Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11900 in astronomical counting style is the year 11901 BCE in historical counting style. -11900 Mar 14 j 00:39 11°♂56'17 min. Earth dist. -11895 Nov 30 i 05:19 17° **X** 09'18 9.26806 AU evening set direct -11894 Feb 09 j 19:24 13° **X** 50'49 -11900 Mar 31 j 17:33 14°る04'42 -2°14'07 -11894 Mar 21 j 17:28 15° **₭**03'25 conjunction asc. node -11900 Mar 31 j 17:35 14°る04'43 2°14'47 -11894 May 24 j 00:14 20° **★** 46'53 minimum elong evening set -11900 Apr 01 j 12:24 14°る10'26 10.61146 AU max. Earth dist. -11900 Apr 18 j 05:52 16°정11'43 -11894 Jun 09 j 21:38 22° **光** 41'49 morning rise conjunction 0°05'56 -11900 Jul 27 j 07:31 23°る30'08 -11894 Jun 09 j 21:39 22° **∺**41'49 0°05'49 retrograde minimum elong -11900 Oct 02 j 17:31 20°**⋜**09'04 -2°36'41 -11894 Jun 09 j 14:57 22° **∺** 39'56 opposition behind sun begin min. Earth dist. -11900 Oct 02 j 05:14 20°る11'29 8.69531 AU behind sun end -11894 Jun 10 j 04:20 22° **★** 43'43 direct -11900 Dec 11 j 13:16 16° ₹42'55 max. Earth dist. -11894 Jun 09 j 03:45 22° ¥ 36'43 11.28911 AU evening set -11899 Mar 27 j 02:26 24°**⋜**15'54 morning rise -11894 Jun 26 j 14:44 24° **∺** 35'36 -11894 Aug 24 j 15:57 0°**Υ** -11899 Apr 13 j 16:09 26° ₹21'12 -1°58'47 conjunction retrograde -11894 Oct 02 j 07:44  $1^{\circ}$ **Y**12'32 minimum elong -11899 Apr 13 j 16:12 26°ਰੋ21'13 1°59'25 -11894 Nov 11 j 00:36 30°R ★ max. Earth dist. -11899 Apr 14 j 04:25 26°중24'52 10.77539 AU opposition -11894 Dec 11 j 01:55 27° **€** 58'08 0°23'32 morning rise -11899 May 01 j 00:47 28°₹24'59 min. Earth dist. -11894 Dec 11 j 19:05 27° **€** 55'00 9.30264 AU -11899 May 14 j 21:27 direct -11893 Feb 21 j 07:07 24° **∺** 37'57 retrograde -11899 Aug 08 j 06:00 5°**≈**31'12 -11893 May 21 j 00:44 0°**Υ** opposition -11899 Oct 14 j 23:48 2°≈12'04 -2°14'22 evening set -11893 Jun 04 j 00:06 1°**Y**31'13 min. Earth dist. -11899 Oct 14 j 17:12 2°≈13'21 8.85240 AU -11899 Nov 15 j 02:14 30°Rる conjunction -11893 Jun 20 j 18:19 3°Y25'15 0°33'15 direct -11899 Dec 24 j 10:13 28°る47'05 minimum elong -11893 Jun 20 i 18:18 3°**Y**25′15 0°33'15 -11898 Feb 01 i 14:37 0°**≈** max. Earth dist. -11893 Jun 19 j 20:22 3°**Y**18′59 11.30801 AU evening set -11898 Apr 08 i 15:50 6°≈10'07 morning rise -11893 Jul 07 i 08:54 5° γ′ 18'20 retrograde -11893 Oct 13 j 09:53 11° Υ 56'05 -11898 Apr 26 j 02:14 8°≈12'36 -1°38'44 -11893 Dec 22 j 11:44 8°**Υ**41'31 conjunction opposition 0°56'17 -11898 Apr 26 j 02:18 8°≈12'37 1°39'18 min. Earth dist. -11893 Dec 23 j 07:40  $8^{\circ}$  **Y** 37'53 9.30620 AU minimum elong -11898 Apr 26 j 07:06 8°≈14'03 10.92473 AU -11892 Mar 03 j 17:54 5°**Υ**21'50 max. Earth dist. direct -11898 May 13 j 07:28 10°≈13'34 -11892 Jun 13 j 22:00 12° Υ 14'01 morning rise evening set -11898 Jun 29 j 14:39 15°≈ -11898 Aug 19 j 18:05 17°≈09'33 -11892 Jun 30 j 13:25 14°**Υ**'07'35 0°59'26 conjunction retrograde -11898 Oct 11 j 18:14 15°R≈ -11892 Jun 30 j 13:22 14°**Υ**'07'34 0°59'33 minimum elong opposition -11898 Oct 26 j 22:56 13°≈52'05 -1°47'12 -11892 Jun 29 j 13:00 14°**Υ**'00'35 11.29568 AU max. Earth dist. -11892 Jul 17 j 01:37 16°**Υ**00'23 min. Earth dist. -11898 Oct 26 j 21:38 13°≈52'20 8.99235 AU morning rise -11897 Jan 06 j 00:24 10°≈28'16 -11892 Oct 23 j 15:41 22°**Υ**41'04 direct retrograde -11897 Mar 26 j 18:16 15°≈ -11891 Jan 01 j 23:13 19°**Υ**26'02 1°27'09 opposition -11897 Apr 20 j 18:09 17°≈42'26 -11891 Jan 02 j 21:35 19°**γ**21'57 9.27864 AU evening set min. Earth dist. direct -11891 Mar 15 j 01:17 16°**Υ**06'42 conjunction -11897 May 08 j 01:18 19°≈42'27 -1°15'10 evening set -11891 Jun 24 j 19:50 22°**Y**59'30 minimum elong -11897 May 08 j 01:20 19°≈42'28 1°15'39 max. Earth dist. -11891 Jul 10 j 05:21 24°**Υ**45'11 11.25251 AU max. Earth dist. -11897 May 07 j 23:21 19°≈41'53 11.05454 AU -11897 May 25 j 03:19 21°≈41'00 -11891 Jul 11 j 08:36 24°**Υ**′53'03 1°23'38 morning rise conjunction -11897 Aug 31 j 02:32 28°≈28'56 -11891 Jul 11 j 08:33 24°**Υ**′53'02 1°23'54 retrograde minimum elong -11897 Nov 07 j 16:30 25°≈12'45 -1°16'37 -11891 Jul 27 j 18:58 26°**Y**46'04 opposition morning rise -11897 Nov 07 j 19:31 25°≈12'11 9.11062 AU -11891 Aug 27 j 12:52 0°8 min. Earth dist. -11891 Nov 04 i 00:49 3°**8**31'50 direct -11896 Jan 18 j 06:20 21°≈50'04 retrograde evening set -11896 May 01 j 10:54 28°≈56'37 opposition -11890 Jan 13 j 14:18 0°816'01 1°55'15 -11896 May 10 j 17:29 0°**米** -11890 Jan 14 j 15:17 0°**8**11'28 9.22079 AU min. Earth dist. -11890 Jan 17 i 06:14 30° R**°**Y -11896 May 18 i 14:55 0° \( \frac{1}{2} \) 54'35 -0°49'14 direct -11890 Mar 26 i 08:54  $26^{\circ}$  Y 56'50 conjunction -11896 May 18 i 14:57 0° \(\frac{1}{2}\)54'35 0°49'35 -11890 May 29 j 09:19 0°8 minimum elong max. Earth dist. -11896 May 18 j 07:55 0° **\( \)** 52'34 11.16060 AU evening set -11890 Jul 05 j 19:13 3°**8**51'59 -11896 Jun 04 j 13:45 2° **¥** 51'06 max. Earth dist. -11890 Jul 21 j 00:07 5°837'21 11.17987 AU morning rise -11896 Sep 10 j 06:27 9°**)** €33'09 retrograde opposition -11896 Nov 18 j 05:50 6° **★** 17'56 -0°43'53 conjunction -11890 Jul 22 j 05:43 5°845'58 1°45'05 min. Earth dist. -11896 Nov 18 j 13:29 6°**升**16'31 9.20345 AU minimum elong -11890 Jul 22 j 05:40 5°**8**45'57 1°45'28 -11895 Jan 29 j 02:48 2°**升**56′15 morning rise -11890 Aug 07 j 14:58 7°**8**39'42 direct -11895 May 12 j 20:21 9° **€** 56'44 retrograde -11890 Nov 15 j 16:56 14°**8**32'40 evening set -11889 Jan 25 j 10:17 11°**8**15'47 2°19'39 opposition -11895 May 29 j 21:09 11° **★** 52'59 -0°21'55 -11889 Jan 26 j 12:37 11°**8**10'58 9.13438 AU conjunction min. Earth dist. -11895 May 29 j 21:10 11° **X** 53'00 0°22'09 -11889 Apr 06 j 20:14 7°**8**56'35 minimum elong direct max. Earth dist. -11895 May 29 j 09:01 11° ★49'31 11.23954 AU evening set -11889 Jul 16 j 21:59 14°**8**55'41 morning rise -11895 Jun 15 j 16:55 13° **★** 47'56 -11889 Jul 17 j 13:00 15°**8** 

max. Earth dist.

-11889 Aug 01 j 01:20 16°**8**41'51 11.07991 AU

-11895 Nov 29 j 16:23 17° **★** 11'41 -0°10'10

-11895 Sep 21 j 07:54 20°**∺**26'18

retrograde

opposition

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11889 in astronomical counting style is the year 11890 BCE in historical counting style. -11889 Aug 02 j 07:07 16°**8**50'38 2°02'59 morning rise -11883 Oct 30 i 19:19  $3^{\circ}\Omega$ 08'06 conjunction -11889 Aug 02 j 07:04 16°\( \begin{aligned}
 50'37 2°03'28 \end{aligned} -11882 Feb 15 j 12:52  $11^{\circ}\Omega$ 29'35 minimum elong retrograde -11889 Aug 18 j 15:53 18°**8**45'37 -11882 Apr 25 j 18:43 8° Ω00'29 2°03'10 morning rise opposition -11889 Nov 27 j 17:10 25°**8**47'45 -11882 Apr 25 j 22:32 7° **Ω**59'43 8.08787 AU min. Earth dist. retrograde -11888 Feb 06 j 12:19 22°829'30 2°39'21 -11882 Jul 01 j 12:46 4°**Ω**36'38 opposition direct -11888 Feb 07 j 14:11 22°**8**24'44 9.02198 AU -11882 Oct 10 j 14:26 12°**Ω**35'52 min. Earth dist. evening set -11888 Apr 17 j 10:43 19°**8**10'07 direct -11888 Jul 27 j 05:52 26°**8**14'44 -11882 Oct 27 j 20:40 14° $\Omega$ 51'53 1°25'01 evening set conjunction max. Earth dist. -11882 Oct 27 j 20:44 14° **Ω**51'54 1°25'31 -11888 Aug 11 j 09:55 28°**8**02'39 10.95567 AU minimum elong max. Earth dist. -11882 Oct 27 j 19:13 14° Ω51'24 10.01985 AU conjunction -11888 Aug 12 j 14:34 28°**8**11'13 2°16'30 -11882 Oct 28 j 21:14 15° $\Omega$ -11888 Aug 12 j 14:31 28°**8**11'13 2°17'03 -11882 Nov 14 j 08:33 17°**Ω**09'46 minimum elong morning rise -11888 Aug 27 j 20:21 0°**П** retrograde -11881 Mar 02 j 17:56  $25^{\circ}\Omega 42'49$ morning rise -11888 Aug 28 j 23:40 0°**Ⅲ**08′01 opposition -11881 May 10 j 11:31 22°**Ω**12'07 1°26'37 retrograde -11888 Dec 09 j 04:50 7°**Д**21'06 min. Earth dist. -11881 May 10 j 09:21 22° $\Omega$ 12'33 7.95803 AU opposition -11887 Feb 17 j 21:59 4°**Д**01'18 2°53'18 direct -11881 Jul 15 j 15:23 18°**Ω**47'06 min. Earth dist. -11887 Feb 18 j 22:25 3°**Д**56'45 8.88710 AU evening set -11881 Oct 25 j 04:17 26°Ω55'46 direct -11887 Apr 29 j 06:23 0°**Ⅱ**41'35 evening set -11887 Aug 07 j 20:46 7°**Ⅲ**53′08 conjunction -11881 Nov 11 j 16:58 29°**Ω**15'29 0°52'48 max. Earth dist. -11887 Aug 23 j 02:20 9°**Д**43'19 10.81137 AU minimum elong -11881 Nov 11 j 17:01 29° $\Omega$ 15'30 0°53'11 max. Earth dist. -11881 Nov 11 j 22:12 29° $\Omega$ 17'14 9.90366 AU conjunction -11887 Aug 24 i 05:53 9°II51'42 2°24'46 -11881 Nov 17 i 06:13 0° m minimum elong -11887 Aug 24 i 05:52 9°**II**51'41 2°25'23 morning rise -11881 Nov 29 j 11:33 1° m 37'07 morning rise -11887 Sep 09 j 16:32 11°**Д**50'53 retrograde -11880 Mar 17 j 05:36 10° m 18'58 retrograde -11887 Dec 22 i 01:59 19° **II** 16'29 opposition -11880 May 24 j 10:15 6° Mp 47'06 0° 43'26 -11886 Mar 02 j 16:26 15° **II** 54'58 3°00'25 min. Earth dist. -11880 May 24 j 02:42 6° **m** 48'39 7.85714 AU opposition -11886 Mar 03 j 15:04 15° **II** 50'42 8.73466 AU -11880 Jul 29 j 03:05 3° m 20'55 min. Earth dist. direct -11886 May 11 j 06:59 12°**Ⅲ**34'42 -11880 Nov 08 j 06:48 11° m 37'55 direct evening set evening set -11886 Aug 19 j 20:22 19°**Д**54'29 -11886 Sep 04 j 05:46 21°**Д**47'51 10.65262 AU -11880 Nov 26 j 01:32 14° m 00'42 0°16'30 max. Earth dist. conjunction -11880 Nov 26 j 01:33 14° m 00'42 0°16'44 minimum elong -11886 Sep 05 j 07:07 21°**Д**55'41 2°26'59 -11880 Nov 26 j 13:52 14° mp 04'51 9.82012 AU conjunction max. Earth dist. -11886 Sep 05 j 07:08 21°**Ц**55'41 -11880 Dec 14 j 01:54 16° Mp 25'17 minimum elong 2°27'39 morning rise -11886 Sep 21 j 20:40 23°**Д**57'51 -11879 Apr 01 j 20:33 25° m 12'25 morning rise retrograde -11886 Nov 20 j 18:12 0°5 -11879 May 11 j 08:24 23° m 50'16 desc. node -11885 Jan 04 j 10:03 1°537'12 -11879 Jun 08 j 12:50 21° m 39'48 -0°03'35 retrograde opposition -11885 Feb 19 j 09:01 30°RⅡ -11879 Jun 08 j 00:07 21° Mp 42'27 7.79297 AU min. Earth dist. opposition -11885 Mar 15 j 20:24 28° II 13'47 2°59'39 direct -11879 Aug 12 j 22:52 18° Mp 12'33 min. Earth dist. -11885 Mar 16 j 16:22 28°**Д**09'58 8.57087 AU evening set -11879 Nov 23 j 19:48 26° m 35'54 direct -11885 May 23 j 18:18 24°**Д**52'49 -11879 Dec 11 j 19:31 29° M 00'44 -0°21'28 -11885 Aug 12 j 07:25 0°ഇ conjunction -11885 Sep 01 j 06:10 2°521'51 minimum elong -11879 Dec 11 j 19:29 29° m 00'43 0°21'25 evening set max. Earth dist. -11879 Dec 12 j 15:01 29° m 07'19 9.77656 AU -11885 Sep 17 j 20:04 4°\$26'15 2°22'25 -11879 Dec 19 j 03:15 0°**♀** conjunction -11885 Sep 17 j 20:06 4°\$26'16 2°23'06 morning rise -11879 Dec 30 j 00:06 1°**2**27'05 minimum elong -11885 Sep 16 j 23:08 4°\$19'39 10.48607 AU -11878 Apr 17 j 10:45 10° **△**15'06 max. Earth dist. retrograde -11885 Oct 04 j 13:44 6°531'55 -11878 Jun 23 j 16:09 6° **△**42'14 -0°50'52 morning rise opposition retrograde -11884 Jan 18 j 07:12 14°\$25'39 min. Earth dist. -11878 Jun 22 j 22:43 6° **2**45'54 7.77167 AU opposition -11884 Mar 28 j 10:15 11°500'18 2°50'07 direct -11878 Aug 28 j 01:19 3°**♀**14'00 min. Earth dist. -11884 Mar 29 i 01:59 10°\$57'15 8.40290 AU evening set -11878 Dec 09 j 16:10 11° **△**41'03 direct -11884 Jun 04 j 14:47 7°538'29 -11884 Sep 13 j 03:47 15°5517'27 -11878 Dec 27 j 19:15 14° \(\Omega\) 06'37 -0°58'06 evening set conjunction -11878 Dec 27 j 19:11 14° \(\Omega\) 06'36 0°58'14 minimum elong conjunction -11884 Sep 29 j 22:10 17°525'31 2°10'34 max. Earth dist. -11878 Dec 28 j 20:53 14°**2**15'15 9.77742 AU minimum elong -11884 Sep 29 j 22:14 17°525'32 2°11'13 morning rise -11877 Jan 15 j 01:59 16° **△**33'17 -11884 Sep 29 j 07:12 17°\$20'43 10.31934 AU -11877 May 02 j 19:47 25°**♀**17'30 max. Earth dist. retrograde -11877 Jul 08 j 16:52 21°**2**44'56 -1°34'36 morning rise -11884 Oct 16 j 21:01 19°535'07 opposition -11877 Jul 07 j 19:40 21°**2**49'24 7.79556 AU -11883 Jan 31 j 16:46 27°543'11 min. Earth dist. retrograde -11883 Apr 11 j 09:49 24°515'54 2°31'17 -11877 Sep 12 j 07:06 18°**♀**15'56 opposition direct -11883 Apr 11 j 19:52 24°513'55 -11877 Dec 25 j 15:04 26° **△**43'29 min. Earth dist. 8.23896 AU evening set -11883 Jun 17 j 20:18 20°553'08 direct evening set -11883 Sep 26 j 14:20 28°542'19 conjunction -11876 Jan 12 j 19:40 29°**♀**08'27 -1°30'37 -11883 Oct 06 j 15:21 0°**Ω** minimum elong -11876 Jan 12 j 19:35 29°**2**08'25 1°30'55 max. Earth dist. -11876 Jan 14 j 01:49 29°**£**18'32 9.82310 AU conjunction -11883 Oct 13 j 14:16 0° Ω54'20 1°51'18 -11876 Jan 19 j 06:00 0° M minimum elong -11883 Oct 13 j 14:20 0°Ω54'22 1°51'54 -11876 Jan 31 j 02:24 1°M 33'59 morning rise

retrograde

-11876 May 16 j 19:58 10° **IL** 10'05

max. Earth dist.

-11883 Oct 13 j 05:58 0° $\Omega$ 51'38 10.16104 AU

•	omena of Saturn fro ical year style is used: The		•				page 3
opposition	-11876 Jul 22 j 12:17	6° <b>™</b> 38′20	-2°11'23	opposition	-11870 Oct 10 j 03:35	27°る17'40	-2°24'57
min. Earth dist.	-11876 Jul 21 j 12:23	6° <b>™</b> 43'21	7.86295 AU	min. Earth dist.	-11870 Oct 09 j 17:24	27° <b>る</b> 19'39	8.76709 AU
direct	-11876 Sep 26 j 11:55	3°M08'50		direct	-11870 Dec 19 j 09:10		
evening set	-11875 Jan 09 j 11:14	11°M33'33			-11869 Mar 23 j 02:54		
				evening set	-11869 Apr 03 j 16:49	1° <b>≈</b> 19'16	
conjunction	-11875 Jan 27 j 15:39				11060 1 01:01.50	20 22106	1040102
minimum elong	-11875 Jan 27 j 15:34			conjunction	-11869 Apr 21 j 04:50	3°≈23'06	
max. Earth dist.	-11875 Jan 29 j 00:28 -11875 Feb 04 j 15:35		9.9101 / AU	minimum elong max. Earth dist.	-11869 Apr 21 j 04:54 -11869 Apr 21 j 14:06	3°≈23'07	1°48'39 10.84523 AU
morning rise	-11875 Feb 04 j 13:35 -11875 Feb 14 j 20:35			morning rise	-11869 May 08 j 11:41	5°≈25'24	10.84323 AU
retrograde	-11875 May 31 j 09:27			retrograde	-11869 Aug 15 j 05:06		
opposition	-11875 Aug 05 j 23:48		-2°38'46	opposition	-11869 Oct 22 j 05:44	9°≈07'10	-1°59'39
min. Earth dist.	-11875 Aug 04 j 22:47			min. Earth dist.	-11869 Oct 22 j 00:11		8.91954 AU
direct	-11875 Oct 11 j 12:40			direct	-11868 Jan 01 j 02:00	5° <b>≈</b> 42'19	
evening set	-11874 Jan 25 j 00:22	26°M03'05		evening set	-11868 Apr 14 j 23:39	13° <b>≈</b> 00′22	
conjunction	-11874 Feb 12 j 03:17	28°M23'30	-2°14'49	conjunction	-11868 May 02 j 08:28	15° <b>≈</b> 01'32	-1°25'51
minimum elong	-11874 Feb 12 j 03:14			minimum elong	-11868 May 02 j 08:31		1°26'22
max. Earth dist.	-11874 Feb 13 j 12:23		10.03200 AU		-11868 May 02 j 03:15		
	-11874 Feb 24 j 13:06	0° <b>∡</b> 7		max. Earth dist.	-11868 May 02 j 12:01		10.98926 AU
morning rise	-11874 Mar 02 j 05:11	0°× <b>7</b> 43'30		morning rise	-11868 May 19 j 11:50		
retrograde min. Earth dist.	-11874 Jun 14 j 10:59	8° <b>₹</b> 53'57 5° <b>₹</b> 30'09	9 10450 ATT	retrograde opposition	-11868 Aug 25 j 15:47 -11868 Nov 02 j 01:26		1920120
opposition	-11874 Aug 19 j 01:38 -11874 Aug 20 j 01:43	5° × 25'10	8.10459 AU 2°55'29	min. Earth dist.	-11868 Nov 02 j 01:30		
direct	-11874 Aug 20 j 01.45 -11874 Oct 26 j 06:05	1°×755'37	-2 33 29	direct	-11867 Jan 12 j 09:39		9.03343 AU
evening set	-11874 Get 20 j 00:03 -11873 Feb 09 j 02:41			evening set	-11867 Apr 26 j 20:17		
evening set	110/3100 07 02.41	10 × 00 07		evening set	1100/14pi 20 j 20.17	24 70/21/23	
conjunction	-11873 Feb 27 j 03:09	12° <b>∡</b> ¹23'17	-2°24'22	conjunction	-11867 May 14 j 01:46	26° <b>≈</b> 20'15	-1°00'47
minimum elong	-11873 Feb 27 j 03:08	12° <b>∡</b> °23′17	2°25'00	minimum elong	-11867 May 14 j 01:49		
max. Earth dist.	-11873 Feb 28 j 10:02	12° <b>₹</b> ³33'08	10.17988 AU	max. Earth dist.	-11867 May 13 j 22:32	26° <b>≈</b> 19'18	11.11210 AU
morning rise	-11873 Mar 17 j 01:17	14° <b>∡</b> ³39'37		morning rise	-11867 May 31 j 02:02	28° <b>≈</b> 17'37	
retrograde	-11873 Jun 28 j 00:33	22° <b>∡</b> ³34'45			-11867 Jun 15 j 14:07	0° <b>ℋ</b>	
opposition	-11873 Sep 02 j 17:26			retrograde	-11867 Sep 05 j 19:49		
min. Earth dist.	-11873 Sep 01 j 19:53		8.26177 AU	opposition	-11867 Nov 13 j 16:11		
direct	-11873 Nov 09 j 15:21			min. Earth dist.	-11867 Nov 13 j 21:22		9.16401 AU
evening set	-11872 Feb 23 j 15:30	23°×'39'18		11.	-11867 Dec 08 j 15:12		
	11072 Mar. 12 : 12.50	250.752156	2025122	direct	-11866 Jan 24 j 09:32		
conjunction minimum elong	-11872 Mar 12 j 12:58 -11872 Mar 12 j 12:59			evening set	-11866 Mar 11 j 11:06 -11866 May 08 j 08:38	0° <b>∺</b> 5° <b>∺</b> 26'30	
max. Earth dist.	-11872 Mar 12 j 12:39			evening set	-11600 May 06 J 06.36	J / 2030	
morning rise	-11872 Mar 30 j 07:08		10.54425710	conjunction	-11866 May 25 j 10:44	7° <b>∺</b> 23'25	-0°33'56
morning rise	-11872 Apr 15 j 07:28	0°궁		minimum elong	-11866 May 25 j 10:46	7° <b>∺</b> 23'25	
retrograde	-11872 Jul 09 j 23:35	5°₹45'12		max. Earth dist.	-11866 May 25 j 01:22		11.20954 AU
opposition	-11872 Sep 14 j 22:39	2° <b>る</b> 20'30	-2°57'25	morning rise	-11866 Jun 11 j 08:00	9° <b>)</b> 18′58	
min. Earth dist.	-11872 Sep 14 j 04:43	2° <b>පි</b> 24'06	8.43054 AU	retrograde	-11866 Sep 16 j 22:02	15° <b>¥</b> 58′26	
	-11872 Oct 17 j 00:08	30°₹ <b>≯</b>		opposition	-11866 Nov 25 j 03:31		
direct	-11872 Nov 22 j 16:11			min. Earth dist.	-11866 Nov 25 j 12:48		9.24757 AU
_	-11872 Dec 29 j 06:56	0° <b>ろ</b>		direct	-11865 Feb 05 j 05:30	9° <b>∺</b> 22'24	
evening set	-11871 Mar 08 j 13:57	6° <b>ප</b> 41'38		evening set	-11865 May 19 j 14:29	16° <b>★</b> 19'56	
conjunction	11971 Mar 26:00:15	8° <b>ට</b> 51'47	2010/00	conjunction	-11865 Jun 05 j 13:24	180 <b>W</b> 15110	0006!16
conjunction minimum elong	-11871 Mar 26 j 08:15 -11871 Mar 26 j 08:17	8° <b>る</b> 51'48		minimum elong	-11865 Jun 05 j 13:24 -11865 Jun 05 j 13:24		
max. Earth dist.	-11871 Mar 27 j 05:07		10.51561 AU	behind sun begin	-11865 Jun 05 j 06:48		0 00 20
morning rise	-11871 Apr 12 j 22:33		10.51501710	behind sun end	-11865 Jun 05 j 20:00		
retrograde	-11871 Jul 22 j 10:12			max. Earth dist.	-11865 Jun 04 j 23:38		11.27847 AU
opposition	-11871 Sep 27 j 17:36		-2°44'44	morning rise	-11865 Jun 22 j 07:39		
min. Earth dist.	-11871 Sep 27 j 03:30			asc. node	-11865 Aug 29 j 11:29		
direct	-11871 Dec 06 j 06:23	11° <b>る</b> 35'47		retrograde	-11865 Sep 27 j 23:29	26° <b>)</b> 46′25	
evening set	-11870 Mar 21 j 22:07	19° <b>ප</b> 14'09		opposition	-11865 Dec 06 j 13:06	23° <b>∺</b> 32′09	0°08'57
				min. Earth dist.	-11865 Dec 07 j 02:20		9.30155 AU
conjunction	-11870 Apr 08 j 13:16			direct	-11864 Feb 16 j 17:52		
minimum elong	-11870 Apr 08 j 13:19			evening set	-11864 May 29 j 15:40	27° <b>∺</b> 05'51	
max. Earth dist.	-11870 Apr 09 j 04:01		10.68521 AU		110617	2001/2000	0001120
morning rise	-11870 Apr 25 j 23:49			conjunction	-11864 Jun 15 j 11:25		0°21'28
retrograda	-11870 Jul 07 j 14:32			minimum elong max. Earth dist.	-11864 Jun 15 j 11:24 -11864 Jun 14 j 17:22		0°21'26
retrograde	-11870 Aug 03 j 12:10 -11870 Aug 30 j 15:35			max. Earth dist.	-11864 Jun 14 j 17:22 -11864 Jun 24 j 05:35	28°π54'59 0° <b>Υ</b>	11.310/1 AU
	110/0 Aug 30 J 13.33	30 NO			1100+Juli 24J 05.55	V I	

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11864 in astronomical counting style is the year 11865 BCE in historical counting style. -11864 Jul 02 j 02:55 0°**Υ**53'20 morning rise -11858 Sep 04 j 21:41 6°**Д**52'49 morning rise -11864 Oct 08 j 00:44 7°**Y**29'59 -11858 Dec 16 j 17:03 14° **II** 12'09 retrograde retrograde opposition -11864 Dec 16 j 22:23 4°Υ15'56 0°42'13 -11857 Feb 25 j 09:48 10°**Д**51'42 2°58'11 opposition -11864 Dec 17 j 16:10 4°Υ 12'41 9.32420 AU -11857 Feb 26 j 11:07 10°**П**46'59 8.81542 AU min. Earth dist. min. Earth dist. -11863 Feb 27 j 03:26 0°Y56'31 -11857 May 06 j 09:15 7°**Д**31'54 direct direct -11863 Jun 09 j 14:18 7°**Y**48′29 evening set evening set -11857 Aug 14 j 22:21 14°**Ⅲ**47'26 max. Earth dist. -11863 Jun 25 j 07:51 9°**Υ**35'29 11.32300 AU max. Earth dist. -11857 Aug 30 j 05:07 16°**Ц**38'57 10.73309 AU -11863 Jun 26 j 06:48 9° $\Upsilon$ 42'02 0°48'15 conjunction conjunction -11857 Aug 31 j 08:16 16°**Ⅱ**47'17 2°26'51 minimum elong -11863 Jun 26 j 06:46 9°**Υ**'42'01 0°48'20 minimum elong -11857 Aug 31 j 08:16 16°**II**47'17 2°27'30 morning rise -11863 Jul 12 j 19:58 11°**Υ**34'44 morning rise -11857 Sep 16 j 20:13 18°**Д**47'55 -11863 Oct 19 j 03:02 18°**Υ**13'15 -11857 Dec 29 j 20:09 26°**Ц**20'35 retrograde retrograde -11863 Dec 28 j 08:43 14°**Υ**'59'01 1°14'00 opposition opposition -11856 Mar 09 j 08:50 22°**I**58'06 3°01'05 min. Earth dist. -11863 Dec 29 j 06:19 14°**Υ**55'06 9.31463 AU min. Earth dist. -11856 Mar 10 j 06:59 22°**耳**53'54 8.65026 AU direct -11862 Mar 10 j 11:38 11°**Y**40'07 direct -11856 May 17 j 16:07 19°**Д**37'27 evening set -11862 Jun 20 j 11:50 18°**Y**31'52 evening set -11856 Aug 26 j 03:00 27°**II**01'55 max. Earth dist. -11862 Jul 05 j 23:14 20°**Υ**17'36 11.29690 AU conjunction -11856 Sep 11 j 15:24 29°**Ⅲ**04'47 2°25'24 conjunction -11862 Jul 07 j 01:31 20°Υ25'09 1°13'24 minimum elong -11856 Sep 11 j 15:26 29° **I**I 04'47 2°26'05 minimum elong -11862 Jul 07 j 01:28 20°**Υ**25'09 1°13'36 max. Earth dist. -11856 Sep 10 j 15:28 28°Д57'18 10.56326 AU morning rise -11862 Jul 23 j 12:40 22°**Y**17'49 -11856 Sep 19 j 00:26 0°5 retrograde  $-11862 \text{ Oct } 30 \text{ j } 10:09 \ 29^{\circ} \Upsilon 00'25$ morning rise -11856 Sep 28 i 06:52 1°9508'44 opposition -11861 Jan 08 j 21:48  $25^{\circ}$   $\Upsilon$  45'34  $1^{\circ}$  43'22 retrograde -11855 Jan 11 j 12:13 8°955'41 min. Earth dist. -11861 Jan 09 j 21:28  $25^{\circ}$   $\Upsilon$  41'17 9.27261 AU opposition -11855 Mar 22 j 17:48 5°931'03 2°55'37 direct -11861 Mar 21 j 20:37  $22^{\circ}$   $\Upsilon$  26'58 min. Earth dist. -11855 Mar 23 j 12:01 5°**5**27'32 8.47720 AU evening set -11861 Jul 01 j 09:56 29°**Y**20'11 -11855 May 30 j 06:43 2°909'24 direct -11861 Jul 07 j 05:50 0°8 -11855 Sep 07 j 18:43 9°9543'41 evening set -11861 Jul 17 j 21:23 1°813'42 1°36'08 -11855 Sep 24 j 10:49 11°550'03 2°16'53 conjunction conjunction -11861 Jul 17 j 21:20 1°813'41 1°36'28 -11855 Sep 24 j 10:52 11°550'04 2°17'34 minimum elong minimum elong -11855 Sep 23 j 14:57 11°\$543'44 10.38962 AU -11861 Jul 16 j 17:27 1°**8**05'37 11.23850 AU max. Earth dist. max. Earth dist. -11861 Aug 03 j 06:53 3°**8**06'49 -11855 Oct 11 j 07:09 13°957'51 morning rise morning rise -11854 Jan 25 j 15:52 21°559'27 -11861 Nov 11 j 00:52 9°**8**55'37 retrograde retrograde -11860 Jan 20 j 15:01 6°\begin{aligned}600839'51 2°09'28 -11854 Apr 05 j 12:55 18°532'40 2°41'04 opposition opposition -11854 Apr 06 j 02:45 18°529'58 8.30444 AU min. Earth dist. min. Earth dist. -11860 Apr 01 j 05:59 3°**8**21'19 -11854 Jun 12 j 07:03 15°509'55 direct direct -11860 Jul 11 j 10:49 10°**8**17'45 -11854 Sep 20 j 22:59 22°554'35 evening set evening set conjunction -11860 Jul 27 j 20:28 12°**8**12'01 1°55'40 conjunction -11854 Oct 07 j 20:09 25°504'51 2°00'58 minimum elong -11860 Jul 27 j 20:25 12°812'00 1°56'06 minimum elong -11854 Oct 07 j 20:13 25°\$04'52 2°01'36 max. Earth dist. -11860 Jul 26 j 14:28 12°**8**03'14 11.14912 AU max. Earth dist. -11854 Oct 07 j 06:16 25°\$00'21 10.22075 AU -11860 Aug 13 j 05:07 14°**8**06'09 -11854 Oct 24 j 22:29 27°516'49 morning rise morning rise -11860 Aug 21 j 03:31 15°8 -11854 Nov 16 j 06:37 0°**Ω** retrograde -11860 Nov 21 j 20:03 21°**8**03'14 -11853 Feb 09 j 06:04 5°**Ω**32'38 retrograde -11859 Jan 31 j 13:45 17°**8**46'14 2°31'19 -11853 Apr 19 j 17:38 2°Ω03'50 2°17'06 opposition opposition -11859 Feb 01 j 16:35 17°**8**41'19 9.09506 AU -11853 Apr 20 j 02:06 2°Ω02'09 8.14104 AU min. Earth dist. min. Earth dist. -11859 Mar 17 i 10:12 15°R8 -11853 May 17 j 14:09 30°RS -11853 Jun 25 j 19:18 28°539'52 direct -11859 Apr 12 j 16:28 14°**8**27'29 direct -11859 May 08 j 14:49 15°8 -11853 Aug 02 j 22:32 0°**Ω** -11859 Jul 22 j 16:05 21°828'53 -11853 Oct 04 j 16:46 6° Ω35'03 evening set evening set max. Earth dist. -11859 Aug 06 j 17:19 23°8 15'08 11.03195 AU -11853 Oct 21 j 20:06 8° Ω49'26 1°37'45 conjunction -11859 Aug 08 j 00:38 23°**8**24'25 2°11'11 -11853 Oct 21 j 20:10  $8^{\circ}\Omega 49'27$  1°38'19 conjunction minimum elong minimum elong -11859 Aug 08 j 00:35 23°824'24 2°11'42 max. Earth dist. -11853 Oct 21 j 13:40 8° **Ω**47'19 10.06581 AU -11853 Nov 08 j 05:04 11° $\Omega$ 05'40 morning rise -11859 Aug 24 j 09:25 25°**8**20'08 morning rise -11859 Oct 08 j 20:46 0°**Ⅱ** -11853 Dec 10 j 15:06 15°**Ω** retrograde -11859 Dec 04 j 01:25 2°**Ⅲ**27'29 retrograde -11852 Feb 24 j 06:36 19°**Ω**34'19 -11858 Feb 01 j 03:37 30°R8 -11852 May 03 j 07:11  $16^{\circ}\Omega$ 03'43  $1^{\circ}44'11$ opposition -11858 Feb 12 j 19:41 29°**8**08'55 2°47'54 min. Earth dist. -11852 May 03 j 09:19  $16^{\circ}\Omega$ 03'17 7.99636 AU opposition -11858 Feb 13 j 22:51 29°**8**03'53 -11852 May 16 j 15:12 15°RΩ min. Earth dist. 8.96565 AU -11858 Apr 24 j 10:22 25°**8**49'44 -11852 Jul 08 j 18:20 12°**Ω**38'33 direct direct -11858 Jul 07 j 11:44  $0^{\circ}\Pi$ -11852 Aug 28 j 12:34 15°**Ω** evening set -11858 Aug 03 j 03:14 2°**Ⅲ**57'32 evening set -11852 Oct 18 j 00:27 20° **Ω** 43'47 max. Earth dist. -11858 Aug 18 j 05:55 4°**П**45'54 10.89148 AU conjunction -11852 Nov 04 j 10:22 23°**Ω**02'07 1°08'01 -11858 Aug 19 j 11:51 4°**Д**54'56 2°21'51 minimum elong -11852 Nov 04 j 10:25 23°**Ω**02'08 1°08'27 conjunction -11858 Aug 19 j 11:49 4°**Д**54'55 2°22'27 max. Earth dist. -11852 Nov 04 j 12:25 23° **Ω**02'48 9.93414 AU minimum elong

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11852 in astronomical counting style is the year 11853 BCE in historical counting style. -11852 Nov 22 j 02:02  $25^{\circ}\Omega$ 22'22 -11846 Jul 31 j 13:12 15°RML morning rise -11852 Dec 30 j 16:34 -11846 Oct 05 j 06:33 11°M232'51 0° m direct -11851 Mar 10 j 15:56 -11846 Dec 07 j 11:34 15°ML retrograde 4° m 01'28 -11845 Jan 18 j 14:00 19° ML54'49 opposition -11851 May 18 j 03:52 0° m 29'24 1°03'38 evening set 0° Mp 30'23 7.87968 AU min. Earth dist. -11851 May 17 j 23:05 -11851 May 24 j 03:32 30°RΩ -11845 Feb 05 j 17:34 22°M16'34 -2°07'46 conjunction direct -11851 Jul 23 j 02:16 27°**Ω**03'06 -11845 Feb 05 j 17:30 22°M 16'32 2°08'16 minimum elong -11851 Sep 17 j 22:12 0° m max. Earth dist. -11845 Feb 07 j 03:03 22°ML27'32 9.97318 AU -11851 Nov 01 j 21:36 evening set 5° m 17'16 morning rise -11845 Feb 23 j 21:04 24°M 38'06 -11845 Apr 11 j 21:35 0°**∡**¹ conjunction -11851 Nov 19 j 13:57 7° mp 39'02 0°33'14 retrograde -11845 Jun 08 j 17:45 2°**₹**55'10 -11851 Nov 19 j 13:59 7°m/39'03 minimum elong 0°33'32 -11845 Aug 07 j 10:01 30°RM min. Earth dist. max. Earth dist. -11851 Nov 20 j 00:33 7° m/42'36 9.83464 AU -11845 Aug 13 j 06:53 29°M 30'53 8.04219 AU morning rise -11851 Dec 07 j 11:50 10° m 02'40 opposition -11845 Aug 14 j 07:43 29°M25'44 -2°49'21 retrograde -11850 Mar 26 j 06:22 18° Mp 48'44 direct -11845 Oct 20 j 04:13 25°M 56'16 opposition -11850 Jun 02 j 05:23 15° **m** 15'41 -11845 Dec 29 j 04:43 0°**∡**7 min. Earth dist. -11850 Jun 01 j 17:54 15° **m** 18'04 7.79927 AU evening set -11844 Feb 02 j 21:44 4°**х** 10′50 direct -11850 Aug 06 j 18:43 11° **m** 48'17 desc. node -11850 Oct 22 j 01:24 16° m 51'42 conjunction -11844 Feb 20 j 23:14 6°**₹**'29'28 -2°21'09 evening set -11850 Nov 17 j 06:35 20° m 09'41 minimum elong -11844 Feb 20 j 23:11 6°**₹**129'28 2°21'45 max. Earth dist. -11844 Feb 22 j 07:25 6°**₹**39'50 10.11497 AU conjunction -11850 Dec 05 i 04:28 22° m 33'58 -0°04'26 morning rise -11844 Mar 09 i 23:14 8° ₹ 47'29 minimum elong -11850 Dec 05 i 04:27 22° m 33'57 retrograde -11844 Jun 21 j 12:25 16° ₹ 49'35 behind sun begin -11850 Dec 04 j 21:14 22° m 31'32 min. Earth dist. -11844 Aug 26 i 04:32 13° **27**27'03 8.19557 AU behind sun end -11850 Dec 05 j 11:41 22° m 36'22 opposition -11844 Aug 27 j 04:17 13° ₹22'11 -3°00'00 max. Earth dist. -11850 Dec 05 j 22:55 22° m 40'11 -11844 Nov 02 j 18:18 9° ₹ 53'16 9.77458 AU direct -11850 Dec 23 j 07:19 24° m 59'53 -11843 Feb 16 j 16:53 17° ₹ 58'18 morning rise evening set -11849 Feb 02 j 19:42 0°₽ -11849 Apr 10 j 22:02 3°**△**48'42 -11843 Mar 06 j 15:44 20° ₹ 13'28 -2°25'58 retrograde conjunction -11849 Jun 17 j 08:57 0° **2**15'13 -0°29'51 minimum elong -11843 Mar 06 j 15:43 20° ₹ 13'28 2°26'37 opposition -11849 Jun 16 j 15:54 0° **2**18'47 7.76116 AU -11843 Mar 07 j 21:07 20° ₹22'45 10.27765 AU min. Earth dist. max. Earth dist. -11849 Jun 20 j 09:32 30°R Mp -11843 Mar 24 j 11:47 22°**尽** 27'39 morning rise direct -11849 Aug 21 j 18:12 26° Mp 46'52 -11843 Jun 18j18:18 0°る -11849 Oct 20 j 05:46 0°**♀** -11843 Jul 04 j 17:43 0°쥥14'11 retrograde -11849 Dec 03 j 00:25 5°**△**13'03 -11843 Jul 20 j 18:45 30°R ⊀ evening set -11843 Sep 09 j 14:15 26° ₹ 48'59 -3°00'14 opposition -11849 Dec 21 j 02:17 7°**△**38'37 -0°42'00 conjunction min. Earth dist. -11843 Sep 08 j 16:57 26° ₹ 53'17 8.36462 AU minimum elong -11849 Dec 21 j 02:14 7°**△**38'36 0°42'03 direct -11843 Nov 16 j 23:22 23°**尽** 20'51 max. Earth dist. -11849 Dec 22 j 03:26 7° **2**47'06 9.75863 AU -11842 Feb 20 j 10:45 0°♂ morning rise -11848 Jan 08 j 08:12 10°**♀**05'27 evening set -11842 Mar 02 j 22:10 1°쥥15'05 retrograde -11848 Apr 25 j 10:34 18°**♀**52'24 -11848 Jul 01 j 11:22 15° **2**19'05 -1°15'41 conjunction -11842 Mar 20 j 18:01 3°ਰੋ26'42 -2°22'47 opposition min. Earth dist. -11848 Jun 30 j 14:08 15°**2**23'34 7.76845 AU -11842 Mar 20 j 18:03 3°**궁**26'42 2°23'27 minimum elong -11848 Sep 04 j 22:24 11°**⊆**50'00 max. Earth dist. -11842 Mar 21 j 19:04 3°중34'27 10.45109 AU direct -11848 Dec 17 j 22:47 20° **2**18'01 -11842 Apr 07 j 09:57 5°♂37'03 evening set morning rise retrograde -11842 Jul 17 j 11:05 13°る08'21 -11847 Jan 05 i 02:53 22° **△**43'31 -1°16'44 -11842 Sep 22 j 13:47 9° \( \frac{3}{45}'22 \) -2°51'10 conjunction opposition -11847 Jan 05 i 02:49 22° **△**43'29 1°16'57 minimum elong min. Earth dist. -11842 Sep 21 j 20:34 9°정48'48 8.53936 AU max. Earth dist. -11847 Jan 06 i 09:05 22° **2**53'39 9.78836 AU direct -11842 Nov 30 j 17:10 6°る18'13 -11847 Jan 23 i 09:48 25° \(\Omega\) 09'49 evening set -11841 Mar 16 j 12:55 14°**⋜**01'11 morning rise -11847 Mar 04 j 15:47 0°M -11847 May 10 j 15:40 3°M 50'23 -11841 Apr 03 j 05:34 16°る09'22 -2°12'35 retrograde conjunction -11847 Jul 15 j 09:48 0°ML22'52 7.82085 AU -11841 Apr 03 j 05:37 16°る09'22 2°13'14 min Earth dist minimum elong -11847 Jul 16 j 09:39 opposition 0°M17'50 -1°55'59 max. Earth dist. -11841 Apr 04 j 00:49 16°る15'12 10.62535 AU -11841 Apr 20 j 17:33 18°**궁**16'05 -11847 Jul 19 j 22:22 30°R Ω morning rise -11841 Jul 29 j 17:59 25°**궁**33'22 direct -11847 Sep 20 j 03:33 26°**£**48'18 retrograde -11847 Nov 19 j 02:28  $0^{\circ}$ M opposition -11841 Oct 05 j 03:51 22°る12'29 -2°34'19 -11846 Jan 02 j 20:52 5°**™**14'52 -11841 Oct 04 j 15:59 22°る14'49 8.71025 AU evening set min. Earth dist. -11841 Dec 13 j 23:57 18°정46'28 direct -11846 Jan 21 j 01:28 -11840 Mar 28 j 13:31 26°♂18'27 conjunction 7°M39'01 -1°45'57 evening set -11846 Jan 21 j 01:23 minimum elong 7°**ጤ**38'59 1°46'20 max. Earth dist. -11846 Jan 22 j 10:29 7°**IL**49'59 9.86170 AU conjunction -11840 Apr 15 j 02:52 28°♂23'27 -1°56'34 morning rise -11846 Feb 08 j 07:28 10°M 03'28 minimum elong -11840 Apr 15 j 02:55 28°중23'28 1°57'11 -11846 Mar 22 j 03:20 15°M max. Earth dist. -11840 Apr 15 j 14:40 28°중26'58 10.79134 AU retrograde -11846 May 25 j 10:37 18°M 33'44 -11840 Apr 28 j 15:28 0°≈ -11846 Jul 30 j 00:15 15°ML07'45 7.91437 AU -11840 May 02 j 11:16 0°≈26'57 min. Earth dist. morning rise

-11840 Aug 09 j 12:58

7°**≈**31'58

retrograde

-11846 Jul 31 j 01:09 15°ML02'32 -2°27'48

opposition

•	Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 6 Attention, astronomical year style is used: The year -11840 in astronomical counting style is the year 11841 BCE in historical counting style.									
		-								
opposition	-11840 Oct 16 j 09:21	4°≈13'02		conjunction	-11834 Jun 21 j 23:13					
min. Earth dist.	-11840 Oct 16 j 02:47	4°≈14'18 0°≈48'11	8.86902 AU	minimum elong	-11834 Jun 21 j 23:11		0°36'33 11.31897 AU			
direct evening set	-11840 Dec 25 j 22:02 -11839 Apr 10 j 01:35	0 ≈48 11 8°≈10'07		max. Earth dist. morning rise	-11834 Jun 21 j 01:38 -11834 Jul 08 j 13:25		11.51697 AU			
evening set	-11839 Apr 10 J 01.33	o ≈100/		retrograde	-11834 Oct 14 j 15:33					
conjunction	-11839 Apr 27 j 11:41	10°~12'18	1°36'00	opposition	-11834 Oct 14 j 13.33 -11834 Dec 23 j 17:24		1°00'08			
minimum elong	-11839 Apr 27 j 11:45			min. Earth dist.	-11834 Dec 24 j 13:20		9.31584 AU			
max. Earth dist.	-11839 Apr 27 j 16:10			direct	-11833 Mar 05 j 23:35		7.5150 <del>4</del> AO			
morning rise	-11839 May 14 j 16:43		10.5 1105 110	evening set	-11833 Jun 16 j 02:37					
morning rise	-11839 Jun 09 j 05:08			evening see	11000 van 10 j 02.07	1				
retrograde	-11839 Aug 21 j 02:00			conjunction	-11833 Jul 02 j 17:43	15° <b>℃</b> 56'08	1°02'28			
opposition	-11839 Oct 28 j 07:31		-1°43'35	minimum elong	-11833 Jul 02 j 17:40		1°02'37			
min. Earth dist.	-11839 Oct 28 j 05:40			max. Earth dist.	-11833 Jul 01 j 16:56		11.30390 AU			
	-11839 Nov 08 j 12:44			morning rise	-11833 Jul 19 j 05:38					
direct	-11838 Jan 07 j 11:12			retrograde	-11833 Oct 25 j 19:42					
	-11838 Mar 06 j 18:07			opposition	-11832 Jan 04 j 04:47		1°30'40			
evening set	-11838 Apr 22 j 02:41			min. Earth dist.	-11832 Jan 05 j 04:00		9.28548 AU			
Č	1 3			direct	-11832 Mar 16 j 06:04					
conjunction	-11838 May 09 j 09:39	21° <b>≈</b> 39'42	-1°12'04	evening set	-11832 Jun 25 j 23:59					
minimum elong	-11838 May 09 j 09:41			max. Earth dist.	-11832 Jul 11 j 08:04		11.25783 AU			
max. Earth dist.	-11838 May 09 j 08:11	21° <b>≈</b> 39'17	11.07173 AU		J					
morning rise	-11838 May 26 j 11:19			conjunction	-11832 Jul 12 j 12:23	26° <b>Ƴ</b> 40'43	1°26'21			
C	-11838 Aug 10 j 07:54			minimum elong	-11832 Jul 12 j 12:20		1°26'38			
retrograde	-11838 Sep 01 j 09:40	0° <b>)</b> 24′51		morning rise	-11832 Jul 28 j 22:40	28° <b>Ƴ</b> 33'38				
	-11838 Sep 23 j 16:00	30°R≈			-11832 Aug 10 j 23:49					
opposition	-11838 Nov 09 j 00:20	27°≈08'51	-1°12'39	retrograde	-11832 Nov 05 j 05:15	5° <b>8</b> 19'20				
min. Earth dist.	-11838 Nov 09 j 03:16	27° <b>≈</b> 08'18	9.12743 AU	opposition	-11831 Jan 14 j 19:37	2° <b>8</b> 03'30	1°58'20			
direct	-11837 Jan 19 j 14:17	23° <b>≈</b> 46′22		min. Earth dist.	-11831 Jan 15 j 21:17	1° <b>8</b> 58'50	9.22462 AU			
	-11837 Apr 25 j 23:57	0° <b>)</b>			-11831 Feb 14 j 07:37	30° <b>ŖƳ</b>				
evening set	-11837 May 03 j 18:28	0° <b>)</b> 51′52		direct	-11831 Mar 27 j 14:45					
					-11831 May 06 j 20:46	$9^{\circ}$ 8				
conjunction	-11837 May 20 j 22:13	2° <b>)</b> 49'33	-0°45'54	evening set	-11831 Jul 06 j 23:04	5° <b>8</b> 39'12				
minimum elong	-11837 May 20 j 22:15	2° <b>)</b> 49'34	0°46'14	max. Earth dist.	-11831 Jul 22 j 03:42	7° <b>8</b> 24'28	11.18206 AU			
max. Earth dist.	-11837 May 20 j 15:26	2° <b>){</b> 47'36	11.17699 AU							
morning rise	-11837 Jun 06 j 20:39	4° <b>)</b> 45′48		conjunction	-11831 Jul 23 j 09:22	7° <b>8</b> 33'06	1°47'24			
retrograde	-11837 Sep 12 j 12:55	11° <b>∺</b> 26′58		minimum elong	-11831 Jul 23 j 09:19	7° <b>8</b> 33'06	1°47'48			
opposition	-11837 Nov 20 j 13:07	8° <b>升</b> 11′56	-0°39'44	morning rise	-11831 Aug 08 j 18:29	9° <b>8</b> 26'47				
min. Earth dist.	-11837 Nov 20 j 21:29	8° <b>升</b> 10′23	9.21925 AU		-11831 Oct 06 j 23:50	15° <b>8</b>				
direct	-11836 Jan 31 j 11:15	4° <b>)</b> 50′25		retrograde	-11831 Nov 16 j 20:59	16° <b>8</b> 19'51				
evening set	-11836 May 14 j 03:03	11° <b>) (</b> 49′57			-11831 Dec 29 j 00:38	15° <b>₹</b> 8				
				opposition	-11830 Jan 26 j 15:21	13° <b>8</b> 02'53	2°22'11			
conjunction	-11836 May 31 j 03:25	13° <b>)</b> 45′57	-0°18'30	min. Earth dist.	-11830 Jan 27 j 17:33		9.13496 AU			
minimum elong	-11836 May 31 j 03:25			direct	-11830 Apr 08 j 01:14	9° <b>8</b> 43'43				
max. Earth dist.	-11836 May 30 j 14:27	13° <b>)</b> 42′15	11.25462 AU		-11830 Jul 02 j 18:43	15° <b>8</b>				
morning rise	-11836 Jun 16 j 22:58			evening set	-11830 Jul 18 j 01:40					
retrograde	-11836 Sep 22 j 12:46			max. Earth dist.	-11830 Aug 02 j 05:14	18° <b>8</b> 28'55	11.07882 AU			
opposition	-11836 Nov 30 j 23:04									
min. Earth dist.	-11836 Dec 01 j 12:30		9.28236 AU	conjunction	-11830 Aug 03 j 10:43					
asc. node	-11835 Feb 04 j 18:58			minimum elong	-11830 Aug 03 j 10:40		2°05'18			
direct	-11835 Feb 11 j 02:15			morning rise	-11830 Aug 19 j 19:17					
evening set	-11835 May 25 j 06:02			retrograde	-11830 Nov 28 j 23:18					
max. Earth dist.	-11835 Jun 10 j 08:42	24° <b>∺</b> 27'46	11.30242 AU	opposition	-11829 Feb 07 j 17:34					
				min. Earth dist.	-11829 Feb 08 j 19:13		9.01928 AU			
conjunction	-11835 Jun 11 j 03:07			direct	-11829 Apr 19 j 15:43					
minimum elong	-11835 Jun 11 j 03:06		0°09'14	evening set	-11829 Jul 29 j 09:35	28° <b>8</b> 01'55				
behind sun begin	-11835 Jun 10 j 21:10				11000 1 11:10 10	2001 150126	2015146			
behind sun end	-11835 Jun 11 j 09:01			conjunction	-11829 Aug 14 j 18:10					
morning rise	-11835 Jun 27 j 19:59			minimum elong	-11829 Aug 14 j 18:08					
	-11835 Aug 01 j 13:39	0°Υ 2° <b>%</b> 02157		max. Earth dist.	-11829 Aug 13 j 12:49		10.95139 AU			
retrograde	-11835 Oct 03 j 12:31	3°Υ02'57			-11829 Aug 14 j 23:24					
*.*	-11835 Dec 09 j 17:43		0007107	morning rise	-11829 Aug 31 j 03:18					
opposition	-11835 Dec 12 j 07:58			retrograde	-11829 Dec 11 j 10:01		2054120			
min. Earth dist.	-11835 Dec 13 j 00:52		9.31486 AU	opposition	-11828 Feb 20 j 03:32					
direct	-11834 Feb 22 j 14:44	26°π28'37 0°Υ		min. Earth dist.	-11828 Feb 21 j 04:31		8.88129 AU			
ovenine set	-11834 May 03 j 17:59	3° <b>Υ</b> 21'10		direct	-11828 Apr 30 j 09:45					
evening set	-11834 Jun 05 j 05:12	5 1 Z1 10		evening set max. Earth dist.	-11828 Aug 09 j 00:46 -11828 Aug 24 j 05:21		10 80414 411			
				max. Dartii Uist.	11020 Aug 24 J 05.21	11 11 30 3 /	10.00+1+ AU			

•	omena of Saturn fro		•				page 7
	ical year style is used: The						
conjunction	-11828 Aug 25 j 09:50	11° <b>Ⅱ</b> 39'37	2°25'25	max. Earth dist.	-11822 Nov 13 j 08:27	1°Mp18'31	9.89225 AU
minimum elong	-11828 Aug 25 j 09:49	11° <b>Ⅱ</b> 39'36	2°26'02	morning rise	-11822 Nov 30 j 22:04	3° <b>™</b> 38'39	
morning rise	-11828 Sep 10 j 20:43	13° <b>Ⅲ</b> 38'55		retrograde	-11821 Mar 19 j 17:14	12° <b>m</b> 21'22	
retrograde	-11828 Dec 23 j 06:46	21° <b>Ⅲ</b> 05′12		opposition	-11821 May 26 j 20:23	8° <b>m</b> 49'24	0°38'49
opposition	-11827 Mar 03 j 22:11	17° <b>Ⅱ</b> 43'33	3°00'49	min. Earth dist.	-11821 May 26 j 12:52	8° <b>m</b> 50'57	7.84735 AU
min. Earth dist.	-11827 Mar 04 j 21:39		8.72599 AU	direct	-11821 Jul 31 j 12:24	5° m 23'05	
direct	-11827 May 12 j 12:32			evening set	-11821 Nov 10 j 17:26	13° m 40'57	
evening set	-11827 Aug 21 j 00:42			Z .	J	•	
max. Earth dist.	-11827 Sep 05 j 10:16		10.64267 AU	conjunction	-11821 Nov 28 j 12:41	16° m 03'59	0°12'42
				minimum elong	-11821 Nov 28 j 12:41		0°12'55
conjunction	-11827 Sep 06 j 11:38	23°T744'48	2°26'56	behind sun begin	-11821 Nov 28 j 08:17		0 12 33
minimum elong	-11827 Sep 06 j 11:38			behind sun end	-11821 Nov 28 j 17:06		
morning rise	-11827 Sep 00 j 11:37 -11827 Sep 23 j 01:25		2 27 30	max. Earth dist.	-11821 Nov 29 j 01:42		0.81202.411
morning risc		0°95			•	-	7.01202 AC
. 1	-11827 Oct 31 j 01:57			morning rise	-11821 Dec 16 j 13:29		
retrograde	-11826 Jan 05 j 16:46	3°527'23	2050111	retrograde	-11820 Apr 03 j 08:07		
opposition	-11826 Mar 17 j 02:37		2°59'11	desc. node	-11820 Apr 04 j 11:44	-	000010
	-11826 Mar 17 j 22:36			opposition	-11820 Jun 09 j 23:22		
min. Earth dist.	-11826 Mar 17 j 22:46		8.55965 AU	min. Earth dist.	-11820 Jun 09 j 10:28		7.78650 AU
direct	-11826 May 24 j 23:52			direct	-11820 Aug 14 j 09:58	-	
	-11826 Jul 27 j 00:31	0		evening set	-11820 Nov 25 j 07:26		
evening set	-11826 Sep 02 j 11:01	4° <b>©</b> 12'23			-11820 Dec 05 j 05:31	0∘ <b>ಹ</b>	
max. Earth dist.	-11826 Sep 18 j 04:59	6° <b>©</b> 10′39	10.47380 AU				
				conjunction	-11820 Dec 13 j 07:33	1° <b>≏</b> 05'29	-0°25'19
conjunction	-11826 Sep 19 j 01:17	6° <b>ॐ</b> 17′03	2°21'38	minimum elong	-11820 Dec 13 j 07:31	1° <b>≏</b> 05'29	0°25'17
minimum elong	-11826 Sep 19 j 01:19	6°9517'04	2°22'19	max. Earth dist.	-11820 Dec 14 j 03:56	1° <b>≏</b> 12'22	9.77158 AU
morning rise	-11826 Oct 05 j 19:11	8°\$22'59		morning rise	-11820 Dec 31 j 12:19	3° <b>₽</b> 31'58	
retrograde	-11825 Jan 19 j 14:59	16°9517'48		retrograde	-11819 Apr 18 j 21:55	12° <b>≙</b> 20'15	
opposition	-11825 Mar 30 j 17:06	12° <b>9</b> 52'16	2°48'44	min. Earth dist.	-11819 Jun 24 j 08:54	8° <b>≙</b> 51'10	7.76827 AU
min. Earth dist.	-11825 Mar 31 j 08:16	12° <b>5</b> 49'19	8.38968 AU	opposition	-11819 Jun 25 j 02:54	8° <b>≏</b> 47'23	-0°55'36
direct	-11825 Jun 06 j 20:04			direct	-11819 Aug 29 j 13:10		
evening set	-11825 Sep 15 j 09:33	17°5510'08		evening set	-11819 Dec 11 j 04:30		
C	1 7			Č	,		
conjunction	-11825 Oct 02 j 04:22	19° <b>©</b> 18'31	2°09'02	conjunction	-11819 Dec 29 j 07:51	16° <b>≙</b> 12'20	-1°01'43
minimum elong	-11825 Oct 02 j 04:26		2°09'41	minimum elong	-11819 Dec 29 j 07:47		
max. Earth dist.	-11825 Oct 01 j 13:33			max. Earth dist.	-11819 Dec 30 j 10:32		
morning rise	-11825 Oct 19 j 03:38			morning rise	-11818 Jan 16 j 14:34		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
retrograde	-11824 Feb 03 j 01:12			retrograde	-11818 May 04 j 06:30		
opposition	-11824 Apr 12 j 17:23		2°28'57	min. Earth dist.	-11818 Jul 09 j 05:45		7 79520 ATT
min. Earth dist.	-11824 Apr 13 j 02:53			opposition	-11818 Jul 10 j 03:43		
direct	-11824 Apr 13 j 02:35		8.22430 AU	direct	-11818 Sep 13 j 18:11		-1 3631
unect	-11824 Sep 22 j 22:52	22 <b>3</b> 4723		evening set	-11818 Dec 27 j 03:54		
avanina aat		0° <b>Ω</b> 37'33		evening set	-11817 Jan 05 j 01:12		
evening set	-11824 Sep 27 j 21:15	0 863/33			-1181/Jan 05 J 01.12	U IIG	
conjunction	-11824 Oct 14 j 21:37	2° <b>Ω</b> 49'56	1°49'01	conjunction	-11817 Jan 14 j 08:37	1° <b>M</b> .14'33	-1°33'44
minimum elong	-11824 Oct 14 j 21:41	2° <b>Ω</b> 49'58	1°49'37	minimum elong	-11817 Jan 14 j 08:33		1°34'03
max. Earth dist.	-11824 Oct 14 j 12:56		10.14651 AU	max. Earth dist.	-11817 Jan 15 j 15:46		9.82419 AU
morning rise	-11824 Oct 14 j 12:30	5° <b>Ω</b> 04'06	10.14031 AU	morning rise	-11817 Feb 01 j 15:11		9.02419 AU
retrograde	-11823 Feb 16 j 22:43			retrograde	-11817 May 19 j 07:00		
C		9° <b>Ω</b> 57'35	1°59'55	-			2014/51
opposition	-11823 Apr 27 j 03:11			opposition	-11817 Jul 24 j 23:04		
min. Earth dist.	-11823 Apr 27 j 06:51	9° <b>£</b> 56'51	8.07342 AU	min. Earth dist.	-11817 Jul 23 j 22:38		7.86555 AU
direct	-11823 Jul 02 j 19:19	6° <b>£</b> 33'38		direct	-11817 Sep 28 j 22:20		
evening set	-11823 Oct 11 j 22:35			evening set	-11816 Jan 12 j 00:21		
	-11823 Oct 15 j 06:40	15°81			-11816 Jan 22 j 06:51	15°11L	
conjunction	-11823 Oct 29 j 05:14	160 0 50110	1022104	conjunction	-11816 Jan 30 j 04:41	160M 02125	1050105
				-	-		
minimum elong	-11823 Oct 29 j 05:18		1°22'33	minimum elong	-11816 Jan 30 j 04:37		
max. Earth dist.	-11823 Oct 29 j 03:29		10.00003 AU	max. Earth dist.	-11816 Jan 31 j 14:09		9.91410 AU
morning rise	-11823 Nov 15 j 17:47			morning rise	-11816 Feb 17 j 09:20		
retrograde	-11822 Mar 04 j 05:12		100013 4	retrograde	-11816 Jun 01 j 21:08		<b>7.073</b> 00 : **
opposition	-11822 May 11 j 20:57		1°22'34	min. Earth dist.	-11816 Aug 06 j 09:24		
min. Earth dist.	-11822 May 11 j 18:48		7.94515 AU	opposition	-11816 Aug 07 j 10:25		-2°41'12
direct	-11822 Jul 16 j 22:49			direct	-11816 Oct 12 j 22:50		
evening set	-11822 Oct 26 j 13:42			evening set	-11815 Jan 26 j 13:15		
	-11822 Nov 03 j 13:31	0° <b>m</b>			-11815 Feb 09 j 23:56	0° <b>∡</b> ¹	
aani	11000 NI- 10:00 50	10 m. 17/20	0040110	aamir	11015 E-1 12 115 50	00.70005	2017/21
conjunction	-11822 Nov 13 j 02:53	1° Mp 16'39	0°49'19	conjunction	-11815 Feb 13 j 15:56		
minimum elong	-11822 Nov 13 j 02:56	1° Mp 16'40	0°49'41	minimum elong	-11815 Feb 13 j 15:53	0° <b>∡</b> ¹28'34	2°16'55

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11815 in astronomical counting style is the year 11816 BCE in historical counting style. -11815 Feb 15 i 01:09 0° ₹39'22 10.03873 AU retrograde -11809 Aug 27 j 20:32 25°≈44'56 max. Earth dist. -11815 Mar 03 j 17:31 2° ₹ 48'23 -11809 Nov 04 j 08:05 22°≈27'56 -1°26'44 morning rise opposition -11815 Jun 15 j 22:33 10° ₹ 58'04 min. Earth dist. -11809 Nov 04 j 08:35 22°≈27'50 9.06671 AU retrograde -11815 Aug 21 j 12:02 -11808 Jan 14 j 17:02 19°≈04'28 opposition 7°**∡**129'27 -2°56'47 direct -11815 Aug 20 j 12:25 7°**∡**734′20 8.11262 AU -11808 Apr 28 j 02:40 26°≈13'16 min. Earth dist. evening set direct -11815 Oct 27 j 16:57 3°**х** 59′56 -11808 May 15 j 07:49 28°**≈**11'53 -0°57'44 -11814 Feb 10 j 14:59 12° ₹ 10'05 evening set conjunction minimum elong -11808 May 15 j 07:51 28°≈11'54 0°58'07 conjunction -11814 Feb 28 j 15:09 14° ₹27'02 -2°24'59 max. Earth dist. -11808 May 15 j 03:53 28°≈10'45 11.12502 AU minimum elong -11814 Feb 28 j 15:08 14° ₹27'01 2°25'37 -11808 May 30 j 24:00 0°**)**€ 0°**)**€09'03 max. Earth dist. -11814 Mar 01 j 21:30 14° ₹ 36'42 10.18908 AU morning rise -11808 Jun 01 j 07:54 -11814 Mar 18 j 13:03 16° **₹** 43'09 morning rise retrograde -11808 Sep 07 j 00:30 6°**)** 52′30 -11814 Jun 29 j 09:55 24° ₹37'20 retrograde opposition -11808 Nov 14 j 22:07 3° ★ 36'45 -0°54'30 min. Earth dist. -11814 Sep 03 j 06:10 21° ₹ 15'02 8.27203 AU min. Earth dist. -11808 Nov 15 j 02:56 3° **∺** 35'51 9.17644 AU opposition -11814 Sep 04 j 03:16 21°**尽** 10'43 -3°01'35 direct -11807 Jan 25 j 18:04 0°**)** 14'32 direct -11814 Nov 11 j 03:25 17° ₹ 41'42 evening set -11807 May 09 j 14:01 7°**¥**16'31 evening set -11813 Feb 25 j 03:06 25° ₹ 41'35 conjunction -11807 May 26 j 15:57 9°**升**13'13 -0°30'44 conjunction -11813 Mar 15 j 00:17 27° ₹ 54'59 -2°25'16 minimum elong -11807 May 26 j 15:59 9°**¥**13'14 0°30'59 minimum elong -11813 Mar 15 j 00:17 27° ₹ 54'59 2°25'56 max. Earth dist. -11807 May 26 j 06:57 9° **H** 10'39 11.22144 AU max. Earth dist. -11813 Mar 16 j 02:06 28° ₹ 03'04 10.35543 AU morning rise -11807 Jun 12 j 12:55 11° **★** 08'33 -11813 Mar 31 j 18:31 0°る retrograde -11807 Sep 18 i 02:55 17° ¥47'21 morning rise -11813 Apr 01 j 18:14 0°**ට**07'16 opposition -11807 Nov 26 j 08:45 14° + 32'34 -0°20'57 retrograde -11813 Jul 12 i 07:29 7°る45'58 min. Earth dist. -11807 Nov 26 j 17:50 14° + 30'53 9.25878 AU opposition -11813 Sep 17 j 07:50 4°중21'28 -2°56'30 direct -11806 Feb 06 j 10:36 11°**光** 11'31 min. Earth dist. -11813 Sep 16 j 13:50 4°**궁**25'05 8.44249 AU -11806 May 20 j 19:06 18° **H** 08'17 evening set -11813 Nov 25 j 03:30 0°る53'14 direct evening set -11812 Mar 10 j 00:35 8°₹41'58 -11806 Jun 06 j 17:47 20° **H** 03'29 -0°03'03 conjunction -11806 Jun 06 j 17:47 20°**米**03'29 0°03'11 minimum elong -11806 Jun 06 j 10:49 20° **光** 01'31 -11812 Mar 27 j 18:40 10°る51'52 -2°18'02 behind sun begin conjunction -11806 Jun 07 j 00:46 20°**米** 05'27 -11812 Mar 27 j 18:42 10°**궁**51'53 2°18'42 minimum elong behind sun end -11812 Mar 28 j 15:11 10°중58'10 10.52826 AU max. Earth dist. -11806 Jun 06 j 04:14 19° **€** 59'38 11.28898 AU max. Earth dist. -11812 Apr 14 j 08:42 13°**⋜**00'26 morning rise -11806 Jun 23 j 11:43 21° **∺** 57'27 morning rise -11812 Jul 23 j 18:37 20°**♂**24'29 -11806 Jul 17 j 12:28 24° **∺** 30'26 retrograde asc. node -11806 Sep 29 j 03:07 28° **∺** 33'52 -11812 Sep 28 j 11:34 17°る04'57 8.61483 AU min. Earth dist. retrograde -11812 Sep 29 j 02:13 17°♂02'03 -2°42'53 -11806 Dec 07 j 17:57 25° **★** 19'40 0°12'51 opposition opposition -11812 Dec 07 j 16:09 13°₹34'51 -11806 Dec 08 j 07:50 25° **★**17'07 9.31130 AU direct min. Earth dist. evening set -11811 Mar 23 j 07:33 21°**궁**12'20 direct -11805 Feb 17 j 22:57 21°**米**59'35 evening set -11805 May 31 j 19:40 28° **∺** 52'50 conjunction -11811 Apr 09 j 22:35 23°る18'57 -2°04'25 -11805 Jun 10 j 18:14 0°**Υ** minimum elong -11811 Apr 09 j 22:38 23°정18'58 2°05'03 max. Earth dist. -11811 Apr 10 j 13:52 23°중23'34 10.69873 AU -11805 Jun 17 j 15:00 0°**Υ**'46'54 0°24'38 conjunction -11811 Apr 27 j 08:47 25° ₹24'05 minimum elong -11805 Jun 17 j 14:59 0°**Υ**'46'54 0°24'36 morning rise -11811 Jun 10 j 02:46 0°≈ max. Earth dist. -11805 Jun 16 j 20:08 0°**Y**41'32 11.32568 AU -11811 Aug 04 j 19:23 2°≈34'56 -11805 Jul 04 j 06:19 2°**Υ**39'56 retrograde morning rise -11811 Oct 01 i 15:49 30°Rる  $-11805 \text{ Oct } 10 \text{ i } 03:49 \quad 9^{\circ} \Upsilon 16'13$ retrograde -11811 Oct 11 j 11:31 29°る14'30 -2°22'20 -11805 Dec 19 i 02:51  $6^{\circ}$  \( \gamma \) 02'12  $0^{\circ}$  45'58 opposition opposition -11805 Dec 19 j 21:07  $5^{\circ}$  \$\cdot 55' 53 9.33243 AU min. Earth dist. -11811 Oct 11 j 01:19 29°る16'29 8.78073 AU min. Earth dist. direct -11811 Dec 20 j 18:14 25°る48'29 direct  $-11804 \text{ Feb} 29 \text{ i } 08:20 \quad 2^{\circ} \Upsilon 42'53$ evening set -11810 Mar 06 j 04:49 0°≈ -11804 Jun 10 j 17:40 9°**Υ**34'19 -11810 Apr 05 j 01:17 3°≈15'18 max. Earth dist. -11804 Jun 26 j 10:45 11°γ21'06 11.33042 AU evening set conjunction -11810 Apr 22 j 13:07 5°≈18'53 -1°45'41 conjunction -11804 Jun 27 j 09:52  $11^{\circ}$   $\Upsilon$  27'42  $0^{\circ}$  51'15 -11804 Jun 27 j 09:50 11°**Υ**27'42 0°51'20 minimum elong -11810 Apr 22 j 13:11 5°≈18'54 1°46'16 minimum elong -11804 Jul 13 j 22:52  $13^{\circ}$  **Y** 20'16 max. Earth dist. -11810 Apr 22 j 22:41 5°≈21'43 10.85901 AU morning rise -11804 Oct 20 j 06:01 19°**Υ**58'33 -11810 May 09 j 19:38 7°**≈**20'56 morning rise retrograde retrograde -11810 Aug 16 j 12:17 14°≈20'29 opposition -11804 Dec 29 j 12:44 16°**Υ**'44'20 1°17'29 -11804 Dec 30 j 09:54 16°**Υ**40'30 9.32128 AU -11810 Oct 23 j 12:59 11°≈01'53 -1°56'27 min. Earth dist. opposition -11810 Oct 23 j 08:10 11°≈02'48 8.93324 AU -11803 Mar 11 j 16:25 13°**Υ**25'32 min. Earth dist. direct -11809 Jan 02 j 09:54 7°≈37'08 -11803 Jun 21 j 14:42 20°**Y**16'51 direct evening set -11803 Jul 07 j 02:42 22°**Y**02'41 11.30273 AU evening set -11809 Apr 17 j 07:09 14°≈54'17 max. Earth dist. -11809 Apr 18 j 03:06 15°≈ -11803 Jul 08 j 04:14 22°**Υ**10'01 1°16'08 conjunction conjunction -11809 May 04 j 15:38 16°≈55'12 -1°23'04 minimum elong -11803 Jul 08 j 04:11 22°**γ**10'00 1°16'21 minimum elong -11809 May 04 j 15:41 16°≈55'13 1°23'34 morning rise -11803 Jul 24 j 15:05 24°**Υ**′02'33 max. Earth dist. -11809 May 04 j 18:27 16°≈56'02 11.00281 AU -11803 Oct 01 j 00:46 0°8 morning rise -11809 May 21 j 18:47 18°≈54'35 -11803 Oct 31 j 14:37 0°845'01 retrograde

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11803 in astronomical counting style is the year 11804 BCE in historical counting style. opposition -11796 Mar 23 j 22:05 7°516'21 2°54'42 opposition -11802 Jan 10 j 01:33 27° Υ30'12 1°46'29 min. Earth dist. -11796 Mar 24 j 16:58 7°512'42 8.47221 AU min. Earth dist. -11802 Jan 11 j 00:49  $27^{\circ}$   $\Upsilon$  25'59 9.27774 AU -11796 May 31 j 09:21 3°554'42 direct -11802 Mar 23 j 00:33 24°**Υ**11'42 -11796 Sep 08 j 21:48 11°529'18 direct evening set -11802 Jun 22 j 20:16  $0^{\circ}$ 8 -11802 Jul 02 j 12:33 -11796 Sep 25 j 14:10 13°\$35'49 2°15'47 evening set 1°**8**04'33 conjunction -11796 Sep 25 j 14:13 13°535'50 2°16'27 minimum elong -11802 Jul 18 j 23:44 2°857'57 1°38'31 -11796 Sep 24 j 18:05 13°529'26 conjunction max. Earth dist. 10.38394 AU -11802 Jul 18 j 23:41 minimum elong 2°**8**57'56 1°38'51 morning rise -11796 Oct 12 j 10:54 15°543'47 max. Earth dist. -11802 Jul 17 j 19:43 2°**8**49'51 11.24294 AU retrograde -11795 Jan 26 j 19:26 23°546'00 morning rise -11802 Aug 04 j 09:01 4°**8**50'59 opposition -11795 Apr 06 j 17:28 20°519'11 2°39'17 -11802 Nov 12 j 02:49 11°**8**39'44 retrograde min. Earth dist. -11795 Apr 07 j 07:50 20°516'22 8.29800 AU -11801 Jan 21 j 18:44 8°**8**23'58 2°12'06 opposition direct -11795 Jun 13 j 11:46 16°556'24 min. Earth dist. -11801 Jan 22 j 20:26 8°**8**19'17 9.20255 AU evening set -11795 Sep 22 j 02:37 24°5541'30 direct -11801 Apr 03 j 07:54 5°**8**05'30 max. Earth dist. -11795 Oct 08 j 10:53 26°547'40 10.21379 AU evening set -11801 Jul 13 j 13:12 12°**8**01'39 conjunction -11795 Oct 09 j 00:15 26°\$52'00 1°59'11 conjunction -11801 Jul 29 j 22:31 13°**8**55'48 1°57'36 minimum elong -11795 Oct 09 j 00:18 26°552'01 minimum elong -11801 Jul 29 j 22:28 13°\(255'47\) 1°58'03 morning rise -11795 Oct 26 j 02:54 29°504'11 max. Earth dist. -11801 Jul 28 j 15:57 13°846'52 11.15234 AU -11795 Nov 02 j 12:42 0°**Ω** -11801 Aug 08 j 02:27 15°8 retrograde -11794 Feb 10 j 10:58 7°**Ω**20'42 morning rise -11801 Aug 15 i 07:09 15° \$\frac{8}{49}\$'53 opposition -11794 Apr 20 j 22:40  $3^{\circ}\Omega$ 51'49  $2^{\circ}$ 14'30 retrograde -11801 Nov 23 j 23:14 22°847'00 min. Earth dist. -11794 Apr 21 i 06:58  $3^{\circ}\Omega$ 50'10 8.13360 AU opposition -11800 Feb 02 j 17:23 19°\(\cent{229}'59\) 2°33'23 direct -11794 Jun 27 i 00:09 0°**Ω**27'50 min. Earth dist. -11800 Feb 03 j 20:43 19°**8**24'59 9.09760 AU evening set -11794 Oct 05 j 21:06 8° **Ω**23'31 -11800 Apr 13 j 20:42 16°811'17 direct -11800 Jul 23 j 18:11 23°**8**12'26 -11794 Oct 23 j 00:57  $10^{\circ}\Omega$ 38'09  $1^{\circ}35'21$ evening set conjunction max. Earth dist. -11800 Aug 07 j 19:37 24°**8**58'44 11.03363 AU -11794 Oct 23 j 01:01  $10^{\circ}\Omega$ 38'10  $1^{\circ}35'53$ minimum elong max. Earth dist. -11794 Oct 22 j 19:15  $10^{\circ}\Omega$ 36'16 10.05812 AU-11800 Aug 09 j 02:39 25°**8**07'56 2°12'37 -11794 Nov 09 j 10:15 12° $\Omega$ 54'38 conjunction morning rise -11800 Aug 09 j 02:36 25°**8**07'55 2°13'09 -11794 Nov 26 j 02:03 15°**Ω** minimum elong morning rise -11800 Aug 25 j 11:24 27°**8**03'38 -11793 Feb 25 j 13:37 21°**Ω**24'01 retrograde -11800 Sep 21 j 06:27 0°**Ⅱ** -11793 May 05 j 12:41 17° $\Omega$ 53'20 1°40'50 opposition -11800 Dec 05 j 04:11 4°**Д**11'07 min. Earth dist. -11793 May 05 j 14:12  $17^{\circ}\Omega$ 53'01 7.98850 AU retrograde -11799 Feb 13 j 23:09 0°**I**52'30 2°49'20 -11793 Jun 17 j 00:41 15° R. € opposition -11799 Feb 15 j 02:06 0°**II**47'32 8.96643 AU -11793 Jul 10 j 22:16 14° **Ω**28'08 min. Earth dist. direct -11799 Feb 25 j 22:43 30°R8 -11793 Aug 03 j 12:22 15°**Ω** direct -11799 Apr 25 j 13:19 27°\begin{array}{c} 33'24 \end{array} evening set -11793 Oct 20 j 05:49 22°**Ω**33'58 -11799 Jun 20 j 01:23 0°**Ц** evening set -11799 Aug 04 j 05:20 4°**Ц**41'05 conjunction -11793 Nov 06 j 16:12  $24^{\circ}\Omega 52'33$   $1^{\circ}05'05$ max. Earth dist. -11799 Aug 19 j 08:37 6°**Д**29'37 10.89121 AU minimum elong -11793 Nov 06 j 16:15  $24^{\circ}\Omega 52'34$   $1^{\circ}05'30$ max. Earth dist. -11793 Nov 06 j 18:34 24° Ω53'20 9.92631 AU -11799 Aug 20 j 14:00 6°**Д**38'28 2°22'44 morning rise -11793 Nov 24 j 08:16 27°**Ω**13'04 conjunction -11799 Aug 20 j 13:58 6°**Д**38'28 2°23'20 -11793 Dec 16 j 12:05 0° Mp minimum elong -11799 Sep 05 j 23:44 8°**Д**36'22 retrograde -11792 Mar 11 j 23:49 5° m 52'48 morning rise -11799 Dec 17 j 20:36 15°**Ц**55'59 retrograde opposition -11792 May 19 j 09:43 2° m 20'40 0°59'42 -11798 Feb 26 j 13:19 12° **II** 35'30 2°58'53 -11792 May 19 j 04:24 2° m 21'46 7.87201 AU opposition min. Earth dist. -11798 Feb 27 j 14:06 12° **II** 30'52 8.81416 AU min. Earth dist. -11792 Jun 19 j 19:11  $30^{\circ}$ R $\Omega$ direct -11798 May 07 j 12:36 9°**II**15'45 direct -11792 Jul 24 j 06:52 28° **Ω**54'17 evening set -11798 Aug 16 j 00:37 16°ДЗ1'19 -11792 Aug 27 j 03:21 0°m max. Earth dist. -11798 Aug 31 j 07:03 18°**Д**22'47 10.73083 AU evening set -11792 Nov 03 j 03:56 7° m 09'10 -11798 Sep 01 j 10:34 18° \$\mathbb{I}\$31'13 2°27'06 conjunction -11792 Nov 20 j 20:36 9° m 31'09 0°29'56 conjunction minimum elong -11798 Sep 01 j 10:34 18°ДЗ1'13 2°27'45 minimum elong -11792 Nov 20 j 20:38 9° m 31'10 0°30'13 morning rise -11798 Sep 17 j 22:38 20°**Д**31'55 max. Earth dist. -11792 Nov 21 j 07:01 9° m/34'39 9.82730 AU retrograde -11798 Dec 31 j 01:27 28° **II** 04'59 morning rise -11792 Dec 08 j 18:53 11° m 55'00 opposition -11797 Mar 11 j 12:44 24°**Ⅱ**42'29 3°01'00 retrograde -11791 Mar 27 j 14:29 20° m 41'38 -11797 Mar 12 j 10:56 24° **II** 38'16 8.64702 AU -11791 Jun 03 j 11:43 17° Mp 08'32 min. Earth dist. opposition 0°13'35 -11797 May 19 j 18:12 21°**Ⅲ**21'52 -11791 Jun 03 j 00:06 17° **m** 10'57 direct min. Earth dist. 7.79241 AU -11797 Aug 28 j 05:35 28°**Ⅱ**46'29 evening set direct -11791 Aug 08 j 00:24 13° Mp 41'02 -11797 Sep 07 j 03:36 0ಂತಾ desc. node -11791 Sep 18 j 21:25 15° m 20'52 evening set -11791 Nov 18 j 13:43 22° m 03'07 conjunction -11797 Sep 13 j 18:04 0°549'27 2°24'59 minimum elong -11797 Sep 13 j 18:05 0°**©**49'27 2°25'40 conjunction -11791 Dec 06 j 11:48 24° m 27'35 -0°07'52 max. Earth dist. -11797 Sep 12 j 17:15 0°941'41 10.55920 AU minimum elong -11791 Dec 06 j 11:48 24° m 27'35 0°07'46 -11797 Sep 30 j 09:52 2°553'32 behind sun begin -11791 Dec 06 j 05:11 24° m/25'22 morning rise

behind sun end

-11791 Dec 06 j 18:24 24° m/29'48

-11796 Jan 13 j 16:21 10°5541'00

retrograde

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11791 in astronomical counting style is the year 11792 BCE in historical counting style. -11791 Dec 07 j 05:45 24° m 33'39 9.76834 AU direct -11785 Nov 05 j 02:05 11° **x** 47'50 max. Earth dist. -11791 Dec 24 j 15:01 26° m 53'41 evening set -11784 Feb 19 j 00:54 19° **₹** 52'41 morning rise -11790 Jan 18 j 03:46 0∘<u>ফ</u> -11790 Apr 12 j 05:55 -11784 Mar 07 j 23:38 22° ₹ 07'44 -2°26'04 5°**-**42'55 conjunction retrograde -11790 Jun 18 j 15:39 2°**2**09'24 -0°34'09 -11784 Mar 07 j 23:38 22° ₹ 07'44 2°26'43 opposition minimum elong -11790 Jun 17 j 22:56 2° **2**12'54 7.75567 AU -11784 Mar 09 j 05:44 22° ₹ 17'14 10.28218 AU min. Earth dist. max. Earth dist. -11790 Jul 16 j 09:28 30° R Mp -11784 Mar 25 j 19:20 24°**⊀**¹21'46 morning rise direct -11784 May 17 j 15:22 -11790 Aug 23 j 00:51 28° Mp 40'56 0°궁 -11790 Sep 29 j 03:18 0∘**⊽** retrograde -11784 Jul 06 j 00:08 2°**る**07'44 -11784 Aug 25 j 11:49 30°₽**√** evening set -11790 Dec 04 j 08:20 7°**♀**07'45 opposition -11784 Sep 10 j 20:24 28° ₹ 42'36 -2°59'51 -11790 Dec 22 j 10:21 9°**△**33'27 -0°45'21 min. Earth dist. -11784 Sep 09 j 23:16 28° ₹ 46'52 8.36990 AU conjunction -11790 Dec 22 j 10:18 -11784 Nov 18 j 05:20 25°**尽** 14'29 minimum elong 9°**£**33'27 0°45'25 direct max. Earth dist. -11790 Dec 23 j 10:49 9°**£**41'43 9.75398 AU -11783 Feb 04 j 22:43 0°궁 morning rise -11789 Jan 09 j 16:32 12°**♀**00'25 evening set -11783 Mar 04 j 05:35 3°る08'23 retrograde -11789 Apr 27 j 17:50 20°**♀**47'34 opposition -11789 Jul 03 j 18:14 17°**2**14'14 -1°19'43 conjunction -11783 Mar 22 j 01:14 5°**ਰ**19'52 -2°22'06 min. Earth dist. -11789 Jul 02 j 21:34 17°**2**18'36 7.76474 AU minimum elong -11783 Mar 22 j 01:16 5°**ਰ**19'52 2°22'46 direct -11789 Sep 07 j 05:13 13°**△**45'02 max. Earth dist. -11783 Mar 23 j 02:34 5°る27'42 10.45724 AU evening set -11789 Dec 20 j 07:19 22° **△**13'34 morning rise -11783 Apr 08 j 16:56 7°る30'03 retrograde -11783 Jul 18 j 17:30 15°る00'42 conjunction -11788 Jan 07 j 11:29 24° \(\Omega\) 39'08 -1°19'44 opposition -11783 Sep 23 j 19:36 11° ₹37'51 -2°49'52 minimum elong -11788 Jan 07 j 11:25 24° \(\Omega\) 39'07 1°19'58 min. Earth dist. -11783 Sep 23 j 02:56 11°**5**41'10 8.54632 AU max. Earth dist. -11788 Jan 08 i 16:59 24° **2**49'03 9.78555 AU direct -11783 Dec 01 j 22:56 8°**궁**10'43 morning rise -11788 Jan 25 j 18:30 27° **2**05'29 evening set -11782 Mar 17 j 19:45 15°る53'16 -11788 Feb 17 j 19:58 0°ML -11788 May 11 j 22:46 5°M46'02 -11782 Apr 04 j 12:07 18°る01'17 -2°11'12 retrograde conjunction -11788 Jul 17 j 16:38 2°ML13'31 -1°59'25 -11782 Apr 04 j 12:10 18°る01'18 2°11'51 opposition minimum elong -11788 Jul 16 j 17:08 2°ML18'28 7.81905 AU max. Earth dist. -11782 Apr 05 j 06:53 18°♂06'59 10.63325 AU min. Earth dist. -11788 Aug 15 j 09:09 30°R ₽ -11782 Apr 21 j 24:00 20°る07'52 morning rise -11782 Jul 30 j 21:39 27°**궁**24'24 -11788 Sep 21 j 10:43 28° **△**43'51 direct retrograde -11788 Oct 28 j 05:52 0°M opposition -11782 Oct 06 j 09:16 24°♂03'40 -2°32'13 -11787 Jan 04 j 05:34 -11782 Oct 05 j 21:23 24°**궁**05'59 8.71905 AU evening set 7°**M**₁0'46 min. Earth dist. -11782 Dec 15 j 07:21 20°♂37'41 direct -11787 Jan 22 j 10:09 9°M 34'56 -1°48'23 -11781 Mar 30 j 19:40 28°중09'07 conjunction evening set -11787 Jan 22 j 10:04 9°M 34'54 1°48'47 -11781 Apr 15 j 10:08 0°≈ minimum elong -11787 Jan 23 j 18:47 9° ML45'47 9.86083 AU max. Earth dist. morning rise -11787 Feb 09 j 16:05 11°ML59'21 conjunction -11781 Apr 17 j 08:46 0°≈13'55 -1°54'36 -11787 Mar 05 j 21:00 15° ML minimum elong -11781 Apr 17 j 08:49 0°≈13'56 1°55'13 retrograde -11787 May 26 j 17:53 20°M29'26 max. Earth dist. -11781 Apr 17 j 20:16 0°≈17'21 10.80110 AU min. Earth dist. -11787 Jul 31 j 06:58 17° ML03'30 7.91453 AU morning rise -11781 May 04 j 17:01 2°≈17'14 -11787 Aug 01 j 08:02 16°M 58'14 -2°30'25 retrograde -11781 Aug 11 j 17:14 9°≈21'31 opposition -11787 Aug 26 j 08:22 15°RML -11781 Oct 18 j 14:17 6°≈02'40 -2°08'32 opposition -11787 Oct 06 j 14:15 13°M28'28 min. Earth dist. -11781 Oct 18 j 07:01 6°≈04'04 8.87951 AU direct -11787 Nov 16 j 11:42 15°M -11781 Dec 28 j 05:17 2°≈37'55 direct -11786 Jan 19 j 22:38 21° ML50'35 evening set evening set -11780 Apr 11 i 06:52 9°≈59'07 -11786 Feb 07 i 02:11 24° ML12'18 -2°09'29 conjunction conjunction -11780 Apr 28 j 16:50 12°≈01'06 -1°33'35 -11786 Feb 07 i 02:07 24° ML12'16 2°10'00 minimum elong minimum elong -11780 Apr 28 i 16:53 12°≈01'07 1°34'07 max. Earth dist. -11786 Feb 08 i 11:47 24° ML23'18 9.97428 AU max. Earth dist. -11780 Apr 28 j 21:59 12°≈02'37 10.95307 AU morning rise -11786 Feb 25 j 05:30 26° ML33'46 morning rise -11780 May 15 j 21:35 14°≈01'33 -11786 Mar 25 j 14:08 0° ₹ -11780 May 24 j 11:41 15°≈ -11786 Jun 10 j 00:39 4° ₹ 50'28 retrograde -11780 Aug 22 j 06:11 20°≈55'40 retrograde opposition -11786 Aug 15 j 14:20 1°**∡** 21′02 -2°50′59 opposition -11780 Oct 29 j 12:02 17°≈38'28 -1°40'22 min. Earth dist. -11786 Aug 14 j 12:57 1° ₹26'19 8.04421 AU min. Earth dist. -11780 Oct 29 j 09:42 17°≈38'55 9.02113 AU -11780 Dec 08 j 15:27 15°R≈ -11786 Sep 01 j 07:15 30°RML direct -11786 Oct 21 j 12:10 27° ML51'31 direct -11779 Jan 08 j 15:45 14°≈14'57 -11786 Dec 09 j 23:54 -11779 Feb 08 j 12:58 15°≈ 0° **√** -11785 Feb 04 j 06:09 6°**х**706′04 -11779 Apr 23 j 07:07 21°≈27'12 evening set evening set -11785 Feb 22 j 07:38 8° ₹24'38 -2°22'04 -11779 May 10 j 13:56 23°≈26'46 -1°09'19 conjunction conjunction minimum elong -11785 Feb 22 j 07:36 8°**х** 24'37 2°22'40 minimum elong -11779 May 10 j 13:58 23°≈26'46 1°09'45 max. Earth dist. -11785 Feb 23 j 16:23 8°**尽**35'10 10.11788 AU max. Earth dist. -11779 May 10 j 13:10 23°≈26'32 11.08362 AU morning rise -11785 Mar 12 j 07:20 10° ₹ 42'31 morning rise -11779 May 27 j 15:17 25°≈24'48 retrograde -11785 Jun 23 j 18:35 18° ₹ 44'07 -11779 Jul 12 j 14:49 0°**)**€ -11785 Aug 28 j 10:33 15°**尽** 21'43 8.19924 AU retrograde -11779 Sep 02 j 12:51 2°**)** 10'59 min. Earth dist.

-11779 Oct 26 j 10:53 30°R≈

-11785 Aug 29 j 10:40 15° ₹ 16'46 -3°00'37

opposition

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11779 in astronomical counting style is the year 11780 BCE in historical counting style. -11779 Nov 10 j 04:22 28°≈55'07 -1°09'08 -11773 Jul 29 i 00:24 0°8 opposition min. Earth dist. -11779 Nov 10 j 07:45 28°≈54'29 9.13940 AU -11773 Jul 30 j 23:15 0°813'15 morning rise 6°858'48 -11778 Jan 20 j 19:05 25°≈32'44 -11773 Nov 07 j 05:43 direct retrograde -11778 Apr 10 j 09:18 0°**)** -11772 Jan 16 j 21:32 3°**8**43'00 2°01'01 opposition 9.23038 AU -11778 May 04 j 22:18 2° **∺** 37'30 -11772 Jan 17 j 22:51 3°**8**38'23 evening set min. Earth dist. direct -11772 Mar 28 j 16:50 0°**8**23'58 -11778 May 22 j 01:43 4° + 34'58 -0°42'57 conjunction evening set -11772 Jul 07 j 23:44 7°**8**18'25 -11778 May 22 j 01:45 4° \(\mathref{\psi}\) 34'59 0°43'15 minimum elong max. Earth dist. -11772 Jul 23 j 04:52 9°**8**03'46 11.18684 AU -11778 May 21 j 18:26 4° **★** 32'53 11.18892 AU max. Earth dist. morning rise -11778 Jun 07 j 23:58 6° **∺** 31'01 conjunction -11772 Jul 24 j 09:57 9°**8**12'13 1°49'26 retrograde -11778 Sep 13 j 15:14 13°**米** 11'32 minimum elong -11772 Jul 24 j 09:54 9°**8**12'12 1°49'50 -11778 Nov 21 j 16:39 9° **€** 56'38 -0°36'03 -11772 Aug 09 j 18:48 11°**8**05'47 opposition morning rise min. Earth dist. -11778 Nov 22 j 01:27 9°**米**55'00 9.23105 AU -11772 Sep 16 j 11:22 15°8 direct -11777 Feb 01 j 15:03 6° **∺**35'15 retrograde -11772 Nov 17 j 23:45 17°**8**58'47 evening set -11777 May 16 j 06:10 13°**米** 34'05 -11771 Jan 23 j 13:28 15°R opposition -11771 Jan 27 j 16:55 14°**8**41'50 2°24'23 conjunction -11777 Jun 02 j 06:12 15°**∺**29'52 -0°15'27 min. Earth dist. -11771 Jan 28 j 18:45 14°**8**37'07 9.13881 AU minimum elong -11777 Jun 02 j 06:12 15°**米**29'53 0°15'39 direct -11771 Apr 09 j 03:27 11°**8**22'44 behind sun begin -11777 Jun 02 j 04:27 15° **€** 29'23 -11771 Jun 17 j 16:17 15°8 behind sun end -11777 Jun 02 j 07:58 15° ¥ 30'22 evening set -11771 Jul 19 j 02:08 18°**8**21'24 max. Earth dist. -11777 Jun 01 j 16:43 15°\(\mathbf{X}\)26'02 11.26617 AU max. Earth dist. -11771 Aug 03 j 05:11 20°807'28 11.08163 AU morning rise -11777 Jun 19 j 01:35 17° + 24'23 retrograde -11777 Sep 24 i 14:34 24° \(\frac{1}{2}\)(01'29 conjunction -11771 Aug 04 j 11:01 20°816'16 2°06'24 opposition -11777 Dec 03 j 02:13 20°\(\frac{1}{4}\)7'07 -0°02'16 minimum elong -11771 Aug 04 i 10:58 20°8 16'15 2°06'53 min. Earth dist. -11777 Dec 03 j 15:11 20° \ 44'44 9.29357 AU morning rise -11771 Aug 20 j 19:28 22°**8**11'10 -11777 Dec 28 j 00:42 19°\colon 02'51 retrograde -11771 Nov 29 j 23:51 29°**8**13'35 asc node -11776 Feb 13 j 06:57 17° **¥** 26'35 -11770 Feb 08 j 19:02 25°855'14 2°42'53 direct opposition -11776 May 26 j 08:23 24° **\( \)** 21'07 -11770 Feb 09 j 21:08 25°850'26 9.02111 AU min. Earth dist. evening set max. Earth dist. -11776 Jun 11 j 11:31 26° **光** 10'35 11.31319 AU -11770 Apr 20 j 15:16 22°835'54 direct -11770 Jul 30 j 09:52 29°**8**40'20 evening set -11776 Jun 12 j 05:17 26°**米**15'38 0°12'20 -11770 Aug 02 j 04:55 0°**Ⅱ** conjunction -11776 Jun 12 j 05:16 26°**米**15'38 0°12'16 -11770 Aug 14 j 12:00 1°**Д**27'45 10.95225 AU minimum elong max. Earth dist. -11776 Jun 12 j 00:33 26° **∺** 14'18 behind sun begin -11770 Aug 15 j 18:14 1°**Д**36'48 2°18'50 -11776 Jun 12 j 09:58 26° ¥ 16'57 behind sun end conjunction -11776 Jun 28 j 21:51 28° **₭** 09'01 -11770 Aug 15 j 18:12 1°**II**36'47 2°19'24 morning rise minimum elong -11776 Jul 16 j 01:03 0°**Υ** -11770 Sep 01 j 03:26 3°**Д**33'37 morning rise -11776 Oct 04 j 15:40 4°**Υ**44'57 -11770 Dec 12 j 10:03 10°**I**I47'19 retrograde retrograde opposition -11776 Dec 13 j 10:44  $1^{\circ}$  \( \gamma \) 30'45  $0^{\circ}$  31'14 opposition -11769 Feb 21 j 04:57 7°**Д**27'21 2°55'29 min. Earth dist. -11776 Dec 14 j 03:12  $1^{\circ}$   $\Upsilon$ 27'45 9.32508 AU min. Earth dist. -11769 Feb 22 j 06:43 7°**I**22'33 8.88115 AU -11775 Jan 03 j 23:44 30°R € direct -11769 May 02 j 11:22 4°**Д**07'34 direct -11775 Feb 23 j 17:58 28°**升** 10'54 evening set -11769 Aug 11 j 00:52 11°**Ⅱ**19'16 -11775 Apr 14 j 01:32 0°**Υ** max. Earth dist. -11769 Aug 26 j 05:34 13°**Д**09'17 10.80306 AU -11775 Jun 06 j 07:06 5°**Y**′02'49 evening set max. Earth dist. -11775 Jun 22 j 03:29 6°**Υ**'50'23 11.32856 AU -11769 Aug 27 j 09:58 13°**Д**17'56 2°25'56 conjunction -11769 Aug 27 j 09:57 13°**Д**17'56 2°26'33 minimum elong -11775 Jun 23 j 00:53  $6^{\circ}$   $\Upsilon$  56'29  $0^{\circ}$  39'26 -11769 Sep 12 j 20:56 15°**Д**17'16 conjunction morning rise -11775 Jun 23 j 00:51  $6^{\circ}$ Y 56'28  $0^{\circ}$ 39'29 -11769 Dec 25 j 08:15 22° **II** 43'46 minimum elong retrograde -11775 Jul 09 j 14:47 8°**Y**49'12 -11768 Mar 04 j 23:28 19° **II** 22'01 3°01'06 morning rise opposition retrograde  $-11775 \text{ Oct } 15 \text{ j } 16:38 \ 15^{\circ} \Upsilon 26'09$ min. Earth dist. -11768 Mar 05 j 23:03 19°**Д**17'35 8.72391 AU opposition -11775 Dec 24 i 19:48 12°Υ11'46 1°03'33 direct -11768 May 13 j 13:55 16°**Д**01'39 min. Earth dist. -11775 Dec 25 j 16:15  $12^{\circ}$   $\Upsilon$  08'03 9.32480 AU evening set -11768 Aug 22 j 00:46 23°**Ⅲ**21'53 direct -11774 Mar 07 j 00:57 8° Υ 52'23 max. Earth dist. -11768 Sep 06 j 11:06 25°Д15'38 10.63960 AU -11774 Jun 17 j 04:08 15°**Υ**43'26 evening set conjunction -11768 Sep 07 j 11:57 25° **I**I 23'20 2°26'52 -11774 Jul 03 j 18:51 17°**Υ**36'39 1°05'10 conjunction minimum elong -11768 Sep 07 j 11:57 25°**Ⅲ**23'20 2°27'32 -11774 Jul 03 j 18:48 17°**Υ**'36'39 1°05'20 morning rise minimum elong -11768 Sep 24 j 01:47 27°**Д**25'45 -11774 Jul $\;$  02 j 17:16  $\;$  17°  $\Upsilon$  29'20  $\;$  11.31211 AU max. Earth dist. -11768 Oct 16 j 04:08 -11774 Jul 20 j 06:38 19°**Y**29'10 -11767 Jan 06 j 17:53 5°906'18 morning rise retrograde -11774 Oct 26 j 20:55  $26^{\circ}$  \bigcap 09'20 -11767 Mar 18 j 03:52 1°542'37 2°58'44 retrograde opposition -11773 Jan 05 j 07:00 22°**Υ**'54'25 1°33'46 min. Earth dist. 1°538'51 8.55560 AU opposition -11767 Mar 18 j 23:34 -11773 Jan 06 j 06:45 22°**Υ**50'06 9.29295 AU min. Earth dist. -11767 Apr 10 j 15:23 30°RⅡ direct -11773 Mar 18 j 08:40 19°**Y**35'18 direct -11767 May 26 j 00:31 28°**Ⅲ**21'32 evening set -11773 Jun 28 j 00:59  $26^{\circ}$ Y 27'11 -11767 Jul 08 j 16:47 0 $\circ$  $\odot$ max. Earth dist. -11773 Jul 13 j 08:47 28°**Υ**12'17 11.26446 AU evening set -11767 Sep 03 j 11:16 5°951'18 max. Earth dist. -11767 Sep 19 j 05:20 7°549'39 10.46883 AU -11773 Jul 14 j 13:07 28°**Y**20'27 1°28'45 conjunction -11773 Jul 14 j 13:04 28°**Y**20'27 1°29'03 -11767 Sep 20 j 01:45 7°556'05 2°20'57 minimum elong conjunction

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 12

	ical records style is used. The	11767	in astronomical as	untina atula ia tha waa	- 11760 DCE in historical	againsting styl	ام
		-			r 11768 BCE in historical		ie.
minimum elong	-11767 Sep 20 j 01:47		2°21'38	evening set	-11761 Nov 27 j 11:43	0° <b>ჲ</b> 26'46	
morning rise	-11767 Oct 06 j 19:50					_	
retrograde	-11766 Jan 20 j 16:56			conjunction	-11761 Dec 15 j 12:06	2° <b>≏</b> 51'54	
opposition	-11766 Mar 31 j 18:34	14° <b>©</b> 31'45	2°47'31	minimum elong	-11761 Dec 15 j 12:04	2° <b>≏</b> 51'54	0°28'22
min. Earth dist.	-11766 Apr 01 j 09:26	14° <b>©</b> 28'51	8.38383 AU	max. Earth dist.	-11761 Dec 16 j 09:25	2° <b>₽</b> 59'06	9.76811 AU
direct	-11766 Jun 07 j 20:58	11° <b>©</b> 09'47		morning rise	-11760 Jan 02 j 16:55	5° <b>≙</b> 18'28	
evening set	-11766 Sep 16 j 10:10	18° <b>5</b> 49'49		retrograde	-11760 Apr 20 j 01:21	14° <b>≏</b> 06'54	
C	1 3			min. Earth dist.	-11760 Jun 25 j 11:44		7.76563 AU
conjunction	-11766 Oct 03 j 05:10	20°958'23	2°07'44	opposition	-11760 Jun 26 j 06:21		
minimum elong	-11766 Oct 03 j 05:14		2°08'23	direct	-11760 Aug 30 j 15:39		0 37 21
max. Earth dist.	-11766 Oct 02 j 13:34				-11760 Dec 12 i 09:18		
	•		10.29693 AU	evening set	-11/00 Dec 12 J 09.16	13 = 33 37	
morning rise	-11766 Oct 20 j 04:50				11500 0 20110 15	1.50 0 50100	100.412.4
	-11766 Dec 26 j 18:37			conjunction	-11760 Dec 30 j 12:45		
retrograde	-11765 Feb 04 j 04:18	1° <b>Ω</b> 18'18		minimum elong	-11760 Dec 30 j 12:41		
	-11765 Mar 16 j 05:17	30° <b>₹</b> ∽		max. Earth dist.	-11760 Dec 31 j 15:57	18° <b>≏</b> 08'31	9.77348 AU
opposition	-11765 Apr 14 j 19:17	27° <b>©</b> 50'45	2°26'59	morning rise	-11759 Jan 17 j 19:25	20° <b>≙</b> 26′05	
min. Earth dist.	-11765 Apr 15 j 05:06	27° <b>©</b> 48'48	8.21734 AU	retrograde	-11759 May 05 j 11:10	29° <b>₽</b> 10′23	
direct	-11765 Jun 21 j 02:56	24° <b>©</b> 27'47		min. Earth dist.	-11759 Jul 10 j 09:08	25° <b>≏</b> 42'32	7.79393 AU
	-11765 Sep 11 j 06:15			opposition	-11759 Jul 11 j 07:20	25° <b>Ω</b> 37'51	-1°42'13
evening set	-11765 Sep 29 j 22:24			direct	-11759 Sep 14 j 20:27		
e vennig see	11700 Sep 25 j 22.21	2 001023		ancer	-11759 Dec 23 j 15:15	0°M	
	11765 0 + 16:22 04	40.020150	1047100	. ,	-11759 Dec 28 j 09:05		
conjunction	-11765 Oct 16 j 23:04		1°47'08	evening set	-11/39 Dec 28 J 09:03	0°M37'02	
minimum elong	-11765 Oct 16 j 23:08						
max. Earth dist.	-11765 Oct 16 j 13:40		10.13891 AU	conjunction	-11758 Jan 15 j 13:46	3°M02'02	
morning rise	-11765 Nov 03 j 05:14	6° <b>Ω</b> 45'23		minimum elong	-11758 Jan 15 j 13:41	3° <b>M</b> L02′00	1°36'31
	-11764 Feb 06 j 04:50	15° <b>Ω</b>		max. Earth dist.	-11758 Jan 16 j 21:00	3°M12'28	9.82353 AU
retrograde	-11764 Feb 19 j 02:26	15° <b>Ω</b> 08'42		morning rise	-11758 Feb 02 j 20:15	5° <b>M</b> 27′30	
	-11764 Mar 02 j 22:45	15°R <b>Ω</b>		retrograde	-11758 May 20 j 12:52	14°ML03'18	
opposition	-11764 Apr 28 j 05:29		1°57'14	min. Earth dist.	-11758 Jul 25 j 02:42		7.86559 AU
min. Earth dist.	-11764 Apr 28 j 09:46			opposition	-11758 Jul 26 j 02:49		
direct	-11764 Jul 03 j 20:12		0.000 11110	direct	-11758 Sep 30 j 01:48	7°ML02'09	2 17 3 .
direct	-11764 Oct 03 j 01:40			direct	-11758 Sep 30 j 01:48		
	•						
evening set	-11764 Oct 13 j 00:27	10-961013		evening set	-11757 Jan 13 j 05:55	13-1162/18	
conjunction	-11764 Oct 30 i 07:30	180(132151	1°19'39			170m をいつい	2°00'57
	,			conjunction	-11757 Jan 31 j 10:07		
minimum elong	-11764 Oct 30 j 07:34	18° <b>Ω</b> 32'52	1°20'07	minimum elong	-11757 Jan 31 j 10:07 -11757 Jan 31 j 10:03		
minimum elong max. Earth dist.	,	18° <b>Ω</b> 32'52	1°20'07	-		17° <b>M</b> 50'19	2°01'25
2	-11764 Oct 30 j 07:34	18° <b>£</b> 32'52 18° <b>£</b> 32'15	1°20'07	minimum elong	-11757 Jan 31 j 10:03	17°ML50'19 18°ML01'13	2°01'25
max. Earth dist.	-11764 Oct 30 j 07:34 -11764 Oct 30 j 05:42 -11764 Nov 16 j 20:29	18° N 32'52 18° N 32'15 20° N 51'24	1°20'07	minimum elong max. Earth dist.	-11757 Jan 31 j 10:03 -11757 Feb 01 j 19:06	17°M50'19 18°M01'13 20°M13'22	2°01'25
max. Earth dist. morning rise retrograde	-11764 Oct 30 j 07:34 -11764 Oct 30 j 05:42 -11764 Nov 16 j 20:29 -11763 Mar 05 j 08:18	18° Ω32'52 18° Ω32'15 20° Ω51'24 29° Ω26'15	1°20'07 9.99800 AU	minimum elong max. Earth dist. morning rise retrograde	-11757 Jan 31 j 10:03 -11757 Feb 01 j 19:06 -11757 Feb 18 j 14:41 -11757 Jun 04 j 02:10	17°M.50'19 18°M.01'13 20°M.13'22 28°M.37'07	2°01'25 9.91483 AU
max. Earth dist. morning rise retrograde opposition	-11764 Oct 30 j 07:34 -11764 Oct 30 j 05:42 -11764 Nov 16 j 20:29 -11763 Mar 05 j 08:18 -11763 May 12 j 23:39	18° Ω32'52 18° Ω32'15 20° Ω51'24 29° Ω26'15 25° Ω55'24	1°20'07 9.99800 AU 1°19'17	minimum elong max. Earth dist. morning rise retrograde opposition	-11757 Jan 31 j 10:03 -11757 Feb 01 j 19:06 -11757 Feb 18 j 14:41 -11757 Jun 04 j 02:10 -11757 Aug 09 j 14:13	17° M 50'19 18° M 01'13 20° M 13'22 28° M 37'07 25° M 06'54	2°01'25 9.91483 AU -2°43'06
max. Earth dist. morning rise retrograde opposition min. Earth dist.	-11764 Oct 30 j 07:34 -11764 Oct 30 j 05:42 -11764 Nov 16 j 20:29 -11763 Mar 05 j 08:18 -11763 May 12 j 23:39 -11763 May 12 j 21:49	18° \Omega 32'52 18° \Omega 32'15 20° \Omega 51'24 29° \Omega 26'15 25° \Omega 55'24 25° \Omega 55'47	1°20'07 9.99800 AU 1°19'17	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-11757 Jan 31 j 10:03 -11757 Feb 01 j 19:06 -11757 Feb 18 j 14:41 -11757 Jun 04 j 02:10 -11757 Aug 09 j 14:13 -11757 Aug 08 j 13:57	17°M50'19 18°M01'13 20°M13'22 28°M37'07 25°M06'54 25°M11'59	2°01'25 9.91483 AU -2°43'06
max. Earth dist. morning rise retrograde opposition	-11764 Oct 30 j 07:34 -11764 Oct 30 j 05:42 -11764 Nov 16 j 20:29 -11763 Mar 05 j 08:18 -11763 May 12 j 23:39 -11763 May 12 j 21:49 -11763 Jul 18 j 01:48	18° N32'52 18° N32'15 20° N51'24 29° N26'15 25° N55'24 25° N55'47 22° N30'12	1°20'07 9.99800 AU 1°19'17	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-11757 Jan 31 j 10:03 -11757 Feb 01 j 19:06 -11757 Feb 18 j 14:41 -11757 Jun 04 j 02:10 -11757 Aug 09 j 14:13 -11757 Aug 08 j 13:57 -11757 Oct 15 j 03:28	17°M50'19 18°M01'13 20°M13'22 28°M37'07 25°M06'54 25°M11'59 21°M37'14	2°01'25 9.91483 AU -2°43'06
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-11764 Oct 30 j 07:34 -11764 Oct 30 j 05:42 -11764 Nov 16 j 20:29 -11763 Mar 05 j 08:18 -11763 May 12 j 23:39 -11763 May 12 j 21:49 -11763 Jul 18 j 01:48 -11763 Oct 22 j 11:50	18° N32'52 18° N32'15 20° N51'24 29° N26'15 25° N55'24 25° N55'47 22° N30'12 0° M	1°20'07 9.99800 AU 1°19'17	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-11757 Jan 31 j 10:03 -11757 Feb 01 j 19:06 -11757 Feb 18 j 14:41 -11757 Jun 04 j 02:10 -11757 Aug 09 j 14:13 -11757 Aug 08 j 13:57 -11757 Oct 15 j 03:28 -11756 Jan 28 j 18:56	17°M50'19 18°M01'13 20°M13'22 28°M37'07 25°M06'54 25°M11'59 21°M37'14 29°M56'10	2°01'25 9.91483 AU -2°43'06
max. Earth dist. morning rise retrograde opposition min. Earth dist.	-11764 Oct 30 j 07:34 -11764 Oct 30 j 05:42 -11764 Nov 16 j 20:29 -11763 Mar 05 j 08:18 -11763 May 12 j 23:39 -11763 May 12 j 21:49 -11763 Jul 18 j 01:48	18° N32'52 18° N32'15 20° N51'24 29° N26'15 25° N55'24 25° N55'47 22° N30'12	1°20'07 9.99800 AU 1°19'17	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-11757 Jan 31 j 10:03 -11757 Feb 01 j 19:06 -11757 Feb 18 j 14:41 -11757 Jun 04 j 02:10 -11757 Aug 09 j 14:13 -11757 Aug 08 j 13:57 -11757 Oct 15 j 03:28	17°M50'19 18°M01'13 20°M13'22 28°M37'07 25°M06'54 25°M11'59 21°M37'14	2°01'25 9.91483 AU -2°43'06
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-11764 Oct 30 j 07:34 -11764 Oct 30 j 05:42 -11764 Nov 16 j 20:29 -11763 Mar 05 j 08:18 -11763 May 12 j 23:39 -11763 May 12 j 21:49 -11763 Jul 18 j 01:48 -11763 Oct 22 j 11:50 -11763 Oct 27 j 16:21	18° N32'52 18° N32'15 20° N51'24 29° N26'15 25° N55'24 25° N55'47 22° N30'12 0° M 0° M40'32	1°20'07 9.99800 AU 1°19'17 7.93728 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-11757 Jan 31 j 10:03 -11757 Feb 01 j 19:06 -11757 Feb 18 j 14:41 -11757 Jun 04 j 02:10 -11757 Aug 09 j 14:13 -11757 Oct 15 j 03:28 -11756 Jan 28 j 18:56 -11756 Jan 29 j 06:58	17°M50'19 18°M01'13 20°M13'22 28°M37'07 25°M06'54 25°M11'59 21°M37'14 29°M56'10 0°×7	2°01'25 9.91483 AU -2°43'06 7.97536 AU
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-11764 Oct 30 j 07:34 -11764 Oct 30 j 05:42 -11764 Nov 16 j 20:29 -11763 Mar 05 j 08:18 -11763 May 12 j 23:39 -11763 May 12 j 21:49 -11763 Jul 18 j 01:48 -11763 Oct 22 j 11:50 -11763 Oct 27 j 16:21	18° N32'52 18° N32'15 20° N51'24 29° N26'15 25° N55'24 25° N55'47 22° N30'12 0° M 0° M40'32 3° M00'49	1°20'07 9.99800 AU 1°19'17 7.93728 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-11757 Jan 31 j 10:03 -11757 Feb 01 j 19:06 -11757 Feb 18 j 14:41 -11757 Jun 04 j 02:10 -11757 Aug 09 j 14:13 -11757 Oct 15 j 03:28 -11756 Jan 28 j 18:56 -11756 Feb 15 j 21:24	17°M.50'19 18°M.01'13 20°M.13'22 28°M.37'07 25°M.06'54 25°M.11'59 21°M.37'14 29°M.56'10 0°×7	2°01'25 9.91483 AU -2°43'06 7.97536 AU
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max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-11764 Oct 30 j 07:34 -11764 Oct 30 j 05:42 -11764 Nov 16 j 20:29 -11763 Mar 05 j 08:18 -11763 May 12 j 23:39 -11763 May 12 j 21:49 -11763 Jul 18 j 01:48 -11763 Oct 22 j 11:50 -11763 Oct 27 j 16:21	18° N32'52 18° N32'15 20° N51'24 29° N26'15 25° N55'24 25° N55'47 22° N30'12 0° M 0° M40'32 3° M00'49	1°20'07 9.99800 AU 1°19'17 7.93728 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-11757 Jan 31 j 10:03 -11757 Feb 01 j 19:06 -11757 Feb 18 j 14:41 -11757 Jun 04 j 02:10 -11757 Aug 09 j 14:13 -11757 Oct 15 j 03:28 -11756 Jan 28 j 18:56 -11756 Feb 15 j 21:24	17°M.50'19 18°M.01'13 20°M.13'22 28°M.37'07 25°M.06'54 25°M.11'59 21°M.37'14 29°M.56'10 0°×7	2°01'25 9.91483 AU -2°43'06 7.97536 AU
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-11764 Oct 30 j 07:34 -11764 Oct 30 j 05:42 -11764 Nov 16 j 20:29 -11763 Mar 05 j 08:18 -11763 May 12 j 23:39 -11763 May 12 j 21:49 -11763 Jul 18 j 01:48 -11763 Oct 22 j 11:50 -11763 Oct 27 j 16:21 -11763 Nov 14 j 05:59 -11763 Nov 14 j 06:02	18° N32'52 18° N32'15 20° N51'24 29° N26'15 25° N55'24 25° N55'47 22° N30'12 0° M 0° M40'32 3° M00'49 3° M00'50	1°20'07 9.99800 AU 1°19'17 7.93728 AU 0°46'30 0°46'50	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong	-11757 Jan 31 j 10:03 -11757 Feb 01 j 19:06 -11757 Feb 18 j 14:41 -11757 Jun 04 j 02:10 -11757 Aug 09 j 14:13 -11757 Oct 15 j 03:28 -11756 Jan 28 j 18:56 -11756 Feb 15 j 21:24 -11756 Feb 15 j 21:21	17°M.50'19 18°M.01'13 20°M.13'22 28°M.37'07 25°M.06'54 25°M.11'59 21°M.37'14 29°M.56'10 0° 🗷 2° 🗷 16'22 2° 🗷 16'21	2°01'25 9.91483 AU -2°43'06 7.97536 AU -2°17'31 2°18'05
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise	-11764 Oct 30 j 07:34 -11764 Oct 30 j 07:42 -11764 Nov 16 j 20:29 -11763 Mar 05 j 08:18 -11763 May 12 j 23:39 -11763 May 12 j 21:49 -11763 Jul 18 j 01:48 -11763 Oct 22 j 11:50 -11763 Oct 27 j 16:21 -11763 Nov 14 j 05:59 -11763 Nov 14 j 06:02 -11763 Nov 14 j 12:22 -11763 Dec 02 j 01:29	18° \Omega 32'52 18° \Omega 32'15 20° \Omega 51'24 29° \Omega 26'15 25° \Omega 55'24 25° \Omega 55'47 22° \Omega 30'12 0° \Omega 40'32 3° \Omega 00'49 3° \Omega 00'50 3° \Omega 02'58 5° \Omega 23'02	1°20'07 9.99800 AU 1°19'17 7.93728 AU 0°46'30 0°46'50	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise	-11757 Jan 31 j 10:03 -11757 Feb 01 j 19:06 -11757 Feb 18 j 14:41 -11757 Jun 04 j 02:10 -11757 Aug 09 j 14:13 -11757 Aug 08 j 13:57 -11757 Oct 15 j 03:28 -11756 Jan 28 j 18:56 -11756 Feb 15 j 21:24 -11756 Feb 15 j 21:21 -11756 Feb 17 j 05:40 -11756 Mar 04 j 22:54	17°M.50'19 18°M.01'13 20°M.13'22 28°M.37'07 25°M.06'54 25°M.11'59 21°M.37'14 29°M.56'10 0° 🗷 2° 🗷 16'22 2° 🗷 16'21 2° 🗷 26'51 4° 🗷 36'07	2°01'25 9.91483 AU -2°43'06 7.97536 AU -2°17'31 2°18'05
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde	-11764 Oct 30 j 07:34 -11764 Oct 30 j 07:42 -11764 Nov 16 j 20:29 -11763 Mar 05 j 08:18 -11763 May 12 j 23:39 -11763 May 12 j 21:49 -11763 Jul 18 j 01:48 -11763 Oct 22 j 11:50 -11763 Oct 27 j 16:21 -11763 Nov 14 j 05:59 -11763 Nov 14 j 06:02 -11763 Dec 02 j 01:29 -11762 Mar 20 j 19:57	18° N32'52 18° N32'15 20° N51'24 29° N26'15 25° N55'24 25° N35'47 22° N30'12 0° M 0° M40'32 3° M00'49 3° M00'50 3° M02'58 5° M23'02 14° M06'19	1°20'07 9.99800 AU 1°19'17 7.93728 AU 0°46'30 0°46'50 9.88496 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde	-11757 Jan 31 j 10:03 -11757 Feb 01 j 19:06 -11757 Feb 18 j 14:41 -11757 Jun 04 j 02:10 -11757 Aug 09 j 14:13 -11757 Aug 08 j 13:57 -11757 Oct 15 j 03:28 -11756 Jan 28 j 18:56 -11756 Feb 15 j 21:24 -11756 Feb 15 j 21:21 -11756 Feb 17 j 05:40 -11756 Mar 04 j 22:54 -11756 Jun 17 j 02:06	17°M.50'19 18°M.01'13 20°M.13'22 28°M.37'07 25°M.06'54 25°M.11'59 21°M.37'14 29°M.56'10 0° 🗷 2° 🗷 16'21 2° 🗷 16'21 2° 🗷 26'51 4° 🗷 36'07 12° 🗷 45'30	2°01'25 9.91483 AU -2°43'06 7.97536 AU -2°17'31 2°18'05 10.04075 AU
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-11764 Oct 30 j 07:34 -11764 Oct 30 j 07:42 -11764 Nov 16 j 20:29 -11763 Mar 05 j 08:18 -11763 May 12 j 23:39 -11763 May 12 j 21:49 -11763 Jul 18 j 01:48 -11763 Oct 22 j 11:50 -11763 Oct 27 j 16:21 -11763 Nov 14 j 05:59 -11763 Nov 14 j 06:02 -11763 Dec 02 j 01:29 -11762 Mar 20 j 19:57 -11762 May 27 j 23:33	18° N32'52 18° N32'15 20° N51'24 29° N26'15 25° N55'24 25° N30'12 0° M 0° M40'32 3° M00'49 3° M00'50 3° M02'58 5° M23'02 14° M06'19 10° M34'17	1°20'07 9.99800 AU 1°19'17 7.93728 AU 0°46'30 0°46'50 9.88496 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-11757 Jan 31 j 10:03 -11757 Feb 01 j 19:06 -11757 Feb 18 j 14:41 -11757 Jun 04 j 02:10 -11757 Aug 09 j 14:13 -11757 Aug 08 j 13:57 -11757 Oct 15 j 03:28 -11756 Jan 28 j 18:56 -11756 Feb 15 j 21:24 -11756 Feb 15 j 21:21 -11756 Feb 17 j 05:40 -11756 Mar 04 j 22:54 -11756 Jun 17 j 02:06 -11756 Aug 22 j 15:57	17°M.50'19 18°M.01'13 20°M.13'22 28°M.37'07 25°M.06'54 25°M.11'59 21°M.37'14 29°M.56'10 0° 🛪  2° 🖈 16'22 2° 🖈 16'21 2° 🖈 26'51 4° 🛪 36'07 12° 🛪 45'30 9° 🖈 17'02	2°01'25 9.91483 AU -2°43'06 7.97536 AU -2°17'31 2°18'05 10.04075 AU -2°57'46
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-11764 Oct 30 j 07:34 -11764 Nov 16 j 20:29 -11763 Mar 05 j 08:18 -11763 May 12 j 23:39 -11763 May 12 j 21:49 -11763 Jul 18 j 01:48 -11763 Oct 22 j 11:50 -11763 Oct 27 j 16:21 -11763 Nov 14 j 05:59 -11763 Nov 14 j 06:02 -11763 Nov 14 j 12:22 -11763 Dec 02 j 01:29 -11762 Mar 20 j 19:57 -11762 May 27 j 23:33 -11762 May 27 j 15:39	18° \Omega 32'52 18° \Omega 32'15 20° \Omega 51'24 29° \Omega 26'15 25° \Omega 55'24 25° \Omega 55'47 22° \Omega 30'12 0° \Omega 40'32 3° \Omega 00'49 3° \Omega 00'50 3° \Omega 00'50 3° \Omega 23'02 14° \Omega 06'19 10° \Omega 34'17 10° \Omega 35'55	1°20'07 9.99800 AU 1°19'17 7.93728 AU 0°46'30 0°46'50 9.88496 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-11757 Jan 31 j 10:03 -11757 Feb 01 j 19:06 -11757 Feb 18 j 14:41 -11757 Jun 04 j 02:10 -11757 Aug 09 j 14:13 -11757 Aug 08 j 13:57 -11757 Oct 15 j 03:28 -11756 Jan 28 j 18:56 -11756 Feb 15 j 21:24 -11756 Feb 15 j 21:21 -11756 Feb 17 j 05:40 -11756 Mar 04 j 22:54 -11756 Aug 22 j 15:57 -11756 Aug 21 j 16:45	17°M.50'19 18°M.01'13 20°M.13'22 28°M.37'07 25°M.06'54 25°M.11'59 21°M.37'14 29°M.56'10 0° x  2° x 16'22 2° x 16'21 2° x 26'51 4° x 36'07 12° x 45'30 9° x 17'02 9° x 21'50	2°01'25 9.91483 AU -2°43'06 7.97536 AU -2°17'31 2°18'05 10.04075 AU
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-11764 Oct 30 j 07:34 -11764 Nov 16 j 20:29 -11763 Mar 05 j 08:18 -11763 May 12 j 23:39 -11763 May 12 j 21:49 -11763 Jul 18 j 01:48 -11763 Oct 22 j 11:50 -11763 Nov 14 j 05:59 -11763 Nov 14 j 06:02 -11763 Nov 14 j 12:22 -11763 Dec 02 j 01:29 -11762 Mar 20 j 19:57 -11762 May 27 j 23:33 -11762 May 27 j 15:39 -11762 Aug 01 j 16:10	18° \( \Omega 32' 52 \) 18° \( \Omega 32' 15 \) 20° \( \Omega 51' 24 \) 29° \( \Omega 26' 15 \) 25° \( \Omega 55' 24 \) 25° \( \Omega 55' 24 \) 20° \( \Omega 40' 32 \) 3° \( \Omega 00' 49 \) 3° \( \Omega 00' 49 \) 3° \( \Omega 00' 50 \) 10° \( \Omega 34' 17 \) 10° \( \Omega 35' 55 \) 7° \( \Omega 07' 55 \)	1°20'07 9.99800 AU 1°19'17 7.93728 AU 0°46'30 0°46'50 9.88496 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-11757 Jan 31 j 10:03 -11757 Feb 01 j 19:06 -11757 Feb 18 j 14:41 -11757 Jun 04 j 02:10 -11757 Aug 09 j 14:13 -11757 Aug 08 j 13:57 -11757 Oct 15 j 03:28 -11756 Jan 28 j 18:56 -11756 Feb 15 j 21:24 -11756 Feb 15 j 21:21 -11756 Feb 17 j 05:40 -11756 Mar 04 j 22:54 -11756 Aug 22 j 15:57 -11756 Aug 21 j 16:45 -11756 Oct 28 j 22:23	17° M.50'19 18° M.01'13 20° M.13'22 28° M.37'07 25° M.06'54 25° M.11'59 21° M.37'14 29° M.56'10 0° 🖈  2° 🖈 16'22 2° 🖈 16'21 2° 🖈 26'51 4° 🖈 36'07 12° 🖈 45'30 9° 🖈 17'02 9° 🛣 17'02 9° 🛣 12'50 5° 🛣 47'33	2°01'25 9.91483 AU -2°43'06 7.97536 AU -2°17'31 2°18'05 10.04075 AU -2°57'46
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-11764 Oct 30 j 07:34 -11764 Nov 16 j 20:29 -11763 Mar 05 j 08:18 -11763 May 12 j 23:39 -11763 May 12 j 21:49 -11763 Jul 18 j 01:48 -11763 Oct 22 j 11:50 -11763 Oct 27 j 16:21 -11763 Nov 14 j 05:59 -11763 Nov 14 j 06:02 -11763 Nov 14 j 12:22 -11763 Dec 02 j 01:29 -11762 Mar 20 j 19:57 -11762 May 27 j 23:33 -11762 May 27 j 15:39	18° \( \Omega 32' 52 \) 18° \( \Omega 32' 15 \) 20° \( \Omega 51' 24 \) 29° \( \Omega 26' 15 \) 25° \( \Omega 55' 24 \) 25° \( \Omega 55' 24 \) 20° \( \Omega 40' 32 \) 3° \( \Omega 00' 49 \) 3° \( \Omega 00' 49 \) 3° \( \Omega 00' 50 \) 10° \( \Omega 34' 17 \) 10° \( \Omega 35' 55 \) 7° \( \Omega 07' 55 \)	1°20'07 9.99800 AU 1°19'17 7.93728 AU 0°46'30 0°46'50 9.88496 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-11757 Jan 31 j 10:03 -11757 Feb 01 j 19:06 -11757 Feb 18 j 14:41 -11757 Jun 04 j 02:10 -11757 Aug 09 j 14:13 -11757 Aug 08 j 13:57 -11757 Oct 15 j 03:28 -11756 Jan 28 j 18:56 -11756 Feb 15 j 21:24 -11756 Feb 15 j 21:21 -11756 Feb 17 j 05:40 -11756 Mar 04 j 22:54 -11756 Aug 22 j 15:57 -11756 Aug 21 j 16:45	17° M.50'19 18° M.01'13 20° M.13'22 28° M.37'07 25° M.06'54 25° M.11'59 21° M.37'14 29° M.56'10 0° 🖈  2° 🖈 16'22 2° 🖈 16'21 2° 🖈 26'51 4° 🖈 36'07 12° 🖈 45'30 9° 🖈 17'02 9° 🛣 17'02 9° 🛣 12'50 5° 🛣 47'33	2°01'25 9.91483 AU -2°43'06 7.97536 AU -2°17'31 2°18'05 10.04075 AU -2°57'46
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max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong behind sun begin behind sun begin behind sun end max. Earth dist. morning rise desc. node retrograde opposition	-11764 Oct 30 j 07:34 -11764 Nov 16 j 20:29 -11763 Mar 05 j 08:18 -11763 May 12 j 23:39 -11763 May 12 j 21:49 -11763 Jul 18 j 01:48 -11763 Oct 22 j 11:50 -11763 Oct 27 j 16:21 -11763 Nov 14 j 05:59 -11763 Nov 14 j 06:02 -11763 Nov 14 j 06:02 -11763 Nov 14 j 12:22 -11763 Dec 02 j 01:29 -11762 Mar 20 j 19:57 -11762 May 27 j 23:33 -11762 May 27 j 15:39 -11762 Nov 11 j 20:53 -11762 Nov 29 j 16:33 -11762 Nov 29 j 16:33 -11762 Nov 29 j 10:37 -11762 Nov 29 j 10:37 -11762 Nov 29 j 10:37 -11762 Nov 30 j 06:48 -11762 Dec 17 j 17:33 -11761 Mar 06 j 21:44 -11761 Apr 05 j 11:02 -11761 Jun 12 j 02:45	18° \( \alpha \) 32'52 18° \( \alpha \) 32'15 20° \( \alpha \) 51'24 29° \( \alpha \) 26'15 25° \( \alpha \) 55'24 25° \( \alpha \) 55'47 22° \( \alpha \) 30'12 0° \( \mathred \) 40'32 3° \( \mathred \) 00'49 3° \( \mathred \) 00'50 10° \( \mathred \) 33'102 14° \( \mathred \) 06'19 10° \( \mathred \) 33'17 10° \( \mathred \) 35'55 7° \( \mathred \) 00'55 15° \( \mathred \) 26'17 17° \( \mathred \) 49'31	1°20'07 9.99800 AU 1°19'17 7.93728 AU 0°46'30 0°46'50 9.88496 AU 0°35'06 7.84095 AU 0°09'40 0°09'51 9.80664 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. direct evening set	-11757 Jan 31 j 10:03 -11757 Feb 01 j 19:06 -11757 Feb 18 j 14:41 -11757 Jun 04 j 02:10 -11757 Aug 09 j 14:13 -11757 Aug 08 j 13:57 -11757 Oct 15 j 03:28 -11756 Jan 28 j 18:56 -11756 Feb 15 j 21:24 -11756 Feb 15 j 21:21 -11756 Feb 17 j 05:40 -11756 Mar 04 j 22:54 -11756 Aug 22 j 15:57 -11756 Aug 22 j 15:57 -11756 Aug 21 j 16:45 -11755 Feb 11 j 20:21 -11755 Mar 01 j 20:21 -11755 Mar 01 j 20:22 -11755 Mar 01 j 20:21 -11755 Mar 19 j 18:10 -11755 Sep 04 j 09:43 -11755 Sep 04 j 09:43 -11755 Sep 05 j 07:02	17° M.50'19 18° M.01'13 20° M.13'22 28° M.37'07 25° M.06'54 25° M.11'59 21° M.37'14 29° M.56'10 0° \$\bar{\text{2}}\$ 2° \$\bar{\text{3}}\$16'21 2° \$\bar{\text{2}}\$26'51 4° \$\bar{\text{3}}\$36'07 12° \$\bar{\text{4}}\$21'50 5° \$\bar{\text{4}}\$71'02 9° \$\bar{\text{2}}\$17'02 9° \$\bar{\text{2}}\$17'02 9° \$\bar{\text{2}}\$12'50 5° \$\bar{\text{4}}\$47'33 13° \$\bar{\text{3}}\$57'44  16° \$\bar{\text{3}}\$14'36 16° \$\bar{\text{2}}\$24'01 18° \$\bar{\text{3}}\$30'38 26° \$\bar{\text{2}}\$24'22 22° \$\bar{\text{3}}\$57'59 19° \$\bar{\text{2}}\$29'02	2°01'25 9.91483 AU -2°43'06 7.97536 AU -2°17'31 2°18'05 10.04075 AU -2°57'46 8.11538 AU -2°25'24 2°26'02 10.19250 AU 8.27611 AU
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction min Earth dist. direct evening set  conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise desc. node retrograde opposition min. Earth dist.	-11764 Oct 30 j 07:34 -11764 Nov 16 j 20:29 -11763 Mar 05 j 08:18 -11763 May 12 j 23:39 -11763 May 12 j 21:49 -11763 Jul 18 j 01:48 -11763 Oct 22 j 11:50 -11763 Oct 27 j 16:21 -11763 Nov 14 j 05:59 -11763 Nov 14 j 05:59 -11763 Nov 14 j 12:22 -11763 Dec 02 j 01:29 -11762 Mar 20 j 19:57 -11762 May 27 j 23:33 -11762 May 27 j 15:39 -11762 Nov 11 j 20:53 -11762 Nov 29 j 16:33 -11762 Nov 29 j 16:33 -11762 Nov 29 j 16:33 -11762 Nov 29 j 10:37 -11762 Nov 29 j 10:37 -11762 Nov 29 j 10:37 -11762 Nov 30 j 06:48 -11761 Mar 06 j 21:44 -11761 Apr 05 j 11:02 -11761 Jun 12 j 02:45 -11761 Jun 12 j 02:45 -11761 Jun 11 j 13:07	18° \( \alpha \) 32'52 18° \( \alpha \) 32'15 20° \( \alpha \) 51'24 29° \( \alpha \) 26'15 25° \( \alpha \) 55'24 25° \( \alpha \) 55'24 25° \( \alpha \) 55'47 22° \( \alpha \) 30'12 0° \( \text{m} \) 40'32 3° \( \text{m} \) 40'32 3° \( \text{m} \) 40'32 3° \( \text{m} \) 40'50 3° \( \text{m} \) 20'58 5° \( \text{m} \) 23'02 14° \( \text{m} \) 06'19 10° \( \text{m} \) 34'17 10° \( \text{m} \) 35'55 7° \( \text{m} \) 07'55 15° \( \text{m} \) 26'17 17° \( \text{m} \) 49'31 17° \( \text{m} \) 51'30 17° \( \text{m} \) 51'30 17° \( \text{m} \) 54'19 20° \( \text{m} \) 14'45 29° \( \text{m} \) 02'29 25° \( \text{m} \) 29'44 25° \( \text{m} \) 32'35	1°20'07 9.99800 AU 1°19'17 7.93728 AU 0°46'30 0°46'50 9.88496 AU 0°35'06 7.84095 AU 0°09'40 0°09'51 9.80664 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set	-11757 Jan 31 j 10:03 -11757 Feb 01 j 19:06 -11757 Feb 18 j 14:41 -11757 Jun 04 j 02:10 -11757 Aug 09 j 14:13 -11757 Aug 08 j 13:57 -11757 Oct 15 j 03:28 -11756 Jan 28 j 18:56 -11756 Jan 29 j 06:58 -11756 Feb 15 j 21:24 -11756 Feb 15 j 21:21 -11756 Mar 04 j 22:54 -11756 Jun 17 j 02:06 -11756 Aug 22 j 15:57 -11756 Aug 22 j 15:57 -11756 Aug 21 j 16:45 -11756 Oct 28 j 22:23 -11755 Feb 11 j 20:21 -11755 Mar 01 j 20:22 -11755 Mar 01 j 20:22 -11755 Mar 03 j 01:55 -11755 Jun 30 j 12:51 -11755 Sep 04 j 09:43 -11755 Sep 05 j 07:02 -11755 Nov 12 j 08:07 -11754 Feb 26 j 08:11	17° M.50'19 18° M.01'13 20° M.13'22 28° M.37'07 25° M.06'54 25° M.11'59 21° M.37'14 29° M.56'10 0° \$\stackstyle{\stackstyle{\stackstyle{2}}} \stackstyle{\stackstyle{2}} \	2°01'25 9.91483 AU -2°43'06 7.97536 AU -2°17'31 2°18'05 10.04075 AU -2°57'46 8.11538 AU -2°25'24 2°26'02 10.19250 AU 8.27611 AU -3°01'38
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong behind sun begin behind sun begin behind sun end max. Earth dist. morning rise desc. node retrograde opposition	-11764 Oct 30 j 07:34 -11764 Nov 16 j 20:29 -11763 Mar 05 j 08:18 -11763 May 12 j 23:39 -11763 May 12 j 21:49 -11763 Jul 18 j 01:48 -11763 Oct 22 j 11:50 -11763 Oct 27 j 16:21 -11763 Nov 14 j 05:59 -11763 Nov 14 j 05:59 -11763 Nov 14 j 12:22 -11763 Dec 02 j 01:29 -11762 Mar 20 j 19:57 -11762 May 27 j 23:33 -11762 May 27 j 15:39 -11762 Nov 11 j 20:53 -11762 Nov 29 j 16:33 -11762 Nov 29 j 16:33 -11762 Nov 29 j 16:33 -11762 Nov 29 j 10:37 -11762 Nov 29 j 10:37 -11761 Nov 05 j 11:02 -11761 Jun 12 j 02:45 -11761 Jun 11 j 13:07 -11761 Aug 16 j 13:29	18° \( \alpha \) 32'52 18° \( \alpha \) 32'15 20° \( \alpha \) 51'24 29° \( \alpha \) 26'15 25° \( \alpha \) 55'24 25° \( \alpha \) 55'24 25° \( \alpha \) 55'47 22° \( \alpha \) 30'12 0° \( \text{m} \) 40'32 3° \( \text{m} \) 40'32 3° \( \text{m} \) 40'32 3° \( \text{m} \) 40'50 3° \( \text{m} \) 23'02 14° \( \text{m} \) 06'19 10° \( \text{m} \) 34'17 10° \( \text{m} \) 35'55 7° \( \text{m} \) 07'55 15° \( \text{m} \) 26'17 17° \( \text{m} \) 49'31 17° \( \text{m} \) 51'30 17° \( \text{m} \) 51'30 17° \( \text{m} \) 54'19 20° \( \text{m} \) 14'45 29° \( \text{m} \) 02'29 25° \( \text{m} \) 29'44 25° \( \text{m} \) 32'35 22° \( \text{m} \) 02'18	1°20'07 9.99800 AU 1°19'17 7.93728 AU 0°46'30 0°46'50 9.88496 AU 0°35'06 7.84095 AU 0°09'40 0°09'51 9.80664 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set	-11757 Jan 31 j 10:03 -11757 Feb 01 j 19:06 -11757 Feb 18 j 14:41 -11757 Jun 04 j 02:10 -11757 Aug 09 j 14:13 -11757 Aug 08 j 13:57 -11757 Oct 15 j 03:28 -11756 Jan 28 j 18:56 -11756 Jan 29 j 06:58 -11756 Feb 15 j 21:21 -11756 Feb 17 j 05:40 -11756 Mar 04 j 22:54 -11756 Jun 17 j 02:06 -11756 Aug 22 j 15:57 -11756 Aug 22 j 15:57 -11756 Aug 21 j 16:45 -11756 Oct 28 j 22:23 -11755 Feb 11 j 20:21 -11755 Mar 01 j 20:22 -11755 Mar 01 j 20:22 -11755 Mar 03 j 01:55 -11755 Jun 30 j 12:51 -11755 Sep 04 j 09:43 -11755 Sep 04 j 09:43 -11755 Nov 12 j 08:07 -11754 Feb 26 j 08:11	17° M.50'19 18° M.01'13 20° M.13'22 28° M.37'07 25° M.06'54 25° M.11'59 21° M.37'14 29° M.56'10 0° \$\bar{\text{2}}\$ 2° \$\bar{\text{2}}\$16'22 2° \$\bar{\text{2}}\$16'21 2° \$\bar{\text{2}}\$26'51 4° \$\bar{\text{3}}\$36'07 12° \$\bar{\text{4}}\$21'50 5° \$\bar{\text{4}}\$71'02 9° \$\bar{\text{2}}\$17'02 9° \$\bar{\text{2}}\$12'50 5° \$\bar{\text{4}}\$47'33 13° \$\bar{\text{3}}\$57'44 16° \$\bar{\text{4}}\$14'36 16° \$\bar{\text{2}}\$14'36 16° \$\bar{\text{2}}\$24'01 18° \$\bar{\text{3}}\$30'38 26° \$\bar{\text{2}}\$24'28 23° \$\bar{\text{3}}\$25'59 19° \$\bar{\text{2}}\$29'02 27° \$\bar{\text{2}}\$28'47	2°01'25 9.91483 AU -2°43'06 7.97536 AU -2°17'31 2°18'05 10.04075 AU -2°57'46 8.11538 AU -2°25'24 2°26'02 10.19250 AU 8.27611 AU -3°01'38
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction min Earth dist. direct evening set  conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise desc. node retrograde opposition min. Earth dist.	-11764 Oct 30 j 07:34 -11764 Nov 16 j 20:29 -11763 Mar 05 j 08:18 -11763 May 12 j 23:39 -11763 May 12 j 21:49 -11763 Jul 18 j 01:48 -11763 Oct 22 j 11:50 -11763 Oct 27 j 16:21 -11763 Nov 14 j 05:59 -11763 Nov 14 j 05:59 -11763 Nov 14 j 12:22 -11763 Dec 02 j 01:29 -11762 Mar 20 j 19:57 -11762 May 27 j 23:33 -11762 May 27 j 15:39 -11762 Nov 11 j 20:53 -11762 Nov 29 j 16:33 -11762 Nov 29 j 16:33 -11762 Nov 29 j 16:33 -11762 Nov 29 j 10:37 -11762 Nov 29 j 10:37 -11762 Nov 29 j 10:37 -11762 Nov 30 j 06:48 -11761 Mar 06 j 21:44 -11761 Apr 05 j 11:02 -11761 Jun 12 j 02:45 -11761 Jun 12 j 02:45 -11761 Jun 11 j 13:07	18° \( \alpha \) 32'52 18° \( \alpha \) 32'15 20° \( \alpha \) 51'24 29° \( \alpha \) 26'15 25° \( \alpha \) 55'24 25° \( \alpha \) 55'24 25° \( \alpha \) 55'47 22° \( \alpha \) 30'12 0° \( \text{m} \) 40'32 3° \( \text{m} \) 40'32 3° \( \text{m} \) 40'32 3° \( \text{m} \) 40'50 3° \( \text{m} \) 20'58 5° \( \text{m} \) 23'02 14° \( \text{m} \) 06'19 10° \( \text{m} \) 34'17 10° \( \text{m} \) 35'55 7° \( \text{m} \) 07'55 15° \( \text{m} \) 26'17 17° \( \text{m} \) 49'31 17° \( \text{m} \) 51'30 17° \( \text{m} \) 51'30 17° \( \text{m} \) 54'19 20° \( \text{m} \) 14'45 29° \( \text{m} \) 02'29 25° \( \text{m} \) 29'44 25° \( \text{m} \) 32'35	1°20'07 9.99800 AU 1°19'17 7.93728 AU 0°46'30 0°46'50 9.88496 AU 0°35'06 7.84095 AU 0°09'40 0°09'51 9.80664 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set  conjunction min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set	-11757 Jan 31 j 10:03 -11757 Feb 01 j 19:06 -11757 Feb 18 j 14:41 -11757 Jun 04 j 02:10 -11757 Aug 09 j 14:13 -11757 Aug 08 j 13:57 -11757 Oct 15 j 03:28 -11756 Jan 28 j 18:56 -11756 Jan 29 j 06:58 -11756 Feb 15 j 21:24 -11756 Feb 15 j 21:21 -11756 Mar 04 j 22:54 -11756 Jun 17 j 02:06 -11756 Aug 22 j 15:57 -11756 Aug 22 j 15:57 -11756 Aug 21 j 16:45 -11756 Oct 28 j 22:23 -11755 Feb 11 j 20:21 -11755 Mar 01 j 20:22 -11755 Mar 01 j 20:22 -11755 Mar 03 j 01:55 -11755 Jun 30 j 12:51 -11755 Sep 04 j 09:43 -11755 Sep 05 j 07:02 -11755 Nov 12 j 08:07 -11754 Feb 26 j 08:11	17° M.50'19 18° M.01'13 20° M.13'22 28° M.37'07 25° M.06'54 25° M.11'59 21° M.37'14 29° M.56'10 0° \$\bar{\text{2}}\$ 2° \$\bar{\text{2}}\$16'22 2° \$\bar{\text{2}}\$16'21 2° \$\bar{\text{2}}\$26'51 4° \$\bar{\text{3}}\$36'07 12° \$\bar{\text{4}}\$21'50 5° \$\bar{\text{4}}\$71'02 9° \$\bar{\text{2}}\$17'02 9° \$\bar{\text{2}}\$12'50 5° \$\bar{\text{4}}\$47'33 13° \$\bar{\text{3}}\$57'44 16° \$\bar{\text{4}}\$14'36 16° \$\bar{\text{2}}\$14'36 16° \$\bar{\text{2}}\$24'01 18° \$\bar{\text{3}}\$30'38 26° \$\bar{\text{2}}\$24'28 23° \$\bar{\text{3}}\$25'59 19° \$\bar{\text{2}}\$29'02 27° \$\bar{\text{2}}\$28'47	2°01'25 9.91483 AU -2°43'06 7.97536 AU -2°17'31 2°18'05 10.04075 AU -2°57'46 8.11538 AU -2°25'24 2°26'02 10.19250 AU 8.27611 AU -3°01'38

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11754 in astronomical counting style is the year 11755 BCE in historical counting style. -11754 Mar 17 j 06:58 29° ₹ 50'09 10.36017 AU max. Earth dist. minimum elong -11748 May 27 j 17:34 10° **X** 54'14 0°28'09 -11754 Mar 18 j 14:29 0°궁 max. Earth dist. -11748 May 27 j 09:16 10°\\$51'52 11.22932 AU -11754 Apr 02 j 23:06 1°る54'17 -11748 Jun 13 j 14:11 12°\mathbf{4}9'25 morning rise morning rise -11754 Jul 13 j 11:28 9°**る**32'33 -11748 Sep 19 j 03:41 19° **∺**27'46 retrograde retrograde -11754 Sep 18 j 11:22 -11748 Nov 27 j 10:33 16° **∺** 13'00 -0°17'29 opposition 6°**る**08'10 -2°55'39 opposition -11754 Sep 17 j 16:48 -11748 Nov 27 j 19:58 16°**米**11'16 9.26656 AU min. Earth dist. 6°る11'54 8.44773 AU min. Earth dist. -11754 Nov 26 j 07:38 2°**정**40'01 direct direct -11747 Feb 07 j 12:24 12° **★** 52'00 -11753 Mar 12 j 05:17 10°**♂**28'31 -11747 May 21 j 20:19 19° **∺**48'13 evening set evening set conjunction -11753 Mar 29 j 23:21 12°♂38'20 -2°17'02 conjunction -11747 Jun 07 j 18:41 21° **X** 43'15 -0°00'08 minimum elong -11753 Mar 29 j 23:23 12°♂38'20 2°17'41 minimum elong -11747 Jun 07 j 18:41 21° ¥43'15 0°00'16 -11753 Mar 30 j 20:28 12°₹44'48 10.53412 AU -11747 Jun 07 j 11:45 21°**)** 41'18 max. Earth dist. behind sun begin morning rise -11753 Apr 16 j 13:07 14°정46'46 behind sun end -11747 Jun 08 j 01:38 21° **★**45'12 retrograde -11753 Jul 25 j 21:55 22°쥥10'20 max. Earth dist. -11747 Jun 07 j 04:42 21° **€** 39'16 11.29661 AU opposition -11753 Oct 01 j 05:41 18°₹48'02 -2°41'15 asc. node -11747 Jun 09 j 10:03 21° **∺** 54'28 min. Earth dist. -11753 Sep 30 j 14:51 18°**궁**50'58 8.62104 AU morning rise -11747 Jun 24 j 12:27 23° **∺** 37'04 direct -11753 Dec 09 j 20:25 15°₹20'56 -11747 Sep 13 j 21:46 evening set -11752 Mar 24 j 11:43 22°₹58'03 retrograde -11747 Sep 30 j 03:25 0°Υ13'04 -11747 Oct 16 j 12:15 30°R € conjunction -11752 Apr 11 j 02:38 25°る04'32 -2°02'49 opposition -11747 Dec 08 j 19:16 26° \tag{58'54} 0°16'18 minimum elong -11752 Apr 11 j 02:41 25°る04'33 2°03'26 min. Earth dist. -11747 Dec 09 j 09:38 26° \( \)56'16 9.31880 AU max. Earth dist. -11752 Apr 11 j 18:32 25°る09'20 10.70545 AU direct -11746 Feb 19 i 00:35 23° + 38'52 morning rise -11752 Apr 28 j 12:33 27°る09'32 -11746 May 28 i 01:58  $0^{\circ}\Upsilon$ -11752 May 23 j 22:11 evening set -11746 Jun 01 j 20:21 0°**Y**31'34 0°≈ retrograde -11752 Aug 05 j 22:55 4°≈19'53 -11752 Oct 12 j 14:47 0°≈59'35 -2°20'02 -11746 Jun 18 j 15:21  $2^{\circ}$   $\Upsilon$  25'30  $0^{\circ}$  27'25 opposition conjunction min. Earth dist. -11752 Oct 12 j 05:05 1°≈01'28 8.78777 AU -11746 Jun 18 j 15:20 2°Υ25'30 0°27'24 minimum elong -11752 Oct 25 j 13:48 30°R 궁 max. Earth dist. -11746 Jun 17 j 20:07 2°**Υ**20'01 11.33292 AU -11752 Dec 21 j 21:43 27°₹33'40 -11746 Jul 05 j 06:32 4°**Υ**18'24 direct morning rise -11746 Oct 11 j 02:44 10° Υ 54'19 -11751 Feb 16 j 02:51 0°≈ retrograde -11751 Apr 06 j 04:54 opposition -11746 Dec 20 j 03:44 7°**Υ**'40'18 0°49'16 evening set 5°≈00'01 -11746 Dec 20 j 21:32 7°**Y**37'04 9.33942 AU min. Earth dist. -11751 Apr 23 j 16:30 7°≈03'29 -1°43'36 -11745 Mar 02 j 09:57 4°**Υ**21'03 conjunction direct -11751 Apr 23 j 16:33 7°≈03'29 1°44'10 -11745 Jun 12 j 17:43 11°**Υ**11'58 minimum elong evening set -11751 Apr 24 j 01:41 7°≈06'12 10.86642 AU -11745 Jun 28 j 11:27 12°**Υ**58'51 11.33710 AU max. Earth dist. max. Earth dist. -11751 May 10 j 22:53 9°≈05'23 morning rise -11745 Jun 29 j 09:45 13° $\Upsilon$ 05'13 0°53'52 -11751 Jul 13 j 03:19 15°≈ conjunction retrograde -11751 Aug 17 j 13:54 16°≈04'23 minimum elong -11745 Jun 29 j 09:43 13°**Υ**05'12 0°53'59 -11751 Sep 22 j 14:05 15°R≈ morning rise -11745 Jul 15 j 22:28 14°**Υ**57'38 opposition -11751 Oct 24 j 15:51 12°≈45'54 -1°53'39 retrograde -11745 Oct 22 j 07:30 21° γ 35'39 min. Earth dist. -11751 Oct 24 j 11:24 12°≈46'45 8.94089 AU opposition -11745 Dec 31 j 13:21  $18^{\circ}$ **Y**21'26  $1^{\circ}$ 20'31 -11750 Jan 03 j 12:57 9°≈21'14 min. Earth dist. -11744 Jan 01 j 09:53 18°**Υ**17'43 9.32766 AU direct -11750 Apr 03 j 18:48 15°≈ -11744 Mar 12 j 18:05 15°**Υ**02'43 direct -11750 Apr 18 j 10:10 16°≈37'53 -11744 Jun 22 j 14:18 21°**Υ**53'32 evening set evening set max. Earth dist. -11744 Jul 08 j 02:26 23°**Y**′39'20 11.30878 AU -11750 May 05 j 18:24 18°≈38'39 -1°20'37 conjunction -11744 Jul 09 i 03:38 23°**Υ**46'34 1°18'30 minimum elong -11750 May 05 j 18:27 18°≈38'40 1°21'06 conjunction -11744 Jul 09 i 03:35 23°**Υ**46'33 max. Earth dist. -11750 May 05 j 20:36 18°≈39'18 11.01066 AU minimum elong -11744 Jul 25 i 14:15 25°**Υ**38'59 morning rise -11750 May 22 j 21:29 20°≈37'55 morning rise retrograde -11750 Aug 28 j 21:54 27°≈27'45 -11744 Sep 07 i 09:05 0°8 -11750 Nov 05 j 10:33 24°≈10'49 -1°23'34 retrograde -11744 Nov 01 j 13:30 2°**8**21'12 opposition min. Earth dist. -11750 Nov 05 j 10:35 24°≈10'48 9.07462 AU -11744 Dec 29 j 14:15 30° R**°**Y opposition -11749 Jan 15 j 21:50 20°≈47'26 -11743 Jan 11 j 01:55 29°**Y**′06'24 1°49'11 direct -11743 Jan 12 j 01:25 29°**Υ**'02'08 9.28355 AU evening set -11749 Apr 30 j 05:02 27°≈55'41 min. Earth dist. -11743 Mar 23 j 23:24 25°**Y**47'58 direct conjunction -11749 May 17 j 10:01 29°≈54'08 -0°55'02 -11743 Jun 08 j 12:03 ್ಣಿ ೧°႘ minimum elong -11749 May 17 j 10:03 29°≈54'09 0°55'24 evening set -11743 Jul 03 j 11:52 2°**8**40'24 max. Earth dist. -11749 May 17 j 06:31 29°≈53'08 11.13301 AU -11749 May 18 j 06:18 -11743 Jul 19 j 22:43 4°\begin{align\*} 33'40 1°40'34 \end{align\*} 0°**)**€ conjunction -11749 Jun 03 j 09:51 -11743 Jul 19 j 22:40 4°**8**33'39 1°40'56 morning rise 1°**米**51'08 minimum elong -11749 Sep 09 j 02:53 4°**8**25'24 11.24848 AU retrograde 8°**)** 34'07 max. Earth dist. -11743 Jul 18 j 18:06 opposition -11749 Nov 17 j 00:17 5°**¥**18'24 -0°51'07 morning rise -11743 Aug 05 j 07:57 6°**8**26'35 min. Earth dist. -11749 Nov 17 j 04:33 5°**升**17'37 9.18434 AU retrograde -11743 Nov 13 j 02:04 13°**8**15'09 direct -11748 Jan 27 j 20:33 1°**)**56'18 opposition -11742 Jan 22 j 18:46 9°**8**59'24 2°14'23 evening set -11748 May 10 j 15:46 8°**)** 57'40 min. Earth dist. -11742 Jan 23 j 20:53 9°**8**54'39 9.20793 AU -11742 Apr 04 j 08:46 6°840'58 direct -11748 May 27 j 17:33 10° **€** 54'14 -0°27'54 -11742 Jul 14 j 12:06 13°**8**36'43 conjunction evening set

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 14 Attention, astronomical year style is used: The year -11742 in astronomical counting style is the year 11743 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	e year -11742	in astronomical co	ounting style is the year	r 11743 BCE in historica	l counting sty	le.
	-11742 Jul 26 j 12:01	15° <b>8</b>		minimum elong	-11736 Oct 09 j 23:33	28°526'50	1°58'18
				max. Earth dist.	-11736 Oct 09 j 10:25		10.21037 AU
conjunction	-11742 Jul 30 j 21:14				-11736 Oct 21 j 23:45		
minimum elong	-11742 Jul 30 j 21:11			morning rise	-11736 Oct 27 j 02:21		
max. Earth dist.	-11742 Jul 29 j 14:58		11.15748 AU	retrograde	-11735 Feb 11 j 12:02		
morning rise	-11742 Aug 16 j 05:46			opposition	-11735 Apr 21 j 22:20		
retrograde	-11742 Nov 24 j 21:38		2025100	min. Earth dist.	-11735 Apr 22 j 06:10		8.12945 AU
opposition	-11741 Feb 03 j 17:13			direct	-11735 Jun 27 j 22:34		
min. Earth dist.	-11741 Feb 04 j 20:07		9.10248 AU	evening set	-11735 Oct 06 j 20:28	9° <b>Ω</b> 59'15	
direct	-11741 Apr 15 j 20:18 -11741 Jul 25 j 16:41			agniumation	11725 Oct 24: 00:25	120 0 1 4102	1922121
evening set max. Earth dist.	-11741 Jul 23 j 18:41 -11741 Aug 09 j 18:59		11 02904 ATT	conjunction minimum elong	-11735 Oct 24 j 00:35 -11735 Oct 24 j 00:39		
max. Earm dist.	-11/41 Aug 09 J 16.39	20 033 13	11.03804 AU	max. Earth dist.	-11735 Oct 24 j 00:39 -11735 Oct 23 j 18:37		
conjunction	-11741 Aug 11 j 01:08	26° <b>×</b> 42'00	2°13'50	morning rise	-11735 Nov 10 j 10:13		10.03341 AC
minimum elong	-11741 Aug 11 j 01:05		2°14'22	morning risc	-11735 Nov 10 j 10:15 -11735 Nov 14 j 05:29		
morning rise	-11741 Aug 27 j 09:42		2 1422	retrograde	-11734 Feb 26 j 14:43		
morning rise	-11741 Sep 08 j 10:51			opposition	-11734 May 06 j 12:43		1°38'03
retrograde	-11741 Dec 07 j 03:54			min. Earth dist.	-11734 May 06 j 14:02		7.98327 AU
opposition	-11740 Feb 15 j 22:44		2°50'31	direct	-11734 Jul 11 j 21:33		
min. Earth dist.	-11740 Feb 17 j 00:58		8.97030 AU	evening set	-11734 Oct 21 j 05:50		
	-11740 Mar 24 j 02:44	30°R₩		Č	J		
direct	-11740 Apr 26 j 13:18	29° <b>8</b> 07'29		conjunction	-11734 Nov 07 j 16:29	26° <b>Ω</b> 29'45	1°02'39
	-11740 May 29 j 04:26	$\Pi^{\circ}0$		minimum elong	-11734 Nov 07 j 16:32	26° <b>Ω</b> 29'46	1°03'03
evening set	-11740 Aug 05 j 03:45	6° <b>Ⅱ</b> 14'50		max. Earth dist.	-11734 Nov 07 j 18:03	26° <b>Ω</b> 30′17	9.92081 AU
max. Earth dist.	-11740 Aug 20 j 06:44	8° <b>Ⅲ</b> 03′15	10.89436 AU	morning rise	-11734 Nov 25 j 08:59	28° <b>Q</b> 50′28	
					-11734 Dec 04 j 08:37	0° <b>m</b> )	
conjunction	-11740 Aug 21 j 12:22	8° <b>Ⅱ</b> 12'11	2°23'27	retrograde	-11733 Mar 14 j 01:07	7° <b>m</b> 30'43	
minimum elong	-11740 Aug 21 j 12:20	8° <b>Ⅱ</b> 12'10	2°24'03	opposition	-11733 May 21 j 10:10	3° <b>m</b> 58'34	0°56'28
morning rise	-11740 Sep 06 j 22:04			min. Earth dist.	-11733 May 21 j 05:11		7.86623 AU
retrograde	-11740 Dec 18 j 20:48			direct	-11733 Jul 26 j 06:19		
opposition	-11739 Feb 27 j 12:40			evening set	-11733 Nov 05 j 04:45	8° <b>m</b> 47'35	
min. Earth dist.	-11739 Feb 28 j 13:37		8.81655 AU				
direct	-11739 May 08 j 10:50			conjunction	-11733 Nov 22 j 21:40		
evening set	-11739 Aug 16 j 22:59		10.50044.477	minimum elong	-11733 Nov 22 j 21:42		
max. Earth dist.	-11739 Sep 01 j 04:25	19°Щ55'57	10.73244 AU	max. Earth dist.	-11733 Nov 23 j 07:04		9.82148 AU
i <b>4</b> :	11720 0 02:00.50	200T0440	2027117	morning rise	-11733 Dec 10 j 20:23		
conjunction	-11739 Sep 02 j 08:50 -11739 Sep 02 j 08:50			retrograde	-11732 Mar 28 j 16:11		0010105
minimum elong morning rise	-11739 Sep 02 j 08:30 -11739 Sep 18 j 21:03		2-27-30	opposition min. Earth dist.	-11732 Jun 04 j 12:34 -11732 Jun 04 j 01:43		
retrograde	-11739 Sep 18 j 21:03 -11739 Dec 31 j 23:33			direct	-11732 Juli 04 j 01:43 -11732 Aug 09 j 00:25		7.78030 AU
opposition	-11739 Dec 31 j 23:33 -11738 Mar 12 j 12:08		3°00'52	desc. node	-11732 Aug 09 j 00:23 -11732 Aug 22 j 21:17		
min. Earth dist.	-11738 Mar 13 j 11:04		8.64773 AU	evening set	-11732 Nov 19 j 15:13	-	
direct	-11738 May 20 j 16:35		0.04773710	evening set	11752 1101 17 15.15	23 114 42 30	
	-11738 Aug 26 j 10:05			conjunction	-11732 Dec 07 j 13:30	26° m 07'35	-0°10'41
evening set	-11738 Aug 29 j 03:52			minimum elong	-11732 Dec 07 j 13:29	-	
C	Z j			behind sun begin	-11732 Dec 07 i 07:50	-	
conjunction	-11738 Sep 14 j 16:26	2°523'00	2°24'37	behind sun end	-11732 Dec 07 j 19:09	~	
minimum elong	-11738 Sep 14 j 16:27	2°523'00	2°25'17	max. Earth dist.	-11732 Dec 08 j 06:43	26° m 13'24	9.76268 AU
max. Earth dist.	-11738 Sep 13 j 15:23	2° <b>©</b> 15'10	10.55912 AU	morning rise	-11732 Dec 25 j 17:00		
morning rise	-11738 Oct 01 j 08:27	4° <b>5</b> 27'08			-11731 Jan 05 j 17:29	0∘ <b>⊽</b>	
retrograde	-11737 Jan 14 j 15:03	12°514'49		retrograde	-11731 Apr 13 j 07:48	7° <b>≏</b> 23'31	
opposition	-11737 Mar 25 j 21:32	8°950'10	2°53'52	opposition	-11731 Jun 19 j 16:53	3° <b>≏</b> 49'58	-0°37'42
min. Earth dist.	-11737 Mar 26 j 16:57	8° <b>5</b> 46'26	8.47120 AU	min. Earth dist.	-11731 Jun 19 j 00:47	3° <b>ჲ</b> 53′21	7.75028 AU
direct	-11737 Jun 02 j 09:21	5° <b>5</b> 28'34		direct	-11731 Aug 24 j 01:38		
evening set	-11737 Sep 10 j 20:17	13° <b>©</b> 03'13		evening set	-11731 Dec 05 j 10:25	8° <b>≏</b> 48'50	
							00.45:
conjunction	-11737 Sep 27 j 12:58			conjunction	-11731 Dec 23 j 12:39		
minimum elong	-11737 Sep 27 j 13:01			minimum elong	-11731 Dec 23 j 12:36		
max. Earth dist.	-11737 Sep 26 j 17:23		10.38214 AU	max. Earth dist.	-11731 Dec 24 j 12:51		9.74897 AU
morning rise	-11737 Oct 14 j 09:52			morning rise	-11730 Jan 10 j 19:00		
retrograde	-11736 Jan 28 j 19:31		2027145	retrograde	-11730 Apr 28 j 19:56		1022101
opposition	-11736 Apr 07 j 16:54			opposition	-11730 Jul 04 j 19:42		
min. Earth dist. direct	-11736 Apr 08 j 07:10 -11736 Jun 14 j 10:46		8.29534 AU	min. Earth dist. direct	-11730 Jul 03 j 23:12 -11730 Sep 08 j 07:04		1.10023 AU
evening set	-11736 Jun 14 j 10:46 -11736 Sep 23 j 01:29			evening set	-11730 Sep 08 j 07:04 -11730 Dec 21 j 09:59		
ovening set	11/30 Sep 23 J 01.29	20 -21011		evening set	11/30 Dec 21 J 09.39	25 <b>—</b> 55 40	
conjunction	-11736 Oct 09 j 23:29	28°526'49	1°57'41	conjunction	-11729 Jan 08 j 14:20	26° <b>₽</b> 21'20	-1°22'11
2011,011011	11,50 000 07 125.27		20,11	-0.1,6.1011	11,2, van 00 j 17.20		

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11729 in astronomical counting style is the year 11730 BCE in historical counting style -11729 Jan 08 j 14:16 26° **2**21'18 1°22'26 minimum elong conjunction -11723 Apr 05 j 14:14 19°₹42'24 -2°09'58 minimum elong max. Earth dist. -11729 Jan 09 j 19:58 26° **2**31'17 9.78153 AU -11723 Apr 05 j 14:17 19°₹42'25 2°10'36 max. Earth dist. -11729 Jan 26 j 21:23 28° **△**47'46 -11723 Apr 06 j 08:35 19°る47'58 10.63711 AU morning rise -11729 Feb 05 i 04:10 0°M -11723 Apr 23 j 02:04 21° ₹ 48'54 morning rise -11729 May 14 j 01:00 -11723 Jul 31 j 22:25 29°る05'03 7°M28'29 retrograde retrograde -11729 Jul 19 j 18:15 3°M55'55 -2°02'15 -11723 Oct 07 j 10:32 25°₹44'21 -2°30'21 opposition opposition min. Earth dist. -11729 Jul 18 j 18:29 -11723 Oct 06 j 21:54 25°정46'49 8.72364 AU 4°**ጤ**00'56 7.81562 AU min. Earth dist. -11723 Dec 16 j 10:02 22°중18'24 -11729 Sep 23 j 13:37 direct 0°M26'10 direct -11728 Jan 06 j 08:40 8°ML53'32 evening set evening set -11722 Mar 31 j 21:30 29°♂49'29 -11722 Apr 02 j 09:31 conjunction -11728 Jan 24 j 13:21 11°ML17'44 -1°50'23 -11728 Jan 24 j 13:16 11°ML17'42 1°50'47 -11722 Apr 18 j 10:35 1°≈54'12 -1°52'52 minimum elong conjunction -11728 Jan 25 j 22:29 11°M28'45 9.85796 AU -11722 Apr 18 j 10:38 max. Earth dist. minimum elong 1°≈54'13 1°53'27 -11728 Feb 11 j 19:07 13°M42'10 morning rise max. Earth dist. -11722 Apr 18 j 22:44 1°≈57'49 10.80662 AU -11728 Feb 21 j 22:12 15°M morning rise -11722 May 05 j 18:39 3°≈57'23 retrograde -11728 May 27 j 19:28 22° ML12'17 retrograde -11722 Aug 12 j 18:30 11°≈01'11 min. Earth dist. -11728 Aug 01 j 08:06 18°M-46'26 7.91232 AU opposition -11722 Oct 19 j 15:18 7°≈42'23 -2°06'08 opposition -11728 Aug 02 j 09:44 18°M41'03 -2°32'34 min. Earth dist. -11722 Oct 19 j 07:24 7°≈43'54 8.88578 AU direct -11728 Oct 07 j 16:50 15°ML11'12 direct -11722 Dec 29 i 06:18 4°≈17'43 evening set -11727 Jan 21 j 01:50 23°M 33'36 evening set -11721 Apr 13 j 08:14 11°≈38'25 conjunction -11727 Feb 08 i 05:24 25° ML55'19 -2°10'53 conjunction -11721 Apr 30 j 18:07 13°≈40'17 -1°31'26 minimum elong -11727 Feb 08 i 05:21 25° ML55'18 2°11'24 minimum elong -11721 Apr 30 j 18:10 13°≈40'18 1°31'57 max. Earth dist. -11727 Feb 09 j 15:48 26° ML06'35 9.97270 AU max. Earth dist. -11721 May 01 j 00:15 13°≈42'05 10.96023 AU morning rise -11727 Feb 26 i 08:29 28°M 16'45 -11721 May 12 j 02:13 15°≈ -11727 Mar 12 i 01:56 0° ₹ -11721 May 17 j 22:36 15°≈40'36 morning rise -11727 Jun 11 j 02:18 6° ₹33'22 -11721 Aug 24 i 06:41 22°≈34'11 retrograde retrograde -11727 Aug 16 j 16:04 3° ₹ 03'54 -2°52'19 opposition -11721 Oct 31 j 12:57 19°≈17'04 -1°37'33 opposition min. Earth dist. -11727 Aug 15 j 14:23 3°**尽**09'15 8.04330 AU min. Earth dist. -11721 Oct 31 j 10:47 19°≈17'28 9.02891 AU -11727 Sep 30 j 23:52 30°RML direct -11720 Jan 10 j 17:19 15°≈53'37 -11720 Apr 24 j 07:52 23°≈05'18 -11727 Oct 22 j 13:58 29°MJ34'17 direct evening set -11727 Nov 13 j 04:13 0° ₹ -11726 Feb 05 j 09:20 7° ₹ 48'59 -11720 May 11 j 14:26 25°≈04'42 -1°06'54 evening set conjunction -11720 May 11 j 14:29 25°≈04'43 1°07'18 minimum elong -11726 Feb 23 j 10:45 10° ₹ 07'31 -2°22'47 -11720 May 11 j 13:41 25°≈04'29 11.09195 AU max. Earth dist. conjunction -11726 Feb 23 j 10:44 10° **₹** 07'31 2°23'24 -11720 May 28 j 15:39 27°≈02'36 minimum elong morning rise -11726 Feb 24 j 20:07 10° ₹ 18'15 10.11764 AU -11720 Jun 25 j 08:21 0°**米** max. Earth dist. morning rise -11726 Mar 13 j 10:15 12° ₹25'21 retrograde -11720 Sep 03 j 12:33 3°**米**48'16 retrograde -11726 Jun 24 j 21:02 20° ₹ 26'44 opposition -11720 Nov 11 j 04:56 0° **★** 32'29 -1°06'02 opposition -11726 Aug 30 j 12:22 16°**尽** 59'22 -3°01'05 min. Earth dist. -11720 Nov 11 j 08:40 0° **∺** 31'48 9.14811 AU min. Earth dist. -11726 Aug 29 j 12:36 17°**尽**04'15 8.19963 AU -11720 Nov 18 j 11:25 30°R≈ -11726 Nov 06 j 03:05 13°**尽** 30'20 direct -11719 Jan 21 j 19:35 27°≈10'12 direct -11725 Feb 20 j 04:02 21° ₹35'13 -11719 Mar 24 j 22:22 0°**米** evening set -11719 May 05 j 22:31 4° **∺** 14'25 evening set conjunction -11725 Mar 10 j 02:35 23° ₹ 50'13 -2°26'05 -11725 Mar 10 j 02:35 23° ₹ 50'13 2°26'45 -11719 May 23 j 01:40 6° \(\mathbf{H}\) 11'44 -0°40'20 minimum elong conjunction -11725 Mar 11 j 08:35 23° ₹ 59'41 10.28322 AU -11719 May 23 j 01:41 6° \*\frac{1}{1}1'44 0° 40'38 max. Earth dist. minimum elong -11725 Mar 27 j 22:07 26° ₹04'11 -11719 May 22 j 17:48 6° \( \) 409'28 11.19786 AU morning rise max. Earth dist. -11725 May 01 i 06:01 0°る -11719 Jun 08 i 23:50 8° **★** 07'39 morning rise retrograde -11725 Jul 08 i 02:40 3°₹49'48 retrograde -11719 Sep 14 j 13:29 14° \(\frac{1}{2}\)47'41 -11719 Nov 22 j 16:43 11°**)** 32'52 -0°32'49 opposition -11725 Sep 12 i 22:02 0°ਰ24'42 -2°59'27 opposition min. Earth dist. -11725 Sep 12 j 01:30 0°る28'51 8.37159 AU min. Earth dist. -11719 Nov 23 i 01:04 11° \( \frac{1}{3} \) 31'19 9.24009 AU -11725 Sep 18 j 00:29 30°R ✓ direct -11718 Feb 02 j 16:29 8°**H** 11'37 -11725 Nov 20 j 07:17 26° ₹ 56'31 -11718 May 17 j 05:51 15°**米**09'55 direct evening set -11724 Jan 20 j 23:24 0°る -11724 Mar 05 j 08:23 4°₹50'20 -11718 Jun 03 j 05:43 17°**米**05'33 -0°12'47 evening set conjunction -11718 Jun 03 j 05:44 17°**米**05'33 0°12'57 minimum elong -11724 Mar 23 j 03:48 7°**ਰ**01'44 -2°21'27 behind sun begin -11718 Jun 03 j 01:25 17°**米**04'20 conjunction -11724 Mar 23 j 03:50 7°**ට**01'44 2°22'08 behind sun end -11718 Jun 03 j 10:03 17°**米**06'46 minimum elong -11724 Mar 24 j 04:29 7°る09'22 10.45961 AU -11718 Jun 02 j 16:46 17° **X** 01'51 11.27521 AU max. Earth dist. max. Earth dist. -11724 Apr 09 j 19:25 9°**궁**11'52 -11718 Jun 20 j 00:53 18° ¥ 59'54 morning rise morning rise -11724 Jul 19 j 17:29 16°정42'07 retrograde retrograde -11718 Sep 25 j 14:58 25° **∺** 36'37 opposition -11724 Sep 24 j 21:09 13°정19'18 -2°48'41 asc. node -11718 Nov 23 j 03:45 23° **★** 09'57 min. Earth dist. -11724 Sep 24 j 04:31 13°₹22'36 8.54940 AU opposition -11718 Dec 04 j 02:05 22° **★**22'21 0°01'00 direct -11724 Dec 03 j 02:28 9°**궁**52'09 min. Earth dist. -11718 Dec 04 j 14:23 22° **★**20'06 9.30245 AU -11723 Mar 18 j 21:59 17°₹34'29 -11717 Feb 14 j 07:24 19°**米** 01'59 evening set direct

evening set

-11717 May 28 j 07:35 25° **ਮ** 55'59

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11717 in astronomical counting style is the year 11718 BCE in historical counting style. -11717 Jun 13 j 11:13 27°**)** €45'30 11.32191 AU opposition max. Earth dist. -11711 Feb 09 i 17:21 27°**8**26'34 2°44'16 min. Earth dist. conjunction -11717 Jun 14 j 04:18 27° **X** 50'22 0°14'59 -11711 Apr 21 j 14:13 24°**8**07'15 direct minimum elong -11717 Jun 14 j 04:17 27° **X** 50'21 0°14'56 -11711 Jul 20 j 22:06 0°**Ⅱ** -11717 Jun 14 j 01:30 27° <del>X</del> 49'34 behind sun begin -11711 Jul 31 j 07:06 evening set 1°**Ⅱ**11'26 -11717 Jun 14 j 07:04 27° **H** 51'08 -11711 Aug 15 j 09:10 2°**П**58'48 10.95492 AU behind sun end max. Earth dist. -11717 Jun 30 j 20:34 29° **∺**43'36 morning rise -11711 Aug 16 j 15:23 3°**Д**07'50 2°19'45 -11717 Jul 03 j 07:39  $0^{\circ}\Upsilon$ conjunction 2°20'19 6°**Ƴ**19'12 3°**Ⅱ**07'50 retrograde -11717 Oct 06 j 14:18 minimum elong -11711 Aug 16 j 15:21 opposition -11717 Dec 15 j 10:26  $3^{\circ}$  \( \begin{picture}
 \chi^{\chi} 05'07
 \] 0°34'25 morning rise -11711 Sep 02 j 00:33 5°**Д**04'37 min. Earth dist. -11717 Dec 16 j 03:09  $3^{\circ}$  **Y** 02'04 9.33358 AU retrograde -11711 Dec 13 j 07:46 12°**Ⅲ**18'16 -11716 Feb 07 j 21:46 30°R € -11710 Feb 22 j 02:59 8°**Д**58'16 opposition 2°56'17 -11716 Feb 25 j 16:46 29°**)** 45'25 -11710 Feb 23 j 04:47 8°**Д**53'29 direct min. Earth dist. 8.88313 AU -11716 Mar 14 j 10:13  $0^{\circ}\Upsilon$ direct -11710 May 03 j 09:36 5°**Ц**38'30 evening set -11716 Jun 07 j 06:00 6°**Y**36′52 evening set -11710 Aug 11 j 21:50 12°**Ⅱ**49'58 max. Earth dist. -11710 Aug 27 j 03:19 14°**Д**40'10 10.80430 AU conjunction -11716 Jun 23 j 23:28 8°**Υ**'30'23 0°41'59 minimum elong -11716 Jun 23 j 23:26 8°**Y**'30'22 0°42'02 conjunction -11710 Aug 28 j 07:01 14°**Д**48'36 2°26'21 max. Earth dist. -11716 Jun 23 j 01:29 8°**Υ**24'07 11.33678 AU minimum elong -11710 Aug 28 j 07:00 14°**Д**48'36 morning rise -11716 Jul 10 j 13:14 10°**Υ**22'58 morning rise -11710 Sep 13 j 17:54 16°**Д**47'55 retrograde -11716 Oct 16 j 15:25 16° Υ 59'38 retrograde -11710 Dec 26 j 05:26 24° II 14'28 opposition -11716 Dec 25 j 19:07  $13^{\circ}$   $\Upsilon$  45'22  $1^{\circ}$  06'32 opposition -11709 Mar 06 j 21:23 20° II 52'37 3°01'18 -11709 Mar 07 j 20:21 20°**Д**48'18 min. Earth dist. -11716 Dec 26 j 16:06 13°**Υ**'41'33 9.33271 AU min. Earth dist. 8.72447 AU direct  $-11715 \text{ Mar } 08 \text{ j } 00:52 \quad 10^{\circ} \Upsilon 26'07$ direct -11709 May 15 j 11:35 17°**Ⅲ**32'15 evening set -11715 Jun 18 j 02:38 17°**Υ**16'45 evening set -11709 Aug 23 j 21:39 24°**Д**52'18 max. Earth dist. -11709 Sep 08 j 08:02 26°Д46'04 10.63944 AU -11715 Jul 04 j 17:04 19°**Υ**09'51 1°07'31 conjunction -11715 Jul 04 j 17:02 19°**Υ**09'50 1°07'42 -11709 Sep 09 j 08:55 26° II 53'46 2°26'46 minimum elong conjunction max. Earth dist. -11715 Jul 03 j 15:13 19°**Υ**02'27 11.31960 AU -11709 Sep 09 j 08:56 26°**Д**53'46 2°27'26 minimum elong -11715 Jul 21 j 04:44 21°**Υ**02'14 -11709 Sep 25 j 22:50 28° II 56'12 morning rise morning rise -11715 Oct 27 j 18:29 27° γ 42'12 -11709 Oct 04 j 20:06 0°5 retrograde -11714 Jan 06 j 05:57 24° $\Upsilon^2$ 27'21 1°36'28 retrograde -11708 Jan 08 j 16:42 6°536'49 opposition -11714 Jan 07 j 05:26 24°**Y**23'05 9.29996 AU -11708 Mar 19 j 01:39 3°513'04 2°58'18 min. Earth dist. opposition -11714 Mar 19 j 07:40 21°**Υ**08'22 -11708 Mar 19 j 21:09 3°509'20 8.55472 AU min. Earth dist. direct -11714 Jun 28 j 23:05 27°**Y** 59'53 -11708 May 14 j 11:03 30°R II evening set -11714 Jul 14 j 07:32 29°**Υ**45'05 11.27089 AU -11708 May 26 j 22:03 29°**Ⅲ**51'56 max. Earth dist. direct -11708 Jun 08 j 06:04 0°ഇ conjunction -11714 Jul 15 j 11:05 29°**Υ**53'01 1°30'50 evening set -11708 Sep 04 j 08:14 7°521'37 minimum elong -11714 Jul 15 j 11:02 29°**Υ**'53'00 1°31'09 -11714 Jul 16 j 11:19 0°8 conjunction -11708 Sep 20 j 22:45 9°\$26'26 2°20'20 morning rise -11714 Jul 31 j 20:56 1°**8**45'41 minimum elong -11708 Sep 20 j 22:47 9°\$26'27 2°21'00 retrograde -11714 Nov 08 j 05:20 8°\( \mathbb{2}\)31'06 max. Earth dist. -11708 Sep 20 j 01:23 9°5519'42 10.46730 AU -11713 Jan 17 j 20:17 5°**8**15'21 2°03'21 morning rise -11708 Oct 07 j 17:05 11°532'33 opposition min. Earth dist. -11713 Jan 18 j 21:00 5°**8**10'51 9.23624 AU retrograde -11707 Jan 21 j 15:32 19°527'54 -11713 Mar 30 j 16:24 1°856'27 -11707 Apr 01 j 16:17 16°502'12 2°46'26 direct opposition -11707 Apr 02 i 07:41 15°\$59'12 8.38158 AU evening set -11713 Jul 09 j 21:31 8°\(250'31\) min. Earth dist. -11707 Jun 08 i 17:06 12°540'09 max. Earth dist. -11713 Jul 25 j 02:33 10°**8**35'47 11.19208 AU direct evening set -11707 Sep 17 i 07:09 20°520'14 -11713 Jul 26 j 07:34 10°844'13 1°51'11 conjunction max. Earth dist. -11707 Oct 03 j 10:00 22°523'37 10.29616 AU minimum elong -11713 Jul 26 i 07:31 10°844'12 1°51'35 -11713 Aug 11 j 16:14 12°**8**37'42 conjunction -11707 Oct 04 i 02:17 22°\$28'51 2°06'36 morning rise -11713 Sep 02 j 10:26 15°8 minimum elong -11707 Oct 04 j 02:20 22°528'52 2°07'14 -11713 Nov 19 j 21:20 19°**8**30'33 morning rise -11707 Oct 21 j 02:16 24°539'04 retrograde -11712 Jan 29 j 15:30 16°**8**13'39 2°26'17 opposition -11707 Dec 08 j 04:24  $0^{\circ}\Omega$ -11706 Feb  $05 \text{ j } 01:45 \quad 2^{\circ} \Omega 49'04$ min. Earth dist. -11712 Jan 30 j 17:38 16°808'52 9.14347 AU retrograde -11712 Feb 15 j 20:10 15°R -11706 Apr 07 j 12:25 30° Rூ direct -11712 Apr 10 j 00:12 12°**8**54'38 opposition -11706 Apr 15 j 17:07 29°\$21'26 2°25'15 -11712 May 31 j 22:15 15°8 min. Earth dist. -11706 Apr 16 j 03:42 29°519'21 8.21392 AU -11712 Jul 19 j 23:41 19°**8**52'58 direct -11706 Jun 22 j 00:26 25°558'23 evening set max. Earth dist. -11712 Aug 04 j 01:44 21°**8**38'44 11.08564 AU -11706 Aug 29 j 17:22 0 $^{\circ}\Omega$ -11706 Sep 30 j 19:30 evening set 3°**Ω**49'08 conjunction -11712 Aug 05 j 08:20 21°**8**47'44 2°07'45 minimum elong -11712 Aug 05 j 08:17 21°**8**47'43 2°08'14 conjunction -11706 Oct 17 j 20:28 6°Ω01'50 1°45'31

minimum elong

max. Earth dist.

morning rise

-11706 Oct 17 j 20:32

-11706 Oct 17 j 11:14

-11706 Nov 04 j 02:56

-11705 Jan 06 j 15:54 15°**Ω** 

6°**Ω**01'52

8°**Ω**16'22

1°46'04

5°**Ω**58'49 10.13508 AU

morning rise

retrograde

-11712 Aug 21 j 16:48 23°**8**42'35

-11712 Nov 30 j 21:24 0°**Д**44'54

-11712 Dec 31 j 21:58 30°R8

 $0^{\circ}\Pi$ 

-11712 Oct 31 j 10:23

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11705 in astronomical counting style is the year 11706 BCE in historical counting style. -11705 Feb 19 i 22:59  $16^{\circ}\Omega$ 39'58 retrograde -11700 Dec 12 j 04:40 -11705 Apr 06 j 03:57 15°RΩ -11700 Dec 29 j 08:47 evening set 2°M11'14 -11705 Apr 30 j 03:24 13° $\Omega$ 10'35 1°54'56 opposition min. Earth dist. -11705 Apr 30 j 07:58 13° **Ω**09'39 8.06114 AU -11699 Jan 16 j 13:22 4°MJ36'13 -1°38'09 conjunction -11705 Jul 05 j 19:19 9°**Ω**46'27 -11699 Jan 16 j 13:17 minimum elong 4°MJ36'11 1°38'29 direct -11705 Sep 22 j 10:47 15°**Ω** -11699 Jan 17 j 19:40 max. Earth dist. 4°M46'20 9.82352 AU -11705 Oct 14 j 22:02 17°**Ω**47'36 -11699 Feb 03 j 19:54 7°ML01'41 evening set morning rise -11699 Apr 25 j 15:43 15°M -11705 Nov 01 j 05:29 20° **Ω**04'23 1°17'36 conjunction retrograde -11699 May 21 j 11:43 15°M 37'25 -11705 Nov 01 j 05:33 20° $\Omega$ 04'24 1°18'03 minimum elong -11699 Jun 16 j 07:34 15°RM max. Earth dist. -11705 Nov 01 j 04:18 20°**Ω**03'59 9.99348 AU min. Earth dist. -11699 Jul 26 j 02:07 12°ML10'48 7.86583 AU -11705 Nov 18 j 18:41 22°**Ω**23'04 -11699 Jul 27 j 01:29 12°M 05'53 -2°19'44 morning rise opposition -11699 Oct 01 j 01:03 8°M36'21 -11704 Feb 02 j 00:04 0° Mp direct retrograde -11704 Mar 06 j 05:28 0° m 58'15 -11699 Dec 29 j 03:33 15°M -11704 Apr 08 j 19:27 30°RΩ evening set -11698 Jan 14 j 05:46 17° ML01'45 opposition -11704 May 13 j 21:37  $27^{\circ}\Omega 27'20$ min. Earth dist. -11704 May 13 j 19:29  $27^{\circ}\Omega 27'46$ 7.93265 AU conjunction -11698 Feb 01 j 09:53 19°M24'47 -2°02'26 direct -11704 Jul 18 j 23:44 24°**Ω**02'05 minimum elong -11698 Feb 01 j 09:49 19°M24'45 2°02'54 -11704 Oct 11 j 05:28 0° Mb max. Earth dist. -11698 Feb 02 j 17:47 19° ML35'18 9.91521 AU evening set -11704 Oct 28 j 14:29 2°M) 12'46 morning rise -11698 Feb 19 j 14:29 21°ML47'47 -11698 May 21 j 19:12 0° ₹ conjunction -11704 Nov 15 i 04:28 4° m 33'14 0°44'08 retrograde -11698 Jun 05 i 00:29 0° ₹11'28 minimum elong -11704 Nov 15 i 04:31 4° m 33'14 0°44'27 -11698 Jun 19 i 06:00 30°RML max. Earth dist. -11704 Nov 15 i 11:40 4° m 35'38 9.88044 AU opposition -11698 Aug 10 j 12:53 26° ML41'22 -2°44'36 morning rise -11704 Dec 03 j 00:08 6° m 55'34 min. Earth dist. -11698 Aug 09 j 13:04 26°M 46'21 7.97593 AU retrograde -11703 Mar 21 j 18:52 15° mp 39'13 direct -11698 Oct 16 j 02:34 23°ML11'42 -11703 May 28 j 21:49 12° mp 07'07 0°32'00 -11697 Jan 17 j 16:06 0° ₹ opposition min. Earth dist. -11703 May 28 j 13:06 12° mp 08'55 7.83688 AU -11697 Jan 29 j 18:55 1° ₹ 30'53 evening set -11703 Aug 02 j 13:14 8° **m** 40'43 direct -11703 Nov 12 j 19:33 16° m 59'25 evening set conjunction -11697 Feb 16 j 21:20 3° ₹ 51'05 -2°18'25 -11697 Feb 16 j 21:17 3° ₹ 51'04 2°19'00 minimum elong -11703 Nov 30 j 15:27 19° m 22'47 0°07'09 max. Earth dist. -11697 Feb 18 j 04:48 4°**尽**01'18 10.04145 AU conjunction -11703 Nov 30 j 15:27 19° **m** 22'47 0°07'18 -11697 Mar 06 j 22:47 6° ₹ 10'48 minimum elong morning rise -11703 Nov 30 j 08:45 19° m 20'33 -11697 Jun 19 j 00:59 14° ₹ 20'06 behind sun begin retrograde -11703 Nov 30 j 22:10 19° m 25'02 -11697 Aug 24 j 14:43 10° ₹ 51'45 -2°58'31 behind sun end opposition -11703 Dec 01 j 06:26 19° Mp 27'50 -11697 Aug 23 j 15:19 10° ₹ 56'34 8.11621 AU max. Earth dist. 9.80325 AU min. Earth dist. -11703 Dec 18 j 16:36 21° m 47'53 -11697 Oct 30 j 21:29 7° ₹22'19 morning rise direct desc. node -11702 Feb 10 j 07:21 27° m 57'49 evening set -11696 Feb 13 j 20:17 15° ₹32'40 -11702 Mar 11 j 19:30 0°**♀** retrograde -11702 Apr 06 j 10:54 0°**△**36'04 conjunction -11696 Mar 02 j 20:17 17°**х** 49'32 -2°25'41 -11702 May 02 j 03:47 30°R Mp minimum elong -11696 Mar 02 j 20:16 17°**х** 49'31 2°26'20 min. Earth dist. -11702 Jun 12 j 10:53 27° m 06'15 7.77969 AU max. Earth dist. -11696 Mar 04 j 01:48 17°**х** 58'57 10.19351 AU -11702 Jun 13 j 01:13 27° m 03'16 -0°15'31 morning rise -11696 Mar 20 j 17:55 20° **₹**05'31 opposition direct -11702 Aug 17 j 10:48 23° M 35'46 retrograde -11696 Jul 01 j 12:12 27° **₹** 59'17 -11702 Nov 12 j 21:34 0°**♀** min. Earth dist. -11696 Sep 05 j 08:03 24° ₹37'20 8.27726 AU -11696 Sep 06 i 05:51 24° ₹32'54 -3°01'37 evening set -11702 Nov 28 j 10:57 2°**♀**00'30 opposition -11696 Nov 13 i 07:26 21° ₹ 04'01 direct -11702 Dec 16 j 11:27 4° \(\Omega\)25'41 -0°30'54 -11695 Feb 27 i 08:00 29° ₹03'52 conjunction evening set -11702 Dec 16 j 11:25 4° \(\Omega\)25'40 0°30'54 minimum elong -11695 Mar 06 j 21:53 0°る max. Earth dist. -11702 Dec 17 i 08:51 4° \(\Omega\) 32'54 9.76642 AU morning rise -11701 Jan 03 j 16:24 6°**£**52'18 conjunction -11695 Mar 17 i 05:10 1°**ठ**17'11 -2°24'37 retrograde -11701 Apr 22 j 01:35 15° **△**40'44 minimum elong -11695 Mar 17 i 05:11 1° 중17'11 2°25'17 min. Earth dist. -11701 Jun 27 j 10:16 12° **2**11'42 7.76460 AU max. Earth dist. -11695 Mar 18 j 07:26 1°る25'24 10.36158 AU -11701 Jun 28 j 04:50 12° **2**07'48 -1°02'25 opposition morning rise -11695 Apr 03 j 22:46 3°₹29'19 -11695 Jul 14 j 10:22 11°**궁**07'28 direct -11701 Sep 01 j 13:45 8°**△**39'25 retrograde -11701 Dec 14 j 08:56 17°**♀**07'37 evening set opposition -11695 Sep 19 j 10:14 7°₹43'11 -2°54'54 -11695 Sep 18 j 15:38 7°정46'55 8.44928 AU min. Earth dist. -11700 Jan 01 j 12:21 19°**2**33'21 -1°06'54 direct -11695 Nov 27 j 06:56 4°**궁**15'07 conjunction -11700 Jan 01 j 12:17 19°**2**33'20 1°07'05 -11694 Mar 13 j 05:05 12°**⋜**03'38 minimum elong evening set -11700 Jan 02 j 14:56 19°**2**42'19 9.77289 AU max. Earth dist. -11700 Jan 19 j 19:05 22°**♀**00'06 -11694 Mar 30 j 23:07 14°♂13'25 -2°16'08 morning rise conjunction -11700 Apr 08 j 05:57 minimum elong -11694 Mar 30 j 23:10 14° ₹ 13'26 2°16'47 retrograde -11700 May 06 j 11:13 0°M44'20 max. Earth dist. -11694 Mar 31 j 20:39 14°중20'02 10.53593 AU -11700 Jun 03 j 16:29 30°R € morning rise -11694 Apr 17 j 12:42 16°♂21'49 min. Earth dist. -11700 Jul 11 j 08:19 27°**2**16'24 7.79370 AU retrograde -11694 Jul 26 j 22:01 23°중45'13 -11700 Jul 12 j 05:56 27°**2**11'50 -1°44'55 -11694 Oct 02 j 04:39 20°₹23'02 -2°39'49 opposition opposition

min. Earth dist.

-11694 Oct 01 j 14:30 20°る25'50 8.62300 AU

-11700 Sep 15 j 19:38 23°**2**42'45

direct

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11694 in astronomical counting style is the year 11695 BCE in historical counting style. direct -11694 Dec 10 j 18:33 16°る55'59 -11688 Aug 15 j 03:04 evening set -11693 Mar 26 j 11:26 24°₹33'05 -11688 Oct 01 j 00:03 1°Y45'15 retrograde -11688 Nov 18 j 15:37 30°R € -11693 Apr 13 j 02:10 26°る39'32 -2°01'25 -11688 Dec 09 j 17:41 28° ¥ 31'02 0°19'21 conjunction opposition -11693 Apr 13 j 02:14 26°る39'33 2°02'02 min. Earth dist. -11688 Dec 10 j 07:35 28° \(\frac{1}{2}\)28'29 9.32247 AU minimum elong -11693 Apr 13 j 17:39 26°중44'12 10.70764 AU max. Earth dist. direct -11687 Feb 19 j 23:31 25° **★** 11'00  $0^{\circ}\Upsilon$ -11693 Apr 30 j 12:01 28°정44'29 morning rise -11687 May 14 j 13:26 -11693 May 11 j 09:02 2°Y03'23 evening set -11687 Jun 02 j 18:06 5°≈54'38 retrograde -11693 Aug 07 j 21:22 -11687 Jun 19 j 13:00 3°**Υ**'57'13 0°29'52 opposition -11693 Oct 14 j 13:49 2°≈34'25 -2°18'03 conjunction 0°29'53 min. Earth dist. -11693 Oct 14 j 04:34 2°≈36'13 8.79018 AU minimum elong -11687 Jun 19 j 12:58 3°**Y**57'12 -11693 Nov 21 j 05:16 30°R ₹ -11687 Jun 18 j 18:30 3°**Υ**51'57 11.33663 AU max. Earth dist. -11693 Dec 23 j 20:48 29°**궁**08'33 -11687 Jul 06 j 03:58  $5^{\circ}$ **Y** 50'01direct morning rise -11692 Jan 25 j 11:32 0°**≈** retrograde  $-11687 \text{ Oct } 12 \text{ j } 01:40 \ 12^{\circ} \Upsilon 25'46$ evening set -11692 Apr 07 j 04:20 6°≈34'48 opposition -11687 Dec 21 j 01:55  $9^{\circ}$ **Y**11'43 0°52'12 min. Earth dist. -11687 Dec 21 j 18:53 9°**Ƴ**08'38 9.34314 AU conjunction -11692 Apr 24 j 15:45 8°≈38'12 -1°41'47 direct -11686 Mar 03 j 09:22 5°**Y**52'29 minimum elong -11692 Apr 24 j 15:48 8°≈38'13 1°42'20 evening set -11686 Jun 13 j 15:13 12°**Y**43'03 max. Earth dist. -11692 Apr 25 j 00:12 8°≈40'42 10.86906 AU max. Earth dist. -11686 Jun 29 j 09:28 14°**Υ**30'02 11.34085 AU morning rise -11692 May 11 j 22:08 10°≈40'05 -11692 Jun 22 j 14:29 15°≈ conjunction -11686 Jun 30 j 07:06  $14^{\circ}$  \begin{pmatrix} \gamma 36'13 & 0\circ 56'11 & \quad \circ 56'11 & \quad \qua retrograde -11692 Aug 18 j 11:34 17°≈38'53 minimum elong -11686 Jun 30 j 07:04 14°**Y**36'12 -11692 Oct 16 j 22:31 15°R≈ morning rise -11686 Jul 16 j 19:32 16° γ 28'32 opposition -11692 Oct 25 j 14:45 14°≈20'27 -1°51'12 retrograde -11686 Oct 23 j 04:13 23° Υ 06'23 min. Earth dist. -11692 Oct 25 j 09:54 14°≈21'22 8.94369 AU opposition -11685 Jan 01 j 11:33 19°**Υ**52'08 1°23'14 direct -11691 Jan 04 j 14:09 10°≈55'49 min. Earth dist. -11685 Jan 02 j 08:05 19°**Υ**48'25 9.33149 AU -11691 Mar 20 j 11:52 15°≈ -11685 Mar 14 j 14:35 16°**Υ**33'28 direct -11691 Apr 19 j 09:13 18°≈12'17 -11685 Jun 24 j 11:31 23°γ23'56 evening set evening set max. Earth dist. -11685 Jul 09 j 23:01 25°**Y**′09'32 11.31270 AU -11691 May 06 j 17:25 20°≈12'59 -1°18'29 conjunction -11685 Jul 11 j 00:32 25°**Υ**′16'51 1°20'37 -11691 May 06 j 17:28 20°≈13'00 1°18'56 minimum elong conjunction -11685 Jul 11 j 00:30 25°**Υ**16'50 1°20'52 -11691 May 06 j 19:52 20°≈13'42 11.01367 AU minimum elong max. Earth dist. -11691 May 23 j 20:24 22°≈12'11 -11685 Jul 27 j 11:04 27°**Υ**09'11 morning rise morning rise -11691 Aug 29 j 21:19 29°≈01'49 -11685 Aug 23 j 09:24 0°**8** retrograde -11691 Nov 06 j 09:19 25°≈44'53 -1°20'47 -11685 Nov 03 j 10:45 3°**8**51'17 opposition retrograde -11691 Nov 06 j 08:47 25°≈44'59 9.07766 AU -11684 Jan 12 j 23:57 0°**8**36'28 1°51'35 min. Earth dist. opposition -11690 Jan 16 j 20:23 22°≈21'34 min. Earth dist. direct evening set -11690 May 01 j 03:51 29°≈29'33 -11684 Jan 21 j 10:11 30°R**Y** -11690 May 05 j 15:07 0°**米** direct -11684 Mar 24 j 22:02 27°**Y**18'04 -11684 May 24 j 02:16 0°**8** conjunction -11690 May 18 j 08:48 1° **★** 27'57 -0°52'40 evening set -11684 Jul 04 j 08:50 4°**8**10'10 -11690 May 18 j 08:50 1° **★** 27'58 0°53'01 minimum elong max. Earth dist. -11690 May 18 j 06:07 1°**米**27'11 11.13618 AU conjunction -11684 Jul 20 j 19:29 6°**8**03'20 1°42'23 -11690 Jun 04 j 08:23 3°**∺**24'52 minimum elong -11684 Jul 20 j 19:25 6°**8**03'19 1°42'45 morning rise -11690 Sep 10 j 00:51 10°**米**07'37 max. Earth dist. -11684 Jul 19 j 15:03 5°**8**55'08 11.25274 AU retrograde -11690 Nov 17 j 23:02 6° \( \)51'56 -0°48'08 -11684 Aug 06 i 04:38 7°**8**56'11 opposition morning rise -11684 Nov 13 j 22:25 14°**8**44'36 min. Earth dist. -11690 Nov 18 i 03:33 6° \( \) 51'05 9.18757 AU retrograde -11683 Jan 23 j 16:23 11°\(28'49\) 2°16'23 direct -11689 Jan 28 j 19:08 3° + 29'50 opposition -11683 Jan 24 i 17:57 11°**8**24'11 9.21245 AU evening set -11689 May 12 j 14:20 10° ₩ 30'56 min. Earth dist. direct -11683 Apr 05 i 06:33 8°810'28 conjunction -11689 May 29 i 15:53 12° # 27'23 -0°25'24 -11683 Jul 14 j 12:10 15°8 minimum elong -11689 May 29 j 15:54 12° \( \frac{1}{2} \) 27'24 0°25'38 -11683 Jul 15 j 08:44 15°**8**05'52 evening set max. Earth dist. -11689 May 29 j 07:26 12° **€** 24'59 11.23266 AU -11689 Jun 15 j 12:23 14°**)** 22'30 morning rise conjunction -11683 Jul 31 j 17:49 16°859'48 2°00'45 retrograde -11689 Sep 21 j 02:07 21°\mathbf{H} 00'38 minimum elong -11683 Jul 31 j 17:46 16°\(\delta 59'47 \quad 2^\circ 01'12\) opposition -11689 Nov 29 j 09:17 17°**米**45'52 -0°14'24 max. Earth dist. -11683 Jul 30 j 12:42 16°**8**51'17 11.16221 AU min. Earth dist. -11689 Nov 29 j 19:05 17° **★** 44'04 9.27006 AU morning rise -11683 Aug 17 j 02:08 18°**8**53'41 -11688 Feb 09 j 11:37 14° **∺**24'53 retrograde -11683 Nov 25 j 19:29 25°**8**50'30 direct -11688 May 06 j 18:11 19° **∺** 36'51 -11682 Feb 04 j 14:37 22°**8**33'26 2°36'41 asc. node opposition -11688 May 22 j 18:27 21°**∺** 20'45 -11682 Feb 05 j 16:31 22°828'41 9.10751 AU evening set min. Earth dist. -11682 Apr 16 j 18:32 19°**8**14'53 direct conjunction -11688 Jun 08 j 16:34 23° **∺** 15'42 0°02'28 evening set -11682 Jul 26 j 13:04 26°**8**15'13 minimum elong -11688 Jun 08 j 16:34 23° **∺** 15'42 0°02'21 behind sun begin -11688 Jun 08 j 09:34 23° **∺** 13'44 conjunction -11682 Aug 11 j 21:23 28°**8**10'31 2°14'54 behind sun end -11688 Jun 08 j 23:34 23° **∺** 17'40 minimum elong -11682 Aug 11 j 21:21 28°**8**10'30 2°15'26 max. Earth dist. -11688 Jun 08 j 02:09 23°**光** 11'36 11.30019 AU max. Earth dist. -11682 Aug 10 j 15:39 28°**8**01'42 11.04325 AU -11688 Jun 25 j 10:18 25°**米**09'27 -11682 Aug 27 j 09:05 0°**Ⅱ** morning rise

Planetary Pheno	omena of Saturn fro	m -11900 t	through -1139	8 (UT), Astrodien	st AG 18-Feb-2025	14:23,	page 19
Attention, astronom	nical year style is used: The	e year -11682	in astronomical c	ounting style is the year	ar 11683 BCE in historica	l counting sty	le.
morning rise	-11682 Aug 28 j 05:50	0° <b>Ⅱ</b> 06′02		opposition	-11675 May 07 j 08:36	20° <b>Ω</b> 56′18	1°35'42
retrograde	-11682 Dec 08 j 01:09	7° <b>Ⅱ</b> 13'13		min. Earth dist.	-11675 May 07 j 10:34	20° <b>Ω</b> 55'54	7.98375 AU
opposition	-11681 Feb 16 j 19:57	3° <b>Ⅱ</b> 54'36	2°51'31	direct	-11675 Jul 12 j 16:18	17° <b>Ω</b> 31'07	
min. Earth dist.	-11681 Feb 17 j 21:56	3° <b>∏</b> 49'48	8.97565 AU	evening set	-11675 Oct 22 j 01:28		
direct	-11681 Apr 28 j 09:06	0° <b>Ⅱ</b> 35'38		Č	,		
evening set	-11681 Aug 06 j 23:54	7° <b>∏</b> 42'34		conjunction	-11675 Nov 08 j 12:15	27°Ω56'16	1°00'38
max. Earth dist.	-11681 Aug 22 j 02:07		10.89974 AU	minimum elong	-11675 Nov 08 j 12:18		1°01'02
max. Earth dist.	11001 Aug 22 J 02.07	) <b>H</b> 3043	10.07774710	max. Earth dist.	-11675 Nov 08 j 13:00		9.92087 AU
conjunction	-11681 Aug 23 j 08:21	9° <b>∏</b> 39'49	2024/03	max. Lartii dist.	-11675 Nov 24 j 00:58		).)2007 NO
minimum elong	-11681 Aug 23 j 08:19		2°24'39	morning rise	-11675 Nov 26 j 05:03	0° Mp 17'04	
			2 24 39	morning rise	,	•	
morning rise	-11681 Sep 08 j 18:08			retrograde	-11674 Mar 14 j 22:03	8° Mp 57'21	0052147
retrograde	-11681 Dec 20 j 15:59		2050152	opposition	-11674 May 22 j 06:04	5° m/25'15	0°53'47
opposition	-11680 Feb 29 j 09:30		2°59'52	min. Earth dist.	-11674 May 22 j 01:55	5° Mp 26'06	7.86574 AU
min. Earth dist.	-11680 Mar 01 j 11:02		8.82179 AU	direct	-11674 Jul 27 j 01:45	1° <b>m</b> 58'48	
direct	-11680 May 09 j 07:08			evening set	-11674 Nov 06 j 00:36	10° Mp 14'23	
evening set	-11680 Aug 17 j 18:49						
max. Earth dist.	-11680 Sep 02 j 00:17	21° <b>Ⅲ</b> 23′01	10.73747 AU	conjunction	-11674 Nov 23 j 17:45	-	0°25'01
				minimum elong	-11674 Nov 23 j 17:46	12° My 36'38	0°25'15
conjunction	-11680 Sep 03 j 04:40	21° <b>Ⅱ</b> 31'43	2°27'25	max. Earth dist.	-11674 Nov 24 j 02:44	12° <b>m</b> 39'39	9.82060 AU
minimum elong	-11680 Sep 03 j 04:40	21° <b>Ⅱ</b> 31'43	2°28'03	morning rise	-11674 Dec 11 j 16:41	15° <b>m</b> 00'46	
morning rise	-11680 Sep 19 j 16:59	23° <b>II</b> 32'22		retrograde	-11673 Mar 30 j 12:39	23° <b>m</b> 47'57	
	-11680 Nov 26 j 07:06	0ಂತಾ		opposition	-11673 Jun 06 j 08:26	20° m 14'51	0°07'14
retrograde	-11679 Jan 01 j 19:29			min. Earth dist.	-11673 Jun 05 j 22:13		7.78522 AU
	-11679 Feb 08 j 02:19			desc. node	-11673 Aug 02 j 06:15		
opposition	-11679 Mar 13 j 08:36		3°00'42	direct	-11673 Aug 10 j 21:03	-	
min. Earth dist.	-11679 Mar 14 j 07:48		8.65240 AU	evening set	-11673 Nov 21 j 11:27	-	
direct	-11679 May 21 j 14:07		0.03210710	evening sec	11075 1107 21 j 11.27	25 10 10 11	
direct	-11679 Aug 15 j 00:33	0°95		conjunction	-11673 Dec 09 j 09:59	27° m 24'52	0°12'56
evening set	-11679 Aug 13 j 00:33			minimum elong	-11673 Dec 09 j 09:57		
•	• •		10 56227 ATT	_			0 12 32
max. Earth dist.	-11679 Sep 14 j 11:47	3°2042'00	10.56337 AU	behind sun begin	-11673 Dec 09 j 05:31		
	11670 0 15:10 07	2001012	202415	behind sun end	-11673 Dec 09 j 14:24		0.50000.444
conjunction	-11679 Sep 15 j 12:07	3°549'36	2°24'15	max. Earth dist.	-11673 Dec 10 j 03:13	-	9.76093 AU
minimum elong	-11679 Sep 15 j 12:09	3° <b>©</b> 49'37	2°24'55	morning rise	-11673 Dec 27 j 13:33		
morning rise	-11679 Oct 02 j 04:08	5° <b>©</b> 53'43			-11673 Dec 27 j 09:52		
retrograde	-11678 Jan 15 j 11:34			retrograde	-11672 Apr 14 j 03:36		
opposition	-11678 Mar 26 j 17:44		2°53'06	opposition	-11672 Jun 20 j 12:43		
min. Earth dist.	-11678 Mar 27 j 12:45	10° <b>©</b> 13'01	8.47499 AU	min. Earth dist.	-11672 Jun 19 j 20:45	5° <b>≙</b> 20'48	7.74820 AU
direct	-11678 Jun 03 j 05:00	6°955'11		direct	-11672 Aug 24 j 22:40	1° <b>≙</b> 48'51	
evening set	-11678 Sep 11 j 15:42	14° <b>©</b> 29'34		evening set	-11672 Dec 06 j 06:59	10° <b>≏</b> 16'35	
conjunction	-11678 Sep 28 j 08:35	16°936'12	2°13'59	conjunction	-11672 Dec 24 j 09:23	12° <b>≏</b> 42'29	-0°50'16
minimum elong	-11678 Sep 28 j 08:38	16°536'13	2°14'38	minimum elong	-11672 Dec 24 j 09:20	12° <b>≏</b> 42'28	0°50'22
max. Earth dist.	-11678 Sep 27 j 13:22	16°930'05	10.38543 AU	max. Earth dist.	-11672 Dec 25 j 09:59	12° <b>♀</b> 50'48	9.74654 AU
morning rise	-11678 Oct 15 j 05:34	18°9544'15		morning rise	-11671 Jan 11 j 15:41		
retrograde	-11677 Jan 29 j 15:48			retrograde	-11671 Apr 29 j 15:33		
opposition	-11677 Apr 09 j 12:57		2°36'23	opposition	-11671 Jul 05 j 15:39		-1°25'37
min. Earth dist.	-11677 Apr 10 j 02:39			min. Earth dist.	-11671 Jul 04 j 18:51		
direct	-11677 Jun 16 j 06:24		0.2, 0.0, 1.0	direct	-11671 Sep 09 j 03:50		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
evening set	-11677 Sep 24 j 20:58			evening set	-11671 Dec 22 j 06:52		
2. J	110,, 50p 2+j20.50	_,23			110,11000 22 1 00.52		
conjunction	-11677 Oct 11 j 19:06	200553105	1°56'23	conjunction	-11670 Jan 09 j 11:21	27° <b>Ω</b> /0'2°	-1°24'07
minimum elong	-11677 Oct 11 j 19:10		1°56'59	minimum elong	-11670 Jan 09 j 11:17		
max. Earth dist.	-11677 Oct 11 j 19:10			max. Earth dist.	-11670 Jan 10 j 17:28		
max. Earni aist.			10.21200 AU	max. Earui üist.			7.11003 AU
	-11677 Oct 12 j 16:28				-11670 Jan 25 j 17:26		
morning rise	-11677 Oct 28 j 22:12			morning rise	-11670 Jan 27 j 18:17		
retrograde	-11676 Feb 13 j 08:18		2010/24	retrograde	-11670 May 14 j 20:42		200 427
opposition	-11676 Apr 22 j 18:15		2°10'24	opposition	-11670 Jul 20 j 14:20		
min. Earth dist.	-11676 Apr 23 j 02:11		8.13104 AU	min. Earth dist.	-11670 Jul 19 j 14:17		7.81258 AU
direct	-11676 Jun 28 j 18:04			direct	-11670 Sep 24 j 09:10		
evening set	-11676 Oct 07 j 16:01	11° <b>Ω</b> 25'32		evening set	-11669 Jan 07 j 06:03	10°M22'16	
conjunction	-11676 Oct 24 j 20:14	13° <b>Ω</b> 40′22	1°31'38	conjunction	-11669 Jan 25 j 10:45	12°M46'31	-1°51'56
minimum elong	-11676 Oct 24 j 20:18	13° <b>Ω</b> 40′23	1°32'09	minimum elong	-11669 Jan 25 j 10:41		1°52'21
max. Earth dist.	-11676 Oct 24 j 13:14	13° <b>Ω</b> 38′04	10.05450 AU	max. Earth dist.	-11669 Jan 26 j 20:10	12°M57'38	9.85473 AU
	-11676 Nov 03 j 22:34				-11669 Feb 11 j 06:41		
morning rise	-11676 Nov 11 j 06:10			morning rise	-11669 Feb 12 j 16:22		
retrograde	-11675 Feb 27 j 11:15			retrograde	-11669 May 29 j 16:25		
-	<b>3</b>			-	, , , ,		

	omena of Saturn fro						page 20
Attention, astronom	nical year style is used: The	e year -11669	in astronomical co	ounting style is the year	r 11670 BCE in historical	counting sty	le.
min. Earth dist.	-11669 Aug 03 j 04:30	20°M15'17	7.90901 AU	opposition	-11663 Oct 20 j 12:35	9° <b>≈</b> 12'28	-2°04'02
opposition	-11669 Aug 04 j 05:58	20°M09'56	-2°34'14	min. Earth dist.	-11663 Oct 20 j 04:50	9° <b>≈</b> 13'57	8.88584 AU
direct	-11669 Oct 09 j 11:47	16°M39'58		direct	-11663 Dec 30 j 03:46	5° <b>≈</b> 47'47	
evening set	-11668 Jan 22 j 23:29	25°ML02'45		evening set	-11662 Apr 14 j 05:50	13° <b>≈</b> 08′28	
					-11662 Apr 30 j 04:29	15° <b>≈</b>	
conjunction	-11668 Feb 10 j 02:59	27°ML24'30	-2°11'57				
minimum elong	-11668 Feb 10 j 02:55			conjunction	-11662 May 01 j 15:37	15° <b>≈</b> 10′19	-1°29'33
max. Earth dist.	-11668 Feb 11 j 13:19	27°M235'45	9.96931 AU	minimum elong	-11662 May 01 j 15:40	15°≈10′20	1°30'03
morning rise	-11668 Feb 28 j 05:54	29°ML45'57		max. Earth dist.	-11662 May 01 j 21:57	15° <b>≈</b> 12'11	10.96118 AU
	-11668 Mar 01 j 01:52	0° <b>∡</b> ¹		morning rise	-11662 May 18 j 20:01	17°≈10'36	
retrograde	-11668 Jun 12 j 00:34	8° <b>∡</b> ¹02'40		retrograde	-11662 Aug 25 j 03:57	24°≈04'03	
min. Earth dist.	-11668 Aug 16 j 11:35	4° <b>∡</b> ³38'21	8.03995 AU	opposition	-11662 Nov 01 j 10:21	20°≈46'58	-1°35'05
opposition	-11668 Aug 17 j 12:37	4° <b>∡</b> ³33′09	-2°53'20	min. Earth dist.	-11662 Nov 01 j 08:25	20°≈47'20	9.03067 AU
direct	-11668 Oct 23 j 09:53	1° <b>∡</b> 03'24		direct	-11661 Jan 11 j 14:06	17° <b>≈</b> 23'34	
evening set	-11667 Feb 06 j 07:00			evening set	-11661 Apr 26 j 05:16	24° <b>≈</b> 35'06	
C	,			· ·	1 3		
conjunction	-11667 Feb 24 j 08:18	11° <b>∡</b> °37′00	-2°23'19	conjunction	-11661 May 13 j 11:38	26° <b>≈</b> 34'27	-1°04'45
minimum elong	-11667 Feb 24 j 08:17			minimum elong	-11661 May 13 j 11:40		1°05'09
max. Earth dist.	-11667 Feb 25 j 17:04			max. Earth dist.	-11661 May 13 j 10:31		11.09452 AU
morning rise	-11667 Mar 14 j 07:46			morning rise	-11661 May 30 j 12:50		
retrograde	-11667 Jun 25 j 18:24				-11661 Jun 12 j 17:14		
min. Earth dist.	-11667 Aug 30 j 10:06		8 19647 AU	retrograde	-11661 Sep 05 j 08:24	5° <b>)</b> 17'49	
opposition	-11667 Aug 31 j 09:06			opposition	-11661 Nov 13 j 02:16	2° <b>H</b> 02'05	-1°03'18
direct	-11667 Nov 07 j 00:34		3 01 23	min. Earth dist.	-11661 Nov 13 j 05:26		9.15131 AU
evening set	-11666 Feb 21 j 01:50			iiiii. Lartii dist.	-11661 Dec 12 j 09:40		).13131 <b>11</b> 0
evening set	11000100 21 1 01.50	23 7 0434		direct	-11660 Jan 23 j 18:14		
conjunction	-11666 Mar 11 j 00:17	25° ₹10'56	-2°26'03	direct	-11660 Mar 05 j 13:21	0° <b>\</b>	
minimum elong	-11666 Mar 11 j 00:17			evening set	-11660 May 06 j 19:36	5° <b>)</b> 43′51	
max. Earth dist.	-11666 Mar 12 j 05:11			evening set	-11000 Way 00 j 19.30	3 /(4331	
morning rise	-11666 Mar 28 j 19:52		10.26016 AU	conjunction	-11660 May 23 j 22:40	7° <b>)</b> 41′06	0030103
morning rise	-11666 Apr 18 j 06:52			minimum elong	-11660 May 23 j 22:41	7° <b>)</b> (41'06	
rotro aro do				Č	-11660 May 23 j 22.41 -11660 May 23 j 15:20		11.20166 AU
retrograde	-11666 Jul 08 j 22:13		2950105	max. Earth dist.	, ,	9° <b>H</b> 36'56	11.20100 AU
opposition	-11666 Sep 13 j 18:50			morning rise	-11660 Jun 09 j 20:43		
min. Earth dist.	-11666 Sep 12 j 22:29		8.36877 AU	retrograde	-11660 Sep 15 j 11:29		0020157
r:	-11666 Oct 08 j 19:55			opposition	-11660 Nov 23 j 13:51		
direct	-11666 Nov 21 j 05:55			min. Earth dist.	-11660 Nov 23 j 21:20		9.24426 AU
	-11665 Jan 03 j 09:02			direct	-11659 Feb 03 j 14:23		
evening set	-11665 Mar 07 j 06:11	6° <b>6</b> 20'12		evening set	-11659 May 18 j 02:42	16° <b>₹</b> 38′58	
conjunction	-11665 Mar 25 j 01:34	8° <b>ට</b> 31'37	-2°20'53	conjunction	-11659 Jun 04 j 02:31	18° <b>)</b> 34'32	-0°10'24
minimum elong	-11665 Mar 25 j 01:36			minimum elong	-11659 Jun 04 j 02:32		
max. Earth dist.	-11665 Mar 26 j 01:37			behind sun begin	-11659 Jun 03 j 21:03		
morning rise	-11665 Apr 11 j 17:11			behind sun end	-11659 Jun 04 j 08:00		
retrograde	-11665 Jul 21 j 14:36			max. Earth dist.	-11659 Jun 03 j 14:32		11.27977 AU
opposition	-11665 Sep 26 j 18:10		-2°47'40	morning rise	-11659 Jun 20 j 21:26		
min. Earth dist.	-11665 Sep 26 j 00:57			retrograde	-11659 Sep 26 j 11:18		
direct	-11665 Dec 04 j 23:47			asc. node	-11659 Oct 22 j 23:35		
evening set	-11664 Mar 19 j 19:36			opposition	-11659 Dec 04 j 23:10		0°03'54
e venning see	1100 1 1141 19 1 19 19 19 19	17 30.27		min. Earth dist.	-11659 Dec 05 j 11:30		9.30728 AU
conjunction	-11664 Apr 06 j 11:54	21°₹12'25	-2°08'52	direct	-11658 Feb 15 j 03:14		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
minimum elong	-11664 Apr 06 j 11:57			evening set	-11658 May 29 j 04:20		
max. Earth dist.	-11664 Apr 07 j 06:45			max. Earth dist.	-11658 Jun 14 j 07:33		11 32699 AII
morning rise	-11664 Apr 23 j 23:38		10.05554710	max. Earth dist.	11030 3411 14 1 07.33	27 7(1403	11.520)) 110
morning rise	-11664 Jul 07 j 03:42			conjunction	-11658 Jun 15 j 00:47	20°¥ 18'57	0°17'22
ratragrada	-11664 Aug 01 j 19:58			minimum elong	-11658 Jun 15 j 00:46		0°17'18
retrograde	-11664 Aug 27 j 17:21			minimum clong	-11658 Jun 21 j 01:01	29 <b>Λ</b> 1837	0 1/16
annagition			2020145	marning rise			
opposition	-11664 Oct 08 j 07:42			morning rise	-11658 Jul 01 j 16:53	1° <b>Y</b> 12'07	
min. Earth dist.	-11664 Oct 07 j 18:29		8.72228 AU	retrograde	-11658 Oct 07 j 10:57	7° <b>Y</b> 47'34	0027115
direct	-11664 Dec 17 j 07:03			opposition	-11658 Dec 16 j 07:29	4°Υ33'35	0°37'15
• .	-11663 Mar 21 j 05:37			min. Earth dist.	-11658 Dec 17 j 00:37	4°Υ30'28	9.33891 AU
evening set	-11663 Apr 01 j 19:06	1° <b>≈</b> 19'33		direct	-11657 Feb 26 j 14:00	1°Υ14'00	
	11662 1 12122 1	20 2 =	1051120	evening set	-11657 Jun 09 j 02:29	8° <b>Ƴ</b> 05'10	
conjunction	-11663 Apr 19 j 08:14				11/77 7 05:100:11	0000000	004444
minimum elong	-11663 Apr 19 j 08:17			conjunction	-11657 Jun 25 j 19:40	9°Υ58'35	0°44'16
max. Earth dist.	-11663 Apr 19 j 21:26		10.80600 AU	minimum elong	-11657 Jun 25 j 19:38	9°Υ58'35	0°44'20
morning rise	-11663 May 06 j 16:09	5°≈27'29		max. Earth dist.	-11657 Jun 24 j 21:25		11.34229 AU
retrograde	-11663 Aug 13 j 15:48	12~≈31'13		morning rise	-11657 Jul 12 j 09:22	11~\\'51'05	

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11657 in astronomical counting style is the year 11658 BCE in historical counting style. retrograde  $-11657 \text{ Oct } 18 \text{ i } 10:33 \ 18^{\circ} \Upsilon 27'38$ retrograde -11651 Dec 27 j 01:36 25° **II** 38'52 -11657 Dec 27 j 15:59  $15^{\circ}$  Y 13'25  $1^{\circ}$  09'12 -11650 Mar 07 j 16:47 22° II 16'58 3°01'26 opposition opposition min. Earth dist. -11657 Dec 28 j 12:30 15°**Υ**09'42 9.33838 AU min. Earth dist. -11650 Mar 08 j 15:32 22°**I**I12'41 8.72741 AU -11656 Mar 08 j 21:37  $11^{\circ}$  **Y** 54'18 -11650 May 16 j 06:56 18°**Д**56'35 direct direct -11656 Jun 18 j 22:44 18°**Y**44'38 evening set evening set -11650 Aug 24 j 16:06 26°**Ⅲ**16'16 max. Earth dist. -11650 Sep 09 j 01:38 28°Д09'44 10.64191 AU -11656 Jul $\,$  05 j 13:06  $\,$  20°  $\!\boldsymbol{\Upsilon}$  37'38  $\,$  1°09'38 conjunction -11656 Jul 05 j 13:03  $20^{\circ}$  **Y** 37'37 -11650 Sep 10 j 03:17 28°**Д**17'41 2°26'40 minimum elong 1°09'50 conjunction -11656 Jul 04 j 12:05 20°**Y**'30'29 11.32529 AU max. Earth dist. minimum elong -11650 Sep 10 j 03:18 28°**Ⅲ**17'41 2°27'19 morning rise -11656 Jul 22 j 00:34 22°**Y**29'55 -11650 Sep 23 j 23:19 0ಂತಾ retrograde -11656 Oct 28 j 16:28 29°**Y**09'45 morning rise -11650 Sep 26 j 17:22 0°ഇ20'06 -11655 Jan 07 j 02:34 25°**Υ**'54'58 1°38'53 opposition retrograde -11649 Jan 09 j 11:40 8°900'32 min. Earth dist. -11655 Jan 08 j 01:15 25°**γ**50'51 9.30564 AU opposition -11649 Mar 20 j 20:50 4°536'43 2°57'51 direct -11655 Mar 20 j 05:39 22°**Y**36'07 min. Earth dist. -11649 Mar 21 j 16:53 4°**©**32'53 8.55660 AU evening set -11655 Jun 29 j 18:59 29°**Y**27'17 direct -11649 May 28 j 15:47 1°9515'32 -11655 Jul 04 j 14:38 0°8 evening set -11649 Sep 06 j 02:31 8°9544'57 max. Earth dist. -11655 Jul 15 j 03:47 1°**8**12'32 11.27645 AU conjunction -11649 Sep 22 j 17:05 10°5549'44 2°19'46 conjunction -11655 Jul 16 j 06:51 1°**8**20'20 1°32'42 minimum elong -11649 Sep 22 j 17:07 10°549'45 2°20'26 minimum elong -11655 Jul 16 j 06:48 1°**8**20'19 1°33'01 max. Earth dist. -11649 Sep 21 j 19:09 10°5542'49 10.46867 AU morning rise -11655 Aug 01 j 16:28 3°**8**12'54 morning rise -11649 Oct 09 j 11:38 12°55'51 retrograde -11655 Nov 09 i 01:02 9°858'08 retrograde -11648 Jan 23 j 08:34 20°551'03 opposition -11654 Jan 18 j 16:48 6°842'27 2°05'26 opposition -11648 Apr 02 j 11:02 17°525'16 2°45'27 min. Earth dist. -11654 Jan 19 i 17:33 6°837'57 9.24172 AU min. Earth dist. -11648 Apr 03 j 03:13 17°522'08 8.38227 AU direct -11654 Mar 31 j 11:12 3°**8**23'39 direct -11648 Jun 09 j 12:46 14°503'09 -11654 Jul 10 j 17:13 10°**8**17'23 -11648 Sep 18 j 01:13 21°5643'03 evening set evening set -11654 Jul 25 j 21:21 12°**8**02'21 11.19741 AU max Earth dist -11648 Oct 04 j 20:34 23°551'42 2°05'36 conjunction -11654 Jul 27 j 02:58 12°8 10'57 1°52'43 -11648 Oct 04 j 20:38 23°551'43 2°06'13 conjunction minimum elong -11654 Jul 27 j 02:55 12°**8**10'56 1°53'09 -11648 Oct 04 j 04:33 23°5546'33 10.29624 AU minimum elong max. Earth dist. -11654 Aug 12 j 11:37 14°**8**04'21 -11648 Oct 21 j 20:42 26°501'56 morning rise morning rise -11654 Aug 20 j 17:43 15°**8** -11648 Nov 24 j 19:01 0°**Ω** -11654 Nov 20 j 16:34 20°**8**57'03 retrograde -11647 Feb 05 j 19:15 4°**Ω**11'53 retrograde -11653 Jan 30 j 11:56 17°**8**40'10 2°27'56 -11647 Apr 16 j 11:40 0° Ω44'10 2°23'45 opposition opposition -11653 Jan 31 j 14:34 17° **8**35'18 9.14865 AU min. Earth dist. -11647 Apr 16 j 22:27 0° **Ω**42'02 8.21329 AU min. Earth dist. -11653 Mar 13 j 23:31 15°R**8** -11647 Apr 25 j 21:06 30° Rூ -11653 Apr 11 j 20:55 14°**8**21'12 direct direct -11647 Jun 22 j 19:58 27°521'03 -11653 May 10 j 07:08 15°**8** -11647 Aug 16 j 14:09 0°**Ω** evening set -11653 Jul 21 j 18:58 21°819'11 evening set -11647 Oct 01 j 13:28 5°**Ω**11'42 max. Earth dist. -11653 Aug 05 j 20:58 23°**8**04'52 11.09060 AU conjunction -11647 Oct 18 j 14:44 7°Ω24'28 1°44'07 -11653 Aug 07 j 03:28 23°**8**13'50 2°08'56 -11647 Oct 18 j 14:48 7°Ω24'30 1°44'39 conjunction minimum elong -11653 Aug 07 j 03:25 23°**8**13'50 2°09'26 max. Earth dist. -11647 Oct 18 j 06:03 7° $\Omega$ 21'38 10.13382 AU minimum elong -11653 Aug 23 j 11:56 25°**8**08'36 -11647 Nov 04 j 21:17 9°**Ω**39'03 morning rise morning rise -11653 Oct 10 j 20:42 0°**П** -11647 Dec 21 j 20:43 15°**Ω** -11653 Dec 02 j 16:37 2°**II**10'45 -11646 Feb 20 j 17:41  $18^{\circ}\Omega$ 02'44 retrograde retrograde -11652 Jan 26 j 22:28 30°R -11646 Apr 25 i 08:04  $15^{\circ}$ R $\Omega$ opposition opposition -11646 Apr 30 j 21:51  $14^{\circ}\Omega$ 33'15  $1^{\circ}52'58$ min. Earth dist. -11652 Feb 12 j 16:05 28°847'29 9.02916 AU min. Earth dist. -11646 May 01 j 02:02 14° **Ω**32'24 8.05923 AU direct -11652 Apr 22 j 10:28 25°**8**33'07 direct -11646 Jul 06 j 13:17 11° $\Omega$ 09'04 -11652 Jul 08 j 13:13 0°**Ⅱ** -11646 Sep 10 j 21:20 15° Ω -11652 Aug 01 j 02:06 2°**II**36'55 -11646 Oct 15 j 16:14 19° **Ω**10'16 evening set evening set max. Earth dist. -11652 Aug 16 j 05:01 4°Д24'27 10.95919 AU conjunction -11646 Nov 01 j 23:58 21°Ω27'08 1°15'52 -11646 Nov 02 j 00:02 21°**Ω**27'09 conjunction -11652 Aug 17 j 10:23 4°**Д**33'14 2°20'31 minimum elong 1°16'18 minimum elong -11652 Aug 17 j 10:21 4°**II**33'13 2°21'05 max. Earth dist. -11646 Nov 01 j 22:56 21°Ω26'48 9.99103 AU -11652 Sep 02 j 19:25 6°**Ц**29'55 morning rise -11646 Nov 19 j 13:19 23° **Ω**45'55 morning rise -11652 Dec 14 j 02:47 13°**II**43'24 -11645 Jan 14 j 09:13 0° Mp retrograde -11651 Feb 22 j 22:34 10°**Ⅲ**23'21 2°56'58 opposition retrograde -11645 Mar 08 j 01:27 2°Mp21'16 -11651 Feb 23 j 23:39 10°**Ⅱ**18'41 min. Earth dist. 8.88703 AU -11645 May 01 j 03:12 30°RΩ direct -11651 May 04 j 05:35 7°**Ⅲ**03'36 opposition -11645 May 15 j 16:03  $28^{\circ}\Omega$ 50'16  $1^{\circ}$ 14'09 evening set -11651 Aug 12 j 16:33 14°**Ⅱ**14'41 min. Earth dist. -11645 May 15 j 13:32 28° Ω50'47 7.92971 AU max. Earth dist. -11651 Aug 27 j 22:03 16°**Д**04'51 10.80771 AU direct -11645 Jul 20 j 17:05 25°**\O**24'58 -11645 Oct 01 j 06:31 0° m conjunction -11651 Aug 29 j 01:43 16°**Ⅱ**13'15 2°26'41 evening set -11645 Oct 30 j 09:07 3° m 35'54 -11651 Aug 29 j 01:42 16°**Д**13'15 2°27'19 minimum elong -11651 Sep 14 j 12:32 18°**Д**12'30 -11645 Nov 16 j 23:15 5° m 56'28 0°42'08 morning rise conjunction

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11645 in astronomical counting style is the year 11646 BCE in historical counting style. -11645 Nov 16 j 23:18 5° m 56'28 0°42'26 -11639 Jul 18 j 14:45 30°RML minimum elong max. Earth dist. -11645 Nov 17 j 06:07 5° m 58'45 min. Earth dist. -11639 Aug 10 j 08:01 28°ML12'30 7.97492 AU 9.87719 AU -11645 Dec 04 j 19:07 8° m 18'55 -11639 Aug 11 j 08:10 28° ML07'28 -2°45'50 morning rise opposition -11644 Mar 22 j 15:02 17° **m** 02'48 direct -11639 Oct 16 j 22:34 24°M37'50 retrograde -11644 May 29 j 16:27 13° **m** 30'41 -11638 Jan 06 j 09:36 0° ⊀7 opposition 0°29'24 -11638 Jan 30 j 15:13 min. Earth dist. -11644 May 29 j 07:36 13° Mp 32'31 7.83346 AU evening set 2°**х** 57′20 direct -11644 Aug 03 j 07:21 10° **m** 04'15 -11644 Nov 13 j 14:33 18° m 23'19 -11638 Feb 17 j 17:44 5°**х** 17'34 -2°19'09 evening set conjunction -11638 Feb 17 j 17:41 minimum elong 5°**х** 17′33 2°19′44 conjunction -11644 Dec 01 j 10:31 20° Mp 46'46 0°05'02 max. Earth dist. -11638 Feb 19 j 01:27 5°**∡**'27'52 10.04039 AU minimum elong -11644 Dec 01 j 10:31 20° m 46'46 0°05'10 morning rise -11638 Mar 07 j 19:01 7°**尽**37'17 -11644 Dec 01 j 03:24 20° mg 44'24 behind sun begin retrograde -11638 Jun 19 j 20:36 15° ₹ 46'41 -11644 Dec 01 j 17:37 20° m 49'09 behind sun end min. Earth dist. -11638 Aug 24 j 10:24 12°**尽**23'19 8.11508 AU max. Earth dist. -11644 Dec 02 j 00:55 20° m 51'37 9.80000 AU opposition -11638 Aug 25 j 10:09 12°**尽** 18'24 -2°59'06 morning rise -11644 Dec 19 j 11:52 23° m 11'58 direct -11638 Oct 31 j 17:29 8° ₹ 49'01 desc. node -11643 Jan 20 j 13:51 27° Mp 10'25 evening set -11637 Feb 14 j 16:54 16° ₹759'41 -11643 Feb 18 j 13:11 0∘**⊽** retrograde -11643 Apr 07 j 06:38 2°**₽**00'25 conjunction -11637 Mar 04 j 16:56 19° ₹ 16'34 -2°25'53 -11643 May 25 j 17:45 30°R MD minimum elong -11637 Mar 04 j 16:55 19° ₹ 16'34 2°26'32 opposition -11643 Jun 13 j 20:08 28° m 27'36 -0°18'13 max. Earth dist. -11637 Mar 05 j 23:03 19° ₹26'11 10.19237 AU min. Earth dist. -11643 Jun 13 j 06:01 28° M 30'33 7.77686 AU morning rise -11637 Mar 22 j 14:21 21° ₹32'33 direct -11643 Aug 18 j 05:29 25° m 00'04 retrograde -11637 Jul 03 i 08:15 29° ₹26'25 -11643 Nov 02 j 01:28 0∘**⊽** min. Earth dist. -11637 Sep 07 i 03:58 26° **x** 04'32 8.27612 AU evening set -11643 Nov 29 i 06:22 3°**£**25'07 opposition -11637 Sep 08 j 01:35 26° ₹00'07 -3°01'32 direct -11637 Nov 15 j 02:56 22° ₹31'16 -11643 Dec 17 j 06:53 5° **2**50'22 -0°33'01 -11636 Feb 24 j 21:48 0°る conjunction -11643 Dec 17 j 06:51 5° **2**50'22 0°33'02 -11636 Feb 29 j 04:46 0°る31'23 minimum elong evening set max. Earth dist. -11643 Dec 18 j 03:35 5° **2**57'22 9.76421 AU -11642 Jan 04 j 12:02 8°**♀**17'04 -11636 Mar 18 j 01:51 2°**3**44'43 -2°24'18 morning rise conjunction -11642 Apr 22 j 20:50 17°**♀**05'36 minimum elong -11636 Mar 18 j 01:53 2°**3**44'44 2°24'58 retrograde -11642 Jun 28 j 23:53 13°**2**32'40 -1°05'00 -11636 Mar 19 j 04:23 2°중53'01 10.36054 AU opposition max. Earth dist. -11642 Jun 28 j 05:57 13°**2**36'27 7.76297 AU -11636 Apr 04 j 19:18 4°**궁**56'51 min. Earth dist. morning rise -11642 Sep 02 j 08:53 10°**♀**04'13 -11636 Jul 15 j 07:46 12°**⋜**35'04 retrograde direct -11642 Dec 15 j 04:41 18° **2**32'41 -11636 Sep 20j06:14 9°정10'52 -2°54'11 evening set opposition -11636 Sep 19 j 12:17 9°**궁**14'28 8.44836 AU min. Earth dist. -11641 Jan 02 j 08:06 20°**⊆**58'27 -1°08'50 -11636 Nov 28 j 01:33 5°**る**42'49 conjunction direct -11641 Jan 02 j 08:02 20°**⊆**58'26 1°09'02 -11635 Mar 14 j 01:53 13°♂31'32 minimum elong evening set max. Earth dist. -11641 Jan 03 j 09:50 21°**2**07'08 9.77165 AU -11635 Mar 31 j 19:48 15°₹41'21 -2°15'18 morning rise -11641 Jan 20 j 14:58 23°**♀**25'14 conjunction -11641 Mar 20 j 03:02 0° € 1 minimum elong -11635 Mar 31 j 19:50 15°₹41'21 2°15'57 retrograde -11641 May 08 j 06:04 2°ML09'29 max. Earth dist. -11635 Apr 01 j 16:46 15°**ठ**47'47 10.53516 AU -11641 Jun 27 j 04:06 30°R ₽ morning rise -11635 Apr 18 j 09:23 17°**⋜**49'46 min. Earth dist. -11641 Jul 13 j 04:04 28° **2**41'28 7.79269 AU retrograde -11635 Jul 27 j 17:42 25°**궁**13'09 -11641 Jul 14 j 01:03 28°**△**37'02 -1°47'11 min. Earth dist. -11635 Oct 02 j 11:08 21°**궁**53'44 8.62241 AU opposition direct -11641 Sep 17 j 14:46 25°**♀**07'55 -11635 Oct 03 j 00:48 21°₹51'03 -2°38'31 opposition -11641 Dec 02 i 01:02 0°M direct -11635 Dec 11 j 15:23 18° **පි**24'00 -11634 Mar 27 j 08:19 26°**궁**01'15 evening set -11641 Dec 31 i 04:44 3°M 36'40 evening set -11640 Jan 18 j 09:18 6° ML01'40 -1°39'47 conjunction conjunction -11634 Apr 13 j 22:56 28° ₹ 07'42 -2°00'09 minimum elong -11640 Jan 18 i 09:13 6°ML01'38 1°40'08 minimum elong -11634 Apr 13 i 22:59 28°₹07'43 2°00'45 max. Earth dist. -11640 Jan 19 j 14:55 6°ML11'34 9.82255 AU max. Earth dist. -11634 Apr 14 j 13:30 28°る12'06 10.70722 AU -11640 Feb 05 j 15:49 8°M27'09 -11634 Apr 29 j 13:55 0°≈ morning rise -11640 Apr 04 j 13:12 15°M morning rise -11634 May 01 j 08:49 0°≈12'41 -11640 May 22 j 06:48 17° ML02'57 retrograde retrograde -11634 Aug 08 j 16:41 7°≈22'47 -11640 Jul 09 j 17:46 15°RML opposition -11634 Oct 15 j 10:01 4°≈02'38 -2°16'14 -11640 Jul 27 j 20:40 13°**M**31'29 -2°21'32 opposition min. Earth dist. -11634 Oct 15 j 00:26 4°≈04'29 8.78989 AU min. Earth dist. -11640 Jul $\,$  26 j 21:28  $\,$  13°  $M_{\bullet}$  36'22  $\,$  7.86490 AU direct -11634 Dec 24 j 18:50 0°≈36'46 -11640 Oct 01 j 20:26 10°ML01'57 -11633 Apr 09 j 01:06 8°≈03'04 direct evening set -11640 Dec 17 j 20:52 15°M -11639 Jan 15 j 01:51 18° M27'39 -11633 Apr 26 j 12:30 10°≈06'28 -1°40'08 evening set conjunction minimum elong -11633 Apr 26 j 12:33 10°≈06'29 1°40'40 conjunction -11639 Feb 02 j 06:00 20°M 50'42 -2°03'39 max. Earth dist. -11633 Apr 26 j 21:02 10°≈09'00 10.86900 AU minimum elong -11639 Feb 02 j 05:56 20°M 50'41 2°04'08 morning rise -11633 May 13 j 18:48 12°≈08'20 max. Earth dist. -11639 Feb 03 j 13:40 21°ML01'10 9.91422 AU -11633 Jun 08 j 20:48 15°≈ morning rise -11639 Feb 20 j 10:30 23°ML13'44 retrograde -11633 Aug 20 j 09:01 19°≈07'07 -11639 Apr 24 j 13:06 -11633 Oct 27 j 11:10 15°≈48'40 -1°48'59 opposition

min. Earth dist.

-11633 Oct 27 j 05:43 15°≈49'43 8.94372 AU

retrograde

-11639 Jun 05 j 20:18 1°**√**37'31

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11633 in astronomical counting style is the year 11634 BCE in historical counting style. -11633 Nov 07 j 04:17 15°R≈ morning rise -11627 Jul 17 j 14:58 17°**Υ**'54'42 -11632 Jan 06 j 10:24 12°≈24'05 -11627 Oct 23 j 23:50 24° Υ 32'28 direct retrograde -11632 Mar 05 j 02:48 15°≈ opposition -11626 Jan 02 j 07:48 21° $\Upsilon$ 18'12 1°25'41 -11632 Apr 20 j 05:45 19°≈40'28 -11626 Jan 03 j 04:42 21°Υ 14'25 9.33340 AU min. Earth dist. evening set -11626 Mar 15 j 11:18 17° $\Upsilon$ 59'31 direct -11632 May 07 j 13:59 21°≈41'11 -1°16'32 -11626 Jun 25 j 07:01 24°**Y**49'48 conjunction evening set -11632 May 07 j 14:02 21°≈41'12 1°16'58 minimum elong max. Earth dist. -11626 Jul 11 j 19:48 26°**Y**'42'38 1°22'31 -11632 May 07 j 17:18 21°≈42'09 11.01392 AU conjunction -11626 Jul 11 j 19:45 26°**Y**42'37 morning rise -11632 May 24 j 16:47 23°≈40'21 minimum elong 1°22'47 -11632 Aug 06 j 13:28 0°**)**€ max. Earth dist. -11626 Jul 10 j 18:11 26°**Υ**35'18 11.31479 AU retrograde -11632 Aug 30 j 17:25 0°**∺**29'55 morning rise -11626 Jul 28 j 06:17 28°**Y**34'55 -11632 Sep 24 j 02:58 30°R≈ -11626 Aug 10 j 04:38 0°8 opposition -11632 Nov 07 j 05:49 27°≈13'00 -1°18'17 retrograde -11626 Nov 04 j 05:24 5°**8**16'58 min. Earth dist. -11632 Nov 07 j 05:25 27°≈13'04 9.07803 AU opposition -11625 Jan 13 j 20:04 2°**8**02'07 1°53'45 direct -11631 Jan 17 j 16:43 23°≈49'39 min. Earth dist. -11625 Jan 14 j 19:26 1°**8**57'53 9.28997 AU -11631 Apr 23 j 09:48 0°**)**€ -11625 Feb 13 j 02:47 30°R**Y** evening set -11631 May 02 j 00:22 0°**₩**57'33 direct -11625 Mar 26 j 17:57 28°**Y**43'45 -11625 May 06 j 08:28 0°8 conjunction -11631 May 19 j 05:11 2° \( \frac{1}{2} \) 55'55 -0°50'31 evening set -11625 Jul 06 j 04:05 5°**8**35'38 minimum elong -11631 May 19 j 05:13 2°\f\55'55 0°50'51 max. Earth dist. -11625 Jul 21 j 11:22 7°820'51 11.25527 AU max. Earth dist. -11631 May 19 j 02:33 2° **\( \)** 55'09 11.13672 AU morning rise -11631 Jun 05 i 04:40 4°**¥** 52'49 conjunction -11625 Jul 22 j 14:40 7°**8**28'44 1°44'01 retrograde -11631 Sep 10 j 21:14 11°\cdot\cdot 35'27 minimum elong -11625 Jul 22 j 14:37 7°**8**28'43 1°44'24 opposition -11631 Nov 18 i 19:31 8° ★ 19'46 -0°45'26 morning rise -11625 Aug 07 j 23:40 9°**8**21'30 min. Earth dist. -11631 Nov 19 j 00:36 8° **H** 18'49 9.18828 AU -11625 Oct 08 j 11:23 15°8 -11630 Jan 29 j 15:40 4° **€** 57'38 -11625 Nov 15 j 18:44 16°809'54 direct retrograde -11625 Dec 25 j 02:41 15°R8 evening set -11624 Jan 25 j 12:17 12°**8**54'07 2°18'11 opposition -11630 May 30 j 12:02 13°\f\ 55'01 -0°23'09 -11624 Jan 26 j 12:48 12°849'40 9.21528 AU conjunction min. Earth dist. -11630 May 30 j 12:03 13°\ 55'01 0°23'21 direct -11624 Apr 06 j 03:10 9°**8**35'49 minimum elong -11630 May 30 j 02:54 13°**米** 52'24 11.23352 AU -11624 Jul 02 j 12:59 15°**8** max. Earth dist. -11630 Jun 16 j 08:32 15° **∺** 50'05 -11624 Jul 16 j 03:50 16°**8**30'59 evening set morning rise -11630 Sep 21 j 20:32 22°**∺**28'08 -11624 Jul 31 j 08:19 18°**8**16'31 11.16533 AU max. Earth dist. retrograde -11630 Nov 30 j 05:46 19° **★** 13'18 -0°11'37 opposition -11630 Nov 30 j 15:12 19°**米**11'34 9.27108 AU -11624 Aug 01 j 12:51 18°**8**24'52 2°02'03 min. Earth dist. conjunction -11629 Feb 10 j 08:22 15° ¥ 52'18 -11624 Aug 01 j 12:48 18°**8**24'51 2°02'31 direct minimum elong -11629 Apr 07 j 09:09 18° **₭** 11'09 -11624 Aug 17 j 21:02 20°**8**18'40 asc. node morning rise evening set -11629 May 24 j 14:30 22° \ \ 48'00 retrograde -11624 Nov 26 j 15:25 27°**8**15'24 opposition -11623 Feb 05 j 10:24 23°**8**58'21 2°38'03 conjunction -11629 Jun 10 j 12:31 24° \ 42'52 0°04'46 min. Earth dist. -11623 Feb 06 j 12:00 23°**8**53'40 9.11105 AU -11629 Jun 10 j 12:30 24° **€** 42'52 0°04'40 direct -11623 Apr 17 j 13:07 20°\( \mathbf{3}39'54 minimum elong -11629 Jun 10 j 05:40 24°**)** 40'57 -11623 Jul 27 j 08:01 27° \( \delta 39'56 \) behind sun begin evening set behind sun end -11629 Jun 10 j 19:21 24°**)** 44'48 max. Earth dist. -11623 Aug 11 j 10:06 29°**8**26'16 11.04723 AU max. Earth dist. -11629 Jun 09 j 22:36 24° ¥38'55 11.30137 AU -11629 Jun 27 j 06:06 26° **ਮ** 36'34 -11623 Aug 12 j 16:07 29°**8**35'09 2°15'50 morning rise conjunction -11629 Jul 30 i 04:20 0°Υ minimum elong -11623 Aug 12 j 16:05 29°\(235'08\) 2°16'22  $-11629 \text{ Oct } 02 \text{ j } 21:19 \quad 3^{\circ} \Upsilon 12'19$ retrograde -11623 Aug 16 i 04:03 0°**Ⅱ** opposition -11629 Dec 11 j 14:06 29° \( \) 58'01 0°22'07 morning rise -11623 Aug 29 і 00:35 1°**Д**30'37 -11629 Dec 11 j 03:17 30°R € retrograde -11623 Dec 08 j 19:21 8°**Д**37'40 min. Earth dist. -11629 Dec 12 j 03:08 29° <del>X</del> 55'39 9.32376 AU opposition -11622 Feb 17 j 15:37 5° **I**I 19'04 2°52'24 direct -11628 Feb 21 j 21:25 26° ¥ 38'00 min. Earth dist. -11622 Feb 18 j 17:55 5° **II**14'13 8.98003 AU -11628 Apr 30 j 09:19 0°**Υ** direct -11622 Apr 29 j 04:32 2°**Д**00'10 -11622 Aug 07 j 18:32 9°**Д**06'47 -11628 Jun 03 j 13:58 3°**Y**30′09 evening set evening set max. Earth dist. -11622 Aug 22 j 20:56 10°**Д**54'56 10.90442 AU -11628 Jun 20 j 08:48 5°**Υ**23'55 0°32'07 conjunction minimum elong -11628 Jun 20 j 08:47 5°**Υ**23'55 0°32'08 conjunction -11622 Aug 24 j 02:53 11°**Д**03'57 2°24'34 -11622 Aug 24 j 02:52 11°**Д**03'57 2°25'10 max. Earth dist. -11628 Jun 19 j 15:10 5°**Υ**°18'55 11.33806 AU minimum elong -11628 Jul 06 j 23:32 7°**Υ**16'40 -11622 Sep 09 j 12:44 13°**Д**01'40 morning rise morning rise -11628 Oct 12 j 21:13 13°**Υ**52'19 -11622 Dec 21 j 11:01 20° **I**I 20'50 retrograde retrograde -11628 Dec 21 j 22:11  $10^{\circ}$  **Y** 38'13  $0^{\circ}$  54'51 -11621 Mar 02 j 04:53 17°**I**I00'27 3°00'12 opposition opposition -11628 Dec 22 j 15:08  $10^{\circ}$  **Y** 35'08 9.34471 AU min. Earth dist. min. Earth dist. -11621 Mar 03 j 06:25 16°**I**55'41 8.82662 AU -11627 Mar 04 j 04:23 7°**Υ**18'59 direct -11621 May 11 j 03:11 13°**Ⅲ**40'54 direct evening set -11627 Jun 14 j 10:58 14°**Υ**09'21 evening set -11621 Aug 19 j 13:07 20°**Ⅲ**55'34 max. Earth dist. -11627 Jun 30 j 04:40 15°**Υ**56'10 11.34256 AU conjunction -11621 Sep 04 j 23:05 22°**I**55'19 2°27'29 -11627 Jul 01 j 02:37 16°**Υ**'02'26 0°58'18 minimum elong -11621 Sep 04 j 23:06 22°**Д**55'19 2°28'08 conjunction -11627 Jul 01 j 02:35 16°**Y**'02'25 0°58'27 max. Earth dist. -11621 Sep 03 j 19:40 22°**Д**46'55 10.74228 AU minimum elong

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11621 in astronomical counting style is the year 11622 BCE in historical counting style. -11621 Sep 21 j 11:23 24°**Д**55'55 retrograde -11614 Mar 31 j 05:14 25° mp 10'02 morning rise -11621 Nov 08 j 14:28 -11614 Jun 07 j 02:16 21° m 36'56 0°04'40 0ംഉ opposition -11620 Jan 03 j 14:19 min. Earth dist. -11614 Jun 06 j 15:48 21° Mp 39'07 7.78570 AU retrograde 2°**5**28'42 -11614 Jul 13 j 18:36 18° **m** 56'41 -11620 Mar 02 j 04:23 30°R Ⅱ desc node -11620 Mar 14 j 03:36 29° **I** 106'18 3° 00'29 -11614 Aug 11 j 15:05 18° Mp 09'20 opposition direct -11620 Mar 15 j 02:08 29°**I** 02'03 8.65713 AU -11614 Nov 22 j 05:38 26° m 32'17 min. Earth dist. evening set direct -11620 May 22 j 08:41 25°**Ⅲ**45'57 -11614 Dec 10 j 04:21 28° m 57'02 -0°14'58 -11620 Aug 03 j 04:36 0ംខ conjunction evening set -11620 Aug 30 j 17:34 3°909'52 minimum elong -11614 Dec 10 j 04:20 28° m 57'02 0°14'56 max. Earth dist. -11620 Sep 15 j 06:26 5°505'18 10.56785 AU behind sun begin -11614 Dec 10 j 01:47 28° m 56'10 behind sun end -11614 Dec 10 j 06:53 28° m 57'53 -11620 Sep 16 j 06:23 conjunction 5°9512'46 2°23'51 max. Earth dist. -11614 Dec 10 j 22:04 29° m 03'01 9.76099 AU -11620 Sep 16 j 06:25 minimum elong 5°**©**12'47 2°24'32 -11614 Dec 17 j 22:38 0°**♀** morning rise -11620 Oct 02 j 22:23 7°9516'50 morning rise -11614 Dec 28 j 07:54 1°**≏**23'22 retrograde -11619 Jan 16 j 06:18 15°504'13 retrograde -11613 Apr 15 j 21:04 10°**2**13'06 opposition -11619 Mar 27 j 12:27 11°539'41 2°52'19 opposition -11613 Jun 22 j 06:24 6°**△**39'32 -0°43'02 min. Earth dist. -11619 Mar 28 j 06:52 11°536'08 8.47923 AU min. Earth dist. -11613 Jun 21 j 14:03 6°**2**42'58 7.74788 AU direct -11619 Jun 03 j 23:46 8°518'18 direct -11613 Aug 26 j 15:38 3°**♀**10'55 evening set -11619 Sep 12 j 09:43 15°552'24 evening set -11613 Dec 08 j 01:25 11° **△**38'45 max. Earth dist. -11619 Sep 28 j 06:48 17°552'42 10.38940 AU conjunction -11613 Dec 26 j 03:53 14° \(\Omega\)04'41 -0°52'11 conjunction -11619 Sep 29 i 02:37 17°\$59'00 2°13'09 minimum elong -11613 Dec 26 j 03:49 14° \(\Omega\) 04'40 0°52'19 minimum elong -11619 Sep 29 i 02:40 17°559'01 2°13'48 max. Earth dist. -11613 Dec 27 i 04:39 14° **2**13'03 9.74581 AU morning rise -11619 Oct 15 j 23:46 20°\$07'02 morning rise -11612 Jan 13 i 10:06 16° **2**31'49 retrograde -11618 Jan 30 j 11:26 28°509'19 retrograde -11612 Apr 30 j 09:59 25° **△**19'27 -11618 Apr 10 j 07:33 24°542'38 2°35'04 opposition -11612 Jul 06 j 09:25 21° **2**46'01 -1°27'55 opposition min. Earth dist. -11618 Apr 10 j 21:20 24°539'56 8.30169 AU min. Earth dist. -11612 Jul 05 j 12:32 21° **2**50′26 7.75651 AU -11618 Jun 16 j 23:48 21°520'05 -11612 Sep 09 j 20:20 18°**♀**16'36 direct direct -11618 Sep 25 j 14:52 29°504'57 -11612 Dec 23 i 01:23 26° **2**46'11 evening set evening set -11618 Oct 02 j 19:11 0°Ω -11611 Jan 10 j 05:49 29° **2**11'56 -1°25'48 conjunction -11618 Oct 12 j 13:03 1° $\Omega$ 15'35 1°55'08 -11611 Jan 10 j 05:45 29° **2**11'54 1°26'05 conjunction minimum elong -11618 Oct 12 j 13:07 1° $\Omega$ 15'37 1°55'43 max. Earth dist. -11611 Jan 11 j 11:43 29°**2**21'59 9.77718 AU minimum elong -11618 Oct 11 j 22:31 1° $\Omega$ 10'53 10.21595 AU -11611 Jan 16 j 04:55 0°M max. Earth dist. -11618 Oct 29 j 16:27  $3^{\circ}\Omega$ 27'58 -11611 Jan 28 j 12:42 1°M 38'24 morning rise morning rise -11617 Feb 14 j 03:27 11° $\Omega$ 44'40 -11611 May 15 j 16:00 10° ML 19'20 retrograde retrograde -11617 Apr 24 j 12:40 8° **Ω**15'55 2°08'36 -11611 Jul 20 j 08:37 6°ML51'39 7.81083 AU opposition min. Earth dist. min. Earth dist. -11617 Apr 24 j 21:19 8°Ω14'12 8.13393 AU opposition -11611 Jul 21 j 08:11 6°ML46'40 -2°06'23 direct -11617 Jun 30 j 11:28 4° **Ω**52'05 direct -11611 Sep 25 j 02:18 3°ML16'44 evening set -11617 Oct 09 j 09:56 12° **Ω**47'51 evening set -11610 Jan 08 j 00:49 11° ML44'43 -11617 Oct 26 j 14:18 15° $\Omega$ 02'41 1°30'03 conjunction -11610 Jan 26 j 05:26 14°ML08'59 -1°53'16 conjunction -11617 Oct 26 j 14:22 15° $\Omega$ 02'42 1°30'32 minimum elong -11610 Jan 26 j 05:21 14°ML08'57 1°53'42 minimum elong max. Earth dist. -11617 Oct 26 j 06:56 15° $\Omega$ 00'16 10.05707 AU max. Earth dist. -11610 Jan 27 j 14:05 14°ML19'51 9.85264 AU -11617 Oct 26 j 06:09 15°**Ω** -11610 Feb 01 j 14:58 15°M -11617 Nov 13 j 00:28 17° $\Omega$ 19'26 morning rise morning rise -11610 Feb 13 j 11:02 16°M 33'28 -11616 Feb 29 i 05:17 25° $\Omega$ 49'07 -11610 May 30 j 11:49 25° ML03'44 retrograde retrograde opposition -11616 May 08 j 02:42 22° $\Omega$ 18'33 1°33'30 opposition -11610 Aug 04 j 23:54 21°M32'25 -2°35'40 min. Earth dist. -11616 May 08 j 05:24 22° $\Omega$ 18'00 7.98583 AU min. Earth dist. -11610 Aug 03 j 23:20 21°M 37'35 7.90664 AU direct -11616 Jul 13 j 11:00  $18^{\circ}\Omega$ 53'24 direct -11610 Oct 10 j 06:29 18° ML02'19 evening set -11616 Oct 22 j 19:20 26° **Ω**59'37 -11609 Jan 23 j 18:27 26°M25'25 evening set -11616 Nov 09 j 06:21 29° $\Omega$ 18'28 0°58'47 conjunction -11609 Feb 10 j 21:49 28°ML47'10 -2°12'51 conjunction minimum elong -11616 Nov 09 j 06:24 29° $\Omega$ 18'29 0°59'09 minimum elong -11609 Feb 10 j 21:46 28°M 47'09 2°13'24 max. Earth dist. -11616 Nov 09 j 07:17 29°**Ω**18'47 9.92258 AU max. Earth dist. -11609 Feb 12 j 06:59 28°ML58'02 9.96659 AU -11609 Feb 20 j 04:31 0°**尽** -11616 Nov 14 j 10:52 0° Mg morning rise -11616 Nov 26 j 23:17 1°Mp39'16 morning rise -11609 Mar 01 j 00:46 1°**尽** 08'39 retrograde -11615 Mar 15 j 14:49 10° m 19'27 retrograde -11609 Jun 13 j 18:24 9° ₹25'24 -11615 May 23 j 00:02 6° Mp 47'23 0°51'20 min. Earth dist. -11609 Aug 18 j 06:32 6° ₹ 00'55 8.03700 AU opposition -11615 May 22 j 20:06 7.86702 AU -11609 Aug 19 j 06:46 5°**₹**55'52 -2°54'12 min. Earth dist. 6°Mp48'11 opposition -11609 Oct 25 j 05:12 2°**尽**26'00 direct -11615 Jul 27 j 21:10 3° Mp 20'58 direct evening set -11615 Nov 06 j 18:29 11° M 36'28 evening set -11608 Feb 08 j 01:58 10° ₹ 41'19 conjunction -11615 Nov 24 j 11:53 13° m 58'46 0°23'00 conjunction -11608 Feb 26 j 03:09 12°₹59'55 -2°23'45 minimum elong -11615 Nov 24 j 11:54 13° **m** 58'46 0°23'13 minimum elong -11608 Feb 26 j 03:07 12°**尽** 59'54 2°24'21 max. Earth dist. -11615 Nov 24 j 21:25 14° m 01'58 9.82148 AU max. Earth dist. -11608 Feb 27 j 10:44 13°**₹**10'05 10.11107 AU -11615 Dec 12 j 10:52 16° m/22'54 -11608 Mar 15 j 02:38 15° ₹ 17'48 morning rise morning rise

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11608 in astronomical counting style is the year 11609 BCE in historical counting style. -11608 Jun 26 j 11:47 23° ₹ 19'20 -11602 May 31 j 16:37 0°**)**€ retrograde min. Earth dist. -11608 Aug 31 j 04:30 19° ₹ 56'35 8.19304 AU -11602 Sep 06 j 04:50 6°¥43'12 retrograde -11608 Sep 01 j 03:22 19° ₹ 51'54 -3°01'39 -11602 Nov 13 j 21:42 3°**¥**27'29 -1°00'47 opposition opposition min. Earth dist. -11608 Nov 07 j 19:43 16° ₹22'37 -11602 Nov 13 j 23:58 3°**米**27'03 9.15070 AU direct -11607 Feb 21 j 20:50 24°**尽**28'04 -11601 Jan 24 j 14:00 evening set direct 0°**₩**05'19 7°**₩**09'19 -11601 May 08 j 15:03 evening set -11607 Mar 11 j 19:18 26° **₹** 43'09 -2°25'59 conjunction -11601 May 25 j 18:06 9°**米**06'34 -0°35'54 -11607 Mar 11 j 19:18 26° ₹ 43'09 2°26'39 minimum elong conjunction max. Earth dist. -11607 Mar 12 j 23:36 26° ₹ 52'06 10.27658 AU minimum elong -11601 May 25 j 18:08 9°**X**06'34 0°36'10 morning rise -11607 Mar 29 j 14:53 28° ₹ 57'11 max. Earth dist. -11601 May 25 j 11:55 9°**米**04'47 11.20161 AU -11607 Apr 07 j 04:49 0°궁 morning rise -11601 Jun 11 j 15:57 11°**米**02'24 -11607 Jul 09 j 16:46 6°**⋜**42'56 retrograde retrograde opposition -11607 Sep 14 j 13:11 3°♂17'45 -2°58'43 opposition -11601 Nov 25 j 09:30 14° **★** 27'35 -0°27'17 min. Earth dist. -11607 Sep 13 j 16:25 3°**궁**21'57 8.36498 AU min. Earth dist. -11601 Nov 25 j 16:54 14° **★**26'13 9.24464 AU -11607 Nov 07 j 19:36 30°R ✓ direct -11600 Feb 05 j 08:54 11°**米**06'31 direct -11607 Nov 22 j 00:23 29°**х** 49'23 evening set -11600 May 18 j 22:06 18°**米**04'32 -11607 Dec 06 j 04:56 0°₹ evening set -11606 Mar 08 j 01:19 7°る43'43 conjunction -11600 Jun 04 j 21:47 20° ₩ 00'04 -0°08'12 minimum elong -11600 Jun 04 j 21:47 20°\tag{00'04} 0°08'21 conjunction -11606 Mar 25 j 20:48 9°る55'13 -2°20'19 behind sun begin -11600 Jun 04 j 15:36 19° ¥ 58'20 minimum elong -11606 Mar 25 j 20:50 9°る55'13 2°20'59 behind sun end -11600 Jun 05 j 03:59 20° **★** 01'49 max. Earth dist. -11606 Mar 26 j 21:09 10°る02'46 10.45322 AU max. Earth dist. -11600 Jun 04 j 09:54 19° ¥ 56'42 11.28055 AU morning rise -11606 Apr 12 j 12:19 12°る05'24 morning rise -11600 Jun 21 j 16:36 21° + 54'20 retrograde -11606 Jul 22 j 09:34 19°る35'49 asc. node -11600 Sep 23 j 20:37 28° ₩ 30'19 opposition -11606 Sep 27 j 12:46 16°정12'56 -2°46'43 retrograde -11600 Sep 27 j 07:20 28° ¥ 30'54 min. Earth dist. -11606 Sep 26 j 19:19 16°**♂**16'24 8.54316 AU opposition -11600 Dec 05 j 18:52 25° **¥** 16'47 0°06'36 -11606 Dec 05 j 18:39 12°る45'43 min. Earth dist. -11600 Dec 06 j 07:36 25° \tau 14'27 9.30845 AU direct evening set -11605 Mar 21 j 14:53 20°₹28'26 -11599 Feb 15 j 23:21 21° **ਮ** 56'37 direct evening set -11599 May 29 j 23:46 28° **ਮ** 50'19 -11599 Jun 09 j 07:22 0°**Υ** -11605 Apr 08 j 07:14 22°る36'27 -2°07'52 conjunction -11605 Apr 08 j 07:17 22°る36'28 2°08'30 minimum elong -11599 Jun 15 j 19:58 0°**Υ**'44'33 0°19'34 -11605 Apr 09 j 02:45 22°정42'23 10.63146 AU max. Earth dist. conjunction -11605 Apr 25 j 18:48 24°₹43'00 -11599 Jun 15 j 19:57 0°**Υ**'44'33 0°19'32 morning rise minimum elong -11599 Jun 15 j 02:18 0°**Υ**'39'32 11.32844 AU -11605 Jun 16 j 07:35 0°≈ max. Earth dist. -11605 Aug 03 j 15:37 1°≈59'19 -11599 Jul 02 j 12:04 2°**Υ**37'41 retrograde morning rise -11605 Sep 22 j 05:51 30°R♂ -11599 Oct  $08 \text{ j } 05:05 \quad 9^{\circ} \mathbf{Y} 13'10$ retrograde -11605 Oct 10 j 02:39 28°♂38'37 -2°27'17 -11599 Dec 17 j 03:10  $5^{\circ}$  **Y** 59'13  $0^{\circ}$  39'54 opposition opposition min. Earth dist. -11605 Oct 09 j 13:50 28° ₹41'07 8.71851 AU min. Earth dist. -11599 Dec 17 j 19:59 5°**Υ**56'10 9.34067 AU direct -11605 Dec 19 j 01:34 25°**♂**12'39 direct -11598 Feb 27 j 09:17 2°**Y**39'44 -11604 Mar 09 j 01:45 0°≈ evening set -11598 Jun 09 j 21:47 9°**Υ**30'51 evening set -11604 Apr 02 j 14:31 2°≈44'01 -11598 Jun 26 j 14:51 11°**Υ**′24'12 0°46'24 conjunction -11604 Apr 20 j 03:34 4°≈48'49 -1°49'56 -11598 Jun 26 j 14:49 11°**Υ**'24'12 0°46'29 conjunction minimum elong -11604 Apr 20 j 03:37 4°≈48'50 1°50'30 max. Earth dist. -11598 Jun 25 j 17:18 11°**Υ**′18'04 11.34429 AU minimum elong max. Earth dist. -11604 Apr 20 j 16:51 4°≈52'47 10.80256 AU -11598 Jul 13 j 04:24 13°**Υ**16'39 morning rise -11598 Oct 19 i 07:15 19° Υ 53'16 morning rise -11604 May 07 j 11:27 6°≈52'04 retrograde -11598 Dec 28 j 11:48  $16^{\circ}$  \( \gamma \) 39'05  $1^{\circ}$  11'43 retrograde -11604 Aug 14 j 11:16 13°≈55'56 opposition -11598 Dec 29 i 07:20  $16^{\circ}$  \( \gamma \) 35'32 9.34061 AU opposition -11604 Oct 21 j 07:44 10°≈37'12 -2°02'07 min. Earth dist. min. Earth dist. -11604 Oct 21 j 00:27 10°≈38'36 8.88283 AU direct  $-11597 \text{ Mar } 10 \text{ j } 18:34 \quad 13^{\circ} \Upsilon 20'04$ evening set direct -11604 Dec 30 j 22:04 7°≈12'32 -11597 Jun 20 j 17:54 20° Υ 10'16 -11603 Apr 15 j 01:22 14°≈33'26 max. Earth dist. -11597 Jul 06 j 08:00 21° Υ 56'18 11.32770 AU evening set -11603 Apr 18 j 21:21 15°≈ conjunction -11597 Jul 07 j 08:11 22° Υ 03'13 1°11'36 conjunction -11603 May 02 j 11:00 16°≈35'19 -1°27'50 minimum elong -11597 Jul 07 j 08:08 22°**Y**03'12 1°11'49 -11597 Jul 23 j 19:26 23°**Y**55′27 minimum elong -11603 May 02 j 11:03 16°≈35'20 1°28'18 morning rise -11603 May 02 j 16:45 16°≈37'00 10.95875 AU max. Earth dist. -11597 Oct 03 j 11:08 0°**8** -11603 May 19 j 15:29 18°≈35'39 morning rise retrograde -11597 Oct 30 j 11:40 0°\(\mathbf{8}\)35'17 -11603 Aug 25 j 21:41 25°≈29'12 -11597 Nov 26 j 21:58 30°R**Y** retrograde -11603 Nov 02 j 05:38 22°≈12'09 -1°32'49 opposition -11596 Jan 08 j 22:27 27°**Y**′20'32 1°41'09 opposition -11603 Nov 02 j 03:18 22°≈12'35 9.02885 AU min. Earth dist. -11596 Jan 09 j 20:57 27°**Υ**16'27 9.30826 AU min. Earth dist. direct -11596 Mar 20 j 23:45 24°**Υ**01'48 direct -11602 Jan 12 j 10:43 18°≈48'45 evening set -11602 Apr 27 j 00:49 26°≈00'25 -11596 Jun 22 j 15:53 0°8 evening set -11596 Jun 30 j 14:11 0°**8**52'47 conjunction -11602 May 14 j 07:07 27°≈59'46 -1°02'47 max. Earth dist. -11596 Jul 15 j 22:23 2°**8**37'52 11.27923 AU minimum elong -11602 May 14 j 07:09 27°≈59'47 1°03'09 max. Earth dist. -11602 May 14 j 06:18 27°≈59'32 11.09339 AU -11596 Jul 17 j 01:49 2°**8**45'46 1°34'27 conjunction -11602 May 31 j 08:16 29°≈57'38 -11596 Jul 17 j 01:46 2°**8**45'45 1°34'47 morning rise minimum elong

Planetary Pheno	omena of Saturn from	m -11900 1	through -11398	8 (UT), Astrodien	st AG 18-Feb-2025	14:23,	page 26
•	nical year style is used: The		•				
morning rise	-11596 Aug 02 j 11:23			opposition	-11589 Apr 04 j 05:22		
retrograde	-11596 Nov 09 j 20:09			min. Earth dist.	-11589 Apr 04 j 21:20		
opposition	-11595 Jan 19 j 12:34		2°07'23	direct	-11589 Jun 11 j 07:28		
min. Earth dist.	-11595 Jan 20 j 13:47		9.24469 AU	evening set	-11589 Sep 19 j 18:47		
direct	-11595 Apr 01 j 07:13			S	1 3		
evening set	-11595 Jul 11 j 12:16	_		conjunction	-11589 Oct 06 j 14:23	25°913'02	2°04'35
e venning see	110,000 11, 12.10	0.237		minimum elong	-11589 Oct 06 j 14:27		2°05'12
conjunction	-11595 Jul 27 j 21:50	13° <b>X</b> 36'09	1°54'10	max. Earth dist.	-11589 Oct 05 j 23:02		
minimum elong	-11595 Jul 27 j 21:47		1°54'36	morning rise	-11589 Oct 23 j 14:34		10.27000 110
max. Earth dist.	-11595 Jul 26 j 16:12			morning not	-11589 Nov 14 j 05:07	0°Ω	
max. Lartii dist.	-11595 Aug 08 j 23:22		11.20031710	retrograde	-11588 Feb 07 j 13:39	5°Ω32'56	
morning rise	-11595 Aug 13 j 06:27			opposition	-11588 Apr 17 j 05:34		2°22'15
retrograde	-11595 Nov 21 j 11:35			min. Earth dist.	-11588 Apr 17 j 15:44		
opposition	-11594 Jan 31 j 07:39		2°29'30	mm. Latin dist.	-11588 May 15 j 16:20		0.21331710
min. Earth dist.	-11594 Feb 01 j 10:00		9.15187 AU	direct	-11588 Jun 23 j 13:26		
direct	-11594 Apr 12 j 17:00		9.1316/ AU	direct	-11588 Jul 31 j 08:05	0°Ω	
	-11594 Apr 12 j 17:00 -11594 Jul 22 j 13:44			ovening set	-11588 Oct 02 j 06:50	6° <b>Ω</b> 32'22	
evening set	-11394 Jul 22 j 13.44	22 044 03		evening set	-11388 Oct 02 J 00.30	0 6632 22	
conjunction	-11594 Aug 07 j 22:14	24° <b>8</b> 38'38	2°10'02	conjunction	-11588 Oct 19 j 08:14	8° <b>Ω</b> 45'08	1°42'44
minimum elong	-11594 Aug 07 j 22:11		2°10'32	minimum elong	-11588 Oct 19 j 08:18		1°43'17
max. Earth dist.	-11594 Aug 06 j 16:45			max. Earth dist.	-11588 Oct 18 j 23:26		10.13567 AU
morning rise	-11594 Aug 24 j 06:32			morning rise	-11588 Nov 05 j 14:55		
	-11594 Sep 25 j 11:25				-11588 Dec 09 j 05:39		
retrograde	-11594 Dec 03 j 11:46			retrograde	-11587 Feb 21 j 11:42		
opposition	-11593 Feb 12 j 08:57		2°46'33	opposition	-11587 May 01 j 15:28		1°51'03
min. Earth dist.	-11593 Feb 13 j 10:44	0° <b>П</b> 12'16	9.03250 AU	min. Earth dist.	-11587 May 01 j 19:18		
mm. Latin dist.	-11593 Feb 16 j 05:31		7.03230 AC	mm. Lattii dist.	-11587 May 01 j 15:16		0.00007 AC
direct	-11593 Apr 24 j 06:21			direct	-11587 Jul 07 j 06:34		
direct	-11593 Apr 24 j 00:21 -11593 Jun 25 j 20:57	0° <b>I</b>		direct	-11587 Jul 07 j 00:34 -11587 Aug 28 j 23:21		
evening set	-11593 Juli 23 j 20:37 -11593 Aug 02 j 20:46			evening set	-11587 Oct 16 j 09:28		
max. Earth dist.			10.96253 AU	evening set	-1138/ Oct 10 J 09.28	20 8630 20	
max. Earm dist.	-11593 Aug 18 j 00:07	3 Щ4632	10.90233 AU	agnismation	-11587 Nov 02 j 17:15	220 0 47110	1014112
:	11502 A 10:05:04	εοπ <i>ετ</i> ιο 1	2021114	conjunction minimum elong	•		
conjunction	-11593 Aug 19 j 05:04	5° <b>I</b> 57'31		U	-11587 Nov 02 j 17:18		1°14'38
minimum elong	-11593 Aug 19 j 05:02		2°21'47	max. Earth dist.	-11587 Nov 02 j 15:29		9.99215 AU
morning rise	-11593 Sep 04 j 14:00	7° <b>I</b> I54'08		morning rise	-11587 Nov 20 j 06:50		
retrograde	-11593 Dec 15 j 23:02		2055122		-11587 Dec 31 j 19:04		
opposition	-11592 Feb 24 j 17:51			retrograde	-11586 Mar 08 j 18:57		
min. Earth dist.	-11592 Feb 25 j 18:33		8.89041 AU	opposition	-11586 May 16 j 09:29	0° mp 10'18	
direct	-11592 May 05 j 00:23			min. Earth dist.	-11586 May 16 j 07:15		7.93039 AU
evening set	-11592 Aug 13 j 11:04	15° <b>Ⅲ</b> 38′22			-11586 May 18 j 12:02		
				direct	-11586 Jul 21 j 10:19		
conjunction	-11592 Aug 29 j 20:06				-11586 Sep 19 j 12:23	0° <b>™</b>	
minimum elong	-11592 Aug 29 j 20:06			evening set	-11586 Oct 31 j 02:21	4° <b>™</b> 55'49	
max. Earth dist.	-11592 Aug 28 j 15:49		10.81109 AU				
morning rise	-11592 Sep 15 j 07:02			conjunction	-11586 Nov 17 j 16:34	-	0°40'17
retrograde	-11592 Dec 27 j 19:40			minimum elong	-11586 Nov 17 j 16:36	7° Mp 16′25	0°40'34
opposition	-11591 Mar 08 j 11:51			max. Earth dist.	-11586 Nov 17 j 22:26	7° Mp 18′22	9.87760 AU
min. Earth dist.	-11591 Mar 09 j 11:03		8.73073 AU	morning rise	-11586 Dec 05 j 12:43	9° <b>™</b> 38'55	
direct	-11591 May 17 j 00:53	20° <b>Ⅱ</b> 19'52		retrograde	-11585 Mar 24 j 08:24	18° <b>™</b> 22'44	
evening set	-11591 Aug 25 j 10:15	27° <b>Ⅱ</b> 39'12		opposition	-11585 May 31 j 09:44	14° <b>m</b> 50'37	0°26'59
				min. Earth dist.	-11585 May 31 j 01:37	14° <b>m</b> 52'18	7.83354 AU
conjunction	-11591 Sep 10 j 21:24	29° <b>Ⅱ</b> 40'33	2°26'30	direct	-11585 Aug 04 j 23:58	11°Mp24'10	
minimum elong	-11591 Sep 10 j 21:25	29° <b>Ⅱ</b> 40'33	2°27'09	evening set	-11585 Nov 15 j 07:54	19° <b>m</b> 43'17	
max. Earth dist.	-11591 Sep 09 j 19:37	29° <b>Ⅲ</b> 32'34	10.64522 AU				
	-11591 Sep 13 j 12:18	0ංම		conjunction	-11585 Dec 03 j 03:56	22°M/06'46	0°03'05
morning rise	-11591 Sep 27 j 11:37	1°9542'55		minimum elong	-11585 Dec 03 j 03:55	22° Mp 06'46	0°03'12
retrograde	-11590 Jan 10 j 04:25			behind sun begin	-11585 Dec 02 j 20:37		
opposition	-11590 Mar 21 j 15:36	5° <b>©</b> 59'15	2°57'22	behind sun end	-11585 Dec 03 j 11:13	22° <b>m</b> 09'12	
min. Earth dist.	-11590 Mar 22 j 12:02	5° <b>©</b> 55'20	8.55978 AU	max. Earth dist.	-11585 Dec 03 j 17:34		9.79997 AU
direct	-11590 May 29 j 11:43	2°538'02	-	morning rise	-11585 Dec 21 j 05:27		-
evening set	-11590 Sep 06 j 20:19			desc. node	-11584 Jan 02 j 14:35		
<b>5</b>	r - J				-11584 Feb 05 j 09:37		
conjunction	-11590 Sep 23 j 11:04	12°511'50	2°19'10	retrograde	-11584 Apr 08 j 00:15		
minimum elong	-11590 Sep 23 j 11:07				-11584 Jun 12 j 02:16		
max. Earth dist.	-11590 Sep 22 j 13:50			opposition	-11584 Jun 14 j 13:19		-0°20'40
morning rise	-11590 Oct 10 j 05:43		, 1, 1, 1, 1, 10	min. Earth dist.	-11584 Jun 13 j 23:50		
retrograde	-11589 Jan 24 j 02:53			direct	-11584 Aug 18 j 22:33		,.,,00,710
						<sub>x</sub> 000	

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11584 in astronomical counting style is the year 11585 BCE in historical counting style. -11584 Oct 21 i 17:50 0°₽ retrograde -11578 Jul 04 i 03:04 0°る47'23 -11584 Nov 29 j 23:47 4°**♀**45'17 -11578 Aug 02 j 15:16 30°R 🗷 evening set -11578 Sep 08 j 18:54 27° ₹21'10 -3°01'25 opposition -11584 Dec 18 j 00:23 7°**2**10'33 -0°34'55 min. Earth dist. -11578 Sep 07 j 22:15 27° ₹25'23 8.27400 AU conjunction -11584 Dec 18 j 00:21 7°**♀**10'32 0°34'57 direct -11578 Nov 15 j 19:27 23° ₹ 52'19 minimum elong -11584 Dec 18 j 20:56 7°**£**17'30 9.76449 AU -11577 Feb 14 j 05:35 0°♂ max. Earth dist. -11583 Jan 05 j 05:36 9°**♀**37'15 -11577 Mar 01 j 23:00 morning rise evening set 1°**る**52'47 -11583 Apr 23 j 14:13 18°**♀**25'44 retrograde -11583 Jun 29 j 17:00 14°**£**52'51 -1°07'18 -11577 Mar 19 j 19:57 4°**ਰ**06'10 -2°23'57 opposition conjunction -11577 Mar 19 j 19:59 4°**궁**06'10 2°24'37 min. Earth dist. -11583 Jun 28 j 23:13 14°**♀**56'35 7.76367 AU minimum elong direct -11583 Sep 03 j 02:38 11°**£**24'22 max. Earth dist. -11577 Mar 20 j 21:27 4°정14'08 10.35803 AU -11583 Dec 15 j 22:09 19°**♀**52'51 -11577 Apr 06 j 13:25 6° **정**18'21 evening set morning rise -11577 Jul 17 j 01:06 13°**⋜**56'43 retrograde conjunction -11582 Jan 03 j 01:40 22° **2**18'37 -1°10'33 opposition -11577 Sep 21 j 23:58 10°♂32'35 -2°53'29 minimum elong -11582 Jan 03 j 01:36 22° **2**18'36 1°10'46 min. Earth dist. -11577 Sep 21 j 06:33 10°る36'05 8.44560 AU max. Earth dist. -11582 Jan 04 j 03:37 22° **2**27'22 9.77265 AU direct -11577 Nov 29 j 20:19 7°る04'32 morning rise -11582 Jan 21 j 08:29 24°**♀**45'22 evening set -11576 Mar 14 j 20:10 14°₹53'35 -11582 Mar 06 j 09:10 0°M retrograde -11582 May 08 j 23:00 3°M29'29 conjunction -11576 Apr 01 j 14:01 17°る03'26 -2°14'30 opposition -11582 Jul 14 j 17:57 29° **2**57'03 -1°49'10 minimum elong -11576 Apr 01 j 14:03 17°る03'27 2°15'09 min. Earth dist. -11582 Jul 13 j 20:48 0°ML01'30 7.79383 AU max. Earth dist. -11576 Apr 02 j 09:59 17°る09'34 10.53215 AU -11582 Jul 14 i 03:57 30°R **≏** morning rise -11576 Apr 19 i 03:41 19°る11'56 direct -11582 Sep 18 j 08:53 26° **2**27'55 retrograde -11576 Jul 28 j 11:00 26°る35'31 -11582 Nov 20 j 11:19 0°M opposition -11576 Oct 03 j 18:46 23° ₹ 13'26 -2°37'18 evening set -11582 Dec 31 j 22:19 4°ML56'43 min. Earth dist. -11576 Oct 03 j 04:51 23°**♂**16'11 8.61921 AU -11576 Dec 12 j 10:28 19°る46'24 direct conjunction -11581 Jan 19 j 02:57 7°M21'41 -1°41'12 -11575 Mar 28 j 02:49 27°**♂**23'56 evening set -11581 Jan 19 j 02:52 7°M21'40 1°41'34 minimum elong max. Earth dist. -11581 Jan 20 j 08:51 7°M-31'41 9.82350 AU -11575 Apr 14 j 17:30 29°る30'27 -1°58'56 conjunction -11581 Feb 06 j 09:19 9°ML47'07 minimum elong -11575 Apr 14 j 17:34 29°る30'28 1°59'32 morning rise -11575 Apr 15 j 07:58 29°る34'49 10.70393 AU -11581 Mar 22 j 14:03 15°M max. Earth dist. -11581 May 23 j 23:26 18° ML22'49 -11575 Apr 18 j 19:33 0°≈ retrograde -11581 Jul 27 j 20:29 15°RML -11575 May 02 j 03:23 1°≈35'29 morning rise -11581 Jul 29 j 13:25 14°ML51'24 -2°23'05 -11575 Aug 09 j 11:55 8°≈45'47 opposition retrograde min. Earth dist. -11581 Jul 28 j 13:55 14°M 56'20 7.86557 AU -11575 Oct 16 j 04:15 5°≈25'37 -2°14'33 opposition -11581 Oct 03 j 14:13 11°M21'54 -11575 Oct 15 j 18:10 5°≈27'35 8.78642 AU direct min. Earth dist. -11581 Dec 07 j 06:32 15°M -11575 Dec 25 j 12:33 1°≈59'46 direct evening set -11580 Jan 16 j 19:27 19°**M**47'42 evening set -11574 Apr 09 j 19:51 9°≈26'19 -11580 Feb 03 j 23:37 22° 11.10'45 -2°04'41 conjunction conjunction -11574 Apr 27 j 07:20 11°≈29'48 -1°38'35 minimum elong -11580 Feb 03 j 23:33 22°M 10'43 2°05'11 minimum elong -11574 Apr 27 j 07:23 11°≈29'49 1°39'05 max. Earth dist. -11580 Feb 05 j 07:40 22°M21'20 9.91444 AU max. Earth dist. -11574 Apr 27 j 16:37 11°≈32'33 10.86553 AU -11580 Feb 22 j 03:54 24°M33'44 morning rise -11574 May 14 j 13:30 13°≈31'42 morning rise -11580 Apr 09 j 10:22 0° ₹ -11574 May 27 j 12:59 15°≈ -11580 Jun 06 j 12:50 2° ₹ 57'33 retrograde -11574 Aug 21 j 03:37 20°≈30'39 retrograde -11580 Aug 05 j 13:01 30°RML -11574 Oct 28 i 05:53 17°≈12'13 -1°46'55 opposition min. Earth dist. -11580 Aug 11 j 00:46 29° ML32'37 7.97469 AU -11574 Oct 28 i 00:39 17°≈13'13 8.94017 AU min. Earth dist. -11580 Aug 12 i 01:00 29°M27'33 -2°46'51 opposition -11574 Nov 28 j 16:12 15°R≈ direct -11580 Oct 17 j 14:52 25°M 57'57 direct -11573 Jan 07 i 04:46 13°≈47'37 -11580 Dec 25 j 23:28 0° ₹ -11573 Feb 15 i 10:23 15°≈ -11579 Jan 31 j 08:52 4° ₹ 17'38 evening set -11573 Apr 22 j 00:40 21°≈04'12 evening set conjunction -11579 Feb 18 j 11:22 6° ₹37'53 -2°19'44 conjunction -11573 May 09 j 08:50 23°≈04'57 -1°14'42 -11579 Feb 18 j 11:20 6° ₹37'53 2°20'20 minimum elong minimum elong -11573 May 09 j 08:53 23°≈04'58 1°15'07 max. Earth dist. -11579 Feb 19 j 19:21 6°**✗¹**48'17 10.03964 AU max. Earth dist. -11573 May 09 j 12:15 23°≈05'57 11.01044 AU morning rise -11579 Mar 08 j 12:29 8° ₹ 57'36 morning rise -11573 May 26 j 11:33 25°≈04'10 retrograde -11579 Jun 20 j 14:47 17°**尽**07'07 -11573 Jul 15 j 11:21 0°**)**€ min. Earth dist. -11579 Aug 25 j 03:55 13° ₹ 43'42 8.11385 AU retrograde -11573 Sep 01 j 12:58 1°**米** 53'54 -11579 Aug 26 j 03:10 13° ₹38'54 -2°59'33 -11573 Oct 21 j 01:59 30°R≈ opposition -11579 Nov 01 j 09:07 10° ₹ 09'31 -11573 Nov 09 j 00:52 28°≈36'58 -1°15'55 direct opposition -11578 Feb 15 j 10:53 18° ₹20'28 min. Earth dist. evening set -11573 Nov 09 j 01:02 28°≈36'56 9.07464 AU direct -11572 Jan 19 j 11:29 25°≈13'35 -11578 Mar 05 j 10:49 20°**₰**37'24 -2°26'01 conjunction -11572 Apr 11 j 00:15 0°**)**€ minimum elong -11578 Mar 05 j 10:49 20° ₹37'24 2°26'39 evening set -11572 May 02 j 19:26 2°**∺**21'38 max. Earth dist. -11578 Mar 06 j 16:37 20° ₹ 46'55 10.19065 AU -11578 Mar 23 j 08:10 22° ₹ 53'25 -11572 May 20 j 00:05 4°¥20'02 -0°48'30 morning rise conjunction

-11572 May 20 j 00:07

minimum elong

4°**)** €20'02 0°48'48

-11578 Jun 04 j 17:20 0°♂

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11572 in astronomical counting style is the year 11573 BCE in historical counting style. minimum elong -11572 May 19 j 20:46 4° ¥ 19'04 11.13346 AU -11566 Jul 23 i 09:26 8°**8**53'17 1°45'59 max. Earth dist. -11572 Jun 05 j 23:37 6° **₭** 16'58 -11566 Aug 08 j 18:16 10°**8**46'02 morning rise morning rise -11572 Sep 11 j 14:54 12° **¥** 59'45 -11566 Sep 19 j 15:37 15°8 retrograde -11566 Nov 16 j 14:28 17°**8**34'30 -11572 Nov 19 j 14:36 9°**)** 44'00 -0°42'53 retrograde opposition -11572 Nov 19 j 19:33 9° **★**43'05 9.18518 AU -11565 Jan 16 j 19:02 15°R**8** min. Earth dist. -11565 Jan 26 j 07:55 14°**8**18'42 2°19'54 direct -11571 Jan 30 j 11:04 6° **★**21'50 opposition -11571 May 14 j 05:49 13°**米**22'56 -11565 Jan 27 j 07:58 14°**8**14'20 evening set min. Earth dist. 9.21596 AU direct -11565 Apr 07 j 21:18 11°**8**00'28 conjunction -11571 May 31 j 07:04 15° **★** 19'21 -0°21'00 -11565 Jun 20 j 16:38 15°**8** minimum elong -11571 May 31 j 07:04 15° **★** 19'22 0°21'12 evening set -11565 Jul 17 j 22:39 17°**8**55'30 max. Earth dist. -11571 May 30 j 22:04 15° **X** 16'47 11.23059 AU max. Earth dist. -11565 Aug 02 j 02:46 19°**8**40'57 11.16657 AU -11571 Jun 17 j 03:30 17°**)** 14'27 morning rise -11571 Sep 22 j 16:29 23° **∺** 52'38 -11565 Aug 03 j 07:29 19°**8**49'20 2°03'18 retrograde conjunction opposition -11571 Dec 01 j 01:01 20° ₭ 37'45 -0°08'58 minimum elong -11565 Aug 03 j 07:26 19°**8**49'19 2°03'46 min. Earth dist. -11571 Dec 01 j 09:39 20° ★ 36'10 9.26827 AU morning rise -11565 Aug 19 j 15:40 21°**8**43'08 direct -11570 Feb 11 j 05:02 17° **∺** 16'43 retrograde -11565 Nov 28 j 09:30 28°839'54 asc. node -11570 Mar 09 j 15:02 17° **∺**49'08 opposition -11564 Feb 07 j 05:58 25°**8**22'51 2°39'21 evening set -11570 May 25 j 09:36 24° **∺** 12'28 min. Earth dist. -11564 Feb 08 j 07:47 25°**8**18'08 9.11297 AU direct -11564 Apr 18 j 08:02 22°**8**04'25 conjunction -11570 Jun 11 j 07:35 26° ₩ 07'22 evening set -11564 Jul 28 j 02:42 29°804'20 minimum elong -11570 Jun 11 j 07:34 26° **★** 07'22 -11564 Aug 05 j 01:23  $\Pi$  $^{\circ}0$ behind sun begin -11570 Jun 11 i 01:04 26° ₩ 05'32 max. Earth dist. -11564 Aug 12 j 04:58 0°**Д**50'41 11.04982 AU behind sun end -11570 Jun 11 j 14:05 26° ¥ 09'12 max. Earth dist. -11570 Jun 10 j 18:39 26° ¥ 03'41 11.29878 AU conjunction -11564 Aug 13 j 10:40 0° Д59'29 2°16'42 morning rise -11570 Jun 28 j 00:56 28°\mathbf{H}01'03 minimum elong -11564 Aug 13 j 10:38 0°**Ⅱ**59'28 2°17'15 -11570 Jul 16 i 10:59  $0^{\circ}\Upsilon$ -11564 Aug 29 j 19:10 2°**Д**54'54 morning rise -11570 Oct 03 j 16:19 4° Υ 36'55 -11564 Dec 09 j 14:28 10°**Д**01'53 retrograde retrograde -11570 Dec 12 j 09:36  $1^{\circ}$   $\Upsilon$  22'34  $0^{\circ}$  24'46 -11563 Feb 18 j 10:55 6°**II**43'18 2°53'12 opposition opposition -11570 Dec 12 j 22:27 1°**Υ**20'13 9.32140 AU -11563 Feb 19 j 12:57 6°**Ц**38'30 8.98336 AU min. Earth dist. min. Earth dist. -11570 Dec 31 j 19:58 30°R € -11563 Apr 30 j 00:31 3°**II**24'27 direct -11569 Feb 22 j 15:24 28° **₭**02'32 -11563 Aug 08 j 12:56 10°**Ⅲ**30'47 direct evening set -11569 Apr 14 j 23:40 0°**Υ** -11569 Jun 05 j 09:07 4°**Y**54'42 -11563 Aug 24 j 21:19 12°**I**27'53 2°25'01 evening set conjunction max. Earth dist. -11569 Jun 21 j 10:12 6°**Υ**43'28 11.33599 AU -11563 Aug 24 j 21:18 12°**II**27'53 2°25'38 minimum elong -11563 Aug 23 j 16:38 12°**Д**19'15 10.90833 AU max. Earth dist. -11569 Jun 22 j 03:46  $6^{\circ}$  \begin{pmatrix} \gamma 48'28 & 0\circ 34'15 \end{pmatrix} -11563 Sep 10 j 07:04 14°**Д**25'32 conjunction morning rise -11569 Jun 22 j 03:45  $6^{\circ}$   $\Upsilon$  48'27  $0^{\circ}$  34'17 -11563 Dec 22 j 05:23 21°**I**I44'34 minimum elong retrograde morning rise -11569 Jul 08 j 18:24 8°**Y**41'12 opposition -11562 Mar 03 j 00:01 18°**Д**24'10 3°00'29 retrograde -11569 Oct 14 j 16:23 15°**Y**16'58 min. Earth dist. -11562 Mar 04 j 00:31 18°**II**19'36 8.83108 AU opposition -11569 Dec 23 j 17:46 12° $\Upsilon$ 02'50 0°57'23 direct -11562 May 11 j 22:06 15°**Ц**04'42 min. Earth dist. -11569 Dec 24 j 11:08 11°**Υ**59'40 9.34303 AU evening set -11562 Aug 20 j 07:14 22°**Ⅱ**19'00 -11568 Mar 05 j 00:02 8°**Y**43'33 direct -11568 Jun 15 j 06:04 15°**Y**33'56 -11562 Sep 05 j 17:16 24°Д18'41 2°27'30 evening set conjunction -11562 Sep 05 j 17:17 24°**Д**18'41 2°28'09 minimum elong -11568 Jul 01 j 21:30 17°**Y**'27'00 1°00'19 max. Earth dist. -11562 Sep 04 j 14:31 24°П10'30 10.74704 AU conjunction -11568 Jul 01 j 21:28 17°**Υ**'26'59 1°00'28 -11562 Sep 22 j 05:32 26°**Д**19'13 minimum elong morning rise -11568 Jun 30 j 23:13  $17^{\circ}$  Y 20'39 11.34120 AU -11562 Oct 25 i 06:42 0°5 max. Earth dist. -11568 Jul 18 i 09:51 19°**Υ**19'16 morning rise retrograde -11561 Jan 04 i 09:20 3°551'47 -11568 Oct 24 j 18:00 25° Υ 57'08 retrograde opposition -11561 Mar 15 j 22:25 0°\$29'24 3°00'12  $-11567 \text{ Jan } 03 \text{ i } 03:16 \ 22^{\circ} \Upsilon 42'49 \ 1^{\circ} 28'02$ min. Earth dist. -11561 Mar 16 i 20:13 0°\$25'17 8.66211 AU opposition min. Earth dist. -11567 Jan 03 j 23:51 22°**Y**39'05 9.33243 AU -11561 Mar 22 j 10:21 30°R **Ⅱ** -11567 Mar 16 j 06:46  $19^{\circ}$ **Y**24'08 direct -11561 May 24 j 03:41 27°**Д**09'07 direct -11567 Jun 26 j 02:00 26°**Y**14'23 -11561 Jul 21 j 21:20 0°5 evening set evening set -11561 Sep 01 j 11:36 4°532'38 conjunction -11567 Jul 12 j 14:42 28°**Y**07'12 1°24'21 max. Earth dist. -11561 Sep 16 j 23:57 6°527'52 10.57293 AU minimum elong -11567 Jul 12 j 14:39 28°**Y**07'11 1°24'38 max. Earth dist. -11567 Jul 11 j 13:59 28°**Υ**00'07 11.31415 AU conjunction -11561 Sep 18 j 00:23 6°\$35'30 2°23'26 -11567 Jul 29 j 01:01 29°**Y**59'27 -11561 Sep 18 j 00:25 6°935'30 morning rise minimum elong 2°24'05 -11567 Jul 29 j 02:58 -11561 Oct 04 j 16:33 ∞೪ morning rise 8°**©**39'31 -11567 Nov 05 j 01:47 6°**8**41'38 retrograde retrograde -11560 Jan 18 j 01:51 16°526'36 -11566 Jan 14 j 15:34 3°**8**26'44 1°55'50 opposition opposition -11560 Mar 28 j 06:53 13°502'08 2°51'29 min. Earth dist. -11566 Jan 15 j 13:55 3°**8**22'41 9.28972 AU min. Earth dist. -11560 Mar 29 j 01:30 12°558'33 8.48426 AU direct -11566 Mar 27 j 14:35 0°**8**08'24 direct -11560 Jun 04 j 16:52 9°540'49 evening set -11566 Jul 06 j 22:57 7°**8**00'13 evening set -11560 Sep 13 j 03:30 17°5014'32 max. Earth dist. -11566 Jul 22 j 07:05 8°**8**45'40 11.25542 AU -11560 Sep 29 j 20:24 19°521'04 2°12'18 conjunction -11566 Jul 23 j 09:29 8°**8**53'17 1°45'35 -11560 Sep 29 j 20:27 19°521'05 2°12'56 conjunction minimum elong

Planetary Phen	omena of Saturn fro	m -11900 i	through -11398	8 (UT), Astrodien	st AG 18-Feb-2025	14:23,	page 29
•	nical year style is used: The		-				
max. Earth dist.	-11560 Sep 28 j 23:59	-		retrograde	-11553 May 02 j 04:10		
morning rise	-11560 Oct 16 j 17:47			min. Earth dist.	-11553 Jul 07 j 06:23		7.75578 AU
retrograde	-11559 Jan 31 j 04:55			opposition	-11553 Jul 08 j 02:27		
opposition	-11559 Apr 11 j 01:46		2°33'44	direct	-11553 Sep 11 j 13:45		
min. Earth dist.	-11559 Apr 11 j 16:10			evening set	-11553 Dec 24 j 19:03		
direct	-11559 Jun 17 j 17:48				-11552 Jan 08 j 00:36		
	-11559 Sep 22 j 20:17				11002 Van 00 j 00.50	0 110	
evening set	-11559 Sep 26 j 08:18			conjunction	-11552 Jan 11 j 23:22	0°MJ31'51	-1°27'23
e venning see	11227 Sep 20 J 00.10	0 002020		minimum elong	-11552 Jan 11 j 23:17	0°M31'50	
conjunction	-11559 Oct 13 j 06:39	2° <b>Ω</b> 37'04	1°53'53	max. Earth dist.	-11552 Jan 13 j 03:59	0°M41'28	9.77592 AU
minimum elong	-11559 Oct 13 j 06:43		1°54'28	morning rise	-11552 Jan 30 j 06:18		9.11392 AU
max. Earth dist.	-11559 Oct 13 j 00:43		10.22051 AU	retrograde	-11552 May 16 j 09:21		
morning rise	-11559 Oct 30 j 10:14		10.22031 AU	min. Earth dist.	-11552 Jul 21 j 02:41	8°M11'25	7.80913 AU
•	-11558 Feb 14 j 19:45				-11552 Jul 22 j 01:17	8°M06'39	
retrograde			2°06'49	opposition direct	•	4°M36'38	-2 08 10
opposition min. Earth dist.	-11558 Apr 25 j 06:34		8.13812 AU		-11552 Sep 25 j 20:11		
direct	-11558 Apr 25 j 15:38		6.13612 AU	evening set	-11551 Jan 08 j 18:33		
	-11558 Jul 01 j 06:38				-11551 Jan 23 j 07:28	13 116	
evening set	-11558 Oct 10 j 03:17				11551 I 26: 22:06	1.50 <b>m</b> 20100	1954121
	-11558 Oct 16 j 17:09	15.91		conjunction	-11551 Jan 26 j 23:06		
	11550 0 . 27:07.57	1.60.000100	1020120	minimum elong	-11551 Jan 26 j 23:01		
conjunction	-11558 Oct 27 j 07:57			max. Earth dist.	-11551 Jan 28 j 06:30		9.85044 AU
minimum elong	-11558 Oct 27 j 08:01			morning rise	-11551 Feb 14 j 04:47		
max. Earth dist.	-11558 Oct 27 j 01:08		10.06092 AU	retrograde	-11551 May 31 j 04:16		
morning rise	-11558 Nov 13 j 18:13			opposition	-11551 Aug 05 j 17:05		
retrograde	-11557 Mar 01 j 21:36			min. Earth dist.	-11551 Aug 04 j 17:09		7.90404 AU
opposition	-11557 May 09 j 20:11		1°31'22	direct	-11551 Oct 11 j 00:03		
min. Earth dist.	-11557 May 09 j 22:47		7.98923 AU	evening set	-11550 Jan 24 j 12:23		
direct	-11557 Jul 15 j 05:19				-11550 Feb 10 j 16:14	0° <b>∡</b> ¹	
evening set	-11557 Oct 24 j 12:39	28° <b>Ω</b> 20'05					
	-11557 Nov 06 j 03:07	0° <b>m</b>		conjunction	-11550 Feb 11 j 15:44	0° <b>∡</b> ¹07'42	-2°13'41
				minimum elong	-11550 Feb 11 j 15:41	0° <b>∡</b> ¹07'41	2°14'13
conjunction	-11557 Nov 10 j 23:55		0°56'58	max. Earth dist.	-11550 Feb 12 j 23:56	0° <b>≯</b> 18'16	9.96352 AU
minimum elong	-11557 Nov 10 j 23:58	0° Mp 38′58	0°57'19	morning rise	-11550 Mar 01 j 18:43	2° <b>∡</b> ¹29'14	
max. Earth dist.	-11557 Nov 11 j 01:17	0° Mp 39′24	9.92549 AU	retrograde	-11550 Jun 14 j 11:30	10° <b>х¹</b> 46′08	
morning rise	-11557 Nov 28 j 16:53	2° <b>m</b> 59'44		min. Earth dist.	-11550 Aug 18 j 23:55	7° <b>∡</b> ¹21'35	8.03352 AU
retrograde	-11556 Mar 16 j 08:02	11° <b>m</b> 39'42		opposition	-11550 Aug 20 j 00:04	7° <b>∡</b> 16'33	-2°54'57
opposition	-11556 May 23 j 17:17	8°17007'38	0°48'57	direct	-11550 Oct 25 j 22:44	3° <b>х</b> ⁴46'36	
min. Earth dist.	-11556 May 23 j 12:56	8° m 08'32	7.86942 AU	evening set	-11549 Feb 08 j 20:05	12° <b>∡</b> °02′15	
direct	-11556 Jul 28 j 13:32	4°M)41'16					
evening set	-11556 Nov 07 j 11:45	12° <b>m</b> 56'34		conjunction	-11549 Feb 26 j 21:18	14° <b>∡</b> ¹20'55	-2°24'06
				minimum elong	-11549 Feb 26 j 21:16	14° <b>∡</b> ¹20'54	2°24'43
conjunction	-11556 Nov 25 j 05:16	15° m 18'52	0°21'04	max. Earth dist.	-11549 Feb 28 j 04:31	14° <b>∡</b> °30′58	10.10716 AU
minimum elong	-11556 Nov 25 j 05:18		0°21'16	morning rise	-11549 Mar 16 j 20:42		
max. Earth dist.	-11556 Nov 25 j 14:54		9.82336 AU	retrograde	-11549 Jun 28 j 05:36		
morning rise	-11556 Dec 13 j 04:17			opposition	-11549 Sep 02 j 20:51		-3°01'50
retrograde	-11555 Mar 31 j 23:43			min. Earth dist.	-11549 Sep 01 j 21:34		
opposition	-11555 Jun 07 j 19:22		0°02'12	direct	-11549 Nov 09 j 13:38		
min. Earth dist.	-11555 Jun 07 j 08:39	-	7.78707 AU	evening set	-11548 Feb 23 j 15:02		
desc. node	-11555 Jun 25 j 03:24			Č	,		
direct	-11555 Aug 12 j 07:08			conjunction	-11548 Mar 12 j 13:35	28° <b>₹</b> '04'41	-2°25'52
evening set	-11555 Nov 22 j 23:00			minimum elong	-11548 Mar 12 j 13:35		
5 · • · · · · · · · · · · · · · · · · ·	-11555 Dec 08 j 19:44			max. Earth dist.	-11548 Mar 13 j 18:21		
	11000 Dec 00 j 17	<u> </u>		man. Darm dist.	-11548 Mar 27 j 20:27		10.27202110
conjunction	-11555 Dec 10 j 21:46	0° <b>£</b> 16'55	-0°16'55	morning rise	-11548 Mar 30 j 09:01	್ರಿ 0° <b>ವ</b> 18'46	
minimum elong	-11555 Dec 10 j 21:45			retrograde	-11548 Jul 10 j 10:42		
max. Earth dist.	-11555 Dec 10 j 21:45		9.76185 AU	min. Earth dist.	-11548 Sep 14 j 10:05		8.36012 AU
morning rise	-11555 Dec 29 j 01:24		7.10103 AU	opposition	-11548 Sep 14 j 10.05 -11548 Sep 15 j 06:54		
•	•			direct			2 30 10
retrograde	-11554 Apr 16 j 15:48		0045125		-11548 Nov 22 j 18:22		
opposition	-11554 Jun 22 j 23:22			evening set	-11547 Mar 08 j 19:42	9° <b>る</b> 05'46	
min. Earth dist.	-11554 Jun 22 j 07:19		7.74820 AU		1154734 00:15:15	110717100	2010/44
direct	-11554 Aug 27 j 08:19			conjunction	-11547 Mar 26 j 15:15		
evening set	-11554 Dec 08 j 18:59	12~ <b>±±</b> 58'35		minimum elong	-11547 Mar 26 j 15:17		
	11664 5 - 55151	1.50 0 5	005404	max. Earth dist.	-11547 Mar 27 j 16:06		10.44820 AU
conjunction	-11554 Dec 26 j 21:25			morning rise	-11547 Apr 13 j 06:40		
minimum elong	-11554 Dec 26 j 21:22			retrograde	-11547 Jul 23 j 04:22		
max. Earth dist.	-11554 Dec 27 j 21:11		9.74560 AU	opposition	-11547 Sep 28 j 06:48		
morning rise	-11553 Jan 14 j 03:44	17° <b>£</b> 51'40		min. Earth dist.	-11547 Sep 27 j 13:57	17°₹38'41	8.53796 AU

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11547 in astronomical counting style is the year 11548 BCE in historical counting style. -11547 Dec 06 j 11:52 14°る08'02 direct retrograde -11541 Sep 29 j 01:14 29° ¥ 56'19 evening set -11546 Mar 22 j 09:36 21°**⋜**51'07 opposition -11541 Dec 07 j 14:30 26° \(\frac{1}{42}\)'11 0°09'18 min. Earth dist. -11541 Dec 08 j 02:57 26° ★39'54 9.30751 AU -11546 Apr 09 j 01:52 23°る59'14 -2°06'51 -11540 Feb 17 j 18:30 23°**米**22'02 conjunction direct  $0^{\circ}\Upsilon$ -11546 Apr 09 j 01:55 23°る59'15 2°07'28 -11540 May 28 j 10:04 minimum elong -11546 Apr 09 j 21:05 24°る05'04 10.62620 AU -11540 May 30 j 19:03 0°Υ15'47 max. Earth dist. evening set -11546 Apr 26 j 13:25 26°る05'52 morning rise 2°**Y**10'00 0°21'46 -11546 Jun 01 j 05:42 -11540 Jun 16 j 15:08 conjunction 2°**Y**10'00 3°**≈**22'24 -11540 Jun 16 j 15:07 0°21'44 retrograde -11546 Aug 04 j 10:20 minimum elong -11540 Jun 15 j 21:54 2°**Υ**'05'06 11.32780 AU opposition -11546 Oct 10 j 21:02 0°≈01'41 -2°25'48 max. Earth dist. min. Earth dist. -11546 Oct 10 j 08:51 0°≈04'04 8.71328 AU morning rise -11540 Jul 03 j 07:08 4°**Y**03'08 -11546 Oct 11 j 05:39 30°R ₹ -11540 Oct 09 j 01:41 10°**Υ**38'45 retrograde -11546 Dec 19 j 19:19 26°₹35'39 -11540 Dec 17 j 22:46 7°**Υ**24'48 direct opposition 0°42'32 -11545 Feb 24 j 20:04 0°**≈** min. Earth dist. -11540 Dec 18 j 14:42 7°**Υ**21'54 9.34028 AU evening set -11545 Apr 04 j 09:25 4°≈07'24 direct -11539 Feb 28 j 06:29 4°**Υ**05'22 evening set -11539 Jun 10 j 17:05 10°**Υ**56'28 conjunction -11545 Apr 21 j 22:20 6°≈12'16 -1°48'32 minimum elong -11545 Apr 21 j 22:23 6°≈12'17 1°49'05 conjunction -11539 Jun 27 j 10:06 12°**Y**49'49 0°48'30 max. Earth dist. -11545 Apr 22 j 10:49 6°≈16'00 10.79747 AU minimum elong -11539 Jun 27 j 10:04 12°**Υ**'49'49 0°48'36 morning rise -11545 May 09 j 06:18 8°≈15'37 max. Earth dist. -11539 Jun 26 j 13:31 12°**Υ**'43'58 11.34411 AU -11545 Jul 27 j 20:58 15°≈ morning rise -11539 Jul 13 j 23:24 14°**Υ**42'14 retrograde -11545 Aug 16 i 04:42 15°≈19'45 retrograde -11539 Oct 20 j 03:07 21° Υ 18'57 -11545 Sep 04 i 17:20 15°R≈ opposition  $-11539 \text{ Dec } 29 \text{ i } 07:43 \quad 18^{\circ} \Upsilon 04'48$ 1°14'12 opposition -11545 Oct 23 j 02:27 12°≈01'00 -2°00'12 min. Earth dist.  $-11539 \text{ Dec } 30 \text{ i } 02:58 \quad 18^{\circ} \Upsilon 01'18$ 9.34063 AU min. Earth dist. -11545 Oct 22 j 18:51 12°≈02'27 8.87800 AU direct  $-11538 \text{ Mar } 11 \text{ j } 13:03 \quad 14^{\circ} \Upsilon 45'52$ direct -11544 Jan 01 j 18:08 8°≈36'17 evening set -11538 Jun 21 j 13:17 21° Υ 36'01 -11544 Apr 07 j 09:41 15°≈ max. Earth dist. -11538 Jul 07 j 03:01 23°**Y**21'58 11.32793 AU -11544 Apr 15 j 20:16 15°≈57'30 evening set conjunction -11538 Jul 08 j 03:20 23°Υ28'55 1°13'33 -11544 May 03 j 05:55 17°≈59'27 -1°26'06 -11538 Jul 08 j 03:17 23°**Υ**28'55 minimum elong 1°13'47 conjunction -11544 May 03 j 05:58 17°≈59'28 1°26'34 -11538 Jul 24 j 14:28 25°**Y**21'09 minimum elong morning rise max. Earth dist. -11544 May 03 j 11:45 18°≈01'10 10.95433 AU -11538 Sep 10 j 09:39 0°8 -11544 May 20 j 10:25 19°≈59'51 -11538 Oct 31 j 06:58 2°801'06 morning rise retrograde -11544 Aug 26 j 17:43 26°≈53'40 -11538 Dec 23 j 09:37 30°R℃ retrograde -11544 Nov 03 j 00:33 23°≈36'34 -1°30'33 -11537 Jan 09 j 18:33 28°**Υ**'46'22 1°43'24 opposition opposition -11537 Jan 10 j 17:26  $28^{\circ}$   $\Upsilon$  42'13 9.30874 AU -11544 Nov 02 j 21:22 23°≈37'10 9.02485 AU min. Earth dist. min. Earth dist. -11543 Jan 13 j 06:09 20°≈13'11 direct -11537 Mar 22 j 19:31 25°**Y**27'40 direct evening set -11543 Apr 27 j 19:56 27°≈25'04 -11537 Jun 10 j 22:04 0°**8** evening set -11537 Jul 02 j 09:37 2°**8**18'37 conjunction -11543 May 15 j 02:17 29°≈24'28 -1°00'49 minimum elong -11543 May 15 j 02:20 29°≈24'29 1°01'10 conjunction -11537 Jul 18 j 21:01 4°**8**11'33 1°36'10 max. Earth dist. -11543 May 15 j 02:32 29°≈24'33 11.09001 AU minimum elong -11537 Jul 18 j 20:58 4°**8**11'32 1°36'30 -11543 May 20 j 04:41 0°**光** max. Earth dist. -11537 Jul 17 j 17:22 4°**8**03'36 11.27991 AU morning rise -11543 Jun 01 j 03:17 1°**∺**22'22 morning rise -11537 Aug 04 j 06:35 6°**8**04'03 -11543 Sep 06 j 23:48 8° **米**08'07 retrograde -11537 Nov 11 j 15:19 12°**8**49'20 retrograde -11543 Nov 14 j 16:54 4° **\( \)** 52'22 -0°58'17 opposition opposition -11536 Jan 22 i 09:39 9°**8**29'08 9.24555 AU min. Earth dist. -11543 Nov 14 i 18:57 4° + 51'59 9.14784 AU min. Earth dist. direct -11542 Jan 25 i 08:09 1°**)**(30'13 direct -11536 Apr 02 j 03:12 6°815'00 evening set -11542 May 09 j 10:21 8° ¥ 34'21 evening set -11536 Jul 12 j 07:35 13°**8**08'27 conjunction -11542 May 26 i 13:18 10° \times 31'37 -0°33'47 conjunction -11536 Jul 28 j 17:07 15°801'55 1°55'36 minimum elong -11542 May 26 j 13:19 10°\(\mathbf{H}\)31'37 0°34'02 minimum elong -11536 Jul 28 j 17:04 15°801'54 1°56'02 max. Earth dist. -11542 May 26 j 07:31 10°**米**29'57 11.19934 AU max. Earth dist. -11536 Jul 27 j 12:24 14°**8**53'34 11.20146 AU -11542 Jun 12 j 11:01 12° **∺**27'27 morning rise -11536 Jul 28 j 10:31 15°**8** retrograde -11542 Sep 18 j 02:24 19° **米** 07'31 morning rise -11536 Aug 14 j 01:35 16°**8**55'13 opposition -11542 Nov 26 j 05:04 15°**米**52'47 -0°24'38 retrograde -11536 Nov 22 j 07:18 23°**8**47'57 min. Earth dist. -11542 Nov 26 j 12:53 15° **★** 51'21 9.24288 AU opposition -11535 Feb 01 j 03:36 20°**8**31'02 2°31'02 -11535 Feb 02 j 05:02 20°**8**26'23 9.15293 AU -11541 Feb 06 j 04:28 12° **★** 31'44 min. Earth dist. direct -11541 May 20 j 17:23 19°**米**29'48 direct -11535 Apr 13 j 13:19 17°**8**12'10 evening set -11535 Jul 23 j 09:00 24°**8**09'45 evening set -11541 Jun 06 j 16:50 21° **★**25'21 -0°06'01 conjunction minimum elong -11541 Jun 06 j 16:50 21° **X**25'21 0°06'09 conjunction -11535 Aug 08 j 17:27 26°**8**04'18 2°11'06 behind sun begin -11541 Jun 06 j 10:11 21°**∺**23'28 minimum elong -11535 Aug 08 j 17:24 26°**8**04'17 2°11'36 behind sun end -11541 Jun 06 j 23:30 21°**∺**27'13 max. Earth dist. -11535 Aug 07 j 12:35 25°**8**55'49 11.09496 AU max. Earth dist. -11541 Jun 06 j 04:27 21°**米**21'49 11.27921 AU morning rise -11535 Aug 25 j 01:36 27°**8**58'57 -11541 Jun 23 j 11:39 23°**)** 19'37 -11535 Sep 12 j 04:17  $0^{\circ}II$ morning rise -11541 Aug 26 j 19:24 29°**米**02'02 retrograde -11535 Dec 04 j 08:51 5°**Ⅱ**01′04 asc. node

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11534 in astronomical counting style is the year 11535 BCE in historical counting style. -11534 Feb 13 i 05:00 1°**Д**42'39 2°47'37 -11528 Jun 02 i 13:55 15°R $\Omega$ opposition min. Earth dist. -11534 Feb 14 j 06:23 1° **II** 37'59 9.03371 AU -11528 Jul 08 j 00:32 13° $\Omega$ 52'44 direct -11534 Mar 09 j 14:35 30°R8 -11528 Aug 11 j 16:53  $15^{\circ}\Omega$ -11534 Apr 25 j 02:05 28°823'28 -11528 Oct 17 j 03:51 21°**Ω**53'35 direct evening set -11534 Jun 08 j 21:54  $0^{\circ}\Pi$ -11528 Nov 03 j 11:45 24°Ω10'28 1°12'25 evening set -11534 Aug 03 j 16:01 5°**I**I26'44 conjunction -11528 Nov 03 j 11:48 24°**Ω**10'29 max. Earth dist. 1°12'49 -11534 Aug 18 j 18:51 7°**Ⅱ**14'12 10.96386 AU minimum elong -11528 Nov 03 j 09:16 24°**Ω**09'39 max. Earth dist. 9.99287 AU 7°**Ⅲ**22'57 2°21'53 conjunction -11534 Aug 20 j 00:09 morning rise -11528 Nov 21 j 01:38 26°Ω29'19 minimum elong -11534 Aug 20 j 00:08 7°**Ⅲ**22'57 2°22'27 -11528 Dec 19 j 16:21 morning rise -11534 Sep 05 j 09:11 9°**Д**19'35 retrograde -11527 Mar 09 j 14:03 5° Mp 04'24 -11534 Dec 16 j 17:39 16°**Д**32'50 retrograde opposition -11527 May 17 j 04:05 1°My33'22 1°09'31 -11533 Feb 25 j 13:51 13°**Д**12'45 2°58'06 -11527 May 17 j 02:34 1° m 33'41 7.93087 AU opposition min. Earth dist. min. Earth dist. -11533 Feb 26 j 14:56 13°**Д**08'05 8.89183 AU -11527 Jun 05 j 23:22 30°RΩ direct -11533 May 06 j 19:07 9°**Д**53'00 direct -11527 Jul 22 j 04:23  $28^{\circ}\Omega$ 07'59 evening set -11533 Aug 15 j 06:09 17°**I**I03'33 -11527 Sep 04 j 23:07 0° m max. Earth dist. -11533 Aug 30 j 10:47 18°**Д**53'24 10.81260 AU evening set -11527 Oct 31 j 20:37 6° Mp 18'46 conjunction -11533 Aug 31 j 15:10 19°**II**02'01 2°27'11 conjunction -11527 Nov 18 j 11:03 8° m 39'22 0°38'17 minimum elong -11533 Aug 31 j 15:09 19°**Ⅲ**02'01 minimum elong -11527 Nov 18 j 11:05 8° m 39'23 0°38'33 morning rise -11533 Sep 17 j 02:14 21°**Д**01'12 max. Earth dist. -11527 Nov 18 j 16:44 8° Mp 41'16 9.87796 AU retrograde -11533 Dec 29 i 14:29 28°**II**27'16 morning rise -11527 Dec 06 i 07:25 11° m 01'55 opposition -11532 Mar 09 i 07:36 25° **II** 05'18 3°01'28 retrograde -11526 Mar 25 j 03:07 19° m 45'39 min. Earth dist. -11532 Mar 10 j 07:07 25° **II** 00'52 8.73227 AU opposition -11526 Jun 01 j 04:08 16° m 13'32 0°24'25 direct -11532 May 17 j 21:35 21°**Ⅱ**44'53 min. Earth dist. -11526 May 31 j 20:28 16° Mp 15'07 7.83373 AU evening set -11532 Aug 26 j 05:07 29°**II**03'59 -11526 Aug 05 j 19:14 12° mp 47'03 direct -11532 Sep 02 j 20:46 0°€ -11526 Nov 16 j 02:22 21° Mp 06'12 evening set -11532 Sep 11 j 16:24 1°505'19 2°26'16 -11526 Dec 03 j 22:34 23° m 29'43 0°00'59 conjunction conjunction -11532 Sep 11 j 16:25 1°505'20 2°26'55 -11526 Dec 03 j 22:36 23° m 29'43 0°01'05 minimum elong minimum elong -11532 Sep 10 j 15:27 0°\$57'36 10.64676 AU -11526 Dec 03 j 15:16 23° m 27'16 max. Earth dist. behind sun begin -11532 Sep 28 j 06:39 3°507'41 -11526 Dec 04 j 05:56 23° Mp 32'10 morning rise behind sun end -11531 Jan 11 j 00:05 10°547'48 -11526 Dec 04 j 12:31 23° m/34'24 max. Earth dist. 9.80008 AU retrograde -11531 Mar 22 j 11:05 7°\$23'51 2°56'47 -11526 Dec 13 j 12:02 24° m/47'00 opposition desc. node -11531 Mar 23 j 07:02 7°520'03 8.56132 AU -11526 Dec 22 j 00:14 25° m 54'59 min. Earth dist. morning rise -11531 May 30 j 07:23 4°502'38 -11525 Jan 24 j 01:42 0°**♀** direct -11525 Apr 09 j 17:59 4°**♀**43'21 evening set -11531 Sep 07 j 15:00 11°531'25 retrograde max. Earth dist. -11531 Sep 23 j 09:26 13°529'43 10.47321 AU opposition -11525 Jun 16 j 07:28 1°**⊆**10'36 -0°23'15 min. Earth dist. -11525 Jun 15 j 17:56 1°**2**13'26 7.77703 AU conjunction -11531 Sep 24 j 05:56 13°536'10 2°18'29 -11525 Jun 30 j 16:24 30°R M -11531 Sep 24 j 05:59 13°536'11 2°19'08 direct -11525 Aug 20 j 17:57 27° Mp 43'05 minimum elong -11531 Oct 11 j 00:37 15°542'15 -11525 Oct 09 j 03:39 0°₽ morning rise retrograde -11530 Jan 24 j 22:05 23°537'06 -11525 Dec 01 j 18:22 6°**₽**08'18 evening set -11530 Apr 05 j 00:39 20°5511'10 2°43'17 opposition -11530 Apr 05 j 15:52 20°508'13 8.38655 AU conjunction -11525 Dec 19 j 19:08 8°**△**33'36 -0°36'55 min. Earth dist. -11525 Dec 19 j 19:06 8° **△**33'35 0°36'59 direct -11530 Jun 12 j 02:26 16°549'01 minimum elong -11525 Dec 20 j 16:29 8° **2**40'49 9.76486 AU evening set -11530 Sep 20 j 13:22 24°528'17 max. Earth dist. morning rise -11524 Jan 07 i 00:18 11° **2**00'17 -11530 Oct 07 i 09:07 26°\$36'57 2°03'28 conjunction retrograde -11524 Apr 24 i 07:25 19° **△**48'43 opposition minimum elong -11530 Oct 07 i 09:10 26°\$36'58 2°04'05 -11524 Jun 30 j 11:05 16° **2**15'50 -1°09'43 max. Earth dist. -11530 Oct 06 j 17:35 26°531'57 10.30015 AU min. Earth dist. -11524 Jun 29 j 16:38 16° **2**19'42 7.76452 AU -11530 Oct 24 j 09:30 28°547'10 direct -11524 Sep 03 j 21:10 12° **△**47'23 morning rise -11530 Nov 03 j 04:40 0°Ω -11524 Dec 16 j 16:44 21° **2**15'51 evening set retrograde -11529 Feb 08 j 08:58  $6^{\circ}\Omega$ 56'43 opposition -11529 Apr 19 j 00:34  $3^{\circ}\Omega$ 28'53  $2^{\circ}20'36$ conjunction -11523 Jan 03 j 20:22 23°**△**41'36 -1°12'21 min. Earth dist. -11529 Apr 19 j 10:30 3°**Ω**26'55 8.21671 AU minimum elong -11523 Jan 03 j 20:17 23°**2**41'35 1°12'35 direct -11529 Jun 25 j 08:06 0°**Ω**05'43 max. Earth dist. -11523 Jan 04 j 23:22 23°**2**50'42 9.77402 AU -11529 Oct 04 j 01:23 7° **Ω**55'51 morning rise -11523 Jan 22 j 03:03 26°**♀**08'17 evening set -11523 Feb 22 j 06:51 -11529 Oct 21 j 02:51  $10^{\circ}\Omega$ 08'38  $1^{\circ}41'15$ retrograde -11523 May 09 j 16:18 conjunction 4°M52'13 -11529 Oct 21 j 02:55  $10^{\circ}\Omega$ 08'39  $1^{\circ}41'46$ -11523 Jul 15 j 11:51 minimum elong opposition 1°ML19'47 -1°51'14 max. Earth dist. -11529 Oct 20 j 17:09  $10^{\circ}\Omega$ 05'28 10.13675 AU min. Earth dist. -11523 Jul 14 j 14:03 1°M24'23 7.79573 AU morning rise -11529 Nov 07 j 09:49  $12^{\circ}\Omega$ 23'14 -11523 Jul 31 j 16:47 30°R **Ω** -11529 Nov 28 j 15:08 15°**Ω** direct -11523 Sep 19 j 02:28 27°**♀**50'39 retrograde -11528 Feb 23 j 07:01 20°**Ω**46'33 -11523 Nov 06 j 12:02 0°M -11528 May 02 j 10:13 17° $\Omega$ 16'59 1°48'58 -11522 Jan 01 j 16:57 6°M19'20 opposition evening set

min. Earth dist.

-11528 May 02 j 14:31  $17^{\circ}\Omega$ 16'07 8.06151 AU

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11522 in astronomical counting style is the year 11523 BCE in historical counting style. -11522 Jan 19 i 21:36 8° ML44'16 -1°42'40 evening set -11516 Mar 28 j 21:21 28°**정**46'39 conjunction minimum elong -11522 Jan 19 j 21:31 8°ML44'14 1°43'02 -11516 Apr 08 j 03:25 max. Earth dist. -11522 Jan 21 j 04:03 8°ML54'26 9.82566 AU -11522 Feb 07 j 03:48 11°ML09'37 -11516 Apr 15 j 12:08 morning rise conjunction 0°≈53'14 -1°57'41 -11522 Mar 10 j 09:53 15°M -11516 Apr 15 j 12:12 minimum elong 0°≈53'15 1°58'16 -11522 May 24 j 17:16 19°**M**.45'03 -11516 Apr 16 j 03:04 0°≈57'44 10.70110 AU retrograde max. Earth dist. -11522 Jul 29 j 07:38 16° M 18'34 7.86778 AU min. Earth dist. morning rise -11516 May 02 j 21:54 2°≈58'18 -11522 Jul 30 j 07:04  $16^{\circ}$ ML13'38 -2°24'40 opposition retrograde -11516 Aug 10 j 06:38 10°≈08'47 -11522 Aug 14 j 05:36 15°RML opposition -11516 Oct 16 j 22:39 6°≈48'39 -2°12'48 direct -11522 Oct 04 j 06:40 12°ML44'07 min. Earth dist. -11516 Oct 16 j 12:58 6°≈50'32 8.78310 AU -11522 Nov 23 j 10:48 15°M direct -11516 Dec 26 j 06:52 3°**≈**22'48 -11521 Jan 17 j 14:01 21° ML09'51 -11515 Apr 10 j 14:40 10°≈49'36 evening set evening set conjunction -11521 Feb 04 j 18:05 23°M 32'51 -2°05'44 conjunction -11515 Apr 28 j 02:09 12°≈53'08 -1°36'59 minimum elong -11521 Feb 04 j 18:01 23°M 32'50 2°06'14 minimum elong -11515 Apr 28 j 02:12 12°≈53'09 1°37'29 max. Earth dist. -11521 Feb 06 j 01:58 23°M 43'22 9.91643 AU max. Earth dist. -11515 Apr 28 j 11:22 12°≈55'52 10.86186 AU morning rise -11521 Feb 22 j 22:14 25°ML55'46 morning rise -11515 May 15 j 08:16 14°≈55'06 -11521 Mar 28 j 17:52 -11515 May 16 j 01:10 15°≈ retrograde -11521 Jun 08 j 07:54 4°**∡**19'22 retrograde -11515 Aug 21 j 22:59 21°≈54'15 opposition -11521 Aug 13 j 18:39 0°**∡**¹49'25 -2°47'52 opposition -11515 Oct 29 j 00:40 18°≈35'51 -1°44'48 min. Earth dist. -11521 Aug 12 j 19:05 0° ₹ 54'20 7.97639 AU min. Earth dist. -11515 Oct 28 j 20:19 18°≈36'41 8.93613 AU -11521 Aug 23 i 17:44 30°RML direct -11514 Jan 07 j 22:59 15°≈11'13 direct -11521 Oct 19 i 07:43 27° ML 19'48 evening set -11514 Apr 22 j 19:46 22°≈28'06 -11521 Dec 13 j 17:52 0°*⊼* evening set -11520 Feb 02 j 03:13 5° ₹ 39'28 conjunction -11514 May 10 j 03:46 24°≈28'54 -1°12'50 minimum elong -11514 May 10 i 03:49 24°≈28'55 1°13'14 -11520 Feb 20 j 05:33 7° ₹ 59'41 -2°20'19 max. Earth dist. -11514 May 10 j 06:14 24°≈29'38 11.00610 AU conjunction -11520 Feb 20 j 05:31 7° ₹ 59'41 2°20'54 -11514 May 27 j 06:32 26°≈28'11 minimum elong morning rise max. Earth dist. -11520 Feb 21 j 12:47 8°**✗** 09'50 10.04087 AU -11514 Jun 29 j 16:30 0°**光** -11514 Sep 02 j 06:34 3° **米** 18'10 -11520 Mar 09 j 06:37 10° ₹ 19'23 morning rise retrograde -11520 Jun 21 j 09:18 18° ₹28'45 -11514 Nov 09 j 20:01 0° **★**01'13 -1°13'30 retrograde opposition -11520 Aug 26 j 20:49 15°**尽** 00'36 -2°59'58 min. Earth dist. -11514 Nov 09 j 20:16 0° **米**01'10 9.07003 AU opposition -11520 Aug 25 j 22:31 15°**尽**05'12 8.11466 AU -11514 Nov 10 j 02:28 30°R≈ min. Earth dist. -11513 Jan 20 j 06:44 26°≈37'49 -11520 Nov 02 j 03:32 11°**尽** 31'12 direct direct -11519 Feb 16 j 05:12 19° ₹ 42'15 -11513 Mar 29 j 06:55 0°**光** evening set -11513 May 04 j 14:39 3° **∺** 46'09 evening set -11519 Mar 06 j 05:02 21° ₹ 59'10 -2°26'06 conjunction minimum elong -11519 Mar 06 j 05:01 21° ₹ 59'10 2°26'44 conjunction -11513 May 21 j 19:14 5°**米**44'36 -0°46'25 max. Earth dist. -11519 Mar 07 j 09:31 22° ₹ 08'15 10.19090 AU minimum elong -11513 May 21 j 19:16 5°**¥**44'37 0°46'43 morning rise -11519 Mar 24 j 02:25 24° ₹ 15'11 max. Earth dist. -11513 May 21 j 15:43 5°**米**43'35 11.12864 AU -11519 May 16 j 09:39 0°る morning rise -11513 Jun 07 j 18:46 7°**米**41'36 retrograde -11519 Jul 04 j 19:50 2°**⋜**09'06 retrograde -11513 Sep 13 j 11:10 14°**米**24'42 -11519 Aug 24 j 08:57 30°R ✓ opposition -11513 Nov 21 j 10:01 11° ¥ 08'54 -0°40'16 -11519 Sep 09 j 12:33 28° **₹** 42'57 -3°01'13 min. Earth dist. -11513 Nov 21 j 14:19 11° **X** 08'06 9.18013 AU opposition min. Earth dist. -11519 Sep 08 j 16:29 28° ₹ 47'03 8.27375 AU direct -11512 Feb 01 j 07:33 7° **∺**46'43 -11519 Nov 16 j 14:33 25° ₹ 14'06 direct evening set -11512 May 15 j 01:09 14° + 48'03 -11518 Feb 02 j 19:21 0°る -11518 Mar 02 j 17:23 3°**⋜**14'43 -11512 Jun 01 i 02:26 16° \* 44'33 -0°18'49 evening set conjunction -11512 Jun 01 j 02:27 16° \ 44'33 0°19'00 minimum elong conjunction -11518 Mar 20 i 14:18 5° ₹28'07 -2°23'33 max. Earth dist. -11512 May 31 j 18:15 16° \( \frac{4}{42} \) 11.22538 AU minimum elong -11518 Mar 20 i 14:19 5°ਰ28'07 2°24'12 morning rise -11512 Jun 17 j 22:42 18°\mathbf{\psi}39'42 max. Earth dist. -11518 Mar 21 j 14:36 5°る35'43 10.35721 AU retrograde -11512 Sep 23 j 12:23 25°\mathbf{\psi} 18'12 -11518 Apr 07 j 07:48 7°る40'19 -11512 Dec 01 j 20:45 22° \( \) 03'15 -0°06'16 morning rise opposition -11518 Jul 17 j 18:24 15°る18'44 -11512 Dec 02 j 05:21 22° <del>X</del> 01'40 9.26288 AU retrograde min. Earth dist. opposition -11518 Sep 22 j 17:49 11°る54'39 -2°52'43 asc. node -11511 Feb 08 j 12:55 18° **∺** 42'45 min. Earth dist. -11518 Sep 22 j 00:15 11°**궁**58'11 8.44422 AU direct -11511 Feb 11 j 23:30 18° **X** 42'12 direct -11518 Nov 30 j 14:58 8°♂26'37 evening set -11511 May 26 j 05:15 25° **★** 38'12 -11517 Mar 16 j 14:34 16°정15'50 evening set conjunction -11511 Jun 12 j 03:07 27° **€** 33'09 0°09'09 -11517 Apr 03 j 08:28 18°♂25'45 -2°13'39 -11511 Jun 12 j 03:06 27° **∺** 33'08 0°09'05 conjunction minimum elong -11517 Apr 03 j 08:30 18°₹25'45 2°14'17 -11511 Jun 11 j 21:07 27° ₩ 31'27 minimum elong behind sun begin max. Earth dist. -11517 Apr 04 j 04:16 18°♂31'50 10.53027 AU behind sun end -11511 Jun 12 j 09:04 27° **∺** 34'49 morning rise -11517 Apr 20 j 22:04 20° 정34'15 max. Earth dist. -11511 Jun 11 j 14:13 27° **★**29'29 11.29328 AU retrograde -11517 Jul 30 j 06:03 27°る57'59 morning rise -11511 Jun 28 j 20:19 29°**∺** 26'53 opposition -11517 Oct 05 j 12:53 24°♂35'55 -2°36'00 -11511 Jul 03 j 19:53 0° $\Upsilon$ min. Earth dist. -11517 Oct 04 j 22:41 24° **정**38'44 8.61678 AU retrograde -11511 Oct 04 j 12:31 6°**Y**03′05

opposition

-11511 Dec 13 j 05:43  $2^{\circ}$  **Y** 48'41  $0^{\circ}$  27'28

-11517 Dec 14 j 04:03 21° ₹08'55

direct

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11511 in astronomical counting style is the year 11512 BCE in historical counting style. -11511 Dec 13 j 19:06 2°**Υ**46'14 9.31591 AU min. Earth dist. retrograde -11505 Dec 11 j 10:56 11°**Д**31'00 -11510 Jan 28 j 04:46 30°R € -11504 Feb 20 j 08:08 8° II 12'21 2°54'01 opposition -11510 Feb 23 j 11:34 29°\cdot\cdot28'35 min. Earth dist. -11504 Feb 21 j 09:00 8°**Д**07'46 8.98225 AU direct -11504 Apr 30 j 21:15 4°**Д**53'33 -11510 Mar 21 j 13:21 0°**Υ** direct -11510 Jun 06 j 04:57 6°**Y**21'02 -11504 Aug 09 j 09:19 11°**Ⅲ**59'51 evening set evening set -11510 Jun 22 j 23:21 8°**Υ**14'49 -11504 Aug 25 j 17:45 13°**Д**56'57 2°25'27 conjunction 0°36'26 conjunction -11510 Jun 22 j 23:20 8°**Υ**14'49 -11504 Aug 25 j 17:44 13°**耳**56'57 2°26'03 minimum elong 0°36'29 minimum elong -11510 Jun 22 j 05:15 8°**Υ**09'40 11.33052 AU -11504 Aug 24 j 14:06 13°**Д**48'38 10.90803 AU max. Earth dist. max. Earth dist. -11504 Sep 11 j 03:26 15°**Д**54'36 morning rise -11510 Jul 09 j 13:58 10°**Υ**07'37 morning rise retrograde -11510 Oct 15 j 11:30 16°**Y**43'44 retrograde -11504 Dec 23 j 03:46 23° **I** 13'44 -11510 Dec 24 j 14:11 13°**Υ**'29'31 1°00'00 -11503 Mar 03 j 21:17 19°**Д**53'18 3°00'43 opposition opposition -11510 Dec 25 j 07:25  $13^{\circ}$   $\Upsilon$  26'23 9.33770 AU min. Earth dist. min. Earth dist. -11503 Mar 04 j 20:47 19°**Ⅱ**48'54 8.83165 AU direct -11509 Mar 06 j 19:48  $10^{\circ}$ **Y**10'12 direct -11503 May 12 j 19:20 16°**Д**33'52 evening set -11509 Jun 17 j 01:54 17°**Y**00'49 evening set -11503 Aug 21 j 03:36 23°**II**47'58 max. Earth dist. -11503 Sep 05 j 10:45 25°**Д**39'26 10.74838 AU conjunction -11509 Jul 03 j 17:14 18°**Υ**'53'54 1°02'23 minimum elong -11509 Jul 03 j 17:12 18°**Υ**53'54 1°02'34 conjunction -11503 Sep 06 j 13:34 25°**Д**47'39 max. Earth dist. -11509 Jul 02 j 19:31 18°**Υ**47'42 11.33598 AU minimum elong -11503 Sep 06 j 13:35 25°**Ⅲ**47'39 morning rise -11509 Jul 20 j 05:29 20°**Υ**46'13 morning rise -11503 Sep 23 j 01:57 27°**Д**48'11 retrograde -11509 Oct 26 j 14:56 27°**Y**24'29 -11503 Oct 12 j 01:20 0°5 opposition -11508 Jan 04 j 23:49  $24^{\circ}$ Y 10'03 1°30'27 retrograde -11502 Jan 05 i 06:56 5°\$20'42 min. Earth dist. -11508 Jan 05 i 19:25  $24^{\circ}$  \( \gamma 06'30 \) 9.32737 AU opposition -11502 Mar 16 j 19:42 1°558'19 2°59'49 direct  $-11508 \text{ Mar } 17 \text{ j } 04:07 \quad 20^{\circ} \Upsilon 51'20$ min. Earth dist. -11502 Mar 17 i 17:24 1°554'13 8.66411 AU evening set -11508 Jun 26 j 21:58 27°**Y**41'49 -11502 Apr 13 j 16:08 30°RII max. Earth dist. -11508 Jul 12 j 10:50 29°**Υ**27'50 11.30925 AU -11502 May 24 j 23:20 28° ДЗ8'04 direct -11502 Jul 04 i 00:16 0°ഇ -11508 Jul 13 j 10:38 29°**Υ**34'40 1°26'13 -11502 Sep 02 j 07:55 6°901'21 conjunction evening set -11508 Jul 13 j 10:35 29°**Y**34'39 minimum elong 1°26'32 -11508 Jul 17 j 02:58 0°₩ -11502 Sep 18 j 20:44 8°504'10 2°22'53 conjunction -11508 Jul 29 j 20:44 1°**8**26'56 -11502 Sep 18 j 20:45 8°504'11 2°23'32 morning rise minimum elong -11508 Nov 05 j 22:48 8°**8**09'27 -11502 Sep 17 j 20:13 7°\$56'32 10.57556 AU retrograde max. Earth dist. -11507 Jan 15 j 12:19 4°**8**54'30 1°57'59 -11502 Oct 05 j 13:08 10°508'12 opposition morning rise -11507 Jan 16 j 10:16 4°\( \alpha 50'31 \) 9.28511 AU -11501 Jan 18 j 21:09 17°555'08 min. Earth dist. retrograde -11507 Mar 28 j 10:06 1°**8**36'10 -11501 Mar 30 j 03:53 14°530'41 2°50'29 direct opposition -11507 Jul 07 j 19:08 8°**8**28'10 -11501 Mar 30 j 22:50 14°527'02 8.48732 AU evening set min. Earth dist. -11507 Jul 23 j 02:56 10°**8**13'36 11.25113 AU -11501 Jun 06 j 13:51 11°509'24 max. Earth dist. direct evening set -11501 Sep 14 j 23:40 18°542'52 conjunction -11507 Jul 24 j 05:27 10°**8**21'15 1°47'12 minimum elong -11507 Jul 24 j 05:24 10°**8**21'14 1°47'36 conjunction -11501 Oct 01 j 16:46 20°\$49'23 2°11'16 morning rise -11507 Aug 09 j 14:12 12°**8**14'03 minimum elong -11501 Oct 01 j 16:49 20°549'24 2°11'54 -11507 Sep 04 j 10:23 15°8 max. Earth dist. -11501 Sep 30 j 20:59 20°543'06 10.39786 AU -11507 Nov 17 j 10:37 19°**8**02'51 -11501 Oct 18 j 14:20 22°557'23 retrograde morning rise -11506 Jan 27 j 05:04 15°**8**47'00 2°21'41 -11501 Dec 29 j 18:52 0°**Ω** opposition min. Earth dist. -11506 Jan 28 j 05:20 15°**8**42'35 9.21214 AU -11500 Feb 02 j 00:27 0° **Ω**59'09 retrograde -11506 Feb 07 i 01:58 15°R& -11500 Mar 07 j 19:05 30°RS -11506 Apr 08 j 17:39 12°\(28'45\) -11500 Apr 11 j 22:28 27°532'33 2°32'09 direct opposition -11506 Jun 05 i 07:41 15°8 -11500 Apr 12 j 12:48 27°529'45 8.31018 AU min. Earth dist. evening set -11506 Jul 18 j 18:53 19°**8**23'57 direct -11500 Jun 18 i 15:39 24°510'07 max. Earth dist. -11506 Aug 02 j 22:57 21°809'27 11.16327 AU -11500 Sep 11 j 17:11  $0^{\circ}\Omega$ -11500 Sep 27 j 04:17 1° **Ω**54'18 evening set conjunction -11506 Aug 04 j 03:32 21°**8**17'48 2°04'35 -11506 Aug 04 j 03:29 21°**8**17'47 2°05'03 conjunction -11500 Oct 14 j 02:55  $4^{\circ}\Omega$ 04'54  $1^{\circ}$ 52'25 minimum elong morning rise -11506 Aug 20 j 11:46 23°**8**11'38 minimum elong -11500 Oct 14 j 02:59 4° **Ω**04'56 1°52'59 -11506 Nov 15 j 21:35 0°**Ⅱ** max. Earth dist. -11500 Oct 13 j 13:33 4°Ω00'35 10.22452 AU retrograde -11506 Nov 29 j 06:39 0°**I**08'43 morning rise -11500 Oct 31 j 06:35  $6^{\circ}\Omega$ 17'13 -11506 Dec 12 j 18:18 30°R**8** retrograde -11499 Feb 15 j 16:33 14°**Ω**33'23 -11505 Feb 08 j 03:15 26°851'37 2°40'41 -11499 Apr 26 j 02:59 11°**Ω**04'43 2°04'43 opposition opposition -11505 Feb 09 j 04:42 26° 846'58 9.11032 AU min. Earth dist. -11499 Apr 26 j 11:24 11° **Ω**03'03 8.14233 AU min. Earth dist. -11505 Apr 20 j 05:41 23°**8**33'12 -11499 Jul 02 j 02:39 7°**Ω**41'01 direct direct -11505 Jul 25 j 03:26  $0^{\circ}\Pi$ -11499 Oct 06 j 06:18 15°**Ω** evening set -11505 Jul 29 j 23:01 0°**Ⅲ**33′10 evening set -11499 Oct 10 j 23:12 15° **Q**36'05 max. Earth dist. -11505 Aug 14 j 02:35 2°**Ⅱ**19'55 11.04785 AU conjunction -11499 Oct 28 j 04:07 17° **Q** 50′54 1°26′38 conjunction -11505 Aug 15 j 07:01 2°**I**I28'21 2°17'35 minimum elong -11499 Oct 28 j 04:11 17° € 50'55 1°27'06 -11505 Aug 15 j 06:59 2°II28'20 max. Earth dist. -11499 Oct 27 j 21:53 17° $\Omega$ 48'51 10.06529 AU minimum elong 2°18'07

morning rise

-11499 Nov 14 j 14:31 20°**Ω**07'35

-11505 Aug 31 j 15:27 4°**Д**23'47

morning rise

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11498 in astronomical counting style is the year 11499 BCE in historical counting style. retrograde -11498 Mar 02 j 18:46  $28^{\circ}\Omega$ 36'41 opposition -11492 Aug 06 j 11:13 24° ML15'46 -2°38'17 -11498 May 10 j 16:16  $25^{\circ}\Omega$ 06'10  $1^{\circ}28'52$ direct -11492 Oct 11 j 19:09 20° ML45'34 opposition min. Earth dist. -11498 May 10 j 18:09 25° **Ω**05'47 7.99370 AU -11491 Jan 25 j 07:16 29° ML08'58 evening set -11498 Jul 16 j 00:31 21°**Ω**41'08 -11491 Jan 31 j 21:11 0° ⊀ direct -11498 Oct 25 j 08:34 29° $\Omega$ 46'44 evening set 1°**∡**30'45 -2°14'30 -11498 Oct 27 j 01:08 -11491 Feb 12 j 10:42 conjunction -11491 Feb 12 j 10:38 1°**х** 30'44 2°15'03 minimum elong -11498 Nov 11 j 19:59 2° m 05'33 0°54'53 -11491 Feb 13 j 18:52 1°**尽**41'18 9.96411 AU conjunction max. Earth dist. minimum elong -11498 Nov 11 j 20:02 2° Mp 05'34 0°55'13 morning rise -11491 Mar 02 j 13:31 3°**х** 52′14 max. Earth dist. -11498 Nov 11 j 21:07 2°M 05'56 9.93002 AU retrograde -11491 Jun 15 j 05:31 12° ₹ 09'01 morning rise -11498 Nov 29 j 13:09 4° Mp 26'18 opposition -11491 Aug 20 j 18:03 8°₹39'26 -2°55'40 retrograde -11497 Mar 18 j 04:54 13° m 05'52 min. Earth dist. -11491 Aug 19 j 17:46 8°**∡**′44′29 8.03341 AU opposition -11497 May 25 j 13:01 9°**m** 33'51 0°46'14 direct -11491 Oct 26 j 17:38 5°**尽** 09'26 min. Earth dist. -11497 May 25 j 08:33 9°**m** 34'47 7.87391 AU evening set -11490 Feb 09 j 14:59 13°**尽**25'12 direct -11497 Jul 30 j 09:03 6° Mp 07'31 evening set -11497 Nov 09 j 07:34 14° Mp 22'32 conjunction -11490 Feb 27 j 16:15 15°**х** 43'51 -2°24'25 minimum elong -11490 Feb 27 j 16:14 15°**х** 43'51 2°25'03 conjunction -11497 Nov 27 j 01:07 16° mp 44'45 0°18'52 max. Earth dist. -11490 Feb 28 j 23:39 15°**х** 53'58 10.10631 AU minimum elong -11497 Nov 27 j 01:08 16° Mp 44'46 0°19'03 morning rise -11490 Mar 17 j 15:27 18° ₹01'46 max. Earth dist. -11497 Nov 27 j 09:58 16° m 47'43 9.82782 AU retrograde -11490 Jun 28 j 23:46 26° ₹03'29 morning rise -11497 Dec 15 j 00:19 19° mp 08'50 opposition -11490 Sep 03 j 14:51 22° ₹35'58 -3°01'56 retrograde -11496 Apr 01 j 19:30 27° m 55'23 min. Earth dist. -11490 Sep 02 j 15:53 22° ₹ 40'41 8.18717 AU desc. node -11496 Jun 04 i 03:02 24° m 44'47 direct -11490 Nov 10 i 07:20 19° ₹ 06'33 opposition -11496 Jun 08 j 14:46 24° m 22'21 -0°00'34 evening set -11489 Feb 24 j 09:56 27° ₹ 12'32 min. Earth dist. -11496 Jun 08 i 04:30 24° m 24'30 7.79139 AU -11496 Aug 13 j 02:48 20° m 54'47 -11489 Mar 14 j 08:27 29° ₹27'43 -2°25'42 direct conjunction -11496 Nov 23 j 18:38 29° m 17'23 -11489 Mar 14 j 08:28 29° ₹27'44 2°26'21 evening set minimum elong -11496 Nov 29 j 02:35 0°**♀** max. Earth dist. -11489 Mar 15 j 13:11 29° ₹36'48 10.26970 AU -11489 Mar 18 j 14:36 0°**ਰ** -11496 Dec 11 j 17:22 1°**2**42'04 -0°19'05 morning rise -11489 Apr 01 j 03:44 1°**정**41'49 conjunction -11489 Jul 12 j 06:06 9°る27'52 -11496 Dec 11 j 17:21 1°**2**42'04 0°19'04 minimum elong retrograde -11496 Dec 12 j 09:37 1°**2**47'33 9.76606 AU -11489 Sep 16 j 05:13 6°**궁**06'39 8.35715 AU max. Earth dist. min. Earth dist. -11496 Dec 29 j 21:11 4°**£**08'21 -11489 Sep 17 j 01:09 6°**궁**02'37 -2°57'48 morning rise opposition -11495 Apr 17 j 10:37 12°**♀**57'33 -11489 Nov 24 j 11:31 2°る34'05 retrograde direct -11495 Jun 23 j 18:27 9°**2**24'04 -0°48'04 -11488 Mar 09 j 14:31 10°**♂**29'01 opposition evening set -11495 Jun 23 j 03:14 9°**2**27'16 7.75219 AU min. Earth dist. -11488 Mar 27 j 09:59 12°₹40'39 -2°19'05 -11495 Aug 28 j 03:32 5°**♀**55'23 direct conjunction evening set -11495 Dec 09 j 14:27 14°**♀**23'05 minimum elong -11488 Mar 27 j 10:01 12°정40'40 2°19'44 max. Earth dist. -11488 Mar 28 j 10:04 12°정48'07 10.44456 AU conjunction -11495 Dec 27 j 16:53 16° **2**48'58 -0°56'01 morning rise -11488 Apr 14 j 01:25 14°**⋜**50'58 minimum elong -11495 Dec 27 j 16:49 16° **2**48'56 0° 56'09 retrograde -11488 Jul 23 j 23:10 22°**♂**21'46 max. Earth dist. -11495 Dec 28 j 15:32 16°**2**56'37 9.74931 AU min. Earth dist. -11488 Sep 28 j 09:10 19°**궁**02'00 8.53377 AU morning rise -11494 Jan 14 j 23:19 19°**2**16'02 opposition -11488 Sep 29j01:11 18°중58'49 -2°44'41 -11494 May 02 j 22:36 28°**೨**03'13 -11488 Dec 07 j 06:10 15°₹31'25 retrograde direct -11494 Jul 08 j 21:10 24°**2**29'53 -1°32'24 -11487 Mar 23 j 04:34 23°**♂**14'50 opposition evening set -11494 Jul 08 i 01:59 24° **△** 33'56 7.75914 AU min. Earth dist. -11487 Apr 09 j 20:46 25°る23'00 -2°05'46 direct -11494 Sep 12 j 08:51 21° \(\Omega\) 00'22 conjunction -11487 Apr 09 j 20:49 25°る23'01 2°06'22 evening set -11494 Dec 25 j 14:24 29° **2**30'00 minimum elong -11494 Dec 29 i 09:11 0°M max. Earth dist. -11487 Apr 10 j 14:43 25° ₹28'28 10.62147 AU morning rise -11487 Apr 27 j 08:25 27°る29'44 -11493 Jan 12 i 18:43 1°ML55'41 -1°29'05 -11487 May 19 i 07:34 0°≈ conjunction minimum elong -11493 Jan 12 j 18:38 1°ML55'39 1°29'23 retrograde -11487 Aug 05 j 03:30 4°≈46'29 max. Earth dist. -11493 Jan 13 j 22:25 2°ML05'00 9.77881 AU -11487 Oct 11 j 15:36 1°≈25'43 -2°24'14 opposition morning rise -11493 Jan 31 j 01:38 4°M22'05 min. Earth dist. -11487 Oct 11 j 03:29 1°≈28'05 8.70808 AU -11487 Oct 30 j 12:14 30°R궁 retrograde -11493 May 18 j 03:29 13°ML02'44 -11493 Jul 23 j 19:39 9°M-30'08 -2°10'03 opposition direct -11487 Dec 20 j 15:42 27°**궁**59'37 min. Earth dist. -11493 Jul 22 j 21:28 9°M-34'49 7.81155 AU -11486 Feb 09 j 01:00 0°≈ -11493 Sep 27 j 15:11 6°ML00'05 -11486 Apr 05 j 04:30 direct evening set 5°**≈**31'44 -11492 Jan 10 j 13:39 14°M28'15 evening set -11492 Jan 14 j 14:42 15°M -11486 Apr 22 j 17:26 conjunction 7°**≈**36'41 -1°47'03 minimum elong -11486 Apr 22 j 17:30 7°≈36'42 1°47'36 conjunction -11492 Jan 28 j 18:12 16°ML52'29 -1°55'48 max. Earth dist. -11486 Apr 23 j 05:26 7°≈40'16 10.79193 AU minimum elong -11492 Jan 28 j 18:07 16°ML52'28 1°56'15 morning rise -11486 May 10 j 01:26 9°**≈**40'06 max. Earth dist. -11492 Jan 30 j 01:10 17° ML02'48 9.85227 AU -11486 Jul 02 j 15:08 15°≈ morning rise -11492 Feb 15 j 23:46 19°ML16'56 retrograde -11486 Aug 17 j 00:39 16°≈44'32 -11492 May 31 j 22:28 27° ML47'06 -11486 Oct 02 j 14:47 15°R≈ retrograde min. Earth dist. -11492 Aug 05 j 11:13 24°M20'49 7.90531 AU -11486 Oct 23 j 21:26 13°≈25'44 -1°58'12 opposition

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11486 in astronomical counting style is the year 11487 BCE in historical counting style. min. Earth dist. -11486 Oct 23 i 13:15 13°≈27'18 8.87212 AU opposition  $-11480 \text{ Dec } 30 \text{ j } 04:53 \quad 19^{\circ} \Upsilon 33'18 \quad 1^{\circ} 16'49$ direct -11485 Jan 02 j 12:56 10°≈01'00 min. Earth dist. -11480 Dec 31 j 00:36  $19^{\circ}$   $\Upsilon$ 29'43 9.33711 AU -11485 Mar 27 j 03:47 15°≈ -11479 Mar 12 j 09:39 16° Υ 14'23 direct -11485 Apr 17 j 15:27 17°≈22'32 -11479 Jun 22 j 10:00 23°**Y**04'44 evening set evening set -11485 May 05 j 01:11 19°≈24'36 -1°24'19 -11479 Jul 08 j 23:46 24°**Y**57'39 conjunction conjunction 1°15'37 -11485 May 05 j 01:14 19°≈24'36 1°24'45 -11479 Jul 08 j 23:43 24°**Y**57'38 1°15'51 minimum elong minimum elong max. Earth dist. -11479 Jul $\,$  07 j 23:02  $\,$  24°  $\!\boldsymbol{\Upsilon}$  50'35  $\,$  11.32459 AU  $\,$ -11485 May 05 j 07:47 19°≈26'32 10.94839 AU max. Earth dist. -11479 Jul 25 j 10:52  $26^{\circ}$ **Y**49'53 morning rise -11485 May 22 j 05:34 21°≈25'05 morning rise retrograde -11485 Aug 28 j 13:12 28°≈19'13 -11479 Aug 24 j 19:56 0°8 opposition -11485 Nov 04 j 19:59 25°≈02'05 -1°28'12 retrograde -11479 Nov 01 j 03:47 3°**8**30'11 -11485 Nov 04 j 16:45 25°≈02'42 9.01885 AU -11478 Jan 10 j 16:03 0°**8**15'26 1°45'47 min. Earth dist. opposition -11484 Jan 15 j 00:30 21°≈38'41 min. Earth dist. -11478 Jan 11 j 14:45 0°**8**11'19 9.30566 AU direct evening set -11484 Apr 28 j 15:26 28°≈50'53 -11478 Jan 14 j 05:17 30°R**Y** -11484 May 08 j 16:10 0°**∀** direct -11478 Mar 23 j 17:04 26°**Y**56'46 -11478 May 27 j 03:32  $0^{\circ}$ 8 conjunction -11484 May 15 j 21:47 0° **★** 50'22 -0°58'46 evening set -11478 Jul 03 j 06:25 3°**8**47'53 minimum elong -11484 May 15 j 21:50 0° **¥** 50′23 0°59′06 max. Earth dist. -11484 May 15 j 22:26 0°**)** 50'33 11.08424 AU conjunction -11478 Jul 19 j 17:43 5°**8**40'49 1°37'59 morning rise -11484 Jun 01 j 22:42 2°**)** 48'21 minimum elong -11478 Jul 19 j 17:40 5°**8**40'48 retrograde -11484 Sep 07 j 20:13 9°**)** 34'24 max. Earth dist. -11478 Jul 18 j 14:54 5° 833'06 11.27702 AU opposition -11484 Nov 15 j 12:42 6° **H** 18'38 -0°55'41 morning rise -11478 Aug 05 i 03:10 7°**8**33'21 min. Earth dist. -11484 Nov 15 i 15:13 6°**¥**18'10 9.14237 AU retrograde -11478 Nov 12 j 13:11 14°**8**18'59 direct -11483 Jan 26 j 04:06 2° <del>) (</del>56'26 opposition -11477 Jan 22 j 06:18 11°**8**03'17 2°11'21 evening set -11483 May 10 j 06:11 10°**)** € 00'51 min. Earth dist. -11477 Jan 23 j 06:24 10°\(258'55\) 9.24292 AU direct -11477 Apr 04 j 01:06 7°**8**44'39 -11483 May 27 j 08:57 11° **\( \)** 58'10 -0°31'34 -11477 Jul 14 j 04:32 14°\begin{align\*} 38'13 conjunction evening set -11483 May 27 j 08:59 11° **\( \)** 58'11 0°31'48 -11477 Jul 17 j 08:54 15°8 minimum elong max. Earth dist. -11483 May 27 j 02:40 11°**米** 56'22 11.19423 AU max. Earth dist. -11477 Jul 29 j 10:13 16°**8**23'38 11.19899 AU -11483 Jun 13 j 06:42 13°**)** 54'05 morning rise -11483 Sep 18 j 21:17 20°  **★** 34'25 -11477 Jul 30 j 14:03 16°\( \arrow\) 31'43 1°57'06 retrograde conjunction -11483 Nov 27 j 01:15 17°**米**19'38 -0°21'53 minimum elong -11477 Jul 30 j 13:59 16°**8**31'42 1°57'32 opposition -11483 Nov 27 j 08:57 17°**米** 18'13 9.23809 AU -11477 Aug 15 j 22:21 18°**8**25'01 min. Earth dist. morning rise -11477 Nov 24 j 06:14 25°**8**18'03 -11482 Feb 07 j 00:07 13°**米** 58'33 direct retrograde -11476 Feb 03 j 01:32 22°**8**01'07 2°32'38 -11482 May 21 j 13:21 20° ¥ 56'52 evening set opposition -11476 Feb 04 j 02:25 21° 856'34 9.15070 AU min. Earth dist. -11482 Jun 07 j 12:39 22° ¥ 52'26 -0°03'43 -11476 Apr 14 j 10:22 18°**8**42'19 conjunction direct minimum elong -11482 Jun 07 j 12:39 22°\ 52'26 0°03'51 evening set -11476 Jul 24 j 06:09 25° **8**39'57 behind sun begin -11482 Jun 07 j 05:44 22° ₩ 50'29 max. Earth dist. -11476 Aug 08 j 09:19 27°**8**25'57 11.09294 AU -11482 Jun 07 j 19:35 22°**米** 54'23 behind sun end max. Earth dist. -11482 Jun 07 j 00:27 22° **€** 48'57 11.27472 AU conjunction -11476 Aug 09 j 14:25 27°**8**34'31 2°12'13 morning rise minimum elong -11476 Aug 09 j 14:23 27°**8**34'30 2°12'43 -11482 Jul 27 j 08:18 28°**升** 11'21 morning rise -11476 Aug 25 j 22:34 29°**8**29'12 asc. node -11482 Aug 19 j 08:25 0°**Υ** -11476 Aug 30 j 10:07 0°**Ⅱ** -11482 Sep 29 j 21:53 1°**Υ**23'46 retrograde -11476 Dec 05 j 05:37 6°**Ц**31'34 retrograde -11482 Nov 11 j 16:59 30°R ★ -11475 Feb 14 i 03:08 3°**II**13'08 2°48'43 opposition -11482 Dec 08 j 11:01 28° \( \) \( 09'35 \) 0°12'06 -11475 Feb 15 i 04:46 3°**II**08'25 9.03197 AU opposition min. Earth dist. -11482 Dec 08 j 22:34 28° \( \) 07'28 9.30321 AU -11475 Apr 14 j 20:18 30°R& min. Earth dist. -11475 Apr 25 j 22:38 29°853'58 direct -11481 Feb 18 j 16:15 24° \(\frac{1}{2}\)49'26 direct -11481 May 16 j 16:42 0°**Υ** -11475 May 07 i 00:46 0°**Ⅱ** -11481 Jun 01 j 15:11 1°Y43'23 evening set -11475 Aug 04 j 13:12 6°**Д**57'18 evening set conjunction -11481 Jun 18 j 11:15 3°**Υ**37'38 0°24'03 conjunction -11475 Aug 20 j 21:13 8°**II**53'31 2°22'33 -11481 Jun 18 j 11:14 3°**Υ**'37'38 0°24'03 minimum elong minimum elong -11475 Aug 20 j 21:11 8°**Д**53'30 2°23'08 -11475 Aug 19 j 15:55 8°**Ц**44'46 10.96240 AU -11481 Jun 17 j 19:03 3°**Υ**'33'01 11.32372 AU max. Earth dist. max. Earth dist. morning rise -11481 Jul 05 j 03:02 5°**Υ**30'47 morning rise -11475 Sep 06 j 06:20 10°**Д**50'09 -11475 Dec 17 j 15:39 18°**Ц**03'39 retrograde -11481 Oct 10 j 22:43 12°**Y**06'42 retrograde -11481 Dec 19 j 19:35 8°**Υ**52'43 0°45'18 opposition -11474 Feb 26 j 12:08 14°**Д**43'31 2°58'37 opposition -11481 Dec 20 j 11:09 8°**Ƴ**49'53 min. Earth dist. -11474 Feb 27 j 13:14 14°**Д**38'50 8.89067 AU min. Earth dist. 9.33637 AU -11480 Mar 01 j 01:55 5°**Y**33'19 direct -11474 May 07 j 18:06 11°**Д**23'46 direct -11480 Jun 11 j 13:32 12°**Υ**24'37 evening set evening set -11474 Aug 16 j 03:15 18°**Ⅲ**34'17 -11480 Jun 27 j 09:55 14°**Υ**°12'09 11.34036 AU max. Earth dist. max. Earth dist. -11474 Aug 31 j 09:03 20°**Ⅲ**24'28 10.81171 AU conjunction -11480 Jun 28 j 06:23 14°**Υ**17'59 0°50'43 conjunction -11474 Sep 01 j 12:22 20°**I**32'46 2°27'22 minimum elong -11480 Jun 28 j 06:21 14°**Υ**17'58 0°50'50 minimum elong -11474 Sep 01 j 12:22 20°**I**32'46 2°28'00 -11480 Jul 14 j 19:32 16°**Y**10'26 morning rise -11474 Sep 17 j 23:28 22°**Д**31'59 morning rise retrograde -11480 Oct 20 j 23:42 22°**Y**47'27 retrograde -11474 Dec 30 j 12:29 29°**Ц**58'13

•	omena of Saturn fro		•				page 36
	nical year style is used: Th			ounting style is the year			
opposition	-11473 Mar 11 j 05:46	26° <b>Ⅲ</b> 36′11	3°01'22	min. Earth dist.	-11467 Jun 01 j 16:46	17° <b>m</b> 44'23	7.83442 AU
min. Earth dist.	-11473 Mar 12 j 04:32	26° <b>Ⅲ</b> 31'54	8.73167 AU	direct	-11467 Aug 06 j 16:30	14°M)16'12	
direct	-11473 May 19 j 19:18	23° <b>Ⅱ</b> 15'46		evening set	-11467 Nov 16 j 23:16	22°M/35'16	
	-11473 Aug 23 j 06:23	0∘ <b>হ</b> ಾ		desc. node	-11467 Nov 20 j 20:44	23°Mp06'17	
evening set	-11473 Aug 28 j 02:16	0°934'47			·	·	
8				conjunction	-11467 Dec 04 j 19:45	24° m 58'49	-0°01'25
conjunction	-11473 Sep 13 j 13:44	2°536'08	2°25'56	minimum elong	-11467 Dec 04 j 19:46		0°01'20
minimum elong	-11473 Sep 13 j 13:45	2°536'09	2°26'35	behind sun begin	-11467 Dec 04 j 12:26	-•	0 0120
max. Earth dist.	-11473 Sep 12 j 13:39	2°928'41	10.64634 AU	behind sun end	-11467 Dec 05 j 03:07	-	
morning rise	-11473 Sep 30 j 03:59	4°938'31	10.04054 AC	max. Earth dist.	-11467 Dec 05 j 10:17	-	9.80074 AU
=					-		9.00074 AU
retrograde	-11472 Jan 12 j 21:53		2057102	morning rise	-11467 Dec 22 j 21:26		
opposition	-11472 Mar 23 j 09:02	8°954'41	2°56'03		-11466 Jan 12 j 06:34		
min. Earth dist.	-11472 Mar 24 j 04:03	8°951'03	8.56116 AU	retrograde	-11466 Apr 10 j 13:58		
direct	-11472 May 31 j 05:09	5° <b>©</b> 33'28		opposition	-11466 Jun 17 j 03:52		
evening set	-11472 Sep 08 j 12:09			min. Earth dist.	-11466 Jun 16 j 13:51		7.77772 AU
max. Earth dist.	-11472 Sep 24 j 06:32	15° <b>©</b> 00'23	10.47328 AU		-11466 Jul 23 j 12:59		
				direct	-11466 Aug 21 j 13:21	29° <b>m</b> 11'59	
conjunction	-11472 Sep 25 j 03:10	15° <b>©</b> 06'54	2°17'39		-11466 Sep 19 j 06:58	0。 <b>ರ</b>	
minimum elong	-11472 Sep 25 j 03:13	15° <b>©</b> 06'54	2°18'17	evening set	-11466 Dec 02 j 15:29	7° <b>≏</b> 37'13	
morning rise	-11472 Oct 11 j 22:02	17° <b>©</b> 13'00					
retrograde	-11471 Jan 25 j 20:41	25°507'50		conjunction	-11466 Dec 20 j 16:22	10° <b>≏</b> 02'31	-0°39'09
opposition	-11471 Apr 05 j 22:33		2°41'56	minimum elong	-11466 Dec 20 j 16:20		
min. Earth dist.	-11471 Apr 06 j 13:30		8.38680 AU	max. Earth dist.	-11466 Dec 21 j 14:06		
direct	-11471 Jun 12 j 23:41		0.50000110	morning rise	-11465 Jan 07 j 21:31		2.7000.110
evening set	-11471 Sep 21 j 10:24			retrograde	-11465 Apr 26 j 04:48		
evening set	-114/1 Sep 21 j 10.24	23 330 43		opposition	-11465 Jul 02 j 07:24		1012122
	11471 0-4 00:06:14	200507126	2002100				
conjunction	-11471 Oct 08 j 06:14		2°02'09	min. Earth dist.	-11465 Jul 01 j 12:35		7.70559 AU
minimum elong	-11471 Oct 08 j 06:17		2°02'45	direct	-11465 Sep 05 j 16:20		
max. Earth dist.	-11471 Oct 07 j 14:10		10.30066 AU	evening set	-11465 Dec 18 j 13:52	22° <b>22</b> 44'36	
	-11471 Oct 22 j 22:48					_	
morning rise	-11471 Oct 25 j 06:56	0° <b>Ω</b> 17'42		conjunction	-11464 Jan 05 j 17:28		
retrograde	-11470 Feb 09 j 07:24	8° <b>Ω</b> 27'08		minimum elong	-11464 Jan 05 j 17:24		
opposition	-11470 Apr 19 j 22:17	4° <b>Ω</b> 59'15	2°18'41	max. Earth dist.	-11464 Jan 06 j 20:41	25° <b>≏</b> 19'29	9.77555 AU
min. Earth dist.	-11470 Apr 20 j 08:35	4° <b>Ω</b> 57'13	8.21731 AU	morning rise	-11464 Jan 24 j 00:07	27° <b>≏</b> 36'58	
direct	-11470 Jun 26 j 04:37	1° <b>Ω</b> 36′02			-11464 Feb 11 j 16:06	$0^{\circ}$ M.	
evening set	-11470 Oct 04 j 22:24	9° <b>Ω</b> 25'59		retrograde	-11464 May 10 j 14:08	6°M20'39	
				min. Earth dist.	-11464 Jul 15 j 10:19	2°M52'48	7.79791 AU
conjunction	-11470 Oct 22 j 00:04	11° <b>Ω</b> 38'47	1°39'31	opposition	-11464 Jul 16 j 08:04		
minimum elong	-11470 Oct 22 j 00:08			11	-11464 Aug 24 j 03:54		
max. Earth dist.	-11470 Oct 21 j 14:09			direct	-11464 Sep 19 j 22:17	•	
morning rise	-11470 Nov 08 j 07:21				-11464 Oct 16 j 15:21	0°M	
morning 1150	-11470 Nov 17 j 02:17			evening set	-11463 Jan 02 j 14:03	7° <b>ML</b> 47'38	
retrograde	-11469 Feb 24 j 03:48			evening set	11405 Juli 02 j 14.05	7 110-77 30	
opposition	-11469 May 04 j 07:29		1°46'35	conjunction	-11463 Jan 20 j 18:34	10°M 12'20	1044'16
				•			
min. Earth dist.	-11469 May 04 j 12:22		8.06228 AU	minimum elong	-11463 Jan 20 j 18:30		
direct	-11469 Jul 09 j 22:24			max. Earth dist.	-11463 Jan 22 j 00:39		9.82840 AU
evening set	-11469 Oct 19 j 00:45	25~ <b>6 (</b> 23'20		morning rise	-11463 Feb 08 j 00:45		
	1116037	250 2	101015		-11463 Feb 26 j 18:07		
conjunction	-11469 Nov 05 j 08:56			retrograde	-11463 May 25 j 14:27		
minimum elong	-11469 Nov 05 j 09:00		1°10'45	min. Earth dist.	-11463 Jul 30 j 04:17		
max. Earth dist.	-11469 Nov 05 j 06:50		9.99370 AU	opposition	-11463 Jul 31 j 03:01	17°M41'23	-2°26'22
morning rise	-11469 Nov 22 j 23:01	27° <b>Ω</b> 59'06			-11463 Sep 05 j 19:46	15°RM	
	-11469 Dec 08 j 21:33	0° mp		direct	-11463 Oct 05 j 03:24	14°ML11'48	
retrograde	-11468 Mar 10 j 09:48	6° Mp 34′00			-11463 Nov 03 j 09:48	15° <b>M</b> ₀	
opposition	-11468 May 18 j 01:04	3° Mp 02'55	1°06'47	evening set	-11462 Jan 18 j 10:56	22°M37'25	
min. Earth dist.	-11468 May 17 j 23:38	3°m/03'12	7.93165 AU		·		
	-11468 Jul 03 j 04:20			conjunction	-11462 Feb 05 j 14:51	25°ML00'19	-2°06'51
direct	-11468 Jul 23 j 02:50			minimum elong	-11462 Feb 05 j 14:47		
	-11468 Aug 11 j 19:01	0°m		max. Earth dist.	-11462 Feb 06 j 21:38		9.91960 AU
evening set	-11468 Nov 01 j 17:23	7° <b>m</b> )48'07		morning rise	-11462 Feb 23 j 19:00		2.2.200710
croning set	11 100 110V 01 J 17.23	, טידיע,וי /		morning HSC	-11462 Mar 16 j 19:20		
agniumation	11460 Nov. 10 : 00.07	100 m 00146	0026102	ratro ara da	·		
conjunction	-11468 Nov 19 j 08:07	-	0°36'02	retrograde	-11462 Jun 09 j 03:37		2040155
minimum elong	-11468 Nov 19 j 08:09		0°36'16	opposition	-11462 Aug 14 j 14:24		
max. Earth dist.	-11468 Nov 19 j 14:30		9.87870 AU	min. Earth dist.	-11462 Aug 13 j 15:42		7.97944 AU
morning rise	-11468 Dec 07 j 04:35	=			-11462 Sep 13 j 08:58		
retrograde	-11467 Mar 25 j 22:28			direct	-11462 Oct 20 j 05:03		
opposition	-11467 Jun 02 j 00:49	17° <b>m</b> 42'43	0°21'30		-11462 Nov 25 j 21:07	0° <b>∡</b> ¹	

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11461 in astronomical counting style is the year 11462 BCE in historical counting style. -11461 Feb 02 j 23:50 7° ₹ 06'23 evening set conjunction -11455 May 11 j 00:24 25°≈56'57 -1°10'46 minimum elong -11455 May 11 j 00:27 25°≈56'58 1°11'09 max. Earth dist. -11461 Feb 21 j 02:01 9° ₹26'30 -2°20'54 -11455 May 11 j 02:14 25°≈57'29 11.00215 AU conjunction -11461 Feb 21 j 01:58 9° ₹26'29 2°21'29 -11455 May 28 j 03:11 27°≈56'18 minimum elong morning rise -11461 Feb 22 j 07:58 9° ₹36'14 10.04355 AU 0°**)**€ -11455 Jun 15 j 19:10 max. Earth dist. 4°**){**46'34 -11461 Mar 11 j 03:03 11° ₹ 46'07 -11455 Sep 03 j 03:46 morning rise retrograde 1°**¥**29'36 -1°10'51 -11461 Jun 23 j 03:36 19°**х** 55'12 -11455 Nov 10 j 16:37 retrograde opposition -11461 Aug 28 j 16:24 16°**又** 27'07 -3°00'20 min. Earth dist. -11455 Nov 10 j 16:27 opposition 1°**∺**29'38 9.06557 AU -11461 Aug 27 j 18:31 16°**尽** 31'38 8.11695 AU min. Earth dist. -11455 Dec 01 j 05:22 30°R≈ direct -11461 Nov 03 j 23:57 12° ₹ 57'43 direct -11454 Jan 21 j 04:45 28°≈06'13 -11460 Feb 18 j 01:31 21° ₹ 08'44 evening set -11454 Mar 12 j 03:39 0°**₩** evening set -11454 May 05 j 11:28 5°**)** 14'50 -11460 Mar 07 j 01:18 23°**x** 25'36 -2°26'08 conjunction minimum elong -11460 Mar 07 j 01:17 23° ₹25'36 2°26'46 conjunction -11454 May 22 j 16:04 7°**米** 13'21 -0°44'09 max. Earth dist. -11460 Mar 08 j 04:53 23° ₹34'24 10.19266 AU minimum elong -11454 May 22 j 16:06 7°**升**13'22 0°44'26 morning rise -11460 Mar 24 j 22:39 25° ₹41'34 max. Earth dist. -11454 May 22 j 13:04 7°**光**12'29 11.12377 AU -11460 May 01 j 12:20 0°る morning rise -11454 Jun 08 j 15:27 9°**米** 10'25 retrograde -11460 Jul 05 j 15:23 3°**る**35'20 retrograde -11454 Sep 14 j 08:30 15° **¥** 53'50 min. Earth dist. -11460 Sep 09 j 11:46 0°る13'21 8.27493 AU opposition -11454 Nov 22 j 07:08 12° \( \frac{1}{38} \) 38'01 -0°37'25 opposition -11460 Sep 10 j 08:00 0°る09'14 -3°00'56 min. Earth dist. -11454 Nov 22 j 11:21 12° <del>X</del> 37'13 9.17481 AU -11460 Sep 12 j 05:24 30°R ⊀ direct -11453 Feb 02 j 03:09 9° **★** 15'50 direct -11460 Nov 17 j 10:14 26° ₹40'24 evening set -11453 May 16 j 22:07 16°**光** 17'27 -11459 Jan 20 j 11:52 0°ਤ evening set -11459 Mar 03 j 13:36 4°₹41'03 conjunction -11453 Jun 02 j 23:19 18° \( \) 14'00 -0°16'25 minimum elong -11453 Jun 02 j 23:20 18°**)** 14'01 0°16'36 -11459 Mar 21 j 10:35 6°る54'28 -2°23'03 max. Earth dist. -11453 Jun 02 j 15:22 18°\dagger 11'44 11.21969 AU conjunction -11459 Mar 21 j 10:36 6°る54'28 2°23'42 morning rise -11453 Jun 19 j 19:27 20° **★**09'13 minimum elong max. Earth dist. -11459 Mar 22 j 10:44 7°**중**02'02 10.35779 AU retrograde -11453 Sep 25 j 09:54 26° \(\mathbf{H}\)48'05 -11459 Apr 08 j 03:59 9°**궁**06'39 -11453 Dec 03 j 18:15 23°¥33'06 -0°03'20 morning rise opposition -11459 Jul 18 j 14:30 16°**♂**45'00 -11453 Dec 04 j 03:32 23° <del>X</del> 31'24 9.25690 AU min. Earth dist. retrograde -11452 Jan 09 j 02:34 21°**米**09'18 -11459 Sep 23 j 13:20 13°중20'58 -2°51'48 opposition asc. node -11459 Sep 22 j 19:41 13°る24'31 8.44410 AU direct -11452 Feb 13 j 20:48 20° **∺** 12'00 min. Earth dist. -11459 Dec 01 j 10:36 9°**궁**52'59 -11452 May 27 j 02:30 27°**米**08'20 evening set direct -11458 Mar 17 j 10:52 17°₹42'19 -11452 Jun 12 j 10:25 28° ¥ 59'25 11.28698 AU max. Earth dist. evening set -11458 Apr 04 j 04:49 19°₹52'15 -2°12'41 -11452 Jun 13 j 00:07 29°**米** 03'19 0°11'34 conjunction conjunction -11458 Apr 04 j 04:52 19°♂52'16 2°13'18 -11452 Jun 13 j 00:07 29° **★** 03'19 0°11'31 minimum elong minimum elong max. Earth dist. -11458 Apr 05 j 00:59 19°る58'27 10.52955 AU behind sun begin -11452 Jun 12 j 19:02 29°**米**01'53 morning rise -11458 Apr 21 j 18:14 22°る00'46 behind sun end -11452 Jun 13 j 05:11 29°**米**04'45 retrograde -11458 Jul 31 j 02:01 29°る24'32 -11452 Jun 21 j 06:52 0°**Υ** opposition -11458 Oct 06 j 08:41 26°♂02'33 -2°34'32 morning rise -11452 Jun 29 j 17:20 0°**Υ**57'07 min. Earth dist. -11458 Oct 05 j 19:03 26°る05'15 8.61540 AU retrograde -11452 Oct 05 j 09:09 7°**Υ**33'43 direct -11458 Dec 14 j 23:59 22°₹35'34 opposition -11452 Dec 14 j 03:28 4°**Υ**′19'14 0°30'24 -11457 Mar 28 j 19:59 0°≈ min. Earth dist. -11452 Dec 14 j 16:59 4°Υ16'46 9.30941 AU -11457 Mar 30 j 17:45 0°≈13'29 direct -11451 Feb 24 j 08:50 0°**Υ**59'06 evening set -11451 Jun 07 i 02:21 7°**Υ**51'51 evening set -11457 Apr 17 j 08:29 2°≈20'07 -1°56'16 conjunction -11457 Apr 17 j 08:32 2°≈20'08 1°56'51 -11451 Jun 23 j 20:36  $9^{\circ}$   $\Upsilon$  45'41  $0^{\circ}$  38'49 minimum elong conjunction -11457 Apr 17 j 23:12 2°≈24'33 10.69917 AU -11451 Jun 23 j 20:35  $9^{\circ}$   $\Upsilon$  45'41  $0^{\circ}$  38'52 max. Earth dist. minimum elong morning rise -11457 May 04 i 18:09 4°≈25'13 max. Earth dist. -11451 Jun 23 i 02:36 9°Υ40'33 11.32380 AU retrograde -11457 Aug 12 i 03:37 11°≈35'49 morning rise -11451 Jul 10 j 11:09 11°**Υ**38'33 opposition -11457 Oct 18 j 18:46 8°≈15'45 -2°10'51 retrograde -11451 Oct 16 j 10:02 18° Υ 15'08 opposition min. Earth dist. -11457 Oct 18 j 10:01 8°≈17'27 8.78066 AU -11451 Dec 25 j 12:20  $15^{\circ}$  \( \gamma 00'47 \)  $1^{\circ}$  02'50 -11451 Dec 26 j 04:46 14° Υ 57'48 9.33080 AU direct -11457 Dec 28 j 01:53 4°≈49'54 min. Earth dist. -11450 Mar 07 j 19:01 11° $\Upsilon$ 41'26 evening set -11456 Apr 11 j 11:11 12°≈16'57 direct evening set -11450 Jun 17 j 23:22 18°**Y**32'20 conjunction -11456 Apr 28 j 22:32 14°≈20'33 -1°35'12 -11456 Apr 28 j 22:35 14°≈20'34 1°35'41 minimum elong conjunction -11450 Jul 04 j 14:40 20°**Y**′25'29 1°04'38 max. Earth dist. -11456 Apr 29 j 06:41 14°≈22'58 10.85889 AU minimum elong -11450 Jul 04 j 14:38 20°**Y**°25'28 1°04'49 -11456 May 04 j 11:36 15°≈ -11450 Jul 03 j 17:57 20°**Y**19'34 11.32894 AU max. Earth dist. morning rise -11456 May 16 j 04:43 16°≈22'34 -11450 Jul 21 j 02:42 22°**Y**17'49 morning rise retrograde -11456 Aug 22 j 18:11 23°≈21'55 retrograde -11450 Oct 27 j 14:07 28° Υ 56'34 opposition -11456 Oct 29 j 20:59 20°≈03'32 -1°42'26 opposition -11449 Jan 05 j 22:25 25°**Y**42'02 1°33'04 min. Earth dist. -11456 Oct 29 j 16:55 20°≈04'19 8.93267 AU min. Earth dist. -11449 Jan 06 j 17:34 25°**Υ**38'34 9.32027 AU direct -11455 Jan 08 j 19:54 16°≈38'54 direct -11449 Mar 19 j 01:38 22°**Υ**23'17 -11455 Apr 23 j 16:28 23°≈56'06 -11449 Jun 28 j 19:48 29°**Y** 14'01 evening set evening set

-11449 Jul 05 j 14:25 0°8

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11449 in astronomical counting style is the year 11450 BCE in historical counting style. -11449 Jul 14 j 08:27 1°**8**00'05 11.30212 AU max. Earth dist. conjunction -11443 Sep 19 i 19:53 9°539'52 2°22'11 minimum elong -11443 Sep 19 j 19:55 9°939'52 2°22'50 9°532'32 10.57434 AU -11449 Jul 15 j 08:18 1°806'56 1°28'15 -11443 Sep 18 j 20:25 conjunction max. Earth dist. -11449 Jul 15 j 08:15 1°806'55 1°28'33 minimum elong -11443 Oct 06 j 12:29 11°5543'56 morning rise -11449 Jul 31 j 18:19 -11442 Jan 19 j 20:58 19°531'02 2°**8**59'17 morning rise retrograde -11449 Nov 07 j 20:30 retrograde 9°**8**42'16 opposition -11442 Mar 31 j 04:02 16°506'31 2°49'17 -11448 Jan 17 j 11:12 opposition 6°**8**27'12 2°00'17 min. Earth dist. -11442 Mar 31 j 22:30 16°502'58 8.48667 AU -11448 Jan 18 j 09:29 min. Earth dist. 6°**8**23'09 9.27808 AU direct -11442 Jun 07 j 14:38 12°545'15 direct -11448 Mar 29 j 07:37 3°**8**08'47 evening set -11442 Sep 15 j 22:46 20°518'37 evening set -11448 Jul 08 j 17:13 10°**8**01'06 max. Earth dist. -11448 Jul 24 j 00:33 11°**8**46'30 11.24421 AU conjunction -11442 Oct 02 j 16:12 22°525'13 2°10'01 -11442 Oct 02 j 16:16 22°\$25'14 2°10'38 minimum elong -11448 Jul 25 j 03:19 11°**8**54'14 1°48'56 -11442 Oct 01 j 21:33 22°519'17 10.39768 AU conjunction max. Earth dist. minimum elong -11448 Jul 25 j 03:16 11°**8**54'13 1°49'20 morning rise -11442 Oct 19 j 13:55 24°533'17 morning rise -11448 Aug 10 j 12:05 13°**8**47'05 -11442 Dec 08 j 12:51  $0^{\circ}\Omega$ -11448 Aug 21 j 10:19 15°**8** retrograde -11441 Feb 03 j 01:27 2°**Ω**35'07 retrograde -11448 Nov 18 j 09:31 20°**8**36'23 -11441 Apr 02 j 20:14 30°R 5 opposition -11447 Jan 28 j 04:17 17°**8**20'26 2°23'36 opposition -11441 Apr 13 j 22:29 29°508'30 2°30'16 min. Earth dist. -11447 Jan 29 j 04:28 17°**8**16'02 9.20542 AU min. Earth dist. -11441 Apr 14 j 11:56 29°505'52 8.31045 AU -11447 Mar 04 j 22:52 15°R8 direct -11441 Jun 20 j 14:40 25°5046'06 direct -11447 Apr 09 j 17:02 14°**8**02'08 -11441 Aug 30 j 15:06 0 $^{\circ}\Omega$ -11447 May 14 j 15:55 15°8 evening set -11441 Sep 29 i 03:37 3°**Ω**30′11 evening set -11447 Jul 19 j 17:06 20°**8**57'35 max. Earth dist. -11447 Aug 03 j 22:07 22°843'26 11.15678 AU conjunction -11441 Oct 16 j 02:30 5° $\Omega$ 40'50 1°50'39 minimum elong -11441 Oct 16 j 02:34  $5^{\circ}\Omega$ 40'51  $1^{\circ}51'12$ -11447 Aug 05 j 01:42 22°851'30 2°05'56 max. Earth dist. -11441 Oct 15 j 13:36 5° $\Omega$ 36'40 10.22515 AU conjunction -11447 Aug 05 j 01:39 22°**8**51'29 -11441 Nov 02 j 06:22  $7^{\circ}\Omega$ 53'12 minimum elong 2°06'24 morning rise -11447 Aug 21 j 09:51 24°**8**45'23 -11440 Jan 11 j 20:23 15°**Ω** morning rise -11447 Oct 14 j 12:09 0°**Ц** -11440 Feb 17 j 17:04 16° **Ω**09'22 retrograde -11447 Nov 30 j 05:27 1°**Д**43'00 -11440 Mar 26 j 01:39 15°RΩ retrograde -11440 Apr 27 j 02:54 12° Ω40'42 2°02'14 -11446 Jan 17 j 17:16 30°R8 opposition -11440 Apr 27 j 10:34 12° **Ω**39'11 8.14335 AU -11446 Feb 09 j 02:47 28°**8**25'46 2°42'06 min. Earth dist. opposition -11446 Feb 10 j 03:09 28°**8**21'19 9.10420 AU -11440 Jul 03 j 01:57 9°**Ω**17'03 min. Earth dist. direct -11446 Apr 21 j 04:41 25°**8**07'20 -11440 Sep 24 j 07:00 15°**Ω** direct -11446 Jul 11 j 19:58 0°**Ⅱ** -11440 Oct 11 j 22:41 17° Ω12'01 evening set -11446 Jul 30 j 21:29 2°**Ⅲ**07'32 evening set -11446 Aug 15 j 02:12 3°**Д**54'40 11.04217 AU -11440 Oct 29 j 03:46 19° Ω 26'53 1°24'27 max. Earth dist. conjunction minimum elong -11440 Oct 29 j 03:50 19° Ω 26'54 1°24'54 conjunction -11446 Aug 16 j 05:33 4°**I**I02'46 2°18'30 max. Earth dist. -11440 Oct 28 j 21:13 19° $\Omega$ 24'44 10.06673 AU minimum elong -11446 Aug 16 j 05:31 4°**Д**02'46 2°19'02 morning rise -11440 Nov 15 j 14:29 21°**Ω**43'37 morning rise -11446 Sep 01 j 13:54 5°**I**I58'16 -11439 Feb 16 j 09:15 0° M retrograde -11446 Dec 12 j 12:04 13°**Д**05'57 retrograde -11439 Mar 03 j 19:04 0° m 12'37 -11445 Feb 21 j 07:55 9°**Д**47'13 2°54'51 -11439 Mar 19 j 05:11 30°R**∂** opposition min. Earth dist. -11445 Feb 22 j 07:49 9°**Ц**42'48 8.97721 AU opposition -11439 May 11 j 16:10  $26^{\circ}\Omega$ 42'09  $1^{\circ}25'54$ -11445 May 02 j 20:55 6°**Ц**28'23 min. Earth dist. -11439 May 11 j 17:53  $26^{\circ}\Omega$ 41'48 7.99548 AU direct -11439 Jul 16 j 23:53 23° $\Omega$ 17'10 evening set -11445 Aug 11 j 08:07 13°**Ⅱ**34'50 direct -11439 Oct 15 j 14:22 -11445 Aug 27 j 16:31 15°**II**32'00 2°25'52 conjunction evening set -11439 Oct 26 j 08:11 1° m 22'38 -11445 Aug 27 j 16:30 15°**II**32'00 2°26'28 minimum elong max. Earth dist. -11445 Aug 26 j 12:59 15°**Д**23'43 10.90372 AU conjunction -11439 Nov 12 j 19:46 3° m 41'29 0°52'23 morning rise -11445 Sep 13 j 02:19 17°**Д**29'44 minimum elong -11439 Nov 12 i 19:48 3° m 41'30 0°52'42 retrograde -11445 Dec 25 j 03:29 24° **II**49'10 max. Earth dist. -11439 Nov 12 j 20:14 3° m 41'38 9.93225 AU -11439 Nov 30 j 13:18 6° Mp 02'17 -11444 Mar 04 j 21:18 21°II28'40 3°00'54 morning rise opposition min. Earth dist. -11444 Mar 05 j 20:38 21° **II** 24'19 8.82817 AU retrograde -11438 Mar 19 j 04:53 14° m 41'38 -11438 May 26 j 12:44 11° Mp 09'42 0°42'58 direct -11444 May 13 j 17:09 18°**Д**09'14 opposition 7.87644 AU evening set -11444 Aug 22 j 02:33 25°**Ⅲ**23'24 min. Earth dist. -11438 May 26 j 08:43 11° **m** 10'31 max. Earth dist. -11444 Sep 06 j 09:49 27° II 14'56 10.74575 AU direct -11438 Jul 31 j 08:16 7° **m** 43'23 -11438 Nov 10 j 07:22 15° m 58'16 evening set -11444 Sep 07 j 12:29 27°**I**23'06 2°27'19 conjunction -11444 Sep 07 j 12:30 27°**Ц**23'06 -11438 Nov 28 j 01:04 18° m 20'30 0°16'14 minimum elong 2°27'57 conjunction -11444 Sep 24 j 01:05 29°**Ⅲ**23'42 morning rise minimum elong -11438 Nov 28 j 01:05 18° Mp 20'30 0°16'23 -11444 Sep 29 j 02:59 0 $\circ$  $\odot$ max. Earth dist. -11438 Nov 28 j 09:20 18° m 23'16 9.83072 AU retrograde -11443 Jan 06 j 05:29 6°956'27 morning rise -11438 Dec 16 j 00:32 20° mp 44'35 opposition -11443 Mar 17 j 19:50 3°934'00 2°59'19 retrograde -11437 Apr 03 j 19:06 29° M 30'50 min. Earth dist. -11443 Mar 18 j 17:39 3°**5**29'52 8.66222 AU desc. node -11437 May 10 j 18:46 28° Mp 18'23 -11443 May 25 j 23:36 0°9513'43 -11437 Jun 10 j 14:08 25° m 57'54 -0°03'54 direct opposition

min. Earth dist.

evening set

-11443 Sep 03 j 06:53

7°536'59

-11437 Jun 10 j 04:29 25° m 59'54 7.79457 AU

•			•		st AG 18-Feb-2025 ar 11438 BCE in historical		page 39
direct	-11437 Aug 15 j 01:57	-	in astronomical co	conjunction	-11430 Mar 15 j 06:48	0° <b>궁</b> 59'13	
ancer	-11437 Nov 19 j 01:13	0ಂ <b>ರ</b>		minimum elong	-11430 Mar 15 j 06:49	0° <b>る</b> 59'13	
evening set	-11437 Nov 25 j 18:24			max. Earth dist.	-11430 Mar 16 j 10:21		10.27081 AU
evening sec	11157 1107 25 j 10.21	0 -32 17		morning rise	-11430 Apr 02 j 02:03	3°₹13'16	10.27001110
conjunction	-11437 Dec 13 j 17:17	3° <b>≏</b> 17'28	-0°21'42	retrograde	-11430 Jul 13 j 03:03		
minimum elong	-11437 Dec 13 j 17:17	3° <b>⊆</b> 17'27		opposition	-11430 Sep 17 j 22:32	7°る33'48	-2°57'09
max. Earth dist.	-11437 Dec 14 j 09:15	3° <b>⊆</b> 22'51	9.76951 AU	min. Earth dist.	-11430 Sep 17 j 22:32	7° <b>る</b> 37'39	
morning rise	-11437 Dec 31 j 21:12	5° <b>Ω</b> 43'42	).10)31 NO	direct	-11430 Nov 25 j 10:18	4°る05'10	0.55705710
retrograde	-11436 Apr 18 j 10:04			evening set	-11429 Mar 11 j 12:36		
opposition	-11436 Jun 24 j 17:30		-0°51'14	evening sec	1112) Mai 11 j 12.50	12 000 03	
min. Earth dist.	-11436 Jun 24 j 02:38		7.75590 AU	conjunction	-11429 Mar 29 j 07:56	14º云11'41	-2°18'17
direct	-11436 Aug 29 j 03:24	7° <b>£</b> 30′29	7.75570710	minimum elong	-11429 Mar 29 j 07:58		
evening set	-11436 Dec 10 j 14:05			max. Earth dist.	-11429 Mar 30 j 06:34		
				morning rise	-11429 Apr 15 j 23:22		
conjunction	-11436 Dec 28 j 16:39	18° <b>Ω</b> 23'51	-0°58'24	retrograde	-11429 Jul 25 j 18:55		
minimum elong	-11436 Dec 28 j 16:35			opposition	-11429 Sep 30 j 22:26		-2°43'23
max. Earth dist.	-11436 Dec 29 j 15:22			min. Earth dist.	-11429 Sep 30 j 06:34		
morning rise	-11435 Jan 15 j 23:04			direct	-11429 Dec 09 j 05:26		
retrograde	-11435 May 03 j 21:17			evening set	-11428 Mar 24 j 02:21		
opposition	-11435 Jul 09 j 19:47		-1°35'11	<b>3</b>	<b>,</b>		
min. Earth dist.	-11435 Jul 09 j 00:33			conjunction	-11428 Apr 10 j 18:34	26° <b>ප</b> 53'49	-2°04'29
direct	-11435 Sep 13 j 08:51			minimum elong	-11428 Apr 10 j 18:37		
	-11435 Dec 18 j 08:14			max. Earth dist.	-11428 Apr 11 j 11:51		
evening set	-11435 Dec 26 j 14:02	1°M04'21		morning rise	-11428 Apr 28 j 06:12		
<i>5</i>				5 5	-11428 May 06 j 16:41	0° <b>≈</b>	
conjunction	-11434 Jan 13 j 18:26	3°M29'57	-1°31'06	retrograde	-11428 Aug 06 j 01:31	6°≈17'16	
minimum elong	-11434 Jan 13 j 18:22	3°M29'56	1°31'25	opposition	-11428 Oct 12 j 12:47	2°≈56'27	-2°22'24
max. Earth dist.	-11434 Jan 14 j 22:25	3°M39'21	9.78278 AU	min. Earth dist.	-11428 Oct 12 j 00:27		8.70575 AU
morning rise	-11434 Feb 01 j 01:12	5°M56'14	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		-11428 Nov 27 j 00:04		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
retrograde	-11434 May 19 j 01:20			direct	-11428 Dec 21 j 12:50		
opposition	-11434 Jul 24 j 17:50		-2°12'15		-11427 Jan 15 j 00:48	0°≈	
min. Earth dist.	-11434 Jul 23 j 19:20			evening set	-11427 Apr 06 j 02:13	7°≈02'29	
direct	-11434 Sep 28 j 14:32	7°M33'52		Ü	1 3		
	-11433 Jan 03 j 12:58			conjunction	-11427 Apr 23 j 15:15	9° <b>≈</b> 07'29	-1°45'21
evening set	-11433 Jan 11 j 13:05			minimum elong	-11427 Apr 23 j 15:18	9° <b>≈</b> 07'30	
· ·	,			max. Earth dist.	-11427 Apr 24 j 03:29	9° <b>≈</b> 11'09	10.78897 AU
conjunction	-11433 Jan 29 j 17:39	18°M26'03	-1°57'19	morning rise	-11427 May 10 j 23:06	11° <b>≈</b> 10'55	
minimum elong	-11433 Jan 29 j 17:34	18°M26'01	1°57'46		-11427 Jun 15 j 12:06	15° <b>≈</b>	
max. Earth dist.	-11433 Jan 31 j 01:01			retrograde	-11427 Aug 17 j 22:05		
morning rise	-11433 Feb 16 j 22:58			opposition	-11427 Oct 24 j 18:53	14° <b>≈</b> 56'35	-1°55'55
retrograde	-11433 Jun 02 j 20:01	29°M20'06		min. Earth dist.	-11427 Oct 24 j 10:58	14° <b>≈</b> 58′06	8.86843 AU
min. Earth dist.	-11433 Aug 07 j 09:00	25°M53'53	7.90882 AU		-11427 Oct 24 j 01:08	15°R≈	
opposition	-11433 Aug 08 j 09:07			direct	-11426 Jan 03 j 10:15		
direct	-11433 Oct 13 j 17:22	22°M18'36			-11426 Mar 12 j 18:40	15° <b>≈</b>	
	-11432 Jan 21 j 19:05	0° <b>∡</b> ¹		evening set	-11426 Apr 18 j 13:14	18° <b>≈</b> 53'31	
evening set	-11432 Jan 27 j 06:18	0° <b>∡</b> ¹41'50					
				conjunction	-11426 May 05 j 22:56	20° <b>≈</b> 55'37	-1°22'16
conjunction	-11432 Feb 14 j 09:40	3° <b>∡</b> 03'33	-2°15'26	minimum elong	-11426 May 05 j 22:59	20° <b>≈</b> 55'38	1°22'41
minimum elong	-11432 Feb 14 j 09:37	3° <b>₹</b> 03'32	2°16'00	max. Earth dist.	-11426 May 06 j 05:40	20° <b>≈</b> 57'36	10.94417 AU
max. Earth dist.	-11432 Feb 15 j 18:04	3° <b>х</b> 14′10	9.96728 AU	morning rise	-11426 May 23 j 03:11	22° <b>≈</b> 56′08	
morning rise	-11432 Mar 03 j 12:16	5° <b>∡</b> ¹24'54		retrograde	-11426 Aug 29 j 11:17	29° <b>≈</b> 50′28	
retrograde	-11432 Jun 16 j 03:27	13° <b>∡</b> ¹41'20		opposition	-11426 Nov 05 j 17:50	26° <b>≈</b> 33'19	-1°25'33
opposition	-11432 Aug 21 j 15:41	10° <b>∡</b> 11'46	-2°56'27	min. Earth dist.	-11426 Nov 05 j 15:24	26° <b>≈</b> 33'46	9.01418 AU
min. Earth dist.	-11432 Aug 20 j 15:54	10° <b>∡</b> 16'43	8.03619 AU	direct	-11425 Jan 15 j 22:21	23° <b>≈</b> 09'51	
direct	-11432 Oct 27 j 14:17	6° <b>∡</b> 141'43			-11425 Apr 27 j 06:34	0° <b>)</b>	
evening set	-11431 Feb 10 j 13:47	14° <b>∡</b> 57′21		evening set	-11425 Apr 30 j 13:23	0° <b>∺</b> 22'18	
conjunction	-11431 Feb 28 j 14:56			conjunction	-11425 May 17 j 19:34		
minimum elong	-11431 Feb 28 j 14:55			minimum elong	-11425 May 17 j 19:36	2° <b>∺</b> 21'51	
max. Earth dist.	-11431 Mar 01 j 21:54		10.10859 AU	max. Earth dist.	-11425 May 17 j 19:27		11.07926 AU
morning rise	-11431 Mar 18 j 14:00			morning rise	-11425 Jun 03 j 20:30	4° <b>)</b> 19′52	
retrograde	-11431 Jun 29 j 22:40			retrograde	-11425 Sep 09 j 17:10		
opposition	-11431 Sep 04 j 12:16			opposition	-11425 Nov 17 j 10:46	7° <b>₩</b> 50′22	
min. Earth dist.	-11431 Sep 03 j 14:22		8.18892 AU	min. Earth dist.	-11425 Nov 17 j 13:32		9.13720 AU
direct	-11431 Nov 11 j 04:31			direct	-11424 Jan 28 j 01:37	4° <b>)</b> €28'07	
evening set	-11430 Feb 25 j 08:27			evening set	-11424 May 11 j 04:16	11° <b>米</b> 32'49	
	-11430 Mar 07 j 11:14	0~0					

Planetary Phenomena of Saturn from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11424 in astronomical counting style is the year 11425 BCE in historical counting style. -11424 May 28 j 06:55 13° ¥ 30'10 -0°29'06 min. Earth dist. -11418 Jan 24 i 06:43 12° \( \begin{aligned}
 36'01 9.23555 AU \) conjunction minimum elong -11424 May 28 j 06:56 13° \( \)30'11 0°29'19 direct -11418 Apr 05 j 01:14 9°**8**21'42 -11424 May 28 j 00:19 13°\(\mathbf{X}\)28'16 11.18895 AU -11418 Jul 03 j 20:53 15°**8** max. Earth dist. -11424 Jun 14 j 04:40 15°**¥**26'09 -11418 Jul 15 j 04:26 16°**8**15'40 morning rise evening set -11424 Sep 19 j 19:46 22° **H** 06'48 -11418 Jul 30 j 09:56 18°**8**01'08 11.19154 AU retrograde max. Earth dist. -11424 Nov 27 j 23:36 18°\ 51'57 -0°18'49 opposition -11424 Nov 28 j 06:41 18° **∺** 50'38 9.23267 AU -11418 Jul 31 j 13:48 18°**8**09'14 1°58'44 min. Earth dist. conjunction -11423 Feb 07 j 23:59 15°**∺** 30'50 minimum elong -11418 Jul 31 j 13:45 18°**8**09'14 direct 1°59'11 -11423 May 22 j 11:37 22°**∺**29'24 evening set morning rise -11418 Aug 16 j 22:05 20°**8**02'40 retrograde -11418 Nov 25 j 06:50 26°**8**56'21 conjunction -11423 Jun 08 j 10:54 24° **★** 25'01 -0°01'09 opposition -11417 Feb 04 j 03:03 23°839'23 2°34'24 -11423 Jun 08 j 10:54 24°**)** 25'01 0°01'16 -11417 Feb 05 j 04:09 23°834'48 9.14328 AU minimum elong min. Earth dist. -11423 Jun 08 j 03:53 24° **∺**23'03 behind sun begin direct -11417 Apr 16 j 09:47 20°**8**20'36 behind sun end -11423 Jun 08 j 17:54 24° **€** 27'00 evening set -11417 Jul 26 j 06:33 27°**8**18'41 max. Earth dist. -11423 Jun 07 j 23:28 24°**米**21'46 11.26916 AU max. Earth dist. -11417 Aug 10 j 09:22 29°**8**04'42 11.08557 AU asc. node -11423 Jun 23 j 11:53 26°**米**07'43 morning rise -11423 Jun 25 j 05:27 26° **∺** 19'22 conjunction -11417 Aug 11 j 14:40 29°**8**13'20 2°13'25 -11423 Jul 31 j 05:05  $0^{\circ}\Upsilon$ minimum elong -11417 Aug 11 j 14:38 29°**8**13'19 2°13'56 retrograde -11423 Sep 30 j 21:24 2°**Y**56'46 -11417 Aug 18 j 05:15 0°**I**I -11423 Dec 05 j 10:14 30°R € morning rise -11417 Aug 27 j 22:56 1°**I**I08'07 opposition -11423 Dec 09 j 09:52 29°\ 42'30 0°15'13 retrograde -11417 Dec 07 j 07:27 8°**Ⅱ**11'09 min. Earth dist. -11423 Dec 09 j 21:09 29° \ 40'26 9.29743 AU opposition -11416 Feb 16 i 05:01 4°**Д**52'41 2°49'55 direct -11422 Feb 19 j 14:12 26° \( 22'22 \) min. Earth dist. -11416 Feb 17 і 06:43 4°**П**47'57 9.02471 AU -11422 May 01 j 22:24  $0^{\circ}\Upsilon$ direct -11416 Apr 27 i 00:37 1°**Ⅱ**33'30 evening set -11422 Jun 02 j 13:43 3°**Υ**16'35 evening set -11416 Aug 05 j 13:54 8°**Д**37'14 -11422 Jun 19 i 09:39  $5^{\circ}$ **Y**10'54  $0^{\circ}$ 26'36 -11416 Aug 21 j 21:58 10°**II**33'33 2°23'15 conjunction conjunction -11422 Jun 19 j 09:38 5°Υ10'53 0°26'36 minimum elong -11416 Aug 21 j 21:57 10°**II**33'32 2°23'50 minimum elong max. Earth dist. -11422 Jun 18 j 17:40 5°**Υ**06'20 11.31771 AU max. Earth dist. -11416 Aug 20 j 17:38 10°**Д**25'04 10.95527 AU -11422 Jul 06 j 01:15 7°**Υ**04'06 -11416 Sep 07 j 07:07 12°**Д**30'18 morning rise morning rise -11422 Oct 11 j 21:39 13° Υ 40'27 -11416 Dec 18 j 17:45 19° II 44'28 retrograde retrograde -11422 Dec 20 j 18:59  $10^{\circ}$ **Y**26'26  $0^{\circ}$ 48'21 -11415 Feb 27 j 14:29 16°**Д**24'14 2°59'09 opposition opposition -11422 Dec 21 j 11:02 10°**Υ**23'31 9.33019 AU -11415 Feb 28 j 14:43 16°**Ц**19'43 8.88377 AU min. Earth dist. min. Earth dist. -11421 Mar 03 j 00:18 7°**Υ**'07'02 -11415 May 08 j 19:25 13°**耳**04'31 direct direct -11421 Jun 13 j 12:22 13°**Υ**58'40 -11415 Aug 17 j 04:17 20°**Ⅲ**15'20 evening set evening set -11421 Jun 29 j 07:53 15°**Υ**46'05 11.33391 AU max. Earth dist. -11415 Sep 01 j 11:20 22° **I** 05'58 10.80505 AU max. Earth dist. conjunction -11421 Jun 30 j 04:57 15° Υ 52'05 0° 53'10 conjunction -11415 Sep 02 j 13:33 22°**Д**13'56 2°27'30 minimum elong -11421 Jun 30 j 04:55 15°**Υ**'52'05 0°53'18 minimum elong -11415 Sep 02 j 13:33 22°**Д**13'56 2°28'07 morning rise -11421 Jul 16 j 18:06 17°**Y**44'37 morning rise -11415 Sep 19 j 00:41 24°**Д**13'16 retrograde -11421 Oct 22 j 22:50 24°**Y**22'09 -11415 Nov 16 j 00:32 0°ഇ -11420 Jan 01 j 04:38 21°**Υ**'07'57 1°19'42 retrograde -11415 Dec 31 j 15:47 1°5540'07 opposition min. Earth dist. -11420 Jan 02 j 00:31 21°**Υ**04'21 9.33049 AU -11414 Feb 16 j 16:12 30°R **Ⅲ** -11420 Mar 13 j 08:53 17°**Y**49'03 opposition -11414 Mar 12 j 08:30 28° **Ⅲ**17'58 3°01'10 direct -11420 Jun 23 j 09:08 24°**Y**39'48 min. Earth dist. -11414 Mar 13 j 06:10 28° **I**I 13'53 8.72539 AU evening set direct -11414 May 20 j 21:36 24° **П**57'33 -11420 Jul 09 j 22:46 26° γ 32'46 1°17'52 conjunction -11414 Aug 09 j 13:47 -11420 Jul 09 j 22:43 26° γ 32'46 1°18'08 -11414 Aug 29 i 03:48 2°516'48 minimum elong evening set -11420 Jul 08 j 22:22 26°**Υ**25'47 11.31771 AU max. Earth dist. morning rise -11420 Jul 26 i 09:46 28° Υ 25'05 conjunction -11414 Sep 14 i 15:22 4°518'18 2°25'27 -11420 Aug 09 j 21:28 0°8 minimum elong -11414 Sep 14 i 15:23 4°518'18 2°26'05 retrograde -11420 Nov 02 j 03:46 5°**8**05'59 max. Earth dist. -11414 Sep 13 j 15:23 4°510'52 10.64048 AU -11419 Jan 11 j 16:15 1°851'11 1°48'24 morning rise -11414 Oct 01 j 05:52 6°520'48 opposition -11419 Jan 12 j 14:09 1°847'13 9.29859 AU min. Earth dist. retrograde -11413 Jan 14 j 02:04 14°501'28 -11419 Feb 07 j 19:40 30°R**Y** opposition -11413 Mar 25 j 11:56 10°537'22 2°55'05 -11419 Mar 24 j 17:13 28°**Y**32'34 direct min. Earth dist. -11413 Mar 26 j 06:34 10°533'47 8.55578 AU -11419 May 07 j 07:58  $0^{\circ}$ 8 direct -11413 Jun 02 j 06:34 7°516'06 -11419 Jul 04 j 05:54 5°**8**24'06 evening set -11413 Sep 10 j 14:01 14°544'55 evening set max. Earth dist. -11413 Sep 26 j 08:19 16°5643'14 10.46849 AU -11419 Jul 20 j 17:10 7°**8**17'07 1°39'58 conjunction -11419 Jul 20 j 17:07 7°**8**17'06 -11413 Sep 27 j 05:09 16°549'49 2°16'33 minimum elong 1°40'20 conjunction max. Earth dist. -11419 Jul 19 j 15:16 7°**8**09'39 11.26974 AU minimum elong -11413 Sep 27 j 05:12 16°549'49 2°17'10 morning rise -11419 Aug 06 j 02:24 9°**8**09'42 morning rise -11413 Oct 14 j 00:24 18°556'05 -11419 Oct 10 j 10:00 15°**8** retrograde -11412 Jan 27 j 23:55 26°951'14 retrograde -11419 Nov 13 j 15:24 15°**8**56'01 opposition -11412 Apr 07 j 01:37 23°525'09 2°40'12 -11419 Dec 18 j 13:37 15°R8 min. Earth dist. -11412 Apr 07 j 16:43 23°522'13 8.38256 AU

direct

-11412 Jun 14 j 01:19 20°502'55

-11418 Jan 23 j 07:13 12°**8**40'17 2°13'36

opposition

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Attention, astronomical year style is used: The year -11412 in astronomical counting style is the year 11413 BCE in historical counting style. -11412 Sep 22 j 12:23 27°5542'06 evening set -11406 Dec 19 j 16:29 24° **2**26'08 evening set -11412 Oct 09 j 08:29 29°550'53 2°00'28 -11405 Jan 06 j 19:58 26° **2**51'44 -1°16'47 conjunction conjunction -11412 Oct 09 j 08:33 29°550'54 2°01'02 -11405 Jan 06 j 19:54 26°**2**51'43 1°17'03 minimum elong minimum elong max. Earth dist. -11412 Oct 08 j 16:55 29°5045'53 10.29713 AU -11405 Jan 07 j 22:31 27°**2**00'40 9.78022 AU max. Earth dist. -11412 Oct 10 j 12:54 -11405 Jan 25 j 02:39 29° **2**18'16  $0^{\circ}\Omega$ morning rise morning rise -11412 Oct 26 j 09:34  $2^{\circ}\Omega$ 01'17 -11405 Jan 30 j 10:19 0°M -11411 Feb 10 j 08:49 10°**Ω**10'57 retrograde retrograde -11405 May 12 j 15:12 8°M01'20 opposition -11411 Apr 21 j 01:22 6°**Ω**42'57 2°16'14 opposition -11405 Jul 18 j 09:13 4°M28'59 -1°56'15 min. Earth dist. -11411 Apr 21 j 11:39 6° **Ω**40'55 8.21441 AU min. Earth dist. -11405 Jul 17 j 12:00 4°ML33'28 7.80356 AU direct -11411 Jun 27 j 08:31 3°**Ω**19'39 direct -11405 Sep 22 j 00:30 0°M59'47 -11411 Oct 06 j 00:35 11°**Ω**09'37 -11404 Jan 04 j 16:16 evening set evening set 9°M28'03 conjunction -11411 Oct 23 j 02:42 13° $\Omega$ 22'33 1°37'17 conjunction -11404 Jan 22 j 20:38 11°ML52'44 -1°46'12 minimum elong -11411 Oct 23 j 02:46 13° $\Omega$ 22'34 1°37'47 minimum elong -11404 Jan 22 j 20:34 11°M 52'42 1°46'36 max. Earth dist. -11411 Oct 22 j 17:54 13° $\Omega$ 19'40 10.13537 AU max. Earth dist. -11404 Jan 24 j 02:04 12°ML02'33 9.83504 AU -11411 Nov 04 j 14:13 15°**Ω** morning rise -11404 Feb 10 j 02:47 14°ML17'50 morning rise -11411 Nov 09 j 10:17 15° **Ω**37'17 -11404 Feb 15 j 12:56 15°M retrograde retrograde -11410 Feb 25 j 05:47  $24^{\circ}\Omega$ 00'29 -11404 May 26 j 14:06 22° ML52'03 opposition -11410 May 05 j 10:22  $20^{\circ}\Omega 30'45$   $1^{\circ}43'31$ min. Earth dist. -11404 Jul 31 j 05:14 19° ML 25'26 7.87849 AU min. Earth dist. -11410 May 05 j 14:46  $20^{\circ}\Omega 29'52$ 8.06080 AU opposition -11404 Aug 01 j 03:35 19°M20'44 -2°28'23 direct -11410 Jul 11 j 01:44 17° Ω06'21 direct -11404 Oct 06 i 05:14 15° ML51'07 evening set -11410 Oct 20 j 03:10 25° Ω06'59 evening set -11403 Jan 19 j 12:34 24°M 16'13 conjunction -11410 Nov 06 j 11:48  $27^{\circ}\Omega 24'00$ 1°07'43 conjunction -11403 Feb 06 j 16:21 26°MJ38'55 -2°08'10 -11410 Nov 06 j 11:52 27° **Ω**24'01 1°08'06 minimum elong -11403 Feb 06 j 16:17 26°MJ38'54 2°08'40 minimum elong max. Earth dist. -11410 Nov 06 j 10:49 27°**Ω**23'41 9.99289 AU max. Earth dist. -11403 Feb 07 j 22:27 26° ML48'51 9.92777 AU -11410 Nov 24 j 02:07  $29^{\circ}\Omega 42'56$ -11403 Feb 24 j 20:23 29° ML01'32 morning rise morning rise -11410 Nov 26 j 06:55 0° Mp -11403 Mar 04 j 11:42 0° ⊀ -11409 Mar 12 j 12:39 8° m 17'44 -11403 Jun 10 j 02:28 7° ₹23'50 retrograde retrograde -11403 Aug 15 j 14:14 3°**尽** 54'03 -2°50'07 -11409 May 20 j 03:41 4° Mp 46'33 1°03'19 opposition opposition -11409 May 20 j 01:24 4° **m** 47'01 min. Earth dist. -11403 Aug 14 j 15:38 3°**尽** 58'45 7.98788 AU min. Earth dist. 7.93151 AU -11409 Jul 25 j 04:48 1° **m** 21'03 direct -11403 Oct 21 j 05:57 0° ₹24'24 direct -11409 Nov 03 j 19:55 9° m 31'33 -11402 Feb 04 j 00:51 8° ₹ 43'27 evening set evening set -11409 Nov 21 j 10:57 11° m 52'14 0°33'09 -11402 Feb 22 j 02:57 11°**尽**03'24 -2°21'33 conjunction conjunction -11409 Nov 21 j 10:58 11° m 52'15 0°33'23 -11402 Feb 22 j 02:54 11° ₹ 03'23 2°22'08 minimum elong minimum elong max. Earth dist. -11409 Nov 21 j 17:57 11° m 54'35 9.87920 AU max. Earth dist. -11402 Feb 23 j 08:25 11° ₹ 12'58 10.05187 AU morning rise -11409 Dec 09 j 07:35 14° Mp 14'49 morning rise -11402 Mar 12 j 03:46 13°**尽**22'48 retrograde -11408 Mar 27 j 01:51 22° m 58'10 retrograde -11402 Jun 24 j 02:50 21° ₹ 31'05 opposition -11408 Jun 03 j 03:08 19° **m** 25'55 0°17'49 opposition -11402 Aug 29 j 15:37 18°**尽** 03'07 -3°00'42 min. Earth dist. -11408 Jun 02 j 18:22 19° m 27'44 7.83559 AU min. Earth dist. -11402 Aug 28 j 17:37 18°**尽**07'39 8.12490 AU direct -11408 Aug 07 j 17:42 15° **m** 59'20 -11402 Nov 05 j 00:19 14° ₹33'46 direct desc. node -11408 Oct 23 j 07:59 21° Mp 04'06 -11401 Feb 19 j 01:50 22° ₹ 44'19 evening set -11408 Nov 18 j 01:52 24° m 18'14 evening set -11401 Mar 09 i 01:34 25° ₹ 01'02 -2°26'07 conjunction -11408 Dec 05 j 22:31 26° m 41'46 -0°04'23 conjunction minimum elong -11401 Mar 09 i 01:34 25° ₹ 01'02 2°26'46 -11408 Dec 05 j 22:31 26° m 41'46 0°04'18 minimum elong max. Earth dist. -11401 Mar 10 j 05:06 25° ₹ 09'49 10.20005 AU -11408 Dec 05 i 15:19 26° m 39'22 -11401 Mar 26 j 22:39 27° ₹ 16'50 behind sun begin morning rise behind sun end -11408 Dec 06 i 05:44 26° m 44'11 -11401 Apr 18 i 16:27 0°ਰ max. Earth dist. -11408 Dec 06 j 13:08 26° m 46'41 9.80257 AU retrograde -11401 Jul 07 j 14:06 5°る09'59 morning rise -11408 Dec 24 j 00:23 29° Mp 07'02 min. Earth dist. -11401 Sep 11 j 10:42 1°る48'07 8.28160 AU -11408 Dec 30 j 18:30 0°**♀** -11401 Sep 12 j 06:50 1°る44'01 -3°00'30 opposition -11407 Apr 11 j 17:37 7°**2**54'54 -11401 Oct 04 j 14:59 30°R ✓ retrograde direct -11401 Nov 19 j 09:59 28° ₹15'15 opposition -11407 Jun 18 j 05:51 4°**2**22'04 -0°29'45 -11400 Jan 03 j 19:40 0°**ਰ** min. Earth dist. -11407 Jun 17 j 15:40 4°**2**25'02 7.78021 AU direct -11407 Aug 22 j 15:09 0°**£**54'27 evening set -11400 Mar 04 j 13:20 6°**る**15'34 -11407 Dec 03 j 18:09 9°**△**19'32 evening set conjunction -11400 Mar 22 j 10:18 8°중28'52 -2°22'26 -11407 Dec 21 j 19:05 11°**2**44'47 -0°41'56 -11400 Mar 22 j 10:19 8°る28'52 2°23'05 conjunction minimum elong -11407 Dec 21 j 19:02 11°**△**44'46 0°42'02 -11400 Mar 23 j 10:29 8°중36'26 10.36364 AU minimum elong max. Earth dist. max. Earth dist. -11407 Dec 22 j 16:24 11°**2**51'59 9.76880 AU morning rise -11400 Apr 09 j 03:27 10°♂40'56 morning rise -11406 Jan 09 j 00:22 14° **2**11'24 retrograde -11400 Jul 19 j 13:33 18°중18'51 retrograde -11406 Apr 27 j 07:33 22°**♀**59'11 opposition -11400 Sep 24 j 11:56 14° ₹54'57 -2°50'40 opposition -11406 Jul 03 j 08:59 19°**2**26'20 -1°15'41 min. Earth dist. -11400 Sep 23 j 19:08 14°る58'20 8.44899 AU min. Earth dist. -11406 Jul 02 j 14:32 19°**2**30'13 7.76947 AU -11400 Dec 02 j 09:10 11°**3**27'01 direct

evening set

-11399 Mar 18 j 10:23 19°**⋜**16'11

-11406 Sep 06 j 18:39 15°**♀**57'50

direct

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Attention, astronomical year style is used: The year -11399 in astronomical counting style is the year 11400 BCE in historical counting style.

conjunction -11399 Apr 05 j 04:13 21°₹326′03 -2°11′30 minimum elong -11399 Apr 05 j 04:15 21°₹326′04 2°12′07 max. Earth dist. -11399 Apr 05 j 23:40 21°₹32′02 10.53344 AU

morning rise -11399 Apr 22 j 17:29 23°♂34'30

-11399 Jun 28 j 23:45 0°≈

retrograde -11399 Aug 01 j 01:23 0°≈57'59

-11399 Sep 03 j 10:31 30°R♂

opposition -11399 Oct 07 j 07:13 27° る36'08 -2°32'47 min. Earth dist. -11399 Oct 06 j 18:47 27° る8'35 8.61829 AU

direct -11399 Dec 15 j 21:56 24° ₹ 09'13