j 20:39 0° ₹ max. Earth dist. -11613 Mar 13 j 13:30 0° ★ -11608 Mar 22 j 21:16 evening set -11613 May 11 j 00:22 9° ₹25′12 max. Earth dist. -11613 May 27 j 05:15 20° ₹53′22 2.47419 AU -11613 Jun 08 j 20:39 0° ↑ asc. node -11613 Jul 03 j 20:26 18° ♀24′34 1°12′25 opposition -11608 Cet 28 j 05:57	20°\$56'06 0°\$\Omega\$ 26°\$\Omega\$19'04 26°\$\Omega\$14'39 0°\$\Omega\$ 0°\$\Omega\$ 8°\$\Omega\$32'30 0°\$\Omega\$	0°33'14
-11614 Jul 09 j 01:46 30°R Ω -11609 Oct 02 j 23:05 greatest brilliancy opposition -11614 Jul 12 j 10:07 28° Ω 40'32 -1.6m opposition -11614 Jul 13 j 07:53 28° Ω 18'59 -5°24'12 conjunction -11609 Nov 06 j 22:27 direct -11614 Aug 19 j 13:34 19° Ω 40'39 minimum elong -11609 Nov 06 j 20:03 1 -11614 Oct 04 j 03:01 0° № -11614 Dec 04 j 11:20 0° № max. Earth dist11609 Dec 18 j 20:39 1 -11613 Jan 24 j 20:39 0° ₹ max. Earth dist11609 Dec 23 j 17:02 asc. node -11613 Jan 27 j 20:50 1° ₹50'06 morning rise -11608 Jan 04 j 23:50 1 1613 Mar 13 j 13:30 0° № -11613 Mar 13 j 13:30 0° № -11608 Mar 22 j 21:16 evening set -11613 May 27 j 10:46 0° ₩ -11608 May 10 j 18:18 max. Earth dist11613 May 27 j 05:15 20° ₩ 53'22 2.47419 AU -11608 Sep 19 j 10:24 1 1613 May 10 3 j 20:26 18° ♥ 24'34 1° 12'25 opposition -11608 Oct 28 j 05:57	0° N 26° N 19'04 26° N 14'39 0° M 26° M 35'35 0° Ω 8° Ω 32'30 0° M	0°33'14
greatest brilliancy opposition	26° \$\Omega 19'04 26° \$\Omega 14'39 0° \$\Omega 26' \$\Omega 35'35 0° \$\Omega 8° \$\Omega 32'30 0° \$\Omega \text{\$\Chi}\$	0°33'14
opposition -11614 Jul 13 j 07:53 28° ♣18'59 -5°24'12 conjunction -11609 Nov 06 j 22:27 direct -11614 Aug 19 j 13:34 19° ♣40'39 -11614 Oct 04 j 03:01 0° № -11614 Dec 04 j 11:20 0° № -11613 Jun 24 j 20:39 0° ♂ -11613 Mar 13 j 13:30 0° № -11613 Mar 13 j 13:30 0° № -11613 May 11 j 00:22 9° ₩25'12 max. Earth dist11609 Nov 11 j 22:18 max. Earth dist11609 Dec 23 j 17:02 -11609 Dec 23 j 17:02 -11608 Mar 04 j 23:50 -11608 Mar 22 j 21:16 -11608 Mar 22 j 21:16 -11608 May 10 j 18:18 max. Earth dist11613 Jun 08 j 20:39 0° ♀ -11608 Sep 19 j 10:24 -11608 Sep 19 j 10:24 -11608 Sep 21 j 02:18 -11608 Oct 28 j 05:57	26° N 14'39 0° M 26° M 35'35 0° <u>A</u> 8° <u>A</u> 32'30 0° M	0°33'14
direct -11614 Aug 19 j 13:34 19° 至40'39 minimum elong -11609 Nov 06 j 20:03 1 -11614 Oct 04 j 03:01 0° 元 -11609 Nov 11 j 22:18 1614 Dec 04 j 11:20 0° ズ max. Earth dist11609 Dec 18 j 20:39 1 -11613 Jan 24 j 20:39 0° 云 -11609 Dec 23 j 17:02 asc. node -11613 Jan 27 j 20:50 1° ♂50'06 morning rise -11608 Jan 04 j 23:50 1613 Mar 13 j 13:30 0° ≈ -11608 Mar 22 j 21:16 evening set -11613 May 11 j 00:22 9° 光 25'12 -11608 May 10 j 18:18 max. Earth dist11613 May 27 j 05:15 20° 光 53'22 2.47419 AU -11608 Sep 19 j 10:24 1616 Se	26° N 14'39 0° M 26° M 35'35 0° <u>A</u> 8° <u>A</u> 32'30 0° M	0°33'14
-11614 Oct 04 j 03:01 0°M -11614 Dec 04 j 11:20 0° 🗷 max. Earth dist11609 Dec 18 j 20:39 1 -11613 Jan 24 j 20:39 0° ♂ -11609 Dec 23 j 17:02 asc. node -11613 Jan 27 j 20:50 1° ♂ morning rise -11608 Jan 04 j 23:50 11608 Mar 13 j 13:30 0° ≈ -11608 Mar 22 j 21:16 evening set -11613 May 11 j 00:22 9° 升 25'12 -11608 May 27 j 05:15 20° 升 53'22 2.47419 AU -11608 Sep 19 j 10:24 11608 Sep 19 j 10:24 11609 Sep 21 j 02:18 11609 Dec 18 j 20:39 11609 Dec 23 j 17:02 11609 Dec 24 j 17:02 11609 Dec	0° ሙ 26° ሙ 35'35 0° 으 8° 으 32'30 0° ጤ	
-11614 Dec 04 j 11:20 0° ₹ max. Earth dist11609 Dec 18 j 20:39 1-11613 Jan 24 j 20:39 0° ₹ -11609 Dec 23 j 17:02 asc. node -11613 Jan 27 j 20:50 1° ₹50'06 morning rise -11608 Jan 04 j 23:50 -11608 Mar 13 j 13:30 0° ≈ -11608 Mar 22 j 21:16 evening set -11613 May 11 j 00:22 9° ₹25'12 -11608 May 10 j 18:18 max. Earth dist11613 May 27 j 05:15 20° ₹53'22 2.47419 AU -11608 May 10 j 18:18 13:1613 Jun 08 j 20:39 0° ♀ asc. node -11608 Sep 19 j 10:24 10:1613 Jun 08 j 20:39 10:218 10:1613 Jun 08 j 20:26 18° ♀ 21 j 02:18 10:	26° m 35'35 0° <u>a</u> 8° <u>a</u> 32'30 0° m	2.48717 AU
asc. node -11613 Jan 24 j 20:39 0° ₹ asc. node -11613 Jan 27 j 20:50 1° ₹50'06 morning rise -11608 Jan 04 j 23:50 -11613 Mar 13 j 13:30 0° ≈ -11613 Apr 27 j 10:46 0° ₹ evening set -11613 May 11 j 00:22 9° ₹25'12 max. Earth dist. -11613 May 27 j 05:15 20° ₹53'22 2.47419 AU -11608 Jul 03 j 13:02 -11608 Sep 19 j 10:24 10 10 10 10 10 10 10 10 10 10 10 10 10	0°മ 8°മ32'30 0°M	2.48/1/ AU
asc. node -11613 Jan 27 j 20:50 1° ₹50'06 morning rise -11608 Jan 04 j 23:50 -11613 Mar 13 j 13:30 0° ≈ -11613 Apr 27 j 10:46 0° ★ evening set -11613 May 11 j 00:22 9° ★25'12 max. Earth dist. -11613 May 27 j 05:15 20° ★53'22 2.47419 AU -11608 Jul 03 j 13:02 -11608 Sep 19 j 10:24 retrograde -11608 Sep 21 j 02:18 retrograde -11608 Oct 28 j 05:57	8° £ 32'30 0° M	
-11613 Mar 13 j 13:30 0°≈ -11608 Feb 05 j 15:39 -11613 Apr 27 j 10:46 0° ★ -11608 Mar 22 j 21:16 evening set -11613 May 11 j 00:22 9° ★25'12 -11608 May 10 j 18:18 max. Earth dist11613 May 27 j 05:15 20° ★53'22 2.47419 AU -11608 Jul 03 j 13:02 -11613 Jun 08 j 20:39 0° Υ asc. node -11608 Sep 19 j 10:24 10:10	0°M	
-11613 Apr 27 j 10:46 0° ★ -11608 Mar 22 j 21:16 evening set -11613 May 11 j 00:22 9° ★25'12 -11608 May 10 j 18:18 max. Earth dist11613 May 27 j 05:15 20° ★53'22 2.47419 AU -11608 Jul 03 j 13:02 -11613 Jun 08 j 20:39 0° Υ asc. node -11608 Sep 19 j 10:24 2 conjunction -11613 Jul 03 j 20:26 18° Υ24'34 1° 12'25 opposition -11608 Oct 28 j 05:57		
evening set max. Earth dist. -11613 May 11 j 00:22 -12 9° + 25'12 -11608 May 10 j 18:18 -11613 May 27 j 05:15 20° + 53'22 2.47419 AU -11608 Jul 03 j 13:02 -11608 Sep 19 j 10:24 retrograde conjunction -11613 Jul 03 j 20:26 18° + 24'34 1° 12'25 opposition -11608 May 10 j 18:18 -11608 Sep 19 j 10:24 -11608 Sep 21 j 02:18 -11608 Oct 28 j 05:57		
max. Earth dist.	°ੁੱਤ	
-11613 Jun 08 j 20:39 0°Υ asc. node -11608 Sep 19 j 10:24 retrograde -11608 Sep 21 j 02:18 conjunction -11613 Jul 03 j 20:26 18°Υ24'34 1°12'25 opposition -11608 Oct 28 j 05:57		
retrograde -11608 Sep 21 j 02:18 conjunction -11613 Jul 03 j 20:26 18°Y24'34 1°12'25 opposition -11608 Oct 28 j 05:57		
conjunction -11613 Jul 03 j 20:26 18° \(\begin{array}{c} 24'34 & 1°12'25 & opposition & -11608 Oct & 28 j 05:57 \end{array} \)		
		1°43'21
-11613 Jul 19 j 06:11 0° 8 min. Earth dist11608 Nov 03 j 05:39		0.59104 AU
-11613 Aug 27 j 07:36 0° II direct -11608 Dec 07 j 16:17	7° ≈ 43'10	
morning rise -11613 Aug 30 j 14:52 2° II 33'53 -11607 Feb 14 j 06:50	0°) €	
-11613 Oct 04 j 20:11 0°5 -11607 Apr 04 j 06:48	$0^{\circ}\Upsilon$	
-11613 Nov 12 j 17:03 $0^{\circ}\Omega$ -11607 May 16 j 17:31	0° 8	
desc. node $-11613 \text{Dec} 17 \text{j} 14:18 26^{\circ} \Omega 09'22$ $-11607 \text{Jun} 25 \text{j} 14:38$	$\Pi^{\circ}0$	
-11613 Dec 22 j 20:12 0° mp -11607 Aug 03 j 15:11	0°®	
-11612 Feb 03 j 05:21 0° ⊆ desc. node -11607 Aug 08 j 04:23	3° 5 29'53	
-11612 Mar 20 j 08:24 0°ML -11607 Sep 11 j 22:53	0 ° Ω	
-11612 May 14 j 03:57 0° 7 -11607 Oct 22 j 10:18	0° m	
retrograde -11612 Jul 09 j 02:18 15° ₹ 13'07 evening set -11607 Nov 04 j 16:44	9° ™ 34'56	
min. Earth dist. $-11612 \text{ Aug } 16 \text{ j } 17:00 5^{\circ} \checkmark 55'22 0.65907 \text{ AU}$ $-11607 \text{ Dec } 03 \text{ j } 14:41$	0∘ ಹ	
opposition -11612 Aug 18 j 00:25 5° ₹23'43 -4°07'50		
greatest brilliancy -11612 Aug 17 j 20:40 5° ₹27'30 -1.4m conjunction -11607 Dec 29 j 10:15		
-11612 Sep 01 j 10:25 30°RM minimum elong -11607 Dec 29 j 09:19		1°13'22
direct -11612 Sep 26 j 13:31 25°ML52'00 -11606 Jan 16 j 17:13	0°M	2.50206.111
-11612 Oct 24 j 01:18 0° ₹ max. Earth dist11606 Jan 23 j 03:14		2.59396 AU
asc. node -11612 Dec 15 j 02:30 21° ₹32'29 morning rise -11606 Feb 19 j 08:52 1		
-11612 Dec 31 j 02:26 0°₹ -11606 Mar 03 j 13:58	0° ⊼	
-11611 Feb 20 j 01:12 0°≈ -11606 Apr 19 j 20:40	0°30	
-11611 Apr 06 j 22:45 0°\dagger -11606 Jun 07 j 10:30 -11611 May 19 j 13:48 0°\dagger -11606 Jul 28 j 08:38	0° ≈	
	0° \ 5° \ 32'27	
-11611 Jun 28 j 20:36 0°8 asc. node -11606 Aug 07 j 07:35 evening set -11611 Jul 03 j 13:53 3°836′02 -11606 Sep 26 j 13:50	J N3221	
-11611 Jul 03 J 13:33 3 3 3 0 0 2 -11606 Sep 26 J 13:30 -11611 Aug 06 j 16:24 0° II retrograde -11606 Nov 11 j 06:00		
-11011 Aug 00 J 10.24 0 L 1010grade -11000 100V 11 J 00:00	0° Y	

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. -11606 Dec 15 j 01:33 3°**Υ**42'06 5°44'08 asc. node -11600 Mar 28 j 11:17 22°정48'22 opposition -11606 Dec 16 j 13:27 3°**Y**11'37 -11600 Apr 08 j 11:28 greatest brilliancy -2.2m 0°≈≈ -11600 Apr 08 j 12:16 min. Earth dist. -11606 Dec 23 j 01:55 0°**Υ**59'42 0.47891 AU max. Earth dist. 0°≈01'20 2.61466 AU -11606 Dec 26 j 04:28 30°R**光** -11605 Jan 21 j 08:53 25° ₩ 30'12 direct conjunction -11600 Apr 29 j 09:42 13°≈51'54 0°19'28 $0^{\circ}\Upsilon$ -11605 Feb 17 j 01:52 minimum elong -11600 Apr 29 j 08:53 13°≈50'33 0°18'57 -11605 Apr 17 j 03:37 0°8 -11600 May 23 j 06:20 0°**∀** -11605 May 31 j 04:39 $0^{\circ}\Pi$ morning rise -11600 Jun 16 j 19:30 16° **★** 59'41 $0^{\circ}\Upsilon$ desc. node -11605 Jun 26 j 08:30 18°**Ⅲ**56'02 -11600 Jul 05 j 05:01 -11605 Jul 11 j 10:43 0ಂತಾ -11600 Aug 15 j 12:12 0°8 -11605 Aug 21 j 08:25 $0^{\circ}\Omega$ -11600 Sep 24 j 15:36 $0^{\circ}\Pi$ -11605 Oct 02 j 01:40 0° M -11600 Nov 03 j 08:08 0ಂತಾ -11605 Nov 14 j 04:58 0∘**⊽** -11600 Dec 13 j 13:27 0° Ω evening set -11605 Dec 23 j 02:23 26°**♀**08'06 -11599 Jan 24 j 21:32 0° m -11605 Dec 28 j 22:46 desc. node -11599 Feb 15 j 15:52 14° Mp 16'46 -11599 Mar 14 j 04:39 0∘**⊽** conjunction -11604 Feb 11 j 02:15 28°ML45'17 -1°05'44 retrograde -11599 May 19 j 03:17 21°**♀**50'25 minimum elong -11604 Feb 11 j 03:38 28°ML47'30 min. Earth dist. -11599 Jun 20 j 17:36 14°**♀**44'47 0.56319 AU -11604 Feb 13 j 00:38 0°*⊼* greatest brilliancy -11599 Jun 26 j 00:46 12°**2**42'15 max. Earth dist. -11604 Feb 19 j 01:14 3°**х** 52′36 2.65377 AU opposition -11599 Jun 27 j 05:03 12° **2** 14'54 -5°23'02 morning rise -11604 Mar 30 j 03:32 29° ₹32'36 direct -11599 Aug 02 j 05:54 4°**♀**07'07 -11604 Mar 30 j 20:42 0°ರ -11599 Oct 20 i 10:54 0°M -11604 May 16 j 19:55 0°**≈** -11599 Dec 13 i 20:04 0° **₹** asc. node -11604 Jun 24 i 00:35 24°≈28'59 -11598 Feb 01 i 15:12 0°궁 -11604 Jul 02 i 14:47 0°**∀** -11598 Feb 13 j 11:30 7°る23'24 asc. node -11604 Aug 18 j 11:57 $0^{\circ}\Upsilon$ -11598 Mar 20 j 19:20 0°≈≈ -11604 Oct 05 j 16:57 -11598 Apr 22 j 21:05 22°≈00'28 0°8 evening set -11604 Nov 29 j 07:08 0°**Ц** -11598 May 04 j 13:44 0°)(-11603 Jan 21 j 23:28 14°**Д**44'16 max. Earth dist. -11598 May 10 j 08:08 3°**¥**58'55 2.52065 AU retrograde -11603 Feb 21 j 18:37 9° **I** 35'54 5° 42'54 opposition -11603 Feb 22 j 07:27 9°**Ⅲ**27'14 -2.8m -11598 Jun 13 j 12:17 28°**米**09'23 1°03'48 greatest brilliancy conjunction -11598 Jun 13 j 10:26 28°**米**06'03 1°03'44 -11603 Feb 23 j 10:35 9°**I**08'55 0.38610 AU min. Earth dist. minimum elong -11603 Mar 24 j 19:50 4°**Ⅱ**18'41 -11598 Jun 16 j 01:30 0°**Υ** direct 0° 8 -11603 May 13 j 15:05 17°**Д**56'26 -11598 Jul 26 j 15:08 desc. node -11603 Jun 05 j 14:10 0°១ -11598 Aug 06 j 14:20 8°**8**18'09 morning rise -11603 Jul 24 j 07:17 -11598 Sep 03 j 21:21 0 $^{\circ}\Omega$ $0^{\circ}\Pi$ -11603 Sep 07 j 22:57 0° M -11598 Oct 12 j 14:40 0ಂತಾ -11603 Oct 23 j 10:59 0∘**⊽** -11598 Nov 20 j 16:05 $0^{\circ}\Omega$ -11603 Dec 08 j 15:22 0°M -11598 Dec 31 j 01:20 0° m -11602 Jan 24 j 11:40 0° ⊀ desc. node -11597 Jan 03 j 10:47 2°m/27'05 evening set -11602 Feb 01 j 11:33 5°**尽** 05'51 -11597 Feb 11 j 23:58 0∘**⊽** -11602 Mar 12 j 11:29 0°궁 -11597 Mar 31 j 21:33 max. Earth dist. -11602 Mar 14 j 14:17 1°**る**21'25 -11597 Jun 10 j 06:49 2.66068 AU -11597 Jun 26 j 08:39 retrograde 1°×735'45 conjunction -11602 Mar 21 j 13:44 5°る50'02 -0°29'54 -11597 Jul 11 j 14:23 30°RM -11602 Mar 21 j 14:51 minimum elong 5°る51'51 0°30'32 min. Earth dist. -11597 Aug 02 j 12:31 22°ML48'24 0.64372 AU -11602 Apr 27 j 21:54 opposition -11597 Aug 05 j 07:32 21°ML41'01 -4°47'50 morning rise -11602 May 07 j 10:26 6°≈14'02 greatest brilliancy -11597 Aug 04 j 21:21 21°ML51'16 -1.4m asc. node -11602 May 11 j 16:21 9°≈01'30 direct -11597 Sep 13 j 01:43 12° M26'36 -11602 Jun 12 i 05:57 0°**₩** -11597 Nov 14 j 22:59 0° ₹ -11602 Jul 26 j 07:30 $0^{\circ}\Upsilon$ -11596 Jan 01 j 16:08 24° ₹ 45'11 asc node -11602 Sep 07 j 06:40 0°8 -11596 Jan 10 j 20:06 -11602 Oct 19 j 15:28 0°**Ⅱ** -11596 Feb 29 j 01:36 0°≈≈ -11602 Dec 01 j 09:31 0ಂತಾ -11596 Apr 14 j 10:42 0°**)**€ -11601 Jan 16 j 05:41 $0^{\circ}\Omega$ -11596 May 26 j 22:38 -11601 Mar 31 j 18:10 $28^{\circ}\Omega$ 35'51 desc. node -11596 Jun 10 j 19:03 10°**Y**53'48 evening set retrograde -11601 Apr 01 j 19:25 28°**Ω**36'20 -11596 Jul 06 j 05:48 0°8 -11601 Apr 29 j 16:10 23° **Ω**32'03 0.44262 AU max. Earth dist. -11596 Jul 07 j 07:47 0°**8**49'27 2.40382 AU min. Earth dist. -11601 May 07 j 10:06 $20^{\circ}\Omega$ 58'56 $-2^{\circ}27'32$ opposition -11601 May 06 j 15:33 21° Ω 14'16 -11596 Aug 08 j 00:40 25°**8**14'57 1°05'11 greatest brilliancy -2.5m conjunction direct -11601 Jun 08 j 13:28 14°Ω42'41 minimum elong -11596 Aug 08 j 03:08 25°**8**19'44 1°05'41 -11601 Aug 03 j 05:35 0° M -11596 Aug 14 j 03:03 $0^{\circ}\Pi$ -11601 Sep 28 j 09:35 0∘**⊽** -11596 Sep 21 j 11:13 -11601 Nov 17 j 13:01 0°M morning rise -11596 Oct 10 j 09:09 14°544'40 -11600 Jan 05 j 05:28 0°**∡** -11596 Oct 30 j 03:38 0 $^{\circ}\Omega$ -11600 Feb 21 j 23:46 0°ਰ desc. node -11596 Nov 20 j 03:40 15° **Ω**56'41

-11596 Dec 09 j 01:02 0° Mp

-11600 Mar 11 j 21:11 12°**⋜**04'29

evening set

```
Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23,
Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style.
                    -11595 Jan 19 i 22:26 0°♀
                                                                        direct
                                                                                            -11590 Jan 02 i 13:44
                                                                                                                    5°)(08'31
                    -11595 Mar 05 j 16:06
                                                                                            -11590 Mar 14 j 17:23
                                                                                                                    0^{\circ}\Upsilon
                                           o°M.
                    -11595 Apr 23 j 21:19
                                           0°×7
                                                                                            -11590 Apr 30 j 08:09
                                                                                                                    0°8
                    -11595 Jun 26 j 03:15
                                                                                            -11590 Jun 10 j 20:16
                                           0°ಕ
                                                                                                                   0^{\circ}\Pi
                    -11595 Jul 30 j 14:21
                                                                                            -11590 Jul 13 j 01:28 24° 108'14
retrograde
                                           6°る22'42
                                                                        desc. node
                    -11595 Aug 31 j 01:01 30°R.✓
                                                                                            -11590 Jul 20 j 20:20
                                                                                                                   0ಂತಾ
opposition
                    -11595 Sep 08 j 03:08 26° ₹ 49'59 -2°44'35
                                                                                            -11590 Aug 29 j 21:40
                                                                                                                    0^{\circ}\Omega
                    -11595 Sep 08 j 06:01 26°х 47′06
greatest brilliancy
                                                      -1.4m
                                                                                            -11590 Oct 09 j 23:18
                                                                                                                    0° m
min. Earth dist.
                    -11595 Sep 09 j 02:52 26° ₹ 26'10
                                                       0.66421 AU
                                                                                            -11590 Nov 21 j 14:49
                                                                                                                    0∘ಹ
direct
                    -11595 Oct 18 j 13:12 16° ₹ 59'21
                                                                        evening set
                                                                                            -11590 Dec 05 j 09:57
                                                                                                                    9°£26'54
asc. node
                    -11595 Nov 18 j 22:41 22° ₹ 17'34
                                                                                            -11589 Jan 05 j 00:27
                                                                                                                    0°M
                    -11595 Dec 09 j 17:57
                                           0°궁
                    -11594 Feb 05 j 09:45
                                           0°≈
                                                                        conjunction
                                                                                            -11589 Jan 25 j 21:52 13°M 45'20 -1°12'55
                    -11594 Mar 24 j 22:19
                                           0°)€
                                                                         minimum elong
                                                                                            -11589 Jan 25 j 22:39 13°M 46'36 1°13'21
                    -11594 May 07 j 02:20
                                           0^{\circ}\Upsilon
                                                                        max. Earth dist.
                                                                                            -11589 Feb 09 j 06:15 23°ML05'42 2.63639 AU
                    -11594 Jun 16 j 13:21
                                           0°8
                                                                                            -11589 Feb 19 j 22:30
                                                                                                                   0°∡7
                    -11594 Jul 25 j 10:20
                                           0^{\circ}\Pi
                                                                        morning rise
                                                                                            -11589 Mar 16 j 03:26 15° ₹ 32'00
evening set
                    -11594 Aug 11 j 18:39 13°Д34'39
                                                                                            -11589 Apr 07 j 20:30
                    -11594 Sep 01 i 17:35 0°5
                                                                                            -11589 May 25 j 06:14
desc. node
                    -11594 Oct 07 j 21:24 28°504'23
                                                                        asc. node
                                                                                            -11589 Jul 11 j 18:50 29°≈47'44
                    -11594 Oct 10 j 09:40 0°Ω
                                                                                            -11589 Jul 12 j 02:44
                                                                                                                    0°₩
                                                                                            -11589 Aug 30 i 09:46
                                                                                                                    0^{\circ}\Upsilon
conjunction
                    -11594 Oct 13 j 11:52 2^{\circ}\Omega 21'58 - 0^{\circ}04'18
                                                                                            -11589 Oct 24 i 16:05
                                                                                                                   0°8
 minimum elong
                    -11594 Oct 13 j 11:31 2^{\circ}\Omega21'18 0^{\circ}03'43
                                                                        retrograde
                                                                                            -11589 Dec 23 i 05:30 16°849'41
 behind sun begin
                    -11594 Oct 12 j 09:23
                                           1°£31′21
                                                                        opposition
                                                                                            -11588 Jan 23 j 14:37 11°820'16 6°58'52
 behind sun end
                    -11594 Oct 14 j 13:39
                                                                        greatest brilliancy
                                                                                            -11588 Jan 25 j 01:43 10°854'49
                                           3°Ω11'12
                                                                                                                              -2.6m
                    -11594 Nov 19 j 06:37
                                                                        min. Earth dist.
                                                                                            -11588 Jan 29 j 13:04 9°837'23 0.41069 AU
                                           0° m
max. Earth dist.
                    -11594 Nov 27 j 04:50 5° m 48'51 2.43834 AU
                                                                                            -11588 Feb 26 j 00:22 5°804'01
                                                                        direct
                    -11594 Dec 14 j 17:18 18° m 28'42
                                                                                            -11588 May 06 j 01:00 0°Ц
morning rise
                    -11594 Dec 30 j 23:51 0°♀
                                                                                            -11588 May 30 j 06:14 14°Д53'02
                                                                        desc. node
                    -11593 Feb 12 j 23:36 0°M
                                                                                            -11588 Jun 22 j 04:01 0°95
                                                                                            -11588 Aug 04 j 20:52 0°Ω
                    -11593 Mar 31 j 14:07 0° ✓
                    -11593 May 20 j 18:43 0°る
                                                                                            -11588 Sep 17 j 07:16 0° Mg
                    -11593 Jul 19 j 16:14 0°≈
                                                                                            -11588 Oct 31 j 13:41 0°₽
                    -11593 Sep 05 j 20:32 11°≈17'54
                                                                                            -11588 Dec 16 j 00:35 0°M
retrograde
                    -11593 Oct 07 j 01:57 5°≈08'05
                                                                                            -11587 Jan 16 j 20:50 20°M 36'53
asc. node
                                                                        evening set
opposition
                    -11593 Oct 13 j 21:55 2°≈32'26 0°17'37
                                                                                            -11587 Jan 31 j 11:26 0° ₹
greatest brilliancy
                    -11593 Oct 13 j 22:59 2°≈31'23 -1.6m
                                                                        max. Earth dist.
                                                                                            -11587 Mar 05 j 02:09 20° ₹ 52'38 2.66426 AU
min. Earth dist.
                    -11593 Oct 18 j 13:25 0°≈43'36 0.62328 AU
                    -11593 Oct 20 j 10:40 30°R궁
                                                                        conjunction
                                                                                            -11587 Mar 06 j 10:27 21°х 44'17 -0°46'09
direct
                    -11593 Nov 23 j 16:52 22°₹35'56
                                                                         minimum elong
                                                                                            -11587 Mar 06 j 11:57 21°х 46'41 0°46'46
                    -11593 Dec 30 j 13:47 0°≈
                                                                                            -11587 Mar 19 j 08:14 0°ਰ
                    -11592 Feb 28 j 04:54 0°米
                                                                                            -11587 Apr 22 j 11:38 21° ₹57'17
                                                                        morning rise
                    -11592 Apr 14 j 01:59 0°Υ
                                                                                            -11587 May 04 j 21:48 0°≈
                    -11592 May 25 j 13:27 0°8
                                                                                            -11587 May 28 j 10:51 15°≈21'24
                                                                        asc. node
                    -11592 Jul 03 j 22:54 0°Ⅱ
                                                                                            -11587 Jun 19 i 16:10 0°)€
                    -11592 Aug 11 i 15:10 0°5
                                                                                            -11587 Aug 03 j 12:36
desc. node
                    -11592 Aug 24 j 21:30 10°515'57
                                                                                            -11587 Sep 16 i 18:02 0°℃
                    -11592 Sep 19 i 15:30 0°Ω
                                                                                            -11587 Oct 31 i 02:51
                    -11592 Oct 13 j 18:24 18^{\circ}\Omega 08'25
                                                                                            -11587 Dec 16 i 17:33
evening set
                                                                                                                   0ಂತಾ
                    -11592 Oct 29 j 20:12 0° Mp
                                                                                            -11586 Feb 19 j 23:58
                                                                                                                   \Omega^{\circ}\Omega
                                                                                            -11586 Mar 08 j 19:27
                                                                        retrograde
                                                                                                                   1°Ω52'21
                                                                                            -11586 Mar 25 j 12:02 30°Rூ
                    -11592 Dec 10 j 03:26 29° m 32'36 -1°04'25
conjunction
                    -11592 Dec 10 j 01:18 29° m 28'52 1°04'21
 minimum elong
                                                                        min. Earth dist.
                                                                                            -11586 Apr 05 j 08:29 27°512'36 0.40294 AU
                    -11592 Dec 10 j 19:07 0°♀
                                                                        opposition
                                                                                            -11586 Apr 10 j 23:24 25°533'15
                                                                                                                               0°29'22
max. Earth dist.
                    -11591 Jan 10 j 20:41 21° 220'18 2.55696 AU
                                                                        greatest brilliancy
                                                                                            -11586 Apr 10 j 21:26 25°534'42
                                                                                                                               -2.8m
                    -11591 Jan 23 j 18:20
                                          0°M
                                                                        desc. node
                                                                                            -11586 Apr 17 j 10:19 23°542'23
                    -11591 Feb 02 j 12:03
                                           6°M27'56
                                                                                            -11586 May 11 j 19:38 20°504'37
morning rise
                                                                        direct
                    -11591 Mar 10 j 16:10
                                                                                            -11586 Jun 23 j 11:49
                                           0° ₹
                                                                                                                    0^{\circ}\Omega
                    -11591 Apr 27 j 08:36
                                           0°る
                                                                                            -11586 Aug 20 j 09:42
                                                                                                                    0° m
                    -11591 Jun 16 j 04:16
                                           0°≈
                                                                                            -11586 Oct 08 j 19:45
                                                                                                                    0∘⊽
                    -11591 Aug 10 j 05:26
                                           0°)€
                                                                                            -11586 Nov 25 j 20:12
                                                                                                                    0°M
asc. node
                    -11591 Aug 24 j 00:44
                                           6°∺27'27
                                                                                            -11585 Jan 12 j 14:31
                                                                                                                    0°∡
retrograde
                    -11591 Oct 20 j 06:53 21° ★ 37'33
                                                                        evening set
                                                                                            -11585 Feb 25 j 12:42 27° ₹ 48'02
opposition
                    -11591 Nov 24 j 13:31 14°米11'54
                                                                                            -11585 Feb 28 j 23:27 0°궁
greatest brilliancy
                    -11591 Nov 25 j 14:18 13° ★49'31 -2.0m
                                                                        max. Earth dist.
                                                                                            -11585 Mar 30 j 04:06 18°정46'30 2.63870 AU
```

min. Earth dist.

-11591 Dec 02 j 04:17 11°\(\chi\)27'12 0.52669 AU

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. -11585 Apr 14 j 14:35 28°₹50'07 -0°00'22 desc. node -11581 Dec 07 j 23:36 $22^{\circ}\Omega 45'56$ conjunction -11585 Apr 14 j 14:38 28°る50'11 0°00'58 -11581 Dec 17 j 18:49 minimum elong 0° m -11585 Apr 13 j 18:52 28°중17'51 -11580 Jan 28 j 21:34 behind sun begin 0∘Ω -11580 Mar 14 j 07:37 -11585 Apr 15 j 10:23 29°중22'32 behind sun end o°m. -11585 Apr 15 j 04:29 29°る12'51 0° **₹** asc. node -11580 May 05 j 03:27 -11585 Apr 16 j 09:15 0°≈ retrograde -11580 Jul 16 j 23:26 23° ₹ 17'23 -3°39'51 -11585 May 31 j 07:54 0°**∀** opposition -11580 Aug 25 j 19:03 13°**尽** 32'49 -11580 Aug 25 j 07:32 13°**尽** 44'25 morning rise -11585 Jun 01 j 00:53 0°**)**€28'54 min. Earth dist. 0.66365 AU $0^{\circ}\Upsilon$ greatest brilliancy -11585 Jul 13 j 14:54 -11580 Aug 25 j 18:15 13°**尽** 33'37 -1.4m -11585 Aug 24 j 10:13 0°8 direct -11580 Oct 04 j 16:30 3°**₹**'53'12 -11585 Oct 04 j 04:28 $0^{\circ}\Pi$ asc. node -11580 Dec 05 j 11:43 21° ₹ 00'24 -11585 Nov 13 j 14:53 0ಂತಾ -11580 Dec 23 j 21:46 0°ಕ -11585 Dec 24 j 21:23 $0^{\circ}\Omega$ -11579 Feb 14 j 13:02 0°≈ -11584 Feb 07 j 11:39 0° m -11579 Apr 01 j 22:55 0°**)**€ desc. node -11584 Mar 04 j 11:02 15° m 05'52 -11579 May 14 j 18:41 $0^{\circ}\Upsilon$ -11584 Apr 08 j 16:38 0∘**⊽** -11579 Jun 24 j 03:19 0°8 retrograde -11584 May 02 j 02:49 3°**△**33'22 evening set -11579 Jul 17 j 06:42 17°**8**46'37 -11584 May 24 j 13:19 30°R Mp -11579 Aug 01 j 23:35 $0^{\circ}\Pi$ min. Earth dist. -11584 Jun 01 j 15:24 27° mp 17'00 0.51785 AU -11579 Sep 09 j 06:14 greatest brilliancy -11584 Jun 07 j 22:51 24° m 57'12 opposition -11584 Jun 09 j 06:15 24° m 28'03 -4°52'34 conjunction -11579 Sep 17 j 09:43 6°522'18 0°27'59 direct -11584 Jul 13 j 21:57 16° m 58'18 minimum elong -11579 Sep 17 i 12:11 6°9527'08 0°28'36 -11584 Sep 03 i 07:10 0∘**⊽** -11579 Oct 17 j 21:17 $0^{\circ}\Omega$ -11584 Nov 01 i 01:28 0°M max. Earth dist. -11579 Oct 20 i 00:44 1°**Ω**38'39 2.39471 AU -11584 Dec 22 j 07:11 0°*⊼* desc. node -11579 Oct 24 j 18:07 5°**Ω**15'24 -11583 Feb 09 j 01:51 0°る -11579 Nov 20 j 21:15 $25^{\circ}\Omega41'39$ morning rise -11583 Mar 02 j 02:51 13°る19'25 -11579 Nov 26 j 16:49 0° m asc node -11583 Mar 27 j 21:34 0°≈ -11578 Jan 07 j 09:34 0∘ଫ -11583 Apr 05 j 22:14 -11578 Feb 20 j 12:31 evening set 5°≈56'21 o°m. max. Earth dist. -11583 Apr 26 j 15:32 19°≈47'21 -11578 Apr 08 j 17:36 00×7 2.56234 AU -11583 May 11 j 15:07 -11578 May 31 j 04:20 0°る 0°**)**€ -11578 Aug 21 j 20:35 27°**궁**36'47 retrograde -11583 May 25 j 23:05 -11578 Sep 29 j 14:44 18°₹29'48 -0°59'34 conjunction 9°**¥**55'43 0°48'58 opposition -11583 May 25 j 21:14 9°**¥**52′28 -11578 Sep 29 j 17:56 18°₹26'38 -1.5m minimum elong 0°48'40 greatest brilliancy -11583 Jun 23 j 06:03 0°**Υ** -11578 Oct 02 j 20:33 17°る12'44 0.64640 AU min. Earth dist. -11583 Jul 16 j 04:50 16°**Υ**44'00 -11578 Oct 23 j 16:37 10°₹22'30 morning rise asc. node -11583 Aug 03 j 01:12 0°8 -11578 Nov 09 j 10:24 8°중31'06 direct -11583 Sep 11 j 13:51 $0^{\circ}II$ -11577 Jan 17 j 19:05 0°≈ -11583 Oct 20 j 13:55 0ಂತಾ -11577 Mar 10 j 11:22 0°**)**€ -11583 Nov 28 j 22:39 $0^{\circ}\Omega$ -11577 Apr 23 j 20:31 $0^{\circ}\Upsilon$ -11582 Jan 08 j 18:32 0° m -11577 Jun 03 j 19:05 0° 8 desc. node -11582 Jan 20 j 05:58 -11577 Jul 12 j 21:52 8° m 06'27 -11582 Feb 21 j 17:34 -11577 Aug 20 j 09:14 -11582 Apr 14 j 11:29 -11577 Sep 11 j 15:03 17°515'56 desc. node -11582 Jun 12 j 04:40 17° ML 15'02 -11577 Sep 20 j 19:11 24°519'35 retrograde evening set min. Earth dist. -11582 Jul 17 i 17:14 9°ML03'01 0.61904 AU -11577 Sep 28 i 05:02 opposition -11582 Jul 21 i 23:39 7°M20'55 -5°15'29 -11577 Nov 07 j 05:14 greatest brilliancy -11582 Jul 21 i 06:04 7° M 38'27 -1.5m -11582 Aug 13 i 15:59 30°R ₽ conjunction -11577 Nov 19 i 21:20 9° m $14'39 - 0^{\circ}47'13$ direct -11582 Aug 28 j 19:04 28° **2**28'19 minimum elong -11577 Nov 19 i 18:37 9° m 09'44 0°46'56 -11582 Sep 13 j 20:58 -11577 Dec 19 j 00:24 0∘**⊽** -11582 Nov 27 j 16:18 max. Earth dist. -11577 Dec 28 j 09:26 6°**2**32'06 2.51331 AU 0°×7 -11581 Jan 18 j 06:10 29° ₹14'29 -11576 Jan 16 j 04:31 19° **2**25'22 asc node morning rise -11581 Jan 19 j 12:34 0°M 0°ਤ -11576 Jan 31 j 21:47 -11581 Mar 08 j 17:01 0°≈ -11576 Mar 17 j 22:52 0° **₹** -11581 Apr 22 j 18:42 0°**∀** -11576 May 05 j 06:13 0°궁 -11581 May 21 j 23:20 20° **∺**26'49 -11576 Jun 26 j 02:26 0°≈ evening set -11581 Jun 04 j 05:44 $0^{\circ}\Upsilon$ -11576 Aug 31 j 13:38 0°\ -11581 Jun 08 j 06:42 2°**Υ**56'27 2.44797 AU max. Earth dist. asc. node -11576 Sep 09 j 17:17 2°**H**25'48 -11581 Jul 14 j 14:41 0°8 retrograde -11576 Oct 01 j 02:32 5°****00'51 -11576 Oct 29 j 05:35 30°R≈ conjunction -11581 Jul 16 j 06:31 1°**8**15'37 1°13'12 opposition -11576 Nov 06 j 15:23 26°≈58'55 2°35'55 minimum elong -11581 Jul 16 j 06:46 1°**8**16'05 1°13'30 greatest brilliancy -11576 Nov 07 j 04:43 26°≈46'23 -11581 Aug 22 j 14:24 Π °0 min. Earth dist. -11576 Nov 13 j 06:53 24°≈29'01 0.57014 AU morning rise -11581 Sep 14 j 06:08 17°**Д**40'29 direct -11576 Dec 16 j 16:47 17°≈23'48 -11581 Sep 30 j 00:52 0ಂತಾ -11575 Feb 03 j 06:59 0°)

-11575 Mar 28 j 10:09

 $0^{\circ}\Upsilon$

-11581 Nov 07 j 19:13

 $0^{\circ}\Omega$

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. -11575 May 10 j 20:47 0°8 -11570 Apr 23 j 07:22 -11575 Jun 20 j 04:12 -11570 May 01 j 22:56 0°П asc node 5°≈≈40'12 -11575 Jul 29 j 16:47 0°9510'52 morning rise -11570 May 16 j 04:27 15°≈04'11 desc node -11575 Jul 29 j 11:06 0ಂತಾ -11570 Jun 07 j 12:06 0°)(-11570 Jul 21 j 06:25 0° -11575 Sep 06 j 23:26 0° Ω 0°8 -11575 Oct 17 j 14:21 0° M -11570 Sep 01 j 18:14 evening set -11575 Nov 16 j 07:45 21° m 13'14 -11570 Oct 13 j 09:57 Π $^{\circ}0$ -11575 Nov 28 j 21:29 0∘<u>ರ</u> -11570 Nov 24 j 01:17 0ಂತಾ -11569 Jan 06 j 09:36 0 $^{\circ}\Omega$ conjunction -11574 Jan 08 j 18:35 27°**2**48'43 -1°14'53 -11569 Feb 26 j 17:07 0° m minimum elong -11574 Jan 08 j 18:21 27°**♀**48'20 1°15'10 desc. node -11569 Mar 22 j 04:19 9°m/05'18 -11574 Jan 12 j 01:21 0°M retrograde -11569 Apr 13 j 23:35 12° M 32'03 -11574 Jan 29 j 15:55 11°M 38'16 2.61127 AU max. Earth dist. min. Earth dist. -11569 May 12 j 14:10 7° Mp 04'55 0.46903 AU -11574 Feb 26 j 21:36 0°**∡**¹ opposition -11569 May 20 j 16:30 4° m 17'00 -3°37'50 morning rise -11574 Feb 28 j 14:55 1°**х¹**06'33 greatest brilliancy -11569 May 19 j 13:44 4° Mp 40'14 -2.3 m -11574 Apr 14 j 23:49 0°ರ -11569 Jun 03 j 13:19 30°RΩ -11574 Jun 02 j 00:59 direct -11569 Jun 22 j 18:13 27°**Ω**32'55 -11574 Jul 21 j 12:50 0°\ -11569 Jul 12 j 22:59 0° m asc. node -11574 Jul 28 j 13:29 4° ¥ 07'41 -11569 Sep 20 j 15:48 -11574 Sep 13 j 14:14 $0^{\circ}\Upsilon$ -11569 Nov 11 j 18:31 retrograde -11574 Nov 25 j 04:58 22° Υ 48'55 -11569 Dec 31 j 04:44 opposition -11574 Dec 28 j 05:10 16° Υ 32'56 6°27'08 -11568 Feb 17 i 06:40 0°ಕ greatest brilliancy -11574 Dec 29 j 20:39 16° Υ 01'02 -11568 Mar 18 j 18:53 19°る30'58 -2.4m asc. node min. Earth dist. $-11573 \text{ Jan } 05 \text{ j } 00:22 14^{\circ} \Upsilon 02'49$ 0.45286 AU evening set -11568 Mar 20 j 20:27 20°**궁**51'13 direct -11573 Feb 02 i 06:14 8°**Y**58'57 -11568 Apr 03 j 21:06 0°≈ -11573 Apr 06 j 06:18 0°8 -11568 Apr 14 j 22:13 max. Earth dist. 7°≈16'49 2.59819 AU -11573 May 23 j 15:21 0°**Ⅱ** -11573 Jun 16 j 21:58 16°**Д**58'41 -11568 May 08 j 18:32 23°≈15'41 0°30'41 desc node conjunction -11573 Jul 05 j 02:36 0°ഇ -11568 May 08 j 17:17 23°≈13'33 minimum elong 0°30'15 -11573 Aug 15 j 16:55 0°**Ω** -11568 May 18 j 15:53 0°**米** -11573 Sep 26 j 20:48 0° M -11568 Jun 26 j 23:07 27°**米**28'17 morning rise -11573 Nov 09 j 07:22 0°**♀** -11568 Jun 30 j 12:04 0°**Υ** -11568 Aug 10 j 15:08 0°8 -11573 Dec 24 j 05:35 0°M -11572 Jan 01 j 17:01 5°M33'30 -11568 Sep 19 j 12:52 0°**П** evening set -11572 Feb 08 j 09:45 -11568 Oct 28 j 22:30 0°5 -11568 Dec 07 j 18:20 0°**Ω** -11572 Feb 20 j 02:01 7° ₹30'18 -0°59'34 conjunction -11567 Jan 18 j 08:07 0° Mg minimum elong -11572 Feb 20 j 03:34 7° ₹32'46 1°00'09 -11567 Feb 06 j 03:09 12° Mp 47'26 desc. node max. Earth dist. -11572 Feb 24 j 16:59 10° ₹28'11 2.65977 AU -11567 Mar 05 j 06:39 0°**♀** -11572 Mar 26 j 05:25 0°る -11567 May 11 j 12:50 morning rise -11572 Apr 07 j 16:11 7°**る**57'51 -11567 May 28 j 06:15 1° ML47'51 retrograde -11572 May 12 j 00:28 0°≈ -11567 Jun 13 j 03:32 30°R € -11572 Jun 14 j 06:25 21°≈28'59 min. Earth dist. -11567 Jun 30 j 22:29 24°**2**16'49 0.58520 AU asc. node -11572 Jun 27 j 09:06 0°**米** -11567 Jul 06 j 15:37 22°**2**02'25 -5°26'50 opposition -11572 Aug 12 j 08:41 0°**Υ** -11567 Jul 05 j 14:41 22°**2**26'55 -1.7m greatest brilliancy -11572 Sep 27 i 15:38 0°8 direct -11567 Aug 12 i 08:22 13° **△**36'55 -11572 Nov 15 і 06:48 0°**Ц** -11567 Oct 11 i 03:40 0° M -11571 Jan 20 i 22:44 0°€ -11567 Dec 07 j 20:55 0°**∡**7 -11571 Feb 08 i 11:52 2°508'49 -11566 Jan 27 j 13:20 retrograde -11571 Feb 27 j 03:14 30°RII -11566 Feb 03 j 19:58 4°る29'00 asc node min. Earth dist. -11571 Mar 10 j 09:18 27° **II** 10'30 0.38431 AU -11566 Mar 16 j 01:26 0°≈ -11571 Mar 11 j 15:59 26° **II** 49'50 4°03'37 -11566 Apr 29 j 22:40 0°**₩** opposition -11571 Mar 11 j 16:13 26° **1**49'41 -2.9m greatest brilliancy evening set -11566 May 03 j 01:27 2°**)** 08'48 direct -11571 Apr 11 j 00:20 21°**II**43'25 max. Earth dist. -11566 May 19 j 13:07 13° **)** 38'38 2.49541 AU -11566 Jun 11 j 10:24 desc. node -11571 May 04 j 02:39 24° Д58'41 $0^{\circ}\Upsilon$ -11571 May 19 j 02:50 0ಂತಾ -11571 Jul 15 j 14:25 0° Ω conjunction -11566 Jun 24 j 19:37 9°Υ46'10 1°09'41 -11571 Sep 01 j 11:21 -11566 Jun 24 j 18:12 9°**Ƴ**43'35 1°09'45 0° m minimum elong -11571 Oct 17 j 23:23 -11566 Jul 21 j 22:38 0°B 0∘**⊽** -11571 Dec 03 j 15:59 -11566 Aug 19 j 20:20 22°**8**04'25 0°M morning rise -11570 Jan 19 j 18:45 0° **₹** -11566 Aug 30 j 02:32 $0^{\circ}\Pi$ -11570 Feb 10 j 06:33 13° ₹ 39'40 -11566 Oct 07 j 17:09 0ಂತಾ evening set -11570 Mar 07 j 21:16 0°ಕ -11566 Nov 15 j 15:28 0 $^{\circ}\Omega$ max. Earth dist. -11570 Mar 20 j 05:46 7°る55'26 2.65522 AU desc. node -11566 Dec 24 j 20:56 29° **Ω**18'12 -11566 Dec 25 j 19:51 0° m -11570 Mar 30 j 06:05 14°**♂**22'27 -0°19'31 -11565 Feb 06 j 08:24 0∘**ত**

0°M

-11565 Mar 24 j 23:29

conjunction

minimum elong

-11570 Mar 30 j 06:52 14°₹23'43 0°20'09

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. -11565 May 21 j 22:02 0° ⊀ -11560 Aug 06 j 15:28 0ಂತಾ -11565 Jul 04 j 08:26 9°**х** 55'08 -11560 Aug 15 j 09:20 retrograde desc. node 6°9544'41 0°**尽**50'23 0.65330 AU -11565 Aug 11 j 07:32 -11560 Sep 14 j 19:12 min. Earth dist. $\Omega^{\circ}\Omega$ -11565 Aug 13 j 06:48 0°**≯**02'43 -4°26'00 -11560 Oct 25 j 02:23 0° m opposition 0°**™**59'37 greatest brilliancy -11565 Aug 13 j 00:21 0°**∡** 09'14 -1.4m evening set -11560 Oct 26 j 11:04 -11565 Aug 13 j 09:30 30°RML -11560 Dec 06 j 03:00 0∘ಹ -11565 Sep 21 j 11:28 20°M38'16 direct 0°**∡**¹ -11560 Dec 21 j 08:04 10°**△**31'44 -1°10'22 -11565 Nov 03 j 21:01 conjunction asc. node -11565 Dec 23 j 01:07 23° ₹03'39 minimum elong -11560 Dec 21 j 06:36 10°**2**29'12 1°10'25 -11564 Jan 04 j 16:26 0°궁 max. Earth dist. -11559 Jan 18 j 02:22 29°**2**19'32 2.57823 AU -11564 Feb 23 j 21:28 0°≈ -11559 Jan 19 j 02:36 0°M -11564 Apr 09 j 14:58 0°**₩** morning rise -11559 Feb 12 j 07:11 15°ML58'21 $0^{\circ}\Upsilon$ -11564 May 22 j 05:49 -11559 Mar 05 j 22:37 0°**∡**7 evening set -11564 Jun 23 j 10:25 23° Υ 50'15 -11559 Apr 22 j 08:12 0°ರ -11564 Jul 01 j 13:43 0° 8 -11559 Jun 10 j 08:40 0°≈ max. Earth dist. -11564 Aug 05 j 13:05 26°**8**57'53 2.38672 AU -11559 Aug 01 j 15:26 0°**)**€ -11564 Aug 09 j 10:27 $0^{\circ}\Pi$ asc. node -11559 Aug 14 j 07:47 6° **)** 40'44 -11559 Oct 11 j 19:53 $0^{\circ}\Upsilon$ conjunction -11564 Aug 22 j 06:50 10°**I**I03'00 0°54'51 retrograde -11559 Nov 01 j 08:18 2°Υ24'11 minimum elong -11564 Aug 22 j 10:05 10°**Д**09'23 0°55'25 -11559 Nov 20 j 17:10 30°R € -11564 Sep 16 j 17:38 0ಂತಾ opposition -11559 Dec 05 j 20:12 25° \(\frac{1}{2} \) 21'36 5°05'14 morning rise -11564 Oct 25 i 18:30 0°**Ω**18'18 greatest brilliancy -11559 Dec 07 i 03:37 24°\cdot\(54'05\) -2.1m -11564 Oct 25 i 08:58 $0^{\circ}\Omega$ min. Earth dist. -11559 Dec 13 j 18:41 22°\(\mathbf{H}\)35'30 0.50050 AU desc. node -11564 Nov 10 j 13:20 12° Ω 20'02 direct -11558 Jan 12 j 23:18 16° **\(44'05** -11564 Dec 04 i 04:43 0° m -11558 Mar 02 j 16:37 $0^{\circ}\Upsilon$ -11563 Jan 14 j 23:05 -11558 Apr 22 j 18:37 0°8 0∘⊽ -11563 Feb 28 j 09:02 -11558 Jun 04 j 11:58 o°m. 0°П -11563 Apr 17 j 14:31 -11558 Jul 03 j 12:36 21°**Д**23'06 0°×7 desc node -11563 Jun 13 j 14:34 0°る -11558 Jul 15 j 02:37 0°5 -11563 Aug 07 j 14:55 14°る20'59 -11558 Aug 24 j 13:51 retrograde $0^{\circ}\Omega$ -11558 Oct 04 j 22:36 -11563 Sep 15 j 21:44 4° **공**56'31 -2°08'23 0° m opposition -11563 Sep 16 j 01:34 4°정52'42 -1.4m greatest brilliancy -11558 Nov 16 j 19:21 0∘ಹ -11563 Sep 17 j 16:49 4°る13'25 0.66039 AU min. Earth dist. -11558 Dec 15 j 16:43 19°**2**34'59 evening set -11563 Sep 28 j 20:09 30°R ✓ -11558 Dec 31 j 08:15 0°M -11563 Oct 26 j 12:12 25° ₹01'43 direct -11563 Nov 09 j 06:43 26° ₹ 09'44 -11557 Feb 04 j 07:11 22°M 52'42 -1°09'19 asc. node conjunction -11563 Nov 25 j 17:29 0°る -11557 Feb 04 j 08:21 22°M 54'36 1°09'48 minimum elong -11562 Jan 29 j 20:41 0°≈ max. Earth dist. -11557 Feb 15 j 02:43 29°ML52'07 2.64706 AU -11562 Mar 19 j 12:26 0°**米** -11557 Feb 15 j 07:36 0° ₹ -11562 May 02 j 01:44 0°**Υ** morning rise -11557 Mar 24 j 19:36 24° ₹02'26 -11562 Jun 11 j 16:53 0°8 -11557 Apr 03 j 03:52 0°**ਰ** -11562 Jul 20 j 15:48 0°**Ⅲ** -11557 May 20 j 07:19 0°≈ -11562 Aug 26 j 08:39 28°**Д**42'59 -11557 Jul 02 j 01:21 27°≈10'14 evening set asc. node -11562 Aug 28 j 00:03 0°ഇ -11557 Jul 06 j 12:28 0°**米** -11562 Sep 28 j 09:08 24°522'50 -11557 Aug 23 j 06:56 desc. node -11562 Oct 05 i 16:43 0°Ω -11557 Oct 12 j 15:39 0°8 -11557 Dec 19 i 19:01 -11562 Oct 27 j 13:24 $16^{\circ}\Omega$ 35'33 $-0^{\circ}21'39$ -11556 Jan 09 і 08:33 2°**Д**30'36 conjunction retrograde -11562 Oct 27 j 11:40 $16^{\circ}\Omega$ 32'18 $0^{\circ}21'09$ minimum elong -11556 Jan 29 i 18:25 30°R -11562 Nov 14 i 13:43 0° Mb -11556 Feb 09 j 05:02 27° \$\frac{8}{18}\$'00 6°31'59 opposition max. Earth dist. -11562 Dec 10 j 09:13 18° m 44'52 2.46523 AU -11556 Feb 10 j 05:22 27°**8**01'08 greatest brilliancy -2.8m -11562 Dec 26 j 06:22 min. Earth dist. -11556 Feb 13 j 00:55 26° **8**14'29 0.39410 AU 0∘∙ -11562 Dec 27 j 02:28 0°**£**35'15 direct -11556 Mar 12 j 05:07 21°839'07 morning rise -11561 Feb 08 j 03:48 o°m. -11556 Apr 18 j 15:13 0°**П** -11561 Mar 26 j 11:21 0° **₹** desc. node -11556 May 20 j 18:42 15°**Д**58'39 -11561 May 14 j 18:18 0°ರ -11556 Jun 13 j 03:28 0ಂತಾ -11561 Jul 09 j 07:54 -11556 Jul 29 j 00:21 0 $^{\circ}\Omega$ 0°≈ -11561 Sep 15 j 00:39 19°≈55'14 -11556 Sep 11 j 11:57 retrograde 0° m -11561 Sep 27 j 09:33 18°≈55'48 asc. node -11556 Oct 26 j 08:37 0∘**⊽** -11561 Oct 22 j 13:55 11°≈23'53 opposition 1°06'04 -11556 Dec 11 j 03:51 0°M greatest brilliancy -11561 Oct 22 j 18:28 11°≈19'29 -1.6m evening set -11555 Jan 25 j 21:52 29°M25'37 min. Earth dist. -11561 Oct 27 j 23:17 9°**≈**18'54 0.60646 AU -11555 Jan 26 j 19:23 0°**∡** direct -11561 Dec 02 j 04:30 1°≈32'06 max. Earth dist. -11555 Mar 10 j 15:36 27° **₹**23'00 2.66338 AU -11560 Feb 20 j 14:36 0°**∀** -11555 Mar 14 j 17:41 0ಂತ -11560 Apr 08 j 02:08 0° γ -11560 May 20 j 02:52 0°8 -11555 Mar 15 j 04:00 0°る16'31 -0°37'01 conjunction

-11555 Mar 15 j 05:19

minimum elong

0°る18'38 0°37'39

-11560 Jun 28 j 18:54 0°**Ⅱ**

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 35

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Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style.
                    -11555 Apr 30 i 05:47 0°≈
                                                                          retrograde
                                                                                              -11550 Jun 20 j 11:13 26° ML01'43
                    -11555 May 01 j 01:11
                                                                          min. Earth dist.
                                                                                              -11550 Jul 26 j 21:34 17° ML29'23 0.63380 AU
morning rise
                                            0°≈31'35
                                                                                              -11550 Jul 30 j 08:25 16°ML06'15 -5°01'15
                    -11555 May 18 j 16:56 12°≈04'28
                                                                          opposition
asc. node
                    -11555 Jun 14 j 18:46
                                            0°∀
                                                                                              -11550 Jul 29 j 19:00 16°ML19'43 -1.5m
                                                                          greatest brilliancy
                                            0^{\circ}\Upsilon
                                                                                              -11550 Sep 06 j 16:23
                    -11555 Jul 29 j 04:33
                                                                          direct
                                                                                                                      7°IL00'59
                    -11555 Sep 10 j 16:15
                                            0^{\circ}8
                                                                                              -11550 Nov 19 j 23:18
                                                                                                                      0°∡7
                    -11555 Oct 23 j 18:54
                                            0^{\circ}\Pi
                                                                          asc. node
                                                                                              -11549 Jan 08 j 14:31 26° ₹ 53'35
                    -11555 Dec 06 j 18:57
                                            0ಂತಾ
                                                                                              -11549 Jan 13 j 22:07
                                                                                                                      0ºಕ
                    -11554 Jan 25 j 00:44
                                           0^{\circ}\Omega
                                                                                              -11549 Mar 03 j 17:25
                                                                                                                      0°≈
retrograde
                    -11554 Mar 22 j 20:14 17^{\circ}\Omega49'28
                                                                                              -11549 Apr 18 j 00:37
                                                                                                                      0°\
desc. node
                    -11554 Apr 07 j 22:51 16° Ω02'35
                                                                                              -11549 May 30 j 13:18
                                                                                                                      0^{\circ}\Upsilon
                    -11554 Apr 19 j 08:13 13° Ω00'10 0.42301 AU
                                                                                                                      2°Υ12'15
min. Earth dist.
                                                                          evening set
                                                                                              -11549 Jun 02 j 14:03
                    -11554 Apr 26 j 10:20 10^{\circ}\Omega46'36 -1°19'15
                                                                                              -11549 Jun 23 j 06:13 17°Υ27'05 2.42255 AU
opposition
                                                                          max. Earth dist.
greatest brilliancy
                    -11554 Apr 26 j 00:39 10^{\circ} \Omega54'12
                                                                                              -11549 Jul 09 j 22:17
direct
                    -11554 May 27 j 21:22
                                            4°£52′56
                    -11554 Aug 10 j 23:02
                                                                          conjunction
                                                                                              -11549 Jul 29 j 11:14 14°857'08
                                                                                                                                  1°10'14
                    -11554 Oct 02 j 09:17
                                            0∘⊽
                                                                           minimum elong
                                                                                              -11549 Jul 29 j 12:46 15°800'06
                                                                                                                                 1°10'39
                    -11554 Nov 20 j 11:21
                                            0°M
                                                                                              -11549 Aug 17 j 21:11
                                                                                                                      0^{\circ}II
                    -11553 Jan 07 j 17:21
                                                                                              -11549 Sep 25 j 06:19
                    -11553 Feb 24 j 07:32
                                            0°궁
                                                                          morning rise
                                                                                              -11549 Sep 29 j 11:14
                                                                                                                      3°9517'03
evening set
                    -11553 Mar 06 j 08:13 6°⋜23'58
                                                                                              -11549 Nov 02 j 23:05
                                                                                                                      0^{\circ}\Omega
max. Earth dist.
                    -11553 Apr 05 j 03:45 25°る39'28
                                                        2.62647 AU
                                                                          desc. node
                                                                                              -11549 Nov 28 i 09:54 19^{\circ}\Omega17'11
asc. node
                    -11553 Apr 05 j 10:51 25°る51'03
                                                                                              -11549 Dec 12 j 20:17
                                                                                                                      0° m
                    -11553 Apr 11 j 19:02
                                                                                              -11548 Jan 23 i 18:07
                                                                                                                      0∘∙თ
                                                                                              -11548 Mar 08 j 15:52
                                                                                                                      0°M
                    -11553 Apr 23 j 14:32
                                                                                              -11548 Apr 27 j 15:34
                                                                                                                      0°∡7
conjunction
                                            7°≈46'58 0°11'06
                    -11553 Apr 23 j 14:05
                                                                                              -11548 Jul 10 j 08:33
                                                                                                                      0°궁
                                            7°≈46'14
                                                        0°10'33
 minimum elong
                    -11553 Apr 22 j 22:48
                                            7°≈20'57
                                                                                              -11548 Jul 24 j 20:18
                                                                                                                     1°る15'35
 behind sun begin
                                                                          retrograde
                    -11553 Apr 24 j 05:22
                                            8°≈11'30
                                                                                              -11548 Aug 07 j 13:56 30°R ✗
 behind sun end
                    -11553 May 26 j 16:30 0°米
                                                                                              -11548 Sep 02 j 12:02 21° ₹37'04 -3°08'47
                                                                          opposition
                    -11553 Jun 10 j 11:36 10° ₭09'24
                                                                          greatest brilliancy
                                                                                              -11548 Sep 02 j 13:32 21° ₹35'34 -1.4m
morning rise
                    -11553 Jul 08 j 19:34 0°Υ
                                                                                              -11548 Sep 02 j 19:54 21° ₹29'08 0.66511 AU
                                                                          min. Earth dist.
                    -11553 Aug 19 j 08:36 0°႘
                                                                                              -11548 Oct 12 j 16:31 11° ₹ 50'49
                                                                          direct
                    -11553 Sep 28 j 18:28 0°Ⅱ
                                                                                              -11548 Nov 25 j 20:51 21° ₹33'16
                                                                          asc. node
                    -11553 Nov 07 j 17:56 0°ഇ
                                                                                              -11548 Dec 15 j 13:21 0°る
                    -11553 Dec 18 j 08:04 0°Ω
                                                                                              -11547 Feb 08 j 18:20 0°≈
                                                                                              -11547 Mar 27 j 20:12 0°米
                    -11552 Jan 30 j 08:27 0° Mg
desc. node
                    -11552 Feb 23 j 21:29 15° m 30'37
                                                                                              -11547 May 09 j 21:38 0°Υ
                    -11552 Mar 21 j 08:42 0° ♀
                                                                                              -11547 Jun 19 j 08:28 0°8
retrograde
                    -11552 May 12 j 02:43 14°♀41'15
                                                                                              -11547 Jul 28 j 05:31 0°П
min. Earth dist.
                    -11552 Jun 12 j 18:56 7°256'39 0.54363 AU
                                                                                              -11547 Jul 31 j 14:10 2°Ⅲ37'34
                                                                          evening set
                    -11552 Jun 19 j 19:09 5°≙16'56 -5°14'39
                                                                                              -11547 Sep 04 j 12:19
opposition
                    -11552 Jun 18 j 12:50 5°-245'51 -1.9m
greatest brilliancy
                    -11552 Jul 05 j 14:42 30°R Mp
                                                                                              -11547 Oct 02 j 07:13 21°538'51 0°09'48
                                                                          conjunction
                    -11552 Jul 25 j 05:23 27° m 25'06
                                                                                              -11547 Oct 02 j 08:10 21°540'40
direct
                                                                           minimum elong
                                                                                              -11547 Oct 01 j 11:07 20°559'59
                    -11552 Aug 15 i 03:35 0°♀
                                                                           behind sun begin
                    -11552 Oct 24 i 22:43
                                                                           behind sun end
                                                                                              -11547 Oct 03 i 05:13 22°521'21
                    -11552 Dec 16 j 19:27 0° ₹
                                                                                              -11547 Oct 13 i 03:24 0^{\circ}\Omega
                    -11551 Feb 04 i 03:51 0°る
                                                                          desc. node
                                                                                              -11547 Oct 15 i 03:10 1^{\circ}\Omega31'33
                    -11551 Feb 20 j 10:30 10°る13'07
                                                                          max. Earth dist.
                                                                                              -11547 Nov 13 j 22:46 24^{\circ}\Omega04'05 2.41721 AU
asc node
                    -11551 Mar 23 j 05:09 0°≈
                                                                                              -11547 Nov 21 j 22:44 0° m
                    -11551 Apr 15 j 12:19 15°≈24'36
                                                                                              -11547 Dec 04 j 17:39
                                                                                                                      9° m 22'23
evening set
                                                                          morning rise
                                                                                              -11546 Jan 02 j 14:20
                    -11551 May 04 j 08:47 28°≈10'50 2.54014 AU
max. Earth dist.
                                                                                                                      0∘⊽
                    -11551 May 07 j 00:27 0°米
                                                                                                                      0°M
                                                                                              -11546 Feb 15 j 13:49
                                                                                              -11546 Apr 03 j 08:06
                                                                                                                      00×7
conjunction
                    -11551 Jun 05 j 08:22 20° ★29'53 0°58'02
                                                                                              -11546 May 24 j 05:35
                                                                                                                      0°궁
                    -11551 Jun 05 j 06:25 20° ₩ 26'27 0°57'52
                                                                                              -11546 Jul 28 j 07:18
 minimum elong
                                           0^{\circ}\Upsilon
                    -11551 Jun 18 j 14:42
                                                                          retrograde
                                                                                              -11546 Aug 30 j 09:06
                                                                                                                      5°≈48'55
                    -11551 Jul 28 j 00:43 29°Y01'56
                                                                                              -11546 Sep 29 j 13:27 30°R 궁
morning rise
                    -11551 Jul 29 j 07:40
                                                                                              -11546 Oct 07 j 18:02 26°₹53'17 -0°15'56
                                            0°8
                                                                          opposition
                                                                                              -11546 Oct 07 j 19:12 26°궁52'09
                    -11551 Sep 06 j 17:07
                                            \Pi^{\circ}0
                                                                          greatest brilliancy
                                                                                                                                 -1.5m
                    -11551 Oct 15 j 13:08
                                            0\circ\odot
                                                                          min. Earth dist.
                                                                                              -11546 Oct 11 j 18:17 25°る18'34 0.63481 AU
                    -11551 Nov 23 j 17:00
                                            0°\Omega
                                                                          asc. node
                                                                                              -11546 Oct 14 j 01:04 24°₹25'19
                    -11550 Jan 03 j 05:06
                                            0° m
                                                                          direct
                                                                                              -11546 Nov 17 j 13:39 16°₹54'50
desc. node
                    -11550 Jan 10 j 16:37
                                            5° m 21'56
                                                                                              -11545 Jan 07 j 20:52
                                                                                                                      0°≈
                    -11550 Feb 15 j 10:34
                                            0∘⊽
                                                                                              -11545 Mar 04 j 04:52
                                                                                                                      0°)
                    -11550 Apr 05 j 09:58
                                            0°M
                                                                                              -11545 Apr 18 j 10:07
                                                                                                                      0^{\circ}\Upsilon
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Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 36

Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. -11545 May 29 j 16:28 0°8 max. Earth dist. -11540 Mar 01 i 07:47 17° ₹ 01'05 2.66325 AU -11545 Jul 07 j 23:08 -11540 Mar 21 j 14:35 0°ಕ 0°Π -11540 Apr 16 j 04:46 16°**♂**24'43 -11545 Aug 15 j 12:46 0ಂತಾ morning rise desc. node -11545 Sep 02 j 02:16 13°537'04 -11540 May 07 j 06:43 0°≈≈ -11545 Sep 23 j 10:17 0° Ω asc. node -11540 Jun 04 j 11:47 18°≈19'43 -11545 Oct 04 j 15:06 evening set 8°**Ω**29'57 -11540 Jun 22 j 07:20 0°**₩** -11540 Aug 06 j 15:04 0° -11545 Nov 02 j 11:48 0° m -11540 Sep 20 j 15:29 0°8 conjunction -11545 Dec 02 j 06:18 21° m 29'51 -0°58'06 -11540 Nov 05 j 10:07 $0^{\circ}\Pi$ minimum elong -11545 Dec 02 j 03:47 21° m 25'23 0°57'57 -11540 Dec 25 j 17:29 0ಂತಾ -11545 Dec 14 j 07:38 0∘**⊽** retrograde -11539 Feb 25 j 00:34 19°530'21 max. Earth dist. -11544 Jan 06 j 01:23 15°**♀**43'33 2.53820 AU min. Earth dist. -11539 Mar 25 j 05:12 14°5649'01 0.39117 AU morning rise -11544 Jan 26 j 21:07 29°**♀**47'20 opposition -11539 Mar 29 j 02:42 13°543'28 2°03'01 -11544 Jan 27 j 04:42 0°M greatest brilliancy -11539 Mar 28 j 22:07 13°546'41 -2.9m -11544 Mar 13 j 02:33 0°**√** desc. node -11539 Apr 24 j 14:46 8°936'17 -11544 Apr 29 j 23:40 0°궁 direct -11539 Apr 28 j 14:00 8°930'11 -11544 Jun 19 j 11:58 0°≈ -11539 Jul 04 j 10:58 $0^{\circ}\Omega$ -11544 Aug 16 j 12:01 0°**₩** -11539 Aug 25 j 07:19 0° m asc. node -11544 Aug 31 j 00:46 5°**)** 54'22 -11539 Oct 12 j 04:56 retrograde -11544 Oct 11 j 17:45 14° **\(\)**41'03 -11539 Nov 28 j 13:33 opposition -11544 Nov 16 j 14:27 6°**¥**58′09 3°30'00 -11538 Jan 15 j 00:16 0°×7 greatest brilliancy -11544 Nov 17 j 10:01 6°**)** 40′06 -1.9m evening set -11538 Feb 19 i 01:17 22° ₹ 12'57 min. Earth dist. -11544 Nov 23 j 19:24 4°**¥** 18'51 0.54701 AU -11538 Mar 03 i 06:13 0°る -11544 Dec 07 i 13:26 30°R≈ max. Earth dist. -11538 Mar 25 j 23:06 14° ₹334'37 2.64708 AU direct -11544 Dec 26 i 03:02 27°≈38'21 -11543 Jan 14 j 12:05 0°**₩** -11538 Apr 08 j 01:09 23°る03'16 -0°08'35 conjunction -11543 Mar 20 j 14:43 $0^{\circ}\Upsilon$ -11538 Apr 08 j 01:31 23°る03'52 0°09'11 minimum elong -11543 May 04 j 14:18 -11538 Apr 07 j 09:08 22°る37'15 0°8 behind sun begin -11543 Jun 14 j 12:38 0°**Ⅱ** -11538 Apr 08 j 17:54 23°₹30'30 behind sun end -11543 Jul 20 j 05:51 27°**Ⅲ**01'17 -11538 Apr 18 j 16:39 0°≈ desc. node -11543 Jul 24 j 03:59 -11538 Apr 22 j 04:43 2°≈17'48 0ಂಲ asc. node -11538 May 25 j 04:28 24°≈12'19 -11543 Sep 01 j 22:23 0 $^{\circ}\Omega$ morning rise -11543 Oct 12 j 17:49 -11538 Jun 02 j 18:35 0°**米** 0° m -11543 Nov 24 j 04:04 -11538 Jul 16 j 07:13 0°**Υ** 0∘**⊽** -11543 Nov 27 j 10:12 -11538 Aug 27 j 10:00 0°8 evening set 2°**♀**14'58 -11542 Jan 07 j 09:51 -11538 Oct 07 j 13:23 0°**Ⅱ** -11538 Nov 17 j 10:39 0ಂತಾ conjunction -11542 Jan 18 j 18:02 7°M30'38 -1°14'25 -11538 Dec 29 j 09:45 0°**Ω** -11542 Jan 18 j 18:25 7°ML31'16 1°14'47 -11537 Feb 13 j 17:50 0° Mg minimum elong max. Earth dist. -11542 Feb 04 j 22:55 18° ML47'04 2.62615 AU desc. node -11537 Mar 12 j 16:36 14° m 07'23 -11542 Feb 22 j 06:04 0° ₹ retrograde -11537 Apr 25 j 05:23 25° m 15'31 -11542 Mar 09 j 15:30 9°**х** 53'46 min. Earth dist. -11537 May 24 j 19:47 19° m 21'26 0.49608 AU morning rise -11542 Apr 10 j 05:07 -11537 May 31 j 11:30 16° M 57'52 -2.2m 0°궁 greatest brilliancy -11542 May 27 j 20:49 -11537 Jun 01 j 18:11 16° Mp 30'06 -4°27'17 opposition -11542 Jul 15 j 08:00 0°**米** -11537 Jul 05 j 17:45 9° mp 19'51 direct asc. node -11542 Jul 18 i 19:39 2°**)**(07'17 -11537 Sep 11 i 10:29 -11542 Sep 04 i 04:43 0°Υ -11537 Nov 05 j 15:26 -11542 Nov 06 j 10:01 0°8 -11537 Dec 26 i 00:30 0° **₹** retrograde -11542 Dec 10 j 12:41 6°817'37 -11536 Feb 12 i 11:50 0°る -11541 Jan 11 j 14:15 0°828'42 6°54'19 -11536 Mar 09 j 02:17 16°る16'47 opposition asc node -11541 Jan 13 j 05:43 29°**Υ**58'39 -2.5m -11536 Mar 29 j 23:38 29°る49'32 greatest brilliancy evening set -11541 Jan 13 j 03:58 30° R**Y** -11536 Mar 30 j 06:02 min. Earth dist. -11541 Jan 18 j 16:10 28°**Υ**20'08 0.42815 AU max. Earth dist. -11536 Apr 21 j 14:27 14°≈47'48 2.57921 AU direct -11541 Feb 15 j 05:39 23°**Y**37'28 -11536 May 14 j 01:04 0°**∀** -11541 Mar 19 j 06:31 0°8 -11541 May 14 j 15:33 $0^{\circ}\Pi$ conjunction -11536 May 18 j 11:14 3°**米**02'20 0°41'28 0°41'07 desc. node -11541 Jun 07 j 10:26 15°**Ⅱ**43'21 -11536 May 18 j 09:35 2°**米**59'30 minimum elong $0^{\circ}\Upsilon$ -11541 Jun 28 j 03:34 -11536 Jun 25 j 19:15 0ಂತಾ -11541 Aug 09 j 17:34 -11536 Jul 07 j 16:35 8°Y35'10 0 $^{\circ}\Omega$ morning rise -11541 Sep 21 j 12:02 0°B 0° m -11536 Aug 05 j 18:30 $0^{\circ}\Pi$ -11541 Nov 04 j 07:45 0∘**⊽** -11536 Sep 14 j 11:30 -11541 Dec 19 j 11:42 -11536 Oct 23 j 15:26 0 \circ \odot evening set -11540 Jan 11 j 01:53 14° ML42'42 -11536 Dec 02 j 04:03 0 $^{\circ}\Omega$ -11540 Feb 03 j 18:42 -11535 Jan 12 j 05:29 0° m desc. node -11535 Jan 27 j 12:26 10° Mp 40'18 -11540 Feb 28 j 23:06 16° **₹** 08'48 -0°52'10 -11535 Feb 25 j 18:24 0∘**ত** conjunction

-11535 Apr 21 j 13:16

-11540 Feb 29 j 00:40 16° ₹ 11'18 0°52'47

minimum elong

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 37 Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style.							
retrograde	-11535 Jun 05 j 23:23	11°ML13'46			-11530 Aug 23 j 05:28	0 \circ \odot	
min. Earth dist.	-11535 Jul 10 j 16:30	3° M 19′13	0.60497 AU	evening set	-11530 Sep 09 j 20:28	13° 5 43'17	
opposition	-11535 Jul 15 j 14:30	1°M22'13	-5°22'45	desc. node	-11530 Sep 18 j 20:30	20°5541'14	
greatest brilliancy	-11535 Jul 14 j 17:33	1°ML43'01	-1.6m		-11530 Sep 30 j 23:15	$0^{\circ}\Omega$	
	-11535 Jul 19 j 02:12	30° ŖΩ			-11530 Nov 09 j 21:03	0° ™	
direct	-11535 Aug 21 j 21:55	22° ≏ 41′06					
	-11535 Sep 28 j 09:18	0° M ∙		conjunction	-11530 Nov 10 j 01:05	0° Mp 07′26	-0°37'09
	-11535 Dec 01 j 10:51	0° ∡ ¹		minimum elong	-11530 Nov 09 j 22:33	0° Mp 02′45	0°36'44
	-11534 Jan 22 j 07:36	0° ට		max. Earth dist.	-11530 Dec 21 j 04:23	29° Mp 43'43	2.49208 AU
asc. node	-11534 Jan 25 j 05:14	1° る 45'34			-11530 Dec 21 j 13:39	0∘ ⊽	
	-11534 Mar 11 j 05:54	0° ≈		morning rise	-11529 Jan 07 j 19:18	11° ≏ 58'44	
	-11534 Apr 25 j 06:51	0° ∀			-11529 Feb 03 j 09:32	0° M	
evening set	-11534 May 13 j 14:59	12°) 44 ′17			-11529 Mar 21 j 11:32	0° ∡ ¹	
max. Earth dist.	-11534 May 29 j 23:25	24° ¥ 21′07	2.46932 AU		-11529 May 09 j 02:22	8°0	
	-11534 Jun 06 j 19:20	$0^{\circ}\Upsilon$			-11529 Jul 01 j 03:02	0° ≈	
				asc. node	-11529 Sep 17 j 16:52	28° ≈ 32'11	
conjunction	-11534 Jul 06 j 16:59	22° Y ′02'43	1°12'54	retrograde	-11529 Sep 24 j 14:18	28° ≈ 49′25	
minimum elong	-11534 Jul 06 j 16:22	22° Y ′01'34	1°13'06	opposition	-11529 Oct 31 j 14:17	20° ≈ 33′27	1°56'46
	-11534 Jul 17 j 06:30	9° 8		greatest brilliancy	-11529 Oct 31 j 23:24	20° ≈ 24'45	-1.7m
	-11534 Aug 25 j 08:27	$\Pi^{\circ}0$		min. Earth dist.	-11529 Nov 06 j 16:16	18° ≈ 14'12	0.58747 AU
morning rise	-11534 Sep 02 j 21:51	6° Ⅲ 39′13		direct	-11529 Dec 10 j 22:19	10° ≈ 49'14	
	-11534 Oct 02 j 20:30	0 \circ \odot			-11528 Feb 11 j 13:39	0°) €	
	-11534 Nov 10 j 15:51	$0^{\circ}\Omega$			-11528 Apr 01 j 16:53	$0^{\circ}\Upsilon$	
desc. node	-11534 Dec 15 j 05:43	25° Ω 59'58			-11528 May 14 j 11:36	9° 8	
	-11534 Dec 20 j 16:18	0° m)			-11528 Jun 23 j 12:03	$\Pi^{\circ}0$	
	-11533 Jan 31 j 21:01	0∘ ⊽			-11528 Aug 01 j 13:45	0 \circ \odot	
	-11533 Mar 18 j 15:20	0° M ∙		desc. node	-11528 Aug 05 j 21:21	3°9519'05	
	-11533 May 11 j 02:54	0° ∡ ¹			-11528 Sep 09 j 21:17	$0^{\circ}\Omega$	
retrograde	-11533 Jul 12 j 06:12	18° ∡ ¹05′25			-11528 Oct 20 j 07:37	0° ™	
min. Earth dist.	-11533 Aug 19 j 23:29	8° ∡ ¹44'33	0.66026 AU	evening set	-11528 Nov 07 j 13:29	13° m 09'36	
opposition	-11533 Aug 21 j 03:05	8° ∡ 16'41	-4°00'23		-11528 Dec 01 j 10:26	0∘ ⊽	
greatest brilliancy	-11533 Aug 20 j 23:58	8° ∡ 19'50	-1.4m				
	-11533 Sep 15 j 19:33	30°RM₊		conjunction	-11527 Jan 01 j 01:15	20° ჲ 59'48	-1°13'48
direct	-11533 Sep 29 j 17:01	28° ML $43'25$		minimum elong	-11527 Jan 01 j 00:31	20° ჲ 58'33	1°13'59
	-11533 Oct 14 j 11:12	0° ∡ ¹			-11527 Jan 14 j 11:11	0° M	
asc. node	-11533 Dec 13 j 10:17	21° ∡ 57′28		max. Earth dist.	-11527 Jan 24 j 21:41	6°M56′02	2.59740 AU
	-11533 Dec 28 j 23:22	0° ප		morning rise	-11527 Feb 21 j 18:53	25° ™ 10′32	
	-11532 Feb 18 j 12:47	0° ≈			-11527 Mar 01 j 06:05	0° ∡	
	-11532 Apr 04 j 16:44	0°) €			-11527 Apr 17 j 10:28	0°ප	
	-11532 May 17 j 11:40	$0^{\circ}\Upsilon$			-11527 Jun 04 j 20:05	0° ≈	
	-11532 Jun 26 j 20:55	9° 8			-11527 Jul 25 j 07:05	0° ∀	
evening set	-11532 Jul 06 j 15:47	7° 呂 28'09		asc. node	-11527 Aug 04 j 13:51	5°) 49′02	
	-11532 Aug 04 j 17:57	$\Pi^{\circ}0$			-11527 Sep 21 j 03:39	$0^{\circ}\Upsilon$	
				retrograde	-11527 Nov 14 j 08:47	14° Y ′00′33	
conjunction	-11532 Sep 05 j 22:12	25° Ⅱ 12'53	0°40'47	opposition	-11527 Dec 18 j 02:07	7° Y °22′58	5°54'38
minimum elong	-11532 Sep 06 j 01:23	25° Ⅱ 19'07	0°41'23	greatest brilliancy	-11527 Dec 19 j 15:01	6° Ƴ 51'57	-2.2m
	-11532 Sep 12 j 00:42	0 \circ \odot		min. Earth dist.	-11527 Dec 26 j 02:51	4° Ƴ 42'05	0.47412 AU
max. Earth dist.	-11532 Sep 18 j 09:26		2.38375 AU		-11526 Jan 14 j 03:44		
	-11532 Oct 20 j 15:10	$0 {\circ} \Omega$		direct	-11526 Jan 24 j 03:44		
desc. node	-11532 Nov 01 j 00:15	8° Ω 41'55			-11526 Feb 03 j 09:02	0 ° Υ	
morning rise	-11532 Nov 09 j 18:15	15° Ω 19'50			-11526 Apr 13 j 20:11	9° 8	
	-11532 Nov 29 j 09:40	0° m)			-11526 May 28 j 14:41	Π $^{\circ}0$	
	-11531 Jan 10 j 01:24	0∘ ⊽		desc. node	-11526 Jun 24 j 01:57	19° Ⅱ 01'34	
	-11531 Feb 23 j 05:20	0° M			-11526 Jul 09 j 02:44	0	
	-11531 Apr 11 j 17:14	0° ∡ 7			-11526 Aug 19 j 02:43	0 \circ Ω	
	-11531 Jun 04 j 11:59	0° ろ			-11526 Sep 29 j 20:24	0° m)	
retrograde	-11531 Aug 15 j 18:35	22° る 22'05			-11526 Nov 11 j 23:06	0∘ ⊽	
opposition	-11531 Sep 23 j 18:19	13° る 06'44		evening set	-11526 Dec 25 j 13:36		
greatest brilliancy	-11531 Sep 23 j 22:08	13° る 02'56			-11526 Dec 26 j 15:58	0°M₊	
min. Earth dist.	-11531 Sep 26 j 08:24		0.65388 AU		-11525 Feb 10 j 17:02	0°⊀	
asc. node	-11531 Oct 30 j 15:20	3° ප 14'50					
direct	-11531 Nov 03 j 11:47	3° ⋜ 09'01		conjunction	-11525 Feb 13 j 10:41	1° ∡ ⁴45'44	
	-11530 Jan 22 j 14:13	0° ≈		minimum elong	-11525 Feb 13 j 12:07	1° х 48′02	
	-11530 Mar 13 j 20:40	0° ∀		max. Earth dist.	-11525 Feb 20 j 20:30		2.65510 AU
	-11530 Apr 26 j 22:03	0° Υ			-11525 Mar 29 j 12:32	0°ಕ	
	-11530 Jun 06 j 18:07	0°8		morning rise	-11525 Apr 02 j 09:34	2° る 28'35	
	-11530 Jul 15 j 19:39	П°0			-11525 May 15 j 11:01	0° ≈	

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Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23,
Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style.
asc. node
                    -11525 Jun 22 j 07:01 24°≈17'26
                                                                                              -11520 Oct 16 i 17:44
                                                                                                                      0^{\circ}M
                    -11525 Jul 01 j 03:53
                                                                                              -11520 Dec 11 j 01:03
                                                                                                                      0°×7
                                           0°₩
                    -11525 Aug 16 j 19:59
                                            0^{\circ}\Upsilon
                                                                                              -11519 Jan 30 j 03:28
                                                                                                                      0°궁
                    -11525 Oct 03 j 12:10
                                                                                              -11519 Feb 10 j 18:52
                                                                                                                      7°る13'49
                                           0°8
                                                                         asc. node
                    -11525 Nov 25 j 00:03
                                           0^{\circ}\Pi
                                                                                              -11519 Mar 18 j 11:49
                                                                                                                      0°≈
                    -11524 Jan 26 j 23:36 19°Ⅲ22'04
retrograde
                                                                         evening set
                                                                                              -11519 Apr 25 j 09:25 25°≈13'10
opposition
                    -11524 Feb 26 j 19:34 14°Ⅲ13'00
                                                        5°22'32
                                                                                              -11519 May 02 j 09:16
                                                                                                                      0°)
greatest brilliancy
                                                                         max. Earth dist.
                    -11524 Feb 27 j 05:27 14°Ⅲ06'22
                                                        -2.9m
                                                                                              -11519 May 12 j 17:53
                                                                                                                      7°₭09'19 2.51606 AU
                                                                                                                      0^{\circ}\Upsilon
min. Earth dist.
                    -11524 Feb 27 j 21:34 13°Ⅲ55'33
                                                        0.38516 AU
                                                                                              -11519 Jun 13 j 23:18
direct
                    -11524 Mar 28 j 14:52
                                           8°Ⅲ59'17
                                                                                                                      1°Y36'42 1°05'28
desc. node
                    -11524 May 11 j 06:52 19°Ⅲ43'40
                                                                         conjunction
                                                                                              -11519 Jun 16 j 04:46
                    -11524 Jun 01 j 04:46
                                                                                              -11519 Jun 16 j 03:02
                                                                                                                      1°Y33'32 1°05'25
                                            0ംខ
                                                                           minimum elong
                                                                                              -11519 Jul 24 j 14:25
                    -11524 Jul 21 j 07:32
                                            0^{\circ}\Omega
                                                                                                                      0°8
                    -11524 Sep 05 j 08:54
                                            0° m
                                                                         morning rise
                                                                                              -11519 Aug 09 j 14:50 12°808'15
                    -11524 Oct 21 j 00:34
                                            0∘⊽
                                                                                              -11519 Sep 01 j 21:16
                                                                                                                      0^{\circ}II
                    -11524 Dec 06 j 06:16
                                            0°M
                                                                                              -11519 Oct 10 j 14:16
                                                                                                                      0ಂತಾ
                    -11523 Jan 22 j 03:13
                                            0°∡¹
                                                                                              -11519 Nov 18 j 14:16
                                                                                                                      0^{\circ}\Omega
evening set
                    -11523 Feb 03 j 18:27
                                            8°х¹03'04
                                                                                              -11519 Dec 28 j 20:37
                                                                                                                      0° m
                    -11523 Mar 10 j 03:46
                                            0°る
                                                                         desc. node
                                                                                              -11518 Jan 01 j 03:07
                                                                                                                      2° m 22'21
max. Earth dist.
                    -11523 Mar 16 j 05:32
                                            3°る53'30 2.65992 AU
                                                                                              -11518 Feb 09 j 13:29
                                                                                              -11518 Mar 28 j 20:47
conjunction
                    -11523 Mar 23 i 19:59
                                            -11518 May 31 j 12:49
                                                                                                                      0°×7
 minimum elong
                    -11523 Mar 23 j 21:01
                                            8°る47'58
                                                      0°27'45
                                                                                              -11518 Jun 28 j 13:11
                                                                                                                     4°х 32′20
                                                                         retrograde
                    -11523 Apr 25 i 15:09
                                            0°≈
                                                                                              -11518 Jul 24 j 09:16 30°RM
asc. node
                    -11523 May 08 j 23:12
                                            8°≈43'59
                                                                         min. Earth dist.
                                                                                              -11518 Aug 04 j 19:53 25°ML41'34 0.64568 AU
                    -11523 May 09 j 16:27
                                            9°≈12'21
                                                                                              -11518 Aug 07 j 11:13 24°M 37'45 -4°42'16
morning rise
                                                                         opposition
                    -11523 Jun 09 j 23:55
                                            0°₩
                                                                         greatest brilliancy
                                                                                              -11518 Aug 07 j 01:46 24°ML47'17 -1.4m
                    -11523 Jul 24 j 01:22
                                            0^{\circ}\Upsilon
                                                                                              -11518 Sep 15 j 06:47 15°M21'27
                                                                         direct
                    -11523 Sep 04 j 23:05
                                            0°8
                                                                                              -11518 Nov 10 j 16:34 0° ⊀
                    -11523 Oct 17 j 04:25
                                            0^{\circ}\Pi
                                                                                              -11518 Dec 29 j 23:21 24° ₹ 53'28
                                                                         asc. node
                    -11523 Nov 28 j 15:03
                                                                                              -11517 Jan 08 j 00:10 0°♂
                                            0ಂತಾ
                    -11522 Jan 12 j 14:42
                                                                                              -11517 Feb 26 j 15:14 0°≈
                                           0^{\circ}\Omega
                    -11522 Mar 15 j 17:36 0° Mp
                                                                                              -11517 Apr 13 j 05:28 0°米
                    -11522 Mar 29 j 09:00 2° m 25'40
                                                                                              -11517 May 25 j 20:42 0°Υ
desc. node
                    -11522 Apr 04 j 21:12 2° m 43'29
                                                                                              -11517 Jun 14 j 17:24 14°Y34'53
retrograde
                                                                         evening set
                    -11522 Apr 24 j 17:11 30°RΩ
                                                                                              -11517 Jul 05 j 05:54 0°8
                    -11522 May 02 j 19:04 27^{\circ}\Omega36'02 0.44757 \text{ AU}
min. Earth dist.
                                                                         max. Earth dist.
                                                                                              -11517 Jul 13 j 11:26
                                                                                                                     6°816'19
                                                                                                                                2.39986 AU
opposition
                    -11522 May 10 j 16:56 24^{\circ}\Omega58'31 -2^{\circ}47'12
greatest brilliancy
                    -11522 May 09 j 19:56 25^{\circ}\Omega16'01 -2.5m
                                                                         conjunction
                                                                                              -11517 Aug 12 j 06:22 29°817'44 1°03'07
direct
                    -11522 Jun 12 j 01:14 18° Ω36'53
                                                                          minimum elong
                                                                                              -11517 Aug 12 j 09:05 29°823'02 1°03'37
                    -11522 Jul 28 j 21:20 0° M
                                                                                              -11517 Aug 13 j 04:03 0°Ⅱ
                    -11522 Sep 25 j 07:00 0°♀
                                                                                              -11517 Sep 20 j 12:03 0°5
                    -11522 Nov 14 j 21:26 0°M
                                                                                              -11517 Oct 14 j 22:07 19°501'50
                                                                         morning rise
                    -11521 Jan 02 j 18:12 0° ₹
                                                                                              -11517 Oct 29 j 03:20 0°Ω
                    -11521 Feb 19 j 15:01 0°ਰ
                                                                                              -11517 Nov 18 j 19:27 15°\Omega43'38
                                                                         desc. node
                                                                                              -11517 Dec 07 j 22:39 0° m
evening set
                    -11521 Mar 15 j 04:53 15°る03'47
asc. node
                    -11521 Mar 26 j 18:26 22°る32'30
                                                                                              -11516 Jan 18 j 16:50
                    -11521 Apr 07 i 04:52 0°≈
                                                                                              -11516 Mar 03 i 05:19
max. Earth dist.
                    -11521 Apr 11 j 08:22 2°≈43'18 2.61188 AU
                                                                                              -11516 Apr 20 j 23:02
                                                                                                                     0°∡7
                                                                                              -11516 Jun 20 j 06:57
                    -11521 May 02 j 18:22 16°≈56'22 0°22'27
                                                                                              -11516 Aug 01 j 18:53
                                                                                                                     9°ප13'57
conjunction
                                                                         retrograde
                    -11521 May 02 j 17:27 16°≈54'49 0°21'58
                                                                                              -11516 Sep 09 j 12:22 30°R ✓
 minimum elong
                    -11521 May 22 j 01:41 0°₩
                                                                         opposition
                                                                                              -11516 Sep 10 j 05:36 29° ₹ 42'42 -2°34'37
                    -11521 Jun 20 j 06:33 20°) € 13'51
morning rise
                                                                         greatest brilliancy
                                                                                              -11516 Sep 10 j 08:39 29° ₹39'38 -1.4m
                                           0^{\circ}\Upsilon
                    -11521 Jul 04 j 01:56
                                                                         min. Earth dist.
                                                                                              -11516 Sep 11 j 08:42 29° ₹ 15'28
                                                                                                                                 0.66367 AU
                    -11521 Aug 14 j 09:57
                                            0°8
                                                                         direct
                                                                                              -11516 Oct 20 j 15:36 19° ₹51'14
                    -11521 Sep 23 j 13:15
                                            0^{\circ}\Pi
                                                                                              -11516 Nov 16 j 04:54 23° ₹ 44'43
                                                                         asc. node
                    -11521 Nov 02 j 04:24
                                            0ಂಣ
                                                                                              -11516 Dec 04 j 20:30 0°궁
                    -11521 Dec 12 j 06:24
                                            0^{\circ}\Omega
                                                                                              -11515 Feb 02 j 13:27
                                                                                                                      0°≈
                    -11520 Jan 23 j 06:53
                                                                                                                      0°∀
                                            0° m
                                                                                              -11515 Mar 22 j 13:13
                                                                                                                      0^{\circ}\Upsilon
desc. node
                    -11520 Feb 14 j 08:37 14° Mp 40'25
                                                                                              -11515 May 04 j 22:44
                    -11520 Mar 10 j 14:01
                                           0∘⊽
                                                                                              -11515 Jun 14 j 12:52
                                                                                                                      0°8
retrograde
                    -11520 May 21 j 14:04 25°♀08'41
                                                                                              -11515 Jul 23 j 11:25
                                                                                                                      \Pi^{\circ}0
min. Earth dist.
                    -11520 Jun 23 j 09:12 17°♀57'31
                                                        0.56745 AU
                                                                         evening set
                                                                                              -11515 Aug 15 j 02:08 17°Ⅲ41'54
opposition
                    -11520 Jun 29 j 16:39 15°-230'41 -5°25'22
                                                                                              -11515 Aug 30 j 18:53
                                                                                                                      0ಂತಾ
                    -11520 Jun 28 j 12:51 15°♀57'42
                                                                                              -11515 Oct 05 j 14:40 27°550'32
greatest brilliancy
                                                                         desc. node
```

-11515 Oct 08 j 10:04 0° Ω

-11520 Aug 04 j 19:37 7°**♀**19'25

direct

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. -11515 Oct 16 j 18:30 $6^{\circ}\Omega 23'15 -0^{\circ}08'28$ -11510 Oct 20 j 01:18 0°8 conjunction -11515 Oct 16 j 17:48 6°**Ω**21'55 0°07'56 -11510 Dec 26 j 23:34 20°857'35 minimum elong retrograde -11515 Oct 15 j 18:16 -11509 Jan 27 j 05:19 15°**8**32'00 behind sun begin 5°**Ω**37'05 opposition 6°55'28 -11515 Oct 17 j 17:20 behind sun end 7°**Ω**06'43 greatest brilliancy -11509 Jan 28 j 14:58 15°**8**07'45 -2.7m -11515 Nov 17 j 05:13 -11509 Feb 01 j 19:29 13°**8**55'40 min. Earth dist. 0.40698 AU max. Earth dist. -11515 Nov 30 j 09:48 9° Mp 40'14 2.44315 AU direct -11509 Mar 01 j 09:27 9°**8**23'00 morning rise -11515 Dec 17 j 17:47 22° Mp 09'03 -11509 May 02 j 19:15 $0^{\circ}\Pi$ -11515 Dec 28 j 19:57 0∘<u>ଫ</u> desc. node -11509 May 28 j 22:30 15°**Ⅱ**31'49 -11514 Feb 10 j 16:34 0°M -11509 Jun 20 j 05:41 0ംഇ 0°**∡**7 -11514 Mar 29 j 02:34 -11509 Aug 03 j 07:35 $0^{\circ}\Omega$ -11514 May 17 j 21:46 0°궁 -11509 Sep 15 j 21:32 0° M -11514 Jul 14 j 23:18 -11509 Oct 30 j 05:12 0∘**⊽** retrograde -11514 Sep 08 j 06:03 14°≈15'01 -11509 Dec 14 j 16:24 0°M asc. node -11514 Oct 04 j 08:37 9°≈50'31 evening set -11508 Jan 20 j 06:06 23°M 39'11 opposition -11514 Oct 16 j 04:07 5°≈32'11 0°30'28 -11508 Jan 30 j 03:22 0°**∡**7 greatest brilliancy -11514 Oct 16 j 06:00 5°≈30'22 -1.6m max. Earth dist. -11508 Mar 06 j 20:50 23°**尽** 30'09 2.66444 AU min. Earth dist. -11514 Oct 20 j 22:28 3°**≈**40'37 0.62018 AU -11514 Oct 31 j 02:04 30°R ₹ conjunction -11508 Mar 08 j 17:44 24° **₹** 41'57 -0°43'42 direct -11514 Nov 25 j 21:06 25°る36'26 minimum elong -11508 Mar 08 j 19:11 24° ₹ 44'17 -11514 Dec 23 j 14:30 -11508 Mar 17 j 00:30 0°ਰ -11513 Feb 25 j 05:35 0°**₩** morning rise -11508 Apr 24 j 17:09 24°る53'22 -11513 Apr 12 j 16:09 $0^{\circ}\Upsilon$ -11508 May 02 j 14:28 0°≈ -11513 May 24 i 09:11 0°8 asc. node -11508 May 25 i 17:48 15°≈05'22 -11513 Jul 02 j 21:23 $0^{\circ}\Pi$ -11508 Jun 17 i 08:47 0°**)** -11513 Aug 10 j 14:43 0°ഇ -11508 Aug 01 j 04:04 $0^{\circ}\Upsilon$ -11513 Aug 23 j 14:16 10°502'44 -11508 Sep 14 j 06:21 0°8 desc node -11513 Sep 18 j 14:54 0°Ω -11508 Oct 28 j 08:12 0°П -11513 Oct 17 j 19:36 21° Ω 55'45 -11508 Dec 13 j 04:08 0ಂತಾ evening set -11513 Oct 28 j 18:29 0° Mp -11507 Feb 08 j 11:31 $0^{\circ}\Omega$ -11513 Dec 09 j 15:35 0°**♀** -11507 Mar 12 j 02:17 6°**Ω**14'47 retrograde -11507 Apr 08 j 14:34 1°**Ω**34'32 min. Earth dist. 0.40612 AU -11513 Dec 13 j 22:00 2°**2**58'48 -1°06'06 conjunction -11507 Apr 13 j 21:19 30°Rூ -11513 Dec 13 j 20:00 2°**£**55'20 1°06'05 opposition -11507 Apr 14 j 13:43 29°547'43 0°02'37 minimum elong -11512 Jan 13 j 19:14 24°**2**08'35 2.56105 AU -11507 Sep 01 j 07:23 8° m 53'05 max. Earth dist. greatest brilliancy -4.3m -11512 Jan 22 j 12:39 0°M -11507 Apr 15 j 03:40 29°537'19 desc. node -11512 Feb 06 j 00:12 9°M 36'52 -11507 May 15 j 10:56 24°514'58 morning rise direct -11507 Jun 16 j 01:01 $0^{\circ}\Omega$ -11512 Mar 08 j 08:06 0° ₹ -11512 Apr 24 j 21:20 0°궁 -11507 Aug 17 j 02:06 -11512 Jun 13 j 10:17 0°≈ -11507 Oct 06 j 02:31 -11512 Aug 06 j 11:35 0°**米** -11507 Nov 23 j 07:52 0°M asc. node -11512 Aug 21 j 07:56 7°**米** 13'43 -11506 Jan 10 j 04:31 -11512 Oct 23 j 02:03 24° **€** 54'59 -11506 Feb 26 j 15:12 0°궁 retrograde -11512 Nov 27 j 05:40 17°**米** 33'20 4°24'30 -11506 Feb 27 j 20:03 0°₹45'59 opposition evening set -11512 Nov 28 j 07:56 17°**米**09'43 -2.0m max. Earth dist. -11506 Mar 31 j 19:35 21°**ਰ**19'50 greatest brilliancy 2.63678 AU -11512 Dec 04 j 22:03 14° **X** 48'09 0.52179 AU asc. node -11506 Apr 12 j 11:05 28° ₹55'06 min. Earth dist. direct -11511 Jan 05 j 01:11 8° \(\cdot\) 34'30 -11506 Apr 14 i 02:46 -11511 Mar 11 j 00:31 -11511 Apr 27 j 16:21 0°8 conjunction -11506 Apr 16 j 22:11 1°≈50'28 0°02'45 -11511 Jun 08 j 11:55 0°**Ⅱ** minimum elong -11506 Apr 16 j 22:07 1°≈50'22 0°02'10 desc. node -11511 Jul 10 i 16:48 24° **1**102'40 behind sun begin -11506 Apr 16 i 02:23 1°≈18'01 -11511 Jul 18 j 15:01 0°ഇ behind sun end -11506 Apr 17 j 17:51 2°≈22'43 -11511 Aug 27 j 17:25 -11506 May 29 j 02:58 0°**₩** $0^{\circ}\Omega$ -11511 Oct 07 j 19:00 -11506 Jun 03 j 09:18 3°**₩**35'01 morning rise $0^{\circ}\Upsilon$ -11511 Nov 19 j 09:45 0°**♀** -11506 Jul 11 j 10:58 -11511 Dec 08 j 01:12 12°**2**45'01 -11506 Aug 22 j 06:24 0°8 evening set -11510 Jan 02 j 18:19 0°M -11506 Oct 01 j 23:44 $\Pi^{\circ}0$ -11506 Nov 11 j 07:45 0ಂತಾ -11510 Jan 28 j 08:45 16°M 50'45 -1°12'04 -11506 Dec 22 j 08:59 $0^{\circ}\Omega$ conjunction -11510 Jan 28 j 09:39 16°M 52'13 1°12'30 minimum elong -11505 Feb 04 j 09:04 0° m -11510 Feb 10 j 22:52 25° ML40'39 2.63878 AU max. Earth dist. desc. node -11505 Mar 03 j 03:25 16° m 00'31 -11510 Feb 17 j 15:17 0°**⊼** -11505 Apr 01 j 17:42 0∘ଫ morning rise -11510 Mar 18 j 10:23 18° ₹ 28'57 retrograde -11505 May 05 j 17:12 7°**₽**03'02 -11510 Apr 05 j 12:13 0°ಕ min. Earth dist. -11505 Jun 05 j 11:04 0°**£**40'18 0.52282 AU -11510 May 22 j 20:24 0°**≈** -11505 Jun 07 j 06:58 30° R My

opposition

direct

greatest brilliancy

-11505 Jun 12 j 22:12 27° M 53'31 -4°59'55

-11505 Jun 11 j 14:46 28° M 22'57

-11505 Jul 17 j 16:54 20° m 19'16

asc. node

-11510 Jul 09 j 02:01 29°≈42'30

0°**)**€

-11510 Jul 09 j 13:13

-11510 Aug 27 j 10:18

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. -11505 Aug 29 j 22:44 0°**♀** -11500 Oct 26 j 01:58 7°**Ω**49'01 2.39854 AU max. Earth dist. -11505 Oct 29 i 23:58 0°M -11500 Nov 24 i 04:53 29° Ω 41'43 morning rise

	-11505 Oct 29 j 23:58	0° M		morning rise	-11500 Nov 24 j 04:53	29° Ω 41'43	
	-11505 Dec 20 j 16:07	0° ∡ ¹			-11500 Nov 24 j 14:46	0° ™	
	-11504 Feb 07 j 15:26	8°0			-11499 Jan 05 j 05:06	0∘ ⊽	
asc. node	-11504 Feb 28 j 09:52	13° る 06'32			-11499 Feb 18 j 04:34	0°M₊	
	-11504 Mar 25 j 14:25	0° ≈			-11499 Apr 06 j 03:42	0° ∡ 7	
evening set	-11504 Apr 08 j 08:25	9° ≈ 02'45			-11499 May 27 j 22:32	0° ට	
max. Earth dist.	-11504 Apr 28 j 19:41	22° ≈ 45′26	2.55858 AU		-11499 Aug 15 j 07:51	0° ≈	
	-11504 May 09 j 10:42	0°) €		retrograde	-11499 Aug 24 j 02:01	0° ≈ 27'48	
				•	-11499 Sep 01 j 12:44	30°Rる	
conjunction	-11504 May 28 j 12:06	13° ¥ 12'24	0°51'23	opposition	-11499 Oct 01 j 17:42		-0°47'51
minimum elong	-11504 May 28 j 10:13			greatest brilliancy	-11499 Oct 01 j 20:25		
	-11504 Jun 21 j 03:50	0° Υ		min. Earth dist.	-11499 Oct 05 j 02:21		
morning rise	-11504 Jul 18 j 23:03			asc. node	-11499 Oct 21 j 00:03		0.01.00110
morning rise	-11504 Aug 01 j 00:22	0°8		direct	-11499 Nov 11 j 12:36		
	-11504 Sep 09 j 13:25	0°II		ancet	-11498 Jan 14 j 01:42	0°≈	
	-11504 Oct 18 j 12:47	0.∞ 0 H			-11498 Mar 07 j 21:06	0° ∀	
	-11504 Nov 26 j 19:29	$0 {\circ} \mathcal{U}$			-11498 Apr 21 j 14:38	0° Υ	
	-11504 Nov 20 j 19:29 -11503 Jan 06 j 11:23	0° m)			-11498 Jun 01 j 17:06	0° 8	
desc. node	-11503 Jan 17 j 22:45					0°I	
desc. node	·	8°₯09'14 0° <u>乒</u>			-11498 Jul 10 j 21:39	0°©	
	-11503 Feb 19 j 01:56			1 1	-11498 Aug 18 j 09:23		
	-11503 Apr 10 j 14:35	0°M		desc. node	-11498 Sep 09 j 07:07		
retrograde	-11503 Jun 14 j 10:08		0.62100.477	evening set	-11498 Sep 24 j 02:22		
min. Earth dist.	-11503 Jul 20 j 02:11				-11498 Sep 26 j 04:27	0° N	
opposition	-11503 Jul 24 j 05:04				-11498 Nov 05 j 03:11	0° ™	
greatest brilliancy	-11503 Jul 23 j 12:16		-1.5m				
direct	-11503 Aug 31 j 02:18	1°M26'51		conjunction	-11498 Nov 22 j 23:11		
_	-11503 Nov 24 j 08:30	0° ∡ ¹		minimum elong	-11498 Nov 22 j 20:27		0°49'55
asc. node	-11502 Jan 15 j 13:19				-11498 Dec 16 j 20:20	0∘ ⊽	
	-11502 Jan 16 j 20:49	0° る		max. Earth dist.	-11498 Dec 30 j 18:34		2.51823 AU
	-11502 Mar 06 j 07:42	0° ≈		morning rise	-11497 Jan 18 j 22:34		
	-11502 Apr 20 j 13:21	0° ∀			-11497 Jan 29 j 15:23	0°M₊	
evening set	-11502 May 24 j 18:39	23° ¥ 58'43			-11497 Mar 16 j 13:37	0° ∡	
	-11502 Jun 02 j 03:14	0° Υ			-11497 May 03 j 16:20	0°ප	
max. Earth dist.	-11502 Jun 11 j 12:00	6° Ƴ 49'26	2.44316 AU		-11497 Jun 24 j 00:36	0° ≈	
	-11502 Jul 12 j 14:07	9° 8			-11497 Aug 25 j 18:09	0° ∀	
				asc. node	-11497 Sep 08 j 00:38	4°) 13′04	
conjunction	-11502 Jul 19 j 07:51	5° 8 07'12	1°12'50	retrograde	-11497 Oct 04 j 16:21	8°) €07'04	
minimum elong	-11502 Jul 19 j 08:23	5° 8 08'12	1°13'10	opposition	-11497 Nov 10 j 02:05	0°) €08'23	2°49'24
	-11502 Aug 20 j 14:51	$\Pi^{\circ}0$			-11497 Nov 10 j 11:01	30° R ≈	
morning rise	-11502 Sep 17 j 16:19	21° Ⅱ 53'42		greatest brilliancy	-11497 Nov 10 j 16:46	29° ≈ 54'36	-1.8m
	-11502 Sep 28 j 01:22	0 \circ \odot		min. Earth dist.	-11497 Nov 16 j 19:14	27° ≈ 37'17	0.56612 AU
	-11502 Nov 05 j 18:39	$0^{\circ}\Omega$		direct	-11497 Dec 20 j 00:20	20° ≈ 35'51	
desc. node	-11502 Dec 05 j 16:22	22° Ω 36′26			-11496 Jan 30 j 03:42	0° ∀	
	-11502 Dec 15 j 16:02	0° m)			-11496 Mar 25 j 14:43	$0^{\circ}\Upsilon$	
	-11501 Jan 26 j 14:59	0∘ ⊽			-11496 May 08 j 12:41	9° 8	
	-11501 Mar 12 j 18:00	0°M₊			-11496 Jun 18 j 00:34	$\Pi^{\circ}0$	
	-11501 May 02 j 17:50	0° ∡ ¹		desc. node	-11496 Jul 27 j 10:09	0°901'47	
retrograde	-11501 Jul 20 j 02:46	26° ₹ 07'54			-11496 Jul 27 j 09:13	0 \circ \odot	
opposition	-11501 Aug 28 j 20:53		-3°31'28		-11496 Sep 04 j 21:41	$0^{\circ}\Omega$	
greatest brilliancy	-11501 Aug 28 j 20:32				-11496 Oct 15 j 11:39	0° m y	
min. Earth dist.	-11501 Aug 28 j 12:32			evening set	-11496 Nov 19 j 02:33		
direct	-11501 Oct 07 j 19:04	6° ∡ ¹43'21		C	-11496 Nov 26 j 17:12	0∘ <u>ଫ</u>	
asc. node	-11501 Dec 03 j 19:13				-11495 Jan 09 j 19:20	0°M₊	
	-11501 Dec 21 j 10:16	0°ਰ				*•	
	-11500 Feb 12 j 22:11	0° ≈		conjunction	-11495 Jan 11 j 08:28	1°M01'52	-1°14'54
	-11500 Mar 30 j 15:30	0°) €		minimum elong	-11495 Jan 11 j 08:26	1° M .01'47	
	-11500 May 12 j 15:20	0° Υ		max. Earth dist.	-11495 Jan 31 j 10:18		
	-11500 May 12 j 13:20 -11500 Jun 22 j 02:20	0°8		max. Durin dist.	-11495 Feb 24 j 13:57	0° √	2.01727 AU
evening set	-11500 Jul 22 j 02:20 -11500 Jul 20 j 14:05			morning rise	-11495 Mar 03 j 00:07	0 x ⁴ 4° x ⁴08'23	
evening set	-11500 Jul 20 j 14:03 -11500 Jul 30 j 23:47	0° Ⅱ		morning 1150	-11495 Mar 03 j 00:07 -11495 Apr 12 j 14:30	4 x 08 23 0°る	
	-11500 Jul 30 j 25:47 -11500 Sep 07 j 06:34	0. о п			-11495 May 30 j 12:49	0°≈	
	-11300 sep 0/J 00.34	U -29			-11495 May 30 J 12:49 -11495 Jul 18 j 17:31	0° ∺	
conjunction	-11500 Sep 20 j 21:02	1006320117	0023146	asc. node	-11495 Jul 18 j 17:31 -11495 Jul 25 j 20:17	0° π 4° ℋ 13'23	
				asc. noue		4°π13′23 0°Υ	
minimum elong	-11500 Sep 20 j 23:11 -11500 Oct 15 j 20:50	10°942'29 0° Ω	0 24 23	ratragrada	-11495 Sep 09 j 17:31 -11495 Nov 28 j 15:34		
desc. node	-11500 Oct 15 j 20:50 -11500 Oct 22 j 09:28	5° Ω 00'10		retrograde opposition	-11495 Nov 28 j 15:34 -11495 Dec 31 j 10:57		6°34'22
acse. Houc	11300 Oct 22 J 09.20	2 3600 10		оррознин	11775 Dec 31 J 10.37	20 12410	J J7 LL

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 41

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Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style.
                    -11494 Jan 02 j 03:09 19^{\circ} \( \gamma 52' 13 \) -2.4m
                                                                                               -11489 Apr 02 j 14:25
greatest brilliancy
min. Earth dist.
                    -11494 Jan 08 j 05:00 17°Υ56'51 0.44795 AU
                                                                                               -11489 Apr 17 j 18:04
                                                                          max. Earth dist.
                                                                                                                       9°≈59'10 2.59468 AU
                    -11494 Feb 05 j 06:46 12° Υ 58'24
direct
                    -11494 Apr 01 j 20:27
                                                                          conjunction
                                                                                               -11489 May 12 j 05:13 26°≈25'15 0°33'35
                                            _0°႘
                    -11494 May 20 j 18:01
                                                                                               -11489 May 12 j 03:51 26°≈22'55
                                            0^{\circ}\Pi
                                                                            minimum elong
                                                                                                                                   0°33'10
                    -11494 Jun 14 j 14:38 17°Ⅲ11'36
                                                                                               -11489 May 17 j 11:10
desc. node
                                                                                                                       0° <del>)(</del>
                    -11494 Jul 02 j 15:04
                                                                                                                       0^{\circ}
                                            0\circ\odot
                                                                                               -11489 Jun 29 j 08:49
                                                                                                                       0°Υ52'02
                    -11494 Aug 13 j 09:17
                                             0^{\circ}\Omega
                                                                          morning rise
                                                                                               -11489 Jun 30 j 13:56
                    -11494 Sep 24 j 14:33
                                            0° m
                                                                                               -11489 Aug 09 j 12:38
                                                                                                                       0^{\circ}8
                    -11494 Nov 07 j 01:08
                                            0∘⊽
                                                                                               -11489 Sep 18 j 10:20
                                                                                                                       0^{\circ}\Pi
                    -11494 Dec 21 j 22:46
                                            0°M
                                                                                               -11489 Oct 27 j 18:58
                                                                                                                       0ಂತಾ
evening set
                    -11493 Jan 04 j 03:29
                                             8^{\circ}M_38'53
                                                                                               -11489 Dec 06 j 12:23
                                                                                                                       0^{\circ}\Omega
                    -11493 Feb 06 j 02:17
                                            0°∡7
                                                                                               -11488 Jan 16 j 20:54
                                                                                                                       0° M
                                                                          desc. node
                                                                                               -11488 Feb 04 j 18:36 12° m 58'56
conjunction
                    -11493 Feb 22 j 10:25 10°尽 29'50 -0°57'37
                                                                                               -11488 Mar 02 j 05:09
                                                                                                                       0∘⊽
 minimum elong
                    -11493 Feb 22 j 11:58 10° ₹32'19
                                                        0°58'12
                                                                                               -11488 May 01 j 22:28
                                                                                                                       0°M
max. Earth dist.
                    -11493 Feb 26 j 12:48 13°尽07'29
                                                        2.66062 AU
                                                                          retrograde
                                                                                               -11488 May 30 j 13:40
                                                                                                                       4°M57'12
                    -11493 Mar 24 j 21:37
                                            0°궁
                                                                                               -11488 Jun 26 j 07:36 30°R €
morning rise
                    -11493 Apr 10 j 22:25 10°る54'06
                                                                          min. Earth dist.
                                                                                               -11488 Jul 03 j 10:35 27° 221'27 0.58915 AU
                    -11493 May 10 j 16:25
                                            0°≈
                                                                          greatest brilliancy
                                                                                               -11488 Jul 07 j 23:48 25°234'02
                                                                                                                                  -1.7m
asc. node
                    -11493 Jun 12 j 12:23 21°≈13'38
                                                                          opposition
                                                                                               -11488 Jul 09 j 00:02 25° 210'08 -5° 26'47
                    -11493 Jun 26 i 00:08
                                            0°∀
                                                                          direct
                                                                                               -11488 Aug 14 j 18:48 16° 241'46
                    -11493 Aug 10 j 20:53
                                                                                               -11488 Oct 06 i 15:10
                                                                                                                       0^{\circ}M
                    -11493 Sep 25 i 20:44
                                            0°8
                                                                                               -11488 Dec 04 i 22:54
                                                                                                                       0° ₹
                    -11493 Nov 12 j 16:03
                                            0^{\circ}\Pi
                                                                                               -11487 Jan 25 i 00:41
                                                                                                                       0°궁
                    -11492 Jan 10 i 11:21
                                                                                               -11487 Feb 01 j 03:51
                                                                                                                       4°る22'20
                                            0ಂತಾ
                                                                          asc node
                    -11492 Feb 13 j 08:49
                                                                                               -11487 Mar 13 j 17:37
                                            6°9543'51
                                                                                                                       0°≈≈
retrograde
                    -11492 Mar 13 j 20:34
                                                                                               -11487 Apr 27 j 18:16
min. Earth dist.
                                            1°9649'39
                                                        0.38472 AU
                                                                                                                       0° <del>)(</del>
                                                                                               -11487 May 05 j 14:40
                    -11492 Mar 15 j 14:36
                                            1°521'12 3°37'18
                                                                          evening set
                                                                                                                       5°)€24'33
opposition
                    -11492 Mar 15 j 13:25 1°522'01
                                                                          max. Earth dist.
                                                                                               -11487 May 22 j 00:23 16° ¥ 53'12 2.49060 AU
greatest brilliancy
                                                        -2.9m
                    -11492 Mar 20 j 16:10 30°RⅡ
                                                                                               -11487 Jun 09 j 08:29
                                                                                                                       0^{\circ}\Upsilon
                    -11492 Apr 14 j 23:32 26° I 14'55
direct
                                                                                               -11487 Jun 27 j 14:18 13°Υ19'43 1°10'43
desc. node
                    -11492 May 01 j 19:00 28°Ⅲ01'18
                                                                          conjunction
                                                                                               -11487 Jun 27 j 13:04 13°Υ17'27
                    -11492 May 09 j 19:20 0°ഇ
                                                                           minimum elong
                    -11492 Jul 12 j 02:41 0°Ω
                                                                                               -11487 Jul 19 j 22:13 0°8
                    -11492 Aug 29 j 17:06 0° Mp
                                                                                               -11487 Aug 23 j 01:04 26°804'59
                                                                          morning rise
                                                                                               -11487 Aug 28 j 02:35 0°Ⅱ
                    -11492 Oct 15 j 11:03 0°♀
                    -11492 Dec 01 j 06:00 0°M
                                                                                               -11487 Oct 05 j 16:39
                                                                                                                       0ಂತಾ
                    -11491 Jan 17 j 09:54 0° ₹
                                                                                               -11487 Nov 13 j 13:23 0°Ω
evening set
                    -11491 Feb 12 j 14:00 16° ₹ 37'33
                                                                          desc. node
                                                                                               -11487 Dec 22 j 11:33 29° Ω09'47
                    -11491 Mar 05 j 13:24 0°る
                                                                                               -11487 Dec 23 j 14:58
max. Earth dist.
                    -11491 Mar 21 j 21:08 10°る28'05 2.65381 AU
                                                                                               -11486 Feb 03 j 22:43
                                                                                               -11486 Mar 22 j 03:28 0° M
                    -11491 Apr 01 j 13:47 17°♂21'45 -0°16'33
                                                                                               -11486 May 17 j 01:18 0° ⊀7
conjunction
                    -11491 Apr 01 j 14:28 17°₹22'50 0°17'10
                                                                                               -11486 Jul 06 j 12:07 12° ₹ 49'45
 minimum elong
                                                                          retrograde
                    -11491 Apr 21 i 00:32 0°≈
                                                                          min. Earth dist.
                                                                                               -11486 Aug 13 j 13:56 3° x 42'01 0.65497 AU
                    -11491 Apr 29 i 04:57
asc. node
                                            5°≈21'34
                                                                          opposition
                                                                                               -11486 Aug 15 i 09:52
                                                                                                                      2°∡ 57'41 -4°19'12
morning rise
                    -11491 May 18 j 12:33 18°≈07'36
                                                                          greatest brilliancy
                                                                                               -11486 Aug 15 i 04:05 3° ₹ 03'31 -1.4m
                    -11491 Jun 05 i 06:10 0°\
                                                                                               -11486 Aug 22 j 22:22 30°RM
                    -11491 Jul 19 i 00:52
                                            0^{\circ}\Upsilon
                                                                          direct
                                                                                               -11486 Sep 23 j 15:51 23°M31'37
                    -11491 Aug 30 j 12:09
                                                                                               -11486 Oct 28 j 22:03 0° ₹
                                            0°X
                    -11491 Oct 11 j 02:03 0°Ⅱ
                                                                                               -11486 Dec 20 j 08:25 23° ₹20'40
                                                                          asc node
                    -11491 Nov 21 j 13:13
                                                                                               -11485 Jan 01 j 16:19
                                                                                                                       0°궁
                                            0ಂತಿ
                    -11490 Jan 03 j 11:01
                                            0^{\circ}\Omega
                                                                                               -11485 Feb 21 j 09:32
                                                                                                                       0°22
                    -11490 Feb 21 j 19:49
                                                                                               -11485 Apr 08 j 08:52
                                                                                                                       0°)
desc. node
                    -11490 Mar 19 j 21:36 11° Mp 18'28
                                                                                               -11485 May 21 j 03:26
                                                                                                                       0^{\circ}\Upsilon
                                                                                               -11485 Jun 27 j 10:34 27°Y37'39
retrograde
                    -11490 Apr 16 j 20:22 16° Mp 19'19
                                                                          evening set
                    -11490 May 15 j 13:52 10° mp 47'07
                                                                                                                       0°8
min. Earth dist.
                                                        0.47401 AU
                                                                                               -11485 Jun 30 j 13:43
                    -11490 May 22 j 11:37
                                                                                                                       0^{\circ}\Pi
greatest brilliancy
                                             8° m/22'54
                                                        -2.3m
                                                                                               -11485 Aug 08 j 11:38
                    -11490 May 23 j 15:40
                                                                                                                       3°Д51'20 2.38477 AU
opposition
                                             7° m 58'19 -3°52'07
                                                                          max. Earth dist.
                                                                                               -11485 Aug 13 j 10:08
direct
                    -11490 Jun 25 j 22:17
                                             1° Mp 09'06
                    -11490 Sep 17 j 04:43
                                             0∘⊽
                                                                          conjunction
                                                                                               -11485 Aug 26 j 14:06 14°I09'43 0°51'53
                    -11490 Nov 09 j 00:37
                                             0°M
                                                                            minimum elong
                                                                                               -11485 Aug 26 j 17:25 14°II16'14 0°52'27
                    -11490 Dec 28 j 16:33
                                            0°∡¹
                                                                                               -11485 Sep 15 j 18:51
                                                                                                                       0\circ\odot
                    -11489 Feb 14 j 21:35
                                            0°궁
                                                                                               -11485 Oct 24 j 09:01
                                                                                                                       0^{\circ}\Omega
                    -11489 Mar 17 j 01:34 19° ₹ 15'06
                                                                                               -11485 Oct 30 j 06:00 4° Ω30'21
asc. node
                                                                          morning rise
                    -11489 Mar 24 j 04:50 23°₹52'19
                                                                                               -11485 Nov 09 j 06:07 12° Ω07'43
evening set
                                                                          desc. node
```

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Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23,
Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style.
                    -11485 Dec 03 i 02:34 0° m
                                                                                             -11479 Feb 25 i 07:35
                    -11484 Jan 13 j 17:43
                                                                                             -11479 Apr 19 j 20:31
                                            0∘⊽
                                                                                                                     0°X
                    -11484 Feb 26 j 22:55
                                                                                             -11479 Jun 02 j 01:34
                                                                                                                     0^{\circ}\Pi
                                            o°m.
                    -11484 Apr 14 j 19:29
                                            0°×7
                                                                                             -11479 Jul 01 j 05:50 21°Ⅲ23'24
                                                                         desc. node
                    -11484 Jun 09 j 09:32
                                                                                                                     0ಂತಾ
                                           0°궁
                                                                                             -11479 Jul 12 j 20:33
                    -11484 Aug 09 j 19:33 17°る12'42
retrograde
                                                                                             -11479 Aug 22 j 09:17
                                                                                                                     0^{\circ}\Omega
                                                                                             -11479 Oct 02 j 18:02
opposition
                    -11484 Sep 18 j 00:19
                                            7°る49'39 -1°57'40
                                                                                                                     0° m
greatest brilliancy
                    -11484 Sep 18 j 04:06
                                            7°る45'52
                                                      -1.4m
                                                                                             -11479 Nov 14 j 13:59
                                                                                                                     0∘ಹ
min. Earth dist.
                    -11484 Sep 19 j 22:22
                                            7°る03'34
                                                       0.65950 AU
                                                                         evening set
                                                                                             -11479 Dec 18 j 05:26 22°246'57
                    -11484 Oct 10 j 20:04 30°R ⊀
                                                                                             -11479 Dec 29 j 01:50
direct
                    -11484 Oct 28 j 14:48 27° ₹ 54'10
                                                                                             -11478 Feb 06 j 16:54 25°ML55'27 -1°08'01
asc. node
                    -11484 Nov 06 j 13:36 28° ₹23'26
                                                                         conjunction
                                                                                             -11478 Feb 06 j 18:10 25°ML57'30
                    -11484 Nov 16 j 16:19
                                            0°궁
                                                                          minimum elong
                                                                                                                                1°08'30
                    -11483 Jan 26 j 19:16
                                                                                             -11478 Feb 13 j 00:16
                                                                                                                     0°∡™
                    -11483 Mar 17 j 01:32
                                            0°)€
                                                                         max. Earth dist.
                                                                                             -11478 Feb 16 j 19:13
                                                                                                                     2°х 26′39
                                                                                                                                 2.64884 AU
                    -11483 Apr 29 j 20:58
                                            0^{\circ}\Upsilon
                                                                         morning rise
                                                                                             -11478 Mar 27 j 02:25 26° ₹ 59'13
                    -11483 Jun 09 j 15:23
                                            0°8
                                                                                             -11478 Mar 31 j 19:47
                    -11483 Jul 18 j 15:57
                                            0^{\circ}\Pi
                                                                                             -11478 May 17 j 22:06
                    -11483 Aug 26 j 00:39
                                                                         asc. node
                                                                                             -11478 Jun 29 i 07:30 27°≈00'13
evening set
                    -11483 Aug 29 j 16:25
                                            2°951'28
                                                                                             -11478 Jul 04 j 00:32
                                                                                                                     0°)€
desc. node
                    -11483 Sep 26 j 02:03 24°508'49
                                                                                             -11478 Aug 20 j 12:12
                                                                                                                     0^{\circ}\Upsilon
                    -11483 Oct 03 i 16:43 0°Ω
                                                                                             -11478 Oct 09 i 01:33
                                                                                                                     0°8
                                                                                             -11478 Dec 08 j 20:25
                                                                                                                     \Pi^{\circ}0
conjunction
                    -11483 Oct 30 j 18:06 20^{\circ}\Omega30'55 -0^{\circ}25'31
                                                                         retrograde
                                                                                             -11477 Jan 13 j 06:03
                                                                                                                     6°Ⅱ58'27
 minimum elong
                    -11483 Oct 30 j 16:07 20^{\circ}\Omega27'12 0^{\circ}25'03
                                                                         opposition
                                                                                             -11477 Feb 13 i 03:07
                                                                                                                     1°I47'30 6°19'04
                    -11483 Nov 12 i 12:10 0° m
                                                                         greatest brilliancy
                                                                                             -11477 Feb 14 j 00:30 1°Д32'49
                                                                                                                                -2.8m
                    -11483 Dec 13 j 00:49 22° m 09'33 2.47017 AU
                                                                         min. Earth dist.
                                                                                             -11477 Feb 16 j 10:37 0° I 53'04 0.39187 AU
max Earth dist
                    -11483 Dec 24 i 02:33 0°♀
                                                                                             -11477 Feb 19 j 18:07 30°R8
                    -11483 Dec 30 j 00:08
                                                                                             -11477 Mar 16 j 19:30 26°814'36
                                            4°£08'10
                                                                         direct
morning rise
                    -11482 Feb 05 j 21:00
                                                                                             -11477 Apr 10 j 06:55 0°Ⅱ
                                           o∘m.
                    -11482 Mar 24 j 00:34
                                                                                             -11477 May 19 j 11:14 17°Д08'29
                                           0°×7
                                                                         desc. node
                    -11482 May 12 j 00:15 0°る
                                                                                             -11477 Jun 10 j 15:35
                                                                                                                     0ಂತಾ
                                                                                             -11477 Jul 27 j 06:43
                    -11482 Jul 05 j 13:23 0°≈
                                                                                                                     0^{\circ}\Omega
                    -11482 Sep 17 j 10:32 22°≈54'47
                                                                                             -11477 Sep 10 j 00:43
retrograde
                                                                                                                     0° m
                    -11482 Sep 24 j 16:16 22°≈34'30
                                                                                             -11477 Oct 24 j 23:47
asc. node
                                                                                                                     0∘⊽
                    -11482 Oct 24 j 20:59 14°≈25'58 1°19'15
                                                                                             -11477 Dec 09 j 19:44 0°M
opposition
                    -11482 Oct 25 j 02:33 14°≈20'36 -1.6m
greatest brilliancy
                                                                                             -11476 Jan 25 j 11:34 0° ⊀
min. Earth dist.
                    -11482 Oct 30 j 08:40 12°≈18'54 0.60323 AU
                                                                         evening set
                                                                                             -11476 Jan 29 j 05:02
                                                                                                                    2°₹23'00
direct
                    -11482 Dec 04 j 09:47 4°≈35'20
                                                                         max. Earth dist.
                                                                                             -11476 Mar 12 j 09:47 29° ₹759'04 2.66297 AU
                    -11481 Feb 17 j 07:15 0°米
                                                                                             -11476 Mar 12 j 10:23 0°ਰ
                    -11481 Apr 06 j 14:22
                                            0^{\circ}\Upsilon
                    -11481 May 18 j 21:48 0°8
                                                                                             -11476 Mar 17 j 10:05
                                                                                                                     3°る11'40 -0°34'22
                                                                         conjunction
                    -11481 Jun 27 j 16:41 0°Ⅱ
                                                                                             -11476 Mar 17 j 11:20 3°₹13'40 0°35'00
                                                                          minimum elong
                    -11481 Aug 05 j 14:15 0°95
                                                                                             -11476 Apr 27 j 23:10 0°≈
                    -11481 Aug 14 j 01:53
                                                                                             -11476 May 03 j 06:35 3°≈27'31
desc. node
                                            6°532'38
                                                                         morning rise
                    -11481 Sep 13 j 17:44
                                            0^{\circ}\Omega
                                                                         asc. node
                                                                                             -11476 May 15 i 23:46 11°≈46'45
                                                                                             -11476 Jun 12 j 12:34 0°)€
                    -11481 Oct 23 i 23:49
                                                                                             -11476 Jul 26 j 21:48
evening set
                    -11481 Oct 30 i 10:02
                                            4° m 40'56
                    -11481 Dec 04 i 22:50
                                                                                             -11476 Sep 08 i 07:21
                                                                                             -11476 Oct 21 j 05:14
                                                                                                                     0^{\circ}\Pi
                    -11481 Dec 25 i 01:04 13° \(\Omega\) 53'48 -1°11'25
                                                                                             -11476 Dec 03 j 18:38
                                                                                                                     0ಂತಾ
conjunction
                    -11481 Dec 24 j 23:46 13° 251'35 1°11'32
                                                                                             -11475 Jan 20 j 11:22
 minimum elong
                                                                                             -11475 Mar 26 j 02:17 22°Ω06'49
                    -11480 Jan 17 j 20:32 0°M
                                                                         retrograde
                    -11480 Jan 20 j 23:44
max. Earth dist.
                                           2°ML05'32 2.58200 AU
                                                                         desc. node
                                                                                             -11475 Apr 05 j 13:59 21° Ω20'44
                                                                                             -11475 Apr 22 j 13:06 17° \Omega 15'44 0.42747 AU
morning rise
                    -11480 Feb 15 j 18:31 19° ML05'27
                                                                         min. Earth dist.
                    -11480 Mar 03 j 14:28
                                           0° √
                                                                         opposition
                                                                                             -11475 Apr 29 j 21:57 14° Q55'45 -1°42'49
                    -11480 Apr 19 j 21:22
                                            0°ಕ
                                                                         greatest brilliancy
                                                                                             -11475 Apr 29 j 09:15 15°Ω05'50 -2.6m
                    -11480 Jun 07 j 16:42
                                                                                             -11475 May 31 j 13:01
                                            0°≈
                                                                         direct
                                                                                                                     8°Ω56'54
                    -11480 Jul 29 j 08:42
                                            0°)€
                                                                                             -11475 Aug 06 j 20:34
                                                                                                                     0° m
                    -11480 Aug 11 j 14:01
                                            7°)€07'32
asc. node
                                                                                             -11475 Sep 29 j 11:45
                                                                                                                     0∘⊽
                    -11480 Oct 02 j 05:16
                                            0^{\circ}\Upsilon
                                                                                             -11475 Nov 17 j 21:47
                                                                                                                     0°M
retrograde
                    -11480 Nov 04 j 06:25
                                            5°Y51′10
                                                                                             -11474 Jan 05 j 07:08
                                                                                                                     0°∡
                    -11480 Dec 05 j 09:58 30°R €
                                                                                             -11474 Feb 21 j 23:29
                                                                                                                     0°궁
opposition
                    -11480 Dec 08 j 16:28 28° ★52'51
                                                       5°17'06
                                                                         evening set
                                                                                             -11474 Mar 08 j 14:59
                                                                                                                     9°る20'36
greatest brilliancy
                    -11480 Dec 10 j 01:10 28° ★24'26
                                                                         asc. node
                                                                                             -11474 Apr 02 j 18:34 25°♂34'57
min. Earth dist.
                    -11480 Dec 16 j 16:43 26° ₭ 06'48
                                                                         max. Earth dist.
                                                                                             -11474 Apr 06 j 19:48 28°정13'33 2.62409 AU
                                                       0.49582 AU
```

-11474 Apr 09 j 12:54

-11479 Jan 15 j 15:22 20° **€**21'04

direct

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 43 Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. conjunction -11474 Apr 25 j 22:03 10°×47'36 0°14'06 retrograde -11469 Jul 27 j 23:52 4°306'45

Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style.								
conjunction	-11474 Apr 25 j 22:03	10° ≈ 47′36	0°14'06	retrograde	-11469 Jul 27 j 23:52	4° る 06'45		
minimum elong	-11474 Apr 25 j 21:28	10° ≈ 46′39	0°13'35		-11469 Aug 21 j 20:22	30°R. ✓		
behind sun begin	-11474 Apr 25 j 10:46	10° ≈ 28′55		opposition	-11469 Sep 05 j 14:10	24° × ⁷ 29'21	-2°59'24	
behind sun end	-11474 Apr 26 j 08:11	11° ≈ 04'24		greatest brilliancy	-11469 Sep 05 j 15:56	24° ∡ ¹27'34	-1.4m	
	-11474 May 24 j 12:11	0°) €		min. Earth dist.	-11469 Sep 06 j 00:57	24° ∡ 18′29	0.66502 AU	
morning rise	-11474 Jun 12 j 20:57	13°) 18′08		direct	-11469 Oct 15 j 19:10	14° ∡ ¹42'18		
_	-11474 Jul 06 j 16:38	$0^{\circ}\mathbf{\Upsilon}$		asc. node	-11469 Nov 24 j 03:30	22° ∡ ³36'53		
	-11474 Aug 17 j 06:18	0°B			-11469 Dec 12 j 10:13	0°ರ		
	-11474 Sep 26 j 15:47	Π°			-11468 Feb 07 j 00:18	0° ≈		
	-11474 Nov 05 j 13:32	0°©			-11468 Mar 25 j 11:48	0°) €		
	-11474 Dec 15 j 23:37	0°N			-11468 May 07 j 18:14	0° Υ		
	-11473 Jan 27 j 14:25	0° m			-11468 Jun 17 j 07:59	0°8		
desc. node	-11473 Feb 21 j 14:07				-11468 Jul 26 j 06:26	0°II		
dese. node	-11473 Mar 18 j 01:21	0∘ ⊽		evening set	-11468 Aug 03 j 20:26	6° Ⅱ 42'32		
retrograde	-11473 May 15 j 14:17			evening sec	-11468 Sep 02 j 13:23	0°95		
min. Earth dist.	-11473 Jun 16 j 11:44		0.54821 AU		11400 Sep 02 j 13.23	0 3		
greatest brilliancy	-11473 Jun 22 j 02:27	9° ₽ 05'41	-1.9m	conjunction	-11468 Oct 05 j 14:55	2506/1/1/1	0°05'33	
opposition	-11473 Jun 23 j 08:35	8° £ 36'47		minimum elong	-11468 Oct 05 j 15:29		0°06'08	
	-		-3 1901	behind sun begin			0 00 08	
direct	-11473 Jul 28 j 20:57	0° ჲ 41'14		U	-11468 Oct 04 j 14:12			
	-11473 Oct 22 j 13:47	0° M 0° ₹		behind sun end	-11468 Oct 06 j 16:46			
	-11473 Dec 15 j 02:39	0° ⊼ ¹			-11468 Oct 11 j 03:33	0° Ω		
_	-11472 Feb 02 j 17:08	0°∃		desc. node	-11468 Oct 12 j 20:33	1° Ω 18'43		
asc. node	-11472 Feb 18 j 18:05			max. Earth dist.	-11468 Nov 18 j 01:45		2.42171 AU	
	-11472 Mar 20 j 22:08	0° ≈			-11468 Nov 19 j 21:01	0° ™		
evening set	1 3	18° ≈ 33′00		morning rise	-11468 Dec 07 j 20:29	13° m 10'00		
	-11472 May 04 j 20:15	0° ∀			-11468 Dec 31 j 10:05	0∘ ⊽		
max. Earth dist.	-11472 May 06 j 13:14	1° ∺ 10′17	2.53587 AU		-11467 Feb 13 j 06:14	0° M		
					-11467 Mar 31 j 19:32	0° ∡ ¹		
conjunction	-11472 Jun 07 j 22:49	23°) ₹51′03	1°00'03		-11467 May 21 j 05:31	0° ප		
minimum elong	-11472 Jun 07 j 20:55	23° ¥ 47′39	0°59'56		-11467 Jul 22 j 02:33	0° ≈		
	-11472 Jun 16 j 12:40	$0^{\circ}\Upsilon$		retrograde	-11467 Sep 01 j 16:35	8° ≈ 44'09		
	-11472 Jul 27 j 07:05	9° 8		opposition	-11467 Oct 09 j 22:45	29° る 50'46	-0°03'29	
morning rise	-11472 Jul 30 j 22:10	2° 8 43'35			-11467 Oct 09 j 13:21	30°Ŗる		
_	-11472 Sep 04 j 17:08	Π°		greatest brilliancy	-11467 Oct 09 j 23:06	29° る 50'25	-1.5m	
	-11472 Oct 13 j 12:48	0°©		asc. node	-11467 Oct 11 j 07:43			
	-11472 Nov 21 j 15:07	0°N		min. Earth dist.	-11467 Oct 14 j 01:45		0.63219 AU	
	-11472 Dec 31 j 23:56	0° m		direct	-11467 Nov 19 j 16:59			
desc. node	-11471 Jan 08 j 09:28	5° m) 19'55		4.1.001	-11466 Jan 02 j 22:49	0° ≈		
dese. Hode	-11471 Feb 12 j 22:49	0∘ ⊽			-11466 Mar 01 j 09:03			
	-11471 Apr 02 j 03:58	* —			-11466 Apr 16 j 01:23	0° Υ		
retrograde	-11471 Jun 22 j 15:02				-11466 May 27 j 12:46	0°8		
min. Earth dist.	-		0.62616.411		-11466 Jul 05 j 21:56	0°II		
	-11471 Jul 29 j 04:44				•	0. о п		
opposition	-11471 Aug 01 j 12:27			1 1	-11466 Aug 13 j 12:33			
greatest brilliancy	-11471 Jul 31 j 23:46		-1.5m	desc. node	-11466 Aug 30 j 19:14			
direct	-11471 Sep 08 j 22:28	9° M 56'47			-11466 Sep 21 j 09:50	0°N		
	-11471 Nov 16 j 04:55	0° ∡ ¹		evening set	-11466 Oct 07 j 18:10			
asc. node	-11470 Jan 05 j 22:00	26° ₹ '57'11			-11466 Oct 31 j 10:07	0° m)		
	-11470 Jan 11 j 04:24	0°ප						
	-11470 Mar 01 j 07:51	0° ≈		conjunction	-11466 Dec 05 j 02:54	=		
	-11470 Apr 15 j 19:40	0° \		minimum elong	-11466 Dec 05 j 00:28		1°00'10	
	-11470 May 28 j 11:23	0° Y			-11466 Dec 12 j 04:02	0∘ ಹ		
evening set	-11470 Jun 05 j 10:17	5° Ƴ 47'12		max. Earth dist.	-11465 Jan 08 j 04:47		2.54252 AU	
max. Earth dist.	-11470 Jun 26 j 19:45	21° Y 37'55	2.41790 AU		-11465 Jan 24 j 22:46	0° M		
	-11470 Jul 07 j 22:14	$0^{\circ}S$		morning rise	-11465 Jan 29 j 10:44	3°M00'20		
					-11465 Mar 11 j 17:57	0° ∡ ¹		
conjunction	-11470 Aug 01 j 14:15	18° 8 53'26	1°08'55		-11465 Apr 28 j 11:15	5°0		
minimum elong	-11470 Aug 01 j 16:04	18° 8 56'57	1°09'21		-11465 Jun 17 j 15:04	0° ≈		
	-11470 Aug 15 j 21:56	$\Pi^{\circ}0$			-11465 Aug 13 j 02:51	0°) €		
	-11470 Sep 23 j 06:55	0°⊛		asc. node	-11465 Aug 29 j 07:58	7° 米 01′55		
morning rise	-11470 Oct 02 j 23:03	7° 5 33'12		retrograde	-11465 Oct 15 j 09:53			
-	-11470 Oct 31 j 22:36	$0^{\circ}\Omega$		opposition	-11465 Nov 20 j 03:58		3°43'26	
desc. node	·	19° Ω 05′26		greatest brilliancy	-11465 Nov 21 j 00:59	9° ¥ 55'10	-1.9m	
	-11470 Dec 10 j 17:43	0° m)		min. Earth dist.	-11465 Nov 27 j 11:19	7°) €33'52	0.54229 AU	
	-11469 Jan 21 j 12:13	0∘ ⊽		direct	-11465 Dec 29 j 12:59	0° ¥ 58'30	-	
	-11469 Mar 07 j 04:11	0° M ₊			-11464 Mar 17 j 08:45	0° Υ		
	-11469 Apr 25 j 13:53	0° ⊼ 7			-11464 May 02 j 01:25	0°8		
	-11469 Jun 30 j 22:04	°ੇਠ ਨ			-11464 Jun 12 j 05:42	0°Ⅱ		

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. desc. node -11464 Jul 17 j 21:10 26° **1**53'30 -11459 Apr 16 j 10:18 -11464 Jul 21 j 23:34 -11459 Apr 19 j 11:21 0ംഉ asc node 1°≈59'34 -11464 Aug 30 j 18:47 morning rise -11459 May 27 j 12:27 27°≈16'04 $0^{\circ}\Omega$ -11459 May 31 j 13:34 -11464 Oct 10 j 13:56 0° m 0°)(-11464 Nov 21 j 23:13 -11459 Jul 14 j 02:55 0° 0∘**⊽** -11464 Nov 30 j 02:34 0°8 evening set 5°**-**237'04 -11459 Aug 25 j 05:32 -11463 Jan 05 j 03:41 0°M -11459 Oct 05 j 07:35 $0^{\circ}\Pi$ -11459 Nov 15 j 01:51 0ಂತಾ conjunction -11463 Jan 21 j 05:25 10°M 38'12 -1°13'56 -11459 Dec 26 j 18:09 0 $^{\circ}\Omega$ minimum elong -11463 Jan 21 j 05:58 10°M 39'07 1°14'18 -11458 Feb 10 j 05:18 0°m max. Earth dist. -11463 Feb 06 j 14:30 21°M21'13 2.62881 AU desc. node -11458 Mar 10 j 08:55 15° m 26'39 -11463 Feb 19 j 22:35 0°**∡** retrograde -11458 Apr 27 j 21:44 28° m 52'40 -11463 Mar 11 j 22:30 12° ₹ 51'27 morning rise min. Earth dist. -11458 May 27 j 17:37 22° m 52'18 0.50114 AU -11463 Apr 07 j 20:17 greatest brilliancy -11458 Jun 03 j 05:56 20° **m** 30'30 -11463 May 25 j 09:58 opposition -11458 Jun 04 j 13:10 20° Mp 01'58 -4°37'23 -11463 Jul 12 j 16:23 0°**)**€ direct -11458 Jul 08 j 15:35 12° Mp 46'52 asc. node -11463 Jul 16 j 02:42 2°\cdot\06'08 -11458 Sep 07 j 05:26 0∘**⊽** -11463 Aug 31 j 22:56 $0^{\circ}\Upsilon$ -11458 Nov 02 j 17:48 -11463 Oct 30 j 08:08 0°8 -11458 Dec 23 j 10:57 retrograde -11463 Dec 14 j 04:32 10°815'01 -11457 Feb 10 j 02:13 opposition -11462 Jan 15 j 00:48 4°**8**31'01 6°56'27 asc. node -11457 Mar 07 j 09:05 16°る02'02 greatest brilliancy -11462 Jan 16 j 15:58 4°**8**01'28 -2.5m -11457 Mar 28 j 23:19 0°≈ min. Earth dist. -11462 Jan 21 j 21:06 2°**8**27'34 0.42366 AU evening set -11457 Apr 02 i 09:09 2°≈53'14 -11462 Jan 31 i 02:28 30° R**Y** max. Earth dist. -11457 Apr 24 i 13:48 17°≈36'25 2.57570 AU direct -11462 Feb 18 j 10:50 27°**Y**47'34 -11457 May 12 j 20:53 0°**)** -11462 Mar 08 j 16:25 0°8 -11462 May 11 j 05:03 0°**Ⅱ** -11457 May 21 j 22:46 6°¥14'24 0°44'08 conjunction -11462 Jun 05 j 02:23 16°**Ⅲ**08'14 -11457 May 21 j 21:03 6°**₩**11'26 0°43'48 desc node minimum elong -11462 Jun 25 j 10:24 0°ഇ -11457 Jun 24 j 17:04 $0^{\circ}\Upsilon$ -11462 Aug 07 j 06:31 -11457 Jul 11 j 08:26 12°**Y**01'36 $0^{\circ}\Omega$ morning rise -11462 Sep 19 j 03:25 -11457 Aug 04 j 17:33 0°**8** 0° m -11457 Sep 13 j 10:47 -11462 Nov 01 j 23:54 0°**♀** Π $^{\circ}$ 0 -11457 Oct 22 j 13:53 -11462 Dec 17 j 03:53 0°M 0ಂತಾ -11461 Jan 13 j 11:41 17° ML46'39 -11457 Dec 01 j 00:19 evening set $0^{\circ}\Omega$ -11461 Feb 01 j 10:50 0° ₹ -11456 Jan 10 j 21:15 0° Mp desc. node -11456 Jan 26 j 04:40 10° m 45'36 -11461 Mar 03 j 06:41 19° ₹ 07'01 -0°49'56 -11456 Feb 23 j 23:55 0°**♀** conjunction minimum elong -11461 Mar 03 j 08:14 19° ₹09'29 0°50'31 -11456 Apr 16 j 21:27 0° M max. Earth dist. -11461 Mar 04 j 02:35 19°**尽** 38'50 2.66386 AU retrograde -11456 Jun 08 j 05:21 14°ML19'04 -11461 Mar 20 j 06:50 0°る min. Earth dist. -11456 Jul 13 j 02:37 6°ML20'33 0.60835 AU morning rise -11461 Apr 19 j 10:16 19° ₹20'14 opposition -11456 Jul 17 j 21:33 4°M26'18 -5°20'51 -11461 May 05 j 23:04 0°≈ -11456 Jul 17 j 01:18 4°M 46'26 -1.6m greatest brilliancy -11461 Jun 02 j 18:30 18°≈04'12 -11456 Jul 29 j 21:40 30°R € asc. node -11461 Jun 20 j 23:18 0°**米** -11456 Aug 24 j 07:27 25° **2**42'36 direct -11461 Aug 05 j 05:18 0°**Υ** -11456 Sep 21 j 05:25 0°M -11456 Nov 28 i 07:43 0° ₹ -11461 Sep 19 i 01:20 0°8 -11461 Nov 03 i 09:36 0°**Ⅱ** -11455 Jan 19 i 17:10 0°る -11455 Jan 22 i 11:41 -11461 Dec 22 i 05:48 0°5 asc. node 1°る40'13 retrograde -11460 Feb 29 i 11:21 23°\$59'32 -11455 Mar 08 i 21:06 0°**≈** min. Earth dist. -11460 Mar 28 j 12:59 19°519'36 0.39322 AU -11455 Apr 23 j 01:47 0°**₩** -11460 Apr 01 j 20:46 18°505'49 evening set -11455 May 16 j 08:17 16° ¥ 10'08 opposition 1°34'58 -11460 Apr 01 j 16:31 18°508'51 max. Earth dist. -11455 Jun 01 j 19:32 27° X 54'34 2.46453 AU greatest brilliancy -2.9m desc. node -11460 Apr 22 j 08:09 13°529'00 -11455 Jun 04 j 17:03 0°**Υ** direct -11460 May 02 j 08:42 12°549'42 -11460 Jun 29 j 19:59 $0^{\circ}\Omega$ conjunction -11455 Jul 09 j 15:42 25°**Υ**46'45 1°13'12 -11460 Aug 22 j 06:52 0° m minimum elong -11455 Jul 09 j 15:22 25°**Y**46'07 1°13'26 -11460 Oct 09 j 14:06 0∘**⊽** -11455 Jul 15 j 06:09 0°8 -11460 Nov 26 j 02:17 0°M -11455 Aug 23 j 09:05 $0^{\circ}\Pi$ -11459 Jan 12 j 14:51 -11455 Sep 06 j 05:32 10°**Ц**46'28 0° **∕**™ morning rise -11459 Feb 21 j 08:47 25° ₹ 10'46 evening set -11455 Sep 30 j 21:06 0ಂತಾ -11459 Feb 28 j 22:19 0°る -11455 Nov 08 j 15:20 $0^{\circ}\Omega$ max. Earth dist. -11459 Mar 27 j 14:49 17°る07'42 2.64548 AU desc. node -11455 Dec 12 j 22:27 25° € 51'06 -11455 Dec 18 j 13:24 0° M conjunction -11459 Apr 10 j 08:43 26°**⋜**02'31 -0°05'33 -11454 Jan 29 j 13:58 0∘**⊽** minimum elong -11459 Apr 10 j 08:57 26°♂02'54 0°06'09 -11454 Mar 16 j 00:10 0°M -11459 Apr 09 j 14:28 25° ₹32'50 -11454 May 07 j 08:57 0°**∡**7 behind sun begin

retrograde

-11454 Jul 14 j 08:54 20° **₹** 57'10

-11459 Apr 11 j 03:26 26° ₹32'59

behind sun end

-11454 Aug 23 j 02:42 11° ₹ 11'41 greatest brilliancy -1 4m -11448 Jan 04 j 17:10 24°**2**18'38 -1°14'14 -11454 Oct 01 j 20:54 1°**∡**³34'27 direct conjunction -11454 Dec 10 j 17:06 22° ₹25'18 -11448 Jan 04 j 16:36 24° **2**17'42 1°14'28 asc. node minimum elong -11448 Jan 13 j 04:42 0° M -11454 Dec 25 j 17:29 ೧ºಕ -11448 Jan 27 j 19:40 -11453 Feb 15 j 23:11 max. Earth dist. 9°**™**42'52 2.60076 AU -11453 Apr 03 j 09:44 0°**∀** morning rise -11448 Feb 25 j 05:25 28°ML16'02 $0^{\circ}\Upsilon$ -11453 May 16 j 08:26 -11448 Feb 27 j 21:48 0°**∡** -11453 Jun 25 j 20:01 0°8 -11448 Apr 15 j 00:11 0°궁 evening set -11453 Jul 10 j 21:47 11°**8**30'48 -11448 Jun 02 j 06:15 0°≈ -11453 Aug 03 j 18:14 0°**П** 0°**)**€ -11448 Jul 22 j 07:49 asc. node -11448 Aug 01 j 20:36 6°**)**€02'40 conjunction -11453 Sep 10 j 09:49 29°**Ⅲ**29'54 -11448 Sep 16 j 10:00 $0^{\circ}\Upsilon$ minimum elong -11453 Sep 10 j 12:49 29°**Д**35'48 0°37'32 retrograde -11448 Nov 17 j 13:55 17°**Υ**37'07 -11453 Sep 11 j 01:10 0ಂತಾ opposition -11448 Dec 21 j 03:14 11°**Υ**04'49 6°04'23 max. Earth dist. -11453 Sep 29 j 23:31 14°5647'34 2.38555 AU greatest brilliancy -11448 Dec 22 j 17:19 10°**Υ**33'11 -2.3m -11453 Oct 19 j 14:54 $0^{\circ}\Omega$ min. Earth dist. -11448 Dec 29 j 04:48 8° Y24'58 0.46915 AU desc. node -11453 Oct 30 j 15:38 8°**Ω**26'45 direct -11447 Jan 27 j 00:49 3°Y06'59 morning rise -11453 Nov 14 j 04:43 $19^{\circ}\Omega$ 27'38 -11447 Apr 10 j 07:29 0°8 -11453 Nov 28 j 07:44 -11447 May 25 j 22:41 $0^{\circ}\Pi$ -11452 Jan 08 i 20:52 0∘ଫ desc. node -11447 Jun 21 j 18:46 19°**Д**08'28 -11452 Feb 21 i 20:55 0°M -11447 Jul 06 i 17:33 0ಂತಾ -11452 Apr 09 i 01:54 0°**∡**¹ -11447 Aug 16 i 20:15 $0^{\circ}\Omega$ -11452 May 31 j 23:59 0°ರ -11447 Sep 27 j 14:39 0° m -11452 Aug 17 j 22:46 25°る12'40 -11447 Nov 09 j 17:00 0∘**⊽** retrograde opposition -11452 Sep 25 j 20:46 15° ₹58'55 -1°18'07 -11447 Dec 24 j 09:01 0°M -11452 Sep 26 j 00:17 15°**궁**55'25 -1.4m -11447 Dec 28 j 01:24 2°M25'48 greatest brilliancy evening set -11452 Sep 28 j 13:34 14°**궁**54'23 0.65245 AU -11446 Feb 08 i 09:17 min. Earth dist. 0°×7 -11452 Oct 27 j 22:34 6° ₹30'31 asc. node -11452 Nov 05 j 14:16 6°る00'58 -11446 Feb 15 j 20:08 4°**₹**'47'57 -1°02'26 direct conjunction -11446 Feb 15 j 21:37 -11451 Jan 19 j 05:12 0°≈ minimum elong 4° \$\sqrt{50}'21 1°02'59 -11451 Mar 11 j 08:04 0°**)** max. Earth dist. -11446 Feb 22 j 13:44 9°**✗**'07'37 2.65639 AU -11451 Apr 24 j 16:40 0°**Υ** -11446 Mar 27 j 04:15 0°궁 -11451 Jun 04 j 16:15 0°**8** -11446 Apr 04 j 16:23 5°る26'04 morning rise -11451 Jul 13 j 19:22 0°**Ⅱ** -11446 May 13 j 02:12 0°≈ -11446 Jun 19 j 12:51 24°≈04'02 -11451 Aug 21 j 05:24 0°5 asc. node evening set -11451 Sep 13 j 05:36 17°554'10 -11446 Jun 28 j 17:37 0°**)**€ desc. node -11451 Sep 16 j 12:02 20°525'50 -11446 Aug 14 j 05:42 $0^{\circ}\Upsilon$ -11451 Sep 28 j 22:26 $0^{\circ}\Omega$ -11446 Sep 30 j 11:29 0° 8 -11451 Nov 07 j 18:42 -11446 Nov 20 j 10:43 0°**Ц** -11445 Jan 31 j 00:11 23°**Д**55'03 retrograde -11451 Nov 13 j 05:26 4° m 00'35 -0°40'35 -11445 Mar 02 j 18:43 18°**Ⅲ**45'18 5°01'03 conjunction opposition -11451 Nov 13 j 02:48 3° m 55'44 0°40'15 greatest brilliancy -11445 Mar 03 j 02:17 18°**Д**40'15 -2.9m minimum elong -11451 Dec 19 j 09:14 min. Earth dist. -11445 Mar 03 j 09:13 18°**II**35'37 0.38420 AU -11451 Dec 23 j 21:05 3° **2**09'14 2.49725 AU max. Earth dist. direct -11445 Apr 02 j 10:54 13°**Д**34'44 -11445 May 09 i 23:25 21°**II**44'04 morning rise -11450 Jan 10 j 15:26 15° **2**27'35 desc. node -11450 Feb 01 i 02:40 0°M -11445 May 28 i 07:24 0°5 -11450 Mar 19 j 01:31 0°**∡**7 -11445 Jul 19 i 05:14 $0^{\circ}\Omega$ -11450 May 06 i 10:53 0°ಕ -11445 Sep 03 i 17:41 -11450 Jun 27 j 20:01 0°≈ -11445 Oct 19 j 13:27 0∘Ω -11450 Sep 08 j 23:52 0°**₩** -11445 Dec 04 j 20:45 o°m. -11450 Sep 15 j 00:10 -11444 Jan 20 j 18:26 asc node 1°\(\mathbf{0}00'51\) 0°×7 retrograde -11450 Sep 27 j 01:35 1° **)** 52'44 -11444 Feb 07 j 02:03 11°**尽**01'48 evening set -11444 Mar 07 j 19:40 -11450 Oct 14 j 00:48 30°R≈ 0°ਰ -11450 Nov 02 j 23:21 23°≈39'37 2°10'12 opposition max. Earth dist. -11444 Mar 18 j 00:06 6°る31'28 2.65892 AU greatest brilliancy -11450 Nov 03 j 09:41 23°≈29'47 -1.7m min. Earth dist. -11450 Nov 09 j 03:35 21°≈18'39 -11444 Mar 26 j 03:18 11°₹44′56 -0°24′16 0.58382 AU conjunction -11450 Dec 13 j 05:13 13°≈57'32 -11444 Mar 26 j 04:14 11°₹46'27 0°24'52 direct minimum elong -11449 Feb 07 j 12:36 0°**₩** -11444 Apr 23 j 07:54 0°≈ $0^{\circ}\Upsilon$ -11449 Mar 31 j 01:07 asc. node -11444 May 06 j 05:27 8°≈26'19 -11449 May 13 j 04:52 0°8 morning rise -11444 May 11 j 23:39 12°≈13'36 -11449 Jun 22 j 09:03 Π °0 -11444 Jun 07 j 17:25 0°**)**€ $0^{\circ}\Upsilon$ -11449 Jul 31 j 12:05 0 \circ \odot -11444 Jul 21 j 19:01 desc. node -11449 Aug 04 j 14:18 3°908'37 -11444 Sep 02 j 15:52 0°8 -11449 Sep 08 j 19:31 $0^{\circ}\Omega$ -11444 Oct 14 j 18:40 $0^{\circ}\Pi$

-11444 Nov 25 j 23:31

0ಂತಾ

-11449 Oct 19 j 04:43

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Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23,
Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style.
                    -11443 Jan 09 i 07:06 0^{\circ}\Omega
                                                                                              -11438 Feb 24 i 04:51
                                                                                                                      0°≈
                    -11443 Mar 06 j 07:02
                                                                                              -11438 Apr 11 j 00:19
                                                                                                                      0° H
                    -11443 Mar 27 j 02:30
                                                                                                                      0^{\circ}\Upsilon
desc. node
                                            5° m 43'57
                                                                                              -11438 May 23 j 18:59
                                                                                              -11438 Jun 17 j 15:04 18°Y 14'28
                    -11443 Apr 07 j 21:31
                                            6° m 41'10
retrograde
                                                                          evening set
                                                                                              -11438 Jul 03 j 06:21
min. Earth dist.
                    -11443 May 05 j 21:02
                                            1° Mp 29'27
                                                        0.45228 AU
                                                                                                                      0°8
                                                                                              -11438 Jul 19 j 01:08 12°802'48 2.39633 AU
                    -11443 May 10 j 08:37 30°RΩ
                                                                          max. Earth dist.
opposition
                    -11443 May 13 j 20:24 28° € 49'14 -3°05'09
                                                                                              -11438 Aug 11 j 05:33
                                                                                                                      0^{\circ}\Pi
greatest brilliancy
                    -11443 May 12 j 21:24 29°Ω08'37
                                                        -2.4m
direct
                    -11443 Jun 15 j 09:46 22°\O22'19
                                                                          conjunction
                                                                                              -11438 Aug 15 j 11:25
                                                                                                                      3°I18'35 1°00'51
                    -11443 Jul 22 j 15:37
                                                                           minimum elong
                                                                                              -11438 Aug 15 j 14:19
                                                                                                                      3°Ⅲ24'15
                                                                                                                                 1°01'23
                    -11443 Sep 22 j 02:52
                                            0∘⊽
                                                                                              -11438 Sep 18 j 13:26
                                                                                                                      0ಂತಾ
                    -11443 Nov 12 j 05:23
                                            0^{\circ}M
                                                                          morning rise
                                                                                              -11438 Oct 18 j 10:08 23°516'09
                    -11443 Dec 31 j 06:44
                                            0°∡¹
                                                                                              -11438 Oct 27 j 03:32
                                                                                                                      0^{\circ}\Omega
                    -11442 Feb 17 j 06:12
                                            0°궁
                                                                          desc. node
                                                                                              -11438 Nov 16 j 12:13 15° Ω31'35
evening set
                    -11442 Mar 17 j 12:34 18°중03'05
                                                                                              -11438 Dec 05 j 20:39
                                                                                                                      0° m
asc. node
                    -11442 Mar 24 j 01:22 22°쥥16'28
                                                                                              -11437 Jan 16 j 11:31
                                                                                                                      0∘⊽
                    -11442 Apr 04 j 22:13
                                                                                              -11437 Mar 01 j 18:58
                                                                                                                      0°M
max. Earth dist.
                    -11442 Apr 13 j 00:35
                                            5°≈19'02 2.60873 AU
                                                                                              -11437 Apr 19 j 02:19
                                                                                              -11437 Jun 16 j 07:00
conjunction
                    -11442 May 05 j 03:59 20°≈02'47 0°25'26
                                                                          retrograde
                                                                                              -11437 Aug 04 j 22:05 12°る04'14
 minimum elong
                    -11442 May 05 j 02:57 20°≈01'02 0°24'58
                                                                          opposition
                                                                                              -11437 Sep 13 j 07:48
                                                                                                                      2°る34'09 -2°24'29
                    -11442 May 19 j 20:51
                                           0°∀
                                                                          greatest brilliancy
                                                                                              -11437 Sep 13 i 10:57
                                                                                                                      2°る30'59 -1.4m
morning rise
                    -11442 Jun 22 j 19:34 23° ¥ 32'25
                                                                          min. Earth dist.
                                                                                              -11437 Sep 14 i 13:39
                                                                                                                      2°る04'11 0.66325 AU
                    -11442 Jul 01 i 22:26
                                            0^{\circ}\Upsilon
                                                                                              -11437 Sep 19 i 19:10 30°R ✓
                    -11442 Aug 12 j 07:08
                                            0°8
                                                                          direct
                                                                                              -11437 Oct 23 j 18:51 22° ₹41'59
                    -11442 Sep 21 i 10:21
                                                                                              -11437 Nov 14 j 12:21 25° ₹22'24
                                            0°Π
                                                                          asc. node
                    -11442 Oct 31 j 00:24
                                                                                              -11437 Nov 30 j 06:59
                                            0ಂತಾ
                                                                                                                      ೧೦೯
                    -11442 Dec 09 j 23:43
                                                                                              -11436 Jan 31 j 16:07
                                            \Omega^{\circ}\Omega
                                                                                                                      0°≈≈
                    -11441 Jan 20 j 17:54 0° Mp
                                                                                              -11436 Mar 20 j 03:48
                                                                                                                      0° <del>)(</del>
                    -11441 Feb 12 j 00:41 14° m 58'54
                                                                                              -11436 May 02 j 18:48
                                                                                                                      0^{\circ}\Upsilon
desc. node
                    -11441 Mar 08 j 05:42 0°♀
                                                                                              -11436 Jun 12 j 12:00 0°8
                    -11441 May 24 j 21:39 28° △21'09
                                                                                              -11436 Jul 21 j 12:10 0°Ⅱ
retrograde
min. Earth dist.
                    -11441 Jun 26 j 21:47 21°♀05'25 0.57168 AU
                                                                                              -11436 Aug 18 j 09:23 21°Ⅱ49'02
                                                                          evening set
                    -11441 Jul 01 j 22:54 19°207'37 -1.8m
                                                                                              -11436 Aug 28 j 20:02 0°ഇ
greatest brilliancy
                    -11441 Jul 03 j 02:13 18° △40'59 -5°26'58
                                                                                              -11436 Oct 03 j 07:54 27°536'23
opposition
                                                                          desc. node
                    -11441 Aug 08 j 07:41 10°£26'36
                                                                                              -11436 Oct 06 j 10:34 0°Ω
direct
                    -11441 Oct 13 j 21:04 0°M
                    -11441 Dec 09 j 05:54 0° ₹
                                                                          conjunction
                                                                                              -11436 Oct 20 j 00:39 10^{\circ}\Omega22'57 -0^{\circ}12'37
                    -11440 Jan 28 j 15:59
                                            0°궁
                                                                           minimum elong
                                                                                              -11436 Oct 19 j 23:36 10^{\circ}\Omega20'57 0^{\circ}12'04
                    -11440 Feb 09 j 02:39
                                           7°る04'34
                                                                           behind sun begin
                                                                                              -11436 Oct 19 j 05:42 9°Ω46'58
asc. node
                    -11440 Mar 16 j 04:38 0°≈
                                                                           behind sun end
                                                                                              -11436 Oct 20 j 17:30 10° Ω54'55
                    -11440 Apr 27 j 21:18 28°≈24'25
                                                                                              -11436 Nov 15 j 04:08 0° Mp
evening set
                    -11440 Apr 30 j 05:14 0°米
                                                                          max. Earth dist.
                                                                                              -11436 Dec 03 j 10:15 13° m 22'30 2.44801 AU
max. Earth dist.
                    -11440 May 14 j 22:58 10° X 10'58 2.51137 AU
                                                                                              -11436 Dec 20 j 17:31 25° m/47'14
                                                                          morning rise
                    -11440 Jun 11 j 21:34
                                                                                              -11436 Dec 26 j 16:26
                                                                                              -11435 Feb 08 i 09:57
                    -11440 Jun 18 j 21:37
conjunction
                                            5°Υ04'15 1°06'58
                                                                                              -11435 Mar 26 j 15:34
                                                                                                                      0°∡7
                    -11440 Jun 18 j 19:58
 minimum elong
                                            5°Υ01'14 1°06'59
                                                                                              -11435 May 15 j 02:11
                    -11440 Jul 22 i 14:02 0°8
                                                                                              -11435 Jul 10 j 16:59
                    -11440 Aug 12 j 16:53 16°801'24
                                                                                              -11435 Sep 10 i 13:14 17°≈10'47
morning rise
                                                                          retrograde
                    -11440 Aug 30 j 21:17
                                                                                              -11435 Oct 01 j 15:44 14°≈16'06
                                            0°Π
                                                                          asc node
                    -11440 Oct 08 j 13:41
                                                                                              -11435 Oct 18 j 09:21
                                                                                                                                 0°43'17
                                            0ಂತಾ
                                                                          opposition
                                                                                                                      8°≈30'12
                    -11440 Nov 16 j 12:06
                                            0^{\circ}\Omega
                                                                          greatest brilliancy
                                                                                              -11435 Oct 18 j 12:03
                                                                                                                      8°≈27'35 -1.6m
                    -11440 Dec 26 j 15:35
                                            0° m
                                                                          min. Earth dist.
                                                                                              -11435 Oct 23 j 06:18
                                                                                                                      6°≈36'17 0.61738 AU
desc. node
                    -11440 Dec 29 j 17:45
                                            2° m 15'04
                                                                                              -11435 Nov 13 j 14:19 30°R♂
                    -11439 Feb 07 j 03:13
                                                                                              -11435 Nov 28 j 01:40 28°ਰ35'17
                                            0∘⊽
                                                                          direct
                    -11439 Mar 25 j 22:10
                                            0°M
                                                                                                                      0°≈
                                                                                              -11435 Dec 13 j 07:32
                    -11439 May 24 j 20:51
                                                                                                                      0°)€
                                            0° ₹
                                                                                              -11434 Feb 22 j 04:59
                                                                                                                      0^{\circ}\Upsilon
                    -11439 Jun 30 j 15:49
retrograde
                                            7°х 26′46
                                                                                              -11434 Apr 10 j 06:26
                                                                                                                      0°8
                    -11439 Aug 03 j 10:41 30°RM
                                                                                              -11434 May 22 j 05:06
min. Earth dist.
                    -11439 Aug 07 j 01:57 28°ML33'07 0.64779 AU
                                                                                              -11434 Jun 30 j 19:51
                                                                                                                      0^{\circ}\Pi
opposition
                    -11439 Aug 09 j 14:18 27° ML32'19 -4°36'23
                                                                                              -11434 Aug 08 j 14:02
                                                                                                                      0ಂತಾ
greatest brilliancy
                    -11439 Aug 09 j 05:35 27°ML41'06 -1.4m
                                                                          desc. node
                                                                                              -11434 Aug 21 j 06:38
                                                                                                                      9°9549'15
direct
                    -11439 Sep 17 j 12:09 18°ML14'13
                                                                                              -11434 Sep 16 j 13:57
                                                                                                                      0°\Omega
                    -11439 Nov 06 j 01:54
                                                                          evening set
                                                                                              -11434 Oct 20 j 20:46 25° Ω43'02
                    -11439 Dec 27 j 07:04 25° ₹03'24
asc. node
                                                                                              -11434 Oct 26 j 16:26
                    -11438 Jan 05 j 03:39 0°♂
                                                                                              -11434 Dec 07 j 11:51
                                                                                                                      0∘⊽
```

Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style. -11434 Dec 16 j 16:53 6°**2**25'34 -1°07'39 desc. node -11428 Apr 12 j 18:56 5°**Ω**45'57 conjunction -11434 Dec 16 j 15:03 6° **2**22'23 1°07'39 -11428 Apr 18 j 05:44 4°Ω07'17 -0°24'19 minimum elong opposition max. Earth dist. -11433 Jan 15 j 21:17 27° **2**02'51 2.56510 AU -11428 Apr 18 j 03:02 4°Ω09'19 -2.8m greatest brilliancy -11433 Jan 20 j 06:52 -11428 May 04 j 01:43 30°R\$ 0°M₊ -11433 Feb 08 j 12:41 12°M46'31 -11428 May 19 j 05:12 28°530'01 morning rise direct 0°**∡**7 -11433 Mar 06 j 23:55 -11428 Jun 03 j 19:21 $0^{\circ}\Omega$ -11433 Apr 23 j 09:58 0°₹ -11428 Aug 13 j 13:46 0° m -11433 Jun 11 j 16:36 0°≈ -11428 Oct 03 j 08:02 0∘ಹ -11433 Aug 03 j 21:33 0°**∀** -11428 Nov 20 j 19:13 0°M asc. node -11433 Aug 19 j 14:14 7°**₩**54'10 -11427 Jan 07 j 18:28 0°**∡**7 retrograde -11433 Oct 26 j 20:34 28° \times 14'09 -11427 Feb 24 j 06:58 0°る -11433 Nov 30 j 22:14 20° **€** 56'28 4°37'09 opposition evening set -11427 Mar 02 j 02:45 3°₹42'45 greatest brilliancy -11433 Dec 02 j 01:57 20° ★31'43 -2.0m max. Earth dist. -11427 Apr 02 j 11:26 23°る53'42 2.63472 AU min. Earth dist. -11433 Dec 08 j 17:24 18° **★** 10'11 0.51726 AU asc. node -11427 Apr 09 j 18:43 28°₹39'04 direct -11432 Jan 08 j 15:01 12°**米**02'19 -11427 Apr 11 j 20:17 -11432 Mar 07 j 01:00 $0^{\circ}\Upsilon$ -11432 Apr 24 j 23:56 0°8 conjunction -11427 Apr 19 j 05:24 4°≈50'15 0°05'47 -11432 Jun 06 j 03:57 $0^{\circ}\Pi$ minimum elong -11427 Apr 19 j 05:09 4°≈49'51 0°05'15 desc. node -11432 Jul 08 j 09:57 23°**Д**59'30 behind sun begin -11427 Apr 18 j 10:08 4°≈18'38 -11432 Jul 16 j 10:15 0ಂತಾ behind sun end -11427 Apr 20 j 00:10 5°≈21'05 -11432 Aug 25 j 13:35 $0^{\circ}\Omega$ -11427 May 26 j 22:08 0°**)**€ -11432 Oct 05 i 14:50 0° m morning rise -11427 Jun 05 i 17:54 6°\ 41'29 -11432 Nov 17 i 04:30 0°**♀** -11427 Jul 09 i 07:19 $0^{\circ}\Upsilon$ -11432 Dec 10 j 15:02 16° \(\Omega\)00'51 -11427 Aug 20 j 03:05 0°8 evening set -11432 Dec 31 j 11:49 -11427 Sep 29 j 19:40 $\Pi^{\circ}0$ -11427 Nov 09 j 01:25 0ംഉ -11431 Jan 30 j 18:59 19°M 55'36 -1°11'05 -11427 Dec 19 j 21:36 conjunction $0^{\circ}\Omega$ -11431 Jan 30 j 20:00 19°ML57'15 1°11'33 -11426 Feb 01 j 08:52 minimum elong 0° m max. Earth dist. -11431 Feb 12 j 13:46 28°ML13'29 2.64088 AU -11426 Feb 28 j 19:15 16° Mp 49'44 desc node -11431 Feb 15 j 07:39 0° ₹ -11426 Mar 26 j 15:46 0°**♀** -11431 Mar 20 j 17:18 21° ₹ 26'28 -11426 May 08 j 06:19 10°**△**34'22 morning rise retrograde -11431 Apr 03 j 03:34 0°ਰ -11426 Jun 08 j 05:53 4°**2**06'11 0.52770 AU min. Earth dist. -11431 May 20 j 10:10 0°≈ -11426 Jun 14 j 06:54 1°**⊆**50'18 -2.0m greatest brilliancy -11431 Jul 06 j 08:10 29°≈36'06 -11426 Jun 15 j 14:33 1°**2**20'30 -5°06'35 asc. node opposition -11431 Jul 06 j 23:24 0°**米** -11426 Jun 19 j 05:38 30°R Mp -11431 Aug 24 j 11:13 0°**Υ** -11426 Jul 20 j 11:39 23° Mp 42'08 direct -11431 Oct 15 j 18:03 0°8 -11426 Aug 23 j 11:21 0°**♀** retrograde -11431 Dec 30 j 18:21 25°**8**14'54 -11426 Oct 26 j 20:08 0°M opposition -11430 Jan 30 j 23:30 19°**8**52'35 6°49'43 -11426 Dec 18 j 00:33 0° ⊀ greatest brilliancy -11430 Feb 01 j 06:54 19°**8**30'08 -2.7m -11425 Feb 05 j 04:58 0°궁 min. Earth dist. -11430 Feb 05 j 03:21 18°**8**24'30 0.40372 AU -11425 Feb 25 j 17:07 12°**궁**54'02 asc. node direct -11430 Mar 04 j 19:32 13°**8**51'03 -11425 Mar 24 j 07:16 0°≈ -11430 Apr 27 j 23:09 0°**П** evening set -11425 Apr 11 j 18:28 12°≈08'53 desc. node -11430 May 26 j 15:42 16°**Д**18'35 max. Earth dist. -11425 May 01 j 19:13 25°≈35'57 2.55457 AU -11430 Jun 17 j 04:31 0°ഇ -11425 May 08 j 06:10 -11430 Jul 31 i 17:36 0°Ω -11425 Jun 01 j 00:48 16° **★**29'07 0°53'43 -11430 Sep 13 i 11:49 0° m conjunction -11425 May 31 j 22:55 16° \(\frac{1}{2} \) 25'47 0°53'30 -11430 Oct 27 i 20:55 0° **♀** minimum elong -11425 Jun 20 j 01:25 0°Υ -11430 Dec 12 j 08:23 0°M -11429 Jan 22 j 13:47 26°M38'34 -11425 Jul 22 i 17:43 23° Υ 51'58 evening set morning rise -11429 Jan 27 j 19:22 0° ⊀ -11425 Jul 30 j 23:20 0°8 max. Earth dist. -11429 Mar 09 j 15:32 26° ₹ 07'41 2.66440 AU -11425 Sep 08 j 13:00 0°П -11425 Oct 17 j 11:57 0ಂತಾ conjunction -11429 Mar 12 j 00:06 27° ₹38'09 -0°41'13 -11425 Nov 25 j 16:57 $0^{\circ}\Omega$ minimum elong -11429 Mar 12 j 01:31 27° ₹ 40'25 0°41'50 -11424 Jan 05 j 05:13 0° m -11429 Mar 15 j 16:45 0°る -11424 Jan 16 j 15:39 8° m 10'21 desc. node 0∘**⊽** morning rise -11429 Apr 27 j 22:34 27°₹49'25 -11424 Feb 17 j 11:56 -11429 May 01 j 07:09 -11424 Apr 06 j 23:54 0°M -11429 May 24 j 00:21 14°≈48'35 retrograde -11424 Jun 16 j 14:10 23°M 18'24 asc. node -11429 Jun 16 j 01:31 -11424 Jul 22 j 10:27 14°M 59'08 0°**₩** min. Earth dist. 0.62479 AU $0^{\circ}\Upsilon$ -11429 Jul 30 j 19:42 opposition -11424 Jul 26 j 10:34 13°ML22'58 -5°08'47 -11429 Sep 12 j 18:54 0°8 greatest brilliancy -11424 Jul 25 j 18:30 13°M 39'02 -1.5m -11429 Oct 26 j 14:03 $0^{\circ}\Pi$ direct -11424 Sep 02 j 10:33 4°M25'43 -11429 Dec 10 j 17:29 0 \circ \odot -11424 Nov 20 j 21:30 0°**∡** -11428 Feb 01 j 23:15 0 $^{\circ}\Omega$ asc. node -11423 Jan 12 j 20:11 29° ₹ 12'18 -11428 Mar 15 j 11:54 10° **Ω**42'35 -11423 Jan 14 j 04:32 0°정 retrograde

-11423 Mar 03 j 22:32

min. Earth dist.

-11428 Apr 11 j 21:10 6° **Ω**02'06 0.40982 AU

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Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23,
Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11900 BCE in historical counting style.
                    -11423 Apr 18 j 08:26 0°光
                                                                                             -11418 Jan 27 i 09:31
                    -11423 May 27 j 12:59 27° + 28'11
                                                                                             -11418 Mar 14 j 04:50
                                                                                                                     0°×7
evening set
                    -11423 May 31 j 01:13 0°Υ
                                                                                             -11418 May 01 j 03:09
                                                                                                                     0°궁
                    -11423 Jun 14 j 11:07 10°Υ30'40 2.43824 AU
max. Earth dist.
                                                                                             -11418 Jun 21 j 00:42
                                                                                                                     0°≈≈
                    -11423 Jul 10 j 13:54
                                                                                                                     0°)€
                                            0^{\circ}8
                                                                                             -11418 Aug 20 j 03:43
                                                                         asc. node
                                                                                             -11418 Sep 05 j 07:28
                                                                                                                     5°) 48′24
                    -11423 Jul 22 j 08:40
conjunction
                                            8°857'27 1°12'15
                                                                         retrograde
                                                                                             -11418 Oct 07 j 06:29 11°\mathbf{1}5'46
                    -11423 Jul 22 j 09:31
 minimum elong
                                            8°859'04
                                                       1°12'36
                                                                         opposition
                                                                                             -11418 Nov 12 j 13:59
                                                                                                                     3°¥20′28
                                                                                                                                 3°03'04
                                                                         greatest brilliancy
                    -11423 Aug 18 j 15:29
                                            0^{\circ}\Pi
                                                                                             -11418 Nov 13 j 06:03
                                                                                                                     3°₩05'28
                                                                                                                                 -1.8m
morning rise
                    -11423 Sep 21 j 02:57 26°Д07'42
                                                                         min. Earth dist.
                                                                                             -11418 Nov 19 j 10:21
                                                                                                                     0°)47'15
                                                                                                                                 0.56168 AU
                    -11423 Sep 26 j 01:53
                                            0ಂತಾ
                                                                                             -11418 Nov 21 j 14:35 30°R≈
                    -11423 Nov 03 j 18:08
                                            0^{\circ}\Omega
                                                                         direct
                                                                                             -11418 Dec 22 j 10:06 23°≈51'06
desc. node
                    -11423 Dec 03 j 08:12 22°\Omega24'54
                                                                                             -11417 Jan 23 j 21:39
                                                                                                                     0°)€
                    -11423 Dec 13 j 13:26
                                                                                             -11417 Mar 23 j 15:43
                                                                                                                     0^{\circ}\Upsilon
                    -11422 Jan 24 j 08:51
                                            0∘⊽
                                                                                             -11417 May 07 j 02:23
                                                                                                                     0°8
                    -11422 Mar 10 j 05:22
                                            0°M
                                                                                             -11417 Jun 16 j 19:12
                                                                                                                     0^{\circ}\Pi
                    -11422 Apr 29 j 11:37
                                            0°⊀
                                                                         desc. node
                                                                                             -11417 Jul 26 j 01:35 29°Ⅲ51'39
retrograde
                    -11422 Jul 22 j 05:15 28° ₹ 59'21
                                                                                             -11417 Jul 26 j 05:58
opposition
                    -11422 Aug 30 j 23:02 19° ₹ 16'36 -3°22'42
                                                                                             -11417 Sep 03 j 18:59
greatest brilliancy
                    -11422 Aug 30 j 23:05 19° ₹ 16'33
                                                                                             -11417 Oct 14 j 08:30
                                                                                                                     0° m
min. Earth dist.
                    -11422 Aug 30 j 17:35 19° ₹22'05
                                                       0.66446 AU
                                                                         evening set
                                                                                             -11417 Nov 22 j 20:45 28° m 08'15
direct
                    -11422 Oct 09 i 22:54
                                           9°х 34′43
                                                                                             -11417 Nov 25 j 12:52
                                                                                                                     0°Ω
asc. node
                    -11422 Dec 01 i 01:36 22° ₹26'07
                                                                                             -11416 Jan 08 j 13:28
                    -11422 Dec 17 j 18:04
                                           0°₹
                    -11421 Feb 10 j 06:24
                                            0°≈
                                                                         conjunction
                                                                                             -11416 Jan 14 j 21:17
                                                                                                                     4°M12'44 -1°14'47
                    -11421 Mar 29 j 08:05
                                            0°₩
                                                                                             -11416 Jan 14 j 21:24
                                                                                                                     4°ML12'55 1°15'06
                                                                          minimum elong
                    -11421 May 11 j 12:32
                                            0^{\circ}\Upsilon
                                                                         max. Earth dist.
                                                                                             -11416 Feb 03 j 05:13 16° ML57'31 2.61721 AU
                    -11421 Jun 21 j 02:15 0°8
                                                                                             -11416 Feb 23 j 06:31
                                                                                                                     0°√
                    -11421 Jul 24 j 19:38 25°855'49
                                                                                             -11416 Mar 05 j 08:10
                                                                                                                     7°∡07'58
evening set
                                                                         morning rise
                    -11421 Jul 30 j 01:01 0°Ⅱ
                                                                                             -11416 Apr 10 j 05:27
                                                                                                                     0°궁
                    -11421 Sep 06 j 07:53
                                                                                             -11416 May 28 j 01:12
                                                                                                                     0°≈
                                                                                             -11416 Jul 15 j 23:35
                                                                                                                     0°₩
                                                                                             -11416 Jul 23 j 03:00
conjunction
                    -11421 Sep 25 j 06:16 14°548'08 0°19'35
                                                                                                                     4°₩16'39
                                                                         asc. node
                    -11421 Sep 25 j 08:05 14°951'41 0°20'10
                                                                                             -11416 Sep 06 j 02:39
                                                                                                                     0^{\circ}\Upsilon
 minimum elong
                    -11421 Oct 14 j 21:09 0°Ω
                                                                                             -11416 Nov 24 j 11:10 0°8
                    -11421 Oct 21 j 02:13 4°Ω46'08
                                                                                             -11416 Dec 02 j 03:05 0°821'19
desc. node
                                                                         retrograde
                    -11421 Nov 02 j 10:54 14°Ω11'06
                                                                                             -11416 Dec 09 j 15:06 30°RΥ
max. Earth dist.
                                                      2.40224 AU
                    -11421 Nov 23 j 13:15 0° Mp
                                                                         opposition
                                                                                             -11415 Jan 03 j 16:47 24°Y16'09
                                                                                                                                 6°40'38
morning rise
                    -11421 Nov 28 j 11:13
                                            3°m/37'56
                                                                         greatest brilliancy
                                                                                             -11415 Jan 05 j 09:33 23°Y43'58
                    -11420 Jan 04 j 00:56
                                            0∘⊽
                                                                         min. Earth dist.
                                                                                             -11415 Jan 11 j 08:08 21°Υ52'01
                                                                                                                                 0.44303 AU
                    -11420 Feb 16 j 20:52
                                                                         direct
                                                                                             -11415 Feb 08 j 07:48 16°Υ57'47
                    -11420 Apr 03 j 14:19
                                                                                             -11415 Mar 27 j 20:36 0°8
                    -11420 May 24 j 18:55
                                                                                             -11415 May 17 j 17:41 0°П
                    -11420 Aug 01 j 19:07
                                                                                             -11415 Jun 12 j 06:13 17°Ⅲ26'11
                                                                         desc. node
                    -11420 Aug 26 j 07:53 3°≈21'33
                                                                                             -11415 Jun 30 j 01:39
retrograde
                    -11420 Sep 17 j 22:47 30°Rる
                                                                                             -11415 Aug 11 i 00:04
                                                                                                                     0^{\circ}\Omega
                    -11420 Oct 03 j 21:45 24°る18'28 -0°35'47
                                                                                             -11415 Sep 22 i 06:59
opposition
greatest brilliancy
                    -11420 Oct 03 i 23:54 24° ₹16'21 -1.5m
                                                                                             -11415 Nov 04 i 17:54
min. Earth dist.
                    -11420 Oct 07 j 09:14 22°る55'52 0.64241 AU
                                                                                             -11415 Dec 19 i 15:19
asc. node
                    -11420 Oct 18 j 06:19 18°る54'55
                                                                                             -11414 Jan 06 j 14:29 11°ML45'42
                                                                         evening set
                    -11420 Nov 13 j 16:34 14°♂19'52
direct
                                                                                             -11414 Feb 03 j 18:33
                    -11419 Jan 10 j 00:10 0°≈
                    -11419 Mar 05 j 04:34
                                                                         conjunction
                                            0°¥
                                                                                             -11414 Feb 24 j 18:47 13° ₹29'35 -0°55'35
                                            0^{\circ}\Upsilon
                    -11419 Apr 19 j 07:31
                                                                          minimum elong
                                                                                             -11414 Feb 24 j 20:21 13° ₹ 32'06
                                                                                                                                0°56'10
                    -11419 May 30 j 14:30
                                            0°8
                                                                         max. Earth dist.
                                                                                             -11414 Feb 28 j 04:49 15° ₹ 40'59
                                                                                                                                2.66163 AU
                    -11419 Jul 08 j 21:21
                                            0^{\circ}\Pi
                                                                                             -11414 Mar 22 j 13:45
                                                                                                                    0°ಕ
                    -11419 Aug 16 j 09:51
                                            0ಂತಾ
                                                                                             -11414 Apr 13 j 04:19 13°₹49'59
                                                                         morning rise
                    -11419 Sep 07 j 00:09 16°546'43
desc. node
                                                                                             -11414 May 08 j 08:20 0°≈
                    -11419 Sep 24 j 04:30
                                            0^{\circ}\Omega
                                                                                             -11414 Jun 09 j 19:01 20°≈59'20
                                                                         asc. node
                    -11419 Sep 27 j 07:12
                                                                                                                     0°∀
evening set
                                            2°£22'45
                                                                                             -11414 Jun 23 j 15:11
                    -11419 Nov 03 j 01:51
                                                                                                                     0^{\circ}\Upsilon
                                                                                             -11414 Aug 08 j 09:24
                                                                                             -11414 Sep 23 j 03:00
                                                                                                                     0°8
conjunction
                    -11419 Nov 25 j 21:56 16° m 38'01 -0°52'52
                                                                                             -11414 Nov 09 j 05:58
                                                                                                                     0^{\circ}\Pi
 minimum elong
                    -11419 Nov 25 j 19:14 16° m 33'10 0°52'39
                                                                                             -11413 Jan 03 j 01:44
                                                                                                                     0ಂತಾ
                    -11419 Dec 14 j 16:56
                                           0∘⊽
                                                                         retrograde
                                                                                             -11413 Feb 17 j 00:36 11°516'58
max. Earth dist.
                    -11418 Jan 02 j 04:54 12°252'52 2.52279 AU
                                                                                             -11413 Mar 18 j 05:59
                                                                                                                     6°∽26′22
                                                                         min. Earth dist.
                                                                                                                                 0.38546 AU
                    -11418 Jan 21 j 14:07 26° 205'41
                                                                                             -11413 Mar 20 j 11:38
morning rise
                                                                         opposition
                                                                                                                     5°5649'39
                                                                                                                                 3°10'21
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Planetary Phenomena of Mars from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 49							
Attention, astronom	ical year style is used: The	e year -11899	in astronomical co	unting style is the year	r 11900 BCE in historical	counting styl	e.
greatest brilliancy	-11413 Mar 20 j 09:17	5° © 51'17	-2.9m	max. Earth dist.	-11408 May 24 j 11:36	20°) €08'54	2.48593 AU
direct	-11413 Apr 19 j 21:05	0°9542'35			-11408 Jun 07 j 06:08	$0^{\circ}\Upsilon$	
desc. node	-11413 Apr 30 j 12:31	1° 5 26'35					
	-11413 Jul 09 j 10:00	$0^{\circ}\Omega$		conjunction	-11408 Jun 30 j 10:27		1°11'36
	-11413 Aug 27 j 21:12	0° ™		minimum elong	-11408 Jun 30 j 09:23		1°11'44
	-11413 Oct 13 j 21:43	0∘ ⊽			-11408 Jul 17 j 21:45	0°B	
	-11413 Nov 29 j 19:15	0°M₊		morning rise	-11408 Aug 26 j 05:42	0° Ⅱ 05′13	
	-11412 Jan 16 j 00:29	0° ∡ 7			-11408 Aug 26 j 03:01	0° Ⅱ	
evening set	-11412 Feb 15 j 21:32				-11408 Oct 03 j 16:58	0°99	
	-11412 Mar 03 j 05:13	0°る			-11408 Nov 11 j 12:26	0°N	
max. Earth dist.	-11412 Mar 23 j 15:30	13° 6 05'46	2.65257 AU	desc. node	-11408 Dec 20 j 04:44		
i	11412 4 02:20:40	200720112	0012125		-11408 Dec 21 j 11:27	0° Т р	
conjunction minimum elong	-11412 Apr 03 j 20:49				-11407 Feb 01 j 14:37	0ം ル 0∘ಹ	
behind sun begin	-11412 Apr 03 j 21:23 -11412 Apr 03 j 12:28		0°14'11		-11407 Mar 19 j 09:52 -11407 May 12 j 17:28	0° ⊼ ¹	
behind sun end	-11412 Apr 03 j 12.28 -11412 Apr 04 j 06:18			retrograde	-11407 Jul 08 j 13:44		
ocimia sun cha	-11412 Apr 04 j 00:18	20 ⊙ 33 33		min. Earth dist.	-11407 Aug 15 j 19:16	6° × 32'08	0.65632 AU
asc. node	-11412 Apr 26 j 11:47	5°≈04'21		opposition	-11407 Aug 17 j 12:12	5°×750'51	
morning rise	-11412 May 20 j 19:36			greatest brilliancy	-11407 Aug 17 j 07:03	5° ₹ 56'02	
morning not	-11412 Jun 03 j 00:22	0° ∀		greatest stilliane)	-11407 Sep 02 j 10:43		
	-11412 Jul 16 j 19:32	0°Υ		direct	-11407 Sep 25 j 21:00		
	-11412 Aug 28 j 06:19	0°8			-11407 Oct 21 j 11:16	0° ∡ 7	
	-11412 Oct 08 j 18:27	0°Щ		asc. node	-11407 Dec 17 j 15:30		
	-11412 Nov 19 j 01:43	0°©			-11407 Dec 29 j 14:37	8°0	
	-11412 Dec 31 j 14:13	$0^{\circ}\Omega$			-11406 Feb 18 j 21:02	0° ≈	
	-11411 Feb 17 j 11:19	0° m			-11406 Apr 06 j 02:14	0°) €	
desc. node	-11411 Mar 17 j 14:12	13°Mp 16'45			-11406 May 19 j 00:21	$0^{\circ}\Upsilon$	
retrograde	-11411 Apr 19 j 15:00	20° My $05'54$			-11406 Jun 28 j 12:51	9° 8	
min. Earth dist.	-11411 May 18 j 14:02	14° m 27'43	0.47907 AU	evening set	-11406 Jun 30 j 13:53	1° 8 32'59	
greatest brilliancy	-11411 May 25 j 08:59				-11406 Aug 06 j 11:59	Π $^{\circ}0$	
opposition	-11411 May 26 j 14:11		-4°05'23	max. Earth dist.	-11406 Aug 23 j 10:14	13° Ⅱ 14′00	2.38353 AU
direct	-11411 Jun 28 j 23:49	4° Mp 44'11					
	-11411 Sep 13 j 12:58	0∘ 亚		conjunction	-11406 Aug 29 j 23:54		0°48'38
	-11411 Nov 06 j 05:14	0°M 0°. ₹		minimum elong	-11406 Aug 30 j 03:13		0°49'13
	-11411 Dec 26 j 03:31 -11410 Feb 12 j 11:57	0°♂ 0°る			-11406 Sep 13 j 19:25 -11406 Oct 22 j 08:52	$0 {\circ} \Omega$	
asc. node	-11410 Feb 12 j 11.37 -11410 Mar 14 j 08:36			morning rise	-11406 Nov 02 j 17:37		
evening set	-11410 Mar 26 j 13:24			desc. node	-11406 Nov 06 j 22:08		
evening set	-11410 Mar 31 j 07:28			dese. Hode	-11406 Dec 01 j 00:45	0°m	
max. Earth dist.	-11410 Apr 19 j 12:48		2.59149 AU		-11405 Jan 11 j 13:13	0∘ ⊽	
	r				-11405 Feb 24 j 14:13	0°M	
conjunction	-11410 May 14 j 15:22	29° ≈ 34'03	0°36'23		-11405 Apr 13 j 02:50	0° ∡ ¹	
minimum elong	-11410 May 14 j 13:55	29° ≈ 31'34	0°36'01		-11405 Jun 06 j 13:13	8°0	
	-11410 May 15 j 06:35	0°) €		retrograde	-11405 Aug 12 j 22:04	20° ප 01'53	
	-11410 Jun 27 j 06:05	$0^{\circ}\Upsilon$		opposition	-11405 Sep 21 j 02:12	10° る 40'12	-1°46'56
morning rise	-11410 Jul 03 j 03:42	4° Ƴ 13'24		greatest brilliancy	-11405 Sep 21 j 05:51		
	-11410 Aug 07 j 10:56	0°8		min. Earth dist.	-11405 Sep 23 j 03:11		0.65850 AU
	-11410 Sep 16 j 08:44	0° I		direct	-11405 Oct 31 j 17:49	0°る44'17	
	-11410 Oct 25 j 16:24	0° ©		asc. node	-11405 Nov 04 j 21:30	0°る50'40	
	-11410 Dec 04 j 07:20	0° N			-11404 Jan 24 j 16:20	0° ≈	
daga mada	-11409 Jan 14 j 10:44	0°Тр			-11404 Mar 14 j 14:33	0° ℋ 0° Ƴ	
desc. node	-11409 Feb 02 j 10:36 -11409 Feb 28 j 06:08	0₀ ʊ			-11404 Apr 27 j 16:18 -11404 Jun 07 j 13:54	0° 8	
	-11409 Apr 26 j 07:05	0° m.			-11404 Jul 16 j 15:57	0°II	
retrograde	-11409 Jun 02 j 19:32	8°M06'05			-11404 Aug 24 j 00:54	0°©	
min. Earth dist.	-11409 Jul 06 j 21:24	0°M26'19	0.59296 AU	evening set	-11404 Sep 02 j 02:23	7° 5 04'50	
	-11409 Jul 08 j 00:15			desc. node	-11404 Sep 23 j 17:23		
greatest brilliancy	-11409 Jul 11 j 08:30		-1.7m		-11404 Oct 01 j 16:13	0° Ω	
opposition	-11409 Jul 12 j 08:07				<i>y</i> - 7-2		
direct	-11409 Aug 18 j 06:05			conjunction	-11404 Nov 03 j 00:30	24° Ω 29'54	-0°29'24
	-11409 Oct 02 j 13:52	0°M		minimum elong	-11404 Nov 02 j 22:17	24° Ω 25'47	0°28'58
	-11409 Dec 02 j 22:57	0° ∡ ″			-11404 Nov 10 j 10:13	0° m ∕	
	-11408 Jan 23 j 10:59	0°₹		max. Earth dist.	-11404 Dec 16 j 01:06		2.47553 AU
asc. node	-11408 Jan 30 j 10:18	4°る15'04			-11404 Dec 21 j 22:34	0∘ ত	
	-11408 Mar 11 j 08:59	0° ≈		morning rise	-11403 Jan 01 j 22:11	7° £ 41'41	
	-11408 Apr 25 j 13:10	0°)(-11403 Feb 03 j 14:30	0°M 0°. ₹	
evening set	-11408 May 08 j 05:58	8°) 45′09			-11403 Mar 21 j 14:40	0° ⊀	

-11403 Oct 27 j 03:43 17°≈26'40 1°32'19 opposition -11403 Oct 27 j 10:19 17°≈20'19 -1.7m greatest brilliancy -11403 Nov 01 j 18:21 15°≈17'11 min. Earth dist. 0.60002 AU -11403 Dec 06 j 15:42 7°≈37'33 direct -11402 Feb 13 j 20:21 0°**∀** $0^{\circ}\Upsilon$ -11402 Apr 04 j 02:07 -11402 May 16 j 16:53 0°**8**

-11402 Jun 25 j 14:54 0°**Ⅱ** -11402 Aug 03 j 13:34 0°ഇ -11402 Aug 11 j 18:41 desc. node 6°∽20'00 -11402 Sep 11 j 16:46 $0^{\circ}\Omega$ -11402 Oct 21 j 21:39

evening set -11402 Nov 02 j 09:43 -11402 Dec 02 j 18:54

conjunction -11402 Dec 27 j 18:54 17° **2**16'39 -1°12'20 minimum elong -11402 Dec 27 j 17:48 17°**2**14'46 1°12'28 -11401 Jan 15 i 14:38 0°M

max. Earth dist. -11401 Jan 23 j 02:18 4°ML59'50 2.58572 AU

8°m/22'19

morning rise -11401 Feb 18 i 06:09 22° ML12'36 -11401 Mar 02 i 06:37 0° ₹

-11401 Apr 18 j 11:09 0°る -11401 Jun 06 j 02:04 0°≈ -11401 Jul 27 j 05:31 0°**米** -11401 Aug 09 j 20:59 7°**∺**29'58

-11401 Sep 26 j 10:47 0°**Υ** -11401 Nov 08 j 07:06 9°**Υ**18'06 retrograde

asc. node

evening set

-11401 Dec 12 j 13:26 2°**Υ**'24'43 5°28'26 opposition

greatest brilliancy -11401 Dec 13 j 23:38 1°**Υ**55'17 -2.2m -11401 Dec 19 j 14:00 30°R €

min. Earth dist.

-11401 Dec 20 j 15:33 29° **∺** 38'33 0.49091 AU -11400 Jan 19 j 09:15 23° **∺** 58'51

direct -11400 Feb 19 j 16:32 0°**Υ** -11400 Apr 16 j 19:32 0°8 -11400 May 30 j 14:05 0°**Ц**

desc. node -11400 Jun 28 j 23:11 21°**Ⅲ**25'00 -11400 Jul 10 j 14:02 0°ഇ -11400 Aug 20 j 04:38 0°**Ω**

-11400 Sep 30 j 13:36 0° Mg -11400 Nov 12 j 08:48 0°**♀** -11400 Dec 20 j 18:00 25°**♀**58'10 -11400 Dec 26 j 19:31 0°M

-11399 Feb 09 i 02:32 28°M 57'58 -1°06'35 conjunction -11399 Feb 09 i 03:52 29° ML00'07 1°07'06 minimum elong

-11399 Feb 10 i 16:56 0° ₹

-11399 Feb 18 i 11:03 5° ₹ 00'06 2.65045 AU max. Earth dist.

-11399 Mar 29 j 09:08 29° ₹ 55'51 morning rise -11399 Mar 29 j 11:44 0°る -11399 May 15 j 13:10 0°≈

-11399 Jun 26 j 13:40 26°≈48'49 asc. node

-11399 Jul 01 j 13:32 0°**光** $0^{\circ}\Upsilon$ -11399 Aug 17 j 19:37 -11399 Oct 05 j 17:12 0°8 -11399 Dec 01 j 15:21 0°**П**