

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 1

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

conjunction	-2899 Nov 20 j 01:21	6° $\mathbb{M}$ 19'37	-0°28'16			-2893 Jan 10 j 18:09	0° $\mathbb{M}$	
minimum elong	-2899 Nov 19 j 23:12	6° $\mathbb{M}$ 15'25	0°28'18	retrograde		-2893 Feb 02 j 12:05	2° $\mathbb{M}$ 53'13	
	-2899 Dec 20 j 04:27	0° $\mathbb{M}$				-2893 Feb 23 j 23:58	30° $\mathbb{R}$ $\mathcal{Q}$	
morning rise	-2898 Jan 26 j 00:56	28° $\mathbb{M}$ 53'12		opposition		-2893 Mar 09 j 22:23	25° $\mathcal{Q}$ 32'52	4°00'00
	-2898 Jan 27 j 11:17	0° $\mathbb{Z}$		greatest brilliancy		-2893 Mar 11 j 04:10	25° $\mathcal{Q}$ 06'22	-2.0m
	-2898 Mar 07 j 16:28	0° $\approx$		min. Earth dist.		-2893 Mar 18 j 04:23	22° $\mathcal{Q}$ 37'32	0.52117 AU
	-2898 Apr 17 j 15:27	0° $\mathbb{H}$		direct		-2893 Apr 17 j 22:45	16° $\mathcal{Q}$ 35'11	
	-2898 May 31 j 02:54	0° $\mathbb{Y}$		desc. node		-2893 Jun 01 j 14:19	27° $\mathcal{Q}$ 51'07	
	-2898 Jul 17 j 05:51	0° $\mathcal{B}$				-2893 Jun 06 j 05:45	0° $\mathbb{M}$	
asc. node	-2898 Aug 17 j 15:12	18° $\mathcal{B}$ 04'05				-2893 Jul 27 j 06:06	0° $\mathcal{L}$	
	-2898 Sep 09 j 23:33	0° $\mathbb{I}$				-2893 Sep 07 j 13:23	0° $\mathbb{M}$	
retrograde	-2898 Nov 12 j 10:38	18° $\mathbb{I}$ 11'48				-2893 Oct 17 j 12:11	0° $\mathbb{M}$	
opposition	-2898 Dec 22 j 03:14	8° $\mathbb{I}$ 41'21	3°57'33			-2893 Nov 26 j 04:30	0° $\mathbb{Z}$	
greatest brilliancy	-2898 Dec 22 j 05:32	8° $\mathbb{I}$ 39'02	-1.3m			-2892 Jan 05 j 18:45	0° $\approx$	
min. Earth dist.	-2898 Dec 23 j 08:23	8° $\mathbb{I}$ 12'17	0.67202 AU			-2892 Feb 16 j 23:31	0° $\mathbb{H}$	
	-2897 Jan 18 j 05:44	30° $\mathbb{R}$ $\mathcal{B}$		evening set		-2892 Mar 23 j 08:25	24° $\mathbb{H}$ 11'11	
direct	-2897 Feb 01 j 02:24	28° $\mathcal{B}$ 45'57				-2892 Apr 01 j 00:40	0° $\mathbb{Y}$	
	-2897 Feb 15 j 16:43	0° $\mathbb{I}$		asc. node		-2892 Apr 08 j 10:34	4° $\mathbb{Y}$ 55'56	
	-2897 May 01 j 18:58	0° $\mathcal{G}$						
	-2897 Jun 20 j 20:35	0° $\mathcal{Q}$		conjunction		-2892 May 13 j 12:19	27° $\mathbb{Y}$ 55'06	0°19'51
	-2897 Aug 04 j 04:03	0° $\mathbb{M}$		minimum elong		-2892 May 13 j 11:32	27° $\mathbb{Y}$ 53'49	0°19'53
desc. node	-2897 Aug 27 j 16:48	16° $\mathbb{M}$ 59'04				-2892 May 16 j 17:27	0° $\mathcal{B}$	
	-2897 Sep 14 j 04:21	0° $\mathcal{L}$		max. Earth dist.		-2892 May 25 j 10:35	5° $\mathcal{B}$ 37'35	2.64751 AU
	-2897 Oct 23 j 05:10	0° $\mathbb{M}$		morning rise		-2892 Jun 30 j 03:52	28° $\mathcal{B}$ 28'56	
evening set	-2897 Nov 24 j 16:58	25° $\mathbb{M}$ 32'35				-2892 Jul 02 j 13:09	0° $\mathbb{I}$	
	-2897 Nov 30 j 08:34	0° $\mathbb{M}$				-2892 Aug 18 j 22:15	0° $\mathcal{G}$	
	-2896 Jan 07 j 14:32	0° $\mathbb{Z}$				-2892 Oct 05 j 16:09	0° $\mathcal{Q}$	
						-2892 Nov 23 j 08:04	0° $\mathbb{M}$	
conjunction	-2896 Jan 29 j 19:58	17° $\mathbb{Z}$ 07'12	-1°06'43			-2891 Jan 14 j 05:19	0° $\mathcal{L}$	
minimum elong	-2896 Jan 29 j 20:32	17° $\mathbb{Z}$ 08'16	1°06'49	retrograde		-2891 Apr 08 j 14:13	29° $\mathcal{L}$ 24'56	
	-2896 Feb 15 j 20:33	0° $\approx$		desc. node		-2891 Apr 18 j 14:32	28° $\mathcal{L}$ 47'45	
max. Earth dist.	-2896 Mar 19 j 05:08	23° $\approx$ 49'04	2.44591 AU	opposition		-2891 May 09 j 17:19	24° $\mathcal{L}$ 05'12	-1°28'15
	-2896 Mar 27 j 19:45	0° $\mathbb{H}$		greatest brilliancy		-2891 May 09 j 23:43	24° $\mathcal{L}$ 00'39	-2.8m
morning rise	-2896 Apr 03 j 02:42	4° $\mathbb{H}$ 28'30		min. Earth dist.		-2891 May 15 j 02:36	22° $\mathcal{L}$ 33'35	0.39773 AU
	-2896 May 09 j 23:35	0° $\mathbb{Y}$		direct		-2891 Jun 11 j 09:06	18° $\mathcal{L}$ 04'04	
	-2896 Jun 24 j 15:16	0° $\mathcal{B}$				-2891 Jul 26 j 11:11	0° $\mathbb{M}$	
asc. node	-2896 Jul 04 j 13:17	6° $\mathcal{B}$ 17'13				-2891 Sep 16 j 02:58	0° $\mathbb{M}$	
	-2896 Aug 12 j 08:11	0° $\mathbb{I}$				-2891 Oct 30 j 11:44	0° $\mathbb{Z}$	
	-2896 Oct 05 j 23:02	0° $\mathcal{G}$				-2891 Dec 12 j 23:14	0° $\approx$	
retrograde	-2896 Dec 18 j 14:21	22° $\mathcal{G}$ 36'09				-2890 Jan 26 j 04:24	0° $\mathbb{H}$	
opposition	-2895 Jan 25 j 19:41	13° $\mathcal{G}$ 54'17	4°55'32	asc. node		-2890 Feb 24 j 08:21	19° $\mathbb{H}$ 20'46	
greatest brilliancy	-2895 Jan 26 j 15:03	13° $\mathcal{G}$ 35'33	-1.5m			-2890 Mar 12 j 15:11	0° $\mathbb{Y}$	
min. Earth dist.	-2895 Jan 30 j 20:59	11° $\mathcal{G}$ 57'07	0.62686 AU			-2890 Apr 28 j 04:26	0° $\mathcal{B}$	
direct	-2895 Mar 07 j 22:30	3° $\mathcal{G}$ 57'19		evening set		-2890 May 04 j 23:37	4° $\mathcal{B}$ 20'36	
	-2895 May 23 j 22:37	0° $\mathcal{Q}$				-2890 Jun 14 j 06:16	0° $\mathbb{I}$	
	-2895 Jul 11 j 12:07	0° $\mathbb{M}$		max. Earth dist.		-2890 Jun 18 j 12:20	2° $\mathbb{I}$ 42'36	2.67199 AU
desc. node	-2895 Jul 14 j 15:25	2° $\mathbb{M}$ 07'15						
	-2895 Aug 22 j 20:56	0° $\mathcal{L}$		conjunction		-2890 Jun 21 j 08:10	4° $\mathbb{I}$ 30'44	0°56'40
	-2895 Oct 01 j 11:21	0° $\mathbb{M}$		minimum elong		-2890 Jun 21 j 06:58	4° $\mathbb{I}$ 28'48	0°56'44
	-2895 Nov 08 j 23:11	0° $\mathbb{M}$				-2890 Jul 31 j 03:14	0° $\mathcal{G}$	
	-2895 Dec 17 j 13:12	0° $\mathbb{Z}$		morning rise		-2890 Aug 05 j 12:25	3° $\mathcal{G}$ 28'14	
	-2894 Jan 26 j 04:16	0° $\approx$				-2890 Sep 15 j 06:21	0° $\mathcal{Q}$	
evening set	-2894 Jan 30 j 07:05	3° $\approx$ 03'01				-2890 Oct 30 j 11:01	0° $\mathbb{M}$	
	-2894 Mar 08 j 12:29	0° $\mathbb{H}$				-2890 Dec 13 j 20:33	0° $\mathcal{L}$	
						-2889 Jan 26 j 21:14	0° $\mathbb{M}$	
conjunction	-2894 Mar 29 j 22:19	14° $\mathbb{H}$ 59'06	-0°30'43	desc. node		-2889 Mar 06 j 14:59	26° $\mathbb{M}$ 03'21	
minimum elong	-2894 Mar 29 j 23:55	15° $\mathbb{H}$ 01'52	0°30'44			-2889 Mar 12 j 15:04	0° $\mathbb{M}$	
	-2894 Apr 20 j 21:39	0° $\mathbb{Y}$				-2889 May 01 j 10:52	0° $\mathbb{Z}$	
max. Earth dist.	-2894 Apr 29 j 06:41	5° $\mathbb{Y}$ 37'56	2.56931 AU	retrograde		-2889 Jun 25 j 11:09	16° $\mathbb{Z}$ 57'27	
morning rise	-2894 May 22 j 15:28	21° $\mathbb{Y}$ 06'33		min. Earth dist.		-2889 Jul 22 j 00:03	12° $\mathbb{Z}$ 26'51	0.40403 AU
asc. node	-2894 May 22 j 11:31	21° $\mathbb{Y}$ 00'04		greatest brilliancy		-2889 Jul 27 j 05:52	10° $\mathbb{Z}$ 52'42	-2.7m
	-2894 Jun 05 j 07:00	0° $\mathcal{B}$		opposition		-2889 Jul 28 j 15:30	10° $\mathbb{Z}$ 27'20	-6°36'18
	-2894 Jul 22 j 11:07	0° $\mathbb{I}$		direct		-2889 Aug 28 j 03:23	4° $\mathbb{Z}$ 56'23	
	-2894 Sep 09 j 11:46	0° $\mathcal{G}$				-2889 Nov 10 j 07:12	0° $\approx$	
	-2894 Nov 01 j 00:14	0° $\mathcal{Q}$				-2888 Jan 01 j 10:21	0° $\mathbb{H}$	

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 2

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

asc. node	-2888 Jan 12 j 06:38	6° $\text{H}$ 33'52		desc. node	-2884 Oct 26 j 12:30	11° $\text{A}$ 36'10	
	-2888 Feb 19 j 11:50	0° $\text{Y}$			-2884 Nov 19 j 09:51	0° $\text{M}$	
	-2888 Apr 07 j 22:22	0° $\text{B}$		morning rise	-2884 Dec 27 j 19:09	0° $\text{X}$ 01'19	
	-2888 May 25 j 21:23	0° $\text{II}$			-2884 Dec 27 j 18:28	0° $\text{X}$	
evening set	-2888 Jun 11 j 10:08	10° $\text{II}$ 27'59			-2883 Feb 04 j 03:19	0° $\text{Z}$	
max. Earth dist.	-2888 Jul 11 j 09:18	29° $\text{II}$ 40'52	2.64231 AU		-2883 Mar 15 j 09:39	0° $\approx$	
	-2888 Jul 11 j 21:07	0° $\text{E}$			-2883 Apr 25 j 10:55	0° $\text{H}$	
					-2883 Jun 08 j 06:55	0° $\text{Y}$	
conjunction	-2888 Jul 27 j 19:10	10° $\text{E}$ 22'06	1°10'48		-2883 Jul 26 j 18:47	0° $\text{B}$	
minimum elong	-2888 Jul 27 j 19:07	10° $\text{E}$ 22'02	1°10'52	asc. node	-2883 Sep 03 j 05:19	20° $\text{B}$ 02'58	
	-2888 Aug 26 j 09:43	0° $\text{O}$			-2883 Sep 28 j 15:12	0° $\text{II}$	
morning rise	-2888 Sep 11 j 14:38	10° $\text{O}$ 57'19		retrograde	-2883 Oct 29 j 22:35	5° $\text{II}$ 23'54	
	-2888 Oct 09 j 05:48	0° $\text{M}$			-2883 Nov 27 j 17:21	30° $\text{R}$ $\text{B}$	
	-2888 Nov 20 j 11:36	0° $\text{A}$		opposition	-2883 Dec 08 j 22:24	25° $\text{B}$ 40'38	3°16'17
	-2888 Dec 31 j 10:52	0° $\text{M}$		greatest brilliancy	-2883 Dec 08 j 20:08	25° $\text{B}$ 42'54	-1.3m
desc. node	-2887 Jan 21 j 13:55	15° $\text{M}$ 43'05		min. Earth dist.	-2883 Dec 08 j 15:40	25° $\text{B}$ 47'23	0.67201 AU
	-2887 Feb 09 j 16:35	0° $\text{X}$		direct	-2882 Jan 18 j 10:40	15° $\text{B}$ 54'43	
	-2887 Mar 22 j 01:50	0° $\text{Z}$			-2882 Mar 14 j 20:47	0° $\text{II}$	
	-2887 May 03 j 06:33	0° $\approx$			-2882 May 11 j 20:35	0° $\text{E}$	
	-2887 Jun 20 j 22:32	0° $\text{H}$			-2882 Jun 29 j 02:06	0° $\text{O}$	
retrograde	-2887 Aug 17 j 03:27	17° $\text{H}$ 55'11			-2882 Aug 11 j 20:56	0° $\text{M}$	
min. Earth dist.	-2887 Sep 17 j 01:52	11° $\text{H}$ 23'13	0.52627 AU	desc. node	-2882 Sep 13 j 09:57	23° $\text{M}$ 44'52	
opposition	-2887 Sep 24 j 09:53	8° $\text{H}$ 36'31	-2°57'50		-2882 Sep 21 j 17:54	0° $\text{A}$	
greatest brilliancy	-2887 Sep 23 j 16:29	8° $\text{H}$ 53'01	-2.0m	evening set	-2882 Oct 28 j 23:04	28° $\text{A}$ 35'37	
direct	-2887 Oct 29 j 07:05	0° $\text{H}$ 55'13			-2882 Oct 30 j 18:20	0° $\text{M}$	
asc. node	-2887 Nov 29 j 06:22	6° $\text{H}$ 13'20			-2882 Dec 07 j 21:54	0° $\text{X}$	
	-2886 Jan 22 j 15:19	0° $\text{Y}$					
	-2886 Mar 17 j 13:56	0° $\text{B}$		conjunction	-2881 Jan 01 j 22:53	19° $\text{X}$ 42'14	-1°01'57
	-2886 May 06 j 16:18	0° $\text{II}$		minimum elong	-2881 Jan 01 j 20:35	19° $\text{X}$ 37'45	1°02'02
	-2886 Jun 23 j 10:35	0° $\text{E}$			-2881 Jan 15 j 03:21	0° $\text{Z}$	
evening set	-2886 Jul 20 j 06:59	17° $\text{E}$ 31'06		max. Earth dist.	-2881 Feb 15 j 09:15	24° $\text{Z}$ 00'32	2.39534 AU
	-2886 Aug 07 j 22:44	0° $\text{O}$			-2881 Feb 23 j 07:49	0° $\approx$	
max. Earth dist.	-2886 Aug 08 j 05:32	0° $\text{O}$ 11'29	2.56169 AU	morning rise	-2881 Mar 10 j 19:57	11° $\approx$ 32'52	
					-2881 Apr 05 j 05:17	0° $\text{H}$	
conjunction	-2886 Sep 06 j 15:03	20° $\text{O}$ 25'02	0°54'20		-2881 May 18 j 09:19	0° $\text{Y}$	
minimum elong	-2886 Sep 06 j 16:36	20° $\text{O}$ 27'44	0°54'23		-2881 Jul 03 j 08:38	0° $\text{B}$	
	-2886 Sep 20 j 05:11	0° $\text{M}$		asc. node	-2881 Jul 22 j 05:27	11° $\text{B}$ 41'26	
morning rise	-2886 Oct 27 j 08:19	26° $\text{M}$ 55'34			-2881 Aug 22 j 08:39	0° $\text{II}$	
	-2886 Oct 31 j 11:56	0° $\text{A}$			-2881 Oct 22 j 21:46	0° $\text{E}$	
desc. node	-2886 Dec 09 j 13:53	29° $\text{A}$ 28'05		retrograde	-2881 Dec 04 j 12:44	9° $\text{E}$ 03'55	
	-2886 Dec 10 j 06:35	0° $\text{M}$		opposition	-2880 Jan 12 j 11:22	29° $\text{II}$ 59'58	4°42'26
	-2885 Jan 18 j 05:00	0° $\text{X}$			-2880 Jan 12 j 11:19	30° $\text{R}$ $\text{II}$	
	-2885 Feb 26 j 02:24	0° $\text{Z}$		greatest brilliancy	-2880 Jan 12 j 23:35	29° $\text{II}$ 47'58	-1.4m
	-2885 Apr 06 j 22:34	0° $\approx$		min. Earth dist.	-2880 Jan 16 j 00:55	28° $\text{II}$ 36'01	0.65224 AU
	-2885 May 19 j 01:40	0° $\text{H}$		direct	-2880 Feb 22 j 17:52	19° $\text{II}$ 58'52	
	-2885 Jul 05 j 03:06	0° $\text{Y}$			-2880 Apr 07 j 06:26	0° $\text{E}$	
	-2885 Sep 18 j 18:42	0° $\text{B}$			-2880 Jun 04 j 12:14	0° $\text{O}$	
retrograde	-2885 Sep 25 j 21:50	0° $\text{B}$ 20'16			-2880 Jul 20 j 15:03	0° $\text{M}$	
	-2885 Oct 02 j 21:37	30° $\text{R}$ $\text{Y}$		desc. node	-2880 Jul 31 j 08:11	7° $\text{M}$ 29'44	
asc. node	-2885 Oct 17 j 05:48	27° $\text{Y}$ 11'12			-2880 Aug 31 j 06:11	0° $\text{A}$	
min. Earth dist.	-2885 Oct 31 j 19:27	21° $\text{Y}$ 59'40	0.62791 AU		-2880 Oct 09 j 12:56	0° $\text{M}$	
opposition	-2885 Nov 04 j 20:31	20° $\text{Y}$ 22'32	0°44'44		-2880 Nov 16 j 19:56	0° $\text{X}$	
greatest brilliancy	-2885 Nov 04 j 17:29	20° $\text{Y}$ 25'34	-1.6m		-2880 Dec 25 j 05:29	0° $\text{Z}$	
direct	-2885 Dec 13 j 05:50	11° $\text{Y}$ 20'10		evening set	-2879 Jan 05 j 06:41	8° $\text{Z}$ 30'55	
	-2884 Feb 16 j 23:12	0° $\text{B}$			-2879 Feb 02 j 15:40	0° $\approx$	
	-2884 Apr 14 j 02:22	0° $\text{II}$					
	-2884 Jun 03 j 00:04	0° $\text{E}$		conjunction	-2879 Mar 08 j 14:57	24° $\approx$ 52'29	-0°49'34
	-2884 Jul 19 j 03:22	0° $\text{O}$		minimum elong	-2879 Mar 08 j 17:18	24° $\approx$ 56'42	0°49'36
	-2884 Aug 31 j 08:15	0° $\text{M}$			-2879 Mar 15 j 19:05	0° $\text{H}$	
evening set	-2884 Sep 01 j 16:36	0° $\text{M}$ 57'55		max. Earth dist.	-2879 Apr 16 j 02:55	21° $\text{H}$ 53'18	2.52530 AU
max. Earth dist.	-2884 Sep 17 j 17:01	12° $\text{M}$ 34'06	2.44191 AU		-2879 Apr 28 j 00:34	0° $\text{Y}$	
	-2884 Oct 11 j 04:52	0° $\text{A}$		morning rise	-2879 May 05 j 00:53	4° $\text{Y}$ 43'43	
				asc. node	-2879 Jun 08 j 04:15	27° $\text{Y}$ 15'24	
conjunction	-2884 Oct 26 j 12:30	11° $\text{A}$ 36'10	-0°00'00		-2879 Jun 12 j 09:59	0° $\text{B}$	
minimum elong	-2884 Oct 26 j 12:29	11° $\text{A}$ 36'08	0°00'02		-2879 Jul 29 j 22:55	0° $\text{II}$	
behind sun begin	-2884 Oct 25 j 15:30	10° $\text{A}$ 56'10			-2879 Sep 18 j 06:56	0° $\text{E}$	
behind sun end	-2884 Oct 27 j 09:29	12° $\text{A}$ 16'09			-2879 Nov 14 j 20:47	0° $\text{O}$	

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 3

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

retrograde	-2878 Jan 13 j 23:39	16°♏11'58			-2874 Nov 25 j 08:05	0°♊	
opposition	-2878 Feb 19 j 17:11	8°♏14'14	4°41'35		-2873 Jan 11 j 15:37	0°♋	
greatest brilliancy	-2878 Feb 20 j 21:46	7°♏47'40	-1.8m	asc. node	-2873 Jan 28 j 22:30	11°♋01'23	
min. Earth dist.	-2878 Feb 26 j 22:23	5°♏33'48	0.56884 AU		-2873 Feb 27 j 19:05	0°♌	
	-2878 Mar 18 j 01:04	30°♋			-2873 Apr 16 j 07:09	0°♍	
direct	-2878 Mar 31 j 22:32	28°♋42'00		evening set	-2873 May 28 j 16:03	26°♍44'16	
	-2878 Apr 15 j 07:24	0°♎			-2873 Jun 02 j 19:39	0°♐	
desc. node	-2878 Jun 18 j 07:46	26°♎59'46		max. Earth dist.	-2873 Jul 03 j 01:31	19°♐16'37	2.66044 AU
	-2878 Jun 23 j 08:41	0°♑					
	-2878 Aug 07 j 15:01	0°♒		conjunction	-2873 Jul 14 j 02:22	26°♐22'31	1°08'27
	-2878 Sep 17 j 08:08	0°♓		minimum elong	-2873 Jul 14 j 01:45	26°♐21'30	1°08'32
	-2878 Oct 26 j 11:21	0°♈			-2873 Jul 19 j 17:01	0°♑	
	-2878 Dec 04 j 13:33	0°♉		morning rise	-2873 Aug 28 j 06:02	25°♑54'05	
	-2877 Jan 13 j 15:44	0°♊			-2873 Sep 03 j 09:56	0°♒	
	-2877 Feb 24 j 10:12	0°♋			-2873 Oct 17 j 16:15	0°♓	
evening set	-2877 Mar 05 j 08:58	6°♋15'12			-2873 Nov 29 j 13:38	0°♌	
	-2877 Apr 09 j 03:16	0°♍			-2872 Jan 10 j 08:42	0°♎	
asc. node	-2877 Apr 26 j 02:05	11°♍17'55		desc. node	-2872 Feb 08 j 08:25	21°♎04'43	
					-2872 Feb 20 j 14:40	0°♏	
conjunction	-2877 Apr 27 j 22:49	12°♍31'51	0°01'06		-2872 Apr 02 j 10:13	0°♐	
minimum elong	-2877 Apr 27 j 22:47	12°♍31'48	0°01'07		-2872 May 17 j 18:50	0°♑	
behind sun begin	-2877 Apr 27 j 01:38	11°♍56'51		retrograde	-2872 Jul 29 j 16:22	27°♑22'36	
behind sun end	-2877 Apr 28 j 19:56	13°♍06'44		min. Earth dist.	-2872 Aug 27 j 10:47	21°♑42'55	0.47601 AU
max. Earth dist.	-2877 May 16 j 14:57	24°♍47'01	2.62322 AU	greatest brilliancy	-2872 Sep 03 j 06:15	19°♑17'10	-2.3m
	-2877 May 24 j 15:33	0°♒		opposition	-2872 Sep 04 j 11:26	18°♑51'03	-4°38'45
morning rise	-2877 Jun 16 j 10:55	14°♒41'18		direct	-2872 Oct 07 j 15:07	11°♑56'19	
	-2877 Jul 10 j 12:15	0°♓			-2872 Dec 08 j 19:32	0°♋	
	-2877 Aug 27 j 07:56	0°♑		asc. node	-2872 Dec 15 j 20:51	3°♋24'37	
	-2877 Oct 15 j 06:43	0°♒			-2871 Feb 03 j 01:41	0°♍	
	-2877 Dec 06 j 01:38	0°♓			-2871 Mar 26 j 00:05	0°♌	
	-2876 Feb 10 j 14:26	0°♌			-2871 May 14 j 00:53	0°♐	
retrograde	-2876 Mar 10 j 16:20	4°♌35'57			-2871 Jun 30 j 09:53	0°♑	
	-2876 Apr 07 j 11:49	30°♋		evening set	-2871 Jul 04 j 21:09	2°♑53'29	
opposition	-2876 Apr 12 j 10:09	28°♋28'44	1°25'31	max. Earth dist.	-2871 Jul 27 j 15:16	17°♑48'07	2.59900 AU
greatest brilliancy	-2876 Apr 12 j 22:30	28°♋18'58	-2.5m		-2871 Aug 14 j 21:09	0°♒	
min. Earth dist.	-2876 Apr 20 j 09:30	25°♋57'34	0.44097 AU				
desc. node	-2876 May 05 j 06:49	22°♋14'20		conjunction	-2871 Aug 21 j 00:20	4°♒09'10	1°04'56
direct	-2876 May 18 j 04:03	21°♋05'53		minimum elong	-2871 Aug 21 j 01:21	4°♒10'54	1°05'00
	-2876 Jun 25 j 08:01	0°♌			-2871 Sep 27 j 07:50	0°♓	
	-2876 Aug 17 j 12:38	0°♍		morning rise	-2871 Oct 08 j 02:45	7°♓39'42	
	-2876 Sep 29 j 17:42	0°♎			-2871 Nov 07 j 22:15	0°♌	
	-2876 Nov 10 j 05:58	0°♏			-2871 Dec 18 j 02:07	0°♎	
	-2876 Dec 22 j 03:03	0°♊		desc. node	-2871 Dec 26 j 06:57	6°♎13'16	
	-2875 Feb 03 j 07:06	0°♋			-2870 Jan 26 j 10:00	0°♌	
asc. node	-2875 Mar 13 j 00:44	25°♋21'50			-2870 Mar 06 j 16:58	0°♐	
	-2875 Mar 20 j 01:07	0°♍			-2870 Apr 16 j 01:28	0°♑	
evening set	-2875 Apr 19 j 04:30	19°♍40'59			-2870 May 29 j 07:10	0°♋	
	-2875 May 05 j 04:15	0°♌			-2870 Jul 19 j 17:05	0°♍	
				retrograde	-2870 Sep 11 j 09:02	15°♍19'35	
conjunction	-2875 Jun 06 j 15:36	20°♌47'34	0°44'41	min. Earth dist.	-2870 Oct 15 j 11:00	7°♍37'20	0.59386 AU
minimum elong	-2875 Jun 06 j 14:20	20°♌45'32	0°44'45	opposition	-2870 Oct 20 j 22:06	5°♍27'41	-0°32'54
max. Earth dist.	-2875 Jun 09 j 06:27	22°♌27'51	2.66903 AU	greatest brilliancy	-2870 Oct 20 j 19:43	5°♍30'03	-1.7m
	-2875 Jun 21 j 02:06	0°♐		asc. node	-2870 Nov 02 j 21:01	0°♍44'43	
morning rise	-2875 Jul 22 j 10:03	19°♐58'59			-2870 Nov 05 j 08:35	30°♋	
	-2875 Aug 07 j 01:56	0°♑		direct	-2870 Nov 27 j 02:37	26°♋51'37	
	-2875 Sep 22 j 16:22	0°♒			-2870 Dec 20 j 16:55	0°♍	
	-2875 Nov 07 j 19:43	0°♓			-2869 Mar 01 j 11:43	0°♌	
	-2875 Dec 23 j 21:18	0°♌			-2869 Apr 23 j 15:35	0°♐	
	-2874 Feb 08 j 22:34	0°♍			-2869 Jun 11 j 11:24	0°♑	
desc. node	-2874 Mar 23 j 07:44	24°♍51'31			-2869 Jul 27 j 06:58	0°♒	
	-2874 Apr 02 j 05:49	0°♏		evening set	-2869 Aug 15 j 09:06	13°♒03'03	
retrograde	-2874 May 28 j 06:03	16°♏35'37		max. Earth dist.	-2869 Aug 30 j 12:10	23°♒37'46	2.49147 AU
min. Earth dist.	-2874 Jun 25 j 15:56	11°♏58'59	0.37830 AU		-2869 Sep 08 j 11:27	0°♓	
opposition	-2874 Jun 28 j 06:07	11°♏16'50	-6°02'28				
greatest brilliancy	-2874 Jun 27 j 15:56	11°♏26'28	-2.9m	conjunction	-2869 Oct 05 j 23:28	19°♓58'25	0°25'28
direct	-2874 Jul 28 j 00:35	6°♏18'04		minimum elong	-2869 Oct 06 j 00:49	20°♓00'55	0°25'28
	-2874 Oct 05 j 21:30	0°♐			-2869 Oct 19 j 11:13	0°♌	

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 4

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

desc. node	-2869 Nov 13 j 05:18	18° $\Omega$ 44'35		min. Earth dist.	-2863 Feb 09 j 08:36	20° $\Omega$ 26'24	0.60856 AU
	-2869 Nov 27 j 20:37	0° $\mathbb{M}$		direct	-2863 Mar 16 j 09:41	12° $\Omega$ 49'44	
morning rise	-2869 Dec 01 j 22:59	3° $\mathbb{M}$ 10'14			-2863 May 14 j 16:28	0° $\Omega$	
	-2868 Jan 05 j 09:33	0° $\mathbb{X}$		desc. node	-2863 Jul 04 j 23:58	29° $\Omega$ 54'54	
	-2868 Feb 12 j 22:03	0° $\mathbb{Z}$			-2863 Jul 05 j 03:05	0° $\mathbb{M}$	
	-2868 Mar 23 j 07:41	0° $\approx$			-2863 Aug 17 j 06:02	0° $\Omega$	
	-2868 May 03 j 14:32	0° $\mathbb{X}$			-2863 Sep 26 j 03:57	0° $\mathbb{M}$	
	-2868 Jun 17 j 02:44	0° $\mathbb{Y}$			-2863 Nov 03 j 20:05	0° $\mathbb{X}$	
	-2868 Aug 07 j 06:27	0° $\mathbb{Z}$			-2863 Dec 12 j 13:31	0° $\mathbb{Z}$	
asc. node	-2868 Sep 19 j 21:38	18° $\mathbb{Z}$ 16'11			-2862 Jan 21 j 07:28	0° $\approx$	
retrograde	-2868 Oct 16 j 12:31	22° $\mathbb{Z}$ 21'45		evening set	-2862 Feb 12 j 08:04	16° $\approx$ 06'51	
min. Earth dist.	-2868 Nov 23 j 20:42	13° $\mathbb{Z}$ 12'02	0.66208 AU		-2862 Mar 03 j 18:16	0° $\mathbb{X}$	
opposition	-2868 Nov 25 j 15:11	12° $\mathbb{Z}$ 29'22	2°25'22				
greatest brilliancy	-2868 Nov 25 j 10:22	12° $\mathbb{Z}$ 34'12	-1.4m	conjunction	-2862 Apr 09 j 23:35	25° $\mathbb{X}$ 46'52	-0°19'04
direct	-2867 Jan 04 j 11:08	2° $\mathbb{Z}$ 57'07		minimum elong	-2862 Apr 10 j 00:34	25° $\mathbb{X}$ 48'31	0°19'04
	-2867 Mar 28 j 10:52	0° $\mathbb{II}$			-2862 Apr 16 j 05:09	0° $\mathbb{Y}$	
	-2867 May 20 j 17:13	0° $\Omega$		max. Earth dist.	-2862 May 05 j 23:37	13° $\mathbb{Y}$ 12'49	2.59077 AU
	-2867 Jul 06 j 20:54	0° $\Omega$		asc. node	-2862 May 12 j 18:19	17° $\mathbb{Y}$ 41'29	
	-2867 Aug 19 j 08:18	0° $\mathbb{M}$		morning rise	-2862 May 31 j 23:30	0° $\mathbb{Z}$ 14'46	
	-2867 Sep 29 j 04:13	0° $\Omega$			-2862 May 31 j 14:23	0° $\mathbb{Z}$	
desc. node	-2867 Sep 30 j 03:31	0° $\Omega$ 43'57			-2862 Jul 17 j 14:22	0° $\mathbb{II}$	
evening set	-2867 Oct 04 j 15:11	4° $\Omega$ 07'36			-2862 Sep 04 j 01:58	0° $\Omega$	
	-2867 Nov 07 j 05:34	0° $\mathbb{M}$			-2862 Oct 24 j 22:09	0° $\Omega$	
max. Earth dist.	-2867 Nov 19 j 20:56	9° $\mathbb{M}$ 53'18	2.37736 AU		-2862 Dec 22 j 14:07	0° $\mathbb{M}$	
				retrograde	-2861 Feb 14 j 20:25	13° $\mathbb{M}$ 44'45	
conjunction	-2867 Dec 05 j 00:08	21° $\mathbb{M}$ 47'25	-0°43'06	opposition	-2861 Mar 21 j 09:19	6° $\mathbb{M}$ 48'29	3°18'43
minimum elong	-2867 Dec 04 j 21:07	21° $\mathbb{M}$ 41'29	0°43'07	greatest brilliancy	-2861 Mar 22 j 12:15	6° $\mathbb{M}$ 25'19	-2.2m
	-2867 Dec 15 j 10:10	0° $\mathbb{X}$		min. Earth dist.	-2861 Mar 29 j 22:09	3° $\mathbb{M}$ 52'56	0.49274 AU
	-2866 Jan 22 j 15:55	0° $\mathbb{Z}$			-2861 Apr 12 j 16:36	30° $\mathbb{R}$ $\Omega$	
morning rise	-2866 Feb 11 j 10:12	15° $\mathbb{Z}$ 16'01		direct	-2861 Apr 28 j 11:50	28° $\Omega$ 17'51	
	-2866 Mar 02 j 19:51	0° $\approx$			-2861 May 14 j 12:46	0° $\mathbb{M}$	
	-2866 Apr 12 j 16:59	0° $\mathbb{X}$		desc. node	-2861 May 23 j 00:41	2° $\mathbb{M}$ 08'06	
	-2866 May 25 j 23:51	0° $\mathbb{Y}$			-2861 Jul 18 j 17:28	0° $\Omega$	
	-2866 Jul 11 j 12:49	0° $\mathbb{Z}$			-2861 Aug 31 j 19:44	0° $\mathbb{M}$	
asc. node	-2866 Aug 07 j 20:41	16° $\mathbb{Z}$ 17'54			-2861 Oct 11 j 12:14	0° $\mathbb{X}$	
	-2866 Sep 01 j 19:49	0° $\mathbb{II}$			-2861 Nov 20 j 15:33	0° $\mathbb{Z}$	
retrograde	-2866 Nov 20 j 08:10	26° $\mathbb{II}$ 02'00			-2861 Dec 31 j 13:46	0° $\approx$	
opposition	-2866 Dec 29 j 19:48	16° $\mathbb{II}$ 40'06	4°17'07		-2860 Feb 12 j 00:45	0° $\mathbb{X}$	
greatest brilliancy	-2866 Dec 30 j 01:22	16° $\mathbb{II}$ 34'35	-1.3m		-2860 Mar 27 j 06:30	0° $\mathbb{Y}$	
min. Earth dist.	-2866 Dec 31 j 21:09	15° $\mathbb{II}$ 51'11	0.66765 AU	asc. node	-2860 Mar 29 j 15:37	1° $\mathbb{Y}$ 34'55	
direct	-2865 Feb 08 j 23:30	6° $\mathbb{II}$ 41'22		evening set	-2860 Apr 02 j 11:57	4° $\mathbb{Y}$ 07'57	
	-2865 Apr 24 j 03:39	0° $\Omega$			-2860 May 12 j 02:02	0° $\mathbb{Z}$	
	-2865 Jun 15 j 03:21	0° $\Omega$					
	-2865 Jul 29 j 23:57	0° $\mathbb{M}$		conjunction	-2860 May 22 j 12:55	6° $\mathbb{Z}$ 44'22	0°29'45
desc. node	-2865 Aug 18 j 01:11	13° $\mathbb{M}$ 36'46		minimum elong	-2860 May 22 j 11:51	6° $\mathbb{Z}$ 42'40	0°29'48
	-2865 Sep 09 j 05:26	0° $\Omega$		max. Earth dist.	-2860 May 30 j 23:58	12° $\mathbb{Z}$ 10'25	2.65763 AU
	-2865 Oct 18 j 08:22	0° $\mathbb{M}$			-2860 Jun 27 j 21:43	0° $\mathbb{II}$	
	-2865 Nov 25 j 12:53	0° $\mathbb{X}$		morning rise	-2860 Jul 08 j 08:48	6° $\mathbb{II}$ 39'22	
evening set	-2865 Dec 10 j 05:33	11° $\mathbb{X}$ 33'53			-2860 Aug 14 j 02:42	0° $\Omega$	
	-2864 Jan 02 j 19:41	0° $\mathbb{Z}$			-2860 Sep 30 j 08:53	0° $\Omega$	
	-2864 Feb 11 j 02:17	0° $\approx$			-2860 Nov 16 j 21:50	0° $\mathbb{M}$	
					-2859 Jan 04 j 21:21	0° $\Omega$	
conjunction	-2864 Feb 13 j 14:00	1° $\approx$ 51'46	-1°03'14		-2859 Feb 28 j 23:33	0° $\mathbb{M}$	
minimum elong	-2864 Feb 13 j 15:48	1° $\approx$ 55'07	1°03'18	desc. node	-2859 Apr 09 j 00:23	13° $\mathbb{M}$ 54'29	
	-2864 Mar 23 j 01:47	0° $\mathbb{X}$		retrograde	-2859 Apr 26 j 11:59	15° $\mathbb{M}$ 44'04	
max. Earth dist.	-2864 Mar 30 j 22:33	5° $\mathbb{X}$ 35'25	2.47502 AU	opposition	-2859 May 26 j 22:03	10° $\mathbb{M}$ 40'31	-3°22'04
morning rise	-2864 Apr 15 j 09:06	16° $\mathbb{X}$ 24'33		greatest brilliancy	-2859 May 27 j 04:39	10° $\mathbb{M}$ 36'04	-2.9m
	-2864 May 05 j 04:49	0° $\mathbb{Y}$		min. Earth dist.	-2859 May 29 j 20:58	9° $\mathbb{M}$ 52'44	0.38265 AU
	-2864 Jun 19 j 16:25	0° $\mathbb{Z}$		direct	-2859 Jun 27 j 01:18	5° $\mathbb{M}$ 17'01	
asc. node	-2864 Jun 24 j 19:39	3° $\mathbb{Z}$ 17'14			-2859 Sep 04 j 21:20	0° $\mathbb{X}$	
	-2864 Aug 06 j 19:44	0° $\mathbb{II}$			-2859 Oct 22 j 18:51	0° $\mathbb{Z}$	
	-2864 Sep 28 j 07:45	0° $\Omega$			-2859 Dec 06 j 17:08	0° $\approx$	
	-2864 Dec 13 j 16:48	0° $\Omega$			-2858 Jan 20 j 17:03	0° $\mathbb{X}$	
retrograde	-2864 Dec 27 j 17:06	1° $\Omega$ 08'43		asc. node	-2858 Feb 14 j 13:32	16° $\mathbb{X}$ 19'23	
	-2863 Jan 10 j 02:39	30° $\mathbb{R}$ $\Omega$			-2858 Mar 07 j 15:01	0° $\mathbb{Y}$	
opposition	-2863 Feb 03 j 11:30	22° $\Omega$ 40'59	4°55'59		-2858 Apr 23 j 10:52	0° $\mathbb{Z}$	
greatest brilliancy	-2863 Feb 04 j 10:42	22° $\Omega$ 18'48	-1.6m	evening set	-2858 May 13 j 18:19	12° $\mathbb{Z}$ 54'42	

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 5

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2858 Jun 09 j 15:47	0° <b>II</b>				-2853 May 13 j 05:57	0° <b>⸥</b>		
max. Earth dist.	-2858 Jun 23 j 21:29	9° <b>II</b> 04'06	2.67022 AU			-2853 Jun 27 j 23:34	0° <b>°</b>		
						-2853 Aug 24 j 17:35	0° <b>8</b>		
conjunction	-2858 Jun 29 j 15:57	12° <b>II</b> 45'12	1°02'05	retrograde		-2853 Oct 03 j 21:56	8° <b>8</b> 51'01		
minimum elong	-2858 Jun 29 j 14:54	12° <b>II</b> 43'31	1°02'10	asc. node		-2853 Oct 07 j 12:04	8° <b>8</b> 45'48		
	-2858 Jul 26 j 12:42	0° <b>☿</b>		min. Earth dist.		-2853 Nov 09 j 17:49	0° <b>8</b> 11'38	0.64266 AU	
morning rise	-2858 Aug 13 j 16:33	11° <b>☿</b> 46'09				-2853 Nov 10 j 05:27	30° <b>℞</b> <b>°</b>		
	-2858 Sep 10 j 11:48	0° <b>♏</b>		opposition		-2853 Nov 12 j 23:34	28° <b>°</b> 53'39	1°24'46	
	-2858 Oct 25 j 07:31	0° <b>♐</b>		greatest brilliancy		-2853 Nov 12 j 18:52	28° <b>°</b> 58'21	-1.5m	
	-2858 Dec 08 j 01:58	0° <b>♑</b>		direct		-2853 Dec 21 j 22:42	19° <b>°</b> 39'14		
	-2857 Jan 20 j 02:37	0° <b>♒</b>				-2852 Feb 06 j 05:23	0° <b>8</b>		
desc. node	-2857 Feb 25 j 00:14	25° <b>♒</b> 04'36				-2852 Apr 07 j 23:52	0° <b>II</b>		
	-2857 Mar 04 j 03:03	0° <b>♓</b>				-2852 May 28 j 20:56	0° <b>☿</b>		
	-2857 Apr 18 j 05:13	0° <b>♈</b>				-2852 Jul 14 j 08:17	0° <b>♏</b>		
	-2857 Jun 18 j 05:46	0° <b>♐</b>				-2852 Aug 26 j 15:32	0° <b>♐</b>		
retrograde	-2857 Jul 09 j 06:49	2° <b>♐</b> 59'55		evening set		-2852 Sep 12 j 23:52	12° <b>♐</b> 32'53		
	-2857 Jul 29 j 23:30	30° <b>♐</b> <b>♈</b>		max. Earth dist.		-2852 Oct 02 j 18:59	27° <b>♐</b> 12'46	2.41473 AU	
min. Earth dist.	-2857 Aug 05 j 06:06	28° <b>♈</b> 09'33	0.42719 AU			-2852 Oct 06 j 12:05	0° <b>♑</b>		
greatest brilliancy	-2857 Aug 11 j 09:47	26° <b>♈</b> 10'41	-2.6m	desc. node		-2852 Oct 16 j 20:22	7° <b>♑</b> 49'32		
opposition	-2857 Aug 12 j 21:30	25° <b>♈</b> 41'39	-6°07'53						
direct	-2857 Sep 13 j 08:11	19° <b>♈</b> 40'54		conjunction		-2852 Nov 09 j 00:55	25° <b>♑</b> 38'06	-0°16'06	
	-2857 Oct 27 j 03:44	0° <b>♐</b>		minimum elong		-2852 Nov 08 j 23:43	25° <b>♑</b> 35'47	0°16'08	
	-2857 Dec 24 j 23:55	0° <b>♐</b>		behind sun begin		-2852 Nov 08 j 19:42	25° <b>♑</b> 28'00		
asc. node	-2856 Jan 02 j 12:48	4° <b>♐</b> 54'52		behind sun end		-2852 Nov 09 j 03:44	25° <b>♑</b> 43'34		
	-2856 Feb 13 j 17:51	0° <b>°</b>				-2852 Nov 14 j 15:51	0° <b>♒</b>		
	-2856 Apr 02 j 21:19	0° <b>8</b>				-2852 Dec 22 j 22:51	0° <b>♓</b>		
	-2856 May 21 j 04:10	0° <b>II</b>		morning rise		-2851 Jan 13 j 03:40	16° <b>♓</b> 38'51		
evening set	-2856 Jun 19 j 22:00	18° <b>II</b> 49'47				-2851 Jan 30 j 06:17	0° <b>♈</b>		
	-2856 Jul 07 j 07:05	0° <b>☿</b>				-2851 Mar 10 j 11:07	0° <b>♐</b>		
max. Earth dist.	-2856 Jul 17 j 05:02	6° <b>☿</b> 26'19	2.62911 AU			-2851 Apr 20 j 09:34	0° <b>♐</b>		
						-2851 Jun 02 j 22:28	0° <b>°</b>		
conjunction	-2856 Aug 05 j 10:05	19° <b>☿</b> 03'45	1°10'04			-2851 Jul 20 j 10:41	0° <b>8</b>		
minimum elong	-2856 Aug 05 j 10:27	19° <b>☿</b> 04'20	1°10'09	asc. node		-2851 Aug 24 j 12:21	19° <b>8</b> 33'18		
	-2856 Aug 21 j 19:25	0° <b>♏</b>				-2851 Sep 15 j 11:30	0° <b>II</b>		
morning rise	-2856 Sep 20 j 20:04	20° <b>♏</b> 28'38		retrograde		-2851 Nov 06 j 15:43	13° <b>II</b> 11'43		
	-2856 Oct 04 j 12:18	0° <b>♐</b>		opposition		-2851 Dec 16 j 12:30	3° <b>II</b> 35'11	3°41'24	
	-2856 Nov 15 j 12:26	0° <b>♑</b>		greatest brilliancy		-2851 Dec 16 j 12:34	3° <b>II</b> 35'07	-1.3m	
	-2856 Dec 26 j 04:05	0° <b>♒</b>		min. Earth dist.		-2851 Dec 17 j 01:45	3° <b>II</b> 21'57	0.67330 AU	
desc. node	-2855 Jan 12 j 00:04	12° <b>♒</b> 37'41				-2851 Dec 25 j 17:34	30° <b>℞</b> <b>8</b>		
	-2855 Feb 04 j 00:29	0° <b>♓</b>		direct		-2850 Jan 26 j 07:53	23° <b>8</b> 43'29		
	-2855 Mar 15 j 21:39	0° <b>♈</b>				-2850 Mar 02 j 03:02	0° <b>II</b>		
	-2855 Apr 26 j 03:56	0° <b>♐</b>				-2850 May 05 j 12:47	0° <b>☿</b>		
	-2855 Jun 10 j 18:27	0° <b>♐</b>				-2850 Jun 23 j 19:32	0° <b>♏</b>		
retrograde	-2855 Aug 26 j 17:57	28° <b>♐</b> 45'05				-2850 Aug 06 j 22:37	0° <b>♐</b>		
min. Earth dist.	-2855 Sep 27 j 20:21	21° <b>♐</b> 46'39	0.55224 AU	desc. node		-2850 Sep 03 j 19:22	20° <b>♐</b> 11'49		
opposition	-2855 Oct 04 j 14:29	19° <b>♐</b> 10'04	-2°01'58			-2850 Sep 16 j 22:29	0° <b>♑</b>		
greatest brilliancy	-2855 Oct 04 j 03:25	19° <b>♐</b> 20'45	-1.9m			-2850 Oct 25 j 23:36	0° <b>♒</b>		
direct	-2855 Nov 09 j 09:16	11° <b>♐</b> 06'52		evening set		-2850 Nov 12 j 19:47	13° <b>♒</b> 59'33		
asc. node	-2855 Nov 19 j 12:25	11° <b>♐</b> 44'43				-2850 Dec 03 j 02:57	0° <b>♓</b>		
	-2854 Jan 13 j 14:41	0° <b>°</b>				-2849 Jan 10 j 08:10	0° <b>♈</b>		
	-2854 Mar 11 j 14:49	0° <b>8</b>							
	-2854 May 01 j 14:20	0° <b>II</b>		conjunction		-2849 Jan 17 j 21:05	5° <b>♈</b> 50'57	-1°06'29	
	-2854 Jun 18 j 16:54	0° <b>☿</b>		minimum elong		-2849 Jan 17 j 20:23	5° <b>♈</b> 49'34	1°06'33	
evening set	-2854 Jul 29 j 11:57	26° <b>☿</b> 44'54				-2849 Feb 18 j 12:31	0° <b>♐</b>		
	-2854 Aug 03 j 07:50	0° <b>♏</b>		max. Earth dist.		-2849 Mar 08 j 18:52	13° <b>♐</b> 35'08	2.42234 AU	
max. Earth dist.	-2854 Aug 15 j 16:31	8° <b>♏</b> 24'53	2.53823 AU	morning rise		-2849 Mar 25 j 00:20	25° <b>♐</b> 24'43		
	-2854 Sep 15 j 13:56	0° <b>♐</b>				-2849 Mar 31 j 09:34	0° <b>♐</b>		
						-2849 May 13 j 11:57	0° <b>°</b>		
conjunction	-2854 Sep 16 j 18:30	0° <b>♐</b> 50'51	0°45'30			-2849 Jun 28 j 04:48	0° <b>8</b>		
minimum elong	-2854 Sep 16 j 20:10	0° <b>♐</b> 53'49	0°45'32	asc. node		-2849 Jul 12 j 11:01	8° <b>8</b> 58'15		
	-2854 Oct 26 j 18:36	0° <b>♑</b>				-2849 Aug 16 j 07:10	0° <b>II</b>		
morning rise	-2854 Nov 08 j 09:07	9° <b>♑</b> 26'02				-2849 Oct 11 j 20:50	0° <b>☿</b>		
desc. node	-2854 Nov 29 j 22:37	25° <b>♑</b> 48'01		retrograde		-2849 Dec 13 j 00:05	17° <b>☿</b> 11'08		
	-2854 Dec 05 j 10:10	0° <b>♒</b>		opposition		-2848 Jan 20 j 14:17	8° <b>☿</b> 18'50	4°51'21	
	-2853 Jan 13 j 04:57	0° <b>♓</b>		greatest brilliancy		-2848 Jan 21 j 06:28	8° <b>☿</b> 03'04	-1.4m	
	-2853 Feb 20 j 22:32	0° <b>♈</b>		min. Earth dist.		-2848 Jan 25 j 00:01	6° <b>☿</b> 36'01	0.63955 AU	
	-2853 Apr 01 j 13:27	0° <b>♐</b>				-2848 Feb 14 j 19:07	30° <b>℞</b> <b>II</b>		

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 6

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

direct	-2848 Mar 01 j 20:19	28° $\Pi$ 19'06		conjunction	-2843 Jun 15 j 02:51	29° $\mathcal{B}$ 08'08	0°52'02
	-2848 Mar 18 j 16:33	0° $\mathcal{E}$		minimum elong	-2843 Jun 15 j 01:35	29° $\mathcal{B}$ 06'06	0°52'06
	-2848 May 28 j 12:20	0° $\mathcal{Q}$		max. Earth dist.	-2843 Jun 14 j 15:28	28° $\mathcal{B}$ 49'59	2.67169 AU
	-2848 Jul 14 j 22:52	0° $\mathcal{M}$			-2843 Jun 16 j 11:24	0° $\Pi$	
desc. node	-2848 Jul 21 j 18:13	4° $\mathcal{M}$ 40'22		morning rise	-2843 Jul 30 j 12:07	28° $\Pi$ 08'21	
	-2848 Aug 26 j 00:37	0° $\mathcal{L}$			-2843 Aug 02 j 09:40	0° $\mathcal{E}$	
	-2848 Oct 04 j 12:03	0° $\mathcal{M}$			-2843 Sep 17 j 17:46	0° $\mathcal{Q}$	
	-2848 Nov 11 j 21:28	0° $\mathcal{X}$			-2843 Nov 02 j 08:08	0° $\mathcal{M}$	
	-2848 Dec 20 j 08:50	0° $\mathcal{Z}$			-2843 Dec 17 j 09:38	0° $\mathcal{L}$	
evening set	-2847 Jan 19 j 17:18	23° $\mathcal{Z}$ 09'28			-2842 Jan 31 j 12:19	0° $\mathcal{M}$	
	-2847 Jan 28 j 20:34	0° $\approx$		desc. node	-2842 Mar 13 j 17:25	26° $\mathcal{M}$ 30'51	
	-2847 Mar 11 j 01:08	0° $\mathcal{K}$			-2842 Mar 19 j 09:39	0° $\mathcal{X}$	
					-2842 May 18 j 13:15	0° $\mathcal{Z}$	
conjunction	-2847 Mar 21 j 01:07	7° $\mathcal{K}$ 04'00	-0°39'05	retrograde	-2842 Jun 13 j 17:44	4° $\mathcal{Z}$ 22'55	
minimum elong	-2847 Mar 21 j 03:08	7° $\mathcal{K}$ 07'32	0°39'05		-2842 Jul 10 j 11:37	30° $\mathcal{R}$ $\mathcal{X}$	
	-2847 Apr 23 j 07:16	0° $\mathcal{Y}$		min. Earth dist.	-2842 Jul 10 j 15:09	29° $\mathcal{X}$ 57'32	0.38933 AU
max. Earth dist.	-2847 Apr 23 j 23:46	0° $\mathcal{Y}$ 27'55	2.55047 AU	opposition	-2842 Jul 15 j 19:06	28° $\mathcal{X}$ 29'36	-6°37'43
morning rise	-2847 May 15 j 07:46	14° $\mathcal{Y}$ 44'20		greatest brilliancy	-2842 Jul 14 j 15:59	28° $\mathcal{X}$ 48'54	-2.8m
asc. node	-2847 May 29 j 09:11	23° $\mathcal{Y}$ 59'02		direct	-2842 Aug 14 j 16:51	23° $\mathcal{X}$ 18'14	
	-2847 Jun 07 j 15:11	0° $\mathcal{B}$			-2842 Sep 17 j 16:17	0° $\mathcal{Z}$	
	-2847 Jul 24 j 21:36	0° $\Pi$			-2842 Nov 16 j 19:34	0° $\approx$	
	-2847 Sep 12 j 09:04	0° $\mathcal{E}$			-2841 Jan 05 j 07:54	0° $\mathcal{K}$	
	-2847 Nov 05 j 11:43	0° $\mathcal{Q}$		asc. node	-2841 Jan 19 j 04:11	8° $\mathcal{K}$ 36'23	
retrograde	-2846 Jan 24 j 17:46	25° $\mathcal{Q}$ 53'52			-2841 Feb 22 j 10:15	0° $\mathcal{Y}$	
opposition	-2846 Mar 01 j 19:00	18° $\mathcal{Q}$ 15'55	4°21'17		-2841 Apr 11 j 09:44	0° $\mathcal{B}$	
greatest brilliancy	-2846 Mar 03 j 00:58	17° $\mathcal{Q}$ 48'42	-1.9m		-2841 May 29 j 03:53	0° $\Pi$	
min. Earth dist.	-2846 Mar 09 j 15:45	15° $\mathcal{Q}$ 25'00	0.54332 AU	evening set	-2841 Jun 06 j 03:18	5° $\Pi$ 02'53	
direct	-2846 Apr 10 j 10:45	9° $\mathcal{Q}$ 00'25		max. Earth dist.	-2841 Jul 08 j 12:45	25° $\Pi$ 44'31	2.65139 AU
desc. node	-2846 Jun 08 j 16:58	27° $\mathcal{Q}$ 09'06			-2841 Jul 15 j 03:02	0° $\mathcal{E}$	
	-2846 Jun 14 j 01:10	0° $\mathcal{M}$					
	-2846 Jul 31 j 21:24	0° $\mathcal{L}$		conjunction	-2841 Jul 22 j 11:35	4° $\mathcal{E}$ 46'19	1°10'19
	-2846 Sep 11 j 10:07	0° $\mathcal{M}$		minimum elong	-2841 Jul 22 j 11:17	4° $\mathcal{E}$ 45'50	1°10'25
	-2846 Oct 20 j 23:07	0° $\mathcal{X}$			-2841 Aug 29 j 18:06	0° $\mathcal{Q}$	
	-2846 Nov 29 j 08:05	0° $\mathcal{Z}$		morning rise	-2841 Sep 05 j 22:28	4° $\mathcal{Q}$ 49'00	
	-2845 Jan 08 j 15:36	0° $\approx$			-2841 Oct 12 j 19:20	0° $\mathcal{M}$	
	-2845 Feb 19 j 14:11	0° $\mathcal{K}$			-2841 Nov 24 j 08:18	0° $\mathcal{L}$	
evening set	-2845 Mar 16 j 09:30	17° $\mathcal{K}$ 07'58			-2840 Jan 04 j 16:14	0° $\mathcal{M}$	
	-2845 Apr 04 j 10:21	0° $\mathcal{Y}$		desc. node	-2840 Jan 29 j 16:32	18° $\mathcal{M}$ 26'17	
asc. node	-2845 Apr 16 j 08:17	7° $\mathcal{Y}$ 56'42			-2840 Feb 14 j 07:31	0° $\mathcal{X}$	
					-2840 Mar 26 j 05:00	0° $\mathcal{Z}$	
conjunction	-2845 May 07 j 13:35	21° $\mathcal{Y}$ 54'43	0°12'12		-2840 May 08 j 08:16	0° $\approx$	
minimum elong	-2845 May 07 j 13:03	21° $\mathcal{Y}$ 53'51	0°12'13		-2840 Jun 30 j 06:38	0° $\mathcal{K}$	
behind sun begin	-2845 May 06 j 23:44	21° $\mathcal{Y}$ 32'06		retrograde	-2840 Aug 09 j 10:43	9° $\mathcal{K}$ 50'04	
behind sun end	-2845 May 08 j 02:22	22° $\mathcal{Y}$ 15'36		min. Earth dist.	-2840 Sep 08 j 09:42	3° $\mathcal{K}$ 41'39	0.50406 AU
	-2845 May 19 j 23:54	0° $\mathcal{B}$		greatest brilliancy	-2840 Sep 15 j 05:10	1° $\mathcal{K}$ 10'32	-2.1m
max. Earth dist.	-2845 May 22 j 12:43	1° $\mathcal{B}$ 38'27	2.63760 AU	opposition	-2840 Sep 16 j 03:45	0° $\mathcal{K}$ 49'37	-3°41'01
morning rise	-2845 Jun 24 j 23:20	23° $\mathcal{B}$ 06'38			-2840 Sep 18 j 09:57	30° $\mathcal{R}$ $\approx$	
	-2845 Jul 05 j 19:11	0° $\Pi$		direct	-2840 Oct 20 j 07:04	23° $\approx$ 28'05	
	-2845 Aug 22 j 08:16	0° $\mathcal{E}$			-2840 Nov 23 j 21:15	0° $\mathcal{K}$	
	-2845 Oct 09 j 13:09	0° $\mathcal{Q}$		asc. node	-2840 Dec 06 j 03:51	4° $\mathcal{K}$ 35'00	
	-2845 Nov 28 j 07:39	0° $\mathcal{M}$			-2839 Jan 27 j 01:28	0° $\mathcal{Y}$	
	-2844 Jan 22 j 18:13	0° $\mathcal{L}$			-2839 Mar 20 j 12:44	0° $\mathcal{B}$	
retrograde	-2844 Mar 26 j 09:01	18° $\mathcal{L}$ 27'27			-2839 May 09 j 03:37	0° $\Pi$	
desc. node	-2844 Apr 25 j 16:48	13° $\mathcal{L}$ 14'51			-2839 Jun 25 j 18:36	0° $\mathcal{E}$	
opposition	-2844 Apr 27 j 05:09	12° $\mathcal{L}$ 47'47	-0°06'05	evening set	-2839 Jul 13 j 14:43	11° $\mathcal{E}$ 35'09	
greatest brilliancy	-2844 Apr 27 j 05:50	12° $\mathcal{L}$ 47'17	-2.7m	max. Earth dist.	-2839 Aug 03 j 02:26	25° $\mathcal{E}$ 09'28	2.57923 AU
min. Earth dist.	-2844 May 04 j 01:48	10° $\mathcal{L}$ 45'13	0.41518 AU		-2839 Aug 10 j 07:19	0° $\mathcal{Q}$	
direct	-2844 May 31 j 06:28	6° $\mathcal{L}$ 10'04					
	-2844 Aug 06 j 13:18	0° $\mathcal{M}$		conjunction	-2839 Aug 30 j 07:52	13° $\mathcal{Q}$ 39'56	0°59'31
	-2844 Sep 21 j 23:49	0° $\mathcal{X}$		minimum elong	-2839 Aug 30 j 09:13	13° $\mathcal{Q}$ 42'16	0°59'34
	-2844 Nov 03 j 19:04	0° $\mathcal{Z}$			-2839 Sep 22 j 16:37	0° $\mathcal{M}$	
	-2844 Dec 16 j 10:21	0° $\approx$		morning rise	-2839 Oct 18 j 18:03	18° $\mathcal{M}$ 42'47	
	-2843 Jan 29 j 02:07	0° $\mathcal{K}$			-2839 Nov 03 j 03:26	0° $\mathcal{L}$	
asc. node	-2843 Mar 03 j 06:21	22° $\mathcal{K}$ 10'09			-2839 Dec 13 j 02:35	0° $\mathcal{M}$	
	-2843 Mar 15 j 04:02	0° $\mathcal{Y}$		desc. node	-2839 Dec 16 j 16:16	2° $\mathcal{M}$ 43'15	
evening set	-2843 Apr 28 j 07:49	28° $\mathcal{Y}$ 36'39			-2838 Jan 21 j 04:58	0° $\mathcal{X}$	
	-2843 Apr 30 j 11:48	0° $\mathcal{B}$			-2838 Mar 01 j 05:53	0° $\mathcal{Z}$	

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 7

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2838 Apr 10 j 05:52	0°♊				-2833 Apr 15 j 01:26	0°♋		
	-2838 May 22 j 16:32	0°♋				-2833 Jun 09 j 02:55	0°♌		
	-2838 Jul 09 j 22:50	0°♍				-2833 Jul 24 j 17:14	0°♎		
retrograde	-2838 Sep 19 j 19:50	24°♍30'03		desc. node		-2833 Aug 08 j 10:36	10°♎23'39		
asc. node	-2838 Oct 24 j 03:39	16°♍44'40				-2833 Sep 04 j 04:58	0°♏		
min. Earth dist.	-2838 Oct 24 j 22:48	16°♍25'47	0.61386 AU			-2833 Oct 13 j 10:35	0°♐		
opposition	-2838 Oct 29 j 15:04	14°♍33'58	0°13'30			-2833 Nov 20 j 16:22	0°♑		
greatest brilliancy	-2838 Oct 29 j 14:03	14°♍34'58	-1.6m	evening set		-2833 Dec 25 j 15:48	27°♑24'08		
direct	-2838 Dec 06 j 12:33	5°♍42'28				-2833 Dec 29 j 00:07	0°♒		
	-2837 Feb 21 j 20:43	0°♓				-2832 Feb 06 j 07:48	0°♓		
	-2837 Apr 18 j 02:19	0°♐							
	-2837 Jun 06 j 13:27	0°♋		conjunction		-2832 Feb 27 j 12:58	15°♊41'54	-0°56'19	
	-2837 Jul 22 j 14:35	0°♌		minimum elong		-2832 Feb 27 j 15:20	15°♊46'13	0°56'22	
evening set	-2837 Aug 25 j 13:22	23°♌23'52				-2832 Mar 18 j 08:06	0°♋		
	-2837 Sep 03 j 20:35	0°♎		max. Earth dist.		-2832 Apr 09 j 15:19	15°♋42'23	2.50343 AU	
max. Earth dist.	-2837 Sep 09 j 12:47	4°♎04'05	2.46434 AU	morning rise		-2832 Apr 26 j 20:32	27°♋33'01		
	-2837 Oct 14 j 19:36	0°♏				-2832 Apr 30 j 11:04	0°♍		
						-2832 Jun 14 j 19:41	0°♓		
conjunction	-2837 Oct 17 j 19:37	2°♏15'10	0°11'32	asc. node		-2832 Jun 15 j 01:59	0°♓10'10		
minimum elong	-2837 Oct 17 j 20:20	2°♏16'31	0°11'32			-2832 Aug 01 j 12:46	0°♐		
behind sun begin	-2837 Oct 17 j 03:13	1°♏44'21				-2832 Sep 21 j 13:48	0°♋		
behind sun end	-2837 Oct 18 j 13:28	2°♏48'42				-2832 Nov 21 j 23:11	0°♌		
desc. node	-2837 Nov 03 j 15:04	14°♏59'44		retrograde		-2831 Jan 06 j 07:40	10°♌01'39		
	-2837 Nov 23 j 03:11	0°♐		opposition		-2831 Feb 12 j 13:23	1°♌49'45	4°49'57	
morning rise	-2837 Dec 16 j 16:13	18°♐20'05		greatest brilliancy		-2831 Feb 13 j 15:52	1°♌24'48	-1.7m	
	-2837 Dec 31 j 13:41	0°♑				-2831 Feb 17 j 09:52	30°♑		
	-2836 Feb 07 j 23:37	0°♒		min. Earth dist.		-2831 Feb 19 j 05:21	29°♒19'29	0.58774 AU	
	-2836 Mar 18 j 06:21	0°♓		direct		-2831 Mar 25 j 04:09	22°♒07'21		
	-2836 Apr 28 j 08:07	0°♋				-2831 May 01 j 18:59	0°♌		
	-2836 Jun 11 j 08:04	0°♍		desc. node		-2831 Jun 25 j 10:04	28°♌17'42		
	-2836 Jul 30 j 14:10	0°♓				-2831 Jun 28 j 03:34	0°♎		
asc. node	-2836 Sep 10 j 02:39	20°♓16'04				-2831 Aug 11 j 09:11	0°♏		
	-2836 Oct 16 j 23:12	0°♐				-2831 Sep 20 j 17:39	0°♐		
retrograde	-2836 Oct 24 j 05:51	0°♐20'05				-2831 Oct 29 j 15:24	0°♑		
	-2836 Oct 31 j 08:48	30°♑				-2831 Dec 07 j 12:44	0°♒		
min. Earth dist.	-2836 Dec 02 j 09:25	20°♑54'49	0.66890 AU			-2830 Jan 16 j 10:04	0°♓		
opposition	-2836 Dec 03 j 07:51	20°♑32'20	2°56'12	evening set		-2830 Feb 24 j 13:25	28°♓17'16		
greatest brilliancy	-2836 Dec 03 j 04:09	20°♑36'02	-1.3m			-2830 Feb 26 j 23:36	0°♋		
direct	-2835 Jan 12 j 13:43	10°♑51'52				-2830 Apr 11 j 12:36	0°♍		
	-2835 Mar 20 j 07:34	0°♐							
	-2835 May 15 j 00:53	0°♋		conjunction		-2830 Apr 20 j 10:27	5°♍58'48	-0°07'21	
	-2835 Jul 01 j 20:07	0°♌		minimum elong		-2830 Apr 20 j 10:48	5°♍59'22	0°07'21	
	-2835 Aug 14 j 13:02	0°♎		behind sun begin		-2830 Apr 19 j 15:15	5°♍26'42		
desc. node	-2835 Sep 20 j 12:33	27°♎03'20		behind sun end		-2830 Apr 21 j 06:21	6°♍32'01		
	-2835 Sep 24 j 10:35	0°♏		asc. node		-2830 May 02 j 23:50	14°♍19'34		
evening set	-2835 Oct 18 j 00:19	17°♏58'49		max. Earth dist.		-2830 May 12 j 08:13	20°♍28'55	2.60971 AU	
	-2835 Nov 02 j 12:08	0°♐				-2830 May 26 j 22:14	0°♓		
	-2835 Dec 10 j 16:15	0°♑		morning rise		-2830 Jun 09 j 23:17	9°♓04'23		
						-2830 Jul 12 j 19:24	0°♐		
conjunction	-2835 Dec 20 j 14:25	7°♑49'22	-0°55'16			-2830 Aug 29 j 20:40	0°♋		
minimum elong	-2835 Dec 20 j 11:24	7°♑43'24	0°55'19			-2830 Oct 18 j 11:35	0°♌		
max. Earth dist.	-2834 Jan 16 j 14:03	28°♑58'56	2.37880 AU			-2830 Dec 11 j 08:44	0°♎		
	-2834 Jan 17 j 21:26	0°♒		retrograde		-2829 Feb 28 j 09:50	25°♎35'03		
	-2834 Feb 26 j 00:48	0°♓		opposition		-2829 Apr 02 j 22:56	19°♎05'09	2°21'01	
morning rise	-2834 Feb 27 j 05:44	0°♓54'23		greatest brilliancy		-2829 Apr 03 j 19:05	18°♎48'30	-2.4m	
	-2834 Apr 07 j 20:36	0°♋		min. Earth dist.		-2829 Apr 11 j 08:25	16°♎19'15	0.46381 AU	
	-2834 May 21 j 00:01	0°♍		direct		-2829 May 09 j 20:19	11°♎09'04		
	-2834 Jul 06 j 02:18	0°♓		desc. node		-2829 May 13 j 09:09	11°♎14'19		
asc. node	-2834 Jul 29 j 02:29	14°♓04'41				-2829 Jul 07 j 15:23	0°♏		
	-2834 Aug 25 j 18:56	0°♐				-2829 Aug 24 j 05:25	0°♐		
	-2834 Nov 01 j 16:23	0°♋				-2829 Oct 05 j 02:23	0°♍		
retrograde	-2834 Nov 28 j 09:13	3°♋54'56				-2829 Nov 14 j 21:15	0°♒		
	-2834 Dec 23 j 01:31	30°♑				-2829 Dec 26 j 06:13	0°♓		
opposition	-2833 Jan 06 j 14:41	24°♐42'31	4°32'59			-2828 Feb 07 j 00:46	0°♋		
greatest brilliancy	-2833 Jan 06 j 23:52	24°♐33'28	-1.3m	asc. node		-2828 Mar 19 j 22:04	28°♋17'26		
min. Earth dist.	-2833 Jan 09 j 12:27	23°♐33'47	0.66045 AU			-2828 Mar 22 j 11:56	0°♍		
direct	-2833 Feb 16 j 21:10	14°♐41'44		evening set		-2828 Apr 12 j 04:02	13°♍35'59		

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 8

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2828 May 07 j 10:34	0°♄				-2823 Apr 19 j 17:23	0°♁	
						-2823 Jun 02 j 15:21	0°♄	
conjunction	-2828 May 31 j 06:30	15°♄18'14	0°38'46			-2823 Jul 27 j 22:23	0°♄	
minimum elong	-2828 May 31 j 05:16	15°♄16'15	0°38'49	retrograde		-2823 Sep 04 j 21:05	8°♄52'44	
max. Earth dist.	-2828 Jun 05 j 10:35	18°♄36'37	2.66497 AU	min. Earth dist.		-2823 Oct 08 j 02:01	1°♄29'25	0.57608 AU
	-2828 Jun 23 j 07:00	0°♄				-2823 Oct 11 j 21:25	30°♄♄	
morning rise	-2828 Jul 16 j 11:00	14°♄45'26		opposition		-2823 Oct 14 j 03:31	29°♄06'50	-1°09'07
	-2828 Aug 09 j 08:53	0°♄		greatest brilliancy		-2823 Oct 13 j 21:53	29°♄12'22	-1.8m
	-2828 Sep 25 j 05:48	0°♄		asc. node		-2823 Nov 09 j 18:04	21°♄23'56	
	-2828 Nov 10 j 22:33	0°♄		direct		-2823 Nov 19 j 18:07	20°♄44'25	
	-2828 Dec 28 j 01:21	0°♄				-2822 Jan 01 j 14:16	0°♄	
	-2827 Feb 15 j 10:22	0°♄				-2822 Mar 05 j 04:37	0°♄	
desc. node	-2827 Mar 30 j 09:19	22°♄11'27				-2822 Apr 26 j 08:44	0°♄	
	-2827 Apr 21 j 05:42	0°♄				-2822 Jun 13 j 21:52	0°♄	
retrograde	-2827 May 14 j 14:46	3°♄19'43				-2822 Jul 29 j 16:31	0°♄	
	-2827 Jun 07 j 10:20	30°♄♄		evening set		-2822 Aug 07 j 23:21	6°♄17'55	
opposition	-2827 Jun 14 j 02:03	28°♄16'00	-5°05'29	max. Earth dist.		-2822 Aug 23 j 17:05	17°♄09'00	2.51301 AU
greatest brilliancy	-2827 Jun 13 j 23:21	28°♄17'48	-2.9m			-2822 Sep 10 j 22:59	0°♄	
min. Earth dist.	-2827 Jun 13 j 23:01	28°♄18'02	0.37617 AU					
direct	-2827 Jul 14 j 05:25	23°♄14'22		conjunction		-2822 Sep 27 j 10:00	11°♄50'33	0°34'46
	-2827 Aug 16 j 16:37	0°♄		minimum elong		-2822 Sep 27 j 11:35	11°♄53'26	0°34'46
	-2827 Oct 13 j 13:07	0°♄				-2822 Oct 22 j 01:46	0°♄	
	-2827 Nov 29 j 21:01	0°♄		desc. node		-2822 Nov 20 j 07:37	22°♄06'22	
	-2826 Jan 14 j 23:42	0°♄		morning rise		-2822 Nov 21 j 07:00	22°♄51'06	
asc. node	-2826 Feb 04 j 19:55	13°♄29'38				-2822 Nov 30 j 14:30	0°♄	
	-2826 Mar 02 j 12:16	0°♄				-2821 Jan 08 j 06:10	0°♄	
	-2826 Apr 18 j 16:05	0°♄				-2821 Feb 15 j 20:26	0°♄	
evening set	-2826 May 22 j 08:32	21°♄19'14				-2821 Mar 27 j 07:23	0°♄	
	-2826 Jun 05 j 01:01	0°♄				-2821 May 07 j 16:19	0°♄	
max. Earth dist.	-2826 Jun 29 j 06:17	15°♄25'43	2.66591 AU			-2821 Jun 21 j 12:39	0°♄	
						-2821 Aug 13 j 09:44	0°♄	
conjunction	-2826 Jul 07 j 22:16	20°♄58'53	1°06'14	asc. node		-2821 Sep 27 j 18:39	15°♄53'38	
minimum elong	-2826 Jul 07 j 21:26	20°♄57'33	1°06'19	retrograde		-2821 Oct 11 j 18:56	17°♄07'12	
	-2826 Jul 21 j 22:28	0°♄		min. Earth dist.		-2821 Nov 18 j 11:37	8°♄10'23	0.65456 AU
morning rise	-2826 Aug 21 j 22:57	20°♄12'37		opposition		-2821 Nov 20 j 21:37	7°♄12'08	2°01'19
	-2826 Sep 05 j 18:36	0°♄		greatest brilliancy		-2821 Nov 20 j 16:25	7°♄17'21	-1.4m
	-2826 Oct 20 j 07:23	0°♄				-2821 Dec 11 j 21:36	30°♄♄	
	-2826 Dec 02 j 13:58	0°♄		direct		-2821 Dec 30 j 08:50	27°♄47'12	
	-2825 Jan 13 j 21:14	0°♄				-2820 Jan 19 j 03:37	0°♄	
desc. node	-2825 Feb 15 j 10:37	23°♄19'23				-2820 Apr 01 j 08:44	0°♄	
	-2825 Feb 24 j 18:40	0°♄				-2820 May 23 j 13:44	0°♄	
	-2825 Apr 08 j 15:02	0°♄				-2820 Jul 09 j 11:33	0°♄	
	-2825 May 26 j 22:19	0°♄				-2820 Aug 21 j 22:37	0°♄	
retrograde	-2825 Jul 21 j 20:01	17°♄45'18		evening set		-2820 Sep 24 j 22:02	24°♄49'19	
min. Earth dist.	-2825 Aug 18 j 17:17	12°♄29'12	0.45342 AU			-2820 Oct 01 j 19:48	0°♄	
greatest brilliancy	-2825 Aug 25 j 09:18	10°♄12'05	-2.4m	desc. node		-2820 Oct 07 j 05:55	4°♄05'31	
opposition	-2825 Aug 26 j 18:36	9°♄43'22	-5°20'44	max. Earth dist.		-2820 Oct 23 j 13:32	16°♄32'33	2.39101 AU
direct	-2825 Sep 28 j 03:02	3°♄12'19				-2820 Nov 09 j 22:51	0°♄	
	-2825 Dec 16 j 06:14	0°♄						
asc. node	-2825 Dec 23 j 18:05	3°♄58'58		conjunction		-2820 Nov 23 j 07:57	10°♄27'15	-0°31'54
	-2824 Feb 07 j 14:39	0°♄		minimum elong		-2820 Nov 23 j 05:34	10°♄22'35	0°31'56
	-2824 Mar 28 j 16:29	0°♄				-2820 Dec 18 j 04:33	0°♄	
	-2824 May 16 j 09:24	0°♄				-2819 Jan 25 j 10:30	0°♄	
evening set	-2824 Jun 28 j 10:53	27°♄16'29		morning rise		-2819 Jan 29 j 16:34	3°♄18'18	
	-2824 Jul 02 j 16:22	0°♄				-2819 Mar 05 j 13:54	0°♄	
max. Earth dist.	-2824 Jul 23 j 04:17	13°♄21'12	2.61347 AU			-2819 Apr 15 j 10:09	0°♄	
						-2819 May 28 j 17:31	0°♄	
conjunction	-2824 Aug 14 j 05:23	27°♄59'44	1°07'43			-2819 Jul 14 j 12:45	0°♄	
minimum elong	-2824 Aug 14 j 06:08	28°♄00'59	1°07'47	asc. node		-2819 Aug 14 j 18:02	18°♄13'00	
	-2824 Aug 17 j 04:57	0°♄				-2819 Sep 06 j 04:21	0°♄	
	-2824 Sep 29 j 19:26	0°♄		retrograde		-2819 Nov 14 j 11:19	21°♄00'08	
morning rise	-2824 Sep 30 j 11:11	0°♄27'43		opposition		-2819 Dec 24 j 03:53	11°♄31'26	4°03'17
	-2824 Nov 10 j 14:50	0°♄		greatest brilliancy		-2819 Dec 24 j 06:52	11°♄28'29	-1.3m
	-2824 Dec 21 j 00:25	0°♄		min. Earth dist.		-2819 Dec 25 j 13:30	10°♄15'8'01	0.67141 AU
desc. node	-2823 Jan 02 j 09:33	9°♄20'48		direct		-2818 Feb 03 j 04:46	1°♄35'15	
	-2823 Jan 29 j 13:42	0°♄				-2818 Apr 28 j 12:37	0°♄	
	-2823 Mar 10 j 01:52	0°♄				-2818 Jun 18 j 07:04	0°♄	



## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 9

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2818 Aug 01 j 21:22	0°♎		max. Earth dist.	-2813 May 28 j 04:19	8°♏16'31	2.64979 AU
desc. node	-2818 Aug 25 j 04:06	16°♎43'42			-2813 Jul 01 j 03:31	0°♐	
	-2818 Sep 12 j 01:24	0°♑		morning rise	-2813 Jul 03 j 06:49	1°♐21'36	
	-2818 Oct 21 j 04:16	0°♒			-2813 Aug 17 j 11:27	0°♑	
evening set	-2818 Nov 28 j 03:58	29°♒51'20			-2813 Oct 04 j 02:36	0°♒	
	-2818 Nov 28 j 08:22	0°♓			-2813 Nov 21 j 11:36	0°♓	
	-2817 Jan 05 j 13:55	0°♈			-2812 Jan 11 j 11:55	0°♑	
					-2812 Mar 18 j 04:05	0°♒	
conjunction	-2817 Feb 02 j 05:07	21°♈15'49	-1°06'12	retrograde	-2812 Apr 12 j 11:05	3°♒39'16	
minimum elong	-2817 Feb 02 j 06:01	21°♈17'31	1°06'16	desc. node	-2812 Apr 16 j 02:50	3°♒34'19	
	-2817 Feb 13 j 18:34	0°♐			-2812 May 07 j 12:08	30°♒	
max. Earth dist.	-2817 Mar 23 j 05:09	27°♐32'02	2.45134 AU	opposition	-2812 May 13 j 09:08	28°♑23'35	-1°54'12
	-2817 Mar 26 j 15:37	0°♋		greatest brilliancy	-2812 May 13 j 16:38	28°♑18'19	-2.8m
morning rise	-2817 Apr 07 j 01:13	8°♋06'17		min. Earth dist.	-2812 May 18 j 10:27	26°♑58'45	0.39437 AU
	-2817 May 08 j 16:42	0°♌		direct	-2812 Jun 14 j 17:39	22°♑30'18	
	-2817 Jun 23 j 04:42	0°♍			-2812 Jul 19 j 14:58	0°♒	
asc. node	-2817 Jul 02 j 17:06	6°♍03'37			-2812 Sep 12 j 18:42	0°♓	
	-2817 Aug 10 j 15:01	0°♐			-2812 Oct 27 j 17:59	0°♈	
	-2817 Oct 03 j 09:06	0°♑			-2812 Dec 10 j 10:37	0°♐	
retrograde	-2817 Dec 21 j 19:34	25°♑30'29			-2811 Jan 23 j 17:38	0°♋	
opposition	-2816 Jan 28 j 23:49	16°♑51'14	4°55'37	asc. node	-2811 Feb 21 j 11:09	19°♋02'52	
greatest brilliancy	-2816 Jan 29 j 20:01	16°♑31'46	-1.5m		-2811 Mar 10 j 05:01	0°♌	
min. Earth dist.	-2816 Feb 03 j 05:51	14°♑49'55	0.62358 AU		-2811 Apr 25 j 18:31	0°♍	
direct	-2816 Mar 10 j 02:52	6°♑55'01		evening set	-2811 May 07 j 06:15	7°♍19'54	
	-2816 May 20 j 10:59	0°♒			-2811 Jun 11 j 20:51	0°♐	
	-2816 Jul 08 j 22:02	0°♓		max. Earth dist.	-2811 Jun 20 j 00:16	5°♐11'17	2.67201 AU
desc. node	-2816 Jul 12 j 02:25	2°♓07'50					
	-2816 Aug 20 j 13:57	0°♑		conjunction	-2811 Jun 23 j 11:50	7°♐24'30	0°58'17
	-2816 Sep 29 j 07:33	0°♒		minimum elong	-2811 Jun 23 j 10:40	7°♐22'37	0°58'22
	-2816 Nov 06 j 20:37	0°♓			-2811 Jul 28 j 18:25	0°♑	
	-2816 Dec 15 j 10:40	0°♈		morning rise	-2811 Aug 07 j 14:42	6°♑21'03	
	-2815 Jan 24 j 00:55	0°♐			-2811 Sep 12 j 21:46	0°♒	
evening set	-2815 Feb 02 j 09:52	6°♐56'00			-2811 Oct 28 j 01:41	0°♓	
	-2815 Mar 06 j 07:41	0°♋			-2811 Dec 11 j 08:51	0°♑	
					-2810 Jan 24 j 04:35	0°♒	
conjunction	-2815 Apr 01 j 15:36	18°♋24'31	-0°27'43	desc. node	-2810 Mar 04 j 02:38	26°♒25'29	
minimum elong	-2815 Apr 01 j 17:02	18°♋27'00	0°27'42		-2810 Mar 09 j 11:22	0°♓	
	-2815 Apr 18 j 15:05	0°♌			-2810 Apr 26 j 15:33	0°♈	
max. Earth dist.	-2815 May 01 j 01:53	8°♌22'15	2.57371 AU	retrograde	-2810 Jun 28 j 17:37	21°♈24'21	
asc. node	-2815 May 19 j 16:12	20°♌41'25		min. Earth dist.	-2810 Jul 25 j 08:41	16°♈49'39	0.40807 AU
morning rise	-2815 May 25 j 00:17	24°♌11'14		greatest brilliancy	-2810 Jul 30 j 18:22	15°♈11'00	-2.7m
	-2815 Jun 02 j 22:24	0°♍		opposition	-2810 Aug 01 j 04:33	14°♈44'44	-6°32'28
	-2815 Jul 19 j 23:55	0°♐		direct	-2810 Aug 31 j 21:32	9°♈08'09	
	-2815 Sep 06 j 19:43	0°♑			-2810 Nov 06 j 01:54	0°♐	
	-2815 Oct 28 j 18:16	0°♒			-2810 Dec 29 j 10:31	0°♋	
	-2814 Jan 01 j 22:16	0°♓		asc. node	-2809 Jan 09 j 10:20	6°♋35'24	
retrograde	-2814 Feb 05 j 07:40	6°♓09'27			-2809 Feb 16 j 19:59	0°♌	
	-2814 Mar 09 j 08:58	30°♒			-2809 Apr 06 j 09:50	0°♍	
opposition	-2814 Mar 12 j 13:17	28°♒53'33	3°50'09		-2809 May 24 j 11:00	0°♐	
greatest brilliancy	-2814 Mar 13 j 18:36	28°♒27'37	-2.0m	evening set	-2809 Jun 14 j 14:40	13°♐23'01	
min. Earth dist.	-2814 Mar 20 j 21:06	25°♒57'20	0.51590 AU		-2809 Jul 10 j 12:42	0°♑	
direct	-2814 Apr 20 j 10:45	19°♒59'56		max. Earth dist.	-2809 Jul 14 j 04:57	2°♑22'48	2.64016 AU
desc. node	-2814 May 30 j 02:52	29°♒10'23					
	-2814 Jun 01 j 01:45	0°♓		conjunction	-2809 Jul 30 j 23:27	13°♑19'10	1°10'43
	-2814 Jul 24 j 08:22	0°♑		minimum elong	-2809 Jul 30 j 23:31	13°♑19'17	1°10'49
	-2814 Sep 05 j 02:21	0°♒			-2809 Aug 25 j 03:05	0°♒	
	-2814 Oct 15 j 04:57	0°♓		morning rise	-2809 Sep 14 j 21:06	14°♒02'07	
	-2814 Nov 23 j 22:29	0°♈			-2809 Oct 08 j 00:31	0°♓	
	-2813 Jan 03 j 12:40	0°♐			-2809 Nov 19 j 06:52	0°♑	
	-2813 Feb 14 j 16:38	0°♋			-2809 Dec 30 j 05:44	0°♒	
evening set	-2813 Mar 26 j 22:18	27°♋28'38		desc. node	-2808 Jan 20 j 02:32	15°♒32'37	
	-2813 Mar 30 j 16:47	0°♌			-2808 Feb 08 j 09:54	0°♓	
asc. node	-2813 Apr 06 j 13:29	4°♌34'17			-2808 Mar 19 j 15:38	0°♈	
	-2813 May 15 j 08:37	0°♍			-2808 Apr 30 j 12:07	0°♐	
					-2808 Jun 16 j 22:12	0°♋	
conjunction	-2813 May 16 j 19:54	0°♍57'06	0°22'40	retrograde	-2808 Aug 19 j 13:32	21°♋21'34	
minimum elong	-2813 May 16 j 19:01	0°♍55'40	0°22'41	min. Earth dist.	-2808 Sep 19 j 16:47	14°♋45'06	0.53127 AU

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 10

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

opposition	-2808 Sep 26 j 23:13	11° $\text{X}$ 59'31	-2°43'15		-2803 Sep 19 j 15:55	0° $\text{A}$	
greatest brilliancy	-2808 Sep 26 j 07:27	12° $\text{X}$ 14'31	-2.0m		-2803 Oct 28 j 17:42	0° $\text{M}$	
direct	-2808 Nov 01 j 01:41	4° $\text{X}$ 13'43		evening set	-2803 Nov 01 j 07:09	2° $\text{M}$ 46'48	
asc. node	-2808 Nov 26 j 10:07	7° $\text{X}$ 54'32			-2803 Dec 05 j 21:28	0° $\text{A}$	
	-2807 Jan 19 j 00:32	0° $\text{Y}$					
	-2807 Mar 14 j 18:10	0° $\text{B}$		conjunction	-2802 Jan 05 j 15:07	24° $\text{A}$ 10'35	-1°03'27
	-2807 May 04 j 03:06	0° $\text{II}$		minimum elong	-2802 Jan 05 j 13:09	24° $\text{A}$ 06'44	1°03'32
	-2807 Jun 21 j 01:13	0° $\text{E}$			-2802 Jan 13 j 02:10	0° $\text{B}$	
evening set	-2807 Jul 22 j 14:35	20° $\text{E}$ 35'05		max. Earth dist.	-2802 Feb 20 j 21:14	29° $\text{B}$ 45'05	2.40019 AU
	-2807 Aug 05 j 16:16	0° $\text{O}$			-2802 Feb 21 j 05:10	0° $\approx$	
max. Earth dist.	-2807 Aug 10 j 03:15	3° $\text{O}$ 00'55	2.55740 AU	morning rise	-2802 Mar 14 j 06:19	15° $\approx$ 39'30	
					-2802 Apr 03 j 00:30	0° $\text{X}$	
conjunction	-2807 Sep 09 j 02:01	23° $\text{O}$ 40'47	0°52'11		-2802 May 16 j 01:37	0° $\text{Y}$	
minimum elong	-2807 Sep 09 j 03:36	23° $\text{O}$ 43'35	0°52'13		-2802 Jun 30 j 20:25	0° $\text{B}$	
	-2807 Sep 18 j 00:59	0° $\text{M}$		asc. node	-2802 Jul 19 j 08:40	11° $\text{B}$ 32'29	
	-2807 Oct 29 j 09:18	0° $\text{A}$			-2802 Aug 19 j 10:30	0° $\text{II}$	
morning rise	-2807 Oct 30 j 02:43	0° $\text{A}$ 32'15			-2802 Oct 17 j 19:08	0° $\text{E}$	
desc. node	-2807 Dec 07 j 01:18	29° $\text{A}$ 07'30		retrograde	-2802 Dec 06 j 15:20	11° $\text{E}$ 53'40	
	-2807 Dec 08 j 04:47	0° $\text{M}$		opposition	-2801 Jan 14 j 13:19	2° $\text{E}$ 51'57	4°44'50
	-2806 Jan 16 j 03:08	0° $\text{A}$		greatest brilliancy	-2801 Jan 15 j 02:22	2° $\text{E}$ 39'11	-1.4m
	-2806 Feb 23 j 23:22	0° $\text{B}$		min. Earth dist.	-2801 Jan 18 j 07:25	1° $\text{E}$ 23'49	0.65022 AU
	-2806 Apr 04 j 16:51	0° $\approx$			-2801 Jan 21 j 22:33	30° $\text{R}$ $\text{II}$	
	-2806 May 16 j 14:21	0° $\text{X}$		direct	-2801 Feb 24 j 20:42	22° $\text{II}$ 50'52	
	-2806 Jul 02 j 01:08	0° $\text{Y}$			-2801 Apr 02 j 14:59	0° $\text{E}$	
	-2806 Sep 04 j 19:02	0° $\text{B}$			-2801 Jun 02 j 14:57	0° $\text{O}$	
retrograde	-2806 Sep 28 j 00:21	3° $\text{B}$ 17'15			-2801 Jul 19 j 05:58	0° $\text{M}$	
asc. node	-2806 Oct 14 j 09:39	1° $\text{B}$ 25'31		desc. node	-2801 Jul 29 j 20:48	7° $\text{M}$ 22'46	
	-2806 Oct 19 j 19:51	30° $\text{R}$ $\text{Y}$			-2801 Aug 30 j 02:19	0° $\text{A}$	
min. Earth dist.	-2806 Nov 03 j 02:32	24° $\text{Y}$ 52'47	0.63085 AU		-2801 Oct 08 j 11:34	0° $\text{M}$	
opposition	-2806 Nov 06 j 23:35	23° $\text{Y}$ 19'41	0°56'17		-2801 Nov 15 j 19:18	0° $\text{A}$	
greatest brilliancy	-2806 Nov 06 j 19:55	23° $\text{Y}$ 23'20	-1.5m		-2801 Dec 24 j 04:20	0° $\text{B}$	
direct	-2806 Dec 15 j 11:41	14° $\text{Y}$ 14'42		evening set	-2800 Jan 09 j 15:41	12° $\text{B}$ 40'53	
	-2805 Feb 12 j 18:24	0° $\text{B}$			-2800 Feb 01 j 13:06	0° $\approx$	
	-2805 Apr 12 j 05:20	0° $\text{II}$					
	-2805 Jun 01 j 11:58	0° $\text{E}$		conjunction	-2800 Mar 11 j 15:52	28° $\approx$ 36'50	-0°46'59
	-2805 Jul 17 j 20:03	0° $\text{O}$		minimum elong	-2800 Mar 11 j 18:11	28° $\approx$ 40'59	0°47'00
	-2805 Aug 30 j 04:04	0° $\text{M}$			-2800 Mar 13 j 14:27	0° $\text{X}$	
evening set	-2805 Sep 05 j 08:38	4° $\text{M}$ 26'12		max. Earth dist.	-2800 Apr 18 j 04:48	24° $\text{X}$ 51'58	2.53020 AU
max. Earth dist.	-2805 Sep 21 j 21:52	16° $\text{M}$ 28'42	2.43648 AU		-2800 Apr 25 j 17:38	0° $\text{Y}$	
	-2805 Oct 10 j 02:41	0° $\text{A}$		morning rise	-2800 May 07 j 15:41	8° $\text{Y}$ 01'57	
desc. node	-2805 Oct 24 j 22:51	11° $\text{A}$ 13'17		asc. node	-2800 Jun 05 j 06:55	26° $\text{Y}$ 55'45	
					-2800 Jun 10 j 00:28	0° $\text{B}$	
conjunction	-2805 Oct 30 j 14:37	15° $\text{A}$ 32'24	-0°03'58		-2800 Jul 27 j 09:47	0° $\text{II}$	
minimum elong	-2805 Oct 30 j 14:20	15° $\text{A}$ 31'52	0°03'59		-2800 Sep 15 j 09:51	0° $\text{E}$	
behind sun begin	-2805 Oct 29 j 14:01	14° $\text{A}$ 45'22			-2800 Nov 10 j 15:32	0° $\text{O}$	
behind sun end	-2805 Oct 31 j 14:39	16° $\text{A}$ 18'24		retrograde	-2799 Jan 16 j 12:41	19° $\text{O}$ 18'15	
	-2805 Nov 18 j 08:46	0° $\text{M}$		opposition	-2799 Feb 22 j 03:26	11° $\text{O}$ 24'23	4°36'22
	-2805 Dec 26 j 17:36	0° $\text{A}$		greatest brilliancy	-2799 Feb 23 j 08:22	10° $\text{O}$ 57'38	-1.8m
morning rise	-2804 Jan 01 j 11:00	4° $\text{A}$ 29'41		min. Earth dist.	-2799 Mar 01 j 12:25	8° $\text{O}$ 41'05	0.56415 AU
	-2804 Feb 03 j 01:48	0° $\text{B}$		direct	-2799 Apr 03 j 07:20	1° $\text{O}$ 54'49	
	-2804 Mar 13 j 06:35	0° $\approx$		desc. node	-2799 Jun 15 j 19:21	27° $\text{O}$ 30'26	
	-2804 Apr 23 j 05:03	0° $\text{X}$			-2799 Jun 20 j 02:26	0° $\text{M}$	
	-2804 Jun 05 j 20:05	0° $\text{Y}$			-2799 Aug 05 j 02:25	0° $\text{A}$	
	-2804 Jul 23 j 20:24	0° $\text{B}$			-2799 Sep 15 j 01:35	0° $\text{M}$	
asc. node	-2804 Aug 31 j 09:37	20° $\text{B}$ 36'49			-2799 Oct 24 j 07:15	0° $\text{A}$	
	-2804 Sep 22 j 11:15	0° $\text{II}$			-2799 Dec 02 j 10:02	0° $\text{B}$	
retrograde	-2804 Oct 31 j 22:32	8° $\text{II}$ 10'41			-2798 Jan 11 j 11:39	0° $\approx$	
	-2804 Dec 07 j 02:39	30° $\text{R}$ $\text{B}$			-2798 Feb 22 j 04:48	0° $\text{X}$	
opposition	-2804 Dec 10 j 22:14	28° $\text{B}$ 28'47	3°23'37	evening set	-2798 Mar 08 j 02:11	9° $\text{X}$ 41'46	
greatest brilliancy	-2804 Dec 10 j 20:24	28° $\text{B}$ 30'37	-1.3m		-2798 Apr 06 j 20:14	0° $\text{Y}$	
min. Earth dist.	-2804 Dec 10 j 19:52	28° $\text{B}$ 31'09	0.67258 AU	asc. node	-2798 Apr 23 j 05:43	10° $\text{Y}$ 56'50	
direct	-2803 Jan 20 j 12:09	18° $\text{B}$ 41'25					
	-2803 Mar 10 j 04:40	0° $\text{II}$		conjunction	-2798 Apr 30 j 09:35	15° $\text{Y}$ 40'59	0°04'12
	-2803 May 09 j 00:11	0° $\text{E}$		minimum elong	-2798 Apr 30 j 09:22	15° $\text{Y}$ 40'38	0°04'13
	-2803 Jun 26 j 16:11	0° $\text{O}$		behind sun begin	-2798 Apr 29 j 12:47	15° $\text{Y}$ 06'42	
	-2803 Aug 09 j 16:08	0° $\text{M}$		behind sun end	-2798 May 01 j 05:57	16° $\text{Y}$ 14'34	
desc. node	-2803 Sep 10 j 21:44	23° $\text{M}$ 26'38		max. Earth dist.	-2798 May 18 j 10:56	27° $\text{Y}$ 30'32	2.62610 AU

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 11

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2798 May 22 j 06:54	0°♄		min. Earth dist.	-2793 Aug 31 j 06:58	25°♊23'49	0.48130 AU
morning rise	-2798 Jun 18 j 16:18	17°♄38'36		greatest brilliancy	-2793 Sep 07 j 04:07	22°♊55'44	-2.3m
	-2798 Jul 08 j 02:04	0°♄		opposition	-2793 Sep 08 j 07:49	22°♊30'49	-4°24'56
	-2798 Aug 24 j 19:30	0°♄		direct	-2793 Oct 11 j 16:22	15°♊31'01	
	-2798 Oct 12 j 13:12	0°♄			-2793 Dec 05 j 03:28	0°♄	
	-2798 Dec 02 j 17:10	0°♄		asc. node	-2793 Dec 14 j 00:58	4°♄05'31	
	-2797 Feb 02 j 13:29	0°♄			-2792 Feb 01 j 00:33	0°♄	
retrograde	-2797 Mar 15 j 01:16	8°♄25'18			-2792 Mar 23 j 08:07	0°♄	
opposition	-2797 Apr 16 j 15:49	2°♄23'10	1°05'00		-2792 May 11 j 13:10	0°♄	
greatest brilliancy	-2797 Apr 17 j 01:10	2°♄15'50	-2.5m		-2792 Jun 28 j 01:10	0°♄	
min. Earth dist.	-2797 Apr 24 j 11:17	29°♄56'42	0.43584 AU	evening set	-2792 Jul 07 j 01:39	5°♄49'59	
	-2797 Apr 24 j 06:57	30°♄		max. Earth dist.	-2792 Jul 29 j 09:02	20°♄28'41	2.59543 AU
desc. node	-2797 May 03 j 18:50	27°♄24'07			-2792 Aug 12 j 14:52	0°♄	
direct	-2797 May 22 j 00:50	25°♄08'36					
	-2797 Jun 18 j 13:48	0°♄		conjunction	-2792 Aug 23 j 06:55	7°♄13'38	1°03'39
	-2797 Aug 15 j 05:12	0°♄		minimum elong	-2792 Aug 23 j 08:01	7°♄15'32	1°03'43
	-2797 Sep 28 j 01:13	0°♄			-2792 Sep 25 j 03:19	0°♄	
	-2797 Nov 08 j 18:47	0°♄		morning rise	-2792 Oct 10 j 15:02	11°♄00'46	
	-2797 Dec 20 j 17:52	0°♄			-2792 Nov 05 j 18:42	0°♄	
	-2796 Feb 01 j 22:24	0°♄			-2792 Dec 15 j 22:40	0°♄	
asc. node	-2796 Mar 10 j 03:46	25°♄01'48		desc. node	-2792 Dec 23 j 18:22	5°♄56'02	
	-2796 Mar 17 j 16:10	0°♄			-2791 Jan 24 j 05:48	0°♄	
evening set	-2796 Apr 21 j 12:50	22°♄44'35			-2791 Mar 04 j 10:54	0°♄	
	-2796 May 02 j 18:56	0°♄			-2791 Apr 13 j 15:41	0°♄	
					-2791 May 26 j 12:52	0°♄	
conjunction	-2796 Jun 08 j 20:32	23°♄43'43	0°46'51		-2791 Jul 15 j 13:51	0°♄	
minimum elong	-2796 Jun 08 j 19:15	23°♄41'39	0°46'54	retrograde	-2791 Sep 13 j 14:24	18°♄26'18	
max. Earth dist.	-2796 Jun 10 j 20:14	24°♄59'47	2.66970 AU	min. Earth dist.	-2791 Oct 17 j 21:27	10°♄39'15	0.59809 AU
	-2796 Jun 18 j 16:36	0°♄		opposition	-2791 Oct 23 j 04:24	8°♄33'32	-0°19'50
morning rise	-2796 Jul 24 j 13:02	22°♄52'26		greatest brilliancy	-2791 Oct 23 j 03:02	8°♄34'53	-1.7m
	-2796 Aug 04 j 16:16	0°♄		asc. node	-2791 Oct 31 j 00:56	5°♄33'12	
	-2796 Sep 20 j 06:00	0°♄			-2791 Nov 25 j 14:35	30°♄	
	-2796 Nov 05 j 07:13	0°♄		direct	-2791 Nov 29 j 12:44	29°♄54'02	
	-2796 Dec 21 j 03:44	0°♄			-2791 Dec 03 j 12:07	0°♄	
	-2795 Feb 05 j 17:04	0°♄			-2790 Feb 26 j 03:25	0°♄	
desc. node	-2795 Mar 20 j 19:29	25°♄57'15			-2790 Apr 20 j 22:38	0°♄	
	-2795 Mar 28 j 04:39	0°♄			-2790 Jun 09 j 00:49	0°♄	
retrograde	-2795 Jun 01 j 01:10	21°♄16'26			-2790 Jul 25 j 00:28	0°♄	
min. Earth dist.	-2795 Jun 29 j 00:25	16°♄44'13	0.37965 AU	evening set	-2790 Aug 17 j 18:45	16°♄14'44	
greatest brilliancy	-2795 Jul 01 j 11:08	16°♄04'21	-2.9m	max. Earth dist.	-2790 Sep 01 j 16:54	26°♄42'52	2.48660 AU
opposition	-2795 Jul 02 j 04:03	15°♄52'52	-6°14'43		-2790 Sep 06 j 07:54	0°♄	
direct	-2795 Jul 31 j 20:14	10°♄53'16					
	-2795 Oct 01 j 07:37	0°♄		conjunction	-2790 Oct 08 j 16:01	23°♄30'05	0°22'10
	-2795 Nov 22 j 05:56	0°♄		minimum elong	-2790 Oct 08 j 17:14	23°♄32'20	0°22'09
	-2794 Jan 08 j 23:00	0°♄			-2790 Oct 17 j 09:41	0°♄	
asc. node	-2794 Jan 26 j 01:31	10°♄51'47		desc. node	-2790 Nov 10 j 17:22	18°♄23'19	
	-2794 Feb 25 j 06:04	0°♄			-2790 Nov 25 j 20:02	0°♄	
	-2794 Apr 13 j 19:54	0°♄		morning rise	-2790 Dec 05 j 04:35	7°♄14'35	
evening set	-2794 May 30 j 20:56	29°♄39'44			-2789 Jan 03 j 08:54	0°♄	
	-2794 May 31 j 09:44	0°♄			-2789 Feb 10 j 20:14	0°♄	
max. Earth dist.	-2794 Jul 04 j 16:32	21°♄50'47	2.65886 AU		-2789 Mar 22 j 03:34	0°♄	
					-2789 May 02 j 06:34	0°♄	
conjunction	-2794 Jul 16 j 06:12	29°♄17'50	1°09'06		-2789 Jun 15 j 11:35	0°♄	
minimum elong	-2794 Jul 16 j 05:39	29°♄16'57	1°09'11		-2789 Aug 04 j 18:17	0°♄	
	-2794 Jul 17 j 08:18	0°♄		asc. node	-2789 Sep 17 j 23:49	19°♄38'33	
morning rise	-2794 Aug 30 j 10:56	28°♄54'38		retrograde	-2789 Oct 19 j 13:35	25°♄13'25	
	-2794 Sep 01 j 02:12	0°♄		min. Earth dist.	-2789 Nov 27 j 02:28	16°♄00'00	0.66380 AU
	-2794 Oct 15 j 08:58	0°♄		opposition	-2789 Nov 28 j 16:24	15°♄21'55	2°34'32
	-2794 Nov 27 j 06:00	0°♄		greatest brilliancy	-2789 Nov 28 j 11:42	15°♄26'38	-1.4m
	-2793 Jan 07 j 23:45	0°♄		direct	-2788 Jan 07 j 14:19	5°♄47'41	
desc. node	-2793 Feb 05 j 18:54	20°♄59'34			-2788 Mar 24 j 22:30	0°♄	
	-2793 Feb 18 j 02:55	0°♄			-2788 May 18 j 00:58	0°♄	
	-2793 Mar 31 j 16:15	0°♄			-2788 Jul 04 j 12:13	0°♄	
	-2793 May 15 j 05:58	0°♄			-2788 Aug 17 j 03:55	0°♄	
	-2793 Jul 20 j 15:52	0°♄		desc. node	-2788 Sep 27 j 15:11	0°♄23'51	
retrograde	-2793 Aug 02 j 07:23	1°♄08'06			-2788 Sep 27 j 02:30	0°♄	
	-2793 Aug 14 j 18:09	30°♄		evening set	-2788 Oct 07 j 14:48	7°♄57'19	

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 12

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2788 Nov 05 j 05:20	0°♌				-2783 Oct 21 j 22:05	0°♏	
max. Earth dist.	-2788 Nov 29 j 04:57	18°♌47'38	2.37576 AU			-2783 Dec 17 j 19:16	0°♐	
				retrograde		-2782 Feb 17 j 22:38	17°♐14'38	
conjunction	-2788 Dec 08 j 10:14	26°♌03'25	-0°46'13	opposition		-2782 Mar 24 j 06:21	10°♐23'08	3°05'06
minimum elong	-2788 Dec 08 j 07:09	25°♌57'20	0°46'15	greatest brilliancy		-2782 Mar 25 j 07:48	10°♐01'21	-2.2m
	-2788 Dec 13 j 10:19	0°♐		min. Earth dist.		-2782 Apr 01 j 17:51	7°♐29'31	0.48731 AU
	-2787 Jan 20 j 15:27	0°♑		direct		-2782 May 01 j 03:11	1°♐58'15	
morning rise	-2787 Feb 15 j 00:37	19°♑35'30		desc. node		-2782 May 20 j 11:34	4°♐25'09	
	-2787 Feb 28 j 17:47	0°♒				-2782 Jul 15 j 07:10	0°♑	
	-2787 Apr 10 j 12:22	0°♓				-2782 Aug 29 j 04:37	0°♌	
	-2787 May 23 j 15:25	0°♈				-2782 Oct 09 j 03:30	0°♐	
	-2787 Jul 08 j 21:58	0°♉				-2782 Nov 18 j 09:14	0°♑	
asc. node	-2787 Aug 04 j 23:33	16°♉18'25				-2782 Dec 29 j 07:56	0°♒	
	-2787 Aug 29 j 11:39	0°♊				-2781 Feb 09 j 18:21	0°♓	
retrograde	-2787 Nov 22 j 09:31	28°♊50'32				-2781 Mar 25 j 23:05	0°♈	
opposition	-2787 Dec 31 j 20:42	19°♊30'28	4°21'41	asc. node		-2781 Mar 27 j 19:29	1°♈13'51	
greatest brilliancy	-2786 Jan 01 j 03:03	19°♊24'12	-1.3m	evening set		-2781 Apr 05 j 22:10	7°♈16'04	
min. Earth dist.	-2786 Jan 03 j 02:45	18°♊37'00	0.66665 AU			-2781 May 10 j 17:43	0°♉	
direct	-2786 Feb 11 j 01:29	9°♊30'58						
	-2786 Apr 20 j 12:06	0°♋		conjunction		-2781 May 25 j 18:13	9°♉40'55	0°32'20
	-2786 Jun 12 j 12:18	0°♌		minimum elong		-2781 May 25 j 17:06	9°♉39'07	0°32'21
	-2786 Jul 27 j 16:58	0°♍		max. Earth dist.		-2781 Jun 02 j 16:57	14°♉46'48	2.65918 AU
desc. node	-2786 Aug 15 j 13:21	13°♍24'11				-2781 Jun 26 j 12:45	0°♊	
	-2786 Sep 07 j 02:23	0°♎		morning rise		-2781 Jul 11 j 10:50	9°♊29'47	
	-2786 Oct 16 j 07:14	0°♏				-2781 Aug 12 j 16:59	0°♋	
	-2786 Nov 23 j 12:20	0°♐				-2781 Sep 28 j 21:18	0°♌	
evening set	-2786 Dec 13 j 17:08	15°♐53'31				-2781 Nov 15 j 05:25	0°♍	
	-2786 Dec 31 j 18:40	0°♑				-2780 Jan 02 j 16:35	0°♎	
	-2785 Feb 08 j 24:00	0°♒				-2780 Feb 24 j 19:43	0°♏	
				desc. node		-2780 Apr 06 j 11:19	16°♏57'00	
conjunction	-2785 Feb 16 j 20:48	5°♒52'49	-1°01'46	retrograde		-2780 Apr 30 j 13:31	20°♏21'33	
minimum elong	-2785 Feb 16 j 22:48	5°♒56'31	1°01'49	opposition		-2780 May 30 j 22:22	15°♏19'30	-3°48'06
	-2785 Mar 21 j 21:38	0°♓		greatest brilliancy		-2780 May 31 j 04:01	15°♏15'43	-2.9m
max. Earth dist.	-2785 Apr 03 j 07:11	8°♓48'27	2.48054 AU	min. Earth dist.		-2780 Jun 02 j 07:18	14°♏41'11	0.38055 AU
morning rise	-2785 Apr 19 j 04:49	19°♓54'32		direct		-2780 Jun 30 j 21:29	10°♏01'41	
	-2785 May 03 j 22:13	0°♈				-2780 Aug 31 j 07:18	0°♐	
	-2785 Jun 18 j 06:37	0°♉				-2780 Oct 19 j 16:32	0°♑	
asc. node	-2785 Jun 22 j 23:36	3°♉01'30				-2780 Dec 04 j 01:05	0°♒	
	-2785 Aug 05 j 04:35	0°♊				-2779 Jan 18 j 05:02	0°♓	
	-2785 Sep 26 j 02:29	0°♋		asc. node		-2779 Feb 11 j 17:43	16°♓04'58	
	-2785 Dec 03 j 10:31	0°♌				-2779 Mar 05 j 04:35	0°♈	
retrograde	-2785 Dec 31 j 00:47	4°♌06'45				-2779 Apr 21 j 01:09	0°♉	
	-2784 Jan 25 j 13:58	30°♌41'56		evening set		-2779 May 15 j 23:01	15°♉49'26	
opposition	-2784 Feb 06 j 17:26	25°♌41'56	4°54'12			-2779 Jun 07 j 06:44	0°♊	
greatest brilliancy	-2784 Feb 07 j 17:20	25°♌19'11	-1.6m	max. Earth dist.		-2779 Jun 25 j 08:40	11°♊30'53	2.66972 AU
min. Earth dist.	-2784 Feb 12 j 18:56	23°♌23'34	0.60501 AU					
direct	-2784 Mar 18 j 15:14	15°♌51'46		conjunction		-2779 Jul 01 j 18:22	15°♊36'23	1°03'20
	-2784 May 10 j 10:11	0°♍		minimum elong		-2779 Jul 01 j 17:21	15°♊34'47	1°03'24
desc. node	-2784 Jul 02 j 12:26	0°♎03'37				-2779 Jul 24 j 04:26	0°♋	
	-2784 Jul 02 j 10:12	0°♏		morning rise		-2779 Aug 15 j 18:31	14°♋38'34	
	-2784 Aug 14 j 22:41	0°♐				-2779 Sep 08 j 04:13	0°♌	
	-2784 Sep 24 j 00:27	0°♑				-2779 Oct 22 j 23:52	0°♍	
	-2784 Nov 01 j 18:00	0°♒				-2779 Dec 05 j 17:02	0°♎	
	-2784 Dec 10 j 11:20	0°♓				-2778 Jan 17 j 14:34	0°♏	
	-2783 Jan 19 j 04:15	0°♈		desc. node		-2778 Feb 22 j 12:53	25°♏14'45	
evening set	-2783 Feb 15 j 06:25	19°♈47'45				-2778 Mar 01 j 08:25	0°♐	
	-2783 Mar 01 j 13:28	0°♉				-2778 Apr 14 j 17:18	0°♑	
						-2778 Jun 08 j 15:47	0°♒	
conjunction	-2783 Apr 12 j 14:06	29°♉05'04	-0°15'56	retrograde		-2778 Jul 12 j 06:56	7°♒15'29	
minimum elong	-2783 Apr 12 j 14:55	29°♉06'25	0°15'56	min. Earth dist.		-2778 Aug 08 j 11:05	2°♒20'38	0.43179 AU
	-2783 Apr 13 j 22:36	0°♊		greatest brilliancy		-2778 Aug 14 j 17:37	0°♒17'35	-2.5m
max. Earth dist.	-2783 May 07 j 17:27	15°♊53'44	2.59462 AU			-2778 Aug 15 j 14:57	30°♒3	
asc. node	-2783 May 09 j 21:36	17°♊19'51		opposition		-2778 Aug 16 j 05:16	29°♒48'14	-5°58'21
	-2783 May 29 j 06:03	0°♋		direct		-2778 Sep 16 j 18:34	23°♒41'54	
morning rise	-2783 Jun 03 j 07:11	3°♋16'24				-2778 Oct 20 j 01:25	0°♌	
	-2783 Jul 15 j 03:53	0°♍				-2778 Dec 21 j 15:23	0°♎	
	-2783 Sep 01 j 11:40	0°♏		asc. node		-2778 Dec 30 j 15:57	5°♏06'28	

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2777 Feb 10 j 23:04	0°♄			-2773 Nov 13 j 15:20	0°♍		
	-2777 Apr 01 j 07:42	0°♅			-2773 Dec 21 j 22:27	0°♆		
	-2777 May 19 j 17:27	0°♁		morning rise	-2772 Jan 17 j 19:13	21°♆05'55		
evening set	-2777 Jun 23 j 02:08	21°♁44'25			-2772 Jan 29 j 05:00	0°♄		
	-2777 Jul 05 j 22:35	0°♄			-2772 Mar 08 j 08:01	0°♁		
max. Earth dist.	-2777 Jul 19 j 23:50	9°♄07'21	2.62645 AU		-2772 Apr 18 j 03:43	0°♅		
					-2772 May 31 j 12:13	0°♄		
conjunction	-2777 Aug 08 j 14:36	22°♄02'15	1°09'34		-2772 Jul 17 j 15:30	0°♅		
minimum elong	-2777 Aug 08 j 15:03	22°♄03'00	1°09'39	asc. node	-2772 Aug 21 j 15:38	19°♅51'24		
	-2777 Aug 20 j 12:52	0°♁			-2772 Sep 11 j 03:45	0°♁		
morning rise	-2777 Sep 24 j 03:46	23°♁37'34		retrograde	-2772 Nov 08 j 16:49	16°♁00'20		
	-2777 Oct 03 j 07:14	0°♁		opposition	-2772 Dec 18 j 13:01	6°♁25'28	3°47'50	
	-2777 Nov 14 j 08:16	0°♁		greatest brilliancy	-2772 Dec 18 j 13:41	6°♁24'47	-1.3m	
	-2777 Dec 24 j 23:59	0°♍		min. Earth dist.	-2772 Dec 19 j 06:57	6°♁07'35	0.67318 AU	
desc. node	-2776 Jan 10 j 12:10	12°♍23'24			-2771 Jan 05 j 04:55	30°♅		
	-2776 Feb 02 j 19:31	0°♆		direct	-2771 Jan 28 j 09:22	26°♅32'37		
	-2776 Mar 13 j 14:14	0°♄			-2771 Feb 22 j 11:43	0°♁		
	-2776 Apr 23 j 14:45	0°♁			-2771 May 02 j 10:23	0°♄		
	-2776 Jun 07 j 12:35	0°♅			-2771 Jun 21 j 07:03	0°♁		
	-2776 Aug 11 j 13:09	0°♄			-2771 Aug 04 j 16:21	0°♁		
retrograde	-2776 Aug 29 j 02:48	2°♄02'57		desc. node	-2771 Sep 01 j 06:53	19°♅55'34		
	-2776 Sep 14 j 22:57	30°♅			-2771 Sep 14 j 19:47	0°♁		
min. Earth dist.	-2776 Sep 30 j 09:30	24°♅59'46	0.55675 AU		-2771 Oct 23 j 22:50	0°♍		
opposition	-2776 Oct 07 j 00:30	22°♅25'48	-1°47'43	evening set	-2771 Nov 16 j 05:32	18°♍15'27		
greatest brilliancy	-2776 Oct 06 j 14:55	22°♅35'06	-1.9m		-2771 Dec 01 j 02:52	0°♆		
direct	-2776 Nov 11 j 23:53	14°♅18'39			-2770 Jan 08 j 07:38	0°♄		
asc. node	-2776 Nov 16 j 15:30	14°♅26'55						
	-2775 Jan 09 j 05:36	0°♄		conjunction	-2770 Jan 21 j 08:55	10°♄07'17	-1°06'47	
	-2775 Mar 08 j 15:19	0°♅		minimum elong	-2770 Jan 21 j 08:36	10°♄06'41	1°06'52	
	-2775 Apr 28 j 23:50	0°♁			-2770 Feb 16 j 10:33	0°♁		
	-2775 Jun 16 j 07:08	0°♄		max. Earth dist.	-2770 Mar 12 j 12:09	17°♁52'38	2.42768 AU	
evening set	-2775 Jul 31 j 19:49	29°♄50'36		morning rise	-2770 Mar 28 j 03:03	29°♁12'41		
	-2775 Aug 01 j 01:23	0°♁			-2770 Mar 29 j 05:25	0°♅		
max. Earth dist.	-2775 Aug 17 j 14:42	11°♁16'10	2.53355 AU		-2770 May 11 j 04:54	0°♄		
	-2775 Sep 13 j 09:51	0°♁			-2770 Jun 25 j 17:43	0°♅		
				asc. node	-2770 Jul 09 j 14:32	8°♅46'13		
conjunction	-2775 Sep 19 j 06:43	4°♁11'00	0°42'55		-2770 Aug 13 j 12:19	0°♁		
minimum elong	-2775 Sep 19 j 08:23	4°♁13'59	0°42'56		-2770 Oct 07 j 21:37	0°♄		
	-2775 Oct 24 j 16:03	0°♁		retrograde	-2770 Dec 15 j 04:45	20°♄03'47		
morning rise	-2775 Nov 11 j 06:32	13°♁11'34		opposition	-2769 Jan 22 j 17:37	11°♄14'02	4°52'30	
desc. node	-2775 Nov 27 j 10:08	25°♁27'50		greatest brilliancy	-2769 Jan 23 j 10:43	10°♄57'26	-1.4m	
	-2775 Dec 03 j 08:17	0°♍		min. Earth dist.	-2769 Jan 27 j 08:08	9°♄26'48	0.63665 AU	
	-2774 Jan 11 j 02:59	0°♆		direct	-2769 Mar 04 j 23:31	1°♄14'35		
	-2774 Feb 18 j 19:33	0°♄			-2769 May 26 j 07:24	0°♁		
	-2774 Mar 30 j 08:12	0°♁			-2769 Jul 13 j 10:34	0°♁		
	-2774 May 10 j 20:15	0°♅		desc. node	-2769 Jul 20 j 04:54	4°♁36'18		
	-2774 Jun 25 j 03:21	0°♄			-2769 Aug 24 j 18:36	0°♁		
	-2774 Aug 19 j 15:41	0°♅			-2769 Oct 03 j 08:57	0°♍		
asc. node	-2774 Oct 04 j 16:03	11°♅45'05			-2769 Nov 10 j 19:35	0°♆		
retrograde	-2774 Oct 06 j 00:22	11°♅45'48			-2769 Dec 19 j 06:58	0°♄		
min. Earth dist.	-2774 Nov 12 j 00:14	3°♅02'43	0.64506 AU	evening set	-2768 Jan 23 j 23:12	27°♄10'39		
opposition	-2774 Nov 15 j 01:37	1°♅49'04	1°35'28		-2768 Jan 27 j 17:47	0°♁		
greatest brilliancy	-2774 Nov 14 j 20:36	1°♅54'06	-1.5m		-2768 Mar 08 j 20:49	0°♅		
	-2774 Nov 19 j 15:27	30°♅						
direct	-2774 Dec 24 j 02:38	22°♄32'26		conjunction	-2768 Mar 23 j 20:55	10°♅35'37	-0°36'13	
	-2773 Jan 31 j 12:04	0°♅		minimum elong	-2768 Mar 23 j 22:49	10°♅38'56	0°36'13	
	-2773 Apr 05 j 22:11	0°♁			-2768 Apr 21 j 00:58	0°♄		
	-2773 May 27 j 07:11	0°♄		max. Earth dist.	-2768 Apr 25 j 18:49	3°♄12'37	2.55510 AU	
	-2773 Jul 13 j 00:27	0°♁		morning rise	-2768 May 17 j 18:07	17°♄52'28		
	-2773 Aug 25 j 11:27	0°♁		asc. node	-2768 May 26 j 13:55	23°♄40'42		
evening set	-2773 Sep 16 j 17:03	16°♁05'27			-2768 Jun 05 j 06:38	0°♅		
	-2773 Oct 05 j 10:24	0°♁			-2768 Jul 22 j 10:02	0°♁		
max. Earth dist.	-2773 Oct 07 j 19:01	1°♁46'25	2.41000 AU		-2768 Sep 09 j 15:37	0°♄		
desc. node	-2773 Oct 15 j 08:27	7°♁29'20			-2768 Nov 01 j 23:30	0°♁		
				retrograde	-2767 Jan 27 j 10:36	29°♁04'30		
conjunction	-2773 Nov 13 j 04:27	29°♁38'50	-0°19'55	opposition	-2767 Mar 04 j 07:32	21°♁30'40	4°13'39	
minimum elong	-2773 Nov 13 j 02:58	29°♁35'57	0°19'55	greatest brilliancy	-2767 Mar 05 j 13:26	21°♁03'36	-1.9m	

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 14

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

min. Earth dist.	-2767 Mar 12 j 06:25	18° $\Omega$ 38'16	0.53818 AU		-2762 May 26 j 17:50	0° $\Pi$	
direct	-2767 Apr 12 j 20:16	12° $\Omega$ 18'23		evening set	-2762 Jun 08 j 08:22	7° $\Pi$ 58'25	
desc. node	-2767 Jun 06 j 04:48	28° $\Omega$ 01'33		max. Earth dist.	-2762 Jul 10 j 06:11	28° $\Pi$ 22'24	2.64961 AU
	-2767 Jun 10 j 02:02	0° $\Pi$			-2762 Jul 12 j 18:39	0° $\Xi$	
	-2767 Jul 29 j 04:31	0° $\Xi$					
	-2767 Sep 09 j 01:13	0° $\Pi$		conjunction	-2762 Jul 24 j 15:44	7° $\Xi$ 42'19	1°10'34
	-2767 Oct 18 j 17:12	0° $\Xi$		minimum elong	-2762 Jul 24 j 15:32	7° $\Xi$ 41'59	1°10'38
	-2767 Nov 27 j 03:03	0° $\Xi$			-2762 Aug 27 j 11:15	0° $\Omega$	
	-2766 Jan 06 j 10:18	0° $\approx$		morning rise	-2762 Sep 08 j 03:48	7° $\Omega$ 50'43	
	-2766 Feb 17 j 08:01	0° $\text{H}$			-2762 Oct 10 j 13:32	0° $\Pi$	
evening set	-2766 Mar 19 j 01:23	20° $\text{H}$ 30'05			-2762 Nov 22 j 02:44	0° $\Xi$	
	-2766 Apr 02 j 03:04	0° $\Upsilon$			-2761 Jan 02 j 09:53	0° $\Pi$	
asc. node	-2766 Apr 13 j 11:12	7° $\Upsilon$ 34'17		desc. node	-2761 Jan 27 j 04:40	18° $\Pi$ 18'04	
					-2761 Feb 11 j 23:07	0° $\Xi$	
conjunction	-2766 May 09 j 22:36	24° $\Upsilon$ 59'20	0°15'08		-2761 Mar 24 j 16:10	0° $\Xi$	
minimum elong	-2766 May 09 j 21:58	24° $\Upsilon$ 58'19	0°15'10		-2761 May 06 j 08:15	0° $\approx$	
behind sun begin	-2766 May 09 j 16:22	24° $\Upsilon$ 49'11			-2761 Jun 25 j 22:54	0° $\text{H}$	
behind sun end	-2766 May 10 j 03:35	25° $\Upsilon$ 07'26		retrograde	-2761 Aug 13 j 00:31	13° $\text{H}$ 25'50	
	-2766 May 17 j 15:34	0° $\text{B}$		min. Earth dist.	-2761 Sep 12 j 03:55	7° $\text{H}$ 12'28	0.50929 AU
max. Earth dist.	-2766 May 24 j 05:58	4° $\text{B}$ 16'26	2.64033 AU	opposition	-2761 Sep 19 j 20:40	4° $\text{H}$ 20'57	-3°26'22
morning rise	-2766 Jun 27 j 03:04	26° $\text{B}$ 00'11		greatest brilliancy	-2761 Sep 18 j 23:47	4° $\text{H}$ 40'23	-2.1m
	-2766 Jul 03 j 09:47	0° $\Pi$			-2761 Oct 02 j 18:33	30° $\text{R}\approx$	
	-2766 Aug 19 j 21:17	0° $\Xi$		direct	-2761 Oct 24 j 05:36	26° $\approx$ 54'27	
	-2766 Oct 06 j 22:37	0° $\Omega$			-2761 Nov 16 j 04:36	0° $\text{H}$	
	-2766 Nov 25 j 07:44	0° $\Pi$		asc. node	-2761 Dec 04 j 07:26	5° $\text{H}$ 45'27	
	-2765 Jan 18 j 07:09	0° $\Xi$			-2760 Jan 24 j 17:13	0° $\Upsilon$	
retrograde	-2765 Mar 31 j 00:31	22° $\Xi$ 29'02			-2760 Mar 17 j 18:22	0° $\text{B}$	
desc. node	-2765 Apr 24 j 05:04	19° $\Xi$ 01'14			-2760 May 06 j 14:41	0° $\Pi$	
opposition	-2765 May 01 j 16:15	16° $\Xi$ 54'15	-0°30'13		-2760 Jun 23 j 09:05	0° $\Xi$	
greatest brilliancy	-2765 May 01 j 19:10	16° $\Xi$ 52'06	-2.7m	evening set	-2760 Jul 15 j 21:19	14° $\Xi$ 36'54	
min. Earth dist.	-2765 May 08 j 07:46	14° $\Xi$ 57'13	0.41094 AU	max. Earth dist.	-2760 Aug 05 j 01:24	28° $\Xi$ 00'26	2.57533 AU
direct	-2765 Jun 04 j 09:29	10° $\Xi$ 25'02			-2760 Aug 08 j 00:33	0° $\Omega$	
	-2765 Aug 03 j 06:11	0° $\Pi$					
	-2765 Sep 20 j 00:58	0° $\Xi$		conjunction	-2760 Sep 01 j 17:08	16° $\Omega$ 51'27	0°57'44
	-2765 Nov 02 j 05:06	0° $\Xi$		minimum elong	-2760 Sep 01 j 18:32	16° $\Omega$ 53'54	0°57'47
	-2765 Dec 14 j 23:41	0° $\approx$			-2760 Sep 20 j 12:02	0° $\Pi$	
	-2764 Jan 27 j 16:31	0° $\text{H}$		morning rise	-2760 Oct 21 j 09:28	22° $\Pi$ 12'14	
asc. node	-2764 Feb 29 j 08:26	21° $\text{H}$ 49'33			-2760 Nov 01 j 00:22	0° $\Xi$	
	-2764 Mar 12 j 18:35	0° $\Upsilon$			-2760 Dec 11 j 00:12	0° $\Pi$	
	-2764 Apr 28 j 02:24	0° $\text{B}$		desc. node	-2760 Dec 14 j 03:41	2° $\Pi$ 23'43	
evening set	-2764 Apr 30 j 15:42	1° $\text{B}$ 38'13			-2759 Jan 19 j 02:22	0° $\Xi$	
	-2764 Jun 14 j 02:16	0° $\Pi$			-2759 Feb 27 j 01:57	0° $\Xi$	
max. Earth dist.	-2764 Jun 16 j 04:38	1° $\Pi$ 20'14	2.67211 AU		-2759 Apr 07 j 22:51	0° $\approx$	
					-2759 May 20 j 02:58	0° $\text{H}$	
conjunction	-2764 Jun 17 j 07:24	2° $\Pi$ 02'52	0°53'55		-2759 Jul 06 j 13:50	0° $\Upsilon$	
minimum elong	-2764 Jun 17 j 06:09	2° $\Pi$ 00'53	0°53'58	retrograde	-2759 Sep 22 j 00:12	27° $\Upsilon$ 31'40	
	-2764 Jul 31 j 00:54	0° $\Xi$		asc. node	-2759 Oct 21 j 06:47	21° $\Upsilon$ 41'53	
morning rise	-2764 Aug 01 j 14:44	1° $\Xi$ 00'46		min. Earth dist.	-2759 Oct 27 j 07:28	19° $\Upsilon$ 22'58	0.61726 AU
	-2764 Sep 15 j 08:53	0° $\Omega$		opposition	-2759 Oct 31 j 19:27	17° $\Upsilon$ 35'15	0°25'49
	-2764 Oct 30 j 21:56	0° $\Pi$		greatest brilliancy	-2759 Oct 31 j 17:32	17° $\Upsilon$ 37'09	-1.6m
	-2764 Dec 14 j 20:05	0° $\Xi$		direct	-2759 Dec 08 j 19:12	8° $\Upsilon$ 40'50	
	-2763 Jan 28 j 15:37	0° $\Pi$			-2758 Feb 18 j 01:53	0° $\text{B}$	
desc. node	-2763 Mar 11 j 04:50	27° $\Pi$ 06'48			-2758 Apr 15 j 06:32	0° $\Pi$	
	-2763 Mar 15 j 19:00	0° $\Xi$			-2758 Jun 04 j 01:24	0° $\Xi$	
	-2763 May 09 j 16:28	0° $\Xi$			-2758 Jul 20 j 06:57	0° $\Omega$	
retrograde	-2763 Jun 17 j 06:57	8° $\Xi$ 59'15		evening set	-2758 Aug 28 j 03:25	26° $\Omega$ 47'16	
min. Earth dist.	-2763 Jul 14 j 01:26	4° $\Xi$ 32'26	0.39238 AU		-2758 Sep 01 j 15:57	0° $\Pi$	
greatest brilliancy	-2763 Jul 18 j 08:42	3° $\Xi$ 18'19	-2.8m	max. Earth dist.	-2758 Sep 12 j 09:30	7° $\Pi$ 41'55	2.45894 AU
opposition	-2763 Jul 19 j 13:18	2° $\Xi$ 57'37	-6°40'17		-2758 Oct 12 j 17:00	0° $\Xi$	
	-2763 Jul 30 j 14:59	30° $\text{R}\Xi$					
direct	-2763 Aug 18 j 15:51	27° $\Xi$ 41'58		conjunction	-2758 Oct 20 j 18:36	6° $\Xi$ 03'42	0°07'47
	-2763 Sep 06 j 19:25	0° $\Xi$		minimum elong	-2758 Oct 20 j 19:06	6° $\Xi$ 04'39	0°07'46
	-2763 Nov 13 j 06:12	0° $\approx$		behind sun begin	-2758 Oct 19 j 21:41	5° $\Xi$ 24'17	
	-2762 Jan 02 j 11:55	0° $\text{H}$		behind sun end	-2758 Oct 21 j 16:31	6° $\Xi$ 45'03	
asc. node	-2762 Jan 16 j 07:39	8° $\text{H}$ 32'05		desc. node	-2758 Nov 01 j 01:14	14° $\Xi$ 37'03	
	-2762 Feb 19 j 19:56	0° $\Upsilon$			-2758 Nov 21 j 01:42	0° $\Pi$	
	-2762 Apr 08 j 21:58	0° $\text{B}$		morning rise	-2758 Dec 20 j 05:07	22° $\Pi$ 42'25	

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2758 Dec 29 j 12:28	0°♊		min. Earth dist.	-2752 Feb 22 j 16:51	2°♌22'05	0.58356 AU
	-2757 Feb 05 j 21:45	0°♋			-2752 Feb 29 j 09:54	30°♏	
	-2757 Mar 17 j 02:48	0°♌		direct	-2752 Mar 27 j 10:42	25°♐14'40	
	-2757 Apr 27 j 01:29	0°♍			-2752 Apr 24 j 22:13	0°♑	
	-2757 Jun 09 j 19:45	0°♎		desc. node	-2752 Jun 22 j 21:45	28°♒36'47	
	-2757 Jul 28 j 11:33	0°♏			-2752 Jun 25 j 04:05	0°♓	
asc. node	-2757 Sep 08 j 06:38	21°♐06'30			-2752 Aug 08 j 23:00	0°♑	
	-2757 Oct 03 j 23:35	0°♑			-2752 Sep 18 j 12:32	0°♒	
retrograde	-2757 Oct 27 j 06:38	3°♒08'39			-2752 Oct 27 j 12:18	0°♓	
	-2757 Nov 17 j 23:53	30°♓			-2752 Dec 05 j 09:58	0°♋	
opposition	-2757 Dec 06 j 07:54	23°♋22'06	3°04'20		-2751 Jan 14 j 06:32	0°♌	
greatest brilliancy	-2757 Dec 06 j 04:31	23°♋25'30	-1.3m		-2751 Feb 24 j 18:35	0°♍	
min. Earth dist.	-2757 Dec 05 j 13:52	23°♋40'11	0.66988 AU	evening set	-2751 Feb 27 j 08:54	1°♎49'54	
direct	-2756 Jan 15 j 14:50	13°♋40'01			-2751 Apr 09 j 05:51	0°♎	
	-2756 Mar 16 j 06:00	0°♑					
	-2756 May 12 j 06:00	0°♒		conjunction	-2751 Apr 22 j 23:04	9°♓12'02	-0°04'14
	-2756 Jun 29 j 10:23	0°♓		minimum elong	-2751 Apr 22 j 23:16	9°♓12'23	0°04'12
	-2756 Aug 12 j 07:59	0°♔		behind sun begin	-2751 Apr 22 j 02:12	8°♓37'16	
desc. node	-2756 Sep 18 j 00:00	26°♔44'39		behind sun end	-2751 Apr 23 j 20:21	9°♓47'28	
	-2756 Sep 22 j 08:14	0°♑		asc. node	-2751 Apr 30 j 03:05	13°♓57'46	
evening set	-2756 Oct 21 j 05:55	22°♑04'03		max. Earth dist.	-2751 May 14 j 02:09	23°♓09'26	2.61299 AU
	-2756 Oct 31 j 11:03	0°♒			-2751 May 24 j 13:46	0°♔	
	-2756 Dec 08 j 15:19	0°♓		morning rise	-2751 Jun 12 j 05:51	12°♔03'46	
					-2751 Jul 10 j 09:10	0°♑	
conjunction	-2756 Dec 24 j 06:23	12°♓19'05	-0°57'37		-2751 Aug 27 j 07:42	0°♒	
minimum elong	-2756 Dec 24 j 03:32	12°♓13'31	0°57'40		-2751 Oct 15 j 16:08	0°♓	
	-2755 Jan 15 j 19:47	0°♋			-2751 Dec 07 j 15:45	0°♔	
max. Earth dist.	-2755 Jan 27 j 18:26	9°♋16'17	2.38191 AU	retrograde	-2750 Mar 03 j 13:57	29°♔12'59	
	-2755 Feb 23 j 21:40	0°♌		opposition	-2750 Apr 05 j 23:41	22°♔48'03	2°03'49
morning rise	-2755 Mar 02 j 19:35	5°♌11'37		greatest brilliancy	-2750 Apr 06 j 17:28	22°♔33'27	-2.4m
	-2755 Apr 05 j 15:17	0°♍		min. Earth dist.	-2750 Apr 14 j 07:09	20°♔05'19	0.45841 AU
	-2755 May 18 j 15:37	0°♎		desc. node	-2750 May 10 j 20:52	15°♔00'33	
	-2755 Jul 03 j 12:53	0°♏		direct	-2750 May 12 j 13:17	14°♔59'21	
asc. node	-2755 Jul 26 j 06:15	14°♐00'33			-2750 Jul 03 j 01:09	0°♑	
	-2755 Aug 22 j 17:25	0°♑			-2750 Aug 21 j 07:10	0°♒	
	-2755 Oct 25 j 12:04	0°♒			-2750 Oct 02 j 13:55	0°♓	
retrograde	-2755 Nov 30 j 11:34	6°♒44'00			-2750 Nov 12 j 12:30	0°♋	
	-2754 Jan 02 j 08:29	30°♓			-2750 Dec 23 j 22:45	0°♌	
opposition	-2754 Jan 08 j 16:04	27°♓33'46	4°36'17		-2749 Feb 04 j 17:20	0°♍	
greatest brilliancy	-2754 Jan 09 j 02:06	27°♓23'53	-1.4m	asc. node	-2749 Mar 18 j 01:21	27°♎56'15	
min. Earth dist.	-2754 Jan 11 j 18:18	26°♓20'43	0.65888 AU		-2749 Mar 21 j 03:56	0°♎	
direct	-2754 Feb 18 j 22:58	17°♓32'36		evening set	-2749 Apr 15 j 13:16	16°♓41'14	
	-2754 Apr 10 j 13:56	0°♔			-2749 May 06 j 01:55	0°♔	
	-2754 Jun 06 j 08:22	0°♓					
	-2754 Jul 22 j 08:58	0°♔		conjunction	-2749 Jun 03 j 11:45	18°♔14'25	0°41'07
desc. node	-2754 Aug 05 j 23:27	10°♔14'55		minimum elong	-2749 Jun 03 j 10:30	18°♔12'24	0°41'10
	-2754 Sep 02 j 01:24	0°♑		max. Earth dist.	-2749 Jun 08 j 03:44	21°♔13'18	2.66599 AU
	-2754 Oct 11 j 09:15	0°♒			-2749 Jun 21 j 21:53	0°♑	
	-2754 Nov 18 j 15:38	0°♓		morning rise	-2749 Jul 19 j 13:34	17°♑37'17	
	-2754 Dec 26 j 22:48	0°♋			-2749 Aug 07 j 23:22	0°♔	
evening set	-2754 Dec 29 j 02:50	1°♋40'54			-2749 Sep 23 j 19:11	0°♓	
	-2753 Feb 04 j 05:00	0°♌			-2749 Nov 09 j 09:00	0°♔	
					-2749 Dec 26 j 04:46	0°♑	
conjunction	-2753 Mar 02 j 17:21	19°♌35'52	-0°54'07		-2748 Feb 12 j 18:40	0°♒	
minimum elong	-2753 Mar 02 j 19:45	19°♌40'14	0°54'08	desc. node	-2748 Mar 27 j 21:44	23°♒52'48	
	-2753 Mar 17 j 03:15	0°♍			-2748 Apr 11 j 04:20	0°♓	
max. Earth dist.	-2753 Apr 12 j 20:09	18°♍48'03	2.50864 AU	retrograde	-2748 May 18 j 11:33	7°♓57'49	
	-2753 Apr 29 j 03:51	0°♎		min. Earth dist.	-2748 Jun 17 j 07:07	3°♓04'07	0.37599 AU
morning rise	-2753 Apr 30 j 14:03	0°♎58'03		opposition	-2748 Jun 18 j 00:56	2°♓52'16	-5°24'48
asc. node	-2753 Jun 13 j 04:31	29°♓51'34		greatest brilliancy	-2748 Jun 17 j 19:39	2°♓55'46	-2.9m
	-2753 Jun 13 j 09:44	0°♏			-2748 Jun 29 j 15:10	30°♓	
	-2753 Jul 30 j 22:40	0°♑		direct	-2748 Jul 17 j 23:15	27°♒52'50	
	-2753 Sep 19 j 13:57	0°♒			-2748 Aug 05 j 03:59	0°♓	
	-2753 Nov 17 j 20:25	0°♓			-2748 Oct 09 j 21:46	0°♋	
retrograde	-2752 Jan 09 j 18:32	13°♓03'42			-2748 Nov 27 j 00:37	0°♌	
opposition	-2752 Feb 15 j 21:27	4°♓55'15	4°46'15		-2747 Jan 12 j 09:37	0°♍	
greatest brilliancy	-2752 Feb 17 j 00:30	4°♓29'52	-1.7m	asc. node	-2747 Feb 01 j 23:22	13°♎16'57	

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 16

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2747 Feb 28 j 00:43	0°♂					-2742 Jan 06 j 05:01	0°♂			
	-2747 Apr 16 j 05:49	0°♂					-2742 Feb 13 j 18:03	0°♂			
evening set	-2747 May 24 j 13:11	24°♂13'39					-2742 Mar 25 j 02:39	0°♂			
	-2747 Jun 02 j 15:45	0°♂					-2742 May 05 j 07:29	0°♂			
max. Earth dist.	-2747 Jun 30 j 18:06	17°♂53'44	2.66473 AU				-2742 Jun 18 j 19:39	0°♂			
							-2742 Aug 09 j 12:27	0°♂			
conjunction	-2747 Jul 10 j 01:44	23°♂52'16	1°07'09		asc. node		-2742 Sep 24 j 21:31	17°♂49'41			
minimum elong	-2747 Jul 10 j 00:59	23°♂51'04	1°07'13		retrograde		-2742 Oct 13 j 20:57	20°♂00'15			
	-2747 Jul 19 j 14:11	0°♂			min. Earth dist.		-2742 Nov 20 j 17:46	10°♂59'36	0.65671 AU		
morning rise	-2747 Aug 24 j 02:54	23°♂09'46			opposition		-2742 Nov 22 j 23:15	10°♂05'50	2°11'10		
	-2747 Sep 03 j 11:03	0°♂			greatest brilliancy		-2742 Nov 22 j 18:00	10°♂11'07	-1.4m		
	-2747 Oct 17 j 24:00	0°♂			direct		-2741 Jan 01 j 11:56	0°♂38'50			
	-2747 Nov 30 j 05:51	0°♂					-2741 Mar 30 j 01:39	0°♂			
	-2746 Jan 11 j 11:17	0°♂					-2741 May 21 j 22:36	0°♂			
desc. node	-2746 Feb 12 j 21:24	23°♂18'16					-2741 Jul 08 j 03:07	0°♂			
	-2746 Feb 22 j 04:59	0°♂					-2741 Aug 20 j 18:13	0°♂			
	-2746 Apr 05 j 16:34	0°♂			evening set		-2741 Sep 28 j 18:08	28°♂30'16			
	-2746 May 22 j 15:03	0°♂					-2741 Sep 30 j 17:59	0°♂			
retrograde	-2746 Jul 24 j 14:16	21°♂39'24			desc. node		-2741 Oct 05 j 17:59	3°♂45'54			
min. Earth dist.	-2746 Aug 21 j 15:54	16°♂18'46	0.45857 AU		max. Earth dist.		-2741 Oct 29 j 16:28	22°♂03'23	2.38731 AU		
greatest brilliancy	-2746 Aug 28 j 10:17	13°♂58'31	-2.4m				-2741 Nov 08 j 22:28	0°♂			
opposition	-2746 Aug 29 j 18:29	13°♂30'36	-5°08'09								
direct	-2746 Oct 01 j 07:20	6°♂54'13			conjunction		-2741 Nov 27 j 14:58	14°♂36'34	-0°35'26		
	-2746 Dec 12 j 09:40	0°♂			minimum elong		-2741 Nov 27 j 12:22	14°♂31'27	0°35'27		
asc. node	-2746 Dec 20 j 22:37	4°♂24'27					-2741 Dec 17 j 04:31	0°♂			
	-2745 Feb 04 j 17:25	0°♂					-2740 Jan 24 j 09:47	0°♂			
	-2745 Mar 27 j 02:11	0°♂			morning rise		-2740 Feb 03 j 08:22	7°♂43'15			
	-2745 May 14 j 22:35	0°♂					-2740 Mar 03 j 11:29	0°♂			
evening set	-2745 Jul 01 j 14:49	0°♂10'42					-2740 Apr 13 j 04:59	0°♂			
	-2745 Jul 01 j 08:10	0°♂					-2740 May 26 j 08:16	0°♂			
max. Earth dist.	-2745 Jul 25 j 23:25	16°♂02'41	2.61022 AU				-2740 Jul 11 j 20:10	0°♂			
	-2745 Aug 15 j 22:54	0°♂			asc. node		-2740 Aug 11 j 20:57	18°♂20'00			
							-2740 Sep 02 j 13:25	0°♂			
conjunction	-2745 Aug 17 j 11:07	1°♂00'52	1°06'47		retrograde		-2740 Nov 16 j 12:52	23°♂48'47			
minimum elong	-2745 Aug 17 j 11:57	1°♂02'16	1°06'50		opposition		-2740 Dec 26 j 04:25	14°♂21'46	4°08'41		
	-2745 Sep 28 j 14:54	0°♂			greatest brilliancy		-2740 Dec 26 j 08:07	14°♂18'06	-1.3m		
morning rise	-2745 Oct 03 j 21:42	3°♂43'17			min. Earth dist.		-2740 Dec 27 j 18:33	13°♂43'52	0.67089 AU		
	-2745 Nov 09 j 11:04	0°♂			direct		-2739 Feb 05 j 05:46	4°♂24'32			
	-2745 Dec 19 j 20:36	0°♂					-2739 Apr 25 j 03:34	0°♂			
desc. node	-2745 Dec 31 j 20:28	9°♂03'37					-2739 Jun 15 j 17:04	0°♂			
	-2744 Jan 28 j 08:58	0°♂					-2739 Jul 30 j 14:30	0°♂			
	-2744 Mar 07 j 19:08	0°♂			desc. node		-2739 Aug 22 j 16:00	16°♂29'54			
	-2744 Apr 17 j 06:25	0°♂					-2739 Sep 09 j 22:12	0°♂			
	-2744 May 30 j 17:50	0°♂					-2739 Oct 19 j 02:56	0°♂			
	-2744 Jul 22 j 17:23	0°♂					-2739 Nov 26 j 07:37	0°♂			
retrograde	-2744 Sep 07 j 03:42	12°♂02'26			evening set		-2739 Dec 01 j 15:28	4°♂12'05			
min. Earth dist.	-2744 Oct 10 j 13:41	4°♂33'48	0.58059 AU				-2738 Jan 03 j 12:45	0°♂			
opposition	-2744 Oct 16 j 10:51	2°♂15'04	-0°55'34								
greatest brilliancy	-2744 Oct 16 j 06:27	2°♂19'24	-1.8m		conjunction		-2738 Feb 05 j 15:08	25°♂26'18	-1°05'26		
	-2744 Oct 22 j 07:28	30°♂♂			minimum elong		-2738 Feb 05 j 16:22	25°♂28'39	1°05'30		
asc. node	-2744 Nov 06 j 22:29	25°♂22'10					-2738 Feb 11 j 16:11	0°♂			
direct	-2744 Nov 22 j 04:42	23°♂48'59					-2738 Mar 24 j 11:15	0°♂			
	-2744 Dec 26 j 07:12	0°♂			max. Earth dist.		-2738 Mar 25 j 19:26	0°♂57'42	2.45694 AU		
	-2743 Mar 02 j 01:14	0°♂			morning rise		-2738 Apr 10 j 00:30	11°♂45'20			
	-2743 Apr 23 j 17:22	0°♂					-2738 May 06 j 09:43	0°♂			
	-2743 Jun 11 j 12:02	0°♂					-2738 Jun 20 j 18:05	0°♂			
	-2743 Jul 27 j 10:22	0°♂			asc. node		-2738 Jun 29 j 21:01	5°♂50'03			
evening set	-2743 Aug 10 j 07:30	9°♂25'02					-2738 Aug 07 j 22:07	0°♂			
max. Earth dist.	-2743 Aug 25 j 20:04	20°♂09'11	2.50820 AU				-2738 Sep 29 j 21:58	0°♂			
	-2743 Sep 08 j 19:31	0°♂			retrograde		-2738 Dec 24 j 02:08	28°♂26'26			
					opposition		-2737 Jan 31 j 04:21	19°♂49'55	4°55'07		
conjunction	-2743 Sep 29 j 24:00	15°♂15'14	0°31'46		greatest brilliancy		-2737 Feb 01 j 01:21	19°♂29'43	-1.5m		
minimum elong	-2743 Sep 30 j 01:31	15°♂18'00	0°31'46		min. Earth dist.		-2737 Feb 05 j 14:27	17°♂44'52	0.62043 AU		
	-2743 Oct 20 j 00:04	0°♂			direct		-2737 Mar 13 j 06:47	9°♂54'17			
desc. node	-2743 Nov 17 j 19:51	21°♂45'49					-2737 May 17 j 18:38	0°♂			
morning rise	-2743 Nov 24 j 08:34	26°♂45'54					-2737 Jul 07 j 07:28	0°♂			
	-2743 Nov 28 j 13:36	0°♂			desc. node		-2737 Jul 10 j 14:44	2°♂11'15			



Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2737 Aug 19 j 07:20	0°♌		conjunction	-2732 Jun 25 j 14:54	10°♊16'26	0°59'48
	-2737 Sep 28 j 04:19	0°♍		minimum elong	-2732 Jun 25 j 13:46	10°♊14'38	0°59'52
	-2737 Nov 05 j 18:33	0°♎			-2732 Jul 26 j 10:06	0°♏	
	-2737 Dec 14 j 08:23	0°♏		morning rise	-2732 Aug 09 j 16:46	9°♏12'53	
	-2736 Jan 22 j 21:30	0°♐			-2732 Sep 10 j 13:49	0°♑	
evening set	-2736 Feb 06 j 11:24	10°♐46'20			-2732 Oct 25 j 17:14	0°♒	
	-2736 Mar 04 j 02:35	0°♑			-2732 Dec 08 j 22:20	0°♌	
					-2731 Jan 21 j 13:32	0°♍	
conjunction	-2736 Apr 04 j 08:26	21°♑49'28	-0°24'37	desc. node	-2731 Mar 01 j 14:49	26°♍44'50	
minimum elong	-2736 Apr 04 j 09:43	21°♑51'41	0°24'37		-2731 Mar 06 j 10:27	0°♎	
	-2736 Apr 16 j 08:06	0°♒			-2731 Apr 22 j 07:24	0°♏	
max. Earth dist.	-2736 May 02 j 19:22	11°♒04'20	2.57788 AU	retrograde	-2731 Jul 01 j 23:15	25°♏53'32	
asc. node	-2736 May 16 j 19:22	20°♒20'53		min. Earth dist.	-2731 Jul 28 j 16:57	21°♏15'45	0.41210 AU
morning rise	-2736 May 27 j 09:15	27°♒16'51		greatest brilliancy	-2731 Aug 03 j 07:22	19°♏31'43	-2.7m
	-2736 May 31 j 13:25	0°♓		opposition	-2731 Aug 04 j 18:22	19°♏04'25	-6°27'06
	-2736 Jul 17 j 12:25	0°♊		direct	-2731 Sep 04 j 14:07	13°♏22'26	
	-2736 Sep 04 j 03:34	0°♋			-2731 Nov 01 j 08:32	0°♐	
	-2736 Oct 25 j 13:27	0°♌			-2731 Dec 26 j 08:14	0°♑	
	-2736 Dec 26 j 05:28	0°♒		asc. node	-2730 Jan 06 j 13:42	6°♑39'10	
retrograde	-2735 Feb 08 j 05:56	9°♒32'30			-2730 Feb 14 j 03:30	0°♓	
opposition	-2735 Mar 15 j 06:53	2°♒20'56	3°39'11		-2730 Apr 03 j 21:22	0°♔	
greatest brilliancy	-2735 Mar 16 j 11:16	1°♒55'56	-2.1m		-2730 May 22 j 00:53	0°♊	
	-2735 Mar 21 j 22:38	30°♒♌		evening set	-2730 Jun 16 j 18:57	16°♊17'03	
min. Earth dist.	-2735 Mar 23 j 14:35	29°♒25'29	0.51060 AU		-2730 Jul 08 j 04:31	0°♋	
direct	-2735 Apr 22 j 23:10	23°♒32'04		max. Earth dist.	-2730 Jul 15 j 21:58	5°♋00'02	2.63788 AU
	-2735 May 25 j 16:08	0°♒					
desc. node	-2735 May 27 j 13:52	0°♒42'32		conjunction	-2730 Aug 02 j 03:29	16°♋15'27	1°10'33
	-2735 Jul 21 j 07:18	0°♌		minimum elong	-2730 Aug 02 j 03:39	16°♋15'44	1°10'36
	-2735 Sep 02 j 14:27	0°♍			-2730 Aug 22 j 20:37	0°♌	
	-2735 Oct 12 j 21:48	0°♎		morning rise	-2730 Sep 17 j 03:15	17°♌06'30	
	-2735 Nov 21 j 17:00	0°♏			-2730 Oct 05 j 19:23	0°♒	
	-2734 Jan 01 j 07:14	0°♐			-2730 Nov 17 j 02:24	0°♌	
	-2734 Feb 12 j 10:19	0°♑			-2730 Dec 28 j 01:10	0°♍	
	-2734 Mar 28 j 09:18	0°♒		desc. node	-2729 Jan 17 j 14:27	15°♍19'27	
evening set	-2734 Mar 29 j 10:18	0°♒41'47			-2729 Feb 06 j 04:05	0°♎	
asc. node	-2734 Apr 03 j 16:53	4°♒12'49			-2729 Mar 18 j 06:46	0°♏	
	-2734 May 13 j 00:02	0°♓			-2729 Apr 28 j 19:51	0°♐	
					-2729 Jun 14 j 05:19	0°♑	
conjunction	-2734 May 19 j 02:38	3°♓57'09	0°25'24	retrograde	-2729 Aug 23 j 01:26	24°♑47'17	
minimum elong	-2734 May 19 j 01:40	3°♓55'36	0°25'27	min. Earth dist.	-2729 Sep 23 j 09:02	18°♑05'31	0.53609 AU
max. Earth dist.	-2734 May 29 j 21:36	10°♓54'18	2.65176 AU	opposition	-2729 Sep 30 j 12:26	15°♑22'06	-2°28'35
	-2734 Jun 28 j 18:05	0°♊		greatest brilliancy	-2729 Sep 29 j 22:18	15°♑35'37	-2.0m
morning rise	-2734 Jul 05 j 09:38	4°♊13'53		direct	-2729 Nov 04 j 19:20	7°♑31'54	
	-2734 Aug 15 j 00:55	0°♋		asc. node	-2729 Nov 24 j 12:40	9°♑50'20	
	-2734 Oct 01 j 13:30	0°♌			-2728 Jan 16 j 04:48	0°♒	
	-2734 Nov 18 j 16:00	0°♍			-2728 Mar 11 j 21:15	0°♎	
	-2733 Jan 07 j 21:50	0°♏			-2728 May 01 j 13:37	0°♐	
	-2733 Mar 09 j 13:41	0°♑			-2728 Jun 18 j 15:57	0°♒	
desc. node	-2733 Apr 14 j 13:19	8°♒02'23		evening set	-2728 Jul 24 j 21:21	23°♒37'21	
retrograde	-2733 Apr 17 j 12:25	8°♒05'39			-2728 Aug 03 j 10:01	0°♌	
opposition	-2733 May 18 j 05:51	2°♒53'37	-2°21'14	max. Earth dist.	-2728 Aug 12 j 02:16	5°♌52'05	2.55305 AU
greatest brilliancy	-2733 May 18 j 14:05	2°♒47'54	-2.8m				
min. Earth dist.	-2733 May 22 j 19:57	1°♒37'09	0.39107 AU	conjunction	-2728 Sep 11 j 12:26	26°♌55'26	0°49'57
	-2733 May 28 j 23:35	30°♒♌		minimum elong	-2728 Sep 11 j 14:02	26°♌58'16	0°49'58
direct	-2733 Jun 19 j 08:41	27°♌08'03			-2728 Sep 15 j 20:59	0°♒	
	-2733 Jul 10 j 06:15	0°♍			-2728 Oct 27 j 06:45	0°♌	
	-2733 Sep 10 j 03:50	0°♎		morning rise	-2728 Nov 01 j 20:59	4°♌09'06	
	-2733 Oct 25 j 21:59	0°♏		desc. node	-2728 Dec 04 j 12:28	28°♌46'38	
	-2733 Dec 08 j 21:20	0°♐			-2728 Dec 06 j 02:54	0°♍	
	-2732 Jan 22 j 07:00	0°♑			-2727 Jan 14 j 01:07	0°♎	
asc. node	-2732 Feb 19 j 15:13	18°♑46'30			-2727 Feb 21 j 20:17	0°♏	
	-2732 Mar 07 j 19:17	0°♒			-2727 Apr 02 j 11:21	0°♐	
	-2732 Apr 23 j 09:08	0°♓			-2727 May 14 j 03:46	0°♑	
evening set	-2732 May 09 j 11:46	10°♓16'21			-2727 Jun 29 j 01:33	0°♒	
	-2732 Jun 09 j 11:54	0°♊			-2727 Aug 28 j 04:51	0°♔	
max. Earth dist.	-2732 Jun 21 j 12:20	7°♊39'18	2.67185 AU	retrograde	-2727 Sep 30 j 03:53	6°♒14'30	
				asc. node	-2727 Oct 11 j 12:55	5°♒20'43	

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2727 Oct 30 j 15:56	30° $\text{R}\text{Y}$			-2722 Aug 27 j 20:46	0° $\text{L}$	
min. Earth dist.	-2727 Nov 05 j 09:51	27° $\text{Y}$ 45'58	0.63369 AU		-2722 Oct 06 j 08:47	0° $\text{M}$	
opposition	-2727 Nov 09 j 02:28	26° $\text{Y}$ 17'05	1°07'44		-2722 Nov 13 j 17:40	0° $\text{X}$	
greatest brilliancy	-2727 Nov 08 j 22:14	26° $\text{Y}$ 21'21	-1.5m		-2722 Dec 22 j 02:38	0° $\text{Z}$	
direct	-2727 Dec 17 j 16:14	17° $\text{Y}$ 09'46		evening set	-2721 Jan 12 j 23:47	16° $\text{Z}$ 49'13	
	-2726 Feb 08 j 04:13	0° $\text{B}$			-2721 Jan 30 j 10:25	0° $\approx$	
	-2726 Apr 09 j 06:38	0° $\text{II}$			-2721 Mar 12 j 10:03	0° $\text{H}$	
	-2726 May 29 j 23:21	0° $\text{E}$					
	-2726 Jul 15 j 12:45	0° $\text{L}$		conjunction	-2721 Mar 15 j 14:20	2° $\text{H}$ 16'03	-0°44'21
	-2726 Aug 28 j 00:17	0° $\text{M}$		minimum elong	-2721 Mar 15 j 16:34	2° $\text{H}$ 20'02	0°44'21
evening set	-2726 Sep 07 j 23:35	7° $\text{M}$ 52'04		max. Earth dist.	-2721 Apr 21 j 03:02	27° $\text{H}$ 43'42	2.53504 AU
max. Earth dist.	-2726 Sep 25 j 06:23	20° $\text{M}$ 29'29	2.43141 AU		-2721 Apr 24 j 11:04	0° $\text{Y}$	
	-2726 Oct 08 j 01:08	0° $\text{L}$		morning rise	-2721 May 11 j 03:58	11° $\text{Y}$ 15'16	
desc. node	-2726 Oct 22 j 10:45	10° $\text{L}$ 52'13		asc. node	-2721 Jun 03 j 11:17	26° $\text{Y}$ 38'06	
					-2721 Jun 08 j 15:23	0° $\text{B}$	
conjunction	-2726 Nov 02 j 15:14	19° $\text{L}$ 25'06	-0°07'47		-2721 Jul 25 j 21:15	0° $\text{II}$	
minimum elong	-2726 Nov 02 j 14:41	19° $\text{L}$ 24'02	0°07'49		-2721 Sep 13 j 14:06	0° $\text{E}$	
behind sun begin	-2726 Nov 01 j 16:20	18° $\text{L}$ 41'10			-2721 Nov 07 j 17:20	0° $\text{L}$	
behind sun end	-2726 Nov 03 j 13:02	20° $\text{L}$ 06'57		retrograde	-2720 Jan 20 j 02:56	22° $\text{L}$ 24'41	
	-2726 Nov 16 j 08:19	0° $\text{M}$		opposition	-2720 Feb 25 j 13:28	14° $\text{L}$ 34'29	4°30'35
	-2726 Dec 24 j 17:11	0° $\text{X}$		greatest brilliancy	-2720 Feb 26 j 18:38	14° $\text{L}$ 07'34	-1.8m
morning rise	-2725 Jan 05 j 01:25	8° $\text{X}$ 54'40		min. Earth dist.	-2720 Mar 04 j 00:50	11° $\text{L}$ 49'16	0.55935 AU
	-2725 Feb 01 j 00:28	0° $\text{Z}$		direct	-2720 Apr 05 j 14:17	5° $\text{L}$ 07'22	
	-2725 Mar 12 j 03:26	0° $\approx$		desc. node	-2720 Jun 13 j 06:39	28° $\text{L}$ 05'21	
	-2725 Apr 21 j 22:59	0° $\text{H}$			-2720 Jun 16 j 16:08	0° $\text{M}$	
	-2725 Jun 04 j 09:11	0° $\text{Y}$			-2720 Aug 02 j 12:17	0° $\text{L}$	
	-2725 Jul 21 j 22:53	0° $\text{B}$			-2720 Sep 12 j 17:48	0° $\text{M}$	
asc. node	-2725 Aug 29 j 12:57	21° $\text{B}$ 05'48			-2720 Oct 22 j 01:55	0° $\text{X}$	
	-2725 Sep 18 j 05:04	0° $\text{II}$			-2720 Nov 30 j 05:20	0° $\text{Z}$	
retrograde	-2725 Nov 04 j 00:11	10° $\text{II}$ 59'44			-2719 Jan 09 j 06:34	0° $\approx$	
opposition	-2725 Dec 13 j 22:45	1° $\text{II}$ 19'20	3°30'52		-2719 Feb 19 j 22:44	0° $\text{H}$	
greatest brilliancy	-2725 Dec 13 j 21:24	1° $\text{II}$ 20'41	-1.3m	evening set	-2719 Mar 10 j 19:56	13° $\text{H}$ 09'36	
min. Earth dist.	-2725 Dec 14 j 00:49	1° $\text{II}$ 17'16	0.67293 AU		-2719 Apr 04 j 12:57	0° $\text{Y}$	
	-2725 Dec 17 j 06:12	30° $\text{R}\text{B}$		asc. node	-2719 Apr 20 j 09:01	10° $\text{Y}$ 35'21	
direct	-2724 Jan 23 j 13:12	21° $\text{B}$ 30'45					
	-2724 Mar 04 j 20:22	0° $\text{II}$		conjunction	-2719 May 02 j 19:58	18° $\text{Y}$ 49'21	0°07'14
	-2724 May 06 j 01:00	0° $\text{E}$		minimum elong	-2719 May 02 j 19:39	18° $\text{Y}$ 48'50	0°07'15
	-2724 Jun 24 j 04:47	0° $\text{L}$		behind sun begin	-2719 May 02 j 00:40	18° $\text{Y}$ 17'37	
	-2724 Aug 07 j 10:29	0° $\text{M}$		behind sun end	-2719 May 03 j 14:39	19° $\text{Y}$ 20'02	
desc. node	-2724 Sep 08 j 09:25	23° $\text{M}$ 09'09			-2719 May 19 j 22:21	0° $\text{B}$	
	-2724 Sep 17 j 13:37	0° $\text{L}$		max. Earth dist.	-2719 May 20 j 01:19	0° $\text{B}$ 04'49	2.62921 AU
	-2724 Oct 26 j 17:13	0° $\text{M}$		morning rise	-2719 Jun 20 j 20:43	20° $\text{B}$ 34'03	
evening set	-2724 Nov 04 j 14:34	6° $\text{M}$ 56'42			-2719 Jul 05 j 16:11	0° $\text{II}$	
	-2724 Dec 03 j 21:28	0° $\text{X}$			-2719 Aug 22 j 07:34	0° $\text{E}$	
					-2719 Oct 09 j 20:40	0° $\text{L}$	
conjunction	-2723 Jan 09 j 03:50	28° $\text{X}$ 30'49	-1°04'38		-2719 Nov 29 j 11:46	0° $\text{M}$	
minimum elong	-2723 Jan 09 j 02:15	28° $\text{X}$ 27'42	1°04'41		-2718 Jan 27 j 08:08	0° $\text{L}$	
	-2723 Jan 11 j 01:33	0° $\text{Z}$		retrograde	-2718 Mar 18 j 10:08	12° $\text{L}$ 14'42	
	-2723 Feb 19 j 03:01	0° $\approx$		opposition	-2718 Apr 19 j 21:26	6° $\text{L}$ 17'45	0°43'52
max. Earth dist.	-2723 Feb 26 j 07:45	5° $\approx$ 24'26	2.40494 AU	greatest brilliancy	-2718 Apr 20 j 03:45	6° $\text{L}$ 12'51	-2.6m
morning rise	-2723 Mar 17 j 12:35	19° $\approx$ 37'19		min. Earth dist.	-2718 Apr 27 j 14:17	3° $\text{L}$ 55'18	0.43096 AU
	-2723 Mar 31 j 20:01	0° $\text{H}$		desc. node	-2718 May 01 j 07:15	2° $\text{L}$ 50'46	
	-2723 May 13 j 18:04	0° $\text{Y}$			-2718 May 14 j 04:17	30° $\text{R}\text{M}$	
	-2723 Jun 28 j 08:24	0° $\text{B}$		direct	-2718 May 24 j 23:11	29° $\text{M}$ 11'29	
asc. node	-2723 Jul 16 j 11:57	11° $\text{B}$ 23'03			-2718 Jun 04 j 21:29	0° $\text{L}$	
	-2723 Aug 16 j 13:16	0° $\text{II}$			-2718 Aug 11 j 18:14	0° $\text{M}$	
	-2723 Oct 13 j 04:32	0° $\text{E}$			-2718 Sep 25 j 07:48	0° $\text{X}$	
retrograde	-2723 Dec 08 j 19:59	14° $\text{E}$ 45'35			-2718 Nov 06 j 07:08	0° $\text{Z}$	
opposition	-2722 Jan 16 j 16:08	5° $\text{E}$ 46'20	4°47'01		-2718 Dec 18 j 08:21	0° $\approx$	
greatest brilliancy	-2722 Jan 17 j 06:07	5° $\text{E}$ 32'40	-1.4m		-2717 Jan 30 j 13:20	0° $\text{H}$	
min. Earth dist.	-2722 Jan 20 j 14:39	4° $\text{E}$ 13'56	0.64776 AU	asc. node	-2717 Mar 08 j 06:07	24° $\text{H}$ 41'11	
	-2722 Feb 01 j 07:05	30° $\text{R}\text{II}$			-2717 Mar 16 j 06:56	0° $\text{Y}$	
direct	-2722 Feb 26 j 22:53	25° $\text{II}$ 45'16		evening set	-2717 Apr 24 j 21:18	25° $\text{Y}$ 48'26	
	-2722 Mar 26 j 13:16	0° $\text{E}$			-2717 May 01 j 09:28	0° $\text{B}$	
	-2722 May 30 j 14:18	0° $\text{L}$					
	-2722 Jul 16 j 18:48	0° $\text{M}$		conjunction	-2717 Jun 12 j 01:08	26° $\text{B}$ 39'07	0°48'56
desc. node	-2722 Jul 27 j 07:25	7° $\text{M}$ 15'47		minimum elong	-2717 Jun 11 j 23:50	26° $\text{B}$ 37'04	0°48'59

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 19

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

max. Earth dist.	-2717 Jun 13 j 12:06	27° $\text{♄}$ 34'51	2.67049 AU	min. Earth dist.	-2712 Oct 20 j 07:00	13° $\text{♊}$ 38'53	0.60186 AU
	-2717 Jun 17 j 07:11	0° $\text{♊}$		opposition	-2712 Oct 25 j 09:46	11° $\text{♊}$ 36'55	-0°06'59
morning rise	-2717 Jul 27 j 14:58	25° $\text{♊}$ 43'56		greatest brilliancy	-2712 Oct 29 j 16:31	9° $\text{♊}$ 56'10	-1.7m
	-2717 Aug 03 j 06:56	0° $\text{♋}$		asc. node	-2712 Oct 28 j 04:17	10° $\text{♊}$ 31'16	
	-2717 Sep 18 j 20:11	0° $\text{♌}$		direct	-2712 Dec 01 j 20:09	2° $\text{♊}$ 54'19	
	-2717 Nov 03 j 19:29	0° $\text{♍}$			-2711 Feb 22 j 16:32	0° $\text{♋}$	
	-2717 Dec 19 j 11:24	0° $\text{♎}$			-2711 Apr 18 j 05:02	0° $\text{♊}$	
	-2716 Feb 03 j 14:18	0° $\text{♏}$			-2711 Jun 06 j 13:51	0° $\text{♋}$	
desc. node	-2716 Mar 18 j 07:16	26° $\text{♏}$ 55'00			-2711 Jul 22 j 17:28	0° $\text{♌}$	
	-2716 Mar 23 j 16:31	0° $\text{♍}$		evening set	-2711 Aug 20 j 06:43	19° $\text{♌}$ 31'38	
retrograde	-2716 Jun 04 j 19:59	25° $\text{♍}$ 57'32		max. Earth dist.	-2711 Sep 04 j 08:00	0° $\text{♍}$ 07'34	2.48132 AU
min. Earth dist.	-2716 Jul 02 j 11:05	21° $\text{♍}$ 27'16	0.38143 AU		-2711 Sep 04 j 03:44	0° $\text{♍}$	
greatest brilliancy	-2716 Jul 05 j 06:32	20° $\text{♍}$ 41'11	-2.9m				
opposition	-2716 Jul 06 j 01:44	20° $\text{♍}$ 28'01	-6°24'41	conjunction	-2711 Oct 11 j 11:23	27° $\text{♍}$ 08'37	0°18'40
direct	-2716 Aug 04 j 19:24	15° $\text{♍}$ 26'32		minimum elong	-2711 Oct 11 j 12:26	27° $\text{♍}$ 10'35	0°18'40
	-2716 Sep 26 j 04:02	0° $\text{♎}$			-2711 Oct 15 j 07:26	0° $\text{♎}$	
	-2716 Nov 19 j 01:46	0° $\text{♏}$		desc. node	-2711 Nov 08 j 04:02	18° $\text{♎}$ 00'42	
	-2715 Jan 06 j 05:48	0° $\text{♐}$			-2711 Nov 23 j 18:53	0° $\text{♏}$	
asc. node	-2715 Jan 23 j 05:20	10° $\text{♐}$ 44'06		morning rise	-2711 Dec 08 j 12:44	11° $\text{♏}$ 25'19	
	-2715 Feb 22 j 16:53	0° $\text{♑}$			-2710 Jan 01 j 08:01	0° $\text{♍}$	
	-2715 Apr 11 j 08:36	0° $\text{♋}$			-2710 Feb 08 j 18:40	0° $\text{♎}$	
	-2715 May 28 j 23:53	0° $\text{♊}$			-2710 Mar 20 j 00:14	0° $\text{♏}$	
evening set	-2715 Jun 02 j 01:30	2° $\text{♊}$ 34'27			-2710 Apr 29 j 23:57	0° $\text{♐}$	
max. Earth dist.	-2715 Jul 06 j 05:44	24° $\text{♊}$ 21'34	2.65747 AU		-2710 Jun 12 j 22:34	0° $\text{♑}$	
	-2715 Jul 14 j 23:56	0° $\text{♋}$			-2710 Aug 01 j 11:21	0° $\text{♋}$	
				asc. node	-2710 Sep 15 j 04:05	20° $\text{♋}$ 49'53	
conjunction	-2715 Jul 18 j 09:43	2° $\text{♋}$ 12'05	1°09'38	retrograde	-2710 Oct 21 j 14:56	28° $\text{♋}$ 02'12	
minimum elong	-2715 Jul 18 j 09:17	2° $\text{♋}$ 11'22	1°09'42	min. Earth dist.	-2710 Nov 29 j 06:49	18° $\text{♋}$ 45'40	0.66517 AU
	-2715 Aug 29 j 19:10	0° $\text{♌}$		opposition	-2710 Nov 30 j 16:42	18° $\text{♋}$ 11'35	2°43'21
morning rise	-2715 Sep 01 j 14:59	1° $\text{♌}$ 53'00		greatest brilliancy	-2710 Nov 30 j 12:08	18° $\text{♋}$ 16'11	-1.4m
	-2715 Oct 13 j 02:41	0° $\text{♍}$		direct	-2709 Jan 09 j 15:31	8° $\text{♋}$ 35'44	
	-2715 Nov 24 j 23:34	0° $\text{♎}$			-2709 Mar 22 j 06:59	0° $\text{♊}$	
	-2714 Jan 05 j 16:08	0° $\text{♏}$			-2709 May 16 j 08:12	0° $\text{♋}$	
desc. node	-2714 Feb 03 j 06:50	20° $\text{♏}$ 54'27			-2709 Jul 03 j 03:19	0° $\text{♌}$	
	-2714 Feb 15 j 16:37	0° $\text{♍}$			-2709 Aug 15 j 23:19	0° $\text{♍}$	
	-2714 Mar 29 j 00:10	0° $\text{♎}$		desc. node	-2709 Sep 26 j 02:29	0° $\text{♎}$ 03'55	
	-2714 May 11 j 21:43	0° $\text{♏}$			-2709 Sep 26 j 00:24	0° $\text{♎}$	
	-2714 Jul 08 j 18:58	0° $\text{♐}$		evening set	-2709 Oct 11 j 16:58	11° $\text{♎}$ 53'05	
retrograde	-2714 Aug 04 j 24:00	4° $\text{♐}$ 51'54			-2709 Nov 04 j 04:28	0° $\text{♏}$	
	-2714 Aug 31 j 08:31	30° $\text{♐}$			-2709 Dec 12 j 09:41	0° $\text{♍}$	
min. Earth dist.	-2714 Sep 03 j 03:31	29° $\text{♐}$ 02'18	0.48666 AU				
greatest brilliancy	-2714 Sep 10 j 01:34	26° $\text{♐}$ 32'34	-2.2m	conjunction	-2709 Dec 13 j 00:17	0° $\text{♍}$ 28'45	-0°49'15
opposition	-2714 Sep 11 j 03:37	26° $\text{♐}$ 08'59	-4°10'41	minimum elong	-2709 Dec 12 j 21:09	0° $\text{♍}$ 22'35	0°49'17
direct	-2714 Oct 14 j 17:54	19° $\text{♐}$ 03'42		max. Earth dist.	-2709 Dec 12 j 19:05	0° $\text{♍}$ 18'31	2.37459 AU
	-2714 Nov 29 j 21:34	0° $\text{♑}$			-2708 Jan 19 j 14:10	0° $\text{♎}$	
asc. node	-2714 Dec 11 j 05:05	4° $\text{♑}$ 52'48		morning rise	-2708 Feb 19 j 17:13	24° $\text{♎}$ 00'10	
	-2713 Jan 28 j 21:44	0° $\text{♑}$			-2708 Feb 27 j 15:05	0° $\text{♏}$	
	-2713 Mar 21 j 15:35	0° $\text{♋}$			-2708 Apr 08 j 07:28	0° $\text{♐}$	
	-2713 May 10 j 01:09	0° $\text{♊}$			-2708 May 21 j 07:16	0° $\text{♑}$	
	-2713 Jun 26 j 16:13	0° $\text{♋}$			-2708 Jul 06 j 08:11	0° $\text{♋}$	
evening set	-2713 Jul 10 j 07:07	8° $\text{♋}$ 48'19		asc. node	-2708 Aug 02 j 04:00	16° $\text{♋}$ 18'26	
max. Earth dist.	-2713 Aug 01 j 08:11	23° $\text{♋}$ 18'22	2.59194 AU		-2708 Aug 26 j 07:00	0° $\text{♊}$	
	-2713 Aug 11 j 08:29	0° $\text{♌}$			-2708 Nov 07 j 17:35	0° $\text{♋}$	
				retrograde	-2708 Nov 24 j 11:31	1° $\text{♋}$ 37'40	
conjunction	-2713 Aug 26 j 14:35	10° $\text{♌}$ 20'08	1°02'14		-2708 Dec 10 j 08:00	30° $\text{♋}$	
minimum elong	-2713 Aug 26 j 15:46	10° $\text{♌}$ 22'11	1°02'16	opposition	-2707 Jan 02 j 21:13	22° $\text{♊}$ 19'33	4°25'51
	-2713 Sep 23 j 23:01	0° $\text{♍}$		greatest brilliancy	-2707 Jan 03 j 04:20	22° $\text{♊}$ 12'30	-1.3m
morning rise	-2713 Oct 14 j 03:45	14° $\text{♍}$ 22'29		min. Earth dist.	-2707 Jan 05 j 07:20	21° $\text{♊}$ 22'01	0.66555 AU
	-2713 Nov 04 j 15:45	0° $\text{♎}$		direct	-2707 Feb 13 j 01:55	12° $\text{♊}$ 19'26	
	-2713 Dec 14 j 20:16	0° $\text{♏}$			-2707 Apr 16 j 15:37	0° $\text{♋}$	
desc. node	-2713 Dec 22 j 06:04	5° $\text{♏}$ 37'14			-2707 Jun 09 j 20:22	0° $\text{♌}$	
	-2712 Jan 23 j 02:58	0° $\text{♍}$			-2707 Jul 25 j 09:48	0° $\text{♍}$	
	-2712 Mar 02 j 06:28	0° $\text{♎}$		desc. node	-2707 Aug 13 j 01:53	13° $\text{♍}$ 12'27	
	-2712 Apr 11 j 07:46	0° $\text{♏}$			-2707 Sep 04 j 23:25	0° $\text{♎}$	
	-2712 May 23 j 21:07	0° $\text{♐}$			-2707 Oct 14 j 06:17	0° $\text{♏}$	
	-2712 Jul 11 j 19:06	0° $\text{♑}$			-2707 Nov 21 j 11:54	0° $\text{♍}$	
retrograde	-2712 Sep 15 j 19:37	21° $\text{♑}$ 30'43		evening set	-2707 Dec 17 j 05:47	20° $\text{♍}$ 14'48	

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2707 Dec 29 j 17:36	0°♁				-2702 Sep 26 j 09:21	0°♁		
	-2706 Feb 06 j 21:28	0°♁				-2702 Nov 12 j 13:27	0°♁		
						-2702 Dec 30 j 14:29	0°♁		
conjunction	-2706 Feb 20 j 05:06	9°♁56'35	-1°00'04			-2701 Feb 20 j 06:51	0°♁		
minimum elong	-2706 Feb 20 j 07:16	10°♁00'38	1°00'07		desc. node	-2701 Apr 04 j 23:45	19°♁33'55		
	-2706 Mar 19 j 17:04	0°♁			retrograde	-2701 May 05 j 09:57	24°♁54'26		
max. Earth dist.	-2706 Apr 05 j 18:25	12°♁06'39	2.48598 AU		opposition	-2701 Jun 04 j 20:11	19°♁53'18	-4°12'19	
morning rise	-2706 Apr 22 j 01:34	23°♁26'49			greatest brilliancy	-2701 Jun 05 j 00:21	19°♁50'29	-2.9m	
	-2706 May 01 j 15:11	0°♁			min. Earth dist.	-2701 Jun 06 j 14:39	19°♁24'50	0.37888 AU	
	-2706 Jun 15 j 20:35	0°♁			direct	-2701 Jul 05 j 12:37	14°♁40'30		
asc. node	-2706 Jun 20 j 02:05	2°♁43'39				-2701 Aug 27 j 04:26	0°♁		
	-2706 Aug 02 j 13:44	0°♁				-2701 Oct 17 j 11:49	0°♁		
	-2706 Sep 22 j 23:24	0°♁				-2701 Dec 02 j 07:45	0°♁		
	-2706 Nov 26 j 03:01	0°♁				-2700 Jan 16 j 16:00	0°♁		
retrograde	-2705 Jan 02 j 10:10	7°♁05'19			asc. node	-2700 Feb 09 j 21:00	15°♁50'44		
	-2705 Feb 05 j 14:23	30°♁				-2700 Mar 02 j 17:14	0°♁		
opposition	-2705 Feb 08 j 23:48	28°♁43'38	4°51'59			-2700 Apr 18 j 14:38	0°♁		
greatest brilliancy	-2705 Feb 10 j 00:22	28°♁20'16	-1.6m		evening set	-2700 May 18 j 04:26	18°♁46'18		
min. Earth dist.	-2705 Feb 15 j 04:21	26°♁22'29	0.60125 AU			-2700 Jun 04 j 20:59	0°♁		
direct	-2705 Mar 21 j 19:41	18°♁54'49			max. Earth dist.	-2700 Jun 26 j 20:52	14°♁00'21	2.66891 AU	
	-2705 May 06 j 15:57	0°♁							
	-2705 Jun 30 j 15:11	0°♁			conjunction	-2700 Jul 03 j 22:23	18°♁31'14	1°04'31	
desc. node	-2705 Jul 01 j 00:13	0°♁14'23			minimum elong	-2700 Jul 03 j 21:27	18°♁29'44	1°04'36	
	-2705 Aug 13 j 14:17	0°♁				-2700 Jul 21 j 19:26	0°♁		
	-2705 Sep 22 j 20:23	0°♁			morning rise	-2700 Aug 17 j 22:20	17°♁35'34		
	-2705 Oct 31 j 15:39	0°♁				-2700 Sep 05 j 19:45	0°♁		
	-2705 Dec 09 j 09:04	0°♁				-2700 Oct 20 j 15:16	0°♁		
	-2704 Jan 18 j 00:59	0°♁				-2700 Dec 03 j 07:17	0°♁		
evening set	-2704 Feb 19 j 04:36	23°♁27'57				-2699 Jan 15 j 02:13	0°♁		
	-2704 Feb 28 j 08:32	0°♁			desc. node	-2699 Feb 19 j 23:42	25°♁20'37		
	-2704 Apr 11 j 15:41	0°♁				-2699 Feb 26 j 14:44	0°♁		
						-2699 Apr 11 j 10:00	0°♁		
conjunction	-2704 Apr 15 j 04:37	2°♁23'32	-0°12'46			-2699 Jun 02 j 01:02	0°♁		
minimum elong	-2704 Apr 15 j 05:16	2°♁24'37	0°12'46		retrograde	-2699 Jul 15 j 05:34	11°♁22'57		
behind sun begin	-2704 Apr 14 j 16:00	2°♁02'14			min. Earth dist.	-2699 Aug 11 j 12:31	6°♁24'28	0.43660 AU	
behind sun end	-2704 Apr 15 j 18:32	2°♁46'58			greatest brilliancy	-2699 Aug 17 j 23:06	4°♁16'55	-2.5m	
asc. node	-2704 May 07 j 00:31	16°♁58'15			opposition	-2699 Aug 19 j 10:13	3°♁47'47	-5°47'57	
max. Earth dist.	-2704 May 09 j 11:18	18°♁35'21	2.59821 AU			-2699 Sep 01 j 05:04	30°♁		
	-2704 May 26 j 21:14	0°♁			direct	-2699 Sep 20 j 03:13	27°♁35'57		
morning rise	-2704 Jun 05 j 14:42	6°♁18'36				-2699 Oct 09 j 23:56	0°♁		
	-2704 Jul 12 j 17:00	0°♁				-2699 Dec 18 j 04:35	0°♁		
	-2704 Aug 29 j 21:24	0°♁			asc. node	-2699 Dec 27 j 20:04	5°♁21'22		
	-2704 Oct 18 j 23:28	0°♁				-2698 Feb 08 j 03:46	0°♁		
	-2704 Dec 13 j 11:14	0°♁				-2698 Mar 29 j 17:46	0°♁		
retrograde	-2703 Feb 20 j 23:23	20°♁44'55				-2698 May 17 j 06:27	0°♁		
opposition	-2703 Mar 27 j 03:31	13°♁58'08	2°50'49		evening set	-2698 Jun 25 j 06:15	24°♁39'20		
greatest brilliancy	-2703 Mar 28 j 03:13	13°♁37'58	-2.2m			-2698 Jul 03 j 13:51	0°♁		
min. Earth dist.	-2703 Apr 04 j 14:43	11°♁06'11	0.48178 AU		max. Earth dist.	-2698 Jul 21 j 17:28	11°♁46'49	2.62351 AU	
direct	-2703 May 03 j 17:40	5°♁39'46							
desc. node	-2703 May 17 j 23:00	7°♁00'27			conjunction	-2698 Aug 10 j 19:52	25°♁02'29	1°08'57	
	-2703 Jul 11 j 15:21	0°♁			minimum elong	-2698 Aug 10 j 20:26	25°♁03'26	1°09'01	
	-2703 Aug 26 j 11:25	0°♁				-2698 Aug 18 j 06:04	0°♁		
	-2703 Oct 06 j 17:16	0°♁			morning rise	-2698 Sep 26 j 12:42	26°♁49'43		
	-2703 Nov 16 j 01:41	0°♁				-2698 Oct 01 j 01:47	0°♁		
	-2703 Dec 27 j 01:06	0°♁				-2698 Nov 12 j 03:25	0°♁		
	-2702 Feb 07 j 11:11	0°♁				-2698 Dec 22 j 18:59	0°♁		
	-2702 Mar 23 j 15:02	0°♁			desc. node	-2697 Jan 07 j 22:23	12°♁07'23		
asc. node	-2702 Mar 24 j 22:59	0°♁53'11				-2697 Jan 31 j 13:32	0°♁		
evening set	-2702 Apr 08 j 08:43	10°♁25'25				-2697 Mar 12 j 05:59	0°♁		
	-2702 May 08 j 08:45	0°♁				-2697 Apr 22 j 01:29	0°♁		
						-2697 Jun 05 j 09:20	0°♁		
conjunction	-2702 May 28 j 00:30	12°♁39'56	0°34'52			-2697 Aug 03 j 05:14	0°♁		
minimum elong	-2702 May 27 j 23:19	12°♁38'02	0°34'54		retrograde	-2697 Sep 01 j 11:16	5°♁19'14		
max. Earth dist.	-2702 Jun 04 j 10:47	17°♁25'36	2.66063 AU			-2697 Sep 29 j 00:54	30°♁		
	-2702 Jun 24 j 03:06	0°♁			min. Earth dist.	-2697 Oct 03 j 23:16	28°♁10'21	0.56155 AU	
morning rise	-2702 Jul 13 j 13:45	12°♁22'52			opposition	-2697 Oct 10 j 10:06	25°♁39'45	-1°33'39	
	-2702 Aug 10 j 06:36	0°♁			greatest brilliancy	-2697 Oct 10 j 01:57	25°♁47'42	-1.9m	

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:22, page 21

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

asc. node	-2697 Nov 14 j 19:36	17° $\text{K}$ 28'51			-2691 Jan 06 j 06:59	0° $\text{Z}$	
direct	-2697 Nov 15 j 12:22	17° $\text{K}$ 28'39					
	-2696 Jan 05 j 11:22	0° $\text{Y}$		conjunction	-2691 Jan 24 j 20:38	14° $\text{Z}$ 23'02	-1°06'49
	-2696 Mar 05 j 14:53	0° $\text{X}$		minimum elong	-2691 Jan 24 j 20:44	14° $\text{Z}$ 23'14	1°06'53
	-2696 Apr 26 j 09:07	0° $\text{II}$			-2691 Feb 14 j 08:36	0° $\approx$	
	-2696 Jun 13 j 21:20	0° $\text{D}$		max. Earth dist.	-2691 Mar 15 j 15:03	21° $\approx$ 43'09	2.43314 AU
	-2696 Jul 29 j 19:03	0° $\Omega$			-2691 Mar 27 j 01:25	0° $\text{K}$	
evening set	-2696 Aug 03 j 02:41	2° $\Omega$ 54'33		morning rise	-2691 Mar 31 j 05:29	2° $\text{K}$ 59'24	
max. Earth dist.	-2696 Aug 19 j 17:07	14° $\Omega$ 14'24	2.52898 AU		-2691 May 08 j 22:05	0° $\text{Y}$	
	-2696 Sep 11 j 06:06	0° $\text{np}$			-2691 Jun 23 j 06:58	0° $\text{X}$	
				asc. node	-2691 Jul 06 j 18:15	8° $\text{X}$ 33'42	
conjunction	-2696 Sep 21 j 18:43	7° $\text{np}$ 30'24	0°40'15		-2691 Aug 10 j 18:17	0° $\text{II}$	
minimum elong	-2696 Sep 21 j 20:21	7° $\text{np}$ 33'20	0°40'15		-2691 Oct 04 j 03:36	0° $\text{D}$	
	-2696 Oct 22 j 13:57	0° $\underline{\text{D}}$		retrograde	-2691 Dec 17 j 10:46	22° $\text{D}$ 57'12	
morning rise	-2696 Nov 14 j 04:49	16° $\underline{\text{D}}$ 58'18		opposition	-2690 Jan 24 j 21:16	14° $\text{D}$ 09'55	4°53'10
desc. node	-2696 Nov 24 j 22:01	25° $\underline{\text{D}}$ 07'29		greatest brilliancy	-2690 Jan 25 j 15:11	13° $\text{D}$ 52'33	-1.5m
	-2696 Dec 01 j 06:51	0° $\text{ml}$		min. Earth dist.	-2690 Jan 29 j 15:19	12° $\text{D}$ 19'16	0.63392 AU
	-2695 Jan 09 j 01:15	0° $\text{X}$		direct	-2690 Mar 07 j 02:10	4° $\text{D}$ 10'46	
	-2695 Feb 16 j 16:33	0° $\text{Z}$			-2690 May 23 j 00:01	0° $\Omega$	
	-2695 Mar 28 j 02:43	0° $\approx$			-2690 Jul 10 j 22:20	0° $\text{np}$	
	-2695 May 08 j 10:23	0° $\text{K}$		desc. node	-2690 Jul 17 j 16:55	4° $\text{np}$ 34'16	
	-2695 Jun 22 j 07:53	0° $\text{Y}$			-2690 Aug 22 j 13:07	0° $\underline{\text{D}}$	
	-2695 Aug 15 j 02:47	0° $\text{X}$			-2690 Oct 01 j 06:26	0° $\text{ml}$	
asc. node	-2695 Oct 01 j 18:44	14° $\text{X}$ 25'25			-2690 Nov 08 j 18:06	0° $\text{X}$	
retrograde	-2695 Oct 08 j 03:02	14° $\text{X}$ 41'00			-2690 Dec 17 j 05:13	0° $\text{Z}$	
min. Earth dist.	-2695 Nov 14 j 06:39	5° $\text{X}$ 54'03	0.64769 AU		-2689 Jan 25 j 14:53	0° $\approx$	
opposition	-2695 Nov 17 j 03:50	4° $\text{X}$ 44'28	1°45'59	evening set	-2689 Jan 27 j 03:35	1° $\approx$ 08'33	
greatest brilliancy	-2695 Nov 16 j 22:32	4° $\text{X}$ 49'49	-1.5m		-2689 Mar 07 j 16:14	0° $\text{K}$	
	-2695 Nov 29 j 17:37	30° $\text{K}$ $\text{Y}$					
direct	-2695 Dec 26 j 06:23	25° $\text{Y}$ 25'41		conjunction	-2689 Mar 27 j 16:21	14° $\text{K}$ 06'39	-0°33'15
	-2694 Jan 24 j 13:30	0° $\text{X}$		minimum elong	-2689 Mar 27 j 18:06	14° $\text{K}$ 09'42	0°33'14
	-2694 Apr 02 j 19:08	0° $\text{II}$			-2689 Apr 19 j 18:24	0° $\text{Y}$	
	-2694 May 24 j 17:12	0° $\text{D}$		max. Earth dist.	-2689 Apr 28 j 15:26	6° $\text{Y}$ 00'20	2.55959 AU
	-2694 Jul 10 j 16:32	0° $\Omega$		morning rise	-2689 May 21 j 04:43	21° $\text{Y}$ 01'22	
	-2694 Aug 23 j 07:24	0° $\text{np}$		asc. node	-2689 May 24 j 16:53	23° $\text{Y}$ 19'45	
evening set	-2694 Sep 19 j 10:28	19° $\text{np}$ 38'33			-2689 Jun 03 j 21:53	0° $\text{X}$	
	-2694 Oct 03 j 08:54	0° $\underline{\text{D}}$			-2689 Jul 20 j 22:23	0° $\text{II}$	
max. Earth dist.	-2694 Oct 11 j 13:47	6° $\underline{\text{D}}$ 10'37	2.40555 AU		-2689 Sep 07 j 22:22	0° $\text{D}$	
desc. node	-2694 Oct 12 j 20:28	7° $\underline{\text{D}}$ 08'39			-2689 Oct 30 j 13:36	0° $\Omega$	
	-2694 Nov 11 j 15:14	0° $\text{ml}$			-2688 Jan 10 j 18:30	0° $\text{np}$	
				retrograde	-2688 Jan 31 j 05:02	2° $\text{np}$ 19'56	
conjunction	-2694 Nov 16 j 08:28	3° $\text{ml}$ 40'09	-0°23'40		-2688 Feb 19 j 08:35	30° $\text{K}$ $\Omega$	
minimum elong	-2694 Nov 16 j 06:42	3° $\text{ml}$ 36'43	0°23'41	opposition	-2688 Mar 06 j 21:34	24° $\Omega$ 49'56	4°05'02
	-2694 Dec 19 j 22:39	0° $\text{X}$		greatest brilliancy	-2688 Mar 08 j 02:59	24° $\Omega$ 23'21	-1.9m
morning rise	-2693 Jan 21 j 11:21	25° $\text{X}$ 32'38		min. Earth dist.	-2688 Mar 14 j 21:27	21° $\Omega$ 57'11	0.53322 AU
	-2693 Jan 27 j 04:25	0° $\text{Z}$		direct	-2688 Apr 15 j 05:48	15° $\Omega$ 41'27	
	-2693 Mar 07 j 05:37	0° $\approx$		desc. node	-2688 Jun 03 j 16:06	29° $\Omega$ 02'42	
	-2693 Apr 16 j 22:24	0° $\text{K}$			-2688 Jun 05 j 16:03	0° $\text{np}$	
	-2693 May 30 j 02:27	0° $\text{Y}$			-2688 Jul 26 j 09:45	0° $\underline{\text{D}}$	
	-2693 Jul 15 j 21:19	0° $\text{X}$			-2688 Sep 06 j 16:03	0° $\text{ml}$	
asc. node	-2693 Aug 19 j 18:06	20° $\text{X}$ 05'11			-2688 Oct 16 j 11:40	0° $\text{X}$	
	-2693 Sep 08 j 03:28	0° $\text{II}$			-2688 Nov 24 j 22:38	0° $\text{Z}$	
retrograde	-2693 Nov 11 j 18:45	18° $\text{II}$ 48'57			-2687 Jan 04 j 05:35	0° $\approx$	
opposition	-2693 Dec 21 j 13:31	9° $\text{II}$ 15'30	3°54'02		-2687 Feb 15 j 02:15	0° $\text{K}$	
greatest brilliancy	-2693 Dec 21 j 14:46	9° $\text{II}$ 14'14	-1.3m	evening set	-2687 Mar 21 j 15:16	23° $\text{K}$ 47'50	
min. Earth dist.	-2693 Dec 22 j 11:27	8° $\text{II}$ 53'36	0.67311 AU		-2687 Mar 30 j 19:57	0° $\text{Y}$	
	-2692 Jan 21 j 10:42	30° $\text{K}$ $\text{X}$		asc. node	-2687 Apr 10 j 14:28	7° $\text{Y}$ 12'08	
direct	-2692 Jan 31 j 10:09	29° $\text{X}$ 21'31					
	-2692 Feb 10 j 19:28	0° $\text{II}$		conjunction	-2687 May 12 j 06:49	28° $\text{Y}$ 02'21	0°18'02
	-2692 Apr 29 j 06:34	0° $\text{D}$		minimum elong	-2687 May 12 j 06:05	28° $\text{Y}$ 01'08	0°18'03
	-2692 Jun 18 j 18:37	0° $\Omega$			-2687 May 15 j 07:14	0° $\text{X}$	
	-2692 Aug 02 j 10:19	0° $\text{np}$		max. Earth dist.	-2687 May 25 j 20:37	6° $\text{X}$ 50'11	2.64271 AU
desc. node	-2692 Aug 29 j 18:22	19° $\text{np}$ 39'01		morning rise	-2687 Jun 29 j 06:38	28° $\text{X}$ 53'37	
	-2692 Sep 12 j 17:13	0° $\underline{\text{D}}$			-2687 Jul 01 j 00:20	0° $\text{II}$	
	-2692 Oct 21 j 22:02	0° $\text{ml}$			-2687 Aug 17 j 10:18	0° $\text{D}$	
evening set	-2692 Nov 19 j 15:38	22° $\text{ml}$ 32'22			-2687 Oct 04 j 08:13	0° $\Omega$	
	-2692 Nov 29 j 02:38	0° $\text{X}$			-2687 Nov 22 j 08:33	0° $\text{np}$	

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 22

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2686 Jan 14 j 02:34	0°♎		evening set	-2681 Jul 19 j 02:51	17°♊36'35	
retrograde	-2686 Apr 03 j 22:12	26°♎41'24			-2681 Aug 06 j 18:01	0°♎	
desc. node	-2686 Apr 21 j 15:27	24°♎45'25		max. Earth dist.	-2681 Aug 08 j 00:16	0°♎50'50	2.57137 AU
opposition	-2686 May 05 j 07:38	21°♎11'42	-0°55'48				
greatest brilliancy	-2686 May 05 j 12:37	21°♎08'04	-2.8m	conjunction	-2681 Sep 05 j 01:43	20°♎01'38	0°55'52
min. Earth dist.	-2686 May 11 j 15:14	19°♎21'35	0.40666 AU	minimum elong	-2681 Sep 05 j 03:12	20°♎04'12	0°55'53
direct	-2686 Jun 07 j 18:50	14°♎51'15			-2681 Sep 19 j 07:37	0°♎	
	-2686 Jul 29 j 06:14	0°♎		morning rise	-2681 Oct 25 j 00:41	25°♎41'35	
	-2686 Sep 16 j 22:03	0°♎			-2681 Oct 30 j 21:21	0°♎	
	-2686 Oct 30 j 13:36	0°♎			-2681 Dec 09 j 21:49	0°♎	
	-2686 Dec 12 j 12:37	0°♎		desc. node	-2681 Dec 12 j 15:02	2°♎04'09	
	-2685 Jan 25 j 07:03	0°♎			-2680 Jan 17 j 23:48	0°♎	
asc. node	-2685 Feb 26 j 12:59	21°♎32'36			-2680 Feb 25 j 22:12	0°♎	
	-2685 Mar 11 j 09:24	0°♎			-2680 Apr 05 j 16:21	0°♎	
	-2685 Apr 26 j 17:11	0°♎			-2680 May 17 j 14:31	0°♎	
evening set	-2685 May 03 j 21:24	4°♎35'48			-2680 Jul 03 j 08:38	0°♎	
	-2685 Jun 12 j 17:12	0°♎			-2680 Sep 15 j 03:18	0°♎	
max. Earth dist.	-2685 Jun 18 j 19:25	3°♎52'50	2.67230 AU	retrograde	-2680 Sep 24 j 03:51	0°♎32'00	
					-2680 Oct 02 j 21:21	30°♎	
conjunction	-2685 Jun 20 j 10:16	4°♎54'42	0°55'38	asc. node	-2680 Oct 18 j 10:07	26°♎26'20	
minimum elong	-2685 Jun 20 j 09:02	4°♎52'44	0°55'43	min. Earth dist.	-2680 Oct 29 j 15:00	22°♎19'10	0.62047 AU
	-2685 Jul 29 j 16:12	0°♎		opposition	-2680 Nov 02 j 22:58	20°♎35'07	0°37'49
morning rise	-2685 Aug 04 j 16:00	3°♎51'08		greatest brilliancy	-2680 Nov 02 j 20:13	20°♎37'52	-1.6m
	-2685 Sep 14 j 00:13	0°♎		direct	-2680 Dec 11 j 00:39	11°♎38'13	
	-2685 Oct 29 j 12:11	0°♎			-2679 Feb 14 j 01:51	0°♎	
	-2685 Dec 13 j 07:19	0°♎			-2679 Apr 12 j 09:55	0°♎	
	-2684 Jan 26 j 20:17	0°♎			-2679 Jun 01 j 13:23	0°♎	
desc. node	-2684 Mar 08 j 16:50	27°♎40'08			-2679 Jul 17 j 23:48	0°♎	
	-2684 Mar 12 j 07:59	0°♎		evening set	-2679 Aug 30 j 15:59	0°♎07'03	
	-2684 May 03 j 00:55	0°♎			-2679 Aug 30 j 12:01	0°♎	
retrograde	-2684 Jun 20 j 17:56	13°♎40'29		max. Earth dist.	-2679 Sep 15 j 06:09	11°♎18'40	2.45374 AU
min. Earth dist.	-2684 Jul 17 j 12:23	9°♎12'32	0.39554 AU		-2679 Oct 10 j 15:08	0°♎	
greatest brilliancy	-2684 Jul 22 j 02:15	7°♎52'15	-2.8m				
opposition	-2684 Jul 23 j 08:42	7°♎29'50	-6°40'48	conjunction	-2679 Oct 23 j 15:29	9°♎47'28	0°04'07
direct	-2684 Aug 22 j 14:01	2°♎09'45		minimum elong	-2679 Oct 23 j 15:45	9°♎47'58	0°04'06
	-2684 Nov 09 j 09:54	0°♎		behind sun begin	-2679 Oct 22 j 16:10	9°♎03'22	
	-2684 Dec 30 j 13:45	0°♎		behind sun end	-2679 Oct 24 j 15:20	10°♎32'38	
asc. node	-2683 Jan 13 j 11:38	8°♎31'11		desc. node	-2679 Oct 29 j 13:29	14°♎17'03	
	-2683 Feb 17 j 04:47	0°♎			-2679 Nov 19 j 00:50	0°♎	
	-2683 Apr 06 j 09:54	0°♎		morning rise	-2679 Dec 23 j 15:56	27°♎00'12	
	-2683 May 24 j 07:42	0°♎			-2679 Dec 27 j 11:38	0°♎	
evening set	-2683 Jun 10 j 11:56	10°♎51'31			-2678 Feb 03 j 20:04	0°♎	
	-2683 Jul 10 j 10:13	0°♎			-2678 Mar 14 j 23:19	0°♎	
max. Earth dist.	-2683 Jul 11 j 19:06	0°♎53'04	2.64775 AU		-2678 Apr 24 j 19:00	0°♎	
					-2678 Jun 07 j 07:58	0°♎	
conjunction	-2683 Jul 26 j 18:50	10°♎36'41	1°10'41		-2678 Jul 25 j 11:01	0°♎	
minimum elong	-2683 Jul 26 j 18:44	10°♎36'31	1°10'46	asc. node	-2678 Sep 05 j 10:37	21°♎50'29	
	-2683 Aug 25 j 04:23	0°♎			-2678 Sep 26 j 07:12	0°♎	
morning rise	-2683 Sep 10 j 08:19	10°♎51'23		retrograde	-2678 Oct 29 j 08:23	5°♎58'06	
	-2683 Oct 08 j 07:47	0°♎			-2678 Nov 28 j 14:59	30°♎	
	-2683 Nov 19 j 21:27	0°♎		opposition	-2678 Dec 08 j 08:20	26°♎12'40	3°12'12
	-2683 Dec 31 j 04:08	0°♎		greatest brilliancy	-2678 Dec 08 j 05:15	26°♎15'46	-1.3m
desc. node	-2682 Jan 24 j 16:47	18°♎08'16		min. Earth dist.	-2678 Dec 07 j 18:11	26°♎26'52	0.67067 AU
	-2682 Feb 09 j 15:40	0°♎		direct	-2677 Jan 17 j 15:52	16°♎29'21	
	-2682 Mar 22 j 04:43	0°♎			-2677 Mar 12 j 19:59	0°♎	
	-2682 May 03 j 10:53	0°♎			-2677 May 10 j 09:23	0°♎	
	-2682 Jun 21 j 07:54	0°♎			-2677 Jun 27 j 23:55	0°♎	
retrograde	-2682 Aug 15 j 14:30	17°♎00'04			-2677 Aug 11 j 02:48	0°♎	
min. Earth dist.	-2682 Sep 14 j 22:27	10°♎40'54	0.51433 AU	desc. node	-2677 Sep 16 j 12:05	26°♎26'38	
opposition	-2682 Sep 22 j 12:29	7°♎50'51	-3°11'32		-2677 Sep 21 j 06:15	0°♎	
greatest brilliancy	-2682 Sep 21 j 17:20	8°♎08'49	-2.1m	evening set	-2677 Oct 25 j 09:46	26°♎04'53	
direct	-2682 Oct 27 j 01:51	0°♎19'28			-2677 Oct 30 j 10:46	0°♎	
asc. node	-2682 Dec 01 j 10:10	7°♎06'22			-2677 Dec 07 j 15:29	0°♎	
	-2681 Jan 21 j 05:33	0°♎					
	-2681 Mar 15 j 23:05	0°♎		conjunction	-2677 Dec 28 j 18:35	16°♎39'13	-0°59'37
	-2681 May 05 j 01:35	0°♎		minimum elong	-2677 Dec 28 j 15:58	16°♎34'02	0°59'40
	-2681 Jun 21 j 23:43	0°♎			-2676 Jan 14 j 19:17	0°♎	

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 23

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

max. Earth dist.	-2676 Feb 04 j 16:04	16° $\text{Z}$ 10'07	2.38530 AU		-2671 Feb 12 j 06:32	0° $\text{Z}$	
	-2676 Feb 22 j 19:35	0° $\approx$		retrograde	-2671 Mar 06 j 18:15	2° $\text{Z}$ 51'37	
morning rise	-2676 Mar 06 j 05:09	9° $\approx$ 18'24			-2671 Mar 28 j 08:52	30° $\text{R}$ $\text{M}$	
	-2676 Apr 03 j 10:51	0° $\text{X}$		opposition	-2671 Apr 09 j 01:00	26° $\text{M}$ 31'45	1°45'47
	-2676 May 16 j 08:00	0° $\text{Y}$		greatest brilliancy	-2671 Apr 09 j 16:16	26° $\text{M}$ 19'22	-2.4m
	-2676 Jul 01 j 00:23	0° $\text{Z}$		min. Earth dist.	-2671 Apr 17 j 08:04	23° $\text{M}$ 51'23	0.45310 AU
asc. node	-2676 Jul 23 j 09:38	13° $\text{Z}$ 53'56		desc. node	-2671 May 08 j 09:25	19° $\text{M}$ 11'00	
	-2676 Aug 19 j 17:56	0° $\text{II}$		direct	-2671 May 15 j 08:07	18° $\text{M}$ 50'46	
	-2676 Oct 19 j 17:17	0° $\text{Z}$			-2671 Jun 27 j 19:24	0° $\text{Z}$	
retrograde	-2676 Dec 02 j 15:42	9° $\text{Z}$ 33'56			-2671 Aug 18 j 06:42	0° $\text{M}$	
opposition	-2675 Jan 10 j 17:50	0° $\text{Z}$ 25'51	4°39'21		-2671 Sep 30 j 00:27	0° $\text{Z}$	
greatest brilliancy	-2675 Jan 11 j 04:41	0° $\text{Z}$ 15'10	-1.4m		-2671 Nov 10 j 02:59	0° $\text{Z}$	
	-2675 Jan 11 j 20:05	30° $\text{R}$ $\text{II}$			-2671 Dec 21 j 14:33	0° $\approx$	
min. Earth dist.	-2675 Jan 13 j 23:58	29° $\text{II}$ 08'56	0.65693 AU		-2670 Feb 02 j 09:13	0° $\text{X}$	
direct	-2675 Feb 20 j 23:46	20° $\text{II}$ 24'30		asc. node	-2670 Mar 15 j 04:01	27° $\text{X}$ 34'55	
	-2675 Apr 05 j 13:09	0° $\text{Z}$			-2670 Mar 18 j 19:23	0° $\text{Y}$	
	-2675 Jun 03 j 11:29	0° $\text{Z}$		evening set	-2670 Apr 17 j 22:53	19° $\text{Y}$ 47'32	
	-2675 Jul 19 j 23:17	0° $\text{M}$			-2670 May 03 j 16:59	0° $\text{Z}$	
desc. node	-2675 Aug 03 j 09:58	10° $\text{M}$ 04'22					
	-2675 Aug 30 j 20:51	0° $\text{Z}$		conjunction	-2670 Jun 05 j 17:07	21° $\text{Z}$ 10'54	0°43'24
	-2675 Oct 09 j 07:20	0° $\text{M}$		minimum elong	-2670 Jun 05 j 15:50	21° $\text{Z}$ 08'50	0°43'27
	-2675 Nov 16 j 14:50	0° $\text{Z}$		max. Earth dist.	-2670 Jun 09 j 20:11	23° $\text{Z}$ 49'02	2.66722 AU
	-2675 Dec 24 j 21:57	0° $\text{Z}$			-2670 Jun 19 j 12:44	0° $\text{II}$	
evening set	-2674 Jan 01 j 12:58	5° $\text{Z}$ 54'33		morning rise	-2670 Jul 21 j 15:37	20° $\text{II}$ 28'21	
	-2674 Feb 02 j 03:05	0° $\approx$			-2670 Aug 05 j 13:58	0° $\text{Z}$	
					-2670 Sep 21 j 08:53	0° $\text{Z}$	
conjunction	-2674 Mar 05 j 18:56	23° $\approx$ 22'25	-0°51'49		-2670 Nov 06 j 19:59	0° $\text{M}$	
minimum elong	-2674 Mar 05 j 21:22	23° $\approx$ 26'48	0°51'50		-2670 Dec 23 j 09:23	0° $\text{Z}$	
	-2674 Mar 14 j 23:31	0° $\text{X}$			-2669 Feb 09 j 07:02	0° $\text{M}$	
max. Earth dist.	-2674 Apr 15 j 00:16	21° $\text{X}$ 50'20	2.51363 AU	desc. node	-2669 Mar 26 j 09:31	25° $\text{M}$ 21'45	
	-2674 Apr 26 j 21:48	0° $\text{Y}$			-2669 Apr 05 j 02:45	0° $\text{Z}$	
morning rise	-2674 May 03 j 04:40	4° $\text{Y}$ 16'06		retrograde	-2669 May 23 j 10:31	12° $\text{Z}$ 37'46	
asc. node	-2674 Jun 10 j 08:36	29° $\text{Y}$ 33'33		opposition	-2669 Jun 22 j 23:59	7° $\text{Z}$ 29'28	-5°42'12
	-2674 Jun 11 j 00:54	0° $\text{Z}$		min. Earth dist.	-2669 Jun 21 j 17:07	7° $\text{Z}$ 49'57	0.37633 AU
	-2674 Jul 28 j 09:50	0° $\text{II}$		greatest brilliancy	-2669 Jun 22 j 16:15	7° $\text{Z}$ 34'36	-2.9m
	-2674 Sep 16 j 16:17	0° $\text{Z}$		direct	-2669 Jul 22 j 19:06	2° $\text{Z}$ 31'14	
	-2674 Nov 13 j 07:13	0° $\text{Z}$			-2669 Oct 07 j 00:29	0° $\text{Z}$	
retrograde	-2673 Jan 12 j 06:46	16° $\text{Z}$ 05'40			-2669 Nov 25 j 02:26	0° $\approx$	
opposition	-2673 Feb 18 j 05:34	8° $\text{Z}$ 00'30	4°42'13		-2668 Jan 10 j 18:35	0° $\text{X}$	
greatest brilliancy	-2673 Feb 19 j 09:01	7° $\text{Z}$ 34'46	-1.7m	asc. node	-2668 Jan 31 j 02:42	13° $\text{X}$ 05'28	
min. Earth dist.	-2673 Feb 25 j 03:30	5° $\text{Z}$ 25'08	0.57907 AU		-2668 Feb 26 j 12:27	0° $\text{Y}$	
	-2673 Mar 15 j 02:24	30° $\text{R}$ $\text{Z}$			-2668 Apr 13 j 18:55	0° $\text{Z}$	
direct	-2673 Mar 30 j 15:36	28° $\text{Z}$ 21'54		evening set	-2668 May 26 j 18:24	27° $\text{Z}$ 09'35	
	-2673 Apr 15 j 20:14	0° $\text{Z}$			-2668 May 31 j 06:00	0° $\text{II}$	
desc. node	-2673 Jun 21 j 08:44	28° $\text{Z}$ 58'18		max. Earth dist.	-2668 Jul 02 j 06:36	20° $\text{II}$ 23'19	2.66369 AU
	-2673 Jun 23 j 01:53	0° $\text{M}$					
	-2673 Aug 07 j 11:33	0° $\text{Z}$		conjunction	-2668 Jul 12 j 05:38	26° $\text{II}$ 46'45	1°07'58
	-2673 Sep 17 j 06:20	0° $\text{M}$		minimum elong	-2668 Jul 12 j 04:58	26° $\text{II}$ 45'39	1°08'03
	-2673 Oct 26 j 08:12	0° $\text{Z}$			-2668 Jul 17 j 05:42	0° $\text{Z}$	
	-2673 Dec 04 j 06:24	0° $\text{Z}$		morning rise	-2668 Aug 26 j 06:38	26° $\text{Z}$ 06'46	
	-2672 Jan 13 j 02:27	0° $\approx$			-2668 Sep 01 j 03:38	0° $\text{Z}$	
	-2672 Feb 23 j 13:24	0° $\text{X}$			-2668 Oct 15 j 16:58	0° $\text{M}$	
evening set	-2672 Mar 02 j 04:36	5° $\text{X}$ 22'33			-2668 Nov 27 j 22:15	0° $\text{Z}$	
	-2672 Apr 06 j 23:15	0° $\text{Y}$			-2667 Jan 09 j 01:53	0° $\text{M}$	
				desc. node	-2667 Feb 10 j 08:51	23° $\text{M}$ 17'18	
conjunction	-2672 Apr 25 j 10:39	12° $\text{Y}$ 22'55	-0°01'06		-2667 Feb 19 j 15:55	0° $\text{Z}$	
minimum elong	-2672 Apr 25 j 10:41	12° $\text{Y}$ 22'57	0°01'05		-2667 Apr 02 j 19:26	0° $\text{Z}$	
behind sun begin	-2672 Apr 24 j 13:15	11° $\text{Y}$ 47'21			-2667 May 18 j 15:20	0° $\approx$	
behind sun end	-2672 Apr 26 j 08:07	12° $\text{Y}$ 58'32		retrograde	-2667 Jul 27 j 10:33	25° $\approx$ 34'50	
asc. node	-2672 Apr 27 j 06:56	13° $\text{Y}$ 36'24		min. Earth dist.	-2667 Aug 24 j 15:23	20° $\approx$ 09'05	0.46386 AU
max. Earth dist.	-2672 May 15 j 15:28	25° $\text{Y}$ 41'53	2.61637 AU	greatest brilliancy	-2667 Aug 31 j 11:55	17° $\approx$ 46'00	-2.4m
	-2672 May 22 j 05:41	0° $\text{Z}$		opposition	-2667 Sep 01 j 18:37	17° $\approx$ 19'08	-4°54'51
morning rise	-2672 Jun 14 j 10:41	14° $\text{Z}$ 59'45		direct	-2667 Oct 04 j 13:33	10° $\approx$ 36'51	
	-2672 Jul 07 j 23:27	0° $\text{II}$			-2667 Dec 08 j 05:13	0° $\text{X}$	
	-2672 Aug 24 j 19:28	0° $\text{Z}$		asc. node	-2667 Dec 18 j 02:26	4° $\text{X}$ 55'14	
	-2672 Oct 12 j 22:05	0° $\text{Z}$			-2666 Feb 01 j 17:56	0° $\text{Y}$	
	-2672 Dec 04 j 03:32	0° $\text{M}$			-2666 Mar 24 j 10:30	0° $\text{Z}$	

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 24

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2666 May 12 j 10:37	0°♊			-2661 Mar 02 j 08:27	0°♊	
	-2666 Jun 28 j 22:56	0°♋			-2661 Apr 11 j 23:38	0°♋	
evening set	-2666 Jul 03 j 19:57	3°♋08'29			-2661 May 24 j 23:22	0°♌	
max. Earth dist.	-2666 Jul 27 j 20:12	18°♋48'27	2.60711 AU		-2661 Jul 10 j 04:44	0°♍	
	-2666 Aug 13 j 16:02	0°♎		asc. node	-2661 Aug 10 j 01:20	18°♍25'56	
					-2661 Aug 31 j 02:59	0°♏	
conjunction	-2666 Aug 19 j 17:42	4°♎04'54	1°05'42	retrograde	-2661 Nov 19 j 14:50	26°♏36'25	
minimum elong	-2666 Aug 19 j 18:38	4°♎06'29	1°05'45	opposition	-2661 Dec 29 j 04:34	17°♏11'00	4°13'38
	-2666 Sep 26 j 09:58	0°♐		greatest brilliancy	-2661 Dec 29 j 08:55	17°♏06'40	-1.3m
morning rise	-2666 Oct 06 j 08:11	6°♐59'53		min. Earth dist.	-2661 Dec 30 j 22:17	16°♏29'30	0.67021 AU
	-2666 Nov 07 j 07:21	0°♑		direct	-2660 Feb 08 j 05:54	7°♏13'02	
	-2666 Dec 17 j 17:15	0°♒			-2660 Apr 21 j 15:17	0°♐	
desc. node	-2666 Dec 29 j 08:10	8°♒46'49			-2660 Jun 13 j 02:31	0°♑	
	-2665 Jan 26 j 05:00	0°♓			-2660 Jul 28 j 07:38	0°♒	
	-2665 Mar 06 j 13:17	0°♈		desc. node	-2660 Aug 20 j 03:51	16°♒15'51	
	-2665 Apr 15 j 20:28	0°♉			-2660 Sep 07 j 19:12	0°♓	
	-2665 May 28 j 22:05	0°♊			-2660 Oct 17 j 01:47	0°♒	
	-2665 Jul 19 j 02:51	0°♋			-2660 Nov 24 j 06:53	0°♓	
retrograde	-2665 Sep 10 j 10:27	15°♋13'35		evening set	-2660 Dec 05 j 04:35	8°♓35'54	
min. Earth dist.	-2665 Oct 14 j 01:05	7°♋39'56	0.58476 AU		-2659 Jan 01 j 11:23	0°♈	
opposition	-2665 Oct 19 j 18:23	5°♋24'24	-0°42'00				
greatest brilliancy	-2665 Oct 19 j 15:08	5°♋27'37	-1.8m	conjunction	-2659 Feb 09 j 02:32	29°♈39'37	-1°04'23
	-2665 Nov 04 j 03:23	30°♋		minimum elong	-2659 Feb 09 j 04:04	29°♈42'31	1°04'26
asc. node	-2665 Nov 05 j 01:29	29°♋44'41			-2659 Feb 09 j 13:21	0°♉	
direct	-2665 Nov 25 j 14:32	26°♋55'02			-2659 Mar 22 j 06:23	0°♊	
	-2665 Dec 18 j 23:10	0°♋		max. Earth dist.	-2659 Mar 28 j 16:07	4°♊35'21	2.46258 AU
	-2664 Feb 27 j 18:29	0°♌		morning rise	-2659 Apr 13 j 00:26	15°♊26'03	
	-2664 Apr 21 j 00:10	0°♍			-2659 May 04 j 02:23	0°♋	
	-2664 Jun 09 j 00:40	0°♎			-2659 Jun 18 j 07:32	0°♌	
	-2664 Jul 25 j 02:47	0°♏		asc. node	-2659 Jun 26 j 23:37	5°♌34'00	
evening set	-2664 Aug 12 j 17:53	12°♏38'34			-2659 Aug 05 j 06:04	0°♍	
max. Earth dist.	-2664 Aug 28 j 07:37	23°♏26'50	2.50322 AU		-2659 Sep 26 j 14:23	0°♎	
	-2664 Sep 06 j 14:42	0°♐			-2659 Dec 10 j 22:01	0°♏	
				retrograde	-2659 Dec 26 j 10:29	1°♏22'42	
conjunction	-2664 Oct 02 j 16:39	18°♐47'27	0°28'35		-2658 Jan 10 j 02:50	30°♏	
minimum elong	-2664 Oct 02 j 18:04	18°♐50'02	0°28'34	opposition	-2658 Feb 02 j 09:32	22°♏48'52	4°54'09
	-2664 Oct 17 j 21:14	0°♑		greatest brilliancy	-2658 Feb 03 j 07:13	22°♏28'02	-1.5m
desc. node	-2664 Nov 15 j 06:31	21°♑24'05		min. Earth dist.	-2658 Feb 07 j 22:27	20°♏41'10	0.61712 AU
	-2664 Nov 26 j 11:53	0°♒		direct	-2658 Mar 15 j 09:49	12°♏54'15	
morning rise	-2664 Nov 27 j 12:40	0°♒47'41			-2658 May 13 j 20:09	0°♑	
	-2663 Jan 04 j 03:32	0°♓			-2658 Jul 04 j 15:38	0°♒	
	-2663 Feb 11 j 15:51	0°♈		desc. node	-2658 Jul 08 j 02:35	2°♒15'44	
	-2663 Mar 22 j 22:32	0°♉			-2658 Aug 17 j 00:16	0°♓	
	-2663 May 02 j 23:42	0°♊			-2658 Sep 26 j 01:05	0°♒	
	-2663 Jun 16 j 04:23	0°♋			-2658 Nov 03 j 16:45	0°♓	
	-2663 Aug 05 j 21:22	0°♌			-2658 Dec 12 j 06:33	0°♈	
asc. node	-2663 Sep 22 j 01:03	19°♌31'20			-2657 Jan 20 j 18:35	0°♉	
retrograde	-2663 Oct 15 j 22:42	22°♌52'08		evening set	-2657 Feb 09 j 12:37	14°♉34'39	
min. Earth dist.	-2663 Nov 22 j 22:09	13°♌48'29	0.65849 AU		-2657 Mar 02 j 21:52	0°♊	
opposition	-2663 Nov 25 j 00:04	12°♌58'13	2°20'42				
greatest brilliancy	-2663 Nov 24 j 18:45	13°♌03'35	-1.4m	conjunction	-2657 Apr 08 j 01:25	25°♊13'51	-0°21'29
direct	-2662 Jan 03 j 14:06	3°♌29'32		minimum elong	-2657 Apr 08 j 02:33	25°♊15'46	0°21'27
	-2662 Mar 26 j 15:30	0°♏			-2657 Apr 15 j 01:23	0°♋	
	-2662 May 19 j 06:21	0°♐		max. Earth dist.	-2657 May 05 j 16:48	13°♋52'37	2.58185 AU
	-2662 Jul 05 j 17:54	0°♑		asc. node	-2657 May 14 j 21:44	19°♋58'33	
	-2662 Aug 18 j 13:03	0°♒		morning rise	-2657 May 30 j 18:18	0°♌22'15	
	-2662 Sep 28 j 15:18	0°♓			-2657 May 30 j 04:38	0°♍	
evening set	-2662 Oct 01 j 17:47	2°♓19'48			-2657 Jul 16 j 01:21	0°♎	
desc. node	-2662 Oct 03 j 04:34	3°♓25'15			-2657 Sep 02 j 12:29	0°♏	
max. Earth dist.	-2662 Nov 05 j 23:15	29°♓17'33	2.38358 AU		-2657 Oct 23 j 11:37	0°♑	
	-2662 Nov 06 j 21:06	0°♔			-2657 Dec 21 j 17:31	0°♒	
				retrograde	-2656 Feb 12 j 02:40	12°♒54'21	
conjunction	-2662 Dec 01 j 02:47	18°♔57'28	-0°38'59	opposition	-2656 Mar 18 j 00:13	5°♒47'07	3°27'39
minimum elong	-2662 Nov 30 j 23:59	18°♔51'59	0°39'01	greatest brilliancy	-2656 Mar 19 j 03:29	5°♒23'12	-2.1m
	-2662 Dec 15 j 03:28	0°♕		min. Earth dist.	-2656 Mar 26 j 08:59	2°♒51'58	0.50522 AU
	-2661 Jan 22 j 08:09	0°♖			-2656 Apr 04 j 16:05	30°♒	
morning rise	-2661 Feb 07 j 03:12	12°♖15'25		direct	-2656 Apr 25 j 10:57	27°♒03'42	



## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 25

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2656 May 16 j 22:58	0°♎		conjunction	-2651 Aug 04 j 07:57	19°♊12'54	1°10'14
desc. node	-2656 May 25 j 01:09	2°♎26'05		minimum elong	-2651 Aug 04 j 08:14	19°♊13'21	1°10'19
	-2656 Jul 18 j 03:22	0°♊			-2651 Aug 20 j 13:54	0°♊	
	-2656 Aug 31 j 01:22	0°♎		morning rise	-2651 Sep 19 j 10:32	20°♊13'45	
	-2656 Oct 10 j 13:55	0°♊			-2651 Oct 03 j 13:48	0°♎	
	-2656 Nov 19 j 11:05	0°♊			-2651 Nov 14 j 21:14	0°♊	
	-2656 Dec 30 j 01:40	0°♊			-2651 Dec 25 j 19:43	0°♎	
	-2655 Feb 10 j 04:09	0°♊		desc. node	-2650 Jan 15 j 00:35	15°♎04'36	
	-2655 Mar 26 j 02:05	0°♎			-2650 Feb 03 j 21:26	0°♊	
evening set	-2655 Mar 31 j 22:26	3°♎54'21			-2650 Mar 15 j 21:26	0°♊	
asc. node	-2655 Mar 31 j 20:37	3°♎51'20			-2650 Apr 26 j 04:18	0°♊	
	-2655 May 10 j 15:45	0°♊			-2650 Jun 10 j 18:00	0°♊	
				retrograde	-2650 Aug 25 j 10:56	28°♊08'42	
conjunction	-2655 May 21 j 10:05	6°♊57'44	0°28'07	min. Earth dist.	-2650 Sep 26 j 00:15	21°♊20'54	0.54108 AU
minimum elong	-2655 May 21 j 09:02	6°♊56'04	0°28'09	opposition	-2650 Oct 02 j 23:43	18°♊40'17	-2°14'08
max. Earth dist.	-2655 May 31 j 12:50	13°♊28'26	2.65362 AU	greatest brilliancy	-2650 Oct 02 j 11:08	18°♊52'23	-2.0m
	-2655 Jun 26 j 08:53	0°♎		direct	-2650 Nov 07 j 09:27	10°♊45'54	
morning rise	-2655 Jul 07 j 12:57	7°♎06'42		asc. node	-2650 Nov 21 j 16:58	12°♊00'46	
	-2655 Aug 12 j 14:42	0°♊			-2649 Jan 12 j 04:33	0°♎	
	-2655 Sep 29 j 01:07	0°♊			-2649 Mar 09 j 23:41	0°♊	
	-2655 Nov 15 j 22:12	0°♎			-2649 Apr 29 j 23:54	0°♎	
	-2654 Jan 04 j 13:08	0°♊			-2649 Jun 17 j 06:34	0°♊	
	-2654 Mar 02 j 19:00	0°♎		evening set	-2649 Jul 28 j 02:59	26°♊37'50	
desc. node	-2654 Apr 12 j 01:40	11°♎55'18			-2649 Aug 02 j 03:49	0°♊	
retrograde	-2654 Apr 21 j 08:28	12°♎27'25		max. Earth dist.	-2649 Aug 15 j 03:02	8°♊46'09	2.54875 AU
opposition	-2654 May 22 j 00:31	7°♎18'33	-2°47'25				
greatest brilliancy	-2654 May 22 j 08:58	7°♎12'42	-2.9m	conjunction	-2649 Sep 14 j 22:34	0°♎09'34	0°47'37
min. Earth dist.	-2654 May 26 j 02:03	6°♎11'11	0.38802 AU	minimum elong	-2649 Sep 15 j 00:12	0°♎12'28	0°47'38
direct	-2654 Jun 22 j 20:32	1°♎40'06			-2649 Sep 14 j 17:09	0°♎	
	-2654 Sep 06 j 08:18	0°♊			-2649 Oct 26 j 04:23	0°♊	
	-2654 Oct 23 j 00:38	0°♊		morning rise	-2649 Nov 05 j 16:04	7°♊47'39	
	-2654 Dec 06 j 07:18	0°♊		desc. node	-2649 Dec 03 j 00:19	28°♊26'59	
	-2653 Jan 19 j 19:50	0°♊			-2649 Dec 05 j 01:04	0°♎	
asc. node	-2653 Feb 16 j 18:50	18°♊30'04			-2648 Jan 12 j 22:51	0°♊	
	-2653 Mar 06 j 09:12	0°♎			-2648 Feb 20 j 16:38	0°♊	
	-2653 Apr 21 j 23:29	0°♊			-2648 Mar 31 j 05:06	0°♊	
evening set	-2653 May 12 j 17:18	13°♊13'03			-2648 May 11 j 16:36	0°♊	
	-2653 Jun 08 j 02:41	0°♎			-2648 Jun 26 j 02:51	0°♎	
max. Earth dist.	-2653 Jun 24 j 03:20	10°♎12'24	2.67144 AU		-2648 Aug 22 j 06:42	0°♊	
				retrograde	-2648 Oct 02 j 06:21	9°♊11'35	
conjunction	-2653 Jun 28 j 18:33	13°♎09'43	1°01'14	asc. node	-2648 Oct 08 j 16:23	8°♊54'32	
minimum elong	-2653 Jun 28 j 17:28	13°♎07'59	1°01'18	min. Earth dist.	-2648 Nov 07 j 15:59	0°♊39'22	0.63673 AU
	-2653 Jul 25 j 01:24	0°♊			-2648 Nov 09 j 07:12	30°♊	
morning rise	-2653 Aug 12 j 19:32	12°♊06'43		opposition	-2648 Nov 11 j 05:00	29°♎13'55	1°18'50
	-2653 Sep 09 j 05:24	0°♊		greatest brilliancy	-2648 Nov 11 j 00:15	29°♎18'42	-1.5m
	-2653 Oct 24 j 08:23	0°♎		direct	-2648 Dec 19 j 20:47	20°♎04'23	
	-2653 Dec 07 j 11:46	0°♊			-2647 Feb 03 j 02:14	0°♊	
	-2652 Jan 19 j 23:18	0°♎			-2647 Apr 06 j 06:39	0°♎	
desc. node	-2652 Feb 28 j 02:07	26°♎58'55			-2647 May 27 j 10:12	0°♊	
	-2652 Mar 03 j 12:17	0°♊			-2647 Jul 13 j 05:04	0°♊	
	-2652 Apr 18 j 09:42	0°♊			-2647 Aug 25 j 20:12	0°♎	
	-2652 Jun 29 j 15:43	0°♊		evening set	-2647 Sep 10 j 13:58	11°♎17'37	
retrograde	-2652 Jul 05 j 02:22	0°♊12'44		max. Earth dist.	-2647 Sep 28 j 10:43	24°♎23'33	2.42660 AU
	-2652 Jul 10 j 13:06	30°♊			-2647 Oct 05 j 23:26	0°♊	
min. Earth dist.	-2652 Jul 31 j 21:11	25°♊32'31	0.41632 AU	desc. node	-2647 Oct 19 j 23:18	10°♊32'33	
greatest brilliancy	-2652 Aug 06 j 17:07	23°♊42'57	-2.6m				
opposition	-2652 Aug 08 j 04:35	23°♊15'02	-6°20'14	conjunction	-2647 Nov 05 j 15:09	23°♊16'52	-0°11'33
direct	-2652 Sep 08 j 02:43	17°♊27'54		minimum elong	-2647 Nov 05 j 14:19	23°♊15'16	0°11'33
	-2652 Oct 27 j 02:45	0°♊		behind sun begin	-2647 Nov 04 j 20:08	22°♊40'18	
	-2652 Dec 23 j 04:39	0°♊		behind sun end	-2647 Nov 06 j 08:30	23°♊50'16	
asc. node	-2651 Jan 03 j 17:36	6°♊45'02			-2647 Nov 14 j 07:56	0°♎	
	-2651 Feb 11 j 10:34	0°♎			-2647 Dec 22 j 17:01	0°♊	
	-2651 Apr 01 j 08:34	0°♊		morning rise	-2646 Jan 08 j 15:11	13°♊17'55	
	-2651 May 19 j 14:32	0°♎			-2646 Jan 29 j 23:26	0°♊	
evening set	-2651 Jun 18 j 22:37	19°♎10'21			-2646 Mar 10 j 00:30	0°♊	
	-2651 Jul 05 j 20:09	0°♊			-2646 Apr 19 j 17:00	0°♊	
max. Earth dist.	-2651 Jul 17 j 11:31	7°♊31'55	2.63532 AU		-2646 Jun 01 j 22:22	0°♎	

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 26

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2646 Jul 19 j 02:13	0°♄				-2641 Sep 11 j 10:30	0°♍	
asc. node	-2646 Aug 26 j 15:44	21°♄30'20				-2641 Oct 20 j 21:29	0°♌	
	-2646 Sep 13 j 12:42	0°♍				-2641 Nov 29 j 01:35	0°♋	
retrograde	-2646 Nov 06 j 02:03	13°♍49'07				-2640 Jan 08 j 02:17	0°♊	
opposition	-2646 Dec 15 j 23:07	4°♍09'44	3°37'43			-2640 Feb 18 j 17:11	0°♑	
greatest brilliancy	-2646 Dec 15 j 22:12	4°♍10'40	-1.3m	evening set		-2640 Mar 13 j 11:36	16°♑32'38	
min. Earth dist.	-2646 Dec 16 j 04:32	4°♍04'19	0.67334 AU			-2640 Apr 02 j 05:54	0°♑	
	-2646 Dec 26 j 17:36	30°♌♄		asc. node		-2640 Apr 17 j 12:23	10°♑13'36	
direct	-2645 Jan 25 j 14:10	24°♌20'04						
	-2645 Feb 27 j 13:27	0°♍		conjunction		-2640 May 05 j 05:22	21°♑55'33	0°10'14
	-2645 May 04 j 00:21	0°♌		minimum elong		-2640 May 05 j 04:55	21°♑54'48	0°10'16
	-2645 Jun 22 j 16:54	0°♎		behind sun begin		-2640 May 04 j 12:43	21°♑28'15	
	-2645 Aug 06 j 04:25	0°♏		behind sun end		-2640 May 05 j 21:06	22°♑21'21	
desc. node	-2645 Sep 06 j 20:59	22°♏52'24				-2640 May 17 j 13:55	0°♄	
	-2645 Sep 16 j 10:51	0°♑		max. Earth dist.		-2640 May 21 j 15:02	2°♄37'50	2.63193 AU
	-2645 Oct 25 j 16:16	0°♍		morning rise		-2640 Jun 23 j 00:50	23°♄28'54	
evening set	-2645 Nov 08 j 21:41	11°♍07'09				-2640 Jul 03 j 06:26	0°♍	
	-2645 Dec 02 j 21:08	0°♌				-2640 Aug 19 j 19:52	0°♌	
	-2644 Jan 10 j 00:47	0°♋				-2640 Oct 07 j 04:36	0°♎	
						-2640 Nov 26 j 07:55	0°♏	
conjunction	-2644 Jan 13 j 16:06	2°♋50'11	-1°05'32			-2639 Jan 21 j 22:37	0°♑	
minimum elong	-2644 Jan 13 j 14:53	2°♋47'48	1°05'36	retrograde		-2639 Mar 22 j 02:32	16°♑14'01	
	-2644 Feb 18 j 00:55	0°♊		opposition		-2639 Apr 23 j 07:39	10°♑22'37	0°21'04
max. Earth dist.	-2644 Mar 02 j 13:21	10°♊08'29	2.41000 AU	greatest brilliancy		-2639 Apr 23 j 10:42	10°♑20'17	-2.6m
morning rise	-2644 Mar 20 j 18:12	23°♊33'08		desc. node		-2639 Apr 28 j 17:48	8°♑42'57	
	-2644 Mar 29 j 15:45	0°♑		min. Earth dist.		-2639 Apr 30 j 19:53	8°♑05'18	0.42602 AU
	-2644 May 11 j 10:48	0°♑		direct		-2639 May 28 j 03:15	3°♑25'08	
	-2644 Jun 25 j 20:46	0°♄				-2639 Aug 07 j 23:52	0°♍	
asc. node	-2644 Jul 13 j 15:43	11°♄13'25				-2639 Sep 22 j 12:15	0°♌	
	-2644 Aug 13 j 17:06	0°♍				-2639 Nov 03 j 19:02	0°♋	
	-2644 Oct 08 j 23:01	0°♌				-2639 Dec 15 j 23:10	0°♊	
retrograde	-2644 Dec 11 j 00:47	17°♌37'14				-2638 Jan 28 j 05:00	0°♑	
opposition	-2643 Jan 18 j 18:21	8°♌40'04	4°48'40	asc. node		-2638 Mar 05 j 10:51	24°♑23'10	
greatest brilliancy	-2643 Jan 19 j 09:05	8°♌25'40	-1.4m			-2638 Mar 13 j 22:28	0°♑	
min. Earth dist.	-2643 Jan 22 j 19:57	7°♌04'36	0.64550 AU	evening set		-2638 Apr 27 j 03:57	28°♑47'58	
	-2643 Feb 14 j 16:25	30°♌♍				-2638 Apr 29 j 00:42	0°♄	
direct	-2643 Mar 01 j 00:07	28°♍39'04						
	-2643 Mar 16 j 01:38	0°♌		conjunction		-2638 Jun 14 j 04:38	29°♄31'46	0°50'54
	-2643 May 27 j 12:14	0°♎		minimum elong		-2638 Jun 14 j 03:21	29°♄29'43	0°50'57
	-2643 Jul 14 j 07:48	0°♏				-2638 Jun 14 j 22:21	0°♍	
desc. node	-2643 Jul 24 j 19:11	7°♏10'26		max. Earth dist.		-2638 Jun 15 j 04:29	0°♍09'47	2.67106 AU
	-2643 Aug 25 j 15:38	0°♑		morning rise		-2638 Jul 29 j 16:23	28°♍33'51	
	-2643 Oct 04 j 06:24	0°♍				-2638 Jul 31 j 22:12	0°♌	
	-2643 Nov 11 j 16:14	0°♌				-2638 Sep 16 j 11:06	0°♎	
	-2643 Dec 20 j 00:56	0°♋				-2638 Nov 01 j 08:43	0°♏	
evening set	-2642 Jan 16 j 07:02	20°♋55'35				-2638 Dec 16 j 20:20	0°♑	
	-2642 Jan 28 j 07:37	0°♊				-2637 Jan 31 j 13:39	0°♍	
	-2642 Mar 10 j 05:33	0°♑		desc. node		-2637 Mar 16 j 18:33	27°♍46'30	
						-2637 Mar 20 j 12:31	0°♌	
conjunction	-2642 Mar 18 j 12:43	5°♑54'51	-0°41'35			-2637 May 29 j 22:36	0°♋	
minimum elong	-2642 Mar 18 j 14:52	5°♑58'41	0°41'36	retrograde		-2637 Jun 09 j 13:35	0°♋45'32	
	-2642 Apr 22 j 04:28	0°♑				-2637 Jun 20 j 03:09	30°♌♌	
max. Earth dist.	-2642 Apr 23 j 04:30	0°♑40'55	2.53980 AU	min. Earth dist.		-2637 Jul 06 j 23:45	26°♌16'48	0.38343 AU
morning rise	-2642 May 13 j 16:27	14°♑28'51		greatest brilliancy		-2637 Jul 10 j 03:46	25°♌24'06	-2.9m
asc. node	-2642 May 31 j 14:34	26°♑18'31		opposition		-2637 Jul 11 j 01:31	25°♌08'57	-6°32'50
	-2642 Jun 06 j 06:20	0°♄		direct		-2637 Aug 09 j 21:58	20°♌04'53	
	-2642 Jul 23 j 08:48	0°♍				-2637 Sep 20 j 21:52	0°♋	
	-2642 Sep 10 j 18:52	0°♌				-2637 Nov 16 j 17:33	0°♊	
	-2642 Nov 03 j 23:27	0°♎				-2636 Jan 04 j 11:25	0°♑	
retrograde	-2641 Jan 22 j 17:39	25°♎34'29		asc. node		-2636 Jan 21 j 09:16	10°♑37'48	
opposition	-2641 Feb 28 j 00:35	17°♎47'37	4°24'03			-2636 Feb 21 j 03:31	0°♑	
greatest brilliancy	-2641 Mar 01 j 05:36	17°♎20'54	-1.8m			-2636 Apr 08 j 21:33	0°♄	
min. Earth dist.	-2641 Mar 07 j 13:36	15°♎01'22	0.55474 AU			-2636 May 26 j 14:23	0°♍	
direct	-2641 Apr 08 j 21:37	8°♎23'32		evening set		-2636 Jun 04 j 05:28	5°♍27'28	
desc. node	-2641 Jun 11 j 18:35	28°♎46'37		max. Earth dist.		-2636 Jul 07 j 17:39	26°♍49'40	2.65594 AU
	-2641 Jun 14 j 00:42	0°♏				-2636 Jul 12 j 15:55	0°♌	
	-2641 Jul 31 j 21:32	0°♑						

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 27

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

conjunction	-2636 Jul 20 j 12:57	5°☿05'18	1°10'02		-2631 Jun 10 j 09:43	0°♊	
minimum elong	-2636 Jul 20 j 12:35	5°☿04'43	1°10'07		-2631 Jul 29 j 06:34	0°♋	
	-2636 Aug 27 j 12:29	0°♌		asc. node	-2631 Sep 12 j 07:46	21°♋53'10	
morning rise	-2636 Sep 03 j 18:56	4°♌50'49			-2631 Oct 11 j 16:27	0°♌	
	-2636 Oct 10 j 20:54	0°♍		retrograde	-2631 Oct 23 j 16:36	0°♌53'09	
	-2636 Nov 22 j 17:52	0°♎			-2631 Nov 04 j 03:35	30°♌♋	
	-2635 Jan 03 j 09:31	0°♏		min. Earth dist.	-2631 Dec 01 j 10:47	21°♋34'05	0.66641 AU
desc. node	-2635 Jan 31 j 18:53	20°♏47'21		opposition	-2631 Dec 02 j 17:19	21°♋03'21	2°51'59
	-2635 Feb 13 j 07:35	0°♐		greatest brilliancy	-2631 Dec 02 j 12:53	21°♋07'49	-1.4m
	-2635 Mar 26 j 09:48	0°♑		direct	-2630 Jan 11 j 17:18	11°♋26'15	
	-2635 May 08 j 17:14	0°♒			-2630 Mar 18 j 08:56	0°♌	
	-2635 Jul 01 j 11:19	0°♓			-2630 May 13 j 13:17	0°☿	
retrograde	-2635 Aug 07 j 17:01	8°♓36'18			-2630 Jun 30 j 17:16	0°♌	
min. Earth dist.	-2635 Sep 06 j 01:27	2°♓40'32	0.49182 AU		-2630 Aug 13 j 18:12	0°♍	
opposition	-2635 Sep 13 j 23:28	29°♓47'39	-3°56'01	desc. node	-2630 Sep 23 j 14:10	29°♍44'46	
greatest brilliancy	-2635 Sep 12 j 23:06	0°♓09'55	-2.2m		-2630 Sep 23 j 22:18	0°♎	
	-2635 Sep 13 j 09:56	30°♓♒		evening set	-2630 Oct 14 j 18:24	15°♎47'30	
direct	-2635 Oct 17 j 18:34	22°♓37'00			-2630 Nov 02 j 03:59	0°♏	
	-2635 Nov 23 j 15:26	0°♐			-2630 Dec 10 j 09:35	0°♑	
asc. node	-2635 Dec 08 j 07:35	5°♐47'15					
	-2634 Jan 25 j 16:15	0°♊		conjunction	-2630 Dec 16 j 12:00	4°♑48'41	-0°52'00
	-2634 Mar 18 j 22:16	0°♋		minimum elong	-2630 Dec 16 j 08:55	4°♑42'36	0°52'03
	-2634 May 07 j 12:56	0°♌		max. Earth dist.	-2630 Dec 24 j 11:21	11°♑05'52	2.37455 AU
	-2634 Jun 24 j 07:15	0°☿			-2629 Jan 17 j 13:20	0°♑	
evening set	-2634 Jul 12 j 12:15	11°☿46'08		morning rise	-2629 Feb 23 j 06:32	28°♑17'37	
max. Earth dist.	-2634 Aug 03 j 04:54	26°☿04'04	2.58833 AU		-2629 Feb 25 j 12:36	0°♒	
	-2634 Aug 09 j 02:02	0°♌			-2629 Apr 07 j 02:32	0°♓	
					-2629 May 19 j 22:54	0°♊	
conjunction	-2634 Aug 28 j 21:56	13°♌26'24	1°00'41		-2629 Jul 04 j 18:17	0°♋	
minimum elong	-2634 Aug 28 j 23:12	13°♌28'34	1°00'44	asc. node	-2629 Jul 31 j 07:05	16°♋16'01	
	-2634 Sep 21 j 18:34	0°♍			-2629 Aug 24 j 03:35	0°♌	
morning rise	-2634 Oct 16 j 16:32	17°♍45'00			-2629 Oct 29 j 22:22	0°☿	
	-2634 Nov 02 j 12:37	0°♎		retrograde	-2629 Nov 27 j 15:24	4°☿27'58	
	-2634 Dec 12 j 17:44	0°♏			-2629 Dec 23 j 22:57	30°♌♌	
desc. node	-2634 Dec 19 j 17:20	5°♏17'46		opposition	-2628 Jan 05 j 22:33	25°♌11'40	4°29'47
	-2633 Jan 21 j 00:13	0°♐		greatest brilliancy	-2628 Jan 06 j 06:23	25°♌03'54	-1.3m
	-2633 Mar 01 j 02:22	0°♑		min. Earth dist.	-2628 Jan 08 j 12:01	24°♌10'48	0.66409 AU
	-2633 Apr 10 j 00:32	0°♒		direct	-2628 Feb 16 j 02:35	15°♌11'18	
	-2633 May 22 j 06:43	0°♓			-2628 Apr 12 j 10:06	0°☿	
	-2633 Jul 09 j 05:49	0°♊			-2628 Jun 07 j 01:32	0°♌	
retrograde	-2633 Sep 19 j 00:11	24°♊35'34			-2628 Jul 23 j 00:41	0°♍	
min. Earth dist.	-2633 Oct 23 j 15:45	16°♊39'42	0.60546 AU	desc. node	-2628 Aug 10 j 12:09	12°♍59'51	
asc. node	-2633 Oct 26 j 07:10	15°♊36'37			-2628 Sep 02 j 19:00	0°♎	
opposition	-2633 Oct 28 j 15:06	14°♊40'44	0°05'50		-2628 Oct 12 j 04:22	0°♏	
greatest brilliancy	-2633 Oct 28 j 14:41	14°♊41'10	-1.7m		-2628 Nov 19 j 11:00	0°♐	
direct	-2633 Dec 05 j 03:52	5°♊55'33		evening set	-2628 Dec 20 j 17:18	24°♑33'51	
	-2632 Feb 20 j 01:18	0°♋			-2628 Dec 27 j 16:30	0°♑	
	-2632 Apr 15 j 10:06	0°♌			-2627 Feb 04 j 19:12	0°♒	
	-2632 Jun 04 j 02:20	0°☿					
	-2632 Jul 20 j 10:22	0°♌		conjunction	-2627 Feb 23 j 09:42	13°♒52'31	-0°58'14
evening set	-2632 Aug 22 j 17:52	22°♌47'11		minimum elong	-2627 Feb 23 j 12:00	13°♒56'46	0°58'16
	-2632 Sep 01 j 23:40	0°♍			-2627 Mar 17 j 12:51	0°♓	
max. Earth dist.	-2632 Sep 06 j 22:03	3°♍30'29	2.47618 AU	max. Earth dist.	-2627 Apr 08 j 06:18	15°♓25'06	2.49120 AU
	-2632 Oct 13 j 05:18	0°♎		morning rise	-2627 Apr 24 j 18:56	26°♓52'28	
					-2627 Apr 29 j 08:29	0°♊	
conjunction	-2632 Oct 14 j 05:48	0°♎45'40	0°15'11		-2627 Jun 13 j 10:53	0°♋	
minimum elong	-2632 Oct 14 j 06:41	0°♎47'19	0°15'10	asc. node	-2627 Jun 17 j 05:48	2°♋27'05	
behind sun begin	-2632 Oct 13 j 21:58	0°♎31'04			-2627 Jul 30 j 23:27	0°♌	
behind sun end	-2632 Oct 14 j 15:24	1°♎03'35			-2627 Sep 19 j 22:05	0°☿	
desc. node	-2632 Nov 05 j 15:43	17°♎39'56			-2627 Nov 20 j 05:34	0°♌	
	-2632 Nov 21 j 17:43	0°♏		retrograde	-2626 Jan 04 j 20:50	10°♌05'48	
morning rise	-2632 Dec 11 j 20:27	15°♏35'51		opposition	-2626 Feb 11 j 06:45	1°♌47'00	4°49'22
	-2632 Dec 30 j 06:55	0°♐		greatest brilliancy	-2626 Feb 12 j 07:47	1°♌23'12	-1.6m
greatest brilliancy	-2631 Jan 28 j 14:51	22°♐56'06	1.2m		-2626 Feb 15 j 23:14	30°♌☿	
	-2631 Feb 06 j 16:45	0°♑		min. Earth dist.	-2626 Feb 17 j 13:58	29°☿23'30	0.59712 AU
	-2631 Mar 17 j 20:33	0°♒		direct	-2626 Mar 23 j 23:47	21°☿59'52	
	-2631 Apr 27 j 17:06	0°♓			-2626 May 01 j 03:18	0°♌	


































































































































## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 28

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2626 Jun 27 j 17:11	0°♎		conjunction	-2621 Jul 07 j 01:49	21°♊24'32	1°05'36
desc. node	-2626 Jun 28 j 10:43	0°♎27'27		minimum elong	-2621 Jul 07 j 00:57	21°♊23'09	1°05'40
	-2626 Aug 11 j 03:54	0°♊			-2621 Jul 20 j 10:54	0°♊	
	-2626 Sep 20 j 14:34	0°♌		morning rise	-2621 Aug 21 j 00:58	20°♊29'50	
	-2626 Oct 29 j 11:44	0°♈			-2621 Sep 04 j 12:03	0°♏	
	-2626 Dec 07 j 05:34	0°♄			-2621 Oct 19 j 07:40	0°♎	
	-2625 Jan 15 j 20:57	0°♌			-2621 Dec 01 j 22:41	0°♊	
evening set	-2625 Feb 22 j 02:53	27°♌08'25			-2620 Jan 13 j 15:09	0°♌	
	-2625 Feb 26 j 03:17	0°♈		desc. node	-2620 Feb 18 j 11:01	25°♌24'49	
	-2625 Apr 10 j 08:51	0°♑			-2620 Feb 24 j 22:38	0°♈	
					-2620 Apr 08 j 05:58	0°♄	
conjunction	-2625 Apr 18 j 18:02	5°♑39'39	-0°09'39		-2620 May 27 j 14:51	0°♌	
minimum elong	-2625 Apr 18 j 18:31	5°♑40'28	0°09'38	retrograde	-2620 Jul 18 j 05:53	15°♌29'37	
behind sun begin	-2625 Apr 18 j 00:43	5°♑10'33		min. Earth dist.	-2620 Aug 14 j 14:56	10°♌26'22	0.44164 AU
behind sun end	-2625 Apr 19 j 12:18	6°♑10'22		greatest brilliancy	-2620 Aug 21 j 04:51	8°♌14'57	-2.5m
asc. node	-2625 May 05 j 04:32	16°♑38'03		opposition	-2620 Aug 22 j 15:01	7°♌46'18	-5°36'29
max. Earth dist.	-2625 May 12 j 03:44	21°♑14'17	2.60192 AU	direct	-2620 Sep 23 j 14:07	1°♌28'27	
	-2625 May 25 j 12:42	0°♄			-2620 Dec 14 j 13:59	0°♈	
morning rise	-2625 Jun 08 j 20:41	9°♄17'47		asc. node	-2620 Dec 24 j 23:43	5°♈39'00	
	-2625 Jul 11 j 06:35	0°♊			-2619 Feb 05 j 07:32	0°♑	
	-2625 Aug 28 j 07:54	0°♊			-2619 Mar 27 j 03:32	0°♄	
	-2625 Oct 17 j 02:36	0°♏			-2619 May 14 j 19:22	0°♊	
	-2625 Dec 10 j 11:21	0°♎		evening set	-2619 Jun 27 j 10:41	27°♊34'36	
retrograde	-2624 Feb 24 j 22:53	24°♎14'38			-2619 Jul 01 j 05:14	0°♊	
opposition	-2624 Mar 30 j 00:21	17°♎32'39	2°35'56	max. Earth dist.	-2619 Jul 23 j 09:33	14°♊23'25	2.62081 AU
greatest brilliancy	-2624 Mar 30 j 22:17	17°♎14'10	-2.3m				
min. Earth dist.	-2624 Apr 07 j 12:47	14°♎41'29	0.47632 AU	conjunction	-2619 Aug 13 j 01:12	28°♊02'22	1°08'13
direct	-2624 May 06 j 09:03	9°♎20'53		minimum elong	-2619 Aug 13 j 01:52	28°♊03'28	1°08'16
desc. node	-2624 May 15 j 11:21	9°♎54'15			-2619 Aug 15 j 23:39	0°♏	
	-2624 Jul 07 j 17:32	0°♊		morning rise	-2619 Sep 28 j 21:05	29°♏59'58	
	-2624 Aug 23 j 16:39	0°♌			-2619 Sep 28 j 21:06	0°♎	
	-2624 Oct 04 j 06:03	0°♈			-2619 Nov 09 j 23:46	0°♊	
	-2624 Nov 13 j 17:15	0°♄			-2619 Dec 20 j 15:29	0°♌	
	-2624 Dec 24 j 17:28	0°♌		desc. node	-2618 Jan 05 j 10:23	11°♌51'44	
	-2623 Feb 05 j 03:23	0°♈			-2618 Jan 29 j 09:13	0°♈	
	-2623 Mar 21 j 06:41	0°♑			-2618 Mar 09 j 23:26	0°♄	
asc. node	-2623 Mar 22 j 01:55	0°♑32'04			-2618 Apr 19 j 14:05	0°♌	
evening set	-2623 Apr 10 j 19:53	13°♑35'48			-2618 Jun 02 j 09:22	0°♈	
	-2623 May 05 j 23:51	0°♄			-2618 Jul 27 j 16:25	0°♑	
				retrograde	-2618 Sep 03 j 18:32	8°♑34'25	
conjunction	-2623 May 30 j 06:48	15°♄38'35	0°37'21	min. Earth dist.	-2618 Oct 06 j 11:48	1°♑20'21	0.56606 AU
minimum elong	-2623 May 30 j 05:35	15°♄36'38	0°37'23		-2618 Oct 09 j 22:14	30°♈	
max. Earth dist.	-2623 Jun 06 j 00:14	19°♄57'04	2.66229 AU	opposition	-2618 Oct 12 j 19:10	28°♈52'23	-1°19'32
	-2623 Jun 21 j 17:47	0°♊		greatest brilliancy	-2618 Oct 12 j 12:19	28°♈59'04	-1.8m
morning rise	-2623 Jul 15 j 16:00	15°♊14'20		asc. node	-2618 Nov 11 j 22:58	20°♈52'19	
	-2623 Aug 07 j 20:44	0°♊		direct	-2618 Nov 18 j 00:10	20°♈37'44	
	-2623 Sep 23 j 22:06	0°♏			-2618 Dec 31 j 02:38	0°♑	
	-2623 Nov 09 j 22:34	0°♎			-2617 Mar 03 j 12:44	0°♄	
	-2623 Dec 27 j 14:41	0°♊			-2617 Apr 24 j 17:41	0°♊	
	-2622 Feb 16 j 03:28	0°♌			-2617 Jun 12 j 10:59	0°♊	
desc. node	-2622 Apr 02 j 11:35	21°♌50'36			-2617 Jul 28 j 12:12	0°♏	
retrograde	-2622 May 09 j 09:11	29°♌28'00		evening set	-2617 Aug 06 j 11:29	6°♏02'41	
opposition	-2622 Jun 08 j 18:08	24°♌27'11	-4°35'21	max. Earth dist.	-2617 Aug 23 j 00:04	17°♏21'19	2.52435 AU
greatest brilliancy	-2622 Jun 08 j 20:39	24°♌25'30	-2.9m		-2617 Sep 10 j 01:55	0°♎	
min. Earth dist.	-2622 Jun 09 j 23:22	24°♌07'45	0.37768 AU				
direct	-2622 Jul 09 j 03:46	19°♌18'42		conjunction	-2617 Sep 25 j 08:43	10°♎54'26	0°37'24
	-2622 Aug 21 j 04:06	0°♈		minimum elong	-2617 Sep 25 j 10:19	10°♎57'19	0°37'25
	-2622 Oct 14 j 04:24	0°♄			-2617 Oct 21 j 11:40	0°♊	
	-2622 Nov 29 j 13:39	0°♌		morning rise	-2617 Nov 18 j 04:42	20°♊48'34	
	-2621 Jan 14 j 02:41	0°♈		desc. node	-2617 Nov 23 j 09:10	24°♊45'33	
asc. node	-2621 Feb 07 j 00:05	15°♈36'26			-2617 Nov 30 j 05:36	0°♌	
	-2621 Mar 01 j 05:47	0°♑			-2616 Jan 08 j 00:11	0°♈	
	-2621 Apr 17 j 04:08	0°♄			-2616 Feb 15 j 14:36	0°♄	
evening set	-2621 May 21 j 09:43	21°♄42'36			-2616 Mar 25 j 22:39	0°♌	
	-2621 Jun 03 j 11:24	0°♊			-2616 May 06 j 02:16	0°♈	
max. Earth dist.	-2621 Jun 29 j 11:24	16°♊32'57	2.66827 AU		-2616 Jun 19 j 15:02	0°♑	
					-2616 Aug 11 j 00:47	0°♄	

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 29

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

asc. node	-2616 Sep 28 j 22:30	16°  45'48			-2610 Jan 23 j 12:04	0° 	
retrograde	-2616 Oct 10 j 04:16	17°  33'43		evening set	-2610 Jan 30 j 08:05	5°  05'55	
min. Earth dist.	-2616 Nov 16 j 10:58	8°  43'50	0.64989 AU		-2610 Mar 05 j 11:34	0° 	
opposition	-2616 Nov 19 j 05:01	7°  37'19	1°56'12				
greatest brilliancy	-2616 Nov 18 j 23:27	7°  42'56	-1.4m	conjunction	-2610 Mar 30 j 12:14	17°  38'21	-0°30'10
	-2616 Dec 12 j 04:50	30°  8'17		minimum elong	-2610 Mar 30 j 13:50	17°  41'09	0°30'11
direct	-2616 Dec 28 j 09:42	28°  16'45			-2610 Apr 17 j 11:35	0° 	
	-2615 Jan 14 j 19:21	0° 		max. Earth dist.	-2610 Apr 30 j 18:09	8°  58'41	2.56390 AU
	-2615 Mar 30 j 14:19	0° 		asc. node	-2610 May 21 j 19:18	22°  58'18	
	-2615 May 22 j 02:38	0° 		morning rise	-2610 May 23 j 15:29	24°  10'58	
	-2615 Jul 08 j 08:08	0° 			-2610 Jun 01 j 12:50	0° 	
	-2615 Aug 21 j 02:41	0° 			-2610 Jul 18 j 10:38	0° 	
evening set	-2615 Sep 22 j 06:46	23°  18'41			-2610 Sep 05 j 05:42	0° 	
	-2615 Oct 01 j 06:31	0° 			-2610 Oct 27 j 06:46	0° 	
desc. node	-2615 Oct 10 j 07:06	6°  47'09			-2609 Jan 01 j 06:25	0° 	
max. Earth dist.	-2615 Oct 15 j 18:36	10°  56'16	2.40077 AU	retrograde	-2609 Feb 02 j 21:53	5°  18'35	
	-2615 Nov 09 j 14:09	0° 			-2609 Mar 05 j 05:22	30°  18'00	
				opposition	-2609 Mar 10 j 11:43	28°  09'28	3°55'51
conjunction	-2615 Nov 19 j 16:08	7°  50'43	-0°27'29	greatest brilliancy	-2609 Mar 11 j 16:30	27°  04'35	-2.0m
minimum elong	-2615 Nov 19 j 14:06	7°  46'44	0°27'30	min. Earth dist.	-2609 Mar 18 j 13:30	25°  01'06	0.52809 AU
	-2615 Dec 17 j 21:57	0° 		direct	-2609 Apr 18 j 15:31	19°  05'30	
morning rise	-2614 Jan 25 j 05:44	0°  30'45			-2609 Jun 01 j 16:10	0° 	
	-2614 Jan 25 j 03:14	0° 		desc. node	-2609 Jun 02 j 03:43	0°  12'47	
	-2614 Mar 05 j 03:02	0° 			-2609 Jul 24 j 12:30	0° 	
	-2614 Apr 14 j 17:28	0° 			-2609 Sep 05 j 05:33	0° 	
	-2614 May 27 j 17:37	0° 			-2609 Oct 15 j 05:13	0° 	
	-2614 Jul 13 j 05:01	0° 			-2609 Nov 23 j 17:36	0° 	
asc. node	-2614 Aug 16 j 22:57	20°  17'37			-2608 Jan 03 j 00:28	0° 	
	-2614 Sep 04 j 10:15	0° 			-2608 Feb 13 j 20:13	0° 	
retrograde	-2614 Nov 13 j 20:02	21°  35'37		evening set	-2608 Mar 24 j 04:46	27°  05'07	
opposition	-2614 Dec 23 j 13:14	12°  03'23	3°59'46		-2608 Mar 28 j 12:34	0° 	
greatest brilliancy	-2614 Dec 23 j 15:02	12°  01'36	-1.3m	asc. node	-2608 Apr 07 j 18:28	6°  51'41	
min. Earth dist.	-2614 Dec 24 j 14:17	11°  38'22	0.67289 AU		-2608 May 12 j 22:31	0° 	
direct	-2613 Feb 02 j 10:20	2°  08'42					
	-2613 Apr 27 j 00:33	0° 		conjunction	-2608 May 14 j 15:06	1°  05'55	0°20'53
	-2613 Jun 17 j 05:39	0° 		minimum elong	-2608 May 14 j 14:16	1°  04'33	0°20'55
	-2613 Aug 01 j 04:05	0° 		max. Earth dist.	-2608 May 27 j 10:29	9°  23'22	2.64491 AU
desc. node	-2613 Aug 28 j 06:03	19°  23'16			-2608 Jun 28 j 14:29	0° 	
	-2613 Sep 11 j 14:28	0° 		morning rise	-2608 Jul 01 j 10:18	1°  47'57	
	-2613 Oct 20 j 20:59	0° 			-2608 Aug 14 j 23:07	0° 	
evening set	-2613 Nov 24 j 03:28	26°  15'34			-2608 Oct 01 j 18:12	0° 	
	-2613 Nov 28 j 02:00	0° 			-2608 Nov 19 j 11:14	0° 	
	-2612 Jan 05 j 05:43	0° 			-2607 Jan 10 j 05:59	0° 	
					-2607 Mar 26 j 15:42	0° 	
conjunction	-2612 Jan 29 j 10:22	18°  43'27	-1°06'34	retrograde	-2607 Apr 07 j 16:51	0°  52'22	
minimum elong	-2612 Jan 29 j 10:52	18°  44'24	1°06'39	desc. node	-2607 Apr 19 j 03:37	0°  02'47	
	-2612 Feb 13 j 05:55	0° 			-2607 Apr 19 j 11:19	30°  18'00	
max. Earth dist.	-2612 Mar 18 j 22:39	25°  43'00	2.43882 AU	opposition	-2607 May 08 j 22:19	25°  27'14	-1°21'12
	-2612 Mar 24 j 20:45	0° 		greatest brilliancy	-2607 May 09 j 05:00	25°  22'24	-2.8m
morning rise	-2612 Apr 03 j 08:46	6°  48'24		min. Earth dist.	-2607 May 14 j 20:15	23°  44'53	0.40252 AU
	-2612 May 06 j 14:53	0° 		direct	-2607 Jun 11 j 02:28	19°  15'02	
	-2612 Jun 20 j 20:19	0° 			-2607 Jul 23 j 10:37	0° 	
asc. node	-2612 Jul 03 j 21:32	8°  19'57			-2607 Sep 13 j 16:00	0° 	
	-2612 Aug 08 j 01:14	0° 			-2607 Oct 27 j 20:29	0° 	
	-2612 Sep 30 j 14:21	0° 			-2607 Dec 10 j 00:20	0° 	
retrograde	-2612 Dec 19 j 17:05	25°  50'15			-2606 Jan 22 j 20:39	0° 	
opposition	-2611 Jan 27 j 00:36	17°  05'17	4°53'19	asc. node	-2606 Feb 23 j 16:46	21°  15'37	
greatest brilliancy	-2611 Jan 27 j 19:12	16°  47'15	-1.5m		-2606 Mar 08 j 23:32	0° 	
min. Earth dist.	-2611 Jan 31 j 21:25	15°  02'00	0.63112 AU		-2606 Apr 24 j 07:25	0° 	
direct	-2611 Mar 09 j 03:44	7°  06'53		evening set	-2606 May 06 j 03:49	7°  35'10	
	-2611 May 19 j 12:37	0° 			-2606 Jun 10 j 07:34	0° 	
	-2611 Jul 08 j 08:57	0° 		max. Earth dist.	-2606 Jun 20 j 12:42	6°  30'19	2.67229 AU
desc. node	-2611 Jul 15 j 05:04	4°  34'10					
	-2611 Aug 20 j 07:09	0° 		conjunction	-2606 Jun 22 j 14:22	7°  14'25	0°57'19
	-2611 Sep 29 j 03:47	0° 		minimum elong	-2606 Jun 22 j 13:10	7°  17'31	0°57'23
	-2611 Nov 06 j 16:41	0° 			-2606 Jul 27 j 06:50	0° 	
	-2611 Dec 15 j 03:37	0° 		morning rise	-2606 Aug 06 j 18:43	6°  45'03	

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2606 Sep 11 j 14:54	0°♌	direct	-2601 Dec 14 j 07:11	14°♑35'23	
	-2606 Oct 27 j 02:03	0°♍		-2600 Feb 10 j 19:33	0°♈	
	-2606 Dec 10 j 18:47	0°♎		-2600 Apr 09 j 12:28	0°♊	
	-2605 Jan 24 j 02:30	0°♏		-2600 May 30 j 01:05	0°♉	
desc. node	-2605 Mar 07 j 04:12	28°♏06'16		-2600 Jul 15 j 16:30	0°♌	
	-2605 Mar 10 j 01:53	0°♐		-2600 Aug 28 j 08:08	0°♍	
	-2605 Apr 28 j 16:40	0°♑	evening set	-2600 Sep 02 j 04:38	3°♍27'04	
retrograde	-2605 Jun 25 j 01:52	18°♑10'54	max. Earth dist.	-2600 Sep 18 j 01:27	14°♍53'06	2.44876 AU
min. Earth dist.	-2605 Jul 21 j 18:48	13°♑42'21		-2600 Oct 08 j 13:33	0°♎	
opposition	-2605 Jul 27 j 23:47	11°♑51'56				
greatest brilliancy	-2605 Jul 26 j 15:48	12°♑15'44	-2.7m	conjunction	-2600 Oct 26 j 12:47	13°♎31'49 0°00'22
direct	-2605 Aug 27 j 06:07	6°♑27'31		minimum elong	-2600 Oct 26 j 12:48	13°♎31'50 0°00'21
	-2605 Nov 06 j 08:34	0°♒	behind sun begin	-2600 Oct 25 j 12:35	12°♎45'52	
	-2605 Dec 28 j 14:31	0°♓	behind sun end	-2600 Oct 27 j 13:01	14°♎17'51	
asc. node	-2604 Jan 11 j 14:58	8°♓30'35	desc. node	-2600 Oct 27 j 01:31	13°♎55'58	
	-2604 Feb 15 j 13:05	0°♑		-2600 Nov 17 j 00:27	0°♏	
	-2604 Apr 03 j 21:26	0°♒		-2600 Dec 25 j 11:25	0°♐	
	-2604 May 21 j 21:16	0°♊	morning rise	-2600 Dec 27 j 03:45	1°♐19'08	
evening set	-2604 Jun 12 j 16:13	13°♊46'07		-2599 Feb 01 j 18:58	0°♑	
	-2604 Jul 08 j 01:30	0°♋		-2599 Mar 12 j 20:16	0°♒	
max. Earth dist.	-2604 Jul 13 j 07:30	3°♋23'19		-2599 Apr 22 j 12:49	0°♓	
				-2599 Jun 04 j 20:33	0°♑	
conjunction	-2604 Jul 28 j 23:32	13°♋34'12	1°10'42	-2599 Jul 22 j 11:58	0°♒	
minimum elong	-2604 Jul 28 j 23:32	13°♋34'12	1°10'45	asc. node	-2599 Sep 02 j 12:59	22°♒27'06
	-2604 Aug 22 j 21:07	0°♌		-2599 Sep 20 j 07:09	0°♊	
morning rise	-2604 Sep 12 j 14:59	13°♌56'44		retrograde	-2599 Oct 31 j 09:41	8°♊47'57
	-2604 Oct 06 j 01:26	0°♍		-2599 Dec 08 j 00:20	30°♒♈	
	-2604 Nov 17 j 15:22	0°♎	opposition	-2599 Dec 10 j 08:52	29°♒03'17	3°19'52
	-2604 Dec 28 j 21:32	0°♏	greatest brilliancy	-2599 Dec 10 j 06:04	29°♒06'06	-1.3m
desc. node	-2603 Jan 22 j 02:44	17°♏55'47	min. Earth dist.	-2599 Dec 09 j 21:44	29°♒14'29	0.67156 AU
	-2603 Feb 07 j 07:36	0°♐	direct	-2598 Jan 19 j 17:50	19°♒18'48	
	-2603 Mar 19 j 17:23	0°♑		-2598 Mar 07 j 23:50	0°♊	
	-2603 Apr 30 j 15:25	0°♒		-2598 May 07 j 11:45	0°♋	
	-2603 Jun 17 j 04:58	0°♓		-2598 Jun 25 j 13:06	0°♌	
retrograde	-2603 Aug 18 j 01:57	20°♓29'27		-2598 Aug 08 j 21:19	0°♍	
min. Earth dist.	-2603 Sep 17 j 16:11	14°♓03'58	0.51944 AU	desc. node	-2598 Sep 13 j 23:10	26°♍07'28
greatest brilliancy	-2603 Sep 24 j 09:07	11°♓32'32	-2.1m	-2598 Sep 19 j 03:57	0°♎	
opposition	-2603 Sep 25 j 02:40	11°♓15'57	-2°56'55	evening set	-2598 Oct 28 j 14:49	0°♏08'55
direct	-2603 Oct 29 j 19:05	3°♓40'04		-2598 Oct 28 j 10:14	0°♐	
asc. node	-2603 Nov 28 j 14:20	8°♓37'59		-2598 Dec 05 j 15:34	0°♑	
	-2602 Jan 17 j 15:27	0°♑				
	-2602 Mar 13 j 03:34	0°♒	conjunction	-2597 Jan 01 j 07:39	21°♑00'53	-1°01'24
	-2602 May 02 j 12:29	0°♊	minimum elong	-2597 Jan 01 j 05:19	20°♑56'17	1°01'27
	-2602 Jun 19 j 14:24	0°♋		-2597 Jan 12 j 18:57	0°♌	
evening set	-2602 Jul 21 j 08:07	20°♋35'39		max. Earth dist.	-2597 Feb 12 j 02:28	23°♋25'55 2.38924 AU
	-2602 Aug 04 j 11:36	0°♌		-2597 Feb 20 j 17:49	0°♍	
max. Earth dist.	-2602 Aug 09 j 21:42	3°♌38'38	2.56728 AU	morning rise	-2597 Mar 10 j 14:49	13°♍24'11
				-2597 Apr 02 j 06:47	0°♓	
conjunction	-2602 Sep 07 j 10:42	23°♌12'27	0°53'52	-2597 May 15 j 00:42	0°♑	
minimum elong	-2602 Sep 07 j 12:13	23°♌15'05	0°53'53	-2597 Jun 29 j 12:15	0°♒	
	-2602 Sep 17 j 03:22	0°♍		asc. node	-2597 Jul 21 j 12:47	13°♒45'58
morning rise	-2602 Oct 27 j 17:26	29°♍14'00		-2597 Aug 17 j 19:41	0°♊	
	-2602 Oct 28 j 18:27	0°♎		-2597 Oct 15 j 16:48	0°♋	
	-2602 Dec 07 j 19:21	0°♏	retrograde	-2597 Dec 05 j 19:25	12°♋24'19	
desc. node	-2602 Dec 10 j 02:16	1°♏44'34	opposition	-2596 Jan 13 j 19:27	3°♋17'58	4°42'01
	-2601 Jan 15 j 20:55	0°♐	greatest brilliancy	-2596 Jan 14 j 07:02	3°♋06'34	-1.4m
	-2601 Feb 23 j 17:57	0°♑	min. Earth dist.	-2596 Jan 17 j 04:31	1°♋58'10	0.65512 AU
	-2601 Apr 04 j 09:21	0°♒		-2596 Jan 22 j 07:25	30°♒♊	
	-2601 May 16 j 02:03	0°♓	direct	-2596 Feb 24 j 01:02	23°♊16'33	
	-2601 Jul 01 j 05:42	0°♑		-2596 Mar 30 j 17:41	0°♋	
	-2601 Sep 03 j 03:52	0°♒		-2596 May 31 j 13:35	0°♌	
retrograde	-2601 Sep 27 j 06:43	3°♒32'10		-2596 Jul 17 j 13:39	0°♍	
asc. node	-2601 Oct 16 j 13:55	0°♒55'10	desc. node	-2596 Jul 31 j 21:11	9°♍54'59	
	-2601 Oct 19 j 19:06	30°♒♑		-2596 Aug 28 j 16:24	0°♎	
min. Earth dist.	-2601 Nov 01 j 21:54	25°♑15'48	0.62394 AU	-2596 Oct 07 j 05:18	0°♏	
opposition	-2601 Nov 06 j 02:51	23°♑34'39	0°49'41	-2596 Nov 14 j 13:39	0°♐	
greatest brilliancy	-2601 Nov 05 j 23:20	23°♑38'11	-1.6m	-2596 Dec 22 j 20:30	0°♑	

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 31

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

evening set	-2595 Jan 04 j 22:48	10° $\text{Z}$ 08'18				-2591 Sep 18 j 22:41	0° $\text{Q}$	
	-2595 Jan 31 j 00:32	0° $\approx$				-2591 Nov 04 j 07:16	0° $\text{P}$	
						-2591 Dec 20 j 14:41	0° $\text{L}$	
conjunction	-2595 Mar 08 j 20:27	27° $\approx$ 09'20	-0°49'21			-2590 Feb 05 j 21:47	0° $\text{M}$	
minimum elong	-2595 Mar 08 j 22:51	27° $\approx$ 13'40	0°49'22	desc. node		-2590 Mar 23 j 20:05	26° $\text{M}$ 41'58	
	-2595 Mar 12 j 19:15	0° $\text{K}$				-2590 Mar 30 j 05:46	0° $\text{J}$	
max. Earth dist.	-2595 Apr 17 j 07:56	24° $\text{K}$ 59'15	2.51876 AU	retrograde		-2590 May 27 j 10:26	17° $\text{J}$ 28'07	
	-2595 Apr 24 j 15:22	0° $\text{Y}$		min. Earth dist.		-2590 Jun 25 j 06:37	12° $\text{J}$ 45'09	0.37691 AU
morning rise	-2595 May 05 j 19:37	7° $\text{Y}$ 35'11		opposition		-2590 Jun 27 j 02:24	12° $\text{J}$ 15'52	-5°58'15
asc. node	-2595 Jun 07 j 12:01	29° $\text{Y}$ 14'47		greatest brilliancy		-2590 Jun 26 j 16:03	12° $\text{J}$ 22'48	-2.9m
	-2595 Jun 08 j 15:48	0° $\text{B}$		direct		-2590 Jul 26 j 21:56	7° $\text{J}$ 18'02	
	-2595 Jul 25 j 20:52	0° $\text{II}$				-2590 Oct 02 j 16:28	0° $\text{Z}$	
	-2595 Sep 13 j 19:05	0° $\text{G}$				-2590 Nov 22 j 01:14	0° $\approx$	
	-2595 Nov 09 j 01:32	0° $\text{Q}$				-2589 Jan 08 j 02:27	0° $\text{K}$	
retrograde	-2594 Jan 14 j 18:40	19° $\text{Q}$ 11'07		asc. node		-2589 Jan 28 j 06:42	12° $\text{K}$ 56'12	
opposition	-2594 Feb 20 j 14:46	11° $\text{Q}$ 08'54	4°37'22			-2589 Feb 23 j 23:51	0° $\text{Y}$	
greatest brilliancy	-2594 Feb 21 j 18:19	10° $\text{Q}$ 43'07	-1.7m			-2589 Apr 12 j 07:57	0° $\text{B}$	
min. Earth dist.	-2594 Feb 27 j 14:55	8° $\text{Q}$ 31'56	0.57483 AU	evening set		-2589 May 29 j 22:12	0° $\text{II}$ 03'08	
direct	-2594 Apr 01 j 21:58	1° $\text{Q}$ 32'48				-2589 May 29 j 20:14	0° $\text{II}$	
desc. node	-2594 Jun 18 j 20:47	29° $\text{Q}$ 25'21		max. Earth dist.		-2589 Jul 04 j 20:32	22° $\text{II}$ 55'07	2.66254 AU
	-2594 Jun 19 j 20:28	0° $\text{P}$						
	-2594 Aug 04 j 23:34	0° $\text{L}$		conjunction		-2589 Jul 15 j 08:10	29° $\text{II}$ 39'03	1°08'39
	-2594 Sep 15 j 00:19	0° $\text{M}$		minimum elong		-2589 Jul 15 j 07:35	29° $\text{II}$ 38'07	1°08'43
	-2594 Oct 24 j 04:27	0° $\text{J}$				-2589 Jul 15 j 21:11	0° $\text{G}$	
	-2594 Dec 02 j 03:04	0° $\text{Z}$		morning rise		-2589 Aug 29 j 09:22	29° $\text{G}$ 02'15	
	-2593 Jan 10 j 22:24	0° $\approx$				-2589 Aug 30 j 20:16	0° $\text{Q}$	
	-2593 Feb 21 j 07:58	0° $\text{K}$				-2589 Oct 14 j 10:16	0° $\text{P}$	
evening set	-2593 Mar 05 j 23:01	8° $\text{K}$ 52'55				-2589 Nov 26 j 15:19	0° $\text{L}$	
	-2593 Apr 05 j 16:13	0° $\text{Y}$				-2588 Jan 07 j 17:27	0° $\text{M}$	
asc. node	-2593 Apr 25 j 09:57	13° $\text{Y}$ 14'25		desc. node		-2588 Feb 08 j 21:00	23° $\text{M}$ 15'26	
						-2588 Feb 18 j 04:08	0° $\text{J}$	
conjunction	-2593 Apr 28 j 21:58	15° $\text{Y}$ 33'49	0°02'04			-2588 Mar 31 j 00:15	0° $\text{Z}$	
minimum elong	-2593 Apr 28 j 21:54	15° $\text{Y}$ 33'42	0°02'06			-2588 May 14 j 22:00	0° $\approx$	
behind sun begin	-2593 Apr 28 j 00:37	14° $\text{Y}$ 58'27		retrograde		-2588 Jul 30 j 07:09	29° $\approx$ 31'38	
behind sun end	-2593 Apr 29 j 19:11	16° $\text{Y}$ 08'56		min. Earth dist.		-2588 Aug 27 j 16:48	23° $\approx$ 59'30	0.46909 AU
max. Earth dist.	-2593 May 18 j 08:17	28° $\text{Y}$ 20'45	2.61952 AU	opposition		-2588 Sep 04 j 18:55	21° $\approx$ 08'38	-4°40'48
	-2593 May 20 j 21:08	0° $\text{B}$		greatest brilliancy		-2588 Sep 03 j 13:39	21° $\approx$ 34'34	-2.3m
morning rise	-2593 Jun 17 j 16:06	17° $\text{B}$ 57'23		direct		-2588 Oct 07 j 18:55	14° $\approx$ 20'33	
	-2593 Jul 06 j 13:19	0° $\text{II}$				-2588 Dec 03 j 14:11	0° $\text{K}$	
	-2593 Aug 23 j 06:55	0° $\text{G}$		asc. node		-2588 Dec 15 j 04:59	5° $\text{K}$ 31'23	
	-2593 Oct 11 j 04:02	0° $\text{Q}$				-2587 Jan 29 j 16:22	0° $\text{Y}$	
	-2593 Dec 01 j 17:13	0° $\text{P}$				-2587 Mar 21 j 18:14	0° $\text{B}$	
	-2592 Feb 03 j 14:42	0° $\text{L}$				-2587 May 09 j 22:38	0° $\text{II}$	
retrograde	-2592 Mar 10 j 04:11	6° $\text{L}$ 38'32				-2587 Jun 26 j 13:51	0° $\text{G}$	
opposition	-2592 Apr 12 j 05:33	0° $\text{L}$ 24'15	1°26'21	evening set		-2587 Jul 06 j 00:22	6° $\text{G}$ 04'45	
greatest brilliancy	-2592 Apr 12 j 18:09	0° $\text{L}$ 14'11	-2.5m	max. Earth dist.		-2587 Jul 29 j 12:25	21° $\text{G}$ 26'22	2.60390 AU
	-2592 Apr 13 j 11:49	30° $\text{R}$ $\text{P}$				-2587 Aug 11 j 09:19	0° $\text{Q}$	
min. Earth dist.	-2592 Apr 20 j 10:38	27° $\text{P}$ 47'08	0.44782 AU					
desc. node	-2592 May 05 j 20:00	23° $\text{P}$ 55'20		conjunction		-2587 Aug 21 j 23:38	7° $\text{Q}$ 07'44	1°04'30
direct	-2592 May 18 j 07:25	22° $\text{P}$ 51'12		minimum elong		-2587 Aug 22 j 00:39	7° $\text{Q}$ 09'28	1°04'33
	-2592 Jun 21 j 05:36	0° $\text{L}$				-2587 Sep 24 j 05:07	0° $\text{P}$	
	-2592 Aug 15 j 01:52	0° $\text{M}$		morning rise		-2587 Oct 08 j 18:37	10° $\text{P}$ 16'29	
	-2592 Sep 27 j 09:28	0° $\text{J}$				-2587 Nov 05 j 03:47	0° $\text{L}$	
	-2592 Nov 07 j 17:02	0° $\text{Z}$				-2587 Dec 15 j 14:14	0° $\text{M}$	
	-2592 Dec 19 j 06:27	0° $\approx$		desc. node		-2587 Dec 26 j 19:50	8° $\text{M}$ 29'09	
	-2591 Jan 31 j 01:22	0° $\text{K}$				-2586 Jan 24 j 01:38	0° $\text{J}$	
asc. node	-2591 Mar 12 j 08:24	27° $\text{K}$ 16'01				-2586 Mar 04 j 08:23	0° $\text{Z}$	
	-2591 Mar 16 j 11:05	0° $\text{Y}$				-2586 Apr 13 j 11:50	0° $\approx$	
evening set	-2591 Apr 20 j 07:05	22° $\text{Y}$ 51'01				-2586 May 26 j 04:39	0° $\text{K}$	
	-2591 May 01 j 08:07	0° $\text{B}$				-2586 Jul 14 j 23:34	0° $\text{Y}$	
				retrograde		-2586 Sep 12 j 15:09	18° $\text{Y}$ 22'49	
conjunction	-2591 Jun 07 j 21:35	24° $\text{B}$ 05'50	0°45'35	min. Earth dist.		-2586 Oct 16 j 10:26	10° $\text{Y}$ 45'17	0.58872 AU
minimum elong	-2591 Jun 07 j 20:17	24° $\text{B}$ 03'47	0°45'38	opposition		-2586 Oct 22 j 01:03	8° $\text{Y}$ 32'05	-0°28'36
max. Earth dist.	-2591 Jun 11 j 10:24	26° $\text{B}$ 21'13	2.66818 AU	greatest brilliancy		-2586 Oct 21 j 22:53	8° $\text{Y}$ 34'13	-1.7m
	-2591 Jun 17 j 03:33	0° $\text{II}$		asc. node		-2586 Nov 02 j 04:27	4° $\text{Y}$ 25'05	
morning rise	-2591 Jul 23 j 17:19	23° $\text{II}$ 19'01				-2586 Nov 27 j 07:55	30° $\text{R}$ $\text{K}$	
	-2591 Aug 03 j 04:36	0° $\text{G}$		direct		-2586 Nov 28 j 00:07	29° $\text{K}$ 59'49	

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2586 Nov 28 j 16:23	0°♂		max. Earth dist.	-2580 Mar 31 j 12:50	8°♂10'32	2.46793 AU
	-2585 Feb 24 j 09:22	0°♂		morning rise	-2580 Apr 15 j 20:49	18°♂58'11	
	-2585 Apr 19 j 06:40	0°♂			-2580 May 01 j 20:12	0°♂	
	-2585 Jun 07 j 13:40	0°♂			-2580 Jun 15 j 22:08	0°♂	
	-2585 Jul 23 j 19:51	0°♂		asc. node	-2580 Jun 24 j 03:21	5°♂17'44	
evening set	-2585 Aug 16 j 03:30	15°♂49'38			-2580 Aug 02 j 15:26	0°♂	
max. Earth dist.	-2585 Aug 31 j 15:11	26°♂36'26	2.49826 AU		-2580 Sep 23 j 10:01	0°♂	
	-2585 Sep 05 j 10:37	0°♂			-2580 Nov 30 j 08:33	0°♂	
				retrograde	-2580 Dec 28 j 18:22	4°♂19'03	
conjunction	-2585 Oct 06 j 08:26	22°♂17'18	0°25'22		-2579 Jan 23 j 20:44	30°♂47'47	4°52'52
minimum elong	-2585 Oct 06 j 09:44	22°♂19'41	0°25'21	opposition	-2579 Feb 04 j 14:38	25°♂47'47	4°52'52
	-2585 Oct 16 j 19:00	0°♂		greatest brilliancy	-2579 Feb 05 j 12:53	25°♂26'24	-1.5m
desc. node	-2585 Nov 13 j 18:07	21°♂03'16		min. Earth dist.	-2579 Feb 10 j 06:28	23°♂37'30	0.61344 AU
	-2585 Nov 25 j 10:35	0°♂		direct	-2579 Mar 17 j 13:04	15°♂54'32	
morning rise	-2585 Dec 01 j 16:24	4°♂48'33			-2579 May 09 j 13:21	0°♂	
	-2584 Jan 03 j 02:18	0°♂			-2579 Jul 01 j 21:45	0°♂	
	-2584 Feb 10 j 13:50	0°♂		desc. node	-2579 Jul 05 j 13:01	2°♂21'00	
	-2584 Mar 20 j 18:41	0°♂			-2579 Aug 14 j 15:49	0°♂	
	-2584 Apr 30 j 16:26	0°♂			-2579 Sep 23 j 20:39	0°♂	
	-2584 Jun 13 j 14:19	0°♂			-2579 Nov 01 j 14:03	0°♂	
	-2584 Aug 02 j 10:56	0°♂			-2579 Dec 10 j 04:14	0°♂	
asc. node	-2584 Sep 19 j 05:12	21°♂00'46			-2578 Jan 18 j 15:38	0°♂	
retrograde	-2584 Oct 17 j 23:21	25°♂43'37		evening set	-2578 Feb 12 j 13:32	18°♂21'20	
min. Earth dist.	-2584 Nov 25 j 01:49	16°♂37'30	0.66018 AU		-2578 Feb 28 j 17:35	0°♂	
opposition	-2584 Nov 27 j 00:46	15°♂50'14	2°29'59				
greatest brilliancy	-2584 Nov 26 j 19:24	15°♂55'39	-1.4m	conjunction	-2578 Apr 10 j 16:51	28°♂34'03	-0°18'22
direct	-2583 Jan 05 j 16:48	6°♂20'08		minimum elong	-2578 Apr 10 j 17:49	28°♂35'41	0°18'22
	-2583 Mar 23 j 02:02	0°♂			-2578 Apr 12 j 19:21	0°♂	
	-2583 May 16 j 13:33	0°♂		max. Earth dist.	-2578 May 07 j 13:46	16°♂38'45	2.58581 AU
	-2583 Jul 03 j 08:52	0°♂		asc. node	-2578 May 12 j 02:16	19°♂38'29	
	-2583 Aug 16 j 08:29	0°♂			-2578 May 27 j 20:39	0°♂	
	-2583 Sep 26 j 13:33	0°♂		morning rise	-2578 Jun 02 j 01:25	3°♂23'10	
desc. node	-2583 Sep 30 j 16:36	3°♂05'36			-2578 Jul 13 j 15:06	0°♂	
evening set	-2583 Oct 04 j 15:34	6°♂04'24			-2578 Aug 30 j 22:31	0°♂	
	-2583 Nov 04 j 20:49	0°♂			-2578 Oct 20 j 12:11	0°♂	
max. Earth dist.	-2583 Nov 12 j 11:58	5°♂56'25	2.38047 AU		-2578 Dec 16 j 22:24	0°♂	
				retrograde	-2577 Feb 14 j 22:13	16°♂15'31	
conjunction	-2583 Dec 04 j 11:37	23°♂10'41	-0°42'16	opposition	-2577 Mar 21 j 17:22	9°♂12'42	3°15'30
minimum elong	-2583 Dec 04 j 08:41	23°♂04'55	0°42'17	greatest brilliancy	-2577 Mar 22 j 19:30	8°♂49'59	-2.1m
	-2583 Dec 13 j 03:28	0°♂		min. Earth dist.	-2577 Mar 30 j 04:39	6°♂16'58	0.49977 AU
	-2582 Jan 20 j 07:28	0°♂		direct	-2577 Apr 29 j 00:08	0°♂34'47	
morning rise	-2582 Feb 10 j 18:29	16°♂38'46		desc. node	-2577 May 23 j 13:29	4°♂22'47	
	-2582 Feb 28 j 06:10	0°♂			-2577 Jul 15 j 20:12	0°♂	
	-2582 Apr 09 j 18:54	0°♂			-2577 Aug 29 j 11:02	0°♂	
	-2582 May 22 j 15:05	0°♂			-2577 Oct 09 j 05:02	0°♂	
	-2582 Jul 07 j 14:16	0°♂			-2577 Nov 18 j 04:11	0°♂	
asc. node	-2582 Aug 07 j 04:48	18°♂28'06			-2577 Dec 28 j 19:10	0°♂	
	-2582 Aug 27 j 19:49	0°♂			-2576 Feb 08 j 21:11	0°♂	
retrograde	-2582 Nov 21 j 17:21	29°♂25'12			-2576 Mar 23 j 18:21	0°♂	
opposition	-2582 Dec 31 j 05:19	20°♂01'14	4°18'23	asc. node	-2576 Mar 29 j 00:02	3°♂30'06	
greatest brilliancy	-2582 Dec 31 j 10:17	19°♂56'18	-1.3m	evening set	-2576 Apr 03 j 10:37	7°♂07'28	
min. Earth dist.	-2581 Jan 02 j 02:01	19°♂16'46	0.66929 AU		-2576 May 08 j 07:13	0°♂	
direct	-2581 Feb 10 j 06:47	10°♂02'58					
	-2581 Apr 18 j 21:48	0°♂		conjunction	-2576 May 23 j 16:50	9°♂57'25	0°30'45
	-2581 Jun 11 j 10:18	0°♂		minimum elong	-2576 May 23 j 15:44	9°♂55'38	0°30'48
	-2581 Jul 26 j 23:51	0°♂		max. Earth dist.	-2576 Jun 02 j 00:14	15°♂56'36	2.65563 AU
desc. node	-2581 Aug 18 j 14:44	16°♂01'22			-2576 Jun 23 j 23:41	0°♂	
	-2581 Sep 06 j 15:48	0°♂		morning rise	-2576 Jul 09 j 15:22	9°♂58'06	
	-2581 Oct 16 j 00:43	0°♂			-2576 Aug 10 j 04:38	0°♂	
	-2581 Nov 23 j 06:44	0°♂			-2576 Sep 26 j 13:06	0°♂	
evening set	-2581 Dec 09 j 15:52	12°♂54'33			-2576 Nov 13 j 05:20	0°♂	
	-2581 Dec 31 j 10:58	0°♂			-2575 Jan 01 j 07:23	0°♂	
	-2580 Feb 08 j 11:41	0°♂			-2575 Feb 25 j 04:42	0°♂	
				desc. node	-2575 Apr 09 j 13:38	15°♂21'37	
conjunction	-2580 Feb 13 j 09:50	3°♂42'31	-1°03'09	retrograde	-2575 Apr 25 j 04:35	16°♂50'48	
minimum elong	-2580 Feb 13 j 11:38	3°♂45'54	1°03'13	opposition	-2575 May 25 j 19:35	11°♂44'33	-3°12'58
	-2580 Mar 20 j 02:43	0°♂		greatest brilliancy	-2575 May 26 j 03:47	11°♂38'56	-2.9m



## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 33

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

min. Earth dist.	-2575 May 29 j 09:16	10° $\mathbb{M}$ 46'03	0.38546 AU	max. Earth dist.	-2570 Aug 17 j 04:58	11° $\mathcal{Q}$ 44'17	2.54441 AU
direct	-2575 Jun 26 j 06:44	6° $\mathbb{M}$ 12'52			-2570 Sep 12 j 12:17	0° $\mathbb{M}$	
	-2575 Sep 02 j 05:38	0° $\mathcal{A}$					
	-2575 Oct 20 j 01:21	0° $\mathcal{Z}$		conjunction	-2570 Sep 17 j 10:36	3° $\mathbb{M}$ 29'12	0°45'07
	-2575 Dec 03 j 16:15	0° $\approx$		minimum elong	-2570 Sep 17 j 12:13	3° $\mathbb{M}$ 32'05	0°45'07
	-2574 Jan 17 j 07:53	0° $\mathcal{H}$			-2570 Oct 24 j 01:21	0° $\mathcal{Q}$	
asc. node	-2574 Feb 13 j 21:39	18° $\mathcal{H}$ 13'33		morning rise	-2570 Nov 08 j 12:42	11° $\mathcal{Q}$ 30'33	
	-2574 Mar 03 j 22:24	0° $\mathcal{Y}$		desc. node	-2570 Nov 30 j 11:30	28° $\mathcal{Q}$ 06'23	
	-2574 Apr 19 j 13:14	0° $\mathcal{B}$			-2570 Dec 02 j 23:04	0° $\mathbb{M}$	
evening set	-2574 May 14 j 23:23	16° $\mathcal{B}$ 11'14			-2569 Jan 10 j 20:56	0° $\mathcal{A}$	
	-2574 Jun 05 j 17:04	0° $\mathbb{I}$			-2569 Feb 18 j 13:46	0° $\mathcal{Z}$	
max. Earth dist.	-2574 Jun 25 j 19:57	12° $\mathbb{I}$ 48'29	2.67117 AU		-2569 Mar 29 j 23:55	0° $\approx$	
					-2569 May 10 j 06:48	0° $\mathcal{H}$	
conjunction	-2574 Jun 30 j 22:16	16° $\mathbb{I}$ 03'36	1°02'34		-2569 Jun 24 j 06:30	0° $\mathcal{Y}$	
minimum elong	-2574 Jun 30 j 21:15	16° $\mathbb{I}$ 01'58	1°02'39		-2569 Aug 18 j 05:57	0° $\mathcal{B}$	
	-2574 Jul 22 j 16:33	0° $\mathcal{G}$		retrograde	-2569 Oct 05 j 07:45	12° $\mathcal{B}$ 08'30	
morning rise	-2574 Aug 14 j 22:05	15° $\mathcal{G}$ 00'28		asc. node	-2569 Oct 06 j 19:56	12° $\mathcal{B}$ 07'35	
	-2574 Sep 06 j 21:02	0° $\mathcal{Q}$		min. Earth dist.	-2569 Nov 10 j 21:19	3° $\mathcal{B}$ 33'21	0.63943 AU
	-2574 Oct 21 j 23:45	0° $\mathbb{M}$		opposition	-2569 Nov 14 j 07:34	2° $\mathcal{B}$ 10'42	1°29'48
	-2574 Dec 05 j 01:34	0° $\mathcal{Q}$		greatest brilliancy	-2569 Nov 14 j 02:20	2° $\mathcal{B}$ 15'57	-1.5m
	-2573 Jan 17 j 09:39	0° $\mathbb{M}$			-2569 Nov 19 j 20:02	30° $\mathcal{R}$ $\mathcal{Y}$	
desc. node	-2573 Feb 25 j 13:02	27° $\mathbb{M}$ 10'27		direct	-2569 Dec 23 j 02:18	22° $\mathcal{Y}$ 59'07	
	-2573 Mar 01 j 15:31	0° $\mathcal{A}$			-2568 Jan 29 j 05:02	0° $\mathcal{B}$	
	-2573 Apr 15 j 17:34	0° $\mathcal{Z}$			-2568 Apr 03 j 04:26	0° $\mathbb{I}$	
	-2573 Jun 13 j 04:24	0° $\approx$			-2568 May 24 j 19:49	0° $\mathcal{G}$	
retrograde	-2573 Jul 09 j 07:02	4° $\approx$ 30'49			-2568 Jul 10 j 20:17	0° $\mathcal{Q}$	
	-2573 Aug 04 j 08:51	30° $\mathcal{R}$ $\mathcal{Z}$			-2568 Aug 23 j 14:58	0° $\mathbb{M}$	
min. Earth dist.	-2573 Aug 05 j 01:40	29° $\mathcal{Z}$ 47'07	0.42083 AU	evening set	-2568 Sep 13 j 08:13	14° $\mathbb{M}$ 52'30	
greatest brilliancy	-2573 Aug 11 j 02:40	27° $\mathcal{Z}$ 52'33	-2.6m	max. Earth dist.	-2568 Oct 01 j 19:14	28° $\mathbb{M}$ 28'07	2.42141 AU
opposition	-2573 Aug 12 j 13:57	27° $\mathcal{Z}$ 24'28	-6°12'04		-2568 Oct 03 j 20:31	0° $\mathcal{Q}$	
direct	-2573 Sep 12 j 17:17	21° $\mathcal{Z}$ 31'36		desc. node	-2568 Oct 17 j 09:14	10° $\mathcal{Q}$ 10'19	
	-2573 Oct 21 j 21:00	0° $\approx$					
	-2573 Dec 20 j 21:59	0° $\mathcal{H}$		conjunction	-2568 Nov 08 j 19:50	27° $\mathcal{Q}$ 20'30	-0°15'29
asc. node	-2572 Jan 01 j 20:58	6° $\mathcal{H}$ 53'33		minimum elong	-2568 Nov 08 j 18:42	27° $\mathcal{Q}$ 18'19	0°15'30
	-2572 Feb 09 j 16:14	0° $\mathcal{Y}$		behind sun begin	-2568 Nov 08 j 10:34	27° $\mathcal{Q}$ 02'37	
	-2572 Mar 29 j 18:48	0° $\mathcal{B}$		behind sun end	-2568 Nov 09 j 02:51	27° $\mathcal{Q}$ 34'02	
	-2572 May 17 j 03:24	0° $\mathbb{I}$			-2568 Nov 12 j 06:23	0° $\mathbb{M}$	
evening set	-2572 Jun 21 j 03:25	22° $\mathbb{I}$ 06'24			-2568 Dec 20 j 15:55	0° $\mathcal{A}$	
	-2572 Jul 03 j 11:13	0° $\mathcal{G}$		morning rise	-2567 Jan 12 j 09:00	17° $\mathcal{A}$ 50'37	
max. Earth dist.	-2572 Jul 19 j 01:22	10° $\mathcal{G}$ 05'04	2.63289 AU		-2567 Jan 27 j 21:55	0° $\mathcal{Z}$	
					-2567 Mar 07 j 21:38	0° $\approx$	
conjunction	-2572 Aug 06 j 13:06	22° $\mathcal{G}$ 12'10	1°09'49		-2567 Apr 17 j 11:37	0° $\mathcal{H}$	
minimum elong	-2572 Aug 06 j 13:29	22° $\mathcal{G}$ 12'49	1°09'53		-2567 May 30 j 12:43	0° $\mathcal{Y}$	
	-2572 Aug 18 j 06:55	0° $\mathcal{Q}$			-2567 Jul 16 j 07:45	0° $\mathcal{B}$	
morning rise	-2572 Sep 21 j 17:54	23° $\mathcal{Q}$ 21'30		asc. node	-2567 Aug 23 j 20:00	21° $\mathcal{B}$ 51'15	
	-2572 Oct 01 j 08:19	0° $\mathbb{M}$			-2567 Sep 09 j 07:29	0° $\mathbb{I}$	
	-2572 Nov 12 j 16:29	0° $\mathcal{Q}$		retrograde	-2567 Nov 08 j 02:20	16° $\mathbb{I}$ 36'53	
	-2572 Dec 23 j 14:51	0° $\mathbb{M}$		opposition	-2567 Dec 17 j 22:53	6° $\mathbb{I}$ 58'31	3°44'16
desc. node	-2571 Jan 12 j 12:28	14° $\mathbb{M}$ 51'48		greatest brilliancy	-2567 Dec 17 j 22:22	6° $\mathbb{I}$ 59'02	-1.3m
	-2571 Feb 01 j 15:26	0° $\mathcal{A}$		min. Earth dist.	-2567 Dec 18 j 07:19	6° $\mathbb{I}$ 50'04	0.67354 AU
	-2571 Mar 13 j 12:48	0° $\mathcal{Z}$			-2566 Jan 06 j 14:42	30° $\mathcal{R}$ $\mathcal{B}$	
	-2571 Apr 23 j 13:43	0° $\approx$		direct	-2566 Jan 27 j 15:22	27° $\mathcal{B}$ 08'00	
	-2571 Jun 07 j 10:09	0° $\mathcal{H}$			-2566 Feb 19 j 10:42	0° $\mathbb{I}$	
	-2571 Aug 12 j 19:35	0° $\mathcal{Y}$			-2566 Apr 30 j 22:05	0° $\mathcal{G}$	
retrograde	-2571 Aug 27 j 19:33	1° $\mathcal{Y}$ 31'25			-2566 Jun 20 j 04:37	0° $\mathcal{Q}$	
	-2571 Sep 11 j 05:11	30° $\mathcal{R}$ $\mathcal{H}$			-2566 Aug 03 j 22:13	0° $\mathbb{M}$	
min. Earth dist.	-2571 Sep 28 j 14:43	24° $\mathcal{H}$ 38'24	0.54589 AU	desc. node	-2566 Sep 04 j 07:53	22° $\mathbb{M}$ 34'44	
opposition	-2571 Oct 05 j 11:19	21° $\mathcal{H}$ 59'42	-1°59'36		-2566 Sep 14 j 07:56	0° $\mathcal{Q}$	
greatest brilliancy	-2571 Oct 05 j 00:11	22° $\mathcal{H}$ 10'26	-1.9m		-2566 Oct 23 j 14:59	0° $\mathbb{M}$	
direct	-2571 Nov 10 j 00:13	14° $\mathcal{H}$ 01'27		evening set	-2566 Nov 12 j 08:46	15° $\mathbb{M}$ 26'28	
asc. node	-2571 Nov 18 j 20:34	14° $\mathcal{H}$ 30'39			-2566 Nov 30 j 20:15	0° $\mathcal{A}$	
	-2570 Jan 07 j 19:45	0° $\mathcal{Y}$			-2565 Jan 07 j 23:20	0° $\mathcal{Z}$	
	-2570 Mar 06 j 23:53	0° $\mathcal{B}$					
	-2570 Apr 27 j 08:43	0° $\mathbb{I}$		conjunction	-2565 Jan 17 j 08:37	7° $\mathcal{Z}$ 18'45	-1°06'11
	-2570 Jun 14 j 19:52	0° $\mathcal{G}$		minimum elong	-2565 Jan 17 j 07:50	7° $\mathcal{Z}$ 17'13	1°06'15
evening set	-2570 Jul 30 j 10:52	29° $\mathcal{G}$ 44'06			-2565 Feb 15 j 22:08	0° $\approx$	
	-2570 Jul 30 j 20:22	0° $\mathcal{Q}$		max. Earth dist.	-2565 Mar 07 j 14:30	14° $\approx$ 44'40	2.41549 AU

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

morning rise	-2565 Mar 25 j 01:46	27° $\approx$ 33'03	direct	-2560 May 31 j 06:30	7° $\underline{\mathbf{a}}$ 36'23	
	-2565 Mar 28 j 10:58	0° $\mathbf{H}$		-2560 Aug 03 j 22:43	0° $\mathbf{M}$	
	-2565 May 10 j 03:24	0° $\mathbf{Y}$		-2560 Sep 19 j 14:37	0° $\mathbf{x}$	
	-2565 Jun 24 j 09:33	0° $\mathbf{B}$		-2560 Nov 01 j 05:39	0° $\mathbf{Z}$	
asc. node	-2565 Jul 11 j 19:05	11° $\mathbf{B}$ 01'57		-2560 Dec 13 j 13:04	0° $\approx$	
	-2565 Aug 11 j 22:23	0° $\mathbf{II}$		-2559 Jan 25 j 20:02	0° $\mathbf{H}$	
	-2565 Oct 06 j 01:01	0° $\mathbf{G}$	asc. node	-2559 Mar 02 j 14:21	24° $\mathbf{H}$ 03'49	
retrograde	-2565 Dec 14 j 05:16	20° $\mathbf{G}$ 28'40		-2559 Mar 11 j 13:38	0° $\mathbf{Y}$	
opposition	-2564 Jan 21 j 20:45	11° $\mathbf{G}$ 33'26 4°49'55		-2559 Apr 26 j 15:38	0° $\mathbf{B}$	
greatest brilliancy	-2564 Jan 22 j 12:10	11° $\mathbf{G}$ 18'22 -1.4m	evening set	-2559 Apr 29 j 11:46	1° $\mathbf{B}$ 49'37	
min. Earth dist.	-2564 Jan 26 j 01:24	9° $\mathbf{G}$ 55'07 0.64317 AU		-2559 Jun 12 j 13:10	0° $\mathbf{II}$	
direct	-2564 Mar 03 j 01:48	1° $\mathbf{G}$ 32'54				
	-2564 May 24 j 07:50	0° $\mathbf{Q}$	conjunction	-2559 Jun 16 j 09:25	2° $\mathbf{II}$ 26'58 0°52'48	
	-2564 Jul 11 j 20:23	0° $\mathbf{M}$	minimum elong	-2559 Jun 16 j 08:08	2° $\mathbf{II}$ 24'57 0°52'52	
desc. node	-2564 Jul 22 j 07:14	7° $\mathbf{M}$ 06'02	max. Earth dist.	-2559 Jun 16 j 19:46	2° $\mathbf{II}$ 43'29 2.67148 AU	
	-2564 Aug 23 j 10:35	0° $\underline{\mathbf{a}}$		-2559 Jul 29 j 13:01	0° $\mathbf{G}$	
	-2564 Oct 02 j 04:16	0° $\mathbf{M}$	morning rise	-2559 Jul 31 j 19:04	1° $\mathbf{G}$ 26'35	
	-2564 Nov 09 j 15:05	0° $\mathbf{x}$		-2559 Sep 14 j 01:38	0° $\mathbf{Q}$	
	-2564 Dec 17 j 23:29	0° $\mathbf{Z}$		-2559 Oct 29 j 21:55	0° $\mathbf{M}$	
evening set	-2563 Jan 19 j 14:55	25° $\mathbf{Z}$ 02'20		-2559 Dec 14 j 06:05	0° $\underline{\mathbf{a}}$	
	-2563 Jan 26 j 04:54	0° $\approx$		-2558 Jan 28 j 15:44	0° $\mathbf{M}$	
	-2563 Mar 08 j 00:57	0° $\mathbf{H}$	desc. node	-2558 Mar 14 j 06:03	28° $\mathbf{M}$ 28'56	
				-2558 Mar 16 j 17:43	0° $\mathbf{x}$	
conjunction	-2563 Mar 21 j 12:00	9° $\mathbf{H}$ 34'59 -0°38'40		-2558 May 14 j 18:44	0° $\mathbf{Z}$	
minimum elong	-2563 Mar 21 j 14:03	9° $\mathbf{H}$ 38'35 0°38'40	retrograde	-2558 Jun 13 j 02:08	5° $\mathbf{Z}$ 23'53	
	-2563 Apr 19 j 21:44	0° $\mathbf{Y}$	min. Earth dist.	-2558 Jul 10 j 08:11	0° $\mathbf{Z}$ 57'05 0.38555 AU	
max. Earth dist.	-2563 Apr 25 j 12:29	3° $\mathbf{Y}$ 49'14 2.54460 AU		-2558 Jul 13 j 17:30	30° $\mathbf{R}$ $\mathbf{x}$	
morning rise	-2563 May 16 j 05:45	17° $\mathbf{Y}$ 43'47	opposition	-2558 Jul 14 j 21:15	29° $\mathbf{x}$ 40'26 -6°38'24	
asc. node	-2563 May 28 j 16:45	25° $\mathbf{Y}$ 57'05	greatest brilliancy	-2558 Jul 13 j 21:02	29° $\mathbf{x}$ 57'30 -2.8m	
	-2563 Jun 03 j 21:17	0° $\mathbf{B}$	direct	-2558 Aug 13 j 17:34	24° $\mathbf{x}$ 33'45	
	-2563 Jul 20 j 20:47	0° $\mathbf{II}$		-2558 Sep 12 j 22:32	0° $\mathbf{Z}$	
	-2563 Sep 08 j 00:56	0° $\mathbf{G}$		-2558 Nov 13 j 06:23	0° $\approx$	
	-2563 Oct 31 j 10:31	0° $\mathbf{Q}$		-2557 Jan 01 j 15:52	0° $\mathbf{H}$	
retrograde	-2562 Jan 25 j 07:53	28° $\mathbf{Q}$ 44'48	asc. node	-2557 Jan 18 j 12:17	10° $\mathbf{H}$ 31'39	
opposition	-2562 Mar 02 j 12:34	21° $\mathbf{Q}$ 01'24 4°16'51		-2557 Feb 18 j 13:20	0° $\mathbf{Y}$	
greatest brilliancy	-2562 Mar 03 j 17:22	20° $\mathbf{Q}$ 34'59 -1.9m		-2557 Apr 07 j 09:47	0° $\mathbf{B}$	
min. Earth dist.	-2562 Mar 10 j 04:23	18° $\mathbf{Q}$ 13'33 0.54994 AU		-2557 May 25 j 04:15	0° $\mathbf{II}$	
direct	-2562 Apr 11 j 06:31	11° $\mathbf{Q}$ 40'59	evening set	-2557 Jun 07 j 09:43	8° $\mathbf{II}$ 21'48	
desc. node	-2562 Jun 09 j 06:04	29° $\mathbf{Q}$ 33'09	max. Earth dist.	-2557 Jul 10 j 08:01	29° $\mathbf{II}$ 22'41 2.65407 AU	
	-2562 Jun 10 j 02:46	0° $\mathbf{M}$		-2557 Jul 11 j 07:13	0° $\mathbf{G}$	
	-2562 Jul 29 j 05:10	0° $\underline{\mathbf{a}}$				
	-2562 Sep 09 j 02:24	0° $\mathbf{M}$	conjunction	-2557 Jul 23 j 16:57	8° $\mathbf{G}$ 00'57 1°10'20	
	-2562 Oct 18 j 16:37	0° $\mathbf{x}$	minimum elong	-2557 Jul 23 j 16:42	8° $\mathbf{G}$ 00'32 1°10'25	
	-2562 Nov 26 j 21:43	0° $\mathbf{Z}$		-2557 Aug 26 j 04:59	0° $\mathbf{Q}$	
	-2561 Jan 05 j 22:06	0° $\approx$	morning rise	-2557 Sep 07 j 00:18	7° $\mathbf{Q}$ 52'40	
	-2561 Feb 16 j 11:48	0° $\mathbf{H}$		-2557 Oct 09 j 14:09	0° $\mathbf{M}$	
evening set	-2561 Mar 17 j 03:33	19° $\mathbf{H}$ 55'30		-2557 Nov 21 j 11:10	0° $\underline{\mathbf{a}}$	
	-2561 Mar 31 j 23:02	0° $\mathbf{Y}$		-2556 Jan 02 j 02:02	0° $\mathbf{M}$	
asc. node	-2561 Apr 15 j 15:45	9° $\mathbf{Y}$ 51'34	desc. node	-2556 Jan 30 j 05:08	20° $\mathbf{M}$ 37'59	
				-2556 Feb 11 j 22:10	0° $\mathbf{x}$	
conjunction	-2561 May 08 j 15:24	25° $\mathbf{Y}$ 02'28 0°13'14		-2556 Mar 23 j 20:06	0° $\mathbf{Z}$	
minimum elong	-2561 May 08 j 14:49	25° $\mathbf{Y}$ 01'32 0°13'15		-2556 May 05 j 16:09	0° $\approx$	
behind sun begin	-2561 May 08 j 03:22	24° $\mathbf{Y}$ 42'46		-2556 Jun 25 j 19:40	0° $\mathbf{H}$	
behind sun end	-2561 May 09 j 02:17	25° $\mathbf{Y}$ 20'17	retrograde	-2556 Aug 10 j 06:38	12° $\mathbf{H}$ 14'29	
	-2561 May 16 j 05:35	0° $\mathbf{B}$	min. Earth dist.	-2556 Sep 08 j 21:38	6° $\mathbf{H}$ 12'21 0.49704 AU	
max. Earth dist.	-2561 May 24 j 07:44	5° $\mathbf{B}$ 15'29 2.63456 AU	opposition	-2556 Sep 16 j 16:53	3° $\mathbf{H}$ 20'22 -3°41'23	
morning rise	-2561 Jun 26 j 05:43	26° $\mathbf{B}$ 24'49	greatest brilliancy	-2556 Sep 15 j 18:05	3° $\mathbf{H}$ 41'23 -2.2m	
	-2561 Jul 01 j 20:49	0° $\mathbf{II}$		-2556 Sep 26 j 09:52	30° $\mathbf{R}$ $\approx$	
	-2561 Aug 18 j 08:35	0° $\mathbf{G}$	direct	-2556 Oct 20 j 14:53	26° $\approx$ 04'50	
	-2561 Oct 05 j 13:42	0° $\mathbf{Q}$		-2556 Nov 15 j 16:30	0° $\mathbf{H}$	
	-2561 Nov 24 j 07:10	0° $\mathbf{M}$	asc. node	-2556 Dec 05 j 11:36	6° $\mathbf{H}$ 50'01	
	-2560 Jan 18 j 06:06	0° $\underline{\mathbf{a}}$		-2555 Jan 22 j 08:54	0° $\mathbf{Y}$	
retrograde	-2560 Mar 25 j 17:49	20° $\underline{\mathbf{a}}$ 11'36		-2555 Mar 16 j 04:22	0° $\mathbf{B}$	
opposition	-2560 Apr 26 j 17:13	14° $\underline{\mathbf{a}}$ 25'34 -0°01'57		-2555 May 05 j 00:21	0° $\mathbf{II}$	
desc. node	-2560 Apr 26 j 05:22	14° $\underline{\mathbf{a}}$ 34'31		-2555 Jun 21 j 22:02	0° $\mathbf{G}$	
greatest brilliancy	-2559 Apr 22 j 13:27	27° $\mathbf{Y}$ 21'51 1.7m	evening set	-2555 Jul 14 j 16:56	14° $\mathbf{G}$ 43'31	
min. Earth dist.	-2560 May 03 j 22:47	12° $\underline{\mathbf{a}}$ 14'17 0.42111 AU	max. Earth dist.	-2555 Aug 04 j 21:43	28° $\mathbf{G}$ 43'36 2.58452 AU	

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2555 Aug 06 j 19:26	0°♌			-2550 May 17 j 15:00	0°♑		
					-2550 Jul 02 j 05:01	0°♎		
conjunction	-2555 Aug 31 j 05:34	16°♌33'38	0°59'02	asc. node	-2550 Jul 28 j 10:06	16°♎11'54		
minimum elong	-2555 Aug 31 j 06:54	16°♌35'57	0°59'04		-2550 Aug 21 j 02:11	0°♏		
	-2555 Sep 19 j 13:55	0°♐			-2550 Oct 23 j 02:14	0°♑		
morning rise	-2555 Oct 19 j 06:54	21°♐11'18		retrograde	-2550 Nov 29 j 17:21	7°♑17'39		
	-2555 Oct 31 j 09:08	0°♑			-2549 Jan 02 j 23:28	30°♑♏		
	-2555 Dec 10 j 14:37	0°♒		opposition	-2549 Jan 07 j 23:30	28°♏02'47	4°33'17	
desc. node	-2555 Dec 17 j 04:20	4°♒59'02		greatest brilliancy	-2549 Jan 08 j 07:59	27°♏54'22	-1.3m	
	-2554 Jan 18 j 20:37	0°♓		min. Earth dist.	-2549 Jan 10 j 15:59	26°♏58'59	0.66281 AU	
	-2554 Feb 26 j 21:19	0°♓		direct	-2549 Feb 18 j 04:17	18°♏02'12		
	-2554 Apr 07 j 16:32	0°♈			-2549 Apr 08 j 20:29	0°♑		
	-2554 May 19 j 16:22	0°♉			-2549 Jun 05 j 06:18	0°♌		
	-2554 Jul 05 j 20:23	0°♑			-2549 Jul 21 j 15:47	0°♐		
retrograde	-2554 Sep 21 j 02:55	27°♑38'39		desc. node	-2549 Aug 08 j 23:38	12°♐49'03		
asc. node	-2554 Oct 23 j 11:33	20°♑37'39			-2549 Sep 01 j 14:48	0°♑		
min. Earth dist.	-2554 Oct 25 j 23:03	19°♑39'22	0.60931 AU		-2549 Oct 11 j 02:30	0°♒		
opposition	-2554 Oct 30 j 19:47	17°♑43'00	0°18'14		-2549 Nov 18 j 09:58	0°♓		
greatest brilliancy	-2554 Oct 30 j 18:20	17°♑44'27	-1.7m	greatest brilliancy	-2549 Dec 07 j 01:16	14°♓40'13	1.2m	
direct	-2554 Dec 07 j 12:04	8°♑55'09		evening set	-2549 Dec 25 j 04:11	28°♓51'43		
	-2553 Feb 16 j 06:11	0°♎			-2549 Dec 26 j 15:13	0°♏		
	-2553 Apr 13 j 14:24	0°♏			-2548 Feb 03 j 16:49	0°♈		
	-2553 Jun 02 j 14:30	0°♑						
	-2553 Jul 19 j 03:08	0°♌		conjunction	-2548 Feb 27 j 13:58	17°♈47'18	-0°56'13	
evening set	-2553 Aug 26 j 04:37	26°♌02'07		minimum elong	-2548 Feb 27 j 16:21	17°♈51'42	0°56'15	
	-2553 Aug 31 j 19:41	0°♐			-2548 Mar 15 j 08:44	0°♉		
max. Earth dist.	-2553 Sep 10 j 07:33	6°♐45'24	2.47120 AU	max. Earth dist.	-2548 Apr 10 j 19:14	18°♉44'43	2.49657 AU	
	-2553 Oct 12 j 03:26	0°♑		morning rise	-2548 Apr 27 j 12:25	0°♑17'38		
					-2548 Apr 27 j 02:07	0°♑		
conjunction	-2553 Oct 18 j 00:08	4°♑22'32	0°11'40		-2548 Jun 11 j 01:37	0°♎		
minimum elong	-2553 Oct 18 j 00:50	4°♑23'51	0°11'40	asc. node	-2548 Jun 14 j 09:42	2°♎10'00		
behind sun begin	-2553 Oct 17 j 08:07	3°♑52'34			-2548 Jul 28 j 09:48	0°♏		
behind sun end	-2553 Oct 18 j 17:33	4°♑55'08			-2548 Sep 16 j 22:24	0°♑		
desc. node	-2553 Nov 04 j 03:48	17°♑19'21			-2548 Nov 15 j 03:25	0°♌		
	-2553 Nov 20 j 16:56	0°♒		retrograde	-2547 Jan 07 j 05:21	13°♌06'26		
morning rise	-2553 Dec 16 j 04:38	19°♒47'10		opposition	-2547 Feb 13 j 13:28	4°♌50'14	4°46'08	
	-2553 Dec 29 j 06:08	0°♓		greatest brilliancy	-2547 Feb 14 j 14:51	4°♌26'10	-1.6m	
	-2552 Feb 05 j 14:57	0°♏		min. Earth dist.	-2547 Feb 19 j 23:40	2°♌24'24	0.59331 AU	
	-2552 Mar 15 j 16:44	0°♈			-2547 Feb 26 j 18:01	30°♒♑		
	-2552 Apr 25 j 09:58	0°♉		direct	-2547 Mar 26 j 04:58	25°♑05'01		
	-2552 Jun 07 j 20:48	0°♑			-2547 Apr 24 j 09:49	0°♌		
	-2552 Jul 26 j 03:31	0°♎			-2547 Jun 24 j 18:16	0°♐		
asc. node	-2552 Sep 09 j 10:38	22°♎48'04		desc. node	-2547 Jun 25 j 23:00	0°♐44'10		
	-2552 Sep 30 j 04:27	0°♏			-2547 Aug 08 j 18:10	0°♑		
retrograde	-2552 Oct 25 j 16:45	3°♏44'01			-2547 Sep 18 j 09:47	0°♒		
	-2552 Nov 18 j 07:37	30°♒♏			-2547 Oct 27 j 08:51	0°♓		
opposition	-2552 Dec 04 j 17:55	23°♓54'53	3°00'16		-2547 Dec 05 j 02:55	0°♏		
min. Earth dist.	-2552 Dec 03 j 14:19	24°♓22'37	0.66779 AU		-2546 Jan 13 j 17:28	0°♈		
greatest brilliancy	-2552 Dec 04 j 13:37	23°♓59'12	-1.3m		-2546 Feb 23 j 22:21	0°♉		
direct	-2551 Jan 13 j 20:28	14°♓16'25		evening set	-2546 Feb 24 j 23:58	0°♉45'33		
	-2551 Mar 14 j 05:10	0°♏			-2546 Apr 08 j 02:14	0°♑		
	-2551 May 10 j 17:37	0°♑						
	-2551 Jun 28 j 06:55	0°♌		conjunction	-2546 Apr 21 j 07:16	8°♑54'52	-0°06'29	
	-2551 Aug 11 j 12:48	0°♐		minimum elong	-2546 Apr 21 j 07:35	8°♑55'23	0°06'29	
desc. node	-2551 Sep 21 j 01:46	29°♐26'07		behind sun begin	-2546 Apr 20 j 11:17	8°♑21'22		
	-2551 Sep 21 j 19:55	0°♑		behind sun end	-2546 Apr 22 j 03:52	9°♑29'22		
evening set	-2551 Oct 17 j 19:29	19°♑42'06		asc. node	-2546 May 02 j 07:50	16°♑16'16		
	-2551 Oct 31 j 03:20	0°♒		max. Earth dist.	-2546 May 14 j 00:35	24°♑00'01	2.60542 AU	
	-2551 Dec 08 j 09:31	0°♓			-2546 May 23 j 04:22	0°♎		
				morning rise	-2546 Jun 11 j 03:05	12°♎17'15		
conjunction	-2551 Dec 19 j 23:09	9°♓07'28	-0°54'32		-2546 Jul 08 j 20:23	0°♏		
minimum elong	-2551 Dec 19 j 20:09	9°♓01'32	0°54'34		-2546 Aug 25 j 18:43	0°♑		
max. Earth dist.	-2550 Jan 07 j 01:19	23°♓21'34	2.37556 AU		-2546 Oct 14 j 06:28	0°♌		
	-2550 Jan 15 j 12:46	0°♏			-2546 Dec 06 j 16:03	0°♐		
	-2550 Feb 23 j 10:34	0°♈		retrograde	-2545 Feb 28 j 02:54	27°♑50'11		
morning rise	-2550 Feb 26 j 19:05	2°♈32'19		opposition	-2545 Apr 02 j 23:56	21°♑13'23	2°19'42	
	-2550 Apr 04 j 22:06	0°♉		greatest brilliancy	-2545 Apr 03 j 19:52	20°♑56'46	-2.3m	

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Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

min. Earth dist.	-2545 Apr 11 j 12:32	18° $\mathbb{M}$ 23'39	0.47094 AU	max. Earth dist.	-2540 Jul 24 j 23:35	16° $\mathfrak{G}$ 56'40	2.61787 AU
direct	-2545 May 10 j 04:46	13° $\mathbb{M}$ 08'21			-2540 Aug 13 j 17:07	0° $\Omega$	
desc. node	-2545 May 13 j 22:23	13° $\mathbb{M}$ 14'04					
	-2545 Jul 04 j 09:44	0° $\underline{\mathfrak{L}}$		conjunction	-2540 Aug 15 j 06:34	1° $\Omega$ 02'34	1°07'21
	-2545 Aug 21 j 20:18	0° $\mathbb{M}$		minimum elong	-2540 Aug 15 j 07:20	1° $\Omega$ 03'50	1°07'24
	-2545 Oct 02 j 18:57	0° $\mathfrak{Z}$			-2540 Sep 26 j 16:14	0° $\mathbb{M}$	
	-2545 Nov 12 j 09:36	0° $\mathfrak{Z}$		morning rise	-2540 Oct 01 j 05:57	3° $\mathbb{M}$ 11'40	
	-2545 Dec 23 j 10:52	0° $\approx$			-2540 Nov 07 j 19:59	0° $\underline{\mathfrak{L}}$	
	-2544 Feb 03 j 20:33	0° $\mathfrak{H}$			-2540 Dec 18 j 12:02	0° $\mathbb{M}$	
	-2544 Mar 18 j 23:04	0° $\mathbb{Y}$		desc. node	-2539 Jan 02 j 22:11	11° $\mathbb{M}$ 35'24	
asc. node	-2544 Mar 19 j 06:09	0° $\mathbb{Y}$ 11'49			-2539 Jan 27 j 05:13	0° $\mathfrak{Z}$	
evening set	-2544 Apr 13 j 04:57	16° $\mathbb{Y}$ 41'20			-2539 Mar 07 j 17:30	0° $\mathfrak{Z}$	
	-2544 May 03 j 15:27	0° $\mathfrak{B}$			-2539 Apr 17 j 03:44	0° $\approx$	
					-2539 May 30 j 11:48	0° $\mathfrak{H}$	
conjunction	-2544 Jun 01 j 11:44	18° $\mathfrak{B}$ 34'13	0°39'43		-2539 Jul 22 j 07:56	0° $\mathbb{Y}$	
minimum elong	-2544 Jun 01 j 10:29	18° $\mathfrak{B}$ 32'12	0°39'46	retrograde	-2539 Sep 06 j 00:37	11° $\mathbb{Y}$ 49'22	
max. Earth dist.	-2544 Jun 07 j 12:18	22° $\mathfrak{B}$ 25'32	2.66360 AU	min. Earth dist.	-2539 Oct 08 j 22:51	4° $\mathbb{Y}$ 31'30	0.57037 AU
	-2544 Jun 19 j 08:54	0° $\mathbb{I}$		opposition	-2539 Oct 15 j 04:09	2° $\mathbb{Y}$ 05'17	-1°05'29
morning rise	-2544 Jul 17 j 18:01	18° $\mathbb{I}$ 04'47		greatest brilliancy	-2539 Oct 14 j 22:35	2° $\mathbb{Y}$ 10'44	-1.8m
	-2544 Aug 05 j 11:21	0° $\mathfrak{G}$			-2539 Oct 20 j 15:23	30° $\mathfrak{H}$	
	-2544 Sep 21 j 11:25	0° $\Omega$		asc. node	-2539 Nov 09 j 01:58	24° $\mathfrak{H}$ 39'56	
	-2544 Nov 07 j 08:24	0° $\mathbb{M}$		direct	-2539 Nov 20 j 12:46	23° $\mathfrak{H}$ 47'24	
	-2544 Dec 24 j 16:08	0° $\underline{\mathfrak{L}}$			-2539 Dec 24 j 16:59	0° $\mathbb{Y}$	
	-2543 Feb 12 j 05:20	0° $\mathbb{M}$			-2538 Feb 28 j 08:10	0° $\mathfrak{B}$	
desc. node	-2543 Mar 30 j 21:41	23° $\mathbb{M}$ 53'27			-2538 Apr 22 j 01:23	0° $\mathbb{I}$	
	-2543 Apr 16 j 19:47	0° $\mathfrak{Z}$			-2538 Jun 10 j 00:16	0° $\mathfrak{G}$	
retrograde	-2543 May 13 j 13:29	4° $\mathfrak{Z}$ 12'55			-2538 Jul 26 j 05:10	0° $\Omega$	
	-2543 Jun 09 j 18:53	30° $\mathfrak{H}$		evening set	-2538 Aug 08 j 20:01	9° $\Omega$ 10'40	
opposition	-2543 Jun 12 j 20:36	29° $\mathbb{M}$ 11'30	-4°57'44	max. Earth dist.	-2538 Aug 25 j 02:24	20° $\Omega$ 20'45	2.51956 AU
greatest brilliancy	-2543 Jun 12 j 21:11	29° $\mathbb{M}$ 11'08	-2.9m		-2538 Sep 07 j 21:31	0° $\mathbb{M}$	
min. Earth dist.	-2543 Jun 13 j 12:39	29° $\mathbb{M}$ 00'53	0.37685 AU				
direct	-2543 Jul 13 j 02:33	24° $\mathbb{M}$ 06'42		conjunction	-2538 Sep 27 j 22:23	14° $\mathbb{M}$ 18'44	0°34'30
	-2543 Aug 13 j 03:30	0° $\mathfrak{Z}$		minimum elong	-2538 Sep 27 j 23:54	14° $\mathbb{M}$ 21'30	0°34'29
	-2543 Oct 10 j 15:54	0° $\mathfrak{Z}$			-2538 Oct 19 j 09:00	0° $\underline{\mathfrak{L}}$	
	-2543 Nov 26 j 18:13	0° $\approx$		desc. node	-2538 Nov 20 j 20:17	24° $\underline{\mathfrak{L}}$ 24'30	
	-2542 Jan 11 j 13:18	0° $\mathfrak{H}$		morning rise	-2538 Nov 21 j 05:07	24° $\underline{\mathfrak{L}}$ 41'21	
asc. node	-2542 Feb 04 j 04:23	15° $\mathfrak{H}$ 23'44			-2538 Nov 28 j 03:51	0° $\mathbb{M}$	
	-2542 Feb 26 j 18:46	0° $\mathbb{Y}$			-2537 Jan 05 j 22:32	0° $\mathfrak{Z}$	
	-2542 Apr 14 j 18:11	0° $\mathfrak{B}$			-2537 Feb 13 j 12:10	0° $\mathfrak{Z}$	
evening set	-2542 May 23 j 13:55	24° $\mathfrak{B}$ 36'09			-2537 Mar 24 j 18:18	0° $\approx$	
	-2542 Jun 01 j 02:18	0° $\mathbb{I}$			-2537 May 04 j 18:10	0° $\mathfrak{H}$	
max. Earth dist.	-2542 Jul 01 j 04:02	19° $\mathbb{I}$ 08'07	2.66746 AU		-2537 Jun 17 j 22:56	0° $\mathbb{Y}$	
					-2537 Aug 08 j 04:59	0° $\mathfrak{B}$	
conjunction	-2542 Jul 09 j 04:19	24° $\mathbb{I}$ 15'44	1°06'33	asc. node	-2537 Sep 27 j 02:28	18° $\mathfrak{B}$ 51'30	
minimum elong	-2542 Jul 09 j 03:32	24° $\mathbb{I}$ 14'28	1°06'38	retrograde	-2537 Oct 13 j 04:57	20° $\mathfrak{B}$ 27'51	
	-2542 Jul 18 j 02:45	0° $\mathfrak{G}$		min. Earth dist.	-2537 Nov 19 j 15:24	11° $\mathfrak{B}$ 35'28	0.65207 AU
morning rise	-2542 Aug 23 j 03:27	23° $\mathfrak{G}$ 23'18		opposition	-2537 Nov 22 j 06:39	10° $\mathfrak{B}$ 31'51	2°06'11
	-2542 Sep 02 j 04:48	0° $\Omega$		greatest brilliancy	-2537 Nov 22 j 00:52	10° $\mathfrak{B}$ 37'40	-1.4m
	-2542 Oct 17 j 00:44	0° $\mathbb{M}$		direct	-2537 Dec 31 j 14:15	1° $\mathfrak{B}$ 09'33	
	-2542 Nov 29 j 14:59	0° $\underline{\mathfrak{L}}$			-2536 Mar 27 j 05:57	0° $\mathbb{I}$	
	-2541 Jan 11 j 05:10	0° $\mathbb{M}$			-2536 May 19 j 10:43	0° $\mathfrak{G}$	
desc. node	-2541 Feb 15 j 22:50	25° $\mathbb{M}$ 27'31			-2536 Jul 05 j 23:10	0° $\Omega$	
	-2541 Feb 22 j 07:58	0° $\mathfrak{Z}$			-2536 Aug 18 j 21:54	0° $\mathbb{M}$	
	-2541 Apr 06 j 04:37	0° $\mathfrak{Z}$		evening set	-2536 Sep 25 j 02:17	26° $\mathbb{M}$ 57'26	
	-2541 May 23 j 20:52	0° $\approx$			-2536 Sep 29 j 04:21	0° $\underline{\mathfrak{L}}$	
retrograde	-2541 Jul 22 j 06:13	19° $\approx$ 37'47		desc. node	-2536 Oct 07 j 18:33	6° $\underline{\mathfrak{L}}$ 26'49	
min. Earth dist.	-2541 Aug 18 j 19:13	14° $\approx$ 28'39	0.44670 AU	max. Earth dist.	-2536 Oct 20 j 16:03	16° $\underline{\mathfrak{L}}$ 14'00	2.39627 AU
greatest brilliancy	-2541 Aug 25 j 10:49	12° $\approx$ 14'09	-2.4m		-2536 Nov 07 j 13:19	0° $\mathbb{M}$	
opposition	-2541 Aug 26 j 19:56	11° $\approx$ 45'59	-5°24'05				
direct	-2541 Sep 28 j 00:23	5° $\approx$ 22'02		conjunction	-2536 Nov 22 j 22:50	11° $\mathbb{M}$ 59'20	-0°31'08
	-2541 Dec 11 j 17:22	0° $\mathfrak{H}$		minimum elong	-2536 Nov 22 j 20:33	11° $\mathbb{M}$ 54'51	0°31'09
asc. node	-2541 Dec 23 j 02:38	6° $\mathfrak{H}$ 00'48			-2536 Dec 15 j 21:24	0° $\mathfrak{Z}$	
	-2540 Feb 03 j 09:47	0° $\mathbb{Y}$			-2535 Jan 23 j 01:58	0° $\mathfrak{B}$	
	-2540 Mar 24 j 12:53	0° $\mathfrak{B}$		morning rise	-2535 Jan 28 j 23:11	4° $\mathfrak{Z}$ 35'20	
	-2540 May 12 j 08:15	0° $\mathbb{I}$			-2535 Mar 03 j 00:12	0° $\approx$	
	-2540 Jun 28 j 20:37	0° $\mathfrak{G}$			-2535 Apr 12 j 12:09	0° $\mathfrak{H}$	
evening set	-2540 Jun 29 j 15:11	0° $\mathfrak{G}$ 29'48			-2535 May 25 j 08:28	0° $\mathbb{Y}$	

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Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2535 Jul 10 j 12:47	0°♄			-2530 Nov 21 j 11:24	0°♄	
asc. node	-2535 Aug 14 j 02:03	20°♄26'16			-2530 Dec 31 j 18:24	0°♄	
	-2535 Aug 31 j 20:21	0°♄			-2529 Feb 11 j 13:32	0°♄	
retrograde	-2535 Nov 15 j 21:19	24°♄25'18		evening set	-2529 Mar 27 j 18:56	0°♄23'35	
opposition	-2535 Dec 25 j 13:50	14°♄54'28	4°05'16		-2529 Mar 27 j 04:55	0°♄	
greatest brilliancy	-2535 Dec 25 j 16:09	14°♄52'09	-1.3m	asc. node	-2529 Apr 05 j 21:39	6°♄30'05	
min. Earth dist.	-2535 Dec 26 j 17:58	14°♄26'24	0.67246 AU		-2529 May 11 j 13:56	0°♄	
direct	-2534 Feb 04 j 12:23	4°♄59'17					
	-2534 Apr 23 j 13:34	0°♄		conjunction	-2529 May 17 j 23:09	4°♄08'48	0°23'42
	-2534 Jun 14 j 14:28	0°♄		minimum elong	-2529 May 17 j 22:14	4°♄07'18	0°23'43
	-2534 Jul 29 j 20:29	0°♄		max. Earth dist.	-2529 May 30 j 00:02	11°♄55'38	2.64732 AU
desc. node	-2534 Aug 25 j 17:00	19°♄08'00			-2529 Jun 27 j 05:02	0°♄	
	-2534 Sep 09 j 11:00	0°♄		morning rise	-2529 Jul 04 j 13:39	4°♄41'09	
	-2534 Oct 18 j 19:45	0°♄			-2529 Aug 13 j 12:30	0°♄	
	-2534 Nov 26 j 01:35	0°♄			-2529 Sep 30 j 05:04	0°♄	
evening set	-2534 Nov 27 j 14:52	1°♄13'31			-2529 Nov 17 j 15:40	0°♄	
	-2533 Jan 03 j 04:53	0°♄			-2528 Jan 07 j 15:05	0°♄	
					-2528 Mar 12 j 05:59	0°♄	
conjunction	-2533 Feb 01 j 21:14	22°♄57'00	-1°06'05	retrograde	-2528 Apr 11 j 09:08	5°♄03'24	
minimum elong	-2533 Feb 01 j 22:07	22°♄58'40	1°06'08	desc. node	-2528 Apr 16 j 15:24	4°♄52'57	
	-2533 Feb 11 j 03:42	0°♄			-2528 May 11 j 12:05	30°♄	
max. Earth dist.	-2533 Mar 23 j 08:37	29°♄45'54	2.44417 AU	opposition	-2528 May 12 j 12:50	29°♄42'20	-1°46'39
	-2533 Mar 23 j 16:26	0°♄		greatest brilliancy	-2528 May 12 j 20:47	29°♄36'38	-2.8m
morning rise	-2533 Apr 07 j 09:03	10°♄31'12		min. Earth dist.	-2528 May 18 j 01:11	28°♄07'55	0.39878 AU
	-2533 May 05 j 07:51	0°♄		direct	-2528 Jun 14 j 07:57	23°♄38'10	
	-2533 Jun 19 j 09:45	0°♄			-2528 Jul 16 j 03:37	0°♄	
asc. node	-2533 Jul 02 j 00:37	8°♄05'36			-2528 Sep 10 j 06:53	0°♄	
	-2533 Aug 06 j 08:32	0°♄			-2528 Oct 25 j 02:22	0°♄	
	-2533 Sep 28 j 03:56	0°♄			-2528 Dec 07 j 11:34	0°♄	
retrograde	-2533 Dec 22 j 23:01	28°♄45'59			-2527 Jan 20 j 09:56	0°♄	
opposition	-2532 Jan 30 j 04:50	20°♄03'21	4°53'12	asc. node	-2527 Feb 20 j 19:02	20°♄56'31	
greatest brilliancy	-2532 Jan 31 j 00:04	19°♄44'43	-1.5m		-2527 Mar 06 j 13:29	0°♄	
min. Earth dist.	-2532 Feb 04 j 05:03	18°♄07'05	0.62789 AU		-2527 Apr 21 j 21:40	0°♄	
direct	-2532 Mar 11 j 07:32	10°♄06'01		evening set	-2527 May 08 j 11:12	10°♄35'43	
	-2532 May 15 j 18:51	0°♄			-2527 Jun 07 j 22:14	0°♄	
	-2532 Jul 05 j 17:03	0°♄		max. Earth dist.	-2527 Jun 22 j 03:27	9°♄03'09	2.67244 AU
desc. node	-2532 Jul 12 j 15:10	4°♄34'36					
	-2532 Aug 17 j 23:19	0°♄		conjunction	-2527 Jun 24 j 18:33	10°♄43'42	0°58'55
	-2532 Sep 26 j 23:36	0°♄		minimum elong	-2527 Jun 24 j 17:23	10°♄41'51	0°58'58
	-2532 Nov 04 j 14:06	0°♄			-2527 Jul 24 j 21:59	0°♄	
	-2532 Dec 13 j 01:17	0°♄		morning rise	-2527 Aug 08 j 21:03	9°♄37'36	
	-2531 Jan 21 j 08:59	0°♄			-2527 Sep 09 j 06:15	0°♄	
evening set	-2531 Feb 02 j 11:55	9°♄01'44			-2527 Oct 24 j 16:40	0°♄	
	-2531 Mar 03 j 07:01	0°♄			-2527 Dec 08 j 07:10	0°♄	
					-2526 Jan 21 j 10:04	0°♄	
conjunction	-2531 Apr 02 j 06:21	21°♄06'06	-0°27'07	desc. node	-2526 Mar 04 j 15:02	28°♄27'40	
minimum elong	-2531 Apr 02 j 07:48	21°♄08'36	0°27'06		-2526 Mar 06 j 22:47	0°♄	
	-2531 Apr 15 j 05:06	0°♄			-2526 Apr 24 j 00:27	0°♄	
max. Earth dist.	-2531 May 02 j 18:38	11°♄52'32	2.56825 AU	retrograde	-2526 Jun 28 j 11:10	22°♄39'32	
asc. node	-2531 May 18 j 23:44	22°♄39'22		min. Earth dist.	-2526 Jul 25 j 01:17	18°♄09'33	0.40255 AU
morning rise	-2531 May 26 j 00:40	27°♄17'07		greatest brilliancy	-2526 Jul 30 j 05:23	16°♄36'52	-2.7m
	-2531 May 30 j 04:14	0°♄		opposition	-2526 Jul 31 j 14:20	16°♄12'08	-6°36'02
	-2531 Jul 15 j 23:27	0°♄		direct	-2526 Aug 30 j 23:46	10°♄42'54	
	-2531 Sep 02 j 14:00	0°♄			-2526 Nov 01 j 23:10	0°♄	
	-2531 Oct 24 j 02:42	0°♄			-2526 Dec 25 j 13:50	0°♄	
	-2531 Dec 25 j 10:51	0°♄		asc. node	-2525 Jan 08 j 18:10	8°♄31'20	
retrograde	-2530 Feb 05 j 15:01	8°♄51'59			-2525 Feb 12 j 20:56	0°♄	
opposition	-2530 Mar 13 j 02:27	1°♄29'57	3°46'04		-2525 Apr 02 j 08:48	0°♄	
greatest brilliancy	-2530 Mar 14 j 06:40	1°♄04'46	-2.0m		-2525 May 20 j 10:49	0°♄	
	-2530 Mar 17 j 07:04	30°♄		evening set	-2525 Jun 15 j 20:44	16°♄40'47	
min. Earth dist.	-2530 Mar 21 j 07:45	28°♄34'49	0.52277 AU		-2525 Jul 06 j 16:59	0°♄	
direct	-2530 Apr 21 j 03:35	22°♄30'29		max. Earth dist.	-2525 Jul 15 j 22:19	5°♄56'58	2.64343 AU
	-2530 May 26 j 18:46	0°♄					
desc. node	-2530 May 30 j 15:11	1°♄31'52		conjunction	-2525 Aug 01 j 03:42	16°♄30'25	1°10'35
	-2530 Jul 21 j 12:41	0°♄		minimum elong	-2525 Aug 01 j 03:48	16°♄30'35	1°10'39
	-2530 Sep 02 j 17:35	0°♄			-2525 Aug 21 j 14:23	0°♄	
	-2530 Oct 12 j 21:31	0°♄		morning rise	-2525 Sep 15 j 20:50	16°♄59'49	

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Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2525 Oct 04 j 19:57	0°♎		opposition	-2520 Dec 12 j 08:39	1°♊52'01	3°27'04
	-2525 Nov 16 j 10:23	0°♏		greatest brilliancy	-2520 Dec 12 j 06:11	1°♊54'29	-1.3m
	-2525 Dec 27 j 16:06	0°♌		min. Earth dist.	-2520 Dec 12 j 00:44	1°♊59'57	0.67220 AU
desc. node	-2524 Jan 20 j 14:36	17°♌44'40			-2520 Dec 17 j 01:17	30°♋♂	
	-2524 Feb 06 j 00:42	0°♌		direct	-2519 Jan 21 j 20:08	22°♋06'27	
	-2524 Mar 17 j 07:12	0°♍			-2519 Mar 02 j 13:01	0°♊	
	-2524 Apr 27 j 21:41	0°♎			-2519 May 04 j 12:49	0°♋	
	-2524 Jun 13 j 09:25	0°♏			-2519 Jun 23 j 01:47	0°♌	
retrograde	-2524 Aug 20 j 12:02	23°♏58'44			-2519 Aug 06 j 15:25	0°♎	
min. Earth dist.	-2524 Sep 20 j 08:30	17°♏28'00	0.52457 AU	desc. node	-2519 Sep 11 j 10:04	25°♎49'02	
opposition	-2524 Sep 27 j 16:57	14°♏40'57	-2°41'57		-2519 Sep 17 j 01:06	0°♏	
greatest brilliancy	-2524 Sep 27 j 00:57	14°♏56'07	-2.0m		-2519 Oct 26 j 08:55	0°♌	
direct	-2524 Nov 01 j 12:43	7°♏00'42		evening set	-2519 Oct 31 j 22:33	4°♌20'06	
asc. node	-2524 Nov 25 j 18:05	10°♏23'07			-2519 Dec 03 j 14:40	0°♌	
	-2523 Jan 13 j 20:39	0°♏					
	-2523 Mar 10 j 06:45	0°♏		conjunction	-2518 Jan 05 j 00:01	25°♏30'48	-1°02'57
	-2523 Apr 29 j 22:42	0°♊		minimum elong	-2518 Jan 04 j 21:58	25°♏26'47	1°03'01
	-2523 Jun 17 j 04:34	0°♋			-2518 Jan 10 j 17:33	0°♏	
evening set	-2523 Jul 23 j 14:54	23°♋37'50			-2518 Feb 18 j 15:07	0°♎	
	-2523 Aug 02 j 04:49	0°♌		max. Earth dist.	-2518 Feb 18 j 13:17	29°♏56'31	2.39397 AU
max. Earth dist.	-2523 Aug 11 j 18:17	6°♌25'36	2.56330 AU	morning rise	-2518 Mar 14 j 01:51	17°♎33'27	
					-2518 Mar 31 j 02:07	0°♏	
conjunction	-2523 Sep 09 j 20:37	26°♌25'30	0°51'43		-2518 May 12 j 17:16	0°♏	
minimum elong	-2523 Sep 09 j 22:11	26°♌28'13	0°51'45		-2518 Jun 27 j 00:35	0°♏	
	-2523 Sep 14 j 23:01	0°♎		asc. node	-2518 Jul 18 j 16:46	13°♏37'51	
	-2523 Oct 26 j 15:50	0°♏			-2518 Aug 14 j 23:06	0°♊	
morning rise	-2523 Oct 30 j 10:45	2°♏47'25			-2518 Oct 11 j 05:08	0°♋	
	-2523 Dec 05 j 17:37	0°♌		retrograde	-2518 Dec 07 j 21:53	15°♋13'57	
desc. node	-2523 Dec 07 j 13:47	1°♌24'02		opposition	-2517 Jan 15 j 20:48	6°♋09'19	4°44'08
	-2522 Jan 13 j 19:08	0°♌		greatest brilliancy	-2517 Jan 16 j 09:02	5°♋57'18	-1.4m
	-2522 Feb 21 j 15:02	0°♍		min. Earth dist.	-2517 Jan 19 j 09:12	4°♋46'26	0.65331 AU
	-2522 Apr 02 j 03:50	0°♎			-2517 Feb 01 j 17:01	30°♋♂	
	-2522 May 13 j 15:20	0°♏		direct	-2517 Feb 26 j 03:01	26°♊08'06	
	-2522 Jun 28 j 05:55	0°♏			-2517 Mar 24 j 11:48	0°♋	
	-2522 Aug 26 j 18:01	0°♏			-2517 May 29 j 13:47	0°♌	
retrograde	-2522 Sep 29 j 08:10	6°♏31'00			-2517 Jul 16 j 03:28	0°♎	
asc. node	-2522 Oct 13 j 17:29	5°♏04'09		desc. node	-2517 Jul 30 j 09:36	9°♎48'25	
	-2522 Oct 30 j 13:06	30°♋♂			-2517 Aug 27 j 11:50	0°♏	
min. Earth dist.	-2522 Nov 04 j 04:05	28°♏11'32	0.62708 AU		-2517 Oct 06 j 03:21	0°♌	
opposition	-2522 Nov 08 j 06:17	26°♏33'12	1°01'18		-2517 Nov 13 j 12:32	0°♌	
greatest brilliancy	-2522 Nov 08 j 02:05	26°♏37'25	-1.6m		-2517 Dec 21 j 18:58	0°♏	
direct	-2522 Dec 16 j 14:26	17°♏31'33		evening set	-2516 Jan 09 j 08:54	14°♏22'24	
	-2521 Feb 06 j 04:08	0°♏			-2516 Jan 29 j 21:40	0°♎	
	-2521 Apr 07 j 13:25	0°♊			-2516 Mar 10 j 14:31	0°♏	
	-2521 May 28 j 11:54	0°♋					
	-2521 Jul 14 j 08:26	0°♌		conjunction	-2516 Mar 11 j 22:49	0°♏58'04	-0°46'42
	-2521 Aug 27 j 03:24	0°♎		minimum elong	-2516 Mar 12 j 01:11	1°♏02'20	0°46'44
evening set	-2521 Sep 05 j 20:24	6°♎54'20		max. Earth dist.	-2516 Apr 19 j 18:01	28°♏13'00	2.52396 AU
max. Earth dist.	-2521 Sep 21 j 20:32	18°♎29'10	2.44348 AU		-2516 Apr 22 j 08:27	0°♏	
	-2521 Oct 07 j 11:05	0°♏		morning rise	-2516 May 08 j 11:20	10°♏56'05	
desc. node	-2521 Oct 25 j 11:33	13°♏32'50		asc. node	-2516 Jun 04 j 14:38	28°♏55'02	
					-2516 Jun 06 j 06:27	0°♏	
conjunction	-2521 Oct 30 j 13:39	17°♏24'56	-0°03'33		-2516 Jul 23 j 08:04	0°♊	
minimum elong	-2521 Oct 30 j 13:24	17°♏24'28	0°03'33		-2516 Sep 10 j 23:06	0°♋	
behind sun begin	-2521 Oct 29 j 13:13	16°♏38'26			-2516 Nov 05 j 03:02	0°♌	
behind sun end	-2521 Oct 31 j 13:36	18°♏10'33		retrograde	-2515 Jan 17 j 05:47	22°♌16'28	
	-2521 Nov 15 j 23:17	0°♌		opposition	-2515 Feb 22 j 23:59	14°♌17'27	4°32'00
	-2521 Dec 24 j 10:39	0°♌		greatest brilliancy	-2515 Feb 24 j 03:39	13°♌51'41	-1.7m
morning rise	-2521 Dec 31 j 18:03	5°♌44'03		min. Earth dist.	-2515 Mar 02 j 03:51	11°♌37'56	0.57043 AU
	-2520 Jan 31 j 17:44	0°♏		direct	-2515 Apr 04 j 05:41	4°♌44'13	
	-2520 Mar 10 j 17:33	0°♎		desc. node	-2515 Jun 16 j 08:24	29°♌56'22	
	-2520 Apr 20 j 07:24	0°♏			-2515 Jun 16 j 10:58	0°♎	
	-2520 Jun 02 j 10:23	0°♏			-2515 Aug 02 j 10:16	0°♏	
	-2520 Jul 19 j 15:26	0°♏			-2515 Sep 12 j 17:41	0°♌	
asc. node	-2520 Aug 30 j 17:17	22°♏59'07			-2515 Oct 22 j 00:29	0°♌	
	-2520 Sep 15 j 05:43	0°♊			-2515 Nov 29 j 23:48	0°♏	
retrograde	-2520 Nov 02 j 09:03	11°♊35'40			-2514 Jan 08 j 18:31	0°♎	

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2514 Feb 19 j 02:41	0°♊			-2510 Oct 12 j 02:58	0°♐		
evening set	-2514 Mar 08 j 17:09	12°♊22'11			-2510 Nov 24 j 07:49	0°♑		
	-2514 Apr 03 j 09:12	0°♑			-2509 Jan 05 j 08:46	0°♒		
asc. node	-2514 Apr 22 j 13:21	12°♑53'03		desc. node	-2509 Feb 06 j 07:25	23°♒09'51		
					-2509 Feb 15 j 16:52	0°♓		
conjunction	-2514 May 01 j 09:25	18°♑44'53	0°05'11		-2509 Mar 29 j 07:08	0°♓		
minimum elong	-2514 May 01 j 09:09	18°♑44'28	0°05'12		-2509 May 12 j 11:39	0°♈		
behind sun begin	-2514 Apr 30 j 12:48	18°♑10'49			-2509 Jul 11 j 18:59	0°♉		
behind sun end	-2514 May 02 j 05:31	19°♑18'05		retrograde	-2509 Aug 02 j 22:58	3°♉19'15		
	-2514 May 18 j 12:27	0°♊			-2509 Aug 24 j 10:23	30°♊		
max. Earth dist.	-2514 May 20 j 05:04	1°♊06'14	2.62248 AU	min. Earth dist.	-2509 Aug 31 j 15:18	27°♊40'59	0.47424 AU	
morning rise	-2514 Jun 19 j 21:38	20°♊55'25		greatest brilliancy	-2509 Sep 07 j 11:59	25°♊14'34	-2.3m	
	-2514 Jul 04 j 03:04	0°♋		opposition	-2509 Sep 08 j 15:52	24°♊49'38	-4°26'47	
	-2514 Aug 20 j 18:34	0°♌		direct	-2509 Oct 11 j 18:49	17°♊56'17		
	-2514 Oct 08 j 11:00	0°♍			-2509 Nov 29 j 12:50	0°♋		
	-2514 Nov 28 j 10:36	0°♎		asc. node	-2509 Dec 13 j 09:07	6°♋13'05		
	-2513 Jan 27 j 18:02	0°♏			-2508 Jan 27 j 14:09	0°♌		
retrograde	-2513 Mar 14 j 14:50	10°♏25'07			-2508 Mar 19 j 02:01	0°♍		
opposition	-2513 Apr 16 j 10:07	4°♏16'22	1°06'22		-2508 May 07 j 10:49	0°♎		
greatest brilliancy	-2513 Apr 16 j 19:53	4°♏08'37	-2.5m		-2508 Jun 24 j 04:58	0°♏		
min. Earth dist.	-2513 Apr 24 j 11:26	1°♏43'22	0.44247 AU	evening set	-2508 Jul 08 j 05:11	9°♏01'14		
	-2513 Apr 30 j 09:33	30°♏		max. Earth dist.	-2508 Jul 31 j 02:55	24°♏01'08	2.60026 AU	
desc. node	-2513 May 04 j 07:20	29°♏01'04			-2508 Aug 09 j 02:46	0°♐		
direct	-2513 May 22 j 06:27	26°♏51'02						
	-2513 Jun 13 j 02:25	0°♑		conjunction	-2508 Aug 24 j 06:36	10°♐12'20	1°03'11	
	-2513 Aug 12 j 17:17	0°♒		minimum elong	-2508 Aug 24 j 07:43	10°♐14'12	1°03'14	
	-2513 Sep 25 j 16:53	0°♓			-2508 Sep 22 j 00:15	0°♑		
	-2513 Nov 06 j 06:04	0°♓		morning rise	-2508 Oct 11 j 07:08	13°♑37'25		
	-2513 Dec 17 j 21:38	0°♈			-2508 Nov 02 j 23:53	0°♒		
	-2512 Jan 29 j 17:03	0°♉			-2508 Dec 13 j 10:33	0°♒		
asc. node	-2512 Mar 09 j 12:13	26°♉56'41		desc. node	-2508 Dec 24 j 06:17	8°♒10'38		
	-2512 Mar 14 j 02:27	0°♑			-2507 Jan 21 j 21:25	0°♓		
evening set	-2512 Apr 22 j 15:24	25°♑54'52			-2507 Mar 02 j 02:39	0°♓		
	-2512 Apr 28 j 22:59	0°♊			-2507 Apr 11 j 02:52	0°♈		
					-2507 May 23 j 12:12	0°♉		
conjunction	-2512 Jun 10 j 02:27	27°♊01'55	0°47'43		-2507 Jul 11 j 04:15	0°♑		
minimum elong	-2512 Jun 10 j 01:09	26°♊59'51	0°47'45	retrograde	-2507 Sep 14 j 18:54	21°♑29'16		
max. Earth dist.	-2512 Jun 12 j 22:54	28°♊51'08	2.66897 AU	min. Earth dist.	-2507 Oct 18 j 19:19	13°♑48'07	0.59292 AU	
	-2512 Jun 14 j 18:04	0°♋		opposition	-2507 Oct 24 j 07:21	11°♑37'29	-0°15'30	
morning rise	-2512 Jul 25 j 19:55	26°♋11'41		greatest brilliancy	-2507 Oct 24 j 06:14	11°♑38'34	-1.7m	
	-2512 Jul 31 j 18:55	0°♌		asc. node	-2507 Oct 30 j 09:13	9°♑16'57		
	-2512 Sep 16 j 12:23	0°♍		direct	-2507 Nov 30 j 10:43	3°♑02'13		
	-2512 Nov 01 j 18:59	0°♎			-2506 Feb 20 j 22:13	0°♊		
	-2512 Dec 17 j 21:33	0°♏			-2506 Apr 16 j 12:58	0°♋		
	-2511 Feb 02 j 17:00	0°♐			-2506 Jun 05 j 02:41	0°♌		
desc. node	-2511 Mar 21 j 07:49	27°♐49'59			-2506 Jul 21 j 13:03	0°♍		
	-2511 Mar 25 j 07:17	0°♊		evening set	-2506 Aug 18 j 12:42	18°♍59'42		
retrograde	-2511 May 31 j 03:52	22°♊10'30		max. Earth dist.	-2506 Sep 02 j 17:37	29°♍36'44	2.49331 AU	
min. Earth dist.	-2511 Jun 28 j 16:27	17°♊32'10	0.37772 AU		-2506 Sep 03 j 06:48	0°♎		
opposition	-2511 Jul 01 j 01:18	16°♊53'45	-6°11'35					
greatest brilliancy	-2511 Jun 30 j 12:10	17°♊02'38	-2.9m	conjunction	-2506 Oct 09 j 00:22	25°♎47'09	0°22'05	
direct	-2511 Jul 30 j 20:22	11°♊55'34		minimum elong	-2506 Oct 09 j 01:32	25°♎49'19	0°22'04	
	-2511 Sep 27 j 23:07	0°♓			-2506 Oct 14 j 17:10	0°♏		
	-2511 Nov 18 j 22:21	0°♈		desc. node	-2506 Nov 11 j 05:45	20°♏41'46		
	-2510 Jan 05 j 09:37	0°♉			-2506 Nov 23 j 09:40	0°♐		
asc. node	-2510 Jan 25 j 10:01	12°♉46'45		morning rise	-2506 Dec 04 j 21:25	8°♐51'45		
	-2510 Feb 21 j 10:50	0°♑			-2505 Jan 01 j 01:18	0°♓		
	-2510 Apr 09 j 20:43	0°♊			-2505 Feb 08 j 11:48	0°♓		
	-2510 May 27 j 10:12	0°♋			-2505 Mar 19 j 14:35	0°♈		
evening set	-2510 Jun 01 j 02:45	2°♋58'02			-2505 Apr 29 j 08:52	0°♉		
max. Earth dist.	-2510 Jul 06 j 13:38	25°♋32'22	2.66104 AU		-2505 Jun 12 j 00:22	0°♑		
	-2510 Jul 13 j 12:20	0°♌			-2505 Jul 31 j 03:21	0°♊		
				asc. node	-2505 Sep 17 j 08:10	22°♊18'49		
conjunction	-2510 Jul 17 j 11:57	2°♌33'58	1°09'15	retrograde	-2505 Oct 20 j 23:23	28°♊35'25		
minimum elong	-2510 Jul 17 j 11:27	2°♌33'10	1°09'19	min. Earth dist.	-2505 Nov 28 j 06:21	19°♊26'32	0.66210 AU	
	-2510 Aug 28 j 12:26	0°♍		opposition	-2505 Nov 30 j 02:02	18°♊42'38	2°38'58	
morning rise	-2510 Aug 31 j 14:11	2°♍02'08		greatest brilliancy	-2505 Nov 29 j 20:42	18°♊47'59	-1.4m	

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 40

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

direct	-2504 Jan 08 j 21:30	9°♄10'49			-2499 Apr 10 j 12:31	0°♄	
	-2504 Mar 19 j 08:43	0°♄					
	-2504 May 13 j 19:56	0°♄		conjunction	-2499 Apr 13 j 08:36	1°♄55'50	-0°15'11
	-2504 Jun 30 j 23:25	0°♄		minimum elong	-2499 Apr 13 j 09:23	1°♄57'10	0°15'10
	-2504 Aug 14 j 03:36	0°♄		behind sun begin	-2499 Apr 13 j 03:06	1°♄46'29	
	-2504 Sep 24 j 11:35	0°♄		behind sun end	-2499 Apr 13 j 15:41	2°♄07'51	
desc. node	-2504 Sep 28 j 03:59	2°♄45'13		asc. node	-2499 May 09 j 05:28	19°♄17'19	
evening set	-2504 Oct 07 j 13:50	9°♄50'40		max. Earth dist.	-2499 May 09 j 13:14	19°♄30'11	2.58977 AU
	-2504 Nov 02 j 20:30	0°♄			-2499 May 25 j 11:57	0°♄	
max. Earth dist.	-2504 Nov 19 j 19:48	13°♄14'01	2.37788 AU	morning rise	-2499 Jun 04 j 09:39	6°♄26'57	
					-2499 Jul 11 j 04:13	0°♄	
conjunction	-2504 Dec 07 j 21:13	27°♄25'25	-0°45'24		-2499 Aug 28 j 07:59	0°♄	
minimum elong	-2504 Dec 07 j 18:12	27°♄19'29	0°45'26		-2499 Oct 17 j 12:47	0°♄	
	-2504 Dec 11 j 03:41	0°♄			-2499 Dec 12 j 11:22	0°♄	
	-2503 Jan 18 j 07:09	0°♄		retrograde	-2498 Feb 17 j 22:09	19°♄43'27	
morning rise	-2503 Feb 14 j 10:29	21°♄02'23		opposition	-2498 Mar 24 j 13:16	12°♄45'27	3°02'09
	-2503 Feb 26 j 04:17	0°♄		greatest brilliancy	-2498 Mar 25 j 14:06	12°♄24'02	-2.2m
	-2503 Apr 07 j 14:29	0°♄		min. Earth dist.	-2498 Apr 02 j 01:58	9°♄49'46	0.49447 AU
	-2503 May 20 j 07:00	0°♄		direct	-2498 May 01 j 16:54	4°♄13'01	
	-2503 Jul 05 j 00:10	0°♄		desc. node	-2498 May 21 j 00:20	6°♄38'24	
asc. node	-2503 Aug 04 j 07:00	18°♄27'04			-2498 Jul 12 j 07:26	0°♄	
	-2503 Aug 24 j 14:47	0°♄			-2498 Aug 26 j 19:20	0°♄	
	-2503 Nov 03 j 23:37	0°♄			-2498 Oct 06 j 19:57	0°♄	
retrograde	-2503 Nov 23 j 18:14	2°♄14'26			-2498 Nov 15 j 21:30	0°♄	
	-2503 Dec 12 j 06:27	30°♄			-2498 Dec 26 j 12:57	0°♄	
opposition	-2502 Jan 02 j 06:08	22°♄51'52	4°22'43		-2497 Feb 06 j 14:20	0°♄	
greatest brilliancy	-2502 Jan 02 j 11:45	22°♄46'18	-1.3m		-2497 Mar 22 j 10:28	0°♄	
min. Earth dist.	-2502 Jan 04 j 06:20	22°♄04'02	0.66846 AU	asc. node	-2497 Mar 27 j 03:20	3°♄08'54	
direct	-2502 Feb 12 j 09:32	12°♄53'09		evening set	-2497 Apr 06 j 21:35	10°♄18'30	
	-2502 Apr 14 j 23:03	0°♄			-2497 May 06 j 22:22	0°♄	
	-2502 Jun 08 j 17:16	0°♄					
	-2502 Jul 24 j 15:45	0°♄		conjunction	-2497 May 26 j 23:09	12°♄56'49	0°33'21
desc. node	-2502 Aug 16 j 01:54	15°♄48'04		minimum elong	-2497 May 26 j 22:00	12°♄54'57	0°33'22
	-2502 Sep 04 j 12:03	0°♄		max. Earth dist.	-2497 Jun 04 j 14:01	18°♄29'05	2.65735 AU
	-2502 Oct 13 j 23:11	0°♄			-2497 Jun 22 j 14:09	0°♄	
	-2502 Nov 21 j 06:01	0°♄		morning rise	-2497 Jul 12 j 18:24	12°♄51'03	
evening set	-2502 Dec 13 j 04:03	17°♄15'55			-2497 Aug 08 j 18:20	0°♄	
	-2502 Dec 29 j 10:00	0°♄			-2497 Sep 25 j 00:56	0°♄	
	-2501 Feb 06 j 09:33	0°♄			-2497 Nov 11 j 12:28	0°♄	
					-2497 Dec 30 j 02:40	0°♄	
conjunction	-2501 Feb 16 j 17:35	7°♄46'39	-1°01'43		-2496 Feb 21 j 04:11	0°♄	
minimum elong	-2501 Feb 16 j 19:36	7°♄50'25	1°01'44	desc. node	-2496 Apr 06 j 23:16	18°♄29'32	
	-2501 Mar 18 j 22:42	0°♄		retrograde	-2496 Apr 29 j 08:14	21°♄26'16	
max. Earth dist.	-2501 Apr 04 j 08:40	11°♄44'21	2.47342 AU	opposition	-2496 May 29 j 19:12	16°♄22'23	-3°39'02
morning rise	-2501 Apr 19 j 17:27	22°♄31'02		greatest brilliancy	-2496 May 30 j 02:49	16°♄17'14	-2.9m
	-2501 Apr 30 j 13:43	0°♄		min. Earth dist.	-2496 Jun 01 j 21:00	15°♄32'35	0.38319 AU
	-2501 Jun 14 j 12:25	0°♄		direct	-2496 Jun 29 j 23:04	10°♄57'23	
asc. node	-2501 Jun 22 j 06:59	5°♄01'42			-2496 Aug 28 j 13:26	0°♄	
	-2501 Aug 01 j 00:38	0°♄			-2496 Oct 16 j 22:40	0°♄	
	-2501 Sep 21 j 06:50	0°♄			-2496 Dec 01 j 00:06	0°♄	
	-2501 Nov 24 j 04:25	0°♄			-2495 Jan 14 j 19:45	0°♄	
retrograde	-2500 Jan 01 j 01:02	7°♄17'04		asc. node	-2495 Feb 11 j 01:47	17°♄59'05	
	-2500 Feb 04 j 16:20	30°♄			-2495 Mar 01 j 11:48	0°♄	
opposition	-2500 Feb 07 j 20:03	28°♄48'15	4°50'56		-2495 Apr 17 j 03:12	0°♄	
greatest brilliancy	-2500 Feb 08 j 18:50	28°♄26'26	-1.6m	evening set	-2495 May 17 j 04:35	19°♄07'28	
min. Earth dist.	-2500 Feb 13 j 15:43	26°♄34'50	0.61001 AU		-2495 Jun 03 j 07:34	0°♄	
direct	-2500 Mar 19 j 18:17	18°♄56'24		max. Earth dist.	-2495 Jun 27 j 11:29	15°♄22'41	2.67075 AU
	-2500 May 04 j 19:19	0°♄					
	-2500 Jun 29 j 02:49	0°♄		conjunction	-2495 Jul 03 j 01:00	18°♄55'46	1°03'48
desc. node	-2500 Jul 03 j 00:52	2°♄29'50		minimum elong	-2495 Jul 03 j 00:02	18°♄54'13	1°03'51
	-2500 Aug 12 j 07:22	0°♄			-2495 Jul 20 j 07:47	0°♄	
	-2500 Sep 21 j 16:24	0°♄		morning rise	-2495 Aug 17 j 00:11	17°♄53'26	
	-2500 Oct 30 j 11:21	0°♄			-2495 Sep 04 j 12:53	0°♄	
	-2500 Dec 08 j 01:37	0°♄			-2495 Oct 19 j 15:32	0°♄	
	-2499 Jan 16 j 12:06	0°♄			-2495 Dec 02 j 15:58	0°♄	
evening set	-2499 Feb 15 j 13:38	22°♄07'14			-2494 Jan 14 j 20:48	0°♄	
	-2499 Feb 26 j 12:32	0°♄		desc. node	-2494 Feb 23 j 00:31	27°♄21'08	



## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 41

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2494 Feb 26 j 19:59	0°♊				-2489 Jan 21 j 22:49	0°♋		
	-2494 Apr 12 j 05:15	0°♌				-2489 Apr 01 j 00:39	0°♍		
	-2494 Jun 04 j 18:46	0°♎				-2489 May 23 j 05:28	0°♏		
retrograde	-2494 Jul 12 j 12:08	8°♐53'25				-2489 Jul 09 j 12:11	0°♑		
min. Earth dist.	-2494 Aug 08 j 09:15	4°♒04'50	0.42551 AU			-2489 Aug 22 j 10:44	0°♓		
greatest brilliancy	-2494 Aug 14 j 13:40	2°♒05'57	-2.6m	evening set		-2489 Sep 17 j 01:08	18°♓23'18		
opposition	-2494 Aug 16 j 00:36	1°♒37'41	-6°02'23			-2489 Oct 02 j 18:43	0°♈		
	-2494 Aug 21 j 04:47	30°♈3		max. Earth dist.		-2489 Oct 06 j 04:02	2°♈31'44	2.41632 AU	
direct	-2494 Sep 16 j 09:51	25°♈38'43		desc. node		-2489 Oct 15 j 20:37	9°♈48'51		
	-2494 Oct 13 j 11:49	0°♉				-2489 Nov 11 j 05:49	0°♉		
	-2494 Dec 17 j 11:15	0°♊							
asc. node	-2494 Dec 30 j 00:16	7°♊06'00		conjunction		-2489 Nov 12 j 23:03	1°♋19'45	-0°19'17	
	-2493 Feb 06 j 20:44	0°♋		minimum elong		-2489 Nov 12 j 21:38	1°♋17'01	0°19'17	
	-2493 Mar 28 j 04:46	0°♌				-2489 Dec 19 j 15:32	0°♌		
	-2493 May 15 j 16:17	0°♍		morning rise		-2488 Jan 17 j 01:09	22°♌18'59		
evening set	-2493 Jun 24 j 07:21	25°♍00'45				-2488 Jan 26 j 20:49	0°♎		
	-2493 Jul 02 j 02:21	0°♏				-2488 Mar 05 j 18:59	0°♐		
max. Earth dist.	-2493 Jul 21 j 16:30	12°♏40'05	2.63035 AU			-2488 Apr 15 j 06:25	0°♑		
						-2488 May 28 j 03:28	0°♒		
conjunction	-2493 Aug 09 j 17:13	25°♓09'46	1°09'17			-2488 Jul 13 j 14:25	0°♋		
minimum elong	-2493 Aug 09 j 17:41	25°♓10'33	1°09'20	asc. node		-2488 Aug 20 j 23:29	22°♋07'29		
	-2493 Aug 17 j 00:00	0°♑				-2488 Sep 05 j 09:22	0°♌		
morning rise	-2493 Sep 25 j 00:53	26°♑28'39		retrograde		-2488 Nov 10 j 02:33	19°♌25'28		
	-2493 Sep 30 j 02:59	0°♒		opposition		-2488 Dec 19 j 23:18	9°♌48'30	3°50'29	
	-2493 Nov 11 j 12:06	0°♓		greatest brilliancy		-2488 Dec 19 j 23:17	9°♌48'31	-1.3m	
	-2493 Dec 22 j 10:37	0°♔		min. Earth dist.		-2488 Dec 20 j 11:13	9°♌36'35	0.67359 AU	
desc. node	-2492 Jan 11 j 00:28	14°♔37'46				-2487 Jan 27 j 00:01	30°♋8		
	-2492 Jan 31 j 10:18	0°♌		direct		-2487 Jan 29 j 18:11	29°♋57'10		
	-2492 Mar 11 j 05:18	0°♍				-2487 Feb 01 j 13:00	0°♍		
	-2492 Apr 21 j 00:44	0°♎				-2487 Apr 27 j 16:59	0°♏		
	-2492 Jun 04 j 06:07	0°♏				-2487 Jun 17 j 15:25	0°♑		
	-2492 Aug 02 j 09:16	0°♐				-2487 Aug 01 j 15:47	0°♒		
retrograde	-2492 Aug 30 j 03:21	4°♐53'16		desc. node		-2487 Sep 01 j 19:29	22°♒18'12		
	-2492 Sep 25 j 12:18	30°♒8				-2487 Sep 12 j 05:19	0°♓		
min. Earth dist.	-2492 Oct 01 j 03:44	27°♒56'15	0.55062 AU			-2487 Oct 21 j 14:27	0°♔		
opposition	-2492 Oct 07 j 22:44	25°♒18'46	-1°44'52	evening set		-2487 Nov 15 j 17:27	19°♒39'24		
greatest brilliancy	-2492 Oct 07 j 13:04	25°♒28'06	-1.9m			-2487 Nov 28 j 20:24	0°♌		
direct	-2492 Nov 12 j 16:00	17°♒16'41				-2486 Jan 05 j 23:02	0°♍		
asc. node	-2492 Nov 15 j 23:19	17°♒20'50							
	-2491 Jan 03 j 00:30	0°♐		conjunction		-2486 Jan 20 j 20:55	11°♓36'31	-1°06'32	
	-2491 Mar 03 j 22:43	0°♋		minimum elong		-2486 Jan 20 j 20:31	11°♓35'46	1°06'36	
	-2491 Apr 24 j 17:28	0°♌				-2486 Feb 13 j 20:25	0°♎		
	-2491 Jun 12 j 09:35	0°♏		max. Earth dist.		-2486 Mar 11 j 16:44	19°♎20'05	2.42058 AU	
	-2491 Jul 28 j 13:27	0°♑				-2486 Mar 26 j 07:05	0°♑		
evening set	-2491 Aug 01 j 18:12	2°♑48'32		morning rise		-2486 Mar 28 j 05:33	1°♑24'03		
max. Earth dist.	-2491 Aug 19 j 02:12	14°♑33'35	2.53993 AU			-2486 May 07 j 20:44	0°♒		
	-2491 Sep 10 j 07:53	0°♒				-2486 Jun 21 j 23:02	0°♓		
				asc. node		-2486 Jul 08 j 22:11	10°♓48'43		
conjunction	-2491 Sep 19 j 22:02	6°♒47'16	0°42'32			-2486 Aug 09 j 04:50	0°♔		
minimum elong	-2491 Sep 19 j 23:39	6°♒50'09	0°42'33			-2486 Oct 02 j 08:14	0°♕		
	-2491 Oct 21 j 22:40	0°♓		retrograde		-2486 Dec 16 j 09:17	23°♕21'26		
morning rise	-2491 Nov 11 j 09:29	15°♓13'47		opposition		-2485 Jan 23 j 23:52	14°♕28'22	4°50'47	
desc. node	-2491 Nov 27 j 22:29	27°♓45'00		greatest brilliancy		-2485 Jan 24 j 16:00	14°♕12'39	-1.4m	
	-2491 Nov 30 j 21:19	0°♔		min. Earth dist.		-2485 Jan 28 j 08:19	12°♕46'40	0.64048 AU	
	-2490 Jan 08 j 19:17	0°♌		direct		-2485 Mar 06 j 05:38	4°♕28'31		
	-2490 Feb 16 j 11:16	0°♍				-2485 May 21 j 23:04	0°♑		
	-2490 Mar 27 j 19:21	0°♎				-2485 Jul 10 j 06:58	0°♒		
	-2490 May 07 j 22:01	0°♏		desc. node		-2485 Jul 20 j 17:38	7°♒01'59		
	-2490 Jun 21 j 12:13	0°♐				-2485 Aug 22 j 04:10	0°♓		
	-2490 Aug 13 j 19:06	0°♑				-2485 Oct 01 j 01:13	0°♔		
asc. node	-2490 Oct 03 j 23:36	14°♑59'32				-2485 Nov 08 j 13:31	0°♌		
retrograde	-2490 Oct 07 j 08:35	15°♑04'05				-2485 Dec 16 j 22:04	0°♍		
min. Earth dist.	-2490 Nov 13 j 02:34	6°♑26'07	0.64204 AU	evening set		-2484 Jan 23 j 20:46	29°♑03'45		
opposition	-2490 Nov 16 j 09:48	5°♑06'37	1°40'31			-2484 Jan 25 j 02:40	0°♎		
greatest brilliancy	-2490 Nov 16 j 04:11	5°♑12'15	-1.5m			-2484 Mar 05 j 21:08	0°♏		
	-2490 Nov 30 j 04:13	30°♑8							
direct	-2490 Dec 25 j 08:05	25°♑52'53		conjunction		-2484 Mar 24 j 08:28	13°♑08'09	-0°35'46	

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

minimum elong	-2484 Mar 24 j 10:23	13° $\text{H}$ 11'32	0°35'46	retrograde	-2479 Jun 16 j 15:58	10° $\text{Z}$ 00'59	
	-2484 Apr 17 j 15:54	0° $\text{Y}$		min. Earth dist.	-2479 Jul 13 j 15:45	5° $\text{Z}$ 35'22	0.38820 AU
max. Earth dist.	-2484 Apr 27 j 13:05	6° $\text{Y}$ 43'28	2.54925 AU	opposition	-2479 Jul 18 j 15:59	4° $\text{Z}$ 10'12	-6°41'41
morning rise	-2484 May 18 j 16:46	20° $\text{Y}$ 53'16		greatest brilliancy	-2479 Jul 17 j 13:40	4° $\text{Z}$ 28'53	-2.8m
asc. node	-2484 May 25 j 21:28	25° $\text{Y}$ 38'13			-2479 Aug 05 j 05:58	30° $\text{R}$ $\text{Z}$	
	-2484 Jun 01 j 13:08	0° $\text{B}$		direct	-2479 Aug 17 j 12:25	29° $\text{Z}$ 00'09	
	-2484 Jul 18 j 09:41	0° $\text{II}$			-2479 Aug 30 j 00:35	0° $\text{Z}$	
	-2484 Sep 05 j 08:21	0° $\text{E}$			-2479 Nov 09 j 14:53	0° $\approx$	
	-2484 Oct 28 j 01:34	0° $\text{O}$			-2479 Dec 29 j 18:57	0° $\text{H}$	
	-2483 Jan 09 j 14:24	0° $\text{M}$		asc. node	-2478 Jan 15 j 15:45	10° $\text{H}$ 27'56	
retrograde	-2483 Jan 27 j 21:58	1° $\text{M}$ 54'47			-2478 Feb 15 j 22:23	0° $\text{Y}$	
	-2483 Feb 14 j 08:01	30° $\text{R}$ $\text{O}$			-2478 Apr 04 j 21:26	0° $\text{B}$	
opposition	-2483 Mar 05 j 00:26	24° $\text{O}$ 15'18	4°09'11		-2478 May 22 j 17:40	0° $\text{II}$	
greatest brilliancy	-2483 Mar 06 j 05:05	23° $\text{O}$ 49'11	-1.9m	evening set	-2478 Jun 09 j 14:13	11° $\text{II}$ 16'54	
min. Earth dist.	-2483 Mar 12 j 20:21	21° $\text{O}$ 24'50	0.54482 AU		-2478 Jul 08 j 22:19	0° $\text{E}$	
direct	-2483 Apr 13 j 16:44	14° $\text{O}$ 58'30		max. Earth dist.	-2478 Jul 12 j 01:05	2° $\text{E}$ 00'16	2.65238 AU
	-2483 Jun 05 j 20:05	0° $\text{M}$					
desc. node	-2483 Jun 06 j 16:53	0° $\text{M}$ 25'35		conjunction	-2478 Jul 25 j 20:37	10° $\text{E}$ 56'22	1°10'33
	-2483 Jul 26 j 10:33	0° $\text{L}$		minimum elong	-2478 Jul 25 j 20:28	10° $\text{E}$ 56'07	1°10'36
	-2483 Sep 06 j 16:46	0° $\text{M}$			-2478 Aug 23 j 21:36	0° $\text{O}$	
	-2483 Oct 16 j 10:26	0° $\text{Z}$		morning rise	-2478 Sep 09 j 05:17	10° $\text{O}$ 53'45	
	-2483 Nov 24 j 16:43	0° $\text{Z}$			-2478 Oct 07 j 07:48	0° $\text{M}$	
	-2482 Jan 03 j 17:04	0° $\approx$			-2478 Nov 19 j 04:59	0° $\text{L}$	
	-2482 Feb 14 j 05:58	0° $\text{H}$			-2478 Dec 30 j 19:05	0° $\text{M}$	
evening set	-2482 Mar 19 j 19:10	23° $\text{H}$ 17'45		desc. node	-2477 Jan 27 j 16:38	20° $\text{M}$ 29'58	
	-2482 Mar 29 j 16:02	0° $\text{Y}$			-2477 Feb 09 j 13:13	0° $\text{Z}$	
asc. node	-2482 Apr 12 j 19:39	9° $\text{Y}$ 30'23			-2477 Mar 22 j 07:00	0° $\text{Z}$	
					-2477 May 03 j 16:50	0° $\approx$	
conjunction	-2482 May 11 j 00:03	28° $\text{Y}$ 06'53	0°16'09		-2477 Jun 21 j 22:38	0° $\text{H}$	
minimum elong	-2482 May 10 j 23:22	28° $\text{Y}$ 05'46	0°16'10	retrograde	-2477 Aug 13 j 18:37	15° $\text{H}$ 52'23	
	-2482 May 13 j 21:21	0° $\text{B}$		min. Earth dist.	-2477 Sep 12 j 15:55	9° $\text{H}$ 45'02	0.50231 AU
max. Earth dist.	-2482 May 26 j 00:43	7° $\text{B}$ 53'20	2.63726 AU	opposition	-2477 Sep 20 j 09:59	6° $\text{H}$ 53'01	-3°26'28
morning rise	-2482 Jun 28 j 09:08	29° $\text{B}$ 18'07		greatest brilliancy	-2477 Sep 19 j 12:45	7° $\text{H}$ 12'41	-2.2m
	-2482 Jun 29 j 11:25	0° $\text{II}$			-2477 Oct 16 j 07:02	30° $\text{R}$ $\approx$	
	-2482 Aug 15 j 21:36	0° $\text{E}$		direct	-2477 Oct 24 j 11:49	29° $\approx$ 32'41	
	-2482 Oct 02 j 23:24	0° $\text{O}$			-2477 Nov 01 j 23:36	0° $\text{H}$	
	-2482 Nov 21 j 08:14	0° $\text{M}$		asc. node	-2477 Dec 03 j 15:45	8° $\text{H}$ 03'20	
	-2481 Jan 13 j 23:51	0° $\text{L}$			-2476 Jan 19 j 22:03	0° $\text{Y}$	
retrograde	-2481 Mar 30 j 06:13	24° $\text{L}$ 10'01			-2476 Mar 13 j 09:07	0° $\text{B}$	
desc. node	-2481 Apr 24 j 17:25	20° $\text{L}$ 19'56			-2476 May 02 j 10:54	0° $\text{II}$	
opposition	-2481 May 01 j 02:37	18° $\text{L}$ 28'48	-0°25'20		-2476 Jun 19 j 12:06	0° $\text{E}$	
greatest brilliancy	-2481 May 01 j 05:16	18° $\text{L}$ 26'48	-2.7m	evening set	-2476 Jul 16 j 23:10	17° $\text{E}$ 44'19	
min. Earth dist.	-2481 May 08 j 01:29	16° $\text{L}$ 23'51	0.41648 AU		-2476 Aug 04 j 12:18	0° $\text{O}$	
direct	-2481 Jun 04 j 07:10	11° $\text{L}$ 47'56		max. Earth dist.	-2476 Aug 06 j 15:04	1° $\text{O}$ 24'52	2.58078 AU
	-2481 Jul 31 j 12:15	0° $\text{M}$					
	-2481 Sep 17 j 14:48	0° $\text{Z}$		conjunction	-2476 Sep 02 j 13:56	19° $\text{O}$ 43'03	0°57'15
	-2481 Oct 30 j 15:03	0° $\text{Z}$		minimum elong	-2476 Sep 02 j 15:20	19° $\text{O}$ 45'27	0°57'17
	-2481 Dec 12 j 01:59	0° $\approx$			-2476 Sep 17 j 09:04	0° $\text{M}$	
	-2480 Jan 24 j 10:09	0° $\text{H}$		morning rise	-2476 Oct 21 j 21:15	24° $\text{M}$ 37'58	
asc. node	-2480 Feb 28 j 16:54	23° $\text{H}$ 44'12			-2476 Oct 29 j 05:49	0° $\text{L}$	
	-2480 Mar 09 j 04:00	0° $\text{Y}$			-2476 Dec 08 j 12:02	0° $\text{M}$	
	-2480 Apr 24 j 06:00	0° $\text{B}$		desc. node	-2476 Dec 14 j 15:56	4° $\text{M}$ 40'19	
evening set	-2480 May 01 j 19:28	4° $\text{B}$ 51'37			-2475 Jan 16 j 17:50	0° $\text{Z}$	
	-2480 Jun 10 j 03:43	0° $\text{II}$			-2475 Feb 24 j 17:13	0° $\text{Z}$	
					-2475 Apr 05 j 09:34	0° $\approx$	
conjunction	-2480 Jun 18 j 13:28	5° $\text{II}$ 21'26	0°54'38		-2475 May 17 j 03:20	0° $\text{H}$	
minimum elong	-2480 Jun 18 j 12:13	5° $\text{II}$ 19'28	0°54'40		-2475 Jul 02 j 14:33	0° $\text{Y}$	
max. Earth dist.	-2480 Jun 18 j 07:13	5° $\text{II}$ 11'28	2.67203 AU		-2475 Sep 12 j 23:49	0° $\text{B}$	
	-2480 Jul 27 j 03:48	0° $\text{E}$		retrograde	-2475 Sep 23 j 05:41	0° $\text{B}$ 41'51	
morning rise	-2480 Aug 02 j 21:05	4° $\text{E}$ 18'27			-2475 Oct 03 j 05:11	30° $\text{R}$ $\text{Y}$	
	-2480 Sep 11 j 16:14	0° $\text{O}$		asc. node	-2475 Oct 20 j 15:07	25° $\text{Y}$ 33'06	
	-2480 Oct 27 j 11:18	0° $\text{M}$		min. Earth dist.	-2475 Oct 28 j 07:00	22° $\text{Y}$ 39'04	0.61290 AU
	-2480 Dec 11 j 16:16	0° $\text{L}$		opposition	-2475 Nov 02 j 00:46	20° $\text{Y}$ 45'43	0°30'39
	-2479 Jan 25 j 19:01	0° $\text{M}$		greatest brilliancy	-2475 Nov 01 j 22:23	20° $\text{Y}$ 48'06	-1.6m
desc. node	-2479 Mar 11 j 17:13	29° $\text{M}$ 06'12		direct	-2475 Dec 09 j 21:14	11° $\text{Y}$ 55'02	
	-2479 Mar 13 j 03:39	0° $\text{Z}$			-2474 Feb 12 j 05:04	0° $\text{B}$	
	-2479 May 06 j 13:45	0° $\text{Z}$			-2474 Apr 10 j 17:04	0° $\text{II}$	

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 43

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2474 May 31 j 01:33	0°☾		conjunction	-2469 Mar 02 j 20:04	21°☾45'31	-0°53'58
	-2474 Jul 16 j 18:50	0°♊		minimum elong	-2469 Mar 02 j 22:32	21°☾50'00	0°53'58
evening set	-2474 Aug 28 j 18:04	29°♊23'45			-2469 Mar 14 j 04:14	0°♋	
	-2474 Aug 29 j 14:38	0°♌		max. Earth dist.	-2469 Apr 14 j 07:09	22°♋03'03	2.50207 AU
max. Earth dist.	-2474 Sep 12 j 19:08	10°♌06'08	2.46599 AU		-2469 Apr 25 j 19:22	0°♍	
	-2474 Oct 10 j 00:38	0°♎		morning rise	-2469 May 01 j 06:54	3°♍44'46	
					-2469 Jun 09 j 16:16	0°♐	
conjunction	-2474 Oct 20 j 21:32	8°♎07'10	0°08'00	asc. node	-2469 Jun 12 j 12:18	1°♐50'47	
minimum elong	-2474 Oct 20 j 22:01	8°♎08'06	0°07'58		-2469 Jul 26 j 20:33	0°♑	
behind sun begin	-2474 Oct 20 j 01:00	7°♎28'39			-2469 Sep 15 j 00:25	0°☾	
behind sun end	-2474 Oct 21 j 19:03	8°♎47'34			-2469 Nov 11 j 14:12	0°♊	
desc. node	-2474 Nov 01 j 13:51	16°♎56'30		retrograde	-2468 Jan 10 j 14:27	16°♊07'39	
	-2474 Nov 18 j 15:30	0°♌		opposition	-2468 Feb 16 j 21:05	7°♊54'31	4°42'15
morning rise	-2474 Dec 19 j 15:13	24°♌04'13		greatest brilliancy	-2468 Feb 17 j 22:51	7°♊30'11	-1.7m
	-2474 Dec 27 j 05:08	0°♍		min. Earth dist.	-2468 Feb 23 j 11:34	5°♊25'26	0.58928 AU
	-2473 Feb 03 j 13:25	0°♎			-2468 Mar 12 j 01:08	30°♋☾	
	-2473 Mar 14 j 13:37	0°☾		direct	-2468 Mar 28 j 12:12	28°☾11'26	
	-2473 Apr 24 j 03:55	0°♋			-2468 Apr 14 j 16:15	0°♊	
	-2473 Jun 06 j 09:28	0°♍			-2468 Jun 21 j 16:38	0°♌	
	-2473 Jul 24 j 03:39	0°♐		desc. node	-2468 Jun 23 j 10:25	1°♌02'54	
asc. node	-2473 Sep 07 j 14:26	23°♐35'19			-2468 Aug 06 j 07:31	0°♎	
	-2473 Sep 24 j 00:11	0°♑			-2468 Sep 16 j 04:39	0°♌	
retrograde	-2473 Oct 28 j 16:12	6°♑33'14			-2468 Oct 25 j 05:57	0°♍	
	-2473 Nov 29 j 12:17	30°♋♎			-2468 Dec 03 j 00:24	0°♎	
opposition	-2473 Dec 07 j 18:12	26°♋45'04	3°08'15		-2467 Jan 11 j 14:10	0°☾	
min. Earth dist.	-2473 Dec 06 j 18:20	27°♋09'01	0.66892 AU		-2467 Feb 21 j 17:32	0°♋	
greatest brilliancy	-2473 Dec 07 j 14:10	26°♋49'07	-1.3m	evening set	-2467 Feb 27 j 20:55	4°♋21'49	
direct	-2472 Jan 16 j 23:37	17°♋05'05			-2467 Apr 05 j 19:34	0°♍	
	-2472 Mar 09 j 17:41	0°♑					
	-2472 May 07 j 20:50	0°☾		conjunction	-2467 Apr 23 j 20:53	12°♍10'37	-0°03'18
	-2472 Jun 25 j 20:05	0°♊		minimum elong	-2467 Apr 23 j 21:04	12°♍10'55	0°03'17
	-2472 Aug 09 j 06:58	0°♌		behind sun begin	-2467 Apr 22 j 23:37	11°♍35'03	
desc. node	-2472 Sep 18 j 12:03	29°♌06'07		behind sun end	-2467 Apr 24 j 18:32	12°♍46'47	
	-2472 Sep 19 j 16:58	0°♎		asc. node	-2467 Apr 29 j 10:39	15°♍53'44	
evening set	-2472 Oct 21 j 00:34	23°♎46'03		max. Earth dist.	-2467 May 15 j 23:38	26°♍49'30	2.60884 AU
	-2472 Oct 29 j 01:58	0°♌			-2467 May 20 j 19:57	0°♐	
	-2472 Dec 06 j 08:39	0°♍		morning rise	-2467 Jun 13 j 10:11	15°♐18'01	
					-2467 Jul 06 j 10:12	0°♑	
conjunction	-2472 Dec 23 j 15:08	13°♍37'17	-0°56'56		-2467 Aug 23 j 05:55	0°☾	
minimum elong	-2472 Dec 23 j 12:17	13°♍31'39	0°56'59		-2467 Oct 11 j 11:42	0°♊	
	-2471 Jan 13 j 11:30	0°♎			-2467 Dec 03 j 02:04	0°♌	
max. Earth dist.	-2471 Jan 18 j 02:52	3°♎37'35	2.37784 AU		-2466 Feb 15 j 12:25	0°♎	
	-2471 Feb 21 j 08:07	0°☾		retrograde	-2466 Mar 03 j 09:34	1°♎26'59	
morning rise	-2471 Mar 02 j 10:17	6°☾52'11			-2466 Mar 18 j 13:45	30°♋♌	
	-2471 Apr 02 j 17:38	0°♋		opposition	-2466 Apr 06 j 00:27	24°♌55'32	2°02'47
	-2471 May 15 j 07:35	0°♍		greatest brilliancy	-2466 Apr 06 j 18:15	24°♌40'49	-2.3m
	-2471 Jun 29 j 16:51	0°♐		min. Earth dist.	-2466 Apr 14 j 11:04	22°♌08'26	0.46542 AU
asc. node	-2471 Jul 25 j 14:01	16°♐06'37		desc. node	-2466 May 11 j 09:05	16°♌58'18	
	-2471 Aug 18 j 03:18	0°♑		direct	-2466 May 13 j 00:07	16°♌57'12	
	-2471 Oct 17 j 12:43	0°☾			-2466 Jun 29 j 12:30	0°♎	
retrograde	-2471 Dec 01 j 18:34	10°☾06'06			-2466 Aug 18 j 21:03	0°♌	
opposition	-2470 Jan 10 j 00:23	0°☾52'55	4°36'20		-2466 Sep 30 j 06:15	0°♍	
greatest brilliancy	-2470 Jan 10 j 09:35	0°☾43'50	-1.3m		-2466 Nov 10 j 00:52	0°♎	
	-2470 Jan 12 j 06:01	30°♋♑			-2466 Dec 21 j 03:30	0°☾	
min. Earth dist.	-2470 Jan 12 j 20:45	29°♑45'30	0.66141 AU		-2465 Feb 01 j 13:12	0°♋	
direct	-2470 Feb 20 j 06:45	20°♑52'09		asc. node	-2465 Mar 17 j 09:27	29°♋50'39	
	-2470 Apr 03 j 18:24	0°☾			-2465 Mar 17 j 15:03	0°♍	
	-2470 Jun 02 j 10:00	0°♊		evening set	-2465 Apr 16 j 14:50	19°♍48'30	
	-2470 Jul 19 j 06:51	0°♌			-2465 May 02 j 06:41	0°♐	
desc. node	-2470 Aug 06 j 11:40	12°♌39'09					
	-2470 Aug 30 j 10:51	0°♎		conjunction	-2465 Jun 04 j 17:40	21°♐32'04	0°42'04
	-2470 Oct 09 j 00:57	0°♌		minimum elong	-2465 Jun 04 j 16:24	21°♐30'01	0°42'06
	-2470 Nov 16 j 09:10	0°♍		max. Earth dist.	-2465 Jun 10 j 01:53	24°♐57'06	2.66480 AU
	-2470 Dec 24 j 13:56	0°♎			-2465 Jun 17 j 23:36	0°♑	
evening set	-2470 Dec 28 j 17:01	3°♎13'02		morning rise	-2465 Jul 20 j 21:15	20°♑57'55	
	-2469 Feb 01 j 14:13	0°☾			-2465 Aug 04 j 01:36	0°☾	
					-2465 Sep 20 j 00:41	0°♊	

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 44

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2465 Nov 05 j 18:52	0°♎		direct	-2460 Nov 23 j 01:26	26°♎54'06	
	-2465 Dec 22 j 19:43	0°♏			-2460 Dec 16 j 09:35	0°♐	
	-2464 Feb 09 j 14:16	0°♐			-2459 Feb 25 j 01:46	0°♑	
desc. node	-2464 Mar 28 j 09:24	25°♐38'40			-2459 Apr 19 j 08:31	0°♒	
	-2464 Apr 07 j 13:58	0°♑			-2459 Jun 07 j 13:17	0°♓	
retrograde	-2464 May 17 j 11:34	8°♑53'15			-2459 Jul 23 j 22:01	0°♈	
opposition	-2464 Jun 16 j 20:38	3°♑50'39	-5°18'09	evening set	-2459 Aug 11 j 03:52	12°♈17'35	
greatest brilliancy	-2464 Jun 16 j 19:03	3°♑51'42	-2.9m	max. Earth dist.	-2459 Aug 26 j 23:38	23°♈11'22	2.51478 AU
min. Earth dist.	-2464 Jun 16 j 23:02	3°♑49'03	0.37610 AU		-2459 Sep 05 j 17:12	0°♎	
	-2464 Jul 03 j 08:59	30°♐					
direct	-2464 Jul 17 j 00:34	28°♐48'42		conjunction	-2459 Sep 30 j 12:04	17°♐43'08	0°31'30
	-2464 Jul 30 j 11:04	0°♑		minimum elong	-2459 Sep 30 j 13:32	17°♐45'47	0°31'30
	-2464 Oct 06 j 22:23	0°♒			-2459 Oct 17 j 06:33	0°♏	
	-2464 Nov 23 j 20:48	0°♓		desc. node	-2459 Nov 18 j 07:34	24°♏03'31	
	-2463 Jan 08 j 22:37	0°♈		morning rise	-2459 Nov 24 j 06:36	28°♏36'28	
asc. node	-2463 Feb 01 j 07:33	15°♈11'05			-2459 Nov 26 j 02:15	0°♐	
	-2463 Feb 24 j 06:45	0°♐			-2458 Jan 03 j 20:48	0°♑	
	-2463 Apr 12 j 07:23	0°♑			-2458 Feb 11 j 09:19	0°♒	
evening set	-2463 May 25 j 19:19	27°♑32'39			-2458 Mar 22 j 13:18	0°♓	
	-2463 May 29 j 16:22	0°♒			-2458 May 02 j 09:27	0°♈	
max. Earth dist.	-2463 Jul 02 j 20:31	21°♒44'26	2.66640 AU		-2458 Jun 15 j 06:53	0°♐	
					-2458 Aug 04 j 13:46	0°♑	
conjunction	-2463 Jul 11 j 08:07	27°♒10'29	1°07'26	asc. node	-2458 Sep 24 j 05:35	20°♑42'06	
minimum elong	-2463 Jul 11 j 07:24	27°♒09'20	1°07'29	retrograde	-2458 Oct 15 j 05:15	23°♑21'25	
	-2463 Jul 15 j 17:41	0°♓		min. Earth dist.	-2458 Nov 21 j 20:47	14°♑25'45	0.65445 AU
morning rise	-2463 Aug 25 j 07:32	26°♓21'15		opposition	-2458 Nov 24 j 08:15	13°♑26'02	2°15'55
	-2463 Aug 30 j 20:30	0°♈		greatest brilliancy	-2458 Nov 24 j 02:22	13°♑31'57	-1.4m
	-2463 Oct 14 j 16:44	0°♐		direct	-2457 Jan 02 j 19:21	4°♑01'39	
	-2463 Nov 27 j 06:26	0°♏			-2457 Mar 24 j 18:55	0°♒	
desc. node	-2462 Jan 08 j 18:55	0°♐			-2457 May 17 j 18:13	0°♓	
	-2462 Feb 13 j 09:34	25°♐27'19			-2457 Jul 04 j 13:58	0°♈	
	-2462 Feb 19 j 18:03	0°♑			-2457 Aug 17 j 17:03	0°♐	
	-2462 Apr 03 j 06:13	0°♒		evening set	-2457 Sep 28 j 21:28	0°♏35'45	
	-2462 May 19 j 16:25	0°♓			-2457 Sep 28 j 02:17	0°♏	
retrograde	-2462 Jul 25 j 01:41	23°♓38'03		desc. node	-2457 Oct 06 j 06:13	6°♏06'42	
min. Earth dist.	-2462 Aug 21 j 21:08	18°♓23'08	0.45165 AU	max. Earth dist.	-2457 Oct 26 j 18:11	21°♏41'26	2.39223 AU
opposition	-2462 Aug 29 j 21:43	15°♓38'25	-5°11'12		-2457 Nov 06 j 12:49	0°♐	
greatest brilliancy	-2462 Aug 28 j 13:35	16°♓06'04	-2.4m				
direct	-2462 Oct 01 j 05:29	9°♓08'56		conjunction	-2457 Nov 27 j 05:05	16°♐06'42	-0°34'39
	-2462 Dec 07 j 15:12	0°♈		minimum elong	-2457 Nov 27 j 02:35	16°♐01'48	0°34'39
asc. node	-2462 Dec 20 j 06:30	6°♈27'39			-2457 Dec 14 j 21:20	0°♑	
	-2461 Jan 31 j 10:39	0°♐			-2456 Jan 22 j 01:14	0°♒	
	-2461 Mar 22 j 21:20	0°♑		morning rise	-2456 Feb 02 j 15:32	9°♒02'26	
	-2461 May 10 j 20:22	0°♒			-2456 Feb 29 j 21:48	0°♓	
	-2461 Jun 27 j 11:19	0°♓			-2456 Apr 10 j 07:07	0°♈	
evening set	-2461 Jul 02 j 19:36	3°♓25'47			-2456 May 22 j 23:31	0°♐	
max. Earth dist.	-2461 Jul 27 j 14:55	19°♓33'02	2.61460 AU		-2456 Jul 07 j 21:08	0°♑	
	-2461 Aug 12 j 09:56	0°♈		asc. node	-2456 Aug 11 j 04:18	20°♑31'27	
					-2456 Aug 28 j 10:00	0°♒	
conjunction	-2461 Aug 18 j 12:26	4°♈04'57	1°06'22	retrograde	-2456 Nov 17 j 21:33	27°♒14'25	
minimum elong	-2461 Aug 18 j 13:17	4°♈06'22	1°06'24	opposition	-2456 Dec 27 j 14:31	17°♒45'00	4°10'26
	-2461 Sep 25 j 10:37	0°♐		greatest brilliancy	-2456 Dec 27 j 17:28	17°♒42'04	-1.3m
morning rise	-2461 Oct 04 j 16:29	6°♐28'02		min. Earth dist.	-2456 Dec 28 j 22:43	17°♒12'58	0.67210 AU
	-2461 Nov 06 j 15:13	0°♏		direct	-2455 Feb 06 j 15:20	7°♒49'01	
	-2461 Dec 17 j 07:24	0°♐			-2455 Apr 19 j 23:42	0°♓	
desc. node	-2460 Jan 01 j 08:11	11°♐17'59			-2455 Jun 11 j 22:59	0°♈	
	-2460 Jan 25 j 23:58	0°♑			-2455 Jul 27 j 12:52	0°♐	
	-2460 Mar 05 j 10:33	0°♒		desc. node	-2455 Aug 23 j 04:24	18°♐53'45	
	-2460 Apr 14 j 17:03	0°♓			-2455 Sep 07 j 07:27	0°♏	
	-2460 May 27 j 15:41	0°♈			-2455 Oct 16 j 18:22	0°♐	
	-2460 Jul 17 j 16:39	0°♐			-2455 Nov 24 j 01:04	0°♑	
retrograde	-2460 Sep 08 j 05:54	15°♐01'00		evening set	-2455 Dec 01 j 01:41	5°♑32'28	
min. Earth dist.	-2460 Oct 11 j 09:25	7°♐39'07	0.57493 AU		-2454 Jan 01 j 04:09	0°♒	
opposition	-2460 Oct 17 j 12:02	5°♐15'29	-0°51'44				
greatest brilliancy	-2460 Oct 17 j 07:44	5°♐19'40	-1.8m	conjunction	-2454 Feb 05 j 07:05	27°♒07'41	-1°05'21
	-2460 Nov 01 j 12:05	30°♐		minimum elong	-2454 Feb 05 j 08:17	27°♒09'59	1°05'24
asc. node	-2460 Nov 06 j 06:26	28°♐46'53			-2454 Feb 09 j 01:48	0°♓	

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 45

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2454 Mar 21 j 12:36	0° $\text{H}$		retrograde	-2449 Apr 16 j 07:34	9° $\text{M}$ 24'20	
max. Earth dist.	-2454 Mar 26 j 12:58	3° $\text{H}$ 37'16	2.44963 AU	opposition	-2449 May 17 j 07:31	4° $\text{M}$ 07'29	-2°13'04
morning rise	-2454 Apr 10 j 08:32	14° $\text{H}$ 11'17		greatest brilliancy	-2449 May 17 j 16:24	4° $\text{M}$ 01'14	-2.8m
	-2454 May 03 j 01:21	0° $\text{Y}$		min. Earth dist.	-2449 May 22 j 10:41	2° $\text{M}$ 41'01	0.39531 AU
	-2454 Jun 16 j 23:45	0° $\text{B}$			-2449 Jun 02 j 06:03	30° $\text{R}$ 0	
asc. node	-2454 Jun 29 j 04:25	7° $\text{B}$ 51'15		direct	-2449 Jun 18 j 17:32	28° $\text{B}$ 11'56	
	-2454 Aug 03 j 16:46	0° $\text{II}$			-2449 Jul 05 j 05:50	0° $\text{M}$	
	-2454 Sep 24 j 20:43	0° $\text{B}$			-2449 Sep 07 j 15:58	0° $\text{X}$	
	-2454 Dec 08 j 01:17	0° $\text{O}$			-2449 Oct 23 j 06:51	0° $\text{B}$	
retrograde	-2454 Dec 25 j 03:46	1° $\text{O}$ 40'38			-2449 Dec 05 j 22:46	0° $\approx$	
	-2453 Jan 10 j 08:14	30° $\text{R}$ 0			-2448 Jan 18 j 23:46	0° $\text{H}$	
opposition	-2453 Feb 01 j 08:42	23° $\text{B}$ 00'18	4°52'28	asc. node	-2448 Feb 18 j 23:35	20° $\text{H}$ 40'06	
greatest brilliancy	-2453 Feb 02 j 04:38	22° $\text{B}$ 41'04	-1.5m		-2448 Mar 04 j 04:06	0° $\text{Y}$	
min. Earth dist.	-2453 Feb 06 j 13:21	21° $\text{B}$ 00'12	0.62493 AU		-2448 Apr 19 j 12:30	0° $\text{B}$	
direct	-2453 Mar 14 j 11:59	13° $\text{B}$ 03'43		evening set	-2448 May 10 j 16:29	13° $\text{B}$ 31'43	
	-2453 May 12 j 20:24	0° $\text{O}$			-2448 Jun 05 j 13:20	0° $\text{II}$	
	-2453 Jul 04 j 01:15	0° $\text{M}$		max. Earth dist.	-2448 Jun 23 j 15:29	11° $\text{II}$ 30'59	2.67239 AU
desc. node	-2453 Jul 11 j 02:53	4° $\text{M}$ 37'15					
	-2453 Aug 16 j 16:09	0° $\text{B}$		conjunction	-2448 Jun 26 j 21:06	13° $\text{II}$ 34'40	1°00'22
	-2453 Sep 25 j 20:06	0° $\text{M}$		minimum elong	-2448 Jun 26 j 19:59	13° $\text{II}$ 32'55	1°00'26
	-2453 Nov 03 j 12:02	0° $\text{X}$			-2448 Jul 22 j 13:34	0° $\text{B}$	
	-2453 Dec 11 j 23:14	0° $\text{B}$		morning rise	-2448 Aug 10 j 22:44	12° $\text{B}$ 28'29	
	-2452 Jan 20 j 06:01	0° $\approx$			-2448 Sep 06 j 22:09	0° $\text{O}$	
evening set	-2452 Feb 06 j 14:28	12° $\approx$ 54'18			-2448 Oct 22 j 07:59	0° $\text{M}$	
	-2452 Mar 01 j 02:36	0° $\text{H}$			-2448 Dec 05 j 20:20	0° $\text{B}$	
					-2447 Jan 18 j 18:35	0° $\text{M}$	
conjunction	-2452 Apr 05 j 00:13	24° $\text{H}$ 32'43	-0°23'59	desc. node	-2447 Mar 02 j 02:20	28° $\text{M}$ 47'44	
minimum elong	-2452 Apr 05 j 01:31	24° $\text{H}$ 34'56	0°23'59		-2447 Mar 03 j 21:25	0° $\text{X}$	
	-2452 Apr 12 j 22:52	0° $\text{Y}$			-2447 Apr 19 j 17:13	0° $\text{B}$	
max. Earth dist.	-2452 May 04 j 16:40	14° $\text{Y}$ 41'42	2.57259 AU	retrograde	-2447 Jul 01 j 21:50	27° $\text{B}$ 13'29	
asc. node	-2452 May 16 j 03:26	22° $\text{Y}$ 18'34		min. Earth dist.	-2447 Jul 28 j 11:04	22° $\text{B}$ 40'16	0.40663 AU
	-2452 May 27 j 20:01	0° $\text{B}$		greatest brilliancy	-2447 Aug 02 j 20:42	21° $\text{B}$ 02'11	-2.7m
morning rise	-2452 May 28 j 10:20	0° $\text{B}$ 23'25		opposition	-2447 Aug 04 j 06:14	20° $\text{B}$ 36'34	-6°30'54
	-2452 Jul 13 j 12:43	0° $\text{II}$		direct	-2447 Sep 03 j 21:22	15° $\text{B}$ 01'45	
	-2452 Aug 30 j 22:53	0° $\text{B}$			-2447 Oct 27 j 23:33	0° $\approx$	
	-2452 Oct 21 j 00:22	0° $\text{O}$			-2447 Dec 22 j 10:33	0° $\text{H}$	
	-2452 Dec 19 j 18:56	0° $\text{M}$		asc. node	-2446 Jan 05 j 22:17	8° $\text{H}$ 36'05	
retrograde	-2451 Feb 08 j 10:22	12° $\text{M}$ 10'47			-2446 Feb 10 j 04:06	0° $\text{Y}$	
opposition	-2451 Mar 15 j 18:20	4° $\text{M}$ 53'12	3°35'17		-2446 Mar 30 j 20:05	0° $\text{B}$	
greatest brilliancy	-2451 Mar 16 j 21:51	4° $\text{M}$ 28'49	-2.0m		-2446 May 18 j 00:25	0° $\text{II}$	
min. Earth dist.	-2451 Mar 24 j 01:47	1° $\text{M}$ 57'08	0.51763 AU	evening set	-2446 Jun 18 j 00:18	19° $\text{II}$ 33'38	
	-2451 Mar 30 j 00:44	30° $\text{R}$ 0			-2446 Jul 04 j 08:29	0° $\text{B}$	
direct	-2451 Apr 23 j 16:59	25° $\text{O}$ 58'03		max. Earth dist.	-2446 Jul 17 j 15:46	8° $\text{B}$ 34'45	2.64129 AU
	-2451 May 19 j 02:54	0° $\text{M}$					
desc. node	-2451 May 28 j 02:18	3° $\text{M}$ 01'49		conjunction	-2446 Aug 03 j 07:00	19° $\text{B}$ 25'18	1°10'21
	-2451 Jul 18 j 10:46	0° $\text{B}$		minimum elong	-2446 Aug 03 j 07:13	19° $\text{B}$ 25'38	1°10'24
	-2451 Aug 31 j 05:50	0° $\text{M}$			-2446 Aug 19 j 07:39	0° $\text{O}$	
	-2451 Oct 10 j 14:44	0° $\text{X}$		morning rise	-2446 Sep 18 j 02:31	20° $\text{O}$ 02'46	
	-2451 Nov 19 j 06:21	0° $\text{B}$			-2446 Oct 02 j 14:36	0° $\text{M}$	
	-2451 Dec 29 j 13:24	0° $\approx$			-2446 Nov 14 j 05:44	0° $\text{B}$	
	-2450 Feb 09 j 07:41	0° $\text{H}$			-2446 Dec 25 j 11:15	0° $\text{M}$	
	-2450 Mar 24 j 21:50	0° $\text{Y}$		desc. node	-2445 Jan 18 j 02:35	17° $\text{M}$ 32'26	
evening set	-2450 Mar 30 j 07:18	3° $\text{Y}$ 37'40			-2445 Feb 03 j 18:33	0° $\text{X}$	
asc. node	-2450 Apr 03 j 01:02	6° $\text{Y}$ 07'53			-2445 Mar 15 j 21:57	0° $\text{B}$	
	-2450 May 09 j 05:43	0° $\text{B}$			-2445 Apr 26 j 05:25	0° $\approx$	
					-2445 Jun 10 j 19:20	0° $\text{H}$	
conjunction	-2450 May 20 j 06:02	7° $\text{B}$ 09'04	0°26'26	retrograde	-2445 Aug 23 j 22:16	27° $\text{H}$ 27'54	
minimum elong	-2450 May 20 j 05:02	7° $\text{B}$ 07'26	0°26'28	min. Earth dist.	-2445 Sep 23 j 23:48	20° $\text{H}$ 52'55	0.52958 AU
max. Earth dist.	-2450 May 31 j 17:10	14° $\text{B}$ 33'01	2.64937 AU	opposition	-2445 Oct 01 j 07:03	18° $\text{H}$ 06'33	-2°26'52
	-2450 Jun 24 j 19:54	0° $\text{II}$		greatest brilliancy	-2445 Sep 30 j 16:38	18° $\text{H}$ 20'14	-2.0m
morning rise	-2450 Jul 06 j 16:40	7° $\text{II}$ 33'26		direct	-2445 Nov 05 j 07:52	10° $\text{H}$ 21'59	
	-2450 Aug 11 j 02:14	0° $\text{B}$		asc. node	-2445 Nov 23 j 20:58	12° $\text{H}$ 24'32	
	-2450 Sep 27 j 16:19	0° $\text{O}$			-2444 Jan 10 j 19:17	0° $\text{Y}$	
	-2450 Nov 14 j 20:44	0° $\text{M}$			-2444 Mar 07 j 08:27	0° $\text{B}$	
	-2449 Jan 04 j 02:59	0° $\text{B}$			-2444 Apr 27 j 08:24	0° $\text{II}$	
	-2449 Mar 04 j 21:30	0° $\text{M}$			-2444 Jun 14 j 18:34	0° $\text{B}$	
desc. node	-2449 Apr 15 j 01:26	9° $\text{M}$ 23'45		evening set	-2444 Jul 25 j 21:24	26° $\text{B}$ 39'47	

## Planetary Phenomena of Mars from -2900 through -2398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 46

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2444 Jul 30 j 21:52	0°♈		max. Earth dist.	-2439 Feb 23 j 14:02	5°♊20'07	2.39846 AU
max. Earth dist.	-2444 Aug 13 j 13:07	9°♈09'58	2.55906 AU	morning rise	-2439 Mar 17 j 10:16	21°♊36'46	
					-2439 Mar 28 j 21:43	0°♋	
conjunction	-2444 Sep 12 j 06:08	29°♈38'36	0°49'29		-2439 May 10 j 09:53	0°♌	
minimum elong	-2444 Sep 12 j 07:42	29°♈41'21	0°49'30		-2439 Jun 24 j 12:56	0°♍	
	-2444 Sep 12 j 18:20	0°♎		asc. node	-2439 Jul 15 j 19:38	13°♍27'39	
	-2444 Oct 24 j 12:47	0°♏			-2439 Aug 12 j 03:06	0°♎	
morning rise	-2444 Nov 02 j 03:58	6°♏22'01			-2439 Oct 07 j 00:50	0°♏	
	-2444 Dec 03 j 15:25	0°♐		retrograde	-2439 Dec 10 j 00:56	18°♏06'24	
desc. node	-2444 Dec 05 j 00:46	1°♐03'26		opposition	-2438 Jan 17 j 23:21	9°♏03'56	4°46'02
	-2443 Jan 11 j 17:00	0°♑		greatest brilliancy	-2438 Jan 18 j 12:23	8°♏51'10	-1.4m
	-2443 Feb 19 j 11:59	0°♒		min. Earth dist.	-2438 Jan 21 j 16:07	7°♏37'02	0.65107 AU
	-2443 Mar 30 j 22:28	0°♓			-2438 Feb 16 j 03:21	30°♒♐	
	-2443 May 11 j 05:09	0°♋		direct	-2438 Feb 28 j 06:42	29°♐02'56	
	-2443 Jun 25 j 08:02	0°♌			-2438 Mar 12 j 21:11	0°♑	
	-2443 Aug 20 j 22:08	0°♍			-2438 May 26 j 09:56	0°♒	
retrograde	-2443 Oct 01 j 10:32	9°♍30'05			-2438 Jul 13 j 15:10	0°♓	
asc. node	-2443 Oct 10 j 20:48	8°♍53'16		desc. node	-2438 Jul 27 j 19:55	9°♓41'33	
min. Earth dist.	-2443 Nov 06 j 10:53	1°♍07'20	0.63010 AU		-2438 Aug 25 j 05:52	0°♔	
	-2443 Nov 09 j 06:13	30°♎♑			-2438 Oct 04 j 00:32	0°♕	
opposition	-2443 Nov 10 j 09:44	29°♑32'27	1°12'48		-2438 Nov 11 j 11:07	0°♖	
greatest brilliancy	-2443 Nov 10 j 04:56	29°♑37'15	-1.5m		-2438 Dec 19 j 17:38	0°♗	
direct	-2443 Dec 18 j 21:24	20°♑28'17		evening set	-2437 Jan 12 j 17:29	18°♗32'17	
	-2442 Jan 31 j 22:43	0°♘			-2437 Jan 27 j 19:20	0°♘	
	-2442 Apr 04 j 12:20	0°♙			-2437 Mar 09 j 10:26	0°♚	
	-2442 May 25 j 21:58	0°♑					
	-2442 Jul 12 j 00:07	0°♒		conjunction	-2437 Mar 15 j 22:14	4°♚39'48	-0°44'03
	-2442 Aug 24 j 22:41	0°♓		minimum elong	-2437 Mar 16 j 00:31	4°♚43'54	0°44'02
evening set	-2442 Sep 08 j 10:50	10°♓19'23			-2437 Apr 21 j 02:09	0°♛	
max. Earth dist.	-2442 Sep 24 j 16:05	22°♓06'18	2.43821 AU	max. Earth dist.	-2437 Apr 22 j 18:47	1°♛09'38	2.52884 AU
	-2442 Oct 05 j 08:41	0°♔		morning rise	-2437 May 12 j 00:30	14°♛11'29	
desc. node	-2442 Oct 22 j 22:48	13°♔11'59		asc. node	-2437 Jun 02 j 18:54	28°♛37'01	
					-2437 Jun 04 j 21:37	0°♜	
conjunction	-2442 Nov 02 j 13:30	21°♔16'30	-0°07'20		-2437 Jul 21 j 19:52	0°♝	
minimum elong	-2442 Nov 02 j 13:00	21°♔15'32	0°07'21		-2437 Sep 09 j 04:17	0°♞	
behind sun begin	-2442 Nov 01 j 14:30	20°♔32'33			-2437 Nov 02 j 09:50	0°♏	
behind sun end	-2442 Nov 03 j 11:30	21°♔58'32		retrograde	-2436 Jan 20 j 17:58	25°♏23'14	
	-2442 Nov 13 j 22:04	0°♕		opposition	-2436 Feb 26 j 10:12	17°♏27'59	4°26'08
	-2442 Dec 22 j 09:41	0°♖		greatest brilliancy	-2436 Feb 27 j 14:07	17°♏02'07	-1.8m
morning rise	-2441 Jan 04 j 08:05	10°♖09'12		min. Earth dist.	-2436 Mar 04 j 18:19	14°♏45'20	0.56554 AU
	-2441 Jan 29 j 16:05	0°♗		direct	-2436 Apr 06 j 14:39	7°♏57'31	
	-2441 Mar 09 j 14:19	0°♘			-2436 Jun 12 j 19:51	0°♓	
	-2441 Apr 19 j 01:32	0°♙		desc. node	-2436 Jun 13 j 18:25	0°♓30'59	
	-2441 Jun 01 j 00:03	0°♑			-2436 Jul 30 j 18:43	0°♔	
	-2441 Jul 17 j 19:36	0°♒			-2436 Sep 10 j 09:19	0°♕	
asc. node	-2441 Aug 28 j 20:52	23°♒26'43			-2436 Oct 19 j 19:04	0°♖	
	-2441 Sep 11 j 16:08	0°♓			-2436 Nov 27 j 19:23	0°♗	
retrograde	-2441 Nov 05 j 09:13	14°♓25'28			-2435 Jan 06 j 13:54	0°♘	
opposition	-2441 Dec 15 j 09:08	4°♓43'12	3°34'05		-2435 Feb 16 j 21:11	0°♙	
greatest brilliancy	-2441 Dec 15 j 07:05	4°♓45'14	-1.3m	evening set	-2435 Mar 11 j 10:56	15°♙50'25	
min. Earth dist.	-2441 Dec 15 j 05:13	4°♓47'06	0.67275 AU		-2435 Apr 01 j 02:23	0°♑	
	-2441 Dec 27 j 18:21	30°♒♓		asc. node	-2435 Apr 19 j 17:21	12°♑32'03	
direct	-2440 Jan 24 j 22:57	24°♓56'24					
	-2440 Feb 24 j 21:48	0°♔		conjunction	-2435 May 03 j 19:40	21°♑53'12	0°08'12
	-2440 May 01 j 10:52	0°♕		minimum elong	-2435 May 03 j 19:18	21°♑52'35	0°08'14
	-2440 Jun 20 j 13:09	0°♖		behind sun begin	-2435 May 03 j 00:57	21°♑22'20	
	-2440 Aug 04 j 08:57	0°♗		behind sun end	-2435 May 04 j 13:39	22°♑22'50	
desc. node	-2440 Sep 08 j 21:39	25°♗32'06			-2435 May 16 j 04:14	0°♘	
	-2440 Sep 14 j 22:15	0°♔		max. Earth dist.	-2435 May 22 j 00:02	3°♘47'57	2.62557 AU
	-2440 Oct 24 j 08:01	0°♕		morning rise	-2435 Jun 22 j 02:06	23°♘50'56	
evening set	-2440 Nov 04 j 04:56	8°♕27'59			-2435 Jul 01 j 17:24	0°♙	
	-2440 Dec 01 j 14:25	0°♖			-2435 Aug 18 j 06:57	0°♑	
					-2435 Oct 05 j 19:11	0°♒	
conjunction	-2439 Jan 08 j 13:47	29°♖54'05	-1°04'12		-2435 Nov 25 j 07:05	0°♓	
minimum elong	-2439 Jan 08 j 12:07	29°♖50'49	1°04'15		-2434 Jan 22 j 03:16	0°♔	
	-2439 Jan 08 j 16:49	0°♗		retrograde	-2434 Mar 17 j 23:50	14°♔12'29	
	-2439 Feb 16 j 12:56	0°♘		opposition	-2434 Apr 19 j 14:57	8°♔08'46	0°45'50

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Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

greatest brilliancy	-2434 Apr 19 j 21:42	8°♌03'26	-2.5m	max. Earth dist.	-2429 Aug 02 j 20:31	26°♌41'32	2.59691 AU
min. Earth dist.	-2434 Apr 27 j 11:46	5°♌40'31	0.43728 AU		-2429 Aug 07 j 19:56	0°♌	
desc. node	-2434 May 01 j 19:04	4°♌24'51					
direct	-2434 May 25 j 03:08	0°♌51'08		conjunction	-2429 Aug 27 j 13:30	13°♌17'15	1°01'45
	-2434 Aug 09 j 04:27	0°♌		minimum elong	-2429 Aug 27 j 14:41	13°♌19'16	1°01'47
	-2434 Sep 22 j 22:47	0°♌			-2429 Sep 20 j 19:31	0°♌	
	-2434 Nov 03 j 18:07	0°♌		morning rise	-2429 Oct 14 j 18:56	16°♌56'58	
	-2434 Dec 15 j 12:01	0°♌			-2429 Nov 01 j 20:35	0°♌	
	-2433 Jan 27 j 08:07	0°♌			-2429 Dec 12 j 07:46	0°♌	
asc. node	-2433 Mar 07 j 14:23	26°♌35'17		desc. node	-2429 Dec 22 j 17:41	7°♌52'04	
	-2433 Mar 12 j 17:27	0°♌			-2428 Jan 20 j 18:14	0°♌	
evening set	-2433 Apr 26 j 00:28	28°♌59'40			-2428 Feb 28 j 21:59	0°♌	
	-2433 Apr 27 j 13:49	0°♌			-2428 Apr 08 j 18:55	0°♌	
					-2428 May 20 j 21:06	0°♌	
conjunction	-2433 Jun 13 j 07:23	29°♌57'39	0°49'46		-2428 Jul 07 j 14:12	0°♌	
minimum elong	-2433 Jun 13 j 06:06	29°♌55'35	0°49'48	retrograde	-2428 Sep 16 j 23:34	24°♌36'11	
	-2433 Jun 13 j 08:52	0°♌		min. Earth dist.	-2428 Oct 21 j 04:59	16°♌50'58	0.59696 AU
max. Earth dist.	-2433 Jun 15 j 10:34	1°♌19'15	2.66993 AU	opposition	-2428 Oct 26 j 13:43	14°♌43'33	-0°02'24
morning rise	-2433 Jul 28 j 22:21	29°♌03'28		greatest brilliancy	-2428 May 23 j 06:35	1°♌37'41	0.4m
	-2433 Jul 30 j 09:44	0°♌		asc. node	-2428 Oct 27 j 12:22	14°♌21'12	
	-2433 Sep 15 j 02:44	0°♌		direct	-2428 Dec 02 j 21:17	6°♌04'59	
	-2433 Oct 31 j 07:30	0°♌			-2427 Feb 17 j 06:34	0°♌	
	-2433 Dec 16 j 05:41	0°♌			-2427 Apr 13 j 17:33	0°♌	
	-2432 Jan 31 j 14:59	0°♌			-2427 Jun 02 j 14:26	0°♌	
desc. node	-2432 Mar 18 j 19:10	28°♌48'36			-2427 Jul 19 j 05:05	0°♌	
	-2432 Mar 20 j 21:23	0°♌		evening set	-2427 Aug 21 j 00:16	22°♌15'50	
retrograde	-2432 Jun 03 j 21:28	26°♌51'23			-2427 Sep 01 j 01:55	0°♌	
min. Earth dist.	-2432 Jul 02 j 00:36	22°♌17'47	0.37895 AU	max. Earth dist.	-2427 Sep 05 j 00:24	2°♌46'44	2.48832 AU
opposition	-2432 Jul 04 j 23:24	21°♌29'42	-6°22'39				
greatest brilliancy	-2432 Jul 04 j 07:27	21°♌40'32	-2.9m	conjunction	-2427 Oct 11 j 18:42	29°♌23'22	0°18'38
direct	-2432 Aug 03 j 15:44	16°♌30'40		minimum elong	-2427 Oct 11 j 19:44	29°♌25'16	0°18'38
	-2432 Sep 22 j 14:17	0°♌			-2427 Oct 12 j 14:31	0°♌	
	-2432 Nov 15 j 17:08	0°♌		desc. node	-2427 Nov 08 j 16:00	20°♌18'44	
	-2431 Jan 02 j 16:01	0°♌			-2427 Nov 21 j 08:21	0°♌	
asc. node	-2431 Jan 22 j 13:03	12°♌37'48		morning rise	-2427 Dec 08 j 03:52	12°♌58'42	
	-2431 Feb 18 j 21:28	0°♌			-2427 Dec 30 j 00:23	0°♌	
	-2431 Apr 07 j 09:19	0°♌			-2426 Feb 06 j 10:17	0°♌	
	-2431 May 25 j 00:11	0°♌			-2426 Mar 17 j 11:18	0°♌	
evening set	-2431 Jun 03 j 07:55	5°♌53'37			-2426 Apr 27 j 02:20	0°♌	
max. Earth dist.	-2431 Jul 08 j 06:18	28°♌08'33	2.65975 AU		-2426 Jun 09 j 11:49	0°♌	
	-2431 Jul 11 j 03:43	0°♌			-2426 Jul 27 j 23:13	0°♌	
				asc. node	-2426 Sep 14 j 11:32	23°♌26'42	
conjunction	-2431 Jul 19 j 15:30	5°♌28'08	1°09'44		-2426 Oct 07 j 16:55	0°♌	
minimum elong	-2431 Jul 19 j 15:06	5°♌27'30	1°09'47	retrograde	-2426 Oct 22 j 23:34	1°♌25'56	
	-2431 Aug 26 j 05:06	0°♌			-2426 Nov 06 j 13:54	30°♌	
morning rise	-2431 Sep 02 j 18:16	5°♌00'12		min. Earth dist.	-2426 Nov 30 j 11:06	22°♌13'51	0.66366 AU
	-2431 Oct 09 j 20:21	0°♌		opposition	-2426 Dec 02 j 02:41	21°♌34'07	2°47'44
	-2431 Nov 22 j 01:05	0°♌		greatest brilliancy	-2426 Dec 01 j 21:30	21°♌39'20	-1.4m
	-2430 Jan 03 j 00:51	0°♌		direct	-2425 Jan 11 j 00:36	12°♌00'26	
desc. node	-2430 Feb 03 j 18:28	23°♌04'02			-2425 Mar 16 j 10:01	0°♌	
	-2430 Feb 13 j 06:22	0°♌			-2425 May 12 j 00:53	0°♌	
	-2430 Mar 26 j 15:09	0°♌			-2425 Jun 29 j 13:00	0°♌	
	-2430 May 09 j 04:50	0°♌			-2425 Aug 12 j 21:47	0°♌	
	-2430 Jul 03 j 05:51	0°♌			-2425 Sep 23 j 08:32	0°♌	
retrograde	-2430 Aug 05 j 14:17	7°♌06'46		desc. node	-2425 Sep 26 j 14:03	2°♌24'32	
min. Earth dist.	-2430 Sep 03 j 12:36	1°♌23'20	0.47952 AU	evening set	-2425 Oct 11 j 15:47	13°♌46'27	
	-2430 Sep 07 j 10:08	30°♌			-2425 Nov 01 j 18:58	0°♌	
greatest brilliancy	-2430 Sep 10 j 10:30	28°♌54'36	-2.3m	max. Earth dist.	-2425 Dec 01 j 19:39	23°♌28'11	2.37588 AU
opposition	-2430 Sep 11 j 12:59	28°♌30'48	-4°12'05		-2425 Dec 10 j 02:40	0°♌	
direct	-2430 Oct 14 j 19:52	21°♌32'19					
	-2430 Nov 23 j 15:00	0°♌		conjunction	-2425 Dec 12 j 10:29	1°♌49'59	-0°48'29
asc. node	-2430 Dec 10 j 13:05	7°♌02'09		minimum elong	-2425 Dec 12 j 07:25	1°♌43'56	0°48'30
	-2429 Jan 24 j 09:22	0°♌			-2424 Jan 17 j 05:47	0°♌	
	-2429 Mar 17 j 08:38	0°♌		morning rise	-2424 Feb 19 j 03:25	25°♌28'48	
	-2429 May 05 j 22:12	0°♌			-2424 Feb 25 j 01:43	0°♌	
	-2429 Jun 22 j 19:31	0°♌			-2424 Apr 05 j 09:50	0°♌	
evening set	-2429 Jul 11 j 10:36	11°♌59'23			-2424 May 17 j 23:10	0°♌	

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Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2424 Jul 02 j 10:59	0°♄		desc. node	-2419 May 18 j 11:03	9°♎11'24	
asc. node	-2424 Aug 01 j 11:32	18°♄26'56			-2419 Jul 08 j 12:35	0°♊	
	-2424 Aug 21 j 12:34	0°♊			-2419 Aug 24 j 01:45	0°♋	
	-2424 Oct 26 j 05:32	0°♋			-2419 Oct 04 j 09:52	0°♌	
retrograde	-2424 Nov 25 j 18:52	5°♋02'19			-2419 Nov 13 j 14:20	0°♍	
	-2424 Dec 23 j 20:25	30°♋♊			-2419 Dec 24 j 06:35	0°♎	
opposition	-2423 Jan 04 j 06:37	25°♊41'30	4°26'39		-2418 Feb 04 j 07:35	0°♏	
greatest brilliancy	-2423 Jan 04 j 12:56	25°♊35'14	-1.3m		-2418 Mar 20 j 02:45	0°♐	
min. Earth dist.	-2423 Jan 06 j 11:06	24°♊49'34	0.66748 AU	asc. node	-2418 Mar 24 j 07:04	2°♐48'07	
direct	-2423 Feb 14 j 11:35	15°♊42'13		evening set	-2418 Apr 09 j 08:28	13°♐28'46	
	-2423 Apr 10 j 17:23	0°♋			-2418 May 04 j 13:38	0°♑	
	-2423 Jun 05 j 23:06	0°♌					
	-2423 Jul 22 j 07:11	0°♍		conjunction	-2418 May 29 j 05:17	15°♑55'44	0°35'51
desc. node	-2423 Aug 13 j 13:39	15°♍36'31		minimum elong	-2418 May 29 j 04:05	15°♑53'48	0°35'53
	-2423 Sep 02 j 08:01	0°♎		max. Earth dist.	-2418 Jun 06 j 06:42	21°♑06'02	2.65891 AU
	-2423 Oct 11 j 21:20	0°♏			-2418 Jun 20 j 04:40	0°♐	
	-2423 Nov 19 j 04:51	0°♑		morning rise	-2418 Jul 14 j 21:14	15°♐43'41	
evening set	-2423 Dec 16 j 17:38	21°♑41'01			-2418 Aug 06 j 08:11	0°♑	
	-2423 Dec 27 j 08:24	0°♒			-2418 Sep 22 j 13:20	0°♌	
	-2422 Feb 04 j 06:41	0°♓			-2418 Nov 08 j 21:06	0°♍	
					-2418 Dec 27 j 01:37	0°♎	
conjunction	-2422 Feb 20 j 02:47	11°♓54'14	-1°00'00		-2417 Feb 16 j 18:25	0°♏	
minimum elong	-2422 Feb 20 j 04:59	11°♓58'21	1°00'02	desc. node	-2417 Apr 05 j 11:21	21°♏10'54	
	-2422 Mar 16 j 17:58	0°♏		retrograde	-2417 May 04 j 09:28	25°♏58'14	
max. Earth dist.	-2422 Apr 06 j 22:42	15°♏08'53	2.47916 AU	opposition	-2417 Jun 03 j 17:27	20°♏56'19	-4°03'42
morning rise	-2422 Apr 22 j 14:32	26°♏05'19		greatest brilliancy	-2417 Jun 04 j 00:14	20°♏51'46	-2.9m
	-2422 Apr 28 j 06:42	0°♐		min. Earth dist.	-2417 Jun 06 j 07:12	20°♏14'50	0.38095 AU
	-2422 Jun 12 j 02:33	0°♑		direct	-2417 Jul 04 j 17:02	15°♏37'19	
asc. node	-2422 Jun 19 j 10:11	4°♑44'58			-2417 Aug 24 j 06:40	0°♑	
	-2422 Jul 29 j 10:20	0°♒			-2417 Oct 14 j 17:16	0°♒	
	-2422 Sep 18 j 05:47	0°♓			-2417 Nov 29 j 06:43	0°♓	
	-2422 Nov 18 j 09:34	0°♌			-2416 Jan 13 j 06:57	0°♏	
retrograde	-2421 Jan 03 j 07:51	10°♌14'46		asc. node	-2416 Feb 09 j 05:29	17°♏44'43	
opposition	-2421 Feb 10 j 01:36	1°♌48'47	4°48'29		-2416 Feb 28 j 00:48	0°♐	
greatest brilliancy	-2421 Feb 11 j 01:00	1°♌26'29	-1.6m		-2416 Apr 14 j 17:00	0°♑	
	-2421 Feb 14 j 19:43	30°♌♋		evening set	-2416 May 19 j 09:58	22°♑03'56	
min. Earth dist.	-2421 Feb 16 j 01:48	29°♋31'37	0.60646 AU		-2416 May 31 j 21:57	0°♒	
direct	-2421 Mar 22 j 23:54	21°♋58'17		max. Earth dist.	-2416 Jun 29 j 00:25	17°♒52'54	2.67011 AU
	-2421 Apr 30 j 08:14	0°♌					
	-2421 Jun 27 j 05:52	0°♍		conjunction	-2416 Jul 05 j 04:27	21°♒49'20	1°04'55
desc. node	-2421 Jul 01 j 12:30	2°♍40'57		minimum elong	-2416 Jul 05 j 03:33	21°♒47'53	1°04'59
	-2421 Aug 10 j 22:12	0°♎			-2416 Jul 17 j 22:51	0°♋	
	-2421 Sep 20 j 11:55	0°♏		morning rise	-2416 Aug 19 j 03:27	20°♋48'49	
	-2421 Oct 29 j 08:43	0°♑			-2416 Sep 02 j 04:31	0°♌	
	-2421 Dec 06 j 23:12	0°♒			-2416 Oct 17 j 07:11	0°♍	
	-2420 Jan 15 j 08:47	0°♓			-2416 Nov 30 j 06:40	0°♎	
evening set	-2420 Feb 19 j 13:15	25°♓51'29			-2415 Jan 12 j 09:02	0°♏	
	-2420 Feb 25 j 07:37	0°♏		desc. node	-2415 Feb 20 j 11:48	27°♍27'29	
	-2420 Apr 08 j 05:43	0°♐			-2415 Feb 24 j 02:59	0°♑	
					-2415 Apr 08 j 23:08	0°♒	
conjunction	-2420 Apr 16 j 00:22	5°♐17'20	-0°11'57		-2415 May 29 j 16:05	0°♓	
minimum elong	-2420 Apr 16 j 00:58	5°♐18'22	0°11'57	retrograde	-2415 Jul 15 j 11:37	13°♓04'48	
behind sun begin	-2420 Apr 15 j 10:07	4°♐53'12		min. Earth dist.	-2415 Aug 11 j 13:53	8°♓11'07	0.43006 AU
behind sun end	-2420 Apr 16 j 15:50	5°♐43'31		greatest brilliancy	-2415 Aug 17 j 20:24	6°♓08'38	-2.5m
asc. node	-2420 May 06 j 08:16	18°♐55'26		opposition	-2415 Aug 19 j 06:57	5°♓40'16	-5°51'58
max. Earth dist.	-2420 May 11 j 10:23	22°♐17'48	2.59364 AU		-2415 Sep 12 j 02:08	30°♒♑	
	-2420 May 23 j 03:16	0°♑		direct	-2415 Sep 19 j 19:34	29°♑35'39	
morning rise	-2420 Jun 06 j 18:01	9°♑30'56			-2415 Sep 27 j 16:23	0°♓	
	-2420 Jul 08 j 17:31	0°♒			-2415 Dec 13 j 22:11	0°♏	
	-2420 Aug 25 j 18:07	0°♓		asc. node	-2415 Dec 27 j 04:13	7°♏20'59	
	-2420 Oct 14 j 15:19	0°♌			-2414 Feb 04 j 00:53	0°♐	
	-2420 Dec 08 j 09:28	0°♍			-2414 Mar 25 j 14:40	0°♑	
retrograde	-2419 Feb 20 j 23:43	23°♍11'14			-2414 May 13 j 05:11	0°♒	
opposition	-2419 Mar 27 j 09:21	16°♍18'14	2°48'08	evening set	-2414 Jun 26 j 11:30	27°♒55'11	
greatest brilliancy	-2419 Mar 28 j 08:44	15°♍58'13	-2.2m		-2414 Jun 29 j 17:31	0°♋	
min. Earth dist.	-2419 Apr 04 j 21:32	13°♍23'51	0.48894 AU	max. Earth dist.	-2414 Jul 23 j 10:10	15°♋19'06	2.62746 AU
direct	-2419 May 04 j 08:30	7°♍51'25					



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Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

conjunction	-2414 Aug 11 j 22:21	28° $\overline{50}$ 09'12	1°08'37			-2409 Jul 11 j 21:29	0° $\overline{8}$
minimum elong	-2414 Aug 11 j 22:56	28° $\overline{50}$ 10'11	1°08'40	asc. node		-2409 Aug 19 j 01:51	22° $\overline{8}$ 19'45
	-2414 Aug 14 j 17:03	0° $\overline{9}$				-2409 Sep 02 j 16:05	0° $\overline{II}$
morning rise	-2414 Sep 27 j 09:51	29° $\overline{9}$ 39'56		retrograde		-2409 Nov 13 j 02:59	22° $\overline{II}$ 14'18
	-2414 Sep 27 j 21:25	0° $\overline{II}$		opposition		-2409 Dec 22 j 23:52	12° $\overline{II}$ 38'48 3°56'25
	-2414 Nov 09 j 07:16	0° $\overline{5}$		greatest brilliancy		-2409 Dec 23 j 00:27	12° $\overline{II}$ 38'13 -1.3m
	-2414 Dec 20 j 05:48	0° $\overline{III}$		min. Earth dist.		-2409 Dec 23 j 16:21	12° $\overline{II}$ 22'22 0.67373 AU
desc. node	-2413 Jan 08 j 10:10	14° $\overline{III}$ 20'28		direct		-2408 Feb 01 j 20:34	2° $\overline{II}$ 46'17
	-2413 Jan 29 j 04:42	0° $\overline{7}$				-2408 Apr 24 j 09:16	0° $\overline{5}$
	-2413 Mar 09 j 21:45	0° $\overline{3}$				-2408 Jun 15 j 01:22	0° $\overline{9}$
	-2413 Apr 19 j 12:39	0° $\approx$				-2408 Jul 30 j 08:43	0° $\overline{II}$
	-2413 Jun 02 j 05:42	0° $\overline{X}$		desc. node		-2408 Aug 30 j 06:39	22° $\overline{II}$ 02'09
	-2413 Jul 27 j 15:03	0° $\overline{Y}$				-2408 Sep 10 j 02:03	0° $\overline{5}$
retrograde	-2413 Sep 02 j 10:45	8° $\overline{Y}$ 09'15				-2408 Oct 19 j 13:19	0° $\overline{III}$
min. Earth dist.	-2413 Oct 04 j 16:06	1° $\overline{Y}$ 07'48	0.55541 AU	evening set		-2408 Nov 19 j 02:53	23° $\overline{III}$ 54'54
	-2413 Oct 07 j 14:31	30° $\overline{R}$ $\overline{X}$				-2408 Nov 26 j 20:08	0° $\overline{7}$
opposition	-2413 Oct 11 j 08:24	28° $\overline{X}$ 32'42	-1°30'37			-2407 Jan 03 j 22:32	0° $\overline{3}$
greatest brilliancy	-2413 Oct 11 j 00:13	28° $\overline{X}$ 40'38	-1.9m				
asc. node	-2413 Nov 14 j 03:49	20° $\overline{X}$ 28'24		conjunction		-2407 Jan 24 j 09:19	15° $\overline{3}$ 54'23 -1°06'38
direct	-2413 Nov 16 j 06:35	20° $\overline{X}$ 26'40		minimum elong		-2407 Jan 24 j 09:21	15° $\overline{3}$ 54'27 1°06'40
	-2413 Dec 29 j 17:05	0° $\overline{Y}$				-2407 Feb 11 j 18:44	0° $\approx$
	-2412 Feb 29 j 20:58	0° $\overline{8}$		max. Earth dist.		-2407 Mar 15 j 14:58	23° $\approx$ 47'13 2.42585 AU
	-2412 Apr 22 j 02:21	0° $\overline{II}$				-2407 Mar 24 j 03:18	0° $\overline{X}$
	-2412 Jun 09 j 23:31	0° $\overline{5}$		morning rise		-2407 Mar 31 j 09:07	5° $\overline{X}$ 14'05
	-2412 Jul 26 j 06:50	0° $\overline{9}$				-2407 May 05 j 14:05	0° $\overline{Y}$
evening set	-2412 Aug 04 j 01:06	5° $\overline{9}$ 51'45				-2407 Jun 19 j 12:29	0° $\overline{8}$
max. Earth dist.	-2412 Aug 20 j 21:33	17° $\overline{9}$ 19'10	2.53525 AU	asc. node		-2407 Jul 06 j 01:42	10° $\overline{8}$ 36'00
	-2412 Sep 08 j 03:47	0° $\overline{II}$				-2407 Aug 06 j 11:33	0° $\overline{II}$
						-2407 Sep 28 j 18:54	0° $\overline{5}$
conjunction	-2412 Sep 22 j 09:41	10° $\overline{II}$ 05'31	0°39'52	retrograde		-2407 Dec 18 j 13:12	26° $\overline{5}$ 14'38
minimum elong	-2412 Sep 22 j 11:16	10° $\overline{II}$ 08'21	0°39'52	opposition		-2406 Jan 26 j 02:56	17° $\overline{5}$ 23'51 4°51'12
	-2412 Oct 19 j 20:11	0° $\overline{5}$		greatest brilliancy		-2406 Jan 26 j 19:52	17° $\overline{5}$ 07'25 -1.4m
morning rise	-2412 Nov 14 j 07:17	18° $\overline{5}$ 59'18		min. Earth dist.		-2406 Jan 30 j 16:11	15° $\overline{5}$ 37'51 0.63790 AU
desc. node	-2412 Nov 25 j 09:31	27° $\overline{5}$ 23'42		direct		-2406 Mar 08 j 09:24	7° $\overline{5}$ 24'15
	-2412 Nov 28 j 19:34	0° $\overline{III}$				-2406 May 18 j 10:48	0° $\overline{9}$
	-2411 Jan 06 j 17:20	0° $\overline{7}$				-2406 Jul 07 j 17:01	0° $\overline{II}$
	-2411 Feb 14 j 08:16	0° $\overline{3}$		desc. node		-2406 Jul 18 j 04:49	6° $\overline{II}$ 59'58
	-2411 Mar 25 j 14:11	0° $\approx$				-2406 Aug 19 j 21:35	0° $\overline{5}$
	-2411 May 05 j 12:53	0° $\overline{X}$				-2406 Sep 28 j 21:57	0° $\overline{III}$
	-2411 Jun 18 j 18:38	0° $\overline{Y}$				-2406 Nov 06 j 11:30	0° $\overline{7}$
	-2411 Aug 09 j 17:14	0° $\overline{8}$				-2406 Dec 14 j 20:02	0° $\overline{3}$
asc. node	-2411 Oct 01 j 03:10	17° $\overline{8}$ 32'08				-2405 Jan 22 j 23:41	0° $\approx$
retrograde	-2411 Oct 09 j 10:16	17° $\overline{8}$ 58'49		evening set		-2405 Jan 27 j 02:27	3° $\approx$ 05'37
min. Earth dist.	-2411 Nov 15 j 09:11	9° $\overline{8}$ 17'02	0.64482 AU			-2405 Mar 04 j 16:33	0° $\overline{X}$
opposition	-2411 Nov 18 j 12:09	8° $\overline{8}$ 01'51	1°50'55				
greatest brilliancy	-2411 Nov 18 j 06:15	8° $\overline{8}$ 07'45	-1.5m	conjunction		-2405 Mar 28 j 04:56	16° $\overline{X}$ 42'12 -0°32'45
	-2411 Dec 13 j 17:47	30° $\overline{R}$ $\overline{Y}$		minimum elong		-2405 Mar 28 j 06:42	16° $\overline{X}$ 45'19 0°32'44
direct	-2411 Dec 27 j 13:23	28° $\overline{Y}$ 45'47				-2405 Apr 16 j 09:22	0° $\overline{Y}$
	-2410 Jan 11 j 02:22	0° $\overline{8}$		max. Earth dist.		-2405 Apr 30 j 09:50	9° $\overline{Y}$ 32'18 2.55388 AU
	-2410 Mar 28 j 18:58	0° $\overline{II}$		morning rise		-2405 May 22 j 04:08	24° $\overline{Y}$ 04'21
	-2410 May 20 j 14:31	0° $\overline{5}$		asc. node		-2405 May 24 j 01:08	25° $\overline{Y}$ 18'39
	-2410 Jul 07 j 03:40	0° $\overline{9}$				-2405 May 31 j 04:19	0° $\overline{8}$
	-2410 Aug 20 j 06:15	0° $\overline{II}$				-2405 Jul 16 j 21:58	0° $\overline{II}$
evening set	-2410 Sep 19 j 17:19	21° $\overline{II}$ 53'19				-2405 Sep 03 j 15:24	0° $\overline{5}$
	-2410 Sep 30 j 16:54	0° $\overline{5}$				-2405 Oct 25 j 18:02	0° $\overline{9}$
max. Earth dist.	-2410 Oct 10 j 03:40	7° $\overline{5}$ 03'41	2.41158 AU			-2405 Dec 31 j 10:31	0° $\overline{II}$
desc. node	-2410 Oct 13 j 08:32	9° $\overline{5}$ 28'21		retrograde		-2404 Jan 31 j 14:38	5° $\overline{II}$ 08'36
	-2410 Nov 09 j 05:29	0° $\overline{III}$				-2404 Feb 29 j 13:25	30° $\overline{R}$ $\overline{9}$
				opposition		-2404 Mar 07 j 13:44	27° $\overline{9}$ 33'13 4°00'38
conjunction	-2410 Nov 16 j 01:59	5° $\overline{III}$ 18'31	-0°22'59	greatest brilliancy		-2404 Mar 08 j 18:12	27° $\overline{9}$ 07'26 -1.9m
minimum elong	-2410 Nov 16 j 00:18	5° $\overline{III}$ 15'16	0°23'00	min. Earth dist.		-2404 Mar 15 j 12:15	24° $\overline{9}$ 41'06 0.53988 AU
	-2410 Dec 17 j 15:32	0° $\overline{7}$		direct		-2404 Apr 16 j 03:54	18° $\overline{9}$ 19'46
morning rise	-2409 Jan 20 j 17:09	26° $\overline{7}$ 46'27				-2404 Jun 01 j 00:25	0° $\overline{II}$
	-2409 Jan 24 j 20:05	0° $\overline{3}$		desc. node		-2404 Jun 04 j 04:05	1° $\overline{II}$ 26'50
	-2409 Mar 04 j 16:31	0° $\approx$				-2404 Jul 23 j 14:17	0° $\overline{5}$
	-2409 Apr 14 j 01:12	0° $\overline{X}$				-2404 Sep 04 j 06:56	0° $\overline{III}$
	-2409 May 26 j 18:08	0° $\overline{Y}$				-2404 Oct 14 j 04:26	0° $\overline{7}$

Attention, astronomical year style is used: The year -2899 in astronomical counting style is the year 2900 BCE in historical counting style.

	-2404 Nov 22 j 11:55	0°♄	-2399 Dec 28 j 13:03	0°♄
	-2403 Jan 01 j 12:02	0°♊		
	-2403 Feb 11 j 23:52	0°♋		
evening set	-2403 Mar 22 j 09:52	26°♋38'38		
	-2403 Mar 27 j 08:35	0°♌		
asc. node	-2403 Apr 09 j 22:36	9°♌08'23		
	-2403 May 11 j 12:35	0°♍		
conjunction	-2403 May 13 j 08:42	1°♍11'58	0°19'03	
minimum elong	-2403 May 13 j 07:54	1°♍10'41	0°19'04	
max. Earth dist.	-2403 May 27 j 19:55	10°♍35'34	2.63977 AU	
	-2403 Jun 27 j 01:29	0°♎		
morning rise	-2403 Jun 30 j 13:12	2°♎13'24		
	-2403 Aug 13 j 10:09	0°♏		
	-2403 Sep 30 j 08:43	0°♐		
	-2403 Nov 18 j 09:25	0°♑		
	-2402 Jan 09 j 22:26	0°♒		
retrograde	-2402 Apr 02 j 22:32	28°♒18'19		
desc. node	-2402 Apr 22 j 03:24	26°♒04'19		
opposition	-2402 May 04 j 15:53	22°♒42'03	-0°50'03	
greatest brilliancy	-2402 May 04 j 20:41	22°♒38'29	-2.7m	
min. Earth dist.	-2402 May 11 j 08:10	20°♒43'49	0.41217 AU	
direct	-2402 Jun 07 j 11:15	16°♒10'12		
	-2402 Jul 26 j 08:28	0°♓		
	-2402 Sep 14 j 11:35	0°♈		
	-2402 Oct 27 j 23:28	0°♉		
	-2402 Dec 09 j 14:48	0°♊		
	-2401 Jan 22 j 00:30	0°♋		
asc. node	-2401 Feb 25 j 20:54	23°♋26'36		
	-2401 Mar 07 j 18:37	0°♌		
	-2401 Apr 22 j 20:30	0°♍		
evening set	-2401 May 05 j 02:03	7°♍51'19		
	-2401 Jun 08 j 18:19	0°♎		
conjunction	-2401 Jun 21 j 17:02	8°♎14'58	0°56'21	
minimum elong	-2401 Jun 21 j 15:48	8°♎13'02	0°56'24	
max. Earth dist.	-2401 Jun 20 j 19:01	7°♎39'55	2.67233 AU	
	-2401 Jul 25 j 18:41	0°♏		
morning rise	-2401 Aug 05 j 23:17	7°♏10'36		
	-2401 Sep 10 j 07:06	0°♐		
	-2401 Oct 26 j 01:03	0°♑		
	-2401 Dec 10 j 02:54	0°♒		
	-2400 Jan 23 j 23:04	0°♓		
desc. node	-2400 Mar 09 j 03:48	29°♓40'07		
	-2400 Mar 09 j 16:16	0°♈		
	-2400 Apr 30 j 03:39	0°♉		
retrograde	-2400 Jun 20 j 09:03	14°♉46'19		
min. Earth dist.	-2400 Jul 17 j 03:13	10°♉20'22	0.39127 AU	
greatest brilliancy	-2400 Jul 21 j 09:26	9°♉07'21	-2.8m	
opposition	-2400 Jul 22 j 13:29	8°♉47'11	-6°42'52	
direct	-2400 Aug 21 j 13:54	3°♉33'01		
	-2400 Nov 05 j 16:09	0°♊		
	-2400 Dec 26 j 20:14	0°♋		
asc. node	-2399 Jan 12 j 19:54	10°♋27'04		
	-2399 Feb 13 j 07:03	0°♌		
	-2399 Apr 02 j 09:11	0°♍		
	-2399 May 20 j 07:15	0°♎		
evening set	-2399 Jun 11 j 18:05	14°♎10'32		
	-2399 Jul 06 j 13:32	0°♏		
max. Earth dist.	-2399 Jul 13 j 18:44	4°♏38'31	2.65062 AU	
conjunction	-2399 Jul 27 j 23:35	13°♏50'27	1°10'36	
minimum elong	-2399 Jul 27 j 23:31	13°♏50'21	1°10'40	
	-2399 Aug 21 j 14:23	0°♐		
morning rise	-2399 Sep 11 j 09:52	13°♐54'04		
	-2399 Oct 05 j 01:48	0°♑		
	-2399 Nov 16 j 23:26	0°♒		