Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 1 Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -7900 i	n astronomical cou	nting style is the year	7901 BCE in historical co	ounting style.	
conjunction	-7900 Dec 15 j 08:04	28° ≙ 58'10	-0°59'54		-7895 Nov 10 j 03:25	0ංම	
minimum elong	-7900 Dec 15 j 05:17	28° ≏ 52'58	1°00'04		-7894 Jan 04 j 07:25	$0^{\circ}\Omega$	
	-7900 Dec 16 j 17:13	0°M₊		retrograde	-7894 Feb 27 j 21:02	14° Ω 56′04	
	-7899 Jan 26 j 21:11	0° ∡ ¹		opposition	-7894 Mar 30 j 15:08	9° Ω 48'27	2°37'07
max. Earth dist.	-7899 Jan 28 j 20:47	1° ∡ °24'33	2.47463 AU	greatest brilliancy	-7894 Mar 31 j 01:23	9° Ω 41'28	-2.9m
morning rise	-7899 Feb 14 j 05:54	12° ∡ °54'51		min. Earth dist.	-7894 Apr 02 j 12:23	9° Ω 01′23	0.38597 AU
	-7899 Mar 11 j 04:22	0°ರ		direct	-7894 Apr 30 j 23:59	4° Ω 22'21	
	-7899 Apr 25 j 19:38	0° ≈		desc. node	-7894 May 03 j 17:49	4° Ω 25'25	
	-7899 Jun 13 j 02:41	0° ∀			-7894 Jul 11 j 21:47	0° m)	
	-7899 Aug 04 j 20:37	0° Υ			-7894 Aug 28 j 21:43	0∘ ত	
asc. node	-7899 Aug 18 j 11:48	6° Y ′58′24			-7894 Oct 12 j 21:58	0° M ₊	
retrograde	-7899 Oct 31 j 08:30	29° Y 46′23			-7894 Nov 26 j 21:35	0° ∡ ¹	
opposition	-7899 Dec 07 j 20:25	21° Υ 20'22			-7893 Jan 11 j 17:34	0° ට	
greatest brilliancy	-7899 Dec 08 j 13:50	21° Y 03'40	-1.6m	. ,	-7893 Feb 27 j 10:31	0°≈	
min. Earth dist.	-7899 Dec 13 j 13:29	19° Y 08'52	0.60399 AU	evening set	-7893 Mar 15 j 12:54	10°≈15'37	
direct	-7898 Jan 17 j 13:08 -7898 Mar 20 j 09:23	11° Y 29'42 0° と		asc. node	-7893 Apr 09 j 19:25 -7893 Apr 15 j 12:39	26° ≈ 21'14 0° ∀	
	•	0°II		may Earth dist	-7893 Apr 26 j 10:12		2.66580 AU
	-7898 May 10 j 05:39 -7898 Jun 22 j 07:10	0°©		max. Earth dist.	-/893 Apr 20 J 10.12	0 Д3/31	2.00380 AU
desc. node	-7898 Jul 29 j 10:06	27°9346'40		conjunction	-7893 May 02 j 07:08	10°) 42′52	0°12'48
dese. Hode	-7898 Aug 01 j 07:54	0°Ω		minimum elong	-7893 May 02 j 06:40	10° X 42'06	
	-7898 Sep 09 j 04:26	0° m)		behind sun begin	-7893 May 01 j 18:39	10° ¥ 22'54	0 12 54
	-7898 Oct 18 j 02:36	0∘ ⊽		behind sun end	-7893 May 02 j 18:40	11°) (01'18	
	-7898 Nov 27 j 00:58	0° M .			-7893 Jun 01 j 06:28	0°Υ	
evening set	-7898 Dec 15 j 00:52	13°ML08'59		morning rise	-7893 Jun 17 j 08:22	10° Y 26'58	
J	-7897 Jan 07 j 15:02	0° ∡ ¹		C	-7893 Jul 17 j 01:38	0°8	
	v				-7893 Aug 30 j 16:25	Π°	
conjunction	-7897 Feb 09 j 02:28	22° ∡ ¹29'56	-1°06'56		-7893 Oct 13 j 05:30	0ංම	
minimum elong	-7897 Feb 09 j 03:47	22° ₹ ³32'09	1°07'26		-7893 Nov 25 j 02:48	$0^{\circ}\Omega$	
	-7897 Feb 20 j 04:21	0°ಕ			-7892 Jan 07 j 04:24	0° m	
max. Earth dist.	-7897 Mar 07 j 07:01	10° ට 06'25	2.58767 AU		-7892 Feb 21 j 19:16	0∘ ত	
morning rise	-7897 Apr 02 j 14:25	27° る 23'08		desc. node	-7892 Mar 20 j 20:35	15° ≏ 50'52	
	-7897 Apr 06 j 15:06	0° ≈			-7892 Apr 30 j 13:25	0° M ₊	
	-7897 May 23 j 15:59	0° ∀		retrograde	-7892 May 10 j 15:19	0°M42'38	
asc. node	-7897 Jul 06 j 08:17	27°) €04'54			-7892 May 20 j 15:44	30° ₹ Ω	
	-7897 Jul 11 j 03:15	0° Y		min. Earth dist.	-7892 Jun 06 j 19:10		0.43001 AU
	-7897 Aug 30 j 22:02	0°B		greatest brilliancy	-7892 Jun 13 j 01:38	23° £ 52'35	
	-7897 Oct 28 j 19:13	0°Ⅱ 12°Ⅲ5312.6		opposition	-7892 Jun 14 j 12:41	23° £ 24'19	-5°13'41
retrograde	-7897 Dec 19 j 17:23	12° Ⅱ 52′26 5° Ⅱ 58′08	6°01'41	direct	-7892 Jul 16 j 02:10		
opposition	-7896 Jan 23 j 02:09	5° П 22'50	-2.1m		-7892 Sep 03 j 13:13	0° ™ 0° <i>⊀</i> ¹	
greatest brilliancy min. Earth dist.	-7896 Jan 24 j 19:03 -7896 Jan 31 j 08:59	3° Ⅱ 22 30 3° Ⅱ 07'47	0.49253 AU		-7892 Oct 30 j 19:17 -7892 Dec 20 j 02:24	0°중	
min. Earm dist.	-7896 Feb 10 j 21:51	30°R₩	0.49233 AU		-7892 Dec 20 j 02.24 -7891 Feb 06 j 22:41	0°≈	
direct	-7896 Feb 29 j 22:51	27° 8 30'52		asc. node	-7891 Feb 24 j 15:53	0 ~ 10° ≈ 59'47	
ancet	-7896 Mar 20 j 14:34	0°Ⅱ		asc. node	-7891 Mar 27 j 00:08	0° ∺	
	-7896 May 22 j 18:56	0°©		evening set	-7891 Apr 22 j 12:08	16°) 49'42	
desc. node	-7896 Jun 15 j 13:32	15° © 38'51			-7891 May 12 j 22:35	0°Υ	
	-7896 Jul 06 j 00:34	$0^{\circ}\Omega$		max. Earth dist.	-7891 May 20 j 14:42	4° Υ 59'48	2.62473 AU
	-7896 Aug 15 j 23:30	0° m)			, ,		
	-7896 Sep 25 j 08:38	0∘ ⊽		conjunction	-7891 Jun 09 j 02:12	17° Ƴ 49'25	0°53'47
	-7896 Nov 05 j 11:11	0°M₊		minimum elong	-7891 Jun 09 j 00:43	17° Ƴ 46'58	0°53'53
	-7896 Dec 18 j 00:16	0° ∡ ¹			-7891 Jun 27 j 06:39	9° 8	
	-7895 Jan 31 j 06:37	0°ಕ		morning rise	-7891 Jul 26 j 07:19	19° 8 52'08	
evening set	-7895 Feb 01 j 21:39	1° る 04'52			-7891 Aug 09 j 19:18	Π °0	
	-7895 Mar 18 j 01:37	0° ≈			-7891 Sep 20 j 15:23	0ං ම	
					-7891 Oct 31 j 04:39	0 $^{\circ}$ Ω	
conjunction	-7895 Mar 24 j 06:30	4°≈00'18			-7891 Dec 10 j 01:40	0° m)	
minimum elong	-7895 Mar 24 j 07:45	4°≈02'19	0°33'29		-7890 Jan 19 j 03:31	0∘ ⊽	
max. Earth dist.	-7895 Apr 02 j 09:26	9°≈52'34	2.65352 AU	desc. node	-7890 Feb 05 j 21:15	12° ≏ 59'18	
	-7895 May 03 j 20:20	0° \ 40 \ (25!54			-7890 Mar 01 j 20:20	0°M	
morning rise	-7895 May 11 j 01:27	4°) ₹35'54			-7890 Apr 17 j 09:05	0°⊀ ⁷	
asc. node	-7895 May 23 j 01:46	12° 升 14'48 0° ♈		retrograde	-7890 Jun 29 j 10:41	26° ₹ 11'15	0.55201 ATT
	-7895 Jun 19 j 23:19			min. Earth dist.	-7890 Jul 31 j 12:48	19° х 13'35 17° х 05'48	0.55291 AU
	-7895 Aug 06 j 01:49 -7895 Sep 22 j 09:32	0°Ⅱ 8°0		greatest brilliancy opposition	-7890 Aug 06 j 01:31 -7890 Aug 07 j 05:19	1/° x '05'48 16° x '38'56	-1.9m -5°19'04
	7073 Sep 22 J 09.32	V <u>н</u>		оррознион	7070 Aug 07 J 05.19	10 > 2020	5 17 04

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 2 Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ie year -7900 i	n astronomical co	unting style is the year	7901 BCE in historical c	ounting style.	
direct	-7890 Sep 11 j 21:20	8° ∡ ³38′05			-7885 Nov 15 j 17:41	0∘ ⊽	
	-7890 Nov 21 j 01:47	ರ°0					
asc. node	-7889 Jan 12 j 16:16	28° る 07'52		conjunction	-7885 Nov 20 j 14:43	3° ≏ 46'09	-0°38'04
	-7889 Jan 15 j 22:39	0° ≈		minimum elong	-7885 Nov 20 j 11:41	3° ≏ 40′18	0°38'01
	-7889 Mar 07 j 11:18	0° ∀			-7885 Dec 25 j 02:48	0°M₊	
	-7889 Apr 24 j 07:10	0° Y		max. Earth dist.	-7884 Jan 06 j 03:49		2.42423 AU
evening set	-7889 Jun 02 j 07:12	25° Ƴ 39'58		morning rise	-7884 Jan 24 j 00:14	21°M58'22	
	-7889 Jun 08 j 17:07	0°8			-7884 Feb 04 j 04:52	0° ∡ ¹	
max. Earth dist.	-7889 Jun 20 j 00:16		2.53410 AU		-7884 Mar 18 j 12:06	0°ರ	
	-7889 Jul 21 j 19:19	Π °0			-7884 May 03 j 09:53	0° ≈	
		_			-7884 Jun 21 j 18:10	0° ∺	
conjunction	-7889 Jul 22 j 12:23	0° Ⅱ 30'29			-7884 Aug 17 j 23:52	0° Υ	
minimum elong	-7889 Jul 22 j 12:25	0° Ⅱ 30'33	1°12'39	asc. node	-7884 Sep 04 j 03:42	7° Y ′01′39	
	-7889 Aug 31 j 20:51	0°9		retrograde	-7884 Oct 15 j 13:31	15° Y ′39'13	
morning rise	-7889 Sep 13 j 07:53	9° © 20'38		opposition	-7884 Nov 22 j 21:23	6° Y 48'12	
	-7889 Oct 10 j 11:02	0° N		greatest brilliancy	-7884 Nov 23 j 06:35		-1.5m
	-7889 Nov 18 j 06:52	0° m)		min. Earth dist.	-7884 Nov 27 j 04:42		0.63377 AU
desc. node	-7889 Dec 24 j 17:09	28° m, 07'02			-7884 Dec 11 j 22:12	30° ₹	
	-7889 Dec 27 j 04:10	ია ო 0∘ ত		direct	-7883 Jan 02 j 20:45	26°) 49'01	
	-7888 Feb 05 j 01:48	0° M 0°. ⊼			-7883 Jan 26 j 08:57	0° Υ	
	-7888 Mar 18 j 03:57	0° ∡ ¹			-7883 Apr 02 j 22:19	0°B	
	-7888 May 03 j 12:44	5°0			-7883 May 20 j 00:40	0°Ⅱ	
. 1	-7888 Jul 02 j 19:15	0°≈			-7883 Jul 01 j 01:24	0° ©	
retrograde	-7888 Aug 05 j 22:27	6°≈34'59		1 1	-7883 Aug 09 j 15:12	0°N	
: E 4 E 4	-7888 Sep 06 j 09:00	30°Rる	0.62060 ATT	desc. node	-7883 Aug 15 j 03:35	4° Ω 15'53	
min. Earth dist.	-7888 Sep 11 j 17:35		0.63968 AU		-7883 Sep 17 j 04:45	0° m)	
opposition	-7888 Sep 14 j 20:25	26° る 38'22			-7883 Oct 25 j 20:44	0∘ ⊽	
greatest brilliancy	-7888 Sep 14 j 13:43	26°る45'06	-1.5m	evening set	-7883 Nov 22 j 00:02	20° ₽ 38'03	
direct	-7888 Oct 23 j 12:12	17°る26'30			-7883 Dec 04 j 13:03	0° ™ 0° <i>⊀</i> 7	
asc. node	-7888 Nov 29 j 20:27	24°る35'20 0°≈			-7882 Jan 14 j 21:32	0. X,	
	-7888 Dec 14 j 04:16 -7887 Feb 12 j 02:21	0 ≈ 0° ∺		conjunction	-7882 Jan 20 j 03:45	3° ∡ ¹42'58	1911/10
	-7887 Apr 03 j 11:11	0° Υ		minimum elong	-7882 Jan 20 j 03:52	3° × ⁴² 36	
	-7887 May 19 j 16:07	0°8		max. Earth dist.	-7882 Feb 22 j 22:05		2.54811 AU
	-7887 Jul 01 j 19:44	0°II		max. Earth dist.	-7882 Feb 27 j 06:42	27 × 03 01 0°る	2.34811 AU
evening set	-7887 Jul 19 j 01:35	12° Ⅱ 30′23		morning rise	-7882 Mar 16 j 12:38	11° る 32'39	
max. Earth dist.	-7887 Aug 09 j 11:24		2.41408 AU		-7882 Apr 13 j 17:04	0°≈	
man. Darvir alov.	-7887 Aug 11 j 14:13	0.ತಿ	2.11.00110		-7882 May 31 j 01:21	0° \	
	, , , , , , , , , , , , , , , , , , , ,	· -			-7882 Jul 19 j 13:56	0° Υ	
conjunction	-7887 Sep 14 j 02:40	25°938'04	0°40'36	asc. node	-7882 Jul 23 j 01:14	2° Υ '01'59	
minimum elong	-7887 Sep 14 j 05:22	25° © 43'17	0°41'04		-7882 Sep 11 j 19:46	0°B	
C	-7887 Sep 19 j 17:45	$0^{\circ}\Omega$		retrograde	-7882 Nov 28 j 14:38	24° 8 48'09	
	-7887 Oct 28 j 02:28	0° m)		opposition	-7881 Jan 03 j 08:30	17° 8 12'29	5°30'36
desc. node	-7887 Nov 10 j 10:38	10° m 27'03		greatest brilliancy	-7881 Jan 04 j 17:29	16° 8 42'22	-1.9m
morning rise	-7887 Nov 16 j 16:28	15° m 19'44		min. Earth dist.	-7881 Jan 10 j 22:36	14° 8 26'51	0.54085 AU
	-7887 Dec 05 j 13:27	0∘ ⊽		direct	-7881 Feb 11 j 18:12	7° 8 59'04	
	-7886 Jan 13 j 23:36	0° M.			-7881 Apr 19 j 06:36	$\Pi^{\circ}0$	
	-7886 Feb 24 j 04:38	0° ∡ ¹			-7881 Jun 05 j 22:04	0ංම	
	-7886 Apr 09 j 01:12	5°0		desc. node	-7881 Jul 03 j 04:41	19° 5 23'49	
	-7886 May 26 j 23:52	0° ≈			-7881 Jul 17 j 13:52	$0^{\circ}\Omega$	
	-7886 Jul 24 j 08:23	0° ∀			-7881 Aug 26 j 08:27	0° ™	
retrograde	-7886 Sep 09 j 23:01	11° 米 17'11			-7881 Oct 04 j 22:52	0∘ 亚	
asc. node	-7886 Oct 18 j 01:38	2°) 18′12			-7881 Nov 14 j 10:51	0° M	
opposition	-7886 Oct 19 j 14:39	1°) 41′03	0°03'33		-7881 Dec 26 j 12:23	0° ∡ ¹	
greatest brilliancy	-7886 Oct 19 j 14:44	1°) 40′58	-1.4m	evening set	-7880 Jan 15 j 20:48	14° ∡ °03′46	
min. Earth dist.	-7886 Oct 20 j 05:12	1° ¥ 26′26	0.66766 AU		-7880 Feb 08 j 10:00	0°ಕ	
	-7886 Oct 23 j 19:43	30° R ≈					
direct	-7886 Nov 29 j 02:12	21° ≈ 50'36		conjunction	-7880 Mar 08 j 00:55	18° පි 56'51	
	-7885 Jan 08 j 06:11	0° ∀		minimum elong	-7880 Mar 08 j 02:34	18° る 59'34	0°49'14
	-7885 Mar 11 j 06:55	0° Υ		max. Earth dist.	-7880 Mar 23 j 10:51	28° る 59'40	2.63401 AU
	-7885 Apr 29 j 02:30	0°B			-7880 Mar 25 j 00:04	0° ≈	
	-7885 Jun 12 j 01:23	0°Щ		morning rise	-7880 Apr 26 j 06:11	20° ≈ 44'24	
	-7885 Jul 23 j 00:04	0ංම			-7880 May 10 j 19:09	0° ∀	
	-7885 Aug 31 j 02:19	0°N		asc. node	-7880 Jun 08 j 19:41	18°) 22′22	
evening set	-7885 Sep 17 j 13:28	13° Ω 39'41			-7880 Jun 27 j 06:50	0° Υ	
desc. node	-7885 Sep 28 j 05:34	22° Ω 02'34			-7880 Aug 14 j 08:52	0° B	
	-7885 Oct 08 j 08:30	0° m)			-7880 Oct 02 j 23:13	0°Щ	

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style. -7880 Nov 27 j 09:15 0ಂಣ -7875 Oct 03 i 09:15 0°×7 -7879 Jan 28 j 06:58 17°9542'35 -7875 Dec 03 j 20:19 0°궁 retrograde 12°903'22 5°09'13 -7879 Mar 01 j 00:30 -7874 Jan 24 j 17:05 0°**≈** opposition 11°538'10 -7874 Jan 29 j 06:32 2°≈43'33 greatest brilliancy -7879 Mar 02 j 10:20 -2.6m asc. node -7879 Mar 07 j 21:50 10°900'45 0.41762 AU 0°**∀** min. Earth dist. -7874 Mar 14 j 23:43 -7879 Apr 04 j 03:45 $0^{\circ}\Upsilon$ direct 5°927'37 -7874 May 01 j 08:51 10°**Y**′08'58 desc. node -7879 May 20 j 09:49 17°955'19 evening set -7874 May 16 j 22:42 24°**Ƴ**13′26 -7879 Jun 12 j 00:41 0° Ω max. Earth dist. -7874 Jun 07 j 03:33 2.57486 AU 0° m -7879 Jul 28 j 15:32 -7874 Jun 15 j 17:02 0°8 -7879 Sep 09 j 16:29 0∘**⊽** -7879 Oct 22 j 11:08 0°M conjunction -7874 Jul 04 j 17:18 13°**8**01'05 1°09'17 -7874 Jul 04 j 16:22 12°**8**59'27 -7879 Dec 05 j 04:01 0°×7 minimum elong 1°09'36 0°₹ -7874 Jul 28 j 22:20 -7878 Jan 19 j 05:08 $0^{\circ}\Pi$ evening set -7878 Feb 27 j 23:29 25°る49'29 morning rise -7874 Aug 23 j 15:21 18°**Ⅲ**31'28 -7878 Mar 06 j 11:16 0°**≈** -7874 Sep 08 j 05:50 0ಂತಾ -7874 Oct 18 j 03:10 $0^{\circ}\Omega$ conjunction -7878 Apr 17 j 10:58 26°≈51'39 -0°05'12 -7874 Nov 26 j 06:26 0° m 26°**≈**51'58 minimum elong -7878 Apr 17 j 11:10 0°05'33 -7873 Jan 04 j 11:18 0∘**ত** behind sun begin -7878 Apr 16 j 16:33 26°≈22'17 desc. node -7873 Jan 10 j 11:58 4°**£**33'42 behind sun end -7878 Apr 18 j 05:47 27°≈21'40 -7873 Feb 13 j 18:48 0°M max. Earth dist. -7878 Apr 17 j 07:05 26°≈45'28 2.66747 AU -7873 Mar 28 j 17:37 0°×7 -7878 Apr 22 j 08:58 0°**)**€ -7873 May 17 j 00:33 0°궁 asc. node -7878 Apr 26 j 12:20 2° # 38'41 -7873 Jul 23 i 17:15 22°る06'03 retrograde morning rise -7878 Jun 02 i 20:35 26° **)** 34'00 min. Earth dist. -7873 Aug 27 j 20:12 14°る00'26 0.61237 AU -7878 Jun 08 j 04:35 $0^{\circ}\Upsilon$ -7873 Sep 01 j 09:40 12°る11'09 -3°54'22 opposition -7878 Jul 24 j 08:57 0°8 -7873 Aug 31 j 19:55 12°**る**24'53 greatest brilliancy -1 6m -7878 Sep 07 j 18:07 $0^{\circ}II$ -7873 Oct 09 j 00:36 3°**る**22'29 direct -7878 Oct 22 j 14:04 0ಂತಾ -7873 Dec 17 j 09:55 23°る56'34 asc. node -7878 Dec 06 j 13:37 $0^{\circ}\Omega$ -7873 Dec 29 j 17:39 0°≈ -7877 Jan 22 j 15:34 0° m -7872 Feb 22 j 01:39 0°) -7877 Mar 27 j 11:41 -7872 Apr 11 j 03:09 0° 0∘∙ 0° 8 2°**2**02'46 -7872 May 26 j 22:32 -7877 Apr 07 j 14:26 desc. node -7877 Apr 16 j 06:34 2°**2**33'40 -7872 Jun 29 j 05:54 23°**8**02'15 retrograde evening set -7877 May 06 j 04:36 -7872 Jul 09 j 00:42 30°₽,₩ $0^{\circ}\Pi$ 28° To 0.39249 AU -7877 May 13 j 16:40 -7872 Jul 15 j 07:15 min. Earth dist. max. Earth dist. 4°**I**I30'39 2.46146 AU -7877 May 18 j 16:27 -7872 Aug 18 j 21:21 opposition 26° m 35'38 -3°03'42 0.00 greatest brilliancy -7877 May 18 j 00:46 26° Mp 46'55 -2.8 m direct -7877 Jun 18 j 00:43 21°M 19'12 conjunction -7872 Aug 22 j 01:39 2°523'31 1°00'41 -7877 Jul 27 j 07:24 0∘**⊽** minimum elong -7872 Aug 22 j 03:50 2°9527'37 1°01'12 -7877 Sep 23 j 15:02 0° M -7872 Sep 27 j 04:13 $0^{\circ}\Omega$ -7877 Nov 11 j 19:20 0°⊀ morning rise -7872 Oct 20 j 06:42 17°**Ω**58'13 -7877 Dec 29 j 15:45 0°る -7872 Nov 04 j 16:17 0° m -7876 Feb 15 j 10:09 desc. node -7872 Nov 27 j 06:54 17° mp 38'14 0°≈ -7876 Mar 13 j 06:53 16°≈54'11 -7872 Dec 13 j 05:54 0∘**ত** asc. node -7876 Apr 03 j 00:03 0°**)**€ -7871 Jan 21 j 18:20 0°M evening set -7876 Apr 07 j 10:10 2° **)** 48'25 -7871 Mar 04 i 03:41 0°×7 max. Earth dist. -7876 May 10 j 11:46 23°**)** 58'16 2.64699 AU -7871 Apr 17 j 13:06 0°궁 -7876 May 19 j 19:17 -7871 Jun 06 j 11:20 0°≈ retrograde -7871 Aug 27 j 10:20 28°≈16'13 -7876 May 24 j 19:06 3°Y14'46 0°39'28 -7871 Oct 05 i 11:10 18°≈49'21 0.66412 AU conjunction min. Earth dist. -7876 May 24 i 17:49 3°Y12'39 0°39'25 -7871 Oct 06 j 07:42 18°≈28'38 -1°04'58 minimum elong opposition -7876 Jul 04 j 06:22 0°8 -7871 Oct 06 j 07:15 18°≈29'05 -1.4m greatest brilliancy -7876 Jul 10 j 03:38 3°857'48 -7871 Nov 03 j 15:10 9°≈42'46 morning rise asc. node 8°≈49'59 -7876 Aug 17 j 03:01 $\mathbb{I}^{\circ 0}$ direct -7871 Nov 15 j 05:45 -7870 Jan 24 j 23:54 -7876 Sep 28 j 11:29 0000 0°) -7876 Nov 08 j 16:28 $0^{\circ}\Upsilon$ $0^{\circ}\Omega$ -7870 Mar 20 j 16:58 -7876 Dec 19 j 08:26 0° m -7870 May 07 j 03:31 0°8 -7875 Jan 29 j 11:47 0∘<u></u>Ω -7870 Jun 19 j 16:14 $0^{\circ}\Pi$ -7875 Feb 22 j 14:39 16°**♀**55'01 -7870 Jul 30 j 12:06 0ಂತಾ desc. node 0°M -7870 Aug 23 j 08:47 18°9512'13 -7875 Mar 14 j 06:29 evening set -7870 Sep 07 j 13:56 -7875 May 08 j 21:36 0° **₹** 0 $^{\circ}$ Ω -7875 Jun 12 j 00:49 7°**х** 13′47 desc. node -7870 Oct 15 j 00:11 29°**Ω**20′27 retrograde min. Earth dist. -7875 Jul 11 j 22:49 1°**≯**07'42 0.50595 AU -7870 Oct 15 j 20:19 0° m -7875 Jul 15 j 01:19 30°RM. greatest brilliancy -7875 Jul 18 j 05:11 28°M49'50 -2.1m conjunction -7870 Oct 24 j 16:09 6° To $56'03 - 0^{\circ}07'21$ -7875 Jul 19 j 17:11 28°M16'35 -5°51'04 -7870 Oct 24 j 15:29 6° m 54'45 0°07'04 opposition minimum elong

6° m 05'18

-7870 Oct 23 j 14:18

-7875 Aug 22 j 21:38

20°M56'24

behind sun begin

direct

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -7900 i	n astronomical cou	inting style is the year	7901 BCE in historical c	ounting style.	
behind sun end	-7870 Oct 25 j 16:41	7° m) 44'10		retrograde	-7864 Jan 02 j 04:43	24° Ⅱ 44'59	
max. Earth dist.	-7870 Nov 19 j 02:50	26° Mp 49° 01	2.38403 AU	opposition	-7864 Feb 04 j 16:48	18° Ⅱ 16'55	6°01'33
	-7870 Nov 23 j 05:18	0० ऌ		greatest brilliancy	-7864 Feb 06 j 11:06	17° Ⅱ 42'05	-2.3m
morning rise	-7870 Dec 29 j 23:42	28° ഫ 04'02		min. Earth dist.	-7864 Feb 13 j 00:16	15° Ⅲ 33'55	0.46470 AU
	-7869 Jan 01 j 13:37	0° M ₊		direct	-7864 Mar 12 j 10:07	10° Ⅱ 24'59	
	-7869 Feb 11 j 15:09	0° ∡ ¹			-7864 May 11 j 20:27	0 \circ \mathfrak{S}	
	-7869 Mar 27 j 00:25	8°0		desc. node	-7864 Jun 06 j 01:49	15° 5 04'48	
	-7869 May 12 j 09:23	0° ≈			-7864 Jun 28 j 11:57	$0^{\circ}\Omega$	
	-7869 Jul 02 j 11:52	0° ∀			-7864 Aug 09 j 15:10	0° m)	
	-7869 Sep 12 j 03:36	$0^{\circ}\Upsilon$			-7864 Sep 19 j 16:09	0∘ ⊽	
asc. node	-7869 Sep 21 j 18:42	1° Y 36'25			-7864 Oct 31 j 05:08	0° M	
retrograde	-7869 Oct 01 j 19:49	2° Υ 12'42			-7864 Dec 13 j 01:42	0° ∡ ¹	
Z .	-7869 Oct 20 j 04:05	30° ₹			-7863 Jan 26 j 12:53	ರ°0	
opposition	-7869 Nov 09 j 19:26	23° ¥ 00'57	1°51'55	evening set	-7863 Feb 11 j 15:47	10° る 37'37	
greatest brilliancy	-7869 Nov 09 j 22:55	22°) 57'29	-1.4m		-7863 Mar 13 j 10:41	0° ≈	
min. Earth dist.	-7869 Nov 12 j 15:59	21°) 52'56	0.65458 AU		, , , , , , , , , , , , , , , , , , ,	-	
direct	-7869 Dec 20 j 18:41	13° ¥ 00'48	0.00 100 110	conjunction	-7863 Apr 02 j 06:03	12° ≈ 44'34	-0°23'02
ancer	-7868 Feb 19 j 10:19	0° Υ		minimum elong	-7863 Apr 02 j 06:58	12° ≈ 46'01	
	-7868 Apr 13 j 11:55	0°8		max. Earth dist.	-7863 Apr 08 j 00:27	16°≈26'16	2.66072 AU
	-7868 May 28 j 20:08	0°II		max. Lartii dist.	-7863 Apr 29 j 05:37	0°) €	2.00072 AO
	-7868 Jul 09 j 06:46	0°©		asc. node	-7863 May 13 j 06:14	8° ¥ 57'02	
	v	0° U			-7863 May 19 j 10:24	12° ¥ 53′25	
11-	-7868 Aug 17 j 13:53			morning rise		12° π 33′23 0° Υ	
desc. node	-7868 Aug 31 j 21:20	11° Ω 08'52			-7863 Jun 15 j 05:16		
. ,	-7868 Sep 24 j 22:56	0° M)			-7863 Jul 31 j 22:40	0° B	
evening set	-7868 Oct 27 j 21:01	25° m/41'23			-7863 Sep 16 j 10:10	0°II	
	-7868 Nov 02 j 10:46	0∘ 亚			-7863 Nov 02 j 07:38	0° ©	
	-7868 Dec 11 j 22:47	0° M .			-7863 Dec 21 j 15:19	0° N	
					-7862 Feb 27 j 02:13	0° m	
conjunction	-7868 Dec 29 j 00:54	12° M ₃37'02		retrograde	-7862 Mar 17 j 18:32	2° m/08'14	
minimum elong	-7868 Dec 28 j 23:07	12°M33'46	1°07'26		-7862 Apr 05 j 10:07	30°R Ω	
	-7867 Jan 22 j 03:21	0° ∡ ¹		opposition	-7862 Apr 17 j 11:29	26° Ω 59'34	
max. Earth dist.	-7867 Feb 08 j 05:33	12° ≯ 01'52	2.50230 AU	min. Earth dist.	-7862 Apr 17 j 10:07	27° Ω 00′28	0.37965 AU
morning rise	-7867 Feb 25 j 20:38	24° ∡ 11'11		greatest brilliancy	-7862 Apr 17 j 12:20	26° Ω 59'00	-3.0m
	-7867 Mar 06 j 10:02	0°ಕ		desc. node	-7862 Apr 24 j 05:52	25° Ω 13'43	
	-7867 Apr 20 j 22:10	0° ≈		direct	-7862 May 17 j 19:58	21° Ω 53'41	
	-7867 Jun 07 j 18:15	0° ∀			-7862 Jun 24 j 03:27	0° m	
	-7867 Jul 28 j 22:56	0° Υ			-7862 Aug 19 j 23:53	0∘ ⊽	
asc. node	-7867 Aug 08 j 18:00	5° Ƴ 54'03			-7862 Oct 06 j 06:15	0° M	
	-7867 Sep 29 j 06:02	9° 8			-7862 Nov 21 j 06:59	0° ∡	
retrograde	-7867 Nov 10 j 01:28	8° 8 44'25			-7861 Jan 06 j 16:19	0°ರ	
opposition	-7867 Dec 16 j 23:51	0° 8 34'22	4°38'29		-7861 Feb 22 j 16:42	0° ≈	
greatest brilliancy	-7867 Dec 17 j 22:37	0° 8 12'49	-1.7m	evening set	-7861 Mar 24 j 07:26	18° ≈ 48′00	
	-7867 Dec 18 j 12:07	30° ŖƳ		asc. node	-7861 Mar 31 j 00:16	23° ≈ 03'30	
min. Earth dist.	-7867 Dec 23 j 09:57	28° Y '08'40	0.58391 AU		-7861 Apr 10 j 22:12	0°) €	
direct	-7866 Jan 26 j 08:25	20° Ƴ 53'02		max. Earth dist.	-7861 May 01 j 22:07	13°) €24'36	2.66127 AU
	-7866 Mar 08 j 02:42	0°B					
	-7866 May 03 j 06:58	$\Pi^{\circ}0$		conjunction	-7861 May 10 j 20:15	19° ₩ 08'10	0°22'59
	-7866 Jun 16 j 10:47	0ංම		minimum elong	-7861 May 10 j 19:25	19° ₩ 06'50	0°22'49
desc. node	-7866 Jul 19 j 22:44	24°5643'22			-7861 May 27 j 16:08	0° Υ	
	-7866 Jul 26 j 22:04	$0^{\circ}\Omega$		morning rise	-7861 Jun 25 j 21:04	19° Y ′05′10	
	-7866 Sep 04 j 00:41	0° m/p		Ü	-7861 Jul 12 j 08:15	0°8	
	-7866 Oct 13 j 03:02	0∘ <u>⊽</u>			-7861 Aug 25 j 15:59	0°II	
	-7866 Nov 22 j 04:34	0° M .			-7861 Oct 07 j 17:39	0° ©	
evening set	-7866 Dec 27 j 03:44	25°M14'54			-7861 Nov 18 j 21:38	0°N	
evening sec	-7865 Jan 02 j 21:15	0° ⊼ ¹			-7861 Dec 30 j 20:23	0° m)	
	-7865 Feb 15 j 12:06	0°ਤ ਹ ×			-7860 Feb 12 j 01:42	0∘ ⊽	
	7003100 13 1 12.00	° O		desc. node	-7860 Mar 11 j 08:55	18° ≏ 03'10	
conjunction	-7865 Feb 19 j 16:56	2° る 49'16	-1°01'31		-7860 Apr 01 j 19:23	0°M	
minimum elong	-7865 Feb 19 j 18:34	2°る52'00		retrograde	-7860 May 23 j 06:21	15°ML11'48	
max. Earth dist.	-7865 Mar 13 j 21:46		2.60630 AU	min. Earth dist.	-7860 Jun 20 j 03:00	9°M58'43	0.45604 AU
max. Darui dist.	-7865 Apr 01 j 22:59	0°≈	2.00030 AU	greatest brilliancy	-7860 Jun 26 j 16:16	7°M45'36	
morning rise	-7865 Apr 11 j 20:59	0 ≈ 6°≈24'47		opposition	-7860 Jun 28 j 07:00	7°M12'29	
morning 1150	-7865 May 18 j 20:33	0 ≈2447 0° ∺		direct	-7860 Jul 28 j 07:00 -7860 Jul 30 j 20:08	0°M41'22	J 7JJJ
asc. node	-7865 Jun 26 j 12:44	0 K 24° X 12'43		direct	-7860 Oct 22 j 12:46	0 111.41 22 0° 🗷	
asc. nout		24° π 12'43 0° Υ			-7860 Oct 22 j 12:46 -7860 Dec 14 j 03:13	0° ਨ ਰਾ	
	-7865 Jul 05 j 21:13	0.8 ೧.1			•	0° ≈	
	-7865 Aug 24 j 10:18	0° U		asa nada	-7859 Feb 01 j 19:52	0°≈ 8°≈01'49	
	-7865 Oct 17 j 06:38	υд		asc. node	-7859 Feb 14 j 21:42	0 ~01 49	

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style. -7859 Mar 22 i 06:16 0°**)**€ -7855 Nov 30 i 18:23 0∘**⊽** -7859 May 01 j 06:52 25°\ 26'19 -7855 Dec 02 j 13:18 1°**£**23'04 evening set morning rise -7859 May 08 j 08:10 $0^{\circ}\Upsilon$ -7854 Jan 09 j 02:41 0°M -7859 May 26 j 17:27 12°**Υ**'00'53 2.60885 AU -7854 Feb 19 j 04:54 0°×7 max. Earth dist. -7854 Apr 03 j 18:59 0°정 -7859 Jun 18 j 04:21 26°**Y**57′50 1°00'41 -7854 May 20 j 22:44 0°≈ conjunction 26°**Y**55′27 -7859 Jun 18 j 02:56 -7854 Jul 14 j 08:34 0°**)**€ minimum elong 1°00'52 -7859 Jun 22 j 16:23 0°8 -7854 Sep 17 j 20:11 19°¥10'53 retrograde $0^{\circ}\Pi02'26$ morning rise -7859 Aug 05 j 03:41 asc. node -7854 Oct 08 j 08:26 16°**∺**23'28 -7859 Aug 05 j 02:19 $0^{\circ}\Pi$ opposition -7854 Oct 27 j 07:14 9°**)** 42′24 0°43'33 -7859 Sep 15 j 17:46 0ಂತಾ greatest brilliancy -7854 Oct 27 j 07:44 9°**)** 41′53 -1.4m -7859 Oct 26 j 00:48 $0^{\circ}\Omega$ min. Earth dist. -7854 Oct 28 j 16:45 9°**₩**08'49 0.66569 AU -7859 Dec 04 j 14:35 0° M -7854 Dec 01 j 06:26 30°R≈ -7858 Jan 13 j 07:13 0∘**⊽** direct -7854 Dec 07 j 00:28 29°≈47'15 desc. node -7858 Jan 27 j 06:51 10°**£**23'48 -7854 Dec 12 j 22:02 0°**)**€ -7858 Feb 23 j 07:48 0°M -7853 Mar 04 j 10:17 $0^{\circ}\Upsilon$ -7858 Apr 08 j 23:01 0°**√** -7853 Apr 23 j 14:54 0°8 -7858 Jun 06 j 04:10 0°る -7853 Jun 07 j 00:11 $0^{\circ}\Pi$ retrograde -7858 Jul 08 j 14:48 6°る19'57 -7853 Jul 18 j 03:08 0ಂತಾ -7858 Aug 08 j 01:24 30°R*x*7 -7853 Aug 26 j 07:06 $0^{\circ}\Omega$ min. Earth dist. -7858 Aug 10 j 20:17 28° ₹ 56'17 0.57619 AU desc. node -7853 Sep 18 j 16:18 18°Ω17'15 opposition -7858 Aug 16 j 19:22 26°**∡**¹36′04 -4°51′34 evening set -7853 Oct 02 i 09:19 29° **Ω**03′23 greatest brilliancy -7858 Aug 15 j 20:48 26° ₹ 58'13 -1.8m -7853 Oct 03 j 14:09 0° m direct -7858 Sep 22 i 04:56 18°**∡**16'26 -7853 Nov 10 j 23:51 0∘**⊽** -7858 Nov 10 j 06:00 0°궁 -7857 Jan 02 j 23:51 26°る18'06 -7853 Dec 05 j 09:12 18°**-**42'08 -0°51'49 conjunction asc node -7857 Jan 09 j 17:10 -7853 Dec 05 j 06:00 18°**♀**36'03 0°51'54 0°≈≈ minimum elong -7857 Mar 02 j 07:24 0°**₩** -7853 Dec 20 j 09:06 o°m. -7857 Apr 19 j 12:45 $0^{\circ}\Upsilon$ -7852 Jan 20 j 17:38 23°ML02'01 2.45178 AU max. Earth dist. -7857 Jun 04 j 02:16 0° 8 -7852 Jan 30 j 10:52 0°×7 -7857 Jun 12 j 01:17 -7852 Feb 05 j 23:07 5°**8**25'10 4°×37'16 evening set morning rise -7852 Mar 13 j 16:20 max. Earth dist. -7857 Jun 28 j 09:55 16°**8**43'39 2.50917 AU 0°ಕ -7857 Jul 17 j 04:39 Π °0 -7852 Apr 28 j 08:28 0°≈ -7852 Jun 15 j 23:03 0°**)**€ -7857 Aug 02 j 08:38 11°**Ⅲ**39'57 1°10'37 -7852 Aug 09 j 01:41 $0^{\circ}\Upsilon$ conjunction -7857 Aug 02 j 09:26 -7852 Aug 25 j 09:10 7°**Y**47'32 minimum elong 11°**I**I41'25 1°11'05 asc. node -7857 Aug 27 j 04:36 -7852 Oct 24 j 10:52 24°**Y**04'45 0ಂತಾ retrograde -7857 Sep 26 j 06:00 22°9546'07 -7852 Dec 01 j 08:12 15°Υ26'46 3°37'03 morning rise opposition -7857 Oct 05 j 15:53 $0^{\circ}\Omega$ greatest brilliancy -7852 Dec 01 j 21:43 15°**Y**13'39 -1.5m -7857 Nov 13 j 08:23 0° m min. Earth dist. -7852 Dec 06 j 09:52 13°**Y**28'49 0.61854 AU desc. node -7857 Dec 15 j 02:17 24° m/37'02 direct -7851 Jan 11 j 04:38 5°Y31'11 -7857 Dec 22 j 02:09 0∘**⊽** -7851 Mar 26 j 00:33 0°8 -7856 Jan 30 j 19:03 0°M -7851 May 14 j 00:32 $0^{\circ}\Pi$ -7856 Mar 12 j 12:38 0°×7 -7851 Jun 25 j 15:26 0ಂತಾ -7856 Apr 26 j 21:17 0°る -7851 Aug 04 j 11:24 0° Ω -7856 Jun 20 i 00:55 0°≈ desc. node -7851 Aug 05 j 14:45 0°Ω52'33 retrograde -7856 Aug 13 j 21:02 14°≈56'04 -7851 Sep 12 i 04:36 0° m min. Earth dist. -7856 Sep 20 j 12:16 5°≈57'31 0.65110 AU -7851 Oct 20 j 23:22 0∘**⊽** -7856 Sep 22 j 20:04 5°≈01'13 -2°12'33 -7851 Nov 29 j 17:52 0°M opposition -7856 Sep 22 j 16:20 5°≈04'59 -1.4m -7851 Dec 05 j 08:08 4°ML07'48 greatest brilliancy evening set -7856 Oct 06 j 05:06 30°RZ -7850 Jan 10 j 04:13 0°×7 -7856 Oct 31 j 23:52 25°る38'43 direct 27°る43'59 -7850 Jan 31 j 18:19 15°**∡**105'33 -1°09'38 asc node -7856 Nov 20 j 04:24 conjunction -7850 Jan 31 j 19:14 -7856 Nov 29 j 10:18 0°22 minimum elong 15°**₹**07'08 1°10'07 -7855 Feb 05 j 15:03 0°) -7850 Feb 22 j 14:16 0°정 $0^{\circ}\Upsilon$ -7855 Mar 29 j 04:51 max. Earth dist. -7850 Mar 02 j 07:49 5°る12'00 2.57082 AU -7855 May 14 j 19:40 0° 8 -7850 Mar 26 j 11:18 21°る11'48 morning rise -7855 Jun 27 j 02:46 $0^{\circ}\Pi$ -7850 Apr 08 j 23:34 0°≈ -7855 Jul 31 j 03:25 24°**Ⅲ**54'35 -7850 May 26 j 02:12 0°**)**€ evening set -7855 Aug 06 j 22:13 000 -7850 Jul 13 j 06:26 29°**)** 36'12 asc. node 19°511'34 2.39228 AU -7850 Jul 13 j 22:16 $0^{\circ}\Upsilon$ max. Earth dist. -7855 Sep 01 j 02:20 0°8 -7855 Sep 15 j 01:12 0° Ω -7850 Sep 03 j 20:49 -7850 Nov 08 j 23:25 $0^{\circ}\Pi$ conjunction -7855 Sep 28 j 03:52 10°Ω13'44 0°24'58 retrograde -7850 Dec 10 j 04:37 5°**Ⅲ**13′05 minimum elong -7855 Sep 28 j 05:56 10°Ω17'46 0°25'23 -7849 Jan 08 j 08:59 30°R₩ -7855 Oct 23 j 08:47 -7849 Jan 14 j 05:34 27°859'10 5°51'25 opposition desc. node -7855 Oct 31 j 21:20 6° Mp 41'17 -7849 Jan 15 j 19:28 27°**8**25'32 -2.0m greatest brilliancy

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style. min. Earth dist. -7849 Jan 22 i 07:22 25°808'16 0.51478 AU -7844 Mar 29 i 08:11 0°) -7849 Feb 21 j 20:59 19°808'44 -7844 Apr 16 j 01:31 11°**)** 14'45 direct evening set -7849 Apr 06 j 14:06 $0^{\circ}II$ -7844 May 15 j 05:41 $0^{\circ}\Upsilon$ 0ಂತಾ -7844 May 16 j 06:50 0°**Υ**40'49 -7849 May 29 j 09:33 max. Earth dist. 2.63575 AU -7849 Jun 23 j 17:37 17°9521'47 desc. node -7844 Jun 02 j 11:55 11°**Y**55'38 0°48'04 -7849 Jul 11 j 07:15 0° Ω conjunction 0° M minimum elong -7844 Jun 02 j 10:28 11°**Υ**53'15 -7849 Aug 20 j 15:43 0°48'06 -7849 Sep 29 j 15:08 -7844 Jun 29 j 15:57 0∘ଫ 0°8 -7844 Jul 19 j 05:51 -7849 Nov 09 j 09:33 0°M morning rise 13°**8**17'37 -7849 Dec 21 j 16:01 0°**∡**¹ -7844 Aug 12 j 08:52 $0^{\circ}\Pi$ evening set -7848 Jan 26 j 08:16 24°**х** 23′28 -7844 Sep 23 j 11:01 0ಂತಾ -7844 Nov 03 j 07:11 -7848 Feb 03 j 17:04 0°ಕ 0° Ω -7844 Dec 13 j 11:44 0° M conjunction -7848 Mar 17 j 11:11 28°る07'00 -0°39'52 -7843 Jan 22 j 22:37 0∘**⊽** minimum elong -7848 Mar 17 j 12:39 28°**る**09'22 0°40'21 desc. node -7843 Feb 13 j 02:02 15° 215'37 -7848 Mar 20 j 08:55 0°**≈** -7843 Mar 06 j 06:35 0°M max. Earth dist. -7848 Mar 29 j 06:50 5°≈45'43 2.64581 AU -7843 Apr 23 j 22:53 0°**⊼** 29°**≈**10'36 morning rise -7848 May 04 j 20:01 retrograde -7843 Jun 22 j 05:50 18°**х** 47′06 0.53253 AU -7848 May 06 j 03:02 0°**)**€ min. Earth dist. -7843 Jul 23 j 09:12 12°**₹**11'40 asc. node -7848 May 30 j 00:15 15°**升** 10′56 greatest brilliancy -7843 Jul 29 j 06:33 9°**∡**757'54 -2.0m -7848 Jun 22 j 09:19 $0^{\circ}\Upsilon$ opposition -7843 Jul 30 j 14:22 9°×27'40 -5°36'06 -7848 Aug 08 j 21:05 0°8 direct -7843 Sep 03 j 14:27 1°**х** 44′00 -7848 Sep 26 i 00:47 $\mathbb{I}^{\circ 0}$ -7843 Nov 26 i 04:10 0°정 -7848 Nov 15 j 20:14 0000 asc. node -7842 Jan 19 i 13:12 0°≈17'00 -7847 Jan 22 j 13:52 $0^{\circ}\Omega$ -7842 Jan 19 j 01:33 0°≈ -7847 Feb 14 j 04:27 2°**Q**58'42 -7842 Mar 10 j 00:44 0°\ retrograde -7847 Mar 08 j 14:18 -7842 Apr 26 j 16:35 $0^{\circ}\Upsilon$ 30°R95 -7847 Mar 17 j 05:59 -7842 May 26 j 04:45 19°**Y**18′52 27°9540'47 3°55'54 opposition evening set -7842 Jun 11 j 02:52 0°8 -7847 Mar 18 j 03:15 27°925'45 greatest brilliancy -2.8m -7847 Mar 22 j 04:53 -7842 Jun 14 j 08:21 2°811'27 2.55319 AU min. Earth dist. 26°9517'05 0.39741 AU max. Earth dist. -7847 Apr 18 j 19:01 direct 21°9546'52 -7847 May 10 j 21:47 -7842 Jul 14 j 16:17 desc. node 24°956'55 conjunction 23°**8**10'44 1°11'46 1°12'09 -7847 May 25 j 15:23 0° Ω -7842 Jul 14 j 15:51 23°**8**09'58 minimum elong -7847 Jul 19 j 14:10 0° M -7842 Jul 24 j 07:26 Π °0 -7847 Sep 02 j 18:29 -7842 Sep 03 j 12:34 0∘**⊽** 0.00 -7847 Oct 16 j 14:19 -7842 Sep 04 j 01:32 0°M morning rise 0°9524'07 -7847 Nov 29 j 21:51 -7842 Oct 13 j 06:24 0°**√** 0 \circ Ω -7846 Jan 14 j 07:49 0°ರ -7842 Nov 21 j 05:30 0° m -7846 Mar 01 j 19:08 0°**≈** -7842 Dec 30 j 05:39 0∘**⊽** evening set -7846 Mar 08 j 23:19 4°≈35'27 desc. node -7842 Dec 31 j 22:49 1°**£**18'27 -7846 Apr 16 j 17:23 29°≈19'17 -7841 Feb 08 j 06:04 0°M asc. node -7846 Apr 17 j 18:55 0°**)**€ -7841 Mar 22 j 13:58 0°**∡**7 max. Earth dist. -7846 Apr 22 j 17:26 -7841 May 08 j 18:31 0°정 3°**₭**09'06 2.66759 AU -7841 Jul 19 j 17:52 0°≈ -7846 Apr 26 j 00:18 5°¥15'00 0°05'21 -7841 Jul 31 j 23:26 0°≈57'48 conjunction retrograde minimum elong -7846 Apr 26 i 00:06 5°**)** 14'41 0°05'03 -7841 Aug 12 j 16:45 30°Rる -7846 Apr 25 i 05:24 4°)(44'52 behind sun begin min. Earth dist. -7841 Sep 06 i 00:59 22°る32'12 0.62852 AU behind sun end -7846 Apr 26 i 18:47 5° **)** 44'31 opposition -7841 Sep 09 i 19:54 21°る00'56 -3°18'06 -7846 Jun 03 j 13:42 $0^{\circ}\Upsilon$ greatest brilliancy -7841 Sep 09 i 10:21 21°る10'31 -1.5m -7846 Jun 11 i 03:55 4°**Y**54'42 direct -7841 Oct 18 i 01:09 11°**る**58'57 morning rise -7846 Jul 19 j 13:11 0°8 -7841 Dec 07 j 16:53 24°る09'18 asc. node -7846 Sep 02 j 11:53 $0^{\circ}II$ -7841 Dec 21 j 03:33 0°**≈** -7846 Oct 16 j 13:36 0ಂತಾ -7840 Feb 16 j 07:09 0°\ $0^{\circ}\Upsilon$ -7846 Nov 29 j 05:29 $0^{\circ}\Omega$ -7840 Apr 06 j 02:55 -7845 Jan 12 j 14:17 0° m -7840 May 22 j 05:00 0°8 -7845 Mar 02 j 13:11 0∘**⊽** -7840 Jul 04 j 09:07 $0^{\circ}\Pi$ 4°**∏**14'24 desc. node -7845 Mar 29 j 00:34 12°**£**25'53 evening set -7840 Jul 10 j 06:44 -7845 May 01 j 03:54 19°**2**19'54 max. Earth dist. -7840 Jul 28 j 00:12 17°**I**10′26 2.43472 AU retrograde -7845 May 28 j 02:30 -7840 Aug 14 j 05:34 0ಂತಾ min. Earth dist. 14°**£**43'47 0.41111 AU opposition -7845 Jun 03 j 23:23 12°**2**38'06 -4°30'31 greatest brilliancy -7845 Jun 02 j 19:02 12°**⊆**59'48 -2.7m conjunction -7840 Sep 03 j 19:15 15°936'55 0°50'32 direct -7845 Jul 04 j 20:31 6°**£**58'29 minimum elong -7840 Sep 03 j 21:55 15°9542'00 0°51'01 -7845 Sep 13 j 11:09 0°M -7840 Sep 22 j 11:04 0° Ω -7845 Nov 05 j 02:35 0°**∡** -7840 Oct 30 j 21:16 0° m -7845 Dec 24 j 04:14 0°궁 morning rise -7840 Nov 04 j 12:41 3°m/38'03 -7844 Feb 10 j 12:04 0°**≈** -7840 Nov 17 j 16:26 13° m 55'10 desc. node

-7844 Mar 03 j 13:11

asc. node

13°≈46'31

-7840 Dec 08 j 09:03

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Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style. -7839 Jan 16 j 19:11 0°M -7834 Apr 25 i 06:25 $0^{\circ}II$ -7834 Jun 10 j 02:56 -7839 Feb 27 j 00:26 0°×7 0ಂತಾ -7839 Apr 11 j 23:55 0°궁 -7834 Jul 10 j 09:17 21°954'47 desc. node -7834 Jul 21 j 05:17 -7839 May 30 j 12:22 0°≈≈ $0^{\circ}\Omega$ -7834 Aug 29 j 16:01 -7839 Aug 01 j 08:53 0°**)**€ 0° m -7839 Sep 04 j 05:21 0∘**⊽** retrograde 6°**升**12'57 -7834 Oct 08 j 00:16 0° M -7839 Oct 05 j 03:03 30°R≈ -7834 Nov 17 j 06:26 0°×7 opposition -7839 Oct 13 j 23:56 26°≈31'09 -0°25'07 -7834 Dec 29 j 02:40 greatest brilliancy -7839 Oct 14 j 00:07 26°≈30'59 -1.4m evening set -7833 Jan 07 j 14:48 6°**х** 38′01 min. Earth dist. -7839 Oct 13 j 22:18 26°**≈**32'48 0.66727 AU -7833 Feb 10 j 20:00 0°정 asc. node -7839 Oct 24 j 22:01 22°≈17'44 -7833 Mar 01 j 18:47 direct -7839 Nov 23 j 06:03 16°≈45'36 conjunction 12°る37'40 -0°54'34 -7838 Jan 15 j 11:15 0°**)**€ minimum elong -7833 Mar 01 j 20:30 12°る40'31 0°55'04 $0^{\circ}\Upsilon$ -7838 Mar 14 j 17:44 max. Earth dist. -7833 Mar 20 j 02:46 24°る40'03 2.62260 AU -7838 May 01 j 23:52 0° 8 -7833 Mar 28 j 07:29 0°≈ -7838 Jun 14 j 19:32 $0^{\circ}II$ morning rise -7833 Apr 20 j 19:06 15°≈08'20 -7838 Jul 25 j 18:05 0ಂತಾ -7833 May 14 j 02:44 0°**)**€ -7838 Sep 02 j 20:38 $0^{\circ}\Omega$ asc. node -7833 Jun 16 j 18:20 21°**¥**13′09 evening set -7838 Sep 06 j 08:30 2°**Ω**43'30 -7833 Jun 30 j 19:16 $0^{\circ}\Upsilon$ desc. node -7838 Oct 05 j 10:57 25°**Ω**32'54 -7833 Aug 18 j 10:22 0°8 $\Pi^{\circ}0$ -7838 Oct 11 j 02:48 -7833 Oct 08 j 10:59 -7833 Dec 09 i 16:56 0ಂತಾ -7838 Nov 08 j 21:53 22° m $34'04 - 0^{\circ}25'27$ retrograde -7832 Jan 16 j 23:13 7°938'44 conjunction minimum elong -7838 Nov 08 j 19:36 22° m 29'38 0°25'17 -7832 Feb 18 j 11:02 1°538'11 5°41'38 opposition -7838 Nov 18 j 11:23 0∘**⊽** greatest brilliancy -7832 Feb 20 j 02:51 1°9507'06 -2.5m -7838 Dec 21 j 14:29 25°**2**20'51 2.40335 AU -7832 Feb 23 j 16:44 30°RⅡ max. Earth dist. -7838 Dec 27 j 19:05 min. Earth dist. -7832 Feb 26 j 06:33 29°**Ⅱ**12'35 o°m. 0.43758 AU -7837 Jan 13 j 11:45 12°M23'11 -7832 Mar 24 j 20:25 24°**Ⅲ**26′50 direct morning rise -7832 Apr 23 j 11:41 -7837 Feb 06 j 19:28 0°×7 0ംഉ 16°9502'42 -7837 Mar 22 j 01:55 0°정 -7832 May 27 j 13:40 desc. node -7837 May 07 j 02:08 -7832 Jun 19 j 13:19 0°22 0° Ω 0°) -7832 Aug 02 j 15:19 -7837 Jun 25 j 23:16 0° m $0^{\circ}\Upsilon$ -7837 Aug 25 j 09:50 -7832 Sep 13 j 14:41 0∘Ω -7837 Sep 12 j 01:03 6°**Y**00′03 -7832 Oct 25 j 17:46 oom. asc. node -7837 Oct 10 j 04:53 10°**Y**18'46 -7832 Dec 07 j 23:44 0°**∡**7 retrograde 1°Υ17'55 2°31'11 0°₹ -7837 Nov 17 j 20:08 -7831 Jan 21 j 17:23 opposition -7837 Nov 18 j 02:30 -7831 Feb 21 j 02:55 19°る52'29 greatest brilliancy 1° **Y**11'38 -1.4m evening set min. Earth dist. -7837 Nov 21 j 11:27 29°**₭**51'52 0.64426 AU -7831 Mar 08 j 18:57 0°≈ -7837 Nov 21 j 03:09 30°**₹**₩ direct -7837 Dec 28 j 20:03 21°\ 17'40 conjunction -7831 Apr 11 j 00:59 21°≈19'18 -0°12'45 -7836 Feb 07 j 18:32 $0^{\circ}\Upsilon$ -7831 Apr 11 j 01:29 21°**≈**20′07 0°13'07 minimum elong -7836 Apr 07 j 00:03 0°8 -7831 Apr 10 j 14:21 21°≈02'20 behind sun begin -7836 May 23 j 07:55 $\mathbb{I}^{\circ 0}$ behind sun end -7831 Apr 11 j 12:37 21°≈37'54 -7836 Jul 04 j 03:24 0ಂತಾ max. Earth dist. -7831 Apr 13 j 12:25 22°≈54'16 2.66559 AU -7836 Aug 12 j 14:45 $0^{\circ}\Omega$ -7831 Apr 24 j 14:58 0°) desc. node -7836 Aug 22 j 08:40 7°**Ω**33'46 asc. node -7831 May 03 j 11:15 5°\ 38'53 -7836 Sep 20 i 02:11 0° m morning rise -7831 May 27 j 17:24 21°\(\mathbf{H}\) 09'26 $0^{\circ}\Upsilon$ -7836 Oct 28 i 15:48 0∘**⊽** -7831 Jun 10 j 12:23 -7836 Nov 11 j 07:02 10°**£**27'27 -7831 Jul 26 j 22:22 0°8 evening set -7836 Dec 07 j 05:06 0°M -7831 Sep 10 j 18:30 $0^{\circ}II$ -7831 Oct 26 j 09:32 0ಂತಾ -7835 Jan 10 j 20:50 25°ML18'58 -1°10'41 -7831 Dec 11 j 19:51 $0^{\circ}\Omega$ conjunction -7835 Jan 10 j 20:10 25°M17'46 1°11'05 -7830 Jan 31 j 16:54 minimum elong O° m -7835 Jan 17 j 10:25 0°×7 retrograde -7830 Apr 03 j 20:39 19° m 44'11 18° **m** 56'40 max. Earth dist. -7835 Feb 17 j 03:34 21°**✗**26'39 2.52823 AU -7830 Apr 14 j 18:43 desc. node -7835 Mar 01 j 17:02 0°궁 min. Earth dist. -7830 May 02 j 08:00 15° mg 03'37 0.38295 AU -7835 Mar 08 j 17:30 4°る43'54 -7830 May 05 j 06:59 14° m 14'56 -1°36'23 morning rise opposition -7835 Apr 16 j 02:37 0°**≈** -7830 May 05 j 01:13 14° Mp 18'54 greatest brilliancy -2.9m -7835 Jun 02 j 14:15 0°**)**€ -7830 Jun 04 j 11:04 9° m 09'45 direct -7835 Jul 22 j 16:26 $0^{\circ}\Upsilon$ 0∘**⊽** -7830 Aug 08 j 09:45 4°Υ10'27 -7830 Sep 28 j 20:24 0°M asc. node -7835 Jul 29 j 23:28 -7835 Sep 17 j 05:17 0°8 -7830 Nov 15 j 08:44 0°**∡**7 retrograde -7835 Nov 20 j 08:20 18°**8**08'23 -7829 Jan 01 j 11:31 0°궁 opposition -7835 Dec 26 j 15:51 10°**8**16'24 5°09'41 -7829 Feb 17 j 21:01 0°≈ greatest brilliancy -7835 Dec 27 j 20:17 9°**8**49'57 -1.8m asc. node -7829 Mar 21 j 04:58 19°≈48'00 min. Earth dist. -7834 Jan 02 j 18:22 7°**8**38'22 0.56099 AU -7829 Apr 02 j 00:21 27°≈17'02 evening set

-7834 Feb 04 j 13:10

direct

0°848'42

-7829 Apr 06 j 07:00

0°)

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 8 Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style.

Attention, astronom	ical year style is used: Th			unting style is the year	7901 BCE in historical c	ounting style.	
max. Earth dist.	-7829 May 07 j 11:28	19°) 55′19	2.65445 AU		-7824 Apr 20 j 19:13	5°0	
					-7824 Jun 10 j 21:57	0° ≈	
conjunction	-7829 May 19 j 09:43	27°) ₹36'48	0°32'44	retrograde	-7824 Aug 21 j 16:55	23° ≈ 05'03	
minimum elong	-7829 May 19 j 08:36	27°) ₹34'59	0°32'38	min. Earth dist.	-7824 Sep 29 j 03:04		0.65944 AU
	-7829 May 23 j 02:08	0° Υ		opposition	-7824 Sep 30 j 15:50	13° ≈ 13'30	
morning rise	-7829 Jul 04 j 12:57	27° Y ′54'38		greatest brilliancy	-7824 Sep 30 j 14:16	13°≈15′05	-1.4m
	-7829 Jul 07 j 16:01	0.8		direct	-7824 Nov 09 j 06:35	3° ≈ 41'40	
	-7829 Aug 20 j 18:08	0°Щ		asc. node	-7824 Nov 10 j 11:46	3°≈42'13	
	-7829 Oct 02 j 10:22	0°©			-7823 Jan 29 j 11:14	0° \	
	-7829 Nov 13 j 01:05	Ω°			-7823 Mar 23 j 17:44	0° Υ	
	-7829 Dec 24 j 04:47	0° my			-7823 May 09 j 20:42	0° B	
	-7828 Feb 04 j 01:08	0∘ ⊽			-7823 Jun 22 j 08:12	0°II	
desc. node	-7828 Mar 01 j 19:55	18° ≏ 13'28			-7823 Aug 02 j 04:52	0.20 0.20	
. 1	-7828 Mar 20 j 10:09	0°M		evening set	-7823 Aug 13 j 00:36	8°5511'38	
retrograde	-7828 Jun 03 j 20:35	28°M31'01	0.40257.411		-7823 Sep 10 j 07:52	0°N	2 27007 ATT
min. Earth dist.	-7828 Jul 02 j 19:37	22°M48'38 20°M30'58	0.48357 AU	max. Earth dist.	-7823 Oct 09 j 09:20	22 8 (44 30	2.37997 AU
greatest brilliancy	-7828 Jul 09 j 06:24			:	7022 0-4 12:22:10	25° Ω 33'27	0007104
opposition direct	-7828 Jul 10 j 20:41 -7828 Aug 13 j 07:40	19°M56'35 12°M57'24	-3,33,13	conjunction	-7823 Oct 12 j 23:10	$25^{\circ} \Omega 34'46$	
direct	-7828 Oct 12 j 05:59	0° √		minimum elong behind sun begin	-7823 Oct 12 j 23:51 -7823 Oct 11 j 23:14	23 δ (34 46 27 24° Ω 46'27	0 07 23
	-7828 Dec 07 j 17:25	0°る		behind sun end	-7823 Oct 11 j 23:14 -7823 Oct 14 j 00:27	26° Ω 23'06	
	-7827 Jan 27 j 12:57	0°≈		ocimia sun cha	-7823 Oct 14 j 00:27	0° m)	
asc. node	-7827 Feb 05 j 03:49	5°≈13'06		desc. node	-7823 Oct 18 j 14:30	2° m/51'33	
asc. Houc	-7827 Mar 17 j 10:31	0° ∺		desc. Hode	-7823 Nov 25 j 23:43	ე∘ ⊽	
	-7827 May 03 j 17:13	0° Υ		morning rise	-7823 Dec 18 j 06:09	ა _ 17° ჲ 07'18	
evening set	-7827 May 10 j 04:49	4°Υ12'25		morning rise	-7822 Jan 04 j 07:13	0°M	
max. Earth dist.	-7827 Jun 02 j 04:16	19° Υ 19'15	2.59110 AU		-7822 Feb 14 j 07:36	0° ∡ 7	
max. Dartii dist.	-7827 Jun 18 j 02:25	0°8	2.37110710		-7822 Mar 29 j 17:09	°ੁੱਠ	
	7027 Juli 10 J 02.23	ů O			-7822 May 15 j 06:58	0° ≈	
conjunction	-7827 Jun 27 j 12:13	6° 8 23'34	1°06'13		-7822 Jul 06 j 09:10	0° ∀	
minimum elong	-7827 Jun 27 j 11:00	6° 8 21'30		retrograde	-7822 Sep 25 j 19:41	27° ¥ 03'57	
8	-7827 Jul 31 j 10:49	0°Ⅱ		asc. node	-7822 Sep 28 j 15:33	27° ¥ 00'53	
morning rise	-7827 Aug 15 j 10:31	10° Ⅱ 41'47		opposition	-7822 Nov 04 j 00:49	17°) 44′08	1°23'18
C	-7827 Sep 10 j 22:33	0∘ ©		greatest brilliancy	-7822 Nov 04 j 02:39	17°) 42′19	-1.4m
	-7827 Oct 21 j 00:34	$0^{\circ}\Omega$		min. Earth dist.	-7822 Nov 06 j 05:19	16° ¥ 51'48	0.66077 AU
	-7827 Nov 29 j 08:10	0° ™		direct	-7822 Dec 14 j 22:03	7°) 45'43	
	-7826 Jan 07 j 17:21	0∘ ⊽			-7821 Feb 24 j 16:18	0° Y	
desc. node	-7826 Jan 17 j 17:36	7° ≙ 31'35			-7821 Apr 17 j 21:30	0° 8	
	-7826 Feb 17 j 06:14	0° M			-7821 Jun 01 j 20:32	Π °0	
	-7826 Apr 01 j 16:54	0° ∡ ¹			-7821 Jul 13 j 04:36	0 \circ	
	-7826 May 23 j 03:22	0°ප			-7821 Aug 21 j 10:48	$0^{\circ}\Omega$	
retrograde	-7826 Jul 17 j 09:31	15° る 57'20		desc. node	-7821 Sep 09 j 02:09	14° Ω 32'57	
min. Earth dist.	-7826 Aug 20 j 16:57		0.59719 AU		-7821 Sep 28 j 18:48	0° m	
opposition	-7826 Aug 25 j 22:03	6° る 05'49		evening set	-7821 Oct 17 j 10:51	14° m 37'37	
greatest brilliancy	-7826 Aug 25 j 04:34	6° る 23'10	-1.7m		-7821 Nov 06 j 05:07	0∘ ಹ	
	-7826 Sep 12 j 16:42	30°₽ ⋌			-7821 Dec 15 j 15:00	0° M	
direct	-7826 Oct 02 j 00:28	27° ∡ ¹29'27					
_	-7826 Oct 22 j 22:55	0°る		conjunction	-7821 Dec 19 j 16:08	3°MJ01'04	
asc. node	-7826 Dec 24 j 06:55	25° る 00'24		minimum elong	-7821 Dec 19 j 13:35	2°M.56'19	1°02'12
	-7825 Jan 02 j 21:19	0° ≈		P 4 2	-7820 Jan 25 j 16:59	0° √ ¹	2 40010 : **
	-7825 Feb 24 j 22:41	0°) €		max. Earth dist.	-7820 Feb 01 j 18:04	4° × 759'59	2.48010 AU
	-7825 Apr 14 j 16:07	0° Υ		morning rise	-7820 Feb 18 j 04:05	16° ∡ ⁷ 29'15	
	-7825 May 30 j 10:05	0°8			-7820 Mar 08 j 21:44	0°る	
evening set	-7825 Jun 22 j 06:05	15° 8 40'01	2 40222 411		-7820 Apr 23 j 09:51	0° ≈ 0°) €	
max. Earth dist.	-7825 Jul 07 j 23:50	26° 8 44'24	2.48322 AU		-7820 Jun 10 j 11:33	0° Υ 0°Υ	
	-7825 Jul 12 j 13:35	$\Pi^{\circ}0$		aga mada	-7820 Aug 01 j 14:47	0° γ 7° Υ 21'09	
conjunction	-7825 Aug 13 j 20:05	23° Ⅲ 31'12	1°06'00	asc. node	-7820 Aug 15 j 15:47 -7820 Oct 11 j 12:05	0° 8	
minimum elong	-7825 Aug 13 j 20:05 -7825 Aug 13 j 21:42			retrograde	-7820 Oct 11 j 12:05 -7820 Nov 02 j 17:56	2° 8 45'38	
minimum ciong	-7825 Aug 13 j 21.42 -7825 Aug 22 j 12:41	23 п 34 12	1 00 30	renograde	-7820 Nov 02 j 17.36 -7820 Nov 23 j 09:38	2 3 43 38	
	-7825 Aug 22 j 12:41 -7825 Sep 30 j 22:12	0°€ 0°€		opposition	-7820 Nov 23 j 09:38 -7820 Dec 10 j 03:15	30° Κ 1 24° Υ 22'13	4°12'56
morning rise	-7825 Oct 10 j 00:33	7° Ω 02'30		greatest brilliancy	-7820 Dec 10 j 03:13	24°\bar{\gamma}24'\bar{\gamma}22'\ba	-1.6m
morning risc	-7825 Nov 08 j 12:15	0° mp		min. Earth dist.	-7820 Dec 10 j 21:41 -7820 Dec 15 j 22:58	24 1 04 32 22° Υ 08'30	0.60061 AU
desc. node	-7825 Dec 05 j 13:00	21° m ₀ 02'19		direct	-7819 Jan 19 j 18:13	14° Υ 33'13	5.55001 AU
acoc. node	-7825 Dec 17 j 03:14	ე∘ <u>ი</u>		411001	-7819 Mar 16 j 07:11	0° 8	
	-7824 Jan 25 j 16:34	0° m .			-7819 May 07 j 13:40	0°II	
	-7824 Mar 07 j 03:26	0° ∡ 7			-7819 Jun 20 j 00:24	0°©	
	, 02ur 0/ J 05.20	· /			, 51, 7 un 20 j 00.27	· •	

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style. desc. node -7819 Jul 27 j 03:09 27°539'21 -7814 May 29 j 22:41 $0^{\circ}\Upsilon$ -7819 Jul 30 j 04:58 $0^{\circ}\Omega$ -7814 Jun 19 j 14:05 13°Y25'19 morning rise -7819 Sep 07 j 02:54 0°m -7814 Jul 14 j 18:24 0°8 -7819 Oct 16 j 00:58 -7814 Aug 28 j 09:07 $\Pi^{\circ}0$ 0∘**⊽** -7819 Nov 24 j 22:12 0°M -7814 Oct 10 j 20:59 000 -7814 Nov 22 j 15:20 evening set -7819 Dec 18 j 00:30 16°M51'23 0° Ω -7813 Jan 04 j 10:26 -7818 Jan 05 j 10:31 0° **₹** 0° m 0∘**⊽** -7813 Feb 18 j 07:06 conjunction -7818 Feb 11 j 19:28 25°**₹**52'16 -1°05'36 desc. node -7813 Mar 19 j 13:06 17°**£**11'15 25°**∡**154'42 1°06'07 minimum elong -7818 Feb 11 j 20:55 -7813 Apr 17 j 11:29 0°M -7818 Feb 17 j 21:55 0°ಕ retrograde -7813 May 14 j 18:21 4°M50'54 -7813 Jun 10 j 20:05 max. Earth dist. -7818 Mar 09 j 06:50 12°る57'12 2.59137 AU 30°**₽**Ω -7813 Jun 10 j 23:06 -7818 Apr 04 j 06:46 0°≈ min. Earth dist. 29°**≏**57'38 0.43463 AU morning rise -7818 Apr 05 j 00:48 0°≈29'15 greatest brilliancy -7813 Jun 17 j 07:33 27°**♀**54'21 -2.5m -7818 May 21 j 05:31 0°**)**€ opposition -7813 Jun 18 j 19:43 27°**2**24'51 -5°24'17 asc. node -7818 Jul 03 j 11:15 26° ¥ 53'33 direct -7813 Jul 20 j 14:43 21°**♀**17'16 -7818 Jul 08 j 13:06 $0^{\circ}\Upsilon$ -7813 Aug 29 j 12:53 0°M -7818 Aug 27 j 22:11 0°8 -7813 Oct 28 j 14:47 0°**∡**7 -7818 Oct 23 j 22:09 $0^{\circ}\Pi$ -7813 Dec 18 j 09:53 0°정 retrograde -7818 Dec 22 j 18:32 16°**Ⅱ**22'33 -7812 Feb 05 j 10:38 0°≈ 6°02'02 opposition -7817 Jan 26 j 00:10 9°**Ⅲ**33'13 asc. node -7812 Feb 22 j 18:52 10°≈44'14 greatest brilliancy -7817 Jan 27 i 17:37 8°**Ⅲ**57'49 -2.2m -7812 Mar 24 i 14:38 0°) min. Earth dist. -7817 Feb 03 i 08:54 6°**Ⅱ**43'02 0.48727 AU -7812 Apr 24 i 18:39 19° **\(**47'02 evening set direct -7817 Mar 04 i 16:49 1°**Ⅱ**12'30 -7812 May 10 j 15:08 $0^{\circ}\Upsilon$ -7817 May 20 j 09:47 0000 max. Earth dist. -7812 May 22 j 05:17 7°**Y**32'51 2.62178 AU desc. node -7817 Jun 14 j 06:02 16°901'04 -7817 Jul 04 j 09:58 $0^{\circ}\Omega$ -7812 Jun 11 j 09:56 20°Υ′52'15 0°55'46 conjunction -7817 Aug 14 j 15:08 0°m -7812 Jun 11 j 08:27 20°**Y**49'48 0°55'52 minimum elong -7817 Sep 24 j 02:42 0∘**⊽** -7812 Jun 25 j 00:58 0°8 0° M -7817 Nov 04 j 05:47 -7812 Jul 28 j 18:07 23°805'54 morning rise -7817 Dec 16 j 18:18 -7812 Aug 07 j 14:54 0°×7 $0^{\circ}\Pi$ -7816 Jan 29 j 23:37 0°정 -7812 Sep 18 j 11:36 0°9 -7812 Oct 29 j 00:46 -7816 Feb 05 j 09:37 4°る15'49 0° Ω evening set -7816 Mar 15 j 17:37 -7812 Dec 07 j 20:43 0°≈ 0° m -7811 Jan 16 j 20:01 0∘ଫ -7816 Mar 26 j 15:07 -7811 Feb 03 j 12:18 conjunction 7°≈01'57 -0°30'17 desc. node 13°**£**00′18 -7811 Feb 27 j 06:47 minimum elong -7816 Mar 26 j 16:17 7°≈03'49 0°30'43 0°M max. Earth dist. -7816 Apr 04 j 00:25 12°≈25'38 2.65507 AU -7811 Apr 14 j 01:06 0°**⊼** -7816 May 01 j 11:37 0°**)**€ retrograde -7811 Jul 01 j 19:00 29°**х** 28′26 morning rise -7816 May 13 j 06:47 7°**¥**31'22 min. Earth dist. -7811 Aug 03 j 02:49 22°**✗**25'43 0.55745 AU -7816 May 20 j 04:27 11°**)** 55'09 -7811 Aug 09 j 16:15 19°**х** 53′23 -5°12′49 asc. node opposition -7816 Jun 17 j 13:53 $0^{\circ}\Upsilon$ -7811 Aug 08 j 13:28 20°**≯**19'20 -1.8m greatest brilliancy -7816 Aug 03 j 14:43 0° 8 -7811 Sep 14 j 11:07 11°**х** 49′03 direct -7816 Sep 19 j 17:54 $\mathbb{I}^{\circ 0}$ -7811 Nov 17 j 01:11 0°정 -7816 Nov 06 j 23:49 0ಂತಾ -7810 Jan 09 j 20:34 28°る10'06 asc. node -7816 Dec 30 i 03:42 $0^{\circ}\Omega$ -7810 Jan 13 i 02:10 0°≈ retrograde -7815 Mar 03 j 21:27 19°**Ω**25'33 -7810 Mar 04 j 22:50 0°) opposition -7815 Apr 03 i 13:17 14°Ω19'29 2°09'49 -7810 Apr 21 j 23:03 $0^{\circ}\Upsilon$ 28°Y46'42 greatest brilliancy -7815 Apr 03 j 20:57 14°Ω14'20 -2.9m evening set -7810 Jun 04 i 16:46 min. Earth dist. -7815 Apr 05 j 22:21 13°Ω41'08 0.38396 AU -7810 Jun 06 i 12:08 0°8 desc. node -7815 May 01 j 09:32 9°Ω03'09 max. Earth dist. -7810 Jun 22 j 01:37 10°**8**37'41 2.52948 AU direct -7815 May 04 j 15:00 8°Ω58'59 -7810 Jul 19 j 16:39 $0^{\circ}\Pi$ -7815 Jul 07 j 12:47 0°m -7815 Aug 25 j 21:31 0∘**⊽** conjunction -7810 Jul 25 j 02:27 3°II52'07 1°12'03 3°**I**I52'31 1°12'29 -7815 Oct 10 j 07:16 0°M minimum elong -7810 Jul 25 j 02:41 -7810 Aug 29 j 19:35 -7815 Nov 24 j 10:32 0°×7 000 -7814 Jan 09 j 07:55 0°정 morning rise -7810 Sep 16 j 07:26 13°908'13 -7814 Feb 25 j 01:29 -7810 Oct 08 j 10:14 $0^{\circ}\Omega$ 0°≈≈ -7814 Mar 17 j 20:10 13°≈14'06 -7810 Nov 16 j 05:37 evening set 0° m -7810 Dec 22 j 07:35 27° m 53'27 asc. node -7814 Apr 06 j 22:10 26°≈01'02 desc. node -7814 Apr 13 j 04:09 0°**₩** -7810 Dec 25 j 01:35 0∘ଫ max. Earth dist. -7814 Apr 28 j 04:39 9°**₭**35'20 2.66510 AU -7809 Feb 02 j 20:39 0°M -7809 Mar 16 j 17:58 0°**∡**7 conjunction -7814 May 04 j 13:28 13°**)** 39'49 0°15'41 -7809 May 01 j 15:24 0°궁 minimum elong -7814 May 04 j 12:54 13°**)** ₹38′54 0°15′28 -7809 Jun 28 j 01:39 0°≈ -7814 May 04 j 08:48 13°**)** 32′20 -7809 Aug 09 j 00:39 9°≈30'24 behind sun begin retrograde

-7814 May 04 j 17:00

behind sun end

13°**)** 45′27

min. Earth dist.

-7809 Sep 14 j 23:35

0°≈46'19 0.64222 AU

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 10 Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style. -7809 Sep 16 j 21:35 30°Rる -7804 Sep 15 i 03:54 0° m -7809 Sep 17 j 23:33 29°る33'52 -2°40'23 -7804 Oct 23 j 19:41 0∘**⊽** opposition -7809 Sep 17 j 17:34 29°る39'53 -1.5m -7804 Nov 25 j 04:06 24°**£**34'05 greatest brilliancy evening set -7804 Dec 02 j 10:55 -7809 Oct 26 j 18:23 20°る20'02 direct o°m. -7809 Nov 28 j 00:46 25°る50'01 -7803 Jan 12 j 17:42 asc. node 0°**∡**7 -7809 Dec 10 j 03:04 0°≈ 0°**)**€ -7803 Jan 23 j 00:27 -7808 Feb 10 j 03:50 conjunction 7°**х** 15′24 -1°11′04 $0^{\circ}\Upsilon$ -7803 Jan 23 j 00:46 -7808 Mar 31 j 23:32 minimum elong 7°**∡**15'58 1°11'31 -7803 Feb 25 j 03:02 0° 8 -7808 May 17 j 09:57 max. Earth dist. 0°る03'46 2.55255 AU -7808 Jun 29 j 17:10 $0^{\circ}\Pi$ -7803 Feb 25 j 00:48 0°정 evening set -7808 Jul 21 j 20:10 16°**Ⅲ**03′08 morning rise -7803 Mar 19 j 01:39 14°**る**44'44 -7803 Apr 11 j 08:46 -7808 Aug 09 j 14:00 0ಂತಾ 0°≈ -7803 May 28 j 13:52 max. Earth dist. -7808 Aug 13 j 08:42 2°950'49 2.40961 AU 0°**)**€ -7803 Jul 16 j 20:11 $0^{\circ}\Upsilon$ conjunction -7808 Sep 17 j 06:20 29°936'00 0°37'09 asc. node -7803 Jul 20 j 04:40 1°Y58'50 minimum elong -7808 Sep 17 j 08:56 29°**5**641'02 0°37'36 -7803 Sep 08 j 05:54 0°8 -7808 Sep 17 j 18:42 $0^{\circ}\Omega$ retrograde -7803 Dec 01 j 06:10 28°802'02 -7808 Oct 26 j 03:25 opposition -7802 Jan 05 j 22:20 20°**8**30'01 5°35'37 desc. node -7808 Nov 08 j 02:51 10° m) 10'27 greatest brilliancy -7802 Jan 07 j 08:19 19°**8**59'10 -1.9m morning rise -7808 Nov 20 j 06:45 19° m 40'45 min. Earth dist. -7802 Jan 13 j 15:30 17°**8**42'46 0.53632 AU -7808 Dec 03 j 13:19 0∘**⊽** direct -7802 Feb 14 j 05:15 11°**8**20'36 -7807 Jan 11 j 21:24 0°M -7802 Apr 15 i 09:32 $0^{\circ}II$ -7807 Feb 21 i 23:17 0°×7 -7802 Jun 03 i 06:20 000 -7807 Apr 06 i 15:05 0°정 desc. node -7802 Jun 30 j 21:48 19°528'46 -7807 May 24 j 04:06 0°≈ -7802 Jul 15 j 06:17 $0^{\circ}\Omega$ -7807 Jul 19 j 18:11 0°**₩** -7802 Aug 24 j 03:57 0° m -7807 Sep 12 j 00:52 14°**)**€06'40 -7802 Oct 02 j 19:14 0∘**⊽** retrograde -7807 Oct 15 j 05:03 7° **H** 04'53 -7802 Nov 12 j 06:50 0°M asc. node -7807 Oct 21 j 16:02 4°**)**€31'37 0°14'52 -7802 Dec 24 j 07:15 0°×7 opposition -7807 Oct 21 j 16:07 -7801 Jan 18 j 12:07 17°**∡**123'47 greatest brilliancy 4°¥31'32 -1.4m evening set -7807 Oct 22 j 09:27 4°**)** 14'08 0.66770 AU -7801 Feb 06 j 03:33 min. Earth dist. 0°궁 -7807 Nov 02 j 10:39 30°R**≈** -7807 Dec 01 j 05:19 direct 24°≈40'19 -7801 Mar 11 j 11:37 22°る03'22 -0°46'23 conjunction -7806 Jan 01 j 21:27 0°**∀** -7801 Mar 11 j 13:15 22°る06'02 0°46'52 minimum elong $0^{\circ}\Upsilon$ -7806 Mar 08 j 07:37 -7801 Mar 23 j 16:20 0°≈ -7806 Apr 26 j 16:02 0°8 -7801 Mar 26 j 02:13 max. Earth dist. 1°**≈**33'49 2.63643 AU -7806 Jun 09 j 20:42 $0^{\circ}\Pi$ -7801 Apr 29 j 12:30 morning rise 23°**≈**41′23 -7806 Jul 20 j 22:40 0ಂತಾ -7801 May 09 j 10:14 0°**)**€ -7806 Aug 29 j 02:40 $0^{\circ}\Omega$ asc. node -7801 Jun 06 j 22:51 18°¥05'02 evening set -7806 Sep 20 j 21:05 17°**Ω**48'37 -7801 Jun 25 j 20:10 $0^{\circ}\Upsilon$ desc. node -7806 Sep 25 j 21:50 21° N 45'43 -7801 Aug 12 j 18:21 0°8 -7806 Oct 06 j 09:22 -7801 Sep 30 j 22:43 $0^{\circ}\Pi$ 0° m -7806 Nov 13 j 18:01 -7801 Nov 23 j 19:03 0ಂತಾ 0∘**⊽** -7800 Feb 01 j 23:30 21°950'12 retrograde -7806 Nov 24 j 00:19 7°**2**55'31 -0°41'34 -7800 Mar 04 j 14:24 conjunction opposition 16°915'07 4°54'05 -7806 Nov 23 j 21:08 minimum elong 7°**2**49'24 0°41'32 greatest brilliancy -7800 Mar 05 i 21:42 15°951'57 -2.6m -7806 Dec 23 i 01:38 0°M min. Earth dist. -7800 Mar 11 i 03:06 14°9519'48 0.41349 AU max. Earth dist. -7805 Jan 09 j 12:59 12°M57'56 2.42912 AU direct -7800 Apr 07 i 10:27 9°9547'12 morning rise -7805 Jan 27 i 03:25 25°M45'39 desc. node -7800 May 18 i 02:00 19°9540'55 -7805 Feb 02 i 01:21 0°×7 -7800 Jun 07 i 18:02 $0^{\circ}\Omega$ -7805 Mar 17 j 05:30 0°궁 -7800 Jul 25 j 17:24 0° m -7805 May 01 j 22:59 0°**≈** -7800 Sep 07 j 03:41 0∘**⊽** -7805 Jun 19 j 23:01 0°**₩** -7800 Oct 20 j 01:55 0°M $0^{\circ}\Upsilon$ 0°×7 -7805 Aug 14 j 21:22 -7800 Dec 02 j 19:53 7°**Υ**58'49 asc. node -7805 Sep 02 j 06:39 -7799 Jan 16 j 21:03 0°정 -7799 Mar 02 j 06:46 -7805 Oct 18 j 19:35 18° Y 33'15 28°る48'55 retrograde evening set 9°**Υ**44'16 -7799 Mar 04 j 03:00 -7805 Nov 26 j 01:38 3°09'31 0°≈ opposition -7805 Nov 26 j 11:42 9°**Y**34'26 greatest brilliancy -1.5m 8°**Y**00'33 0.63130 AU -7799 Apr 19 j 16:06 29°≈46′07 -0°02′19 min. Earth dist. -7805 Nov 30 j 11:47 conjunction -7799 Apr 19 j 16:13 -7805 Dec 31 j 00:00 30°**₹** minimum elong 29°**≈**46′17 0°02'38 29°\ 45'44 -7799 Apr 18 j 20:50 direct -7804 Jan 06 j 00:34 behind sun begin 29°≈15'22 $0^{\circ}\Upsilon$ -7804 Jan 12 j 04:38 behind sun end -7799 Apr 20 j 11:36 0°**)** 17'13 -7804 Mar 30 j 20:11 0°8 max. Earth dist. -7799 Apr 18 j 23:23 29°≈19'27 2.66776 AU -7804 May 17 j 14:13 Π °0 -7799 Apr 20 j 00:49 0°**)**€ -7804 Jun 28 j 20:53 0 \circ \odot asc. node -7799 Apr 23 j 15:54 2°**H**19'03 -7804 Aug 07 j 13:25 $0^{\circ}\Omega$ -7799 Jun 05 j 00:12 29°**)** 27'00 morning rise

desc. node

-7804 Aug 12 j 19:42

4°**Ω**03'39

-7799 Jun 05 j 20:42

 $0^{\circ}\Upsilon$

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style. -7799 Jul 22 j 00:56 0°8 greatest brilliancy -7794 Sep 03 j 02:07 15°る25'32 -1.6m -7799 Sep 05 j 08:44 $\mathbb{I}^{\circ 0}$ -7794 Oct 11 j 09:14 6°**ප**21'33 direct -7799 Oct 20 j 01:05 0ಂತಾ -7794 Dec 14 j 13:49 24°る28'49 asc. node -7794 Dec 26 j 03:50 $0^{\circ}\Omega$ -7799 Dec 03 j 16:55 0°≈ 0° m -7793 Feb 19 j 08:21 0°**)**€ -7798 Jan 18 j 22:59 $0^{\circ}\Upsilon$ -7798 Mar 16 j 14:23 0∘ଫ -7793 Apr 09 j 17:15 0°8 desc. node -7798 Apr 05 j 04:58 5°**£**45'27 -7793 May 25 j 16:57 retrograde -7798 Apr 19 j 19:34 7°**£**11'35 evening set -7793 Jul 02 j 20:50 26°**8**24'10 min. Earth dist. -7798 May 17 j 01:03 2°**-**40'43 0.39560 AU -7793 Jul 07 j 22:04 Π $^{\circ}0$ opposition -7798 May 22 j 12:34 1°**2**05'30 -3°27'28 max. Earth dist. -7793 Jul 18 j 21:51 7°**I**54'37 2.45638 AU greatest brilliancy -7798 May 21 j 17:45 1°**₽**19'10 -2.8m -7793 Aug 17 j 20:36 0ಂತಾ -7798 May 26 j 08:24 30°R, My direct -7798 Jun 21 j 21:11 25° m 45'18 conjunction -7793 Aug 25 j 23:17 6°506'24 0°58'32 -7798 Jul 18 j 13:22 0∘**⊽** minimum elong -7793 Aug 26 j 01:36 6°9510'48 0°59'01 -7798 Sep 20 j 04:13 0°M -7793 Sep 26 j 04:27 $0^{\circ}\Omega$ -7798 Nov 09 j 01:00 0°**√** morning rise -7793 Oct 24 j 15:56 22°**Ω**09'54 -7798 Dec 27 j 02:59 0°ರ -7793 Nov 03 j 16:32 0° m -7797 Feb 12 j 23:50 0°≈ desc. node -7793 Nov 25 j 22:34 17° m 22'18 asc. node -7797 Mar 11 j 11:13 16°≈37'59 -7793 Dec 12 j 05:17 0°Ω -7797 Apr 01 j 15:23 0°\ -7792 Jan 20 j 15:50 0°M evening set -7797 Apr 10 j 15:24 5°**)**(42'42 -7792 Mar 01 j 21:54 0°×7 max. Earth dist. -7797 May 13 j 03:19 26°\(\frac{1}{31'29}\) 2.64518 AU -7792 Apr 15 j 01:16 0°궁 -7797 May 18 j 12:13 $0^{\circ}\Upsilon$ -7792 Jun 03 i 07:42 0°≈ -7792 Aug 16 j 01:07 0°) -7797 May 28 j 00:01 6°Υ10'20 0°41'51 -7792 Aug 29 j 11:51 1° **H** 06'28 conjunction retrograde -7797 May 27 j 22:41 6°Υ08'10 0°41'50 -7792 Sep 11 j 07:03 minimum elong 30°R≈ -7797 Jul 03 j 00:50 0°8 -7792 Oct 08 j 09:08 opposition 21° \$\approx 19'43 \ -0° 53'43 -7797 Jul 13 j 09:37 6°858'59 -7792 Oct 08 j 08:52 greatest brilliancy 21°≈19'59 morning rise -1 4m -7792 Oct 07 j 15:18 -7797 Aug 15 j 22:35 0°π min. Earth dist. 21°≈37'41 0.66495 AU -7797 Sep 27 j 07:19 -7792 Oct 31 j 18:33 0.00 13°≈28'13 asc. node -7797 Nov 07 j 11:29 $0^{\circ}\Omega$ -7792 Nov 17 j 09:23 11°≈39'54 direct -7797 Dec 18 j 01:08 0° mb -7791 Jan 21 j 03:32 0°**∀** $0^{\circ}\Upsilon$ -7796 Jan 27 j 23:25 0∘ଫ -7791 Mar 17 j 23:55 -7796 Feb 21 j 07:03 -7791 May 04 j 19:16 0°8 desc. node 17°**£**12'51 -7796 Mar 11 j 05:17 -7791 Jun 17 j 12:47 0°M $0^{\circ}\Pi$ -7791 Jul 28 j 11:30 -7796 May 02 j 19:09 0° **₹** 0.00 retrograde -7796 Jun 14 j 15:02 10°**∡**751'10 evening set -7791 Aug 26 j 11:46 22°908'43 min. Earth dist. -7796 Jul 14 j 19:21 4°**₰**38'59 0.51104 AU -7791 Sep 05 j 14:46 $0^{\circ}\Omega$ greatest brilliancy -7796 Jul 20 j 23:45 2°**∡**121'40 -2.1m -7791 Oct 12 j 16:37 29°**Ω**03'32 desc. node -7796 Jul 22 j 11:11 1°**∡**148'43 -5°48'52 -7791 Oct 13 j 21:21 0° m opposition -7796 Jul 27 j 11:23 30°RML -7796 Aug 25 j 18:35 24°M23'56 -7791 Oct 28 j 02:06 11° Mp 09'18 -0°11'37 direct conjunction -7796 Sep 26 j 12:12 -7791 Oct 28 j 01:02 11° Mp 07'12 0°11'23 0°×7 minimum elong -7796 Nov 30 j 15:15 0°る -7791 Oct 27 j 04:56 10° m 27'48 behind sun begin -7795 Jan 22 j 00:47 -7791 Oct 28 j 21:07 behind sun end 11° Mp 46'35 asc. node -7795 Jan 26 i 10:37 2°≈37'14 -7791 Nov 21 i 05:30 0°Ω -7795 Mar 12 j 12:40 0°**)**€ max. Earth dist. -7791 Nov 26 i 13:35 4°**2**08'00 2.38655 AU -7795 Apr 29 i 01:08 $0^{\circ}\Upsilon$ -7791 Dec 30 j 12:08 0°M evening set -7795 May 19 j 06:29 13°Y10'26 morning rise -7790 Jan 02 j 09:10 2°M09'11 max. Earth dist. -7795 Jun 08 j 23:38 26°**Y**57'17 2.57109 AU -7790 Feb 09 j 11:14 0°×7 -7795 Jun 13 j 11:58 0°8 -7790 Mar 24 j 17:11 0°궁 -7790 May 09 j 20:46 0°**≈** -7795 Jul 07 j 03:24 16°811'49 1°10'06 -7790 Jun 29 j 10:09 0°\ conjunction $0^{\circ}\Upsilon$ minimum elong -7795 Jul 07 j 02:34 16°810'22 1°10'25 -7790 Sep 03 j 07:57 -7795 Jul 26 j 19:22 $0^{\circ}II$ -7790 Sep 18 j 22:07 3°Y43'50 asc. node -7790 Oct 04 j 00:04 -7795 Aug 26 j 07:14 21°**I**59'29 5°Y03'51 morning rise retrograde -7795 Sep 06 j 04:17 0ಂತಾ -7790 Nov 01 j 00:55 30°**₹**₩ -7795 Oct 16 j 02:14 $0^{\circ}\Omega$ -7790 Nov 11 j 22:09 25°\dagger53'58 2°02'49 opposition 0° m -7790 Nov 12 j 02:11 -7795 Nov 24 j 05:09 greatest brilliancy 25°**)** 49'59 -1.4m 0∘**⊽** -7794 Jan 02 j 08:30 min. Earth dist. -7790 Nov 14 j 21:32 24°**)** 43'15 0.65284 AU 4°**£**26'08 15°**)** 54'01 desc. node -7794 Jan 08 j 04:48 direct -7790 Dec 22 j 21:51 $0^{\circ}\Upsilon$ -7794 Feb 11 j 12:40 0°M -7789 Feb 15 j 04:15 -7794 Mar 26 j 04:13 0°**∡** -7789 Apr 11 j 18:16 0°8 -7794 May 13 j 12:55 0°궁 -7789 May 27 j 12:23 $0^{\circ}\Pi$ retrograde -7794 Jul 25 j 20:47 25°**る**08'22 -7789 Jul 08 j 03:47 0ಂಣ 16°る59'32 0.61553 AU $0^{\circ}\Omega$ min. Earth dist. -7794 Aug 30 j 04:00 -7789 Aug 16 j 13:24

-7794 Sep 03 j 14:56

opposition

15°る12'44 -3°44'49

desc. node

-7789 Aug 30 j 13:44

10°**Ω**53'57

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 12 Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style. -7789 Sep 23 i 23:25 0° m -7784 Jul 29 i 12:54 0°8 -7789 Nov 01 j 04:55 29° m 48'21 -7784 Sep 13 j 21:29 $\Pi^{\circ}0$ evening set -7789 Nov 01 j 10:57 0∘**⊽** -7784 Oct 30 j 11:45 0ಂತಾ -7789 Dec 10 j 21:39 -7784 Dec 17 j 23:30 $0^{\circ}\Omega$ oom. -7783 Feb 15 j 12:19 0° m conjunction -7788 Jan 02 j 02:35 16°M22'52 -1°08'15 retrograde -7783 Mar 21 j 15:34 6° Mp 43'44 minimum elong -7788 Jan 02 j 01:05 16°M20'09 1°08'34 opposition -7783 Apr 21 j 10:10 1° Mp 32'43 0°02'27 -7788 Jan 21 j 00:12 0°**∡**¹ greatest brilliancy -7783 Apr 21 j 10:17 1° m 32'39 -3.0m max. Earth dist. -7788 Feb 11 j 18:55 15°**х** 19′23 2.50714 AU min. Earth dist. -7783 Apr 20 j 20:33 1° m 41'50 0.37940 AU morning rise -7788 Feb 29 j 13:30 27°**х** 32′31 desc. node -7783 Apr 21 j 22:27 1° m 24'30 -7788 Mar 04 j 04:23 0°궁 -7783 Apr 27 j 06:53 30°**ŖΩ** -7788 Apr 18 j 13:33 -7783 May 21 j 18:06 26°**Ω**28'18 0°≈ direct -7788 Jun 05 j 05:15 0°**)**€ -7783 Jun 14 j 13:34 0° M $0^{\circ}\Upsilon$ -7788 Jul 25 j 23:34 -7783 Aug 16 j 10:56 0∘**⊽** asc. node -7788 Aug 05 j 21:28 6°Y03'31 -7783 Oct 03 j 10:54 0°M -7788 Sep 23 j 20:49 0°8 -7783 Nov 18 j 17:34 0°**⊼** retrograde -7788 Nov 12 j 13:01 11°848'34 -7782 Jan 04 j 05:17 0°ರ 3°**8**41'40 opposition -7788 Dec 19 j 09:16 4°46'30 -7782 Feb 20 j 06:53 0°≈ greatest brilliancy -7788 Dec 20 j 09:11 3°819'06 -1.7m evening set -7782 Mar 26 j 14:34 21°≈46'09 min. Earth dist. -7788 Dec 25 j 22:45 1°**8**13'31 0.57967 AU asc. node -7782 Mar 28 j 02:51 22°≈43'45 -7788 Dec 29 j 07:42 30°RΥ -7782 Apr 08 j 13:29 0°\ direct -7787 Jan 28 i 16:01 24° Y 02' 58 max. Earth dist. -7782 May 03 j 16:19 16°**)**€02'09 2.66030 AU -7787 Mar 01 i 19:52 0°8 -7787 Apr 30 i 08:02 $\mathbb{I}^{\circ 0}$ conjunction -7782 May 13 j 02:10 22°\(\)\(04'50\)\(0°25'44\) -7787 Jun 14 j 00:36 0ಂಣ -7782 May 13 j 01:16 22°**)** 03'22 0°25'35 minimum elong -7787 Jul 17 j 13:48 24°937'30 -7782 May 25 j 08:34 $0^{\circ}\Upsilon$ desc node -7787 Jul 24 j 16:52 $0^{\circ}\Omega$ -7782 Jun 28 j 02:32 22°Y03'55 morning rise -7787 Sep 01 j 21:39 0°m -7782 Jul 10 j 01:37 0°8 -7787 Oct 11 j 00:34 0∘**⊽** -7782 Aug 23 j 09:37 0°Π 0°M -7787 Nov 20 j 01:38 -7782 Oct 05 j 10:34 000 28°M46'42 -7787 Dec 29 j 23:31 -7782 Nov 16 j 12:31 $0^{\circ}\Omega$ evening set -7782 Dec 28 j 07:02 -7787 Dec 31 j 17:05 0°×7 0° m -7786 Feb 13 j 06:21 0°궁 -7781 Feb 09 j 02:23 0∘ಹ -7781 Mar 10 j 00:38 desc. node 18°**£**49'44 -7786 Feb 22 j 06:07 6°る01'59 -0°59'46 -7781 Mar 29 j 04:33 conjunction 0°M -7786 Feb 22 j 07:48 6°る04'48 1°00'17 -7781 May 27 j 03:41 minimum elong retrograde 19°M07'45 -7786 Mar 15 j 18:05 20°る16'29 2.60956 AU max. Earth dist. min. Earth dist. -7781 Jun 24 j 05:43 13°ML48'12 0.46115 AU -7786 Mar 30 j 15:31 0°**≈** greatest brilliancy -7781 Jun 30 j 17:30 11°M34'41 -2.4m morning rise -7786 Apr 14 j 04:21 9°≈23'55 opposition -7781 Jul 02 j 08:22 11°ML01'01 -5°50'23 -7786 May 16 j 11:18 0°**)**€ direct -7781 Aug 04 j 01:29 4°M24'20 asc. node -7786 Jun 23 j 16:43 23°¥59'12 -7781 Oct 19 j 20:04 0°**⊼** -7786 Jul 03 j 09:12 $0^{\circ}\Upsilon$ -7781 Dec 12 j 07:05 0°정 -7786 Aug 21 j 15:40 0° 8 -7780 Jan 31 j 06:06 0°**≈** -7786 Oct 13 j 13:32 $\mathbb{I}^{\circ 0}$ -7780 Feb 13 j 00:51 7°≈49'19 asc. node -7785 Jan 05 j 12:45 28°**Ⅲ**24'15 -7780 Mar 19 j 19:50 0°**)**€ retrograde -7785 Feb 07 i 19:20 22°**I**101'40 5°57'50 evening set -7780 May 03 j 13:58 28°¥25'40 opposition -7785 Feb 09 i 13:42 greatest brilliancy 21°**Ⅲ**27′09 -2.3m -7780 May 06 i 00:21 $0^{\circ}\Upsilon$ min. Earth dist. -7785 Feb 16 i 01:53 19°**II**20'43 0.45926 AU max. Earth dist. -7780 May 28 j 10:12 14°Υ38'20 2.60585 AU direct -7785 Mar 16 j 08:12 14°**Ⅱ**16'52 -7785 May 08 j 08:09 0ಂತಾ -7780 Jun 20 j 12:26 0°802'38 1°02'17 conjunction desc. node -7785 Jun 04 i 17:17 15°9643'05 -7780 Jun 20 j 11:04 0°800'20 1°02'29 minimum elong -7785 Jun 26 j 13:59 $0^{\circ}\Omega$ -7780 Jun 20 j 10:52 0°8 -7780 Aug 02 j 22:37 -7785 Aug 08 j 02:48 0°m $0^{\circ}\Pi$ -7785 Sep 18 j 07:29 0∘∙თ morning rise -7780 Aug 07 j 15:10 3°**Ⅱ**18'53 -7785 Oct 29 j 21:49 0°M -7780 Sep 13 j 15:05 000 -7780 Oct 23 j 22:13 -7785 Dec 11 j 18:31 0°×7 $0^{\circ}\Omega$ -7784 Jan 25 j 05:18 0°정 -7780 Dec 02 j 11:04 0° m 13°**ප්**45'17 -7779 Jan 11 j 01:22 0∘**⊽** evening set -7784 Feb 15 j 02:35 -7784 Mar 11 j 02:37 -7779 Jan 24 j 22:53 10°**£**22'11 0°≈ desc. node -7779 Feb 20 j 21:06 0°M 0°**∡**7 conjunction -7784 Apr 04 j 13:13 15°≈43'05 -0°20'13 -7779 Apr 06 j 00:09 minimum elong -7784 Apr 04 j 14:01 15°≈44'21 0°20'36 -7779 May 31 j 02:44 0°궁 max. Earth dist. -7784 Apr 09 j 13:55 18°≈56'20 2.66200 AU retrograde -7779 Jul 10 j 21:10 9°**る**32'49 -7784 Apr 26 j 21:14 0°**)**€ min. Earth dist. -7779 Aug 13 j 08:05 2°**る**04'55 0.58038 AU asc. node -7784 May 10 j 09:37 8°****37'39 greatest brilliancy -7779 Aug 18 j 07:04 0°**ප**08'05 -1.7m -7784 May 21 j 14:35 15°**)** 46′50 -7779 Aug 18 j 15:17 morning rise -7784 Jun 12 j 20:32 $0^{\circ}\Upsilon$ -7779 Aug 19 j 04:34 29°**∡**¹46'57 -4°43'45 opposition

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 13 Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -7900 i	n astronomical co	unting style is the year	7901 BCE in historical c	ounting style.	
direct	-7779 Sep 24 j 17:43	21° ∡ °24′05		conjunction	-7774 Dec 08 j 19:32	22° ≙ 51'37	-0°54'36
	-7779 Nov 04 j 17:54	0°ಕ		minimum elong	-7774 Dec 08 j 16:25	22° ≏ 45'43	0°54'44
asc. node	-7779 Dec 31 j 03:26	26° පි 28'30			-7774 Dec 18 j 07:13	0°M₊	
	-7778 Jan 06 j 15:26	0° ≈		max. Earth dist.	-7773 Jan 24 j 01:11	26°M57'43	2.45735 AU
	-7778 Feb 27 j 16:36	0°) €			-7773 Jan 28 j 07:01	0° ∡ ¹	
	-7778 Apr 17 j 03:09	0° Υ		morning rise	-7773 Feb 08 j 23:58	8° ≯ 18′08	
	-7778 Jun 01 j 20:16	9° 8			-7773 Mar 12 j 09:59	0°ප	
evening set	-7778 Jun 14 j 13:45	8° 8 40'01			-7773 Apr 26 j 22:44	0° ≈	
max. Earth dist.	-7778 Jun 30 j 16:42	19° 8 50'47	2.50454 AU		-7773 Jun 14 j 07:08	0°) €	
	-7778 Jul 15 j 01:27	Π $^{\circ}0$			-7773 Aug 06 j 14:41	0° Y	
				asc. node	-7773 Aug 23 j 13:26	8° Y 21'48	
conjunction	-7778 Aug 05 j 01:40	15° Ⅱ 10′18	1°09'45	retrograde	-7773 Oct 27 j 18:06	27° Y '00'25	
minimum elong	-7778 Aug 05 j 02:40	15° Ⅱ 12'07	1°10'15	opposition	-7773 Dec 04 j 13:42	18° Y 24'45	3°46'27
	-7778 Aug 25 j 03:20	0ංම		greatest brilliancy	-7773 Dec 05 j 04:10	18° Ƴ 10'45	-1.6m
morning rise	-7778 Sep 29 j 08:25	26°5941'32		min. Earth dist.	-7773 Dec 09 j 18:35	16° Y 24'06	0.61561 AU
	-7778 Oct 03 j 15:39	$0^{\circ}\Omega$		direct	-7772 Jan 14 j 09:37	8° Y 30'24	
	-7778 Nov 11 j 08:12	0° m			-7772 Mar 22 j 12:06	9° 8	
desc. node	-7778 Dec 12 j 18:30	24° m 23'53			-7772 May 11 j 11:45	$\Pi^{\circ}0$	
	-7778 Dec 20 j 00:54	0∘ ⊽			-7772 Jun 23 j 10:15	0ಂಣ	
	-7777 Jan 28 j 15:27	0° M			-7772 Aug 02 j 09:30	$0^{\circ}\Omega$	
	-7777 Mar 11 j 04:47	0° ∡ 7		desc. node	-7772 Aug 03 j 07:39	0° Ω 42'29	
	-7777 Apr 25 j 04:36	ರ°0			-7772 Sep 10 j 03:51	0° m)	
	-7777 Jun 16 j 23:23	0° ≈			-7772 Oct 18 j 22:22	0∘ ⊽	
retrograde	-7777 Aug 16 j 22:29	17° ≈ 49'38			-7772 Nov 27 j 15:40	0°M₊	
min. Earth dist.	-7777 Sep 23 j 17:37	8° ≈ 48'23	0.65289 AU	evening set	-7772 Dec 08 j 10:29	7°M57'10	
opposition	-7777 Sep 25 j 22:26	7° ≈ 55'09	-2°01'38		-7771 Jan 08 j 00:13	0° ∡ ¹	
greatest brilliancy	-7777 Sep 25 j 19:15	7°≈58'21	-1.4m		,		
	-7777 Oct 20 j 03:34	30°Ŗる		conjunction	-7771 Feb 03 j 13:35	18° ∡ ³33′02	-1°08'43
direct	-7777 Nov 04 j 05:24	28° ට 30'49		minimum elong	-7771 Feb 03 j 14:39	18° ∡ ³34'52	1°09'13
asc. node	-7777 Nov 18 j 07:56	29° ප් 40'31			-7771 Feb 20 j 08:16	0°ರ	
	-7777 Nov 20 j 06:13	0° ≈		max. Earth dist.	-7771 Mar 04 j 12:19	8° ට 10'51	2.57497 AU
	-7776 Feb 03 j 10:47	0°)		morning rise	-7771 Mar 28 j 23:15	24° る 20'42	
	-7776 Mar 26 j 14:59	$0^{\circ}\mathbf{\Upsilon}$		C	-7771 Apr 06 j 15:35	0° ≈	
	-7776 May 12 j 12:01	0°8			-7771 May 23 j 15:50	0°) €	
	-7776 Jun 24 j 22:56	0° I I		asc. node	-7771 Jul 10 j 09:44	29° ∺ 27'11	
evening set	-7776 Aug 03 j 03:48	28° Ⅱ 43'00			-7771 Jul 11 j 07:26	0° Υ	
Ü	-7776 Aug 04 j 20:48	0ංම			-7771 Aug 31 j 17:20	0°8	
max. Earth dist.	-7776 Sep 07 j 02:08	25°522'38	2.38902 AU		-7771 Nov 01 j 22:50	0°II	
	-7776 Sep 13 j 01:09	0°N		retrograde	-7771 Dec 13 j 01:15	8° Ⅱ 33'56	
	,,,,,,,,,			opposition	-7770 Jan 16 j 23:27	1° Ⅱ 24'36	5°54'02
conjunction	-7776 Oct 01 j 13:16	14° Ω 26'30	0°20'50	greatest brilliancy	-7770 Jan 18 j 14:19	0° I I50′26	
minimum elong	-7776 Oct 01 j 15:03	14° Ω 29'58	0°21'13	greatest orimane)	-7770 Jan 20 j 23:32	30°R 8	2.0111
minimum crong	-7776 Oct 21 j 09:07	0° m)	0 21 13	min. Earth dist.	-7770 Jan 25 j 04:01	28° 8 32'44	0.50975 AU
desc. node	-7776 Oct 29 j 12:02	6° Mp 22'30		direct	-7770 Feb 24 j 12:03	22° 8 39'27	0.50775710
desc. node	-7776 Nov 28 j 18:07	0∘ ರ		direct	-7770 Mar 31 j 14:23	0°Ⅱ	
morning rise	-7776 Dec 06 j 04:03	ა — 5° ჲ 44'09			-7770 May 26 j 10:18	0°©	
morning rise	-7775 Jan 07 j 00:53	0° M		desc. node	-7770 Jun 21 j 10:15	17°934'05	
	-7775 Feb 17 j 00:33	0° ⊼ ¹		3050. Hode	-7770 Jul 08 j 20:34	0°Ω	
	-7775 Apr 01 j 10:37	0°ਤ ਹ ×			-7770 Aug 18 j 09:41	0° m)	
	-7775 May 18 j 06:53	0°≈			-7770 Sep 27 j 10:48	0∘ ত رااا	
	-7775 Jul 10 j 16:16	0° ∺			-7770 Nov 07 j 05:19	0° ™	
retrograde	-7775 Sep 19 j 21:52	21°) 58'51			-7770 Dec 19 j 10:58	0° ⊼	
asc. node	-7775 Oct 05 j 12:06	20°\(\frac{1}{2}2'03\)		evening set	-7769 Jan 28 j 21:58	27° х 37'59	
opposition	-7775 Oct 29 j 08:12	12°\(\frac{7}{31'39}\)	0°54'40	evening set	-7769 Feb 01 j 10:46	0°る	
greatest brilliancy	-7775 Oct 29 j 08:12 -7775 Oct 29 j 08:55	12° H 30'57	-1.4m		-7769 Mar 19 j 01:27	0°≈	
min. Earth dist.	-7775 Oct 29 j 08:33	11° X 55'05	0.66510 AU		-//09 Iviai 19 j 01.2/	0 ~	
direct	-7775 Dec 09 j 02:58	2°\(\frac{11}{35}\) \(\frac{15}{35}\) \(\frac{15}{35}\)	0.00510 AU	conjunction	-7769 Mar 20 j 20:54	1° ≈ 10'24	-0°37'16
uncci	-7774 Mar 01 j 04:57	2° π 33'32' 0° Υ		·	v	1°≈10′24 1°≈12′40	
		0°8		minimum elong	-7769 Mar 20 j 22:18	1°≈12′40 8°≈19′37	
	-7774 Apr 21 j 02:51			max. Earth dist.	-7769 Mar 31 j 22:36		2.64772 AU
	-7774 Jun 04 j 18:48	0° I			-7769 May 04 j 18:38	0° ₩	
	-7774 Jul 16 j 01:09	0.ಲ		morning rise	-7769 May 08 j 01:50	2° H 06'10	
d 1	-7774 Aug 24 j 06:46	0° Ω		asc. node	-7769 May 28 j 02:46	14° ¥ 50'54	
desc. node	-7774 Sep 16 j 07:18	17° Ω 59'34			-7769 Jun 20 j 23:51	0° Υ	
	-7774 Oct 01 j 14:12	0° Mp			-7769 Aug 07 j 09:15	0°B	
evening set	-7774 Oct 05 j 21:16	3° m/22'21			-7769 Sep 24 j 06:49	0°II	
	-7774 Nov 08 j 23:19	0∘ ⊽			-7769 Nov 13 j 08:09	0°©	
					-7768 Ian 13 i 11:40	$0 \circ 0$	

-7768 Jan 13 j 11:40 0°**Ω**

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 14 Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style. -7768 Feb 19 i 00:43 7°Ω17'05 -7763 Mar 07 j 12:39 0°) retrograde -7768 Mar 21 j 00:28 2°**Ω**02'34 3°33'39 -7763 Apr 24 j 08:21 $0^{\circ}\Upsilon$ opposition 22°Y23'21 -7768 Mar 21 j 18:40 -7763 May 28 j 13:25 greatest brilliancy 1°**Ω**49'52 -2.8m evening set -7763 Jun 08 j 21:33 0°8 0°**Ω**47'04 0.39418 AU min. Earth dist. -7768 Mar 25 j 13:15 -7763 Jun 16 j 04:34 -7768 Mar 28 j 11:13 30°R95 max. Earth dist. 4°**8**56'56 2.54880 AU 26°9516'17 direct -7768 Apr 22 j 04:22 desc. node -7768 May 08 j 13:38 28°901'24 conjunction -7763 Jul 17 j 04:46 26°**8**28'13 1°12'03 -7763 Jul 17 j 04:29 -7768 May 16 j 10:09 0° Ω minimum elong 26°**8**27'43 1°12'26 0° m -7763 Jul 22 j 04:16 -7768 Jul 16 j 02:21 Π $^{\circ}0$ -7768 Aug 31 j 00:18 0∘**⊽** -7763 Sep 01 j 10:42 0ಂತಾ -7768 Oct 14 j 02:22 0°M morning rise -7763 Sep 06 j 22:08 4°9504'32 -7768 Nov 27 j 12:18 0°**∡** -7763 Oct 11 j 04:56 0° Ω 0°る -7763 Nov 19 j 03:35 -7767 Jan 11 j 23:00 0° m -7767 Feb 27 j 10:32 0°**≈** -7763 Dec 28 j 02:19 0∘**⊽** evening set -7767 Mar 11 j 06:40 7°≈34'18 desc. node -7763 Dec 29 j 13:24 1°**≏**07'01 asc. node -7767 Apr 13 j 20:34 28°≈59'23 -7762 Feb 05 j 23:58 0°M -7767 Apr 15 j 10:35 0°**)**€ -7762 Mar 20 j 02:27 0°**⊼** max. Earth dist. -7767 Apr 24 j 10:52 5°**)** 45′04 2.66734 AU -7762 May 05 j 16:50 0°정 -7762 Jul 08 j 11:39 0°≈ conjunction -7767 Apr 28 j 06:06 8°¥10'48 0°08'13 retrograde -7762 Aug 03 j 01:37 3°≈55'21 minimum elong -7767 Apr 28 j 05:47 8°**¥**10'17 0°07'59 -7762 Aug 26 j 22:37 30°R₹ behind sun begin -7767 Apr 27 i 12:43 7°**)**(43'02 min. Earth dist. -7762 Sep 08 i 07:40 25°る26'34 0.63143 AU behind sun end -7767 Apr 28 j 22:51 8° **)** 37'33 -7762 Sep 11 i 23:34 23°る58'24 -3°08'01 opposition -7767 Jun 01 i 05:50 $0^{\circ}\Upsilon$ greatest brilliancy -7762 Sep 11 i 14:52 24°る07'07 -1.5m -7767 Jun 13 j 08:41 7°**Υ**50'33 direct -7762 Oct 20 j 08:38 14°る54'07 morning rise -7767 Jul 17 j 05:40 0°8 -7762 Dec 04 j 21:33 25°る03'09 asc. node -7767 Aug 31 j 03:57 $0^{\circ}II$ -7762 Dec 16 j 22:04 0°≈ -7767 Oct 14 j 03:50 0ಂತಾ -7761 Feb 13 j 10:51 0°\ $0^{\circ}\Omega$ -7761 Apr 04 j 15:46 $0^{\circ}\Upsilon$ -7767 Nov 26 j 15:27 0° M 0° 8 -7766 Jan 09 j 14:26 -7761 May 20 j 22:50 -7766 Feb 26 j 03:37 0∘∙თ -7761 Jul 03 j 06:20 $0^{\circ}\Pi$ -7766 Mar 26 j 17:32 14°**£**29'53 evening set -7761 Jul 13 j 22:50 7°**Ⅱ**41′00 desc. node -7766 May 04 j 11:59 23°**♀**39'25 -7761 Aug 01 j 00:51 20°**I**55'39 2.42987 AU retrograde max. Earth dist. -7766 May 31 j 08:08 -7761 Aug 13 j 05:00 min. Earth dist. 19°**♀**01'23 0.41511 AU 0ಂತಾ -7766 Jun 06 j 05:03 greatest brilliancy 17°**♀**13'10 -2.7m -7766 Jun 07 j 11:29 -7761 Sep 07 j 19:44 19°9527'30 0°47'38 opposition 16°**£**49'37 -4°46'29 conjunction -7766 Jul 08 j 13:01 -7761 Sep 07 j 22:26 19°532'41 0°48'06 direct 11°**≏**05'09 minimum elong -7766 Sep 09 j 02:58 0°M -7761 Sep 21 j 11:34 $0^{\circ}\Omega$ -7766 Nov 02 j 03:07 0°**√** -7761 Oct 29 j 21:43 0° m -7766 Dec 21 j 13:15 0°ರ morning rise -7761 Nov 09 j 01:18 7° m 56'54 -7765 Feb 08 j 00:35 0°**≈** desc. node -7761 Nov 16 j 08:35 13° m 39'44 -7765 Mar 01 j 16:47 13°≈30'57 -7761 Dec 07 j 08:24 0∘**ত** asc. node -7765 Mar 27 j 22:49 0°**)**€ -7760 Jan 15 j 16:26 0°M -7765 Apr 19 j 07:40 14°**)** 11′19 -7760 Feb 25 j 18:28 0°**∡**7 evening set -7765 May 13 j 22:06 $0^{\circ}\Upsilon$ -7760 Apr 09 j 12:44 0°정 -7760 May 27 i 13:45 max. Earth dist. -7765 May 18 j 22:25 3°Υ15'16 2.63318 AU 0°≈ -7760 Jul 26 i 11:39 0°) 14°**Υ**56'09 -7765 Jun 05 j 18:43 conjunction 0°50'14 -7760 Sep 06 i 06:26 9°\ 02'56 retrograde minimum elong -7765 Jun 05 i 17:16 14°Υ53'46 0°50'18 -7760 Oct 14 j 11:38 30°R≈ -7765 Jun 28 j 09:56 0°8 -7760 Oct 16 i 01:21 29°≈22'06 -0°13'52 opposition -7765 Jul 22 j 15:01 16°827'09 -7760 Oct 16 j 01:31 29°≈21'56 -1.4m morning rise greatest brilliancy 29°≈20'34 0.66777 AU -7765 Aug 11 j 03:59 $0^{\circ}II$ min. Earth dist. -7760 Oct 16 j 02:53 -7765 Sep 22 j 06:40 0ಂತಾ asc. node -7760 Oct 22 j 01:52 26°≈58'41 -7765 Nov 02 j 02:33 19°≈35'26 $0^{\circ}\Omega$ direct -7760 Nov 25 j 09:57 -7759 Jan 10 j 15:08 -7765 Dec 12 j 05:49 0° m 0°) $0^{\circ}\Upsilon$ -7764 Jan 21 j 13:32 0∘**⊽** -7759 Mar 11 j 21:02 desc. node -7764 Feb 11 j 18:00 15°**♀**22'52 -7759 Apr 29 j 14:02 0°8 -7764 Mar 03 j 13:46 0°M -7759 Jun 12 j 15:03 $0^{\circ}\Pi$ -7764 Apr 20 j 02:07 0° ×7 -7759 Jul 23 j 16:47 0ಂತಾ -7764 Jun 24 j 15:02 22°**₹**10'04 -7759 Aug 31 j 21:04 0° Ω retrograde -7764 Jul 26 j 00:22 min. Earth dist. 15°**尽**29'44 0.53728 AU evening set -7759 Sep 09 j 13:50 6°**Ω**47'00 greatest brilliancy -7764 Jul 31 j 20:12 13°**х** 16'46 -1.9m desc. node -7759 Oct 03 j 03:38 25°**Ω**16'38 opposition -7764 Aug 02 j 03:09 12°**₹**47'16 -5°31'18 -7759 Oct 09 j 03:46 0° m direct -7764 Sep 06 j 06:23 4°**х** 59′50 -7764 Nov 22 j 14:01 0°궁 conjunction -7759 Nov 12 j 07:49 26° m $45'52 - 0^{\circ}29'23$ -7763 Jan 16 j 17:39 0°≈15'39 -7759 Nov 12 j 05:15 26° m/40'52 0°29'16 asc. node minimum elong -7763 Jan 16 j 06:51 -7759 Nov 16 j 11:47 0∘**ত** 0°≈

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 15 Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ne year -7900 i	n astronomical co	ounting style is the year	7901 BCE in historical c	ounting style.	
	-7759 Dec 25 j 17:55	0° M		min. Earth dist.	-7753 Mar 01 j 09:58	3° © 18'55	0.43286 AU
max. Earth dist.	-7759 Dec 26 j 01:38	0° M 14′28	2.40773 AU		-7753 Mar 14 j 12:24	30°RⅡ	
morning rise	-7758 Jan 16 j 17:43	16° ™ 18'14		direct	-7753 Mar 28 j 23:19	28° Ⅲ 35′11	
	-7758 Feb 04 j 15:54	0° ∡			-7753 Apr 12 j 10:07	0 \circ \odot	
	-7758 Mar 19 j 19:06	0°ප		desc. node	-7753 May 26 j 05:57	17° © 10'58	
	-7758 May 04 j 14:36	0° ≈			-7753 Jun 17 j 03:06	$0^{\circ}\Omega$	
	-7758 Jun 23 j 01:58	0° ∀			-7753 Jul 31 j 23:12	0° ™	
	-7758 Aug 20 j 13:31	0° Y			-7753 Sep 12 j 04:49	0∘ ⊽	
asc. node	-7758 Sep 09 j 04:03	7° Y 20'50			-7753 Oct 24 j 10:13	0° M	
retrograde	-7758 Oct 12 j 09:08	13° Ƴ 10'49			-7753 Dec 06 j 16:43	0° ∡ ¹	
opposition	-7758 Nov 19 j 23:16	4° Ƴ 11'50	2°41'37		-7752 Jan 20 j 10:02	0°ಕ	
greatest brilliancy	-7758 Nov 20 j 06:22	4° Υ ′04'52	-1.5m	evening set	-7752 Feb 24 j 11:21	22° る 54'05	
min. Earth dist.	-7758 Nov 23 j 17:57	2° Y '42'42	0.64219 AU		-7752 Mar 06 j 11:11	0° ≈	
	-7758 Nov 30 j 22:16	30°Ŗ ℋ					
direct	-7758 Dec 30 j 23:46	24°) 1 1′53		conjunction	-7752 Apr 13 j 06:50	24° ≈ 14'41	-0°09'52
	-7757 Feb 01 j 15:02	0 ° Υ		minimum elong	-7752 Apr 13 j 07:14	24° ≈ 15′18	0°10'13
	-7757 Apr 05 j 02:20	0° 8		behind sun begin	-7752 Apr 12 j 15:58	23° ≈ 50'55	
	-7757 May 21 j 22:48	Π $^{\circ}0$		behind sun end	-7752 Apr 13 j 22:29	24° ≈ 39'40	
	-7757 Jul 02 j 23:35	$0 \circ \mathfrak{S}$		max. Earth dist.	-7752 Apr 15 j 01:58	25° ≈ 23'34	2.66622 AU
	-7757 Aug 11 j 13:28	$0^{\circ}\Omega$			-7752 Apr 22 j 07:03	0° ∀	
desc. node	-7757 Aug 21 j 00:43	7° Ω 20′05		asc. node	-7752 Apr 30 j 14:07	5°) 17'46	
	-7757 Sep 19 j 01:53	0° ™		morning rise	-7752 May 29 j 21:29	24°) €02'22	
	-7757 Oct 27 j 15:20	0∘ 亚			-7752 Jun 08 j 04:27	0° Y	
evening set	-7757 Nov 15 j 13:22	14° ≏ 29'35			-7752 Jul 24 j 13:54	9° 8	
	-7757 Dec 06 j 03:32	0°M			-7752 Sep 08 j 07:55	Π $^{\circ}$ 0	
					-7752 Oct 23 j 17:57	0ංම	
conjunction	-7756 Jan 14 j 20:00	28°M57'27	-1°10'59		-7752 Dec 08 j 16:52	$0^{\circ}\Omega$	
minimum elong	-7756 Jan 14 j 19:37	28°M56'46	1°11'24		-7751 Jan 27 j 00:49	0° m)	
-	-7756 Jan 16 j 07:07	0° ∡ ¹		retrograde	-7751 Apr 07 j 13:15	24° m 27'37	
max. Earth dist.	-7756 Feb 20 j 11:28	24° ₹ ³33'04	2.53290 AU	desc. node	-7751 Apr 12 j 09:07	24° Mp 18'17	
	-7756 Feb 28 j 11:29	0°రె		min. Earth dist.	-7751 May 05 j 17:34	19° m 51'03	0.38480 AU
morning rise	-7756 Mar 11 j 08:17	7° る 59'47		opposition	-7751 May 09 j 06:43	18° m 52'02	-2°04'59
-	-7756 Apr 13 j 18:25	0° ≈		greatest brilliancy	-7751 May 08 j 22:16	18° m 57'53	-2.9m
	-7756 May 31 j 02:20	0° ∀		direct	-7751 Jun 08 j 09:28	13° m) 44'55	
	-7756 Jul 19 j 20:54	0° Υ			-7751 Aug 03 j 12:17	0∘ ⊽	
asc. node	-7756 Jul 27 j 02:44	4° Υ 11'25			-7751 Sep 25 j 18:15	0°M	
	-7756 Sep 13 j 05:12	0°B			-7751 Nov 12 j 17:20	0° ∡ ¹	
retrograde	-7756 Nov 22 j 21:03	21° 8 16'41			-7751 Dec 30 j 00:04	ರ°0	
opposition	-7756 Dec 29 j 03:15	13° 8 28'04	5°16'07		-7750 Feb 15 j 11:24	0° ≈	
greatest brilliancy	-7756 Dec 30 j 08:53	13° 8 00'40		asc. node	-7750 Mar 18 j 09:05	19° ≈ 30'24	
min. Earth dist.	-7755 Jan 05 j 09:33	10° 8 47'32	0.55671 AU		-7750 Apr 03 j 22:42	0° ∀	
direct	-7755 Feb 06 j 23:05	4° 8 03'27		evening set	-7750 Apr 04 j 06:08	0°) 11'48	
	-7755 Apr 21 j 22:42	Π $^{\circ}0$		max. Earth dist.	-7750 May 09 j 05:37	22°) 32′04	2.65298 AU
	-7755 Jun 07 j 14:47	0 \circ \odot			-7750 May 20 j 19:11	0° Y	
desc. node	-7755 Jul 08 j 01:52	21° © 53'55					
	-7755 Jul 18 j 23:31	$0^{\circ}\Omega$		conjunction	-7750 May 21 j 14:46	0° Υ 31'43	0°35'16
	-7755 Aug 27 j 12:43	0° m		minimum elong	-7750 May 21 j 13:35	0° Υ 29'48	0°35'13
	-7755 Oct 05 j 21:32	0∘ <u>⊽</u>		, and the second	-7750 Jul 05 j 10:21	0°8	
	-7755 Nov 15 j 03:07	0° M		morning rise	-7750 Jul 06 j 18:37	0° 8 53'54	
	-7755 Dec 26 j 22:08	0° ∡ ″		-	-7750 Aug 18 j 13:13	0° I I	
evening set	-7754 Jan 10 j 07:45	10° ∡ °02′23			-7750 Sep 30 j 05:17	0°©	
	-7754 Feb 08 j 14:00	0°ප			-7750 Nov 10 j 18:36	$0^{\circ}\Omega$	
	-				-7750 Dec 21 j 19:10	0° m)	
conjunction	-7754 Mar 04 j 06:29	15° る 46'28	-0°52'25		-7749 Feb 01 j 08:45	0∘ ⊽	
minimum elong	-7754 Mar 04 j 08:11	15° る 49'18	0°52'56	desc. node	-7749 Feb 28 j 11:30	18° ≙ 41'08	
max. Earth dist.	-7754 Mar 21 j 21:45		2.62539 AU		-7749 Mar 17 j 22:47	0° M	
	-7754 Mar 26 j 00:05	0° ≈			-7749 May 20 j 02:01	0° ∡ ¹	
morning rise	-7754 Apr 23 j 02:06	18° ≈ 06'17		retrograde	-7749 Jun 07 j 13:46	2° ₹ 19'08	
-	-7754 May 11 j 17:52	0° ∀		<u> </u>	-7749 Jun 25 j 10:50	30°RML	
asc. node	-7754 Jun 13 j 21:22	20° ¥ 56′20		min. Earth dist.	-7749 Jul 06 j 19:23	26°M30'40	0.48886 AU
	-7754 Jun 28 j 08:12	0° Y		greatest brilliancy	-7749 Jul 13 j 04:46	24°M12'45	
	-7754 Aug 15 j 18:24	0°8		opposition	-7749 Jul 14 j 18:52	23°M38'17	
	-7754 Oct 05 j 05:17	0°Щ		direct	-7749 Aug 17 j 08:46	16°M34'06	
	-7754 Dec 03 j 03:41	0ಂತಾ			-7749 Oct 08 j 10:22	0° ∡ ¹	
retrograde	-7753 Jan 20 j 13:06	11° 5 34'40			-7749 Dec 05 j 16:38	ರ°0	
opposition	-7753 Feb 21 j 20:32	5° © 38'50	5°31'57		-7748 Jan 25 j 21:52	0° ≈	
greatest brilliancy	-7753 Feb 23 j 10:50	5°509'08	-2.5m	asc. node	-7748 Feb 03 j 07:44	5° ≈ 04'06	
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Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style. -7748 Mar 14 j 23:45 0°**)**€ -7743 Jan 02 i 05:11 0°M -7748 May 01 j 09:23 $0^{\circ}\Upsilon$ -7743 Feb 12 j 03:03 0°×7 -7748 May 12 j 12:01 7°**Y**12'24 -7743 Mar 27 j 08:59 0°궁 evening set -7748 Jun 03 j 21:56 21°**Υ**58'41 2.58763 AU max. Earth dist. -7743 May 12 j 16:40 0°**≈** -7748 Jun 15 j 21:03 -7743 Jul 03 j 02:22 0°) 0°8 -7743 Sep 25 j 18:47 29°¥53'20 asc. node -7748 Jun 29 j 20:57 9°**8**30'53 1°07'22 conjunction retrograde -7743 Sep 27 j 22:30 29°**X**55'06 1°34'20 -7748 Jun 29 j 19:50 minimum elong 9°**8**28'59 1°07'39 opposition -7743 Nov 06 j 03:01 20°**)** 37′00 -7748 Jul 29 j 07:25 Π °0 greatest brilliancy -7743 Nov 06 j 05:16 20°**)** 34'46 -1.4m morning rise -7748 Aug 18 j 00:04 14°**Ⅲ**03'59 min. Earth dist. -7743 Nov 08 j 10:49 19°**¥**41'31 0.65954 AU -7748 Sep 08 j 20:30 0ಂತಾ direct -7743 Dec 17 j 01:44 10°**)** 38′22 -7748 Oct 18 j 23:01 $0^{\circ}\Upsilon$ $0^{\circ}\Omega$ -7742 Feb 20 j 22:14 -7742 Apr 15 j 05:47 -7748 Nov 27 j 06:08 0° m 0°8 -7747 Jan 05 j 13:31 0∘**⊽** -7742 May 30 j 13:27 $0^{\circ}\Pi$ desc. node -7747 Jan 15 j 10:18 7°**£**26'29 -7742 Jul 11 j 01:55 0ಂತಾ -7747 Feb 14 j 22:26 0°M -7742 Aug 19 j 10:25 $0^{\circ}\Omega$ -7747 Mar 30 j 00:14 0°**√** desc. node -7742 Sep 06 j 18:53 14° € 18'24 -7747 May 19 j 02:14 0°る -7742 Sep 26 j 19:12 0° m retrograde -7747 Jul 19 j 14:45 19°**る**05'19 evening set -7742 Oct 20 j 19:29 18° mp 48'13 min. Earth dist. -7747 Aug 23 j 02:45 11°る14'26 0.60085 AU -7742 Nov 04 j 05:07 0∘**⊽** opposition -7747 Aug 28 j 05:28 9°**ප**12'45 -4°10'41 -7742 Dec 13 j 13:34 greatest brilliancy -7747 Aug 27 j 13:00 9°る29'04 -1.6m direct -7747 Oct 04 i 11:58 0°る33'26 -7742 Dec 22 i 20:19 6°ML54'54 -1°03'46 conjunction asc. node -7747 Dec 21 i 10:10 25°る21'53 minimum elong -7742 Dec 22 i 17:58 6°ML50'33 1°04'01 -7747 Dec 30 j 12:57 0°≈ -7741 Jan 23 j 13:26 0°×7 -7746 Feb 22 j 06:13 0°**₩** -7741 Feb 04 j 14:42 8° ₹ 32'52 2.48514 AU max. Earth dist. -7746 Apr 12 j 06:07 $0^{\circ}\Upsilon$ -7741 Feb 20 j 23:38 19°**₹**57'50 morning rise -7746 May 28 j 04:07 0°8 -7741 Mar 07 j 15:37 0°₹ -7741 Apr 22 j 00:32 -7746 Jun 24 j 19:35 18°**8**58'20 0°≈ evening set -7746 Jul 10 j 08:32 -7741 Jun 08 j 21:10 0°) max. Earth dist. 29°**8**56'38 2.47821 AU -7746 Jul 10 j 10:25 -7741 Jul 30 j 11:19 $0^{\circ}\Upsilon$ Π °0 -7741 Aug 13 j 19:14 7°**Y**39'34 asc. node 27°**II**08'22 1°04'33 -7746 Aug 16 j 15:24 -7741 Oct 04 j 00:08 0°8 conjunction -7746 Aug 16 j 17:11 27°**I**11'42 1°05'03 -7741 Nov 06 j 03:16 5°**8**47'06 minimum elong retrograde -7746 Aug 20 j 11:24 0ಂತಾ -7741 Dec 06 j 13:30 30°**R**Υ -7746 Sep 28 j 21:52 $0^{\circ}\Omega$ -7741 Dec 13 j 11:17 27°**Y**'26'35 4°21'42 opposition -7741 Dec 14 j 06:52 morning rise -7746 Oct 13 j 07:01 11°**Ω**08′20 greatest brilliancy 27°**Y**′07'55 -1.6m -7746 Nov 06 j 12:00 0° m min. Earth dist. -7741 Dec 19 j 10:49 25°Υ09'53 0.59679 AU desc. node -7746 Dec 03 j 04:17 20° m 46'52 direct -7740 Jan 23 j 01:33 17°**Y**39'36 -7746 Dec 15 j 02:08 0∘**⊽** -7740 Mar 11 j 17:27 0°8 -7745 Jan 23 j 13:29 0°M -7740 May 04 j 18:52 $0^{\circ}\Pi$ -7745 Mar 05 j 20:44 0°×7 -7740 Jun 17 j 15:50 0ಂತಾ -7745 Apr 19 j 05:29 0°る -7740 Jul 24 j 18:23 27°931'08 desc. node -7745 Jun 08 j 11:46 -7740 Jul 28 j 00:45 $0^{\circ}\Omega$ -7745 Aug 24 j 18:13 -7740 Sep 05 j 00:36 retrograde 25°≈57'24 0° M min. Earth dist. -7745 Oct 02 i 07:58 16°≈40'37 0.66073 AU -7740 Oct 13 j 23:08 0∘**⊽** -7745 Oct 03 i 17:41 16°≈06'41 -1°22'13 -7740 Nov 22 j 19:43 0°M opposition greatest brilliancy -7745 Oct 03 i 16:28 16°≈07'54 -1.4m -7740 Dec 20 j 22:24 20°M29'18 evening set asc. node -7745 Nov 08 j 14:38 6°≈38'56 -7739 Jan 03 j 06:40 0°×7 direct -7745 Nov 12 j 11:17 6°≈33'18 -7744 Jan 26 j 22:18 0°**₩** -7739 Feb 14 i 10:19 29°**х** 09'19 -1°04'11 conjunction -7744 Mar 21 j 01:44 $0^{\circ}\Upsilon$ -7739 Feb 14 i 11:50 29°**₹**11'53 1°04'42 minimum elong -7744 May 07 j 12:32 0°8 -7739 Feb 15 j 16:17 0°궁 -7744 Jun 20 j 04:30 $\mathbb{I}^{\circ 0}$ max. Earth dist. -7739 Mar 11 j 07:11 15°る47'26 2.59501 AU -7744 Jul 31 j 03:53 0000 -7739 Apr 01 j 23:18 0°22 -7744 Aug 16 j 01:43 12°903'21 morning rise -7739 Apr 07 j 09:25 3°≈31'02 evening set -7739 May 18 j 20:01 -7744 Sep 08 j 08:13 $0^{\circ}\Omega$ 0°**)**€ -7739 Jun 30 j 14:58 26° ¥41'21 asc. node $0^{\circ}\Upsilon$ -7744 Oct 16 j 08:43 29°**Ω**46'55 0°02'44 -7739 Jul 06 j 00:16 conjunction -7744 Oct 16 j 08:57 29°**Ω**47'24 -7739 Aug 25 j 00:53 0°8 minimum elong 0°03'03 -7739 Oct 19 j 13:45 $0^{\circ}\Pi$ behind sun begin -7744 Oct 15 j 05:59 28°**Ω**54'24 behind sun end -7744 Oct 17 j 11:56 0° Mp 40'24retrograde -7739 Dec 25 j 21:35 19°**Ⅲ**52′06 -7744 Oct 16 j 15:23 0° m opposition -7738 Jan 28 j 22:11 13°**Ⅲ**07'59 6°01'34 max. Earth dist. -7744 Oct 18 j 08:02 1° m 19'54 2.37933 AU greatest brilliancy -7738 Jan 30 j 16:20 12°**Ⅲ**32'21 -2.2m desc. node -7744 Oct 19 j 22:10 2° m 34'50 min. Earth dist. -7738 Feb 06 j 07:44 10°**Ⅱ**18'19 0.48177 AU -7744 Nov 23 j 23:25 0∘**⊽** -7738 Mar 07 j 11:14 4°**I**53'21 direct -7744 Dec 21 j 18:26 21°**≙**21'20 -7738 May 16 j 19:42 0ಂತಾ morning rise

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 17 Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	ie year -7900 i	n astronomical co	unting style is the year	7901 BCE in historical c	counting style.	
desc. node	-7738 Jun 11 j 20:57	16° 5 24'16		minimum elong	-7733 Jun 14 j 15:26	23° Y ′50'44	0°57'46
	-7738 Jul 01 j 17:29	$0^{\circ}\Omega$			-7733 Jun 23 j 19:51	0° ႘	
	-7738 Aug 12 j 05:26	0° m y		morning rise	-7733 Aug 01 j 03:46	26° 8 16'36	
	-7738 Sep 21 j 19:45	0∘ 亚			-7733 Aug 06 j 11:22	$\Pi^{\circ}0$	
	-7738 Nov 01 j 23:44	0° M .			-7733 Sep 17 j 08:53	0°ಅ	
	-7738 Dec 14 j 12:09	0° ∡ ¹			-7733 Oct 27 j 21:57	$0^{\circ}\Omega$	
	-7737 Jan 27 j 16:52	ರ°0			-7733 Dec 06 j 16:45	0° m	
evening set	-7737 Feb 07 j 21:48	7° る 26'13			-7732 Jan 15 j 13:24	0∘ <mark>⊽</mark>	
C	-7737 Mar 14 j 10:11	0° ≈		desc. node	-7732 Feb 02 j 04:21	13° ≏ 01'25	
	J				-7732 Feb 25 j 18:23	0°M₊	
conjunction	-7737 Mar 29 j 22:59	10° ≈ 01'21	-0°27'32		-7732 Apr 10 j 20:35	0° ∡ ¹	
minimum elong	-7737 Mar 30 j 00:03	10° ≈ 03'04			-7732 Jun 13 j 13:28	8°0	
max. Earth dist.	-7737 Apr 06 j 13:56		2.65669 AU	retrograde	-7732 Jul 04 j 02:22	2° る 44'50	
man. Darut dist.	-7737 Apr 30 j 03:36	0°) €	2.00000 110	readstate	-7732 Jul 23 j 17:09	30°R. ✓	
morning rise	-7737 May 16 j 11:07	10°) 24′10		min. Earth dist.	-7732 Aug 05 j 15:38	25° ₹ 37'53	0.56195 AU
asc. node	-7737 May 18 j 08:02	11°) (35'42		greatest brilliancy	-7732 Aug 11 j 01:12	23° ⋌ 37'39	
ase. Hode	-7737 Jun 16 j 05:14	0°Υ		opposition	-7732 Aug 12 j 02:53	23° × ³ 217	
	-7737 Aug 02 j 04:33	0°8		direct	-7732 Sep 17 j 01:55	14° 7 59'28	3 00 02
	-7737 Sep 18 j 03:48	0°II		uncet	-7732 Nov 12 j 16:25	0°る	
	-7737 Nov 04 j 23:30	0°©		asc. node	-7731 Jan 07 j 00:16	28° ට 14'05	
	-7737 Dec 26 j 15:21	0° U		asc. node	-7731 Jan 10 j 03:53	28 ⊘ 1403	
ratra ara da	•				·	0 ∞ 0° ∺	
retrograde	-7736 Mar 07 j 21:24	23° Ω 53'28	1041150		-7731 Mar 02 j 09:20	0° Υ	
opposition	-7736 Apr 07 j 10:42	18° Ω 48'10	1°41'59		-7731 Apr 19 j 14:09		
greatest brilliancy	-7736 Apr 07 j 16:08	18° Ω 44'32		. ,	-7731 Jun 04 j 06:37	0°8	
min. Earth dist.	-7736 Apr 09 j 08:35		0.38221 AU	evening set	-7731 Jun 07 j 03:47	1° 8 56'50	2.52510.444
desc. node	-7736 Apr 29 j 02:27	14° Ω 05'30		max. Earth dist.	-7731 Jun 24 j 02:45		2.52510 AU
direct	-7736 May 08 j 08:53	13° Ω 32'07			-7731 Jul 17 j 13:46	Π $^{\circ}0$	
	-7736 Jul 02 j 16:27	0° m/					
	-7736 Aug 22 j 19:17	0∘ ⊽		conjunction	-7731 Jul 27 j 17:12	7° Ⅱ 15'33	
	-7736 Oct 07 j 15:48	0° M ₊		minimum elong	-7731 Jul 27 j 17:36	7° Ⅱ 16'17	1°12'09
	-7736 Nov 21 j 23:06	0° ∡			-7731 Aug 27 j 18:33	0ა ௐ	
	-7735 Jan 06 j 22:06	0°ಕ		morning rise	-7731 Sep 19 j 06:12	16° 9 54'07	
	-7735 Feb 22 j 16:31	0° ≈			-7731 Oct 06 j 10:06	0 \circ Ω	
evening set	-7735 Mar 20 j 03:17	16° ≈ 11'45			-7731 Nov 14 j 05:21	0° ™	
asc. node	-7735 Apr 04 j 01:19	25° ≈ 41'00		desc. node	-7731 Dec 20 j 00:15	27° mp 41'58	
	-7735 Apr 10 j 20:01	0° ∀			-7731 Dec 23 j 00:06	0∘ ⊽	
max. Earth dist.	-7735 Apr 29 j 21:56	12° 升 10′31	2.66458 AU		-7730 Jan 31 j 16:36	0° M	
					-7730 Mar 14 j 09:10	0° ∡ ¹	
conjunction	-7735 May 06 j 18:45				-7730 Apr 28 j 20:06	8°0	
minimum elong	-7735 May 06 j 18:05	16° ∺ 33'19	0°18'18		-7730 Jun 23 j 03:40	0° ≈	
	-7735 May 27 j 15:28	0° Y		retrograde	-7730 Aug 11 j 02:18	12° ≈ 25′24	
morning rise	-7735 Jun 21 j 18:33	16° Ƴ 20'45		min. Earth dist.	-7730 Sep 17 j 05:51	3° ≈ 38′08	0.64443 AU
	-7735 Jul 12 j 11:52	0° 8		opposition	-7730 Sep 20 j 02:28	2° ≈ 29'10	-2°29'48
	-7735 Aug 26 j 02:34	Π \circ 0		greatest brilliancy	-7730 Sep 19 j 21:12	2° ≈ 34'28	-1.5m
	-7735 Oct 08 j 13:18	0ංම			-7730 Sep 26 j 09:54	30°Ŗ⋜	
	-7735 Nov 20 j 04:53	$0^{\circ}\Omega$		direct	-7730 Oct 29 j 00:39	23° る 13'09	
	-7734 Jan 01 j 18:08	0° m)		asc. node	-7730 Nov 25 j 04:37	27° る 14'45	
	-7734 Feb 14 j 23:35	0∘ ত			-7730 Dec 04 j 06:21	0° ≈	
desc. node	-7734 Mar 17 j 05:34	18° ≏ 21'49			-7729 Feb 07 j 03:08	0° ∀	
	-7734 Apr 09 j 17:25	0° M			-7729 Mar 30 j 10:34	0° Y	
retrograde	-7734 May 17 j 19:15	8°M56'21			-7729 May 16 j 02:33	0°8	
min. Earth dist.	-7734 Jun 14 j 03:50	3° M 57'41	0.43942 AU		-7729 Jun 28 j 13:18	$\Pi^{\circ}0$	
greatest brilliancy	-7734 Jun 20 j 12:22	1°M52'43	-2.5m	evening set	-7729 Jul 25 j 17:33	19° Ⅱ 43'45	
opposition	-7734 Jun 22 j 01:24	1°ML22'00	-5°33'25		-7729 Aug 08 j 12:31	0 \circ \odot	
	-7734 Jun 26 j 06:35	30° Ŗ Ω		max. Earth dist.	-7729 Aug 19 j 09:22	8° © 12'05	2.40533 AU
direct	-7734 Jul 24 j 00:44	25° ≏ 08'44			-7729 Sep 16 j 18:37	$0^{\circ}\Omega$	
	-7734 Aug 21 j 21:10	0° M ,					
	-7734 Oct 25 j 07:46	0° ∡ ⊓		conjunction	-7729 Sep 21 j 12:20	3° Ω 40′51	0°33'28
	-7734 Dec 15 j 16:38	ರ∘ರ		minimum elong	-7729 Sep 21 j 14:48	3° Ω 45'38	0°33'54
	-7733 Feb 02 j 22:20	0° ≈		5	-7729 Oct 25 j 03:43	0° m	
asc. node	-7733 Feb 19 j 22:30	10° ≈ 30'02		desc. node	-7729 Nov 06 j 18:11	9° m 53'01	
	-7733 Mar 23 j 05:07	0°)		morning rise	-7729 Nov 24 j 20:51	24° m) 02'06	
evening set	-7733 Apr 28 j 01:13	22°) 44'03		Q 12	-7729 Dec 02 j 13:03	0ಂ ರ	
Č	-7733 May 09 j 07:57	0° Υ			-7728 Jan 10 j 19:33	0°M	
max. Earth dist.	-7733 May 24 j 22:29	10° Y ′09'34	2.61911 AU		-7728 Feb 20 j 18:41	0° ∡	
	, ,				-7728 Apr 04 j 06:05	8°0	
conjunction	-7733 Jun 14 j 16:53	23° Y ′53'09	0°57'37		-7728 May 21 j 10:19	0° ≈	
J							

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 18 Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style. -7728 Jul 15 i 14:23 0°**∀** -7723 Aug 21 j 23:05 0° m -7728 Sep 14 j 01:44 16°**)** 54'49 -7723 Sep 30 j 15:33 0∘**⊽** retrograde -7728 Oct 12 j 09:02 11°**)**(41'42 -7723 Nov 10 j 02:55 0°M asc. node -7728 Oct 23 j 16:53 0°25'59 0°×7 7°**)**€21'04 -7723 Dec 22 j 02:14 opposition greatest brilliancy -7728 Oct 23 j 17:02 -7722 Jan 21 j 03:15 20°**х** 43′04 7°**升**20′55 -1.4m evening set min. Earth dist. -7728 Oct 24 j 13:48 7°**₩**00'08 0.66750 AU -7722 Feb 03 j 21:06 0°궁 -7728 Nov 13 j 16:17 30°R≈ 27°≈28'49 direct -7728 Dec 03 j 08:14 conjunction -7722 Mar 13 j 22:08 25°る09'36 -0°43'56 0°**)**€ -7728 Dec 24 j 11:00 minimum elong -7722 Mar 13 j 23:43 25°**る**12'10 0°44'25 $0^{\circ}\Upsilon$ -7727 Mar 05 j 06:12 -7722 Mar 21 j 08:33 0°≈ -7727 Apr 24 j 04:35 0°8 max. Earth dist. -7722 Mar 27 j 21:45 4°≈14'48 2.63873 AU -7727 Jun 07 j 15:13 $\Pi^{\circ}0$ -7722 May 01 j 18:52 morning rise 26°≈38'31 -7727 Jul 18 j 20:23 0ಂತಾ -7722 May 07 j 01:20 0°**)**€ -7727 Aug 27 j 02:00 $0^{\circ}\Omega$ asc. node -7722 Jun 04 j 01:18 17° **X** 46'10 desc. node -7727 Sep 23 j 12:46 21°**Q**28'22 -7722 Jun 23 j 09:53 $0^{\circ}\Upsilon$ evening set -7727 Sep 24 j 08:06 22°**Ω**06'19 -7722 Aug 10 j 04:54 0°8 -7727 Oct 04 j 09:08 0° m -7722 Sep 28 j 00:51 $0^{\circ}\Pi$ -7727 Nov 11 j 17:16 0∘**⊽** -7722 Nov 19 j 15:35 0ಂತಾ retrograde -7721 Feb 05 j 16:24 25°958'47 conjunction -7727 Nov 27 j 12:12 12°**2**10'56 -0°44'59 opposition -7721 Mar 09 j 05:11 20°9528'06 4°37'36 minimum elong -7727 Nov 27 j 08:57 12°**♀**04'43 0°45'01 greatest brilliancy -7721 Mar 10 j 09:49 20°907'10 -2.7m -7727 Dec 20 i 23:36 0°M min. Earth dist. -7721 Mar 15 i 09:54 18°9540'05 0.40931 AU max. Earth dist. -7726 Jan 13 j 10:04 17°**M**21'47 2.43462 AU direct -7721 Apr 11 j 15:59 14°9508'44 morning rise -7726 Jan 30 j 06:53 29°M34'06 desc. node -7721 May 16 j 17:43 21°9540'48 -7726 Jan 30 j 21:21 0°×7 -7721 Jun 03 j 22:23 $0^{\circ}\Omega$ -7726 Mar 14 j 22:54 0°궁 -7721 Jul 23 j 16:09 0° m -7726 Apr 29 j 12:35 0°**≈** -7721 Sep 05 j 13:21 0∘**⊽** -7726 Jun 17 j 05:18 0°**₩** -7721 Oct 18 j 15:52 0°M -7726 Aug 11 j 01:46 $0^{\circ}\Upsilon$ -7721 Dec 01 j 11:22 0°×7 -7726 Aug 30 j 11:01 8°Y49'15 -7720 Jan 15 j 12:49 0°궁 asc. node -7726 Oct 21 j 00:26 21°Y26'34 -7720 Mar 01 j 18:39 0°≈ retrograde -7726 Nov 28 j 05:33 12°Υ39'49 3°19'18 1°≈49'46 -7720 Mar 04 j 15:01 opposition evening set -7726 Nov 28 j 16:29 0°**∀** 12°**Y**29′09 -7720 Apr 17 j 16:29 greatest brilliancy -1.5m 1°**¥**58'40 -7726 Dec 02 j 19:26 10°**Y**52'50 0.62876 AU -7720 Apr 20 j 18:49 min. Earth dist. asc. node -7725 Jan 08 j 05:05 2°**Y**42'00 direct -7725 Mar 28 j 15:11 -7720 Apr 21 j 22:13 2°\(\mathbf{4}2'23\) 0°00'40 0°8 conjunction -7725 May 16 j 03:00 $0^{\circ}\Pi$ -7720 Apr 21 j 22:14 2°**)** 42'25 minimum elong 0°00'22 -7725 Jun 27 j 16:09 0ಂತಾ behind sun begin -7720 Apr 21 j 02:50 2°¥11'28 -7725 Aug 06 j 11:36 $0^{\circ}\Omega$ behind sun end -7720 Apr 22 j 17:38 3°¥13'22 desc. node -7725 Aug 11 j 12:07 3°£52'06 max. Earth dist. -7720 Apr 20 j 14:08 1°**¥**51'11 2.66790 AU -7725 Sep 14 j 03:04 0° m -7720 Jun 03 j 12:41 $0^{\circ}\Upsilon$ -7725 Oct 22 j 18:32 0∘**⊽** -7720 Jun 07 j 05:00 2°Y22'14 morning rise -7725 Nov 29 j 09:30 28°**♀**32'25 -7720 Jul 19 j 16:59 0° 8 evening set -7725 Dec 01 j 08:31 0°M -7720 Sep 02 j 23:57 $0^{\circ}\Pi$ -7724 Jan 11 j 13:28 -7720 Oct 17 j 13:35 0ಂತಾ 0°×7 -7720 Nov 30 i 23:12 $0^{\circ}\Omega$ 10°**₹**50'02 -1°10'37 conjunction -7724 Jan 26 j 22:14 -7719 Jan 15 i 13:34 0° m -7724 Jan 26 j 22:48 minimum elong 10°**∡**751'01 1°11'06 -7719 Mar 09 i 12:40 0∘**⊽** -7724 Feb 23 i 18:31 0°정 desc. node -7719 Apr 02 j 21:39 8°**£**56'54 max. Earth dist. -7724 Feb 28 i 08:34 3°る06'04 2.55708 AU retrograde -7719 Apr 23 i 08:31 11°**£**41'12 -7724 Mar 21 i 15:06 17°る57'55 min. Earth dist. -7719 May 20 i 08:10 7°**2**10'52 0.39866 AU morning rise -7724 Apr 09 j 00:16 0°≈ -7719 May 25 j 08:01 5°**£**43'34 -2.8m greatest brilliancy -7724 May 26 j 02:35 0°**₩** -7719 May 26 j 05:36 5°**£**27'46 -3°49'13 opposition 0°**ഫ**03'53 $0^{\circ}\Upsilon$ -7719 Jun 25 j 16:27 -7724 Jul 14 j 03:25 direct 1°Y54'12 -7719 Sep 16 j 13:21 -7724 Jul 17 j 08:12 0°M asc. node -7724 Sep 04 j 20:03 -7719 Nov 06 j 05:24 0°8 0°×7 -7724 Nov 19 j 04:16 $0^{\circ}II$ -7719 Dec 24 j 13:36 0°정 -7724 Dec 03 j 23:45 1°**Ⅱ**17′09 -7718 Feb 10 j 13:11 0°≈ retrograde -7724 Dec 18 j 05:37 30°R₩ -7718 Mar 08 j 14:36 16°≈20'43 asc. node 23°**8**49'20 5°40'10 0°**)**€ opposition -7723 Jan 08 j 13:10 -7718 Mar 30 j 06:28 greatest brilliancy -7723 Jan 10 j 00:21 23°**8**17'38 -1.9m evening set -7718 Apr 12 j 22:09 8°**)** 39'33 min. Earth dist. -7723 Jan 16 j 09:54 21°**8**00'03 0.53152 AU max. Earth dist. -7718 May 14 j 22:01 29°**升**10′09 2.64298 AU direct -7723 Feb 16 j 18:29 14°**8**44'02 -7718 May 16 j 04:50 $0^{\circ}\Upsilon$ -7723 Apr 11 j 03:07 Π °0 -7723 May 31 j 12:30 0 \circ \odot conjunction -7718 May 30 j 06:49 9°**Υ**09'39 0°44'14 desc. node -7723 Jun 28 j 14:20 19°534'43 -7718 May 30 j 05:27 9° \(\gamma 0 \cdot 44' 15 minimum elong -7723 Jul 12 j 21:49 $0^{\circ}\Omega$ -7718 Jun 30 j 18:48 0°8

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-	nical year style is used: Th		•	//		, ,	. 19
morning rise	-7718 Jul 15 j 18:01	10° 8 05'24	an abar on on our car co	greatest brilliancy	-7713 Oct 11 j 10:43	24°≈11'23	-1.4m
	-7718 Aug 13 j 17:31	0°П		min. Earth dist.	-7713 Oct 10 j 20:45	24°≈25'26	0.66591 AU
	-7718 Sep 25 j 02:32	0°20		asc. node	-7713 Oct 29 j 22:10	17°≈33'06	0.00371710
	-7718 Nov 05 j 06:12	0°N		direct	-7713 Nov 20 j 13:48	14°≈30'00	
	-7718 Dec 15 j 18:08	0° mp		uncet	-7712 Jan 18 j 00:44	0° ∺	
	-7717 Jan 25 j 12:24	0∘ <u>ت</u> س			-7712 Mar 15 j 05:31	0° Υ	
desc. node	-7717 Feb 18 j 23:06	0 = 17° £ 26'17			-7712 May 02 j 10:13	0°8	
dese. Hode	-7717 Mar 09 j 07:49	0°M			-7712 Jun 15 j 08:43	0°II	
	-7717 Apr 28 j 19:23	0° ∡ 7			-7712 Jul 26 j 10:27	0°©	
retrograde	-7717 Jun 18 j 02:45	14° ∡ 22'00		evening set	-7712 Aug 29 j 15:18	26°906'59	
min. Earth dist.	-7717 Jul 18 j 12:56	8° √ 05'05	0.51597 AU	evening set	-7712 Aug 29 j 13:18 -7712 Sep 03 j 15:24	20 3 00 39	
		5° ₹ 47'46		desc. node	-7712 Sep 03 j 13.24 -7712 Oct 10 j 09:10	0 8 <i>t</i> 28°Ω46'46	
greatest brilliancy	-7717 Jul 24 j 16:36	5° ₹ 15'22		desc. node	·	28 3 2 40 40	
opposition	-7717 Jul 26 j 03:18		-5-45-55		-7712 Oct 11 j 22:26	U III	
T' 4	-7717 Aug 11 j 11:52	30°RM 270m 4€12€			7712 0 4 21 12 22	1.50 m -22100	0015152
direct	-7717 Aug 29 j 14:03	27°M46'26		conjunction	-7712 Oct 31 j 12:32	15° My 23'09	
	-7717 Sep 17 j 22:32	0° ∡ 7		minimum elong	-7712 Oct 31 j 11:04	15° Mp 20'16	0°15′39
	-7717 Nov 28 j 08:21	0°ප		behind sun begin	-7712 Oct 31 j 03:23	15° Mp 05'15	
	-7716 Jan 20 j 08:02	0°≈		behind sun end	-7712 Oct 31 j 18:44	15° m 35'17	
asc. node	-7716 Jan 24 j 14:24	2° ≈ 31'08			-7712 Nov 19 j 05:53	0∘ ⊽	
	-7716 Mar 10 j 01:21	0°) €		max. Earth dist.	-7712 Dec 04 j 16:56		2.38953 AU
	-7716 Apr 26 j 17:15	0° Υ			-7712 Dec 28 j 10:49	0° M	
evening set	-7716 May 21 j 14:40	16° Y °12'46		morning rise	-7711 Jan 05 j 18:29	6°M13'27	
max. Earth dist.	-7716 Jun 10 j 17:48	29° Y ′38′15	2.56692 AU		-7711 Feb 07 j 07:20	0° ∡ ¹	
	-7716 Jun 11 j 06:42	0° 8			-7711 Mar 22 j 09:47	0°₹	
					-7711 May 07 j 08:04	0° ≈	
conjunction	-7716 Jul 09 j 14:37	19° 8 25'14			-7711 Jun 26 j 09:38	0° ∀	
minimum elong	-7716 Jul 09 j 13:55	19° 8 24'01	1°11'08		-7711 Aug 27 j 20:05	0° Υ	
	-7716 Jul 24 j 16:05	Π °0		asc. node	-7711 Sep 16 j 01:04	5° Ƴ 36'31	
morning rise	-7716 Aug 29 j 01:23	25° Ⅲ 33′06		retrograde	-7711 Oct 06 j 03:05	7° Ƴ 55'07	
	-7716 Sep 04 j 02:10	0 \circ \mathfrak{s}			-7711 Nov 10 j 22:30	30° ₹ ₩	
	-7716 Oct 14 j 00:30	$0^{\circ}\Omega$		opposition	-7711 Nov 14 j 00:45	28°) 47′06	2°13'29
	-7716 Nov 22 j 02:58	0° m		greatest brilliancy	-7711 Nov 14 j 05:25	28° ∺ 42'30	-1.4m
	-7716 Dec 31 j 04:52	0∘ ⊽		min. Earth dist.	-7711 Nov 17 j 04:13	27° ∺ 32'35	0.65123 AU
desc. node	-7715 Jan 05 j 18:59	4° ≙ 15'00		direct	-7711 Dec 25 j 01:51	18° ∺ 46′59	
	-7715 Feb 09 j 06:04	0° M			-7710 Feb 10 j 12:28	0 ° Υ	
	-7715 Mar 23 j 15:19	0° ∡			-7710 Apr 08 j 23:30	0°8	
	-7715 May 10 j 05:28	ರ°0			-7710 May 25 j 04:09	Π°	
retrograde	-7715 Jul 28 j 00:17	28° る 08'55			-7710 Jul 06 j 00:17	0 \circ \odot	
min. Earth dist.	-7715 Sep 01 j 12:30	19° る 56'25	0.61888 AU		-7710 Aug 14 j 12:16	$0^{\circ}\Omega$	
opposition	-7715 Sep 05 j 20:06	18° る 13'02	-3°35'03	desc. node	-7710 Aug 28 j 05:47	10° Ω 39'48	
greatest brilliancy	-7715 Sep 05 j 08:17	18° る 24'49	-1.6m		-7710 Sep 21 j 23:09	0° m)	
direct	-7715 Oct 13 j 18:23	9° ろ 19'08			-7710 Oct 30 j 10:27	0∘ ত	
asc. node	-7715 Dec 11 j 17:44	25° る 05'40		evening set	-7710 Nov 04 j 12:42	3° £ 55'56	
	-7715 Dec 22 j 10:01	0° ≈		-	-7710 Dec 08 j 20:02	0° M .	
	-7714 Feb 16 j 14:11	0° ∀			·		
	-7714 Apr 07 j 06:55	0° Y		conjunction	-7709 Jan 05 j 04:14	20°M08'55	-1°09'10
	-7714 May 23 j 11:10	0° ႘		minimum elong	-7709 Jan 05 j 03:00	20°ML06'39	
evening set	-7714 Jul 05 j 11:24	29° 8 45'39		3	-7709 Jan 18 j 20:42	0° ∡ ¹	
S	-7714 Jul 05 j 19:27	0°II		max. Earth dist.	-7709 Feb 14 j 04:45		2.51208 AU
max. Earth dist.	-7714 Jul 21 j 12:23	11° Ⅱ 18'37	2.45133 AU		-7709 Mar 02 j 22:30	0°ප	
	-7714 Aug 15 j 20:01	0°95		morning rise	-7709 Mar 04 j 06:40	0° ට 54'34	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				-7709 Apr 17 j 04:44	0° ≈	
conjunction	-7714 Aug 28 j 21:35	9° 9 50'39	0°56'11		-7709 Jun 03 j 16:11	0°)	
minimum elong	-7714 Aug 29 j 00:01	9° © 55'16			-7709 Jul 24 j 01:07	0°Υ	
viong	-7714 Sep 24 j 04:50	0°Ω	0 00 11	asc. node	-7709 Aug 04 j 00:24	6° Υ 10'30	
morning rise	-7714 Oct 28 j 03:09	26° Ω 25'33		use. Houe	-7709 Sep 20 j 02:22	0°8	
	-7714 Nov 01 j 16:49	0° my		retrograde	-7709 Nov 15 j 23:46	14° 8 53'07	
desc. node	-7714 Nov 23 j 13:54	17° Mp 05'51		opposition	-7709 Dec 22 j 18:44	6° 8 49'23	4°53'55
acse. Hode	-7714 Dec 10 j 04:27	0∘ ⊽		greatest brilliancy	-7709 Dec 22 j 18:44 -7709 Dec 23 j 19:54	6° 8 25'47	-1.7m
	-7713 Jan 18 j 12:54	0° m .		min. Earth dist.	-7709 Dec 29 j 12:30	4° 8 18'00	0.57575 AU
	-7713 Feb 28 j 15:36	0° ⊼		mm. Bartii Uist.	-7708 Jan 11 j 16:01	4 3 18 00 30° ₹ Υ	0.51515 AU
	-7713 Apr 13 j 13:13	0°る		direct	-7708 Jan 11 j 10:01	27° Υ 12'55	
	-7/13 Apr 13 j 13.13 -7713 Jun 01 j 05:42	0°≈		uncei	-7708 Feb 01 j 00.39 -7708 Feb 22 j 09:36	0°8	
	-7/13 Jun 01 j 05:42 -7713 Aug 06 j 05:42	0° ∺			-7708 Feb 22 j 09:36 -7708 Apr 27 j 07:32	0°I	
retrograda	-7713 Sep 01 j 12:44	3° ¥ 56'58			-7708 Apr 27 j 07.32	0°©	
retrograde		3°π3638 30°ℝ≈		desa nodo		୦°୭ 24°933'18	
onnosition	-7713 Sep 25 j 21:16	30°қ≈ 24°≈11'18	0.042127	desc. node	-7708 Jul 15 j 05:57	24°933′18 0°Ω	
opposition	-7713 Oct 11 j 10:48	∠ + ∞1118	-U 4221		-7708 Jul 22 j 11:54	0 06	

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 20 Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style. -7708 Aug 30 j 18:41 0° m -7703 Jul 07 i 19:30 0°8 -7708 Oct 08 j 21:55 0∘**⊽** -7703 Aug 21 j 04:00 $0^{\circ}\Pi$ -7708 Nov 17 j 22:16 0°M -7703 Oct 03 j 04:22 0ಂತಾ $0^{\circ}\Omega$ 0°×7 -7703 Nov 14 j 04:21 -7708 Dec 29 j 12:24 2°×17'56 0° m evening set -7707 Jan 01 j 18:43 -7703 Dec 25 j 18:40 0∘**⊽** -7707 Feb 11 j 00:05 0°る -7702 Feb 06 j 04:46 19°**△**32'00 desc. node -7702 Mar 07 j 15:59 0° M conjunction -7707 Feb 24 j 19:25 9°**ට**15'31 -0°57'53 -7702 Mar 24 j 23:22 minimum elong -7707 Feb 24 j 21:08 9°**ට**18'23 0°58'23 retrograde -7702 May 29 j 23:27 23°M06'01 max. Earth dist. -7707 Mar 17 j 16:14 23°る03'01 2.61280 AU min. Earth dist. -7702 Jun 27 j 07:49 17°**M**40'51 0.46648 AU -7707 Mar 28 j 07:40 0°≈ greatest brilliancy -7702 Jul 03 j 19:18 15° M $_25'54$ -2.3m -7702 Jul 05 j 10:33 morning rise -7707 Apr 16 j 12:33 12°≈25'00 opposition 14°M51'35 -5°54'03 -7707 May 14 j 01:45 0°**)**€ direct -7702 Aug 07 j 06:36 8°M09'25 asc. node -7707 Jun 20 j 19:41 23°\ 44'25 -7702 Oct 15 j 21:14 0°**⊼** -7707 Jun 30 j 20:56 $0^{\circ}\Upsilon$ -7702 Dec 09 j 09:59 0°ರ -7707 Aug 18 j 21:13 0°8 -7701 Jan 28 j 16:26 0°≈ -7707 Oct 09 j 23:45 $0^{\circ}II$ asc. node -7701 Feb 10 j 05:15 7°≈38'30 -7707 Dec 20 j 13:51 0ಂತಾ -7701 Mar 18 j 09:48 0°) retrograde -7706 Jan 08 j 21:38 2°9508'10 -7701 May 04 j 16:55 $0^{\circ}\Upsilon$ -7706 Jan 27 j 07:44 30°RⅡ evening set -7701 May 06 j 20:24 1°Y23'09 opposition -7706 Feb 10 j 23:08 25°**II**50'23 5°52'37 max. Earth dist. -7701 May 31 j 04:14 17°**Y**17'13 2.60273 AU greatest brilliancy -7706 Feb 12 i 16:56 25°**Ⅱ**16'31 -7701 Jun 19 j 05:42 0°8 -2.4m min. Earth dist. -7706 Feb 19 i 02:28 23°**Ⅱ**13'01 0.45428 AU direct -7706 Mar 19 i 06:12 18°**Ⅱ**12'29 -7701 Jun 23 i 19:48 3°805'48 1°03'44 conjunction -7706 May 03 j 04:07 0ಂಣ -7701 Jun 23 j 18:29 3°**8**03'34 1°03'59 minimum elong -7706 Jun 02 j 09:48 16°927'44 -7701 Aug 01 j 19:21 $0^{\circ}\Pi$ desc node -7706 Jun 23 j 14:09 -7701 Aug 11 j 02:31 6°**Ⅲ**34'40 $0^{\circ}\Omega$ morning rise 0°m -7701 Sep 12 j 13:03 0ಂತಾ -7706 Aug 05 j 14:24 0∘**⊽** -7701 Oct 22 j 20:33 -7706 Sep 15 j 23:19 $0^{\circ}\Omega$ 0°M -7706 Oct 27 j 15:05 -7701 Dec 01 j 08:45 0° m -7700 Jan 09 j 20:55 -7706 Dec 09 j 11:48 0°×7 0∘Ω -7705 Jan 22 j 21:59 0°궁 -7700 Jan 23 j 15:40 10° - 19'18 desc. node -7705 Feb 17 j 12:30 16°**ප**50'51 -7700 Feb 19 j 12:03 0°M evening set -7705 Mar 09 j 18:40 -7700 Apr 03 j 04:03 0°**∡**7 0°≈ -7700 May 26 j 01:09 0°궁 -7705 Apr 07 j 19:53 -7700 Jul 13 j 03:44 conjunction 18°≈40'39 -0°17'22 retrograde 12°る44'08 -7705 Apr 07 j 20:35 minimum elong 18°**≈**41'45 0°17'45 min. Earth dist. -7700 Aug 15 j 19:25 5°る12'17 0.58441 AU max. Earth dist. -7705 Apr 12 j 02:59 21°≈25'37 2.66296 AU -7700 Aug 21 j 13:20 2°る56'48 -4°35'28 opposition -7705 Apr 25 j 12:55 0°**)**€ greatest brilliancy -7700 Aug 20 j 16:58 3°る16'49 -1.7m -7705 May 08 j 12:27 8°**¥**17'17 -7700 Aug 29 j 08:17 30°R.✓ asc. node -7705 May 24 j 18:52 18°**)** 40′26 direct -7700 Sep 27 j 07:01 24°**₹**30'33 morning rise -7705 Jun 11 j 11:53 $0^{\circ}\Upsilon$ -7700 Oct 29 j 03:16 0°정 -7705 Jul 28 j 03:14 0°8 -7700 Dec 28 j 06:54 26°る40'55 asc. node -7705 Sep 12 j 08:57 $\mathbb{I}^{\circ 0}$ -7699 Jan 03 j 12:13 0°≈ -7705 Oct 28 j 16:22 0ಂತಾ -7699 Feb 25 j 01:53 0°**)**€ $0^{\circ}\Upsilon$ -7705 Dec 15 i 10:38 $0^{\circ}\Omega$ -7699 Apr 14 j 18:04 -7704 Feb 08 i 20:12 0° m -7699 May 30 j 14:51 0°8 retrograde -7704 Mar 25 i 11:40 11° m 26'49 evening set -7699 Jun 17 i 01:46 11°**8**53'11 desc. node -7704 Apr 19 i 13:39 7° m 46'13 max. Earth dist. -7699 Jul 02 j 20:38 22°852'08 2.49969 AU -7704 Apr 24 j 06:33 6° m 31'31 0.37974 AU -7699 Jul 12 j 22:41 $0^{\circ}\Pi$ min. Earth dist. -7704 Apr 25 j 11:13 6° Tb 12'11 -0°28'08 opposition -7704 Apr 25 j 10:17 6° m 12'48 -3.0m -7699 Aug 07 j 18:38 18°**Ⅱ**40'06 1°08'43 greatest brilliancy conjunction -7704 May 25 j 17:36 1° m 08'23 -7699 Aug 07 j 19:50 18°**Ⅱ**42'18 1°09'13 direct minimum elong -7704 Aug 12 j 16:02 0∘Σ -7699 Aug 23 j 02:22 000 -7704 Sep 30 j 14:24 0°M -7699 Oct 01 j 15:37 $0^{\circ}\Omega$ -7704 Nov 16 j 04:13 0°×7 -7699 Oct 02 j 11:14 0°**£**37'43 morning rise -7703 Jan 01 j 18:40 0°정 -7699 Nov 09 j 08:15 0°Щ -7703 Feb 17 j 21:31 -7699 Dec 10 j 10:19 24° m 09'14 0°≈ desc. node 22°≈26'19 -7699 Dec 18 j 00:02 0∘Ω asc. node -7703 Mar 25 j 07:15 24°≈40'54 -7698 Jan 26 j 12:31 0°M evening set -7703 Mar 28 j 20:07 0°**)**€ 0°**∡**7 -7703 Apr 06 j 05:09 -7698 Mar 08 j 21:55 max. Earth dist. -7703 May 05 j 09:48 18°**¥**37'54 2.65924 AU -7698 Apr 22 j 13:39 0°궁 -7698 Jun 13 j 05:12 0°≈ conjunction -7703 May 15 j 06:32 24°**H** 58'25 0°28'23 retrograde -7698 Aug 18 j 23:51 20°≈41'55 minimum elong -7703 May 15 j 05:33 24°**)** 56'49 0°28'16 min. Earth dist. -7698 Sep 25 j 23:18 11°≈37'47 0.65456 AU -7703 May 23 j 01:23 $0^{\circ}\Upsilon$ -7698 Sep 28 j 00:32 10°≈48'15 -1°50'39 opposition

-7703 Jun 30 j 07:09

morning rise

25°\bar{Y}00'42

-7698 Sep 27 j 21:53

10°≈50'55 -1.4m

greatest brilliancy

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 21 Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	ie year -7900 i	n astronomical co	ounting style is the year	7901 BCE in historical c	ounting style.	
direct	-7698 Nov 06 j 10:26	1° ≈ 22'00			-7692 Feb 19 j 02:46	0°ಕ	
asc. node	-7698 Nov 15 j 11:19	1° ≈ 51'30		max. Earth dist.	-7692 Mar 06 j 12:34	11° る 01'47	2.57890 AU
	-7697 Jan 31 j 04:22	0° ∀		morning rise	-7692 Mar 31 j 08:57	27° る 25'13	
	-7697 Mar 25 j 00:58	0° Ƴ			-7692 Apr 04 j 07:59	0° ≈	
	-7697 May 11 j 04:48	0° 8			-7692 May 21 j 05:50	0° ∺	
	-7697 Jun 23 j 19:47	0°II		asc. node	-7692 Jul 07 j 13:20	29° 升 17'31	
. ,	-7697 Aug 03 j 20:08	0°55			-7692 Jul 08 j 17:17	0° Υ	
evening set	-7697 Aug 07 j 02:10	2°526'40			-7692 Aug 28 j 16:02	$\mathfrak{g}_{\circ 0}$	
max. Earth dist.	-7697 Sep 12 j 01:44 -7697 Sep 14 j 07:42	0° Ω 1° Ω 44'50	2.38588 AU	rotro ara da	-7692 Oct 27 j 05:44	11° Ц 56'38	
max. Earm dist.	-/09/ Sep 14 J 07.42	1 8644 30	2.36366 AU	retrograde opposition	-7692 Dec 16 j 00:42 -7691 Jan 19 j 18:04	4° ∏ 52'14	5056!12
conjunction	-7697 Oct 05 j 20:33	18° Ω 34'23	0°16'43	greatest brilliancy	-7691 Jan 21 j 09:59	4° Ⅱ 3214 4° Ⅱ 17'24	
minimum elong	-7697 Oct 05 j 22:01	18° Ω 37'16		min. Earth dist.	-7691 Jan 28 j 00:37	1° Ⅱ 59'38	0.50429 AU
g	-7697 Oct 20 j 09:53	0° m)	0 1, 0.	mm. Bartin diot.	-7691 Feb 03 j 05:29	30°R 8	0.00.29110
desc. node	-7697 Oct 28 j 04:04	6° m 05'32		direct	-7691 Feb 27 j 03:32	26° 8 12'09	
	-7697 Nov 27 j 18:06	0∘ <u>⊽</u>			-7691 Mar 23 j 15:36	0°II	
morning rise	-7697 Dec 10 j 17:30	10° ≙ 01'57			-7691 May 23 j 06:49	0° ©	
	-7696 Jan 05 j 23:14	0° M ,		desc. node	-7691 Jun 19 j 00:47	17° 5 47'27	
	-7696 Feb 15 j 20:23	0° ∡ ⊓			-7691 Jul 06 j 07:23	$0^{\circ}\Omega$	
	-7696 Mar 30 j 02:38	ರ∘ರ			-7691 Aug 16 j 01:39	0° m)	
	-7696 May 15 j 15:56	0° ≈ ≈			-7691 Sep 25 j 04:48	0∘ ⊽	
	-7696 Jul 07 j 04:13	0° ∀			-7691 Nov 04 j 23:49	0° M	
retrograde	-7696 Sep 21 j 23:35	24°) 48′13			-7691 Dec 17 j 05:05	0° ∡ ¹	
asc. node	-7696 Oct 02 j 15:50	24° ∺ 03'23			-7690 Jan 30 j 04:02	0°ಕ	
opposition	-7696 Oct 31 j 09:55	15° ¥ 22'43	1°05'47	evening set	-7690 Jan 31 j 11:03	0° る 51'52	
greatest brilliancy	-7696 Oct 31 j 10:53	15° ∺ 21'44	-1.4m		-7690 Mar 16 j 17:48	0° ≈	
min. Earth dist.	-7696 Nov 02 j 02:19	14°) 42′26	0.66433 AU				
direct	-7696 Dec 11 j 06:34	5°) €26'19		conjunction	-7690 Mar 23 j 05:10	4°≈11'42	
	-7695 Feb 25 j 19:21	0° Υ		minimum elong	-7690 Mar 23 j 06:29	4°≈13'49	
	-7695 Apr 18 j 13:18	0°B		max. Earth dist.	-7690 Apr 02 j 15:21		2.64969 AU
	-7695 Jun 02 j 12:49	0° Ⅱ			-7690 May 02 j 10:10	0° \ 4° \ €0!55	
	-7695 Jul 13 j 23:11	0 ಂ Ω		morning rise asc. node	-7690 May 10 j 06:24	4° ¥ 59'55 14° ¥ 33'08	
desc. node	-7695 Aug 22 j 06:54 -7695 Sep 14 j 00:10	0 8ι 17°Ω44'14		asc. node	-7690 May 25 j 06:41 -7690 Jun 18 j 14:25	14 χ3308 0° Υ	
desc. Hode	-7695 Sep 29 j 15:01	0°M)			-7690 Aug 04 j 21:43	0°8	
evening set	-7695 Oct 09 j 05:54	7° Mp 33'18			-7690 Sep 21 j 13:53	0°II	
e venning see	-7695 Nov 06 j 23:36	0∘ ⊽			-7690 Nov 09 j 23:59	0°®	
	, , , , , , , , , , , , , , , , , , , ,	• —			-7689 Jan 06 j 11:06	0°N	
conjunction	-7695 Dec 12 j 01:57	26° £ 51'47	-0°57'04	retrograde	-7689 Feb 23 j 00:24	11° Ω 36'56	
minimum elong	-7695 Dec 11 j 22:58	26° ≏ 46′10		opposition	-7689 Mar 25 j 19:25	6° Ω 25'31	3°10'13
C	-7695 Dec 16 j 06:04	0°M		greatest brilliancy	-7689 Mar 26 j 10:52	6° Ω 14'53	
	-7694 Jan 26 j 03:46	0° ∡ ¹		min. Earth dist.	-7689 Mar 29 j 22:57	5° Ω 17'11	0.39114 AU
max. Earth dist.	-7694 Jan 27 j 06:29	0° ∡ ¹47'48	2.46254 AU	direct	-7689 Apr 26 j 17:06	0° Ω 46′09	
morning rise	-7694 Feb 11 j 22:19	11° ₹ ′53′18		desc. node	-7689 May 07 j 06:21	1° Ω 30′05	
	-7694 Mar 10 j 04:04	0°ಕ			-7689 Jul 13 j 08:49	0° m	
	-7694 Apr 24 j 13:23	0° ≈			-7689 Aug 29 j 03:50	0∘ ⊽	
	-7694 Jun 11 j 15:55	0° ∀			-7689 Oct 12 j 12:55	0°M₊	
	-7694 Aug 03 j 06:41	0° Υ			-7689 Nov 26 j 01:37	0° ∡ 7	
asc. node	-7694 Aug 20 j 17:00	8° Υ 50'51			-7688 Jan 10 j 13:22	0°ප	
retrograde	-7694 Oct 30 j 01:21	29° Υ ′58'12	2055145		-7688 Feb 26 j 01:24	0°≈	
opposition	-7694 Dec 06 j 19:59	21° Y 25'24	3°55'45	evening set	-7688 Mar 13 j 14:31	10°≈34'20	
greatest brilliancy	-7694 Dec 07 j 11:34	21° Y 10'24 19° Y 21'05	-1.6m 0.61219 AU	asc. node	-7688 Apr 10 j 23:43	28° ≈ 39'51 0° 米	
min. Earth dist. direct	-7694 Dec 12 j 05:12 -7693 Jan 16 j 16:01	19 γ 21 03 11° γ 32'24	0.01219 AU	max. Earth dist.	-7688 Apr 13 j 02:01 -7688 Apr 26 j 01:07		2.66720 AU
direct	-7693 Mar 19 j 16:15	0° 8		max. Earth dist.	-7000 Apr 20 J 01.07	6 X 1013	2.00720 AU
	-7693 May 09 j 20:09	0°II		conjunction	-7688 Apr 30 j 11:35	11° ∺ 06'22	0°11'06
	-7693 Jun 22 j 03:09	0°©		minimum elong	-7688 Apr 30 j 11:10	11° X 00'22	0°10'52
desc. node	-7693 Aug 01 j 23:04	0° Ω 32'06		behind sun begin	-7688 Apr 29 j 20:48	10°) 42'45	·
	-7693 Aug 01 j 06:16	0° Ω		behind sun end	-7688 May 01 j 01:32	11°) 28'40	
	-7693 Sep 09 j 02:21	0° m)			-7688 May 29 j 21:56	0° Υ	
	-7693 Oct 17 j 21:10	0∘ <u>⊽</u>		morning rise	-7688 Jun 15 j 13:03	10° Ƴ 45'57	
	-7693 Nov 26 j 13:40	0° M			-7688 Jul 14 j 22:12	9° 8	
evening set	-7693 Dec 12 j 10:51	11° M 41'49			-7688 Aug 28 j 20:07	$\Pi^{\circ}0$	
	-7692 Jan 06 j 20:41	0° ∡ ¹			-7688 Oct 11 j 18:18	0 \circ	
					-7688 Nov 24 j 02:04	$0^{\circ}\Omega$	
conjunction	-7692 Feb 07 j 06:14	21° х 54'53			-7687 Jan 06 j 16:33	0° m	
minimum elong	-7692 Feb 07 j 07:28	21° ∡ 56′59	1°08'11		-7687 Feb 22 j 03:25	0∘ ⊽	

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 22

		-	n astronomical cou		7901 BCE in historical c		
desc. node	-7687 Mar 24 j 10:10	16° £ 18'36		evening set	-7682 Jul 16 j 18:06	11° I I15'10	2 42510 441
retrograde	-7687 May 07 j 17:03	27° £ 56'20	0.41020.477	max. Earth dist.	-7682 Aug 04 j 22:44	25° Ⅱ 22'08	2.42510 AU
min. Earth dist.	-7687 Jun 03 j 15:01		0.41929 AU		-7682 Aug 11 j 03:40	0ං ව	
opposition	-7687 Jun 10 j 21:50	20° £ 58′00					
greatest brilliancy	-7687 Jun 09 j 13:42	21° £ 23'16	-2.6m	conjunction	-7682 Sep 10 j 23:04	23°S25'02	
direct	-7687 Jul 12 j 04:21	15° ≏ 08'13		minimum elong	-7682 Sep 11 j 01:45	23°930'12	0°44'57
	-7687 Sep 04 j 07:17	0°M			-7682 Sep 19 j 11:37	$\mathfrak{O}^{\circ}\mathfrak{O}$	
	-7687 Oct 30 j 01:29	0° ∡			-7682 Oct 27 j 22:13	0° Mp	
	-7687 Dec 18 j 21:20	0° ට		morning rise	-7682 Nov 12 j 14:53	12° m 17'29	
	-7686 Feb 05 j 12:33	0° ≈		desc. node	-7682 Nov 13 j 23:58	13° m/22'11	
asc. node	-7686 Feb 26 j 20:00	13°≈15'27			-7682 Dec 05 j 08:19	0∘ ⊽	
. ,	-7686 Mar 25 j 13:12	0° ∺			-7681 Jan 13 j 14:41	0°M 0°. ₹	
evening set	-7686 Apr 21 j 14:38	17° ₩ 09'12			-7681 Feb 23 j 13:49	0° ⊼	
To all III	-7686 May 11 j 14:32	0° Υ	2 (2000 411		-7681 Apr 08 j 03:09	5°0	
max. Earth dist.	-7686 May 20 j 18:00	5° Y 56′00	2.63080 AU		-7681 May 25 j 17:46	0° ≈	
	7606 1 00:01.20	1.70005.000	0053130		-7681 Jul 22 j 11:48	0° \	
conjunction	-7686 Jun 08 j 01:29	17° Υ 56'30		retrograde	-7681 Sep 09 j 07:19	11° 米 51'27	0000004
minimum elong	-7686 Jun 08 j 00:02	17° Y 54'05	0°52'25	opposition	-7681 Oct 19 j 02:29	2°) 11′59	
	-7686 Jun 26 j 04:13	0°8		greatest brilliancy	-7681 Oct 19 j 02:36	2° ★ 11'52	
morning rise	-7686 Jul 24 j 23:35	19° 8 35'18		min. Earth dist.	-7681 Oct 19 j 07:59	2° ₩ 06'28	0.66796 AU
	-7686 Aug 08 j 23:37	0°II		asc. node	-7681 Oct 20 j 05:25	1°) 44′59	
	-7686 Sep 20 j 02:51	0ංව ව			-7681 Oct 24 j 15:20	30°R≈	
	-7686 Oct 30 j 22:25	$\Omega^{\circ}\Omega$		direct	-7681 Nov 28 j 13:21	22°≈23'58	
	-7686 Dec 10 j 00:18	0° m/			-7680 Jan 06 j 03:27	0° ∀	
	-7685 Jan 19 j 04:53	0∘ ⊽			-7680 Mar 08 j 22:59	0° Υ	
desc. node	-7685 Feb 09 j 09:27	15° ≏ 28'11			-7680 Apr 27 j 03:40	0° B	
	-7685 Mar 01 j 21:57	0°M			-7680 Jun 10 j 10:06	0°II	
	-7685 Apr 17 j 10:57	0° ∡ 7			-7680 Jul 21 j 14:52	0°9	
retrograde	-7685 Jun 28 j 01:04	25° 🗷 33'36	0.54006.433		-7680 Aug 29 j 20:43	0°N	
min. Earth dist.	-7685 Jul 29 j 15:35	18° ∡ 748'48	0.54206 AU	evening set	-7680 Sep 12 j 23:52	11° Ω 01'22	
greatest brilliancy	-7685 Aug 04 j 10:37		-1.9m	desc. node	-7680 Sep 30 j 18:08	24° Ω 57'44	
opposition	-7685 Aug 05 j 16:27	16° х 07'49 8° х 16'20	-5~25'51		-7680 Oct 07 j 03:54	0 ಂಹ 0ಂ ಥು	
direct	-7685 Sep 10 j 00:28				-7680 Nov 14 j 11:26	0-32	
1	-7685 Nov 19 j 18:36	0°る 0°≈14'33		. ,.	760031 15:3131	10.0005150	0022122
asc. node	-7684 Jan 14 j 20:44	0 ~14 33					
		0000		conjunction	-7680 Nov 15 j 21:21	1° ♀ 05'50	
	-7684 Jan 14 j 10:37	0° ≈		minimum elong	-7680 Nov 15 j 18:32	1° ≏ 00′22	
	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38	0° ℋ		minimum elong	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17	1° ♀ 00'22 0° ™	0°33'17
avaning sat	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Apr 21 j 23:28	0° ∀ 0° Υ		minimum elong max. Earth dist.	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51	1° 으 00'22 0°ጤ 5°ጤ08'11	
evening set	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Apr 21 j 23:28 -7684 May 30 j 23:19	0°¥ 0°Υ 25°Υ30'37		minimum elong	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20	1° Ω 00'22 0° M 5° M 08'11 20° M 14'32	0°33'17
	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Apr 21 j 23:28 -7684 May 30 j 23:19 -7684 Jun 06 j 15:51	0°¥ 0°Υ 25°Υ30'37 0°႘	2.54466 ATT	minimum elong max. Earth dist.	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20 -7679 Feb 02 j 12:16	1° Ω 00'22 0° M 5° M08'11 20° M14'32 0° 🗷	0°33'17
evening set max. Earth dist.	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Apr 21 j 23:28 -7684 May 30 j 23:19	0°¥ 0°Υ 25°Υ30'37	2.54466 AU	minimum elong max. Earth dist.	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20 -7679 Feb 02 j 12:16 -7679 Mar 17 j 12:38	1°₽00'22 0°M 5°M08'11 20°M14'32 0°⊀ 0°♂	0°33'17
max. Earth dist.	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Apr 21 j 23:28 -7684 May 30 j 23:19 -7684 Jun 06 j 15:51 -7684 Jun 18 j 03:26	0°₩ 0°Ψ 25°Ψ30'37 0°₩ 7°₩47'31		minimum elong max. Earth dist.	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20 -7679 Feb 02 j 12:16 -7679 Mar 17 j 12:38 -7679 May 02 j 03:55	1° \$\infty\$00'22 0° \$\mathbb{M}\$. 5° \$\mathbb{M}\$.08'11 20° \$\mathbb{M}\$.14'32 0° \$\mathbb{S}\$ 0° \$\mathbb{S}\$ 0° \$\mathbb{S}\$	0°33'17
max. Earth dist.	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Apr 21 j 23:28 -7684 May 30 j 23:19 -7684 Jun 06 j 15:51 -7684 Jun 18 j 03:26 -7684 Jul 19 j 17:37	0°₩ 0°Ψ 25°Ψ30'37 0°₩ 7°₩47'31	1°12'10	minimum elong max. Earth dist.	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20 -7679 Feb 02 j 12:16 -7679 Mar 17 j 12:38 -7679 May 02 j 03:55 -7679 Jun 20 j 06:34	1° \$\Omega\$00'22 0° \$\mathbb{N}\$. 5° \$\mathbb{M}\$.08'11 20° \$\mathbb{M}\$.14'32 0° \$\mathscr{A}\$' 0° \$\mathscr{C}\$\$ 0° \$\approx\$ 0° \$\mathscr{C}\$\$	0°33'17
max. Earth dist.	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Apr 21 j 23:28 -7684 May 30 j 23:19 -7684 Jun 06 j 15:51 -7684 Jun 18 j 03:26 -7684 Jul 19 j 17:37 -7684 Jul 19 j 17:30	0°₩ 0°Ψ 25°Ψ30'37 0°℧ 7°℧47'31 29°℧46'44 29°℧46'32	1°12'10	minimum elong max. Earth dist. morning rise	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20 -7679 Feb 02 j 12:16 -7679 Mar 17 j 12:38 -7679 May 02 j 03:55 -7679 Jun 20 j 06:34 -7679 Aug 16 j 05:14	1° \$\overline{O}00'22 0° \$\mathbb{N}\$. 5° \$\mathbb{N}\$.08'11 20° \$\mathbb{N}\$.14'32 0° \$\mathscr{A}\$ 0° \$\mathscr{A}\$ 0° \$\mathscr{A}\$ 0° \$\mathscr{A}\$ 0° \$\mathscr{A}\$ 0° \$\mathscr{A}\$	0°33'17
max. Earth dist.	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Apr 21 j 23:28 -7684 May 30 j 23:19 -7684 Jun 06 j 15:51 -7684 Jun 18 j 03:26 -7684 Jul 19 j 17:37 -7684 Jul 19 j 17:30 -7684 Jul 20 j 01:06	0°¥ 0°Y 25°Y30'37 0°8 7°847'31 29°846'44 29°846'32 0°∏	1°12'10	minimum elong max. Earth dist. morning rise asc. node	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20 -7679 Feb 02 j 12:16 -7679 Mar 17 j 12:38 -7679 May 02 j 03:55 -7679 Jun 20 j 06:34 -7679 Aug 16 j 05:14 -7679 Sep 06 j 08:04	1° \$\infty\$00'22 0° \text{\$\text{\$\text{\$\Lorentz\$}}\$} \\ 5° \text{\$\text{\$\Lorentz\$}\$} \\ 20° \text{\$\text{\$\Lorentz\$}}\$} \\ 0° \text{\$\text{\$\Sigma\$}}\$} \\ 0° \text{\$\text{\$\Sigma\$}}\$} \\ 0° \text{\$\text{\$\Sigma\$}}\$} \\ 0° \text{\$\text{\$\Sigma\$}}\$} \\ 0° \text{\$\Y\$}\$} \\ 0° \text{\$\Y\$}\$	0°33'17
max. Earth dist. conjunction minimum elong	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Apr 21 j 23:28 -7684 May 30 j 23:19 -7684 Jun 06 j 15:51 -7684 Jun 18 j 03:26 -7684 Jul 19 j 17:37 -7684 Jul 19 j 17:30 -7684 Jul 20 j 01:06 -7684 Aug 30 j 09:16	0°¥ 0°Y 25°Y30'37 0°8 7°847'31 29°846'44 29°846'32 0°∏ 0°©	1°12'10	minimum elong max. Earth dist. morning rise asc. node retrograde	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20 -7679 Feb 02 j 12:16 -7679 Mar 17 j 12:38 -7679 May 02 j 03:55 -7679 Jun 20 j 06:34 -7679 Aug 16 j 05:14 -7679 Sep 06 j 08:04 -7679 Oct 14 j 12:39	1° \$\Omega 00'22 0° \text{\$\text{\$\text{\$\Lambda\$}}\$} \\ 5° \text{\$\Lambda\$08'11} \\ 20° \text{\$\text{\$\Lambda\$}}\$ \\ 0° \$\text{\$\Color \text{\$\Color \text{\$\colo	0°33'17 2.41277 AU
max. Earth dist.	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Apr 21 j 23:28 -7684 May 30 j 23:19 -7684 Jun 06 j 15:51 -7684 Jun 18 j 03:26 -7684 Jul 19 j 17:37 -7684 Jul 19 j 17:30 -7684 Jul 20 j 01:06 -7684 Aug 30 j 09:16 -7684 Sep 09 j 17:56	0°¥ 0°Y 25°Y30'37 0°8 7°847'31 29°846'44 29°846'32 0°Ⅲ 0°∞ 7°∞43'10	1°12'10	minimum elong max. Earth dist. morning rise asc. node retrograde opposition	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20 -7679 Feb 02 j 12:16 -7679 Mar 17 j 12:38 -7679 May 02 j 03:55 -7679 Jun 20 j 06:34 -7679 Aug 16 j 05:14 -7679 Sep 06 j 08:04 -7679 Oct 14 j 12:39 -7679 Nov 22 j 02:21	1° \$\Omega 00'22 0° \$\mathbb{n}\$. 5° \$\mathbb{n} 08'11 20° \$\mathbb{n} 14'32 0° \$\mathbb{s}\$. 0° \$\mathbb{s}\$. 0° \$\mathbb{s}\$. 0° \$\mathbb{n}\$. 0° \$\mathbb{n}\$. 16° \$\mathbb{n} 01'49 7° \$\mathbb{n} 05'02	0°33'17 2.41277 AU 2°51'46
max. Earth dist. conjunction minimum elong	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Apr 21 j 23:28 -7684 May 30 j 23:19 -7684 Jun 06 j 15:51 -7684 Jun 18 j 03:26 -7684 Jul 19 j 17:37 -7684 Jul 19 j 17:30 -7684 Jul 20 j 01:06 -7684 Aug 30 j 09:16 -7684 Sep 09 j 17:56 -7684 Oct 09 j 04:18	0°₩ 0°Υ 25°Υ30'37 0°℧ 7°℧47'31 29°℧46'44 29°℧46'32 0°Ⅲ 0°郖 7°郖43'10 0°Ω	1°12'10	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20 -7679 Feb 02 j 12:16 -7679 Mar 17 j 12:38 -7679 May 02 j 03:55 -7679 Jun 20 j 06:34 -7679 Sep 06 j 08:04 -7679 Oct 14 j 12:39 -7679 Nov 22 j 02:21 -7679 Nov 22 j 10:16	1° \$\Omega 00'22 0° \$\mathbb{N}\$. 5° \$\mathbb{M} 08'11 20° \$\mathbb{M} 14'32 0° \$\mathbb{A}\$ 0° \$\mathbb{A}\$ 0° \$\mathbb{A}\$ 0° \$\mathbb{M}\$ 0° \$\mathbb{M}\$ 16° \$\mathbb{M} 01'49 7° \$\mathbb{M} 05'02 6° \$\mathbb{N} 57'16	0°33'17 2.41277 AU 2°51'46 -1.5m
max. Earth dist. conjunction minimum elong	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Apr 21 j 23:28 -7684 May 30 j 23:19 -7684 Jun 06 j 15:51 -7684 Jun 18 j 03:26 -7684 Jul 19 j 17:37 -7684 Jul 19 j 17:30 -7684 Jul 20 j 01:06 -7684 Aug 30 j 09:16 -7684 Sep 09 j 17:56 -7684 Oct 09 j 04:18 -7684 Nov 17 j 02:45	0°¥ 0°Y 25°Y30'37 0°8 7°847'31 29°846'44 29°846'32 0°Ⅲ 0°ॐ 7°ॐ43'10 0°Ω 0°™	1°12'10	minimum elong max. Earth dist. morning rise asc. node retrograde opposition	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20 -7679 Feb 02 j 12:16 -7679 Mar 17 j 12:38 -7679 May 02 j 03:55 -7679 Jun 20 j 06:34 -7679 Sep 06 j 08:04 -7679 Oct 14 j 12:39 -7679 Nov 22 j 02:21 -7679 Nov 26 j 01:19	1° \$\to\$00'22 0° \$\mathbb{n}\$. 5° \$\mathbb{n}\$.08'11 20° \$\mathbb{n}\$.14'32 0° \$\napprox\$ 0° \$\to\$ 0° \$\to\$ 0° \$\to\$ 0° \$\to\$ 0° \$\to\$ 16° \$\to\$01'49 7° \$\to\$05'02 6° \$\to\$5'116 5° \$\to\$32'00	0°33'17 2.41277 AU 2°51'46
max. Earth dist. conjunction minimum elong morning rise	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Apr 21 j 23:28 -7684 May 30 j 23:19 -7684 Jun 06 j 15:51 -7684 Jun 18 j 03:26 -7684 Jul 19 j 17:37 -7684 Jul 19 j 17:30 -7684 Aug 30 j 09:16 -7684 Sep 09 j 17:56 -7684 Oct 09 j 04:18 -7684 Nov 17 j 02:45 -7684 Dec 26 j 00:09	0°¥ 0°Y 25°Y30'37 0°8 7°847'31 29°846'44 29°846'32 0°¶ 0°\$ 7°\$43'10 0°\$ 0°\$ 0°\$ 0°\$ 0°\$ 0°\$ 0°\$ 0°	1°12'10	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist.	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20 -7679 Feb 02 j 12:16 -7679 Mar 17 j 12:38 -7679 May 02 j 03:55 -7679 Jun 20 j 06:34 -7679 Aug 16 j 05:14 -7679 Sep 06 j 08:04 -7679 Nov 22 j 02:21 -7679 Nov 22 j 10:16 -7679 Nov 26 j 01:19 -7679 Dec 12 j 02:27	1° \$\to\$00'22 0° \$\mathbb{\text{N}}\$. 5° \$\mathbb{\text{M}}.08'11 20° \$\mathbb{\text{M}}.14'32 0° \$\napprox' \\ 0° \$\text{S}\$ 0° \$\text{S}\$ 0° \$\text{Y}\$ 0° \$\text{Y}\$ 0° \$\text{Y}\$ 16° \$\text{Y} 01'49 7° \$\text{Y} 05'02 6° \$\text{Y} 57'16 5° \$\text{Y} 32'00 30° \$\text{R}\$\text{\text{H}}\$	0°33'17 2.41277 AU 2°51'46 -1.5m
max. Earth dist. conjunction minimum elong	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Apr 21 j 23:28 -7684 May 30 j 23:19 -7684 Jun 06 j 15:51 -7684 Jun 18 j 03:26 -7684 Jul 19 j 17:37 -7684 Jul 19 j 17:30 -7684 Jul 20 j 01:06 -7684 Aug 30 j 09:16 -7684 Sep 09 j 17:56 -7684 Oct 09 j 04:18 -7684 Nov 17 j 02:45 -7684 Dec 26 j 00:09 -7684 Dec 27 j 05:43	0°¥ 0°Y 25°Y30'37 0°8 7°847'31 29°846'44 29°846'32 0°Ⅲ 0°∞ 7°©43'10 0°Ω 0°№ 0°№ 0°№	1°12'10	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20 -7679 Feb 02 j 12:16 -7679 Mar 17 j 12:38 -7679 May 02 j 03:55 -7679 Jun 20 j 06:34 -7679 Aug 16 j 05:14 -7679 Sep 06 j 08:04 -7679 Nov 22 j 02:21 -7679 Nov 22 j 10:16 -7679 Nov 26 j 01:19 -7679 Dec 12 j 02:27 -7678 Jan 02 j 04:13	1° \$\sim 00'22\) 0° \$\mathbb{N}\$. 5° \$\mathbb{N}.08'11\) 20° \$\mathbb{N}.14'32\) 0° \$\mathbb{N}\$. 16° \$\mathbb{N}\$01'49\) 7° \$\mathbb{N}\$05'02\) 6° \$\mathbb{N}\$57'16\] 5° \$\mathbb{N}\$32'00\] 30° \$\mathbb{N}\$. 27° \$\mathbb{N}\$05'12	0°33'17 2.41277 AU 2°51'46 -1.5m
max. Earth dist. conjunction minimum elong morning rise	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Apr 21 j 23:28 -7684 May 30 j 23:19 -7684 Jun 06 j 15:51 -7684 Jun 18 j 03:26 -7684 Jul 19 j 17:37 -7684 Jul 19 j 17:30 -7684 Jul 20 j 01:06 -7684 Aug 30 j 09:16 -7684 Sep 09 j 17:56 -7684 Oct 09 j 04:18 -7684 Nov 17 j 02:45 -7684 Dec 26 j 00:09 -7684 Dec 27 j 05:43 -7683 Feb 03 j 19:00	0° ₩ 0° Υ 25° Υ30'37 0° ℧ 7° ℧47'31 29° ℧46'44 29° ℧46'32 0° Ⅲ 0° Ω 0° Ω 0° Ω 0° Ω 0° Ω	1°12'10	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist.	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20 -7679 Feb 02 j 12:16 -7679 Mar 17 j 12:38 -7679 May 02 j 03:55 -7679 Jun 20 j 06:34 -7679 Aug 16 j 05:14 -7679 Sep 06 j 08:04 -7679 Nov 22 j 02:21 -7679 Nov 22 j 10:16 -7679 Nov 26 j 01:19 -7679 Dec 12 j 02:27 -7678 Jan 02 j 04:13 -7678 Jan 24 j 14:46	1° \$\to\$00'22 0° \$\mathbb{\text{TL}}\$ 5° \$\mathbb{\text{TL}}08'11 20° \$\mathbb{\text{TL}}14'32 0° \$\napprox' \\ 0° \$\times \\ 16° \$\times \\ 16° \$\times \\ 16° \$\times \\ 16° \$\times \\ 5° \$\times \\ 27° \$\times \\ 27° \$\times \\ 27° \$\times \\ 0° \$\times \\ 27° \$\times \\ 0° \$\times \\ 27° \$\times \\ 0° \$\t	0°33'17 2.41277 AU 2°51'46 -1.5m
max. Earth dist. conjunction minimum elong morning rise	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Apr 21 j 23:28 -7684 May 30 j 23:19 -7684 Jun 06 j 15:51 -7684 Jun 18 j 03:26 -7684 Jul 19 j 17:37 -7684 Jul 19 j 17:30 -7684 Jul 20 j 01:06 -7684 Aug 30 j 09:16 -7684 Oct 09 j 04:18 -7684 Nov 17 j 02:45 -7684 Dec 26 j 00:09 -7684 Dec 27 j 05:43 -7683 Feb 03 j 19:00 -7683 Mar 17 j 16:09	0°\ 0°\ 25°\ 30'37 0°\ 7°\ 347'31 29°\ 346'44 29°\ 346'32 0°\ 10°\ 0°\ 0°\ 0°\ 0°\ 0°\ 0°\ 0°\ 0°\ 0°\	1°12'10	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist.	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20 -7679 Feb 02 j 12:16 -7679 Mar 17 j 12:38 -7679 May 02 j 03:55 -7679 Jun 20 j 06:34 -7679 Aug 16 j 05:14 -7679 Sep 06 j 08:04 -7679 Nov 22 j 02:21 -7679 Nov 22 j 10:16 -7679 Nov 26 j 01:19 -7679 Dec 12 j 02:27 -7678 Jan 02 j 04:13 -7678 Jan 24 j 14:46 -7678 Apr 02 j 03:02	1° \$\to\$00'22 0° \$\mathbb{\text{TL}}\$ 5° \$\mathbb{\text{TL}}08'11 20° \$\mathbb{\text{TL}}14'32 0° \$\napprox' \\ 0° \$\text{TC}\$ 0° \$\text{TC}\$ 0° \$\text{TC}\$ 0° \$\text{TC}\$ 0° \$\text{TC}\$ 0° \$\text{TC}\$ 16° \$\text{TC}\$1'16 5° \$\text{TC}\$32'00 30° \$\text{TC}\$ 27° \$\text{TC}\$05'12 0° \$\text{TC}\$ 0° \$\text{TC}\$	0°33'17 2.41277 AU 2°51'46 -1.5m
max. Earth dist. conjunction minimum elong morning rise	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Apr 21 j 23:28 -7684 May 30 j 23:19 -7684 Jun 06 j 15:51 -7684 Jun 18 j 03:26 -7684 Jul 19 j 17:37 -7684 Jul 19 j 17:30 -7684 Jul 20 j 01:06 -7684 Aug 30 j 09:16 -7684 Sep 09 j 17:56 -7684 Oct 09 j 04:18 -7684 Dec 26 j 00:09 -7684 Dec 27 j 05:43 -7683 Feb 03 j 19:00 -7683 Mar 17 j 16:09 -7683 May 02 j 17:35	0°\(\text{\text{\text{0°Y}}}\) 0°\(\text{\text{\text{\text{0°Y}}}}\) 25°\(\text{\text{\text{\text{30'37}}}}\) 0°\(\text{\tex{\tex	1°12'10	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist.	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20 -7679 Feb 02 j 12:16 -7679 Mar 17 j 12:38 -7679 May 02 j 03:55 -7679 Jun 20 j 06:34 -7679 Aug 16 j 05:14 -7679 Sep 06 j 08:04 -7679 Nov 22 j 02:21 -7679 Nov 22 j 02:21 -7679 Nov 22 j 01:19 -7679 Dec 12 j 02:27 -7678 Jan 02 j 04:13 -7678 Apr 02 j 03:02 -7678 May 19 j 13:28	1° \$\to\$00'22 0° \$\mathbb{\text{TL}}\$ 5° \$\mathbb{\text{TL}}08'11 20° \$\mathbb{\text{TL}}14'32 0° \$\napprox' \\ 0° \$\text{TC}\$ 0° \$\text{TC}\$ 0° \$\text{TC}\$ 0° \$\text{TC}\$ 0° \$\text{TC}\$ 0° \$\text{TC}\$ 16° \$\text{TO}1'49 7° \$\text{TO}5'02 6° \$\text{TS}7'16 5° \$\text{TS}2'00 30° \$\text{R}\$ 27° \$\text{TO}5'12 0° \$\text{TC}\$ 0° \$\text{TC}\$ 0° \$\text{TC}\$ 0° \$\text{TC}\$	0°33'17 2.41277 AU 2°51'46 -1.5m
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max. Earth dist. conjunction minimum elong morning rise desc. node	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Apr 21 j 23:28 -7684 May 30 j 23:19 -7684 Jun 06 j 15:51 -7684 Jun 18 j 03:26 -7684 Jul 19 j 17:37 -7684 Jul 19 j 17:30 -7684 Jul 20 j 01:06 -7684 Aug 30 j 09:16 -7684 Sep 09 j 17:56 -7684 Oct 09 j 04:18 -7684 Nov 17 j 02:45 -7684 Dec 26 j 00:09 -7684 Dec 27 j 05:43 -7683 Feb 03 j 19:00 -7683 May 02 j 17:35 -7683 Jul 01 j 08:35 -7683 Aug 05 j 04:47 -7683 Sep 06 j 11:14	0°\(\cdot\) 0°\(\cdot\) 0°\(\cdot\) 25°\(\cdot\)30'37 0°\(\cdot\) 7°\(\cdot\)44'31 29°\(\cdot\)46'32 0°\(\cdot\)	1°12'10	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20 -7679 Feb 02 j 12:16 -7679 Mar 17 j 12:38 -7679 May 02 j 03:55 -7679 Jun 20 j 06:34 -7679 Sep 06 j 08:04 -7679 Oct 14 j 12:39 -7679 Nov 22 j 02:21 -7679 Nov 22 j 02:21 -7679 Nov 22 j 10:16 -7679 Nov 26 j 01:19 -7679 Dec 12 j 02:27 -7678 Jan 02 j 04:13 -7678 Apr 02 j 03:02 -7678 May 19 j 13:28 -7678 Aug 09 j 12:12 -7678 Aug 18 j 16:34	1° \$\textit{\Omega} 00'22 \\ 0° \$\mathbb{M}\$. 5° \$\mathbb{M} 08'11 \\ 20° \$\mathbb{M}\$. 0° \$\mathbb{A}\$. 0° \$\mathbb{A}\$. 0° \$\mathbb{A}\$. 0° \$\mathbb{M}\$. 0° \$\mathbb{M}\$. 0° \$\mathbb{M}\$. 0° \$\mathbb{M}\$. 0° \$\mathbb{M}\$. 128 \\ 16° \$\mathbb{M} 01'49 \\ 7° \$\mathbb{M} 05'02 \\ 6° \$\mathbb{M}\$. 5° \$\mathbb{M} 32'00 \\ 30° \$\mathbb{M}\$. 27° \$\mathbb{M} 05'12 \\ 0° \$\mathbb{M}\$. 0° \$\mathbb{M}\$	0°33'17 2.41277 AU 2°51'46 -1.5m
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max. Earth dist. conjunction minimum elong morning rise desc. node retrograde min. Earth dist. opposition greatest brilliancy	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Apr 21 j 23:28 -7684 May 30 j 23:19 -7684 Jun 06 j 15:51 -7684 Jun 18 j 03:26 -7684 Jul 19 j 17:37 -7684 Jul 19 j 17:30 -7684 Aug 30 j 09:16 -7684 Sep 09 j 17:56 -7684 Oct 09 j 04:18 -7684 Nov 17 j 02:45 -7684 Dec 26 j 00:09 -7684 Dec 27 j 05:43 -7683 Feb 03 j 19:00 -7683 Mar 17 j 16:09 -7683 Mug 05 j 04:47 -7683 Sep 06 j 11:14 -7683 Sep 10 j 15:43 -7683 Sep 11 j 10:03	0° ₩ 0° Ψ 25° Ψ30'37 0° ℧ 7° ℧47'31 29° ℧46'44 29° ℧46'32 0° Ⅲ 0° 宓 7° 孪43'10 0° Ω 0° № 0° 亞 0° 亞 56'35 0° Ⅲ 0° ズ 0° Խ 0° ズ 0° ℧ 28° ℧21'08 26° ℧56'49 27° ℧04'38	1°12'10 1°12'36 0.63414 AU -2°57'34	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20 -7679 Feb 02 j 12:16 -7679 Mar 17 j 12:38 -7679 May 02 j 03:55 -7679 Jun 20 j 06:34 -7679 Aug 16 j 05:14 -7679 Sep 06 j 08:04 -7679 Nov 22 j 02:21 -7679 Nov 22 j 10:16 -7679 Nov 22 j 10:16 -7679 Nov 22 j 02:27 -7678 Jan 02 j 04:13 -7678 Jan 02 j 04:13 -7678 Apr 02 j 03:02 -7678 May 19 j 13:28 -7678 Aug 09 j 12:12 -7678 Aug 18 j 16:34 -7678 Sep 17 j 01:26 -7678 Oct 25 j 14:28 -7678 Nov 18 j 21:21	1° \$\infty\$00'22 0° \$\mathbb{\text{N}}\$.08'11 20° \$\mathbb{\text{N}}\$.08'5 0° \$\infty\$0° \$\mathbb{\text{N}}\$.00' \$\te	0°33'17 2.41277 AU 2°51'46 -1.5m
max. Earth dist. conjunction minimum elong morning rise desc. node retrograde min. Earth dist. opposition greatest brilliancy direct	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Apr 21 j 23:28 -7684 May 30 j 23:19 -7684 Jun 06 j 15:51 -7684 Jun 18 j 03:26 -7684 Jul 19 j 17:37 -7684 Jul 19 j 17:30 -7684 Jul 20 j 01:06 -7684 Aug 30 j 09:16 -7684 Sep 09 j 17:56 -7684 Oct 09 j 04:18 -7684 Nov 17 j 02:45 -7684 Dec 26 j 00:09 -7684 Dec 27 j 05:43 -7683 Feb 03 j 19:00 -7683 Mar 17 j 16:09 -7683 May 02 j 17:35 -7683 Jul 01 j 08:35 -7683 Sep 06 j 11:14 -7683 Sep 10 j 15:43 -7683 Sep 14 j 03:50 -7683 Sep 13 j 20:03 -7683 Oct 22 j 16:07	0° ₩ 0° Ψ 25° Ψ30'37 0° ℧ 7° ℧47'31 29° ℧46'44 29° ℧46'32 0° Ⅲ 0° 宓 7° ⑤43'10 0° Ω 0° № 0° △ 0° № 0° △ 0° № 0° № 0° № 26° ℧56'35 0° № 28° ℧21'08 26° ℧56'49 27° ℧04'38 17° ℧49'53	1°12'10 1°12'36 0.63414 AU -2°57'34	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20 -7679 Feb 02 j 12:16 -7679 Mar 17 j 12:38 -7679 May 02 j 03:55 -7679 Jun 20 j 06:34 -7679 Aug 16 j 05:14 -7679 Sep 06 j 08:04 -7679 Nov 22 j 02:21 -7679 Nov 22 j 10:16 -7679 Nov 22 j 10:16 -7679 Nov 26 j 01:19 -7679 Dec 12 j 02:27 -7678 Jan 02 j 04:13 -7678 Apr 02 j 03:02 -7678 May 19 j 13:28 -7678 Aug 09 j 12:12 -7678 Aug 18 j 16:34 -7678 Sep 17 j 01:26 -7678 Nov 18 j 21:21 -7678 Nov 18 j 21:21 -7678 Dec 04 j 01:24	1° \$\infty\$00'22 0° \$\mathbb{\text{N}}\$. 5° \$\mathbb{\text{N}}.08'11 20° \$\mathbb{\text{N}}.14'32 0° \$\napprox' \\ 0° \$\mathred{\text{S}}\$. 0° \$\mathred{\text{N}}\$. 0° \$\mathred{\text{N}}\$. 0° \$\mathred{\text{N}}\$. 0° \$\mathred{\text{N}}\$. 0° \$\mathred{\text{N}}\$. 16° \$\mathred{\text{V}}01'49 7° \$\mathred{\text{V}}05'02 6° \$\mathred{\text{Y}}57'16 5° \$\mathred{\text{Y}}32'00 30° \$\mathred{\text{N}}\$. 27° \$\mathred{\text{N}}05'12 0° \$\mathred{\text{V}}\$. 0° \$\mathred{\text{V}}\$. 0° \$\mathred{\text{U}}\$. 0° \$\mathred{\text{V}}\$. 0° \$\mathred{\text{N}}\$. 0° \$\mathred{\text{Q}}\$. 18° \$\mathred{\text{Q}}35'12 0° \$\mathred{\text{IL}}\$.	0°33'17 2.41277 AU 2°51'46 -1.5m
max. Earth dist. conjunction minimum elong morning rise desc. node retrograde min. Earth dist. opposition greatest brilliancy direct	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Mar 04 j 23:28 -7684 May 30 j 23:19 -7684 Jun 06 j 15:51 -7684 Jun 18 j 03:26 -7684 Jul 19 j 17:37 -7684 Jul 19 j 17:30 -7684 Jul 20 j 01:06 -7684 Aug 30 j 09:16 -7684 Sep 09 j 17:56 -7684 Oct 09 j 04:18 -7684 Nov 17 j 02:45 -7684 Dec 26 j 00:09 -7684 Dec 27 j 05:43 -7683 Feb 03 j 19:00 -7683 Mar 17 j 16:09 -7683 May 02 j 17:35 -7683 Jul 01 j 08:35 -7683 Sep 10 j 15:43 -7683 Sep 10 j 15:43 -7683 Sep 10 j 15:43 -7683 Sep 13 j 20:03 -7683 Oct 22 j 16:07 -7683 Dec 02 j 00:40	0° H 0° Y 25° Y30'37 0° S 7° S47'31 29° S46'44 29° S46'32 0° II 0° S 0° M 0° M 256'35 0° M 0° S 0° S 28° S21'08 28° S21'08 26° S56'49 27° S04'38 17° S49'53 26° S03'46	1°12'10 1°12'36 0.63414 AU -2°57'34	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20 -7679 Feb 02 j 12:16 -7679 Mar 17 j 12:38 -7679 May 02 j 03:55 -7679 Jun 20 j 06:34 -7679 Aug 16 j 05:14 -7679 Sep 06 j 08:04 -7679 Nov 22 j 02:21 -7679 Nov 22 j 10:16 -7679 Nov 22 j 10:16 -7679 Nov 26 j 01:19 -7679 Dec 12 j 02:27 -7678 Jan 02 j 04:13 -7678 Apr 02 j 03:02 -7678 May 19 j 13:28 -7678 Aug 09 j 12:12 -7678 Aug 18 j 16:34 -7678 Sep 17 j 01:26 -7678 Nov 18 j 21:21 -7678 Nov 18 j 21:21 -7678 Dec 04 j 01:24	1° \$\infty\$00'22 0° \$\mathbb{\text{N}}\$. 5° \$\mathbb{\text{N}}.08'11 20° \$\mathbb{\text{N}}.14'32 0° \$\napprox' \\ 0° \$\mathred{\text{S}}\$. 0° \$\mathred{\text{N}}\$. 0° \$\mathred{\text{N}}\$. 0° \$\mathred{\text{N}}\$. 0° \$\mathred{\text{N}}\$. 0° \$\mathred{\text{N}}\$. 16° \$\mathred{\text{V}}01'49 7° \$\mathred{\text{V}}05'02 6° \$\mathred{\text{Y}}57'16 5° \$\mathred{\text{Y}}32'00 30° \$\mathred{\text{N}}\$. 27° \$\mathred{\text{N}}05'12 0° \$\mathred{\text{V}}\$. 0° \$\mathred{\text{V}}\$. 0° \$\mathred{\text{U}}\$. 0° \$\mathred{\text{V}}\$. 0° \$\mathred{\text{N}}\$. 0° \$\mathred{\text{Q}}\$. 18° \$\mathred{\text{Q}}35'12 0° \$\mathred{\text{IL}}\$.	0°33'17 2.41277 AU 2°51'46 -1.5m 0.64004 AU
max. Earth dist. conjunction minimum elong morning rise desc. node retrograde min. Earth dist. opposition greatest brilliancy direct	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Mar 04 j 23:28 -7684 May 30 j 23:19 -7684 Jun 06 j 15:51 -7684 Jun 18 j 03:26 -7684 Jul 19 j 17:37 -7684 Jul 19 j 17:30 -7684 Jul 20 j 01:06 -7684 Aug 30 j 09:16 -7684 Sep 09 j 17:56 -7684 Oct 09 j 04:18 -7684 Nov 17 j 02:45 -7684 Dec 26 j 00:09 -7684 Dec 27 j 05:43 -7683 Feb 03 j 19:00 -7683 Mar 17 j 16:09 -7683 May 02 j 17:35 -7683 Jul 01 j 08:35 -7683 Aug 05 j 04:47 -7683 Sep 10 j 15:43 -7683 Sep 10 j 15:43 -7683 Sep 13 j 20:03 -7683 Oct 22 j 16:07 -7683 Dec 02 j 00:40 -7683 Dec 12 j 06:43	0° H 0° Y 25° Y30'37 0° S 7° S47'31 29° S46'44 29° S46'32 0° Π 0° S 0° M 0° Ω 0° M 0° Δ 0° M 0° Δ 0° M 0° S 0° M 0° S 0° S 0° S 0° S 130° RS 28° S21'08 26° S56'49 27° S04'38 17° S49'53 26° S03'46 0° S	1°12'10 1°12'36 0.63414 AU -2°57'34	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct desc. node evening set	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20 -7679 Feb 02 j 12:16 -7679 Mar 17 j 12:38 -7679 May 02 j 03:55 -7679 Jun 20 j 06:34 -7679 Aug 16 j 05:14 -7679 Sep 06 j 08:04 -7679 Nov 22 j 02:21 -7679 Nov 22 j 10:16 -7679 Nov 22 j 10:16 -7679 Pec 12 j 02:27 -7678 Jan 02 j 04:13 -7678 Apr 02 j 03:02 -7678 May 19 j 13:28 -7678 Aug 09 j 12:12 -7678 Aug 09 j 12:12 -7678 Aug 18 j 16:34 -7678 Sep 17 j 01:26 -7678 Nov 18 j 21:21 -7678 Dec 04 j 01:24 -7677 Jan 14 j 03:12	1° ₽00'22 0° M 5° M08'11 20° M14'32 0° ₹ 0° ₹ 0° ₹ 0° ↑ 8° ↑31'28 16° ↑01'49 7° ↑05'02 6° ↑57'16 5° ↑32'00 30° ₹ 27° 升05'12 0° ↑ 0° ₺ 0° ጠ 0° ₽ 0° Д 7° Д06'04 0° М 0° ₽	0°33'17 2.41277 AU 2°51'46 -1.5m 0.64004 AU
max. Earth dist. conjunction minimum elong morning rise desc. node retrograde min. Earth dist. opposition greatest brilliancy direct	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Apr 21 j 23:28 -7684 May 30 j 23:19 -7684 Jun 06 j 15:51 -7684 Jun 18 j 03:26 -7684 Jul 19 j 17:37 -7684 Jul 19 j 17:30 -7684 Jul 20 j 01:06 -7684 Aug 30 j 09:16 -7684 Sep 09 j 17:56 -7684 Oct 09 j 04:18 -7684 Nov 17 j 02:45 -7684 Dec 26 j 00:09 -7684 Dec 27 j 05:43 -7683 Feb 03 j 19:00 -7683 Mar 17 j 16:09 -7683 May 02 j 17:35 -7683 Aug 05 j 04:47 -7683 Sep 10 j 15:43 -7683 Sep 10 j 15:43 -7683 Sep 13 j 20:03 -7683 Oct 22 j 16:07 -7683 Dec 02 j 00:40 -7683 Dec 12 j 06:43 -7682 Feb 10 j 12:43	0° H 0° Y 25° Y30'37 0° B 7° B47'31 29° B46'44 29° B46'32 0° Π 0° Φ 7° Φ43'10 0° Ω 0° Ω 0° Ω 0° Ω 0° Ω 0° Ω 0° Ω 0° Ω 0° Ω 0° Ω 10° Ω 0° Ω 10° Ω	1°12'10 1°12'36 0.63414 AU -2°57'34	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct desc. node evening set	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20 -7679 Feb 02 j 12:16 -7679 Mar 17 j 12:38 -7679 May 02 j 03:55 -7679 Jun 20 j 06:34 -7679 Aug 16 j 05:14 -7679 Sep 06 j 08:04 -7679 Nov 22 j 02:21 -7679 Nov 22 j 10:16 -7679 Nov 22 j 10:16 -7679 Nov 26 j 01:19 -7679 Dec 12 j 02:27 -7678 Jan 02 j 04:13 -7678 Apr 02 j 03:02 -7678 May 19 j 13:28 -7678 Aug 09 j 12:12 -7678 Aug 09 j 12:12 -7678 Aug 18 j 16:34 -7678 Sep 17 j 01:26 -7678 Oct 25 j 14:28 -7678 Nov 18 j 21:21 -7678 Dec 04 j 01:24 -7677 Jan 14 j 03:12	1° \$\infty\$00'22 0° \$\mathbb{\text{N}}\$. 5° \$\mathbb{\text{N}}.08'11 20° \$\mathbb{\text{N}}.14'32 0° \$\napprox' \text{0° \$\mathbb{\text{N}}\$. 0° \$\mathbb{\text{N}}\$. 0° \$\mathbb{\text{N}}\$. 0° \$\mathbb{\text{N}}\$. 0° \$\mathbb{\text{N}}\$. 16° \$\mathbb{\text{V}}01'49 7° \$\mathbb{\text{V}}05'02 6° \$\mathbb{\text{Y}}57'16 5° \$\mathbb{\text{Y}}32'00 30° \$\mathbb{\text{R}}\$. 27° \$\mathbb{\text{N}}05'12 0° \$\mathbb{\text{V}}\$. 0° \$\mathbb{\text{N}}\$. 0° \$\mathbb{\text{N}}\$. 0° \$\mathbb{\text{N}}\$. 0° \$\mathbb{\text{N}}\$. 0° \$\mathbb{\text{N}}\$. 2° \$\mathbb{\text{N}}39'13 2° \$\mathbb{\text{N}}38'58	0°33'17 2.41277 AU 2°51'46 -1.5m 0.64004 AU
max. Earth dist. conjunction minimum elong morning rise desc. node retrograde min. Earth dist. opposition greatest brilliancy direct	-7684 Jan 14 j 10:37 -7684 Mar 04 j 23:38 -7684 Mar 04 j 23:28 -7684 May 30 j 23:19 -7684 Jun 06 j 15:51 -7684 Jun 18 j 03:26 -7684 Jul 19 j 17:37 -7684 Jul 19 j 17:30 -7684 Jul 20 j 01:06 -7684 Aug 30 j 09:16 -7684 Sep 09 j 17:56 -7684 Oct 09 j 04:18 -7684 Dec 26 j 00:09 -7684 Dec 27 j 05:43 -7683 Feb 03 j 19:00 -7683 Mar 17 j 16:09 -7683 May 02 j 17:35 -7683 Jul 01 j 08:35 -7683 Sep 10 j 15:43 -7683 Sep 10 j 15:43 -7683 Sep 10 j 15:43 -7683 Sep 13 j 20:03 -7683 Oct 22 j 16:07 -7683 Dec 02 j 00:40 -7683 Dec 12 j 06:43 -7682 Feb 10 j 12:43 -7682 Feb 10 j 12:43	0°升 0°Y 25°Y30'37 0°℧ 7°℧47'31 29°℧46'44 29°℧46'32 0°用 0°亞 7°亞43'10 0°瓜 0°亞 0°亞 0°亞 0°亞 6°至56'35 0°肌 0°丞 6°※53'41 30°Rゼ 28°℧21'08 26°℧556'49 27°℧04'38 17°℧49'53 26°Ծ03'46 0°ж 0°भ 0°%	1°12'10 1°12'36 0.63414 AU -2°57'34	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct desc. node evening set	-7680 Nov 15 j 18:32 -7680 Dec 23 j 16:17 -7680 Dec 30 j 12:51 -7679 Jan 20 j 00:20 -7679 Feb 02 j 12:16 -7679 Mar 17 j 12:38 -7679 May 02 j 03:55 -7679 Jun 20 j 06:34 -7679 Aug 16 j 05:14 -7679 Sep 06 j 08:04 -7679 Oct 14 j 12:39 -7679 Nov 22 j 02:21 -7679 Nov 22 j 10:16 -7679 Nov 22 j 10:16 -7679 Pec 12 j 02:27 -7678 Jan 02 j 04:13 -7678 Apr 02 j 03:02 -7678 May 19 j 13:28 -7678 Aug 09 j 12:12 -7678 Aug 18 j 16:34 -7678 Sep 17 j 01:26 -7678 Oct 25 j 14:28 -7678 Nov 18 j 21:21 -7678 Dec 04 j 01:24 -7677 Jan 17 j 20:39 -7677 Jan 17 j 20:31	1° \$\infty\$00'22 0° \$\mathbb{\text{N}}\$. 5° \$\mathbb{\text{N}}.08'11 20° \$\mathbb{\text{N}}.14'32 0° \$\napprox' \text{0° \$\mathbb{\text{N}}\$. 0° \$\mathbb{\text{N}}\$. 0° \$\mathbb{\text{N}}\$. 0° \$\mathbb{\text{N}}\$. 0° \$\mathbb{\text{N}}\$. 16° \$\mathbb{\text{V}}01'49 7° \$\mathbb{\text{V}}05'02 6° \$\mathbb{\text{Y}}57'16 5° \$\mathbb{\text{Y}}32'00 30° \$\mathbb{\text{R}}\$. 27° \$\mathbb{\text{N}}05'12 0° \$\mathbb{\text{V}}\$. 0° \$\mathbb{\text{N}}\$. 0° \$\mathbb{\text{N}}\$. 0° \$\mathbb{\text{N}}\$. 0° \$\mathbb{\text{N}}\$. 0° \$\mathbb{\text{N}}\$. 2° \$\mathbb{\text{N}}39'13 2° \$\mathbb{\text{N}}38'58	0°33'17 2.41277 AU 2°51'46 -1.5m 0.64004 AU -1°11'06 1°11'32

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style. -7677 Mar 15 i 00:03 11°る17'44 direct -7672 Jun 12 j 05:35 18° m 13'51 morning rise -7677 Apr 12 j 10:05 -7672 Jul 28 j 20:48 0∘**⊽** 0°≈≈ -7672 Sep 22 j 13:01 -7677 May 29 j 14:47 0°**₩** 0°M -7677 Jul 18 j 02:38 $0^{\circ}\Upsilon$ -7672 Nov 10 j 00:23 0°×7 4°Υ10'22 -7677 Jul 25 j 06:08 -7672 Dec 27 j 11:34 0°궁 asc. node -7671 Feb 13 j 00:55 -7677 Sep 10 j 11:17 0°8 0°≈ 24°826'01 retrograde -7677 Nov 26 j 12:14 asc. node -7671 Mar 15 j 12:35 19°≈13'12 opposition -7676 Jan 01 j 15:38 16°**8**41'15 5°21'58 -7671 Apr 01 j 13:33 0°**)**€ greatest brilliancy -7676 Jan 02 j 22:34 16°**8**12'50 -1.8m evening set -7671 Apr 06 j 12:33 3°**)** 08'41 min. Earth dist. -7676 Jan 09 j 01:39 13°**8**58'09 0.55228 AU max. Earth dist. -7671 May 11 j 00:24 25°**₭**11'14 2.65125 AU direct -7676 Feb 10 j 10:25 7°**8**19'42 -7671 May 18 j 11:19 $0^{\circ}\Upsilon$ -7676 Apr 18 j 09:57 $0^{\circ}\Pi$ 3°**Y**29'43 0°37'48 -7676 Jun 05 j 01:13 0ಂತಾ conjunction -7671 May 23 j 20:46 desc. node -7676 Jul 05 j 18:25 21°954'23 minimum elong -7671 May 23 j 19:31 3°**Y**27'42 0°37'46 -7676 Jul 16 j 17:08 $0^{\circ}\Omega$ -7671 Jul 03 j 03:42 0°8 -7676 Aug 25 j 09:11 0° m morning rise -7671 Jul 09 j 01:38 3°**8**57'24 -7676 Oct 03 j 18:44 0∘**⊽** -7671 Aug 16 j 07:22 $0^{\circ}\Pi$ -7676 Nov 12 j 23:45 0°M -7671 Sep 27 j 23:34 0ಂತಾ -7676 Dec 24 j 17:28 0°×7 -7671 Nov 08 j 12:01 $0^{\circ}\Omega$ evening set -7675 Jan 13 j 01:04 13°**х** 27′16 -7671 Dec 19 j 10:19 0° m -7675 Feb 06 i 07:45 0°궁 -7670 Jan 29 j 18:33 0°Ω desc. node -7670 Feb 26 i 03:57 19°**£**04'31 -7675 Mar 06 i 18:35 18°る56'19 -0°50'10 -7670 Mar 14 j 17:28 0°M conjunction -7675 Mar 06 j 20:18 18°る59'07 0°50'40 -7670 May 10 j 13:42 0°×7 minimum elong -7675 Mar 23 i 16:23 0°≈ -7670 Jun 10 j 03:58 5°**₹**'58'54 retrograde -7675 Mar 23 j 20:55 0°≈07'22 2.62818 AU -7670 Jul 09 j 21:41 30°RML max. Earth dist. -7675 Apr 25 j 09:38 21°≈05'29 -7670 Jul 09 j 15:03 0°**₹**05'52 0.49391 AU min. Earth dist. morning rise -7675 May 09 j 08:53 0°₩ -7670 Jul 16 j 00:25 greatest brilliancy 27°M-47'07 -2.2m -7675 Jun 10 j 23:40 20°**)** 38′05 -7670 Jul 17 j 14:08 27°M12'51 -5°54'57 asc node opposition $0^{\circ}\Upsilon$ -7675 Jun 25 j 21:26 -7670 Aug 20 j 07:46 20°MJ04'04 direct 0° 8 -7670 Oct 03 j 00:45 0°×7 -7675 Aug 13 j 03:32 -7675 Oct 02 j 02:51 $\mathbb{I}^{\circ 0}$ -7670 Dec 02 j 14:19 0°궁 0ಂತಾ -7675 Nov 27 j 17:55 -7669 Jan 23 j 06:09 0°≈ -7674 Jan 24 j 00:50 -7669 Jan 31 j 11:30 4°≈55'50 retrograde 15°930'34 asc. node -7674 Feb 25 j 05:54 -7669 Mar 13 j 12:35 0°**)**€ opposition 9°939'35 5°20'56 -7674 Feb 26 j 18:20 -7669 Apr 30 j 01:13 $0^{\circ}\Upsilon$ greatest brilliancy 9°511'37 -2.5m 10°**Y**13′21 min. Earth dist. -7674 Mar 04 j 14:18 7°\$25'11 0.42808 AU evening set -7669 May 15 j 19:33 direct -7674 Mar 31 j 23:57 2°5944'26 max. Earth dist. -7669 Jun 06 j 17:00 24°**Y**41'01 2.58373 AU desc. node -7674 May 23 j 21:50 18°9528'18 -7669 Jun 14 j 15:17 0°8 -7674 Jun 13 j 10:53 $0^{\circ}\Omega$ -7674 Jul 29 j 04:45 0° m conjunction -7669 Jul 03 j 06:55 12°841'16 1°08'26 -7674 Sep 09 j 17:35 0∘**ত** -7669 Jul 03 j 05:53 12°839'31 1°08'44 minimum elong -7674 Oct 22 j 01:49 0°M -7669 Jul 28 j 03:28 $0^{\circ}\Pi$ -7674 Dec 04 j 09:08 0°×7 -7669 Aug 21 j 15:53 17° II 31'55 morning rise -7673 Jan 18 j 02:15 0°る -7669 Sep 07 j 17:42 0ಂತಾ 25°る57'42 evening set -7673 Feb 26 i 20:48 -7669 Oct 17 j 20:34 $0^{\circ}\Omega$ -7673 Mar 05 j 03:00 0°≈ -7669 Nov 26 i 03:14 0° m -7668 Jan 04 i 09:06 0∘**⊽** -7673 Apr 16 j 13:27 27°≈12'01 -0°06'57 desc. node -7668 Jan 14 i 00:40 7°**£**17'49 conjunction -7673 Apr 16 i 13:44 27°≈12'28 0°07'17 -7668 Feb 13 i 14:42 0°M minimum elong -7673 Apr 15 j 20:01 26°≈44'11 -7668 Mar 27 j 09:01 0°×7 behind sun begin -7673 Apr 17 j 07:27 27°≈40'45 -7668 May 15 j 09:14 0°궁 behind sun end 27°≈54'25 2.66671 AU max. Earth dist. -7673 Apr 17 j 16:01 -7668 Jul 21 j 19:18 22°る08'43 retrograde -7673 Apr 20 j 22:39 0°**∀** min. Earth dist. -7668 Aug 25 j 12:27 14°る13'34 0.60451 AU -7668 Aug 30 j 11:20 asc. node -7673 Apr 28 j 17:00 4° **)** 57'29 12°る15'38 -4°01'30 opposition -1.6m -7673 Jun 02 j 02:06 26°\ 57'05 -7668 Aug 29 j 20:04 12°る30'49 morning rise greatest brilliancy $0^{\circ}\Upsilon$ -7673 Jun 06 j 20:04 -7668 Oct 06 j 21:35 3°**る**33'16 direct -7673 Jul 23 j 05:16 0°8 -7668 Dec 18 j 14:18 25°る47'00 asc. node $0^{\circ}\Pi$ -7668 Dec 27 j 02:28 0°**≈** -7673 Sep 06 j 21:50 -7673 Oct 22 j 03:58 000 -7667 Feb 19 j 13:28 0°**)**€ $0^{\circ}\Upsilon$ $0^{\circ}\Omega$ -7673 Dec 06 j 17:42 -7667 Apr 09 j 20:10 -7672 Jan 23 j 21:43 0° m -7667 May 25 j 22:21 0°8 evening set desc. node -7672 Apr 10 j 01:54 29° m 03'19 -7667 Jun 27 j 08:37 22°**8**15'29 retrograde -7672 Apr 11 j 06:55 29° m 03'54 -7667 Jul 08 j 07:35 $0^{\circ}\Pi$ 24° Mp 30'54 0.38662 AU min. Earth dist. -7672 May 09 j 01:32 max. Earth dist. -7667 Jul 12 j 16:37 3°**Д**07'22 2.47308 AU -7672 May 13 j 03:37 23° m/22'42 -2°31'42 -7667 Aug 18 j 10:28 0ಂತಾ opposition

-7672 May 12 j 16:26

greatest brilliancy

23° Mp 30'29 -2.9m

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -7900 i	n astronomical cou	inting style is the year	7901 BCE in historical c	ounting style.	
conjunction	-7667 Aug 19 j 11:24	0°9546'34	1°02'47	asc. node	-7662 Aug 10 j 22:09	7° Ƴ 53'09	
minimum elong	-7667 Aug 19 j 13:23	0°950'16	1°03'17		-7662 Sep 27 j 16:17	0° 8	
	-7667 Sep 26 j 21:44	$0^{\circ}\Omega$		retrograde	-7662 Nov 08 j 12:10	8° 8 46'30	
morning rise	-7667 Oct 16 j 15:14	15° Ω 17'40		opposition	-7662 Dec 15 j 18:36	0° 8 29'02	4°29'55
	-7667 Nov 04 j 11:42	0° m)		greatest brilliancy	-7662 Dec 16 j 15:27	0° 8 09'14	-1.6m
desc. node	-7667 Nov 30 j 19:33	20° m/31'50			-7662 Dec 17 j 01:09	30° ₹Ƴ	
	-7667 Dec 13 j 00:43	0∘ ত		min. Earth dist.	-7662 Dec 21 j 22:46	28° Y 08'30	0.59319 AU
	-7666 Jan 21 j 09:56	0°M		direct	-7661 Jan 25 j 08:57	20° Ƴ 43'29	
	-7666 Mar 03 j 13:43	0° ∡ ¹			-7661 Mar 07 j 15:28	$6^{\circ}B$	
	-7666 Apr 16 j 16:06	0°ರ			-7661 May 02 j 23:49	$\Pi^{\circ}0$	
	-7666 Jun 05 j 05:04	0° ≈			-7661 Jun 16 j 07:51	0ಂಣ	
retrograde	-7666 Aug 26 j 19:17	28° ≈ 48'03		desc. node	-7661 Jul 23 j 10:21	27°523'15	
opposition	-7666 Oct 05 j 19:22	18° ≈ 58'25	-1°11'04		-7661 Jul 26 j 21:07	$0^{\circ}\Omega$	
min. Earth dist.	-7666 Oct 04 j 13:59		0.66208 AU		-7661 Sep 03 j 22:39	0° m	
greatest brilliancy	-7666 Oct 05 j 18:31	18° ≈ 59'17	-1.4m		-7661 Oct 12 j 21:24	0∘ ⊽	
asc. node	-7666 Nov 05 j 19:03	9° ≈ 53'25	-7.1		-7661 Nov 21 j 17:12	0°M	
direct	-7666 Nov 14 j 15:31	9° ≈ 23'15		evening set	-7661 Dec 24 j 20:00	24°ML06'14	
ancer	-7665 Jan 23 j 06:03	0° \		evening sec	-7660 Jan 02 j 02:46	0° ∡ ¹	
	-7665 Mar 19 j 09:17	0° Υ			-7660 Feb 14 j 10:43	∘ੰਤ	
	-7665 May 06 j 04:14	0°8			-70001C0 14j10.43	0 0	
	-7665 Jun 19 j 00:45	0°II		conjunction	-7660 Feb 18 j 01:08	2° පි 26'03	1002/38
	-7665 Jul 30 j 03:02	0ಂಣ ೧ H		v	-7660 Feb 18 j 02:45	2°る28'46	
	3			minimum elong	,		
evening set	-7665 Aug 20 j 02:16	15°953'50		max. Earth dist.	-7660 Mar 13 j 04:27		2.59860 AU
	-7665 Sep 07 j 08:56	0° Ω			-7660 Mar 30 j 15:56	0°≈	
	-7665 Oct 15 j 16:28	0° Mp		morning rise	-7660 Apr 09 j 18:23	6°≈33'14	
desc. node	-7665 Oct 18 j 15:00	2° Mp 18'39			-7660 May 16 j 10:36	0° ∀	
				asc. node	-7660 Jun 27 j 18:08	26°) €28'01	
conjunction	-7665 Oct 20 j 17:44	3° m 58'21			-7660 Jul 03 j 11:33	0° Υ	
minimum elong	-7665 Oct 20 j 17:39	3° m 58'10	0°01'21		-7660 Aug 22 j 04:22	0°8	
behind sun begin	-7665 Oct 19 j 14:18	3° Mp 04'27			-7660 Oct 15 j 12:28	0° I I	
behind sun end	-7665 Oct 21 j 20:59	4° My 51'52		retrograde	-7660 Dec 29 j 01:54	23° Ⅱ 24'53	
max. Earth dist.	-7665 Oct 30 j 21:08	11° m 56'15	2.37953 AU	opposition	-7659 Jan 31 j 21:17	16° Ⅱ 45'27	5°59'59
	-7665 Nov 22 j 23:48	0∘ ⊽		greatest brilliancy	-7659 Feb 02 j 15:35	16° Ⅱ 09'51	-2.2m
morning rise	-7665 Dec 26 j 06:10	25° ≏ 32'42		min. Earth dist.	-7659 Feb 09 j 05:33	13° Ⅱ 57'43	0.47670 AU
	-7664 Jan 01 j 03:50	0° M ₊		direct	-7659 Mar 10 j 05:00	8° Ⅱ 36'43	
	-7664 Feb 10 j 23:04	0° ∡ ¹			-7659 May 12 j 24:00	0 \circ	
	-7664 Mar 25 j 01:21	0°ಕ		desc. node	-7659 Jun 09 j 13:46	16° © 52'27	
	-7664 May 10 j 03:12	0°≈			-7659 Jun 29 j 00:33	$0 {\circ} \Omega$	
	-7664 Jun 29 j 22:30	0°) €			-7659 Aug 09 j 20:15	O° My	
	-7664 Sep 08 j 02:08	0 ° Υ			-7659 Sep 19 j 13:29	0∘ ত	
asc. node	-7664 Sep 22 j 22:29	2° Y 25'59			-7659 Oct 30 j 18:12	0°M,	
retrograde	-7664 Sep 30 j 00:40	2° Y 44'36			-7659 Dec 12 j 06:15	0° ∡ ¹	
	-7664 Oct 20 j 12:41	30° ₹ ₩			-7658 Jan 25 j 10:07	ರ°ರ	
opposition	-7664 Nov 08 j 05:02	23°) €28'19	1°45'12	evening set	-7658 Feb 10 j 08:41	10°る34'09	
greatest brilliancy	-7664 Nov 08 j 07:46	23° ¥ 25'37	-1.4m		-7658 Mar 12 j 02:39	0° ≈	
min. Earth dist.	-7664 Nov 10 j 17:15	22°) €28'36	0.65838 AU				
direct	-7664 Dec 19 j 05:22	13° ¥ 29'04		conjunction	-7658 Apr 01 j 06:14	12°≈59'53	-0°24'45
	-7663 Feb 16 j 23:32	$0^{\circ}\mathbf{\Upsilon}$		minimum elong	-7658 Apr 01 j 07:12	13° ≈ 01'27	0°25'10
	-7663 Apr 12 j 13:43	0°8		max. Earth dist.	-7658 Apr 08 j 05:47	17° ≈ 28'46	2.65804 AU
	-7663 May 28 j 06:19	$\Pi^{\circ}0$			-7658 Apr 27 j 19:29	0°)	
	-7663 Jul 08 j 23:09	0ං ම		asc. node	-7658 May 15 j 11:09	11°) 15′40	
	-7663 Aug 17 j 09:52	$0^{\circ}\Omega$		morning rise	-7658 May 18 j 15:42	13°) (17'40	
desc. node	-7663 Sep 04 j 11:03	14° Ω 03'02			-7658 Jun 13 j 20:30	0° Υ	
	-7663 Sep 24 j 19:31	0° m/y			-7658 Jul 30 j 18:16	0°8	
evening set	-7663 Oct 24 j 03:57	22° m 58'06			-7658 Sep 15 j 13:34	0°II	
evening sec	-7663 Nov 02 j 05:12	0ಂ ರ			-7658 Nov 01 j 23:43	0°9	
	-7663 Dec 11 j 12:30	0° m .			-7658 Dec 22 j 09:52	$0 {\circ} \mathcal{U}$	
	, 505 500 11 j 12.50	↓ IIV		retrograde	-7657 Mar 12 j 20:11	28° Ω 31'10	
conjunction	-7663 Dec 26 j 00:20	10° M 47'06	-1°05'21	opposition	-7657 Apr 12 j 11:19	23°Ω25'04	1°12'24
minimum elong	-7663 Dec 25 j 22:14	10°ML43'15		greatest brilliancy		23° Ω 22'51	-2.9m
minimum clong	·	10°111643°13 0° ∡ 7	1 00 37		-7657 Apr 12 j 14:36		-2.9m 0.38111 AU
may Dorth 1: 1	-7662 Jan 21 j 10:28	0° x ′ 11° x 748′50	2 40020 411	min. Earth dist.	-7657 Apr 13 j 18:38	23° Ω 04'02	0.30111 AU
max. Earth dist.	-7662 Feb 07 j 02:29		2.49028 AU	desc. node	-7657 Apr 27 j 18:09	19° Ω 43'30	
morning rise	-7662 Feb 23 j 19:14	23° ∡ 25'06		direct	-7657 May 13 j 06:50	18° Ω 12'18	
	-7662 Mar 05 j 10:10	0° 3			-7657 Jun 27 j 22:29	0° ™	
	-7662 Apr 19 j 15:58	0° ≈			-7657 Aug 20 j 13:51	0∘ ™	
	-7662 Jun 06 j 07:46	0° ∀			-7657 Oct 05 j 23:37	0°M 0°. 7	
	-7662 Jul 27 j 10:21	0° Y			-7657 Nov 20 j 11:41	0° ∡	

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 25

•	ical year style is used: Th		•	· ·		, ,	5 25
recention, astronomi	-7656 Jan 05 j 12:28	0°궁	ii ustronomicui cou	morning rise	-7652 Sep 22 j 05:48	20°943'05	
	-7656 Feb 21 j 07:39	0° ≈		morning not	-7652 Oct 04 j 09:26	0°Ω	
evening set	-7656 Mar 22 j 09:18	19°≈07'22			-7652 Nov 12 j 04:44	0° m)	
asc. node	-7656 Apr 01 j 05:16	25°≈22'20		desc. node	-7652 Dec 17 j 16:10	27° m , 29'13	
ase. Hode	-7656 Apr 08 j 11:49	0° ∺		dese. Hode	-7652 Dec 20 j 22:32	0° ت	
max. Earth dist.	-7656 May 01 j 12:14		2.66387 AU		-7651 Jan 29 j 12:44	0° ™	
max. Latin dist.	-7030 May 01 j 12.14	14 /(41 02	2.00307 AC		-7651 Mar 12 j 00:51	0° ⊼ ¹	
conjunction	-7656 May 08 j 23:17	19° ∺ 27'54	0°21'14		-7651 Apr 26 j 02:06	0°ਤ ਹ ×	
minimum elong	-7656 May 08 j 22:32	19° H 26'40	0°21'05		-7651 Jun 18 j 17:42	0° ≈	
minimum ciong	-7656 May 25 j 08:11	0°Υ	0 21 03	retrograde	-7651 Aug 13 j 05:08	15°≈21'12	
morning rise	-7656 Jun 23 j 23:02	19° Y 16′28		min. Earth dist.	-7651 Sep 19 j 13:06		0.64656 AU
morning risc	-7656 Jul 10 j 05:22	0°8		opposition	-7651 Sep 22 j 05:35	5°≈25'33	
	-7656 Aug 23 j 20:10	0°II		greatest brilliancy	-7651 Sep 22 j 01:01	5°≈30'08	
	-7656 Oct 06 j 05:48	0°9		greatest orimaney	-7651 Oct 06 j 21:39	30°RZ	1.5111
	-7656 Nov 17 j 18:32	0°Ω		direct	-7651 Oct 31 j 06:26	26° පි 07'14	
	-7656 Dec 30 j 02:04	0° m		asc. node	-7651 Nov 22 j 07:27	28°පි51'28	
	-7655 Feb 11 j 17:53	0∘ ಹ		ase. Houe	-7651 Nov 26 j 21:06	0°≈	
desc. node	-7655 Mar 14 j 20:17	0 — 19° Ω 25'30			-7650 Feb 04 j 00:05	0° ₩	
desc. flode	-7655 Apr 03 j 15:01	0° M			-7650 Mar 27 j 20:59	0° Υ	
retrograde	-7655 May 20 j 18:29	13°ML05'53			-7650 May 13 j 19:09	0°8	
min. Earth dist.	-7655 Jun 17 j 08:46	8°ML02'10	0.44453 AU		-7650 Jun 26 j 09:42	0°II	
greatest brilliancy	-7655 Jun 23 j 17:52	5°M54'50		evening set	-7650 Jul 28 j 13:59	23° Ⅱ 22'31	
opposition	-7655 Jun 25 j 08:01	5°M22'51		evening set	-7650 Aug 06 j 11:18	0°95	
opposition	-7655 Jul 15 j 16:34	30°R <u>Ω</u>	-5 41 15	max. Earth dist.	-7650 Aug 23 j 22:38	13°9512'24	2.40108 AU
direct	-7655 Jul 27 j 10:15	29° £ 03'57		max. Earth dist.	-7650 Sep 14 j 18:37	0°Ω	2.40108 AU
direct	-7655 Aug 08 j 13:15	0° ™			-7030 Sep 14 j 10.57	0 80	
	-7655 Oct 21 j 20:19	0° ⊼ ¹		conjunction	-7650 Sep 24 j 17:47	7° Ω 44'51	0°29'42
	-7655 Dec 12 j 22:05	0° ਣ		minimum elong	-7650 Sep 24 j 17:47	7° Ω 49'18	0°30'07
	-7654 Jan 31 j 09:32	0°≈		minimum clong	-7650 Oct 23 j 03:56	0°M)	0 3007
asc. node	-7654 Feb 17 j 02:35	0 ∞ 10°≈17'12		desc. node	-7650 Nov 04 j 09:42	9° Mp 36'14	
asc. node	-7654 Mar 20 j 19:17	0° \		morning rise	-7650 Nov 28 j 11:33	28° m) 24'48	
evening set	-7654 Apr 30 j 07:40	25°) (41'13		morning risc	-7650 Nov 30 j 12:34	0° र	
evening set	-7654 May 07 j 00:25	25 γ (4115			-7649 Jan 08 j 17:27	0° ™	
max. Earth dist.	-7654 May 26 j 18:44		2.61629 AU		-7649 Feb 18 j 13:57	0° ⊼ ¹	
max. Earm dist.	-7034 May 20 J 18.44	12 31 40	2.01029 AU		-7649 Apr 02 j 21:10	0° ਠ	
conjunction	-7654 Jun 16 j 23:41	26° Ƴ 54'33	0°59'22		-7649 May 19 j 17:14	0° ≈	
minimum elong	-7654 Jun 16 j 22:16	26°Υ52'10	0°59'31		-7649 Jul 12 j 16:43	0° ∺	
minimum ciong	-7654 Jun 21 j 14:22	0°8	0 3731	retrograde	-7649 Sep 17 j 03:27	19° ∺ 44'56	
morning rise	-7654 Aug 03 j 13:27	29° 8 28'18		asc. node	-7649 Oct 10 j 12:15	16°) (09'41	
morning risc	-7654 Aug 04 j 07:33	0°Ⅱ		opposition	-7649 Oct 26 j 18:33	10° X 12'55	0°37'18
	-7654 Sep 15 j 06:05	0°9		greatest brilliancy	-7649 Oct 26 j 18:48	10° X 12'40	-1.4m
	-7654 Oct 25 j 19:18	0°N		min. Earth dist.	-7649 Oct 27 j 19:43	9° H 47'44	0.66716 AU
	-7654 Dec 04 j 13:07	0° m)		direct	-7649 Dec 06 j 11:43	0° ₩ 19'38	0.00710710
	-7653 Jan 13 j 07:15	0∘ ಹ		direct	-7648 Mar 02 j 01:31	0° Υ	
desc. node	-7653 Jan 30 j 20:37	13° ⊆ 02'01			-7648 Apr 21 j 16:09	0°8	
desc. node	-7653 Feb 23 j 06:40	0°ML			-7648 Jun 05 j 09:36	0°II	
	-7653 Apr 08 j 18:24	0° ⊼ ¹			-7648 Jul 16 j 18:32	0°©	
	-7653 Jun 06 j 00:28	0°ප			-7648 Aug 25 j 02:07	0°N	
retrograde	-7653 Jul 07 j 11:42	6°පි03'08		desc. node	-7648 Sep 21 j 05:13	21° Ω 12'18	
	-7653 Aug 06 j 05:07	30°R ✓		evening set	-7648 Sep 27 j 16:48	26° Ω 17'55	
min. Earth dist.	-7653 Aug 09 j 05:46	28° ₹ '51'36	0.56637 AU	evening sec	-7648 Oct 02 j 09:47	0° m)	
opposition	-7653 Aug 15 j 14:10	26° ₹ '23'39			-7648 Nov 09 j 17:18	0∘ <mark>ಹ</mark>	
greatest brilliancy	-7653 Aug 14 j 13:42	26° ⊀ ¹47'27			70.01.01 09 j 17.10	v —	
direct	-7653 Sep 20 j 17:53	18° ∡ 11'53		conjunction	-7648 Nov 30 j 21:12	16° ≏ 19'07	-0°48'08
	-7653 Nov 08 j 19:15	0°ਰ		minimum elong	-7648 Nov 30 j 17:56	16° £ 12'52	
asc. node	-7652 Jan 05 j 03:22	28° ට 20'12		mana crong	-7648 Dec 18 j 22:07	0°M	0 1011
	-7652 Jan 08 j 03:32	0° ≈		max. Earth dist.	-7647 Jan 17 j 05:35		2.43971 AU
	-7652 Feb 28 j 19:02	0°) €			-7647 Jan 28 j 17:39	0° ∡ 7	
	-7652 Apr 17 j 04:48	0°Υ		morning rise	-7647 Feb 02 j 08:32	3° ∡ 18′20	
	-7652 Jun 02 j 00:40	0°8			-7647 Mar 12 j 16:26	ರ°0	
evening set	-7652 Jun 09 j 14:28	5° 8 07'10			-7647 Apr 27 j 02:20	0° ≈	
max. Earth dist.	-7652 Jun 26 j 04:49	16° 8 30'37	2.52046 AU		-7647 Jun 14 j 12:11	0°) €	
	-7652 Jul 15 j 10:21	0°II			-7647 Aug 07 j 10:27	0° Υ	
	,			asc. node	-7647 Aug 27 j 14:10	9° Ƴ 32'51	
conjunction	-7652 Jul 30 j 08:02	10° Ⅱ 40′21	1°11'11	retrograde	-7647 Oct 23 j 06:58	24° Ƴ 22'42	
minimum elong	-7652 Jul 30 j 08:37		1°11'40	opposition	-7647 Nov 30 j 10:57	15° Ƴ 38'45	3°29'09
٥	-7652 Aug 25 j 16:55	0°ಅ		greatest brilliancy	-7647 Nov 30 j 22:56	15° Ƴ 27'07	
	5 ,				,		

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style. 13°**Υ**47'38 0.62576 AU min. Earth dist. -7647 Dec 05 j 05:28 evening set -7641 Mar 07 j 23:47 4°≈51'04 direct -7646 Jan 10 j 10:54 5°Y41'39 -7641 Apr 16 j 08:25 0°**₩** -7646 Mar 25 j 05:09 0°8 -7641 Apr 18 j 22:05 1°**H**38'24 asc node $\mathbb{I}^{\circ 0}$ -7641 Apr 23 j 02:51 -7646 May 13 j 13:45 max. Earth dist. 4°**)** 19′13 2.66809 AU -7646 Jun 25 j 10:12 0000 -7646 Aug 04 j 09:09 $0^{\circ}\Omega$ -7641 Apr 25 j 04:04 conjunction 5°**)** 37'46 0°03'36 3°**Ω**40'09 -7641 Apr 25 j 03:54 desc. node -7646 Aug 09 j 03:44 minimum elong 5°**X**37'31 0°03'20 -7646 Sep 12 j 02:07 -7641 Apr 24 j 08:42 0° m behind sun begin 5°**₩**06'53 -7641 Apr 25 j 23:06 -7646 Oct 20 j 17:44 0∘ଫ behind sun end 6°****08'09 0° M $0^{\circ}\Upsilon$ -7646 Nov 29 j 06:47 -7641 Jun 02 j 05:00 5°**Y**15'49 evening set -7646 Dec 02 j 12:14 2° Mc24'05 morning rise -7641 Jun 10 j 08:59 -7641 Jul 18 j 09:24 -7645 Jan 09 j 10:03 0°×7 0°8 -7641 Sep 01 j 15:35 $\Pi^{\circ}0$ conjunction -7645 Jan 29 j 17:20 14°**≯**18'11 -1°10'02 -7641 Oct 16 j 02:46 0ಂತಾ minimum elong -7645 Jan 29 j 18:05 14°**∡**°19′30 1°10'30 -7641 Nov 29 j 06:57 $0^{\circ}\Omega$ -7645 Feb 21 j 13:02 0°정 -7640 Jan 13 j 08:16 0° m max. Earth dist. -7645 Mar 02 j 07:59 5°**る**56'39 2.56134 AU -7640 Mar 03 j 21:48 0∘**⊽** morning rise -7645 Mar 25 j 02:52 21°**る**06'55 desc. node -7640 Mar 31 j 14:37 11°**≏**43'48 -7645 Apr 07 j 16:33 retrograde -7640 Apr 26 j 19:09 16°**♀**07'05 -7645 May 24 j 16:06 0°**)**€ min. Earth dist. -7640 May 23 j 16:45 11°**≏**34'59 0.40195 AU -7645 Jul 12 j 11:53 $0^{\circ}\Upsilon$ opposition -7640 May 29 j 20:46 9°**2**45'43 -4°09'10 -7645 Jul 15 i 11:09 1°Y46'42 greatest brilliancy -7640 May 28 i 20:45 10°**♀**03'34 -2.8m asc. node -7645 Sep 02 i 13:42 0°8 direct -7640 Jun 29 i 12:11 4°**£**17'31 -7645 Nov 08 j 18:30 $\mathbb{I}^{\circ 0}$ -7640 Sep 12 j 17:24 0°M -7645 Dec 07 j 20:13 4°**Ⅱ**34'08 -7640 Nov 03 j 08:27 0°×7 retrograde -7644 Jan 03 j 22:39 30°R8 -7640 Dec 21 j 23:33 0°궁 -7644 Jan 12 j 05:13 27°**8**10'51 5°44'12 -7639 Feb 08 j 02:06 0°≈ opposition -7644 Jan 13 j 17:40 -7639 Mar 05 j 17:41 greatest brilliancy 26°**8**38'12 -2.0m 16°≈03'31 asc. node -7644 Jan 20 j 04:07 -7639 Mar 27 j 21:21 min. Earth dist. 24°**8**20'17 0.52631 AU 0°**)**€ -7644 Feb 20 j 07:23 18°**8**09'35 -7639 Apr 15 j 04:37 11°\ 35'56 direct evening set -7639 May 13 j 21:32 -7644 Apr 06 j 07:22 0° $0^{\circ}\Pi$ -7644 May 28 j 15:45 0ಂತಾ -7639 May 16 j 17:25 1°Υ49'46 2.64103 AU max. Earth dist. -7644 Jun 26 j 04:47 19°9540'35 desc. node 12°**Υ**07'22 0°46'31 -7644 Jul 10 j 11:30 -7639 Jun 01 j 12:45 0 $^{\circ}\Omega$ conjunction -7644 Aug 19 j 16:49 -7639 Jun 01 j 11:21 12°**Υ**'05'05 0°46'33 0° m minimum elong -7644 Sep 28 j 10:52 -7639 Jun 28 j 13:06 0∘**⊽** 0°8 -7644 Nov 07 j 22:28 -7639 Jul 18 j 01:10 13°**8**09'25 0°M morning rise -7644 Dec 19 j 21:09 0°**√** -7639 Aug 11 j 12:55 $\Pi^{\circ}0$ -7643 Jan 23 j 17:57 24°**₹**00'46 -7639 Sep 22 j 22:15 0ಂತಾ evening set -7643 Feb 01 j 14:58 0°ರ -7639 Nov 03 j 01:20 $0^{\circ}\Omega$ -7639 Dec 13 j 11:30 0° m -7643 Mar 16 j 07:37 28°る13'08 -0°41'28 -7638 Jan 23 j 01:58 conjunction 0°Ω -7643 Mar 16 j 09:09 28°る15'37 0°41'56 -7638 Feb 16 j 14:25 17°**♀**36'53 minimum elong desc. node -7643 Mar 19 j 01:19 -7638 Mar 06 j 12:03 0°M max. Earth dist. -7643 Mar 29 j 17:36 6°≈55'17 2.64113 AU -7638 Apr 24 j 09:23 0°×7 morning rise -7643 May 04 i 00:18 29°≈33'14 retrograde -7638 Jun 20 j 15:16 17°**∡**751'41 -7643 May 04 j 17:06 0°**∀** min. Earth dist. -7638 Jul 21 i 06:21 11°**₹**29'52 0.52102 AU asc. node -7643 Jun 01 i 05:04 17° ****28'13 greatest brilliancy -7638 Jul 27 j 09:15 9°**х** 12'47 -2.0m $0^{\circ}\Upsilon$ -7643 Jun 21 j 00:23 opposition -7638 Jul 28 j 18:58 8°**х** 41'14 -5°42'07 -7643 Aug 07 j 16:37 0°8 -7638 Sep 01 j 11:02 1°**х** 07'46 direct -7643 Sep 25 j 05:16 $0^{\circ}II$ -7638 Nov 24 j 21:58 0°궁 -7643 Nov 15 j 20:13 0ಂತಾ -7637 Jan 17 j 14:00 0°≈ -7642 Feb 05 j 08:36 $0^{\circ}\Omega$ -7637 Jan 21 j 17:37 2°≈26'04 asc node 0°**Ω**06'11 retrograde -7642 Feb 09 j 11:01 -7637 Mar 08 j 13:16 0°) $0^{\circ}\Upsilon$ -7642 Feb 13 j 13:11 30°R95 -7637 Apr 25 j 08:49 -7637 May 24 j 23:20 19°**Y**16′29 -7642 Mar 12 j 19:37 24°540'06 4°19'43 opposition evening set greatest brilliancy -7642 Mar 13 j 21:48 -7637 Jun 10 j 01:12 0°8 24°9521'16 -2.7m 0.40522 AU -7637 Jun 13 j 16:35 2°**8**27'19 2.56305 AU min. Earth dist. -7642 Mar 18 j 18:20 22°958'01 max. Earth dist. direct -7642 Apr 14 j 22:35 18°9529'09 23°**9**55'42 -7637 Jul 13 j 01:44 22°**8**38'39 1°11'20 desc. node -7642 May 14 j 09:59 conjunction

-7637 Jul 13 j 01:10

-7637 Jul 23 j 12:56

-7637 Sep 01 j 18:28

-7637 Sep 03 j 00:36

-7637 Oct 12 j 23:35

-7637 Nov 21 j 01:41

-7637 Dec 30 j 02:05

minimum elong

morning rise

22°**8**37'40 1°11'42

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-7642 Jul 20 j 11:56

-7642 Sep 02 j 21:35

-7642 Oct 16 j 04:51

-7642 Nov 29 j 02:12

-7641 Jan 13 j 04:16

-7641 Feb 28 j 10:19

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style. desc. node -7636 Jan 04 j 11:12 4°**£**06'04 direct -7632 Dec 27 j 05:11 21°**)** 38'13 -7636 Feb 08 j 00:14 0°M -7631 Feb 05 j 06:47 $0^{\circ}\Upsilon$ -7636 Mar 21 j 03:21 0°×7 -7631 Apr 06 j 03:33 0°8 -7636 May 07 j 01:04 0°궁 -7631 May 22 j 19:38 $0^{\circ}\Pi$ -7631 Jul 03 j 20:40 -7636 Jul 16 j 18:32 000 0°≈ -7636 Jul 30 j 04:40 -7631 Aug 12 j 10:58 $0^{\circ}\Omega$ retrograde 1°≈09'32 -7636 Aug 12 j 02:29 30°Ŗる desc. node -7631 Aug 25 j 21:15 10°**Ω**24'57 22°る52'42 0.62199 AU -7636 Sep 03 j 21:37 -7631 Sep 19 j 22:32 min. Earth dist. 0° m -7636 Sep 08 j 01:00 -7631 Oct 28 j 09:25 opposition 21°る13'27 -3°25'05 0∘ಹ greatest brilliancy -7636 Sep 07 j 14:14 21°る24'12 -1.6m evening set -7631 Nov 07 j 22:41 8°**ഫ**08'19 direct -7636 Oct 16 j 02:04 12°る16'39 -7631 Dec 06 j 17:47 0°M -7636 Dec 08 j 21:13 25°る48'33 asc. node -7630 Jan 08 j 07:38 -7636 Dec 18 j 09:57 0°≈ conjunction 23°M58'34 -1°09'54 -7635 Feb 13 j 18:11 0°**)**€ minimum elong -7630 Jan 08 j 06:42 23°M56'53 1°10'17 $0^{\circ}\Upsilon$ -7635 Apr 04 j 19:20 -7630 Jan 16 j 16:41 0°**⊼** -7635 May 21 j 04:15 0° 8 max. Earth dist. -7630 Feb 16 j 10:20 21°**✗**36′02 2.51738 AU -7635 Jul 03 j 15:49 $0^{\circ}II$ -7630 Feb 28 j 16:24 0°정 evening set -7635 Jul 08 j 04:23 3°**Ⅱ**13'30 morning rise -7630 Mar 07 j 00:36 4°る18'02 max. Earth dist. -7635 Jul 24 j 17:57 15°**Ⅱ**11'56 2.44637 AU -7630 Apr 14 j 20:07 0°≈ -7635 Aug 13 j 18:40 -7630 Jun 01 j 03:54 0°) -7630 Jul 21 j 04:35 $0^{\circ}\Upsilon$ conjunction -7635 Aug 31 j 21:44 13°9540'06 0°53'37 asc. node -7630 Aug 01 i 04:11 6°Y15'26 -7635 Sep 01 i 00:16 13°9544'55 0°54'07 -7630 Sep 15 i 19:09 0°8 minimum elong -7635 Sep 22 i 04:47 $0^{\circ}\Omega$ -7630 Nov 18 j 12:20 17°857'17 retrograde -7635 Oct 30 i 17:05 0° m -7630 Dec 25 j 04:26 9°857'07 5°00'54 opposition -7635 Oct 31 j 13:59 0° m 40'54 -7630 Dec 26 j 06:57 9°**8**32'21 -1.7m morning rise greatest brilliancy -7635 Nov 21 j 06:05 16° m 50'36 -7629 Jan 01 j 01:49 7°**8**22'52 0.57167 AU desc. node min. Earth dist. -7635 Dec 08 j 04:00 0∘**⊽** -7629 Feb 03 j 09:39 0°822'48 direct -7634 Jan 16 j 10:41 0°M -7629 Apr 25 j 04:17 $0^{\circ}II$ -7634 Feb 26 j 10:13 0°×7 -7629 Jun 10 j 03:40 000 -7634 Apr 11 j 02:26 0°정 -7629 Jul 13 j 22:49 24°930'33 desc. node -7634 May 29 j 06:24 -7629 Jul 21 j 06:58 0°22 0 $^{\circ}\Omega$ -7629 Aug 29 j 16:02 -7634 Jul 30 j 05:21 0°**)**€ 0° m -7634 Sep 03 j 14:09 6°\ 46'13 -7629 Oct 07 j 19:42 0∘Ω retrograde 0°M -7634 Oct 05 j 23:39 -7629 Nov 16 j 19:18 30°R≈ 27°**≈**01'53 -0°31'14 -7634 Oct 13 j 12:00 -7629 Dec 28 j 07:56 0°**∡**7 opposition 5°**х¹**49'04 -7634 Oct 13 j 12:03 greatest brilliancy 27°**≈**01'51 -1.4m evening set -7628 Jan 05 j 14:20 min. Earth dist. -7634 Oct 13 j 02:16 27°≈11'40 0.66648 AU -7628 Feb 09 j 17:55 0°ರ asc. node -7634 Oct 27 j 02:24 21°≈53'07 direct -7634 Nov 22 j 16:51 17°≈18'59 conjunction -7628 Feb 28 j 08:54 12°る29'04 -0°55'53 -7633 Jan 13 j 13:38 0°**)**€ minimum elong -7628 Feb 28 j 10:38 12°る31'57 0°56'23 -7633 Mar 13 j 09:37 $0^{\circ}\Upsilon$ -7628 Mar 19 j 14:32 25°る49'39 2.61598 AU max. Earth dist. -7633 May 01 j 00:12 0° 8 -7628 Mar 25 j 23:53 0°**≈** -7633 Jun 14 j 03:38 $\mathbb{I}^{\circ 0}$ -7628 Apr 18 j 20:38 15°≈25'43 morning rise -7633 Jul 25 j 08:16 0ಂತಾ -7628 May 11 j 16:28 0°**)**€ -7633 Sep 02 j 22:32 0°Ω15'00 -7628 Jun 17 j 22:25 23°**)** 28'17 evening set asc. node -7628 Jun 28 i 09:24 $0^{\circ}\Upsilon$ -7633 Sep 02 j 14:49 $0^{\circ}\Omega$ desc. node -7633 Oct 08 i 23:57 28°**Ω**28'48 -7628 Aug 16 j 04:25 0°8 -7633 Oct 10 j 22:21 0° m -7628 Oct 06 j 14:47 $0^{\circ}II$ -7628 Dec 10 i 02:24 0ಂತಾ -7633 Nov 05 i 01:47 19° m 44'23 -0°20'10 -7627 Jan 12 i 05:01 5°952'43 conjunction retrograde -7633 Nov 04 i 23:56 19° Mp 40'46 0°20'00 -7627 Feb 13 j 02:20 30°RⅡ minimum elong -7633 Nov 18 j 05:23 0∘**⊽** -7627 Feb 14 j 03:35 29°II39'51 5°46'20 opposition 29°**Ⅱ**07'02 -2.4m max. Earth dist. -7633 Dec 12 j 08:13 18°**♀**35'46 2.39359 AU greatest brilliancy -7627 Feb 15 j 20:25 -7633 Dec 27 j 09:04 0°M min. Earth dist. -7627 Feb 22 j 04:00 27°**I**I06'23 0.44918 AU 22°**Ⅱ**09'46 morning rise -7632 Jan 10 j 03:37 10°ML17'38 direct -7627 Mar 22 j 02:38 -7632 Feb 06 j 03:29 0°×7 -7627 Apr 26 j 22:28 000 -7632 Mar 20 j 02:55 0°る desc. node -7627 May 31 j 02:08 17°5518'13 -7632 May 04 j 20:26 0°≈ -7627 Jun 20 j 11:08 $0^{\circ}\Omega$ -7632 Jun 23 j 11:34 0°\ -7627 Aug 03 j 00:47 0° m $0^{\circ}\Upsilon$ -7627 Sep 13 j 14:36 0∘**⊽** -7632 Aug 22 j 11:29 asc. node -7632 Sep 13 j 05:31 7°**Y**15′22 -7627 Oct 25 j 08:13 0°M retrograde -7632 Oct 08 j 05:47 10°**Y**44'37 -7627 Dec 07 j 05:09 0°**∡**7 opposition -7632 Nov 16 j 02:52 1°**Y**38'43 2°23'54 -7626 Jan 20 j 14:49 0°궁 greatest brilliancy -7632 Nov 16 j 08:14 1°**Y**33'26 -1.4m evening set -7626 Feb 19 j 22:35 19°**る**56'08 min. Earth dist. -7632 Nov 19 j 10:44 0°Υ20'01 0.64950 AU -7626 Mar 07 j 10:50 0°**≈**

-7632 Nov 20 j 07:09

30°₽**,**₩

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 28 Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -7900 i	n astronomical cou	inting style is the year	7901 BCE in historical co	ounting style.	
conjunction	-7626 Apr 10 j 02:52	21° ≈ 38′26	-0°14'29		-7621 Apr 01 j 10:09	0°⊀	
minimum elong	-7626 Apr 10 j 03:27	21° ≈ 39′22	0°14'50		-7621 May 22 j 15:21	0° ට	
behind sun begin	-7626 Apr 09 j 20:41	21° ≈ 28'33		retrograde	-7621 Jul 16 j 10:32	15° る 51'44	
behind sun end	-7626 Apr 10 j 10:12	21° ≈ 50′11		min. Earth dist.	-7621 Aug 19 j 07:12		0.58839 AU
max. Earth dist.	-7626 Apr 13 j 19:50	24° ≈ 00'44	2.66384 AU	opposition	-7621 Aug 24 j 21:02	6° ප 03'24	
	-7626 Apr 23 j 04:44	0°)		greatest brilliancy	-7621 Aug 24 j 01:56	6° る 22'14	-1.7m
asc. node	-7626 May 05 j 15:35	7° ¥ 57'08			-7621 Sep 11 j 15:23	30°₹ ⋌ 7	
morning rise	-7626 May 26 j 23:26	21°) 34′21		direct	-7621 Sep 30 j 18:04	27° ∡ 33'47	
	-7626 Jun 09 j 03:31	0° Υ			-7621 Oct 21 j 05:39	0°ප	
	-7626 Jul 25 j 18:15	0°B		asc. node	-7621 Dec 26 j 10:44	26°る56'08	
	-7626 Sep 09 j 21:47	0°II			-7620 Jan 01 j 07:13	0° ≈	
	-7626 Oct 25 j 23:37	0°©			-7620 Feb 23 j 10:35	0°) €	
	-7626 Dec 12 j 03:43	0° N			-7620 Apr 12 j 08:37	0° Υ	
	-7625 Feb 02 j 22:14	0° m)			-7620 May 28 j 09:11	0°8	
retrograde	-7625 Mar 30 j 07:30	16° Mp 04'45		evening set	-7620 Jun 19 j 13:26	15° 8 06'16	2 40461 444
desc. node	-7625 Apr 18 j 06:06	13° Mp 52'23	0.20021 ATT	max. Earth dist.	-7620 Jul 05 j 02:25	25° 8 57'09	2.49461 AU
min. Earth dist.	-7625 Apr 28 j 14:41	11° Mp 16'13			-7620 Jul 10 j 19:46	$\Pi^{\circ}0$	
opposition	-7625 Apr 30 j 10:26	10° Mp 46'41			7(20 4 10:12.22	220 T 12122	1007121
greatest brilliancy	-7625 Apr 30 j 07:56	10° Mp 48'23	-3.0m	conjunction	-7620 Aug 10 j 12:32	22° I 12'22	
direct	-7625 May 30 j 12:39	5° m/43'33		minimum elong	-7620 Aug 10 j 13:55	22° I 14'54	1,08,01
	-7625 Aug 09 j 14:22	ია ო			-7620 Aug 21 j 01:09	0°©	
	-7625 Sep 28 j 16:04	0°M 0°. ₹			-7620 Sep 29 j 15:09	0°N	
	-7625 Nov 14 j 14:05	0°♂ 5°0		morning rise	-7620 Oct 05 j 16:35	4° Ω 40'06	
	-7625 Dec 31 j 07:41	0°≈		desc. node	-7620 Nov 07 j 07:34	0° Mp 23° Mp 54'18	
aga mada	-7624 Feb 16 j 11:56			desc. node	-7620 Dec 08 j 01:06	-	
asc. node	-7624 Mar 22 j 10:27	22°≈07'20 27°≈37'32			-7620 Dec 15 j 22:13	0° I ľ 0° 亞	
evening set	-7624 Mar 31 j 02:47 -7624 Apr 03 j 20:34	2/ ≈ 3/32 0° H			-7619 Jan 24 j 08:33 -7619 Mar 06 j 14:16	0° ⊼ 7	
max. Earth dist.	-7624 Apr 03 j 20.34 -7624 May 07 j 01:49		2.65793 AU		-7619 Mar 00 j 14.10	0°중	
max. Earm dist.	-7024 May 07 J 01.49	21 /(1140	2.03793 AU		-7619 Jun 09 j 15:35	0°≈	
conjunction	-7624 May 17 j 12:27	27° ¥ 55'03	0°31'02	retrograde	-7619 Aug 21 j 02:16	0 ∞ 23°≈34'15	
minimum elong	-7624 May 17 j 11:23	27° H 53'20	0°30'57	min. Earth dist.	-7619 Sep 28 j 06:14	23 ≈34 13 14°≈26'21	0.65636 AU
minimum clong	-7624 May 20 j 17:52	27 γ (33 20	0 3037	opposition	-7619 Sep 30 j 02:48	13°≈41'29	
morning rise	-7624 Jul 02 j 13:33	28° Y ′01'17		greatest brilliancy	-7619 Sep 30 j 02:48	13°≈43'37	
morning rise	-7624 Jul 05 j 13:01	0°8		direct	-7619 Nov 08 j 14:37	4°≈13'11	-1.4111
	-7624 Aug 18 j 22:08	0°II		asc. node	-7619 Nov 12 j 15:21	4°≈19'14	
	-7624 Sep 30 j 22:18	0°9		ase. node	-7618 Jan 27 j 18:46	0°) €	
	-7624 Nov 11 j 20:57	0°N			-7618 Mar 22 j 09:50	0° Υ	
	-7624 Dec 23 j 08:06	0° m)			-7618 May 08 j 20:55	0°8	
	-7623 Feb 03 j 10:47	0∘ ⊽			-7618 Jun 21 j 16:11	0°II	
desc. node	-7623 Mar 05 j 08:29	20° ♀ 07'30			-7618 Aug 01 j 19:15	0 . ಲ	
acoc. noue	-7623 Mar 21 j 05:10	0°M		evening set	-7618 Aug 10 j 00:33	6°911'03	
retrograde	-7623 Jun 01 j 17:10	26°M54'59		evening see	-7618 Sep 10 j 02:20	0°Ω	
min. Earth dist.	-7623 Jun 30 j 06:08	21°M25'30	0.47147 AU	max. Earth dist.	-7618 Sep 22 j 05:23		2.38329 AU
greatest brilliancy	-7623 Jul 06 j 18:17	19°ML08'57	-2.3m		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, 00	
opposition	-7623 Jul 08 j 09:39	18°MJ34'20		conjunction	-7618 Oct 09 j 04:30	22° Ω 43'33	0°12'32
direct	-7623 Aug 10 j 09:21	11°ML47'20		minimum elong	-7618 Oct 09 j 05:38	22° Ω 45'47	0°12'53
	-7623 Oct 11 j 16:23	0° ∡ ¹		behind sun begin	-7618 Oct 08 j 12:47	22° Ω 12'44	
	-7623 Dec 06 j 11:50	0°ರ		behind sun end	-7618 Oct 09 j 22:29	23° Ω 18'51	
	-7622 Jan 26 j 02:21	0° ≈			-7618 Oct 18 j 10:47	0° m	
asc. node	-7622 Feb 07 j 08:32	7° ≈ 26'35		desc. node	-7618 Oct 25 j 20:26	5° m 48'57	
	-7622 Mar 15 j 23:30	0° ∀			-7618 Nov 25 j 18:11	0∘ ত	
	-7622 May 02 j 09:14	$0^{\circ}\mathbf{\Upsilon}$		morning rise	-7618 Dec 14 j 08:04	14° £ 21'31	
evening set	-7622 May 09 j 03:58	4° Y 22'47		-	-7617 Jan 03 j 21:30	0° M ,	
max. Earth dist.	-7622 Jun 02 j 01:38	20° Y ′02'07	2.59911 AU		-7617 Feb 13 j 15:54	0° ∡ ¹	
	-7622 Jun 17 j 00:07	9° 8			-7617 Mar 28 j 18:13	0°ප	
					-7617 May 14 j 00:52	0° ≈	
conjunction	-7622 Jun 26 j 05:05	6° 8 13'05	1°05'09		-7617 Jul 04 j 18:49	0°)	
minimum elong	-7622 Jun 26 j 03:51	6° 8 10'59	1°05'23	retrograde	-7617 Sep 25 j 02:10	27°) €38'13	
-	-7622 Jul 30 j 15:23	$0^{\circ}\Pi$		asc. node	-7617 Sep 30 j 19:12	27° ∺ 25'39	
morning rise	-7622 Aug 13 j 16:14	9° Ⅱ 56'30		opposition	-7617 Nov 03 j 11:53	18°) 14'35	1°16'52
	-7622 Sep 10 j 10:03	0ಂತಾ		greatest brilliancy	-7617 Nov 03 j 13:12	18°) 13′16	-1.4m
	-7622 Oct 20 j 17:51	$0^{\circ}\Omega$		min. Earth dist.	-7617 Nov 05 j 08:51	17°) €29'48	0.66358 AU
	-7622 Nov 29 j 05:30	0° m		direct	-7617 Dec 14 j 09:40	8° 升 17'16	
	-7621 Jan 07 j 16:00	0∘ ⊽			-7616 Feb 23 j 05:44	0 ° Υ	
desc. node	-7621 Jan 21 j 06:11	10° ≙ 12'34			-7616 Apr 15 j 22:37	9° 8	
	-7621 Feb 17 j 03:24	0° M ₊			-7616 May 31 j 06:05	$\Pi^{\circ}0$	

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 29

5			•	//	7901 BCE in historical c	, ,	<i>5 2)</i>
recention, astronom	-7616 Jul 11 j 20:31	0°99	ii ustronomicui coc	max. Earth dist.	-7611 Apr 04 j 10:25		2.65152 AU
	-7616 Aug 20 j 06:25	0°N		man. Bartir dist.	-7611 Apr 30 j 01:34	0° ∀	2.00102110
desc. node	-7616 Sep 11 j 16:04	17° Ω 28'08		morning rise	-7611 May 12 j 11:53	7° ¥ 55'30	
desc. Hode	-7616 Sep 27 j 15:20	0° m)		asc. node	-7611 May 22 j 09:35	14° X 13'51	
evening set	-7616 Oct 12 j 15:02	11° m) 45'57		ase. Hode	-7611 Jun 16 j 04:52	0° Υ	
evening set	-7616 Nov 04 j 23:35	0∘ ರ			-7611 Aug 02 j 10:04	0°8	
	-7616 Dec 14 j 04:44	0° ™			-7611 Sep 18 j 21:00	0°II	
	-7010 Dec 14 j 04.44	O IIG			-7611 Nov 06 j 17:23	0°©	
conjunction	-7616 Dec 15 j 08:36	0°M52'20	-0°50'21		-7611 Dec 31 j 15:15	0°Ω	
minimum elong	-7616 Dec 15 j 05:45	0°M46'59		retrograde	-7610 Feb 27 j 00:18	16° Ω 05'06	
minimum ciong	-7615 Jan 24 j 00:20	0° ⊼ ¹	0 3932	opposition	-7610 Mar 29 j 17:11		2°44'35
max. Earth dist.	-7615 Jan 29 j 23:42		2.46770 AU	greatest brilliancy	-7610 Mar 30 j 05:40	10° Ω 47'02	
morning rise	,	15° x 28'37	2.40770 AU	min. Earth dist.	-	9° Ω 55'39	0.38868 AU
morning rise	-7615 Feb 14 j 20:45 -7615 Mar 07 j 21:54	13 メ ・28 37			-7610 Apr 02 j 08:46	5° Ω 22'02	0.38808 AU
	-7615 Apr 22 j 03:45	0°≈		direct desc. node	-7610 Apr 30 j 10:49 -7610 May 04 j 22:11	5° Ω 30'02	
		0 ≈ 0° ∺		desc. Hode		0° m)	
	-7615 Jun 09 j 00:42	0° Υ			-7610 Jul 09 j 08:00	0∘ ट ० ाक्र	
1-	-7615 Jul 31 j 00:46				-7610 Aug 26 j 06:11		
asc. node	-7615 Aug 17 j 19:21	9° Y 14'42			-7610 Oct 09 j 23:40	0°M√	
. 1	-7615 Oct 09 j 11:52	0°8			-7610 Nov 23 j 15:34	0° ∡ ¹	
retrograde	-7615 Nov 01 j 09:42	2° 8 56'11			-7609 Jan 08 j 04:22	0° ට	
***	-7615 Nov 22 j 19:16	30° ₹ Υ	400 4142		-7609 Feb 23 j 16:46	0° ≈	
opposition	-7615 Dec 09 j 02:18	24° Y 26′21	4°04'43	evening set	-7609 Mar 16 j 21:16	13°≈31'38	
greatest brilliancy	-7615 Dec 09 j 19:06	24°Υ10'13	-1.6m	asc. node	-7609 Apr 09 j 03:13	28°≈20'19	
min. Earth dist.	-7615 Dec 14 j 15:59	22°Υ18'06	0.60891 AU	P. 4. P.	-7609 Apr 11 j 17:49	0° ∀	0.66670.444
direct	-7614 Jan 18 j 22:15	14° Y 34'12		max. Earth dist.	-7609 Apr 28 j 13:25	10°) 43′43	2.66678 AU
	-7614 Mar 15 j 14:00	0° B			# coo > c	1.40)(0011.5	0010155
	-7614 May 07 j 03:54	0°II		conjunction	-7609 May 03 j 16:23	14° ₩ 00'15	0°13'55
	-7614 Jun 19 j 19:56	0°©		minimum elong	-7609 May 03 j 15:52	13° ¥ 59′26	0°13'43
desc. node	-7614 Jul 30 j 14:46	0° Ω 22'44		behind sun begin	-7609 May 03 j 06:02	13°) 43′43	
	-7614 Jul 30 j 02:51	0 $^{\circ}\Omega$		behind sun end	-7609 May 04 j 01:42	14°) 15′09	
	-7614 Sep 07 j 00:26	0° m)			-7609 May 28 j 14:22	0° Υ	
	-7614 Oct 15 j 19:20	0∘ 亚		morning rise	-7609 Jun 18 j 17:07	13° Y 40′33	
	-7614 Nov 24 j 11:00	0° M ,			-7609 Jul 13 j 15:08	0°8	
evening set	-7614 Dec 15 j 10:53	15°M26'34			-7609 Aug 27 j 12:45	0°II	
	-7613 Jan 04 j 16:33	0° ∡ ¹			-7609 Oct 10 j 09:10	0ංම	
		-			-7609 Nov 22 j 13:04	0 $^{\circ}$ Ω	
conjunction	-7613 Feb 09 j 23:17	25° ∡ 18'01			-7608 Jan 04 j 19:31	0° m)	
minimum elong	-7613 Feb 10 j 00:38	25° ∡ ′20′20	1°06'59		-7608 Feb 19 j 08:16	0∘ ত	
	-7613 Feb 16 j 20:48	0°₹		desc. node	-7608 Mar 22 j 00:32	17° ≙ 55'40	
max. Earth dist.	-7613 Mar 09 j 08:10		2.58284 AU		-7608 Apr 22 j 12:19	0° M	
morning rise	-7613 Apr 03 j 19:38	0° ≈ 31'58		retrograde	-7608 May 10 j 20:53	2°M17'26	
	-7613 Apr 03 j 00:01	0° ≈			-7608 May 29 j 00:56	30° ₹ Ω	
	-7613 May 19 j 19:27	0° ∀		min. Earth dist.	-7608 Jun 06 j 22:43	27° £ 31'30	0.42396 AU
asc. node	-7613 Jul 05 j 15:57	29° ∺ 06'39		greatest brilliancy	-7608 Jun 12 j 23:27	25° £ 36'55	
	-7613 Jul 07 j 02:54	0° Y		opposition	-7608 Jun 14 j 09:31	25° ≏ 09'42	-5°13'47
	-7613 Aug 26 j 15:36	0°8		direct	-7608 Jul 15 j 18:39	19° ≏ 14'20	
	-7613 Oct 23 j 05:31	Π °0			-7608 Aug 29 j 16:42	0° M	
retrograde	-7613 Dec 20 j 00:51	15° Ⅱ 22'19			-7608 Oct 26 j 21:45	0° ∡ ¹	
opposition	-7612 Jan 23 j 13:33	8° Ⅱ 22'14			-7608 Dec 16 j 05:13	0°ಕ	
greatest brilliancy	-7612 Jan 25 j 06:06	7° Ⅱ 46'58	-2.1m		-7607 Feb 03 j 00:50	0° ≈	
min. Earth dist.	-7612 Jan 31 j 19:54	5° Ⅱ 30′28	0.49934 AU	asc. node	-7607 Feb 24 j 00:03	13° ≈ 00'48	
	-7612 Feb 25 j 04:26	30° ₹ 8			-7607 Mar 23 j 03:56	0° ℋ	
direct	-7612 Mar 01 j 18:07	29° 8 47'00		evening set	-7607 Apr 23 j 20:16	20°) 04'11	
	-7612 Mar 07 j 09:00	Π $^{\circ}0$			-7607 May 09 j 07:18	0 ° $\mathbf{\gamma}$	
	-7612 May 20 j 00:44	0 \circ \odot		max. Earth dist.	-7607 May 22 j 13:53	8° Ƴ 36'37	2.62841 AU
desc. node	-7612 Jun 16 j 17:33	18° © 05'20					
	-7612 Jul 03 j 18:13	0 \circ Ω		conjunction	-7607 Jun 10 j 07:14	20° Ƴ 54'37	
	-7612 Aug 13 j 18:09	0° m		minimum elong	-7607 Jun 10 j 05:47	20° Y 52'12	0°54'26
	-7612 Sep 22 j 23:18	0∘ ⊽			-7607 Jun 23 j 22:53	0°8	
	-7612 Nov 02 j 18:36	0°M₊		morning rise	-7607 Jul 27 j 07:34	22° 8 41'58	
	-7612 Dec 14 j 23:12	0° ∡ ¹			-7607 Aug 06 j 19:48	Π °0	
	-7611 Jan 27 j 21:07	5°0			-7607 Sep 17 j 23:50	0ංම	
evening set	-7611 Feb 02 j 23:39	4° る 04'48			-7607 Oct 28 j 19:13	0 $^{\circ}\Omega$	
	-7611 Mar 14 j 09:55	0° ≈			-7607 Dec 07 j 19:47	0° m)	
					-7606 Jan 16 j 21:17	0∘ ⊽	
conjunction	-7611 Mar 25 j 13:47	7° ≈ 13'42	-0°31'57	desc. node	-7606 Feb 07 j 01:18	15° ≙ 32'14	
minimum elong	-7611 Mar 25 j 15:01	7° ≈ 15'42	0°32'23		-7606 Feb 27 j 07:35	0°ML	

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 30 Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -7900 i	n astronomical cou	inting style is the year	7901 BCE in historical c	ounting style.	
	-7606 Apr 14 j 00:31	0°⊀			-7601 Jul 20 j 13:31	0ං ම	
retrograde	-7606 Jun 30 j 12:43	28° ∡ 757'33			-7601 Aug 28 j 21:08	$0^{\circ}\Omega$	
min. Earth dist.	-7606 Aug 01 j 08:10	22° ҂ 07′23	0.54693 AU	evening set	-7601 Sep 17 j 06:40	15° Ω 08'09	
greatest brilliancy	-7606 Aug 07 j 01:21	19° ₹ 56'15	-1.9m	desc. node	-7601 Sep 29 j 10:39	24° Ω 41'19	
opposition	-7606 Aug 08 j 05:56	19° ∡ ¹28'50	-5°19'44		-7601 Oct 06 j 04:46	0° m	
direct	-7606 Sep 12 j 18:38	11° ∡ ³32'58			-7601 Nov 13 j 11:39	0∘ ⊽	
	-7606 Nov 15 j 17:10	0°₹					
	-7605 Jan 11 j 13:40	0° ≈		conjunction	-7601 Nov 20 j 07:33	5° ≏ 18'04	
asc. node	-7605 Jan 12 j 00:16	0° ≈ 15′04		minimum elong	-7601 Nov 20 j 04:33	5° ≙ 12'15	0°37'02
	-7605 Mar 03 j 10:51	0° ∀			-7601 Dec 22 j 14:57	0° M	
	-7605 Apr 20 j 14:58	0° Υ		max. Earth dist.	-7600 Jan 05 j 10:08		2.41748 AU
evening set	-7605 Jun 03 j 08:33	28° Ƴ 36'14		morning rise	-7600 Jan 24 j 04:57	24°M06'33	
	-7605 Jun 05 j 10:28	0° 8			-7600 Feb 01 j 08:42	0° ∡ ¹	
max. Earth dist.	-7605 Jun 21 j 05:06		2.54031 AU		-7600 Mar 15 j 06:10	0°ಕ	
	-7605 Jul 18 j 22:08	Π $^{\circ}$ 0			-7600 Apr 29 j 17:21	0° ≈	
					-7600 Jun 17 j 11:58	0°) €	
conjunction	-7605 Jul 23 j 06:25	3° Ⅱ 04'57		_	-7600 Aug 12 j 04:06	0° Υ	
minimum elong	-7605 Jul 23 j 06:28	3° Ⅱ 05'02	1°12'34	asc. node	-7600 Sep 03 j 11:41	9° Ƴ 34'07	
	-7605 Aug 29 j 08:02	0°9		retrograde	-7600 Oct 16 j 18:28	18° Y 55'16	
morning rise	-7605 Sep 13 j 14:24	11°523'03		opposition	-7600 Nov 24 j 06:28	10° ℃ 01'07	3°01'54
	-7605 Oct 08 j 03:57	$0^{\circ}\Omega$		greatest brilliancy	-7600 Nov 24 j 15:18	9° Y 52′29	-1.5m
	-7605 Nov 16 j 02:23	0° m)		min. Earth dist.	-7600 Nov 28 j 09:54	8° Y 23'53	0.63756 AU
	-7605 Dec 24 j 22:41	0∘ ⊽		direct	-7599 Jan 04 j 08:12	0° Υ 01'29	
desc. node	-7605 Dec 25 j 22:02	0° £ 44'48			-7599 Mar 29 j 23:39	0°B	
	-7604 Feb 02 j 14:59	0°M₊			-7599 May 17 j 02:12	0°II	
	-7604 Mar 15 j 07:07	0° ∡			-7599 Jun 28 j 14:56	0° ©	
	-7604 Apr 29 j 20:53	5°0			-7599 Aug 07 j 10:29	0° Ω	
	-7604 Jun 25 j 17:12	0° ≈		desc. node	-7599 Aug 16 j 08:41	6° Ω 53'15	
retrograde	-7604 Aug 07 j 08:43	9°≈50'39	0.62660.444		-7599 Sep 15 j 01:03	0° m/y	
min. Earth dist.	-7604 Sep 12 j 23:44		0.63668 AU		-7599 Oct 23 j 14:03	0° ⊽	
opposition	-7604 Sep 16 j 07:28	29° る 54'00		evening set	-7599 Nov 22 j 02:06	22° ₽ 33'03	
greatest brilliancy	-7604 Sep 16 j 00:31	0°≈01'00	-1.5m		-7599 Dec 01 j 23:56	0°M 0°. ₹	
T'	-7604 Sep 16 j 01:30	30°R♂			-7598 Jan 11 j 23:57	0° ∡ ¹	
direct	-7604 Oct 24 j 21:58	20°る44'35					
	760431 20:04.05	270712157		. ,.	7500 1 20:10.10	CO 712140	1011101
asc. node	-7604 Nov 29 j 04:05	27° ට 12'57		conjunction	-7598 Jan 20 j 18:10	6° ₹ 13'48	
asc. node	-7604 Dec 07 j 02:27	0° ≈		conjunction minimum elong	-7598 Jan 20 j 18:17	6° ∡ 14′02	
asc. node	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36	0° ≈ 0° ∀		minimum elong	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01	6° ス 14'02 0° る	1°11'28
asc. node	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31	0° ≈ 0° ∀ 0° Υ		minimum elong max. Earth dist.	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15	6° メ 14'02 0° ♂ 0° ♂ 27'38	1°11'28 2.54239 AU
asc. node	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13	ზ°0 9°¥ 0°¥		minimum elong	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45	6° メ 14'02 0°る 0°る27'38 14°る31'16	1°11'28 2.54239 AU
	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37	0°₩ 0°₩ 0°₩ 0°₩		minimum elong max. Earth dist.	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Apr 10 j 02:12	6°₹14'02 0°♂ 0°♂27'38 14°♂31'16 0°≈	1°11'28 2.54239 AU
evening set	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19	0°≈ 0° ℋ 0° Ƴ 0° ℧ 0° ℿ 14° ℿ46′40	2.42024 ATI	minimum elong max. Earth dist.	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Apr 10 j 02:12 -7598 May 27 j 03:42	6° ₹14'02 0° ♂ 0° ♂27'38 14° ♂31'16 0° ≈ 0° 升	1°11'28 2.54239 AU
	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19 -7603 Aug 08 j 19:44	0°≈ 0°∀ 0°Υ 0°Υ 0°Β 0°Π 14°Π46'40 29°Π46'44	2.42024 AU	minimum elong max. Earth dist. morning rise	-7598 Jan 20 j 18:17 -7598 Feb 24 j 10:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Apr 10 j 02:12 -7598 May 27 j 03:42 -7598 Jul 15 j 09:20	6° ₹14'02 0° ♂ 0° ♂27'38 14° ♂31'16 0° ≫ 0° 升 0° Υ	1°11'28 2.54239 AU
evening set	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19	0°≈ 0° ℋ 0° Ƴ 0° ℧ 0° ℿ 14° ℿ46′40	2.42024 AU	minimum elong max. Earth dist.	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Apr 10 j 02:12 -7598 May 27 j 03:42 -7598 Jul 15 j 09:20 -7598 Jul 22 j 09:14	6° ፟፟፠14'02 0° ፟ጜ 0° ጜ27'38 14° ጜ31'16 0° ፟፠ 0° ጕ 0° ጕ 4° ϒ07'12	1°11'28 2.54239 AU
evening set max. Earth dist.	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19 -7603 Aug 08 j 19:44 -7603 Aug 09 j 02:50	0°≈ 0°ℋ 0°ℋ 0°℧ 0°Ⅱ 14°Ⅲ46'40 29°Ⅲ46'44 0°ℱ		minimum elong max. Earth dist. morning rise asc. node	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Apr 10 j 02:12 -7598 Jul 27 j 03:42 -7598 Jul 22 j 09:14 -7598 Sep 06 j 21:46	6° ₹14'02 0° ♂ 0° ♂ 227'38 14° ♂ 31'16 0° ≈ 0° 升 0° ♀ 4° ♀ 07'12	1°11'28 2.54239 AU
evening set max. Earth dist. conjunction	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19 -7603 Aug 08 j 19:44 -7603 Aug 09 j 02:50 -7603 Sep 14 j 01:35	0°≈ 0° H 0° Y 0° Y 0° B 0° Π 14° Π46'40 29° Π46'44 0° © 27° \$20'53	0°41'13	minimum elong max. Earth dist. morning rise asc. node retrograde	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Apr 10 j 02:12 -7598 Jul 27 j 03:42 -7598 Jul 22 j 09:14 -7598 Sep 06 j 21:46 -7598 Nov 29 j 05:38	6° ₹14'02 0° ♂ 0° ♂ 227'38 14° ♂ 31'16 0° ≈ 0° 升 0° Ŷ 4° Ŷ 07'12 0° ♂ 27° ♂ 37'36	1°11'28 2.54239 AU
evening set max. Earth dist.	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19 -7603 Aug 08 j 19:44 -7603 Aug 09 j 02:50 -7603 Sep 14 j 01:35 -7603 Sep 14 j 04:13	0°≈ 0°∀ 0°∀ 0°∀ 0°Ⅱ 14°Ⅱ46'40 29°Ⅱ46'44 0°© 27°©20'53 27°©25'58		minimum elong max. Earth dist. morning rise asc. node retrograde opposition	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Apr 10 j 02:12 -7598 Jul 22 j 09:14 -7598 Jul 22 j 09:14 -7598 Nov 29 j 05:38 -7597 Jan 04 j 04:50	6°♂14'02 0°♂ 0°♂27'38 14°♂31'16 0°≈ 0°升 0°升 4°°¥07'12 0°♂ 27°♂37'36 19°♂57'01	1°11'28 2.54239 AU 5°27'36
evening set max. Earth dist. conjunction	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19 -7603 Aug 08 j 19:44 -7603 Aug 09 j 02:50 -7603 Sep 14 j 01:35 -7603 Sep 14 j 04:13 -7603 Sep 17 j 11:55	0°≈ 0° H 0° Y 0° Y 0° B 0° II 14° II 46'40 29° II 46'44 0° S 27° S 20'53 27° S 25'58 0° Ω	0°41'13	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Apr 10 j 02:12 -7598 May 27 j 03:42 -7598 Jul 15 j 09:20 -7598 Jul 22 j 09:14 -7598 Sep 06 j 21:46 -7598 Nov 29 j 05:38 -7597 Jan 04 j 04:50 -7597 Jan 05 j 13:07	6°♂14'02 0°♂ 0°♂ 14°♂31'16 0°≈ 0°升 0°升 0°Y 4°Y07'12 0°♂ 27°♂37'36 19°♂57'01 19°♂27'28	1°11'28 2.54239 AU 5°27'36 -1.9m
evening set max. Earth dist. conjunction minimum elong	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19 -7603 Aug 08 j 19:44 -7603 Aug 09 j 02:50 -7603 Sep 14 j 01:35 -7603 Sep 14 j 04:13 -7603 Sep 17 j 11:55 -7603 Oct 25 j 22:41	0°≈ 0°) 0°) 0°) 0°] 14°] 14°] 146'40 29°] 146'44 0°] 27°] 20'53 27°] 20'53 0°] 0°] 0°]	0°41'13	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist.	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 May 27 j 03:42 -7598 Jul 15 j 09:20 -7598 Jul 22 j 09:14 -7598 Sep 06 j 21:46 -7598 Nov 29 j 05:38 -7597 Jan 04 j 04:50 -7597 Jan 11 j 17:11	6°♂14'02 0°♂ 0°♂ 14°♂31'16 0°≈ 0°升 0°升 0°Y 4°Y07'12 0°♂ 27°♂37'36 19°♂57'01 19°♂27'28 17°♂12'12	1°11'28 2.54239 AU 5°27'36
evening set max. Earth dist. conjunction minimum elong desc. node	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19 -7603 Aug 08 j 19:44 -7603 Aug 09 j 02:50 -7603 Sep 14 j 01:35 -7603 Sep 14 j 04:13 -7603 Sep 17 j 11:55 -7603 Oct 25 j 22:41 -7603 Nov 11 j 15:46	0°≈ 0°) 0°) 0°) 0°) 14° 1146'40 29° 1146'44 0° © 27° © 220'53 27° © 225'58 0° Ω 0° m 13° m 05'38	0°41'13	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Apr 10 j 02:12 -7598 May 27 j 03:42 -7598 Jul 15 j 09:20 -7598 Jul 22 j 09:14 -7598 Sep 06 j 21:46 -7598 Nov 29 j 05:38 -7597 Jan 04 j 04:50 -7597 Jan 05 j 13:07 -7597 Jan 11 j 17:11 -7597 Feb 12 j 20:18	6°メ14'02 0°る 0°る27'38 14°る31'16 0°≈ 0°升 0°升 0°分 4°Ŷ07'12 0°8 27°837'36 19°857'01 19°827'28 17°812'12	1°11'28 2.54239 AU 5°27'36 -1.9m
evening set max. Earth dist. conjunction minimum elong	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19 -7603 Aug 08 j 19:44 -7603 Aug 09 j 02:50 -7603 Sep 14 j 01:35 -7603 Sep 14 j 04:13 -7603 Sep 17 j 11:55 -7603 Oct 25 j 22:41 -7603 Nov 11 j 15:46 -7603 Nov 16 j 04:09	0°≈ 0°Υ 0°Υ 0°Υ 0°Ш 14°П46'40 29°П46'44 0°© 27°©20'53 27°©25'58 0°Ω 0°™ 13°™05'38 16°™37'38	0°41'13	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist.	-7598 Jan 20 j 18:17 -7598 Feb 24 j 10:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Apr 10 j 02:12 -7598 Jul 15 j 09:20 -7598 Jul 22 j 09:14 -7598 Sep 06 j 21:46 -7598 Nov 29 j 05:38 -7597 Jan 04 j 04:50 -7597 Jan 05 j 13:07 -7597 Feb 12 j 20:18 -7597 Apr 15 j 13:31	6°♂14'02 0°♂5 0°♂527'38 14°♂31'16 0°≈ 0°升 0°升 0°भ 4°Ŷ07'12 0°♂ 27°♂37'36 19°♂57'01 19°♂27'28 17°♂12'12 10°♂38'42 0°用	1°11'28 2.54239 AU 5°27'36 -1.9m
evening set max. Earth dist. conjunction minimum elong desc. node	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19 -7603 Aug 08 j 19:44 -7603 Aug 09 j 02:50 -7603 Sep 14 j 01:35 -7603 Sep 14 j 04:13 -7603 Sep 17 j 11:55 -7603 Oct 25 j 22:41 -7603 Nov 11 j 15:46 -7603 Nov 16 j 04:09 -7603 Dec 03 j 08:04	0°≈ 0° γ 0° γ 0° γ 0° β 0° Π 14° Π 46′ 40 29° Π 46′ 44 0° 9 25′ 58 0° Ω 0° Μ 13° Μ 05′ 38 16° Μ 37′ 38 0° Ω	0°41'13	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Apr 10 j 02:12 -7598 May 27 j 03:42 -7598 Jul 15 j 09:20 -7598 Jul 22 j 09:14 -7598 Sep 06 j 21:46 -7598 Nov 29 j 05:38 -7597 Jan 04 j 04:50 -7597 Jan 05 j 13:07 -7597 Jan 11 j 17:11 -7597 Feb 12 j 20:18 -7597 Apr 15 j 13:31 -7597 Jun 03 j 08:44	6° ₰ 14'02 0° ♂ 0° ♂ 27'38 14° ♂ 31'16 0° ※ 0° ዠ 0° ዠ 0° ੴ 27'212 0° ੴ 27'28 17° ♂ 38'42 0° Ⅲ 0° ∰	1°11'28 2.54239 AU 5°27'36 -1.9m
evening set max. Earth dist. conjunction minimum elong desc. node	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19 -7603 Aug 08 j 19:44 -7603 Aug 09 j 02:50 -7603 Sep 14 j 01:35 -7603 Sep 14 j 04:13 -7603 Sep 17 j 11:55 -7603 Nov 11 j 15:46 -7603 Nov 16 j 04:09 -7603 Dec 03 j 08:04 -7602 Jan 11 j 12:48	0°≈ 0° भ 0° भ 0° Ч 0° Ч 0° В 0° П 14° П 46' 40 29° П 46' 44 0° © 27° © 20' 53 27° © 25' 58 0° П 0° П 13° Т 05' 38 16° Т 37' 38 0° С 0° П	0°41'13	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist.	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Apr 10 j 02:12 -7598 May 27 j 03:42 -7598 Jul 15 j 09:20 -7598 Jul 22 j 09:14 -7598 Sep 06 j 21:46 -7598 Nov 29 j 05:38 -7597 Jan 04 j 04:50 -7597 Jan 05 j 13:07 -7597 Jan 11 j 17:11 -7597 Feb 12 j 20:18 -7597 Apr 15 j 13:31 -7597 Jun 03 j 08:44 -7597 Jul 04 j 09:23	6° ₰14'02 0° ♂ 0° ♂ 27'38 14° ♂ 31'16 0° ≫ 0° ዧ 4° ♈ 07'12 0° ੴ 27° ♂ 37'36 19° ♂ 57'01 19° ♂ 27'28 17° ♂ 12'12 10° ♂ 38'42 0° Ⅲ 0° ⑤ 21° © 55'56	1°11'28 2.54239 AU 5°27'36 -1.9m
evening set max. Earth dist. conjunction minimum elong desc. node	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19 -7603 Aug 08 j 19:44 -7603 Aug 09 j 02:50 -7603 Sep 14 j 01:35 -7603 Sep 14 j 04:13 -7603 Sep 17 j 11:55 -7603 Oct 25 j 22:41 -7603 Nov 11 j 15:46 -7603 Nov 16 j 04:09 -7603 Dec 03 j 08:04 -7602 Jan 11 j 12:48 -7602 Feb 21 j 09:13	0°≈ 0° ¥ 0° Y 0° Y 0° B 0° II 14° II 46'40 29° II 46'44 0° 29 27° 220'53 27° 225'58 0° Ω 0° II 13° II 05'38 16° II 37'38 0° Ω 0° II	0°41'13	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Apr 10 j 02:12 -7598 May 27 j 03:42 -7598 Jul 15 j 09:20 -7598 Jul 22 j 09:14 -7598 Sep 06 j 21:46 -7598 Nov 29 j 05:38 -7597 Jan 04 j 04:50 -7597 Jan 05 j 13:07 -7597 Feb 12 j 20:18 -7597 Apr 15 j 13:31 -7597 Jun 03 j 08:44 -7597 Jul 04 j 09:23 -7597 Jul 15 j 08:44	6° ₰14'02 0° ♂ 0° ♂ 27'38 14° ♂ 31'16 0° ※ 0° ዠ 0° ዣ 4° ♈ 07'12 0° ੴ 27° ♂ 37'36 19° ♂ 57'01 19° ♂ 27'28 17° ♂ 12'12 10° ♂ 38'42 0° Ⅲ 0° ⑤ 21° ⑤ 55'56 0° ₰	1°11'28 2.54239 AU 5°27'36 -1.9m
evening set max. Earth dist. conjunction minimum elong desc. node	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19 -7603 Aug 08 j 19:44 -7603 Aug 09 j 02:50 -7603 Sep 14 j 01:35 -7603 Sep 14 j 04:13 -7603 Sep 17 j 11:55 -7603 Nov 11 j 15:46 -7603 Nov 16 j 04:09 -7603 Dec 03 j 08:04 -7602 Jan 11 j 12:48 -7602 Feb 21 j 09:13 -7602 Apr 05 j 18:01	0°≈ 0°Y 0°Y 0°Y 0°B 0°∏ 14°∏46'40 29°∏46'44 0°© 27°©20'53 27°©25'58 0°Ω 0°™ 13°™05'38 16°™37'38 0°Ω 0°™ 0°% 0°™	0°41'13	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Apr 10 j 02:12 -7598 May 27 j 03:42 -7598 Jul 15 j 09:20 -7598 Jul 22 j 09:14 -7598 Sep 06 j 21:46 -7598 Nov 29 j 05:38 -7597 Jan 04 j 04:50 -7597 Jan 11 j 17:11 -7597 Feb 12 j 20:18 -7597 Apr 15 j 13:31 -7597 Jul 04 j 09:23 -7597 Jul 04 j 09:23 -7597 Jul 15 j 08:44 -7597 Aug 24 j 04:09	6° ₰14'02 0° ♂ 0° ♂ 27'38 14° ♂ 31'16 0° ≫ 0° ዠ 0° ዣ 4° ♈ 07'12 0° ੴ 27° ♂ 37'36 19° ♂ 57'01 19° ♂ 57'01 19° ♂ 57'01 19° ♂ 38'42 0° Ⅲ 0° ॼ 21° ☞ 55'56 0° ഏ 0° ⋒	1°11'28 2.54239 AU 5°27'36 -1.9m
evening set max. Earth dist. conjunction minimum elong desc. node	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19 -7603 Aug 08 j 19:44 -7603 Aug 09 j 02:50 -7603 Sep 14 j 01:35 -7603 Sep 14 j 04:13 -7603 Sep 17 j 11:55 -7603 Oct 25 j 22:41 -7603 Nov 11 j 15:46 -7603 Nov 16 j 04:09 -7603 Dec 03 j 08:04 -7602 Jan 11 j 12:48 -7602 Feb 21 j 09:13 -7602 Apr 05 j 18:01 -7602 May 22 j 23:10	0°≈ 0°Y 0°Y 0°Y 0°B 0°∏ 14°∏46'40 29°∏46'44 0°© 27°©20'53 27°©25'58 0°Ω 0°™ 13°™05'38 16°™37'38 0°Ω 0°™ 0°™ 0°™ 0°™	0°41'13	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Apr 10 j 02:12 -7598 May 27 j 03:42 -7598 Jul 15 j 09:20 -7598 Jul 22 j 09:14 -7598 Sep 06 j 21:46 -7598 Nov 29 j 05:38 -7597 Jan 04 j 04:50 -7597 Jan 05 j 13:07 -7597 Jan 11 j 17:11 -7597 Feb 12 j 20:18 -7597 Apr 15 j 13:31 -7597 Jun 03 j 08:44 -7597 Jul 04 j 09:23 -7597 Jul 15 j 08:44 -7597 Aug 24 j 04:09 -7597 Oct 02 j 14:57	6° ₹14'02 0° ₹37'38 14° ₹31'16 0° ≈ 0° 升 0° भ 0° भ 4° Ŷ07'12 0° ₹ 27° ₹37'36 19° ₹57'01 19° ₹27'28 17° ₹12'12 10° ₹38'42 0° Ⅲ 0° \$2 21° \$55'56 0° \$0 0° №	1°11'28 2.54239 AU 5°27'36 -1.9m
evening set max. Earth dist. conjunction minimum elong desc. node morning rise	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19 -7603 Aug 08 j 19:44 -7603 Aug 09 j 02:50 -7603 Sep 14 j 01:35 -7603 Sep 14 j 04:13 -7603 Sep 17 j 11:55 -7603 Oct 25 j 22:41 -7603 Nov 11 j 15:46 -7603 Nov 16 j 04:09 -7603 Dec 03 j 08:04 -7602 Jan 11 j 12:48 -7602 Feb 21 j 09:13 -7602 Apr 05 j 18:01 -7602 May 22 j 23:10 -7602 Jul 18 j 00:30	0°≈ 0°Y 0°Y 0°Y 0°Y 0°N 14°II46'40 29°II46'44 0°9 27°920'53 27°925'58 0°N 13°IN05'38 16°IN37'38 0°Ω 0°IN 0°X 0°IN 0°X 0°S 0°N 0°S 0°N	0°41'13	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Apr 10 j 02:12 -7598 May 27 j 03:42 -7598 Jul 15 j 09:20 -7598 Jul 22 j 09:14 -7598 Sep 06 j 21:46 -7598 Nov 29 j 05:38 -7597 Jan 04 j 04:50 -7597 Jan 05 j 13:07 -7597 Jan 11 j 17:11 -7597 Feb 12 j 20:18 -7597 Jun 03 j 08:44 -7597 Jul 04 j 09:23 -7597 Jul 15 j 08:44 -7597 Aug 24 j 04:09 -7597 Oct 02 j 14:57 -7597 Nov 11 j 19:55	6° \$\times 14'02 0° \$\times 27'38 14° \$\times 31'16 0° \$\times 0° \$\times 0° \$\times 0° \$\times 0° \$\times 27'08'37'36 19° \$\times 57'01 19° \$\times 27'28 17° \$\times 12'12 10° \$\times 38'42 0° \$\times 0° \$\t	1°11'28 2.54239 AU 5°27'36 -1.9m
evening set max. Earth dist. conjunction minimum elong desc. node morning rise	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19 -7603 Aug 08 j 19:44 -7603 Aug 09 j 02:50 -7603 Sep 14 j 01:35 -7603 Sep 14 j 04:13 -7603 Sep 17 j 11:55 -7603 Oct 25 j 22:41 -7603 Nov 16 j 04:09 -7603 Dec 03 j 08:04 -7602 Jun 11 j 12:48 -7602 Feb 21 j 09:13 -7602 May 22 j 23:10 -7602 Jul 18 j 00:30 -7602 Sep 11 j 09:29	0°≈ 0° H 0° Y 0° Y 0° B 0° II 14° II 46'40 29° II 46'44 0° S 27° S 20'53 27° S 25'58 0° A 0° III 13° III 05'38 16° III 37'38 0° S 0° III 0° S 0° S 0° S 0° S 13° S 40'32	0°41'13	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct desc. node	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Mar 10 j 02:12 -7598 May 27 j 03:42 -7598 Jul 15 j 09:20 -7598 Jul 22 j 09:14 -7598 Sep 06 j 21:46 -7598 Nov 29 j 05:38 -7597 Jan 04 j 04:50 -7597 Jan 05 j 13:07 -7597 Jan 11 j 17:11 -7597 Feb 12 j 20:18 -7597 Apr 15 j 13:31 -7597 Jul 04 j 09:23 -7597 Jul 04 j 09:23 -7597 Jul 15 j 08:44 -7597 Aug 24 j 04:09 -7597 Oct 02 j 14:57 -7597 Nov 11 j 19:55 -7597 Dec 23 j 12:46	6° \$\times 14'02 0° \$\times 27'38 14° \$\times 31'16 0° \$\times 0° \$\times 0° \$\times 0° \$\times 27'28 17° \$\times 37'36 19° \$\times 57'01 19° \$\times 27'28 17° \$\times 12'12 10° \$\times 38'42 0° \$\times 0° \$\	1°11'28 2.54239 AU 5°27'36 -1.9m
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evening set max. Earth dist. conjunction minimum elong desc. node morning rise retrograde asc. node opposition	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19 -7603 Aug 08 j 19:44 -7603 Aug 09 j 02:50 -7603 Sep 14 j 01:35 -7603 Sep 14 j 04:13 -7603 Sep 17 j 11:55 -7603 Oct 25 j 22:41 -7603 Nov 11 j 15:46 -7603 Nov 16 j 04:09 -7603 Dec 03 j 08:04 -7602 Jun 11 j 12:48 -7602 Feb 21 j 09:13 -7602 Apr 05 j 18:01 -7602 Jul 18 j 00:30 -7602 Sep 11 j 09:29 -7602 Oct 17 j 09:12 -7602 Oct 21 j 03:55	0°≈ 0° H 0° Y 0° B 0° II 14° II 46'40 29° II 46'44 0° S 27° S 20'53 27° S 25'58 0° Ω 0° II 13° II 105'38 16° II 13' II 105'38 16° II 10° Z 0° II 10° Z 0° X 10° Z 0° X 10° X 10° Z 0° X 10° X 10° Z 0° X 10° X 1	0°41'13 0°41'39 0°08'41	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct desc. node	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Mar 10 j 02:12 -7598 May 27 j 03:42 -7598 Jul 15 j 09:20 -7598 Jul 22 j 09:14 -7598 Sep 06 j 21:46 -7598 Nov 29 j 05:38 -7597 Jan 04 j 04:50 -7597 Jan 05 j 13:07 -7597 Jan 11 j 17:11 -7597 Feb 12 j 20:18 -7597 Apr 15 j 13:31 -7597 Jul 04 j 09:23 -7597 Jul 04 j 09:23 -7597 Jul 15 j 08:44 -7597 Aug 24 j 04:09 -7597 Oct 02 j 14:57 -7597 Nov 11 j 19:55 -7597 Dec 23 j 12:46	6° \$\times 14'02 0° \$\times 27'38 14° \$\times 31'16 0° \$\times 0° \$\times 0° \$\times 0° \$\times 27'28 17° \$\times 37'36 19° \$\times 57'01 19° \$\times 27'28 17° \$\times 12'12 10° \$\times 38'42 0° \$\times 0° \$\	1°11'28 2.54239 AU 5°27'36 -1.9m
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evening set max. Earth dist. conjunction minimum elong desc. node morning rise retrograde asc. node opposition	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19 -7603 Aug 08 j 19:44 -7603 Aug 09 j 02:50 -7603 Sep 14 j 01:35 -7603 Sep 14 j 04:13 -7603 Sep 14 j 04:13 -7603 Sep 17 j 11:55 -7603 Nov 11 j 15:46 -7603 Nov 11 j 15:46 -7603 Nov 16 j 04:09 -7603 Dec 03 j 08:04 -7602 Jun 11 j 12:48 -7602 Feb 21 j 09:13 -7602 Apr 05 j 18:01 -7602 May 22 j 23:10 -7602 Sep 11 j 09:29 -7602 Oct 17 j 09:12 -7602 Oct 21 j 03:55 -7602 Oct 21 j 03:58 -7602 Oct 21 j 13:47	0°≈ 0° H 0° Y 0° B 0° Π 14° Π46'40 29° Π46'44 0° © 27° © 20'53 27° © 25'58 0° Ω 0° M 13° M 05'38 16° M 37'38 0° Ω 0° M 0° X 0° S 0° M 14° H40'32 6° H33'09 5° H02'41 5° H02'38 4° H52'47	0°41'13 0°41'39 0°08'41	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct desc. node evening set conjunction	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Apr 10 j 02:12 -7598 May 27 j 03:42 -7598 Jul 15 j 09:20 -7598 Jul 22 j 09:14 -7598 Nov 29 j 05:38 -7597 Jan 04 j 04:50 -7597 Jan 05 j 13:07 -7597 Jan 11 j 17:11 -7597 Feb 12 j 20:18 -7597 Apr 15 j 13:31 -7597 Jul 04 j 09:23 -7597 Jul 04 j 09:23 -7597 Jul 15 j 08:44 -7597 Aug 24 j 04:09 -7597 Oct 02 j 14:57 -7597 Nov 11 j 19:55 -7597 Dec 23 j 12:46 -7596 Feb 05 j 01:41	6° ₹14'02 0° ₹ 0° ₹27'38 14° ₹31'16 0° ₹ 0° ¥ 0° ¥ 0° ¥ 0° ¥ 27° ₹37'36 19° ₹57'01 19° ₹57'01 19° ₹27'28 17° ₹312'12 10° ₹38'42 0° Ⅲ 0° \$ 21° \$55'56 0° \$ 0° № 0° \$ 16° ₹49'34 0° ₹ 22° ₹02'29	1°11'28 2.54239 AU 5°27'36 -1.9m 0.54734 AU
evening set max. Earth dist. conjunction minimum elong desc. node morning rise retrograde asc. node opposition greatest brilliancy min. Earth dist.	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19 -7603 Aug 08 j 19:44 -7603 Aug 09 j 02:50 -7603 Sep 14 j 01:35 -7603 Sep 14 j 04:13 -7603 Sep 17 j 11:55 -7603 Oct 25 j 22:41 -7603 Nov 16 j 04:09 -7603 Dec 03 j 08:04 -7602 Jan 11 j 12:48 -7602 Feb 21 j 09:13 -7602 Apr 05 j 18:01 -7602 May 22 j 23:10 -7602 Oct 17 j 09:12 -7602 Oct 21 j 03:55 -7602 Oct 21 j 03:55 -7602 Oct 21 j 13:47 -7602 Nov 03 j 10:20	0°≈ 0° H 0° Y 0° B 0° Π 14° Π46'40 29° Π46'44 0° 25 27° 220'53 27° 225'58 0° Ω 0° M 13° M 05'38 16° M 37'38 0° Ω 0° M 0° X 0° M 14° H40'32 6° H33'09 5° H02'41 5° H02'38 4° H52'47 30° R≈	0°41'13 0°41'39 0°08'41 -1.4m	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct desc. node	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Apr 10 j 02:12 -7598 May 27 j 03:42 -7598 Jul 15 j 09:20 -7598 Jul 22 j 09:14 -7598 Sep 06 j 21:46 -7598 Nov 29 j 05:38 -7597 Jan 04 j 04:50 -7597 Jan 11 j 17:11 -7597 Feb 12 j 20:18 -7597 Apr 15 j 13:31 -7597 Jul 04 j 09:23 -7597 Jul 15 j 08:44 -7597 Jul 15 j 08:44 -7597 Aug 24 j 04:09 -7597 Oct 02 j 14:57 -7597 Nov 11 j 19:55 -7597 Dec 23 j 12:46 -7596 Jan 16 j 17:16 -7596 Feb 05 j 01:41 -7596 Mar 09 j 04:50 -7596 Mar 09 j 04:50	6° ₹14'02 0° ₹ 0° ₹27'38 14° ₹31'16 0° ₹ 0° ¥ 0° ¥ 0° ¥ 27° ₹37'36 19° ₹57'01 19° ₹27'28 17° ₹12'12 10° ₹38'42 0° Ⅲ 0° \$ 21° \$55'56 0° \$ 0° № 0° \$ 0° № 0° \$ 21° ₹49'34 0° ₹	1°11'28 2.54239 AU 5°27'36 -1.9m 0.54734 AU
evening set max. Earth dist. conjunction minimum elong desc. node morning rise retrograde asc. node opposition greatest brilliancy	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19 -7603 Aug 08 j 19:44 -7603 Aug 09 j 02:50 -7603 Sep 14 j 01:35 -7603 Sep 14 j 04:13 -7603 Sep 17 j 11:55 -7603 Oct 25 j 22:41 -7603 Nov 16 j 04:09 -7603 Dec 03 j 08:04 -7602 Jan 11 j 12:48 -7602 Feb 21 j 09:13 -7602 Apr 05 j 18:01 -7602 May 22 j 23:10 -7602 Oct 17 j 09:12 -7602 Oct 21 j 03:55 -7602 Oct 21 j 03:58 -7602 Nov 03 j 10:20 -7602 Nov 03 j 10:20 -7602 Nov 03 j 15:53	0°≈ 0° H 0° Y 0° B 0° Π 14° Π46'40 29° Π46'44 0° 25° 25'58 0° Ω 0° ™ 13° ™ 05'38 16° ™ 37'38 0° Ω 0° ™ 0° ¾ 0° % 0° № 14° H40'32 6° H33'09 5° H02'41 5° H02'38 4° H52'47 30° R≈ 25°≈ 13'26	0°41'13 0°41'39 0°08'41 -1.4m	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct desc. node evening set conjunction minimum elong	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Apr 10 j 02:12 -7598 May 27 j 03:42 -7598 Jul 15 j 09:20 -7598 Jul 22 j 09:14 -7598 Sep 06 j 21:46 -7598 Nov 29 j 05:38 -7597 Jan 04 j 04:50 -7597 Jan 05 j 13:07 -7597 Jan 11 j 17:11 -7597 Feb 12 j 20:18 -7597 Apr 15 j 13:31 -7597 Jul 04 j 09:23 -7597 Jul 04 j 09:23 -7597 Jul 15 j 08:44 -7597 Aug 24 j 04:09 -7597 Oct 02 j 14:57 -7597 Nov 11 j 19:55 -7597 Dec 23 j 12:46 -7596 Jan 16 j 17:16 -7596 Feb 05 j 01:41 -7596 Mar 09 j 04:50 -7596 Mar 09 j 06:30 -7596 Mar 21 j 08:57	6° ₹14'02 0° ₹ 0° ₹27'38 14° ₹31'16 0° ₹ 0° ¥ 0° ¥ 0° ¥ 0° ¥ 0° ¥ 27° ₹37'36 19° ₹57'01 19° ₹57'01 19° ₹38'42 0° Ⅲ 0° \$ 21° \$55'56 0° \$ 0° № 0° \$ 16° ₹49'34 0° ₹ 22° ₹02'29 22° ₹02'29 22° ₹05'13 0° ≈	1°11'28 2.54239 AU 5°27'36 -1.9m 0.54734 AU -0°47'54 0°48'23
evening set max. Earth dist. conjunction minimum elong desc. node morning rise retrograde asc. node opposition greatest brilliancy min. Earth dist.	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19 -7603 Aug 08 j 19:44 -7603 Aug 09 j 02:50 -7603 Sep 14 j 01:35 -7603 Sep 14 j 04:13 -7603 Sep 17 j 11:55 -7603 Oct 25 j 22:41 -7603 Nov 11 j 15:46 -7603 Nov 16 j 04:09 -7603 Dec 03 j 08:04 -7602 Jan 11 j 12:48 -7602 Feb 21 j 09:13 -7602 Apr 05 j 18:01 -7602 May 22 j 23:10 -7602 May 22 j 23:10 -7602 Oct 17 j 09:12 -7602 Oct 21 j 03:55 -7602 Oct 21 j 03:58 -7602 Nov 03 j 10:20 -7602 Nov 03 j 10:20 -7602 Nov 03 j 15:53 -7602 Dec 30 j 11:19	0°≈ 0° H 0° Y 0° B 0° Π 14° Π46'40 29° Π46'44 0° 25° 25'58 0° Ω 0° ™ 13° ™ 05'38 16° ™ 37'38 0° Ω 0° ™ 0° % 0° % 0° M 14° H40'32 6° H33'09 5° H02'41 5° H02'38 4° H52'47 30° R≈ 25°≈ 13'26 0° H	0°41'13 0°41'39 0°08'41 -1.4m	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct desc. node evening set conjunction minimum elong max. Earth dist.	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Apr 10 j 02:12 -7598 May 27 j 03:42 -7598 Jul 15 j 09:20 -7598 Jul 22 j 09:14 -7598 Sep 06 j 21:46 -7598 Nov 29 j 05:38 -7597 Jan 04 j 04:50 -7597 Jan 05 j 13:07 -7597 Jan 11 j 17:11 -7597 Feb 12 j 20:18 -7597 Apr 15 j 13:31 -7597 Jul 04 j 09:23 -7597 Jul 04 j 09:23 -7597 Jul 15 j 08:44 -7597 Aug 24 j 04:09 -7597 Oct 02 j 14:57 -7597 Nov 11 j 19:55 -7597 Dec 23 j 12:46 -7596 Jan 16 j 17:16 -7596 Feb 05 j 01:41 -7596 Mar 09 j 06:30 -7596 Mar 09 j 06:30 -7596 Mar 21 j 08:57 -7596 Mar 25 j 15:35	6° \$\times 14'02 0° \$\times 27'38 14° \$\times 31'16 0° \$\times 0° \$\times 0° \$\times 0° \$\times 0° \$\times 27'28 17° \$\times 27'28 17° \$\times 12'12 10° \$\times 38'42 0° \$\times 0° \$\tim	1°11'28 2.54239 AU 5°27'36 -1.9m 0.54734 AU
evening set max. Earth dist. conjunction minimum elong desc. node morning rise retrograde asc. node opposition greatest brilliancy min. Earth dist.	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19 -7603 Aug 08 j 19:44 -7603 Aug 09 j 02:50 -7603 Sep 14 j 01:35 -7603 Sep 14 j 04:13 -7603 Sep 17 j 11:55 -7603 Oct 25 j 22:41 -7603 Nov 11 j 15:46 -7603 Nov 16 j 04:09 -7603 Dec 03 j 08:04 -7602 Jan 11 j 12:48 -7602 Feb 21 j 09:13 -7602 Apr 05 j 18:01 -7602 May 22 j 23:10 -7602 May 22 j 23:10 -7602 Oct 17 j 09:12 -7602 Oct 21 j 03:55 -7602 Oct 21 j 03:55 -7602 Oct 21 j 13:47 -7602 Nov 03 j 10:20 -7602 Nov 03 j 10:20 -7602 Nov 03 j 15:53 -7602 Dec 30 j 11:19 -7601 Mar 06 j 22:52	0°≈ 0° Y 0° Y 0° Y 0° Y 0° Y 0° Y 114° II 46' 40 29° II 46' 44 0° S 27° S 25' 58 0° Ω 0° M 13° M 05' 38 16° M 37' 38 0° Ω 0° M 0° X 0° X 0° X 14° Y 40' 32 6° Y 33' 09 5° Y 02' 41 5° Y 02' 38 4° Y 52' 47 30° R≈ 25° ≈ 13' 26 0° Y 0° Y	0°41'13 0°41'39 0°08'41 -1.4m	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct desc. node evening set conjunction minimum elong	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Apr 10 j 02:12 -7598 May 27 j 03:42 -7598 Jul 15 j 09:20 -7598 Jul 22 j 09:14 -7598 Sep 06 j 21:46 -7598 Nov 29 j 05:38 -7597 Jan 04 j 04:50 -7597 Jan 11 j 17:11 -7597 Feb 12 j 20:18 -7597 Apr 15 j 13:31 -7597 Jul 04 j 09:23 -7597 Jul 04 j 09:23 -7597 Jul 15 j 08:44 -7597 Dec 23 j 12:46 -7596 Feb 05 j 01:41 -7596 Mar 09 j 04:50 -7596 Mar 09 j 06:30 -7596 Mar 21 j 08:57 -7596 Mar 25 j 15:35 -7596 Apr 27 j 15:11	6° \$\times 14'02 0° \$\times 27'38 14° \$\times 31'16 0° \$\times 0°	1°11'28 2.54239 AU 5°27'36 -1.9m 0.54734 AU -0°47'54 0°48'23
evening set max. Earth dist. conjunction minimum elong desc. node morning rise retrograde asc. node opposition greatest brilliancy min. Earth dist.	-7604 Dec 07 j 02:27 -7603 Feb 07 j 13:36 -7603 Mar 30 j 15:31 -7603 May 16 j 09:13 -7603 Jun 28 j 23:37 -7603 Jul 19 j 12:19 -7603 Aug 08 j 19:44 -7603 Aug 09 j 02:50 -7603 Sep 14 j 01:35 -7603 Sep 14 j 04:13 -7603 Sep 17 j 11:55 -7603 Oct 25 j 22:41 -7603 Nov 11 j 15:46 -7603 Nov 16 j 04:09 -7603 Dec 03 j 08:04 -7602 Jan 11 j 12:48 -7602 Feb 21 j 09:13 -7602 Apr 05 j 18:01 -7602 May 22 j 23:10 -7602 May 22 j 23:10 -7602 Oct 17 j 09:12 -7602 Oct 21 j 03:55 -7602 Oct 21 j 03:58 -7602 Nov 03 j 10:20 -7602 Nov 03 j 10:20 -7602 Nov 03 j 15:53 -7602 Dec 30 j 11:19	0°≈ 0° H 0° Y 0° B 0° Π 14° Π46'40 29° Π46'44 0° 25° 25'58 0° Ω 0° ™ 13° ™ 05'38 16° ™ 37'38 0° Ω 0° ™ 0° % 0° % 0° M 14° H40'32 6° H33'09 5° H02'41 5° H02'38 4° H52'47 30° R≈ 25°≈ 13'26 0° H	0°41'13 0°41'39 0°08'41 -1.4m	minimum elong max. Earth dist. morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct desc. node evening set conjunction minimum elong max. Earth dist.	-7598 Jan 20 j 18:17 -7598 Feb 24 j 00:01 -7598 Feb 24 j 16:15 -7598 Mar 17 j 13:45 -7598 Apr 10 j 02:12 -7598 May 27 j 03:42 -7598 Jul 15 j 09:20 -7598 Jul 22 j 09:14 -7598 Sep 06 j 21:46 -7598 Nov 29 j 05:38 -7597 Jan 04 j 04:50 -7597 Jan 05 j 13:07 -7597 Jan 11 j 17:11 -7597 Feb 12 j 20:18 -7597 Apr 15 j 13:31 -7597 Jul 04 j 09:23 -7597 Jul 04 j 09:23 -7597 Jul 15 j 08:44 -7597 Aug 24 j 04:09 -7597 Oct 02 j 14:57 -7597 Nov 11 j 19:55 -7597 Dec 23 j 12:46 -7596 Jan 16 j 17:16 -7596 Feb 05 j 01:41 -7596 Mar 09 j 06:30 -7596 Mar 09 j 06:30 -7596 Mar 21 j 08:57 -7596 Mar 25 j 15:35	6° \$\times 14'02 0° \$\times 27'38 14° \$\times 31'16 0° \$\times 0° \$\times 0° \$\times 0° \$\times 0° \$\times 27'28 17° \$\times 27'28 17° \$\times 12'12 10° \$\times 38'42 0° \$\times 0° \$\tim	1°11'28 2.54239 AU 5°27'36 -1.9m 0.54734 AU -0°47'54 0°48'23

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 31

•	omena of Mars fron		•	* *			e 31
Attention, astronom	nical year style is used: Th		in astronomical co				5952126
	-7596 Jun 23 j 11:01	0°Υ		opposition	-7591 Jul 20 j 08:47	0° ∡ 745'48	-5°53'26
	-7596 Aug 10 j 13:30	0° X			-7591 Jul 22 j 11:29	30°RM	
	-7596 Sep 29 j 02:51	0° I		direct	-7591 Aug 23 j 07:45	23°M32'07	
	-7596 Nov 23 j 00:29	0°©			-7591 Sep 26 j 13:37	0° ⊼ ¹	
retrograde	-7595 Jan 27 j 14:17	19° © 27'01			-7591 Nov 29 j 09:54	0°ප	
opposition	-7595 Feb 28 j 15:36	13°5541'20			-7590 Jan 20 j 13:48	0° ≈	
greatest brilliancy	-7595 Mar 02 j 02:21	13°9515'02		asc. node	-7590 Jan 28 j 14:33	4°≈47'23	
min. Earth dist.	-7595 Mar 07 j 20:33	11°9531'32	0.42322 AU		-7590 Mar 11 j 01:11	0°) €	
direct	-7595 Apr 04 j 01:34	6° © 54'59		_	-7590 Apr 27 j 17:05	0° Υ	
desc. node	-7595 May 21 j 13:46	19° © 56'11		evening set	-7590 May 18 j 03:43	13° Y 15′08	
	-7595 Jun 09 j 11:19	0° N		max. Earth dist.	-7590 Jun 08 j 17:00		2.58010 AU
	-7595 Jul 26 j 07:42	0° my			-7590 Jun 12 j 09:51	0°8	
	-7595 Sep 07 j 04:37	0∘ 亚			### ### ### ##########################	1501 150150	1000101
	-7595 Oct 19 j 16:05	0°M		conjunction	-7590 Jul 05 j 16:47	15° 8 50'52	
	-7595 Dec 02 j 00:35	0° ∡		minimum elong	-7590 Jul 05 j 15:53	15° 8 49'18	1°09'41
	-7594 Jan 15 j 17:54	0°る			-7590 Jul 26 j 00:10	0°П 200Д 5 ста 4	
evening set	-7594 Mar 01 j 05:50	29° る 00'45		morning rise	-7590 Aug 24 j 06:23	20° ∏ 56'34	
	-7594 Mar 02 j 18:36	0° ≈			-7590 Sep 05 j 15:48	0° ©	
	7504 4 10:10 2 1	001/00102	000 410 4		-7590 Oct 15 j 19:07	0° N	
conjunction	-7594 Apr 18 j 19:21	0°) €08'03			-7590 Nov 24 j 01:19	0° my	
minimum elong	-7594 Apr 18 j 19:32	0°) €08'21	0°04'22		-7589 Jan 02 j 05:34	0∘ ⊽	
behind sun begin	-7594 Apr 18 j 00:28	29°≈37'57		desc. node	-7589 Jan 11 j 16:38	7° Ω 10'30	
behind sun end	-7594 Apr 19 j 14:36	0°) €38'46			-7589 Feb 11 j 07:49	0°M	
D d F.	-7594 Apr 18 j 14:17	0°){	2 ((720 111		-7589 Mar 25 j 19:02	0° ∡	
max. Earth dist.	-7594 Apr 19 j 06:32		2.66728 AU		-7589 May 12 j 21:10	0°る	
asc. node	-7594 Apr 25 j 20:51	4°) €38'35		retrograde	-7589 Jul 25 j 01:45	25°る13'07	0.00001.177
morning rise	-7594 Jun 04 j 05:47	29°) € 50'15		min. Earth dist.	-7589 Aug 28 j 23:18		0.60801 AU
	-7594 Jun 04 j 11:51	0°Υ		opposition	-7589 Sep 02 j 17:46	15° る 19'17	
	-7594 Jul 20 j 20:52	0° B		greatest brilliancy	-7589 Sep 02 j 03:37	15° る 33'22	-1.6m
	-7594 Sep 04 j 12:07	0° Ⅱ		direct	-7589 Oct 10 j 06:30	6° る 33'48	
	-7594 Oct 19 j 14:49	0° ©		asc. node	-7589 Dec 16 j 17:40	26°₹16'05	
	-7594 Dec 03 j 20:40 -7593 Jan 20 j 02:30	0° Ω 0° ™			-7589 Dec 24 j 11:51 -7588 Feb 17 j 19:21	0° ≈ 0° ∀	
	-7593 Mar 23 j 00:39	0∘ ত بالا			-7588 Apr 07 j 09:16	0 χ 0°Υ	
desc. node	-7593 Apr 08 j 18:53	ა = 3° ჲ 16'30			-7588 May 23 j 15:49	0° 8	
retrograde	-7593 Apr 15 j 22:43	3° ⊆ 36'59		evening set	-7588 Jun 29 j 23:28	25° 8 37'08	
retrograde	-7593 May 10 j 01:50	30°R, Mp		evening set	-7588 Jul 06 j 04:13	0°Ⅱ	
min. Earth dist.	-7593 May 13 j 10:44	29° Mp 05'06	0.38878 AU	max. Earth dist.	-7588 Jul 15 j 14:05		2.46819 AU
opposition	-7593 May 17 j 22:44	27° m 49'24		max. Lartii dist.	-7588 Aug 16 j 09:20	0.20 0.11	2.40017 AU
greatest brilliancy	-7593 May 17 j 08:56	27° m ₀ 59'07			7500 Mug 10 J 07.20	0 3	
direct	-7593 Jun 17 j 03:09	22° m 37'56	2.7111	conjunction	-7588 Aug 22 j 08:34	4°527'41	1°00'49
	-7593 Jul 22 j 23:05	0° ⊽		minimum elong	-7588 Aug 22 j 10:41	4°931'38	1°01'19
	-7593 Sep 20 j 04:51	0°M		minimum ciong	-7588 Sep 24 j 21:53	0° Ω	1 01 1)
	-7593 Nov 08 j 06:25	0° ∡ 7		morning rise	-7588 Oct 19 j 23:07	19° Ω 25'50	
	-7593 Dec 25 j 22:31	8°0			-7588 Nov 02 j 12:06	0° m)	
	-7592 Feb 11 j 14:10	0° ≈		desc. node	-7588 Nov 28 j 11:58	20° m) 17'07	
asc. node	-7592 Mar 12 j 15:23	18° ≈ 55'03			-7588 Dec 11 j 00:20	0∘ ⊽	
	-7592 Mar 30 j 04:25	0°) €			-7587 Jan 19 j 07:36	0°M₊	
evening set	-7592 Apr 08 j 19:02	6°) €05'22			-7587 Mar 01 j 08:03	0° ∡ ¹	
max. Earth dist.	-7592 May 12 j 16:33	27°) 45'43	2.64969 AU		-7587 Apr 14 j 04:22	8°0	
	-7592 May 16 j 03:46	0° Y			-7587 Jun 02 j 01:53	0° ≈	
	, ,				-7587 Aug 12 j 10:21	0° ∀	
conjunction	-7592 May 26 j 02:31	6° Y 26'46	0°40'16	retrograde	-7587 Aug 28 j 22:02	1°) 38′32	
minimum elong	-7592 May 26 j 01:13	6° Y 24'40	0°40'15		-7587 Sep 13 j 12:54	30°R≈	
_	-7592 Jun 30 j 21:35	0°8		opposition	-7587 Oct 07 j 21:05	21° ≈ 49'57	-0°59'51
morning rise	-7592 Jul 11 j 08:00	6° 8 59'12		min. Earth dist.	-7587 Oct 06 j 20:03	22°≈15′09	0.66310 AU
	-7592 Aug 14 j 02:07	Π $^{\circ}0$		greatest brilliancy	-7587 Oct 07 j 20:31	21° ≈ 50'31	-1.4m
	-7592 Sep 25 j 18:24	0 \circ \odot		asc. node	-7587 Nov 02 j 22:43	13° ≈ 27'43	
	-7592 Nov 06 j 05:56	$0^{\circ}\Omega$		direct	-7587 Nov 16 j 18:24	12° ≈ 12'57	
	-7592 Dec 17 j 01:59	0° m			-7586 Jan 19 j 08:30	0° ∀	
	-7591 Jan 27 j 05:20	0∘ ⊽			-7586 Mar 16 j 15:31	$0^{\circ}\Upsilon$	
desc. node	-7591 Feb 23 j 19:21	19° ჲ 23'29			-7586 May 03 j 19:03	0° 8	
	-7591 Mar 11 j 15:18	0° M			-7586 Jun 16 j 20:08	Π °0	
	-7591 May 03 j 23:32	0° ∡ ¹			-7586 Jul 28 j 01:15	0 \circ \odot	
retrograde	-7591 Jun 12 j 19:29	9° ∡ ³36'38		evening set	-7586 Aug 23 j 07:13	19° © 54'48	
min. Earth dist.	-7591 Jul 12 j 10:50	3° ∡ ³38'35	0.49906 AU		-7586 Sep 05 j 08:45	$0^{\circ}\Omega$	
greatest brilliancy	-7591 Jul 18 j 19:52	1° ∡ 19'31	-2.1m		-7586 Oct 13 j 16:52	0° m)	

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style. desc. node -7586 Oct 16 j 05:32 1°**m** 59'15 -7581 May 15 j 00:53 0°**)** -7581 Jun 25 j 20:36 26°**)** 13′23 asc. node conjunction -7586 Oct 24 j 06:35 8° To $18'30 -0^{\circ}06'07$ -7581 Jul 01 j 23:01 d

conjunction	-/586 Oct 24 j 06:35	8° II) 18'30	-0°06'0'/		-/581 Jul 01 j 23:01	0_{\circ} ,	
minimum elong	-7586 Oct 24 j 06:01	8° Mp 17′22	0°05'51		-7581 Aug 20 j 09:01	9° 8	
behind sun begin	-7586 Oct 23 j 03:58	7° Mp 26'14			-7581 Oct 12 j 17:21	Π $^{\circ}0$	
behind sun end	-7586 Oct 25 j 08:04	9° m 08'30		retrograde	-7580 Jan 02 j 05:17	27° Ⅱ 00'52	
	·		2 20100 111	•	-		5055115
max. Earth dist.	-7586 Nov 09 j 10:30	20° TD 59'06	2.38100 AU	opposition	-7580 Feb 04 j 21:42	20° Ⅲ 26′04	
	-7586 Nov 20 j 23:50	0∘ ⊽		greatest brilliancy	-7580 Feb 06 j 15:45	19° Ⅱ 50'54	-2.3m
morning rise	-7586 Dec 29 j 18:27	29° ₽ 44'42		min. Earth dist.	-7580 Feb 13 j 04:48	17° Ⅱ 40'43	0.47154 AU
· ·	-7586 Dec 30 j 02:34	0°M		direct	-7580 Mar 12 j 22:35	12° Ⅲ 24'12	
	·	0° × 7⊓		ancet	•	0°ම	
	-7585 Feb 08 j 19:36				-7580 May 08 j 18:24		
	-7585 Mar 23 j 18:34	0°る		desc. node	-7580 Jun 07 j 06:07	17° © 25'32	
	-7585 May 08 j 15:02	0° ≈			-7580 Jun 26 j 04:50	$0 {\circ} \Omega$	
	-7585 Jun 27 j 21:32	0°) €			-7580 Aug 07 j 09:38	0° ™	
	-7585 Aug 31 j 23:16	$0^{\circ}\mathbf{\Upsilon}$			-7580 Sep 17 j 06:21	0∘ ⊽	
asc. node	-7585 Sep 21 j 02:10	4° Υ 41'01			-7580 Oct 28 j 12:08	0° M	
					•		
retrograde	-7585 Oct 03 j 03:50	5° Ƴ 33'18			-7580 Dec 09 j 23:56	0° ∡ ¹	
	-7585 Nov 01 j 15:01	30°Ŗ ℋ			-7579 Jan 23 j 02:58	0°₹	
opposition	-7585 Nov 11 j 06:56	26°) 19′05	1°55'54	evening set	-7579 Feb 12 j 20:13	13° る 43'29	
greatest brilliancy	-7585 Nov 11 j 10:13	26° ¥ 15'49	-1.4m	_	-7579 Mar 09 j 18:38	0° ≈	
min. Earth dist.	-7585 Nov 13 j 23:26	25°) 15'10			, e , s = e s j = e i e e		
	·		0.03099 AU		7570	1.60 00100	0001154
direct	-7585 Dec 22 j 07:44	16° 米 19′10		conjunction	-7579 Apr 03 j 14:24	16° ≈ 00′29	
	-7584 Feb 13 j 17:28	0° Y		minimum elong	-7579 Apr 03 j 15:16	16° ≈ 01'52	0°22'18
	-7584 Apr 09 j 20:34	0°8		max. Earth dist.	-7579 Apr 10 j 02:07	20° ≈ 10′08	2.65938 AU
	-7584 May 25 j 22:49	$\Pi^{\circ}0$			-7579 Apr 25 j 10:56	0° ∀	
	-7584 Jul 06 j 20:05	0°ഇ		asc. node	-7579 May 12 j 13:50	10°) 55'33	
	3						
	-7584 Aug 15 j 08:55	0 ° Ω		morning rise	-7579 May 20 j 20:55	16°) 12'58	
desc. node	-7584 Sep 02 j 01:42	13° Ω 45'43			-7579 Jun 11 j 11:31	0 ° $\mathbf{\Upsilon}$	
	-7584 Sep 22 j 19:13	0° ™			-7579 Jul 28 j 08:12	9° 8	
evening set	-7584 Oct 27 j 15:58	27° Mp 16'00			-7579 Sep 13 j 00:19	Π $^{\circ}0$	
•	-7584 Oct 31 j 04:29	0∘ ⊽			-7579 Oct 30 j 02:28	0°©	
	-7584 Dec 09 j 10:32	0°M₊			-7579 Dec 18 j 13:03	0°N	
	-7304 DCC 07 j 10.32	O IIG			•		
					-7578 Feb 22 j 00:57	0° m)	
conjunction	-7584 Dec 29 j 06:36	14°M44'32		retrograde	-7578 Mar 16 j 17:37	3° m 07′29	
minimum elong	-7584 Dec 29 j 04:46	14° M 41'10	1°07'05		-7578 Apr 08 j 19:50	30° R Ω	
	-7583 Jan 19 j 06:43	0° ∡ 7		opposition	-7578 Apr 16 j 11:06	28° Ω 00'40	0°42'36
max. Earth dist.	-7583 Feb 09 j 11:15	15° ∡ °00'38	2.49578 AU	greatest brilliancy	-7578 Apr 16 j 12:41	27° Ω 59'36	-3.0m
morning rise	-7583 Feb 26 j 15:29	26° ₹ ′54'12		min. Earth dist.	-7578 Apr 17 j 03:05	27° Ω 49'57	
morning risc	3						0.36007 AC
	-7583 Mar 03 j 04:12	0°ප		desc. node	-7578 Apr 25 j 09:50	25° Ω 42'18	
	-7583 Apr 17 j 07:14	0° ≈		direct	-7578 May 17 j 01:04	22° Ω 51′22	
	-7583 Jun 03 j 18:44	0° ∀			-7578 Jun 20 j 16:33	0° m)	
	-7583 Jul 24 j 11:07	$0^{\circ}\Upsilon$			-7578 Aug 17 j 03:52	0∘ ⊽	
asc. node	-7583 Aug 08 j 01:36	8° Y ′04'25			-7578 Oct 03 j 05:25	0°M	
	-7583 Sep 22 j 08:20	0°8			-7578 Nov 17 j 23:04	0° ∡ 7	
					•		
retrograde	-7583 Nov 10 j 23:23	11° 8 47'25			-7577 Jan 03 j 02:00	0° ට	
opposition	-7583 Dec 18 j 02:53	3° 8 33'17	4°37'49		-7577 Feb 18 j 22:04	0° ≈	
greatest brilliancy	-7583 Dec 19 j 01:01	3° 8 12'18	-1.7m	evening set	-7577 Mar 25 j 16:23	22° ≈ 05'34	
min. Earth dist.	-7583 Dec 24 j 10:20	1° 8 09'52	0.58944 AU	asc. node	-7577 Mar 30 j 08:12	25° ≈ 03'12	
	-7583 Dec 27 j 14:16	30° ₹ Υ			-7577 Apr 07 j 02:54	0° ∀	
direct	-7582 Jan 27 j 15:41	23° Y ′49'17		max. Earth dist.	-7577 May 04 j 02:15	17°) 12′20	2.66292 AU
direct	·			max. Lartii dist.	-7377 Way 04 J 02.13	17 /(12 20	2.002)2 AO
	-7582 Mar 01 j 13:13	0° 8					
	-7582 Apr 30 j 02:29	Π $\circ 0$		conjunction	-7577 May 12 j 05:07	22° 米 24'41	0°24'01
	-7582 Jun 13 j 23:06	0 \circ 20		minimum elong	-7577 May 12 j 04:15	22°) €23'18	0°23'52
desc. node	-7582 Jul 21 j 03:00	27°9517'21			-7577 May 24 j 00:06	$0^{\circ}\Upsilon$	
	-7582 Jul 24 j 17:11	$0^{\circ}\Omega$		morning rise	-7577 Jun 27 j 04:31	22° Y 15′24	
	-7582 Sep 01 j 20:35	0° my			-7577 Jul 08 j 22:08	0°8	
					•		
	-7582 Oct 10 j 19:32	0∘ ⊽			-7577 Aug 22 j 13:17	Π $^{\circ}$ 0	
	-7582 Nov 19 j 14:24	0° M			-7577 Oct 04 j 22:21	0 \circ 6	
evening set	-7582 Dec 27 j 18:20	27° M 44'47			-7577 Nov 16 j 09:04	$\mathfrak{O}^{\circ} \mathfrak{O}$	
	-7582 Dec 30 j 22:24	0° ∡ ¹			-7577 Dec 28 j 12:08	0° m	
	-7581 Feb 12 j 04:32	8°0			-7576 Feb 09 j 16:55	0∘ ಹ	
	,5011 0 0 12 J 07.32	ÿ O		daga rada	·		
	7501 F 1 2011115	50 - 7,	1000155	desc. node	-7576 Mar 12 j 12:47	20° £ 21′00	
conjunction	-7581 Feb 20 j 16:53	5° る 45'06			-7576 Mar 29 j 14:54	0°M	
minimum elong	-7581 Feb 20 j 18:33	5° る 47'54		retrograde	-7576 May 23 j 16:28	17°M07'32	
max. Earth dist.	-7581 Mar 16 j 00:44	21° る 16'41	2.60221 AU	min. Earth dist.	-7576 Jun 20 j 09:56	12°ML00'16	0.44935 AU
	-7581 Mar 29 j 08:02	0°≈		greatest brilliancy	-7576 Jun 26 j 20:59	9°M50'09	-2.4m
morning rise	-7581 Apr 13 j 03:58	9° ≈ 37'18		opposition	-7576 Jun 28 j 12:00	9°M17'12	-5°47'38
	1 3			**		· -	

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 33

•	cal year style is used. Th		•	* * ·	7901 BCE in historical co	, ,	6 33
direct	-7576 Jul 30 j 17:16	2°M53'18	ii ustronomicui cou	conjunction	-7571 Sep 27 j 23:01	11° Ω 47'21	0°25'52
	-7576 Oct 18 j 04:52	0° ∡ ¹		minimum elong	-7571 Sep 28 j 01:06	11°Ω51'24	
	-7576 Dec 10 j 02:15	0°ප			-7571 Oct 21 j 04:50	0° m)	
	-7575 Jan 28 j 19:56	0° ≈		desc. node	-7571 Nov 02 j 02:08	9° m) 19'57	
asc. node	-7575 Feb 14 j 05:41	10° ≈ 04'03			-7571 Nov 28 j 12:35	0∘ <u>⊽</u>	
	-7575 Mar 18 j 08:51	0°)		morning rise	-7571 Dec 02 j 02:20	2° ≏ 46'31	
evening set	-7575 May 02 j 14:28	28°) 39'46		C	-7570 Jan 06 j 15:36	0° M .	
•	-7575 May 04 j 16:18	$0^{\circ}\mathbf{\Upsilon}$			-7570 Feb 16 j 09:19	0° ∡ ¹	
max. Earth dist.	-7575 May 28 j 16:04	15° Ƴ 36'40	2.61312 AU		-7570 Mar 31 j 12:26	0°ರ	
					-7570 May 17 j 01:04	0° ≈	
conjunction	-7575 Jun 19 j 07:53	29° Ƴ 59'25	1°01'02		-7570 Jul 09 j 00:54	0°)	
minimum elong	-7575 Jun 19 j 06:30	29° Ƴ 57'06	1°01'14	retrograde	-7570 Sep 19 j 06:32	22°) € 33'45	
	-7575 Jun 19 j 08:14	9° 8		asc. node	-7570 Oct 07 j 16:16	20°) 19'36	
	-7575 Aug 02 j 02:55	$\Pi^{\circ}0$		opposition	-7570 Oct 28 j 20:13	13°) €03'23	0°48'25
morning rise	-7575 Aug 06 j 01:08	2° Ⅱ 45′20		greatest brilliancy	-7570 Oct 28 j 20:38	13°) €02'57	-1.4m
	-7575 Sep 13 j 02:23	0ං ව		min. Earth dist.	-7570 Oct 30 j 01:38	12°) € 33'58	0.66685 AU
	-7575 Oct 23 j 15:47	$0^{\circ}\Omega$		direct	-7570 Dec 08 j 13:45	3°) €09'01	
	-7575 Dec 02 j 08:56	0° m			-7569 Feb 27 j 19:01	$0^{\circ}\mathbf{\Upsilon}$	
	-7574 Jan 11 j 01:10	0∘ ⊽			-7569 Apr 20 j 03:29	9° 8	
desc. node	-7574 Jan 28 j 11:38	12° ჲ 59'26			-7569 Jun 04 j 03:55	Π°	
	-7574 Feb 20 j 20:05	0°M			-7569 Jul 15 j 16:41	0°©	
	-7574 Apr 05 j 19:53	0° ∡ ¹			-7569 Aug 24 j 02:20	$0^{\circ}\Omega$	
	-7574 May 30 j 21:06	0°ರ		desc. node	-7569 Sep 19 j 21:35	20° Ω 55'34	
retrograde	-7574 Jul 09 j 20:19	9° ට 15'56			-7569 Oct 01 j 10:46	0° m)	
min. Earth dist.	-7574 Aug 11 j 19:18	1° る 58'57	0.57070 AU	evening set	-7569 Oct 02 j 00:34	0° m/27'08	
	-7574 Aug 16 j 21:29	30°₽ ✓		C	-7569 Nov 08 j 17:56	0∘ ⊽	
opposition	-7574 Aug 17 j 23:24	29° ∡ ³34'41	-4°51'06		,		
greatest brilliancy	-7574 Aug 17 j 00:15	29° ∡ 757'17		conjunction	-7569 Dec 05 j 05:27	20° ≙ 24'13	-0°51'04
direct	-7574 Sep 23 j 06:13	21° √ 19'11		minimum elong	-7569 Dec 05 j 02:12	20° ≏ 18'02	
	-7574 Nov 03 j 08:12	ರ°0		Č	-7569 Dec 17 j 21:22	0° M	
asc. node	-7573 Jan 02 j 07:27	28° පි 28'51		max. Earth dist.	-7568 Jan 21 j 10:14	25°M31'59	2.44476 AU
	-7573 Jan 05 j 02:18	0° ≈			-7568 Jan 27 j 14:42	0° ∡ ¹	
	-7573 Feb 26 j 04:39	0°) €		morning rise	-7568 Feb 06 j 09:36	6° ∡ 759'49	
	-7573 Apr 15 j 19:34	$0^{\circ}\Upsilon$		C	-7568 Mar 10 j 10:37	0°ರ	
	-7573 May 31 j 18:56	0°8			-7568 Apr 24 j 16:47	0° ≈	
evening set	-7573 Jun 13 j 00:47	8° 8 16'39			-7568 Jun 11 j 20:17	0°) €	
max. Earth dist.	-7573 Jun 29 j 09:56	19° 8 33'14	2.51555 AU		-7568 Aug 03 j 23:45	0°Υ	
	-7573 Jul 14 j 07:10	0°II		asc. node	-7568 Aug 24 j 16:58	10° Ƴ 08'57	
	,			retrograde	-7568 Oct 25 j 14:07	27° Ƴ 16'49	
conjunction	-7573 Aug 02 j 23:57	14° Ⅱ 07'07	1°10'31	opposition	-7568 Dec 02 j 15:43	18° Υ 35'32	3°38'31
minimum elong	-7573 Aug 03 j 00:44		1°10'59	greatest brilliancy	-7568 Dec 03 j 04:48	18° Ƴ 22'52	-1.5m
	-7573 Aug 24 j 15:22	0ಂತಾ		min. Earth dist.	-7568 Dec 07 j 14:13	16° Ƴ 40'41	0.62294 AU
morning rise	-7573 Sep 26 j 08:07	24°937'53		direct	-7567 Jan 12 j 14:59	8° Ƴ 38'47	
8	-7573 Oct 03 j 08:34	$0^{\circ}\Omega$			-7567 Mar 21 j 16:23	0°8	
	-7573 Nov 11 j 03:38	0°m			-7567 May 11 j 00:34	0°II	
desc. node	-7573 Dec 16 j 06:45	27° m) 15'04			-7567 Jun 23 j 04:35	0°ಅ	
	-7573 Dec 19 j 20:19	0∘ ⊽			-7567 Aug 02 j 06:52	0°N	
	-7572 Jan 28 j 08:18	0°M		desc. node	-7567 Aug 06 j 19:40	3° Ω 28'34	
	-7572 Mar 09 j 16:26	0° ∡ 7			-7567 Sep 10 j 01:11	0° mp	
	-7572 Apr 23 j 09:19	0°ප			-7567 Oct 18 j 16:52	0∘ <u>⊽</u>	
	-7572 Jun 14 j 17:24	0° ≈			-7567 Nov 27 j 05:05	0° M ₊	
retrograde	-7572 Aug 15 j 08:19	18° ≈ 14'31		evening set	-7567 Dec 05 j 14:23	6° M ₊14'04	
min. Earth dist.	-7572 Sep 21 j 19:56	9° ≈ 19'49	0.64876 AU		-7566 Jan 07 j 06:50	0° ∡ 7	
opposition	-7572 Sep 24 j 07:58	8° ≈ 19'23			, , ,	• •	
greatest brilliancy	-7572 Sep 24 j 04:04	8°≈23'19		conjunction	-7566 Feb 01 j 12:28	17° ∡ ¹45'37	-1°09'16
greatest orimaney	-7572 Oct 20 j 23:20	30°R₹	1.1111	minimum elong	-7566 Feb 01 j 13:24	17° × ⁷ 47'16	
direct	-7572 Nov 02 j 10:13	28° る 58'55		g	-7566 Feb 19 j 07:54	0°ਰ	1 05 .6
	-7572 Nov 15 j 12:56	0°≈		max. Earth dist.	-7566 Mar 04 j 03:19	8° る 39'47	2.56555 AU
asc. node	-7572 Nov 19 j 11:59	0°≈40'03		morning rise	-7566 Mar 27 j 14:59	8 03947 24° る 15'54	2.00000 110
450. HOGO	-7571 Jan 31 j 19:46	0° ∺			-7566 Apr 05 j 09:11	0°≈	
	-7571 Mar 25 j 07:26	0° Υ			-7566 May 22 j 05:58	0° ₩	
	-7571 May 11 j 12:04	0° 8			-7566 Jul 09 j 20:58	0°Υ	
	-7571 Jun 24 j 06:36	0°II		asc. node	-7566 Jul 12 j 14:04	1° Υ 38'06	
evening set	-7571 Jul 31 j 09:50	26° Ⅱ 59'19		use. Houc	-7566 Aug 30 j 09:48	0°8	
evening set	-7571 Aug 04 j 10:45	0°9			-7566 Nov 01 j 10:00	0°II	
max. Earth dist.	-7571 Aug 04 j 10.45	0 3 17° 9 59'01	2.39698 AU	retrograde	-7566 Dec 10 j 16:23	7° П 51'06	
man. Darui dist.	-7571 Sep 12 j 19:22	0° Ω	2.37070 AU	opposition	-7565 Jan 14 j 20:56	0° П 31'46	5°47'27
	7571 bep 12 J 19.22	· 06		оррознин	1505 Jan 17 J 20.50	0 11.71.40	3 7/2/

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 34 Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ne year -7900 i	in astronomical co	unting style is the year	7901 BCE in historical c	ounting style.	
greatest brilliancy	-7565 Jan 16 j 10:17	29° 8 58'24	-2.0m		-7560 Feb 06 j 14:56	0° ≈	
	-7565 Jan 16 j 08:30	30° Ŗ ႘		asc. node	-7560 Mar 02 j 21:37	15° ≈ 47'52	
min. Earth dist.	-7565 Jan 22 j 20:46	27° 8 40'57	0.52153 AU		-7560 Mar 25 j 12:08	0° ∀	
direct	-7565 Feb 22 j 18:42	21° 8 34'32		evening set	-7560 Apr 17 j 09:57	14° ₩ 30'32	
	-7565 Apr 01 j 18:17	Π $^{\circ}0$			-7560 May 11 j 14:08	$0^{\circ}\mathbf{\Upsilon}$	
	-7565 May 26 j 18:17	0 \circ 20		max. Earth dist.	-7560 May 18 j 09:48	4° Ƴ 24'40	2.63902 AU
desc. node	-7565 Jun 24 j 21:50	19° © 50'19					
	-7565 Jul 09 j 01:46	$0^{\circ}\Omega$		conjunction	-7560 Jun 03 j 18:06	15° Ƴ 04'17	0°48'42
	-7565 Aug 18 j 11:20	0° m		minimum elong	-7560 Jun 03 j 16:40	15° Ƴ 01'56	0°48'46
	-7565 Sep 27 j 06:48	0∘ ⊽		-	-7560 Jun 26 j 07:23	0°B	
	-7565 Nov 06 j 18:20	0° M		morning rise	-7560 Jul 20 j 08:06	16° 8 13'16	
	-7565 Dec 18 j 16:06	0° ∡ ¹		Č	-7560 Aug 09 j 08:31	0°II	
evening set	-7564 Jan 27 j 07:56	27° ∡ 16'55			-7560 Sep 20 j 18:21	0° ©	
C	-7564 Jan 31 j 08:44	ರ°0			-7560 Oct 31 j 20:56	$0^{\circ}\Omega$	
	-7564 Mar 16 j 17:54	0° ≈			-7560 Dec 11 j 05:16	0° m)	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-			-7559 Jan 20 j 15:53	0∘ ⊽	
conjunction	-7564 Mar 18 j 16:54	1°≈16'25	-0°38'55	desc. node	-7559 Feb 14 j 06:04	o — 17° ≏ 47'22	
minimum elong	-7564 Mar 18 j 18:22	1°≈18'47		dese. Hode	-7559 Mar 03 j 17:12	0°M	
max. Earth dist.	-7564 Mar 31 j 11:37				-7559 Apr 20 j 07:26	0° ∡ 7	
max. Lattii dist.	-7564 May 02 j 08:40	0° ∺	2.04333 AC	retrograde	-7559 Jun 23 j 05:27	21° × ⁷ 23'52	
morning rise	-7564 May 06 j 05:46	2° 升 28′27		min. Earth dist.	-7559 Jul 24 j 01:24		0.52618 AU
asc. node	-7564 May 29 j 08:24	17° ¥ 09'53		greatest brilliancy	-7559 Jul 30 j 02:41	12° × 40'05	
asc. Houe	-7564 Jun 18 j 14:39	0° Υ		-	-7559 Jul 30 j 02.41	12° x '40'03	
	·	0° 8		opposition direct		4° x ⁷ 31'06	-3 3/36
	-7564 Aug 05 j 04:05 -7564 Sep 22 j 09:52	0°II		direct	-7559 Sep 04 j 07:49	4 ×3100	
		0°©			-7559 Nov 21 j 07:06	0°≈	
	-7564 Nov 12 j 04:22			1	-7558 Jan 14 j 18:54		
. 1	-7563 Jan 16 j 13:32	0° Ω		asc. node	-7558 Jan 18 j 21:20	2°≈23'13	
retrograde	-7563 Feb 13 j 09:28	4° Ω 21'00			-7558 Mar 06 j 00:50	0°) €	
	-7563 Mar 12 j 21:26	30°₹©	20.50140		-7558 Apr 23 j 00:11	0°Υ 22°Ω2211.5	
opposition	-7563 Mar 16 j 12:47	28°\$58'47	3°59'48	evening set	-7558 May 27 j 07:46	22° Y 20'15	
greatest brilliancy	-7563 Mar 17 j 12:17	28°5542'03	-2.7m		-7558 Jun 07 j 19:24	0°8	
min. Earth dist.	-7563 Mar 22 j 02:38	27°523'46	0.40165 AU	max. Earth dist.	-7558 Jun 15 j 19:07	5° 8 23'11	2.55898 AU
direct	-7563 Apr 18 j 10:44	22° © 55'19					
desc. node	-7563 May 12 j 02:19	26° © 31'37		conjunction	-7558 Jul 15 j 12:47	25° 8 52'43	1°11'43
	-7563 May 22 j 08:42	$0^{\circ}\Omega$		minimum elong	-7558 Jul 15 j 12:23	25° 8 52'00	1°12'07
	-7563 Jul 17 j 04:30	0° m/p			-7558 Jul 21 j 09:26	0°П	
	-7563 Aug 31 j 05:20	0∘ ⊽			-7558 Aug 31 j 22:45	0ಂತಾ	
	-7563 Oct 13 j 18:05	0°M₊		morning rise	-7558 Sep 04 j 11:47	2° 5 37'02	
	-7563 Nov 26 j 17:24	0° ∡			-7558 Oct 10 j 22:35	0 $^{\circ}$ Ω	
	-7562 Jan 10 j 19:56	0°る			-7558 Nov 19 j 00:33	0° m)	
	-7562 Feb 26 j 02:00	0° ≈			-7558 Dec 27 j 23:42	0∘ ⊽	
evening set	-7562 Mar 10 j 06:49	7° ≈ 49'21		desc. node	-7557 Jan 02 j 03:52	3° ჲ 57'09	
	-7562 Apr 14 j 00:17	0° ∀			-7557 Feb 05 j 19:01	0° M	
asc. node	-7562 Apr 16 j 01:38	1° ¥ 18'43			-7557 Mar 19 j 16:19	0° ∡ ¹	
max. Earth dist.	-7562 Apr 24 j 16:41	6° 米 49′05	2.66802 AU		-7557 May 04 j 23:18	0°ප	
					-7557 Jul 06 j 23:28	0° ≈	
conjunction	-7562 Apr 27 j 09:05	8° ∺ 31'53	0°06'29	retrograde	-7557 Aug 02 j 10:13	4° ≈ 11'03	
minimum elong	-7562 Apr 27 j 08:50	8° ∺ 31′29	0°06'13		-7557 Aug 27 j 00:19	30°₽₹	
behind sun begin	-7562 Apr 26 j 14:39	8° ∺ 02′28		min. Earth dist.	-7557 Sep 07 j 06:57		0.62492 AU
behind sun end	-7562 Apr 28 j 03:01	9°) €00'30		opposition	-7557 Sep 11 j 06:01	24° る 14'36	
	-7562 May 30 j 21:17	0 ° Υ		greatest brilliancy	-7557 Sep 10 j 20:11	24° る 24'27	-1.5m
morning rise	-7562 Jun 12 j 12:48	8° Y ′09'27		direct	-7557 Oct 19 j 09:01	15° る 15'12	
	-7562 Jul 16 j 01:48	9° 8		asc. node	-7557 Dec 07 j 00:38	26° る 38'35	
	-7562 Aug 30 j 07:10	Π $^{\circ}0$			-7557 Dec 15 j 02:04	0° ≈	
	-7562 Oct 13 j 15:49	0 \circ \odot			-7556 Feb 11 j 20:53	0° ∀	
	-7562 Nov 26 j 14:37	$0^{\circ}\Omega$			-7556 Apr 02 j 07:28	0° Y	
	-7561 Jan 10 j 04:02	0° m			-7556 May 18 j 21:23	0° 8	
	-7561 Feb 27 j 22:32	0∘ ⊽			-7556 Jul 01 j 12:17	$\Pi^{\circ}0$	
desc. node	-7561 Mar 30 j 04:58	14° ≏ 13'48		evening set	-7556 Jul 10 j 20:32	6° Ⅲ 40′02	
retrograde	-7561 May 01 j 03:12	20° ჲ 38′03		max. Earth dist.	-7556 Jul 28 j 02:19	19° Ⅱ 10'46	2.44133 AU
min. Earth dist.	-7561 May 28 j 02:11	16° ≏ 03'41	0.40587 AU		-7556 Aug 11 j 17:17	0°©	
greatest brilliancy	-7561 Jun 02 j 10:19	14° ≏ 27'33	-2.7m		-		
opposition	-7561 Jun 03 j 12:57	14° ≏ 07'25	-4°27'54	conjunction	-7556 Sep 03 j 21:26	17° © 29'17	0°50'54
direct	-7561 Jul 04 j 07:31	8° ≙ 34'08		minimum elong	-7556 Sep 04 j 00:00	17° 5 34'12	0°51'23
	-7561 Sep 09 j 13:22	0° M		3	-7556 Sep 20 j 04:36	$0^{\circ}\Omega$	
	-7561 Nov 01 j 09:54	0° ∡ ¹			-7556 Oct 28 j 17:07	0° m)	
	-7561 Dec 20 j 09:06	8°0		morning rise	-7556 Nov 04 j 01:15	4° m) 57'46	
	ý			-	ž	-	

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 35

-	omena of Mars fron		•	/ *		, ,	e 35
	nical year style is used: Th	-	in astronomical co				0.56700.444
desc. node	-7556 Nov 18 j 21:41	16° m/34'39		min. Earth dist.	-7550 Jan 03 j 15:54		0.56702 AU
	-7556 Dec 06 j 03:22	0∘ ⊽		direct	-7550 Feb 05 j 17:54	3° 8 37'16	
	-7555 Jan 14 j 08:24	0°M			-7550 Apr 21 j 19:40	0°II	
	-7555 Feb 24 j 05:02	0° ∡ 7			-7550 Jun 07 j 14:22	0°©	
	-7555 Apr 08 j 16:12	6°0		desc. node	-7550 Jul 11 j 13:50	24°\$27'46	
	-7555 May 26 j 08:47	0° ≈			-7550 Jul 19 j 00:20	0° Ω	
	-7555 Jul 24 j 13:13	0° ∀			-7550 Aug 27 j 12:17	0° m)	
retrograde	-7555 Sep 05 j 17:07	9°) (36′41			-7550 Oct 05 j 16:56	0∘ 亚	
opposition	-7555 Oct 15 j 13:29	29° ≈ 53'38			-7550 Nov 14 j 16:21	0° M	
min. Earth dist.	-7555 Oct 15 j 07:52	29° ≈ 59'17	0.66699 AU		-7550 Dec 26 j 03:55	0° ∡ 7	
	-7555 Oct 15 j 07:09	30°R≈		evening set	-7549 Jan 08 j 08:37	9° ∡ 16′28	
greatest brilliancy	-7555 Oct 15 j 13:35	29°≈53'32	-1.4m		-7549 Feb 07 j 12:25	0°ප	
asc. node	-7555 Oct 24 j 05:27	26° ≈ 29'27				—	
direct	-7555 Nov 24 j 18:53	20°≈09'18		conjunction	-7549 Mar 02 j 20:51	15° る 38'39	
	-7554 Jan 08 j 13:53	0°) €		minimum elong	-7549 Mar 02 j 22:35	15°₹41'33	
	-7554 Mar 10 j 12:08	0° Υ		max. Earth dist.	-7549 Mar 22 j 07:08		2.61904 AU
	-7554 Apr 28 j 13:59	0°8			-7549 Mar 24 j 16:48	0° ≈	
	-7554 Jun 11 j 22:58	0°Щ		morning rise	-7549 Apr 22 j 03:16	18° ≈ 23'10	
	-7554 Jul 23 j 06:50	0°50			-7549 May 10 j 07:50	0° ∀	
_	-7554 Aug 31 j 15:05	$0^{\circ}\Omega$		asc. node	-7549 Jun 16 j 01:56	23°) 12′06	
evening set	-7554 Sep 06 j 03:58	4°Ω18'08			-7549 Jun 26 j 22:39	0° Υ	
desc. node	-7554 Oct 06 j 15:49	28° Ω 11'25			-7549 Aug 14 j 12:57	0°B	
	-7554 Oct 08 j 23:02	0° ™			-7549 Oct 04 j 09:26	0°Щ	
				_	-7549 Dec 03 j 23:10	0°€	
conjunction	-7554 Nov 08 j 13:14	24° Mp 00'44		retrograde	-7548 Jan 16 j 13:42	9° © 39'09	
minimum elong	-7554 Nov 08 j 11:03	23° m 56'27	0°24'10	opposition	-7548 Feb 18 j 09:05	3° © 31'37	
	-7554 Nov 16 j 05:27	0∘ ⊽		greatest brilliancy	-7548 Feb 20 j 01:02	2°959'56	-2.4m
max. Earth dist.	-7554 Dec 18 j 03:13	24° Ω 33'44	2.39744 AU	min. Earth dist.	-7548 Feb 26 j 08:28	1° © 01'08	0.44387 AU
	-7554 Dec 25 j 07:38	0°M₊			-7548 Feb 29 j 19:00	30°R∏	
morning rise	-7553 Jan 13 j 11:59	14°M19'29		direct	-7548 Mar 25 j 00:54	26° Ⅱ 09'59	
	-7553 Feb 03 j 23:46	0° ∡			-7548 Apr 18 j 11:26	0ა ௐ	
	-7553 Mar 18 j 20:09	6°0		desc. node	-7548 May 28 j 17:09	18°9514'44	
	-7553 May 03 j 09:04	0° ≈			-7548 Jun 17 j 03:32	0 $^{\circ}\Omega$	
	-7553 Jun 21 j 14:35	0° ∀			-7548 Jul 31 j 08:48	0° m)	
	-7553 Aug 18 j 17:00	0°Υ			-7548 Sep 11 j 04:13	0∘ ⊽	
asc. node	-7553 Sep 11 j 08:26	8° Υ 43'18			-7548 Oct 23 j 00:07	0° ™	
retrograde	-7553 Oct 11 j 11:41	13° Y 37'17			-7548 Dec 04 j 21:43	0° ∡ 7	
opposition	-7553 Nov 19 j 06:26	4° Ƴ 33'47	2°34'24		-7547 Jan 18 j 07:19	0° ろ	
greatest brilliancy	-7553 Nov 19 j 12:33	4° Υ 27'45	-1.4m	evening set	-7547 Feb 22 j 08:42	23° පි 01'14	
min. Earth dist.	-7553 Nov 22 j 18:16	3°Υ11'11	0.64743 AU		-7547 Mar 05 j 03:03	0° ≈	
	-7553 Dec 01 j 05:08	30° ₹					
direct	-7553 Dec 30 j 07:56	24°) €33'09		conjunction	-7547 Apr 12 j 09:40	24° ≈ 35'29	
	-7552 Jan 30 j 21:47	0° Υ		minimum elong	-7547 Apr 12 j 10:07	24°≈36'13	0°11'55
	-7552 Apr 03 j 04:34	0° 8		behind sun begin	-7547 Apr 11 j 20:57	24°≈15'11	
	-7552 May 20 j 09:53	0°II		behind sun end	-7547 Apr 12 j 23:17	24°≈57'16	2 ((101 177
	-7552 Jul 01 j 16:40	0° ©		max. Earth dist.	-7547 Apr 15 j 13:24	26° ≈ 36'31	2.66484 AU
J 1	-7552 Aug 10 j 09:54	0° Ω		1	-7547 Apr 20 j 20:48	0° ∺ 7° ∺ 37'21	
desc. node	-7552 Aug 23 j 13:18	10° Ω 10'30		asc. node	-7547 May 02 j 19:13		
	-7552 Sep 17 j 22:38	0° m)		morning rise	-7547 May 29 j 03:28	24°) €27'08 0° Υ	
	-7552 Oct 26 j 09:21	0° ⊽			-7547 Jun 06 j 19:28		
evening set	-7552 Nov 11 j 05:45	12° Ω 12'43			-7547 Jul 23 j 09:36	$^{0\circ}$ H	
	-7552 Dec 04 j 16:33	0°M₊			-7547 Sep 07 j 11:11		
i 4 :	7551 1 11:07:44	270 m 40115	1010124		-7547 Oct 23 j 08:05	0° ⊙	
conjunction	-7551 Jan 11 j 07:44	27°M40'15			-7547 Dec 09 j 00:12	0° N 0° N	
minimum elong	-7551 Jan 11 j 07:04	27°M39'02	1-10-48		-7546 Jan 28 j 21:49		
may Earth dist	-7551 Jan 14 j 13:32	0° √ 24° √ 35'10	2.52212 AU	retrograde desc. node	-7546 Apr 03 j 05:12	20° Mp 41'26	
max. Earth dist.	-7551 Feb 18 j 13:20	24°♂35'10 0°る	2.34212 AU		-7546 Apr 15 j 22:33	19° Mp 38'42	0.20006 411
morning ris-	-7551 Feb 26 j 10:57			min. Earth dist.	-7546 May 02 j 00:41	15° M 57'33	0.38096 AU
morning rise	-7551 Mar 09 j 16:23	7°る36'41		opposition	-7546 May 04 j 08:52	15°M) 19'36	
	-7551 Apr 12 j 12:01	0° ≈		greatest brilliancy	-7546 May 04 j 04:29	15° Mp 22'34	-2.9M
	-7551 May 29 j 16:10	0°) €		direct	-7546 Jun 03 j 10:01	10° Mp 16'28	
	-7551 Jul 18 j 09:17	0° Υ 6° Υ 16'44			-7546 Aug 05 j 03:14 -7546 Sep 25 j 15:22	0° Մ 0° 亞	
asa noda		D 1 1 D 71/1			-/340 Sep 23 1 13:22	UIIL	
asc. node	-7551 Jul 29 j 06:53						
	-7551 Sep 11 j 19:05	0°8			-7546 Nov 11 j 22:44	0° ∡ ¹	
retrograde	-7551 Sep 11 j 19:05 -7551 Nov 21 j 04:05	0° 8 21° 8 05'17	5°07'44		-7546 Nov 11 j 22:44 -7546 Dec 28 j 19:55	∿∡°0 る°0	
	-7551 Sep 11 j 19:05	0°8		asc. node	-7546 Nov 11 j 22:44	0° ∡ ¹	

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style. -7545 Apr 02 j 11:46 0°**)**€ -7540 Jan 23 i 05:33 0°M -7545 Apr 03 j 09:28 0° **)** 34'24 -7540 Mar 04 j 07:33 0°×7 evening set -7545 May 09 j 15:02 23°**)**(41'11 2.65671 AU -7540 Apr 17 j 09:06 0°궁 max. Earth dist. -7545 May 19 j 10:22 $0^{\circ}\Upsilon$ -7540 Jun 06 j 06:04 0°≈ -7540 Aug 23 j 05:30 retrograde 26°≈26'39 0°**Υ**50'56 0°33'39 -7545 May 20 j 17:55 conjunction min. Earth dist. -7540 Sep 30 j 12:03 17°≈15'28 0.65783 AU 0°**Υ**49'06 minimum elong -7545 May 20 j 16:47 0°33'34 opposition -7540 Oct 02 j 04:42 16°≈34'29 -1°28'27 -7545 Jul 04 j 06:39 0°8 greatest brilliancy -7540 Oct 02 j 03:00 16°**≈**36'11 -1.4m morning rise -7545 Jul 05 j 18:52 1°800'12 asc. node -7540 Nov 09 j 19:12 7°≈04'39 -7545 Aug 17 j 16:24 $0^{\circ}\Pi$ direct -7540 Nov 10 j 17:28 7°≈04'19 -7545 Sep 29 j 16:19 0ಂತಾ -7539 Jan 24 j 05:13 0°**)**€ $0^{\circ}\Omega$ $0^{\circ}\Upsilon$ -7545 Nov 10 j 13:40 -7539 Mar 19 j 17:21 0° 8 -7545 Dec 21 j 21:49 0° m -7539 May 06 j 11:58 -7544 Feb 01 j 17:53 0∘**⊽** -7539 Jun 19 j 11:33 $0^{\circ}\Pi$ desc. node -7544 Mar 03 j 00:13 20°**♀**38'24 -7539 Jul 30 j 17:20 0ಂತಾ -7544 Mar 17 j 16:21 0°M evening set -7539 Aug 13 j 02:24 10°904'08 -7544 May 25 j 10:02 0°**√** -7539 Sep 08 j 02:02 $0^{\circ}\Omega$ 0°**∡¹**42'53 retrograde -7544 Jun 04 j 12:20 max. Earth dist. -7539 Sep 29 j 21:32 17°Ω00'11 2.38145 AU -7544 Jun 14 j 10:42 30°RM min. Earth dist. -7544 Jul 03 j 04:38 25°M08'44 0.47663 AU conjunction -7539 Oct 12 j 14:39 26°**Ω**58'35 0°08'13 greatest brilliancy -7544 Jul 09 j 17:20 22°M50'56 -2.3m minimum elong -7539 Oct 12 j 15:26 27°**Ω**00'05 0°08'32 opposition -7544 Jul 11 i 08:22 22°M16'23 -5°57'50 behind sun begin -7539 Oct 11 i 15:57 26°Ω14'00 direct -7544 Aug 13 j 13:25 15°M24'12 behind sun end -7539 Oct 13 i 14:55 27°Ω46'11 -7544 Oct 07 i 01:12 0°×7 -7539 Oct 16 j 11:03 0° m -7544 Dec 03 j 11:33 0°정 desc. node -7539 Oct 23 j 11:32 5° m 31'00 -7543 Jan 23 j 11:10 -7539 Nov 23 j 18:02 0∘**⊽** 0°≈≈ -7539 Dec 17 j 21:22 18°**£**38'25 -7543 Feb 04 j 11:31 7°≈15'50 morning rise asc node 0°**₩** -7538 Jan 01 j 20:00 -7543 Mar 13 j 12:28 o°m. -7543 Apr 30 j 01:09 $0^{\circ}\Upsilon$ -7538 Feb 11 j 12:02 0°×7 -7543 May 11 j 11:06 7°**Y**22'15 -7538 Mar 26 j 10:46 0°궁 evening set 22°Υ49'32 2.59588 AU -7543 Jun 04 j 00:25 -7538 May 11 j 11:20 0°22 max. Earth dist. -7538 Jul 01 j 13:24 0°) -7543 Jun 14 j 18:31 0°8 0° -7538 Sep 18 j 16:02 0°Y26'40 -7543 Jun 28 j 13:37 9°**8**19'07 1°06'24 -7538 Sep 27 j 05:29 conjunction retrograde -7538 Sep 27 j 23:05 0°Y26'28 minimum elong -7543 Jun 28 j 12:27 9°**8**17'07 1°06'40 asc. node -7543 Jul 28 j 11:46 -7538 Oct 05 j 12:36 $0^{\circ}\Pi$ 30°**₹** -7538 Nov 05 j 13:20 morning rise -7543 Aug 16 j 04:30 13°**Ⅱ**15'25 opposition 21°**)** 04'49 1°27'46 -7543 Sep 08 j 07:37 0ಂತಾ greatest brilliancy -7538 Nov 05 j 15:03 21°**₭**03'07 -1.4m -7543 Oct 18 j 15:43 $0^{\circ}\Omega$ min. Earth dist. -7538 Nov 07 j 14:06 20°**)** 16'14 0.66257 AU -7543 Nov 27 j 02:44 0° m -7538 Dec 16 j 10:58 11°**)** 06'42 direct -7542 Jan 05 j 11:24 0∘**⊽** -7537 Feb 19 j 11:56 $0^{\circ}\Upsilon$ -7542 Jan 18 j 22:00 10°**♀**07'40 -7537 Apr 14 j 07:12 0°8 desc. node -7542 Feb 14 j 19:02 0°M -7537 May 29 j 22:59 $0^{\circ}\Pi$ -7542 Mar 29 j 17:09 0°×7 -7537 Jul 10 j 17:27 0ಂತಾ 0°る -7537 Aug 19 j 05:23 -7542 May 18 j 14:02 0° Ω retrograde -7542 Jul 18 j 18:14 19°る00'25 -7537 Sep 10 i 06:47 17°Ω10'57 desc. node min. Earth dist. -7542 Aug 21 j 19:20 11°る18'25 0.59230 AU -7537 Sep 26 i 14:59 0° m greatest brilliancy -7542 Aug 26 j 10:43 9°る28'24 -1.7m -7537 Oct 17 i 03:06 16° m 05'30 evening set -7542 Aug 27 j 04:37 9°**ප**10'41 -4°18'06 -7537 Nov 03 i 22:51 0∘**⊽** opposition -7542 Oct 03 j 04:01 0°る37'47 -7537 Dec 13 j 02:51 0°M direct -7542 Dec 23 j 14:18 27°る15'29 asc node -7537 Dec 19 j 17:01 4°ML56'38 -1°01'28 -7542 Dec 28 j 22:43 0°≈≈ conjunction 0°**)**€ -7537 Dec 19 j 14:24 4°ML51'43 1°01'42 -7541 Feb 20 j 17:41 minimum elong $0^{\circ}\Upsilon$ -7541 Apr 10 j 22:02 -7536 Jan 22 j 20:39 00 🗸 -7541 May 27 j 02:38 0°8 max. Earth dist. -7536 Feb 02 j 14:01 7°**х** 39′49 2.47330 AU -7541 Jun 23 j 02:16 18°**8**22'46 morning rise -7536 Feb 18 j 19:05 19°**х** 03′32 evening set -7541 Jul 08 j 18:00 29°**8**20'32 2.48991 AU -7536 Mar 05 j 15:55 0°정 max. Earth dist. -7541 Jul 09 j 16:18 $0^{\circ}\Pi$ -7536 Apr 19 j 18:45 0°≈ -7536 Jun 06 j 10:48 0°**)**€ 25°II46'13 1°06'08 -7536 Jul 27 j 22:10 $0^{\circ}\Upsilon$ conjunction -7541 Aug 14 j 06:53 9°Y35'16 minimum elong -7541 Aug 14 j 08:28 25°**Ⅱ**49'07 1°06'37 asc. node -7536 Aug 14 j 23:23 -7541 Aug 19 j 23:52 0 \circ \odot -7536 Oct 01 j 07:26 0°8 -7541 Sep 28 j 15:04 0° Ω retrograde -7536 Nov 03 j 18:43 5°**8**52'58 morning rise -7541 Oct 09 j 21:06 8°**Ω**40'31 -7536 Dec 04 j 10:32 30°**₹**Υ -7541 Nov 06 j 07:38 0° m opposition -7536 Dec 11 j 08:21 27°**Y**25'59 4°13'13 desc. node -7541 Dec 06 j 17:44 23°m/41'12 -7536 Dec 12 j 02:20 27°**Y**08'45 greatest brilliancy -1.6m

min. Earth dist.

-7536 Dec 17 j 01:04

25°Υ14'52 0.60563 AU

-7541 Dec 14 j 21:20

0∘**⊽**

Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style.									
direct	-7535 Jan 21 j 02:25	17° Ƴ 34'48	n uon onomicui cou	conjunction	-7530 May 05 j 22:06	16°) 55'36	0°16'45		
ancer	-7535 Mar 11 j 03:00	0°8		minimum elong	-7530 May 05 j 21:29	16° ¥ 54'38			
	-7535 May 04 j 10:50	0°II		minimum ciong	-7530 May 26 j 06:46	0° Υ	0 10 33		
	-7535 Jun 17 j 12:50	0ංම 0 ස		morning rise	-7530 Jun 20 j 21:52	16° Y 36′29			
	-7535 Jul 27 j 23:49	0° U		morning risc	-7530 Jul 11 j 08:09	0° 8			
daga mada	-	0° Ω 14'36				0°II			
desc. node	-7535 Jul 28 j 07:30				-7530 Aug 25 j 05:49	0°©			
	-7535 Sep 04 j 22:58	0° m/			-7530 Oct 08 j 01:09				
	-7535 Oct 13 j 17:53	0∘ ⊽			-7530 Nov 20 j 02:07	0°O			
	-7535 Nov 22 j 08:36	0°M			-7529 Jan 02 j 02:06	0° m/			
evening set	-7535 Dec 18 j 11:48	19°M11'59			-7529 Feb 15 j 21:23	0∘ ⊽			
	-7534 Jan 02 j 12:34	0° ∡		desc. node	-7529 Mar 20 j 17:11	19° ≙ 19'13			
				_	-7529 Apr 13 j 01:58	0° M ₊			
conjunction	-7534 Feb 12 j 17:08	28° ∡ ¹41'56		retrograde	-7529 May 14 j 22:24	6°M29'05			
minimum elong	-7534 Feb 12 j 18:37	28° ∡ ⁴44'26	1°05'38	min. Earth dist.	-7529 Jun 11 j 01:59	1°M40'45	0.42833 AU		
	-7534 Feb 14 j 15:01	0°₹			-7529 Jun 16 j 08:07	30°Ŗ 죠			
max. Earth dist.	-7534 Mar 11 j 04:16	16° る 29'59	2.58682 AU	greatest brilliancy	-7529 Jun 17 j 06:09	29° ≏ 42'12	-2.6m		
	-7534 Mar 31 j 16:22	0° ≈		opposition	-7529 Jun 18 j 17:56	29° ≙ 13'23	-5°24'55		
morning rise	-7534 Apr 06 j 06:23	3° ≈ 38'19		direct	-7529 Jul 20 j 05:35	23° ₽ 13'05			
	-7534 May 17 j 09:46	0°) €			-7529 Aug 23 j 22:14	0° M .			
asc. node	-7534 Jul 02 j 19:08	28°) 54'41			-7529 Oct 24 j 15:35	0° ✓			
	-7534 Jul 04 j 13:44	$0^{\circ}\mathbf{\Upsilon}$			-7529 Dec 14 j 12:12	0°ರ			
	-7534 Aug 23 j 17:44	0°8			-7528 Feb 01 j 12:35	0° ≈			
	-7534 Oct 18 j 18:41	0°II		asc. node	-7528 Feb 22 j 03:06	12° ≈ 45'22			
retrograde	-7534 Dec 23 j 00:07	18° Ⅱ 48'24		use. Houe	-7528 Mar 20 j 18:16	0°) €			
opposition	-7533 Jan 26 j 09:34	11° I I52'36	5°57'34	evening set	-7528 Apr 26 j 02:46	23°) €01'10			
	v	11° I 17'17		evening set		23 γ 01 10			
greatest brilliancy	-7533 Jan 28 j 02:23			Eth dit	-7528 May 06 j 23:37		2.62566 ATT		
min. Earth dist.	-7533 Feb 03 j 16:19	9° Ⅱ 01'45	0.49426 AU	max. Earth dist.	-7528 May 24 j 08:15	11 15 32	2.62566 AU		
direct	-7533 Mar 05 j 08:19	3° Ⅱ 23'12			7.500 X 10:14.50	22200	005645		
	-7533 May 17 j 14:21	0ං ව		conjunction	-7528 Jun 12 j 14:53	23° Y 56'46	0°56'15		
desc. node	-7533 Jun 15 j 10:31	18°526'02		minimum elong	-7528 Jun 12 j 13:26	23° Y 54′22	0°56'22		
	-7533 Jul 02 j 03:58	$0 {\circ} \Omega$			-7528 Jun 21 j 16:59	0°8			
	-7533 Aug 12 j 10:27	0° m		morning rise	-7528 Jul 29 j 17:46	25° 8 54'02			
	-7533 Sep 21 j 18:04	0∘ ⊽			-7528 Aug 04 j 15:17	Π $\circ 0$			
	-7533 Nov 01 j 13:53	0° M			-7528 Sep 15 j 20:05	0°ಲ			
	-7533 Dec 13 j 17:52	0° ∡ ¹			-7528 Oct 26 j 15:32	$0^{\circ}\Omega$			
	-7532 Jan 26 j 14:41	8°0			-7528 Dec 05 j 15:13	0° m			
evening set	-7532 Feb 06 j 12:09	7° る 16'25			-7527 Jan 14 j 14:20	0∘ ত			
	-7532 Mar 12 j 02:26	0° ≈		desc. node	-7527 Feb 04 j 17:11	15° ≏ 34'12			
	J				-7527 Feb 24 j 19:04	0° M .			
conjunction	-7532 Mar 27 j 22:21	10° ≈ 14'53	-0°29'13		-7527 Apr 10 j 19:40	0° ∡ ¹			
minimum elong	-7532 Mar 27 j 23:30	10°≈16'44			-7527 Jun 14 j 09:07	0°ප			
max. Earth dist.	-7532 Apr 06 j 05:54		2.65326 AU	retrograde	-7527 Jul 02 j 23:08	2° る 15'49			
max. Lartii dist.	-7532 Apr 00 j 03:34 -7532 Apr 27 j 17:21	0° \	2.03320 AC	retrograde	-7527 Jul 20 j 15:19	2 3 13 ₹ 7			
morning rise	-7532 Apr 27 j 17:21 -7532 May 14 j 16:51	10° ∺ 49'42		min. Earth dist.	-7527 Aug 03 j 23:34	25° ₹ 19'47	0.55148 AU		
•									
asc. node	-7532 May 19 j 12:32	13° ¥ 53'54		opposition	-7527 Aug 10 j 17:12	22° 🖈 44'23			
	-7532 Jun 13 j 19:57	0° Υ		greatest brilliancy	-7527 Aug 09 j 13:51	23° х 10′46	-1.9m		
	-7532 Jul 30 j 23:34	0°8		direct	-7527 Sep 15 j 08:49	14° ∡ ⁴44'32			
	-7532 Sep 16 j 06:13	Π°			-7527 Nov 11 j 09:07	0° ට			
	-7532 Nov 03 j 15:11	0 \circ \odot			-7526 Jan 08 j 15:43	0° ≈			
	-7532 Dec 26 j 16:45	$0^{\circ}\Omega$		asc. node	-7526 Jan 09 j 04:21	0° ≈ 17'48			
retrograde	-7531 Mar 02 j 21:33	20° Ω 32′22			-7526 Feb 28 j 21:34	0° ∀			
opposition	-7531 Apr 02 j 14:51	15° Ω 24'36	2°18'05		-7526 Apr 18 j 06:07	0° Υ			
greatest brilliancy	-7531 Apr 03 j 00:24	15° Ω 18′04	-2.9m		-7526 Jun 03 j 04:43	$8^{\circ 0}$			
min. Earth dist.	-7531 Apr 05 j 16:15	14° Ω 34'33	0.38623 AU	evening set	-7526 Jun 05 j 18:08	1° 8 43'08			
desc. node	-7531 May 02 j 13:52	9° Ω 57'51		max. Earth dist.	-7526 Jun 23 j 10:12	13° 8 43'42	2.53558 AU		
direct	-7531 May 04 j 02:12	9° Ω 56'55			-7526 Jul 16 j 18:42	0° I I			
	-7531 Jul 04 j 21:23	0° m/y			J				
	-7531 Aug 23 j 06:05	0∘ ಹ		conjunction	-7526 Jul 25 j 20:32	6° Ⅱ 26'43	1°11'57		
	-7531 Oct 07 j 09:25	0° M ₊		minimum elong	-7526 Jul 25 j 20:46		1°12'23		
	-7531 Oct 07 j 09.25 -7531 Nov 21 j 05:06	0° ⊼ 7		minimum ciong	-7526 Aug 27 j 06:05	0°©	1 1223		
	v			morning rise					
	-7530 Jan 05 j 19:15	0°る		morning rise	-7526 Sep 16 j 13:25	15°909'42			
	-7530 Feb 21 j 08:07	0° ≈			-7526 Oct 06 j 02:39	0°N			
evening set	-7530 Mar 19 j 04:23	16°≈29'20			-7526 Nov 14 j 00:55	0° Mp			
asc. node	-7530 Apr 06 j 06:26	28°≈00′21			-7526 Dec 22 j 20:06	0∘ ⊽			
	-7530 Apr 09 j 09:36	0° ∺		desc. node	-7526 Dec 23 j 12:30	0° £ 31'32			
max. Earth dist.	-7530 Apr 30 j 04:40	13° 米 15′54	2.66622 AU		-7525 Jan 31 j 10:08	0° M			
					-7525 Mar 13 j 21:55	0° ∡ ¹			

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style. -7525 Apr 28 j 01:35 0°궁 -7520 Aug 05 i 08:13 $0^{\circ}\Omega$ -7525 Jun 21 j 21:05 -7520 Aug 14 j 00:20 6°**Ω**40'37 0°≈≈ desc. node -7525 Aug 10 j 12:40 -7520 Sep 13 j 00:05 0° m 12° 246'32 retrograde -7525 Sep 16 j 06:57 -7520 Oct 21 j 13:06 0∘**⊽** min. Earth dist. 4°≈06'10 0.63923 AU -7525 Sep 19 j 10:42 -7520 Nov 25 j 06:40 26°**♀**30'56 opposition 2°≈49'57 -2°36'22 evening set -7525 Sep 19 j 04:30 greatest brilliancy 2°≈56'11 -1.5m -7520 Nov 29 j 22:03 0°M -7525 Sep 26 j 16:00 30°Ŗる -7519 Jan 09 j 20:26 0°**∡**7 -7525 Oct 28 j 02:23 23°る38'25 direct asc. node -7525 Nov 27 j 08:32 28°る32'07 conjunction -7519 Jan 23 j 15:28 9°**х** 48'10 -1°10'46 -7519 Jan 23 j 15:49 -7525 Dec 02 j 01:45 0°≈ minimum elong 9°**х** 48'47 1°11'12 -7519 Feb 21 j 18:23 -7524 Feb 05 j 12:38 0°**)**€ 0°정 $0^{\circ}\Upsilon$ -7519 Feb 26 j 15:18 3°**る**18'59 -7524 Mar 28 j 02:38 max. Earth dist. 2.54683 AU 0° 8 -7524 May 14 j 02:07 morning rise -7519 Mar 20 j 03:26 17°る45'07 -7524 Jun 26 j 20:15 $0^{\circ}II$ -7519 Apr 07 j 18:07 0°≈ evening set -7524 Jul 22 j 06:03 18°**Ⅲ**17'59 -7519 May 24 j 16:27 0°**)**€ -7524 Aug 07 j 01:53 0ಂತಾ -7519 Jul 12 j 16:19 $0^{\circ}\Upsilon$ max. Earth dist. -7524 Aug 12 j 06:14 3°552'42 2.41553 AU asc. node -7519 Jul 19 j 11:53 4°Y02'43 -7524 Sep 15 j 12:11 $0^{\circ}\Omega$ -7519 Sep 03 j 11:25 0°8 -7519 Nov 19 j 23:48 $0^{\circ}\Pi$ conjunction -7524 Sep 17 j 04:26 1°Ω17'52 0°37'49 retrograde -7519 Dec 01 j 23:13 0°II50'28 minimum elong -7524 Sep 17 j 07:00 1°**Ω**22'49 0°38'14 -7519 Dec 13 j 09:44 30°R₩ -7524 Oct 23 i 23:04 0° m opposition -7518 Jan 06 j 18:21 23°**8**13'30 5°32'30 desc. node -7524 Nov 09 i 07:30 12° m 49'18 greatest brilliancy -7518 Jan 08 i 03:40 22°843'04 -1.9m morning rise -7524 Nov 19 j 18:39 21° m 00'37 min. Earth dist. -7518 Jan 14 i 08:20 20°**8**27'43 0.54273 AU -7524 Dec 01 i 07:29 0∘**⊽** direct -7518 Feb 15 i 06:00 13°**8**58'34 -7523 Jan 09 j 10:21 0°M -7518 Apr 11 j 10:08 $0^{\circ}\Pi$ -7523 Feb 19 j 03:56 0°×7 -7518 May 31 j 15:40 0ಂತಾ -7523 Apr 03 j 08:19 0°궁 -7518 Jul 02 j 01:50 22°900'01 desc node -7523 May 20 j 04:53 -7518 Jul 13 j 00:31 0°≈≈ $0^{\circ}\Omega$ -7523 Jul 13 j 21:25 0°**)**€ -7518 Aug 21 j 23:20 0° m -7523 Sep 13 j 12:48 17°**¥**30′15 -7518 Sep 30 j 11:11 0∘∙თ retrograde -7523 Oct 14 j 12:42 -7518 Nov 09 j 15:53 oom. 11°**∺**17'32 asc. node 7°**)** 53'48 0°19'57 0°×7 -7523 Oct 23 j 05:22 -7518 Dec 21 j 07:45 opposition -7523 Oct 23 j 05:24 7°**)**€53'46 -7517 Jan 19 j 09:22 20°**х** 11′44 greatest brilliancy -1.4m evening set 7°**)** 40′07 0.66816 AU -7523 Oct 23 j 19:00 -7517 Feb 02 j 19:21 min. Earth dist. 0°궁 -7523 Nov 15 j 12:15 30°R≈ -7523 Dec 02 j 17:26 -7517 Mar 12 j 15:45 25°る09'53 -0°45'31 direct 28°≈03'26 conjunction -7523 Dec 21 j 03:54 0°**)**€ minimum elong -7517 Mar 12 j 17:23 25°る12'34 0°45'58 -7522 Mar 03 j 20:18 $0^{\circ}\Upsilon$ -7517 Mar 20 j 01:19 0°≈ -7522 Apr 23 j 04:49 0° 8 max. Earth dist. -7517 Mar 28 j 07:08 5°**≈**21'41 2.63349 AU -7522 Jun 06 j 23:40 $0^{\circ}II$ morning rise -7517 Apr 30 j 21:36 26°≈58'44 -7522 Jul 18 j 11:31 0ಂತಾ -7517 May 05 j 15:14 0°) -7522 Aug 26 j 21:10 $0^{\circ}\Omega$ -7517 Jun 06 j 06:40 20°**)**€04'30 asc. node -7522 Sep 20 j 13:37 19°**Ω**15'53 -7517 Jun 22 j 00:24 $0^{\circ}\Upsilon$ evening set -7522 Sep 27 j 02:48 24°**Ω**24'27 -7517 Aug 08 j 23:21 0° 8 desc. node -7517 Sep 27 i 03:33 -7522 Oct 04 i 05:34 0° m $0^{\circ}II$ -7522 Nov 11 j 12:00 0∘**⊽** -7517 Nov 19 i 15:53 0ಂತಾ retrograde -7516 Feb 01 i 07:53 23°9529'37 9°**£**29'53 -0°40'37 conjunction -7522 Nov 23 j 17:51 opposition -7516 Mar 04 i 03:43 17°5548'46 4°54'23 -7522 Nov 23 i 14:41 9°**£**23'46 0°40'36 greatest brilliancy -7516 Mar 05 i 12:35 17°524'15 -2.6m minimum elong -7522 Dec 20 j 13:49 0°M min. Earth dist. -7516 Mar 11 j 03:30 15°9544'11 0.41887 AU max. Earth dist. -7521 Jan 09 j 12:35 14°M53'51 2.42224 AU direct -7516 Apr 07 j 08:35 11°9510'30 morning rise -7521 Jan 27 j 09:36 27°ML57'55 desc. node -7516 May 19 j 05:55 21°936'42 -7521 Jan 30 j 05:15 0°×7 -7516 Jun 05 j 02:29 $0^{\circ}\Omega$ 0°る -7521 Mar 13 j 23:37 -7516 Jul 23 j 09:23 0° m -7516 Sep 04 j 15:50 -7521 Apr 28 j 06:39 0°≈ 0∘**⊽** -7521 Jun 15 j 17:47 0°**)**€ -7516 Oct 17 j 06:53 0°M $0^{\circ}\Upsilon$ -7521 Aug 09 j 08:28 -7516 Nov 29 j 16:34 0°**∡**7 -7521 Sep 01 j 14:03 10°**Y**28′02 -7515 Jan 13 j 09:57 0°る asc. node -7521 Oct 20 j 01:08 21°\partial 49'08 -7515 Feb 28 j 10:29 retrograde 0°≈ 12°Υ57'23 3°11'50 2°≈01'45 opposition -7521 Nov 27 j 10:34 evening set -7515 Mar 03 j 14:04 greatest brilliancy -7521 Nov 27 j 20:20 12°**Y**47′50 -1.5m -7515 Apr 16 j 06:12 0°**)**€ min. Earth dist. -7521 Dec 01 j 17:22 11°**Υ**16'49 0.63511 AU direct -7520 Jan 07 j 11:10 2°**Y**57'52 conjunction -7515 Apr 21 j 01:28 3°**₭**03'57 -0°01'08 -7520 Mar 26 j 17:39 0°8 minimum elong -7515 Apr 21 j 01:29 3°**)**€03'59 0°01'24

-7515 Apr 20 j 05:59

-7515 Apr 21 j 21:00

behind sun begin

behind sun end

2° # 32'52

3°**)**€35'06

-7520 May 14 j 14:14

-7520 Jun 26 j 09:35

 $\Pi^{\circ}0$

0ಂತಾ

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 39 Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	•		inting style is the year		ounting style.	
max. Earth dist.	-7515 Apr 20 j 23:44		2.66762 AU		-7510 May 09 j 13:16	0°ಕ	
asc. node	-7515 Apr 22 j 23:45	4°) € 17'47		retrograde	-7510 Jul 27 j 07:43	28° る 17'42	
	-7515 Jun 02 j 03:55	0° Υ		min. Earth dist.	-7510 Aug 31 j 09:23		0.61139 AU
morning rise	-7515 Jun 06 j 10:03	2° Y 44'05		opposition	-7510 Sep 04 j 23:53	18°る22'54	
	-7515 Jul 18 j 12:44	0° B		greatest brilliancy	-7510 Sep 04 j 10:44	18°る36'02	-1.6m
	-7515 Sep 02 j 02:36	0°II		direct	-7510 Oct 12 j 14:34	9° る 34'40	
	-7515 Oct 17 j 01:45	0° ಲ		asc. node	-7510 Dec 13 j 21:13	26° る 50'23	
	-7515 Dec 01 j 00:01 -7514 Jan 16 j 10:44	0° Ω 0° m			-7510 Dec 20 j 16:36 -7509 Feb 15 j 00:33	0° €	
	-7514 Mar 13 j 08:58	0∘ ত اللا			-7509 Peb 13 j 00:33	0° Υ	
desc. node	-7514 Mar 13 j 08:38 -7514 Apr 06 j 09:07	0 == 7° ჲ 07'18			-7509 Apr 03 j 22:20 -7509 May 22 j 09:31	0°8	
retrograde	-7514 Apr 19 j 12:58	8° ≏ 16'41		evening set	-7509 Jul 03 j 13:41	28° 8 57'32	
min. Earth dist.	-7514 May 16 j 22:19		0.39162 AU	evening set	-7509 Jul 05 j 01:01	0°Ⅱ	
opposition	-7514 May 21 j 19:48	2° ₽ 21'01		max. Earth dist.	-7509 Jul 19 j 11:51	10° Ⅱ 19'24	2.46318 AU
greatest brilliancy	-7514 May 21 j 03:08	2° £ 32'57			-7509 Aug 15 j 08:16	0ంత	
8	-7514 May 30 j 11:02	30°R, Mp					
direct	-7514 Jun 21 j 03:39	27° m 05'44		conjunction	-7509 Aug 26 j 05:29	8° 5 08'41	0°58'41
	-7514 Jul 12 j 19:35	0∘ <u>ଫ</u>		minimum elong	-7509 Aug 26 j 07:44	8°9512'56	0°59'11
	-7514 Sep 16 j 16:49	0° M .		C	-7509 Sep 23 j 21:58	$0^{\circ}\Omega$	
	-7514 Nov 05 j 11:56	0° ∡ ¹		morning rise	-7509 Oct 24 j 07:35	23° Ω 35'40	
	-7514 Dec 23 j 09:48	0°ರ			-7509 Nov 01 j 12:26	0° m)	
	-7513 Feb 09 j 03:54	0° ≈		desc. node	-7509 Nov 27 j 03:34	20° Mp 00'50	
asc. node	-7513 Mar 10 j 19:07	18° ≈ 37'43			-7509 Dec 09 j 23:58	0∘ ⊽	
	-7513 Mar 28 j 19:43	0°) €			-7508 Jan 18 j 05:28	0° M	
evening set	-7513 Apr 12 j 00:19	8° ¥ 59′22			-7508 Feb 28 j 02:45	0° ∡ ¹	
	-7513 May 14 j 20:35	0° Y			-7508 Apr 11 j 17:20	0°ರ	
max. Earth dist.	-7513 May 15 j 05:49	0° Υ 14'54	2.64800 AU		-7508 May 30 j 01:00	0° ≈	
					-7508 Aug 02 j 20:37	0° ∀	
conjunction	-7513 May 29 j 07:24			retrograde	-7508 Aug 31 j 00:44	4° ∺ 29'15	
minimum elong	-7513 May 29 j 06:04	9° Ƴ 19'36	0°42'38		-7508 Sep 25 j 22:32	30°R ≈	
	-7513 Jun 29 j 15:54	0°8		opposition	-7508 Oct 09 j 22:26	24° ≈ 41'32	
morning rise	-7513 Jul 14 j 13:47	9° 8 59'30		min. Earth dist.	-7508 Oct 09 j 00:58	25°≈03'11	0.66406 AU
	-7513 Aug 12 j 21:29	0°II		greatest brilliancy	-7508 Oct 09 j 22:06	24°≈41'53	-1.4m
	-7513 Sep 24 j 13:59	0° ಲ		asc. node	-7508 Oct 31 j 01:49	17°≈22'06	
	-7513 Nov 05 j 00:35	0° Ω 0° n		direct	-7508 Nov 18 j 20:28 -7507 Jan 15 j 04:00	15° ≈ 03'05 0° ∀	
	-7513 Dec 15 j 18:18 -7512 Jan 25 j 16:43	0∘ ⊽ ० ाक्र			-7507 Jan 13 j 04.00 -7507 Mar 13 j 20:45	0° Υ	
desc. node	-7512 Jan 25 j 10:43 -7512 Feb 22 j 10:40	0 = 19° £ 41'04			-7507 May 01 j 09:54	0°8	
desc. Hode	-7512 Pco 22 j 10:40 -7512 Mar 08 j 14:47	0° M			-7507 Jun 14 j 15:59	0°II	
	-7512 Apr 28 j 12:31	0° ⊼			-7507 Jul 26 j 00:03	0°©	
retrograde	-7512 Jun 15 j 12:51	13° × 17'51		evening set	-7507 Aug 26 j 10:04	23°950'57	
min. Earth dist.	-7512 Jul 15 j 09:04	7° ∡ 13'37	0.50447 AU		-7507 Sep 03 j 09:04	0°N	
greatest brilliancy	-7512 Jul 21 j 16:43	4° ₹ ¹54'54			-7507 Oct 11 j 17:32	0° m/	
opposition	-7512 Jul 23 j 04:44	4° ∡ 121'42	-5°51'02	desc. node	-7507 Oct 13 j 21:25	1° mp 42'00	
••	-7512 Aug 05 j 08:18	30°RML			v	•	
direct	-7512 Aug 26 j 08:29	27°ML02'43		conjunction	-7507 Oct 27 j 17:00	12° m 33'30	-0°10'25
	-7512 Sep 17 j 16:16	0° ∡¹		minimum elong	-7507 Oct 27 j 16:02	12° m 31'37	0°10'12
	-7512 Nov 26 j 02:42	5°0		behind sun begin	-7507 Oct 26 j 18:09	11° m)48'40	
	-7511 Jan 17 j 20:55	0° ≈		behind sun end	-7507 Oct 28 j 13:55	13° m 14'33	
asc. node	-7511 Jan 25 j 18:23	4° ≈ 40'47			-7507 Nov 18 j 23:52	0∘ ⊽	
	-7511 Mar 08 j 13:47	0° ∺		max. Earth dist.	-7507 Nov 20 j 11:27		2.38274 AU
	-7511 Apr 25 j 09:02	0° Υ			-7507 Dec 28 j 01:06	0°M₊	
evening set	-7511 May 20 j 10:58	16° Y 15′13		morning rise	-7506 Jan 02 j 05:01	3°M53'29	
	-7511 Jun 10 j 04:29	0° 8			-7506 Feb 06 j 15:51	0° ∡	
max. Earth dist.	-7511 Jun 10 j 17:27	0° 8 21'43	2.57647 AU		-7506 Mar 21 j 11:37	0°ප	
	7511 X 1 00:00 11	1001 25010 5	1010100		-7506 May 06 j 03:00	0° ≈	
conjunction	-7511 Jul 08 j 02:11	18° 8 59'36			-7506 Jun 24 j 21:54	0°) €	
minimum elong	-7511 Jul 08 j 01:23	18° 8 58'14	1~10/28	000 mc J-	-7506 Aug 25 j 17:29	0°Υ 6°Υ42119	
morning ris-	-7511 Jul 23 j 20:59	0°Ⅱ 24°Ⅲ21'20		asc. node	-7506 Sep 18 j 05:24	6° Υ 42'18 8° Υ 24'33	
morning rise	-7511 Aug 26 j 21:00	24° Ⅱ 21'20 0° ⑤		retrograde	-7506 Oct 05 j 09:06	8° ₹24'33 30° R X	
	-7511 Sep 03 j 14:10 -7511 Oct 13 j 18:12	0° U		opposition	-7506 Nov 11 j 09:24 -7506 Nov 13 j 09:39	30°₹ ⊼ 29° 光 12'23	2°06'39
	-7511 Oct 13 j 18:12 -7511 Nov 22 j 00:09	0° m)		greatest brilliancy	-7506 Nov 13 j 19:39	29° X 12'23 29° X 08'33	-1.4m
	-7511 Nov 22 j 00.09 -7511 Dec 31 j 02:57	0∘ ⊽ ० ाक्र		min. Earth dist.	-7506 Nov 16 j 05:29	29 H 08 33 28° H 05'08	0.65542 AU
desc. node	-7510 Jan 09 j 09:23	ი 7° -2 02'51		direct	-7506 Dec 24 j 09:26	19° X 12'14	5.05574 AU
Lest. Hour	-7510 Feb 09 j 01:57	0°ML			-7505 Feb 08 j 22:52	0° Υ	
	-7510 Mar 23 j 06:25	0° ⊼			-7505 Apr 08 j 01:00	0°8	
	j ***.20	·			r	_	

3	nical year style is used: Th		`	//		, ,	- 40
Attention, astronom	-7505 May 24 j 14:16	0°Ⅱ	in astronomical col	minimum elong	-7500 Apr 05 j 21:54	18° ≈ 59'25	0°19'27
	-7505 Jul 05 j 16:43	0°®		max. Earth dist.	-7500 Apr 11 j 18:59	22° ≈ 45'23	2.66076 AU
	-7505 Aug 14 j 08:11	0°N			-7500 Apr 23 j 02:43	0°) €	
desc. node	-7505 Aug 31 j 18:23	13° Ω 31'37		asc. node	-7500 May 09 j 17:59	10°) 37′10	
	-7505 Sep 21 j 19:31	0° m)		morning rise	-7500 May 23 j 00:25	19° ¥ 05'05	
	-7505 Oct 30 j 04:30	0∘ ⊽			-7500 Jun 09 j 02:56	0° Y	
evening set	-7505 Nov 01 j 00:04	1° ≏ 24'29			-7500 Jul 25 j 22:41	9° 8	
	-7505 Dec 08 j 09:15	0° M			-7500 Sep 10 j 12:05	$\Pi^{\circ}0$	
					-7500 Oct 27 j 07:26	0 \circ 50	
conjunction	-7504 Jan 02 j 09:03	18°M33'24	-1°07'54		-7500 Dec 14 j 22:58	$0^{\circ}\Omega$	
minimum elong	-7504 Jan 02 j 07:31	18°M30'35	1°08'14		-7499 Feb 11 j 20:26	0° ™	
	-7504 Jan 18 j 03:27	0° ∡ 7		retrograde	-7499 Mar 20 j 16:52	7° Mp 41'28	
max. Earth dist.	-7504 Feb 12 j 20:13		2.50070 AU	opposition	-7499 Apr 20 j 09:59	2° m 33'49	0°12'50
	-7504 Feb 29 j 22:30	0°ಕ		greatest brilliancy	-7499 Apr 20 j 10:24	2°m/33'32	
morning rise	-7504 Mar 01 j 09:20	0° る 18'32		min. Earth dist.	-7499 Apr 20 j 12:13	2°m/32'19	0.37928 AU
	-7504 Apr 14 j 22:42	0° ≈		desc. node	-7499 Apr 23 j 02:24	1° m 51'06	
	-7504 Jun 01 j 06:03	0°) €			-7499 Apr 30 j 12:34	30°R€	
,	-7504 Jul 21 j 13:10	0° Υ		direct	-7499 May 20 j 18:19	27° Ω 27'36	
asc. node	-7504 Aug 05 j 04:56	8°Υ13'08			-7499 Jun 09 j 21:25	0° m)	
. 1	-7504 Sep 17 j 14:34	0°8			-7499 Aug 13 j 13:27	0∘ 亚	
retrograde	-7504 Nov 13 j 12:21	14° 8 51'01 6° 8 40'13	4°45'33		-7499 Sep 30 j 09:37	0° ጤ 0° ዶ	
opposition	-7504 Dec 20 j 11:55 -7504 Dec 21 j 11:16	6° 8 18'07	4°45°55 -1.7m		-7499 Nov 15 j 09:36 -7499 Dec 31 j 15:05	0° X ' ਠ°0	
greatest brilliancy min. Earth dist.	-7504 Dec 26 j 21:52	_	0.58529 AU		-7499 Dec 31 j 13:03 -7498 Feb 16 j 12:25	0°≈	
iiiii. Eartii dist.	-7503 Jan 08 j 15:40	4 O14 38 30°RΥ	0.36329 AU	evening set	-7498 Mar 27 j 23:00	0 ∞ 25°≈02'35	
direct	-7503 Jan 29 j 21:39	26° Υ ′58'18		asc. node	-7498 Mar 27 j 11:16	24° ≈ 43'58	
uncet	-7503 Feb 21 j 07:48	0°8		use. Houe	-7498 Apr 04 j 18:15	0° ∀	
	-7503 Apr 27 j 01:03	0°II		max. Earth dist.	-7498 May 05 j 15:45		2.66206 AU
	-7503 Jun 11 j 12:07	0°©			, ,, , ,, , , , , , , , , , , , ,	-, ,,	
desc. node	-7503 Jul 18 j 18:35	27° © 12'21		conjunction	-7498 May 14 j 10:20	25°) 19'44	0°26'42
	-7503 Jul 22 j 11:45	$0^{\circ}\Omega$		minimum elong	-7498 May 14 j 09:24	25° ¥ 18'14	0°26'36
	-7503 Aug 30 j 17:39	0° m)		_	-7498 May 21 j 16:31	0° Y	
	-7503 Oct 08 j 17:23	0∘ ⊽		morning rise	-7498 Jun 29 j 09:01	25° Y °12'02	
	-7503 Nov 17 j 11:50	0° M			-7498 Jul 06 j 15:28	0° 8	
	-7503 Dec 28 j 18:37	0° ∡ ¹			-7498 Aug 20 j 07:00	Π °0	
evening set	-7503 Dec 30 j 14:37	1° ≯ 18'06			-7498 Oct 02 j 15:32	0 \circ \odot	
	-7502 Feb 09 j 23:04	0°ප			-7498 Nov 14 j 00:25	$0^{\circ}\Omega$	
		_			-7498 Dec 25 j 23:32	0° ™	
conjunction	-7502 Feb 23 j 06:25	8° る 58'57			-7497 Feb 06 j 18:57	0∘ ত	
minimum elong	-7502 Feb 23 j 08:08	9° る 01'49		desc. node	-7497 Mar 11 j 05:13	21° Ω 08'57	
max. Earth dist.	-7502 Mar 17 j 17:02		2.60553 AU		-7497 Mar 26 j 05:52	0°M	
	-7502 Mar 27 j 00:47	0°≈ 120× -27102		retrograde	-7497 May 27 j 14:42	21°M04'25	0.45427.411
morning rise	-7502 Apr 15 j 11:28	12° ≈ 37'02 0° 米		min. Earth dist.	-7497 Jun 24 j 10:25	15°M52'58 13°M40'43	0.45427 AU
asc. node	-7502 May 12 j 15:47 -7502 Jun 23 j 00:23	0 X 25° ¥ 59'32		greatest brilliancy opposition	-7497 Jun 30 j 22:57 -7497 Jul 02 j 14:13	13°M07'17	-2.4m 5°52'38
asc. nouc	-7502 Jun 29 j 11:15	25 γ (3932		direct	-7497 Aug 04 j 01:00	6°M38'03	-5 52 56
	-7502 Juli 29 j 11:13	0°8		direct	-7497 Oct 15 j 08:51	0° ⊼	
	-7502 Aug 17 j 13:11 -7502 Oct 09 j 03:40	0°II			-7497 Dec 08 j 05:30	0°₹	
	-7502 Dec 26 j 04:40	0° ©			-7496 Jan 27 j 06:06	0° ≈	
retrograde	-7501 Jan 05 j 09:16	0° © 37'39		asc. node	-7496 Feb 12 j 08:47	9° ≈ 51'09	
5	-7501 Jan 15 j 08:46	30°RⅡ			-7496 Mar 15 j 22:29	0° ∀	
opposition	-7501 Feb 07 j 22:34	24° Ⅲ 08′02	5°53'48		-7496 May 02 j 08:34	0° Υ	
greatest brilliancy	-7501 Feb 09 j 16:26	23° II 33'23	-2.3m	evening set	-7496 May 04 j 21:08	1° Y '37'29	
min. Earth dist.	-7501 Feb 16 j 06:24	21° Ⅲ 24′06	0.46603 AU	max. Earth dist.	-7496 May 30 j 10:53	18° Y 16'31	2.61024 AU
direct	-7501 Mar 16 j 16:56	16° Ⅱ 13'45			-7496 Jun 17 j 02:48	$0^{\circ}B$	
	-7501 May 04 j 23:49	0 \circ					
desc. node	-7501 Jun 05 j 21:04	18° © 02'24		conjunction	-7496 Jun 21 j 15:41	3° 8 02'33	1°02'36
	-7501 Jun 24 j 05:52	0 $^{\circ}$ Ω		minimum elong	-7496 Jun 21 j 14:21	3° 8 00'19	1°02'48
	-7501 Aug 05 j 20:59	0° m)			-7496 Jul 30 j 23:15	0∘Щ	
	-7501 Sep 15 j 21:45	0∘ ⊽		morning rise	-7496 Aug 08 j 11:50	5° Ⅱ 59'17	
	-7501 Oct 27 j 05:05	0° M -			-7496 Sep 10 j 23:44	0°©	
	-7501 Dec 08 j 17:09	0° ∡ ¹			-7496 Oct 21 j 13:16	0° N	
	-7500 Jan 21 j 19:45	0°る			-7496 Nov 30 j 05:37	0° m)	
evening set	-7500 Feb 16 j 06:42	16°る50'38		4 1	-7495 Jan 08 j 19:49	0° <u>Ω</u>	
	-7500 Mar 07 j 10:52	0° ≈		desc. node	-7495 Jan 26 j 03:28	12° ⊆ 57'00	
aaniumatiam	7500 4 05 : 21:00	18° ≈ 58'11	0010104		-7495 Feb 18 j 10:22	0° ጤ 0° <i>ጃ</i>	
conjunction	-7500 Apr 05 j 21:08	10 ×28 11	-U 17 UU		-7495 Apr 02 j 23:27	υ χ .	

•	ical year style is used: Th		•	* *			5 4 1
Attention, astronom	-7495 May 25 j 18:10	10 year - 7900 1 0°る	iii astronomicai co	unting style is the year	-7490 Sep 29 j 10:37	0° M)	
ratra ara da	-7495 Jul 12 j 04:36	0 8 12° る 28'27		avanina aat	-7490 Oct 05 j 13:00	4° Mp 47'37	
retrograde	•		0.57490 ATT	evening set	,	4°الب4/ع/ 0° م	
min. Earth dist.	-7495 Aug 14 j 08:37		0.57489 AU		-7490 Nov 06 j 17:32	0-22	
greatest brilliancy	-7495 Aug 19 j 10:26	3°る06'35 2°る45'01			7400 D 00 : 16:26	240 0 25155	0952155
opposition	-7495 Aug 20 j 08:25		-4-430/	conjunction	-7490 Dec 08 j 16:36	24° Ω 35'55	
11	-7495 Aug 27 j 14:59	30°₹ ⋌ ¹		minimum elong	-7490 Dec 08 j 13:25	24° £ 29'52	0°54′02
direct	-7495 Sep 25 j 17:37	24° メ 26'03 0°る		max. Earth dist.	-7490 Dec 15 j 19:50	0°M	2 45027 ATT
1-	-7495 Oct 27 j 18:49	28° る 39'38		max. Earth dist.	-7489 Jan 24 j 07:33	29° I L09'54 0° <i>⊀</i> 7	2.45037 AU
asc. node	-7495 Dec 30 j 11:08 -7494 Jan 01 j 23:00	28 ○ 3938 0° ≈			-7489 Jan 25 j 11:20		
	-7494 Feb 23 j 13:29	0 ≈ 0° ∺		morning rise	-7489 Feb 09 j 10:53 -7489 Mar 09 j 04:48	10°♂41'56 0°る	
	-7494 Apr 13 j 09:51	0 K 0°Υ			-7489 Apr 23 j 07:35	0°≈	
	-7494 May 29 j 12:56	0°8			-7489 Jun 10 j 05:16	0 ≈ 0° ∺	
evening set	-7494 Jun 15 j 12:08	11° 8 28'18			-7489 Aug 01 j 16:27	0°Υ	
max. Earth dist.	-7494 Jul 13 j 12:08	22° 8 46'10	2.51102 AU	asc. node	-7489 Aug 22 j 20:43	10° Υ 40'39	
max. Earm dist.	-7494 Jul 12 j 04:00	0°Ⅱ	2.31102 AU	asc. node	-7489 Oct 23 j 07:13	0° 8	
	-/494 Jul 12 j 04.00	υщ		retrograde	-7489 Oct 28 j 21:52	0° 8 11'26	
conjunction	-7494 Aug 05 j 15:44	17° Ⅲ 33'37	1°09'40	retrograde	-7489 Nov 03 j 09:32	30°RY	
minimum elong	-7494 Aug 05 j 16:42	17° Ⅲ 35'37		opposition	-7489 Dec 05 j 20:32	21° Υ 32'40	3°47'42
minimum clong	-7494 Aug 22 j 14:17	0°95	1 100)	greatest brilliancy	-7489 Dec 06 j 10:39	21° Υ 19'00	
morning rise	-7494 Sep 29 j 09:01	28°9528'58		min. Earth dist.	-7489 Dec 10 j 21:53	19° Υ 35'03	0.62003 AU
morning risc	-7494 Oct 01 j 08:34	0°Ω		direct	-7488 Jan 15 j 17:58	11° Υ 36'35	0.02003 AC
	-7494 Nov 09 j 03:42	0°m)		direct	-7488 Mar 17 j 22:07	0° 8	
desc. node	-7494 Dec 13 j 23:17	البات 27° (100/202)			-7488 May 08 j 10:12	0°II	
dese. Hode	-7494 Dec 17 j 19:24	ე∘ <u>ი</u>			-7488 Jun 20 j 22:26	0°©	
	-7493 Jan 26 j 05:10	0°M			-7488 Jul 31 j 04:14	0° Ω	
	-7493 Mar 08 j 09:20	0° ⊼ 7		desc. node	-7488 Aug 04 j 11:38	3° Ω 17'46	
	-7493 Apr 21 j 18:11	0° ਠ		dese. node	-7488 Sep 07 j 23:50	0° mp	
	-7493 Jun 11 j 23:41	0° ≈			-7488 Oct 16 j 15:25	0∘ ⊽	
retrograde	-7493 Aug 18 j 11:34	21° ≈ 08′26			-7488 Nov 25 j 02:34	0° M	
min. Earth dist.	-7493 Sep 25 j 02:03	12° ≈ 10'31	0.65064 AU	evening set	-7488 Dec 08 j 18:13	10°M08'08	
opposition	-7493 Sep 27 j 10:36	11° ≈ 13′29	-1°57'03		-7487 Jan 05 j 02:42	0° ∡ ¹	
greatest brilliancy	-7493 Sep 27 j 07:15	11° ≈ 16′51	-1.4m				
direct	-7493 Nov 05 j 14:12	1° ≈ 51′09		conjunction	-7487 Feb 04 j 08:31	21° ∡ 15′54	-1°08'20
asc. node	-7493 Nov 17 j 15:38	2° ≈ 42'42		minimum elong	-7487 Feb 04 j 09:38	21° ∡ 17'49	1°08'49
	-7492 Jan 29 j 12:21	0° ∀			-7487 Feb 17 j 01:53	0°ಕ	
	-7492 Mar 22 j 16:27	0° Y		max. Earth dist.	-7487 Mar 06 j 02:59		2.56991 AU
	-7492 May 09 j 03:46	9° 8		morning rise	-7487 Mar 30 j 03:07	27° る 26'06	
	-7492 Jun 22 j 02:19	Π °0			-7487 Apr 03 j 01:10	0° ≈	
	-7492 Aug 02 j 09:10	0°50			-7487 May 19 j 19:34	0° ∀	
evening set	-7492 Aug 03 j 08:58	0° © 44'25			-7487 Jul 07 j 06:22	0° Υ	
max. Earth dist.	-7492 Sep 03 j 04:06	24°506'28	2.39338 AU	asc. node	-7487 Jul 09 j 17:25	1° Υ 29'27	
	-7492 Sep 10 j 19:24	0 ° Ω			-7487 Aug 27 j 07:52	0° B	
	7402 0 4 01:06:20	150 055140	0021150		-7487 Oct 26 j 12:04	0°II	
conjunction	-7492 Oct 01 j 06:39	15° Ω 55'48		retrograde	-7487 Dec 13 j 12:22	11° I I1'23	5040150
minimum elong	-7492 Oct 01 j 08:28	15° Ω 59'21 0° m	0°22'12	opposition	-7486 Jan 17 j 14:08	3° П 56'02 3° П 22'14	5°49'58 -2.0m
desc. node	-7492 Oct 19 j 05:27 -7492 Oct 30 j 17:17	9° Mp 01'24		greatest brilliancy min. Earth dist.	-7486 Jan 19 j 04:08 -7486 Jan 25 j 15:18	1° Ⅱ 05'10	
desc. node	-7492 Nov 26 j 12:47	ე∘ ত		iiiii. Eartii tiist.	-7486 Jan 28 j 20:49	30°R 8	0.51059 AU
morning rise	-7492 Dec 05 j 16:24	ი — 7° ჲ 06'09		direct	-7486 Feb 25 j 06:58	25° 8 03'47	
morning risc	-7491 Jan 04 j 14:23	0°M		direct	-7486 Mar 25 j 16:42	0°Ⅱ	
	-7491 Feb 14 j 05:39	0° ∡ 7			-7486 May 23 j 17:12	0°©	
	-7491 Mar 29 j 04:56	°ੇਤ		desc. node	-7486 Jun 22 j 14:30	20° © 02'39	
	-7491 May 14 j 10:40	0° ≈		dese. Hode	-7486 Jul 06 j 14:29	0°Ω	
	-7491 Jul 05 j 14:08	0° ∀			-7486 Aug 16 j 04:58	0° m/y	
retrograde	-7491 Sep 21 j 09:30	25°) €21'48			-7486 Sep 25 j 02:12	0∘ ⊽	
asc. node	-7491 Oct 04 j 19:33	24°) (10'28			-7486 Nov 04 j 13:49	0° ™	
opposition	-7491 Oct 30 j 21:19	15°) €52'56	0°59'30		-7486 Dec 16 j 10:42	0° × 7⊓	
greatest brilliancy	-7491 Oct 30 j 21:57	15° ¥ 52'18	-1.4m	evening set	-7485 Jan 29 j 22:27	0° る 34'22	
min. Earth dist.	-7491 Nov 01 j 06:08	15° ∺ 20'06	0.66623 AU	ū	-7485 Jan 29 j 02:02	5°0	
direct	-7491 Dec 10 j 14:51	5°) 57'44			-7485 Mar 15 j 09:59	0° ≈	
	-7490 Feb 24 j 09:11	0° Y			•		
							0026116
	-7490 Apr 17 j 13:41	9° 8		conjunction	-7485 Mar 22 j 02:59	4° ≈ 21'38	-0°36'16
	-7490 Apr 17 j 13:41 -7490 Jun 01 j 21:20	$\Pi^{\circ}0$		conjunction minimum elong	-7485 Mar 22 j 02:59 -7485 Mar 22 j 04:22	4°≈21'38 4°≈23'53	
	-7490 Jun 01 j 21:20 -7490 Jul 13 j 13:52	0°© ∏°0		-	-7485 Mar 22 j 04:22 -7485 Apr 03 j 04:44	4°≈23'53 12°≈10'15	
	-7490 Jun 01 j 21:20 -7490 Jul 13 j 13:52 -7490 Aug 22 j 01:29	0ಂ೮ 0ಂಪ 0ಂ∏		minimum elong max. Earth dist.	-7485 Mar 22 j 04:22 -7485 Apr 03 j 04:44 -7485 Apr 30 j 23:48	4°≈23'53 12°≈10'15 0°¥	0°36'42
desc. node	-7490 Jun 01 j 21:20 -7490 Jul 13 j 13:52	0°© ∏°0		minimum elong	-7485 Mar 22 j 04:22 -7485 Apr 03 j 04:44	4°≈23'53 12°≈10'15	0°36'42

•	ical year style is used: Th		•	· · ·		, ,	0 12
asc. node	-7485 May 27 j 10:42	16° ¥ 50′20		greatest brilliancy	-7480 Aug 01 j 18:01	16° ∡ 02'07	-2.0m
	-7485 Jun 17 j 04:47	0° Υ		opposition	-7480 Aug 03 j 01:29	15° ∡ ³32'15	-5°32'36
	-7485 Aug 03 j 16:00	0°8		direct	-7480 Sep 07 j 01:04	7° ∡ ′49'41	
	-7485 Sep 20 j 15:56	$\Pi^{\circ}0$			-7480 Nov 17 j 12:18	ರ°ರ	
	-7485 Nov 09 j 17:24	0 \circ \odot			-7479 Jan 11 j 22:58	0° ≈	
	-7484 Jan 08 j 20:13	0 $^{\circ}$ Ω		asc. node	-7479 Jan 16 j 01:03	2° ≈ 21'31	
retrograde	-7484 Feb 18 j 05:31	8° Ω 38'34			-7479 Mar 03 j 12:01	0°) €	
opposition	-7484 Mar 20 j 06:48	3° Ω 19'54	3°38'19		-7479 Apr 20 j 15:20	0° Y	
greatest brilliancy	-7484 Mar 21 j 03:14	3° Ω 05′26		evening set	-7479 May 29 j 16:27	25° Y ′24'45	
min. Earth dist.	-7484 Mar 25 j 09:28	1° Ω 53′21	0.39806 AU		-7479 Jun 05 j 13:27	0°8	
	-7484 Apr 01 j 15:01	30°Rூ		max. Earth dist.	-7479 Jun 17 j 21:20	8° 8 18'51	2.55459 AU
direct	-7484 Apr 21 j 22:22	27°523'53			7470 1 1 10:01 20	200 4 1 010 6	1011150
desc. node	-7484 May 09 j 17:37	29°529'46		conjunction	-7479 Jul 18 j 01:20		1°11'59
	-7484 May 11 j 20:14	0° N		minimum elong	-7479 Jul 18 j 01:04	29° ႘ 09'38	1°12'22
	-7484 Jul 13 j 15:19	0ം ⊽ 0ംൂമ			-7479 Jul 19 j 05:41	0° © 0°∏	
	-7484 Aug 28 j 10:37 -7484 Oct 11 j 05:51	0°M		morning rise	-7479 Aug 29 j 20:25 -7479 Sep 07 j 07:57	0 କ୍ତ 6°ହେ16'19	
	-7484 Nov 24 j 07:38	0° ∡ 7		morning risc	-7479 Oct 08 j 20:55	0°Ω	
	-7483 Jan 08 j 10:55	0° ਠ			-7479 Nov 16 j 22:43	0° mp	
	-7483 Feb 23 j 17:08	0° ≈			-7479 Dec 25 j 20:49	0° ⊽	
evening set	-7483 Mar 12 j 14:56	10°≈50'02		desc. node	-7479 Dec 30 j 18:09	ა _ 3° ჲ 44'29	
evening sec	-7483 Apr 11 j 15:37	0°) €		dese. node	-7478 Feb 03 i 13:45	0°M.	
asc. node	-7483 Apr 13 j 04:21	0° ¥ 58'33			-7478 Mar 17 j 06:07	0° ∡ 7	
max. Earth dist.	-7483 Apr 26 j 11:19	9°) €27'23	2.66789 AU		-7478 May 02 j 00:39	0°8	
	1 3				-7478 Jun 30 j 01:53	0° ≈	
conjunction	-7483 Apr 29 j 15:31	11° ¥ 29′00	0°09'22	retrograde	-7478 Aug 04 j 13:50	7° ≈ 09'07	
minimum elong	-7483 Apr 29 j 15:10	11°) €28'26	0°09'10	-	-7478 Sep 06 j 09:27	30°Ŗる	
behind sun begin	-7483 Apr 28 j 23:01	11°) 02'41		min. Earth dist.	-7478 Sep 09 j 14:11	28° る 44'17	0.62785 AU
behind sun end	-7483 Apr 30 j 07:19	11° ¥ 54'12		opposition	-7478 Sep 13 j 09:50	27° る 12'17	-3°04'30
	-7483 May 28 j 13:05	0° Y		greatest brilliancy	-7478 Sep 13 j 00:51	27° る 21'18	-1.5m
morning rise	-7483 Jun 14 j 17:36	11° Y °05'33		direct	-7478 Oct 21 j 14:36	18° ろ 10'38	
	-7483 Jul 13 j 17:58	0°8		asc. node	-7478 Dec 04 j 04:53	27° る 34'47	
	-7483 Aug 27 j 22:59	$\Pi^{\circ}0$			-7478 Dec 10 j 09:57	0° ≈	
	-7483 Oct 11 j 05:50	0°99			-7477 Feb 08 j 23:03	0°) €	
	-7483 Nov 24 j 00:21	0° N			-7477 Mar 31 j 19:41	0°Υ	
	-7482 Jan 07 j 04:01	0° m)			-7477 May 17 j 14:51	8°0	
JJ.	-7482 Feb 23 j 14:21	0° ™			-7477 Jun 30 j 09:13	0°П 10°По5110	
desc. node retrograde	-7482 Mar 27 j 21:15 -7482 May 04 j 09:50	16° £ 24'03 25° £ 03'02		evening set max. Earth dist.	-7477 Jul 14 j 12:24 -7477 Aug 01 j 01:19	10° П 05'18 22° П 51'53	2.43631 AU
min. Earth dist.	-7482 May 31 j 08:24	23 ⊆ 03 02 20° ⊆ 27'44	0.40956 AU	max. Earm dist.	-7477 Aug 01 j 01:19	0°95	2.43031 AU
greatest brilliancy	-7482 Jun 05 j 21:42	18° Ω 46'27	-2.7m		-/4// Aug 10 j 10.50	0 3	
opposition	-7482 Jun 07 j 02:56	18° ≏ 24'07		conjunction	-7477 Sep 07 j 21:53	21° © 19'18	0°48'02
direct	-7482 Jul 07 j 22:35	12° Ω 46'24		minimum elong	-7477 Sep 08 j 00:31	21°524'19	0°48'29
	-7482 Sep 04 j 23:12	0° M ,			-7477 Sep 19 j 04:56	0°N	
	-7482 Oct 29 j 08:57	0° ∡ ¹			-7477 Oct 27 j 17:29	0° m	
	-7482 Dec 17 j 17:27	8°0		morning rise	-7477 Nov 08 j 14:26	9° m 18'01	
	-7481 Feb 04 j 02:57	0° ≈		desc. node	-7477 Nov 17 j 12:48	16° Mp 17'20	
asc. node	-7481 Mar 01 j 00:29	15° ≈ 31'42			-7477 Dec 05 j 02:47	0∘ ⊽	
	-7481 Mar 24 j 02:15	0°)			-7476 Jan 13 j 05:56	0° M	
evening set	-7481 Apr 20 j 16:20	17° ¥ 27'50			-7476 Feb 22 j 23:38	0° ∡ ¹	
	-7481 May 10 j 05:59	0° Y			-7476 Apr 06 j 06:05	0°ප	
max. Earth dist.	-7481 May 21 j 01:11	6° Ƴ 59'07	2.63666 AU		-7476 May 23 j 12:38	0° ≈	
		••			-7476 Jul 19 j 16:12	0° ∀	
conjunction	-7481 Jun 07 j 01:04	18° ℃ 05'08	0°50'51	retrograde	-7476 Sep 07 j 19:32	12°) €25'46	0000:10
minimum elong	-7481 Jun 06 j 23:38	18° Y ′02'46	0°50'57	opposition	-7476 Oct 17 j 14:36	2°) (43'43	
	-7481 Jun 25 j 00:51	0°8		greatest brilliancy	-7476 Oct 17 j 14:43	2°)(43'36	-1.4m
morning rise	-7481 Jul 23 j 16:46	19° 8 21'51		min. Earth dist.	-7476 Oct 17 j 12:12	2°) 46′08	0.66758 AU
	-7481 Aug 08 j 03:17	0°© 11°0		asc. node	-7476 Oct 21 j 09:11	1°) €12'57	
	-7481 Sep 19 j 13:49 -7481 Oct 30 j 16:17	0°€ 0°€		direct	-7476 Oct 24 j 11:50 -7476 Nov 26 j 20:49	30°R≈ 22°≈58'13	
	-7481 Oct 30 j 16:17 -7481 Dec 09 j 23:27	0° m)		uncet	-7475 Jan 02 j 21:36	22°≈58°13 0° ∺	
	-7480 Jan 19 j 07:08	0∘ ত المار			-7475 Mar 07 j 13:45	0 K 0°Υ	
desc. node	-7480 Feb 12 j 22:26	0 = 17° £ 55'34			-7475 Apr 26 j 03:40	%8 0°8	
desc. node	-7480 Mar 01 j 01:10	0°M√			-7475 Jun 09 j 18:22	0°II	
	-7480 Apr 16 j 14:53	0° × 7			-7475 Jul 21 j 05:36	0°95	
retrograde	-7480 Jun 25 j 18:13	24° × ⁷ 50'34			-7475 Aug 29 j 15:44	$0 {\circ} {\mathcal O}$	
min. Earth dist.	-7480 Jul 26 j 19:33	18° ∡ 16'40	0.53097 AU	evening set	-7475 Sep 09 j 08:26	8° Ω 18'55	
				<i>5</i>	1 3		

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style. desc. node -7475 Oct 04 i 08:25 27°**Ω**54'25 -7470 Aug 11 j 21:30 0°8 -7475 Oct 07 j 00:17 -7470 Oct 01 j 05:43 $\Pi^{\circ}0$ -7470 Nov 28 j 03:41 0ಂತಾ -7469 Jan 20 j 01:04 -7475 Nov 11 j 23:34 28° m 13'33 -0°28'17 13°9528'03 conjunction retrograde 28° Mp 08'41 0°28'11 -7475 Nov 11 j 21:04 -7469 Feb 21 j 15:23 5°29'45 minimum elong opposition 7°**9**25'40 0∘**⊽** -7475 Nov 14 j 06:10 greatest brilliancy -7469 Feb 23 j 06:23 6°955'09 -2.5m min. Earth dist. -7475 Dec 23 j 06:50 0°M -7469 Mar 01 j 12:29 4°958'33 0.43908 AU max. Earth dist. -7475 Dec 24 j 07:06 0°M45'51 2.40141 AU direct -7469 Mar 29 j 02:17 0°9511'45 19°9519'48 morning rise -7474 Jan 16 j 19:27 18°M18'10 desc. node -7469 May 27 j 09:57 -7474 Feb 01 j 20:34 0° **₹** -7469 Jun 14 j 16:39 0° Ω -7474 Mar 16 j 13:48 0°궁 -7469 Jul 29 j 16:38 0° M -7469 Sep 09 j 18:15 -7474 Apr 30 j 22:16 0°≈ 0°Ω -7469 Oct 21 j 16:27 -7474 Jun 18 j 19:04 0°**)**€ 0°M -7474 Aug 14 j 09:47 $0^{\circ}\Upsilon$ -7469 Dec 03 j 14:31 0°**⊼** asc. node -7474 Sep 08 j 11:22 9°Y59'17 -7468 Jan 16 j 23:46 0°정 retrograde -7474 Oct 13 j 17:10 16°**Y**28'37 evening set -7468 Feb 25 j 17:19 26°る03'59 opposition -7474 Nov 21 j 09:37 7°**Υ**27'07 2°44'38 -7468 Mar 02 j 19:01 0°≈ greatest brilliancy -7474 Nov 21 j 16:28 7°**Y**20′22 -1.4m min. Earth dist. -7474 Nov 25 j 00:22 6°**Y**01'37 0.64546 AU conjunction -7468 Apr 14 j 15:44 27°≈31'45 -0°08'42 -7474 Dec 12 j 18:07 30°**₹** minimum elong -7468 Apr 14 j 16:05 27°≈32'19 0°09'01 direct -7473 Jan 01 j 10:17 27°**)**€26'32 behind sun begin -7468 Apr 13 j 23:36 27°≈06'00 -7473 Jan 22 j 11:31 $0^{\circ}\Upsilon$ behind sun end -7468 Apr 15 i 08:34 27°≈58'38 -7473 Apr 01 i 04:24 0°8 max. Earth dist. -7468 Apr 17 i 06:31 29°≈12'02 2.66559 AU -7473 May 18 j 23:56 $\mathbb{I}^{\circ 0}$ -7468 Apr 18 j 12:33 0°**∀** -7473 Jun 30 j 12:30 0000 asc. node -7468 Apr 29 j 22:17 7°**)** 17'09 -7473 Aug 09 j 08:35 $0^{\circ}\Omega$ -7468 May 31 j 07:18 27°¥20'14 morning rise -7473 Aug 22 j 05:31 9°**Ω**56'52 -7468 Jun 04 j 11:06 $0^{\circ}\Upsilon$ desc node -7473 Sep 16 j 22:30 0°m -7468 Jul 21 j 00:38 0°8 -7473 Oct 25 j 09:13 0∘**⊽** -7468 Sep 05 j 00:14 $0^{\circ}II$ -7473 Nov 15 j 11:50 16°**£**14'50 -7468 Oct 20 j 16:21 000 evening set -7468 Dec 05 j 21:33 $0^{\circ}\Omega$ -7473 Dec 03 j 15:26 0°M -7472 Jan 13 j 10:39 -7467 Jan 24 j 08:06 0°×7 0° m -7467 Apr 07 j 00:41 25° m 24'03 retrograde -7472 Jan 15 j 07:07 1°**1**°49 -1°10′42 **7**′19′49 -1°10′42 -7467 Apr 13 j 13:40 25° m 06'52 conjunction desc. node -7472 Jan 15 j 06:44 -7467 May 05 j 12:30 20° m 43'10 0.38244 AU minimum elong 1°**∡**19'08 1°11'07 min. Earth dist. -7472 Feb 21 j 18:33 27°**✗**37'23 2.52678 AU -7467 May 08 j 08:44 max. Earth dist. opposition 19° m 56'36 -1°55'55 -7472 Feb 25 j 05:49 -7467 May 08 j 02:07 0°ਰ greatest brilliancy 20° Mp 01'08 -2.9m morning rise -7472 Mar 12 j 07:44 10°る53'59 direct -7467 Jun 07 j 11:51 14° m 52'01 -7472 Apr 10 j 04:14 0°**≈** -7467 Jul 31 j 01:50 0°Ω -7472 May 27 j 04:53 0°**)**€ -7467 Sep 22 j 12:32 0°M -7472 Jul 15 j 15:09 $0^{\circ}\Upsilon$ -7467 Nov 09 j 07:01 0°**⊼** -7472 Jul 26 j 10:00 6°Y16'26 -7467 Dec 26 j 08:13 0°정 asc. node -7472 Sep 08 j 01:21 0° 8 -7466 Feb 11 j 15:53 0°≈ -7472 Nov 23 j 17:43 24°811'15 -7466 Mar 17 j 17:04 21°≈30'44 retrograde asc. node -7472 Dec 30 j 02:25 16°818'08 5°13'55 -7466 Mar 31 j 02:59 opposition 0°)(greatest brilliancy -7472 Dec 31 i 07:21 15°**8**51'13 -1.8m evening set -7466 Apr 05 j 14:34 3°¥28'36 min. Earth dist. -7471 Jan 06 i 04:24 13°840'20 0.56280 AU max. Earth dist. -7466 May 11 j 04:17 26°¥10'33 2.65531 AU direct -7471 Feb 08 i 01:08 6°849'10 -7466 May 17 j 02:52 -7471 Apr 18 j 08:26 $\mathbb{I}^{\circ 0}$ -7471 Jun 05 i 01:15 0ಂತಾ -7466 May 22 j 22:29 3°Y45'19 0°36'08 conjunction desc. node -7471 Jul 09 j 06:08 24°526'40 -7466 May 22 i 21:17 3°**Y**43'23 0°36'07 minimum elong -7471 Jul 16 j 18:05 $0^{\circ}\Omega$ -7466 Jul 02 j 00:23 0°8 -7466 Jul 07 j 23:50 3°858'38 -7471 Aug 25 j 08:43 0° mb morning rise -7471 Oct 03 j 14:09 0∘∙თ -7466 Aug 15 j 10:55 $0^{\circ}II$ -7471 Nov 12 j 13:10 nom. -7466 Sep 27 j 10:39 000 -7471 Dec 23 j 23:39 0°×7 -7466 Nov 08 j 06:38 $0^{\circ}\Omega$ -7470 Jan 11 j 02:40 12°**х** 43′19 -7466 Dec 19 j 11:43 0° m evening set -7470 Feb 05 j 06:43 0°궁 -7465 Jan 30 j 01:26 0∘**⊽** -7465 Mar 01 j 15:21 21°**2**06'50 desc. node -7470 Mar 05 j 09:11 18°る48'53 -0°51'39 -7465 Mar 15 j 06:36 0°M conjunction 18°る51'46 0°52'09 0°**∡**7 minimum elong -7470 Mar 05 j 10:55 -7465 May 12 j 22:04 -7470 Mar 22 j 09:35 0°≈ retrograde -7465 Jun 08 j 08:10 4°**₹**33'01 max. Earth dist. -7470 Mar 23 j 22:03 0°≈59'32 2.62194 AU -7465 Jul 03 j 20:47 30°RM morning rise -7470 Apr 24 j 10:21 21°≈21'35 min. Earth dist. -7465 Jul 07 j 05:13 28°M⋅52'27 0.48211 AU -7470 May 07 j 23:03 0°**)**€ greatest brilliancy -7465 Jul 13 j 16:47 26°M34'26 -2.2m -7470 Jun 13 j 05:10 22°\£55'45 -7465 Jul 15 j 07:17 25°M59'59 -5°58'08 asc. node opposition

direct

-7465 Aug 17 j 17:28

19°M02'09

-7470 Jun 24 j 11:42

 $0^{\circ}\Upsilon$

•	ical year style is used: Th		•	/ /		, ,	<i>,</i> 11
recommon, astronomi	-7465 Oct 02 j 18:39	0° ⊼ ¹	ii ustronomicar coc	behind sun end	-7460 Oct 17 j 02:52	2° m 04'23	
	-7465 Dec 01 i 09:19	0°ਰ		desc. node	-7460 Oct 21 j 03:00	5° mp 13'19	
	-7464 Jan 21 j 19:30	0° ≈		dese. Hode	-7460 Nov 21 j 17:58	0₀ ರ	
asc. node	-7464 Feb 02 j 15:43	7°≈07'31		morning rise	-7460 Dec 21 j 10:17	ა _ 22° ჲ 54'10	
asc. node	-7464 Mar 11 j 01:18	0° ∺		morning rise	-7460 Dec 30 j 18:32	0°M	
	-7464 Apr 27 j 16:57	0° Υ			-7459 Feb 09 j 08:20	0° ∡ ⊓	
evening set	-7464 May 13 j 17:38	10° Y 20′50			-7459 Mar 24 j 03:44	0° ਠ	
max. Earth dist.	-7464 Jun 05 j 20:31	25° Υ 32'39	2.59260 AU		-7459 May 08 j 22:37	0° ≈	
max. Lattii dist.	-7464 Jun 12 j 12:50	0° 8	2.37200 AO		-7459 Jun 28 j 10:28	0° ∺	
	-7404 Juli 12 j 12.30	00			-7459 Sep 05 j 04:54	0° Υ	
conjunction	-7464 Jun 30 j 21:54	12° 8 25'00	100721	asc. node	-7459 Sep 25 j 02:01	3° Υ 09'50	
minimum elong	-7464 Jun 30 j 20:50		1°07'49	retrograde	-7459 Sep 29 j 09:34	3° Υ 16'45	
minimum clong	-7464 Jul 26 j 08:09	0°Ⅱ	1 0/49	retrograde	-7459 Oct 21 j 17:22	30° R X	
morning rise	-7464 Aug 18 j 17:03	16° Ⅱ 35'02		opposition	-7459 Nov 07 j 15:14		1°38'40
morning risc	-7464 Sep 06 j 05:24	0°9		greatest brilliancy	-7459 Nov 07 j 13:14	23°\(\frac{1}{30}\)30'33'	-1.4m
	-7464 Oct 16 j 14:05	0°Ω		min. Earth dist.	-7459 Nov 09 j 18:54	23°\(\frac{1}{3}\)	0.66146 AU
	-7464 Nov 25 j 00:37	0° m)		direct	-7459 Dec 18 j 12:39	13° ¥ 58′07	0.00140 AU
	-7463 Jan 03 j 07:33	0∘ ত رااہ		uncet	-7458 Feb 15 j 11:10	0° Υ	
desc. node	-7463 Jan 16 j 14:44	0 = 10° £ 03'03			-7458 Apr 11 j 14:22	0°8	
desc. node	-7463 Feb 12 j 11:29	0°M				0°II	
	3	0° ⊼ 7			-7458 May 27 j 15:36	0°©	
	-7463 Mar 27 j 01:28				-7458 Jul 08 j 14:44	0° U	
	-7463 May 14 j 19:24	0°る		44-	-7458 Aug 17 j 05:08		
retrograde	-7463 Jul 21 j 00:16	22°る09'34	0.50007.411	desc. node	-7458 Sep 07 j 23:21	16° Ω 55'33	
min. Earth dist.	-7463 Aug 24 j 06:12		0.59607 AU		-7458 Sep 24 j 15:38	0° M)	
opposition	-7463 Aug 29 j 12:06	12°る18'13		evening set	-7458 Oct 20 j 12:48	20° m 18'04	
greatest brilliancy	-7463 Aug 28 j 19:13	12° る 34'58	-1./m		-7458 Nov 01 j 23:10	0∘ 亚	
direct	-7463 Oct 05 j 13:47	3°る42'22			-7458 Dec 11 j 01:51	0° M	
asc. node	-7463 Dec 20 j 18:01	27° る 38'43			7450 D 22 : 22 47	00% 52155	1002110
	-7463 Dec 25 j 11:07	0° ≈		conjunction	-7458 Dec 22 j 22:47	8°M53'55	
	-7462 Feb 18 j 00:18	0° ∀		minimum elong	-7458 Dec 22 j 20:23	8°M49'26	1°03'34
	-7462 Apr 08 j 11:28	0° Υ		P. 4. P.	-7457 Jan 20 j 17:38	0° ⊼ ¹	2 45020 444
	-7462 May 24 j 20:08	0°8		max. Earth dist.	-7457 Feb 05 j 06:41	11° х 06'08	2.47838 AU
evening set	-7462 Jun 25 j 14:50	21° 8 38'59		morning rise	-7457 Feb 21 j 15:53	22° ∡ ³34'37	
F 4 F	-7462 Jul 07 j 12:44	0°II	2 40500 477		-7457 Mar 04 j 10:23	0°ප	
max. Earth dist.	-7462 Jul 11 j 08:48	2° Ⅱ 42'58	2.48500 AU		-7457 Apr 18 j 10:08	0° ≈	
	T. (2) 17:01.02	200 T 20120	100.412.4		-7457 Jun 04 j 21:27	0°) €	
conjunction	-7462 Aug 17 j 01:02	29° Ⅱ 20′29	1°04'34		-7457 Jul 25 j 21:19	0° Υ	
minimum elong	-7462 Aug 17 j 02:46	29° Ⅱ 23'41	1°05'04	asc. node	-7457 Aug 13 j 02:36	9° Y 51'40	
	-7462 Aug 17 j 22:21	0° ⊙			-7457 Sep 26 j 00:16	0°8	
	-7462 Sep 26 j 14:46	0°N		retrograde	-7457 Nov 07 j 05:36	8° 8 53'17	4001144
morning rise	-7462 Oct 13 j 02:09	12° Ω 42'45		opposition	-7457 Dec 14 j 15:51	0° 8 29'12	4°21'44
	-7462 Nov 04 j 07:38	0° m/y		greatest brilliancy	-7457 Dec 15 j 10:54	0°810'56	-1.6m
desc. node	-7462 Dec 04 j 09:25	23° m 25'56			-7457 Dec 15 j 22:17	30° ₹ Υ	
	-7462 Dec 12 j 20:38	0∘ ⊽		min. Earth dist.	-7457 Dec 20 j 11:05	28° Y 15'52	0.60191 AU
	-7461 Jan 21 j 03:03	0° M ₊		direct	-7456 Jan 24 j 07:36	20° Ƴ 39'40	
	-7461 Mar 03 j 01:38	0° ∡ ¹			-7456 Mar 05 j 23:30	0°B	
	-7461 Apr 15 j 20:41	0°ප			-7456 May 01 j 14:36	0°Щ	
	-7461 Jun 04 j 00:13	0° ≈			-7456 Jun 15 j 04:01	0°95	
retrograde	-7461 Aug 26 j 07:44	29° ≈ 19'02		desc. node	-7456 Jul 25 j 23:01	0° Ω 06′03	
min. Earth dist.	-7461 Oct 03 j 16:51	20°≈05'20	0.65921 AU		-7456 Jul 25 j 19:50	0 $^{\circ}\Omega$	
opposition	-7461 Oct 05 j 06:30	19° ≈ 27′20			-7456 Sep 02 j 21:06	0° m)	
greatest brilliancy	-7461 Oct 05 j 05:10	19° ≈ 28'41	-1.4m		-7456 Oct 11 j 16:33	0∘ ⊽	
asc. node	-7461 Nov 07 j 22:14	10° ≈ 09'16			-7456 Nov 20 j 06:41	0° M	
direct	-7461 Nov 13 j 20:46	9° ≈ 55'40		evening set	-7456 Dec 21 j 10:24	22°M51'30	
	-7460 Jan 21 j 11:23	0° ∀			-7456 Dec 31 j 09:14	0° ∡	
	-7460 Mar 17 j 00:16	0° Y			-7455 Feb 12 j 09:51	0°ಕ	
	-7460 May 04 j 03:14	0°8				_	
	-7460 Jun 17 j 07:24	0°II		conjunction	-7455 Feb 15 j 08:27	2°る00'05	
	-7460 Jul 28 j 15:58	0°€		minimum elong	-7455 Feb 15 j 10:01	2° る 02'44	
evening set	-7460 Aug 16 j 02:59	13°954'12		max. Earth dist.	-7455 Mar 13 j 00:17		2.59047 AU
	-7460 Sep 06 j 02:09	0 \circ Ω			-7455 Mar 29 j 09:17	0° ≈	
max. Earth dist.	-7460 Oct 09 j 19:42		2.37986 AU	morning rise	-7455 Apr 08 j 15:11	6°≈40'34	
	-7460 Oct 14 j 11:33	0° m			-7455 May 15 j 00:36	0° ∺	
				asc. node	-7455 Jun 29 j 22:31	28°) 41'46	
conjunction	-7460 Oct 15 j 23:57	1° m)11'31	0°03'55		-7455 Jul 02 j 01:20	0° Ƴ	
minimum elong	-7460 Oct 16 j 00:20	1°Mp12'16	0°04'12		-7455 Aug 20 j 21:30	0°₽	
behind sun begin	-7460 Oct 14 j 21:48	0° Mp 20'09			-7455 Oct 14 j 16:22	Π $^{\circ}$ 0	

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style. -7455 Dec 26 j 00:34 22°**Ⅲ**17'53 -7449 Mar 19 i 07:54 0°) retrograde -7454 Jan 29 j 07:26 15°**Ⅲ**27′00 5°57'07 -7449 Apr 29 j 09:11 25°**)** 58'40 opposition evening set -7454 Jan 31 j 00:40 14°**I**151′40 -7449 May 05 j 15:34 $0^{\circ}\Upsilon$ greatest brilliancy -2.2m min. Earth dist. -7454 Feb 06 j 16:02 12°**Д**36'22 0.48870 AU -7449 May 26 j 23:19 13°**Υ**49'26 2.62311 AU max. Earth dist. -7454 Mar 08 j 00:51 7°**Ⅱ**04'16 direct -7454 May 13 j 20:35 -7449 Jun 15 j 21:50 $26^{\circ} \Upsilon 58'08$ 0°58'03 0.00 conjunction minimum elong -7449 Jun 15 j 20:25 26° Y 55'46 desc. node -7454 Jun 13 j 00:52 18°9548'20 0°58'14 -7449 Jun 20 j 10:59 0°8 -7454 Jun 29 j 10:34 0° Ω 29°**8**04'23 -7454 Aug 10 j 00:32 0° m morning rise -7449 Aug 02 j 02:54 -7454 Sep 19 j 11:11 0∘**⊽** -7449 Aug 03 j 10:52 $0^{\circ}\Pi$ -7454 Oct 30 j 08:05 0°M -7449 Sep 14 j 16:31 0ಂತಾ -7454 Dec 11 j 11:59 0°**∡** -7449 Oct 25 j 11:57 0° Ω 0°₹ -7449 Dec 04 j 10:40 -7453 Jan 24 j 08:08 0° M evening set -7453 Feb 09 j 00:07 10°る26'53 -7448 Jan 13 j 07:23 0∘**⊽** -7453 Mar 10 j 19:03 0°**≈** desc. node -7448 Feb 03 j 08:44 15°**2**35'26 -7448 Feb 23 j 06:53 0°M conjunction -7453 Mar 31 j 06:07 13°≈14'24 -0°26'27 -7448 Apr 07 j 17:08 0°**⊼** minimum elong -7453 Mar 31 j 07:09 13°≈16'05 0°26'51 -7448 Jun 05 j 06:57 0°정 max. Earth dist. -7453 Apr 08 j 20:18 18°**≈**45'55 2.65502 AU retrograde -7448 Jul 05 j 08:34 5°る35'12 -7453 Apr 26 j 09:17 0°**)**€ -7448 Aug 02 j 17:23 30°R ×7 0.55601 AU morning rise -7453 May 17 j 20:57 13°\ 42'23 min. Earth dist. -7448 Aug 06 j 14:44 28°**₹**33'28 asc. node -7453 May 17 j 16:04 13°\ 34'36 greatest brilliancy -7448 Aug 12 j 02:21 26°**₹**'26'15 -1.8m -7453 Jun 12 j 11:13 $0^{\circ}\Upsilon$ opposition -7448 Aug 13 i 04:35 26°**₹**00'49 -5°06'16 -7453 Jul 29 j 13:27 0°8 direct -7448 Sep 17 j 22:36 17°**₹**57'18 -7453 Sep 14 j 16:23 Π °0 -7448 Nov 06 j 13:09 0°궁 -7453 Nov 01 j 15:34 0ಂತಾ -7447 Jan 05 j 15:18 0°≈ -7453 Dec 23 j 07:17 $0^{\circ}\Omega$ -7447 Jan 06 j 07:34 0°≈22'38 asc node -7452 Mar 06 j 19:38 24°**Ω**59'29 -7447 Feb 26 j 06:55 0°**₩** retrograde -7452 Apr 06 j 12:07 -7447 Apr 15 j 20:18 $0^{\circ}\Upsilon$ 19°Ω53'28 1°50'44 opposition -7452 Apr 06 j 19:02 19°**Ω**48'48 -2.9m -7447 May 31 j 22:25 0°8 greatest brilliancy -7452 Apr 09 j 00:54 19°**Ω**12'28 0.38397 AU -7447 Jun 08 j 04:11 min. Earth dist. evening set 4°**8**51'44 desc. node -7452 Apr 30 j 05:53 14°**£**53′39 max. Earth dist. -7447 Jun 25 j 15:14 16°**8**45'42 2.53131 AU -7452 May 07 j 15:25 direct 14°**£**31'36 -7447 Jul 14 j 15:10 Π $^{\circ}0$ -7452 Jun 29 j 20:29 0° M -7452 Aug 20 j 02:25 0∘**⊽** -7447 Jul 28 j 10:13 9°II48'05 1°11'36 conjunction -7452 Oct 04 j 17:05 $0^{\circ}M$ -7447 Jul 28 j 10:38 9°**Ⅱ**48'49 minimum elong 1°12'03 -7452 Nov 18 j 17:09 -7447 Aug 25 j 04:28 0°⊀ 0ಂತಾ -7447 Sep 19 j 11:12 -7451 Jan 03 j 09:08 0°ರ morning rise 18°953'36 -7451 Feb 18 j 22:52 0°**≈** -7447 Oct 04 j 02:01 $0^{\circ}\Omega$ evening set -7451 Mar 21 j 11:55 19°≈28'11 -7447 Nov 12 j 00:15 0° m -7451 Apr 03 j 09:14 27°≈40'13 -7447 Dec 20 j 18:20 0∘**⊽** asc. node -7451 Apr 07 j 01:06 0°**)**€ -7447 Dec 21 j 04:35 0° 219'44 desc. node max. Earth dist. -7451 May 01 j 21:12 15°**¥**50'20 2.66574 AU -7446 Jan 29 j 06:01 0°M -7446 Mar 11 j 13:23 0°**∡**7 -7451 May 08 j 03:52 19°**¥**51'16 0°19'34 -7446 Apr 25 j 07:34 0°정 conjunction -7451 May 08 i 03:09 minimum elong 19°**¥**50'07 0°19'24 -7446 Jun 17 j 12:18 0°≈ -7451 May 23 j 23:03 $0^{\circ}\Upsilon$ retrograde -7446 Aug 12 i 15:23 15°≈43'20 19° **Y**32'16 morning rise -7451 Jun 23 i 02:18 min. Earth dist. -7446 Sep 18 j 13:14 6°≈59'51 0.64157 AU -7451 Jul 09 i 01:04 0°8 -7446 Sep 21 i 13:54 5°≈46'38 -2°25'34 opposition -7451 Aug 22 j 22:46 $0^{\circ}II$ -7446 Sep 21 j 08:23 5°≈52'12 -1.5m greatest brilliancy -7451 Oct 05 j 17:04 0ಂತಾ -7446 Oct 07 j 11:39 30°Rる -7451 Nov 17 j 15:27 $0^{\circ}\Omega$ -7446 Oct 30 j 08:00 26°る33'07 direct -7451 Dec 30 j 09:47 0°m -7446 Nov 24 j 11:46 0°≈02'00 asc. node -7450 Feb 12 j 14:36 0∘**⊽** -7446 Nov 24 j 08:38 0°28 desc. node -7450 Mar 18 j 09:48 20°**♀**32'55 -7445 Feb 02 j 08:55 0°) $0^{\circ}\Upsilon$ -7450 Apr 06 j 03:03 0°M -7445 Mar 26 j 12:17 retrograde -7450 May 18 j 01:29 10°MJ38'11 -7445 May 12 j 17:50 0°8 -7450 Jun 14 j 05:14 0.43285 AU -7445 Jun 25 j 15:53 $0^{\circ}\Pi$ min. Earth dist. 5°M46'40 -7450 Jun 20 j 12:14 -7445 Jul 26 j 02:37 21°II56'17 greatest brilliancy 3°M44'54 -2.5m evening set -7450 Jun 22 j 01:10 opposition 3°M14'54 -5°34'35 -7445 Aug 06 j 00:10 0ಂತಾ -7450 Jul 02 j 21:22 max. Earth dist. -7445 Aug 17 j 02:52 8°919'36 2.41113 AU direct -7450 Jul 23 j 17:17 27°**2**09'26 -7445 Sep 14 j 12:04 0° Ω -7450 Aug 14 j 09:43 0°M -7450 Oct 21 j 05:40 0°**∡** conjunction -7445 Sep 21 j 09:12 5°**Ω**19'31 0°34'13 -7450 Dec 11 j 17:37 0°궁 minimum elong -7445 Sep 21 j 11:39 5°**Ω**24'16 0°34'38 -7449 Jan 29 j 23:19 0°**≈** -7445 Oct 22 j 23:31 -7449 Feb 19 j 05:55 12°≈30'58 desc. node -7445 Nov 07 j 23:01 12° m/31'59 asc. node

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style. -7445 Nov 24 i 08:18 25° m 21'08 -7439 Apr 06 j 20:38 $0^{\circ}II$ morning rise -7445 Nov 30 j 07:26 0∘**⊽** -7439 May 28 j 21:27 0ಂತಾ -7444 Jan 08 j 08:45 0°M -7439 Jun 29 j 18:41 22°905'08 desc. node -7439 Jul 10 j 16:16 0°×7 -7444 Feb 17 j 23:40 $0^{\circ}\Omega$ -7439 Aug 19 j 18:53 0°정 -7444 Mar 31 j 23:49 0° m 0∘**⊽** -7444 May 17 j 12:23 0°22 -7439 Sep 28 j 07:56 0° M 0°**)**€ -7444 Jul 10 j 01:41 -7439 Nov 07 j 12:26 0°×7 retrograde -7444 Sep 15 j 14:48 20°**¥**18'59 -7439 Dec 19 j 03:14 asc. node -7444 Oct 11 j 16:03 15°**¥**50′36 evening set -7438 Jan 22 j 01:48 23°×33'21 opposition -7444 Oct 25 j 06:14 10°**)** 43′39 0°31'04 -7438 Jan 31 j 13:24 0°ಕ greatest brilliancy -7444 Oct 25 j 06:18 10°**)** 43′34 -1.4m -7438 Mar 15 j 03:07 28°る17'16 -0°43'01 min. Earth dist. -7444 Oct 25 j 22:53 10°**¥**26′55 $0.66800 \, AU$ conjunction direct -7444 Dec 04 j 19:17 0°**)** 52′21 minimum elong -7438 Mar 15 j 04:41 28°る19'51 0°43'29 -7443 Feb 28 j 15:35 $0^{\circ}\Upsilon$ -7438 Mar 17 j 18:01 -7443 Apr 20 j 16:06 0°8 max. Earth dist. -7438 Mar 29 j 23:25 7°**≈**57'06 2.63601 AU -7443 Jun 04 j 17:25 $0^{\circ}II$ morning rise -7438 May 03 j 03:57 29°≈55'27 -7443 Jul 16 j 08:45 0ಂತಾ -7438 May 03 j 06:48 0°**)**€ -7443 Aug 24 j 20:18 $0^{\circ}\Omega$ asc. node -7438 Jun 03 j 09:10 19°**)** 45'11 evening set -7443 Sep 24 j 00:11 23°**Ω**32'34 -7438 Jun 19 j 14:34 $0^{\circ}\Upsilon$ desc. node -7443 Sep 24 j 17:30 24° **Ω**06'33 -7438 Aug 06 j 10:35 0°8 -7443 Oct 02 j 05:26 0° m -7438 Sep 24 j 07:01 $0^{\circ}\Pi$ -7443 Nov 09 j 11:37 0°Ω -7438 Nov 15 j 16:45 0ಂತಾ retrograde -7437 Feb 05 i 01:15 27°533'00 conjunction -7443 Nov 27 i 05:56 13°**2**45'55 -0°44'05 opposition -7437 Mar 08 i 16:26 21°956'42 4°38'48 -7443 Nov 27 j 02:40 13°**≏**39'39 0°44'08 greatest brilliancy -7437 Mar 09 j 22:58 21°934'05 minimum elong -2.6m -7443 Dec 18 j 12:21 min. Earth dist. -7437 Mar 15 j 08:11 0.41450 AU oom. 19°958'51 -7442 Jan 12 j 23:51 19°ML00'15 2.42767 AU -7437 Apr 11 j 15:00 max Earth dist direct 15°926'20 -7442 Jan 28 j 01:57 0°×7 desc. node -7437 May 17 j 21:57 23°930'23 -7442 Jan 30 j 13:28 1°**∡**¹47'18 -7437 Jun 01 j 04:09 $0^{\circ}\Omega$ morning rise -7442 Mar 11 j 17:42 0°정 -7437 Jul 21 j 08:28 0° m -7442 Apr 25 j 21:04 -7437 Sep 03 j 02:06 0°22 0∘ಹ -7442 Jun 13 j 01:28 0°**)**€ -7437 Oct 15 j 21:23 0°M -7442 Aug 05 j 18:52 $0^{\circ}\Upsilon$ -7437 Nov 28 j 08:33 0°**∡**7 -7442 Aug 29 j 18:09 11°Υ14'56 -7436 Jan 12 j 02:05 0°궁 asc. node -7442 Oct 22 j 07:15 24°**Y**41′22 -7436 Feb 27 j 02:25 retrograde 0°≈ -7442 Nov 29 j 14:09 opposition 15°**Υ**51'40 3°21'23 evening set -7436 Mar 05 j 22:16 5°≈02'26 greatest brilliancy -7442 Nov 30 j 00:46 15°**Y**41'17 -1.5m -7436 Apr 13 j 22:06 0°**₩** min. Earth dist. -7442 Dec 03 j 23:41 14°**Υ**08'29 0.63265 AU -7436 Apr 20 j 02:40 3°**)** 57'04 asc. node direct -7441 Jan 09 j 13:39 5°Y52'37 -7441 Mar 24 j 09:11 0° 8 conjunction -7436 Apr 23 j 07:34 5°\ 59'46 0°01'51 -7441 May 13 j 02:08 $0^{\circ}II$ -7436 Apr 23 j 07:29 5°**¥**59'36 0°01'36 minimum elong -7441 Jun 25 j 04:26 0ಂತಾ behind sun begin -7436 Apr 22 j 12:01 5°**)** €28'34 -7441 Aug 04 j 06:09 $0^{\circ}\Omega$ behind sun end -7436 Apr 24 j 02:57 6°\(\)30'39 -7441 Aug 12 j 16:09 6°**Ω**28'07 max. Earth dist. -7436 Apr 22 j 18:44 5°¥39'18 2.66793 AU desc. node -7441 Sep 11 j 23:08 -7436 May 30 j 20:03 $0^{\circ}\Upsilon$ 0° m 5°**Y**37'42 -7441 Oct 20 j 11:59 0°Ω morning rise -7436 Jun 08 j 14:10 -7441 Nov 28 i 19:53 0°M -7436 Jul 16 i 04:58 0°8 evening set -7441 Nov 29 j 12:54 0°M31'54 -7436 Aug 30 j 18:00 $0^{\circ}II$ -7440 Jan 08 j 16:39 0°×7 -7436 Oct 14 j 14:29 0ಂತಾ -7436 Nov 28 j 06:33 $0^{\circ}\Omega$ -7440 Jan 27 j 13:44 13°**∡** 24'09 -1°10'19 -7435 Jan 13 j 01:48 0° m conjunction -7440 Jan 27 j 14:19 13°**∡** 25′11 1°10′47 -7435 Mar 06 j 15:44 0∘**⊽** minimum elong -7440 Feb 20 j 12:41 0°궁 desc. node 10°**£**27'24 -7435 Apr 04 j 01:35 max. Earth dist. -7440 Feb 29 j 20:12 6°る20'08 2.55158 AU retrograde -7435 Apr 22 j 23:51 12°**-**49'43 -7440 Mar 22 j 17:06 20°る58'32 min. Earth dist. -7435 May 20 j 06:00 8°**2**19'06 0.39433 AU morning rise 6°**-**46′26 -3°44′15 -7440 Apr 05 j 10:22 0°≈ opposition -7435 May 25 j 14:20 -7440 May 22 j 06:03 0°**)**€ greatest brilliancy -7435 May 24 j 18:39 7°**£**00'41 -2.8m -7440 Jul 10 j 00:54 $0^{\circ}\Upsilon$ -7435 Jun 24 j 22:24 1°**£**27'47 direct 3°Y57'30 0°M asc. node -7440 Jul 16 j 15:51 -7435 Sep 12 j 23:51 0°8 0°**∡**7 -7440 Aug 31 j 05:14 -7435 Nov 02 j 15:51 $0^{\circ}\Pi$ 0°정 -7440 Nov 07 j 09:14 -7435 Dec 20 j 20:15 retrograde -7440 Dec 04 j 14:46 4°**I**102'30 -7434 Feb 06 j 17:06 0°≈ -7440 Dec 29 j 23:20 30°R₩ asc. node -7434 Mar 07 j 22:27 18°≈20'34 opposition -7439 Jan 09 j 07:44 26°**8**29'05 5°36'46 -7434 Mar 26 j 10:32 0°**)**€ evening set greatest brilliancy -7439 Jan 10 j 17:57 25°**8**57'58 -1.9m -7434 Apr 14 j 06:26 11°**H** 55'22 min. Earth dist. -7439 Jan 17 j 00:02 23°**8**42'10 0.53816 AU -7434 May 12 j 12:50 -7439 Feb 17 j 15:39 17°**8**18'06 max. Earth dist. -7434 May 16 j 21:02 2°Υ48'04 2.64600 AU direct

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 47 Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	ne year -7900 i	in astronomical co	unting style is the year	7901 BCE in historical c	ounting style.	
conjunction	-7434 May 31 j 13:41	12° Y 20'06		retrograde	-7429 Sep 03 j 02:20	7° ∺ 19'29	
minimum elong	-7434 May 31 j 12:19	12° Y 17'51	0°45'00		-7429 Oct 06 j 19:50	30°R ≈	
	-7434 Jun 27 j 09:34	9° 8		opposition	-7429 Oct 12 j 23:40	27° ≈ 32'33	-0°37'21
morning rise	-7434 Jul 16 j 21:12	13° 8 03'56		min. Earth dist.	-7429 Oct 12 j 05:02	27° ≈ 51′20	0.66509 AU
	-7434 Aug 10 j 16:15	Π °0		greatest brilliancy	-7429 Oct 12 j 23:30	27° ≈ 32'43	-1.4m
	-7434 Sep 22 j 09:14	0		asc. node	-7429 Oct 29 j 05:49	21° ≈ 33'49	
	-7434 Nov 02 j 19:28	$0^{\circ}\Omega$		direct	-7429 Nov 21 j 23:34	17° ≈ 52'53	
	-7434 Dec 13 j 11:36	0° ™			-7428 Jan 11 j 14:36	0° ∀	
	-7433 Jan 23 j 06:10	0∘ ⊽			-7428 Mar 11 j 00:28	0° Y	
desc. node	-7433 Feb 20 j 03:25	19° Ω 55'56			-7428 Apr 28 j 23:55	0° 8	
	-7433 Mar 06 j 18:30	0° M			-7428 Jun 12 j 11:15	Π °0	
	-7433 Apr 24 j 22:24	0° ∡			-7428 Jul 23 j 22:32	0 \circ \odot	
retrograde	-7433 Jun 19 j 03:00	16° ₹ 51'12		evening set	-7428 Aug 29 j 12:22	27°5946'41	
min. Earth dist.	-7433 Jul 19 j 05:02		0.50938 AU		-7428 Sep 01 j 09:19	0 $^{\circ}$ Ω	
greatest brilliancy	-7433 Jul 25 j 10:13	8° ≯ 22'54			-7428 Oct 09 j 18:19	0° m)	
opposition	-7433 Jul 26 j 21:24	7° ∡ 750′12	-5°47'57	desc. node	-7428 Oct 11 j 13:55	1° m 25'43	
direct	-7433 Aug 30 j 04:01	0° ∡ ¹26'42					
	-7433 Nov 23 j 16:51	0°る		conjunction	-7428 Oct 31 j 03:17	16° Mp 48'06	
	-7432 Jan 16 j 03:05	0° ≈		minimum elong	-7428 Oct 31 j 01:56	16° Mp 45'26	0°14'28
asc. node	-7432 Jan 23 j 22:08	4° ≈ 35'24		behind sun begin	-7428 Oct 30 j 13:04	16° m 20'13	
	-7432 Mar 06 j 01:46	0° ∀		behind sun end	-7428 Oct 31 j 14:47	17° m) 10'40	
	-7432 Apr 23 j 00:26	0° Y			-7428 Nov 17 j 00:03	0∘ ⊽	
evening set	-7432 May 22 j 19:05	19° Ƴ 17'40		max. Earth dist.	-7428 Nov 28 j 11:57		2.38509 AU
	-7432 Jun 07 j 22:31	9° 8			-7428 Dec 25 j 23:41	0° M	
max. Earth dist.	-7432 Jun 12 j 15:16	3° 8 09'01	2.57237 AU	morning rise	-7427 Jan 05 j 15:50	8°M02'11	
					-7427 Feb 04 j 12:03	0° ∡ ¹	
conjunction	-7432 Jul 10 j 13:30	22° 8 13'13	1°10'48		-7427 Mar 19 j 04:31	0°ප	
minimum elong	-7432 Jul 10 j 12:51	22° 8 12'04	1°11'10		-7427 May 03 j 15:03	0° ≈	
	-7432 Jul 21 j 17:00	$\Pi^{\circ}0$			-7427 Jun 21 j 23:32	0° ₩	
morning rise	-7432 Aug 29 j 14:41	27° Ⅱ 53'56			-7427 Aug 20 j 11:14	0° Y	
	-7432 Sep 01 j 11:31	0 \circ \odot		asc. node	-7427 Sep 15 j 08:31	8° Ƴ 28'57	
	-7432 Oct 11 j 16:06	$0^{\circ}\Omega$		retrograde	-7427 Oct 07 j 13:08	11° Y 15'24	
	-7432 Nov 19 j 21:52	o° my		opposition	-7427 Nov 15 j 11:58	2° Y 04'58	2°17'08
	-7432 Dec 28 j 23:31	0∘ ⊽		greatest brilliancy	-7427 Nov 15 j 16:24	2° Y 00'34	-1.4m
desc. node	-7431 Jan 06 j 23:53	6° £ 52'11		min. Earth dist.	-7427 Nov 18 j 10:37	0° Ƴ 54'56	0.65389 AU
	-7431 Feb 06 j 19:54	0° M			-7427 Nov 20 j 18:32	30° ₹	
	-7431 Mar 20 j 18:41	0° ∡ ″		direct	-7427 Dec 26 j 11:53	22°) €04'45	
	-7431 May 06 j 09:32	8°0			-7426 Feb 03 j 12:59	0° Υ	
	-7431 Jul 15 j 05:23	0° ≈			-7426 Apr 05 j 03:59	0°B	
retrograde	-7431 Jul 29 j 11:11	1°≈18′28			-7426 May 22 j 05:02	$\Pi^{\circ}0$	
•	-7431 Aug 12 j 01:13	30°Rる			-7426 Jul 03 j 12:46	0ංම	
min. Earth dist.	-7431 Sep 02 j 17:01	23° る 10'25	0.61465 AU		-7426 Aug 12 j 06:57	$0^{\circ}\Omega$	
opposition	-7431 Sep 07 j 04:33	21° පි 22'58		desc. node	-7426 Aug 29 j 10:37	13° Ω 17'31	
greatest brilliancy	-7431 Sep 06 j 16:19	21° る 35'12			-7426 Sep 19 j 19:26	0° m)	
direct	-7431 Oct 14 j 21:53	12° る 32'21			-7426 Oct 28 j 04:22	0∘ <u>⊽</u>	
asc. node	-7431 Dec 11 j 01:31	27° る 29'54		evening set	-7426 Nov 04 j 08:17	5° ≏ 33'12	
	-7431 Dec 16 j 16:24	0° ≈		C	-7426 Dec 06 j 08:02	0° M .	
	-7430 Feb 12 j 04:49	0°) €			. ,		
	-7430 Apr 03 j 11:07	0° Υ		conjunction	-7425 Jan 05 j 11:29	22°M21'36	-1°08'51
	-7430 May 20 j 02:51	0°8		minimum elong	-7425 Jan 05 j 10:13	22°M19'16	
	-7430 Jul 02 j 21:32	0°II			-7425 Jan 16 j 00:22	0° ∡ 7	
evening set	-7430 Jul 06 j 03:48	2° I 18'25		max. Earth dist.	-7425 Feb 15 j 08:59		2.50555 AU
max. Earth dist.	-7430 Jul 22 j 03:30		2.45798 AU		-7425 Feb 27 j 16:57	0°ಕ	
	-7430 Aug 13 j 06:53	0.ಪ		morning rise	-7425 Mar 05 j 03:04	3° ප 42'16	
	7 150 Flag 15 J 00.55	٠ ٠		morning rise	-7425 Apr 13 j 14:15	0°≈	
conjunction	-7430 Aug 29 j 03:20	11° © 52'35	0°56'23		-7425 May 30 j 17:36	0° ∺	
minimum elong	-7430 Aug 29 j 05:42				-7425 Jul 19 j 16:22	0° Υ	
minimum ciong	-7430 Sep 21 j 21:35	0°Ω	0 3031	asc. node	-7425 Aug 03 j 07:46	8° Υ 18'50	
morning rise	-7430 Oct 27 j 18:22	27° Ω 51'37		450. HOGO	-7425 Aug 05 j 07:40	0°8	
morning 1150	-7430 Oct 27 j 18.22 -7430 Oct 30 j 12:05	0° mp		retrograde	-7425 Nov 16 j 23:17	17° 8 53'53	
desc. node	-7430 Oct 30 j 12.03	0 ių 19°Mo,44'17		opposition	-7425 Nov 16 j 23.17 -7425 Dec 23 j 20:25	9° 8 45'54	1052112
acsc. Hour	•	19° டி 4417			-7425 Dec 24 j 20:51	9° 8 22'49	4°32'43
	-7430 Dec 07 j 22:43	0° M		greatest brilliancy		7° 8 18'14	-1./m 0.58140 AU
	-7429 Jan 16 j 02:22	0°IIL 0° ズ		min. Earth dist.	-7425 Dec 30 j 09:05	0° 8 06'09	0.36140 AU
	-7429 Feb 25 j 20:40			direct	-7424 Feb 02 j 03:58		
	-7429 Apr 10 j 06:04	ිදුර ව°00			-7424 Apr 23 j 22:04	0°II	
	-7429 May 28 j 01:40	0° ≈		daga == -1-	-7424 Jun 09 j 01:11	0°95	
	-7429 Jul 28 j 04:19	0°) €		desc. node	-7424 Jul 16 j 10:16	27° © 07'18	

Planetary Phenomena of Mars from -7900 through -7398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style. -7424 Jul 20 j 06:28 morning rise $0^{\circ}\Omega$ -7419 Jul 01 i 13:55 28°Y08'55 -7424 Aug 28 j 14:38 0°m -7419 Jul 04 j 09:10 0°8 -7424 Oct 06 j 14:55 0∘**⊽** -7419 Aug 18 j 01:04 $0^{\circ}II$ 0°M -7419 Sep 30 j 08:59 0ಂತಾ -7424 Nov 15 j 08:51 -7424 Dec 26 j 14:27 0°**√** -7419 Nov 11 j 15:51 $0^{\circ}\Omega$ 4°**⋌**'51'19 -7419 Dec 23 j 10:54 -7423 Jan 02 j 10:46 0° m evening set 0∘**⊽** -7423 Feb 07 j 17:19 0°궁 -7418 Feb 03 j 21:33 desc. node -7418 Mar 08 j 19:42 21°**£**51'32 0° M conjunction -7423 Feb 25 j 20:19 12°る13'32 -0°57'14 -7418 Mar 22 j 04:02 12°る16'28 0°57'43 minimum elong -7423 Feb 25 j 22:05 retrograde -7418 May 30 j 14:24 25°M05'15 max. Earth dist. -7423 Mar 19 j 11:34 26°る33'52 2.60879 AU min. Earth dist. -7418 Jun 27 j 14:08 19°**M**47'42 0.45969 AU -7418 Jul 04 j 02:20 -7423 Mar 24 j 17:22 0°≈ greatest brilliancy 17°**M**.34'19 -2.4m -7418 Jul 05 j 17:39 morning rise -7423 Apr 17 j 19:41 15°≈38'09 opposition 17°M00'23 -5°56'29 -7423 May 10 j 06:33 0°**)**€ direct -7418 Aug 07 j 09:43 10°M25'12 asc. node -7423 Jun 20 j 03:20 25°\ 44'26 -7418 Oct 11 j 05:30 0°**⊼** -7423 Jun 26 j 23:25 $0^{\circ}\Upsilon$ -7418 Dec 05 j 07:32 0°정 -7423 Aug 14 j 21:43 0°8 -7417 Jan 24 j 16:03 0°≈ -7423 Oct 05 j 17:09 $\mathbb{I}^{\circ 0}$ asc. node -7417 Feb 09 j 12:50 9°≈39'55 -7423 Dec 11 j 18:21 0ಂತಾ -7417 Mar 14 j 12:06 0°) retrograde -7422 Jan 08 j 15:32 4°9516'55 -7417 May 01 j 00:47 $0^{\circ}\Upsilon$ -7422 Feb 04 j 06:24 30°R∏ evening set -7417 May 08 j 03:07 4°Y34'02 -7422 Feb 11 i 00:45 27°**I**52'19 5°48'50 max. Earth dist. -7417 Jun 02 i 03:06 20°Y52'09 2.60729 AU opposition greatest brilliancy -7422 Feb 12 j 18:29 27° II 18'12 -2.3m -7417 Jun 15 j 21:19 0°8 min. Earth dist. -7422 Feb 19 j 08:24 25°**Ⅱ**10'09 0.46099 AU direct -7422 Mar 19 j 15:13 20° II 05'01 -7417 Jun 24 i 22:47 6°804'43 1°04'01 conjunction -7422 Apr 29 j 11:45 0ಂತಾ -7417 Jun 24 j 21:30 6°**8**02'34 1°04'16 minimum elong -7422 Jun 03 j 13:40 18°9544'43 -7417 Jul 29 j 19:40 desc node 0°Π -7422 Jun 21 j 05:41 -7417 Aug 11 j 22:28 9°**I**13'14 $0^{\circ}\Omega$ morning rise -7422 Aug 03 j 08:41 0°m -7417 Sep 09 j 21:24 0ംഉ -7422 Sep 13 j 13:46 0∘∙თ -7417 Oct 20 j 11:16 0° Ω -7422 Oct 24 j 22:31 0°M -7417 Nov 29 j 02:56 0° m -7422 Dec 06 j 10:38 0°×7 -7416 Jan 07 j 15:03 0∘ಹ 0°정 -7421 Jan 19 j 12:37 -7416 Jan 24 j 19:36 12°**£**54'03 desc. node -7421 Feb 18 j 16:52 19°**る**56'57 -7416 Feb 17 j 01:14 evening set 0°M -7421 Mar 06 j 03:04 -7416 Mar 31 j 04:16 0°**∡**7 0°≈ -7416 May 21 j 04:43 0°궁 -7421 Apr 09 j 04:17 -7416 Jul 14 j 11:46 conjunction 21°≈56'27 -0°16'13 retrograde 15°**ප්**43'04 minimum elong -7421 Apr 09 j 04:55 21°≈57'29 0°16'34 min. Earth dist. -7416 Aug 16 j 21:05 8°る15'59 0.57916 AU max. Earth dist. -7421 Apr 14 j 09:45 25°≈17'21 2.66192 AU -7416 Aug 22 j 18:12 5°る57'23 -4°34'28 opposition -7421 Apr 21 j 18:29 0°**)**€ greatest brilliancy -7416 Aug 21 j 21:16 6°る17'57 -1.7m asc. node -7421 May 07 j 20:18 10°¥15'53 -7416 Sep 09 j 08:28 30°R.**✓** -7421 May 26 j 04:56 21°**)** 58'55 -7416 Sep 28 j 06:13 27°**∡**35′08 morning rise direct -7421 Jun 07 j 18:21 $0^{\circ}\Upsilon$ -7416 Oct 18 j 17:02 0°정 -7421 Jul 24 j 13:08 0°8 -7416 Dec 27 j 14:24 28°る53'14 asc. node -7421 Sep 08 j 23:47 $\mathbb{I}^{\circ 0}$ -7416 Dec 29 j 17:04 0°≈ -7421 Oct 25 i 12:37 0ಂತಾ -7415 Feb 20 i 21:37 0°) $0^{\circ}\Upsilon$ -7421 Dec 12 j 11:33 $0^{\circ}\Omega$ -7415 Apr 10 j 23:52 -7420 Feb 05 i 16:00 0° m -7415 May 27 i 06:43 0°8 retrograde -7420 Mar 24 j 17:22 12° m 21'35 evening set -7415 Jun 17 j 23:19 14°840'08 -7420 Apr 20 j 17:52 8° mb 10'19 max. Earth dist. -7415 Jul 04 j 04:58 25°854'48 2.50634 AU desc. node 7° Mp 11'28 -0°17'38 -7420 Apr 24 j 10:41 -7415 Jul 10 j 00:35 $0^{\circ}\Pi$ opposition 7° M 11′42 -3.0m -7420 Apr 24 j 10:20 greatest brilliancy 7° mp 18'21 0.37928 AU -7420 Apr 24 j 00:22 -7415 Aug 08 j 07:32 21°**II**01'05 1°08'39 min. Earth dist. conjunction $21^{\circ}\Pi03'12 \quad 1^{\circ}09'08$ direct -7420 May 24 j 18:09 2° m 06'45minimum elong -7415 Aug 08 j 08:41 -7420 Aug 09 j 17:44 0∘∙თ -7415 Aug 20 j 12:52 000 -7420 Sep 27 j 13:06 0°M -7415 Sep 29 j 08:18 $0^{\circ}\Omega$ -7420 Nov 12 j 20:24 0°**∡** morning rise -7415 Oct 02 j 10:49 2°Ω22'49 -7420 Dec 29 j 04:40 0°る -7415 Nov 07 j 03:43 0° m -7415 Dec 11 j 15:03 26° Mp 47'24 -7419 Feb 14 j 03:14 0°≈ desc. node 24°≈24'42 -7415 Dec 15 j 18:40 0∘**⊽** asc. node -7419 Mar 24 j 14:41 0°M evening set -7419 Mar 30 j 05:03 27°≈57'54 -7414 Jan 24 j 02:26 -7419 Apr 02 j 09:59 0°**)**€ -7414 Mar 06 j 02:48 0°**∡**7 max. Earth dist. -7419 May 07 j 08:00 22°**升**15′29 2.66097 AU -7414 Apr 19 j 04:06 0°ಕ -7414 Jun 08 j 10:44 0°≈ conjunction -7419 May 16 j 15:26 28°**)** 14'03 0°29'22 retrograde -7414 Aug 20 j 13:26 24°≈02'40 -7419 May 16 j 14:25 28°\ 12'25 0°29'16 -7414 Sep 27 j 07:05 15°≈02'18 0.65248 AU minimum elong min. Earth dist.

-7414 Sep 29 j 12:56

14°≈07'59 -1°45'53

opposition

-7419 May 19 j 09:16

 $0^{\circ}\Upsilon$

•	ical year style is used: Th		•	/ /		, ,	2 19
greatest brilliancy	-7414 Sep 29 j 10:06	14°≈10'51		conjunction	-7408 Feb 08 j 01:45	24° ×7 39'50	-1°07'16
direct	-7414 Nov 07 j 19:06	4°≈43'58		minimum elong	-7408 Feb 08 j 03:01	24° × ⁷ 42'01	
asc. node	-7414 Nov 14 j 18:20	5°≈01'32		minimum ciong	-7408 Feb 15 j 20:26	0°ਰ	1 07 10
use. Houe	-7413 Jan 26 j 01:36	0° ∀		max. Earth dist.	-7408 Mar 08 j 04:25		2.57391 AU
	-7413 Mar 21 j 00:48	0° Υ		max. Earth dist.	-7408 Mar 31 j 17:39	0°≈	2.57571710
	-7413 May 07 j 19:29	0°8		morning rise	-7408 Apr 01 j 13:28	0°≈32'25	
	-7413 Jun 20 j 22:16	0°II		morning rise	-7408 May 17 j 09:41	0° ∺	
	-7413 Aug 01 j 07:46	0°©			-7408 Jul 04 j 16:36	0° Υ	
evening set	-7413 Aug 07 j 07:18	4°928'00		asc. node	-7408 Jul 06 j 20:44	1° Υ 19'24	
evening set	-7413 Sep 09 j 19:25	0°Ω		ase. Houe	-7408 Aug 24 j 08:01	0°8	
max. Earth dist.	-7413 Sep 09 j 19:29		2.38984 AU		-7408 Oct 21 j 10:04	0°II	
max. Earth dist.	7413 Sep 10 J 07.30	0 002322	2.50704710	retrograde	-7408 Dec 16 j 08:46	14° ∏ 33'25	
conjunction	-7413 Oct 05 j 14:04	20° Ω 04'20	0°17'44	opposition	-7407 Jan 20 j 08:03	7° I I22'37	5°51'58
minimum elong	-7413 Oct 05 j 15:36	20° Ω 07'19		greatest brilliancy	-7407 Jan 21 j 22:51	6° Ⅱ 48'24	
g	-7413 Oct 18 j 05:49	0° m)	0 100.	min. Earth dist.	-7407 Jan 28 j 12:17		0.51123 AU
desc. node	-7413 Oct 29 j 08:40	8° m 43'53		mm. zwim wist.	-7407 Feb 13 j 14:58	30°R 8	0.51125110
acor. noue	-7413 Nov 25 j 12:36	0∘ ⊽		direct	-7407 Feb 27 j 21:14	28° 8 35'53	
morning rise	-7413 Dec 10 j 06:35	11° ≏ 26'41		anov	-7407 Mar 14 j 13:50	0°II	
morning rise	-7412 Jan 03 j 12:45	0°ML			-7407 May 20 j 11:32	0°©	
	-7412 Feb 13 j 01:38	0° ∡ 7		desc. node	-7407 Jun 20 j 05:00	20°915'44	
	-7412 Mar 26 j 21:17	0°ਰ		dobe. Hode	-7407 Jul 04 j 00:51	0°Ω	
	-7412 May 11 j 20:31	0° ≈			-7407 Aug 13 j 21:01	0° m)	
	-7412 Jul 02 j 06:02	0° ₩			-7407 Sep 22 j 20:38	0∘ ⊽	
retrograde	-7412 Sep 23 j 12:08	28°) 11'41			-7407 Nov 02 j 08:55	0° M	
asc. node	-7412 Oct 01 j 22:38	27°) (43'37			-7407 Dec 14 j 05:26	0° ∡ 7	
opposition	-7412 Nov 01 j 22:40	18°) (44'13	1°10'32		-7406 Jan 26 j 19:50	0°ප	
greatest brilliancy	-7412 Nov 01 j 23:31	18°) (43′21	-1.4m	evening set	-7406 Feb 01 j 11:42	3° ਰ 48'31	
min. Earth dist.	-7412 Nov 03 j 10:12	18°) €08'40	0.66561 AU	evening see	-7406 Mar 13 j 02:41	0° ≈	
direct	-7412 Dec 12 j 17:11	8°) 48'31	0.00001110		, 100 11 111 15 j 02.11	0	
	-7411 Feb 20 j 18:29	0°Υ		conjunction	-7406 Mar 24 j 11:27	7° ≈ 23'07	-0°33'38
	-7411 Apr 14 j 22:44	0°8		minimum elong	-7406 Mar 24 j 12:45	7°≈25'13	
	-7411 May 30 j 14:36	0°II		max. Earth dist.	-7406 Apr 04 j 17:51		2.64752 AU
	-7411 Jul 11 j 11:22	0ං ම			-7406 Apr 28 j 15:32	0°) €	
	-7411 Aug 20 j 01:11	$0^{\circ}\Omega$		morning rise	-7406 May 11 j 15:52	8° ¥ 18′09	
desc. node	-7411 Sep 15 j 04:36	20° £ 22′03		asc. node	-7406 May 24 j 14:25	16° ¥ 32'01	
	-7411 Sep 27 j 11:03	0° m)			-7406 Jun 14 j 19:34	0° Υ	
evening set	-7411 Oct 08 j 22:11	9° m 00'30			-7406 Aug 01 j 04:50	9° 8	
	-7411 Nov 04 j 17:32	0∘ 亚			-7406 Sep 17 j 23:43	Π°	
					-7406 Nov 06 j 10:56	0ංම	
conjunction	-7411 Dec 12 j 00:34	28° ≙ 40'45	-0°56'27		-7405 Jan 02 j 09:07	$0^{\circ}\Omega$	
minimum elong	-7411 Dec 11 j 21:31	28° ≏ 34'59	0°56'38	retrograde	-7405 Feb 22 j 00:20	12° Ω 55'17	
	-7411 Dec 13 j 18:28	0°M₊		opposition	-7405 Mar 25 j 00:22	7° Ω 40′05	3°15'52
	-7410 Jan 23 j 07:54	0° ∡ 7		greatest brilliancy	-7405 Mar 25 j 17:45	7° Ω 27'55	-2.8m
max. Earth dist.	-7410 Jan 27 j 11:28	2° ₹ 159'22	2.45555 AU	min. Earth dist.	-7405 Mar 29 j 16:20	6° £ 21′58	0.39457 AU
morning rise	-7410 Feb 12 j 10:39	14° ∡ ¹21'16		direct	-7405 Apr 26 j 06:48	1° Ω 51'39	
	-7410 Mar 06 j 22:47	0°ರ		desc. node	-7405 May 08 j 09:43	2° Ω 50'34	
	-7410 Apr 20 j 22:15	0° ≈			-7405 Jul 10 j 20:19	0° m)	
	-7410 Jun 07 j 14:28	0°) €			-7405 Aug 26 j 13:48	0° ∿	
	-7410 Jul 29 j 11:08	0° Y			-7405 Oct 09 j 16:26	0° M ₊	
asc. node	-7410 Aug 20 j 00:12	11° Y 08'26			-7405 Nov 22 j 21:12	0° ≯ ¹	
	-7410 Oct 07 j 08:57	9° 8			-7404 Jan 07 j 01:40	ರ°ರ	
retrograde	-7410 Oct 31 j 06:26	3° 8 09'34			-7404 Feb 22 j 08:23	0°≈	
	-7410 Nov 22 j 08:49	30° ₹Ƴ		evening set	-7404 Mar 14 j 22:17	13° ≈ 48′54	
opposition	-7410 Dec 08 j 02:34	24° Y 33'18	3°56'43		-7404 Apr 09 j 07:19	0°)	
greatest brilliancy	-7410 Dec 08 j 17:38	24° Y 18'43	-1.5m	asc. node	-7404 Apr 10 j 07:47	0°) 39′00	
min. Earth dist.	-7410 Dec 13 j 06:33	22° Ƴ 33'23	0.61685 AU	max. Earth dist.	-7404 Apr 28 j 04:18	12° ∺ 02'18	2.66783 AU
direct	-7409 Jan 17 j 22:45	14° Ƴ 38'33					
	-7409 Mar 14 j 18:37	0°8		conjunction	-7404 May 01 j 20:40	14° ¥ 23′24	0°12'12
	-7409 May 06 j 17:10	Π °0		minimum elong	-7404 May 01 j 20:13	14° ¥ 22'41	0°12'01
	-7409 Jun 19 j 14:54	0ංම		behind sun begin	-7404 May 01 j 07:22	14° ∺ 02'10	
	-7409 Jul 30 j 00:57	0°N		behind sun end	-7404 May 02 j 09:05	14°) 43′13	
desc. node	-7409 Aug 03 j 03:40	3° Ω 08'17			-7404 May 26 j 05:21	0° Υ	
	-7409 Sep 06 j 22:24	0° m y		morning rise	-7404 Jun 16 j 21:13	13° Y ′59′06	
	-7409 Oct 15 j 14:21	0∘ ⊽			-7404 Jul 11 j 10:37	0°B	
	-7409 Nov 24 j 00:41	0° M ₊			-7404 Aug 25 j 15:23	Π \circ 0	
evening set	-7409 Dec 12 j 18:55	13°M54'37			-7404 Oct 08 j 20:40	0° ©	
	-7408 Jan 03 j 23:13	0° ∡ ¹			-7404 Nov 21 j 11:28	0 $^{\circ}$ Ω	

Attention, astronomical year style is used: The year -7900 in astronomical counting style is the year 7901 BCE in historical counting style.

```
-7403 Jan 04 j 06:55
                                            0° m
                    -7403 Feb 19 j 16:23
                                            0∘⊽
                    -7403 Mar 25 j 14:20
                                           18°♀16'58
desc. node
                    -7403 May 07 j 17:05
                                           29°♀22'07
retrograde
                    -7403 Jun 03 j 13:08
                                           24°£45'28 0.41345 AU
min. Earth dist.
                    -7403 Jun 09 j 07:35
greatest brilliancy
                                           22°♀59'27 -2.7m
                    -7403 Jun 10 j 14:52
opposition
                                           22°£35'21 -4°59'47
                    -7403 Jul 11 j 13:48
direct
                                           16°♀52'55
                    -7403 Aug 30 j 20:22
                                            0^{\circ}M
                    -7403 Oct 26 j 06:22
                                            0°∡¹
                                            0°궁
                    -7403 Dec 15 j 01:24
                    -7402 Feb 01 j 15:00
                                            0°≈
asc. node
                    -7402 Feb 26 j 03:45
                                           15°≈15'56
                    -7402 Mar 21 j 16:41
                                            0°)€
evening set
                    -7402 Apr 22 j 22:23
                                           20°¥23'39
                    -7402 May 07 j 22:26
                                            0^{\circ}\Upsilon
max. Earth dist.
                    -7402 May 22 j 15:22
                                            9°Υ30'30 2.63439 AU
conjunction
                    -7402 Jun 09 j 07:11
                                           21°Y'03'31 0°52'54
 minimum elong
                    -7402 Jun 09 j 05:44
                                           21° Y 01'09 0° 53'00
                    -7402 Jun 22 j 19:06
                                            0°8
morning rise
                    -7402 Jul 26 i 00:35
                                           22°827'46
                    -7402 Aug 05 j 22:53
                                            0^{\circ}\Pi
                    -7402 Sep 17 j 10:03
                                            0ಂಣ
                    -7402 Oct 28 j 12:20
                                            0^{\circ}\Omega
                    -7402 Dec 07 j 18:17
                                            0°m
                    -7401 Jan 16 j 23:10
                                            0∘ଫ
                    -7401 Feb 10 j 13:53
                                           18°♀00'14
desc. node
                    -7401 Feb 27 j 10:42
                                            0°M
                    -7401 Apr 14 j 04:13
                                            0°∡¹
                    -7401 Jun 29 j 04:03
                                          28°∡14'17
retrograde
                    -7401 Jul 30 j 11:38
                                          21°尽34'53 0.53571 AU
min. Earth dist.
                    -7401 Aug 05 j 08:08
greatest brilliancy
                                          19°х 21′22 -1.9m
                    -7401 Aug 06 j 14:37
                                           18°∡ 52'19 -5°27'00
opposition
                    -7401 Sep 10 j 16:41
                                           11°∡05'50
direct
                    -7401 Nov 14 j 12:06
                                            0°ರ
                    -7400 Jan 10 j 02:02
                                            0°≈
asc. node
                    -7400 Jan 14 j 04:28
                                            2°≈20'43
                    -7400 Feb 29 j 22:56
                                            0°)€
                    -7400 Apr 18 j 06:32
                                            0^{\circ}\Upsilon
                                           28°Y29'18
evening set
                    -7400 Jun 01 j 01:29
                    -7400 Jun 03 j 07:52
                                            0^{\circ}8
max. Earth dist.
                    -7400 Jun 19 j 20:03
                                           11°807'53 2.55055 AU
                    -7400 Jul 17 j 02:36
                                            \Pi^{\circ}0
                    -7400 Jul 20 j 13:18
                                            2°II25'38 1°12'05
conjunction
                    -7400 Jul 20 j 13:12
                                            2°I25'27 1°12'31
 minimum elong
                    -7400 Aug 27 j 19:03
                                            0ಂತಾ
                    -7400 Sep 10 j 02:48
                                            9°951'52
morning rise
                    -7400 Oct 06 i 20:19
                                            0^{\circ}\Omega
                    -7400 Nov 14 i 21:55
                                            0°m
                    -7400 Dec 23 j 18:49
                                            0∘⊽
desc. node
                    -7400 Dec 28 j 10:04
                                            3°£33'16
                    -7399 Feb 01 j 09:14
                                            0°M
                                            0°∡¹
                    -7399 Mar 14 j 20:46
                                            0°궁
                    -7399 Apr 29 j 03:58
                    -7399 Jun 24 j 12:33
                                            0°≈
                    -7399 Aug 06 j 16:22
                                           10°≈07'07
retrograde
                    -7399 Sep 11 j 21:04
                                            1°≈39'04 0.63062 AU
min. Earth dist.
                    -7399 Sep 15 j 13:47
                                            0°≈10′00 -2°53′58
opposition
                    -7399 Sep 15 j 05:37
                                            0°≈18'11 -1.5m
greatest brilliancy
                    -7399 Sep 15 j 23:45
                                           30°Ŗる
direct
                    -7399 Oct 23 j 21:51
                                           21°る06'09
asc. node
                    -7399 Dec 01 j 08:21
                                           28°る38'34
                    -7399 Dec 05 j 03:34
                                            0°≈
```