

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 1

Attention, astronomical year style is used: The year -8400 in astronomical counting style is the year 8401 BCE in historical counting style.

evening set	-8400 Jan 12 j 19:13	7°♄30'57				-8395 Jun 19 j 08:46	0°♄	
				retrograde		-8395 Aug 14 j 10:45	2°♄43'44	
conjunction	-8400 Jan 30 j 19:38	9°♄55'17 -1°47'29				-8395 Oct 11 j 11:50	30°♄	
minimum elong	-8400 Jan 30 j 19:34	9°♄55'16 1°47'59		min. Earth dist.		-8395 Oct 19 j 11:15	29°♄21'24	8.29543 AU
max. Earth dist.	-8400 Jan 31 j 13:10	10°♄01'10 9.79873 AU		opposition		-8395 Oct 20 j 03:42	29°♄18'03	-2°24'46
morning rise	-8400 Feb 17 j 23:32	12°♄20'44		direct		-8395 Dec 27 j 14:22	25°♄48'43	
retrograde	-8400 Jun 04 j 19:39	21°♄04'51				-8394 Mar 10 j 14:24	0°♄	
opposition	-8400 Aug 10 j 17:57	17°♄32'15 -2°30'10		evening set		-8394 Apr 12 j 20:08	3°♄47'46	
min. Earth dist.	-8400 Aug 10 j 02:55	17°♄35'25 7.79964 AU						
direct	-8400 Oct 15 j 07:41	14°♄03'01		conjunction		-8394 Apr 30 j 17:40	6°♄01'04	-1°45'36
evening set	-8399 Jan 27 j 17:13	22°♄31'34		minimum elong		-8394 Apr 30 j 17:44	6°♄01'05	1°45'54
				max. Earth dist.		-8394 May 01 j 13:08	6°♄07'09	10.37587 AU
conjunction	-8399 Feb 14 j 19:18	24°♄56'03 -2°09'04		morning rise		-8394 May 18 j 10:58	8°♄13'00	
minimum elong	-8399 Feb 14 j 19:15	24°♄56'02 2°09'36		retrograde		-8394 Aug 27 j 08:44	15°♄47'26	
max. Earth dist.	-8399 Feb 15 j 16:51	25°♄03'16 9.80814 AU		opposition		-8394 Nov 02 j 07:55	12°♄23'48	-1°56'04
morning rise	-8399 Mar 04 j 23:38	27°♄21'12		min. Earth dist.		-8394 Nov 01 j 18:07	12°♄26'34	8.45761 AU
	-8399 Mar 25 j 21:44	0°♄		direct		-8393 Jan 10 j 12:06	8°♄55'31	
retrograde	-8399 Jun 20 j 00:45	6°♄00'31		evening set		-8393 Apr 26 j 13:35	16°♄43'28	
opposition	-8399 Aug 25 j 14:42	2°♄28'29 -2°51'42						
min. Earth dist.	-8399 Aug 24 j 21:32	2°♄32'06 7.83101 AU		conjunction		-8393 May 14 j 08:11	18°♄53'30	-1°20'36
	-8399 Sep 27 j 07:52	30°♄		minimum elong		-8393 May 14 j 08:15	18°♄53'31	1°20'46
direct	-8399 Oct 30 j 11:23	28°♄58'29		max. Earth dist.		-8393 May 14 j 23:46	18°♄58'17	10.54032 AU
	-8399 Dec 02 j 12:09	0°♄		morning rise		-8393 May 31 j 21:48	21°♄02'01	
evening set	-8398 Feb 12 j 15:04	7°♄27'10		retrograde		-8393 Sep 08 j 18:50	28°♄22'55	
				opposition		-8393 Nov 15 j 03:12	25°♄01'21	-1°22'46
conjunction	-8398 Mar 02 j 17:45	9°♄50'46 -2°21'52		min. Earth dist.		-8393 Nov 14 j 17:10	25°♄03'19	8.62114 AU
minimum elong	-8398 Mar 02 j 17:43	9°♄50'45 2°22'26		direct		-8392 Jan 24 j 00:30	21°♄34'18	
max. Earth dist.	-8398 Mar 03 j 17:50	9°♄58'46 9.86001 AU		evening set		-8392 May 08 j 17:48	29°♄11'19	
morning rise	-8398 Mar 20 j 21:20	12°♄14'32				-8392 May 15 j 13:23	0°♄	
retrograde	-8398 Jul 04 j 20:58	20°♄44'54						
opposition	-8398 Sep 09 j 06:18	17°♄13'58 -3°01'31		conjunction		-8392 May 26 j 08:47	1°♄18'08	-0°52'32
min. Earth dist.	-8398 Sep 08 j 12:05	17°♄17'48 7.90275 AU		minimum elong		-8392 May 26 j 08:49	1°♄18'08	0°52'35
direct	-8398 Nov 14 j 15:10	13°♄43'32		max. Earth dist.		-8392 May 26 j 19:18	1°♄21'18	10.70190 AU
evening set	-8397 Feb 28 j 08:14	22°♄08'47		morning rise		-8392 Jun 12 j 18:30	3°♄23'21	
				retrograde		-8392 Sep 19 j 20:02	10°♄32'25	
conjunction	-8397 Mar 18 j 10:40	24°♄30'35 -2°25'17		opposition		-8392 Nov 26 j 14:19	7°♄12'44	-0°46'54
minimum elong	-8397 Mar 18 j 10:41	24°♄30'35 2°25'49		min. Earth dist.		-8392 Nov 26 j 08:04	7°♄13'56	8.77840 AU
max. Earth dist.	-8397 Mar 19 j 11:29	24°♄38'44 9.95020 AU		direct		-8391 Feb 05 j 02:39	3°♄47'06	
morning rise	-8397 Apr 05 j 12:37	26°♄52'05		evening set		-8391 May 21 j 09:45	11°♄13'51	
	-8397 May 01 j 02:00	0°♄						
retrograde	-8397 Jul 19 j 04:54	5°♄10'16		conjunction		-8391 Jun 07 j 20:41	13°♄17'36	-0°22'58
opposition	-8397 Sep 23 j 14:25	1°♄40'50 -2°59'29		minimum elong		-8391 Jun 07 j 20:42	13°♄17'37	0°22'54
min. Earth dist.	-8397 Sep 22 j 20:08	1°♄44'39 8.00932 AU		max. Earth dist.		-8391 Jun 08 j 01:44	13°♄19'06	10.85353 AU
	-8397 Oct 14 j 15:54	30°♄		morning rise		-8391 Jun 25 j 02:23	15°♄19'47	
direct	-8397 Nov 29 j 14:39	28°♄10'22		retrograde		-8391 Oct 01 j 12:30	22°♄18'59	
	-8396 Jan 14 j 01:39	0°♄		opposition		-8391 Dec 08 j 18:18	19°♄00'57	-0°10'14
evening set	-8396 Mar 14 j 16:34	6°♄29'00		min. Earth dist.		-8391 Dec 08 j 15:18	19°♄01'31	8.92274 AU
				direct		-8390 Feb 17 j 20:03	15°♄36'46	
conjunction	-8396 Apr 01 j 18:01	8°♄48'21 -2°19'35		asc. node		-8390 Mar 24 j 04:29	16°♄32'43	
minimum elong	-8396 Apr 01 j 18:04	8°♄48'22 2°20'03		evening set		-8390 Jun 02 j 14:40	22°♄54'21	
max. Earth dist.	-8396 Apr 02 j 17:56	8°♄56'06 10.07192 AU						
morning rise	-8396 Apr 19 j 17:38	11°♄06'59		conjunction		-8390 Jun 19 j 21:25	24°♄55'18	0°06'52
	-8396 May 22 j 14:31	15°♄		minimum elong		-8390 Jun 19 j 21:25	24°♄55'18	0°07'03
retrograde	-8396 Aug 01 j 01:22	19°♄10'59		behind sun begin		-8390 Jun 19 j 14:52	24°♄53'24	
opposition	-8396 Oct 06 j 13:49	15°♄43'21 -2°46'38		behind sun end		-8390 Jun 20 j 03:58	24°♄57'12	
min. Earth dist.	-8396 Oct 05 j 20:00	15°♄47'01 8.14308 AU		max. Earth dist.		-8390 Jun 19 j 22:09	24°♄55'30	10.98901 AU
	-8396 Oct 15 j 09:48	15°♄		morning rise		-8390 Jul 06 j 22:55	26°♄54'44	
direct	-8396 Dec 13 j 07:11	12°♄13'15				-8390 Aug 04 j 14:24	0°♄	
	-8395 Feb 08 j 20:22	15°♄		retrograde		-8390 Oct 13 j 01:00	3°♄46'13	
evening set	-8395 Mar 29 j 13:01	20°♄22'51		opposition		-8390 Dec 20 j 16:33	0°♄29'33	0°25'45
				min. Earth dist.		-8390 Dec 20 j 16:52	0°♄29'29	9.04837 AU
conjunction	-8395 Apr 16 j 12:49	22°♄39'17 -2°05'50				-8390 Dec 27 j 06:29	30°♄	
minimum elong	-8395 Apr 16 j 12:52	22°♄39'19 2°06'14		direct		-8389 Mar 02 j 05:19	27°♄06'46	
max. Earth dist.	-8395 Apr 17 j 10:56	22°♄46'20 10.21678 AU				-8389 May 03 j 15:07	0°♄	
morning rise	-8395 May 04 j 09:28	24°♄54'39		evening set		-8389 Jun 14 j 10:27	4°♄16'29	

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 2

Attention, astronomical year style is used: The year -8389 in astronomical counting style is the year 8390 BCE in historical counting style.

conjunction	-8389 Jul 01 j 12:51	6° <b>8</b> 14'58	0°35'38	retrograde	-8383 Dec 29 j 10:50	20° <b>5</b> 27'11	
minimum elong	-8389 Jul 01 j 12:49	6° <b>8</b> 14'57	0°35'55	opposition	-8382 Mar 10 j 08:20	17° <b>5</b> 10'13	2°59'19
max. Earth dist.	-8389 Jul 01 j 09:45	6° <b>8</b> 14'04	11.10313 AU	min. Earth dist.	-8382 Mar 11 j 05:01	17° <b>5</b> 06'27	9.14149 AU
morning rise	-8389 Jul 18 j 10:03	8° <b>8</b> 12'00		direct	-8382 May 20 j 13:17	13° <b>5</b> 51'54	
retrograde	-8389 Oct 24 j 08:47	14° <b>8</b> 57'53		evening set	-8382 Aug 29 j 05:51	20° <b>5</b> 50'02	
opposition	-8388 Jan 01 j 10:29	11° <b>8</b> 42'17	0°59'52				
min. Earth dist.	-8388 Jan 01 j 15:02	11° <b>8</b> 41'26	9.15077 AU	conjunction	-8382 Sep 14 j 13:07	22° <b>5</b> 44'26	2°27'35
direct	-8388 Mar 13 j 05:32	8° <b>8</b> 20'47		minimum elong	-8382 Sep 14 j 13:08	22° <b>5</b> 44'26	2°28'07
	-8388 Jun 21 j 08:45	15° <b>8</b>		max. Earth dist.	-8382 Sep 13 j 14:01	22° <b>5</b> 37'37	11.09015 AU
evening set	-8388 Jun 24 j 22:40	15° <b>8</b> 24'07		morning rise	-8382 Sep 30 j 20:42	24° <b>5</b> 39'02	
					-8382 Nov 24 j 18:05	0° <b>8</b>	
conjunction	-8388 Jul 11 j 20:36	17° <b>8</b> 20'29	1°02'33	retrograde	-8381 Jan 10 j 11:30	1° <b>8</b> 42'58	
minimum elong	-8388 Jul 11 j 20:33	17° <b>8</b> 20'28	1°02'55		-8381 Feb 27 j 20:45	30° <b>8</b> 36	
max. Earth dist.	-8388 Jul 11 j 12:46	17° <b>8</b> 18'13	11.19199 AU	opposition	-8381 Mar 22 j 10:33	28° <b>5</b> 24'34	2°59'16
morning rise	-8388 Jul 28 j 13:53	19° <b>8</b> 15'35		min. Earth dist.	-8381 Mar 23 j 06:46	28° <b>5</b> 20'51	9.03644 AU
retrograde	-8388 Nov 03 j 12:59	25° <b>8</b> 58'00		direct	-8381 Jun 01 j 03:06	25° <b>5</b> 05'56	
opposition	-8387 Jan 12 j 01:33	22° <b>8</b> 43'06	1°31'06		-8381 Aug 21 j 10:46	0° <b>8</b>	
min. Earth dist.	-8387 Jan 12 j 10:16	22° <b>8</b> 41'30	9.22647 AU	evening set	-8381 Sep 09 j 12:13	2° <b>8</b> 08'28	
direct	-8387 Mar 25 j 01:21	19° <b>8</b> 22'41					
evening set	-8387 Jul 06 j 04:46	26° <b>8</b> 21'10		conjunction	-8381 Sep 25 j 20:25	4° <b>8</b> 04'35	2°24'22
				minimum elong	-8381 Sep 25 j 20:27	4° <b>8</b> 04'35	2°24'52
conjunction	-8387 Jul 22 j 22:27	28° <b>8</b> 15'51	1°26'48	max. Earth dist.	-8381 Sep 24 j 21:42	3° <b>8</b> 57'49	10.97348 AU
minimum elong	-8387 Jul 22 j 22:25	28° <b>8</b> 15'50	1°27'14	morning rise	-8381 Oct 12 j 05:52	6° <b>8</b> 01'12	
max. Earth dist.	-8387 Jul 22 j 09:57	28° <b>8</b> 12'15	11.25261 AU	retrograde	-8380 Jan 22 j 21:42	13° <b>8</b> 14'56	
	-8387 Aug 07 j 02:44	0° <b>8</b>		opposition	-8380 Apr 02 j 19:15	9° <b>8</b> 54'49	2°52'09
morning rise	-8387 Aug 08 j 12:21	0° <b>8</b> 09'29		min. Earth dist.	-8380 Apr 03 j 14:40	9° <b>8</b> 51'12	8.90848 AU
retrograde	-8387 Nov 14 j 16:25	6° <b>8</b> 50'33		direct	-8380 Jun 11 j 22:10	6° <b>8</b> 35'38	
opposition	-8386 Jan 23 j 14:50	3° <b>8</b> 35'56	1°58'40	evening set	-8380 Sep 20 j 01:01	13° <b>8</b> 43'58	
min. Earth dist.	-8386 Jan 24 j 02:44	3° <b>8</b> 33'46	9.27259 AU		-8380 Sep 30 j 15:01	15° <b>8</b>	
direct	-8386 Apr 05 j 16:53	0° <b>8</b> 16'25					
evening set	-8386 Jul 17 j 06:36	7° <b>8</b> 11'38		conjunction	-8380 Oct 06 j 11:13	15° <b>8</b> 42'24	2°15'14
				minimum elong	-8380 Oct 06 j 11:16	15° <b>8</b> 42'25	2°15'40
conjunction	-8386 Aug 02 j 20:41	9° <b>8</b> 05'08	1°47'44	max. Earth dist.	-8380 Oct 05 j 12:45	15° <b>8</b> 35'36	10.83634 AU
minimum elong	-8386 Aug 02 j 20:38	9° <b>8</b> 05'07	1°48'13	morning rise	-8380 Oct 22 j 23:54	17° <b>8</b> 41'40	
max. Earth dist.	-8386 Aug 02 j 05:01	9° <b>8</b> 00'37	11.28252 AU	retrograde	-8379 Feb 03 j 16:40	25° <b>8</b> 06'31	
morning rise	-8386 Aug 19 j 07:31	10° <b>8</b> 57'47		opposition	-8379 Apr 15 j 11:10	21° <b>8</b> 44'33	2°37'38
retrograde	-8386 Nov 25 j 21:42	17° <b>8</b> 39'34		min. Earth dist.	-8379 Apr 16 j 05:45	21° <b>8</b> 41'03	8.76238 AU
opposition	-8385 Feb 04 j 03:46	14° <b>8</b> 24'54	2°21'52	direct	-8379 Jun 23 j 21:49	18° <b>8</b> 24'36	
min. Earth dist.	-8385 Feb 04 j 18:09	14° <b>8</b> 22'17	9.28699 AU	evening set	-8379 Oct 01 j 21:53	25° <b>8</b> 40'06	
direct	-8385 Apr 17 j 05:14	11° <b>8</b> 06'03					
evening set	-8385 Jul 28 j 05:55	17° <b>8</b> 59'40		conjunction	-8379 Oct 18 j 11:21	27° <b>8</b> 41'25	2°00'01
				minimum elong	-8379 Oct 18 j 11:24	27° <b>8</b> 41'26	2°00'23
conjunction	-8385 Aug 13 j 17:00	19° <b>8</b> 52'31	2°04'46	max. Earth dist.	-8379 Oct 17 j 14:52	27° <b>8</b> 35'07	10.68387 AU
minimum elong	-8385 Aug 13 j 16:57	19° <b>8</b> 52'30	2°05'18	morning rise	-8379 Nov 04 j 04:20	29° <b>8</b> 43'53	
max. Earth dist.	-8385 Aug 12 j 22:42	19° <b>8</b> 47'15	11.28027 AU		-8379 Nov 06 j 10:00	0° <b>8</b>	
morning rise	-8385 Aug 30 j 01:28	21° <b>8</b> 44'45		retrograde	-8378 Feb 16 j 20:53	7° <b>8</b> 21'04	
retrograde	-8385 Dec 07 j 06:25	28° <b>8</b> 29'17		opposition	-8378 Apr 28 j 11:19	3° <b>8</b> 57'05	2°15'36
opposition	-8384 Feb 15 j 18:16	25° <b>8</b> 14'14	2°40'05	min. Earth dist.	-8378 Apr 29 j 03:42	3° <b>8</b> 53'57	8.60380 AU
min. Earth dist.	-8384 Feb 16 j 11:31	25° <b>8</b> 11'06	9.26908 AU	direct	-8378 Jul 06 j 05:45	0° <b>8</b> 36'13	
direct	-8384 Apr 27 j 14:43	21° <b>8</b> 55'50		evening set	-8378 Oct 14 j 04:41	8° <b>8</b> 00'07	
evening set	-8384 Aug 07 j 04:22	28° <b>8</b> 49'25					
	-8384 Aug 17 j 11:04	0° <b>8</b>		conjunction	-8378 Oct 30 j 22:31	10° <b>8</b> 04'50	1°38'52
conjunction	-8384 Aug 23 j 13:05	0° <b>8</b> 42'12	2°17'23	minimum elong	-8378 Oct 30 j 22:35	10° <b>8</b> 04'51	1°39'06
minimum elong	-8384 Aug 23 j 13:03	0° <b>8</b> 42'11	2°17'56	max. Earth dist.	-8378 Oct 30 j 05:44	9° <b>8</b> 59'35	10.52211 AU
max. Earth dist.	-8384 Aug 22 j 15:41	0° <b>8</b> 36'00	11.24626 AU	morning rise	-8378 Nov 16 j 20:34	12° <b>8</b> 10'57	
morning rise	-8384 Sep 08 j 20:16	2° <b>8</b> 34'38		retrograde	-8377 Mar 02 j 13:58	20° <b>8</b> 01'16	
retrograde	-8384 Dec 17 j 16:49	9° <b>8</b> 23'52		opposition	-8377 May 11 j 20:16	16° <b>8</b> 35'15	1°46'16
opposition	-8383 Feb 26 j 11:28	6° <b>8</b> 08'03	2°52'46	min. Earth dist.	-8377 May 12 j 08:58	16° <b>8</b> 32'48	8.43952 AU
min. Earth dist.	-8383 Feb 27 j 07:13	6° <b>8</b> 04'27	9.21993 AU	direct	-8377 Jul 18 j 22:59	13° <b>8</b> 13'22	
direct	-8383 May 09 j 00:25	2° <b>8</b> 49'48		evening set	-8377 Oct 26 j 23:26	20° <b>8</b> 46'43	
evening set	-8383 Aug 18 j 03:51	9° <b>8</b> 44'57					
max. Earth dist.	-8383 Sep 02 j 11:56	11° <b>8</b> 31'26	11.18214 AU	conjunction	-8377 Nov 12 j 22:25	22° <b>8</b> 55'12	1°12'10
				minimum elong	-8377 Nov 12 j 22:29	22° <b>8</b> 55'13	1°12'18
conjunction	-8383 Sep 03 j 11:13	11° <b>8</b> 38'14	2°25'08	max. Earth dist.	-8377 Nov 12 j 10:07	22° <b>8</b> 51'17	10.35836 AU
minimum elong	-8383 Sep 03 j 11:12	11° <b>8</b> 38'13	2°25'40	morning rise	-8377 Nov 30 j 02:13	25° <b>8</b> 05'18	
morning rise	-8383 Sep 19 j 18:09	13° <b>8</b> 31'26			-8376 Jan 13 j 01:00	0° <b>8</b>	
				retrograde	-8376 Mar 15 j 19:12	3° <b>8</b> 08'59	

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 3

Attention, astronomical year style is used: The year -8376 in astronomical counting style is the year 8377 BCE in historical counting style.

	-8376 May 20 j 13:56	30° $\mathbb{R}$ $\mathbb{M}$		conjunction	-8370 Feb 08 j 08:28	18° $\mathbb{X}$ 45'34	-2°00'44
opposition	-8376 May 24 j 14:15	29° $\mathbb{M}$ 41'02	1°10'18	minimum elong	-8370 Feb 08 j 08:24	18° $\mathbb{X}$ 45'33	2°01'17
min. Earth dist.	-8376 May 24 j 22:24	29° $\mathbb{M}$ 39'26	8.27744 AU	max. Earth dist.	-8370 Feb 09 j 05:28	18° $\mathbb{X}$ 52'37	9.80004 AU
direct	-8376 Jul 30 j 23:20	26° $\mathbb{M}$ 18'01		morning rise	-8370 Feb 26 j 12:46	21° $\mathbb{X}$ 10'59	
	-8376 Oct 04 j 19:01	0° $\underline{\mathbb{L}}$		retrograde	-8370 Jun 13 j 22:36	29° $\mathbb{X}$ 52'55	
evening set	-8376 Nov 08 j 07:36	4° $\underline{\mathbb{L}}$ 01'40		opposition	-8370 Aug 19 j 16:42	26° $\mathbb{X}$ 20'44	-2°43'45
				min. Earth dist.	-8370 Aug 18 j 23:15	26° $\mathbb{X}$ 24'25	7.81578 AU
conjunction	-8376 Nov 25 j 12:08	6° $\underline{\mathbb{L}}$ 14'02	0°40'48	direct	-8370 Oct 24 j 10:36	22° $\mathbb{X}$ 51'17	
minimum elong	-8376 Nov 25 j 12:10	6° $\underline{\mathbb{L}}$ 14'03	0°40'48		-8369 Jan 26 j 20:29	0° $\mathbb{Z}$	
max. Earth dist.	-8376 Nov 25 j 04:19	6° $\underline{\mathbb{L}}$ 11'31	10.20078 AU	evening set	-8369 Feb 06 j 05:34	1° $\mathbb{Z}$ 20'14	
morning rise	-8376 Dec 12 j 22:03	8° $\underline{\mathbb{L}}$ 28'14					
retrograde	-8375 Mar 30 j 10:45	16° $\underline{\mathbb{L}}$ 44'49		conjunction	-8369 Feb 24 j 08:12	3° $\mathbb{Z}$ 44'17	-2°17'26
opposition	-8375 Jun 07 j 17:06	13° $\underline{\mathbb{L}}$ 15'07	0°29'04	minimum elong	-8369 Feb 24 j 08:09	3° $\mathbb{Z}$ 44'16	2°18'00
min. Earth dist.	-8375 Jun 07 j 20:39	13° $\underline{\mathbb{L}}$ 14'24	8.12610 AU	max. Earth dist.	-8369 Feb 25 j 09:10	3° $\mathbb{Z}$ 52'37	9.83830 AU
direct	-8375 Aug 13 j 10:07	9° $\underline{\mathbb{L}}$ 50'53		morning rise	-8369 Mar 14 j 12:11	6° $\mathbb{Z}$ 08'42	
evening set	-8375 Nov 22 j 06:07	17° $\underline{\mathbb{L}}$ 45'17		retrograde	-8369 Jun 28 j 23:04	14° $\mathbb{Z}$ 43'18	
				opposition	-8369 Sep 03 j 10:55	11° $\mathbb{Z}$ 12'09	-2°58'38
conjunction	-8375 Dec 09 j 16:10	20° $\underline{\mathbb{L}}$ 01'27	0°06'13	min. Earth dist.	-8369 Sep 02 j 15:21	11° $\mathbb{Z}$ 16'16	7.87496 AU
minimum elong	-8375 Dec 09 j 16:10	20° $\underline{\mathbb{L}}$ 01'27	0°06'04	direct	-8369 Nov 08 j 14:07	7° $\mathbb{Z}$ 42'18	
behind sun begin	-8375 Dec 09 j 09:18	19° $\underline{\mathbb{L}}$ 59'13		evening set	-8368 Feb 22 j 01:40	16° $\mathbb{Z}$ 09'11	
behind sun end	-8375 Dec 09 j 23:02	20° $\underline{\mathbb{L}}$ 03'40					
max. Earth dist.	-8375 Dec 09 j 13:26	20° $\underline{\mathbb{L}}$ 00'35	10.05813 AU	conjunction	-8368 Mar 11 j 04:25	18° $\mathbb{Z}$ 31'46	-2°24'53
morning rise	-8375 Dec 27 j 07:58	22° $\underline{\mathbb{L}}$ 19'30		minimum elong	-8368 Mar 11 j 04:24	18° $\mathbb{Z}$ 31'46	2°25'25
desc. node	-8374 Feb 13 j 07:18	27° $\underline{\mathbb{L}}$ 47'38		max. Earth dist.	-8368 Mar 12 j 07:18	18° $\mathbb{Z}$ 40'38	9.91693 AU
	-8374 Mar 15 j 08:02	0° $\mathbb{M}$		morning rise	-8368 Mar 29 j 07:00	20° $\mathbb{Z}$ 54'13	
retrograde	-8374 Apr 14 j 10:57	0° $\mathbb{M}$ 47'39		retrograde	-8368 Jul 12 j 13:18	29° $\mathbb{Z}$ 17'43	
	-8374 May 14 j 16:40	30° $\mathbb{R}$ $\underline{\mathbb{L}}$		opposition	-8368 Sep 16 j 22:33	25° $\mathbb{Z}$ 48'03	-3°01'35
opposition	-8374 Jun 22 j 03:55	27° $\underline{\mathbb{L}}$ 16'31	-0°15'22	min. Earth dist.	-8368 Sep 16 j 02:28	25° $\mathbb{Z}$ 52'15	7.97141 AU
min. Earth dist.	-8374 Jun 22 j 03:00	27° $\underline{\mathbb{L}}$ 16'42	7.99455 AU	direct	-8368 Nov 22 j 14:36	22° $\mathbb{Z}$ 18'07	
direct	-8374 Aug 27 j 08:12	23° $\underline{\mathbb{L}}$ 51'02			-8367 Mar 03 j 09:43	0° $\approx$	
	-8374 Nov 21 j 12:33	0° $\mathbb{M}$		evening set	-8367 Mar 08 j 14:24	0° $\approx$ 39'30	
evening set	-8374 Dec 06 j 19:02	1° $\mathbb{M}$ 56'00					
				conjunction	-8367 Mar 26 j 16:24	2° $\approx$ 59'50	-2°22'58
conjunction	-8374 Dec 24 j 10:18	4° $\mathbb{M}$ 15'33	-0°29'50	minimum elong	-8367 Mar 26 j 16:26	2° $\approx$ 59'51	2°23'28
minimum elong	-8374 Dec 24 j 10:16	4° $\mathbb{M}$ 15'32	0°30'06	max. Earth dist.	-8367 Mar 27 j 19:08	3° $\approx$ 08'32	10.02981 AU
max. Earth dist.	-8374 Dec 24 j 13:27	4° $\mathbb{M}$ 16'36	9.93944 AU	morning rise	-8367 Apr 13 j 16:51	5° $\approx$ 19'35	
morning rise	-8373 Jan 11 j 07:16	6° $\mathbb{M}$ 36'57		retrograde	-8367 Jul 26 j 16:16	13° $\approx$ 29'27	
	-8373 Apr 13 j 11:57	15° $\mathbb{M}$		min. Earth dist.	-8367 Sep 30 j 06:59	10° $\approx$ 05'28	8.09779 AU
retrograde	-8373 Apr 29 j 17:36	15° $\mathbb{M}$ 14'18		opposition	-8367 Oct 01 j 01:57	10° $\approx$ 01'32	-2°53'09
	-8373 May 15 j 23:04	15° $\mathbb{R}$ $\mathbb{M}$		direct	-8367 Dec 07 j 09:42	6° $\approx$ 31'51	
opposition	-8373 Jul 06 j 21:19	11° $\mathbb{M}$ 42'08	-1°00'12	evening set	-8366 Mar 23 j 16:05	14° $\approx$ 44'57	
min. Earth dist.	-8373 Jul 06 j 15:52	11° $\mathbb{M}$ 43'16	7.89158 AU		-8366 Mar 25 j 15:59	15° $\approx$	
direct	-8373 Sep 10 j 16:07	8° $\mathbb{M}$ 15'26					
	-8373 Dec 10 j 05:32	15° $\mathbb{M}$		conjunction	-8366 Apr 10 j 16:38	17° $\approx$ 02'30	-2°12'30
evening set	-8373 Dec 21 j 21:17	16° $\mathbb{M}$ 30'00		minimum elong	-8366 Apr 10 j 16:41	17° $\approx$ 02'31	2°12'55
				max. Earth dist.	-8366 Apr 11 j 16:58	17° $\approx$ 10'18	10.16832 AU
conjunction	-8372 Jan 08 j 17:05	18° $\mathbb{M}$ 52'14	-1°04'42	morning rise	-8366 Apr 28 j 14:28	19° $\approx$ 19'06	
minimum elong	-8372 Jan 08 j 17:01	18° $\mathbb{M}$ 52'13	1°05'05	retrograde	-8366 Aug 09 j 06:42	27° $\approx$ 14'06	
max. Earth dist.	-8372 Jan 09 j 02:29	18° $\mathbb{M}$ 55'23	9.85295 AU	opposition	-8366 Oct 14 j 19:54	23° $\approx$ 48'08	-2°34'54
morning rise	-8372 Jan 26 j 18:01	21° $\mathbb{M}$ 16'07		min. Earth dist.	-8366 Oct 14 j 03:22	23° $\approx$ 51'31	8.24470 AU
retrograde	-8372 May 14 j 04:18	29° $\mathbb{M}$ 59'18		direct	-8366 Dec 21 j 21:20	20° $\approx$ 19'02	
opposition	-8372 Jul 20 j 19:05	26° $\mathbb{M}$ 26'36	-1°42'04	evening set	-8365 Apr 07 j 05:05	28° $\approx$ 22'08	
min. Earth dist.	-8372 Jul 20 j 09:15	26° $\mathbb{M}$ 28'39	7.82452 AU		-8365 Apr 20 j 07:04	0° $\mathbb{H}$	
direct	-8372 Sep 24 j 08:40	22° $\mathbb{M}$ 58'46					
	-8372 Dec 26 j 00:14	0° $\mathbb{X}$		conjunction	-8365 Apr 25 j 03:31	0° $\mathbb{H}$ 36'37	-1°54'51
evening set	-8371 Jan 05 j 10:36	1° $\mathbb{X}$ 21'07		minimum elong	-8365 Apr 25 j 03:35	0° $\mathbb{H}$ 36'38	1°55'10
				max. Earth dist.	-8365 Apr 25 j 23:27	0° $\mathbb{H}$ 42'53	10.32243 AU
conjunction	-8371 Jan 23 j 09:50	3° $\mathbb{X}$ 45'03	-1°35'51	morning rise	-8365 May 12 j 22:20	2° $\mathbb{H}$ 49'53	
minimum elong	-8371 Jan 23 j 09:46	3° $\mathbb{X}$ 45'01	1°36'19	retrograde	-8365 Aug 22 j 08:10	10° $\mathbb{H}$ 30'02	
max. Earth dist.	-8371 Jan 24 j 01:23	3° $\mathbb{X}$ 50'17	9.80514 AU	opposition	-8365 Oct 28 j 04:03	7° $\mathbb{H}$ 06'08	-2°08'52
morning rise	-8371 Feb 10 j 13:12	6° $\mathbb{X}$ 10'18		min. Earth dist.	-8365 Oct 27 j 14:18	7° $\mathbb{H}$ 08'53	8.40241 AU
retrograde	-8371 May 29 j 15:11	14° $\mathbb{X}$ 55'08		direct	-8364 Jan 05 j 00:34	3° $\mathbb{H}$ 37'54	
opposition	-8371 Aug 04 j 18:27	11° $\mathbb{X}$ 22'26	-2°17'35	evening set	-8364 Apr 20 j 04:30	11° $\mathbb{H}$ 30'17	
min. Earth dist.	-8371 Aug 04 j 04:29	11° $\mathbb{X}$ 25'22	7.79851 AU				
direct	-8371 Oct 09 j 07:46	7° $\mathbb{X}$ 53'40		conjunction	-8364 May 08 j 00:16	13° $\mathbb{H}$ 41'34	-1°31'41
evening set	-8370 Jan 21 j 06:59	16° $\mathbb{X}$ 21'02		minimum elong	-8364 May 08 j 00:19	13° $\mathbb{H}$ 41'36	1°31'53
				max. Earth dist.	-8364 May 08 j 15:34	13° $\mathbb{H}$ 46'18	10.48302 AU

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 4

Attention, astronomical year style is used: The year -8364 in astronomical counting style is the year 8365 BCE in historical counting style.

morning rise	-8364 May 25 j 15:38	15° $\text{K}$ 51'27	conjunction	-8358 Jul 18 j 16:43	23° $\text{B}$ 54'51	1°16'54
retrograde	-8364 Sep 02 j 22:19	23° $\text{K}$ 17'46	minimum elong	-8358 Jul 18 j 16:40	23° $\text{B}$ 54'50	1°17'18
opposition	-8364 Nov 09 j 03:08	19° $\text{K}$ 55'50 -1°37'18	max. Earth dist.	-8358 Jul 18 j 06:03	23° $\text{B}$ 51'46	11.21502 AU
min. Earth dist.	-8364 Nov 08 j 16:09	19° $\text{K}$ 58'01 8.56281 AU	morning rise	-8358 Aug 04 j 08:02	25° $\text{B}$ 49'12	
direct	-8363 Jan 17 j 17:54	16° $\text{K}$ 28'44		-8358 Sep 14 j 19:05	0° $\text{II}$	
evening set	-8363 May 03 j 14:17	24° $\text{K}$ 10'13	retrograde	-8358 Nov 10 j 10:08	2° $\text{II}$ 31'00	
				-8357 Jan 09 j 00:25	30° $\text{R}$ 8	
conjunction	-8363 May 21 j 06:52	26° $\text{K}$ 18'20 -1°04'43	opposition	-8357 Jan 19 j 03:14	29° $\text{B}$ 15'51	1°47'32
minimum elong	-8363 May 21 j 06:55	26° $\text{K}$ 18'21 1°04'49	min. Earth dist.	-8357 Jan 19 j 13:54	29° $\text{B}$ 13'53	9.23976 AU
max. Earth dist.	-8363 May 21 j 17:59	26° $\text{K}$ 21'43 10.64258 AU	direct	-8357 Apr 01 j 05:03	25° $\text{B}$ 55'27	
morning rise	-8363 Jun 07 j 18:23	28° $\text{K}$ 24'54		-8357 Jun 15 j 21:54	0° $\text{II}$	
	-8363 Jun 21 j 09:56	0° $\text{Y}$	evening set	-8357 Jul 13 j 00:33	2° $\text{II}$ 52'22	
retrograde	-8363 Sep 15 j 04:37	5° $\text{Y}$ 38'51				
opposition	-8363 Nov 21 j 17:44	2° $\text{Y}$ 18'43 -1°02'18	conjunction	-8357 Jul 29 j 16:17	4° $\text{II}$ 46'29	1°39'20
min. Earth dist.	-8363 Nov 21 j 09:54	2° $\text{Y}$ 20'15 8.71893 AU	minimum elong	-8357 Jul 29 j 16:14	4° $\text{II}$ 46'28	1°39'48
	-8363 Dec 24 j 11:45	30° $\text{R}$ 8	max. Earth dist.	-8357 Jul 29 j 01:49	4° $\text{II}$ 42'20	11.25562 AU
direct	-8362 Jan 30 j 23:39	28° $\text{K}$ 52'51	morning rise	-8357 Aug 15 j 04:21	6° $\text{II}$ 39'40	
	-8362 Mar 09 j 06:22	0° $\text{Y}$	retrograde	-8357 Nov 21 j 13:03	13° $\text{II}$ 21'20	
evening set	-8362 May 16 j 11:32	6° $\text{Y}$ 23'53	opposition	-8356 Jan 30 j 16:27	10° $\text{II}$ 06'13	2°12'42
			min. Earth dist.	-8356 Jan 31 j 06:39	10° $\text{II}$ 03'37	9.26630 AU
conjunction	-8362 Jun 03 j 00:27	8° $\text{Y}$ 28'57 -0°35'37	direct	-8356 Apr 11 j 17:56	6° $\text{II}$ 46'31	
minimum elong	-8362 Jun 03 j 00:29	8° $\text{Y}$ 28'58 0°35'36	evening set	-8356 Jul 23 j 00:52	13° $\text{II}$ 41'09	
max. Earth dist.	-8362 Jun 03 j 07:28	8° $\text{Y}$ 31'03 10.79430 AU				
morning rise	-8362 Jun 20 j 07:51	10° $\text{Y}$ 32'24	conjunction	-8356 Aug 08 j 13:07	15° $\text{II}$ 34'22	1°58'06
retrograde	-8362 Sep 27 j 01:25	17° $\text{Y}$ 35'43	minimum elong	-8356 Aug 08 j 13:04	15° $\text{II}$ 34'22	1°58'38
opposition	-8362 Dec 04 j 00:42	14° $\text{Y}$ 17'12 -0°25'48	max. Earth dist.	-8356 Aug 07 j 19:04	15° $\text{II}$ 29'11	11.26684 AU
min. Earth dist.	-8362 Dec 03 j 21:11	14° $\text{Y}$ 17'53 8.86432 AU	morning rise	-8356 Aug 24 j 22:44	17° $\text{II}$ 26'54	
direct	-8361 Feb 12 j 20:03	10° $\text{Y}$ 52'34	retrograde	-8356 Dec 01 j 19:38	24° $\text{II}$ 10'27	
evening set	-8361 May 28 j 21:27	18° $\text{Y}$ 14'06	opposition	-8355 Feb 10 j 06:12	20° $\text{II}$ 55'03	2°33'08
			min. Earth dist.	-8355 Feb 10 j 22:32	20° $\text{II}$ 52'05	9.26311 AU
conjunction	-8361 Jun 15 j 06:10	20° $\text{Y}$ 16'17 -0°05'49	direct	-8355 Apr 23 j 05:52	17° $\text{II}$ 35'54	
minimum elong	-8361 Jun 15 j 06:10	20° $\text{Y}$ 16'17 0°05'42	evening set	-8355 Aug 02 j 23:24	24° $\text{II}$ 29'46	
behind sun begin	-8361 Jun 14 j 23:20	20° $\text{Y}$ 14'17				
behind sun end	-8361 Jun 15 j 12:59	20° $\text{Y}$ 18'16	conjunction	-8355 Aug 19 j 09:08	26° $\text{II}$ 22'39	2°12'40
max. Earth dist.	-8361 Jun 15 j 07:58	20° $\text{Y}$ 16'47 10.93202 AU	minimum elong	-8355 Aug 19 j 09:05	26° $\text{II}$ 22'39	2°13'13
morning rise	-8361 Jul 02 j 09:24	22° $\text{Y}$ 16'54	max. Earth dist.	-8355 Aug 18 j 13:35	26° $\text{II}$ 17'00	11.24833 AU
asc. node	-8361 Aug 27 j 19:09	27° $\text{Y}$ 43'36	morning rise	-8355 Sep 04 j 16:55	28° $\text{II}$ 15'05	
retrograde	-8361 Oct 08 j 15:13	29° $\text{Y}$ 11'38		-8355 Sep 20 j 15:01	0° $\text{B}$	
opposition	-8361 Dec 16 j 01:33	25° $\text{Y}$ 54'27 0°10'39	retrograde	-8355 Dec 13 j 05:19	5° $\text{B}$ 02'25	
min. Earth dist.	-8361 Dec 16 j 02:22	25° $\text{Y}$ 54'18 8.99329 AU	opposition	-8354 Feb 21 j 21:56	1° $\text{B}$ 46'26	2°48'14
direct	-8360 Feb 25 j 09:13	22° $\text{Y}$ 31'00	min. Earth dist.	-8354 Feb 22 j 15:23	1° $\text{B}$ 43'16	9.23006 AU
evening set	-8360 Jun 08 j 21:12	29° $\text{Y}$ 44'13		-8354 Mar 19 j 15:23	30° $\text{R}$ II	
	-8360 Jun 11 j 04:18	0° $\text{B}$	direct	-8354 May 04 j 15:29	28° $\text{II}$ 27'41	
				-8354 Jun 18 j 05:27	0° $\text{B}$	
conjunction	-8360 Jun 26 j 01:25	1° $\text{B}$ 43'48 0°23'36	evening set	-8354 Aug 13 j 22:12	5° $\text{B}$ 22'19	
minimum elong	-8360 Jun 26 j 01:24	1° $\text{B}$ 43'47 0°23'50	max. Earth dist.	-8354 Aug 29 j 09:35	7° $\text{B}$ 09'25	11.20045 AU
max. Earth dist.	-8360 Jun 25 j 21:53	1° $\text{B}$ 42'46 11.05062 AU				
morning rise	-8360 Jul 13 j 00:35	3° $\text{B}$ 41'55	conjunction	-8354 Aug 30 j 06:14	7° $\text{B}$ 15'26	2°22'33
retrograde	-8360 Oct 18 j 23:10	10° $\text{B}$ 30'13	minimum elong	-8354 Aug 30 j 06:12	7° $\text{B}$ 15'25	2°23'05
opposition	-8360 Dec 26 j 21:20	7° $\text{B}$ 14'02 0°45'41	morning rise	-8354 Sep 15 j 13:03	9° $\text{B}$ 08'19	
min. Earth dist.	-8360 Dec 27 j 01:38	7° $\text{B}$ 13'14 9.10114 AU	retrograde	-8354 Dec 24 j 21:21	16° $\text{B}$ 01'17	
direct	-8359 Mar 08 j 14:02	3° $\text{B}$ 51'43	opposition	-8353 Mar 05 j 17:06	12° $\text{B}$ 44'28	2°57'26
evening set	-8359 Jun 20 j 12:29	10° $\text{B}$ 57'59	min. Earth dist.	-8353 Mar 06 j 11:44	12° $\text{B}$ 41'04	9.16806 AU
			direct	-8353 May 16 j 02:10	9° $\text{B}$ 25'53	
conjunction	-8359 Jul 07 j 12:21	12° $\text{B}$ 55'19 0°51'25	evening set	-8353 Aug 24 j 23:01	16° $\text{B}$ 22'48	
minimum elong	-8359 Jul 07 j 12:19	12° $\text{B}$ 55'18 0°51'44	max. Earth dist.	-8353 Sep 09 j 07:50	18° $\text{B}$ 10'09	11.12474 AU
max. Earth dist.	-8359 Jul 07 j 04:43	12° $\text{B}$ 53'06 11.14600 AU				
morning rise	-8359 Jul 24 j 07:30	14° $\text{B}$ 51'20	conjunction	-8353 Sep 10 j 06:11	18° $\text{B}$ 16'42	2°27'17
	-8359 Jul 25 j 14:07	15° $\text{B}$	minimum elong	-8353 Sep 10 j 06:11	18° $\text{B}$ 16'42	2°27'49
retrograde	-8359 Oct 30 j 04:56	21° $\text{B}$ 35'21	morning rise	-8353 Sep 26 j 13:20	20° $\text{B}$ 10'42	
opposition	-8358 Jan 07 j 13:19	18° $\text{B}$ 19'49 1°18'17	retrograde	-8352 Jan 05 j 18:09	27° $\text{B}$ 11'02	
min. Earth dist.	-8358 Jan 07 j 20:30	18° $\text{B}$ 18'29 9.18418 AU	opposition	-8352 Mar 16 j 17:09	23° $\text{B}$ 53'05	3°00'13
	-8358 Mar 14 j 22:45	15° $\text{R}$ 8	min. Earth dist.	-8352 Mar 17 j 12:57	23° $\text{B}$ 49'27	9.07911 AU
direct	-8358 Mar 20 j 13:02	14° $\text{B}$ 58'31	direct	-8352 May 26 j 14:04	20° $\text{B}$ 34'29	
	-8358 Mar 26 j 02:43	15° $\text{B}$	evening set	-8352 Sep 04 j 03:21	27° $\text{B}$ 35'06	
evening set	-8358 Jul 01 j 20:58	21° $\text{B}$ 59'21				
			conjunction	-8352 Sep 20 j 10:53	29° $\text{B}$ 30'24	2°26'29

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 5

Attention, astronomical year style is used: The year -8352 in astronomical counting style is the year 8353 BCE in historical counting style.

minimum elong	-8352 Sep 20 j 10:54	29° $\overline{23}$ 0'25	2°26'59	conjunction	-8346 Dec 04 j 00:03	14° $\overline{21}$ 2'26	0°21'03
max. Earth dist.	-8352 Sep 19 j 12:19	29° $\overline{23}$ 2'43	11.02360 AU	minimum elong	-8346 Dec 04 j 00:04	14° $\overline{21}$ 2'27	0°20'59
	-8352 Sep 24 j 14:38	0° $\overline{0}$		max. Earth dist.	-8346 Dec 03 j 19:08	14° $\overline{21}$ 9'51	10.13744 AU
morning rise	-8352 Oct 06 j 19:32	1° $\overline{0}$ 26'07		morning rise	-8346 Dec 21 j 13:11	16° $\overline{21}$ 37'35	
retrograde	-8351 Jan 16 j 23:33	8° $\overline{0}$ 35'30		retrograde	-8345 Apr 08 j 09:18	25° $\overline{21}$ 00'06	
opposition	-8351 Mar 28 j 23:00	5° $\overline{0}$ 16'09	2°56'04	opposition	-8345 Jun 16 j 09:33	21° $\overline{21}$ 30'13	0°03'37
min. Earth dist.	-8351 Mar 29 j 18:31	5° $\overline{0}$ 12'33	8.96601 AU	min. Earth dist.	-8345 Jun 16 j 11:20	21° $\overline{21}$ 29'51	8.06756 AU
direct	-8351 Jun 07 j 08:01	1° $\overline{0}$ 57'17		desc. node	-8345 Jul 16 j 20:20	19° $\overline{21}$ 15'17	
evening set	-8351 Sep 15 j 13:18	9° $\overline{0}$ 03'01		direct	-8345 Aug 21 j 20:11	18° $\overline{21}$ 05'53	
				evening set	-8345 Nov 30 j 22:50	26° $\overline{21}$ 05'34	
conjunction	-8351 Oct 01 j 22:31	11° $\overline{0}$ 00'23	2°19'50				
minimum elong	-8351 Oct 01 j 22:34	11° $\overline{0}$ 00'23	2°20'17	conjunction	-8345 Dec 18 j 11:56	28° $\overline{21}$ 23'30	-0°14'37
max. Earth dist.	-8351 Oct 01 j 01:26	10° $\overline{0}$ 54'02	10.90023 AU	minimum elong	-8345 Dec 18 j 11:55	28° $\overline{21}$ 23'29	0°14'50
morning rise	-8351 Oct 18 j 09:39	12° $\overline{0}$ 58'24		behind sun begin	-8345 Dec 18 j 09:09	28° $\overline{21}$ 22'35	
	-8351 Nov 05 j 04:20	15° $\overline{0}$		behind sun end	-8345 Dec 18 j 14:42	28° $\overline{21}$ 24'24	
retrograde	-8350 Jan 29 j 15:04	20° $\overline{0}$ 18'15		max. Earth dist.	-8345 Dec 18 j 12:47	28° $\overline{21}$ 23'46	10.00509 AU
opposition	-8350 Apr 10 j 11:36	16° $\overline{0}$ 57'18	2°44'38		-8345 Dec 30 j 17:19	0° $\overline{0}$	
min. Earth dist.	-8350 Apr 11 j 05:24	16° $\overline{0}$ 53'58	8.83259 AU	morning rise	-8344 Jan 05 j 06:31	0° $\overline{0}$ 43'16	
	-8350 May 08 j 10:07	15° $\overline{0}$ 8'0		retrograde	-8344 Apr 22 j 13:38	9° $\overline{0}$ 16'17	
direct	-8350 Jun 19 j 05:47	13° $\overline{0}$ 37'59		opposition	-8344 Jun 29 j 23:52	5° $\overline{0}$ 45'05	-0°41'21
	-8350 Jul 29 j 16:47	15° $\overline{0}$		min. Earth dist.	-8344 Jun 29 j 20:36	5° $\overline{0}$ 45'45	7.94823 AU
evening set	-8350 Sep 27 j 06:37	20° $\overline{0}$ 50'10		direct	-8344 Sep 03 j 22:33	2° $\overline{0}$ 19'26	
				evening set	-8344 Dec 14 j 19:19	10° $\overline{0}$ 29'22	
conjunction	-8350 Oct 13 j 18:37	22° $\overline{0}$ 50'08	2°07'09				
minimum elong	-8350 Oct 13 j 18:40	22° $\overline{0}$ 50'09	2°07'32	conjunction	-8343 Jan 01 j 13:15	12° $\overline{0}$ 50'21	-0°50'13
max. Earth dist.	-8350 Oct 12 j 23:25	22° $\overline{0}$ 44'16	10.75902 AU	minimum elong	-8343 Jan 01 j 13:12	12° $\overline{0}$ 50'20	0°50'33
morning rise	-8350 Oct 30 j 09:24	24° $\overline{0}$ 51'04		max. Earth dist.	-8343 Jan 01 j 20:02	12° $\overline{0}$ 52'36	9.90015 AU
	-8350 Dec 18 j 17:53	0° $\overline{0}$ 7			-8343 Jan 17 j 20:24	15° $\overline{0}$	
retrograde	-8349 Feb 11 j 16:34	2° $\overline{0}$ 22'38		morning rise	-8343 Jan 19 j 12:20	15° $\overline{0}$ 13'03	
	-8349 Apr 09 j 22:00	30° $\overline{0}$ 8'0		retrograde	-8343 May 08 j 00:02	23° $\overline{0}$ 53'37	
opposition	-8349 Apr 23 j 08:19	28° $\overline{0}$ 59'54	2°25'42	opposition	-8343 Jul 14 j 19:42	20° $\overline{0}$ 21'31	-1°24'51
min. Earth dist.	-8349 Apr 23 j 23:43	28° $\overline{0}$ 56'59	8.68386 AU	min. Earth dist.	-8343 Jul 14 j 11:41	20° $\overline{0}$ 23'11	7.86087 AU
direct	-8349 Jul 01 j 09:43	25° $\overline{0}$ 39'57		direct	-8343 Sep 18 j 10:10	16° $\overline{0}$ 54'33	
	-8349 Sep 13 j 05:50	0° $\overline{0}$ 7		evening set	-8343 Dec 30 j 03:49	25° $\overline{0}$ 13'16	
evening set	-8349 Oct 09 j 09:06	2° $\overline{0}$ 59'49					
max. Earth dist.	-8349 Oct 25 j 07:31	4° $\overline{0}$ 57'31	10.60554 AU	conjunction	-8342 Jan 17 j 01:34	27° $\overline{0}$ 36'25	-1°23'14
				minimum elong	-8342 Jan 17 j 01:30	27° $\overline{0}$ 36'24	1°23'41
conjunction	-8349 Oct 26 j 00:51	5° $\overline{0}$ 02'54	1°48'26	max. Earth dist.	-8342 Jan 17 j 14:08	27° $\overline{0}$ 40'38	9.83071 AU
minimum elong	-8349 Oct 26 j 00:54	5° $\overline{0}$ 02'55	1°48'43	morning rise	-8342 Feb 04 j 03:48	0° $\overline{0}$ 21'03	
morning rise	-8349 Nov 11 j 20:29	7° $\overline{0}$ 07'15			-8342 Feb 04 j 00:37	0° $\overline{0}$ 7	
retrograde	-8348 Feb 25 j 05:16	14° $\overline{0}$ 51'26		retrograde	-8342 May 23 j 11:41	8° $\overline{0}$ 45'19	
opposition	-8348 May 05 j 13:37	11° $\overline{0}$ 26'51	1°59'21	opposition	-8342 Jul 29 j 18:29	5° $\overline{0}$ 12'47	-2°03'27
min. Earth dist.	-8348 May 06 j 02:41	11° $\overline{0}$ 24'20	8.52591 AU	min. Earth dist.	-8342 Jul 29 j 06:25	5° $\overline{0}$ 15'18	7.81224 AU
direct	-8348 Jul 12 j 21:54	8° $\overline{0}$ 06'01		direct	-8342 Oct 03 j 06:33	1° $\overline{0}$ 44'35	
evening set	-8348 Oct 20 j 22:42	15° $\overline{0}$ 34'41		evening set	-8341 Jan 14 j 21:14	10° $\overline{0}$ 09'43	
conjunction	-8348 Nov 06 j 19:08	17° $\overline{0}$ 41'18	1°23'59	conjunction	-8341 Feb 01 j 21:42	12° $\overline{0}$ 34'00	-1°51'04
minimum elong	-8348 Nov 06 j 19:12	17° $\overline{0}$ 41'19	1°24'09	minimum elong	-8341 Feb 01 j 21:38	12° $\overline{0}$ 33'59	1°51'34
max. Earth dist.	-8348 Nov 06 j 04:38	17° $\overline{0}$ 36'44	10.44608 AU	max. Earth dist.	-8341 Feb 02 j 15:15	12° $\overline{0}$ 39'54	9.80234 AU
morning rise	-8348 Nov 23 j 20:25	19° $\overline{0}$ 49'29		morning rise	-8341 Feb 20 j 01:41	14° $\overline{0}$ 59'23	
retrograde	-8347 Mar 10 j 04:21	27° $\overline{0}$ 46'42		retrograde	-8341 Jun 07 j 20:41	23° $\overline{0}$ 42'52	
opposition	-8347 May 19 j 03:32	24° $\overline{0}$ 20'14	1°26'05	opposition	-8341 Aug 13 j 17:16	20° $\overline{0}$ 10'25	-2°33'55
min. Earth dist.	-8347 May 19 j 13:48	24° $\overline{0}$ 18'13	8.36551 AU	min. Earth dist.	-8341 Aug 13 j 02:19	20° $\overline{0}$ 13'34	7.80610 AU
direct	-8347 Jul 25 j 18:47	20° $\overline{0}$ 58'19		direct	-8341 Oct 18 j 08:15	16° $\overline{0}$ 41'11	
evening set	-8347 Nov 03 j 00:45	28° $\overline{0}$ 36'46		evening set	-8340 Jan 30 j 19:10	25° $\overline{0}$ 09'37	
	-8347 Nov 13 j 23:19	0° $\overline{0}$					
conjunction	-8347 Nov 20 j 02:38	0° $\overline{0}$ 47'11	0°54'28	conjunction	-8340 Feb 17 j 21:15	27° $\overline{0}$ 33'56	-2°11'27
minimum elong	-8347 Nov 20 j 02:40	0° $\overline{0}$ 47'12	0°54'31	minimum elong	-8340 Feb 17 j 21:11	27° $\overline{0}$ 33'55	2°12'01
max. Earth dist.	-8347 Nov 19 j 16:21	0° $\overline{0}$ 43'53	10.28752 AU	max. Earth dist.	-8340 Feb 18 j 18:36	27° $\overline{0}$ 41'04	9.81720 AU
morning rise	-8347 Dec 07 j 09:52	2° $\overline{0}$ 59'22		morning rise	-8340 Mar 07 j 01:33	29° $\overline{0}$ 58'53	
retrograde	-8346 Mar 24 j 13:34	11° $\overline{0}$ 09'35			-8340 Mar 07 j 04:59	0° $\overline{0}$ 3	
opposition	-8346 Jun 02 j 02:21	7° $\overline{0}$ 41'18	0°46'55	retrograde	-8340 Jun 21 j 23:40	8° $\overline{0}$ 36'59	
min. Earth dist.	-8346 Jun 02 j 08:56	7° $\overline{0}$ 40'00	8.20991 AU	opposition	-8340 Aug 27 j 13:18	5° $\overline{0}$ 05'11	-2°53'50
direct	-8346 Aug 08 j 02:35	4° $\overline{0}$ 18'13		min. Earth dist.	-8340 Aug 26 j 20:15	5° $\overline{0}$ 08'46	7.84262 AU
evening set	-8346 Nov 16 j 16:27	12° $\overline{0}$ 07'09		direct	-8340 Nov 01 j 12:25	1° $\overline{0}$ 35'12	
				evening set	-8339 Feb 14 j 16:30	10° $\overline{0}$ 03'19	

Attention, astronomical year style is used: The year -8339 in astronomical counting style is the year 8340 BCE in historical counting style.

conjunction	-8339 Mar 04 j 19:07	12° $\text{Z}$ 26'37	-2°22'57		-8333 Apr 29 j 03:52	0° $\text{Y}$	
minimum elong	-8339 Mar 04 j 19:05	12° $\text{Z}$ 26'37	2°23'31	evening set	-8333 May 11 j 09:06	1° $\text{Y}$ 24'43	
max. Earth dist.	-8339 Mar 05 j 18:58	12° $\text{Z}$ 34'32	9.87391 AU				
morning rise	-8339 Mar 22 j 22:32	14° $\text{Z}$ 50'04		conjunction	-8333 May 28 j 23:38	3° $\text{Y}$ 31'09	-0°48'28
retrograde	-8339 Jul 06 j 17:06	23° $\text{Z}$ 18'47		minimum elong	-8333 May 28 j 23:41	3° $\text{Y}$ 31'09	0°48'29
min. Earth dist.	-8339 Sep 10 j 09:27	19° $\text{Z}$ 51'57	7.91873 AU	max. Earth dist.	-8333 May 29 j 08:40	3° $\text{Y}$ 33'51	10.72142 AU
opposition	-8339 Sep 11 j 03:47	19° $\text{Z}$ 48'06	-3°01'57	morning rise	-8333 Jun 15 j 09:03	5° $\text{Y}$ 35'59	
direct	-8339 Nov 16 j 14:56	16° $\text{Z}$ 17'44		retrograde	-8333 Sep 22 j 07:27	12° $\text{Y}$ 43'38	
evening set	-8338 Mar 02 j 08:25	24° $\text{Z}$ 41'57		opposition	-8333 Nov 29 j 03:58	9° $\text{Y}$ 24'05	-0°41'47
				min. Earth dist.	-8333 Nov 28 j 21:58	9° $\text{Y}$ 25'15	8.79663 AU
conjunction	-8338 Mar 20 j 10:46	27° $\text{Z}$ 03'24	-2°25'03	direct	-8332 Feb 07 j 18:46	5° $\text{Y}$ 58'33	
minimum elong	-8338 Mar 20 j 10:47	27° $\text{Z}$ 03'25	2°25'34	evening set	-8332 May 22 j 23:33	13° $\text{Y}$ 24'04	
max. Earth dist.	-8338 Mar 21 j 11:33	27° $\text{Z}$ 11'32	9.96804 AU				
morning rise	-8338 Apr 07 j 12:26	29° $\text{Z}$ 24'30		conjunction	-8332 Jun 09 j 10:08	15° $\text{Y}$ 27'28	-0°18'47
	-8338 Apr 12 j 03:49	0° $\approx$		minimum elong	-8332 Jun 09 j 10:09	15° $\text{Y}$ 27'29	0°18'41
retrograde	-8338 Jul 21 j 00:08	7° $\approx$ 40'46		max. Earth dist.	-8332 Jun 09 j 14:32	15° $\text{Y}$ 28'46	10.87027 AU
opposition	-8338 Sep 25 j 10:38	4° $\approx$ 11'35	-2°58'20	morning rise	-8332 Jun 26 j 15:23	17° $\text{Y}$ 29'19	
min. Earth dist.	-8338 Sep 24 j 15:56	4° $\approx$ 15'28	8.02866 AU	retrograde	-8332 Oct 03 j 00:42	24° $\text{Y}$ 27'27	
direct	-8338 Dec 01 j 12:34	0° $\approx$ 41'13		opposition	-8332 Dec 10 j 07:08	21° $\text{Y}$ 09'31	-0°05'06
evening set	-8337 Mar 17 j 15:02	8° $\approx$ 58'28		min. Earth dist.	-8332 Dec 10 j 04:19	21° $\text{Y}$ 10'03	8.93780 AU
				asc. node	-8331 Jan 31 j 18:10	18° $\text{Y}$ 02'08	
conjunction	-8337 Apr 04 j 16:25	11° $\approx$ 17'26	-2°18'08	direct	-8331 Feb 19 j 11:07	17° $\text{Y}$ 45'26	
minimum elong	-8337 Apr 04 j 16:27	11° $\approx$ 17'27	2°18'36	evening set	-8331 Jun 04 j 03:13	25° $\text{Y}$ 01'58	
max. Earth dist.	-8337 Apr 05 j 16:36	11° $\approx$ 25'15	10.09259 AU				
morning rise	-8337 Apr 22 j 15:39	13° $\approx$ 35'36		conjunction	-8331 Jun 21 j 09:36	27° $\text{Y}$ 02'38	0°10'59
	-8337 May 03 j 23:40	15° $\approx$		minimum elong	-8331 Jun 21 j 09:36	27° $\text{Y}$ 02'38	0°11'11
retrograde	-8337 Aug 03 j 20:10	21° $\approx$ 37'34		behind sun begin	-8331 Jun 21 j 04:21	27° $\text{Y}$ 01'07	
opposition	-8337 Oct 09 j 08:36	18° $\approx$ 10'09	-2°44'06	behind sun end	-8331 Jun 21 j 14:51	27° $\text{Y}$ 04'09	
min. Earth dist.	-8337 Oct 08 j 14:34	18° $\approx$ 13'52	8.16455 AU	max. Earth dist.	-8331 Jun 21 j 10:12	27° $\text{Y}$ 02'49	11.00229 AU
	-8337 Nov 26 j 23:31	15° $\approx$		morning rise	-8331 Jul 08 j 10:33	29° $\text{Y}$ 01'47	
direct	-8337 Dec 16 j 03:31	14° $\approx$ 40'11			-8331 Jul 17 j 00:19	0° $\text{Z}$	
	-8336 Jan 04 j 07:50	15° $\approx$		retrograde	-8331 Oct 14 j 12:23	5° $\text{Z}$ 52'30	
evening set	-8336 Mar 31 j 09:45	22° $\approx$ 48'12		opposition	-8331 Dec 22 j 04:48	2° $\text{Z}$ 35'56	0°30'43
				min. Earth dist.	-8331 Dec 22 j 06:02	2° $\text{Z}$ 35'42	9.05984 AU
conjunction	-8336 Apr 18 j 09:25	25° $\approx$ 04'14	-2°03'23		-8330 Jan 30 j 22:06	30° $\text{R}$ $\text{Y}$	
minimum elong	-8336 Apr 18 j 09:29	25° $\approx$ 04'15	2°03'45	direct	-8330 Mar 03 j 17:01	29° $\text{Y}$ 13'15	
max. Earth dist.	-8336 Apr 19 j 07:48	25° $\approx$ 11'21	10.23895 AU		-8330 Apr 04 j 07:26	0° $\text{Z}$	
morning rise	-8336 May 06 j 05:39	27° $\approx$ 19'08		evening set	-8330 Jun 15 j 22:07	6° $\text{Z}$ 22'12	
	-8336 May 28 j 18:23	0° $\text{X}$					
retrograde	-8336 Aug 16 j 03:50	5° $\text{X}$ 06'09		conjunction	-8330 Jul 03 j 00:01	8° $\text{Z}$ 20'26	0°39'35
opposition	-8336 Oct 21 j 21:05	1° $\text{X}$ 40'43	-2°21'09	minimum elong	-8330 Jul 02 j 24:00	8° $\text{Z}$ 20'26	0°39'52
min. Earth dist.	-8336 Oct 21 j 05:09	1° $\text{X}$ 43'57	8.31775 AU	max. Earth dist.	-8330 Jul 02 j 19:59	8° $\text{Z}$ 19'16	11.11261 AU
	-8336 Nov 12 j 12:35	30° $\text{R}$ $\approx$		morning rise	-8330 Jul 19 j 20:49	10° $\text{Z}$ 17'17	
direct	-8336 Dec 29 j 09:50	28° $\approx$ 11'30			-8330 Sep 05 j 11:20	15° $\text{Z}$	
	-8335 Feb 13 j 21:56	0° $\text{X}$		retrograde	-8330 Oct 25 j 18:44	17° $\text{Z}$ 02'43	
evening set	-8335 Apr 14 j 15:03	6° $\text{X}$ 08'56			-8330 Dec 17 j 03:29	15° $\text{R}$ $\text{Z}$	
				opposition	-8329 Jan 02 j 22:14	13° $\text{Z}$ 47'11	1°04'30
conjunction	-8335 May 02 j 12:18	8° $\text{X}$ 21'47	-1°42'23	min. Earth dist.	-8329 Jan 03 j 04:00	13° $\text{Z}$ 46'07	9.15838 AU
minimum elong	-8335 May 02 j 12:21	8° $\text{X}$ 21'48	1°42'38	direct	-8329 Mar 15 j 18:05	10° $\text{Z}$ 25'44	
max. Earth dist.	-8335 May 03 j 07:24	8° $\text{X}$ 27'44	10.39823 AU		-8329 Jun 04 j 09:42	15° $\text{Z}$	
morning rise	-8335 May 20 j 05:10	10° $\text{X}$ 33'16		evening set	-8329 Jun 27 j 09:41	17° $\text{Z}$ 28'38	
retrograde	-8335 Aug 28 j 23:25	18° $\text{X}$ 05'47					
min. Earth dist.	-8335 Nov 03 j 11:19	14° $\text{X}$ 44'57	8.47961 AU	conjunction	-8329 Jul 14 j 07:05	19° $\text{Z}$ 24'48	1°06'12
opposition	-8335 Nov 04 j 00:04	14° $\text{X}$ 42'24	-1°51'40	minimum elong	-8329 Jul 14 j 07:03	19° $\text{Z}$ 24'47	1°06'34
direct	-8334 Jan 12 j 06:29	11° $\text{X}$ 14'12		max. Earth dist.	-8329 Jul 13 j 21:50	19° $\text{Z}$ 22'08	11.19751 AU
evening set	-8334 Apr 28 j 06:33	19° $\text{X}$ 00'34		morning rise	-8329 Jul 31 j 00:06	21° $\text{Z}$ 19'46	
				retrograde	-8329 Nov 05 j 23:26	28° $\text{Z}$ 02'04	
conjunction	-8334 May 16 j 00:44	21° $\text{X}$ 10'11	-1°16'51	opposition	-8328 Jan 14 j 13:03	24° $\text{Z}$ 47'11	1°35'18
minimum elong	-8334 May 16 j 00:47	21° $\text{X}$ 10'12	1°16'59	min. Earth dist.	-8328 Jan 14 j 22:09	24° $\text{Z}$ 45'31	9.23006 AU
max. Earth dist.	-8334 May 16 j 15:07	21° $\text{X}$ 14'35	10.56174 AU	direct	-8328 Mar 26 j 13:32	21° $\text{Z}$ 26'51	
morning rise	-8334 Jun 02 j 14:01	23° $\text{X}$ 18'16		evening set	-8328 Jul 07 j 15:18	28° $\text{Z}$ 25'07	
	-8334 Aug 14 j 21:01	0° $\text{Y}$			-8328 Jul 21 j 12:13	0° $\text{Z}$	
retrograde	-8334 Sep 10 j 08:35	0° $\text{Y}$ 37'30					
	-8334 Oct 07 j 00:59	30° $\text{R}$ $\text{X}$		conjunction	-8328 Jul 24 j 08:38	0° $\text{Z}$ 19'41	1°30'02
opposition	-8334 Nov 16 j 18:05	27° $\text{X}$ 16'06	-1°17'53	minimum elong	-8328 Jul 24 j 08:35	0° $\text{Z}$ 19'40	1°30'29
min. Earth dist.	-8334 Nov 16 j 08:55	27° $\text{X}$ 17'54	8.64174 AU	max. Earth dist.	-8328 Jul 23 j 19:54	0° $\text{Z}$ 16'02	11.25415 AU
direct	-8333 Jan 25 j 17:03	23° $\text{X}$ 49'10		morning rise	-8328 Aug 09 j 22:09	2° $\text{Z}$ 13'14	

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Attention, astronomical year style is used: The year -8328 in astronomical counting style is the year 8329 BCE in historical counting style.

retrograde	-8328 Nov 16 j 03:35	8° $\Pi$ 54'30		retrograde	-8321 Jan 24 j 14:04	15° $\Omega$ 28'44	
opposition	-8327 Jan 25 j 02:26	5° $\Pi$ 39'53	2°02'19		-8321 Feb 18 j 03:18	15° $\kappa$ $\Omega$	
min. Earth dist.	-8327 Jan 25 j 14:10	5° $\Pi$ 37'45	9.27227 AU	opposition	-8321 Apr 05 j 11:06	12° $\Omega$ 08'29	2°50'31
direct	-8327 Apr 07 j 04:48	2° $\Pi$ 20'26		min. Earth dist.	-8321 Apr 06 j 07:02	12° $\Omega$ 04'46	8.88882 AU
evening set	-8327 Jul 18 j 16:57	9° $\Pi$ 15'39		direct	-8321 Jun 14 j 10:57	8° $\Omega$ 49'14	
					-8321 Sep 14 j 06:16	15° $\Omega$	
conjunction	-8327 Aug 04 j 06:45	11° $\Pi$ 09'06	1°50'28	evening set	-8321 Sep 22 j 14:52	15° $\Omega$ 58'39	
minimum elong	-8327 Aug 04 j 06:42	11° $\Pi$ 09'05	1°50'58	max. Earth dist.	-8321 Oct 08 j 02:51	17° $\Omega$ 50'38	10.81578 AU
max. Earth dist.	-8327 Aug 03 j 15:19	11° $\Pi$ 04'40	11.28035 AU				
morning rise	-8327 Aug 20 j 17:14	13° $\Pi$ 01'43		conjunction	-8321 Oct 09 j 01:23	17° $\Omega$ 57'28	2°13'24
retrograde	-8327 Nov 27 j 10:07	19° $\Pi$ 43'56		minimum elong	-8321 Oct 09 j 01:26	17° $\Omega$ 57'29	2°13'49
opposition	-8326 Feb 05 j 15:41	16° $\Pi$ 29'15	2°24'51	morning rise	-8321 Oct 25 j 14:35	19° $\Omega$ 57'08	
min. Earth dist.	-8326 Feb 06 j 06:32	16° $\Pi$ 26'33	9.28319 AU	retrograde	-8320 Feb 06 j 09:09	27° $\Omega$ 23'41	
direct	-8326 Apr 18 j 16:14	13° $\Pi$ 10'27		opposition	-8320 Apr 17 j 04:20	24° $\Omega$ 01'30	2°34'53
evening set	-8326 Jul 29 j 16:21	20° $\Pi$ 04'13		min. Earth dist.	-8320 Apr 17 j 22:58	23° $\Omega$ 57'59	8.74090 AU
max. Earth dist.	-8326 Aug 14 j 07:59	21° $\Pi$ 51'34	11.27477 AU	direct	-8320 Jun 25 j 13:21	20° $\Omega$ 41'28	
				evening set	-8320 Oct 03 j 13:00	27° $\Omega$ 58'10	
conjunction	-8326 Aug 15 j 03:05	21° $\Pi$ 57'05	2°06'54	max. Earth dist.	-8320 Oct 19 j 07:30	29° $\Omega$ 53'55	10.66189 AU
minimum elong	-8326 Aug 15 j 03:02	21° $\Pi$ 57'04	2°07'26				
morning rise	-8326 Aug 31 j 11:26	23° $\Pi$ 49'22		conjunction	-8320 Oct 20 j 03:02	29° $\Omega$ 59'57	1°57'18
	-8326 Nov 12 j 00:30	0° $\Theta$		minimum elong	-8320 Oct 20 j 03:06	29° $\Omega$ 59'58	1°57'38
retrograde	-8326 Dec 08 j 16:53	0° $\Theta$ 34'32			-8320 Oct 20 j 03:13	0° $\eta$	
	-8325 Jan 04 j 20:56	30° $\kappa$ $\Pi$		morning rise	-8320 Nov 05 j 20:33	2° $\eta$ 02'53	
opposition	-8325 Feb 17 j 06:34	27° $\Pi$ 19'24	2°42'20	retrograde	-8319 Feb 18 j 16:34	9° $\eta$ 41'51	
min. Earth dist.	-8325 Feb 18 j 00:43	27° $\Pi$ 16'07	9.26197 AU	opposition	-8319 Apr 30 j 05:45	6° $\eta$ 17'38	2°11'45
direct	-8325 Apr 30 j 01:13	24° $\Pi$ 01'01		min. Earth dist.	-8319 Apr 30 j 21:22	6° $\eta$ 14'38	8.58138 AU
	-8325 Aug 01 j 10:07	0° $\Theta$		direct	-8319 Jul 07 j 23:19	2° $\eta$ 56'40	
evening set	-8325 Aug 09 j 15:02	0° $\Theta$ 54'59		evening set	-8319 Oct 15 j 21:31	10° $\eta$ 21'51	
conjunction	-8325 Aug 25 j 23:29	2° $\Theta$ 47'49	2°18'51	conjunction	-8319 Nov 01 j 16:00	12° $\eta$ 27'04	1°35'17
minimum elong	-8325 Aug 25 j 23:28	2° $\Theta$ 47'48	2°19'24	minimum elong	-8319 Nov 01 j 16:04	12° $\eta$ 27'05	1°35'30
max. Earth dist.	-8325 Aug 25 j 01:28	2° $\Theta$ 41'26	11.23741 AU	max. Earth dist.	-8319 Nov 01 j 00:03	12° $\eta$ 22'04	10.49964 AU
morning rise	-8325 Sep 11 j 06:40	4° $\Theta$ 40'21		morning rise	-8319 Nov 18 j 14:39	14° $\eta$ 33'42	
retrograde	-8325 Dec 20 j 05:57	11° $\Theta$ 30'28		retrograde	-8318 Mar 04 j 12:17	22° $\eta$ 25'48	
opposition	-8324 Feb 29 j 00:20	8° $\Theta$ 14'32	2°54'09	opposition	-8318 May 13 j 15:54	18° $\eta$ 59'33	1°41'24
min. Earth dist.	-8324 Feb 29 j 20:16	8° $\Theta$ 10'55	9.20936 AU	min. Earth dist.	-8318 May 14 j 03:37	18° $\eta$ 57'16	8.41717 AU
direct	-8324 May 10 j 13:24	4° $\Theta$ 56'18		direct	-8318 Jul 20 j 15:32	15° $\eta$ 37'31	
evening set	-8324 Aug 19 j 14:52	11° $\Theta$ 51'59		evening set	-8318 Oct 28 j 18:02	23° $\eta$ 12'16	
conjunction	-8324 Sep 04 j 22:15	13° $\Theta$ 45'25	2°25'52	conjunction	-8318 Nov 14 j 17:37	25° $\eta$ 21'14	1°07'51
minimum elong	-8324 Sep 04 j 22:14	13° $\Theta$ 45'25	2°26'24	minimum elong	-8318 Nov 14 j 17:40	25° $\eta$ 21'15	1°07'57
max. Earth dist.	-8324 Sep 03 j 23:26	13° $\Theta$ 38'45	11.16983 AU	max. Earth dist.	-8318 Nov 14 j 05:33	25° $\eta$ 17'23	10.33652 AU
morning rise	-8324 Sep 21 j 05:08	15° $\Theta$ 38'48		morning rise	-8318 Dec 01 j 22:09	27° $\eta$ 31'52	
retrograde	-8324 Dec 31 j 00:32	22° $\Theta$ 35'40			-8318 Dec 22 j 10:50	0° $\Omega$	
opposition	-8323 Mar 11 j 22:05	19° $\Theta$ 18'34	2°59'46	retrograde	-8317 Mar 18 j 17:54	5° $\Omega$ 37'16	
min. Earth dist.	-8323 Mar 12 j 18:14	19° $\Theta$ 14'54	9.12752 AU	opposition	-8317 May 27 j 11:15	2° $\Omega$ 09'04	1°04'34
direct	-8323 May 22 j 01:03	16° $\Theta$ 00'16		min. Earth dist.	-8317 May 27 j 18:44	2° $\Omega$ 07'36	8.25633 AU
evening set	-8323 Aug 30 j 17:33	22° $\Theta$ 59'08			-8317 Jun 25 j 22:37	30° $\kappa$ $\eta$	
max. Earth dist.	-8323 Sep 15 j 01:55	24° $\Theta$ 46'57	11.07458 AU	direct	-8317 Aug 02 j 17:58	28° $\eta$ 45'53	
					-8317 Sep 08 j 15:10	0° $\Omega$	
conjunction	-8323 Sep 16 j 00:57	24° $\Theta$ 53'45	2°27'30	evening set	-8317 Nov 11 j 03:57	6° $\Omega$ 30'57	
minimum elong	-8323 Sep 16 j 00:57	24° $\Theta$ 53'45	2°28'02				
morning rise	-8323 Oct 02 j 08:39	26° $\Theta$ 48'37		conjunction	-8317 Nov 28 j 09:04	8° $\Omega$ 43'48	0°35'55
	-8323 Oct 31 j 19:52	0° $\Omega$		minimum elong	-8317 Nov 28 j 09:06	8° $\Omega$ 43'49	0°35'53
retrograde	-8322 Jan 12 j 03:26	3° $\Omega$ 53'53		max. Earth dist.	-8317 Nov 28 j 01:19	8° $\Omega$ 41'18	10.18081 AU
opposition	-8322 Mar 24 j 01:18	0° $\Omega$ 35'20	2°58'42	morning rise	-8317 Dec 15 j 19:47	10° $\Omega$ 58'30	
min. Earth dist.	-8322 Mar 24 j 21:29	0° $\Omega$ 31'37	9.01935 AU	retrograde	-8316 Apr 01 j 09:59	19° $\Omega$ 16'38	
	-8322 Apr 01 j 02:05	30° $\kappa$ $\Theta$		opposition	-8316 Jun 09 j 15:19	15° $\Omega$ 46'43	0°22'44
direct	-8322 Jun 02 j 16:13	27° $\Theta$ 16'41		min. Earth dist.	-8316 Jun 09 j 18:39	15° $\Omega$ 46'03	8.10748 AU
	-8322 Jul 31 j 13:34	0° $\Omega$		direct	-8316 Aug 15 j 07:05	12° $\Omega$ 22'16	
evening set	-8322 Sep 11 j 00:57	4° $\Omega$ 20'08		evening set	-8316 Nov 24 j 04:20	20° $\Omega$ 18'02	
max. Earth dist.	-8322 Sep 26 j 09:51	6° $\Omega$ 09'33	10.95509 AU				
conjunction	-8322 Sep 27 j 09:17	6° $\Omega$ 16'33	2°23'26	conjunction	-8316 Dec 11 j 15:00	22° $\Omega$ 34'38	0°00'59
minimum elong	-8322 Sep 27 j 09:19	6° $\Omega$ 16'34	2°23'55	minimum elong	-8316 Dec 11 j 15:00	22° $\Omega$ 34'38	0°00'50
morning rise	-8322 Oct 13 j 19:08	8° $\Omega$ 13'31		behind sun begin	-8316 Dec 11 j 07:46	22° $\Omega$ 32'17	
	-8322 Dec 31 j 06:38	15° $\Omega$		behind sun end	-8316 Dec 11 j 22:14	22° $\Omega$ 36'59	
				max. Earth dist.	-8316 Dec 11 j 12:45	22° $\Omega$ 33'58	10.04121 AU

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Attention, astronomical year style is used: The year -8316 in astronomical counting style is the year 8317 BCE in historical counting style.

desc. node	-8316 Dec 21 j 19:21	23° <u>♄</u> 54'44	direct	-8310 Nov 10 j 13:10	10° <u>♂</u> 18'36		
morning rise	-8316 Dec 29 j 07:31	24° <u>♄</u> 53'09	evening set	-8309 Feb 24 j 02:57	18° <u>♂</u> 44'52		
	-8315 Feb 11 j 10:56	0° <u>♂</u>					
retrograde	-8315 Apr 16 j 10:54	3° <u>♂</u> 22'32	conjunction	-8309 Mar 14 j 05:34	21° <u>♂</u> 07'12	-2°25'12	
	-8315 Jun 22 j 07:57	30° <u>♂</u> <u>♄</u>	minimum elong	-8309 Mar 14 j 05:33	21° <u>♂</u> 07'12	2°25'45	
opposition	-8315 Jun 24 j 03:00	29° <u>♄</u> 51'13	-0°21'55	max. Earth dist.	-8309 Mar 15 j 08:33	21° <u>♂</u> 16'05	9.92919 AU
min. Earth dist.	-8315 Jun 24 j 01:56	29° <u>♄</u> 51'26	7.97957 AU	morning rise	-8309 Apr 01 j 07:56	23° <u>♂</u> 29'20	
direct	-8315 Aug 29 j 06:12	26° <u>♄</u> 25'30			-8309 May 31 j 03:51	0° <u>♁</u>	
	-8315 Oct 31 j 17:56	0° <u>♂</u>	retrograde	-8309 Jul 15 j 11:19	1° <u>♁</u> 51'17		
evening set	-8315 Dec 08 j 18:54	4° <u>♂</u> 31'42			-8309 Aug 30 j 09:21	30° <u>♂</u> <u>♂</u>	
			opposition	-8309 Sep 19 j 20:04	28° <u>♂</u> 21'47	-3°01'06	
conjunction	-8315 Dec 26 j 10:46	6° <u>♂</u> 51'36	-0°35'01	min. Earth dist.	-8309 Sep 19 j 00:23	28° <u>♂</u> 25'54	7.98566 AU
minimum elong	-8315 Dec 26 j 10:44	6° <u>♂</u> 51'36	0°35'18	direct	-8309 Nov 25 j 13:00	24° <u>♂</u> 51'51	
max. Earth dist.	-8315 Dec 26 j 14:57	6° <u>♂</u> 53'00	9.92653 AU		-8308 Feb 13 j 04:10	0° <u>♁</u>	
morning rise	-8314 Jan 13 j 08:14	9° <u>♂</u> 13'21		evening set	-8308 Mar 10 j 14:29	3° <u>♁</u> 12'18	
	-8314 Mar 04 j 17:28	15° <u>♂</u>					
retrograde	-8314 May 01 j 18:35	17° <u>♂</u> 51'32		conjunction	-8308 Mar 28 j 16:16	5° <u>♁</u> 32'19	-2°22'01
	-8314 Jun 30 j 14:30	15° <u>♂</u> <u>♂</u>		minimum elong	-8308 Mar 28 j 16:18	5° <u>♁</u> 32'20	2°22'30
opposition	-8314 Jul 08 j 21:01	14° <u>♂</u> 19'14	-1°06'31	max. Earth dist.	-8308 Mar 29 j 18:30	5° <u>♁</u> 40'50	10.04599 AU
min. Earth dist.	-8314 Jul 08 j 15:02	14° <u>♂</u> 20'28	7.88109 AU	morning rise	-8308 Apr 15 j 16:32	7° <u>♁</u> 51'42	
direct	-8314 Sep 12 j 15:11	10° <u>♂</u> 52'19			-8308 Jun 25 j 14:40	15° <u>♁</u>	
	-8314 Nov 20 j 01:13	15° <u>♂</u>	retrograde	-8308 Jul 28 j 12:49	15° <u>♁</u> 59'46		
evening set	-8314 Dec 23 j 22:25	19° <u>♂</u> 07'52			-8308 Aug 30 j 14:33	15° <u>♂</u> <u>♁</u>	
			opposition	-8308 Oct 02 j 22:18	12° <u>♁</u> 32'07	-2°51'09	
conjunction	-8313 Jan 10 j 18:42	21° <u>♂</u> 30'19	-1°09'30	min. Earth dist.	-8308 Oct 02 j 03:46	12° <u>♁</u> 35'56	8.11561 AU
minimum elong	-8313 Jan 10 j 18:38	21° <u>♂</u> 30'18	1°09'53	direct	-8308 Dec 09 j 08:22	9° <u>♁</u> 02'30	
max. Earth dist.	-8313 Jan 11 j 05:34	21° <u>♂</u> 33'58	9.84484 AU		-8307 Mar 07 j 03:41	15° <u>♁</u>	
morning rise	-8313 Jan 28 j 19:52	23° <u>♂</u> 54'24		evening set	-8307 Mar 25 j 14:41	17° <u>♁</u> 14'24	
	-8313 Mar 23 j 02:27	0° <u>♂</u> <u>♂</u>					
retrograde	-8313 May 17 j 05:29	2° <u>♂</u> 37'58		conjunction	-8307 Apr 12 j 14:56	19° <u>♁</u> 31'34	-2°10'25
	-8313 Jul 12 j 17:19	30° <u>♂</u> <u>♂</u>		minimum elong	-8307 Apr 12 j 14:59	19° <u>♁</u> 31'35	2°10'49
opposition	-8313 Jul 23 j 19:02	29° <u>♂</u> 05'08	-1°47'40	max. Earth dist.	-8307 Apr 13 j 14:36	19° <u>♁</u> 39'08	10.18782 AU
min. Earth dist.	-8313 Jul 23 j 08:15	29° <u>♂</u> 07'24	7.81916 AU	morning rise	-8307 Apr 30 j 12:32	21° <u>♁</u> 47'46	
direct	-8313 Sep 27 j 08:58	25° <u>♂</u> 37'08		retrograde	-8307 Aug 11 j 00:10	29° <u>♁</u> 40'50	
	-8313 Dec 07 j 00:15	0° <u>♂</u> <u>♂</u>	opposition	-8307 Oct 16 j 14:57	26° <u>♁</u> 15'10	-2°31'38	
evening set	-8312 Jan 08 j 12:38	4° <u>♂</u> 00'07		min. Earth dist.	-8307 Oct 15 j 22:17	26° <u>♁</u> 18'33	8.26562 AU
			direct	-8307 Dec 23 j 19:52	22° <u>♁</u> 46'12		
conjunction	-8312 Jan 26 j 12:13	6° <u>♂</u> 24'09	-1°39'52		-8306 Apr 02 j 12:41	0° <u>♂</u>	
minimum elong	-8312 Jan 26 j 12:09	6° <u>♂</u> 24'07	1°40'21	evening set	-8306 Apr 09 j 01:49	0° <u>♂</u> 47'49	
max. Earth dist.	-8312 Jan 27 j 05:16	6° <u>♂</u> 29'53	9.80236 AU				
morning rise	-8312 Feb 13 j 15:39	8° <u>♂</u> 49'26		conjunction	-8306 Apr 26 j 23:59	3° <u>♂</u> 01'52	-1°51'51
retrograde	-8312 May 31 j 15:54	17° <u>♂</u> 34'05		minimum elong	-8306 Apr 27 j 00:03	3° <u>♂</u> 01'53	1°52'10
opposition	-8312 Aug 06 j 18:14	14° <u>♂</u> 01'20	-2°21'59	max. Earth dist.	-8306 Apr 27 j 19:42	3° <u>♂</u> 08'03	10.34479 AU
min. Earth dist.	-8312 Aug 06 j 03:14	14° <u>♂</u> 04'29	7.79854 AU	morning rise	-8306 May 14 j 18:28	5° <u>♂</u> 14'40	
direct	-8312 Oct 11 j 08:19	10° <u>♂</u> 32'25		retrograde	-8306 Aug 23 j 23:43	12° <u>♂</u> 52'52	
evening set	-8311 Jan 23 j 09:26	19° <u>♂</u> 00'02		opposition	-8306 Oct 29 j 21:40	9° <u>♂</u> 29'13	-2°04'40
			min. Earth dist.	-8306 Oct 29 j 07:28	9° <u>♂</u> 32'04	8.42568 AU	
conjunction	-8311 Feb 10 j 11:06	21° <u>♂</u> 24'32	-2°03'41	direct	-8305 Jan 06 j 21:16	6° <u>♂</u> 01'10	
minimum elong	-8311 Feb 10 j 11:02	21° <u>♂</u> 24'30	2°04'14	evening set	-8305 Apr 22 j 23:15	13° <u>♂</u> 51'52	
max. Earth dist.	-8311 Feb 11 j 09:16	21° <u>♂</u> 31'58	9.80264 AU				
morning rise	-8311 Feb 28 j 15:18	23° <u>♂</u> 49'50		conjunction	-8305 May 10 j 18:47	16° <u>♂</u> 02'43	-1°28'02
	-8311 Apr 23 j 15:55	0° <u>♂</u>		minimum elong	-8305 May 10 j 18:50	16° <u>♂</u> 02'44	1°28'14
retrograde	-8311 Jun 15 j 22:31	2° <u>♂</u> 31'01		max. Earth dist.	-8305 May 11 j 10:17	16° <u>♂</u> 07'30	10.50697 AU
	-8311 Aug 09 j 09:39	30° <u>♂</u> <u>♂</u>		morning rise	-8305 May 28 j 09:42	18° <u>♂</u> 12'06	
opposition	-8311 Aug 21 j 16:02	28° <u>♂</u> 58'52	-2°46'38	retrograde	-8305 Sep 05 j 14:36	25° <u>♂</u> 36'32	
min. Earth dist.	-8311 Aug 20 j 21:54	29° <u>♂</u> 02'41	7.82101 AU	opposition	-8305 Nov 11 j 19:19	22° <u>♂</u> 14'52	-1°32'29
direct	-8311 Oct 26 j 10:48	25° <u>♂</u> 29'19		min. Earth dist.	-8305 Nov 11 j 08:20	22° <u>♂</u> 17'02	8.58677 AU
	-8310 Jan 06 j 21:54	0° <u>♂</u>		direct	-8304 Jan 20 j 11:03	18° <u>♂</u> 47'58	
evening set	-8310 Feb 08 j 07:44	3° <u>♂</u> 58'04		evening set	-8304 May 05 j 07:17	26° <u>♂</u> 27'47	
conjunction	-8310 Feb 26 j 10:21	6° <u>♂</u> 21'57	-2°19'07	conjunction	-8304 May 22 j 23:32	28° <u>♂</u> 35'29	-1°00'40
minimum elong	-8310 Feb 26 j 10:19	6° <u>♂</u> 21'57	2°19'40	minimum elong	-8304 May 22 j 23:35	28° <u>♂</u> 35'30	1°00'45
max. Earth dist.	-8310 Feb 27 j 12:00	6° <u>♂</u> 30'30	9.84598 AU	max. Earth dist.	-8304 May 23 j 10:44	28° <u>♂</u> 38'53	10.66629 AU
morning rise	-8310 Mar 16 j 14:07	8° <u>♂</u> 46'09			-8304 Jun 03 j 15:08	0° <u>♂</u>	
retrograde	-8310 Jun 30 j 21:48	17° <u>♂</u> 19'32		morning rise	-8304 Jun 09 j 10:31	0° <u>♂</u> 41'35	
opposition	-8310 Sep 05 j 09:29	13° <u>♂</u> 48'30	-2°59'50	retrograde	-8304 Sep 16 j 18:18	7° <u>♂</u> 53'50	
min. Earth dist.	-8310 Sep 04 j 13:48	13° <u>♂</u> 52'38	7.88499 AU	opposition	-8304 Nov 23 j 08:43	4° <u>♂</u> 34'00	-0°57'09



## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 9

Attention, astronomical year style is used: The year -8304 in astronomical counting style is the year 8305 BCE in historical counting style.

min. Earth dist.	-8304 Nov 23 j 01:45	4° $\Upsilon$ 35'21	8.74195 AU	morning rise	-8298 Aug 16 j 14:25	8° $\Pi$ 44'06	
direct	-8303 Feb 01 j 16:02	1° $\Upsilon$ 08'19		retrograde	-8298 Nov 23 j 00:21	15° $\Pi$ 25'55	
evening set	-8303 May 18 j 02:55	8° $\Upsilon$ 37'53		opposition	-8297 Feb 01 j 04:19	12° $\Pi$ 10'47	2°15'59
				min. Earth dist.	-8297 Feb 01 j 19:11	12° $\Pi$ 08'04	9.26661 AU
conjunction	-8303 Jun 04 j 15:19	10° $\Upsilon$ 42'31	-0°31'22	direct	-8297 Apr 14 j 06:38	8° $\Pi$ 51'07	
minimum elong	-8303 Jun 04 j 15:21	10° $\Upsilon$ 42'32	0°31'20	evening set	-8297 Jul 25 j 11:23	15° $\Pi$ 45'40	
max. Earth dist.	-8303 Jun 04 j 21:31	10° $\Upsilon$ 44'22	10.81636 AU				
morning rise	-8303 Jun 21 j 22:15	12° $\Upsilon$ 45'34		conjunction	-8297 Aug 10 j 23:21	17° $\Pi$ 38'51	2°00'31
retrograde	-8303 Sep 28 j 13:43	19° $\Upsilon$ 47'30		minimum elong	-8297 Aug 10 j 23:18	17° $\Pi$ 38'50	2°01'02
opposition	-8303 Dec 05 j 14:43	16° $\Upsilon$ 29'14	-0°20'33	max. Earth dist.	-8297 Aug 10 j 05:00	17° $\Pi$ 33'33	11.26460 AU
min. Earth dist.	-8303 Dec 05 j 12:15	16° $\Upsilon$ 29'43	8.88526 AU	morning rise	-8297 Aug 27 j 08:41	19° $\Pi$ 31'21	
direct	-8302 Feb 14 j 12:08	13° $\Upsilon$ 04'48		retrograde	-8297 Dec 04 j 06:52	26° $\Pi$ 15'19	
evening set	-8302 May 30 j 11:17	20° $\Upsilon$ 25'03		opposition	-8296 Feb 12 j 18:20	22° $\Pi$ 59'49	2°35'42
				min. Earth dist.	-8296 Feb 13 j 10:38	22° $\Pi$ 56'51	9.25842 AU
conjunction	-8302 Jun 16 j 19:25	22° $\Upsilon$ 26'50	-0°01'33	direct	-8296 Apr 24 j 17:25	19° $\Pi$ 40'40	
minimum elong	-8302 Jun 16 j 19:26	22° $\Upsilon$ 26'51	0°01'24	evening set	-8296 Aug 04 j 09:56	26° $\Pi$ 34'42	
behind sun begin	-8302 Jun 16 j 12:20	22° $\Upsilon$ 24'46					
behind sun end	-8302 Jun 17 j 02:33	22° $\Upsilon$ 28'55		conjunction	-8296 Aug 20 j 19:30	28° $\Pi$ 27'36	2°14'26
max. Earth dist.	-8302 Jun 16 j 19:46	22° $\Upsilon$ 26'55	10.95148 AU	minimum elong	-8296 Aug 20 j 19:27	28° $\Pi$ 27'35	2°14'59
morning rise	-8302 Jul 03 j 22:19	24° $\Upsilon$ 27'06		max. Earth dist.	-8296 Aug 19 j 23:50	28° $\Pi$ 21'55	11.24113 AU
asc. node	-8302 Jul 06 j 04:14	24° $\Upsilon$ 42'36			-8296 Sep 03 j 04:21	0° $\Theta$	
	-8302 Aug 31 j 01:47	0° $\mathcal{B}$		morning rise	-8296 Sep 06 j 03:02	0° $\Theta$ 20'05	
retrograde	-8302 Oct 10 j 02:31	1° $\mathcal{B}$ 20'46		retrograde	-8296 Dec 14 j 18:48	7° $\Theta$ 08'07	
	-8302 Nov 20 j 03:12	30° $\mathcal{R}\Upsilon$		opposition	-8295 Feb 23 j 10:37	3° $\Theta$ 52'00	2°50'00
opposition	-8302 Dec 17 j 14:37	28° $\Upsilon$ 03'47	0°15'47	min. Earth dist.	-8295 Feb 24 j 04:34	3° $\Theta$ 48'44	9.22051 AU
min. Earth dist.	-8302 Dec 17 j 15:51	28° $\Upsilon$ 03'33	9.01119 AU	direct	-8295 May 06 j 03:35	0° $\Theta$ 33'11	
direct	-8301 Feb 26 j 23:12	24° $\Upsilon$ 40'33		evening set	-8295 Aug 15 j 09:07	7° $\Theta$ 28'13	
	-8301 May 25 j 10:14	0° $\mathcal{B}$					
evening set	-8301 Jun 11 j 09:53	1° $\mathcal{B}$ 52'42		conjunction	-8295 Aug 31 j 16:57	9° $\Theta$ 21'26	2°23'37
				minimum elong	-8295 Aug 31 j 16:56	9° $\Theta$ 21'26	2°24'09
conjunction	-8301 Jun 28 j 13:39	3° $\mathcal{B}$ 51'58	0°27'42	max. Earth dist.	-8295 Aug 30 j 19:13	9° $\Theta$ 15'06	11.18858 AU
minimum elong	-8301 Jun 28 j 13:38	3° $\mathcal{B}$ 51'57	0°27'57	morning rise	-8295 Sep 16 j 23:50	11° $\Theta$ 14'29	
max. Earth dist.	-8301 Jun 28 j 09:20	3° $\mathcal{B}$ 50'42	11.06663 AU	retrograde	-8295 Dec 26 j 09:29	18° $\Theta$ 08'23	
morning rise	-8301 Jul 15 j 12:22	5° $\mathcal{B}$ 49'47		opposition	-8294 Mar 07 j 06:22	14° $\Theta$ 51'23	2°58'19
retrograde	-8301 Oct 21 j 10:27	12° $\mathcal{B}$ 37'20		min. Earth dist.	-8294 Mar 08 j 02:05	14° $\Theta$ 47'47	9.15397 AU
opposition	-8301 Dec 29 j 09:42	9° $\mathcal{B}$ 21'18	0°50'33	direct	-8294 May 17 j 13:05	11° $\Theta$ 32'41	
min. Earth dist.	-8301 Dec 29 j 14:05	9° $\mathcal{B}$ 20'29	9.11521 AU	evening set	-8294 Aug 26 j 10:25	18° $\Theta$ 30'15	
direct	-8300 Mar 10 j 04:17	5° $\mathcal{B}$ 59'10					
evening set	-8300 Jun 22 j 00:16	13° $\mathcal{B}$ 04'37		conjunction	-8294 Sep 11 j 17:33	20° $\Theta$ 24'21	2°27'34
				minimum elong	-8294 Sep 11 j 17:33	20° $\Theta$ 24'21	2°28'06
conjunction	-8300 Jul 08 j 23:45	15° $\mathcal{B}$ 01'42	0°55'15	max. Earth dist.	-8294 Sep 10 j 18:26	20° $\Theta$ 17'34	11.10855 AU
minimum elong	-8300 Jul 08 j 23:42	15° $\mathcal{B}$ 01'41	0°55'35	morning rise	-8294 Sep 28 j 00:55	22° $\Theta$ 18'35	
	-8300 Jul 08 j 17:53	15° $\mathcal{B}$		retrograde	-8293 Jan 07 j 07:49	29° $\Theta$ 20'10	
max. Earth dist.	-8300 Jul 08 j 16:00	14° $\mathcal{B}$ 59'27	11.15790 AU	opposition	-8293 Mar 19 j 07:11	26° $\Theta$ 01'59	3°00'08
morning rise	-8300 Jul 25 j 18:21	16° $\mathcal{B}$ 57'27		min. Earth dist.	-8293 Mar 20 j 03:27	25° $\Theta$ 58'15	9.06084 AU
retrograde	-8300 Oct 31 j 17:10	23° $\mathcal{B}$ 41'02		direct	-8293 May 29 j 03:45	22° $\Theta$ 43'13	
opposition	-8299 Jan 09 j 01:29	20° $\mathcal{B}$ 25'37	1°22'43	evening set	-8293 Sep 06 j 15:26	29° $\Theta$ 44'44	
min. Earth dist.	-8299 Jan 09 j 09:27	20° $\mathcal{B}$ 24'09	9.19393 AU		-8293 Sep 08 j 19:50	0° $\Omega$	
direct	-8299 Mar 22 j 01:09	17° $\mathcal{B}$ 04'29					
evening set	-8299 Jul 03 j 08:06	24° $\mathcal{B}$ 04'42		conjunction	-8293 Sep 22 j 23:13	1° $\Omega$ 40'21	2°25'56
				minimum elong	-8293 Sep 22 j 23:14	1° $\Omega$ 40'21	2°26'27
conjunction	-8299 Jul 20 j 03:21	26° $\mathcal{B}$ 00'01	1°20'21	max. Earth dist.	-8293 Sep 22 j 00:58	1° $\Omega$ 33'44	11.00347 AU
minimum elong	-8299 Jul 20 j 03:18	26° $\mathcal{B}$ 00'00	1°20'46	morning rise	-8293 Oct 09 j 08:04	3° $\Omega$ 36'23	
max. Earth dist.	-8299 Jul 19 j 15:43	25° $\mathcal{B}$ 56'40	11.22241 AU	retrograde	-8292 Jan 19 j 15:48	10° $\Omega$ 47'16	
morning rise	-8299 Aug 05 j 18:17	27° $\mathcal{B}$ 54'12		opposition	-8292 Mar 30 j 14:06	7° $\Omega$ 27'38	2°54'57
	-8299 Aug 25 j 01:55	0° $\Pi$		min. Earth dist.	-8292 Mar 31 j 09:13	7° $\Omega$ 24'06	8.94409 AU
retrograde	-8299 Nov 11 j 20:03	4° $\Pi$ 35'51		direct	-8292 Jun 08 j 21:28	4° $\Omega$ 08'38	
opposition	-8298 Jan 20 j 15:16	1° $\Pi$ 20'45	1°51'27	evening set	-8292 Sep 17 j 02:24	11° $\Omega$ 15'27	
min. Earth dist.	-8298 Jan 21 j 03:11	1° $\Pi$ 18'34	9.24491 AU				
	-8298 Feb 08 j 13:07	30° $\mathcal{R}\mathcal{B}$		conjunction	-8292 Oct 03 j 12:00	13° $\Omega$ 13'12	2°18'25
direct	-8298 Apr 02 j 16:25	28° $\mathcal{B}$ 00'26		minimum elong	-8292 Oct 03 j 12:03	13° $\Omega$ 13'13	2°18'52
	-8298 May 24 j 06:26	0° $\Pi$		max. Earth dist.	-8292 Oct 02 j 15:09	13° $\Omega$ 06'55	10.87683 AU
evening set	-8298 Jul 14 j 11:19	4° $\Pi$ 57'02			-8292 Oct 18 j 08:07	15° $\Omega$	
max. Earth dist.	-8298 Jul 30 j 10:42	6° $\Pi$ 46'28	11.25828 AU	morning rise	-8292 Oct 19 j 23:30	15° $\Omega$ 11'39	
				retrograde	-8291 Jan 31 j 08:22	22° $\Omega$ 33'15	
conjunction	-8298 Jul 31 j 02:34	6° $\Pi$ 51'01	1°42'18	opposition	-8291 Apr 12 j 04:01	19° $\Omega$ 12'00	2°42'26
minimum elong	-8298 Jul 31 j 02:31	6° $\Pi$ 51'00	1°42'47	min. Earth dist.	-8291 Apr 12 j 21:26	19° $\Omega$ 08'44	8.80781 AU

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 10

Attention, astronomical year style is used: The year -8291 in astronomical counting style is the year 8292 BCE in historical counting style.

direct	-8291 Jun 20 j 19:43	15° $\Omega$ 52'32		retrograde	-8285 Apr 25 j 17:10	11° $\mathbb{M}$ 55'32	
evening set	-8291 Sep 28 j 21:06	23° $\Omega$ 06'02		opposition	-8285 Jul 03 j 00:24	8° $\mathbb{M}$ 24'12	-0°47'55
				min. Earth dist.	-8285 Jul 02 j 20:12	8° $\mathbb{M}$ 25'04	7.93471 AU
conjunction	-8291 Oct 15 j 09:31	25° $\Omega$ 06'28	2°04'50	direct	-8285 Sep 06 j 20:45	4° $\mathbb{M}$ 58'25	
minimum elong	-8291 Oct 15 j 09:34	25° $\Omega$ 06'29	2°05'13	evening set	-8285 Dec 17 j 21:05	13° $\mathbb{M}$ 09'38	
max. Earth dist.	-8291 Oct 14 j 13:48	25° $\Omega$ 00'26	10.73328 AU		-8285 Dec 31 j 18:43	15° $\mathbb{M}$	
morning rise	-8291 Nov 01 j 00:57	27° $\Omega$ 07'55					
	-8291 Nov 26 j 05:06	0° $\mathbb{M}$		conjunction	-8284 Jan 04 j 15:24	15° $\mathbb{M}$ 30'54	-0°55'18
retrograde	-8290 Feb 13 j 11:55	4° $\mathbb{M}$ 41'25		minimum elong	-8284 Jan 04 j 15:21	15° $\mathbb{M}$ 30'53	0°55'39
opposition	-8290 Apr 25 j 02:08	1° $\mathbb{M}$ 18'25	2°22'23	max. Earth dist.	-8284 Jan 04 j 22:37	15° $\mathbb{M}$ 33'19	9.88922 AU
min. Earth dist.	-8290 Apr 25 j 17:44	1° $\mathbb{M}$ 15'27	8.65722 AU	morning rise	-8284 Jan 22 j 14:57	17° $\mathbb{M}$ 53'55	
	-8290 May 12 j 18:28	30° $\mathbb{R}$ $\Omega$		retrograde	-8284 May 10 j 03:45	26° $\mathbb{M}$ 35'15	
direct	-8290 Jul 03 j 01:09	27° $\Omega$ 58'16		opposition	-8284 Jul 16 j 20:54	23° $\mathbb{M}$ 03'07	-1°30'55
	-8290 Aug 21 j 02:11	0° $\mathbb{M}$		min. Earth dist.	-8284 Jul 16 j 12:29	23° $\mathbb{M}$ 04'52	7.85283 AU
evening set	-8290 Oct 11 j 01:10	5° $\mathbb{M}$ 19'39		direct	-8284 Sep 20 j 11:02	19° $\mathbb{M}$ 36'02	
				evening set	-8283 Jan 01 j 07:05	27° $\mathbb{M}$ 55'46	
conjunction	-8290 Oct 27 j 17:26	7° $\mathbb{M}$ 23'16	1°45'15		-8283 Jan 16 j 20:11	0° $\mathbb{X}$	
minimum elong	-8290 Oct 27 j 17:30	7° $\mathbb{M}$ 23'17	1°45'31				
max. Earth dist.	-8290 Oct 26 j 24:00	7° $\mathbb{M}$ 17'51	10.57855 AU	conjunction	-8283 Jan 19 j 05:06	0° $\mathbb{X}$ 19'06	-1°27'44
morning rise	-8290 Nov 13 j 13:50	9° $\mathbb{M}$ 28'13		minimum elong	-8283 Jan 19 j 05:01	0° $\mathbb{X}$ 19'04	1°28'11
retrograde	-8289 Feb 27 j 01:50	17° $\mathbb{M}$ 14'29		max. Earth dist.	-8283 Jan 19 j 17:54	0° $\mathbb{X}$ 23'23	9.82548 AU
opposition	-8289 May 08 j 08:58	13° $\mathbb{M}$ 49'37	1°54'57	morning rise	-8283 Feb 06 j 07:38	2° $\mathbb{X}$ 43'52	
min. Earth dist.	-8289 May 08 j 22:08	13° $\mathbb{M}$ 47'05	8.49872 AU	retrograde	-8283 May 25 j 14:26	11° $\mathbb{X}$ 28'18	
direct	-8289 Jul 15 j 14:21	10° $\mathbb{M}$ 28'37		opposition	-8283 Jul 31 j 19:54	7° $\mathbb{X}$ 55'49	-2°08'31
evening set	-8289 Oct 23 j 16:32	17° $\mathbb{M}$ 58'58		min. Earth dist.	-8283 Jul 31 j 07:45	7° $\mathbb{X}$ 58'22	7.81011 AU
				direct	-8283 Oct 05 j 08:46	4° $\mathbb{X}$ 27'33	
conjunction	-8289 Nov 09 j 13:42	20° $\mathbb{M}$ 06'10	1°19'59	evening set	-8282 Jan 17 j 01:20	12° $\mathbb{X}$ 53'18	
minimum elong	-8289 Nov 09 j 13:45	20° $\mathbb{M}$ 06'11	1°20'08				
max. Earth dist.	-8289 Nov 09 j 00:15	20° $\mathbb{M}$ 01'55	10.41930 AU	conjunction	-8282 Feb 04 j 01:57	15° $\mathbb{X}$ 17'37	-1°54'35
morning rise	-8289 Nov 26 j 15:43	22° $\mathbb{M}$ 14'57		minimum elong	-8282 Feb 04 j 01:53	15° $\mathbb{X}$ 17'35	1°55'07
	-8288 Feb 24 j 08:26	0° $\mathbb{X}$		max. Earth dist.	-8282 Feb 04 j 19:50	15° $\mathbb{X}$ 23'37	9.80314 AU
retrograde	-8288 Mar 12 j 01:34	0° $\mathbb{X}$ 14'19		morning rise	-8282 Feb 22 j 06:01	17° $\mathbb{X}$ 42'58	
	-8288 Mar 28 j 22:20	30° $\mathbb{R}$ $\mathbb{M}$		retrograde	-8282 Jun 09 j 22:05	26° $\mathbb{X}$ 26'00	
opposition	-8288 May 21 j 00:29	26° $\mathbb{M}$ 47'35	1°20'42	opposition	-8282 Aug 15 j 18:36	22° $\mathbb{X}$ 53'41	-2°37'35
min. Earth dist.	-8288 May 21 j 10:02	26° $\mathbb{M}$ 45'43	8.33950 AU	min. Earth dist.	-8282 Aug 15 j 03:22	22° $\mathbb{X}$ 56'54	7.81004 AU
direct	-8288 Jul 27 j 14:25	23° $\mathbb{M}$ 25'31		direct	-8282 Oct 20 j 10:52	19° $\mathbb{X}$ 24'26	
	-8288 Oct 27 j 00:42	0° $\mathbb{X}$		evening set	-8281 Feb 01 j 23:19	27° $\mathbb{X}$ 52'55	
evening set	-8288 Nov 04 j 20:37	1° $\mathbb{X}$ 05'41			-8281 Feb 17 j 22:15	0° $\mathbb{Z}$	
conjunction	-8288 Nov 21 j 23:19	3° $\mathbb{X}$ 16'43	0°49'47	conjunction	-8281 Feb 20 j 01:29	0° $\mathbb{Z}$ 17'08	-2°13'46
minimum elong	-8288 Nov 21 j 23:21	3° $\mathbb{X}$ 16'43	0°49'49	minimum elong	-8281 Feb 20 j 01:26	0° $\mathbb{Z}$ 17'07	2°14'19
max. Earth dist.	-8288 Nov 21 j 14:48	3° $\mathbb{X}$ 13'58	10.26280 AU	max. Earth dist.	-8281 Feb 20 j 23:25	0° $\mathbb{Z}$ 24'28	9.82408 AU
morning rise	-8288 Dec 09 j 07:15	5° $\mathbb{X}$ 29'28		morning rise	-8281 Mar 10 j 05:42	2° $\mathbb{Z}$ 41'54	
retrograde	-8287 Mar 26 j 13:15	13° $\mathbb{X}$ 41'43		retrograde	-8281 Jun 24 j 23:49	11° $\mathbb{Z}$ 18'59	
opposition	-8287 Jun 04 j 00:42	10° $\mathbb{X}$ 13'10	0°40'47	opposition	-8281 Aug 30 j 14:02	7° $\mathbb{Z}$ 47'22	-2°55'49
min. Earth dist.	-8287 Jun 04 j 05:51	10° $\mathbb{X}$ 12'09	8.18699 AU	min. Earth dist.	-8281 Aug 29 j 20:25	7° $\mathbb{Z}$ 51'04	7.85243 AU
direct	-8287 Aug 09 j 23:24	6° $\mathbb{X}$ 49'56		direct	-8281 Nov 04 j 14:27	4° $\mathbb{Z}$ 17'24	
evening set	-8287 Nov 18 j 14:34	14° $\mathbb{X}$ 40'29		evening set	-8280 Feb 17 j 20:14	12° $\mathbb{Z}$ 45'03	
conjunction	-8287 Dec 05 j 22:51	16° $\mathbb{X}$ 55'18	0°15'55	conjunction	-8280 Mar 06 j 22:54	15° $\mathbb{Z}$ 08'08	-2°23'53
minimum elong	-8287 Dec 05 j 22:52	16° $\mathbb{X}$ 55'18	0°15'49	minimum elong	-8280 Mar 06 j 22:53	15° $\mathbb{Z}$ 08'07	2°24'26
behind sun begin	-8287 Dec 05 j 21:40	16° $\mathbb{X}$ 54'55		max. Earth dist.	-8280 Mar 07 j 23:27	15° $\mathbb{Z}$ 16'16	9.88647 AU
behind sun end	-8287 Dec 06 j 00:05	16° $\mathbb{X}$ 55'42		morning rise	-8280 Mar 25 j 02:05	17° $\mathbb{Z}$ 31'15	
max. Earth dist.	-8287 Dec 05 j 19:25	16° $\mathbb{X}$ 54'11	10.11654 AU	retrograde	-8280 Jul 08 j 16:39	25° $\mathbb{Z}$ 58'26	
morning rise	-8287 Dec 23 j 12:37	19° $\mathbb{X}$ 11'59		min. Earth dist.	-8280 Sep 12 j 08:29	22° $\mathbb{Z}$ 31'57	7.93378 AU
retrograde	-8286 Apr 10 j 11:13	27° $\mathbb{X}$ 36'09		opposition	-8280 Sep 13 j 03:31	22° $\mathbb{Z}$ 27'58	-3°02'11
desc. node	-8286 May 24 j 13:28	25° $\mathbb{X}$ 59'41		direct	-8280 Nov 18 j 16:01	18° $\mathbb{Z}$ 57'39	
opposition	-8286 Jun 18 j 09:03	24° $\mathbb{X}$ 06'03	-0°02'57	evening set	-8279 Mar 04 j 11:07	27° $\mathbb{Z}$ 20'56	
min. Earth dist.	-8286 Jun 18 j 09:24	24° $\mathbb{X}$ 05'59	8.04905 AU				
direct	-8286 Aug 23 j 17:07	20° $\mathbb{X}$ 41'34		conjunction	-8279 Mar 22 j 13:26	29° $\mathbb{Z}$ 42'03	-2°24'37
evening set	-8286 Dec 02 j 22:54	28° $\mathbb{X}$ 42'43		minimum elong	-8279 Mar 22 j 13:27	29° $\mathbb{Z}$ 42'03	2°25'07
	-8286 Dec 12 j 19:29	0° $\mathbb{M}$		max. Earth dist.	-8279 Mar 23 j 14:59	29° $\mathbb{Z}$ 50'25	9.98545 AU
					-8279 Mar 24 j 20:17	0° $\mathbb{X}$	
conjunction	-8286 Dec 20 j 12:31	1° $\mathbb{M}$ 01'03	-0°19'55	morning rise	-8279 Apr 09 j 14:44	2° $\mathbb{X}$ 02'45	
minimum elong	-8286 Dec 20 j 12:30	1° $\mathbb{M}$ 01'03	0°20'08	retrograde	-8279 Jul 22 j 23:12	10° $\mathbb{X}$ 17'06	
max. Earth dist.	-8286 Dec 20 j 14:12	1° $\mathbb{M}$ 01'36	9.98892 AU	opposition	-8279 Sep 27 j 09:16	6° $\mathbb{X}$ 48'09	-2°56'54
morning rise	-8285 Jan 07 j 07:40	3° $\mathbb{M}$ 21'16		min. Earth dist.	-8279 Sep 26 j 14:03	6° $\mathbb{X}$ 52'09	8.04798 AU

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 11

Attention, astronomical year style is used: The year -8279 in astronomical counting style is the year 8280 BCE in historical counting style.

direct	-8279 Dec 03 j 13:03	3° $\approx$ 17'54	min. Earth dist.	-8273 Dec 12 j 19:33	23° $\Upsilon$ 22'28	8.95734 AU
evening set	-8278 Mar 19 j 16:04	11° $\approx$ 33'47	direct	-8272 Feb 22 j 01:48	19° $\Upsilon$ 58'10	
			evening set	-8272 Jun 05 j 17:25	27° $\Upsilon$ 13'25	
conjunction	-8278 Apr 06 j 17:18	13° $\approx$ 52'20	-2°16'28			
minimum elong	-8278 Apr 06 j 17:21	13° $\approx$ 52'21	2°16'54	conjunction	-8272 Jun 22 j 23:15	29° $\Upsilon$ 13'43 0°15'14
max. Earth dist.	-8278 Apr 07 j 18:09	14° $\approx$ 00'20	10.11374 AU	minimum elong	-8272 Jun 22 j 23:15	29° $\Upsilon$ 13'43 0°15'26
	-8278 Apr 15 j 11:45	15° $\approx$		behind sun begin	-8272 Jun 22 j 21:14	29° $\Upsilon$ 13'08
morning rise	-8278 Apr 24 j 16:07	16° $\approx$ 10'03		behind sun end	-8272 Jun 23 j 01:15	29° $\Upsilon$ 14'18
retrograde	-8278 Aug 05 j 17:02	24° $\approx$ 09'54		max. Earth dist.	-8272 Jun 22 j 23:06	29° $\Upsilon$ 13'40 11.02013 AU
min. Earth dist.	-8278 Oct 10 j 11:59	20° $\approx$ 46'27	8.18700 AU		-8272 Jun 29 j 13:22	0° $\mathcal{B}$
opposition	-8278 Oct 11 j 05:54	20° $\approx$ 42'46	-2°41'15	morning rise	-8272 Jul 09 j 23:40	1° $\mathcal{B}$ 12'31
direct	-8278 Dec 18 j 03:01	17° $\approx$ 12'56		retrograde	-8272 Oct 15 j 23:58	8° $\mathcal{B}$ 02'14
evening set	-8277 Apr 03 j 08:58	25° $\approx$ 19'20		opposition	-8272 Dec 23 j 18:23	4° $\mathcal{B}$ 45'47 0°35'46
				min. Earth dist.	-8272 Dec 23 j 20:50	4° $\mathcal{B}$ 45'20 9.07600 AU
conjunction	-8277 Apr 21 j 08:22	27° $\approx$ 34'54	-2°00'41	direct	-8271 Mar 05 j 08:07	1° $\mathcal{B}$ 23'13
minimum elong	-8277 Apr 21 j 08:26	27° $\approx$ 34'55	2°01'02	evening set	-8271 Jun 17 j 11:05	8° $\mathcal{B}$ 31'09
max. Earth dist.	-8277 Apr 22 j 06:43	27° $\approx$ 41'58	10.26261 AU			
morning rise	-8277 May 09 j 04:12	29° $\approx$ 49'18		conjunction	-8271 Jul 04 j 12:21	10° $\mathcal{B}$ 29'04 0°43'36
	-8277 May 10 j 14:51	0° $\mathcal{H}$		minimum elong	-8271 Jul 04 j 12:20	10° $\mathcal{B}$ 29'04 0°43'53
retrograde	-8277 Aug 18 j 22:33	7° $\mathcal{H}$ 34'10		max. Earth dist.	-8271 Jul 04 j 06:52	10° $\mathcal{B}$ 27'29 11.12680 AU
opposition	-8277 Oct 24 j 16:51	4° $\mathcal{H}$ 09'01	-2°17'12	morning rise	-8271 Jul 21 j 08:46	12° $\mathcal{B}$ 25'37
min. Earth dist.	-8277 Oct 24 j 01:43	4° $\mathcal{H}$ 12'05	8.34206 AU		-8271 Aug 14 j 04:34	15° $\mathcal{B}$
direct	-8276 Jan 01 j 07:51	0° $\mathcal{H}$ 39'56		retrograde	-8271 Oct 27 j 06:11	19° $\mathcal{B}$ 10'23
evening set	-8276 Apr 16 j 12:22	8° $\mathcal{H}$ 35'38		opposition	-8270 Jan 04 j 11:04	15° $\mathcal{B}$ 54'56 1°09'11
				min. Earth dist.	-8270 Jan 04 j 17:26	15° $\mathcal{B}$ 53'45 9.17070 AU
conjunction	-8276 May 04 j 09:12	10° $\mathcal{H}$ 48'01	-1°38'54		-8270 Jan 16 j 23:38	15° $\mathcal{R}$ $\mathcal{B}$
minimum elong	-8276 May 04 j 09:16	10° $\mathcal{H}$ 48'02	1°39'08	direct	-8270 Mar 17 j 07:59	12° $\mathcal{B}$ 33'36
max. Earth dist.	-8276 May 05 j 03:23	10° $\mathcal{H}$ 53'40	10.42303 AU		-8270 May 13 j 15:45	15° $\mathcal{B}$
morning rise	-8276 May 22 j 01:43	12° $\mathcal{H}$ 59'00		evening set	-8270 Jun 28 j 21:34	19° $\mathcal{B}$ 35'43
retrograde	-8276 Aug 30 j 16:43	20° $\mathcal{H}$ 29'26				
opposition	-8276 Nov 05 j 18:26	17° $\mathcal{H}$ 06'19	-1°46'58	conjunction	-8270 Jul 15 j 18:30	21° $\mathcal{B}$ 31'39 1°09'51
min. Earth dist.	-8276 Nov 05 j 06:22	17° $\mathcal{H}$ 08'44	8.50443 AU	minimum elong	-8270 Jul 15 j 18:28	21° $\mathcal{B}$ 31'39 1°10'14
direct	-8275 Jan 14 j 02:51	13° $\mathcal{H}$ 38'18		max. Earth dist.	-8270 Jul 15 j 08:35	21° $\mathcal{B}$ 28'47 11.20767 AU
evening set	-8275 Apr 30 j 01:50	21° $\mathcal{H}$ 22'54		morning rise	-8270 Aug 01 j 11:07	23° $\mathcal{B}$ 26'24
					-8270 Oct 25 j 13:20	0° $\Pi$
conjunction	-8275 May 17 j 19:31	23° $\mathcal{H}$ 32'02	-1°12'51	retrograde	-8270 Nov 07 j 10:09	0° $\Pi$ 08'21
minimum elong	-8275 May 17 j 19:34	23° $\mathcal{H}$ 32'03	1°12'58		-8270 Nov 20 j 10:37	30° $\mathcal{R}$ $\mathcal{B}$
max. Earth dist.	-8275 May 18 j 08:42	23° $\mathcal{H}$ 36'03	10.58638 AU	opposition	-8269 Jan 16 j 01:19	26° $\mathcal{B}$ 53'30 1°39'29
morning rise	-8275 Jun 04 j 08:26	25° $\mathcal{H}$ 39'39		min. Earth dist.	-8269 Jan 16 j 10:28	26° $\mathcal{B}$ 51'50 9.23813 AU
	-8275 Jul 14 j 12:08	0° $\Upsilon$		direct	-8269 Mar 29 j 02:31	23° $\mathcal{B}$ 33'16
retrograde	-8275 Sep 11 j 22:52	2° $\Upsilon$ 57'01			-8269 Jul 05 j 11:17	0° $\Pi$
	-8275 Nov 13 j 07:20	30° $\mathcal{R}$ $\mathcal{H}$		evening set	-8269 Jul 10 j 02:32	0° $\Pi$ 31'02
opposition	-8275 Nov 18 j 11:00	29° $\mathcal{H}$ 35'50	-1°12'43			
min. Earth dist.	-8275 Nov 18 j 01:56	29° $\mathcal{H}$ 37'37	8.66585 AU	conjunction	-8269 Jul 26 j 19:30	2° $\Pi$ 25'26 1°33'14
direct	-8274 Jan 27 j 13:08	26° $\mathcal{H}$ 09'04		minimum elong	-8269 Jul 26 j 19:28	2° $\Pi$ 25'25 1°33'42
	-8274 Apr 09 j 01:03	0° $\Upsilon$		max. Earth dist.	-8269 Jul 26 j 06:47	2° $\Pi$ 21'46 11.25998 AU
evening set	-8274 May 13 j 02:23	3° $\Upsilon$ 42'57		morning rise	-8269 Aug 12 j 08:33	4° $\Pi$ 18'49
				retrograde	-8269 Nov 18 j 16:17	11° $\Pi$ 00'01
conjunction	-8274 May 30 j 16:31	5° $\Upsilon$ 48'55	-0°44'12	opposition	-8268 Jan 27 j 14:35	7° $\Pi$ 45'26 2°05'54
minimum elong	-8274 May 30 j 16:33	5° $\Upsilon$ 48'56	0°44'12	min. Earth dist.	-8268 Jan 28 j 02:50	7° $\Pi$ 43'12 9.27601 AU
max. Earth dist.	-8274 May 31 j 00:58	5° $\Upsilon$ 51'27	10.74478 AU	direct	-8268 Apr 08 j 17:06	4° $\Pi$ 26'05
morning rise	-8274 Jun 17 j 01:29	7° $\Upsilon$ 53'19		evening set	-8268 Jul 20 j 03:51	11° $\Pi$ 21'02
retrograde	-8274 Sep 23 j 21:50	14° $\Upsilon$ 59'23				
opposition	-8274 Nov 30 j 19:28	11° $\Upsilon$ 40'00	-0°36'27	conjunction	-8268 Aug 05 j 17:13	13° $\Pi$ 14'23 1°53'08
min. Earth dist.	-8274 Nov 30 j 13:30	11° $\Upsilon$ 41'10	8.81891 AU	minimum elong	-8268 Aug 05 j 17:10	13° $\Pi$ 14'22 1°53'38
direct	-8273 Feb 09 j 12:47	8° $\Upsilon$ 14'39		max. Earth dist.	-8268 Aug 05 j 01:02	13° $\Pi$ 09'44 11.28196 AU
evening set	-8273 May 25 j 15:08	15° $\Upsilon$ 38'38		morning rise	-8268 Aug 22 j 03:23	15° $\Pi$ 06'56
				retrograde	-8268 Nov 28 j 20:30	21° $\Pi$ 49'21
conjunction	-8273 Jun 12 j 01:19	17° $\Upsilon$ 41'38	-0°14'26	opposition	-8267 Feb 07 j 04:03	18° $\Pi$ 34'39 2°27'45
minimum elong	-8273 Jun 12 j 01:20	17° $\Upsilon$ 41'38	0°14'20	min. Earth dist.	-8267 Feb 07 j 19:54	18° $\Pi$ 31'46 9.28295 AU
behind sun begin	-8273 Jun 11 j 22:04	17° $\Upsilon$ 40'41		direct	-8267 Apr 20 j 02:51	15° $\Pi$ 15'54
behind sun end	-8273 Jun 12 j 04:36	17° $\Upsilon$ 42'36		evening set	-8267 Jul 31 j 03:00	22° $\Pi$ 09'38
max. Earth dist.	-8273 Jun 12 j 05:43	17° $\Upsilon$ 42'56	10.89128 AU			
morning rise	-8273 Jun 29 j 05:59	19° $\Upsilon$ 43'03		conjunction	-8267 Aug 16 j 13:22	24° $\Pi$ 02'27 2°08'57
retrograde	-8273 Oct 05 j 14:26	26° $\Upsilon$ 39'52		minimum elong	-8267 Aug 16 j 13:19	24° $\Pi$ 02'26 2°09'30
asc. node	-8273 Dec 11 j 00:19	23° $\Upsilon$ 30'41		max. Earth dist.	-8267 Aug 15 j 17:18	23° $\Pi$ 56'40 11.27260 AU
opposition	-8273 Dec 12 j 21:33	23° $\Upsilon$ 22'05	0°00'11	morning rise	-8267 Sep 01 j 21:37	25° $\Pi$ 54'44

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 12

Attention, astronomical year style is used: The year -8267 in astronomical counting style is the year 8268 BCE in historical counting style.

	-8267 Oct 12 j 05:17	0°☾		minimum elong	-8261 Oct 22 j 18:32	2°☿17'25	1°54'49
retrograde	-8267 Dec 10 j 05:01	2°☾40'21		max. Earth dist.	-8261 Oct 21 j 23:33	2°☿11'33	10.64002 AU
	-8266 Feb 10 j 17:54	30°♊II		morning rise	-8261 Nov 08 j 12:31	4°☿20'49	
opposition	-8266 Feb 18 j 19:04	29°♊25'09	2°44'26	retrograde	-8260 Feb 21 j 12:50	12°☿01'35	
min. Earth dist.	-8266 Feb 19 j 13:36	29°♊21'48	9.25800 AU	opposition	-8260 May 01 j 23:50	8°☿37'08	2°07'50
direct	-8266 May 01 j 14:26	26°♊06'46		min. Earth dist.	-8260 May 02 j 14:38	8°☿34'18	8.55879 AU
	-8266 Jul 13 j 16:49	0°☾		direct	-8260 Jul 09 j 14:24	5°☿16'05	
evening set	-8266 Aug 11 j 01:43	3°☾00'53		evening set	-8260 Oct 17 j 14:05	12°☿42'37	
conjunction	-8266 Aug 27 j 10:03	4°☾53'45	2°20'13	conjunction	-8260 Nov 03 j 09:10	14°☿48'20	1°31'40
minimum elong	-8266 Aug 27 j 10:01	4°☾53'45	2°20'46	minimum elong	-8260 Nov 03 j 09:13	14°☿48'21	1°31'52
max. Earth dist.	-8266 Aug 26 j 12:06	4°☾47'24	11.23150 AU	max. Earth dist.	-8260 Nov 02 j 17:11	14°☿43'19	10.47680 AU
morning rise	-8266 Sep 12 j 17:06	6°☾46'21		morning rise	-8260 Nov 20 j 08:34	16°☿55'30	
retrograde	-8266 Dec 21 j 18:17	13°☾37'08		retrograde	-8259 Mar 06 j 09:01	24°☿49'27	
opposition	-8265 Mar 02 j 13:06	10°☾21'06	2°55'24	opposition	-8259 May 15 j 11:25	21°☿22'58	1°36'28
min. Earth dist.	-8265 Mar 03 j 08:47	10°☾17'31	9.20153 AU	min. Earth dist.	-8259 May 15 j 22:45	21°☿20'45	8.39420 AU
direct	-8265 May 13 j 00:49	7°☾02'53		direct	-8259 Jul 22 j 08:32	18°☿00'48	
evening set	-8265 Aug 22 j 01:49	13°☾58'55		evening set	-8259 Oct 30 j 12:30	25°☿37'02	
max. Earth dist.	-8265 Sep 06 j 10:29	15°☾45'49	11.16001 AU				
conjunction	-8265 Sep 07 j 09:12	15°☾52'28	2°26'29	conjunction	-8259 Nov 16 j 12:41	27°☿46'33	1°03'30
minimum elong	-8265 Sep 07 j 09:12	15°☾52'27	2°27'01	minimum elong	-8259 Nov 16 j 12:44	27°☿46'34	1°03'35
morning rise	-8265 Sep 23 j 16:01	17°☾45'59		max. Earth dist.	-8259 Nov 16 j 00:24	27°☿42'38	10.31391 AU
retrograde	-8264 Jan 02 j 14:43	24°☾43'47		morning rise	-8259 Dec 03 j 18:04	29°☿57'45	
opposition	-8264 Mar 13 j 11:38	21°☾26'34	3°00'05	retrograde	-8259 Dec 04 j 01:17	0°♊	
min. Earth dist.	-8264 Mar 14 j 07:51	21°☾22'52	9.11575 AU	opposition	-8258 Mar 20 j 16:16	8°♊04'58	
direct	-8264 May 23 j 13:23	18°☾08'16		opposition	-8258 May 29 j 08:10	4°♊36'33	0°58'49
evening set	-8264 Sep 01 j 05:06	25°☾07'41		min. Earth dist.	-8258 May 29 j 15:40	4°♊35'04	8.23423 AU
				direct	-8258 Aug 04 j 12:53	1°♊13'11	
conjunction	-8264 Sep 17 j 12:29	27°☾02'31	2°27'19	evening set	-8258 Nov 13 j 00:15	8°♊59'48	
minimum elong	-8264 Sep 17 j 12:30	27°☾02'31	2°27'50	conjunction	-8258 Nov 30 j 06:01	11°♊13'11	0°31'02
max. Earth dist.	-8264 Sep 16 j 12:37	26°☾55'28	11.06100 AU	minimum elong	-8258 Nov 30 j 06:03	11°♊13'11	0°30'59
morning rise	-8264 Oct 03 j 20:25	28°☾57'37		max. Earth dist.	-8258 Nov 29 j 22:46	11°♊10'50	10.15970 AU
retrograde	-8264 Oct 12 j 23:10	0°♊		morning rise	-8258 Dec 17 j 17:31	13°♊28'25	
opposition	-8263 Jan 13 j 18:24	6°♊04'04		retrograde	-8257 Apr 04 j 09:49	21°♊48'16	
min. Earth dist.	-8263 Mar 25 j 15:48	2°♊45'23	2°58'01	opposition	-8257 Jun 12 j 13:32	18°♊18'09	0°16'25
direct	-8263 Mar 26 j 12:41	2°♊41'32	9.00395 AU	min. Earth dist.	-8257 Jun 12 j 16:42	18°♊17'31	8.08764 AU
	-8263 May 08 j 19:45	30°♊☾		direct	-8257 Aug 18 j 03:30	14°♊53'31	
evening set	-8263 Jun 04 j 04:23	29°☾26'42		desc. node	-8257 Oct 30 j 11:09	19°♊29'00	
	-8263 Jun 30 j 03:21	0°♊		evening set	-8257 Nov 27 j 02:31	22°♊50'47	
conjunction	-8263 Sep 28 j 21:54	8°♊27'39	2°22'24	conjunction	-8257 Dec 14 j 13:54	25°♊07'52	-0°04'18
minimum elong	-8263 Sep 28 j 21:56	8°♊27'40	2°22'52	minimum elong	-8257 Dec 14 j 13:54	25°♊07'52	0°04'28
max. Earth dist.	-8263 Sep 27 j 21:54	8°♊20'28	10.93814 AU	behind sun begin	-8257 Dec 14 j 06:48	25°♊05'33	
morning rise	-8263 Oct 15 j 08:11	10°♊24'57		behind sun end	-8257 Dec 14 j 21:00	25°♊10'11	
retrograde	-8263 Nov 28 j 05:27	15°♊		max. Earth dist.	-8257 Dec 14 j 12:56	25°♊07'34	10.02294 AU
	-8262 Jan 26 j 04:35	17°♊41'35		morning rise	-8256 Jan 01 j 07:03	27°♊26'51	
opposition	-8262 Mar 29 j 08:39	15°♊♊		retrograde	-8256 Jan 21 j 19:40	0°♊	
min. Earth dist.	-8262 Apr 07 j 02:31	14°♊21'09	2°48'45	opposition	-8256 Apr 18 j 11:43	5°♊57'41	
direct	-8262 Apr 07 j 22:56	14°♊17'21	8.87028 AU	min. Earth dist.	-8256 Jun 26 j 02:15	2°♊26'11	-0°28'26
	-8262 Jun 16 j 00:45	11°♊01'51		direct	-8256 Jun 26 j 00:29	2°♊26'32	7.96327 AU
evening set	-8262 Aug 26 j 09:43	15°♊			-8256 Jul 29 j 05:49	30°♊♊	
	-8262 Sep 24 j 04:21	18°♊12'19		direct	-8256 Aug 31 j 04:30	29°♊00'17	
conjunction	-8262 Oct 10 j 15:20	20°♊11'30	2°11'29	evening set	-8256 Oct 02 j 13:44	0°♊	
minimum elong	-8262 Oct 10 j 15:23	20°♊11'31	2°11'53		-8256 Dec 10 j 18:58	7°♊07'52	
max. Earth dist.	-8262 Oct 09 j 17:18	20°♊04'48	10.79598 AU	conjunction	-8256 Dec 28 j 11:28	9°♊28'10	-0°40'09
morning rise	-8262 Oct 27 j 04:58	22°♊11'35		minimum elong	-8256 Dec 28 j 11:26	9°♊28'10	0°40'26
retrograde	-8261 Feb 08 j 03:13	29°♊39'46		max. Earth dist.	-8256 Dec 28 j 17:14	9°♊30'05	9.91229 AU
opposition	-8261 Apr 19 j 20:59	26°♊17'23	2°32'03	morning rise	-8255 Jan 15 j 09:21	11°♊50'16	
min. Earth dist.	-8261 Apr 20 j 15:12	26°♊13'56	8.71987 AU	retrograde	-8255 Feb 09 j 19:45	15°♊	
direct	-8261 Jun 28 j 04:58	22°♊57'17		opposition	-8255 May 03 j 19:48	20°♊29'30	
	-8261 Oct 04 j 01:30	0°♊		min. Earth dist.	-8255 Jul 10 j 20:58	16°♊57'02	-1°12'45
evening set	-8261 Oct 06 j 03:51	0°♊15'10			-8255 Jul 10 j 13:53	16°♊58'30	7.86935 AU
conjunction	-8261 Oct 22 j 18:29	2°♊17'24	1°54'30	direct	-8255 Aug 04 j 21:45	15°♊♊	
					-8255 Sep 14 j 15:04	13°♊29'57	
					-8255 Oct 24 j 10:54	15°♊	

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 13

Attention, astronomical year style is used: The year -8255 in astronomical counting style is the year 8256 BCE in historical counting style.

evening set	-8255 Dec 26 j 00:02	21° $\mathbb{M}$ 46'38		opposition	-8249 Oct 05 j 19:06	15° $\approx$ 04'09	-2°48'57
				min. Earth dist.	-8249 Oct 05 j 00:25	15° $\approx$ 07'59	8.13350 AU
conjunction	-8254 Jan 12 j 20:45	24° $\mathbb{M}$ 09'22	-1°14'12		-8249 Oct 06 j 15:12	15° $\mathbb{R}$ $\approx$	
minimum elong	-8254 Jan 12 j 20:41	24° $\mathbb{M}$ 09'21	1°14'37	direct	-8249 Dec 12 j 08:25	11° $\approx$ 34'37	
max. Earth dist.	-8254 Jan 13 j 09:07	24° $\mathbb{M}$ 13'31	9.83552 AU		-8248 Feb 14 j 16:33	15° $\approx$	
morning rise	-8254 Jan 30 j 22:08	26° $\mathbb{M}$ 33'39		evening set	-8248 Mar 27 j 13:39	19° $\approx$ 45'14	
	-8254 Feb 27 j 12:35	0° $\mathbb{X}$					
retrograde	-8254 May 19 j 06:45	5° $\mathbb{X}$ 17'44		conjunction	-8248 Apr 14 j 13:44	22° $\approx$ 02'01	-2°08'10
opposition	-8254 Jul 25 j 19:21	1° $\mathbb{X}$ 44'49	-1°53'08	minimum elong	-8248 Apr 14 j 13:47	22° $\approx$ 02'02	2°08'33
min. Earth dist.	-8254 Jul 25 j 07:24	1° $\mathbb{X}$ 47'19	7.81271 AU	max. Earth dist.	-8248 Apr 15 j 13:12	22° $\approx$ 09'30	10.20731 AU
	-8254 Aug 16 j 16:51	30° $\mathbb{R}$ $\mathbb{M}$		morning rise	-8248 May 02 j 11:02	24° $\approx$ 17'48	
direct	-8254 Sep 29 j 08:55	28° $\mathbb{M}$ 16'39			-8248 Jun 24 j 09:46	0° $\mathbb{H}$	
	-8254 Nov 11 j 03:15	0° $\mathbb{X}$		retrograde	-8248 Aug 12 j 18:12	2° $\mathbb{H}$ 08'59	
evening set	-8253 Jan 10 j 15:14	6° $\mathbb{X}$ 40'24			-8248 Oct 02 j 08:44	30° $\mathbb{R}$ $\approx$	
				opposition	-8248 Oct 18 j 10:24	28° $\approx$ 43'33	-2°28'12
conjunction	-8253 Jan 28 j 15:03	9° $\mathbb{X}$ 04'33	-1°43'47	min. Earth dist.	-8248 Oct 17 j 17:11	28° $\approx$ 47'03	8.28634 AU
minimum elong	-8253 Jan 28 j 14:58	9° $\mathbb{X}$ 04'32	1°44'16	direct	-8248 Dec 25 j 17:40	25° $\approx$ 14'44	
max. Earth dist.	-8253 Jan 29 j 09:17	9° $\mathbb{X}$ 10'41	9.79861 AU		-8247 Mar 13 j 23:45	0° $\mathbb{H}$	
morning rise	-8253 Feb 15 j 18:32	11° $\mathbb{X}$ 29'54		evening set	-8247 Apr 10 j 23:02	3° $\mathbb{H}$ 14'52	
retrograde	-8253 Jun 03 j 17:13	20° $\mathbb{X}$ 14'28					
opposition	-8253 Aug 09 j 18:33	16° $\mathbb{X}$ 41'41	-2°26'14	conjunction	-8247 Apr 28 j 20:59	5° $\mathbb{H}$ 28'30	-1°48'44
min. Earth dist.	-8253 Aug 09 j 02:46	16° $\mathbb{X}$ 45'00	7.79778 AU	minimum elong	-8247 Apr 28 j 21:03	5° $\mathbb{H}$ 28'31	1°49'01
direct	-8253 Oct 14 j 08:02	13° $\mathbb{X}$ 12'37		max. Earth dist.	-8247 Apr 29 j 17:13	5° $\mathbb{H}$ 34'50	10.36689 AU
evening set	-8252 Jan 26 j 12:26	21° $\mathbb{X}$ 40'33		morning rise	-8247 May 16 j 15:02	7° $\mathbb{H}$ 40'50	
				retrograde	-8247 Aug 25 j 17:49	15° $\mathbb{H}$ 17'08	
conjunction	-8252 Feb 13 j 14:11	24° $\mathbb{X}$ 05'02	-2°06'30	opposition	-8247 Oct 31 j 15:55	11° $\mathbb{H}$ 53'42	-2°00'19
minimum elong	-8252 Feb 13 j 14:07	24° $\mathbb{X}$ 05'00	2°07'03	min. Earth dist.	-8247 Oct 31 j 01:19	11° $\mathbb{H}$ 56'37	8.44873 AU
max. Earth dist.	-8252 Feb 14 j 12:57	24° $\mathbb{X}$ 12'40	9.80464 AU	direct	-8246 Jan 08 j 16:39	8° $\mathbb{H}$ 25'51	
morning rise	-8252 Mar 02 j 18:22	26° $\mathbb{X}$ 30'15		evening set	-8246 Apr 24 j 18:31	16° $\mathbb{H}$ 14'50	
	-8252 Mar 30 j 20:28	0° $\mathbb{Z}$					
retrograde	-8252 Jun 17 j 23:40	5° $\mathbb{Z}$ 10'44		conjunction	-8246 May 12 j 13:45	18° $\mathbb{H}$ 25'15	-1°24'17
opposition	-8252 Aug 23 j 15:56	1° $\mathbb{Z}$ 38'38	-2°49'20	minimum elong	-8246 May 12 j 13:49	18° $\mathbb{H}$ 25'16	1°24'27
min. Earth dist.	-8252 Aug 22 j 21:37	1° $\mathbb{Z}$ 42'29	7.82583 AU	max. Earth dist.	-8246 May 13 j 05:53	18° $\mathbb{H}$ 30'13	10.53096 AU
	-8252 Sep 13 j 00:06	30° $\mathbb{R}$ $\mathbb{X}$		morning rise	-8246 May 30 j 04:10	20° $\mathbb{H}$ 34'10	
direct	-8252 Oct 28 j 10:42	28° $\mathbb{X}$ 08'56		retrograde	-8246 Sep 07 j 06:09	27° $\mathbb{H}$ 56'42	
	-8252 Dec 12 j 06:55	0° $\mathbb{Z}$		opposition	-8246 Nov 13 j 12:13	24° $\mathbb{H}$ 35'16	-1°27'33
evening set	-8251 Feb 10 j 10:35	6° $\mathbb{Z}$ 37'33		min. Earth dist.	-8246 Nov 13 j 01:41	24° $\mathbb{H}$ 37'20	8.61111 AU
				direct	-8245 Jan 22 j 05:46	21° $\mathbb{H}$ 08'32	
conjunction	-8251 Feb 28 j 13:06	9° $\mathbb{Z}$ 01'17	-2°20'37	evening set	-8245 May 08 j 00:48	28° $\mathbb{H}$ 46'40	
minimum elong	-8251 Feb 28 j 13:04	9° $\mathbb{Z}$ 01'16	2°21'11		-8245 May 18 j 06:07	0° $\mathbb{Y}$	
max. Earth dist.	-8251 Mar 01 j 14:44	9° $\mathbb{Z}$ 09'49	9.85339 AU				
morning rise	-8251 Mar 18 j 16:45	11° $\mathbb{Z}$ 25'16		conjunction	-8245 May 25 j 16:36	0° $\mathbb{Y}$ 53'53	-0°56'33
retrograde	-8251 Jul 02 j 22:00	19° $\mathbb{Z}$ 57'25		minimum elong	-8245 May 25 j 16:39	0° $\mathbb{Y}$ 53'54	0°56'36
opposition	-8251 Sep 07 j 08:36	16° $\mathbb{Z}$ 26'30	-3°00'50	max. Earth dist.	-8245 May 26 j 03:23	0° $\mathbb{Y}$ 57'09	10.69071 AU
min. Earth dist.	-8251 Sep 06 j 13:12	16° $\mathbb{Z}$ 30'35	7.89491 AU	morning rise	-8245 Jun 12 j 03:07	2° $\mathbb{Y}$ 59'32	
direct	-8251 Nov 12 j 13:32	12° $\mathbb{Z}$ 56'31		retrograde	-8245 Sep 19 j 08:18	10° $\mathbb{Y}$ 10'02	
evening set	-8250 Feb 26 j 04:51	21° $\mathbb{Z}$ 22'12		opposition	-8245 Nov 26 j 00:16	6° $\mathbb{Y}$ 50'27	-0°51'56
				min. Earth dist.	-8245 Nov 25 j 18:13	6° $\mathbb{Y}$ 51'38	8.76600 AU
conjunction	-8250 Mar 16 j 07:17	23° $\mathbb{Z}$ 44'15	-2°25'21	direct	-8244 Feb 04 j 09:46	3° $\mathbb{Y}$ 24'58	
minimum elong	-8250 Mar 16 j 07:17	23° $\mathbb{Z}$ 44'15	2°25'54	evening set	-8244 May 19 j 18:47	10° $\mathbb{Y}$ 52'57	
max. Earth dist.	-8250 Mar 17 j 09:50	23° $\mathbb{Z}$ 52'59	9.94143 AU				
morning rise	-8250 Apr 03 j 09:30	26° $\mathbb{Z}$ 06'06		conjunction	-8244 Jun 06 j 06:37	12° $\mathbb{Y}$ 57'08	-0°27'05
	-8250 May 05 j 17:44	0° $\approx$		minimum elong	-8244 Jun 06 j 06:38	12° $\mathbb{Y}$ 57'09	0°27'01
retrograde	-8250 Jul 17 j 09:41	4° $\approx$ 26'26		max. Earth dist.	-8244 Jun 06 j 11:30	12° $\mathbb{Y}$ 58'35	10.83969 AU
opposition	-8250 Sep 21 j 18:09	0° $\approx$ 57'07	-3°00'24	morning rise	-8244 Jun 23 j 13:08	14° $\mathbb{Y}$ 59'44	
min. Earth dist.	-8250 Sep 20 j 22:42	1° $\approx$ 01'10	7.99999 AU	retrograde	-8244 Sep 30 j 02:28	22° $\mathbb{Y}$ 00'12	
	-8250 Oct 03 j 07:51	30° $\mathbb{R}$ $\mathbb{Z}$		opposition	-8244 Dec 07 j 05:12	18° $\mathbb{Y}$ 42'11	-0°15'17
direct	-8250 Nov 27 j 13:47	27° $\mathbb{Z}$ 27'10		min. Earth dist.	-8244 Dec 07 j 03:06	18° $\mathbb{Y}$ 42'35	8.90763 AU
	-8249 Jan 20 j 18:00	0° $\approx$		direct	-8243 Feb 16 j 04:11	15° $\mathbb{Y}$ 17'57	
evening set	-8249 Mar 13 j 14:57	5° $\approx$ 46'38		asc. node	-8243 May 14 j 00:45	20° $\mathbb{Y}$ 36'20	
				evening set	-8243 Jun 01 j 01:31	22° $\mathbb{Y}$ 36'47	
conjunction	-8249 Mar 31 j 16:34	8° $\approx$ 06'18	-2°20'53				
minimum elong	-8249 Mar 31 j 16:37	8° $\approx$ 06'19	2°21'21	conjunction	-8243 Jun 18 j 09:09	24° $\mathbb{Y}$ 38'11	0°02'49
max. Earth dist.	-8249 Apr 01 j 18:17	8° $\approx$ 14'38	10.06227 AU	minimum elong	-8243 Jun 18 j 09:08	24° $\mathbb{Y}$ 38'10	0°02'59
morning rise	-8249 Apr 18 j 16:39	10° $\approx$ 25'20		behind sun begin	-8243 Jun 18 j 02:04	24° $\mathbb{Y}$ 36'07	
	-8249 May 28 j 04:38	15° $\approx$		behind sun end	-8243 Jun 18 j 16:13	24° $\mathbb{Y}$ 40'14	
retrograde	-8249 Jul 31 j 07:56	18° $\approx$ 31'34		max. Earth dist.	-8243 Jun 18 j 08:43	24° $\mathbb{Y}$ 38'04	10.97258 AU

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 14

Attention, astronomical year style is used: The year -8243 in astronomical counting style is the year 8244 BCE in historical counting style.

morning rise	-8243 Jul 05 j 11:34	26° $\Upsilon$ 38'03		retrograde	-8237 Dec 17 j 05:51	9° $\Theta$ 12'51	
	-8243 Aug 05 j 22:38	0° $\mathcal{B}$		opposition	-8236 Feb 25 j 22:53	5° $\Theta$ 56'40	2°51'37
retrograde	-8243 Oct 11 j 13:58	3° $\mathcal{B}$ 30'34		min. Earth dist.	-8236 Feb 26 j 17:55	5° $\Theta$ 53'12	9.21438 AU
opposition	-8243 Dec 19 j 04:06	0° $\mathcal{B}$ 13'47	0°20'54	direct	-8236 May 07 j 13:51	2° $\Theta$ 37'51	
min. Earth dist.	-8243 Dec 19 j 05:18	0° $\mathcal{B}$ 13'33	9.03086 AU	evening set	-8236 Aug 16 j 19:35	9° $\Theta$ 33'07	
	-8243 Dec 22 j 05:22	30° $\mathcal{K}$ $\Upsilon$		max. Earth dist.	-8236 Sep 01 j 04:27	11° $\Theta$ 19'46	11.18023 AU
direct	-8242 Feb 28 j 15:00	26° $\Upsilon$ 50'45					
	-8242 May 05 j 00:57	0° $\mathcal{B}$		conjunction	-8236 Sep 02 j 03:13	11° $\Theta$ 26'24	2°24'33
evening set	-8242 Jun 12 j 22:51	4° $\mathcal{B}$ 01'43		minimum elong	-8236 Sep 02 j 03:12	11° $\Theta$ 26'24	2°25'05
				morning rise	-8236 Sep 18 j 10:10	13° $\Theta$ 19'34	
conjunction	-8242 Jun 30 j 02:12	6° $\mathcal{B}$ 00'37	0°31'47	retrograde	-8236 Dec 27 j 21:42	20° $\Theta$ 14'17	
minimum elong	-8242 Jun 30 j 02:11	6° $\mathcal{B}$ 00'36	0°32'03	opposition	-8235 Mar 08 j 19:07	16° $\Theta$ 57'08	2°59'03
max. Earth dist.	-8242 Jun 29 j 21:50	5° $\mathcal{B}$ 59'21	11.08462 AU	min. Earth dist.	-8235 Mar 09 j 15:30	16° $\Theta$ 53'24	9.14348 AU
morning rise	-8242 Jul 17 j 00:21	7° $\mathcal{B}$ 58'05		direct	-8235 May 19 j 01:41	13° $\Theta$ 38'22	
retrograde	-8242 Oct 22 j 23:16	14° $\mathcal{B}$ 44'46		evening set	-8235 Aug 27 j 21:08	20° $\Theta$ 36'25	
opposition	-8242 Dec 30 j 22:24	11° $\mathcal{B}$ 28'55	0°55'21	max. Earth dist.	-8235 Sep 12 j 05:19	22° $\Theta$ 23'54	11.09597 AU
min. Earth dist.	-8242 Dec 31 j 03:20	11° $\mathcal{B}$ 28'00	9.13143 AU				
direct	-8241 Mar 12 j 17:25	8° $\mathcal{B}$ 07'00		conjunction	-8235 Sep 13 j 04:22	22° $\Theta$ 30'41	2°27'45
	-8241 Jun 22 j 19:34	15° $\mathcal{B}$		minimum elong	-8235 Sep 13 j 04:23	22° $\Theta$ 30'41	2°28'16
evening set	-8241 Jun 24 j 12:19	15° $\mathcal{B}$ 11'30		morning rise	-8235 Sep 29 j 11:50	24° $\Theta$ 25'07	
					-8235 Nov 26 j 22:04	0° $\Omega$	
conjunction	-8241 Jul 11 j 11:17	17° $\mathcal{B}$ 08'17	0°59'02	retrograde	-8234 Jan 08 j 21:47	1° $\Omega$ 27'44	
minimum elong	-8241 Jul 11 j 11:15	17° $\mathcal{B}$ 08'17	0°59'23		-8234 Feb 22 j 05:20	30° $\mathcal{R}$ $\Theta$	
max. Earth dist.	-8241 Jul 11 j 02:55	17° $\mathcal{B}$ 05'52	11.17211 AU	opposition	-8234 Mar 20 j 20:28	28° $\Theta$ 09'21	2°59'54
morning rise	-8241 Jul 28 j 05:23	19° $\mathcal{B}$ 03'46		min. Earth dist.	-8234 Mar 21 j 16:32	28° $\Theta$ 05'39	9.04624 AU
retrograde	-8241 Nov 03 j 03:23	25° $\mathcal{B}$ 46'45		direct	-8234 May 30 j 16:01	24° $\Theta$ 50'30	
opposition	-8240 Jan 11 j 13:45	22° $\mathcal{B}$ 31'30	1°27'05		-8234 Aug 22 j 11:19	0° $\Omega$	
min. Earth dist.	-8240 Jan 11 j 22:58	22° $\mathcal{B}$ 29'48	9.20618 AU	evening set	-8234 Sep 08 j 02:47	1° $\Omega$ 52'42	
direct	-8240 Mar 23 j 13:00	19° $\mathcal{B}$ 10'32					
evening set	-8240 Jul 04 j 19:25	26° $\mathcal{B}$ 10'04		conjunction	-8234 Sep 24 j 10:48	3° $\Omega$ 48'34	2°25'18
				minimum elong	-8234 Sep 24 j 10:49	3° $\Omega$ 48'35	2°25'48
conjunction	-8240 Jul 21 j 14:04	28° $\mathcal{B}$ 05'08	1°23'43	max. Earth dist.	-8234 Sep 23 j 12:42	3° $\Omega$ 41'59	10.98697 AU
minimum elong	-8240 Jul 21 j 14:01	28° $\mathcal{B}$ 05'07	1°24'09	morning rise	-8234 Oct 10 j 19:49	5° $\Omega$ 44'53	
max. Earth dist.	-8240 Jul 21 j 00:59	28° $\mathcal{B}$ 01'22	11.23244 AU	retrograde	-8233 Jan 21 j 06:08	12° $\Omega$ 57'03	
morning rise	-8240 Aug 07 j 04:40	29° $\mathcal{B}$ 59'07		opposition	-8233 Apr 02 j 04:13	9° $\Omega$ 37'11	2°53'43
	-8240 Aug 07 j 07:49	0° $\Pi$		min. Earth dist.	-8233 Apr 02 j 23:07	9° $\Omega$ 33'41	8.92581 AU
retrograde	-8240 Nov 13 j 07:04	6° $\Pi$ 40'30		direct	-8233 Jun 11 j 09:27	6° $\Omega$ 18'04	
opposition	-8239 Jan 22 j 03:15	3° $\Pi$ 25'29	1°55'15	evening set	-8233 Sep 19 j 14:39	13° $\Omega$ 25'49	
min. Earth dist.	-8239 Jan 22 j 15:54	3° $\Pi$ 23'10	9.25284 AU		-8233 Oct 02 j 17:22	15° $\Omega$	
direct	-8239 Apr 04 j 05:46	0° $\Pi$ 05'18		max. Earth dist.	-8233 Oct 05 j 02:58	15° $\Omega$ 17'24	10.85706 AU
evening set	-8239 Jul 15 j 22:02	7° $\Pi$ 01'27					
				conjunction	-8233 Oct 06 j 00:29	15° $\Omega$ 23'53	2°16'56
conjunction	-8239 Aug 01 j 12:52	8° $\Pi$ 55'17	1°45'11	minimum elong	-8233 Oct 06 j 00:32	15° $\Omega$ 23'54	2°17'23
minimum elong	-8239 Aug 01 j 12:49	8° $\Pi$ 55'16	1°45'40	morning rise	-8233 Oct 22 j 12:25	17° $\Omega$ 22'42	
max. Earth dist.	-8239 Jul 31 j 20:26	8° $\Pi$ 50'33	11.26388 AU	retrograde	-8232 Feb 03 j 01:05	24° $\Omega$ 45'49	
morning rise	-8239 Aug 18 j 00:25	10° $\Pi$ 48'14		opposition	-8232 Apr 13 j 19:19	21° $\Omega$ 24'19	2°40'09
retrograde	-8239 Nov 24 j 11:03	17° $\Pi$ 30'02		min. Earth dist.	-8232 Apr 14 j 13:05	21° $\Omega$ 20'59	8.78659 AU
opposition	-8238 Feb 02 j 16:04	14° $\Pi$ 14'55	2°19'09	direct	-8232 Jun 22 j 08:51	18° $\Omega$ 04'41	
min. Earth dist.	-8238 Feb 03 j 06:58	14° $\Pi$ 12'12	9.26993 AU	evening set	-8232 Sep 30 j 10:26	25° $\Omega$ 19'18	
direct	-8238 Apr 15 j 18:08	10° $\Pi$ 55'22					
evening set	-8238 Jul 26 j 21:44	17° $\Pi$ 49'42		conjunction	-8232 Oct 16 j 23:13	27° $\Omega$ 20'09	2°02'31
				minimum elong	-8232 Oct 16 j 23:16	27° $\Omega$ 20'10	2°02'52
conjunction	-8238 Aug 12 j 09:29	19° $\Pi$ 42'48	2°02'48	max. Earth dist.	-8232 Oct 16 j 03:00	27° $\Omega$ 13'57	10.71106 AU
minimum elong	-8238 Aug 12 j 09:26	19° $\Pi$ 42'47	2°03'20	morning rise	-8232 Nov 02 j 15:19	29° $\Omega$ 22'04	
max. Earth dist.	-8238 Aug 11 j 15:09	19° $\Pi$ 37'31	11.26548 AU		-8232 Nov 07 j 22:34	0° $\mathcal{N}$	
morning rise	-8238 Aug 28 j 18:28	21° $\Pi$ 35'14		retrograde	-8231 Feb 15 j 04:45	6° $\mathcal{N}$ 57'15	
retrograde	-8238 Dec 05 j 19:12	28° $\Pi$ 19'28		opposition	-8231 Apr 26 j 18:37	3° $\mathcal{N}$ 33'59	2°19'03
opposition	-8237 Feb 14 j 06:12	25° $\Pi$ 03'57	2°38'08	min. Earth dist.	-8231 Apr 27 j 10:39	3° $\mathcal{N}$ 30'56	8.63399 AU
min. Earth dist.	-8237 Feb 14 j 22:58	25° $\Pi$ 00'54	9.25695 AU	direct	-8231 Jul 04 j 15:04	0° $\mathcal{N}$ 13'39	
direct	-8237 Apr 27 j 05:08	21° $\Pi$ 44'52		evening set	-8231 Oct 12 j 15:55	7° $\mathcal{N}$ 36'22	
evening set	-8237 Aug 06 j 20:18	28° $\Pi$ 38'53					
	-8237 Aug 18 j 15:35	0° $\Theta$		conjunction	-8231 Oct 29 j 08:48	9° $\mathcal{N}$ 40'28	1°42'05
max. Earth dist.	-8237 Aug 22 j 08:59	0° $\Theta$ 25'51	11.23727 AU	minimum elong	-8231 Oct 29 j 08:52	9° $\mathcal{N}$ 40'29	1°42'20
				max. Earth dist.	-8231 Oct 28 j 15:52	9° $\mathcal{N}$ 35'11	10.55478 AU
conjunction	-8237 Aug 23 j 05:33	0° $\Theta$ 31'48	2°16'05	morning rise	-8231 Nov 15 j 05:51	11° $\mathcal{N}$ 45'56	
minimum elong	-8237 Aug 23 j 05:31	0° $\Theta$ 31'47	2°16'38	retrograde	-8230 Feb 28 j 19:18	19° $\mathcal{N}$ 34'02	
morning rise	-8237 Sep 08 j 12:57	2° $\Theta$ 24'18		opposition	-8230 May 10 j 02:36	16° $\mathcal{N}$ 08'53	1°50'36

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), AstroDienst AG 18-Feb-2025 14:23, page 15

Attention, astronomical year style is used: The year -8230 in astronomical counting style is the year 8231 BCE in historical counting style.

min. Earth dist.	-8230 May 10 j 15:30	16° $\overline{m}$ 06'24	8.47453 AU	max. Earth dist.	-8224 Jan 22 j 19:54	3° $\overline{x}$ 00'55	9.82035 AU
direct	-8230 Jul 17 j 07:07	12° $\overline{m}$ 47'42		morning rise	-8224 Feb 09 j 09:17	5° $\overline{x}$ 21'19	
evening set	-8230 Oct 25 j 08:55	20° $\overline{m}$ 19'32		retrograde	-8224 May 27 j 14:02	14° $\overline{x}$ 05'56	
				opposition	-8224 Aug 02 j 19:15	10° $\overline{x}$ 33'29	-2°13'12
conjunction	-8230 Nov 11 j 06:49	22° $\overline{m}$ 27'17	1°16'03	min. Earth dist.	-8224 Aug 02 j 06:47	10° $\overline{x}$ 36'06	7.80769 AU
minimum elong	-8230 Nov 11 j 06:53	22° $\overline{m}$ 27'18	1°16'11	direct	-8224 Oct 07 j 08:04	7° $\overline{x}$ 05'08	
max. Earth dist.	-8230 Nov 10 j 18:27	22° $\overline{m}$ 23'22	10.39517 AU	evening set	-8223 Jan 19 j 03:13	15° $\overline{x}$ 31'27	
morning rise	-8230 Nov 28 j 09:28	24° $\overline{m}$ 36'37					
	-8229 Jan 16 j 20:17	0° $\overline{u}$		conjunction	-8223 Feb 06 j 04:06	17° $\overline{x}$ 55'50	-1°57'49
retrograde	-8229 Mar 14 j 22:19	2° $\overline{u}$ 37'56		minimum elong	-8223 Feb 06 j 04:02	17° $\overline{x}$ 55'48	1°58'20
	-8229 May 13 j 06:43	30° $\overline{r}$ $\overline{m}$		max. Earth dist.	-8223 Feb 06 j 22:51	18° $\overline{x}$ 02'08	9.80327 AU
opposition	-8229 May 23 j 19:35	29° $\overline{m}$ 10'55	1°15'27	morning rise	-8223 Feb 24 j 08:11	20° $\overline{x}$ 21'10	
min. Earth dist.	-8229 May 24 j 04:05	29° $\overline{m}$ 09'15	8.31575 AU	retrograde	-8223 Jun 11 j 22:00	29° $\overline{x}$ 03'51	
direct	-8229 Jul 30 j 07:50	25° $\overline{m}$ 48'42		opposition	-8223 Aug 17 j 17:53	25° $\overline{x}$ 31'39	-2°40'52
	-8229 Oct 08 j 22:13	0° $\overline{u}$		min. Earth dist.	-8223 Aug 17 j 01:58	25° $\overline{x}$ 35'00	7.81288 AU
evening set	-8229 Nov 07 j 14:55	3° $\overline{u}$ 30'25		direct	-8223 Oct 22 j 10:35	22° $\overline{x}$ 02'22	
					-8222 Jan 31 j 02:09	0° $\overline{z}$	
conjunction	-8229 Nov 24 j 18:18	5° $\overline{u}$ 41'59	0°45'15	evening set	-8222 Feb 04 j 01:23	0° $\overline{z}$ 31'00	
minimum elong	-8229 Nov 24 j 18:20	5° $\overline{u}$ 42'00	0°45'14				
max. Earth dist.	-8229 Nov 24 j 10:46	5° $\overline{u}$ 39'34	10.23993 AU	conjunction	-8222 Feb 22 j 03:41	2° $\overline{z}$ 55'08	-2°15'47
morning rise	-8229 Dec 12 j 02:55	7° $\overline{u}$ 55'20		minimum elong	-8222 Feb 22 j 03:38	2° $\overline{z}$ 55'07	2°16'20
retrograde	-8228 Mar 28 j 12:55	16° $\overline{u}$ 09'25		max. Earth dist.	-8222 Feb 23 j 02:44	3° $\overline{z}$ 02'50	9.82947 AU
opposition	-8228 Jun 05 j 21:13	12° $\overline{u}$ 40'38	0°34'50	morning rise	-8222 Mar 12 j 07:44	5° $\overline{z}$ 19'45	
min. Earth dist.	-8228 Jun 06 j 01:06	12° $\overline{u}$ 39'52	8.16550 AU	retrograde	-8222 Jun 26 j 23:31	13° $\overline{z}$ 56'00	
direct	-8228 Aug 11 j 16:43	9° $\overline{u}$ 17'14		opposition	-8222 Sep 01 j 12:54	10° $\overline{z}$ 24'32	-2°57'29
evening set	-8228 Nov 20 j 10:59	17° $\overline{u}$ 09'21		min. Earth dist.	-8222 Aug 31 j 18:24	10° $\overline{z}$ 28'25	7.86039 AU
				direct	-8222 Nov 06 j 14:14	6° $\overline{z}$ 54'36	
conjunction	-8228 Dec 07 j 19:52	19° $\overline{u}$ 24'39	0°10'59	evening set	-8221 Feb 19 j 21:56	15° $\overline{z}$ 21'56	
minimum elong	-8228 Dec 07 j 19:53	19° $\overline{u}$ 24'39	0°10'52				
behind sun begin	-8228 Dec 07 j 14:24	19° $\overline{u}$ 22'53		conjunction	-8221 Mar 10 j 00:40	17° $\overline{z}$ 44'49	-2°24'35
behind sun end	-8228 Dec 08 j 01:22	19° $\overline{u}$ 26'26		minimum elong	-8221 Mar 10 j 00:39	17° $\overline{z}$ 44'49	2°25'08
max. Earth dist.	-8228 Dec 07 j 17:02	19° $\overline{u}$ 23'44	10.09687 AU	max. Earth dist.	-8221 Mar 11 j 02:19	17° $\overline{z}$ 53'19	9.89689 AU
morning rise	-8228 Dec 25 j 10:21	21° $\overline{u}$ 41'50		morning rise	-8221 Mar 28 j 03:35	20° $\overline{z}$ 07'42	
	-8227 Mar 31 j 13:50	0° $\overline{m}$		retrograde	-8221 Jul 11 j 15:36	28° $\overline{z}$ 33'35	
desc. node	-8227 Apr 03 j 16:34	0° $\overline{m}$ 03'25		min. Earth dist.	-8221 Sep 15 j 06:03	25° $\overline{z}$ 07'26	7.94643 AU
retrograde	-8227 Apr 12 j 11:34	0° $\overline{m}$ 07'31		opposition	-8221 Sep 16 j 01:39	25° $\overline{z}$ 03'19	-3°02'10
	-8227 Apr 24 j 08:10	30° $\overline{r}$ $\overline{u}$		direct	-8221 Nov 21 j 15:40	21° $\overline{z}$ 33'06	
opposition	-8227 Jun 20 j 06:41	26° $\overline{u}$ 37'14	-0°09'15	evening set	-8220 Mar 06 j 12:02	29° $\overline{z}$ 55'38	
min. Earth dist.	-8227 Jun 20 j 06:13	26° $\overline{u}$ 37'19	8.03161 AU		-8220 Mar 07 j 01:40	0° $\overline{z}$	
direct	-8227 Aug 25 j 12:44	23° $\overline{u}$ 12'33					
	-8227 Nov 25 j 01:41	0° $\overline{m}$		conjunction	-8220 Mar 24 j 14:18	2° $\overline{z}$ 16'29	-2°24'00
evening set	-8227 Dec 04 j 21:12	1° $\overline{m}$ 15'07		minimum elong	-8220 Mar 24 j 14:19	2° $\overline{z}$ 16'29	2°24'29
				max. Earth dist.	-8220 Mar 25 j 16:34	2° $\overline{z}$ 25'03	10.00028 AU
conjunction	-8227 Dec 22 j 11:17	3° $\overline{m}$ 33'51	-0°24'57	morning rise	-8220 Apr 11 j 15:17	4° $\overline{z}$ 36'50	
minimum elong	-8227 Dec 22 j 11:16	3° $\overline{m}$ 33'50	0°25'12	retrograde	-8220 Jul 24 j 20:20	12° $\overline{z}$ 49'33	
max. Earth dist.	-8227 Dec 22 j 13:17	3° $\overline{m}$ 34'30	9.97379 AU	min. Earth dist.	-8220 Sep 28 j 11:23	9° $\overline{z}$ 24'51	8.06458 AU
morning rise	-8226 Jan 09 j 07:03	5° $\overline{m}$ .54'27		opposition	-8220 Sep 29 j 06:30	9° $\overline{z}$ 20'53	-2°55'18
retrograde	-8226 Apr 27 j 17:25	14° $\overline{m}$ .29'48		direct	-8220 Dec 05 j 11:53	5° $\overline{z}$ 50'44	
opposition	-8226 Jul 04 j 22:58	10° $\overline{m}$ .58'20	-0°54'09	evening set	-8219 Mar 21 j 15:43	14° $\overline{z}$ 05'32	
min. Earth dist.	-8226 Jul 04 j 18:27	10° $\overline{m}$ .59'16	7.92207 AU		-8219 Mar 28 j 19:30	15° $\overline{z}$	
direct	-8226 Sep 08 j 18:54	7° $\overline{m}$ 32'23					
	-8226 Dec 14 j 02:42	15° $\overline{m}$		conjunction	-8219 Apr 08 j 16:43	16° $\overline{z}$ 23'44	-2°14'40
evening set	-8226 Dec 19 j 20:49	15° $\overline{m}$ .44'47		minimum elong	-8219 Apr 08 j 16:46	16° $\overline{z}$ 23'45	2°15'05
				max. Earth dist.	-8219 Apr 09 j 17:39	16° $\overline{z}$ 31'44	10.13210 AU
conjunction	-8225 Jan 06 j 15:32	18° $\overline{m}$ .06'21	-1°00'05	morning rise	-8219 Apr 26 j 15:12	18° $\overline{z}$ 41'02	
minimum elong	-8225 Jan 06 j 15:29	18° $\overline{m}$ .06'20	1°00'27	retrograde	-8219 Aug 07 j 12:53	26° $\overline{z}$ 39'04	
max. Earth dist.	-8225 Jan 06 j 23:10	18° $\overline{m}$ .08'54	9.87897 AU	min. Earth dist.	-8219 Oct 12 j 08:42	23° $\overline{z}$ 15'48	8.20669 AU
morning rise	-8225 Jan 24 j 15:33	20° $\overline{m}$ .29'38		opposition	-8219 Oct 13 j 02:03	23° $\overline{z}$ 12'15	-2°38'18
retrograde	-8225 May 13 j 03:31	29° $\overline{m}$ .11'39		direct	-8219 Dec 20 j 00:25	19° $\overline{z}$ 42'33	
opposition	-8225 Jul 19 j 20:04	25° $\overline{m}$ .39'27	-1°36'36	evening set	-8218 Apr 05 j 06:57	27° $\overline{z}$ 47'35	
min. Earth dist.	-8225 Jul 19 j 11:30	25° $\overline{m}$ .41'14	7.84521 AU		-8218 Apr 22 j 21:17	0° $\overline{z}$	
direct	-8225 Sep 23 j 10:11	22° $\overline{m}$ .12'15					
	-8225 Dec 31 j 03:26	0° $\overline{x}$		conjunction	-8218 Apr 23 j 06:01	0° $\overline{z}$ 02'45	-1°57'54
evening set	-8224 Jan 04 j 08:06	0° $\overline{x}$ 32'53		minimum elong	-8218 Apr 23 j 06:05	0° $\overline{z}$ 02'47	1°58'14
				max. Earth dist.	-8218 Apr 24 j 03:45	0° $\overline{z}$ 09'37	10.28355 AU
conjunction	-8224 Jan 22 j 06:29	2° $\overline{x}$ 56'24	-1°31'54	morning rise	-8218 May 11 j 01:35	2° $\overline{z}$ 16'44	
minimum elong	-8224 Jan 22 j 06:25	2° $\overline{x}$ 56'23	1°32'21	retrograde	-8218 Aug 20 j 16:45	9° $\overline{z}$ 59'42	

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), AstroDienst AG 18-Feb-2025 14:23, page 16

Attention, astronomical year style is used: The year -8218 in astronomical counting style is the year 8219 BCE in historical counting style.

opposition	-8218 Oct 26 j 11:42	6° $\text{X}$ 34'52	-2°13'12	retrograde	-8212 Oct 28 j 16:31	21° $\text{B}$ 17'04	
min. Earth dist.	-8218 Oct 25 j 21:02	6° $\text{X}$ 37'50	8.36384 AU	opposition	-8211 Jan 05 j 23:29	18° $\text{B}$ 01'41	1°13'43
direct	-8217 Jan 03 j 04:42	3° $\text{X}$ 05'57		min. Earth dist.	-8211 Jan 06 j 05:41	18° $\text{B}$ 00'32	9.18447 AU
evening set	-8217 Apr 19 j 08:34	11° $\text{X}$ 00'09			-8211 Feb 26 j 09:25	15° $\text{R}$ $\text{B}$	
				direct	-8211 Mar 18 j 21:32	14° $\text{B}$ 40'29	
conjunction	-8217 May 07 j 05:03	13° $\text{X}$ 12'06	-1°35'23		-8211 Apr 08 j 06:30	15° $\text{B}$	
minimum elong	-8217 May 07 j 05:07	13° $\text{X}$ 12'07	1°35'36	evening set	-8211 Jun 30 j 08:52	21° $\text{B}$ 41'41	
max. Earth dist.	-8217 May 07 j 22:15	13° $\text{X}$ 17'26	10.44548 AU				
morning rise	-8217 May 24 j 21:17	15° $\text{X}$ 22'39		conjunction	-8211 Jul 17 j 05:25	23° $\text{B}$ 37'21	1°13'23
retrograde	-8217 Sep 02 j 08:02	22° $\text{X}$ 51'16		minimum elong	-8211 Jul 17 j 05:22	23° $\text{B}$ 37'20	1°13'47
opposition	-8217 Nov 08 j 11:55	19° $\text{X}$ 28'25	-1°42'14	max. Earth dist.	-8211 Jul 16 j 19:41	23° $\text{B}$ 34'33	11.21966 AU
min. Earth dist.	-8217 Nov 07 j 23:50	19° $\text{X}$ 30'49	8.52712 AU	morning rise	-8211 Aug 02 j 21:30	25° $\text{B}$ 31'50	
direct	-8216 Jan 16 j 23:40	16° $\text{X}$ 00'35			-8211 Sep 16 j 22:38	0° $\text{II}$	
evening set	-8216 May 01 j 20:18	23° $\text{X}$ 43'39		retrograde	-8211 Nov 08 j 22:03	2° $\text{II}$ 13'17	
					-8210 Jan 03 j 07:45	30° $\text{R}$ $\text{B}$	
conjunction	-8216 May 19 j 13:38	25° $\text{X}$ 52'20	-1°08'51	opposition	-8210 Jan 17 j 13:10	28° $\text{B}$ 58'30	1°43'30
minimum elong	-8216 May 19 j 13:41	25° $\text{X}$ 52'21	1°08'57	min. Earth dist.	-8210 Jan 17 j 22:34	28° $\text{B}$ 56'46	9.24837 AU
max. Earth dist.	-8216 May 20 j 02:25	25° $\text{X}$ 56'14	10.60917 AU	direct	-8210 Mar 30 j 15:25	25° $\text{B}$ 38'22	
morning rise	-8216 Jun 06 j 02:07	27° $\text{X}$ 59'30			-8210 Jun 17 j 06:29	0° $\text{II}$	
	-8216 Jun 23 j 11:27	0° $\text{Y}$		evening set	-8210 Jul 11 j 13:08	2° $\text{II}$ 35'26	
retrograde	-8216 Sep 13 j 13:57	5° $\text{Y}$ 15'12					
opposition	-8216 Nov 20 j 03:14	1° $\text{Y}$ 54'16	-1°07'34	conjunction	-8210 Jul 28 j 05:40	4° $\text{II}$ 29'38	1°36'18
min. Earth dist.	-8216 Nov 19 j 17:59	1° $\text{Y}$ 56'04	8.68833 AU	minimum elong	-8210 Jul 28 j 05:38	4° $\text{II}$ 29'37	1°36'47
	-8216 Dec 16 j 00:28	30° $\text{R}$ $\text{X}$		max. Earth dist.	-8210 Jul 27 j 16:29	4° $\text{II}$ 25'50	11.26830 AU
direct	-8215 Jan 29 j 07:57	28° $\text{X}$ 27'42		morning rise	-8210 Aug 13 j 18:17	6° $\text{II}$ 22'49	
	-8215 Mar 14 j 03:54	0° $\text{Y}$		retrograde	-8210 Nov 20 j 01:43	13° $\text{II}$ 03'45	
evening set	-8215 May 14 j 19:05	6° $\text{Y}$ 00'02		opposition	-8209 Jan 29 j 02:01	9° $\text{II}$ 49'12	2°09'18
				min. Earth dist.	-8209 Jan 29 j 15:17	9° $\text{II}$ 46'47	9.28258 AU
conjunction	-8215 Jun 01 j 08:51	8° $\text{Y}$ 05'35	-0°39'56	direct	-8209 Apr 11 j 03:01	6° $\text{II}$ 29'55	
minimum elong	-8215 Jun 01 j 08:53	8° $\text{Y}$ 05'36	0°39'56	evening set	-8209 Jul 22 j 13:56	13° $\text{II}$ 24'25	
max. Earth dist.	-8215 Jun 01 j 17:32	8° $\text{Y}$ 08'11	10.76686 AU	max. Earth dist.	-8209 Aug 07 j 09:29	15° $\text{II}$ 12'38	11.28663 AU
morning rise	-8215 Jun 18 j 17:13	10° $\text{Y}$ 09'32					
retrograde	-8215 Sep 25 j 12:29	17° $\text{Y}$ 14'07		conjunction	-8209 Aug 08 j 02:48	15° $\text{II}$ 17'37	1°55'39
opposition	-8215 Dec 02 j 10:37	13° $\text{Y}$ 54'57	-0°31'09	minimum elong	-8209 Aug 08 j 02:45	15° $\text{II}$ 17'36	1°56'10
min. Earth dist.	-8215 Dec 02 j 05:03	13° $\text{Y}$ 56'01	8.84030 AU	morning rise	-8209 Aug 24 j 12:46	17° $\text{II}$ 10'03	
direct	-8214 Feb 11 j 04:21	10° $\text{Y}$ 29'46		retrograde	-8209 Dec 01 j 06:48	23° $\text{II}$ 52'27	
evening set	-8214 May 27 j 06:13	17° $\text{Y}$ 52'18		opposition	-8208 Feb 09 j 15:23	20° $\text{II}$ 37'45	2°30'27
				min. Earth dist.	-8208 Feb 10 j 07:49	20° $\text{II}$ 34'46	9.28590 AU
conjunction	-8214 Jun 13 j 15:56	19° $\text{Y}$ 54'55	-0°10'09	direct	-8208 Apr 21 j 15:10	17° $\text{II}$ 19'03	
minimum elong	-8214 Jun 13 j 15:56	19° $\text{Y}$ 54'55	0°10'01	evening set	-8208 Aug 01 j 12:37	24° $\text{II}$ 12'31	
behind sun begin	-8214 Jun 13 j 10:13	19° $\text{Y}$ 53'15					
behind sun end	-8214 Jun 13 j 21:40	19° $\text{Y}$ 56'36		conjunction	-8208 Aug 17 j 22:42	26° $\text{II}$ 05'15	2°10'51
max. Earth dist.	-8214 Jun 13 j 20:05	19° $\text{Y}$ 56'08	10.91178 AU	minimum elong	-8208 Aug 17 j 22:39	26° $\text{II}$ 05'14	2°11'24
morning rise	-8214 Jun 30 j 20:04	21° $\text{Y}$ 55'57		max. Earth dist.	-8208 Aug 17 j 02:32	25° $\text{II}$ 59'26	11.27379 AU
retrograde	-8214 Oct 07 j 02:19	28° $\text{Y}$ 51'29		morning rise	-8208 Sep 03 j 06:45	27° $\text{II}$ 57'28	
asc. node	-8214 Oct 19 j 21:30	28° $\text{Y}$ 43'02			-8208 Sep 22 j 01:12	0° $\text{B}$	
opposition	-8214 Dec 14 j 11:38	25° $\text{Y}$ 33'53	0°05'24	retrograde	-8208 Dec 11 j 15:39	4° $\text{B}$ 43'19	
min. Earth dist.	-8214 Dec 14 j 10:40	25° $\text{Y}$ 34'04	8.97684 AU	opposition	-8207 Feb 20 j 06:24	1° $\text{B}$ 28'03	2°46'21
direct	-8213 Feb 23 j 17:25	22° $\text{Y}$ 10'05		min. Earth dist.	-8207 Feb 21 j 00:36	1° $\text{B}$ 24'45	9.25758 AU
evening set	-8213 Jun 08 j 07:11	29° $\text{Y}$ 24'06			-8207 Mar 13 j 05:09	30° $\text{R}$ $\text{II}$	
	-8213 Jun 13 j 12:04	0° $\text{B}$		direct	-8207 May 03 j 01:31	28° $\text{II}$ 09'44	
					-8207 Jun 21 j 01:19	0° $\text{B}$	
conjunction	-8213 Jun 25 j 12:24	1° $\text{B}$ 24'00	0°19'24	evening set	-8207 Aug 12 j 11:13	5° $\text{B}$ 03'42	
minimum elong	-8213 Jun 25 j 12:23	1° $\text{B}$ 24'00	0°19'38				
max. Earth dist.	-8213 Jun 25 j 10:59	1° $\text{B}$ 23'36	11.03833 AU	conjunction	-8207 Aug 28 j 19:27	6° $\text{B}$ 56'34	2°21'27
morning rise	-8213 Jul 12 j 12:23	3° $\text{B}$ 22'27		minimum elong	-8207 Aug 28 j 19:26	6° $\text{B}$ 56'33	2°21'59
retrograde	-8213 Oct 18 j 11:46	10° $\text{B}$ 11'08		max. Earth dist.	-8207 Aug 27 j 21:53	6° $\text{B}$ 50'18	11.22939 AU
opposition	-8213 Dec 26 j 07:30	6° $\text{B}$ 54'49	0°40'43	morning rise	-8207 Sep 14 j 02:19	8° $\text{B}$ 49'09	
min. Earth dist.	-8213 Dec 26 j 10:32	6° $\text{B}$ 54'15	9.09290 AU	retrograde	-8207 Dec 23 j 05:55	15° $\text{B}$ 40'20	
direct	-8212 Mar 06 j 22:58	3° $\text{B}$ 32'22		opposition	-8206 Mar 04 j 00:29	12° $\text{B}$ 24'12	2°56'28
evening set	-8212 Jun 18 j 23:34	10° $\text{B}$ 39'14		min. Earth dist.	-8206 Mar 04 j 20:08	12° $\text{B}$ 20'38	9.19775 AU
				direct	-8206 May 14 j 11:36	9° $\text{B}$ 06'00	
conjunction	-8212 Jul 06 j 00:17	12° $\text{B}$ 36'49	0°47'30	evening set	-8206 Aug 23 j 11:28	16° $\text{B}$ 02'07	
minimum elong	-8212 Jul 06 j 00:15	12° $\text{B}$ 36'48	0°47'49				
max. Earth dist.	-8212 Jul 05 j 17:59	12° $\text{B}$ 34'59	11.14213 AU	conjunction	-8206 Sep 08 j 18:43	17° $\text{B}$ 55'42	2°26'59
morning rise	-8212 Jul 22 j 20:16	14° $\text{B}$ 33'04		minimum elong	-8206 Sep 08 j 18:43	17° $\text{B}$ 55'42	2°27'30
	-8212 Jul 26 j 19:52	15° $\text{B}$		max. Earth dist.	-8206 Sep 07 j 19:20	17° $\text{B}$ 48'52	11.15449 AU



## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 17

Attention, astronomical year style is used: The year -8206 in astronomical counting style is the year 8207 BCE in historical counting style.

morning rise	-8206 Sep 25 j 01:35	19°♄49'18		max. Earth dist.	-8200 Nov 17 j 16:44	0°♄00'50	10.29331 AU
retrograde	-8205 Jan 04 j 02:26	26°♄47'41		morning rise	-8200 Dec 05 j 11:04	2°♄16'29	
opposition	-8205 Mar 15 j 23:27	23°♄30'24	3°00'15	retrograde	-8199 Mar 22 j 11:51	10°♄25'26	
min. Earth dist.	-8205 Mar 16 j 20:28	23°♄26'33	9.10843 AU	opposition	-8199 May 31 j 02:04	6°♄56'51	0°53'23
direct	-8205 May 25 j 23:16	20°♄12'04		min. Earth dist.	-8199 May 31 j 09:46	6°♄55'20	8.21368 AU
evening set	-8205 Sep 03 j 15:02	27°♄11'48		direct	-8199 Aug 06 j 04:39	3°♄33'21	
				evening set	-8199 Nov 14 j 17:43	11°♄21'29	
conjunction	-8205 Sep 19 j 22:22	29°♄06'44	2°27'03	conjunction	-8199 Dec 02 j 00:11	13°♄35'22	0°26'26
minimum elong	-8205 Sep 19 j 22:23	29°♄06'44	2°27'33	minimum elong	-8199 Dec 02 j 00:13	13°♄35'23	0°26'22
max. Earth dist.	-8205 Sep 18 j 21:38	28°♄59'25	11.05195 AU	max. Earth dist.	-8199 Dec 01 j 17:52	13°♄33'19	10.13959 AU
	-8205 Sep 27 j 10:36	0°♄		morning rise	-8199 Dec 19 j 12:18	15°♄51'07	
morning rise	-8205 Oct 06 j 06:33	1°♄02'00		retrograde	-8198 Apr 06 j 05:53	24°♄12'40	
retrograde	-8204 Jan 16 j 05:15	8°♄09'19		opposition	-8198 Jun 14 j 08:38	20°♄42'22	0°10'29
opposition	-8204 Mar 27 j 04:14	4°♄50'31	2°57'13	min. Earth dist.	-8198 Jun 14 j 11:20	20°♄41'50	8.06829 AU
min. Earth dist.	-8204 Mar 28 j 01:49	4°♄46'32	8.99309 AU	direct	-8198 Aug 19 j 21:47	17°♄17'36	
direct	-8204 Jun 05 j 15:27	1°♄31'48		desc. node	-8198 Sep 11 j 02:33	17°♄45'43	
evening set	-8204 Sep 13 j 23:51	8°♄36'36		evening set	-8198 Nov 28 j 21:53	25°♄16'26	
max. Earth dist.	-8204 Sep 29 j 08:48	10°♄26'23	10.92565 AU				
conjunction	-8204 Sep 30 j 08:38	10°♄33'32	2°21'19	conjunction	-8198 Dec 16 j 09:56	27°♄34'00	-0°09'06
minimum elong	-8204 Sep 30 j 08:40	10°♄33'32	2°21'47	minimum elong	-8198 Dec 16 j 09:55	27°♄34'00	0°09'18
morning rise	-8204 Oct 16 j 19:12	12°♄31'04		behind sun begin	-8198 Dec 16 j 03:51	27°♄32'01	
	-8204 Nov 07 j 20:44	15°♄		behind sun end	-8198 Dec 16 j 16:00	27°♄35'59	
retrograde	-8203 Jan 27 j 18:49	19°♄48'50		max. Earth dist.	-8198 Dec 16 j 10:15	27°♄34'06	10.00461 AU
opposition	-8203 Apr 08 j 15:38	16°♄28'15	2°46'58	morning rise	-8197 Jan 03 j 03:33	29°♄53'26	
min. Earth dist.	-8203 Apr 09 j 11:55	16°♄24'28	8.85609 AU		-8197 Jan 03 j 23:55	0°♄	
	-8203 Apr 29 j 01:16	15°♄♄		retrograde	-8197 Apr 21 j 09:01	8°♄25'49	
direct	-8203 Jun 17 j 13:43	13°♄08'55		opposition	-8197 Jun 28 j 22:31	4°♄54'08	-0°34'31
	-8203 Aug 03 j 23:51	15°♄		min. Earth dist.	-8197 Jun 28 j 19:44	4°♄54'43	7.94643 AU
evening set	-8203 Sep 25 j 15:41	20°♄20'08		direct	-8197 Sep 02 j 23:56	1°♄28'06	
max. Earth dist.	-8203 Oct 11 j 05:24	22°♄13'02	10.78030 AU	evening set	-8197 Dec 13 j 16:12	9°♄37'09	
conjunction	-8203 Oct 12 j 03:07	22°♄19'39	2°09'35	conjunction	-8197 Dec 31 j 09:16	11°♄57'53	-0°44'54
minimum elong	-8203 Oct 12 j 03:10	22°♄19'40	2°09'59	minimum elong	-8197 Dec 31 j 09:13	11°♄57'52	0°45'13
morning rise	-8203 Oct 28 j 17:07	24°♄20'04		max. Earth dist.	-8197 Dec 31 j 16:08	12°♄00'10	9.89704 AU
	-8203 Dec 23 j 21:51	0°♄		morning rise	-8196 Jan 18 j 07:33	14°♄20'21	
retrograde	-8202 Feb 09 j 18:43	1°♄49'35			-8196 Jan 23 j 09:57	15°♄	
	-8202 Mar 31 j 03:29	30°♄♄		retrograde	-8196 May 05 j 18:25	23°♄00'47	
opposition	-8202 Apr 21 j 11:02	28°♄27'03	2°29'15	opposition	-8196 Jul 12 j 18:08	19°♄28'10	-1°18'32
min. Earth dist.	-8202 Apr 22 j 04:48	28°♄23'41	8.70272 AU	min. Earth dist.	-8196 Jul 12 j 10:02	19°♄29'51	7.85617 AU
direct	-8202 Jun 29 j 16:23	25°♄06'55		direct	-8196 Sep 16 j 10:42	16°♄00'56	
	-8202 Sep 16 j 18:06	0°♄		evening set	-8196 Dec 27 j 23:03	24°♄18'55	
evening set	-8202 Oct 07 j 16:23	2°♄25'48					
conjunction	-8202 Oct 24 j 07:26	4°♄28'25	1°51'48	conjunction	-8195 Jan 14 j 20:06	26°♄41'57	-1°18'32
minimum elong	-8202 Oct 24 j 07:30	4°♄28'26	1°52'06	minimum elong	-8195 Jan 14 j 20:02	26°♄41'56	1°18'58
max. Earth dist.	-8202 Oct 23 j 12:06	4°♄22'26	10.62174 AU	max. Earth dist.	-8195 Jan 15 j 09:07	26°♄46'19	9.82439 AU
morning rise	-8202 Nov 10 j 02:02	6°♄32'15		morning rise	-8195 Feb 01 j 21:45	29°♄06'30	
retrograde	-8201 Feb 23 j 05:08	14°♄14'33			-8195 Feb 08 j 18:15	0°♄	
opposition	-8201 May 04 j 15:07	10°♄49'57	2°04'04	retrograde	-8195 May 21 j 06:30	7°♄51'17	
min. Earth dist.	-8201 May 05 j 05:53	10°♄47'06	8.53942 AU	opposition	-8195 Jul 27 j 17:04	4°♄18'16	-1°58'09
direct	-8201 Jul 12 j 03:26	7°♄28'49		min. Earth dist.	-8195 Jul 27 j 04:32	4°♄20'54	7.80407 AU
evening set	-8201 Oct 20 j 04:02	14°♄56'35		direct	-8195 Oct 01 j 04:51	0°♄49'56	
				evening set	-8194 Jan 12 j 15:24	9°♄14'41	
conjunction	-8201 Nov 05 j 23:35	17°♄02'45	1°28'13	conjunction	-8194 Jan 30 j 15:22	11°♄38'59	-1°47'20
minimum elong	-8201 Nov 05 j 23:38	17°♄02'46	1°28'23	minimum elong	-8194 Jan 30 j 15:17	11°♄38'58	1°47'51
max. Earth dist.	-8201 Nov 05 j 07:00	16°♄57'31	10.45684 AU	max. Earth dist.	-8194 Jan 31 j 09:50	11°♄45'12	9.79239 AU
morning rise	-8201 Nov 22 j 23:44	19°♄10'25		morning rise	-8194 Feb 17 j 19:00	14°♄04'28	
retrograde	-8200 Mar 08 j 03:04	27°♄06'02		retrograde	-8194 Jun 05 j 17:39	22°♄49'11	
opposition	-8200 May 17 j 04:03	23°♄39'24	1°31'47	opposition	-8194 Aug 11 j 16:33	19°♄16'21	-2°30'04
min. Earth dist.	-8200 May 17 j 15:46	23°♄37'06	8.37367 AU	min. Earth dist.	-8194 Aug 11 j 00:38	19°♄19'42	7.79429 AU
direct	-8200 Jul 23 j 23:09	20°♄17'07		direct	-8194 Oct 16 j 05:47	15°♄47'06	
evening set	-8200 Nov 01 j 04:05	27°♄54'45		evening set	-8193 Jan 28 j 13:04	24°♄15'37	
	-8200 Nov 17 j 14:06	0°♄					
conjunction	-8200 Nov 18 j 04:54	0°♄04'44	0°59'24	conjunction	-8193 Feb 15 j 14:52	26°♄40'07	-2°08'59
minimum elong	-8200 Nov 18 j 04:57	0°♄04'45	0°59'27	minimum elong	-8193 Feb 15 j 14:48	26°♄40'06	2°09'33
				max. Earth dist.	-8193 Feb 16 j 13:34	26°♄47'44	9.80374 AU

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 18

Attention, astronomical year style is used: The year -8193 in astronomical counting style is the year 8194 BCE in historical counting style.

morning rise	-8193 Mar 05 j 19:07	29° $\text{Z}$ 05'20	conjunction	-8187 May 14 j 07:36	20° $\text{H}$ 45'05	-1°20'33	
	-8193 Mar 12 j 19:24	0° $\text{Z}$	minimum elong	-8187 May 14 j 07:39	20° $\text{H}$ 45'06	1°20'42	
retrograde	-8193 Jun 20 j 23:09	7° $\text{Z}$ 45'23	max. Earth dist.	-8187 May 14 j 23:56	20° $\text{H}$ 50'06	10.55280 AU	
opposition	-8193 Aug 26 j 13:46	4° $\text{Z}$ 13'18	-2°51'41	morning rise	-8187 May 31 j 21:35	22° $\text{H}$ 53'35	
min. Earth dist.	-8193 Aug 25 j 19:38	4° $\text{Z}$ 17'07	7.82764 AU		-8187 Aug 23 j 13:11	0° $\text{Y}$	
direct	-8193 Oct 31 j 09:58	0° $\text{Z}$ 43'27		retrograde	-8187 Sep 08 j 20:30	0° $\text{Y}$ 14'22	
evening set	-8192 Feb 13 j 11:16	9° $\text{Z}$ 12'11			-8187 Sep 25 j 04:54	30° $\text{R}$ $\text{H}$	
				opposition	-8187 Nov 15 j 04:17	26° $\text{H}$ 53'09	-1°22'40
conjunction	-8192 Mar 02 j 13:47	11° $\text{Z}$ 35'48	-2°21'52	min. Earth dist.	-8187 Nov 14 j 18:11	26° $\text{H}$ 55'08	8.63382 AU
minimum elong	-8192 Mar 02 j 13:45	11° $\text{Z}$ 35'47	2°22'26	direct	-8186 Jan 24 j 00:07	23° $\text{H}$ 26'35	
max. Earth dist.	-8192 Mar 03 j 15:06	11° $\text{Z}$ 44'13	9.85776 AU		-8186 Apr 30 j 16:24	0° $\text{Y}$	
morning rise	-8192 Mar 20 j 17:24	13° $\text{Z}$ 59'39		evening set	-8186 May 09 j 17:18	1° $\text{Y}$ 03'06	
retrograde	-8192 Jul 04 j 19:20	22° $\text{Z}$ 30'49					
min. Earth dist.	-8192 Sep 08 j 10:29	19° $\text{Z}$ 04'03	7.90174 AU	conjunction	-8186 May 27 j 08:36	3° $\text{Y}$ 09'52	-0°52'29
opposition	-8192 Sep 09 j 05:50	18° $\text{Z}$ 59'59	-3°01'33	minimum elong	-8186 May 27 j 08:38	3° $\text{Y}$ 09'52	0°52'30
direct	-8192 Nov 14 j 13:25	15° $\text{Z}$ 29'54		max. Earth dist.	-8186 May 27 j 18:41	3° $\text{Y}$ 12'54	10.71404 AU
evening set	-8191 Feb 28 j 04:53	23° $\text{Z}$ 55'13		morning rise	-8186 Jun 13 j 18:46	5° $\text{Y}$ 15'04	
				retrograde	-8186 Sep 20 j 21:20	12° $\text{Y}$ 23'53	
conjunction	-8191 Mar 18 j 07:16	26° $\text{Z}$ 17'03	-2°25'19	opposition	-8186 Nov 27 j 14:58	9° $\text{Y}$ 04'31	-0°46'48
minimum elong	-8191 Mar 18 j 07:17	26° $\text{Z}$ 17'03	2°25'50	min. Earth dist.	-8186 Nov 27 j 09:03	9° $\text{Y}$ 05'40	8.78952 AU
max. Earth dist.	-8191 Mar 19 j 09:37	26° $\text{Z}$ 25'43	9.95061 AU	direct	-8185 Feb 06 j 02:06	5° $\text{Y}$ 39'13	
morning rise	-8191 Apr 05 j 09:21	28° $\text{Z}$ 38'40		evening set	-8185 May 22 j 09:34	13° $\text{Y}$ 05'36	
	-8191 Apr 16 j 02:26	0° $\approx$					
retrograde	-8191 Jul 19 j 04:39	6° $\approx$ 57'38		conjunction	-8185 Jun 08 j 20:55	15° $\text{Y}$ 09'21	-0°22'54
opposition	-8191 Sep 23 j 14:36	3° $\approx$ 28'27	-2°59'31	minimum elong	-8185 Jun 08 j 20:56	15° $\text{Y}$ 09'22	0°22'49
min. Earth dist.	-8191 Sep 22 j 18:45	3° $\approx$ 32'34	8.01128 AU	max. Earth dist.	-8185 Jun 09 j 01:12	15° $\text{Y}$ 10'37	10.86305 AU
	-8191 Nov 24 j 07:33	30° $\text{R}$ $\text{Z}$		morning rise	-8185 Jun 26 j 03:01	17° $\text{Y}$ 11'32	
direct	-8191 Nov 29 j 12:55	29° $\text{Z}$ 58'29		retrograde	-8185 Oct 02 j 13:45	24° $\text{Y}$ 10'31	
	-8191 Dec 04 j 17:36	0° $\approx$		opposition	-8185 Dec 09 j 18:42	20° $\text{Y}$ 52'42	-0°10'09
evening set	-8190 Mar 15 j 13:43	8° $\approx$ 17'07		min. Earth dist.	-8185 Dec 09 j 16:17	20° $\text{Y}$ 53'09	8.93044 AU
				direct	-8184 Feb 18 j 20:23	17° $\text{Y}$ 28'41	
conjunction	-8190 Apr 02 j 15:18	10° $\approx$ 36'31	-2°19'37	asc. node	-8184 Mar 23 j 08:34	18° $\text{Y}$ 22'02	
minimum elong	-8190 Apr 02 j 15:20	10° $\approx$ 36'31	2°20'04	evening set	-8184 Jun 02 j 14:46	24° $\text{Y}$ 46'03	
max. Earth dist.	-8190 Apr 03 j 17:15	10° $\approx$ 44'55	10.07563 AU				
morning rise	-8190 Apr 20 j 15:08	12° $\approx$ 55'13		conjunction	-8184 Jun 19 j 21:56	26° $\text{Y}$ 47'01	0°06'56
	-8190 May 07 j 12:38	15° $\approx$		minimum elong	-8184 Jun 19 j 21:57	26° $\text{Y}$ 47'01	0°07'07
retrograde	-8190 Aug 02 j 02:16	20° $\approx$ 59'53		behind sun begin	-8184 Jun 19 j 15:25	26° $\text{Y}$ 45'08	
opposition	-8190 Oct 07 j 14:29	17° $\approx$ 32'36	-2°46'37	behind sun end	-8184 Jun 20 j 04:29	26° $\text{Y}$ 48'55	
min. Earth dist.	-8190 Oct 06 j 19:09	17° $\approx$ 36'34	8.14852 AU	max. Earth dist.	-8184 Jun 19 j 21:46	26° $\text{Y}$ 46'58	10.99459 AU
	-8190 Nov 11 j 09:48	15° $\text{R}$ $\approx$		morning rise	-8184 Jul 06 j 23:47	28° $\text{Y}$ 46'29	
direct	-8190 Dec 14 j 05:14	14° $\approx$ 03'06			-8184 Jul 17 j 20:36	0° $\text{Z}$	
	-8189 Jan 15 j 23:08	15° $\approx$		retrograde	-8184 Oct 13 j 02:19	5° $\text{Z}$ 37'47	
evening set	-8189 Mar 30 j 11:02	22° $\approx$ 12'35		opposition	-8184 Dec 20 j 16:42	2° $\text{Z}$ 21'12	0°25'50
				min. Earth dist.	-8184 Dec 20 j 18:03	2° $\text{Z}$ 20'57	9.05183 AU
conjunction	-8189 Apr 17 j 11:04	24° $\approx$ 29'04	-2°05'51		-8183 Jan 24 j 11:41	30° $\text{R}$ $\text{Y}$	
minimum elong	-8189 Apr 17 j 11:08	24° $\approx$ 29'05	2°06'12	direct	-8183 Mar 02 j 04:51	28° $\text{Y}$ 58'26	
max. Earth dist.	-8189 Apr 18 j 11:11	24° $\approx$ 36'44	10.22408 AU		-8183 Apr 07 j 12:25	0° $\text{Z}$	
morning rise	-8189 May 05 j 08:02	26° $\approx$ 44'29		evening set	-8183 Jun 14 j 10:47	6° $\text{Z}$ 08'05	
	-8189 Jun 02 j 00:34	0° $\text{H}$					
retrograde	-8189 Aug 15 j 12:47	4° $\text{H}$ 33'57		conjunction	-8183 Jul 01 j 13:39	8° $\text{Z}$ 06'37	0°35'43
min. Earth dist.	-8189 Oct 20 j 11:02	1° $\text{H}$ 12'16	8.30440 AU	minimum elong	-8183 Jul 01 j 13:37	8° $\text{Z}$ 06'37	0°35'59
opposition	-8189 Oct 21 j 04:38	1° $\text{H}$ 08'42	-2°24'42	max. Earth dist.	-8183 Jul 01 j 09:13	8° $\text{Z}$ 05'20	11.10433 AU
	-8189 Nov 04 j 14:18	30° $\text{R}$ $\approx$		morning rise	-8183 Jul 18 j 11:14	10° $\text{Z}$ 03'44	
direct	-8189 Dec 28 j 13:08	27° $\approx$ 39'59			-8183 Sep 07 j 00:45	15° $\text{Z}$	
	-8188 Feb 19 j 16:19	0° $\text{H}$		retrograde	-8183 Oct 24 j 09:01	16° $\text{Z}$ 49'26	
evening set	-8188 Apr 12 j 18:57	5° $\text{H}$ 38'46			-8183 Dec 12 j 09:10	15° $\text{R}$ $\text{Z}$	
				opposition	-8182 Jan 01 j 10:10	13° $\text{Z}$ 33'47	0°59'57
conjunction	-8188 Apr 30 j 16:44	7° $\text{H}$ 52'03	-1°45'34	min. Earth dist.	-8182 Jan 01 j 16:04	13° $\text{Z}$ 32'41	9.14981 AU
minimum elong	-8188 Apr 30 j 16:48	7° $\text{H}$ 52'05	1°45'50	direct	-8182 Mar 14 j 04:48	10° $\text{Z}$ 12'05	
max. Earth dist.	-8188 May 01 j 13:42	7° $\text{H}$ 58'36	10.38642 AU		-8182 Jun 05 j 02:45	15° $\text{Z}$	
morning rise	-8188 May 18 j 10:20	10° $\text{H}$ 04'00		evening set	-8182 Jun 25 j 23:14	17° $\text{Z}$ 15'31	
retrograde	-8188 Aug 27 j 10:15	17° $\text{H}$ 38'31					
opposition	-8188 Nov 02 j 09:09	14° $\text{H}$ 15'20	-1°55'59	conjunction	-8182 Jul 12 j 21:36	19° $\text{Z}$ 11'59	1°02'38
min. Earth dist.	-8188 Nov 01 j 18:42	14° $\text{H}$ 18'13	8.46935 AU	minimum elong	-8182 Jul 12 j 21:33	19° $\text{Z}$ 11'58	1°02'59
direct	-8187 Jan 10 j 11:47	10° $\text{H}$ 47'37		max. Earth dist.	-8182 Jul 12 j 12:02	19° $\text{Z}$ 09'13	11.18884 AU
evening set	-8187 Apr 26 j 12:44	18° $\text{H}$ 35'06		morning rise	-8182 Jul 29 j 15:19	21° $\text{Z}$ 07'10	
				retrograde	-8182 Nov 04 j 13:03	27° $\text{Z}$ 49'26	

Attention, astronomical year style is used: The year -8181 in astronomical counting style is the year 8182 BCE in historical counting style.

opposition	-8181 Jan 13 j 00:48	24° <b>8</b> 34'22	1°31'12		-8175 Mar 24 j 19:51	30° <b>8</b> 5	
min. Earth dist.	-8181 Jan 13 j 10:49	24° <b>8</b> 32'31	9.22130 AU	direct	-8175 Jun 01 j 01:27	26° <b>5</b> 52'14	
direct	-8181 Mar 26 j 01:30	21° <b>8</b> 13'35			-8175 Aug 03 j 15:11	0° <b>0</b>	
evening set	-8181 Jul 07 j 05:28	28° <b>8</b> 12'18		evening set	-8175 Sep 09 j 11:51	3° <b>0</b> 54'53	
	-8181 Jul 22 j 22:53	0° <b>0</b>					
conjunction	-8181 Jul 23 j 23:35	0° <b>0</b> 07'06	1°26'54	conjunction	-8175 Sep 25 j 19:58	5° <b>0</b> 50'57	2°24'36
minimum elong	-8181 Jul 23 j 23:32	0° <b>0</b> 07'05	1°27'20	minimum elong	-8175 Sep 25 j 20:00	5° <b>0</b> 50'57	2°25'05
max. Earth dist.	-8181 Jul 23 j 09:40	0° <b>0</b> 03'06	11.24562 AU	max. Earth dist.	-8175 Sep 24 j 21:05	5° <b>0</b> 44'08	10.97444 AU
morning rise	-8181 Aug 09 j 13:49	2° <b>0</b> 00'50		morning rise	-8175 Oct 12 j 05:14	7° <b>0</b> 47'29	
retrograde	-8181 Nov 15 j 16:07	8° <b>0</b> 41'47		retrograde	-8174 Jan 19 j 03:54	15° <b>0</b>	
opposition	-8180 Jan 24 j 13:47	5° <b>0</b> 26'53	1°58'48		-8174 Jan 22 j 18:39	15° <b>0</b> 00'38	
min. Earth dist.	-8180 Jan 25 j 02:27	5° <b>0</b> 24'34	9.26411 AU		-8174 Jan 26 j 09:15	15° <b>0</b> 8	
direct	-8180 Apr 05 j 16:45	2° <b>0</b> 06'54		opposition	-8174 Apr 03 j 15:40	11° <b>0</b> 40'36	2°52'26
evening set	-8180 Jul 17 j 07:20	9° <b>0</b> 02'25		min. Earth dist.	-8174 Apr 04 j 11:12	11° <b>0</b> 36'58	8.91133 AU
				direct	-8174 Jun 12 j 19:39	8° <b>0</b> 21'22	
conjunction	-8180 Aug 02 j 21:50	10° <b>0</b> 56'03	1°47'51		-8174 Sep 16 j 18:59	15° <b>0</b>	
minimum elong	-8180 Aug 02 j 21:47	10° <b>0</b> 56'02	1°48'21	evening set	-8174 Sep 21 j 00:22	15° <b>0</b> 29'47	
max. Earth dist.	-8180 Aug 02 j 05:30	10° <b>0</b> 51'21	11.27302 AU	max. Earth dist.	-8174 Oct 06 j 11:54	17° <b>0</b> 21'20	10.84095 AU
morning rise	-8180 Aug 19 j 08:57	12° <b>0</b> 48'49		conjunction	-8174 Oct 07 j 10:23	17° <b>0</b> 28'08	2°15'28
retrograde	-8180 Nov 25 j 21:51	19° <b>0</b> 30'27		minimum elong	-8174 Oct 07 j 10:25	17° <b>0</b> 28'09	2°15'54
opposition	-8179 Feb 04 j 02:25	16° <b>0</b> 15'25	2°22'02	morning rise	-8174 Oct 23 j 22:47	19° <b>0</b> 27'17	
min. Earth dist.	-8179 Feb 04 j 17:30	16° <b>0</b> 12'40	9.27700 AU	retrograde	-8173 Feb 04 j 12:57	26° <b>0</b> 51'36	
direct	-8179 Apr 17 j 05:02	12° <b>0</b> 56'00		opposition	-8173 Apr 16 j 07:39	23° <b>0</b> 29'53	2°37'54
evening set	-8179 Jul 28 j 06:33	19° <b>0</b> 49'55		min. Earth dist.	-8173 Apr 17 j 02:11	23° <b>0</b> 26'24	8.76880 AU
				direct	-8173 Jun 24 j 18:50	20° <b>0</b> 10'06	
conjunction	-8179 Aug 13 j 17:58	21° <b>0</b> 42'53	2°04'54	evening set	-8173 Oct 02 j 20:57	27° <b>0</b> 25'38	
minimum elong	-8179 Aug 13 j 17:55	21° <b>0</b> 42'52	2°05'26				
max. Earth dist.	-8179 Aug 12 j 23:04	21° <b>0</b> 37'27	11.27030 AU	conjunction	-8173 Oct 19 j 10:11	29° <b>0</b> 26'50	2°00'15
morning rise	-8179 Aug 30 j 02:41	23° <b>0</b> 35'13		minimum elong	-8173 Oct 19 j 10:14	29° <b>0</b> 26'51	2°00'36
	-8179 Nov 17 j 04:03	0° <b>0</b>		max. Earth dist.	-8173 Oct 18 j 14:02	29° <b>0</b> 20'39	10.69199 AU
retrograde	-8179 Dec 07 j 04:22	0° <b>0</b> 19'29			-8173 Oct 23 j 22:04	0° <b>0</b> 8	
	-8179 Dec 27 j 09:28	30° <b>0</b> 8		morning rise	-8173 Nov 05 j 02:46	1° <b>0</b> 29'08	
opposition	-8178 Feb 15 j 16:25	27° <b>0</b> 04'01	2°40'18	retrograde	-8172 Feb 17 j 17:44	9° <b>0</b> 05'49	
min. Earth dist.	-8178 Feb 16 j 10:15	27° <b>0</b> 00'46	9.25961 AU	opposition	-8172 Apr 28 j 07:57	5° <b>0</b> 42'16	2°15'51
direct	-8178 Apr 28 j 13:36	23° <b>0</b> 45'01		min. Earth dist.	-8172 Apr 29 j 00:03	5° <b>0</b> 39'12	8.61362 AU
	-8178 Aug 02 j 10:11	0° <b>0</b>		direct	-8172 Jul 06 j 03:56	2° <b>0</b> 21'45	
evening set	-8178 Aug 08 j 04:55	0° <b>0</b> 38'51		evening set	-8172 Oct 14 j 03:44	9° <b>0</b> 45'37	
conjunction	-8178 Aug 24 j 13:50	2° <b>0</b> 31'42	2°17'33	conjunction	-8172 Oct 30 j 21:15	11° <b>0</b> 50'10	1°39'05
minimum elong	-8178 Aug 24 j 13:48	2° <b>0</b> 31'41	2°18'05	minimum elong	-8172 Oct 30 j 21:18	11° <b>0</b> 50'11	1°39'18
max. Earth dist.	-8178 Aug 23 j 15:54	2° <b>0</b> 25'21	11.23764 AU	max. Earth dist.	-8172 Oct 30 j 04:59	11° <b>0</b> 45'05	10.53352 AU
morning rise	-8178 Sep 09 j 21:10	4° <b>0</b> 24'10		morning rise	-8172 Nov 16 j 18:48	13° <b>0</b> 56'05	
retrograde	-8178 Dec 18 j 14:36	11° <b>0</b> 13'02		retrograde	-8171 Mar 02 j 11:25	21° <b>0</b> 45'49	
opposition	-8177 Feb 27 j 09:04	7° <b>0</b> 56'48	2°53'00	opposition	-8171 May 11 j 16:57	18° <b>0</b> 20'24	1°46'30
min. Earth dist.	-8177 Feb 28 j 05:02	7° <b>0</b> 53'10	9.21254 AU	min. Earth dist.	-8171 May 12 j 05:12	18° <b>0</b> 18'02	8.45253 AU
direct	-8177 May 09 j 23:55	4° <b>0</b> 38'00		direct	-8171 Jul 18 j 20:04	14° <b>0</b> 59'02	
evening set	-8177 Aug 19 j 04:03	11° <b>0</b> 33'20		evening set	-8171 Oct 26 j 22:19	22° <b>0</b> 32'12	
conjunction	-8177 Sep 04 j 11:34	13° <b>0</b> 26'38	2°25'19	conjunction	-8171 Nov 12 j 20:50	24° <b>0</b> 40'26	1°12'22
minimum elong	-8177 Sep 04 j 11:33	13° <b>0</b> 26'37	2°25'51	minimum elong	-8171 Nov 12 j 20:53	24° <b>0</b> 40'27	1°12'29
max. Earth dist.	-8177 Sep 03 j 12:29	13° <b>0</b> 19'54	11.17614 AU	max. Earth dist.	-8171 Nov 12 j 08:43	24° <b>0</b> 36'36	10.37281 AU
morning rise	-8177 Sep 20 j 18:28	15° <b>0</b> 19'50		morning rise	-8171 Nov 30 j 00:04	26° <b>0</b> 50'17	
retrograde	-8177 Dec 30 j 08:19	22° <b>0</b> 15'06			-8171 Dec 26 j 19:05	0° <b>0</b> 5	
opposition	-8176 Mar 10 j 05:35	18° <b>0</b> 57'50	2°59'35	retrograde	-8170 Mar 16 j 16:45	4° <b>0</b> 53'20	
min. Earth dist.	-8176 Mar 11 j 01:58	18° <b>0</b> 54'07	9.13718 AU	opposition	-8170 May 25 j 11:14	1° <b>0</b> 26'03	1°10'32
direct	-8176 May 20 j 11:56	15° <b>0</b> 39'05		min. Earth dist.	-8170 May 25 j 19:01	1° <b>0</b> 24'32	8.29330 AU
evening set	-8176 Aug 29 j 05:39	22° <b>0</b> 37'19			-8170 Jun 13 j 07:22	30° <b>0</b> 8	
conjunction	-8176 Sep 14 j 13:00	24° <b>0</b> 31'43	2°27'48	direct	-8170 Jul 31 j 20:19	28° <b>0</b> 03'40	
minimum elong	-8176 Sep 14 j 13:00	24° <b>0</b> 31'43	2°28'19		-8170 Sep 16 j 13:15	0° <b>0</b> 5	
max. Earth dist.	-8176 Sep 13 j 14:08	24° <b>0</b> 24'58	11.08751 AU	evening set	-8170 Nov 09 j 06:04	5° <b>0</b> 46'54	
morning rise	-8176 Sep 30 j 20:28	26° <b>0</b> 26'16		conjunction	-8170 Nov 26 j 09:58	7° <b>0</b> 58'58	0°41'00
	-8176 Nov 03 j 06:23	0° <b>0</b>		minimum elong	-8170 Nov 26 j 10:00	7° <b>0</b> 58'59	0°40'59
retrograde	-8175 Jan 10 j 08:38	3° <b>0</b> 29'41		max. Earth dist.	-8170 Nov 26 j 02:22	7° <b>0</b> 56'31	10.21791 AU
opposition	-8175 Mar 22 j 07:22	0° <b>0</b> 11'08	2°59'33	morning rise	-8170 Dec 13 j 19:18	10° <b>0</b> 12'50	
min. Earth dist.	-8175 Mar 23 j 03:18	0° <b>0</b> 07'27	9.03567 AU	retrograde	-8169 Mar 31 j 07:42	18° <b>0</b> 28'40	

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 20

Attention, astronomical year style is used: The year -8169 in astronomical counting style is the year 8170 BCE in historical counting style.

opposition	-8169 Jun 08 j 14:18	14° <u>♏</u> 59'41	0°29'19			-8163 Jan 12 j 21:37	0° <u>♏</u>	
min. Earth dist.	-8169 Jun 08 j 17:46	14° <u>♏</u> 58'59	8.14430 AU	evening set		-8163 Feb 06 j 00:26	3° <u>♏</u> 01'23	
direct	-8169 Aug 14 j 07:55	11° <u>♏</u> 36'06						
evening set	-8169 Nov 23 j 04:05	19° <u>♏</u> 29'48		conjunction		-8163 Feb 24 j 02:50	5° <u>♏</u> 25'28	-2°17'30
				minimum elong		-8163 Feb 24 j 02:47	5° <u>♏</u> 25'27	2°18'03
conjunction	-8169 Dec 10 j 13:30	21° <u>♏</u> 45'36	0°06'25	max. Earth dist.		-8163 Feb 25 j 02:58	5° <u>♏</u> 33'31	9.83338 AU
minimum elong	-8169 Dec 10 j 13:30	21° <u>♏</u> 45'36	0°06'16	morning rise		-8163 Mar 14 j 06:42	7° <u>♏</u> 49'58	
behind sun begin	-8169 Dec 10 j 06:40	21° <u>♏</u> 43'23		retrograde		-8163 Jun 28 j 20:17	16° <u>♏</u> 25'32	
behind sun end	-8169 Dec 10 j 20:19	21° <u>♏</u> 47'48		opposition		-8163 Sep 03 j 08:53	12° <u>♏</u> 54'14	-2°58'49
max. Earth dist.	-8169 Dec 10 j 10:48	21° <u>♏</u> 44'44	10.07708 AU	min. Earth dist.		-8163 Sep 02 j 13:49	12° <u>♏</u> 58'14	7.86670 AU
morning rise	-8169 Dec 28 j 04:43	24° <u>♏</u> 03'17		direct		-8163 Nov 08 j 10:53	9° <u>♏</u> 24'20	
desc. node	-8168 Feb 16 j 11:45	29° <u>♏</u> 43'41		evening set		-8162 Feb 21 j 20:41	17° <u>♏</u> 51'30	
	-8168 Feb 19 j 13:41	0° <u>♏</u>						
retrograde	-8168 Apr 14 j 07:00	2° <u>♏</u> 30'31		conjunction		-8162 Mar 11 j 23:22	20° <u>♏</u> 14'15	-2°25'03
	-8168 Jun 09 j 13:15	30° <u>♏</u> 0		minimum elong		-8162 Mar 11 j 23:22	20° <u>♏</u> 14'14	2°25'36
opposition	-8168 Jun 22 j 01:01	29° <u>♏</u> 00'03	-0°15'05	max. Earth dist.		-8162 Mar 13 j 01:43	20° <u>♏</u> 22'57	9.90550 AU
min. Earth dist.	-8168 Jun 22 j 00:21	29° <u>♏</u> 00'11	8.01368 AU	morning rise		-8162 Mar 30 j 02:05	22° <u>♏</u> 36'55	
direct	-8168 Aug 27 j 06:01	25° <u>♏</u> 35'11				-8162 Jun 10 j 03:58	0° <u>♏</u>	
	-8168 Nov 06 j 16:29	0° <u>♏</u>		retrograde		-8162 Jul 13 j 11:28	1° <u>♏</u> 01'42	
evening set	-8168 Dec 06 j 16:12	3° <u>♏</u> 39'12				-8162 Aug 15 j 23:12	30° <u>♏</u> 0	
				opposition		-8162 Sep 17 j 21:06	27° <u>♏</u> 31'40	-3°01'55
conjunction	-8168 Dec 24 j 06:50	5° <u>♏</u> 58'22	-0°29'36	min. Earth dist.		-8162 Sep 17 j 01:30	27° <u>♏</u> 35'46	7.95719 AU
minimum elong	-8168 Dec 24 j 06:48	5° <u>♏</u> 58'21	0°29'52	direct		-8162 Nov 23 j 11:44	24° <u>♏</u> 01'30	
max. Earth dist.	-8168 Dec 24 j 09:34	5° <u>♏</u> 59'16	9.95805 AU			-8161 Feb 18 j 02:10	0° <u>♏</u>	
morning rise	-8167 Jan 11 j 03:11	8° <u>♏</u> 19'22		evening set		-8161 Mar 09 j 10:00	2° <u>♏</u> 23'28	
	-8167 Mar 13 j 07:16	15° <u>♏</u>						
retrograde	-8167 Apr 29 j 13:30	16° <u>♏</u> 55'52		conjunction		-8161 Mar 27 j 12:08	4° <u>♏</u> 44'05	-2°23'14
	-8167 Jun 16 j 14:38	15° <u>♏</u> 0		minimum elong		-8161 Mar 27 j 12:10	4° <u>♏</u> 44'06	2°23'44
opposition	-8167 Jul 06 j 18:15	13° <u>♏</u> 24'16	-0°59'53	max. Earth dist.		-8161 Mar 28 j 14:26	4° <u>♏</u> 52'40	10.01310 AU
min. Earth dist.	-8167 Jul 06 j 13:30	13° <u>♏</u> 25'15	7.90880 AU	morning rise		-8161 Apr 14 j 12:56	7° <u>♏</u> 04'10	
direct	-8167 Sep 10 j 13:31	9° <u>♏</u> 58'07				-8161 Jul 11 j 02:07	15° <u>♏</u>	
	-8167 Nov 26 j 01:54	15° <u>♏</u>		retrograde		-8161 Jul 27 j 15:19	15° <u>♏</u> 15'28	
evening set	-8167 Dec 21 j 17:23	18° <u>♏</u> 11'44				-8161 Aug 13 j 03:53	15° <u>♏</u> 0	
				min. Earth dist.		-8161 Oct 01 j 06:28	11° <u>♏</u> 50'56	8.07916 AU
conjunction	-8166 Jan 08 j 12:34	20° <u>♏</u> 33'36	-1°04'29	opposition		-8161 Oct 02 j 01:09	11° <u>♏</u> 47'04	-2°53'35
minimum elong	-8166 Jan 08 j 12:30	20° <u>♏</u> 33'35	1°04'51	direct		-8161 Dec 08 j 07:21	8° <u>♏</u> 17'01	
max. Earth dist.	-8166 Jan 08 j 21:19	20° <u>♏</u> 36'32	9.86806 AU			-8160 Mar 11 j 05:44	15° <u>♏</u>	
morning rise	-8166 Jan 26 j 12:53	22° <u>♏</u> 57'09		evening set		-8160 Mar 23 j 12:40	16° <u>♏</u> 30'56	
	-8166 Apr 01 j 15:09	0° <u>♏</u>						
retrograde	-8166 May 15 j 00:15	1° <u>♏</u> 39'53		conjunction		-8160 Apr 10 j 13:26	18° <u>♏</u> 48'50	-2°12'48
	-8166 Jun 27 j 21:43	30° <u>♏</u> 0		minimum elong		-8160 Apr 10 j 13:29	18° <u>♏</u> 48'51	2°13'13
opposition	-8166 Jul 21 j 15:58	28° <u>♏</u> 07'38	-1°41'47	max. Earth dist.		-8160 Apr 11 j 13:44	18° <u>♏</u> 56'37	10.14835 AU
min. Earth dist.	-8166 Jul 21 j 06:49	28° <u>♏</u> 09'32	7.83687 AU	morning rise		-8160 Apr 28 j 11:42	21° <u>♏</u> 05'49	
direct	-8166 Sep 25 j 05:35	24° <u>♏</u> 40'17		retrograde		-8160 Aug 09 j 06:33	29° <u>♏</u> 02'13	
	-8166 Dec 13 j 03:46	0° <u>♏</u>		opposition		-8160 Oct 14 j 19:42	25° <u>♏</u> 35'41	-2°35'20
evening set	-8165 Jan 06 j 05:52	3° <u>♏</u> 01'53		min. Earth dist.		-8160 Oct 14 j 02:41	25° <u>♏</u> 39'10	8.22426 AU
				direct		-8160 Dec 21 j 20:11	22° <u>♏</u> 06'08	
conjunction	-8165 Jan 24 j 04:38	5° <u>♏</u> 25'35	-1°35'40			-8159 Apr 05 j 17:52	0° <u>♏</u>	
minimum elong	-8165 Jan 24 j 04:33	5° <u>♏</u> 25'33	1°36'08	evening set		-8159 Apr 07 j 02:25	0° <u>♏</u> 10'01	
max. Earth dist.	-8165 Jan 24 j 19:25	5° <u>♏</u> 30'33	9.81436 AU					
morning rise	-8165 Feb 11 j 07:33	7° <u>♏</u> 50'38		conjunction		-8159 Apr 25 j 01:12	2° <u>♏</u> 24'50	-1°55'09
retrograde	-8165 May 30 j 11:34	16° <u>♏</u> 35'32		minimum elong		-8159 Apr 25 j 01:16	2° <u>♏</u> 24'51	1°55'27
opposition	-8165 Aug 05 j 15:29	13° <u>♏</u> 03'05	-2°17'24	max. Earth dist.		-8159 Apr 25 j 22:12	2° <u>♏</u> 31'27	10.30236 AU
min. Earth dist.	-8165 Aug 05 j 02:07	13° <u>♏</u> 05'53	7.80431 AU	morning rise		-8159 May 12 j 20:32	4° <u>♏</u> 38'28	
direct	-8165 Oct 10 j 04:32	9° <u>♏</u> 34'39		retrograde		-8159 Aug 22 j 07:20	12° <u>♏</u> 19'46	
evening set	-8164 Jan 22 j 01:53	18° <u>♏</u> 01'37		opposition		-8159 Oct 28 j 04:16	8° <u>♏</u> 55'12	-2°09'17
				min. Earth dist.		-8159 Oct 27 j 13:23	8° <u>♏</u> 58'12	8.38348 AU
conjunction	-8164 Feb 09 j 03:03	20° <u>♏</u> 26'04	-2°00'40	direct		-8158 Jan 05 j 00:25	5° <u>♏</u> 26'28	
minimum elong	-8164 Feb 09 j 02:59	20° <u>♏</u> 26'03	2°01'11	evening set		-8158 Apr 21 j 02:20	13° <u>♏</u> 19'20	
max. Earth dist.	-8164 Feb 09 j 23:06	20° <u>♏</u> 32'48	9.80227 AU					
morning rise	-8164 Feb 27 j 07:06	22° <u>♏</u> 51'26		conjunction		-8158 May 08 j 22:35	15° <u>♏</u> 30'54	-1°31'57
	-8164 May 03 j 07:16	0° <u>♏</u>		minimum elong		-8158 May 08 j 22:39	15° <u>♏</u> 30'55	1°32'09
retrograde	-8164 Jun 13 j 19:33	1° <u>♏</u> 33'54		max. Earth dist.		-8158 May 09 j 15:35	15° <u>♏</u> 36'10	10.46588 AU
	-8164 Jul 25 j 17:08	30° <u>♏</u> 0		morning rise		-8158 May 26 j 14:30	17° <u>♏</u> 41'04	
opposition	-8164 Aug 19 j 14:07	28° <u>♏</u> 01'47	-2°43'45	retrograde		-8158 Sep 03 j 22:17	25° <u>♏</u> 08'04	
min. Earth dist.	-8164 Aug 18 j 21:19	28° <u>♏</u> 05'19	7.81441 AU	opposition		-8158 Nov 10 j 03:16	21° <u>♏</u> 45'28	-1°37'40
direct	-8164 Oct 24 j 07:29	24° <u>♏</u> 32'28		min. Earth dist.		-8158 Nov 09 j 14:47	21° <u>♏</u> 47'57	8.54781 AU

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 21

Attention, astronomical year style is used: The year -8157 in astronomical counting style is the year 8158 BCE in historical counting style.

direct	-8157 Jan 18 j 17:18	18° $\text{K}$ 17'50	opposition	-8151 Jan 18 j 23:23	0° $\text{II}$ 59'12	1°47'13
evening set	-8157 May 04 j 12:32	25° $\text{K}$ 59'29	min. Earth dist.	-8151 Jan 19 j 09:35	0° $\text{II}$ 57'20	9.25939 AU
				-8151 Feb 01 j 15:42	30° $\text{R}$ 8	
conjunction	-8157 May 22 j 05:38	28° $\text{K}$ 07'47 -1°04'59	direct	-8151 Apr 01 j 00:39	27° $\text{R}$ 39'10	
minimum elong	-8157 May 22 j 05:40	28° $\text{K}$ 07'48 1°05'03		-8151 May 27 j 07:31	0° $\text{II}$	
max. Earth dist.	-8157 May 22 j 18:47	28° $\text{K}$ 11'47 10.63011 AU	evening set	-8151 Jul 12 j 22:01	4° $\text{II}$ 35'28	
	-8157 Jun 06 j 16:48	0° $\text{Y}$				
morning rise	-8157 Jun 08 j 17:37	0° $\text{Y}$ 14'33	conjunction	-8151 Jul 29 j 14:02	6° $\text{II}$ 29'25	1°39'08
retrograde	-8157 Sep 16 j 04:18	7° $\text{Y}$ 28'43	minimum elong	-8151 Jul 29 j 13:59	6° $\text{II}$ 29'25	1°39'36
opposition	-8157 Nov 22 j 17:30	4° $\text{Y}$ 08'00 -1°02'38	max. Earth dist.	-8151 Jul 28 j 23:47	6° $\text{II}$ 25'20	11.27773 AU
min. Earth dist.	-8157 Nov 22 j 08:28	4° $\text{Y}$ 09'46 8.70910 AU	morning rise	-8151 Aug 15 j 02:23	8° $\text{II}$ 22'26	
direct	-8156 Jan 31 j 22:36	0° $\text{Y}$ 41'38	retrograde	-8151 Nov 21 j 09:31	15° $\text{II}$ 03'00	
evening set	-8156 May 16 j 09:50	8° $\text{Y}$ 12'33	opposition	-8150 Jan 30 j 11:41	11° $\text{II}$ 48'28	2°12'24
			min. Earth dist.	-8150 Jan 31 j 01:39	11° $\text{II}$ 45'55	9.29055 AU
conjunction	-8156 Jun 02 j 23:12	10° $\text{Y}$ 17'43 -0°35'52	direct	-8150 Apr 12 j 13:36	8° $\text{II}$ 29'15	
minimum elong	-8156 Jun 02 j 23:14	10° $\text{Y}$ 17'44 0°35'50	evening set	-8150 Jul 23 j 22:10	15° $\text{II}$ 23'12	
max. Earth dist.	-8156 Jun 03 j 07:56	10° $\text{Y}$ 20'20 10.78739 AU				
morning rise	-8156 Jun 20 j 07:03	12° $\text{Y}$ 21'17	conjunction	-8150 Aug 09 j 10:39	17° $\text{II}$ 16'13	1°57'56
retrograde	-8156 Sep 26 j 23:56	19° $\text{Y}$ 24'29	minimum elong	-8150 Aug 09 j 10:36	17° $\text{II}$ 16'12	1°58'27
opposition	-8156 Dec 04 j 00:00	16° $\text{Y}$ 05'31 -0°26'06	max. Earth dist.	-8150 Aug 08 j 16:51	17° $\text{II}$ 11'06	11.29296 AU
min. Earth dist.	-8156 Dec 03 j 19:16	16° $\text{Y}$ 06'26 8.86037 AU	morning rise	-8150 Aug 25 j 20:24	19° $\text{II}$ 08'30	
direct	-8155 Feb 12 j 19:24	12° $\text{Y}$ 40'30	retrograde	-8150 Dec 02 j 15:07	25° $\text{II}$ 50'47	
evening set	-8155 May 28 j 19:26	20° $\text{Y}$ 01'42	opposition	-8149 Feb 11 j 00:43	22° $\text{II}$ 36'03	2°32'52
			min. Earth dist.	-8149 Feb 11 j 16:58	22° $\text{II}$ 33'06	9.29069 AU
conjunction	-8155 Jun 15 j 04:36	22° $\text{Y}$ 03'55 -0°06'05	direct	-8149 Apr 24 j 00:46	19° $\text{II}$ 17'27	
minimum elong	-8155 Jun 15 j 04:35	22° $\text{Y}$ 03'55 0°05'56	evening set	-8149 Aug 03 j 20:24	26° $\text{II}$ 10'30	
behind sun begin	-8155 Jun 14 j 21:48	22° $\text{Y}$ 01'56	max. Earth dist.	-8149 Aug 19 j 10:38	27° $\text{II}$ 57'28	11.27703 AU
behind sun end	-8155 Jun 15 j 11:22	22° $\text{Y}$ 05'54				
max. Earth dist.	-8155 Jun 15 j 07:50	22° $\text{Y}$ 04'50 10.93117 AU	conjunction	-8149 Aug 20 j 06:16	28° $\text{II}$ 03'08	2°12'33
morning rise	-8155 Jul 02 j 08:19	24° $\text{Y}$ 04'34	minimum elong	-8149 Aug 20 j 06:14	28° $\text{II}$ 03'07	2°13'05
asc. node	-8155 Aug 30 j 23:18	29° $\text{Y}$ 43'36	morning rise	-8149 Sep 05 j 14:01	29° $\text{II}$ 55'16	
	-8155 Sep 04 j 13:16	0° $\text{R}$		-8149 Sep 06 j 06:50	0° $\text{R}$	
retrograde	-8155 Oct 08 j 13:14	0° $\text{R}$ 58'55	retrograde	-8149 Dec 14 j 00:30	6° $\text{R}$ 41'11	
	-8155 Nov 12 j 03:43	30° $\text{R}$ Y	opposition	-8148 Feb 22 j 15:44	3° $\text{R}$ 25'53	2°48'01
opposition	-8155 Dec 15 j 23:59	27° $\text{Y}$ 41'28 0°10'20	min. Earth dist.	-8148 Feb 23 j 09:38	3° $\text{R}$ 22'38	9.25939 AU
min. Earth dist.	-8155 Dec 15 j 23:33	27° $\text{Y}$ 41'34 8.99549 AU	direct	-8148 May 04 j 10:34	0° $\text{R}$ 07'38	
direct	-8154 Feb 25 j 07:30	24° $\text{Y}$ 17'49	evening set	-8148 Aug 13 j 18:49	7° $\text{R}$ 01'22	
	-8154 May 27 j 05:55	0° $\text{R}$	max. Earth dist.	-8148 Aug 29 j 05:08	8° $\text{R}$ 47'52	11.22986 AU
evening set	-8154 Jun 09 j 19:03	1° $\text{R}$ 30'35				
conjunction	-8154 Jun 26 j 23:44	3° $\text{R}$ 30'09 0°23'21	conjunction	-8148 Aug 30 j 02:52	8° $\text{R}$ 54'10	2°22'30
minimum elong	-8154 Jun 26 j 23:43	3° $\text{R}$ 30'09 0°23'35	minimum elong	-8148 Aug 30 j 02:50	8° $\text{R}$ 54'10	2°23'01
max. Earth dist.	-8154 Jun 26 j 21:25	3° $\text{R}$ 29'29 11.05595 AU	morning rise	-8148 Sep 15 j 09:36	10° $\text{R}$ 46'44	
morning rise	-8154 Jul 13 j 23:21	5° $\text{R}$ 28'15	retrograde	-8148 Dec 24 j 15:19	17° $\text{R}$ 38'07	
retrograde	-8154 Oct 19 j 20:43	12° $\text{R}$ 15'56	opposition	-8147 Mar 05 j 09:54	14° $\text{R}$ 21'57	2°57'20
opposition	-8154 Dec 27 j 18:49	8° $\text{R}$ 59'42 0°45'23	min. Earth dist.	-8147 Mar 06 j 06:05	14° $\text{R}$ 18'17	9.19695 AU
min. Earth dist.	-8154 Dec 27 j 21:42	8° $\text{R}$ 59'10 9.10945 AU	direct	-8147 May 15 j 20:02	11° $\text{R}$ 03'47	
direct	-8153 Mar 09 j 11:34	5° $\text{R}$ 37'24	evening set	-8147 Aug 24 j 19:01	17° $\text{R}$ 59'47	
evening set	-8153 Jun 21 j 10:12	12° $\text{R}$ 43'09	max. Earth dist.	-8147 Sep 09 j 01:54	19° $\text{R}$ 46'18	11.15237 AU
conjunction	-8153 Jul 08 j 10:31	14° $\text{R}$ 40'25 0°51'11	conjunction	-8147 Sep 10 j 02:07	19° $\text{R}$ 53'23	2°27'20
minimum elong	-8153 Jul 08 j 10:29	14° $\text{R}$ 40'25 0°51'30	minimum elong	-8147 Sep 10 j 02:06	19° $\text{R}$ 53'22	2°27'51
max. Earth dist.	-8153 Jul 08 j 04:19	14° $\text{R}$ 38'38 11.15738 AU	morning rise	-8147 Sep 26 j 09:06	21° $\text{R}$ 47'02	
	-8153 Jul 11 j 06:08	15° $\text{R}$	retrograde	-8146 Jan 05 j 10:12	28° $\text{R}$ 45'46	
morning rise	-8153 Jul 25 j 05:59	16° $\text{R}$ 36'22	opposition	-8146 Mar 17 j 08:56	25° $\text{R}$ 28'25	3°00'16
retrograde	-8153 Oct 31 j 03:13	23° $\text{R}$ 19'36	min. Earth dist.	-8146 Mar 18 j 06:40	25° $\text{R}$ 24'26	9.10490 AU
opposition	-8152 Jan 08 j 10:10	20° $\text{R}$ 04'17 1°17'58	direct	-8146 May 27 j 07:44	22° $\text{R}$ 10'06	
min. Earth dist.	-8152 Jan 08 j 16:21	20° $\text{R}$ 03'08 9.19838 AU	evening set	-8146 Sep 04 j 22:39	29° $\text{R}$ 09'56	
direct	-8152 Mar 20 j 09:57	16° $\text{R}$ 43'12		-8146 Sep 12 j 02:16	0° $\text{R}$	
evening set	-8152 Jul 01 j 18:30	23° $\text{R}$ 43'26	max. Earth dist.	-8146 Sep 20 j 05:21	0° $\text{R}$ 57'38	11.04700 AU
conjunction	-8152 Jul 18 j 14:36	25° $\text{R}$ 38'50 1°16'41	conjunction	-8146 Sep 21 j 06:03	1° $\text{R}$ 04'57	2°26'41
minimum elong	-8152 Jul 18 j 14:33	25° $\text{R}$ 38'49 1°17'05	minimum elong	-8146 Sep 21 j 06:04	1° $\text{R}$ 04'57	2°27'10
max. Earth dist.	-8152 Jul 18 j 04:53	25° $\text{R}$ 36'03 11.23208 AU	morning rise	-8146 Oct 07 j 14:22	3° $\text{R}$ 00'18	
morning rise	-8152 Aug 04 j 06:11	27° $\text{R}$ 33'03	retrograde	-8145 Jan 17 j 15:21	10° $\text{R}$ 08'13	
	-8152 Aug 27 j 01:34	0° $\text{II}$	opposition	-8145 Mar 29 j 13:58	6° $\text{R}$ 49'20	2°56'21
retrograde	-8152 Nov 10 j 06:41	4° $\text{II}$ 13'56	min. Earth dist.	-8145 Mar 30 j 11:28	6° $\text{R}$ 45'22	8.98662 AU
			direct	-8145 Jun 08 j 01:20	3° $\text{R}$ 30'39	

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 22

Attention, astronomical year style is used: The year -8145 in astronomical counting style is the year 8146 BCE in historical counting style.

evening set	-8145 Sep 16 j 07:46	10° $\Omega$ 35'43		conjunction	-8139 Dec 18 j 01:28	29° $\underline{\Omega}$ 49'13	-0°13'25
				minimum elong	-8139 Dec 18 j 01:27	29° $\underline{\Omega}$ 49'13	0°13'38
conjunction	-8145 Oct 02 j 16:48	12° $\Omega$ 32'49	2°20'13	behind sun begin	-8139 Dec 17 j 21:33	29° $\underline{\Omega}$ 47'56	
minimum elong	-8145 Oct 02 j 16:50	12° $\Omega$ 32'49	2°20'40	behind sun end	-8139 Dec 18 j 05:21	29° $\underline{\Omega}$ 50'30	
max. Earth dist.	-8145 Oct 01 j 17:27	12° $\Omega$ 25'48	10.91774 AU	max. Earth dist.	-8139 Dec 18 j 02:14	29° $\underline{\Omega}$ 49'28	9.99029 AU
morning rise	-8145 Oct 19 j 03:31	14° $\Omega$ 30'32			-8139 Dec 19 j 10:06	0° $\mathbb{M}$	
	-8145 Oct 23 j 08:24	15° $\Omega$		morning rise	-8138 Jan 04 j 19:30	2° $\mathbb{M}$ 09'02	
retrograde	-8144 Jan 30 j 05:50	21° $\Omega$ 49'06		retrograde	-8138 Apr 23 j 03:00	10° $\mathbb{M}$ 42'37	
opposition	-8144 Apr 10 j 01:55	18° $\Omega$ 28'26	2°45'11	opposition	-8138 Jun 30 j 14:02	7° $\mathbb{M}$ 10'49	-0°39'55
min. Earth dist.	-8144 Apr 10 j 21:44	18° $\Omega$ 24'45	8.84673 AU	min. Earth dist.	-8138 Jun 30 j 10:32	7° $\mathbb{M}$ 11'33	7.93312 AU
direct	-8144 Jun 18 j 22:01	15° $\Omega$ 09'09		direct	-8138 Sep 04 j 13:08	3° $\mathbb{M}$ 44'40	
evening set	-8144 Sep 27 j 00:15	22° $\Omega$ 20'51		evening set	-8138 Dec 15 j 08:45	11° $\mathbb{M}$ 54'56	
conjunction	-8144 Oct 13 j 11:58	24° $\Omega$ 20'35	2°07'44	conjunction	-8137 Jan 02 j 02:08	14° $\mathbb{M}$ 15'58	-0°49'07
minimum elong	-8144 Oct 13 j 12:01	24° $\Omega$ 20'36	2°08'07	minimum elong	-8137 Jan 02 j 02:05	14° $\mathbb{M}$ 15'57	0°49'27
max. Earth dist.	-8144 Oct 12 j 13:53	24° $\Omega$ 13'52	10.76968 AU	max. Earth dist.	-8137 Jan 02 j 09:04	14° $\mathbb{M}$ 18'17	9.88488 AU
morning rise	-8144 Oct 30 j 02:21	26° $\Omega$ 21'16			-8137 Jan 07 j 14:04	15° $\mathbb{M}$	
	-8144 Dec 01 j 23:18	0° $\mathbb{M}$		morning rise	-8137 Jan 20 j 00:49	16° $\mathbb{M}$ 38'46	
retrograde	-8143 Feb 11 j 06:31	3° $\mathbb{M}$ 51'47		retrograde	-8137 May 08 j 13:29	25° $\mathbb{M}$ 20'08	
opposition	-8143 Apr 22 j 22:01	0° $\mathbb{M}$ 29'10	2°26'34	opposition	-8137 Jul 15 j 10:26	21° $\mathbb{M}$ 47'26	-1°23'37
min. Earth dist.	-8143 Apr 23 j 15:52	0° $\mathbb{M}$ 25'47	8.69078 AU	min. Earth dist.	-8137 Jul 15 j 02:04	21° $\mathbb{M}$ 49'11	7.84551 AU
	-8143 Apr 29 j 08:38	30° $\mathbb{R}$ $\Omega$		direct	-8137 Sep 19 j 01:23	18° $\mathbb{M}$ 20'01	
direct	-8143 Jul 01 j 01:42	27° $\Omega$ 09'02		evening set	-8137 Dec 30 j 17:02	26° $\mathbb{M}$ 39'09	
	-8143 Aug 28 j 21:34	0° $\mathbb{M}$					
evening set	-8143 Oct 09 j 01:54	4° $\mathbb{M}$ 28'39		conjunction	-8136 Jan 17 j 14:19	29° $\mathbb{M}$ 02'24	-1°22'19
				minimum elong	-8136 Jan 17 j 14:15	29° $\mathbb{M}$ 02'22	1°22'45
conjunction	-8143 Oct 25 j 17:15	6° $\mathbb{M}$ 31'34	1°49'15	max. Earth dist.	-8136 Jan 18 j 03:03	29° $\mathbb{M}$ 06'40	9.81531 AU
minimum elong	-8143 Oct 25 j 17:19	6° $\mathbb{M}$ 31'35	1°49'31		-8136 Jan 24 j 17:57	0° $\mathbb{M}$	
max. Earth dist.	-8143 Oct 24 j 21:01	6° $\mathbb{M}$ 25'18	10.60881 AU	morning rise	-8136 Feb 04 j 16:18	1° $\mathbb{M}$ 27'10	
morning rise	-8143 Nov 11 j 12:25	8° $\mathbb{M}$ 35'44		retrograde	-8136 May 23 j 01:41	10° $\mathbb{M}$ 12'29	
retrograde	-8142 Feb 24 j 18:10	16° $\mathbb{M}$ 19'11		opposition	-8136 Jul 29 j 09:49	6° $\mathbb{M}$ 39'26	-2°02'30
opposition	-8142 May 06 j 02:54	12° $\mathbb{M}$ 54'31	2°00'30	min. Earth dist.	-8136 Jul 28 j 21:29	6° $\mathbb{M}$ 42'01	7.79684 AU
min. Earth dist.	-8142 May 06 j 18:19	12° $\mathbb{M}$ 51'34	8.52545 AU	direct	-8136 Oct 02 j 21:50	3° $\mathbb{M}$ 10'54	
direct	-8142 Jul 13 j 13:07	9° $\mathbb{M}$ 33'21		evening set	-8135 Jan 14 j 10:24	11° $\mathbb{M}$ 36'34	
evening set	-8142 Oct 21 j 14:34	17° $\mathbb{M}$ 02'02					
				conjunction	-8135 Feb 01 j 10:31	14° $\mathbb{M}$ 01'00	-1°50'24
conjunction	-8142 Nov 07 j 10:35	19° $\mathbb{M}$ 08'33	1°24'59	minimum elong	-8135 Feb 01 j 10:27	14° $\mathbb{M}$ 00'58	1°50'54
minimum elong	-8142 Nov 07 j 10:39	19° $\mathbb{M}$ 08'34	1°25'09	max. Earth dist.	-8135 Feb 02 j 04:40	14° $\mathbb{M}$ 07'06	9.78698 AU
max. Earth dist.	-8142 Nov 06 j 17:54	19° $\mathbb{M}$ 03'17	10.44225 AU	morning rise	-8135 Feb 19 j 14:20	16° $\mathbb{M}$ 26'35	
morning rise	-8142 Nov 24 j 11:20	21° $\mathbb{M}$ 16'36		retrograde	-8135 Jun 07 j 11:55	25° $\mathbb{M}$ 11'24	
retrograde	-8141 Mar 10 j 16:26	29° $\mathbb{M}$ 13'33		opposition	-8135 Aug 13 j 09:37	21° $\mathbb{M}$ 38'33	-2°33'19
opposition	-8141 May 19 j 16:51	25° $\mathbb{M}$ 46'49	1°27'27	min. Earth dist.	-8135 Aug 12 j 17:55	21° $\mathbb{M}$ 41'51	7.79094 AU
min. Earth dist.	-8141 May 20 j 04:54	25° $\mathbb{M}$ 44'27	8.35845 AU	direct	-8135 Oct 18 j 00:08	18° $\mathbb{M}$ 09'08	
direct	-8141 Jul 26 j 10:16	22° $\mathbb{M}$ 24'29		evening set	-8134 Jan 30 j 08:29	26° $\mathbb{M}$ 38'11	
evening set	-8141 Nov 03 j 15:52	0° $\underline{\Omega}$ 03'11					
	-8141 Nov 03 j 05:43	0° $\underline{\Omega}$		conjunction	-8134 Feb 17 j 10:22	29° $\mathbb{M}$ 02'43	-2°11'04
				minimum elong	-8134 Feb 17 j 10:18	29° $\mathbb{M}$ 02'42	2°11'37
conjunction	-8141 Nov 20 j 17:19	2° $\underline{\Omega}$ 13'35	0°55'37	max. Earth dist.	-8134 Feb 18 j 08:55	29° $\mathbb{M}$ 10'16	9.80236 AU
minimum elong	-8141 Nov 20 j 17:22	2° $\underline{\Omega}$ 13'36	0°55'39		-8134 Feb 24 j 13:26	0° $\mathbb{M}$	
max. Earth dist.	-8141 Nov 20 j 05:52	2° $\underline{\Omega}$ 09'54	10.27785 AU	morning rise	-8134 Mar 07 j 14:40	1° $\mathbb{M}$ 27'55	
morning rise	-8141 Dec 08 j 00:00	4° $\underline{\Omega}$ 25'43		retrograde	-8134 Jun 22 j 15:43	10° $\mathbb{M}$ 07'38	
retrograde	-8140 Mar 24 j 01:42	12° $\underline{\Omega}$ 36'04		opposition	-8134 Aug 28 j 06:43	6° $\mathbb{M}$ 35'33	-2°53'35
opposition	-8140 Jun 01 j 15:48	9° $\underline{\Omega}$ 07'22	0°48'25	min. Earth dist.	-8134 Aug 27 j 12:33	6° $\mathbb{M}$ 39'23	7.82833 AU
min. Earth dist.	-8140 Jun 01 j 23:08	9° $\underline{\Omega}$ 05'54	8.19811 AU	direct	-8134 Nov 02 j 04:20	3° $\mathbb{M}$ 05'34	
direct	-8140 Aug 07 j 18:08	5° $\underline{\Omega}$ 43'47		evening set	-8133 Feb 15 j 06:41	11° $\mathbb{M}$ 34'26	
evening set	-8140 Nov 16 j 07:09	13° $\underline{\Omega}$ 33'07					
				conjunction	-8133 Mar 05 j 09:18	13° $\mathbb{M}$ 58'00	-2°22'50
conjunction	-8140 Dec 03 j 14:14	15° $\underline{\Omega}$ 47'26	0°22'17	minimum elong	-8133 Mar 05 j 09:17	13° $\mathbb{M}$ 58'00	2°23'22
minimum elong	-8140 Dec 03 j 14:16	15° $\underline{\Omega}$ 47'26	0°22'10	max. Earth dist.	-8133 Mar 06 j 10:43	14° $\mathbb{M}$ 06'27	9.86043 AU
max. Earth dist.	-8140 Dec 03 j 08:44	15° $\underline{\Omega}$ 45'38	10.12417 AU	morning rise	-8133 Mar 23 j 12:53	16° $\mathbb{M}$ 21'45	
morning rise	-8140 Dec 21 j 02:48	18° $\underline{\Omega}$ 03'35		retrograde	-8133 Jul 07 j 11:05	24° $\mathbb{M}$ 52'10	
retrograde	-8139 Apr 07 j 21:42	26° $\underline{\Omega}$ 26'28		opposition	-8133 Sep 11 j 22:21	21° $\mathbb{M}$ 21'22	-3°01'59
opposition	-8139 Jun 15 j 23:12	22° $\underline{\Omega}$ 56'03	0°05'09	min. Earth dist.	-8133 Sep 11 j 02:35	21° $\mathbb{M}$ 25'31	7.90630 AU
min. Earth dist.	-8139 Jun 16 j 01:08	22° $\underline{\Omega}$ 55'39	8.05333 AU	direct	-8133 Nov 17 j 07:10	17° $\mathbb{M}$ 51'10	
desc. node	-8139 Jul 29 j 06:16	20° $\underline{\Omega}$ 01'03		evening set	-8132 Mar 01 j 23:54	26° $\mathbb{M}$ 16'13	
direct	-8139 Aug 21 j 10:56	19° $\underline{\Omega}$ 31'11					
evening set	-8139 Nov 30 j 12:56	27° $\underline{\Omega}$ 31'16		conjunction	-8132 Mar 20 j 02:23	28° $\mathbb{M}$ 37'58	-2°25'06

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 23

Attention, astronomical year style is used: The year -8132 in astronomical counting style is the year 8133 BCE in historical counting style.

minimum elong	-8132 Mar 20 j 02:23	28° $\text{Z}$ 37'58	2°25'37	conjunction	-8126 Jun 10 j 08:24	17° $\text{Y}$ 14'27	-0°19'00
max. Earth dist.	-8132 Mar 21 j 05:09	28° $\text{Z}$ 46'45	9.95700 AU	minimum elong	-8126 Jun 10 j 08:25	17° $\text{Y}$ 14'27	0°18'53
	-8132 Mar 30 j 12:50	0° $\approx$		max. Earth dist.	-8126 Jun 10 j 13:10	17° $\text{Y}$ 15'51	10.88231 AU
morning rise	-8132 Apr 07 j 04:16	0° $\approx$ 59'22		morning rise	-8126 Jun 27 j 14:03	19° $\text{Y}$ 16'16	
retrograde	-8132 Jul 20 j 20:27	9° $\approx$ 17'17		retrograde	-8126 Oct 04 j 00:31	26° $\text{Y}$ 14'03	
min. Earth dist.	-8132 Sep 24 j 10:02	5° $\approx$ 52'25	8.01924 AU	opposition	-8126 Dec 11 j 05:27	22° $\text{Y}$ 56'25	-0°05'22
opposition	-8132 Sep 25 j 06:33	5° $\approx$ 48'09	-2°58'31	min. Earth dist.	-8126 Dec 11 j 02:48	22° $\text{Y}$ 56'55	8.94962 AU
direct	-8132 Dec 01 j 05:47	2° $\approx$ 18'08		asc. node	-8125 Feb 04 j 12:12	19° $\text{Y}$ 44'38	
evening set	-8131 Mar 17 j 07:51	10° $\approx$ 36'10		direct	-8125 Feb 20 j 08:07	19° $\text{Y}$ 32'37	
				evening set	-8125 Jun 05 j 01:23	26° $\text{Y}$ 48'45	
conjunction	-8131 Apr 04 j 09:26	12° $\approx$ 55'23	-2°18'19				
minimum elong	-8131 Apr 04 j 09:28	12° $\approx$ 55'24	2°18'45	conjunction	-8125 Jun 22 j 08:10	28° $\text{Y}$ 49'24	0°10'46
max. Earth dist.	-8131 Apr 05 j 12:10	13° $\approx$ 04'02	10.08522 AU	minimum elong	-8125 Jun 22 j 08:09	28° $\text{Y}$ 49'23	0°10'58
	-8131 Apr 20 j 13:14	15° $\approx$		behind sun begin	-8125 Jun 22 j 02:49	28° $\text{Y}$ 47'51	
morning rise	-8131 Apr 22 j 08:58	15° $\approx$ 13'51		behind sun end	-8125 Jun 22 j 13:30	28° $\text{Y}$ 50'56	
retrograde	-8131 Aug 03 j 18:07	23° $\approx$ 17'17		max. Earth dist.	-8125 Jun 22 j 08:23	28° $\text{Y}$ 49'27	11.01349 AU
min. Earth dist.	-8131 Oct 08 j 10:01	19° $\approx$ 54'07	8.15942 AU		-8125 Jul 02 j 09:37	0° $\text{Z}$	
opposition	-8131 Oct 09 j 05:44	19° $\approx$ 50'04	-2°44'21	morning rise	-8125 Jul 09 j 09:27	0° $\text{Z}$ 48'29	
direct	-8131 Dec 15 j 21:36	16° $\approx$ 20'35		retrograde	-8125 Oct 15 j 10:52	7° $\text{Z}$ 38'45	
evening set	-8130 Apr 01 j 04:03	24° $\approx$ 29'14		opposition	-8125 Dec 23 j 02:41	4° $\text{Z}$ 22'22	0°30'25
				min. Earth dist.	-8125 Dec 23 j 04:41	4° $\text{Z}$ 22'00	9.07026 AU
conjunction	-8130 Apr 19 j 04:01	26° $\approx$ 45'28	-2°03'36	direct	-8124 Mar 03 j 14:45	0° $\text{Z}$ 59'49	
minimum elong	-8130 Apr 19 j 04:04	26° $\approx$ 45'29	2°03'57	evening set	-8124 Jun 15 j 20:19	8° $\text{Z}$ 08'22	
max. Earth dist.	-8130 Apr 20 j 04:49	26° $\approx$ 53'21	10.23640 AU				
morning rise	-8130 May 07 j 00:40	29° $\approx$ 00'37		conjunction	-8124 Jul 02 j 22:35	10° $\text{Z}$ 06'34	0°39'21
	-8130 May 15 j 02:18	0° $\text{X}$		minimum elong	-8124 Jul 02 j 22:34	10° $\text{Z}$ 06'34	0°39'38
retrograde	-8130 Aug 17 j 02:40	6° $\text{X}$ 48'43		max. Earth dist.	-8124 Jul 02 j 17:28	10° $\text{Z}$ 05'05	11.12202 AU
opposition	-8130 Oct 22 j 19:02	3° $\text{X}$ 23'38	-2°21'24	morning rise	-8124 Jul 19 j 19:46	12° $\text{Z}$ 03'22	
min. Earth dist.	-8130 Oct 22 j 01:41	3° $\text{X}$ 27'09	8.31778 AU		-8124 Aug 16 j 09:14	15° $\text{Z}$	
	-8130 Dec 20 j 10:58	30° $\text{R}$ $\approx$		retrograde	-8124 Oct 25 j 16:55	18° $\text{Z}$ 48'14	
direct	-8130 Dec 30 j 05:10	29° $\approx$ 54'57		opposition	-8123 Jan 02 j 19:30	15° $\text{Z}$ 32'47	1°04'11
	-8129 Jan 08 j 23:30	0° $\text{X}$		min. Earth dist.	-8123 Jan 03 j 01:59	15° $\text{Z}$ 31'35	9.16678 AU
evening set	-8129 Apr 15 j 10:49	7° $\text{X}$ 52'47			-8123 Jan 10 j 05:02	15° $\text{R}$ $\text{Z}$	
				direct	-8123 Mar 15 j 15:45	12° $\text{Z}$ 11'18	
conjunction	-8129 May 03 j 08:22	10° $\text{X}$ 05'46	-1°42'36		-8123 May 16 j 11:58	15° $\text{Z}$	
minimum elong	-8129 May 03 j 08:26	10° $\text{X}$ 05'47	1°42'50	evening set	-8123 Jun 27 j 07:38	19° $\text{Z}$ 13'47	
max. Earth dist.	-8129 May 04 j 05:25	10° $\text{X}$ 12'20	10.40099 AU				
morning rise	-8129 May 21 j 01:42	12° $\text{X}$ 17'25		conjunction	-8123 Jul 14 j 05:29	21° $\text{Z}$ 09'56	1°05'57
retrograde	-8129 Aug 29 j 23:06	19° $\text{X}$ 50'34		minimum elong	-8123 Jul 14 j 05:26	21° $\text{Z}$ 09'55	1°06'19
opposition	-8129 Nov 04 j 22:44	16° $\text{X}$ 27'35	-1°51'54	max. Earth dist.	-8123 Jul 13 j 19:10	21° $\text{Z}$ 06'57	11.20474 AU
min. Earth dist.	-8129 Nov 04 j 08:50	16° $\text{X}$ 30'22	8.48486 AU	morning rise	-8123 Jul 30 j 22:53	23° $\text{Z}$ 04'51	
direct	-8128 Jan 13 j 02:45	12° $\text{X}$ 59'58		retrograde	-8123 Nov 05 j 19:58	29° $\text{Z}$ 46'28	
evening set	-8128 Apr 28 j 03:24	20° $\text{X}$ 46'22		opposition	-8122 Jan 14 j 09:23	26° $\text{Z}$ 31'33	1°34'59
				min. Earth dist.	-8122 Jan 14 j 19:14	26° $\text{Z}$ 29'44	9.23612 AU
conjunction	-8128 May 15 j 21:52	22° $\text{X}$ 56'02	-1°17'03	direct	-8122 Mar 27 j 10:26	23° $\text{Z}$ 11'00	
minimum elong	-8128 May 15 j 21:55	22° $\text{X}$ 56'03	1°17'10		-8122 Jul 07 j 05:15	0° $\text{II}$	
max. Earth dist.	-8128 May 16 j 13:40	23° $\text{X}$ 00'52	10.56938 AU	evening set	-8122 Jul 08 j 13:00	0° $\text{II}$ 08'54	
morning rise	-8128 Jun 02 j 11:36	25° $\text{X}$ 04'11					
	-8128 Jul 19 j 04:59	0° $\text{Y}$		conjunction	-8122 Jul 25 j 06:47	2° $\text{II}$ 03'26	1°29'48
retrograde	-8128 Sep 10 j 08:02	2° $\text{Y}$ 23'38		minimum elong	-8122 Jul 25 j 06:44	2° $\text{II}$ 03'25	1°30'15
	-8128 Nov 04 j 08:06	30° $\text{R}$ $\text{X}$		max. Earth dist.	-8122 Jul 24 j 17:07	1° $\text{II}$ 59'31	11.25908 AU
opposition	-8128 Nov 16 j 17:00	29° $\text{X}$ 02'37	-1°18'06	morning rise	-8122 Aug 10 j 20:35	3° $\text{II}$ 56'56	
min. Earth dist.	-8128 Nov 16 j 06:48	29° $\text{X}$ 04'37	8.65131 AU	retrograde	-8122 Nov 16 j 23:51	10° $\text{II}$ 37'25	
direct	-8127 Jan 25 j 14:25	25° $\text{X}$ 36'12		opposition	-8121 Jan 25 j 21:50	7° $\text{II}$ 22'40	2°02'01
	-8127 Apr 12 j 12:54	0° $\text{Y}$		min. Earth dist.	-8121 Jan 26 j 10:21	7° $\text{II}$ 20'23	9.27620 AU
evening set	-8127 May 11 j 06:32	3° $\text{Y}$ 11'29		direct	-8121 Apr 08 j 01:44	4° $\text{II}$ 02'53	
				evening set	-8121 Jul 19 j 14:13	10° $\text{II}$ 57'44	
conjunction	-8127 May 28 j 21:26	5° $\text{Y}$ 17'54	-0°48'40	max. Earth dist.	-8121 Aug 04 j 11:58	12° $\text{II}$ 46'26	11.28356 AU
minimum elong	-8127 May 28 j 21:29	5° $\text{Y}$ 17'55	0°48'41				
max. Earth dist.	-8127 May 29 j 07:18	5° $\text{Y}$ 20'52	10.73242 AU	conjunction	-8121 Aug 05 j 04:23	12° $\text{II}$ 51'09	1°50'15
morning rise	-8127 Jun 15 j 07:18	7° $\text{Y}$ 22'46		minimum elong	-8121 Aug 05 j 04:20	12° $\text{II}$ 51'08	1°50'46
retrograde	-8127 Sep 22 j 06:48	14° $\text{Y}$ 30'17		morning rise	-8121 Aug 21 j 15:05	14° $\text{II}$ 43'43	
opposition	-8127 Nov 29 j 02:40	11° $\text{Y}$ 11'05	-0°42'01	retrograde	-8121 Nov 28 j 04:59	21° $\text{II}$ 25'03	
min. Earth dist.	-8127 Nov 28 j 20:07	11° $\text{Y}$ 12'20	8.80845 AU	opposition	-8120 Feb 06 j 10:19	18° $\text{II}$ 10'08	2°24'37
direct	-8126 Feb 07 j 16:39	7° $\text{Y}$ 45'57		min. Earth dist.	-8120 Feb 07 j 02:06	18° $\text{II}$ 07'16	9.28603 AU
evening set	-8126 May 23 j 21:22	15° $\text{Y}$ 11'04		direct	-8120 Apr 18 j 11:50	14° $\text{II}$ 50'55	
				evening set	-8120 Jul 29 j 12:53	21° $\text{II}$ 44'16	

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 24

Attention, astronomical year style is used: The year -8120 in astronomical counting style is the year 8121 BCE in historical counting style.

conjunction	-8120 Aug 14 j 23:54	23° $\Pi$ 37'04	2°06'45	evening set	-8114 Oct 04 j 03:34	29° $\Omega$ 21'45	
minimum elong	-8120 Aug 14 j 23:51	23° $\Pi$ 37'04	2°07'18		-8114 Oct 09 j 09:53	0° $\eta$	
max. Earth dist.	-8120 Aug 14 j 03:59	23° $\Pi$ 31'21	11.27767 AU				
morning rise	-8120 Aug 31 j 08:28	25° $\Pi$ 29'17		conjunction	-8114 Oct 20 j 17:13	1° $\eta$ 23'13	1°58'11
	-8120 Oct 15 j 23:01	0° $\mathfrak{C}$		minimum elong	-8114 Oct 20 j 17:17	1° $\eta$ 23'14	1°58'30
retrograde	-8120 Dec 08 j 10:20	2° $\mathfrak{C}$ 13'27		max. Earth dist.	-8114 Oct 19 j 21:29	1° $\eta$ 17'09	10.67910 AU
	-8119 Feb 02 j 12:51	30° $\mathfrak{R}\Pi$		morning rise	-8114 Nov 06 j 10:06	3° $\eta$ 25'47	
opposition	-8119 Feb 17 j 00:04	28° $\Pi$ 58'02	2°42'11	retrograde	-8113 Feb 19 j 04:07	11° $\eta$ 03'27	
min. Earth dist.	-8119 Feb 17 j 18:44	28° $\Pi$ 54'38	9.26536 AU	opposition	-8113 Apr 30 j 16:41	7° $\eta$ 39'40	2°12'56
direct	-8119 Apr 29 j 21:16	25° $\Pi$ 39'07		min. Earth dist.	-8113 May 01 j 08:23	7° $\eta$ 36'40	8.59937 AU
	-8119 Jul 16 j 19:17	0° $\mathfrak{C}$		direct	-8113 Jul 08 j 11:32	4° $\eta$ 19'01	
evening set	-8119 Aug 09 j 10:51	2° $\mathfrak{C}$ 32'36		evening set	-8113 Oct 16 j 11:12	11° $\eta$ 43'34	
conjunction	-8119 Aug 25 j 19:32	4° $\mathfrak{C}$ 25'20	2°18'48	conjunction	-8113 Nov 02 j 05:10	13° $\eta$ 48'27	1°36'22
minimum elong	-8119 Aug 25 j 19:30	4° $\mathfrak{C}$ 25'20	2°19'20	minimum elong	-8113 Nov 02 j 05:13	13° $\eta$ 48'28	1°36'35
max. Earth dist.	-8119 Aug 24 j 21:10	4° $\mathfrak{C}$ 18'52	11.24163 AU	max. Earth dist.	-8113 Nov 01 j 12:51	13° $\eta$ 43'21	10.51819 AU
morning rise	-8119 Sep 11 j 02:47	6° $\mathfrak{C}$ 17'44		morning rise	-8113 Nov 19 j 03:10	15° $\eta$ 54'42	
retrograde	-8119 Dec 19 j 21:52	13° $\mathfrak{C}$ 06'39		retrograde	-8112 Mar 03 j 22:32	23° $\eta$ 45'37	
opposition	-8118 Feb 28 j 16:24	9° $\mathfrak{C}$ 50'24	2°54'08	opposition	-8112 May 13 j 02:29	20° $\eta$ 19'57	1°42'49
min. Earth dist.	-8118 Mar 01 j 12:24	9° $\mathfrak{C}$ 46'46	9.21475 AU	min. Earth dist.	-8112 May 13 j 14:26	20° $\eta$ 17'38	8.43616 AU
direct	-8118 May 11 j 07:59	6° $\mathfrak{C}$ 31'41		direct	-8112 Jul 20 j 03:12	16° $\eta$ 58'25	
evening set	-8118 Aug 20 j 09:43	13° $\mathfrak{C}$ 26'45		evening set	-8112 Oct 28 j 06:58	24° $\eta$ 32'33	
conjunction	-8118 Sep 05 j 17:13	15° $\mathfrak{C}$ 20'02	2°25'57	conjunction	-8112 Nov 14 j 05:54	26° $\eta$ 41'10	1°09'06
minimum elong	-8118 Sep 05 j 17:12	15° $\mathfrak{C}$ 20'02	2°26'28	minimum elong	-8112 Nov 14 j 05:57	26° $\eta$ 41'11	1°09'11
max. Earth dist.	-8118 Sep 04 j 18:27	15° $\mathfrak{C}$ 13'23	11.17651 AU	max. Earth dist.	-8112 Nov 13 j 17:03	26° $\eta$ 37'05	10.35578 AU
morning rise	-8118 Sep 21 j 23:59	17° $\mathfrak{C}$ 13'13		morning rise	-8112 Dec 01 j 09:46	28° $\eta$ 51'25	
retrograde	-8118 Dec 31 j 15:03	24° $\mathfrak{C}$ 08'43			-8112 Dec 10 j 16:57	0° $\mathfrak{A}$	
opposition	-8117 Mar 12 j 12:58	20° $\mathfrak{C}$ 51'23	2°59'57	retrograde	-8111 Mar 18 j 04:02	6° $\mathfrak{A}$ 55'45	
min. Earth dist.	-8117 Mar 13 j 09:09	20° $\mathfrak{C}$ 47'41	9.13571 AU	opposition	-8111 May 26 j 21:43	3° $\mathfrak{A}$ 28'16	1°06'11
direct	-8117 May 22 j 18:15	17° $\mathfrak{C}$ 32'40		min. Earth dist.	-8111 May 27 j 05:46	3° $\mathfrak{A}$ 26'41	8.27567 AU
evening set	-8117 Aug 31 j 11:18	24° $\mathfrak{C}$ 30'49		direct	-8111 Aug 02 j 05:28	0° $\mathfrak{A}$ 05'41	
				evening set	-8111 Nov 10 j 16:04	7° $\mathfrak{A}$ 50'07	
conjunction	-8117 Sep 16 j 18:36	26° $\mathfrak{C}$ 25'14	2°27'45	conjunction	-8111 Nov 27 j 20:24	10° $\mathfrak{A}$ 02'36	0°37'18
minimum elong	-8117 Sep 16 j 18:37	26° $\mathfrak{C}$ 25'14	2°28'16	minimum elong	-8111 Nov 27 j 20:26	10° $\mathfrak{A}$ 02'36	0°37'15
max. Earth dist.	-8117 Sep 15 j 19:18	26° $\mathfrak{C}$ 18'22	11.08426 AU	max. Earth dist.	-8111 Nov 27 j 12:17	9° $\mathfrak{A}$ 59'58	10.20015 AU
morning rise	-8117 Oct 03 j 02:06	28° $\mathfrak{C}$ 19'51		morning rise	-8111 Dec 15 j 06:22	12° $\mathfrak{A}$ 16'54	
	-8117 Oct 17 j 22:40	0° $\Omega$		retrograde	-8110 Apr 01 j 20:02	20° $\mathfrak{A}$ 34'09	
retrograde	-8116 Jan 12 j 16:53	5° $\Omega$ 23'40		opposition	-8110 Jun 10 j 01:52	17° $\mathfrak{A}$ 04'58	0°24'29
opposition	-8116 Mar 23 j 14:59	2° $\Omega$ 05'00	2°59'06	min. Earth dist.	-8110 Jun 10 j 05:43	17° $\mathfrak{A}$ 04'12	8.12661 AU
min. Earth dist.	-8116 Mar 24 j 11:27	2° $\Omega$ 01'14	9.03063 AU	direct	-8110 Aug 15 j 18:13	13° $\mathfrak{A}$ 41'13	
	-8116 Apr 23 j 04:32	30° $\mathfrak{R}\mathfrak{C}$		evening set	-8110 Nov 24 j 15:35	21° $\mathfrak{A}$ 36'15	
direct	-8116 Jun 02 j 08:13	28° $\mathfrak{C}$ 46'04					
	-8116 Jul 11 j 08:19	0° $\Omega$		conjunction	-8110 Dec 12 j 01:31	23° $\mathfrak{A}$ 52'28	0°02'26
evening set	-8116 Sep 10 j 17:42	5° $\Omega$ 48'48		minimum elong	-8110 Dec 12 j 01:30	23° $\mathfrak{A}$ 52'28	0°02'16
max. Earth dist.	-8116 Sep 26 j 01:50	7° $\Omega$ 37'49	10.96779 AU	behind sun begin	-8110 Dec 11 j 18:17	23° $\mathfrak{A}$ 50'07	
				behind sun end	-8110 Dec 12 j 08:43	23° $\mathfrak{A}$ 54'48	
conjunction	-8116 Sep 27 j 01:50	7° $\Omega$ 44'59	2°23'53	max. Earth dist.	-8110 Dec 11 j 23:10	23° $\mathfrak{A}$ 51'45	10.05995 AU
minimum elong	-8116 Sep 27 j 01:51	7° $\Omega$ 44'59	2°24'21	morning rise	-8110 Dec 29 j 17:15	26° $\mathfrak{A}$ 10'35	
morning rise	-8116 Oct 13 j 11:24	9° $\Omega$ 41'39		desc. node	-8109 Jan 06 j 11:37	27° $\mathfrak{A}$ 09'48	
	-8116 Dec 05 j 14:56	15° $\Omega$			-8109 Jan 30 j 11:08	0° $\mathfrak{M}$	
retrograde	-8115 Jan 24 j 01:24	16° $\Omega$ 55'22		retrograde	-8109 Apr 16 j 21:07	4° $\mathfrak{M}$ 39'14	
	-8115 Mar 16 j 07:49	15° $\mathfrak{R}\Omega$		opposition	-8109 Jun 24 j 13:42	1° $\mathfrak{M}$ 08'37	-0°20'08
opposition	-8115 Apr 04 j 23:28	13° $\Omega$ 35'10	2°51'09	min. Earth dist.	-8109 Jun 24 j 12:58	1° $\mathfrak{M}$ 08'46	7.99755 AU
min. Earth dist.	-8115 Apr 05 j 19:58	13° $\Omega$ 31'21	8.90295 AU		-8109 Jul 08 j 21:44	30° $\mathfrak{R}\mathfrak{A}$	
direct	-8115 Jun 14 j 01:43	10° $\Omega$ 15'50		direct	-8109 Aug 29 j 17:20	27° $\mathfrak{A}$ 43'36	
	-8115 Sep 01 j 00:37	15° $\Omega$			-8109 Oct 18 j 13:41	0° $\mathfrak{M}$	
evening set	-8115 Sep 22 j 06:29	17° $\Omega$ 24'35		evening set	-8109 Dec 09 j 05:23	5° $\mathfrak{M}$ 48'59	
conjunction	-8115 Oct 08 j 16:44	19° $\Omega$ 23'06	2°14'04	conjunction	-8109 Dec 26 j 20:33	8° $\mathfrak{M}$ 08'31	-0°33'37
minimum elong	-8115 Oct 08 j 16:47	19° $\Omega$ 23'07	2°14'28	minimum elong	-8109 Dec 26 j 20:31	8° $\mathfrak{M}$ 08'30	0°33'54
max. Earth dist.	-8115 Oct 07 j 18:03	19° $\Omega$ 16'14	10.83106 AU	max. Earth dist.	-8109 Dec 27 j 00:30	8° $\mathfrak{M}$ 09'50	9.94331 AU
morning rise	-8115 Oct 25 j 05:29	21° $\Omega$ 22'27		morning rise	-8108 Jan 13 j 17:16	10° $\mathfrak{M}$ 29'53	
retrograde	-8114 Feb 05 j 20:10	28° $\Omega$ 47'33			-8108 Feb 20 j 06:37	15° $\mathfrak{M}$	
opposition	-8114 Apr 17 j 15:48	25° $\Omega$ 25'37	2°35'47	retrograde	-8108 May 01 j 04:25	19° $\mathfrak{M}$ 07'34	
min. Earth dist.	-8114 Apr 18 j 10:37	25° $\Omega$ 22'05	8.75728 AU	opposition	-8108 Jul 08 j 07:49	15° $\mathfrak{M}$ 35'51	-1°04'48
direct	-8114 Jun 26 j 03:19	22° $\Omega$ 05'42					



## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 25

Attention, astronomical year style is used: The year -8108 in astronomical counting style is the year 8109 BCE in historical counting style.

min. Earth dist.	-8108 Jul 08 j 02:23	15° $\mathbb{M}$ 36'58	7.89593 AU	max. Earth dist.	-8102 Mar 30 j 06:41	7° $\approx$ 08'31	10.02092 AU
	-8108 Jul 15 j 14:35	15° $\mathbb{R}\mathbb{M}$		morning rise	-8102 Apr 16 j 05:45	9° $\approx$ 20'05	
direct	-8108 Sep 12 j 02:39	12° $\mathbb{M}$ 09'33			-8102 Jun 05 j 23:18	15° $\approx$	
	-8108 Nov 06 j 22:37	15° $\mathbb{M}$		retrograde	-8102 Jul 29 j 05:44	17° $\approx$ 30'25	
evening set	-8108 Dec 23 j 08:11	20° $\mathbb{M}$ 24'22			-8102 Sep 21 j 20:26	15° $\mathbb{R}\approx$	
				opposition	-8102 Oct 03 j 15:23	14° $\approx$ 02'15	-2°51'52
conjunction	-8107 Jan 10 j 03:47	22° $\mathbb{M}$ 46'32	-1°08'14	min. Earth dist.	-8102 Oct 02 j 20:51	14° $\approx$ 06'05	8.08856 AU
minimum elong	-8107 Jan 10 j 03:43	22° $\mathbb{M}$ 46'30	1°08'37	direct	-8102 Dec 09 j 23:47	10° $\approx$ 32'17	
max. Earth dist.	-8107 Jan 10 j 14:00	22° $\mathbb{M}$ 49'57	9.85702 AU		-8101 Feb 22 j 06:13	15° $\approx$	
morning rise	-8107 Jan 28 j 04:16	25° $\mathbb{M}$ 10'19		evening set	-8101 Mar 26 j 05:00	18° $\approx$ 45'43	
	-8107 Mar 09 j 10:30	0° $\mathbb{Z}$					
retrograde	-8107 May 16 j 15:33	3° $\mathbb{Z}$ 53'51		conjunction	-8101 Apr 13 j 05:40	21° $\approx$ 03'24	-2°10'59
opposition	-8107 Jul 23 j 06:07	0° $\mathbb{Z}$ 21'30	-1°46'12	minimum elong	-8101 Apr 13 j 05:43	21° $\approx$ 03'25	2°11'22
min. Earth dist.	-8107 Jul 22 j 19:59	0° $\mathbb{Z}$ 23'36	7.82793 AU	max. Earth dist.	-8101 Apr 14 j 05:24	21° $\approx$ 11'01	10.15931 AU
	-8107 Jul 27 j 13:33	30° $\mathbb{R}\mathbb{M}$		morning rise	-8101 May 01 j 03:50	23° $\approx$ 20'11	
direct	-8107 Sep 26 j 19:48	26° $\mathbb{M}$ 54'02			-8101 Jul 05 j 13:37	0° $\mathbb{H}$	
	-8107 Nov 24 j 05:43	0° $\mathbb{Z}$		retrograde	-8101 Aug 11 j 18:29	1° $\mathbb{H}$ 15'26	
evening set	-8106 Jan 07 j 21:51	5° $\mathbb{Z}$ 16'38			-8101 Sep 18 j 10:10	30° $\mathbb{R}\approx$	
				opposition	-8101 Oct 17 j 09:16	27° $\approx$ 49'09	-2°32'30
conjunction	-8106 Jan 25 j 20:52	7° $\mathbb{Z}$ 40'31	-1°38'51	min. Earth dist.	-8101 Oct 16 j 15:54	27° $\approx$ 52'41	8.23645 AU
minimum elong	-8106 Jan 25 j 20:48	7° $\mathbb{Z}$ 40'30	1°39'20	direct	-8101 Dec 24 j 12:38	24° $\approx$ 19'43	
max. Earth dist.	-8106 Jan 26 j 12:50	7° $\mathbb{Z}$ 45'53	9.80724 AU		-8100 Mar 19 j 17:51	0° $\mathbb{H}$	
morning rise	-8106 Feb 12 j 23:49	10° $\mathbb{Z}$ 05'43		evening set	-8100 Apr 08 j 17:48	2° $\mathbb{H}$ 22'51	
retrograde	-8106 Jun 01 j 03:12	18° $\mathbb{Z}$ 51'03					
opposition	-8106 Aug 07 j 06:05	15° $\mathbb{Z}$ 18'36	-2°20'56	conjunction	-8100 Apr 26 j 16:29	4° $\mathbb{H}$ 37'26	-1°52'31
min. Earth dist.	-8106 Aug 06 j 15:52	15° $\mathbb{Z}$ 21'35	7.79922 AU	minimum elong	-8100 Apr 26 j 16:33	4° $\mathbb{H}$ 37'27	1°52'48
direct	-8106 Oct 11 j 18:56	11° $\mathbb{Z}$ 50'06		max. Earth dist.	-8100 Apr 27 j 13:30	4° $\mathbb{H}$ 44'02	10.31584 AU
evening set	-8105 Jan 23 j 18:42	20° $\mathbb{Z}$ 17'50		morning rise	-8100 May 14 j 11:33	6° $\mathbb{H}$ 50'46	
				retrograde	-8100 Aug 23 j 19:53	14° $\mathbb{H}$ 30'52	
conjunction	-8105 Feb 10 j 20:01	22° $\mathbb{Z}$ 42'23	-2°03'02	opposition	-8100 Oct 29 j 17:11	11° $\mathbb{H}$ 06'31	-2°05'34
minimum elong	-8105 Feb 10 j 19:57	22° $\mathbb{Z}$ 42'22	2°03'34	min. Earth dist.	-8100 Oct 29 j 01:41	11° $\mathbb{H}$ 09'38	8.39784 AU
max. Earth dist.	-8105 Feb 11 j 16:49	22° $\mathbb{Z}$ 49'22	9.79900 AU	direct	-8099 Jan 06 j 14:25	7° $\mathbb{H}$ 37'57	
morning rise	-8105 Mar 01 j 00:02	25° $\mathbb{Z}$ 07'48		evening set	-8099 Apr 22 j 16:26	15° $\mathbb{H}$ 29'49	
	-8105 Apr 10 j 12:09	0° $\mathbb{Z}$					
retrograde	-8105 Jun 16 j 11:18	3° $\mathbb{Z}$ 50'21		conjunction	-8099 May 10 j 12:33	17° $\mathbb{H}$ 41'07	-1°28'43
min. Earth dist.	-8105 Aug 21 j 11:47	0° $\mathbb{Z}$ 21'55	7.81310 AU	minimum elong	-8099 May 10 j 12:36	17° $\mathbb{H}$ 41'09	1°28'53
opposition	-8105 Aug 22 j 04:57	0° $\mathbb{Z}$ 18'18	-2°46'06	max. Earth dist.	-8099 May 11 j 06:14	17° $\mathbb{H}$ 46'35	10.48121 AU
	-8105 Aug 25 j 19:56	30° $\mathbb{R}\mathbb{Z}$		morning rise	-8099 May 28 j 04:05	19° $\mathbb{H}$ 50'58	
direct	-8105 Oct 26 j 21:24	26° $\mathbb{Z}$ 48'57		retrograde	-8099 Sep 05 j 10:46	27° $\mathbb{H}$ 16'44	
	-8105 Dec 25 j 15:37	0° $\mathbb{Z}$		opposition	-8099 Nov 11 j 15:27	23° $\mathbb{H}$ 54'21	-1°33'22
evening set	-8104 Feb 08 j 17:53	5° $\mathbb{Z}$ 18'22		min. Earth dist.	-8099 Nov 11 j 02:52	23° $\mathbb{H}$ 56'50	8.56368 AU
				direct	-8098 Jan 20 j 05:50	20° $\mathbb{H}$ 26'52	
conjunction	-8104 Feb 26 j 20:18	7° $\mathbb{Z}$ 42'28	-2°18'51	evening set	-8098 May 06 j 01:28	28° $\mathbb{H}$ 07'24	
minimum elong	-8104 Feb 26 j 20:15	7° $\mathbb{Z}$ 42'28	2°19'24		-8098 May 21 j 15:29	0° $\mathbb{Y}$	
max. Earth dist.	-8104 Feb 27 j 20:36	7° $\mathbb{Z}$ 50'35	9.83391 AU				
morning rise	-8104 Mar 16 j 00:06	10° $\mathbb{Z}$ 06'57		conjunction	-8098 May 23 j 18:18	0° $\mathbb{Y}$ 15'25	-1°01'22
retrograde	-8104 Jun 30 j 12:33	18° $\mathbb{Z}$ 42'11		minimum elong	-8098 May 23 j 18:20	0° $\mathbb{Y}$ 15'26	1°01'25
opposition	-8104 Sep 04 j 23:42	15° $\mathbb{Z}$ 11'02	-2°59'49	max. Earth dist.	-8098 May 24 j 07:52	0° $\mathbb{Y}$ 19'33	10.64656 AU
min. Earth dist.	-8104 Sep 04 j 04:50	15° $\mathbb{Z}$ 15'00	7.86912 AU	morning rise	-8098 Jun 10 j 05:53	2° $\mathbb{Y}$ 21'52	
direct	-8104 Nov 10 j 01:16	11° $\mathbb{Z}$ 41'07		retrograde	-8098 Sep 17 j 14:09	9° $\mathbb{Y}$ 34'48	
evening set	-8103 Feb 23 j 14:11	20° $\mathbb{Z}$ 08'28		opposition	-8098 Nov 24 j 04:48	6° $\mathbb{Y}$ 14'17	-0°58'01
				min. Earth dist.	-8098 Nov 23 j 20:23	6° $\mathbb{Y}$ 15'55	8.72581 AU
conjunction	-8103 Mar 13 j 16:47	22° $\mathbb{Z}$ 31'10	-2°25'18	direct	-8097 Feb 02 j 11:32	2° $\mathbb{Y}$ 48'02	
minimum elong	-8103 Mar 13 j 16:47	22° $\mathbb{Z}$ 31'10	2°25'50	evening set	-8097 May 18 j 21:36	10° $\mathbb{Y}$ 17'51	
max. Earth dist.	-8103 Mar 14 j 18:48	22° $\mathbb{Z}$ 39'45	9.90976 AU				
morning rise	-8103 Mar 31 j 19:24	24° $\mathbb{Z}$ 53'44		conjunction	-8097 Jun 05 j 10:30	12° $\mathbb{Y}$ 22'40	-0°32'04
	-8103 May 14 j 13:19	0° $\approx$		minimum elong	-8097 Jun 05 j 10:32	12° $\mathbb{Y}$ 22'41	0°32'00
retrograde	-8103 Jul 15 j 03:31	3° $\approx$ 17'51		max. Earth dist.	-8097 Jun 05 j 18:40	12° $\mathbb{Y}$ 25'07	10.80424 AU
	-8103 Sep 17 j 02:24	30° $\mathbb{R}\mathbb{Z}$		morning rise	-8097 Jun 22 j 18:02	14° $\mathbb{Y}$ 25'55	
opposition	-8103 Sep 19 j 11:48	29° $\mathbb{Z}$ 48'01	-3°01'30	retrograde	-8097 Sep 29 j 09:31	21° $\mathbb{Y}$ 27'58	
min. Earth dist.	-8103 Sep 18 j 16:38	29° $\mathbb{Z}$ 52'01	7.96326 AU	opposition	-8097 Dec 06 j 10:33	18° $\mathbb{Y}$ 09'09	-0°21'24
direct	-8103 Nov 25 j 03:07	26° $\mathbb{Z}$ 17'53		min. Earth dist.	-8097 Dec 06 j 06:14	18° $\mathbb{Y}$ 09'59	8.87719 AU
	-8102 Jan 30 j 06:43	0° $\approx$		direct	-8096 Feb 15 j 07:34	14° $\mathbb{Y}$ 44'15	
evening set	-8102 Mar 11 j 03:01	4° $\approx$ 39'41		evening set	-8096 May 30 j 05:54	22° $\mathbb{Y}$ 04'19	
conjunction	-8102 Mar 29 j 05:01	7° $\approx$ 00'09	-2°22'23	conjunction	-8096 Jun 16 j 14:32	24° $\mathbb{Y}$ 06'12	-0°02'16
minimum elong	-8102 Mar 29 j 05:03	7° $\approx$ 00'10	2°22'52	minimum elong	-8096 Jun 16 j 14:32	24° $\mathbb{Y}$ 06'12	0°02'07

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 26

Attention, astronomical year style is used: The year -8096 in astronomical counting style is the year 8097 BCE in historical counting style.

behind sun begin	-8096 Jun 16 j 07:26	24° $\Upsilon$ 04'08		conjunction	-8090 Aug 21 j 11:09	29° $\Pi$ 53'59	2°14'01
behind sun end	-8096 Jun 16 j 21:39	24° $\Upsilon$ 08'16		minimum elong	-8090 Aug 21 j 11:07	29° $\Pi$ 53'58	2°14'33
max. Earth dist.	-8096 Jun 16 j 17:04	24° $\Upsilon$ 06'53	10.94779 AU	max. Earth dist.	-8090 Aug 20 j 15:37	29° $\Pi$ 48'21	11.28299 AU
morning rise	-8096 Jul 03 j 17:57	26° $\Upsilon$ 06'32			-8090 Aug 22 j 08:04	0° $\Theta$	
asc. node	-8096 Jul 15 j 00:08	27° $\Upsilon$ 22'55		morning rise	-8090 Sep 06 j 18:39	1° $\Theta$ 45'59	
	-8096 Aug 09 j 18:54	0° $\mathcal{B}$		retrograde	-8090 Dec 15 j 06:39	8° $\Theta$ 31'45	
retrograde	-8096 Oct 09 j 20:43	2° $\mathcal{B}$ 59'51		opposition	-8089 Feb 23 j 22:03	5° $\Theta$ 16'29	2°49'26
	-8096 Dec 13 j 12:51	30° $\mathcal{K}\Upsilon$		min. Earth dist.	-8089 Feb 24 j 16:22	5° $\Theta$ 13'09	9.26424 AU
opposition	-8096 Dec 17 j 09:41	29° $\Upsilon$ 42'30	0°14'55	direct	-8089 May 06 j 16:07	1° $\Theta$ 58'19	
min. Earth dist.	-8096 Dec 17 j 08:52	29° $\Upsilon$ 42'39	9.01180 AU	evening set	-8089 Aug 15 j 23:34	8° $\Theta$ 51'39	
direct	-8095 Feb 26 j 18:37	26° $\Upsilon$ 18'58		max. Earth dist.	-8089 Aug 31 j 08:49	10° $\Theta$ 37'50	11.23364 AU
	-8095 May 08 j 22:35	0° $\mathcal{B}$					
evening set	-8095 Jun 11 j 04:16	3° $\mathcal{B}$ 30'36		conjunction	-8089 Sep 01 j 07:21	10° $\Theta$ 44'21	2°23'21
				minimum elong	-8089 Sep 01 j 07:19	10° $\Theta$ 44'21	2°23'53
conjunction	-8095 Jun 28 j 08:34	5° $\mathcal{B}$ 29'51	0°27'00	morning rise	-8089 Sep 17 j 14:05	12° $\Theta$ 36'52	
minimum elong	-8095 Jun 28 j 08:33	5° $\mathcal{B}$ 29'50	0°27'15	retrograde	-8089 Dec 26 j 19:18	19° $\Theta$ 28'16	
max. Earth dist.	-8095 Jun 28 j 06:28	5° $\mathcal{B}$ 29'14	11.07177 AU	opposition	-8088 Mar 06 j 16:12	16° $\Theta$ 12'05	2°57'59
morning rise	-8095 Jul 15 j 07:44	7° $\mathcal{B}$ 27'38		min. Earth dist.	-8088 Mar 07 j 12:59	16° $\Theta$ 08'18	9.19975 AU
retrograde	-8095 Oct 21 j 04:46	14° $\mathcal{B}$ 14'25		direct	-8088 May 17 j 01:14	12° $\Theta$ 53'59	
opposition	-8095 Dec 29 j 03:37	10° $\mathcal{B}$ 58'15	0°49'41	evening set	-8088 Aug 25 j 23:25	19° $\Theta$ 49'42	
min. Earth dist.	-8095 Dec 29 j 06:11	10° $\mathcal{B}$ 57'47	9.12466 AU	max. Earth dist.	-8088 Sep 10 j 06:15	21° $\Theta$ 36'10	11.15419 AU
direct	-8094 Mar 10 j 22:25	7° $\mathcal{B}$ 36'03					
evening set	-8094 Jun 22 j 18:21	14° $\mathcal{B}$ 40'46		conjunction	-8088 Sep 11 j 06:27	21° $\Theta$ 43'15	2°27'34
	-8094 Jun 25 j 14:14	15° $\mathcal{B}$		minimum elong	-8088 Sep 11 j 06:27	21° $\Theta$ 43'15	2°28'05
				morning rise	-8088 Sep 27 j 13:31	23° $\Theta$ 36'53	
conjunction	-8094 Jul 09 j 18:18	16° $\mathcal{B}$ 37'44	0°54'33		-8088 Dec 10 j 10:31	0° $\Omega$	
minimum elong	-8094 Jul 09 j 18:16	16° $\mathcal{B}$ 37'43	0°54'53	retrograde	-8087 Jan 06 j 16:27	0° $\Omega$ 35'47	
max. Earth dist.	-8094 Jul 09 j 12:30	16° $\mathcal{B}$ 36'04	11.17182 AU		-8087 Feb 03 j 09:02	30° $\mathcal{K}\mathcal{B}$	
morning rise	-8094 Jul 26 j 13:15	18° $\mathcal{B}$ 33'22		opposition	-8087 Mar 18 j 15:03	27° $\Theta$ 18'23	3°00'08
retrograde	-8094 Nov 01 j 10:08	25° $\mathcal{B}$ 15'49		min. Earth dist.	-8087 Mar 19 j 12:40	27° $\Theta$ 14'25	9.10563 AU
opposition	-8093 Jan 09 j 18:18	22° $\mathcal{B}$ 00'33	1°21'51	direct	-8087 May 28 j 14:45	24° $\Theta$ 00'07	
min. Earth dist.	-8093 Jan 10 j 01:03	21° $\mathcal{B}$ 59'19	9.21202 AU		-8087 Aug 28 j 09:21	0° $\Omega$	
direct	-8093 Mar 22 j 17:28	18° $\mathcal{B}$ 39'34		evening set	-8087 Sep 06 j 02:56	0° $\Omega$ 59'46	
evening set	-8093 Jul 04 j 01:47	25° $\mathcal{B}$ 38'52		max. Earth dist.	-8087 Sep 21 j 10:22	2° $\Omega$ 47'41	11.04653 AU
conjunction	-8093 Jul 20 j 21:21	27° $\mathcal{B}$ 33'59	1°19'41	conjunction	-8087 Sep 22 j 10:29	2° $\Omega$ 54'49	2°26'16
minimum elong	-8093 Jul 20 j 21:18	27° $\mathcal{B}$ 33'59	1°20'06	minimum elong	-8087 Sep 22 j 10:30	2° $\Omega$ 54'50	2°26'45
max. Earth dist.	-8093 Jul 20 j 10:58	27° $\mathcal{B}$ 31'00	11.24474 AU	morning rise	-8087 Oct 08 j 18:48	4° $\Omega$ 50'13	
morning rise	-8093 Aug 06 j 12:35	29° $\mathcal{B}$ 27'57		retrograde	-8086 Jan 18 j 21:25	11° $\Omega$ 58'24	
	-8093 Aug 11 j 07:24	0° $\Pi$		opposition	-8086 Mar 30 j 20:01	8° $\Omega$ 39'29	2°55'26
retrograde	-8093 Nov 12 j 12:07	6° $\Pi$ 08'13		min. Earth dist.	-8086 Mar 31 j 17:02	8° $\Omega$ 35'36	8.98485 AU
opposition	-8092 Jan 21 j 06:57	2° $\Pi$ 53'30	1°50'36	direct	-8086 Jun 09 j 06:02	5° $\Omega$ 20'52	
min. Earth dist.	-8092 Jan 21 j 17:50	2° $\Pi$ 51'31	9.27116 AU	evening set	-8086 Sep 17 j 12:12	12° $\Omega$ 25'57	
	-8092 Mar 09 j 08:49	30° $\mathcal{K}\mathcal{B}$					
direct	-8092 Apr 02 j 09:14	29° $\mathcal{B}$ 33'32		conjunction	-8086 Oct 03 j 21:22	14° $\Omega$ 23'07	2°19'08
	-8092 Apr 26 j 05:41	0° $\Pi$		minimum elong	-8086 Oct 03 j 21:24	14° $\Omega$ 23'08	2°19'35
evening set	-8092 Jul 14 j 04:24	6° $\Pi$ 29'03		max. Earth dist.	-8086 Oct 02 j 21:43	14° $\Omega$ 16'01	10.91468 AU
					-8086 Oct 09 j 00:13	15° $\Omega$	
conjunction	-8092 Jul 30 j 19:57	8° $\Pi$ 22'46	1°41'41	morning rise	-8086 Oct 20 j 08:15	16° $\Omega$ 20'56	
minimum elong	-8092 Jul 30 j 19:54	8° $\Pi$ 22'45	1°42'10	retrograde	-8085 Jan 31 j 12:29	23° $\Omega$ 39'59	
max. Earth dist.	-8092 Jul 30 j 05:06	8° $\Pi$ 18'31	11.28840 AU	opposition	-8085 Apr 12 j 08:19	20° $\Omega$ 19'17	2°43'29
morning rise	-8092 Aug 16 j 08:03	10° $\Pi$ 15'33		min. Earth dist.	-8085 Apr 13 j 04:15	20° $\Omega$ 15'34	8.84230 AU
retrograde	-8092 Nov 22 j 15:26	16° $\Pi$ 55'40		direct	-8085 Jun 21 j 03:15	17° $\Omega$ 00'03	
opposition	-8091 Jan 31 j 18:39	13° $\Pi$ 41'08	2°15'11	evening set	-8085 Sep 29 j 04:59	24° $\Omega$ 11'57	
min. Earth dist.	-8091 Feb 01 j 08:26	13° $\Pi$ 38'38	9.30017 AU				
direct	-8091 Apr 13 j 21:44	10° $\Pi$ 22'00		conjunction	-8085 Oct 15 j 16:50	26° $\Omega$ 11'50	2°06'02
evening set	-8091 Jul 25 j 03:44	17° $\Pi$ 15'16		minimum elong	-8085 Oct 15 j 16:53	26° $\Omega$ 11'51	2°06'23
				max. Earth dist.	-8085 Oct 14 j 17:50	26° $\Omega$ 04'49	10.76405 AU
conjunction	-8091 Aug 10 j 16:00	19° $\Pi$ 08'06	1°59'58	morning rise	-8085 Nov 01 j 07:38	28° $\Omega$ 12'42	
minimum elong	-8091 Aug 10 j 15:58	19° $\Pi$ 08'05	2°00'29		-8085 Nov 16 j 16:36	0° $\mathcal{N}$	
max. Earth dist.	-8091 Aug 09 j 22:38	19° $\Pi$ 03'07	11.30136 AU	retrograde	-8084 Feb 13 j 14:14	5° $\mathcal{N}$ 43'51	
morning rise	-8091 Aug 27 j 01:26	21° $\Pi$ 00'13		opposition	-8084 Apr 24 j 04:50	2° $\mathcal{N}$ 21'13	2°24'05
retrograde	-8091 Dec 03 j 21:06	27° $\Pi$ 42'12		min. Earth dist.	-8084 Apr 24 j 23:25	2° $\mathcal{N}$ 17'42	8.68381 AU
opposition	-8090 Feb 12 j 07:13	24° $\Pi$ 27'28	2°34'59		-8084 May 28 j 16:12	30° $\mathcal{K}\mathcal{B}$	
min. Earth dist.	-8090 Feb 12 j 23:08	24° $\Pi$ 24'35	9.29791 AU	direct	-8084 Jul 02 j 06:42	29° $\Omega$ 01'07	
direct	-8090 Apr 25 j 07:29	21° $\Pi$ 08'57			-8084 Aug 05 j 01:55	0° $\mathcal{N}$	
evening set	-8090 Aug 05 j 01:30	28° $\Pi$ 01'29		evening set	-8084 Oct 10 j 07:15	6° $\mathcal{N}$ 21'09	

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 27

Attention, astronomical year style is used: The year -8084 in astronomical counting style is the year 8085 BCE in historical counting style.

conjunction	-8084 Oct 26 j 22:55	8° $\overline{\text{M}}$ 24'16	1°46'55	conjunction	-8077 Jan 19 j 02:49	1° $\overline{\text{X}}$ 09'12	-1°25'32
minimum elong	-8084 Oct 26 j 22:58	8° $\overline{\text{M}}$ 24'17	1°47'11	minimum elong	-8077 Jan 19 j 02:44	1° $\overline{\text{X}}$ 09'11	1°25'59
max. Earth dist.	-8084 Oct 26 j 02:18	8° $\overline{\text{M}}$ 17'52	10.60078 AU	max. Earth dist.	-8077 Jan 19 j 15:20	1° $\overline{\text{X}}$ 13'25	9.80644 AU
morning rise	-8084 Nov 12 j 18:32	10° $\overline{\text{M}}$ 28'40		morning rise	-8077 Feb 06 j 05:05	3° $\overline{\text{X}}$ 34'11	
retrograde	-8083 Feb 26 j 00:45	18° $\overline{\text{M}}$ 12'56		retrograde	-8077 May 25 j 13:23	12° $\overline{\text{X}}$ 20'04	
opposition	-8083 May 07 j 10:04	14° $\overline{\text{M}}$ 48'14	1°57'17	opposition	-8077 Jul 31 j 21:17	8° $\overline{\text{X}}$ 46'58	-2°06'11
min. Earth dist.	-8083 May 08 j 02:03	14° $\overline{\text{M}}$ 45'10	8.51622 AU	min. Earth dist.	-8077 Jul 31 j 09:15	8° $\overline{\text{X}}$ 49'29	7.78932 AU
direct	-8083 Jul 14 j 19:19	11° $\overline{\text{M}}$ 27'04		direct	-8077 Oct 05 j 09:54	5° $\overline{\text{X}}$ 18'17	
evening set	-8083 Oct 22 j 20:39	18° $\overline{\text{M}}$ 56'23		evening set	-8076 Jan 16 j 23:40	13° $\overline{\text{X}}$ 44'47	
conjunction	-8083 Nov 08 j 17:09	21° $\overline{\text{M}}$ 03'11	1°22'07	conjunction	-8076 Feb 04 j 00:01	16° $\overline{\text{X}}$ 09'23	-1°52'58
minimum elong	-8083 Nov 08 j 17:13	21° $\overline{\text{M}}$ 03'12	1°22'15	minimum elong	-8076 Feb 03 j 23:57	16° $\overline{\text{X}}$ 09'22	1°53'28
max. Earth dist.	-8083 Nov 08 j 00:56	20° $\overline{\text{M}}$ 58'03	10.43212 AU	max. Earth dist.	-8076 Feb 04 j 18:20	16° $\overline{\text{X}}$ 15'33	9.78081 AU
morning rise	-8083 Nov 25 j 18:16	23° $\overline{\text{M}}$ 11'30		morning rise	-8076 Feb 22 j 03:58	18° $\overline{\text{X}}$ 35'06	
retrograde	-8082 Feb 02 j 18:38	0° $\overline{\text{A}}$		retrograde	-8076 Jun 08 j 23:14	27° $\overline{\text{X}}$ 20'09	
retrograde	-8082 Mar 12 j 00:12	1° $\overline{\text{A}}$ 09'26		opposition	-8076 Aug 14 j 21:22	23° $\overline{\text{X}}$ 47'15	-2°36'02
opposition	-8082 Apr 18 j 21:21	30° $\overline{\text{R}}$ $\overline{\text{M}}$		min. Earth dist.	-8076 Aug 14 j 05:34	23° $\overline{\text{X}}$ 50'36	7.78632 AU
opposition	-8082 May 21 j 00:38	27° $\overline{\text{M}}$ 42'37	1°23'36	direct	-8076 Oct 19 j 12:10	20° $\overline{\text{X}}$ 17'42	
min. Earth dist.	-8082 May 21 j 12:30	27° $\overline{\text{M}}$ 40'18	8.34743 AU	evening set	-8075 Jan 31 j 22:20	28° $\overline{\text{X}}$ 47'19	
direct	-8082 Jul 27 j 18:01	24° $\overline{\text{M}}$ 20'17			-8075 Feb 10 j 01:39	0° $\overline{\text{Z}}$	
evening set	-8082 Oct 19 j 14:17	0° $\overline{\text{A}}$		conjunction	-8075 Feb 19 j 00:23	1° $\overline{\text{Z}}$ 11'56	-2°12'46
evening set	-8082 Nov 04 j 22:56	1° $\overline{\text{A}}$ 59'46		minimum elong	-8075 Feb 19 j 00:19	1° $\overline{\text{Z}}$ 11'55	2°13'19
conjunction	-8082 Nov 22 j 00:53	4° $\overline{\text{A}}$ 10'29	0°52'17	max. Earth dist.	-8075 Feb 19 j 23:30	1° $\overline{\text{Z}}$ 19'41	9.79926 AU
minimum elong	-8082 Nov 22 j 00:56	4° $\overline{\text{A}}$ 10'30	0°52'18	morning rise	-8075 Mar 09 j 04:38	3° $\overline{\text{Z}}$ 37'10	
max. Earth dist.	-8082 Nov 21 j 13:54	4° $\overline{\text{A}}$ 06'58	10.26621 AU	retrograde	-8075 Jun 24 j 03:34	12° $\overline{\text{Z}}$ 16'47	
morning rise	-8082 Dec 09 j 07:56	6° $\overline{\text{A}}$ 22'56		opposition	-8075 Aug 29 j 18:33	8° $\overline{\text{Z}}$ 44'39	-2°55'06
retrograde	-8081 Mar 26 j 11:52	14° $\overline{\text{A}}$ 34'23		min. Earth dist.	-8075 Aug 28 j 23:47	8° $\overline{\text{Z}}$ 48'37	7.82689 AU
opposition	-8081 Jun 04 j 00:22	11° $\overline{\text{A}}$ 05'36	0°44'04	direct	-8075 Nov 03 j 16:26	5° $\overline{\text{Z}}$ 14'32	
min. Earth dist.	-8081 Jun 04 j 07:05	11° $\overline{\text{A}}$ 04'16	8.18600 AU	evening set	-8074 Feb 16 j 20:39	13° $\overline{\text{Z}}$ 43'39	
direct	-8081 Aug 10 j 01:06	7° $\overline{\text{A}}$ 41'59		conjunction	-8074 Mar 06 j 23:24	16° $\overline{\text{Z}}$ 07'13	-2°23'32
evening set	-8081 Nov 18 j 15:32	15° $\overline{\text{A}}$ 32'15		minimum elong	-8074 Mar 06 j 23:23	16° $\overline{\text{Z}}$ 07'13	2°24'04
conjunction	-8081 Dec 05 j 23:03	17° $\overline{\text{A}}$ 46'53	0°18'39	max. Earth dist.	-8074 Mar 08 j 01:43	16° $\overline{\text{Z}}$ 15'58	9.86059 AU
minimum elong	-8081 Dec 05 j 23:04	17° $\overline{\text{A}}$ 46'53	0°18'32	morning rise	-8074 Mar 25 j 02:50	18° $\overline{\text{Z}}$ 30'55	
max. Earth dist.	-8081 Dec 05 j 17:25	17° $\overline{\text{A}}$ 45'03	10.11186 AU	retrograde	-8074 Jul 08 j 23:36	27° $\overline{\text{Z}}$ 00'54	
morning rise	-8081 Dec 23 j 12:04	20° $\overline{\text{A}}$ 03'23		opposition	-8074 Sep 13 j 10:00	23° $\overline{\text{Z}}$ 30'04	-3°02'12
retrograde	-8080 Apr 09 j 10:02	28° $\overline{\text{A}}$ 27'22		min. Earth dist.	-8074 Sep 12 j 13:32	23° $\overline{\text{Z}}$ 34'22	7.90803 AU
opposition	-8080 Jun 17 j 08:31	24° $\overline{\text{A}}$ 56'51	0°00'30	direct	-8074 Nov 18 j 19:33	19° $\overline{\text{Z}}$ 59'46	
min. Earth dist.	-8080 Jun 17 j 10:09	24° $\overline{\text{A}}$ 56'31	8.04101 AU	evening set	-8073 Mar 04 j 13:42	28° $\overline{\text{Z}}$ 24'45	
desc. node	-8080 Jun 21 j 11:50	24° $\overline{\text{A}}$ 36'48			-8073 Mar 16 j 18:43	0° $\overline{\text{A}}$	
direct	-8080 Aug 22 j 17:38	21° $\overline{\text{A}}$ 31'54		conjunction	-8073 Mar 22 j 16:15	0° $\overline{\text{A}}$ 46'25	-2°24'47
evening set	-8080 Dec 01 j 22:44	29° $\overline{\text{A}}$ 33'04		minimum elong	-8073 Mar 22 j 16:16	0° $\overline{\text{A}}$ 46'26	2°25'17
evening set	-8080 Dec 05 j 09:37	0° $\overline{\text{M}}$		max. Earth dist.	-8073 Mar 23 j 19:56	0° $\overline{\text{A}}$ 55'31	9.96030 AU
conjunction	-8080 Dec 19 j 11:35	1° $\overline{\text{M}}$ 51'19	-0°17'09	morning rise	-8073 Apr 09 j 17:57	3° $\overline{\text{A}}$ 07'43	
minimum elong	-8080 Dec 19 j 11:34	1° $\overline{\text{M}}$ 51'19	0°17'24	retrograde	-8073 Jul 23 j 08:24	11° $\overline{\text{A}}$ 24'54	
max. Earth dist.	-8080 Dec 19 j 11:45	1° $\overline{\text{M}}$ 51'23	9.97820 AU	opposition	-8073 Sep 27 j 17:52	7° $\overline{\text{A}}$ 55'47	-2°57'29
morning rise	-8079 Jan 06 j 06:06	4° $\overline{\text{M}}$ 11'28		min. Earth dist.	-8073 Sep 26 j 21:07	8° $\overline{\text{A}}$ 00'06	8.02389 AU
retrograde	-8079 Apr 24 j 15:29	12° $\overline{\text{M}}$ 46'03		direct	-8073 Dec 03 j 18:12	4° $\overline{\text{A}}$ 25'42	
opposition	-8079 Jul 02 j 00:13	9° $\overline{\text{M}}$ 14'11	-0°44'35	evening set	-8072 Mar 18 j 21:12	12° $\overline{\text{A}}$ 43'24	
min. Earth dist.	-8079 Jul 01 j 20:51	9° $\overline{\text{M}}$ 14'53	7.92150 AU	conjunction	-8072 Apr 05 j 22:44	15° $\overline{\text{A}}$ 02'29	-2°17'02
direct	-8079 Sep 05 j 22:21	5° $\overline{\text{M}}$ 47'54		minimum elong	-8072 Apr 05 j 22:46	15° $\overline{\text{A}}$ 02'30	2°17'28
evening set	-8079 Dec 16 j 19:48	13° $\overline{\text{M}}$ 59'18			-8072 Apr 05 j 15:02	15° $\overline{\text{A}}$	
evening set	-8079 Dec 24 j 11:52	15° $\overline{\text{M}}$		max. Earth dist.	-8072 Apr 07 j 02:00	15° $\overline{\text{A}}$ 11'18	10.09128 AU
conjunction	-8078 Jan 03 j 13:26	16° $\overline{\text{M}}$ 20'36	-0°52'44	morning rise	-8072 Apr 23 j 22:01	17° $\overline{\text{A}}$ 20'47	
minimum elong	-8078 Jan 03 j 13:23	16° $\overline{\text{M}}$ 20'35	0°53'05	retrograde	-8072 Aug 05 j 04:47	25° $\overline{\text{A}}$ 23'17	
max. Earth dist.	-8078 Jan 03 j 19:47	16° $\overline{\text{M}}$ 22'43	9.87395 AU	opposition	-8072 Oct 10 j 16:37	21° $\overline{\text{A}}$ 56'09	-2°42'12
morning rise	-8078 Jan 21 j 12:30	18° $\overline{\text{M}}$ 43'40		min. Earth dist.	-8072 Oct 09 j 21:13	22° $\overline{\text{A}}$ 00'09	8.16663 AU
retrograde	-8078 May 10 j 01:33	27° $\overline{\text{M}}$ 25'53		direct	-8072 Dec 17 j 09:46	18° $\overline{\text{A}}$ 26'38	
opposition	-8078 Jul 16 j 21:21	23° $\overline{\text{M}}$ 53'08	-1°27'58	evening set	-8071 Apr 02 j 16:37	26° $\overline{\text{A}}$ 34'44	
min. Earth dist.	-8078 Jul 16 j 13:26	23° $\overline{\text{M}}$ 54'47	7.83555 AU	conjunction	-8071 Apr 20 j 16:22	28° $\overline{\text{A}}$ 50'48	-2°01'30
direct	-8078 Sep 20 j 12:26	20° $\overline{\text{M}}$ 25'34		minimum elong	-8071 Apr 20 j 16:26	28° $\overline{\text{A}}$ 50'49	2°01'50
evening set	-8077 Jan 01 j 05:16	28° $\overline{\text{M}}$ 45'43		max. Earth dist.	-8071 Apr 21 j 17:05	28° $\overline{\text{A}}$ 58'38	10.24484 AU
evening set	-8077 Jan 10 j 12:49	0° $\overline{\text{X}}$			-8071 Apr 29 j 18:54	0° $\overline{\text{H}}$	

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 28

Attention, astronomical year style is used: The year -8071 in astronomical counting style is the year 8072 BCE in historical counting style.

morning rise	-8071 May 08 j 12:49	1° $\text{X}$ 05'44	minimum elong	-8065 Jul 05 j 04:35	11° $\text{S}$ 59'32	0°42'56
retrograde	-8071 Aug 18 j 12:45	8° $\text{X}$ 52'50	max. Earth dist.	-8065 Jul 04 j 22:43	11° $\text{S}$ 57'50	11.13700 AU
opposition	-8071 Oct 24 j 05:23	5° $\text{X}$ 27'51 -2°18'20	morning rise	-8065 Jul 22 j 01:30	13° $\text{S}$ 56'04	
min. Earth dist.	-8071 Oct 23 j 12:30	5° $\text{X}$ 31'16 8.32723 AU		-8065 Jul 31 j 14:35	15° $\text{S}$	
direct	-8071 Dec 31 j 16:13	1° $\text{X}$ 59'12	retrograde	-8065 Oct 27 j 21:49	20° $\text{S}$ 40'14	
evening set	-8070 Apr 16 j 22:23	9° $\text{X}$ 56'20	opposition	-8064 Jan 05 j 01:51	17° $\text{S}$ 24'56	1°08'00
			min. Earth dist.	-8064 Jan 05 j 08:04	17° $\text{S}$ 23'47	9.18131 AU
conjunction	-8070 May 04 j 19:41	12° $\text{X}$ 09'07 -1°39'50		-8064 Feb 10 j 15:23	15° $\text{R}$ $\text{S}$	
minimum elong	-8070 May 04 j 19:45	12° $\text{X}$ 09'08 1°40'03	direct	-8064 Mar 16 j 22:50	14° $\text{S}$ 03'40	
max. Earth dist.	-8070 May 05 j 16:06	12° $\text{X}$ 15'28 10.41147 AU		-8064 Apr 20 j 20:42	15° $\text{S}$	
morning rise	-8070 May 22 j 12:54	14° $\text{X}$ 20'32	evening set	-8064 Jun 28 j 13:10	21° $\text{S}$ 05'18	
retrograde	-8070 Aug 31 j 07:56	21° $\text{X}$ 52'40				
opposition	-8070 Nov 06 j 08:22	18° $\text{X}$ 29'50 -1°48'09	conjunction	-8064 Jul 15 j 10:39	23° $\text{S}$ 01'11	1°08'55
min. Earth dist.	-8070 Nov 05 j 18:29	18° $\text{X}$ 32'35 8.49618 AU	minimum elong	-8064 Jul 15 j 10:36	23° $\text{S}$ 01'11	1°09'18
direct	-8069 Jan 14 j 14:02	15° $\text{X}$ 02'16	max. Earth dist.	-8064 Jul 15 j 00:38	22° $\text{S}$ 58'18	11.21859 AU
evening set	-8069 Apr 30 j 14:04	22° $\text{X}$ 47'55	morning rise	-8064 Aug 01 j 03:39	24° $\text{S}$ 55'52	
				-8064 Sep 23 j 07:03	0° $\text{II}$	
conjunction	-8069 May 18 j 08:16	24° $\text{X}$ 57'21 -1°13'50	retrograde	-8064 Nov 07 j 01:27	1° $\text{II}$ 36'57	
minimum elong	-8069 May 18 j 08:19	24° $\text{X}$ 57'22 1°13'56		-8064 Dec 23 j 08:15	30° $\text{R}$ $\text{S}$	
max. Earth dist.	-8069 May 18 j 23:39	25° $\text{X}$ 02'03 10.58160 AU	opposition	-8063 Jan 15 j 15:12	28° $\text{S}$ 22'10	1°38'21
morning rise	-8069 Jun 04 j 21:47	27° $\text{X}$ 05'16	min. Earth dist.	-8063 Jan 16 j 00:35	28° $\text{S}$ 20'26	9.24923 AU
	-8069 Jun 30 j 13:48	0° $\text{Y}$	direct	-8063 Mar 28 j 17:35	25° $\text{S}$ 01'50	
retrograde	-8069 Sep 12 j 15:15	4° $\text{Y}$ 23'43		-8063 Jun 21 j 10:25	0° $\text{II}$	
opposition	-8069 Nov 19 j 01:56	1° $\text{Y}$ 02'52 -1°13'56	evening set	-8063 Jul 09 j 17:50	1° $\text{II}$ 58'58	
min. Earth dist.	-8069 Nov 18 j 15:02	1° $\text{Y}$ 05'00 8.66426 AU				
	-8069 Dec 02 j 16:34	30° $\text{R}$ $\text{X}$	conjunction	-8063 Jul 26 j 11:19	3° $\text{II}$ 53'18	1°32'23
direct	-8068 Jan 28 j 01:55	27° $\text{X}$ 36'35	minimum elong	-8063 Jul 26 j 11:16	3° $\text{II}$ 53'17	1°32'50
	-8068 Mar 23 j 06:46	0° $\text{Y}$	max. Earth dist.	-8063 Jul 25 j 22:02	3° $\text{II}$ 49'29	11.27127 AU
evening set	-8068 May 12 j 16:08	5° $\text{Y}$ 11'01	morning rise	-8063 Aug 12 j 00:41	5° $\text{II}$ 46'33	
			retrograde	-8063 Nov 18 j 05:03	12° $\text{II}$ 26'36	
conjunction	-8068 May 30 j 06:48	7° $\text{Y}$ 17'09 -0°45'11	opposition	-8062 Jan 27 j 03:10	9° $\text{II}$ 11'59	2°04'52
minimum elong	-8068 May 30 j 06:50	7° $\text{Y}$ 17'10 0°45'11	min. Earth dist.	-8062 Jan 27 j 16:08	9° $\text{II}$ 09'37	9.28747 AU
max. Earth dist.	-8068 May 30 j 17:17	7° $\text{Y}$ 20'18 10.74627 AU	direct	-8062 Apr 09 j 06:24	5° $\text{II}$ 52'24	
morning rise	-8068 Jun 16 j 16:16	9° $\text{Y}$ 21'44	evening set	-8062 Jul 20 j 18:31	12° $\text{II}$ 46'36	
retrograde	-8068 Sep 23 j 15:20	16° $\text{Y}$ 28'18				
opposition	-8068 Nov 30 j 11:01	13° $\text{Y}$ 09'15 -0°37'39	conjunction	-8062 Aug 06 j 08:16	14° $\text{II}$ 39'50	1°52'22
min. Earth dist.	-8068 Nov 30 j 03:54	13° $\text{Y}$ 10'37 8.82294 AU	minimum elong	-8062 Aug 06 j 08:13	14° $\text{II}$ 39'49	1°52'53
direct	-8067 Feb 09 j 01:59	9° $\text{Y}$ 44'18	max. Earth dist.	-8062 Aug 05 j 15:05	14° $\text{II}$ 34'54	11.29374 AU
evening set	-8067 May 25 j 05:48	17° $\text{Y}$ 08'25	morning rise	-8062 Aug 22 j 18:45	16° $\text{II}$ 32'14	
			retrograde	-8062 Nov 29 j 07:38	23° $\text{II}$ 13'15	
conjunction	-8067 Jun 11 j 16:33	19° $\text{Y}$ 11'32 -0°15'26	opposition	-8061 Feb 07 j 15:22	19° $\text{II}$ 58'26	2°26'53
minimum elong	-8067 Jun 11 j 16:34	19° $\text{Y}$ 11'32 0°15'19	min. Earth dist.	-8061 Feb 08 j 07:55	19° $\text{II}$ 55'25	9.29515 AU
behind sun begin	-8067 Jun 11 j 14:27	19° $\text{Y}$ 10'55	direct	-8061 Apr 20 j 16:23	16° $\text{II}$ 39'21	
behind sun end	-8067 Jun 11 j 18:40	19° $\text{Y}$ 12'09	evening set	-8061 Jul 31 j 16:39	23° $\text{II}$ 32'12	
max. Earth dist.	-8067 Jun 11 j 22:11	19° $\text{Y}$ 13'11 10.89740 AU	max. Earth dist.	-8061 Aug 16 j 06:50	25° $\text{II}$ 18'57	11.28558 AU
morning rise	-8067 Jun 28 j 21:44	21° $\text{Y}$ 13'02				
retrograde	-8067 Oct 05 j 07:02	28° $\text{Y}$ 09'53	conjunction	-8061 Aug 17 j 03:18	25° $\text{II}$ 24'50	2°08'22
opposition	-8067 Dec 12 j 13:07	24° $\text{Y}$ 52'25 -0°01'02	minimum elong	-8061 Aug 17 j 03:16	25° $\text{II}$ 24'49	2°08'54
min. Earth dist.	-8067 Dec 12 j 10:47	24° $\text{Y}$ 52'52 8.96502 AU	morning rise	-8061 Sep 02 j 11:45	27° $\text{II}$ 16'54	
asc. node	-8067 Dec 23 j 04:03	24° $\text{Y}$ 04'32		-8061 Sep 28 j 00:12	0° $\text{S}$	
direct	-8066 Feb 21 j 15:31	21° $\text{Y}$ 28'48	retrograde	-8061 Dec 10 j 14:45	4° $\text{S}$ 00'54	
evening set	-8066 Jun 06 j 08:53	28° $\text{Y}$ 43'58	opposition	-8060 Feb 19 j 04:50	0° $\text{S}$ 45'31	2°43'48
	-8066 Jun 17 j 07:37	0° $\text{S}$	min. Earth dist.	-8060 Feb 19 j 23:29	0° $\text{S}$ 42'08	9.27206 AU
				-8060 Feb 29 j 17:36	30° $\text{R}$ $\text{II}$	
conjunction	-8066 Jun 23 j 15:12	0° $\text{S}$ 44'18 0°14'15	direct	-8060 May 01 j 03:09	27° $\text{II}$ 26'45	
minimum elong	-8066 Jun 23 j 15:12	0° $\text{S}$ 44'18 0°14'28		-8060 Jun 28 j 11:34	0° $\text{S}$	
behind sun begin	-8066 Jun 23 j 12:01	0° $\text{S}$ 43'23	evening set	-8060 Aug 10 j 14:08	4° $\text{S}$ 19'45	
behind sun end	-8066 Jun 23 j 18:22	0° $\text{S}$ 45'13				
max. Earth dist.	-8066 Jun 23 j 15:10	0° $\text{S}$ 44'18 11.02893 AU	conjunction	-8060 Aug 26 j 22:44	6° $\text{S}$ 12'24	2°19'52
morning rise	-8066 Jul 10 j 16:07	2° $\text{S}$ 43'08	minimum elong	-8060 Aug 26 j 22:42	6° $\text{S}$ 12'23	2°20'23
retrograde	-8066 Oct 16 j 16:21	9° $\text{S}$ 32'32	max. Earth dist.	-8060 Aug 26 j 00:52	6° $\text{S}$ 06'04	11.24703 AU
opposition	-8066 Dec 24 j 09:35	6° $\text{S}$ 16'21 0°34'34	morning rise	-8060 Sep 12 j 05:48	8° $\text{S}$ 04'42	
min. Earth dist.	-8066 Dec 24 j 12:09	6° $\text{S}$ 15'52 9.08562 AU	retrograde	-8060 Dec 21 j 01:36	14° $\text{S}$ 53'32	
direct	-8065 Mar 05 j 23:09	2° $\text{S}$ 53'57	opposition	-8059 Mar 01 j 20:53	11° $\text{S}$ 37'18	2°55'03
evening set	-8065 Jun 18 j 02:51	10° $\text{S}$ 01'38	min. Earth dist.	-8059 Mar 02 j 16:28	11° $\text{S}$ 33'44	9.21881 AU
			direct	-8059 May 12 j 11:51	8° $\text{S}$ 18'39	
conjunction	-8065 Jul 05 j 04:37	11° $\text{S}$ 59'32 0°42'38	evening set	-8059 Aug 21 j 12:46	15° $\text{S}$ 13'24	

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 29

Attention, astronomical year style is used: The year -8059 in astronomical counting style is the year 8060 BCE in historical counting style.

conjunction	-8059 Sep 06 j 20:12	17° $\mathfrak{D}$ 06'36	2°26'25	conjunction	-8053 Nov 16 j 10:41	28° $\mathfrak{M}$ 31'04	1°06'11
minimum elong	-8059 Sep 06 j 20:12	17° $\mathfrak{D}$ 06'36	2°26'56	minimum elong	-8053 Nov 16 j 10:44	28° $\mathfrak{M}$ 31'05	1°06'16
max. Earth dist.	-8059 Sep 05 j 21:19	16° $\mathfrak{D}$ 59'56	11.17919 AU	max. Earth dist.	-8053 Nov 15 j 21:13	28° $\mathfrak{M}$ 26'46	10.34480 AU
morning rise	-8059 Sep 23 j 02:54	18° $\mathfrak{D}$ 59'45			-8053 Nov 28 j 02:38	0° $\mathfrak{D}$	
retrograde	-8058 Jan 01 j 20:04	25° $\mathfrak{D}$ 55'16		morning rise	-8053 Dec 03 j 15:06	0° $\mathfrak{D}$ 41'36	
opposition	-8058 Mar 13 j 17:23	22° $\mathfrak{D}$ 37'55	3°00'08	retrograde	-8052 Mar 19 j 10:41	8° $\mathfrak{D}$ 46'48	
min. Earth dist.	-8058 Mar 14 j 13:59	22° $\mathfrak{D}$ 34'08	9.13701 AU	opposition	-8052 May 28 j 03:45	5° $\mathfrak{D}$ 19'10	1°02'21
direct	-8058 May 23 j 22:33	19° $\mathfrak{D}$ 19'13		min. Earth dist.	-8052 May 28 j 12:29	5° $\mathfrak{D}$ 17'27	8.26408 AU
evening set	-8058 Sep 01 j 14:15	26° $\mathfrak{D}$ 17'09		direct	-8052 Aug 03 j 10:22	1° $\mathfrak{D}$ 56'27	
				evening set	-8052 Nov 11 j 21:29	9° $\mathfrak{D}$ 41'39	
conjunction	-8058 Sep 17 j 21:26	28° $\mathfrak{D}$ 11'33	2°27'37				
minimum elong	-8058 Sep 17 j 21:26	28° $\mathfrak{D}$ 11'33	2°28'07	conjunction	-8052 Nov 29 j 02:17	11° $\mathfrak{D}$ 54'24	0°34'03
max. Earth dist.	-8058 Sep 16 j 21:10	28° $\mathfrak{D}$ 04'24	11.08424 AU	minimum elong	-8052 Nov 29 j 02:18	11° $\mathfrak{D}$ 54'25	0°33'59
	-8058 Oct 03 j 07:41	0° $\mathfrak{D}$		max. Earth dist.	-8052 Nov 28 j 18:20	11° $\mathfrak{D}$ 51'50	10.18827 AU
morning rise	-8058 Oct 04 j 05:05	0° $\mathfrak{D}$ 06'11		morning rise	-8052 Dec 16 j 12:40	14° $\mathfrak{D}$ 09'01	
retrograde	-8057 Jan 13 j 19:44	7° $\mathfrak{D}$ 10'08		retrograde	-8051 Apr 03 j 03:19	22° $\mathfrak{D}$ 27'13	
opposition	-8057 Mar 25 j 19:28	3° $\mathfrak{D}$ 51'24	2°58'33	opposition	-8051 Jun 11 j 08:24	18° $\mathfrak{D}$ 57'55	0°20'17
min. Earth dist.	-8057 Mar 26 j 16:46	3° $\mathfrak{D}$ 47'29	9.02924 AU	min. Earth dist.	-8051 Jun 11 j 12:26	18° $\mathfrak{D}$ 57'07	8.11459 AU
direct	-8057 Jun 04 j 11:05	0° $\mathfrak{D}$ 32'27		direct	-8051 Aug 16 j 23:59	15° $\mathfrak{D}$ 34'03	
evening set	-8057 Sep 12 j 20:32	7° $\mathfrak{D}$ 35'06		evening set	-8051 Nov 25 j 22:03	23° $\mathfrak{D}$ 30'01	
max. Earth dist.	-8057 Sep 28 j 04:32	9° $\mathfrak{D}$ 24'04	10.96518 AU	desc. node	-8051 Dec 02 j 02:41	24° $\mathfrak{D}$ 18'07	
conjunction	-8057 Sep 29 j 04:45	9° $\mathfrak{D}$ 31'18	2°23'08	conjunction	-8051 Dec 13 j 08:27	25° $\mathfrak{D}$ 46'32	-0°01'06
minimum elong	-8057 Sep 29 j 04:47	9° $\mathfrak{D}$ 31'18	2°23'36	minimum elong	-8051 Dec 13 j 08:26	25° $\mathfrak{D}$ 46'32	0°01'17
morning rise	-8057 Oct 15 j 14:32	11° $\mathfrak{D}$ 28'02		behind sun begin	-8051 Dec 13 j 01:13	25° $\mathfrak{D}$ 44'11	
	-8057 Nov 17 j 04:02	15° $\mathfrak{D}$		behind sun end	-8051 Dec 13 j 15:40	25° $\mathfrak{D}$ 48'53	
retrograde	-8056 Jan 26 j 05:00	18° $\mathfrak{D}$ 42'04		max. Earth dist.	-8051 Dec 13 j 06:57	25° $\mathfrak{D}$ 46'06	10.04807 AU
opposition	-8056 Apr 06 j 04:01	15° $\mathfrak{D}$ 21'44	2°49'52	morning rise	-8051 Dec 31 j 00:29	28° $\mathfrak{D}$ 04'56	
min. Earth dist.	-8056 Apr 07 j 00:46	15° $\mathfrak{D}$ 17'52	8.89902 AU		-8050 Jan 15 j 07:04	0° $\mathfrak{M}$	
	-8056 Apr 11 j 01:01	15° $\mathfrak{R}$ $\mathfrak{D}$		retrograde	-8050 Apr 18 j 04:44	6° $\mathfrak{M}$ 34'37	
direct	-8056 Jun 15 j 06:50	12° $\mathfrak{D}$ 02'20		opposition	-8050 Jun 25 j 20:57	3° $\mathfrak{M}$ 03'54	-0°24'28
	-8056 Aug 15 j 06:33	15° $\mathfrak{D}$		min. Earth dist.	-8050 Jun 25 j 19:39	3° $\mathfrak{M}$ 04'09	7.98619 AU
evening set	-8056 Sep 23 j 09:24	19° $\mathfrak{D}$ 11'07			-8050 Aug 11 j 15:17	30° $\mathfrak{R}$ $\mathfrak{D}$	
				direct	-8050 Aug 31 j 00:36	29° $\mathfrak{D}$ 38'48	
conjunction	-8056 Oct 09 j 19:59	21° $\mathfrak{D}$ 09'46	2°12'43		-8050 Sep 19 j 04:04	0° $\mathfrak{M}$	
minimum elong	-8056 Oct 09 j 20:02	21° $\mathfrak{D}$ 09'47	2°13'07	evening set	-8050 Dec 10 j 13:02	7° $\mathfrak{M}$ 45'10	
max. Earth dist.	-8056 Oct 08 j 21:48	21° $\mathfrak{D}$ 03'02	10.82590 AU				
morning rise	-8056 Oct 26 j 08:54	23° $\mathfrak{D}$ 09'13		conjunction	-8050 Dec 28 j 04:37	10° $\mathfrak{M}$ 05'00	-0°37'01
	-8055 Jan 11 j 10:49	0° $\mathfrak{M}$		minimum elong	-8050 Dec 28 j 04:35	10° $\mathfrak{M}$ 04'59	0°37'20
retrograde	-8055 Feb 07 j 02:02	0° $\mathfrak{M}$ 34'46		max. Earth dist.	-8050 Dec 28 j 09:42	10° $\mathfrak{M}$ 06'41	9.93271 AU
	-8055 Mar 06 j 00:54	30° $\mathfrak{R}$ $\mathfrak{D}$		morning rise	-8049 Jan 15 j 01:33	12° $\mathfrak{M}$ 26'38	
opposition	-8055 Apr 18 j 20:25	27° $\mathfrak{D}$ 12'40	2°33'47		-8049 Feb 04 j 09:39	15° $\mathfrak{M}$	
min. Earth dist.	-8055 Apr 19 j 14:50	27° $\mathfrak{D}$ 09'12	8.75087 AU	retrograde	-8049 May 03 j 12:52	21° $\mathfrak{M}$ 05'13	
direct	-8055 Jun 27 j 07:36	23° $\mathfrak{D}$ 52'41		opposition	-8049 Jul 10 j 15:43	17° $\mathfrak{M}$ 33'25	-1°08'58
	-8055 Sep 25 j 14:15	0° $\mathfrak{M}$		min. Earth dist.	-8049 Jul 10 j 09:16	17° $\mathfrak{M}$ 34'45	7.88664 AU
evening set	-8055 Oct 05 j 06:51	1° $\mathfrak{M}$ 08'55			-8049 Aug 14 j 15:29	15° $\mathfrak{R}$ $\mathfrak{M}$	
				direct	-8049 Sep 14 j 09:49	14° $\mathfrak{M}$ 07'04	
conjunction	-8055 Oct 21 j 20:48	3° $\mathfrak{M}$ 10'33	1°56'15		-8049 Oct 14 j 17:34	15° $\mathfrak{M}$	
minimum elong	-8055 Oct 21 j 20:52	3° $\mathfrak{M}$ 10'34	1°56'34	evening set	-8049 Dec 25 j 17:10	22° $\mathfrak{M}$ 22'48	
max. Earth dist.	-8055 Oct 21 j 01:00	3° $\mathfrak{M}$ 04'27	10.67156 AU				
morning rise	-8055 Nov 07 j 13:58	5° $\mathfrak{M}$ 13'18		conjunction	-8048 Jan 12 j 13:02	24° $\mathfrak{M}$ 45'11	-1°11'22
retrograde	-8054 Feb 20 j 09:26	12° $\mathfrak{M}$ 51'31		minimum elong	-8048 Jan 12 j 12:58	24° $\mathfrak{M}$ 45'10	1°11'47
opposition	-8054 May 01 j 21:37	9° $\mathfrak{M}$ 27'34	2°10'14	max. Earth dist.	-8048 Jan 13 j 00:07	24° $\mathfrak{M}$ 48'54	9.84916 AU
min. Earth dist.	-8054 May 02 j 13:06	9° $\mathfrak{M}$ 24'37	8.59071 AU	morning rise	-8048 Jan 30 j 13:40	27° $\mathfrak{M}$ 09'10	
direct	-8054 Jul 09 j 14:39	6° $\mathfrak{M}$ 06'50			-8048 Feb 22 j 03:41	0° $\mathfrak{X}$	
evening set	-8054 Oct 17 j 15:00	13° $\mathfrak{M}$ 31'46		retrograde	-8048 May 18 j 00:55	5° $\mathfrak{X}$ 53'15	
				opposition	-8048 Jul 24 j 14:23	2° $\mathfrak{X}$ 20'51	-1°49'52
conjunction	-8054 Nov 03 j 09:13	15° $\mathfrak{M}$ 36'51	1°33'55	min. Earth dist.	-8048 Jul 24 j 03:31	2° $\mathfrak{X}$ 23'07	7.82181 AU
minimum elong	-8054 Nov 03 j 09:16	15° $\mathfrak{M}$ 36'52	1°34'07		-8048 Aug 24 j 14:01	30° $\mathfrak{R}$ $\mathfrak{M}$	
max. Earth dist.	-8054 Nov 02 j 16:02	15° $\mathfrak{M}$ 31'28	10.50867 AU	direct	-8048 Sep 28 j 02:50	28° $\mathfrak{M}$ 53'19	
morning rise	-8054 Nov 20 j 07:41	17° $\mathfrak{M}$ 43'21			-8048 Nov 01 j 05:20	0° $\mathfrak{X}$	
retrograde	-8053 Mar 06 j 04:22	25° $\mathfrak{M}$ 34'59		evening set	-8047 Jan 09 j 07:45	7° $\mathfrak{X}$ 16'37	
opposition	-8053 May 15 j 08:00	22° $\mathfrak{M}$ 09'10	1°39'29				
min. Earth dist.	-8053 May 15 j 20:19	22° $\mathfrak{M}$ 06'46	8.42574 AU	conjunction	-8047 Jan 27 j 06:51	9° $\mathfrak{X}$ 40'38	-1°41'29
direct	-8053 Jul 22 j 07:39	18° $\mathfrak{M}$ 47'29		minimum elong	-8047 Jan 27 j 06:47	9° $\mathfrak{X}$ 40'37	1°41'58
evening set	-8053 Oct 30 j 11:25	26° $\mathfrak{M}$ 22'11		max. Earth dist.	-8047 Jan 27 j 23:03	9° $\mathfrak{X}$ 46'05	9.80263 AU
				morning rise	-8047 Feb 14 j 09:53	12° $\mathfrak{X}$ 05'56	

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 30

Attention, astronomical year style is used: The year -8047 in astronomical counting style is the year 8048 BCE in historical counting style.

retrograde	-8047 Jun 02 j 13:16	20° $\text{♄}$ 51'30		conjunction	-8041 Apr 29 j 01:52	6° $\text{♄}$ 36'09	-1°50'08
opposition	-8047 Aug 08 j 14:41	17° $\text{♄}$ 19'03	-2°23'48	minimum elong	-8041 Apr 29 j 01:56	6° $\text{♄}$ 36'10	1°50'24
min. Earth dist.	-8047 Aug 08 j 00:22	17° $\text{♄}$ 22'04	7.79615 AU	max. Earth dist.	-8041 Apr 29 j 23:33	6° $\text{♄}$ 42'58	10.32435 AU
direct	-8047 Oct 13 j 02:14	13° $\text{♄}$ 50'29		morning rise	-8041 May 16 j 20:41	8° $\text{♄}$ 49'19	
evening set	-8046 Jan 25 j 05:02	22° $\text{♄}$ 18'44		retrograde	-8041 Aug 26 j 04:29	16° $\text{♄}$ 28'37	
				min. Earth dist.	-8041 Oct 31 j 09:19	13° $\text{♄}$ 07'33	8.40684 AU
conjunction	-8046 Feb 12 j 06:20	24° $\text{♄}$ 43'20	-2°04'55	opposition	-8041 Nov 01 j 00:52	13° $\text{♄}$ 04'26	-2°02'16
minimum elong	-8046 Feb 12 j 06:16	24° $\text{♄}$ 43'19	2°05'27	direct	-8040 Jan 08 j 22:17	9° $\text{♄}$ 35'58	
max. Earth dist.	-8046 Feb 13 j 02:50	24° $\text{♄}$ 50'13	9.79724 AU	evening set	-8040 Apr 24 j 01:12	17° $\text{♄}$ 27'15	
morning rise	-8046 Mar 02 j 10:25	27° $\text{♄}$ 08'48					
	-8046 Mar 25 j 00:13	0° $\text{♄}$		conjunction	-8040 May 11 j 21:08	19° $\text{♄}$ 38'23	-1°25'50
retrograde	-8046 Jun 17 j 21:51	5° $\text{♄}$ 51'19		minimum elong	-8040 May 11 j 21:12	19° $\text{♄}$ 38'24	1°25'59
opposition	-8046 Aug 23 j 13:41	2° $\text{♄}$ 19'20	-2°47'56	max. Earth dist.	-8040 May 12 j 15:17	19° $\text{♄}$ 43'59	10.49087 AU
min. Earth dist.	-8046 Aug 22 j 20:54	2° $\text{♄}$ 22'52	7.81267 AU	morning rise	-8040 May 29 j 12:21	21° $\text{♄}$ 48'03	
	-8046 Sep 22 j 19:43	30° $\text{♄}$		retrograde	-8040 Sep 06 j 17:17	29° $\text{♄}$ 13'00	
direct	-8046 Oct 28 j 06:02	28° $\text{♄}$ 49'57		opposition	-8040 Nov 12 j 22:48	25° $\text{♄}$ 50'46	-1°29'33
	-8046 Dec 02 j 11:22	0° $\text{♄}$		min. Earth dist.	-8040 Nov 12 j 10:47	25° $\text{♄}$ 53'09	8.57376 AU
evening set	-8045 Feb 10 j 04:33	7° $\text{♄}$ 19'43		direct	-8039 Jan 21 j 14:22	22° $\text{♄}$ 23'23	
					-8039 May 06 j 22:28	0° $\text{♄}$	
conjunction	-8045 Feb 28 j 06:56	9° $\text{♄}$ 43'50	-2°19'51	evening set	-8039 May 07 j 09:29	0° $\text{♄}$ 03'16	
minimum elong	-8045 Feb 28 j 06:54	9° $\text{♄}$ 43'49	2°20'24				
max. Earth dist.	-8045 Mar 01 j 06:32	9° $\text{♄}$ 51'43	9.83467 AU	conjunction	-8039 May 25 j 02:00	2° $\text{♄}$ 11'04	-0°58'09
morning rise	-8045 Mar 18 j 10:48	12° $\text{♄}$ 08'19		minimum elong	-8039 May 25 j 02:03	2° $\text{♄}$ 11'05	0°58'11
retrograde	-8045 Jul 02 j 22:43	20° $\text{♄}$ 43'15		max. Earth dist.	-8039 May 25 j 15:13	2° $\text{♄}$ 15'04	10.65709 AU
opposition	-8045 Sep 07 j 08:23	17° $\text{♄}$ 12'13	-3°00'29	morning rise	-8039 Jun 11 j 13:23	4° $\text{♄}$ 17'18	
min. Earth dist.	-8045 Sep 06 j 14:04	17° $\text{♄}$ 16'04	7.87105 AU	retrograde	-8039 Sep 18 j 20:14	11° $\text{♄}$ 29'26	
direct	-8045 Nov 12 j 11:20	13° $\text{♄}$ 42'18		opposition	-8039 Nov 25 j 11:38	8° $\text{♄}$ 09'04	-0°53'55
evening set	-8044 Feb 26 j 00:54	22° $\text{♄}$ 09'50		min. Earth dist.	-8039 Nov 25 j 03:38	8° $\text{♄}$ 10'37	8.73664 AU
				direct	-8038 Feb 03 j 19:32	4° $\text{♄}$ 42'55	
conjunction	-8044 Mar 15 j 03:28	24° $\text{♄}$ 32'28	-2°25'22	evening set	-8038 May 20 j 04:50	12° $\text{♄}$ 12'00	
minimum elong	-8044 Mar 15 j 03:27	24° $\text{♄}$ 32'28	2°25'54				
max. Earth dist.	-8044 Mar 16 j 04:42	24° $\text{♄}$ 40'48	9.91280 AU	conjunction	-8038 Jun 06 j 17:22	14° $\text{♄}$ 16'37	-0°28'41
morning rise	-8044 Apr 02 j 06:06	26° $\text{♄}$ 54'59		minimum elong	-8038 Jun 06 j 17:24	14° $\text{♄}$ 16'37	0°28'37
	-8044 Apr 27 j 05:38	0° $\text{♄}$		max. Earth dist.	-8038 Jun 07 j 00:46	14° $\text{♄}$ 18'49	10.81529 AU
retrograde	-8044 Jul 16 j 11:51	5° $\text{♄}$ 18'36		morning rise	-8038 Jun 24 j 00:42	16° $\text{♄}$ 19'38	
opposition	-8044 Sep 20 j 20:24	1° $\text{♄}$ 48'56	-3°00'59	retrograde	-8038 Sep 30 j 14:02	23° $\text{♄}$ 20'55	
min. Earth dist.	-8044 Sep 20 j 01:24	1° $\text{♄}$ 52'54	7.96732 AU	opposition	-8038 Dec 07 j 16:47	20° $\text{♄}$ 02'12	-0°17'14
	-8044 Oct 13 j 18:03	30° $\text{♄}$		min. Earth dist.	-8038 Dec 07 j 12:10	20° $\text{♄}$ 03'05	8.88832 AU
direct	-8044 Nov 26 j 13:40	28° $\text{♄}$ 18'51		direct	-8037 Feb 16 j 15:04	16° $\text{♄}$ 37'24	
	-8043 Jan 08 j 22:48	0° $\text{♄}$		evening set	-8037 Jun 01 j 12:20	23° $\text{♄}$ 56'43	
evening set	-8043 Mar 12 j 13:22	6° $\text{♄}$ 40'34		asc. node	-8037 Jun 03 j 19:17	24° $\text{♄}$ 12'34	
conjunction	-8043 Mar 30 j 15:21	9° $\text{♄}$ 00'57	-2°21'32	conjunction	-8037 Jun 18 j 20:39	25° $\text{♄}$ 58'21	0°01'13
minimum elong	-8043 Mar 30 j 15:23	9° $\text{♄}$ 00'58	2°22'00	minimum elong	-8037 Jun 18 j 20:40	25° $\text{♄}$ 58'21	0°01'24
max. Earth dist.	-8043 Mar 31 j 16:37	9° $\text{♄}$ 09'11	10.02603 AU	behind sun begin	-8037 Jun 18 j 13:33	25° $\text{♄}$ 56'17	
morning rise	-8043 Apr 17 j 16:01	11° $\text{♄}$ 20'46		behind sun end	-8037 Jun 19 j 03:46	26° $\text{♄}$ 00'25	
	-8043 May 18 j 04:11	15° $\text{♄}$		max. Earth dist.	-8037 Jun 18 j 23:21	25° $\text{♄}$ 59'05	10.95892 AU
retrograde	-8043 Jul 30 j 12:55	19° $\text{♄}$ 30'31		morning rise	-8037 Jul 05 j 23:43	27° $\text{♄}$ 58'28	
opposition	-8043 Oct 04 j 23:43	16° $\text{♄}$ 02'30	-2°50'14		-8037 Jul 24 j 04:53	0° $\text{♄}$	
min. Earth dist.	-8043 Oct 04 j 04:47	16° $\text{♄}$ 06'25	8.09456 AU	retrograde	-8037 Oct 12 j 02:06	4° $\text{♄}$ 51'06	
	-8043 Oct 17 j 18:56	15° $\text{♄}$		opposition	-8037 Dec 19 j 15:27	1° $\text{♄}$ 33'49	0°19'00
direct	-8043 Dec 11 j 09:40	12° $\text{♄}$ 32'37		min. Earth dist.	-8037 Dec 19 j 14:08	1° $\text{♄}$ 34'04	9.02281 AU
	-8042 Feb 03 j 00:18	15° $\text{♄}$			-8036 Jan 10 j 05:01	30° $\text{♄}$	
evening set	-8042 Mar 27 j 14:53	20° $\text{♄}$ 45'44		direct	-8036 Feb 29 j 02:23	28° $\text{♄}$ 10'23	
					-8036 Apr 17 j 23:42	0° $\text{♄}$	
conjunction	-8042 Apr 14 j 15:35	23° $\text{♄}$ 03'20	-2°09'18	evening set	-8036 Jun 12 j 09:51	5° $\text{♄}$ 21'15	
minimum elong	-8042 Apr 14 j 15:39	23° $\text{♄}$ 03'21	2°09'40				
max. Earth dist.	-8042 Apr 15 j 15:32	23° $\text{♄}$ 11'00	10.16630 AU	conjunction	-8036 Jun 29 j 13:51	7° $\text{♄}$ 20'15	0°30'15
morning rise	-8042 May 02 j 13:36	25° $\text{♄}$ 19'57		minimum elong	-8036 Jun 29 j 13:49	7° $\text{♄}$ 20'15	0°30'31
	-8042 Jun 12 j 15:47	0° $\text{♄}$		max. Earth dist.	-8036 Jun 29 j 12:31	7° $\text{♄}$ 19'52	11.08263 AU
retrograde	-8042 Aug 13 j 02:25	3° $\text{♄}$ 14'30		morning rise	-8036 Jul 16 j 12:32	9° $\text{♄}$ 17'48	
	-8042 Oct 16 j 08:05	30° $\text{♄}$			-8036 Sep 16 j 14:31	15° $\text{♄}$	
opposition	-8042 Oct 18 j 17:13	29° $\text{♄}$ 48'21	-2°29'56	retrograde	-8036 Oct 22 j 09:50	16° $\text{♄}$ 03'58	
min. Earth dist.	-8042 Oct 17 j 23:20	29° $\text{♄}$ 52'00	8.24413 AU		-8036 Nov 27 j 22:17	15° $\text{♄}$	
direct	-8042 Dec 25 j 20:53	26° $\text{♄}$ 19'02		opposition	-8036 Dec 30 j 08:58	12° $\text{♄}$ 47'51	0°53'31
	-8041 Mar 03 j 13:20	0° $\text{♄}$		min. Earth dist.	-8036 Dec 30 j 11:48	12° $\text{♄}$ 47'20	9.13533 AU
evening set	-8041 Apr 11 j 03:11	4° $\text{♄}$ 21'42		direct	-8035 Mar 12 j 03:21	9° $\text{♄}$ 25'44	

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 31

Attention, astronomical year style is used: The year -8035 in astronomical counting style is the year 8036 BCE in historical counting style.

	-8035 Jun 10 j 09:29	15°♄		minimum elong	-8029 Sep 13 j 07:52	23°♄25'45	2°28'11
evening set	-8035 Jun 23 j 23:09	16°♄29'42		morning rise	-8029 Sep 29 j 14:50	25°♄19'20	
					-8029 Nov 15 j 03:58	0°♄	
conjunction	-8035 Jul 10 j 22:41	18°♄26'27	0°57'34	retrograde	-8028 Jan 08 j 18:41	2°♄18'11	
minimum elong	-8035 Jul 10 j 22:38	18°♄26'26	0°57'55		-8028 Mar 06 j 00:55	30°♄	
max. Earth dist.	-8035 Jul 10 j 16:39	18°♄24'42	11.18215 AU	opposition	-8028 Mar 19 j 17:50	29°♄00'46	2°59'55
morning rise	-8035 Jul 27 j 17:18	20°♄21'52		min. Earth dist.	-8028 Mar 20 j 14:39	28°♄56'57	9.10922 AU
retrograde	-8035 Nov 02 j 12:53	27°♄03'46		direct	-8028 May 29 j 16:39	25°♄42'37	
opposition	-8034 Jan 10 j 23:08	23°♄48'33	1°25'19		-8028 Aug 13 j 14:02	0°♄	
min. Earth dist.	-8034 Jan 11 j 06:26	23°♄47'12	9.22210 AU	evening set	-8028 Sep 07 j 04:10	2°♄41'55	
direct	-8034 Mar 23 j 22:55	20°♄27'36		max. Earth dist.	-8028 Sep 22 j 11:53	4°♄29'52	11.04959 AU
evening set	-8034 Jul 05 j 05:53	27°♄26'15					
				conjunction	-8028 Sep 23 j 11:46	4°♄36'56	2°25'48
conjunction	-8034 Jul 22 j 01:00	29°♄21'08	1°22'21	minimum elong	-8028 Sep 23 j 11:48	4°♄36'56	2°26'16
minimum elong	-8034 Jul 22 j 00:57	29°♄21'07	1°22'46	morning rise	-8028 Oct 09 j 20:09	6°♄32'18	
max. Earth dist.	-8034 Jul 21 j 13:58	29°♄17'58	11.25434 AU	retrograde	-8027 Jan 20 j 00:22	13°♄40'28	
	-8034 Jul 27 j 16:27	0°♄		opposition	-8027 Mar 31 j 22:30	10°♄21'33	2°54'30
morning rise	-8034 Aug 07 j 16:00	1°♄14'54		min. Earth dist.	-8027 Apr 01 j 19:27	10°♄17'41	8.98725 AU
retrograde	-8034 Nov 13 j 15:14	7°♄54'42		direct	-8027 Jun 10 j 08:08	7°♄03'00	
opposition	-8033 Jan 22 j 11:13	4°♄40'01	1°53'34	evening set	-8027 Sep 18 j 13:21	14°♄07'51	
min. Earth dist.	-8033 Jan 22 j 21:53	4°♄38'04	9.28035 AU		-8027 Sep 25 j 21:30	15°♄	
direct	-8033 Apr 04 j 14:31	1°♄20'07					
evening set	-8033 Jul 16 j 07:44	8°♄15'00		conjunction	-8027 Oct 04 j 22:31	16°♄05'01	2°18'07
				minimum elong	-8027 Oct 04 j 22:33	16°♄05'02	2°18'32
conjunction	-8033 Aug 01 j 23:00	10°♄08'32	1°43'55	max. Earth dist.	-8027 Oct 03 j 22:00	15°♄57'39	10.91640 AU
minimum elong	-8033 Aug 01 j 22:57	10°♄08'31	1°44'25	morning rise	-8027 Oct 21 j 09:40	18°♄02'52	
max. Earth dist.	-8033 Aug 01 j 08:37	10°♄04'24	11.29701 AU	retrograde	-8026 Feb 01 j 14:58	25°♄21'56	
morning rise	-8033 Aug 18 j 10:46	12°♄01'08		opposition	-8026 Apr 13 j 10:47	22°♄01'17	2°41'52
retrograde	-8033 Nov 24 j 18:21	18°♄40'55		min. Earth dist.	-8026 Apr 14 j 07:27	21°♄57'25	8.84310 AU
opposition	-8032 Feb 02 j 22:35	15°♄26'22	2°17'37	direct	-8026 Jun 22 j 04:23	18°♄42'06	
min. Earth dist.	-8032 Feb 03 j 11:40	15°♄24'00	9.30823 AU	evening set	-8026 Sep 30 j 06:03	25°♄53'53	
direct	-8032 Apr 15 j 02:05	12°♄07'20					
evening set	-8032 Jul 26 j 06:23	19°♄00'01		conjunction	-8026 Oct 16 j 18:03	27°♄53'48	2°04'27
				minimum elong	-8026 Oct 16 j 18:06	27°♄53'49	2°04'48
conjunction	-8032 Aug 11 j 18:27	20°♄52'41	2°01'44	max. Earth dist.	-8026 Oct 15 j 18:47	27°♄46'42	10.76407 AU
minimum elong	-8032 Aug 11 j 18:24	20°♄52'41	2°02'16	morning rise	-8026 Nov 02 j 09:08	29°♄54'44	
max. Earth dist.	-8032 Aug 11 j 01:40	20°♄47'53	11.30878 AU		-8026 Nov 03 j 02:47	0°♄	
morning rise	-8032 Aug 28 j 03:34	22°♄44'39		retrograde	-8025 Feb 14 j 14:57	7°♄26'05	
retrograde	-8032 Dec 05 j 00:53	29°♄26'23		opposition	-8025 Apr 26 j 07:20	4°♄03'27	2°21'49
opposition	-8031 Feb 13 j 10:49	26°♄11'40	2°36'48	min. Earth dist.	-8025 Apr 27 j 02:23	3°♄59'51	8.68283 AU
min. Earth dist.	-8031 Feb 14 j 02:51	26°♄08'46	9.30475 AU	direct	-8025 Jul 04 j 08:43	0°♄43'24	
direct	-8031 Apr 26 j 11:00	22°♄53'14		evening set	-8025 Oct 12 j 08:27	8°♄03'27	
evening set	-8031 Aug 06 j 03:46	29°♄45'17		max. Earth dist.	-8025 Oct 28 j 04:22	10°♄00'26	10.59895 AU
	-8031 Aug 08 j 07:55	0°♄					
				conjunction	-8025 Oct 29 j 00:29	10°♄06'40	1°44'50
conjunction	-8031 Aug 22 j 13:07	1°♄37'38	2°15'15	minimum elong	-8025 Oct 29 j 00:33	10°♄06'42	1°45'05
minimum elong	-8031 Aug 22 j 13:05	1°♄37'38	2°15'48	morning rise	-8025 Nov 14 j 20:22	12°♄11'11	
max. Earth dist.	-8031 Aug 21 j 17:01	1°♄31'51	11.28918 AU	retrograde	-8024 Feb 28 j 03:37	19°♄55'47	
morning rise	-8031 Sep 07 j 20:31	3°♄29'33		opposition	-8024 May 08 j 12:36	16°♄31'03	1°54'26
retrograde	-8031 Dec 16 j 07:49	10°♄15'07		min. Earth dist.	-8024 May 09 j 04:24	16°♄28'01	8.51341 AU
opposition	-8030 Feb 25 j 01:16	6°♄59'52	2°50'36	direct	-8024 Jul 15 j 22:23	13°♄09'56	
min. Earth dist.	-8030 Feb 25 j 20:10	6°♄56'27	9.26986 AU	evening set	-8024 Oct 23 j 22:18	20°♄39'24	
direct	-8030 May 07 j 18:19	3°♄41'47					
evening set	-8030 Aug 17 j 01:23	10°♄34'44		conjunction	-8024 Nov 09 j 19:12	22°♄46'21	1°19'36
max. Earth dist.	-8030 Sep 01 j 10:16	12°♄20'46	11.23870 AU	minimum elong	-8024 Nov 09 j 19:15	22°♄46'22	1°19'43
				max. Earth dist.	-8024 Nov 09 j 03:11	22°♄41'18	10.42841 AU
conjunction	-8030 Sep 02 j 08:58	12°♄27'20	2°24'03	morning rise	-8024 Nov 26 j 20:34	24°♄54'50	
minimum elong	-8030 Sep 02 j 08:57	12°♄27'20	2°24'34		-8023 Jan 12 j 02:54	0°♄	
morning rise	-8030 Sep 18 j 15:42	14°♄19'46		retrograde	-8023 Mar 13 j 04:53	2°♄53'12	
retrograde	-8030 Dec 27 j 21:58	21°♄11'05			-8023 May 14 j 22:39	30°♄	
opposition	-8029 Mar 08 j 19:12	17°♄54'55	2°58'28	opposition	-8023 May 22 j 03:24	29°♄26'22	1°20'15
min. Earth dist.	-8029 Mar 09 j 15:43	17°♄51'11	9.20429 AU	min. Earth dist.	-8023 May 22 j 14:49	29°♄24'08	8.34282 AU
direct	-8029 May 19 j 05:21	14°♄36'54		direct	-8023 Jul 28 j 19:04	26°♄04'03	
evening set	-8029 Aug 28 j 00:48	21°♄32'15			-8023 Oct 05 j 03:24	0°♄	
max. Earth dist.	-8029 Sep 12 j 08:34	23°♄18'56	11.15826 AU	evening set	-8023 Nov 06 j 01:09	3°♄43'51	
conjunction	-8029 Sep 13 j 07:52	23°♄25'45	2°27'41	conjunction	-8023 Nov 23 j 03:22	5°♄54'44	0°49'26

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodiens AG 18-Feb-2025 14:23, page 32

Attention, astronomical year style is used: The year -8023 in astronomical counting style is the year 8024 BCE in historical counting style.

minimum elong	-8023 Nov 23 j 03:24	5° <u>54</u> '45	0°49'26	conjunction	-8016 Feb 21 j 07:39	3° <u>30</u> '40	-2°14'04
max. Earth dist.	-8023 Nov 22 j 15:47	5° <u>51</u> '01	10.26086 AU	minimum elong	-8016 Feb 21 j 07:36	3° <u>30</u> '43	2°14'36
morning rise	-8023 Dec 10 j 10:46	8° <u>07</u> '22		max. Earth dist.	-8016 Feb 22 j 07:30	3° <u>31</u> '24	9.79483 AU
retrograde	-8022 Mar 27 j 16:48	16° <u>19</u> '22		morning rise	-8016 Mar 10 j 11:48	5° <u>29</u> '57	
opposition	-8022 Jun 05 j 03:34	12° <u>50</u> '33	0°40'22	retrograde	-8016 Jun 25 j 10:14	14° <u>30</u> '42	
min. Earth dist.	-8022 Jun 05 j 10:18	12° <u>49</u> '12	8.17992 AU	min. Earth dist.	-8016 Aug 30 j 04:52	10° <u>34</u> '35	7.82332 AU
direct	-8022 Aug 11 j 02:27	9° <u>26</u> '55		opposition	-8016 Aug 31 j 00:04	10° <u>33</u> '32	-2°56'14
evening set	-8022 Nov 19 j 18:28	17° <u>17</u> '41		direct	-8016 Nov 04 j 22:27	7° <u>30</u> '18	
				evening set	-8015 Feb 18 j 04:06	15° <u>33</u> '52	
conjunction	-8022 Dec 07 j 02:12	19° <u>32</u> '30	0°15'35				
minimum elong	-8022 Dec 07 j 02:13	19° <u>32</u> '30	0°15'27	conjunction	-8015 Mar 08 j 06:55	18° <u>30</u> '30	-2°24'00
behind sun begin	-8022 Dec 07 j 00:14	19° <u>31</u> '52		minimum elong	-8015 Mar 08 j 06:54	18° <u>30</u> '29	2°24'32
behind sun end	-8022 Dec 07 j 04:12	19° <u>33</u> '09		max. Earth dist.	-8015 Mar 09 j 09:47	18° <u>30</u> '26	9.85788 AU
max. Earth dist.	-8022 Dec 06 j 19:39	19° <u>30</u> '22	10.10532 AU	morning rise	-8015 Mar 26 j 10:12	20° <u>32</u> '12	
morning rise	-8022 Dec 24 j 15:39	21° <u>49</u> '12		retrograde	-8015 Jul 10 j 05:52	28° <u>35</u> '06	
	-8021 Mar 26 j 10:37	0° <u>11</u> '		opposition	-8015 Sep 14 j 15:42	25° <u>32</u> '15	-3°02'15
retrograde	-8021 Apr 11 j 14:22	0° <u>11</u> '47		min. Earth dist.	-8015 Sep 13 j 19:10	25° <u>32</u> '34	7.90624 AU
	-8021 Apr 27 j 17:30	30° <u>18</u> '		direct	-8015 Nov 20 j 01:14	21° <u>35</u> '50	
desc. node	-8021 May 22 j 01:08	28° <u>51</u> '27			-8014 Mar 03 j 12:47	0° <u>00</u> '	
opposition	-8021 Jun 19 j 12:14	26° <u>43</u> '15	-0°03'24	evening set	-8014 Mar 05 j 21:08	0° <u>00</u> '18	04
min. Earth dist.	-8021 Jun 19 j 14:25	26° <u>42</u> '48	8.03401 AU				
direct	-8021 Aug 24 j 21:08	23° <u>18</u> '13		conjunction	-8014 Mar 23 j 23:41	2° <u>39</u> '45	-2°24'23
	-8021 Nov 23 j 15:16	0° <u>11</u> '		minimum elong	-8014 Mar 23 j 23:42	2° <u>39</u> '46	2°24'53
evening set	-8021 Dec 04 j 02:31	1° <u>12</u> '00	02	max. Earth dist.	-8014 Mar 25 j 03:34	2° <u>48</u> '54	9.95946 AU
				morning rise	-8014 Apr 11 j 01:18	5° <u>01</u> '02	
conjunction	-8021 Dec 21 j 15:38	3° <u>13</u> '30	-0°20'16	retrograde	-8014 Jul 24 j 14:40	13° <u>17</u> '57	
minimum elong	-8021 Dec 21 j 15:36	3° <u>13</u> '29	0°20'31	opposition	-8014 Sep 28 j 23:34	9° <u>48</u> '51	-2°56'29
max. Earth dist.	-8021 Dec 21 j 15:04	3° <u>13</u> '19	9.97097 AU	min. Earth dist.	-8014 Sep 28 j 03:17	9° <u>53</u> '04	8.02395 AU
morning rise	-8020 Jan 08 j 10:32	5° <u>15</u> '51		direct	-8014 Dec 04 j 23:47	6° <u>18</u> '39	
retrograde	-8020 Apr 25 j 19:38	14° <u>13</u> '04		evening set	-8013 Mar 21 j 04:35	14° <u>36</u> '26	
opposition	-8020 Jul 03 j 04:23	11° <u>02</u> '10	-0°48'25		-8013 Mar 24 j 06:50	15° <u>00</u> '	
min. Earth dist.	-8020 Jul 03 j 01:46	11° <u>02</u> '42	7.91411 AU				
direct	-8020 Sep 07 j 02:16	7° <u>13</u> '56		conjunction	-8013 Apr 08 j 06:02	16° <u>55</u> '30	-2°15'49
	-8020 Dec 11 j 20:51	15° <u>11</u> '		minimum elong	-8013 Apr 08 j 06:04	16° <u>55</u> '30	2°16'15
evening set	-8020 Dec 18 j 00:32	15° <u>14</u> '55		max. Earth dist.	-8013 Apr 09 j 08:50	17° <u>04</u> '09	10.09227 AU
				morning rise	-8013 Apr 26 j 05:17	19° <u>13</u> '44	
conjunction	-8019 Jan 04 j 18:25	18° <u>09</u> '25	-0°55'41	retrograde	-8013 Aug 07 j 10:52	27° <u>15</u> '48	
minimum elong	-8019 Jan 04 j 18:22	18° <u>09</u> '24	0°56'03	opposition	-8013 Oct 12 j 22:10	23° <u>48</u> '43	-2°40'14
max. Earth dist.	-8019 Jan 05 j 00:33	18° <u>11</u> '28	9.86655 AU	min. Earth dist.	-8013 Oct 12 j 03:20	23° <u>52</u> '35	8.16847 AU
morning rise	-8019 Jan 22 j 17:43	20° <u>13</u> '24		direct	-8013 Dec 19 j 15:43	20° <u>19</u> '07	
retrograde	-8019 May 11 j 06:24	29° <u>15</u> '29		evening set	-8012 Apr 03 j 23:37	28° <u>27</u> '08	
opposition	-8019 Jul 18 j 01:57	25° <u>42</u> '41	-1°31'29		-8012 Apr 16 j 07:11	0° <u>00</u> '	
min. Earth dist.	-8019 Jul 17 j 18:26	25° <u>44</u> '15	7.82836 AU				
direct	-8019 Sep 21 j 16:42	22° <u>15</u> '01		conjunction	-8012 Apr 21 j 23:14	0° <u>43</u> '08	-1°59'35
	-8019 Dec 28 j 21:05	0° <u>37</u> '		minimum elong	-8012 Apr 21 j 23:18	0° <u>43</u> '09	1°59'54
evening set	-8018 Jan 02 j 10:50	0° <u>35</u> '55		max. Earth dist.	-8012 Apr 22 j 23:07	0° <u>50</u> '43	10.24758 AU
				morning rise	-8012 May 09 j 19:40	2° <u>58</u> '00	
conjunction	-8018 Jan 20 j 08:37	2° <u>59</u> '35	-1°28'08	retrograde	-8012 Aug 19 j 17:39	10° <u>44</u> '36	
minimum elong	-8018 Jan 20 j 08:33	2° <u>59</u> '33	1°28'35	opposition	-8012 Oct 25 j 10:47	7° <u>19</u> '41	-2°15'35
max. Earth dist.	-8018 Jan 20 j 21:32	3° <u>03</u> '56	9.79953 AU	min. Earth dist.	-8012 Oct 24 j 17:51	7° <u>23</u> '07	8.33075 AU
morning rise	-8018 Feb 07 j 10:59	5° <u>24</u> '43		direct	-8011 Jan 01 j 23:19	3° <u>51</u> '01	
retrograde	-8018 May 26 j 18:58	14° <u>11</u> '07		evening set	-8011 Apr 18 j 04:44	11° <u>47</u> '54	
opposition	-8018 Aug 02 j 02:18	10° <u>37</u> '58	-2°09'08				
min. Earth dist.	-8018 Aug 01 j 14:06	10° <u>40</u> '31	7.78294 AU	conjunction	-8011 May 06 j 01:56	14° <u>00</u> '35	-1°37'21
direct	-8018 Oct 06 j 14:44	7° <u>09</u> '09		minimum elong	-8011 May 06 j 02:00	14° <u>00</u> '36	1°37'33
evening set	-8017 Jan 18 j 06:03	15° <u>36</u> '23		max. Earth dist.	-8011 May 06 j 22:00	14° <u>06</u> '50	10.41587 AU
				morning rise	-8011 May 23 j 19:04	16° <u>11</u> '56	
conjunction	-8017 Feb 05 j 06:38	18° <u>01</u> '08	-1°54'59	retrograde	-8011 Sep 01 j 11:31	23° <u>43</u> '33	
minimum elong	-8017 Feb 05 j 06:34	18° <u>01</u> '06	1°55'30	opposition	-8011 Nov 07 j 13:27	20° <u>20</u> '46	-1°44'49
max. Earth dist.	-8017 Feb 06 j 01:39	18° <u>07</u> '32	9.77496 AU	min. Earth dist.	-8011 Nov 06 j 22:52	20° <u>23</u> '40	8.50127 AU
morning rise	-8017 Feb 23 j 10:35	20° <u>26</u> '57		direct	-8010 Jan 15 j 21:10	16° <u>53</u> '17	
retrograde	-8017 Jun 11 j 05:30	29° <u>12</u> '20		evening set	-8010 May 01 j 19:53	24° <u>38</u> '34	
min. Earth dist.	-8017 Aug 16 j 10:22	25° <u>42</u> '50	7.78120 AU				
opposition	-8017 Aug 17 j 02:41	25° <u>39</u> '23	-2°38'10	conjunction	-8010 May 19 j 14:02	26° <u>47</u> '52	-1°10'57
direct	-8017 Oct 21 j 17:43	22° <u>09</u> '43		minimum elong	-8010 May 19 j 14:05	26° <u>47</u> '53	1°11'01
	-8016 Jan 29 j 03:06	0° <u>33</u> '		max. Earth dist.	-8010 May 20 j 05:58	26° <u>52</u> '44	10.58757 AU
evening set	-8016 Feb 03 j 05:27	0° <u>33</u> '58		morning rise	-8010 Jun 06 j 03:20	28° <u>55</u> '40	



## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 33

Attention, astronomical year style is used: The year -8010 in astronomical counting style is the year 8011 BCE in historical counting style.

	-8010 Jun 15 j 05:46	0°♊		conjunction	-8004 Jul 27 j 12:56	5°♊35'54	1°34'40
retrograde	-8010 Sep 13 j 20:39	6°♊13'36		minimum elong	-8004 Jul 27 j 12:53	5°♊35'53	1°35'08
opposition	-8010 Nov 20 j 06:42	2°♊52'50	-1°10'12	max. Earth dist.	-8004 Jul 26 j 23:29	5°♊32'03	11.28211 AU
min. Earth dist.	-8010 Nov 19 j 19:12	2°♊55'05	8.67090 AU	morning rise	-8004 Aug 13 j 02:01	7°♊28'59	
	-8009 Jan 03 j 06:39	30°♋		retrograde	-8004 Nov 19 j 05:19	14°♊08'34	
direct	-8009 Jan 29 j 06:45	29°♋26'39		opposition	-8003 Jan 28 j 05:32	10°♊54'04	2°07'23
	-8009 Feb 24 j 05:51	0°♊		min. Earth dist.	-8003 Jan 28 j 19:07	10°♊51'36	9.29803 AU
evening set	-8009 May 14 j 21:28	7°♊00'37		direct	-8003 Apr 10 j 08:15	7°♊34'36	
				evening set	-8003 Jul 21 j 19:58	14°♊28'14	
conjunction	-8009 Jun 01 j 12:00	9°♊06'38	-0°42'04				
minimum elong	-8009 Jun 01 j 12:02	9°♊06'39	0°42'02	conjunction	-8003 Aug 07 j 09:20	16°♊21'15	1°54'14
max. Earth dist.	-8009 Jun 01 j 23:32	9°♊10'06	10.75385 AU	minimum elong	-8003 Aug 07 j 09:17	16°♊21'14	1°54'45
morning rise	-8009 Jun 18 j 21:07	11°♊11'02		max. Earth dist.	-8003 Aug 06 j 15:32	16°♊16'09	11.30380 AU
retrograde	-8009 Sep 25 j 19:36	18°♊17'04		morning rise	-8003 Aug 23 j 19:40	18°♊13'29	
opposition	-8009 Dec 02 j 15:39	14°♊58'07	-0°33'45	retrograde	-8003 Nov 30 j 09:06	24°♊54'08	
min. Earth dist.	-8009 Dec 02 j 08:34	14°♊59'29	8.83134 AU	opposition	-8002 Feb 08 j 17:15	21°♊39'24	2°28'50
direct	-8008 Feb 11 j 06:12	11°♊33'17		min. Earth dist.	-8002 Feb 09 j 09:43	21°♊36'25	9.30469 AU
evening set	-8008 May 26 j 10:30	18°♊56'50		direct	-8002 Apr 21 j 19:53	18°♊20'27	
				evening set	-8002 Aug 01 j 17:31	25°♊12'43	
conjunction	-8008 Jun 12 j 20:53	20°♊59'45	-0°12'15	max. Earth dist.	-8002 Aug 17 j 08:01	26°♊59'27	11.29443 AU
minimum elong	-8008 Jun 12 j 20:54	20°♊59'45	0°12'07				
behind sun begin	-8008 Jun 12 j 16:05	20°♊58'20		conjunction	-8002 Aug 18 j 04:00	27°♊05'12	2°09'45
behind sun end	-8008 Jun 13 j 01:43	21°♊01'09		minimum elong	-8002 Aug 18 j 03:58	27°♊05'11	2°10'17
max. Earth dist.	-8008 Jun 13 j 02:51	21°♊01'29	10.90672 AU	morning rise	-8002 Sep 03 j 12:11	28°♊57'07	
morning rise	-8008 Jun 30 j 01:46	23°♊01'05			-8002 Sep 12 j 23:21	0°♋	
retrograde	-8008 Oct 06 j 10:08	29°♊57'21		retrograde	-8002 Dec 11 j 15:21	5°♋40'48	
asc. node	-8008 Nov 14 j 07:10	28°♊43'45		opposition	-8001 Feb 20 j 06:24	2°♋25'28	2°45'09
opposition	-8008 Dec 13 j 17:23	26°♊39'59	0°02'52	min. Earth dist.	-8001 Feb 21 j 00:28	2°♋22'12	9.28018 AU
min. Earth dist.	-8008 Dec 13 j 15:14	26°♊40'24	8.97516 AU		-8001 Mar 29 j 19:12	30°♋	
direct	-8007 Feb 22 j 21:18	23°♊16'28		direct	-8001 May 03 j 04:24	29°♊06'50	
	-8007 Jun 02 j 23:42	0°♋			-8001 Jun 05 j 21:49	0°♋	
evening set	-8007 Jun 07 j 12:54	0°♋30'59		evening set	-8001 Aug 12 j 14:33	5°♋59'18	
conjunction	-8007 Jun 24 j 18:47	2°♋31'06	0°17'22	conjunction	-8001 Aug 28 j 23:02	7°♋51'48	2°20'44
minimum elong	-8007 Jun 24 j 18:46	2°♋31'05	0°17'36	minimum elong	-8001 Aug 28 j 23:00	7°♋51'48	2°21'15
max. Earth dist.	-8007 Jun 24 j 18:20	2°♋30'58	11.03967 AU	max. Earth dist.	-8001 Aug 28 j 01:33	7°♋45'36	11.25434 AU
morning rise	-8007 Jul 11 j 19:30	4°♋29'42		morning rise	-8001 Sep 14 j 05:53	9°♋43'59	
retrograde	-8007 Oct 17 j 18:41	11°♋18'31		retrograde	-8001 Dec 23 j 03:24	16°♋32'35	
opposition	-8007 Dec 25 j 13:13	8°♋02'26	0°38'17	opposition	-8000 Mar 02 j 22:17	13°♋16'22	2°55'46
min. Earth dist.	-8007 Dec 25 j 15:22	8°♋02'02	9.09680 AU	min. Earth dist.	-8000 Mar 03 j 17:58	13°♋12'47	9.22531 AU
direct	-8006 Mar 07 j 03:18	4°♋40'11		direct	-8000 May 13 j 13:15	9°♋57'49	
evening set	-8006 Jun 19 j 06:07	11°♋47'10		evening set	-8000 Aug 22 j 12:49	16°♋52'03	
conjunction	-8006 Jul 06 j 07:33	13°♋44'51	0°45'34	conjunction	-8000 Sep 07 j 20:05	18°♋45'11	2°26'45
minimum elong	-8006 Jul 06 j 07:31	13°♋44'50	0°45'53	minimum elong	-8000 Sep 07 j 20:04	18°♋45'10	2°27'16
max. Earth dist.	-8006 Jul 06 j 01:57	13°♋43'14	11.14837 AU	max. Earth dist.	-8000 Sep 06 j 20:24	18°♋38'17	11.18482 AU
	-8006 Jul 17 j 03:49	15°♋		morning rise	-8000 Sep 24 j 02:50	20°♋38'15	
morning rise	-8006 Jul 23 j 04:06	15°♋41'09		retrograde	-7999 Jan 02 j 19:32	27°♋33'34	
retrograde	-8006 Oct 28 j 23:46	22°♋24'47		opposition	-7999 Mar 14 j 18:29	24°♋16'12	3°00'12
opposition	-8005 Jan 06 j 05:00	19°♋09'35	1°11'25	min. Earth dist.	-7999 Mar 15 j 15:54	24°♋12'17	9.14171 AU
min. Earth dist.	-8005 Jan 06 j 10:27	19°♋08'35	9.19271 AU	direct	-7999 May 24 j 22:29	20°♋57'32	
direct	-8005 Mar 19 j 03:20	15°♋48'29		evening set	-7999 Sep 02 j 13:58	27°♋55'05	
evening set	-8005 Jun 30 j 15:45	22°♋49'26					
				conjunction	-7999 Sep 18 j 21:05	29°♋49'25	2°27'25
conjunction	-8005 Jul 17 j 12:56	24°♋45'06	1°11'35	minimum elong	-7999 Sep 18 j 21:06	29°♋49'25	2°27'55
minimum elong	-8005 Jul 17 j 12:54	24°♋45'05	1°11'58	max. Earth dist.	-7999 Sep 17 j 20:27	29°♋42'10	11.08799 AU
max. Earth dist.	-8005 Jul 17 j 03:48	24°♋42'28	11.22989 AU		-7999 Sep 20 j 09:02	0°♌	
morning rise	-8005 Aug 03 j 05:28	26°♋39'32		morning rise	-7999 Oct 05 j 04:51	1°♌44'00	
	-8005 Sep 04 j 06:23	0°♌		retrograde	-7998 Jan 14 j 19:37	8°♌47'52	
retrograde	-8005 Nov 09 j 04:31	3°♌20'08		opposition	-7998 Mar 26 j 20:14	5°♌29'05	2°57'58
opposition	-8004 Jan 17 j 18:02	0°♌05'29	1°41'22	min. Earth dist.	-7998 Mar 27 j 17:49	5°♌25'06	9.03196 AU
min. Earth dist.	-8004 Jan 18 j 03:26	0°♌03'45	9.26038 AU	direct	-7998 Jun 05 j 12:56	2°♌10'08	
	-8004 Jan 18 j 23:55	30°♌		evening set	-7998 Sep 13 j 19:56	9°♌12'28	
direct	-8004 Mar 29 j 20:20	26°♌45'19		max. Earth dist.	-7998 Sep 29 j 04:39	11°♌01'36	10.96687 AU
	-8004 Jun 04 j 19:08	0°♌					
evening set	-8004 Jul 10 j 19:51	3°♌41'47		conjunction	-7998 Sep 30 j 04:19	11°♌08'39	2°22'24
				minimum elong	-7998 Sep 30 j 04:21	11°♌08'40	2°22'51

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 34

Attention, astronomical year style is used: The year -7998 in astronomical counting style is the year 7999 BCE in historical counting style.

morning rise	-7998 Oct 16 j 14:07	13° $\Omega$ 05'23		behind sun begin	-7992 Dec 14 j 02:57	27° $\underline{\Omega}$ 25'10	
	-7998 Nov 02 j 10:35	15° $\Omega$		behind sun end	-7992 Dec 14 j 17:12	27° $\underline{\Omega}$ 29'48	
retrograde	-7997 Jan 27 j 06:07	20° $\Omega$ 19'25		max. Earth dist.	-7992 Dec 14 j 08:49	27° $\underline{\Omega}$ 27'07	10.03916 AU
opposition	-7997 Apr 08 j 04:40	16° $\Omega$ 59'00	2°48'38	morning rise	-7991 Jan 01 j 02:20	29° $\underline{\Omega}$ 46'07	
min. Earth dist.	-7997 Apr 09 j 00:55	16° $\Omega$ 55'14	8.89964 AU		-7991 Jan 02 j 21:33	0° $\mathbb{M}$	
	-7997 May 06 j 17:26	15° $\mathbb{R}\Omega$		retrograde	-7991 Apr 19 j 07:22	8° $\mathbb{M}$ 16'34	
direct	-7997 Jun 17 j 07:12	13° $\Omega$ 39'36		opposition	-7991 Jun 26 j 22:37	4° $\mathbb{M}$ 45'45	-0°28'03
	-7997 Jul 27 j 13:14	15° $\Omega$		min. Earth dist.	-7991 Jun 26 j 20:48	4° $\mathbb{M}$ 46'08	7.97713 AU
evening set	-7997 Sep 25 j 08:41	20° $\Omega$ 48'09		direct	-7991 Sep 01 j 00:38	1° $\mathbb{M}$ 20'36	
				evening set	-7991 Dec 11 j 15:12	9° $\mathbb{M}$ 27'47	
conjunction	-7997 Oct 11 j 19:27	22° $\Omega$ 46'49	2°11'28				
minimum elong	-7997 Oct 11 j 19:30	22° $\Omega$ 46'50	2°11'51	conjunction	-7991 Dec 29 j 06:59	11° $\mathbb{M}$ 47'50	-0°39'51
max. Earth dist.	-7997 Oct 10 j 21:17	22° $\Omega$ 40'06	10.82548 AU	minimum elong	-7991 Dec 29 j 06:57	11° $\mathbb{M}$ 47'49	0°40'10
morning rise	-7997 Oct 28 j 08:30	24° $\Omega$ 46'20		max. Earth dist.	-7991 Dec 29 j 12:00	11° $\mathbb{M}$ 49'30	9.92373 AU
	-7997 Dec 18 j 06:06	0° $\mathbb{M}$		morning rise	-7990 Jan 16 j 04:09	14° $\mathbb{M}$ 09'42	
retrograde	-7996 Feb 09 j 02:27	2° $\mathbb{M}$ 11'58			-7990 Jan 22 j 16:02	15° $\mathbb{M}$	
	-7996 Apr 04 j 00:12	30° $\mathbb{R}\Omega$		retrograde	-7990 May 04 j 17:36	22° $\mathbb{M}$ 49'05	
opposition	-7996 Apr 19 j 20:59	28° $\Omega$ 49'47	2°31'57	opposition	-7990 Jul 11 j 18:01	19° $\mathbb{M}$ 17'14	-1°12'24
min. Earth dist.	-7996 Apr 20 j 15:14	28° $\Omega$ 46'20	8.74934 AU	min. Earth dist.	-7990 Jul 11 j 11:14	19° $\mathbb{M}$ 18'38	7.87814 AU
direct	-7996 Jun 28 j 06:59	25° $\Omega$ 29'46		direct	-7990 Sep 15 j 09:59	15° $\mathbb{M}$ 50'49	
	-7996 Sep 12 j 02:24	0° $\mathbb{M}$		evening set	-7990 Dec 26 j 20:22	24° $\mathbb{M}$ 07'25	
evening set	-7996 Oct 06 j 06:18	2° $\mathbb{M}$ 45'56					
conjunction	-7996 Oct 22 j 20:22	4° $\mathbb{M}$ 47'38	1°54'32	conjunction	-7989 Jan 13 j 16:21	26° $\mathbb{M}$ 29'59	-1°13'57
minimum elong	-7996 Oct 22 j 20:25	4° $\mathbb{M}$ 47'39	1°54'49	minimum elong	-7989 Jan 13 j 16:17	26° $\mathbb{M}$ 29'58	1°14'22
max. Earth dist.	-7996 Oct 21 j 23:35	4° $\mathbb{M}$ 41'14	10.66904 AU	max. Earth dist.	-7989 Jan 14 j 03:08	26° $\mathbb{M}$ 33'36	9.84145 AU
morning rise	-7996 Nov 08 j 13:51	6° $\mathbb{M}$ 50'28		morning rise	-7989 Jan 31 j 17:15	28° $\mathbb{M}$ 54'10	
retrograde	-7995 Feb 21 j 10:16	14° $\mathbb{M}$ 28'54			-7989 Feb 09 j 04:16	0° $\mathbb{X}$	
opposition	-7995 May 02 j 22:07	11° $\mathbb{M}$ 04'51	2°07'50	retrograde	-7989 May 20 j 06:14	7° $\mathbb{X}$ 38'52	
min. Earth dist.	-7995 May 03 j 14:16	11° $\mathbb{M}$ 01'46	8.58707 AU	opposition	-7989 Jul 26 j 17:13	4° $\mathbb{X}$ 06'27	-1°52'53
direct	-7995 Jul 10 j 14:44	7° $\mathbb{M}$ 44'03		min. Earth dist.	-7989 Jul 26 j 06:26	4° $\mathbb{X}$ 08'42	7.81526 AU
evening set	-7995 Oct 18 j 14:35	15° $\mathbb{M}$ 09'05		direct	-7989 Sep 30 j 04:56	0° $\mathbb{X}$ 38'47	
				evening set	-7988 Jan 11 j 11:49	9° $\mathbb{X}$ 02'52	
conjunction	-7995 Nov 04 j 08:59	17° $\mathbb{M}$ 14'17	1°31'46	conjunction	-7988 Jan 29 j 10:59	11° $\mathbb{X}$ 27'00	-1°43'37
minimum elong	-7995 Nov 04 j 09:02	17° $\mathbb{M}$ 14'18	1°31'56	minimum elong	-7988 Jan 29 j 10:55	11° $\mathbb{X}$ 26'58	1°44'06
max. Earth dist.	-7995 Nov 03 j 15:00	17° $\mathbb{M}$ 08'39	10.50415 AU	max. Earth dist.	-7988 Jan 30 j 02:39	11° $\mathbb{X}$ 32'16	9.79730 AU
morning rise	-7995 Nov 21 j 07:50	19° $\mathbb{M}$ 20'56		morning rise	-7988 Feb 16 j 14:13	13° $\mathbb{X}$ 52'25	
retrograde	-7994 Mar 07 j 05:13	27° $\mathbb{M}$ 12'54		retrograde	-7988 Jun 03 j 18:01	22° $\mathbb{X}$ 38'17	
opposition	-7994 May 16 j 08:40	23° $\mathbb{M}$ 46'59	1°36'35	opposition	-7988 Aug 09 j 17:54	19° $\mathbb{X}$ 05'50	-2°26'07
min. Earth dist.	-7994 May 16 j 21:49	23° $\mathbb{M}$ 44'26	8.42017 AU	min. Earth dist.	-7988 Aug 09 j 04:03	19° $\mathbb{X}$ 08'44	7.79205 AU
direct	-7994 Jul 23 j 07:19	20° $\mathbb{M}$ 25'14		direct	-7988 Oct 14 j 06:06	15° $\mathbb{X}$ 37'09	
evening set	-7994 Oct 31 j 11:14	28° $\mathbb{M}$ 00'13		evening set	-7987 Jan 26 j 09:34	24° $\mathbb{X}$ 05'58	
	-7994 Nov 16 j 05:52	0° $\underline{\Omega}$					
conjunction	-7994 Nov 17 j 10:51	0° $\underline{\Omega}$ 09'15	1°03'41	conjunction	-7987 Feb 13 j 10:52	26° $\mathbb{X}$ 30'38	-2°06'26
minimum elong	-7994 Nov 17 j 10:54	0° $\underline{\Omega}$ 09'16	1°03'44	minimum elong	-7987 Feb 13 j 10:49	26° $\mathbb{X}$ 30'37	2°06'58
max. Earth dist.	-7994 Nov 16 j 21:30	0° $\underline{\Omega}$ 04'59	10.33842 AU	max. Earth dist.	-7987 Feb 14 j 06:48	26° $\mathbb{X}$ 37'20	9.79417 AU
morning rise	-7994 Dec 04 j 15:34	2° $\underline{\Omega}$ 19'57		morning rise	-7987 Mar 03 j 15:04	28° $\mathbb{X}$ 56'09	
retrograde	-7993 Mar 21 j 11:02	10° $\underline{\Omega}$ 25'42			-7987 Mar 11 j 19:27	0° $\mathbb{Z}$	
opposition	-7993 May 30 j 04:39	6° $\underline{\Omega}$ 57'57	0°59'04	retrograde	-7987 Jun 19 j 01:36	7° $\mathbb{Z}$ 38'46	
min. Earth dist.	-7993 May 30 j 13:40	6° $\underline{\Omega}$ 56'10	8.25685 AU	opposition	-7987 Aug 24 j 17:05	4° $\mathbb{Z}$ 06'49	-2°49'22
direct	-7993 Aug 05 j 11:25	3° $\underline{\Omega}$ 35'08		min. Earth dist.	-7987 Aug 24 j 00:41	4° $\mathbb{Z}$ 10'17	7.81059 AU
evening set	-7993 Nov 13 j 21:57	11° $\underline{\Omega}$ 20'49		direct	-7987 Oct 29 j 10:53	0° $\mathbb{Z}$ 37'22	
				evening set	-7986 Feb 11 j 09:19	9° $\mathbb{Z}$ 07'33	
conjunction	-7993 Dec 01 j 03:10	13° $\underline{\Omega}$ 33'47	0°31'18	conjunction	-7986 Mar 01 j 11:47	11° $\mathbb{Z}$ 31'41	-2°20'37
minimum elong	-7993 Dec 01 j 03:12	13° $\underline{\Omega}$ 33'48	0°31'13	minimum elong	-7986 Mar 01 j 11:44	11° $\mathbb{Z}$ 31'41	2°21'09
max. Earth dist.	-7993 Nov 30 j 19:43	13° $\underline{\Omega}$ 31'23	10.18036 AU	max. Earth dist.	-7986 Mar 02 j 11:02	11° $\mathbb{Z}$ 39'27	9.83343 AU
morning rise	-7993 Dec 18 j 13:48	15° $\underline{\Omega}$ 48'35		morning rise	-7986 Mar 19 j 15:42	13° $\mathbb{Z}$ 56'11	
retrograde	-7992 Apr 04 j 04:17	24° $\underline{\Omega}$ 07'28		retrograde	-7986 Jul 04 j 01:11	22° $\mathbb{Z}$ 31'04	
opposition	-7992 Jun 12 j 09:32	20° $\underline{\Omega}$ 38'03	0°16'46	opposition	-7986 Sep 08 j 11:50	19° $\mathbb{Z}$ 00'07	-3°00'56
min. Earth dist.	-7992 Jun 12 j 13:16	20° $\underline{\Omega}$ 37'18	8.10611 AU	min. Earth dist.	-7986 Sep 07 j 17:30	19° $\mathbb{Z}$ 03'58	7.87061 AU
direct	-7992 Aug 18 j 01:23	17° $\underline{\Omega}$ 14'06		direct	-7986 Nov 13 j 15:37	15° $\mathbb{Z}$ 30'10	
desc. node	-7992 Nov 02 j 13:20	22° $\underline{\Omega}$ 11'02		evening set	-7985 Feb 27 j 05:53	23° $\mathbb{Z}$ 57'57	
evening set	-7992 Nov 26 j 23:21	25° $\underline{\Omega}$ 10'44					
conjunction	-7992 Dec 14 j 10:05	27° $\underline{\Omega}$ 27'29	-0°03'59	conjunction	-7985 Mar 17 j 08:33	26° $\mathbb{Z}$ 20'36	-2°25'19
minimum elong	-7992 Dec 14 j 10:04	27° $\underline{\Omega}$ 27'29	0°04'11	minimum elong	-7985 Mar 17 j 08:34	26° $\mathbb{Z}$ 20'36	2°25'50
				max. Earth dist.	-7985 Mar 18 j 09:47	26° $\mathbb{Z}$ 28'56	9.91312 AU

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 35

Attention, astronomical year style is used: The year -7985 in astronomical counting style is the year 7986 BCE in historical counting style.

morning rise	-7985 Apr 04 j 11:10	28° $\text{Z}$ 43'06	conjunction	-7979 Jun 07 j 20:28	16° $\text{Y}$ 01'09	-0°25'40
	-7985 Apr 14 j 12:38	0° $\approx$	minimum elong	-7979 Jun 07 j 20:30	16° $\text{Y}$ 01'10	0°25'34
retrograde	-7985 Jul 18 j 14:50	7° $\approx$ 06'32	max. Earth dist.	-7979 Jun 08 j 03:59	16° $\text{Y}$ 03'23	10.82212 AU
opposition	-7985 Sep 22 j 23:54	3° $\approx$ 36'57 -3°00'26	morning rise	-7979 Jun 25 j 03:35	18° $\text{Y}$ 04'02	
min. Earth dist.	-7985 Sep 22 j 04:27	3° $\approx$ 41'00 7.96831 AU	retrograde	-7979 Oct 01 j 16:11	25° $\text{Y}$ 04'53	
direct	-7985 Nov 28 j 17:11	0° $\approx$ 06'53	opposition	-7979 Dec 08 j 19:30	21° $\text{Y}$ 46'14	-0°13'30
evening set	-7984 Mar 13 j 18:22	8° $\approx$ 28'41	min. Earth dist.	-7979 Dec 08 j 14:16	21° $\text{Y}$ 47'14	8.89526 AU
			direct	-7978 Feb 17 j 19:34	18° $\text{Y}$ 21'31	
conjunction	-7984 Mar 31 j 20:27	10° $\approx$ 49'04 -2°20'42	asc. node	-7978 Apr 26 j 23:21	21° $\text{Y}$ 48'07	
minimum elong	-7984 Mar 31 j 20:29	10° $\approx$ 49'05 2°21'09	evening set	-7978 Jun 02 j 15:09	25° $\text{Y}$ 40'21	
max. Earth dist.	-7984 Apr 01 j 22:14	10° $\approx$ 57'28 10.02775 AU				
morning rise	-7984 Apr 18 j 20:58	13° $\approx$ 08'50	conjunction	-7978 Jun 19 j 23:18	27° $\text{Y}$ 41'51	0°04'16
	-7984 May 03 j 18:33	15° $\approx$	minimum elong	-7978 Jun 19 j 23:18	27° $\text{Y}$ 41'51	0°04'28
retrograde	-7984 Jul 31 j 17:19	21° $\approx$ 18'17	behind sun begin	-7978 Jun 19 j 16:20	27° $\text{Y}$ 39'49	
min. Earth dist.	-7984 Oct 05 j 07:46	17° $\approx$ 54'22 8.09688 AU	behind sun end	-7978 Jun 20 j 06:16	27° $\text{Y}$ 43'52	
opposition	-7984 Oct 06 j 03:14	17° $\approx$ 50'21 -2°48'44	max. Earth dist.	-7978 Jun 20 j 02:47	27° $\text{Y}$ 42'50	10.96597 AU
	-7984 Nov 15 j 11:44	15° $\approx$	morning rise	-7978 Jul 07 j 01:58	29° $\text{Y}$ 41'47	
direct	-7984 Dec 12 j 13:02	14° $\approx$ 20'31		-7978 Jul 09 j 17:36	0° $\text{Z}$	
	-7983 Jan 08 j 14:24	15° $\approx$	retrograde	-7978 Oct 13 j 04:47	6° $\text{Z}$ 33'59	
evening set	-7983 Mar 28 j 19:43	22° $\approx$ 33'34	opposition	-7978 Dec 20 j 17:56	3° $\text{Z}$ 16'46	0°22'39
			min. Earth dist.	-7978 Dec 20 j 16:45	3° $\text{Z}$ 17'00	9.02986 AU
conjunction	-7983 Apr 15 j 20:28	24° $\approx$ 51'08 -2°07'44		-7977 Feb 18 j 10:26	30° $\text{R}$ $\text{Y}$	
minimum elong	-7983 Apr 15 j 20:32	24° $\approx$ 51'09 2°08'06	direct	-7977 Mar 02 j 04:00	29° $\text{Y}$ 53'25	
max. Earth dist.	-7983 Apr 16 j 21:15	24° $\approx$ 59'04 10.16937 AU		-7977 Mar 13 j 22:22	0° $\text{Z}$	
morning rise	-7983 May 03 j 18:17	27° $\approx$ 07'41	evening set	-7977 Jun 14 j 12:14	7° $\text{Z}$ 03'48	
	-7983 May 27 j 18:24	0° $\text{X}$				
retrograde	-7983 Aug 14 j 06:47	5° $\text{X}$ 01'50	conjunction	-7977 Jul 01 j 15:53	9° $\text{Z}$ 02'39	0°33'09
opposition	-7983 Oct 19 j 20:42	1° $\text{X}$ 35'47 -2°27'37	minimum elong	-7977 Jul 01 j 15:52	9° $\text{Z}$ 02'38	0°33'26
min. Earth dist.	-7983 Oct 19 j 02:50	1° $\text{X}$ 39'26 8.24775 AU	max. Earth dist.	-7977 Jul 01 j 14:39	9° $\text{Z}$ 02'17	11.08963 AU
	-7983 Nov 09 j 05:49	30° $\text{R}$ $\approx$	morning rise	-7977 Jul 18 j 14:14	11° $\text{Z}$ 00'02	
direct	-7983 Dec 27 j 00:37	28° $\approx$ 06'31		-7977 Aug 26 j 11:35	15° $\text{Z}$	
	-7982 Feb 12 j 08:55	0° $\text{X}$	retrograde	-7977 Oct 24 j 10:32	17° $\text{Z}$ 45'49	
evening set	-7982 Apr 12 j 07:47	6° $\text{X}$ 09'00		-7977 Dec 25 j 16:15	15° $\text{R}$ $\text{Z}$	
			opposition	-7976 Jan 01 j 11:20	14° $\text{Z}$ 29'46	0°56'56
conjunction	-7982 Apr 30 j 06:26	8° $\text{X}$ 23'23 -1°48'00	min. Earth dist.	-7976 Jan 01 j 14:43	14° $\text{Z}$ 29'08	9.14234 AU
minimum elong	-7982 Apr 30 j 06:30	8° $\text{X}$ 23'24 1°48'15	direct	-7976 Mar 13 j 06:06	11° $\text{Z}$ 07'42	
max. Earth dist.	-7982 May 01 j 04:29	8° $\text{X}$ 30'19 10.32866 AU		-7976 May 25 j 19:27	15° $\text{Z}$	
morning rise	-7982 May 18 j 01:04	10° $\text{X}$ 36'28	evening set	-7976 Jun 25 j 00:55	18° $\text{Z}$ 11'11	
retrograde	-7982 Aug 27 j 07:23	18° $\text{X}$ 15'18				
opposition	-7982 Nov 02 j 04:16	14° $\text{X}$ 51'14 -1°59'19	conjunction	-7976 Jul 12 j 00:01	20° $\text{Z}$ 07'45	1°00'14
min. Earth dist.	-7982 Nov 01 j 13:17	14° $\text{X}$ 54'15 8.41165 AU	minimum elong	-7976 Jul 11 j 23:58	20° $\text{Z}$ 07'44	1°00'36
direct	-7981 Jan 10 j 02:39	11° $\text{X}$ 22'50	max. Earth dist.	-7976 Jul 11 j 17:19	20° $\text{Z}$ 05'49	11.18900 AU
evening set	-7981 Apr 26 j 05:35	19° $\text{X}$ 13'51	morning rise	-7976 Jul 28 j 18:27	22° $\text{Z}$ 03'01	
			retrograde	-7976 Nov 03 j 13:58	28° $\text{Z}$ 44'37	
conjunction	-7981 May 14 j 01:19	21° $\text{X}$ 24'52 -1°23'14	opposition	-7975 Jan 12 j 01:05	25° $\text{Z}$ 29'24	1°28'23
minimum elong	-7981 May 14 j 01:22	21° $\text{X}$ 24'53 1°23'22	min. Earth dist.	-7975 Jan 12 j 08:10	25° $\text{Z}$ 28'06	9.22887 AU
max. Earth dist.	-7981 May 14 j 19:00	21° $\text{X}$ 30'19 10.49622 AU	direct	-7975 Mar 25 j 02:03	22° $\text{Z}$ 08'32	
morning rise	-7981 May 31 j 16:24	23° $\text{X}$ 34'25	evening set	-7975 Jul 06 j 07:06	29° $\text{Z}$ 06'42	
	-7981 Aug 06 j 14:38	0° $\text{Y}$		-7975 Jul 14 j 03:27	0° $\text{II}$	
retrograde	-7981 Sep 08 j 20:30	0° $\text{Y}$ 58'52				
	-7981 Oct 12 j 11:13	30° $\text{R}$ $\text{X}$	conjunction	-7975 Jul 23 j 01:56	1° $\text{II}$ 01'26	1°24'42
opposition	-7981 Nov 15 j 02:03	27° $\text{X}$ 36'46 -1°26'09	minimum elong	-7975 Jul 23 j 01:53	1° $\text{II}$ 01'25	1°25'09
min. Earth dist.	-7981 Nov 14 j 14:26	27° $\text{X}$ 39'04 8.57955 AU	max. Earth dist.	-7975 Jul 22 j 15:10	0° $\text{II}$ 58'21	11.26084 AU
direct	-7980 Jan 23 j 18:02	24° $\text{X}$ 09'27	morning rise	-7975 Aug 08 j 16:40	2° $\text{II}$ 55'04	
	-7980 Apr 22 j 19:54	0° $\text{Y}$	retrograde	-7975 Nov 14 j 15:50	9° $\text{II}$ 34'36	
evening set	-7980 May 08 j 13:24	1° $\text{Y}$ 48'58	opposition	-7974 Jan 23 j 12:41	6° $\text{II}$ 19'54	1°56'13
			min. Earth dist.	-7974 Jan 23 j 22:39	6° $\text{II}$ 18'05	9.28660 AU
conjunction	-7980 May 26 j 05:38	3° $\text{Y}$ 56'38 -0°55'15	direct	-7974 Apr 05 j 16:33	3° $\text{II}$ 00'05	
minimum elong	-7980 May 26 j 05:41	3° $\text{Y}$ 56'39 0°55'17	evening set	-7974 Jul 17 j 08:26	9° $\text{II}$ 54'31	
max. Earth dist.	-7980 May 26 j 18:07	4° $\text{Y}$ 00'25 10.66331 AU				
morning rise	-7980 Jun 12 j 16:54	6° $\text{Y}$ 02'45	conjunction	-7974 Aug 02 j 23:30	11° $\text{II}$ 47'54	1°45'54
retrograde	-7980 Sep 19 j 21:59	13° $\text{Y}$ 14'23	minimum elong	-7974 Aug 02 j 23:27	11° $\text{II}$ 47'53	1°46'24
opposition	-7980 Nov 26 j 14:40	9° $\text{Y}$ 54'07 -0°50'15	max. Earth dist.	-7974 Aug 02 j 09:54	11° $\text{II}$ 44'00	11.30293 AU
min. Earth dist.	-7980 Nov 26 j 06:16	9° $\text{Y}$ 55'45 8.74319 AU	morning rise	-7974 Aug 19 j 10:55	13° $\text{II}$ 40'22	
direct	-7979 Feb 04 j 23:49	6° $\text{Y}$ 28'02	retrograde	-7974 Nov 25 j 20:04	20° $\text{II}$ 19'56	
evening set	-7979 May 21 j 08:06	13° $\text{Y}$ 56'42	opposition	-7973 Feb 03 j 23:54	17° $\text{II}$ 05'25	2°19'45
			min. Earth dist.	-7973 Feb 04 j 12:53	17° $\text{II}$ 03'04	9.31385 AU

Attention, astronomical year style is used: The year -7973 in astronomical counting style is the year 7974 BCE in historical counting style.

direct	-7973 Apr 17 j 03:26	13° $\Pi$ 46'27		opposition	-7967 Apr 14 j 10:36	23° $\Omega$ 37'14	2°40'18
evening set	-7973 Jul 28 j 06:40	20° $\Pi$ 38'42		min. Earth dist.	-7967 Apr 15 j 07:36	23° $\Omega$ 33'19	8.84588 AU
				direct	-7967 Jun 23 j 04:23	20° $\Omega$ 18'05	
conjunction	-7973 Aug 13 j 18:24	22° $\Pi$ 31'15	2°03'16	evening set	-7967 Oct 01 j 04:39	27° $\Omega$ 29'37	
minimum elong	-7973 Aug 13 j 18:21	22° $\Pi$ 31'15	2°03'48				
max. Earth dist.	-7973 Aug 13 j 01:22	22° $\Pi$ 26'22	11.31405 AU	conjunction	-7967 Oct 17 j 16:53	29° $\Omega$ 29'33	2°02'57
morning rise	-7973 Aug 30 j 03:20	24° $\Pi$ 23'07		minimum elong	-7967 Oct 17 j 16:57	29° $\Omega$ 29'34	2°03'17
	-7973 Oct 31 j 05:44	0° $\mathfrak{C}$		max. Earth dist.	-7967 Oct 16 j 18:19	29° $\Omega$ 22'40	10.76643 AU
retrograde	-7973 Dec 06 j 23:40	1° $\mathfrak{C}$ 04'40			-7967 Oct 21 j 20:45	0° $\mathfrak{M}$	
	-7972 Jan 13 j 17:03	30° $\mathfrak{R}$ $\Pi$		morning rise	-7967 Nov 03 j 08:05	1° $\mathfrak{M}$ 30'29	
opposition	-7972 Feb 15 j 11:55	27° $\Pi$ 49'58	2°38'23	retrograde	-7966 Feb 15 j 14:50	9° $\mathfrak{M}$ 01'50	
min. Earth dist.	-7972 Feb 16 j 04:26	27° $\Pi$ 46'59	9.30976 AU	opposition	-7966 Apr 27 j 06:57	5° $\mathfrak{M}$ 39'11	2°19'40
direct	-7972 Apr 27 j 10:45	24° $\Pi$ 31'36		min. Earth dist.	-7966 Apr 28 j 01:34	5° $\mathfrak{M}$ 35'40	8.68464 AU
	-7972 Jul 25 j 12:34	0° $\mathfrak{C}$		direct	-7966 Jul 05 j 09:19	2° $\mathfrak{M}$ 19'11	
evening set	-7972 Aug 07 j 03:38	1° $\mathfrak{C}$ 23'17		evening set	-7966 Oct 13 j 07:04	9° $\mathfrak{M}$ 39'02	
conjunction	-7972 Aug 23 j 12:44	3° $\mathfrak{C}$ 15'31	2°16'19	conjunction	-7966 Oct 29 j 23:22	11° $\mathfrak{M}$ 42'18	1°42'54
minimum elong	-7972 Aug 23 j 12:41	3° $\mathfrak{C}$ 15'31	2°16'51	minimum elong	-7966 Oct 29 j 23:25	11° $\mathfrak{M}$ 42'19	1°43'08
max. Earth dist.	-7972 Aug 22 j 16:16	3° $\mathfrak{C}$ 09'38	11.29387 AU	max. Earth dist.	-7966 Oct 29 j 03:38	11° $\mathfrak{M}$ 36'11	10.60022 AU
morning rise	-7972 Sep 08 j 20:06	5° $\mathfrak{C}$ 07'20		morning rise	-7966 Nov 15 j 19:23	13° $\mathfrak{M}$ 46'52	
retrograde	-7972 Dec 17 j 08:16	11° $\mathfrak{C}$ 52'48		retrograde	-7965 Mar 01 j 04:46	21° $\mathfrak{M}$ 31'30	
opposition	-7971 Feb 26 j 01:54	8° $\mathfrak{C}$ 37'34	2°51'34	opposition	-7965 May 10 j 12:14	18° $\mathfrak{M}$ 06'47	1°51'47
min. Earth dist.	-7971 Feb 26 j 20:42	8° $\mathfrak{C}$ 34'09	9.27426 AU	min. Earth dist.	-7965 May 11 j 03:30	18° $\mathfrak{M}$ 03'50	8.51409 AU
direct	-7971 May 08 j 20:22	5° $\mathfrak{C}$ 19'32		direct	-7965 Jul 17 j 20:16	14° $\mathfrak{M}$ 45'43	
evening set	-7971 Aug 18 j 00:50	12° $\mathfrak{C}$ 12'09		evening set	-7965 Oct 25 j 21:07	22° $\mathfrak{M}$ 15'06	
max. Earth dist.	-7971 Sep 02 j 10:29	13° $\mathfrak{C}$ 58'21	11.24279 AU				
conjunction	-7971 Sep 03 j 08:23	14° $\mathfrak{C}$ 04'41	2°24'36	conjunction	-7965 Nov 11 j 18:12	24° $\mathfrak{M}$ 22'06	1°17'18
minimum elong	-7971 Sep 03 j 08:22	14° $\mathfrak{C}$ 04'41	2°25'07	minimum elong	-7965 Nov 11 j 18:16	24° $\mathfrak{M}$ 22'07	1°17'24
morning rise	-7971 Sep 19 j 14:59	15° $\mathfrak{C}$ 57'03		max. Earth dist.	-7965 Nov 11 j 01:36	24° $\mathfrak{M}$ 16'51	10.42857 AU
retrograde	-7971 Dec 28 j 21:50	22° $\mathfrak{C}$ 48'17		morning rise	-7965 Nov 28 j 19:54	26° $\mathfrak{M}$ 30'39	
opposition	-7970 Mar 09 j 19:35	19° $\mathfrak{C}$ 32'06	2°58'48		-7965 Dec 28 j 20:32	0° $\mathfrak{A}$	
min. Earth dist.	-7970 Mar 10 j 15:13	19° $\mathfrak{C}$ 28'32	9.20810 AU	retrograde	-7964 Mar 14 j 04:50	4° $\mathfrak{A}$ 29'06	
direct	-7970 May 20 j 05:12	16° $\mathfrak{C}$ 14'12		opposition	-7964 May 23 j 03:03	1° $\mathfrak{A}$ 02'17	1°17'12
evening set	-7970 Aug 28 j 23:58	23° $\mathfrak{C}$ 09'13		min. Earth dist.	-7964 May 23 j 14:35	1° $\mathfrak{A}$ 00'02	8.34235 AU
max. Earth dist.	-7970 Sep 13 j 08:21	24° $\mathfrak{C}$ 56'01	11.16188 AU		-7964 Jun 05 j 14:30	30° $\mathfrak{R}$ $\mathfrak{M}$	
				direct	-7964 Jul 29 j 17:48	27° $\mathfrak{M}$ 40'00	
					-7964 Sep 19 j 09:00	0° $\mathfrak{A}$	
conjunction	-7970 Sep 14 j 07:02	25° $\mathfrak{C}$ 02'39	2°27'42	evening set	-7964 Nov 07 j 00:18	5° $\mathfrak{A}$ 19'52	
minimum elong	-7970 Sep 14 j 07:02	25° $\mathfrak{C}$ 02'39	2°28'12				
morning rise	-7970 Sep 30 j 13:55	26° $\mathfrak{C}$ 56'11		conjunction	-7964 Nov 24 j 02:40	7° $\mathfrak{A}$ 30'49	0°46'52
	-7970 Oct 29 j 02:03	0° $\Omega$		minimum elong	-7964 Nov 24 j 02:42	7° $\mathfrak{A}$ 30'50	0°46'51
retrograde	-7969 Jan 09 j 19:10	3° $\Omega$ 54'58		max. Earth dist.	-7964 Nov 23 j 14:04	7° $\mathfrak{A}$ 26'46	10.25993 AU
opposition	-7969 Mar 21 j 18:08	0° $\Omega$ 37'33	2°59'36	morning rise	-7964 Dec 11 j 10:26	9° $\mathfrak{A}$ 43'33	
min. Earth dist.	-7969 Mar 22 j 14:36	0° $\Omega$ 33'49	9.11274 AU	retrograde	-7963 Mar 28 j 16:21	17° $\mathfrak{A}$ 55'41	
	-7969 Mar 30 j 08:39	30° $\mathfrak{R}$ $\mathfrak{C}$		opposition	-7963 Jun 06 j 03:16	14° $\mathfrak{A}$ 26'53	0°37'03
direct	-7969 May 31 j 16:42	27° $\mathfrak{C}$ 19'29		min. Earth dist.	-7963 Jun 06 j 10:45	14° $\mathfrak{A}$ 25'24	8.17844 AU
	-7969 Jul 29 j 10:33	0° $\Omega$		direct	-7963 Aug 12 j 02:03	11° $\mathfrak{A}$ 03'15	
evening set	-7969 Sep 09 j 03:11	4° $\Omega$ 18'26		evening set	-7963 Nov 20 j 17:56	18° $\mathfrak{A}$ 54'11	
max. Earth dist.	-7969 Sep 24 j 10:28	6° $\Omega$ 06'15	11.05310 AU				
conjunction	-7969 Sep 25 j 10:43	6° $\Omega$ 13'25	2°25'18	conjunction	-7963 Dec 08 j 01:53	21° $\mathfrak{A}$ 09'06	0°12'53
minimum elong	-7969 Sep 25 j 10:44	6° $\Omega$ 13'25	2°25'46	minimum elong	-7963 Dec 08 j 01:53	21° $\mathfrak{A}$ 09'06	0°12'44
morning rise	-7969 Oct 11 j 19:15	8° $\Omega$ 08'47		behind sun begin	-7963 Dec 07 j 21:22	21° $\mathfrak{A}$ 07'38	
	-7968 Jan 03 j 08:45	15° $\Omega$		behind sun end	-7963 Dec 08 j 06:25	21° $\mathfrak{A}$ 10'34	
retrograde	-7968 Jan 21 j 24:00	15° $\Omega$ 16'48		max. Earth dist.	-7963 Dec 07 j 18:53	21° $\mathfrak{A}$ 06'49	10.10349 AU
	-7968 Feb 09 j 18:09	15° $\mathfrak{R}$ $\Omega$		morning rise	-7963 Dec 25 j 15:37	23° $\mathfrak{A}$ 25'54	
opposition	-7968 Apr 01 j 22:38	11° $\Omega$ 57'55	2°53'33		-7962 Feb 24 j 23:15	0° $\mathfrak{M}$	
min. Earth dist.	-7968 Apr 02 j 20:00	11° $\Omega$ 53'58	8.99061 AU	retrograde	-7962 Apr 12 j 14:11	1° $\mathfrak{M}$ 50'43	
direct	-7968 Jun 11 j 06:51	8° $\Omega$ 39'25		desc. node	-7962 Apr 24 j 08:29	1° $\mathfrak{M}$ 43'23	
	-7968 Sep 13 j 04:50	15° $\Omega$			-7962 May 30 j 01:33	30° $\mathfrak{R}$ $\mathfrak{A}$	
evening set	-7968 Sep 19 j 12:08	15° $\Omega$ 43'55		opposition	-7962 Jun 20 j 12:09	28° $\mathfrak{A}$ 20'11	-0°06'48
				min. Earth dist.	-7962 Jun 20 j 15:01	28° $\mathfrak{A}$ 19'36	8.03180 AU
				direct	-7962 Aug 25 j 20:43	24° $\mathfrak{A}$ 55'08	
conjunction	-7968 Oct 05 j 21:21	17° $\Omega$ 41'04	2°17'06		-7962 Nov 11 j 05:36	0° $\mathfrak{M}$	
minimum elong	-7968 Oct 05 j 21:24	17° $\Omega$ 41'04	2°17'30	evening set	-7962 Dec 05 j 02:24	2° $\mathfrak{M}$ 57'12	
max. Earth dist.	-7968 Oct 04 j 20:43	17° $\Omega$ 33'40	10.91959 AU				
morning rise	-7968 Oct 22 j 08:44	19° $\Omega$ 38'55		conjunction	-7962 Dec 22 j 15:48	5° $\mathfrak{M}$ 15'46	-0°22'58
retrograde	-7967 Feb 02 j 13:00	26° $\Omega$ 57'54		minimum elong	-7962 Dec 22 j 15:47	5° $\mathfrak{M}$ 15'45	0°23'14

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Attention, astronomical year style is used: The year -7962 in astronomical counting style is the year 7963 BCE in historical counting style.

max. Earth dist.	-7962 Dec 22 j 15:26	5° <b>ℓ</b> 15'39	9.96851 AU		-7955 Feb 19 j 05:10	0° <b>≈</b>	
morning rise	-7961 Jan 09 j 10:54	7° <b>ℓ</b> 36'13		evening set	-7955 Mar 06 j 23:05	1° <b>≈</b> 58'33	
	-7961 Mar 21 j 23:14	15° <b>ℓ</b>					
retrograde	-7961 Apr 27 j 20:11	16° <b>ℓ</b> 11'41		conjunction	-7955 Mar 25 j 01:34	4° <b>≈</b> 20'15	-2°23'58
	-7961 Jun 04 j 00:23	15° <b>ℓ</b>		minimum elong	-7955 Mar 25 j 01:35	4° <b>≈</b> 20'16	2°24'27
opposition	-7961 Jul 05 j 04:25	12° <b>ℓ</b> 39'47	-0°51'43	max. Earth dist.	-7955 Mar 26 j 04:31	4° <b>≈</b> 29'06	9.95846 AU
min. Earth dist.	-7961 Jul 05 j 02:01	12° <b>ℓ</b> 40'17	7.91145 AU	morning rise	-7955 Apr 12 j 03:14	6° <b>≈</b> 41'33	
direct	-7961 Sep 09 j 02:15	9° <b>ℓ</b> 13'22		retrograde	-7955 Jul 25 j 16:14	14° <b>≈</b> 58'18	
	-7961 Nov 30 j 20:24	15° <b>ℓ</b>		min. Earth dist.	-7955 Sep 29 j 04:36	11° <b>≈</b> 33'18	8.02328 AU
evening set	-7961 Dec 20 j 01:05	17° <b>ℓ</b> 25'52		opposition	-7955 Sep 30 j 00:16	11° <b>≈</b> 29'12	-2°55'31
				direct	-7955 Dec 06 j 01:33	7° <b>≈</b> 58'55	
conjunction	-7960 Jan 06 j 19:15	19° <b>ℓ</b> 47'28	-0°58'13		-7954 Mar 11 j 23:51	15° <b>≈</b>	
minimum elong	-7960 Jan 06 j 19:11	19° <b>ℓ</b> 47'26	0°58'35	evening set	-7954 Mar 22 j 06:24	16° <b>≈</b> 16'50	
max. Earth dist.	-7960 Jan 07 j 01:54	19° <b>ℓ</b> 49'41	9.86371 AU				
morning rise	-7960 Jan 24 j 18:35	22° <b>ℓ</b> 10'47		conjunction	-7954 Apr 09 j 07:49	18° <b>≈</b> 35'54	-2°14'43
	-7960 Apr 10 j 18:05	0° <b>♂</b>		minimum elong	-7954 Apr 09 j 07:52	18° <b>≈</b> 35'55	2°15'07
retrograde	-7960 May 12 j 07:05	0° <b>♂</b> 53'51		max. Earth dist.	-7954 Apr 10 j 09:36	18° <b>≈</b> 44'13	10.09193 AU
	-7960 Jun 12 j 23:45	30° <b>ℓ</b>		morning rise	-7954 Apr 27 j 07:10	20° <b>≈</b> 54'10	
opposition	-7960 Jul 19 j 02:04	27° <b>ℓ</b> 21'03	-1°34'28	retrograde	-7954 Aug 08 j 10:38	28° <b>≈</b> 55'59	
min. Earth dist.	-7960 Jul 18 j 18:17	27° <b>ℓ</b> 22'40	7.82550 AU	opposition	-7954 Oct 13 j 22:44	25° <b>≈</b> 28'55	-2°38'29
direct	-7960 Sep 22 j 17:16	23° <b>ℓ</b> 53'20		min. Earth dist.	-7954 Oct 13 j 03:58	25° <b>≈</b> 32'47	8.16839 AU
	-7960 Dec 16 j 23:10	0° <b>♂</b>		direct	-7954 Dec 20 j 18:15	21° <b>≈</b> 59'16	
evening set	-7959 Jan 03 j 11:55	2° <b>♂</b> 14'40			-7953 Apr 05 j 01:38	0° <b>♂</b>	
				evening set	-7953 Apr 06 j 01:16	0° <b>♂</b> 07'20	
conjunction	-7959 Jan 21 j 09:53	4° <b>♂</b> 38'25	-1°30'18				
minimum elong	-7959 Jan 21 j 09:49	4° <b>♂</b> 38'23	1°30'46	conjunction	-7953 Apr 24 j 00:55	2° <b>♂</b> 23'19	-1°57'53
max. Earth dist.	-7959 Jan 21 j 23:22	4° <b>♂</b> 42'57	9.79661 AU	minimum elong	-7953 Apr 24 j 00:58	2° <b>♂</b> 23'20	1°58'11
morning rise	-7959 Feb 08 j 12:11	7° <b>♂</b> 03'35		max. Earth dist.	-7953 Apr 25 j 00:18	2° <b>♂</b> 30'44	10.24784 AU
retrograde	-7959 May 27 j 19:45	15° <b>♂</b> 50'13		morning rise	-7953 May 11 j 21:20	4° <b>♂</b> 38'10	
opposition	-7959 Aug 03 j 02:36	12° <b>♂</b> 17'02	-2°11'34	retrograde	-7953 Aug 21 j 17:03	12° <b>♂</b> 24'33	
min. Earth dist.	-7959 Aug 02 j 13:55	12° <b>♂</b> 19'42	7.78019 AU	opposition	-7953 Oct 27 j 11:20	8° <b>♂</b> 59'38	-2°13'10
direct	-7959 Oct 07 j 15:07	8° <b>♂</b> 48'12		min. Earth dist.	-7953 Oct 26 j 17:53	9° <b>♂</b> 03'10	8.33120 AU
evening set	-7958 Jan 19 j 07:29	17° <b>♂</b> 15'49		direct	-7952 Jan 04 j 01:19	5° <b>♂</b> 30'57	
				evening set	-7952 Apr 19 j 06:03	13° <b>♂</b> 27'46	
conjunction	-7958 Feb 06 j 08:11	19° <b>♂</b> 40'39	-1°56'39				
minimum elong	-7958 Feb 06 j 08:07	19° <b>♂</b> 40'37	1°57'09	conjunction	-7952 May 07 j 03:18	15° <b>♂</b> 40'27	-1°35'11
max. Earth dist.	-7958 Feb 07 j 03:33	19° <b>♂</b> 47'10	9.77230 AU	minimum elong	-7952 May 07 j 03:21	15° <b>♂</b> 40'28	1°35'22
morning rise	-7958 Feb 24 j 12:05	22° <b>♂</b> 06'30		max. Earth dist.	-7952 May 07 j 23:49	15° <b>♂</b> 46'50	10.41670 AU
	-7958 May 12 j 16:36	0° <b>♂</b>		morning rise	-7952 May 24 j 20:17	17° <b>♂</b> 51'44	
retrograde	-7958 Jun 12 j 06:34	0° <b>♂</b> 52'03		retrograde	-7952 Sep 02 j 13:11	25° <b>♂</b> 23'11	
	-7958 Jul 12 j 23:13	30° <b>ℓ</b>		opposition	-7952 Nov 08 j 13:58	22° <b>♂</b> 00'24	-1°41'54
min. Earth dist.	-7958 Aug 17 j 10:41	27° <b>♂</b> 22'34	7.77880 AU	min. Earth dist.	-7952 Nov 07 j 23:00	22° <b>♂</b> 03'23	8.50231 AU
opposition	-7958 Aug 18 j 03:10	27° <b>♂</b> 19'05	-2°39'51	direct	-7951 Jan 16 j 20:55	18° <b>♂</b> 32'56	
direct	-7958 Oct 22 j 17:47	23° <b>♂</b> 49'21		evening set	-7951 May 02 j 20:57	26° <b>♂</b> 18'05	
	-7957 Jan 17 j 00:38	0° <b>♂</b>					
evening set	-7957 Feb 04 j 07:21	2° <b>♂</b> 19'58		conjunction	-7951 May 20 j 15:06	28° <b>♂</b> 27'23	-1°08'26
				minimum elong	-7951 May 20 j 15:09	28° <b>♂</b> 27'24	1°08'30
conjunction	-7957 Feb 22 j 09:35	4° <b>♂</b> 44'44	-2°15'05	max. Earth dist.	-7951 May 21 j 07:49	28° <b>♂</b> 32'30	10.58906 AU
minimum elong	-7957 Feb 22 j 09:32	4° <b>♂</b> 44'43	2°15'37		-7951 Jun 02 j 07:16	0° <b>♀</b>	
max. Earth dist.	-7957 Feb 23 j 09:16	4° <b>♂</b> 52'41	9.79264 AU	morning rise	-7951 Jun 07 j 04:11	0° <b>♀</b> 35'07	
morning rise	-7957 Mar 12 j 13:42	7° <b>♂</b> 10'03		retrograde	-7951 Sep 14 j 21:06	7° <b>♀</b> 52'50	
retrograde	-7957 Jun 27 j 11:28	15° <b>♂</b> 49'49		opposition	-7951 Nov 21 j 07:11	4° <b>♀</b> 32'08	-1°06'57
min. Earth dist.	-7957 Sep 01 j 05:50	12° <b>♂</b> 21'37	7.82142 AU	min. Earth dist.	-7951 Nov 20 j 19:58	4° <b>♀</b> 34'19	8.67274 AU
opposition	-7957 Sep 02 j 00:36	12° <b>♂</b> 17'39	-2°57'04	direct	-7950 Jan 30 j 07:04	1° <b>♀</b> 05'58	
direct	-7957 Nov 06 j 22:06	8° <b>♂</b> 47'20		evening set	-7950 May 15 j 22:24	8° <b>♀</b> 39'49	
evening set	-7956 Feb 20 j 06:11	17° <b>♂</b> 17'14					
				conjunction	-7950 Jun 02 j 12:45	10° <b>♀</b> 45'46	-0°39'21
conjunction	-7956 Mar 09 j 08:57	19° <b>♂</b> 40'54	-2°24'18	minimum elong	-7950 Jun 02 j 12:47	10° <b>♀</b> 45'47	0°39'18
minimum elong	-7956 Mar 09 j 08:56	19° <b>♂</b> 40'53	2°24'49	max. Earth dist.	-7950 Jun 03 j 00:28	10° <b>♀</b> 49'17	10.75622 AU
max. Earth dist.	-7956 Mar 10 j 11:11	19° <b>♂</b> 49'37	9.85625 AU	morning rise	-7950 Jun 19 j 21:42	12° <b>♀</b> 50'07	
morning rise	-7956 Mar 27 j 12:14	22° <b>♂</b> 04'37		retrograde	-7950 Sep 26 j 19:16	19° <b>♀</b> 55'56	
	-7956 Jun 16 j 14:33	0° <b>≈</b>		opposition	-7950 Dec 03 j 16:09	16° <b>♀</b> 37'04	-0°30'20
retrograde	-7956 Jul 11 j 07:40	0° <b>≈</b> 34'27		min. Earth dist.	-7950 Dec 03 j 09:28	16° <b>♀</b> 38'21	8.83428 AU
	-7956 Aug 05 j 00:28	30° <b>ℓ</b>		direct	-7949 Feb 12 j 07:38	13° <b>♀</b> 12'16	
opposition	-7956 Sep 15 j 16:24	27° <b>♂</b> 03'36	-3°02'11	evening set	-7949 May 28 j 11:14	20° <b>♀</b> 35'39	
min. Earth dist.	-7956 Sep 14 j 20:36	27° <b>♂</b> 07'46	7.90493 AU				
direct	-7956 Nov 21 j 01:35	23° <b>♂</b> 33'06		conjunction	-7949 Jun 14 j 21:17	22° <b>♀</b> 38'27	-0°09'27

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodiens AG 18-Feb-2025 14:23, page 38

Attention, astronomical year style is used: The year -7949 in astronomical counting style is the year 7950 BCE in historical counting style.

minimum elong	-7949 Jun 14 j 21:18	22° $\Upsilon$ 38'27	0°09'18	evening set	-7943 Aug 02 j 16:01	26° $\Pi$ 47'01	
behind sun begin	-7949 Jun 14 j 15:19	22° $\Upsilon$ 36'42		max. Earth dist.	-7943 Aug 18 j 07:12	28° $\Pi$ 33'52	11.30124 AU
behind sun end	-7949 Jun 15 j 03:17	22° $\Upsilon$ 40'12					
max. Earth dist.	-7949 Jun 15 j 02:48	22° $\Upsilon$ 40'03	10.91037 AU	conjunction	-7943 Aug 19 j 02:23	28° $\Pi$ 39'22	2°10'56
morning rise	-7949 Jul 02 j 02:03	24° $\Upsilon$ 39'41		minimum elong	-7943 Aug 19 j 02:20	28° $\Pi$ 39'21	2°11'28
	-7949 Aug 25 j 18:39	0° $\mathcal{B}$			-7943 Aug 30 j 20:02	0° $\mathcal{E}$	
retrograde	-7949 Oct 08 j 09:49	1° $\mathcal{B}$ 35'43		morning rise	-7943 Sep 04 j 10:18	0° $\mathcal{E}$ 31'09	
asc. node	-7949 Oct 12 j 02:05	1° $\mathcal{B}$ 35'01		retrograde	-7943 Dec 12 j 15:13	7° $\mathcal{E}$ 14'38	
	-7949 Nov 22 j 06:10	30° $\mathcal{K}\Upsilon$		opposition	-7942 Feb 21 j 05:37	3° $\mathcal{E}$ 59'22	2°46'18
opposition	-7949 Dec 15 j 17:48	28° $\Upsilon$ 18'24	0°06'17	min. Earth dist.	-7942 Feb 21 j 23:28	3° $\mathcal{E}$ 56'08	9.28681 AU
min. Earth dist.	-7949 Dec 15 j 15:10	28° $\Upsilon$ 18'54	8.97955 AU	direct	-7942 May 04 j 03:53	0° $\mathcal{E}$ 40'51	
direct	-7948 Feb 24 j 22:00	24° $\Upsilon$ 54'58		evening set	-7942 Aug 13 j 12:47	7° $\mathcal{E}$ 32'53	
	-7948 May 20 j 00:04	0° $\mathcal{B}$					
evening set	-7948 Jun 08 j 13:11	2° $\mathcal{B}$ 09'09		conjunction	-7942 Aug 29 j 21:01	9° $\mathcal{E}$ 25'17	2°21'27
				minimum elong	-7942 Aug 29 j 21:00	9° $\mathcal{E}$ 25'16	2°21'59
conjunction	-7948 Jun 25 j 18:50	4° $\mathcal{B}$ 09'08	0°20'07	max. Earth dist.	-7942 Aug 28 j 23:12	9° $\mathcal{E}$ 18'59	11.26074 AU
minimum elong	-7948 Jun 25 j 18:49	4° $\mathcal{B}$ 09'08	0°20'21	morning rise	-7942 Sep 15 j 03:48	11° $\mathcal{E}$ 17'22	
max. Earth dist.	-7948 Jun 25 j 18:46	4° $\mathcal{B}$ 09'07	11.04479 AU	retrograde	-7942 Dec 24 j 00:52	18° $\mathcal{E}$ 05'44	
morning rise	-7948 Jul 12 j 19:20	6° $\mathcal{B}$ 07'39		opposition	-7941 Mar 04 j 21:24	14° $\mathcal{E}$ 49'35	2°56'20
retrograde	-7948 Oct 18 j 18:00	12° $\mathcal{B}$ 56'11		min. Earth dist.	-7941 Mar 05 j 17:36	14° $\mathcal{E}$ 45'55	9.23147 AU
opposition	-7948 Dec 26 j 13:24	9° $\mathcal{B}$ 40'07	0°41'34	direct	-7941 May 15 j 10:52	11° $\mathcal{E}$ 31'08	
min. Earth dist.	-7948 Dec 26 j 14:35	9° $\mathcal{B}$ 39'54	9.10249 AU	evening set	-7941 Aug 24 j 10:38	18° $\mathcal{E}$ 24'56	
direct	-7947 Mar 08 j 04:57	6° $\mathcal{B}$ 17'57					
evening set	-7947 Jun 20 j 05:59	13° $\mathcal{B}$ 24'33		conjunction	-7941 Sep 09 j 17:44	20° $\mathcal{E}$ 17'57	2°26'59
	-7947 Jul 04 j 02:54	15° $\mathcal{B}$		minimum elong	-7941 Sep 09 j 17:44	20° $\mathcal{E}$ 17'57	2°27'29
				max. Earth dist.	-7941 Sep 08 j 17:47	20° $\mathcal{E}$ 10'59	11.19071 AU
conjunction	-7947 Jul 07 j 07:15	15° $\mathcal{B}$ 22'06	0°48'10	morning rise	-7941 Sep 26 j 00:33	22° $\mathcal{E}$ 10'57	
minimum elong	-7947 Jul 07 j 07:13	15° $\mathcal{B}$ 22'05	0°48'29	retrograde	-7940 Jan 04 j 17:10	29° $\mathcal{E}$ 06'05	
max. Earth dist.	-7947 Jul 07 j 02:46	15° $\mathcal{B}$ 20'48	11.15451 AU	opposition	-7940 Mar 15 j 17:16	25° $\mathcal{E}$ 48'45	3°00'10
morning rise	-7947 Jul 24 j 03:27	17° $\mathcal{B}$ 18'16		min. Earth dist.	-7940 Mar 16 j 14:43	25° $\mathcal{E}$ 44'49	9.14725 AU
retrograde	-7947 Oct 30 j 00:30	24° $\mathcal{B}$ 01'37		direct	-7940 May 25 j 22:09	22° $\mathcal{E}$ 30'09	
opposition	-7946 Jan 07 j 05:00	20° $\mathcal{B}$ 46'28	1°14'26	evening set	-7940 Sep 03 j 11:27	29° $\mathcal{E}$ 27'17	
min. Earth dist.	-7946 Jan 07 j 10:17	20° $\mathcal{B}$ 45'30	9.19918 AU		-7940 Sep 08 j 04:33	0° $\mathcal{Q}$	
direct	-7946 Mar 20 j 03:18	17° $\mathcal{B}$ 25'28					
evening set	-7946 Jul 01 j 15:22	24° $\mathcal{B}$ 26'00		conjunction	-7940 Sep 19 j 18:38	1° $\mathcal{Q}$ 21'33	2°27'09
				minimum elong	-7940 Sep 19 j 18:39	1° $\mathcal{Q}$ 21'33	2°27'38
conjunction	-7946 Jul 18 j 12:13	26° $\mathcal{B}$ 21'32	1°13'55	max. Earth dist.	-7940 Sep 18 j 18:43	1° $\mathcal{Q}$ 14'30	11.09313 AU
minimum elong	-7946 Jul 18 j 12:11	26° $\mathcal{B}$ 21'31	1°14'19	morning rise	-7940 Oct 06 j 02:22	3° $\mathcal{Q}$ 16'04	
max. Earth dist.	-7946 Jul 18 j 03:18	26° $\mathcal{B}$ 18'58	11.23655 AU	retrograde	-7939 Jan 15 j 18:14	10° $\mathcal{Q}$ 19'43	
morning rise	-7946 Aug 04 j 04:28	28° $\mathcal{B}$ 15'50		opposition	-7939 Mar 27 j 18:30	7° $\mathcal{Q}$ 00'56	2°57'19
	-7946 Aug 20 j 02:02	0° $\mathcal{H}$		min. Earth dist.	-7939 Mar 28 j 15:28	6° $\mathcal{Q}$ 57'05	9.03663 AU
retrograde	-7946 Nov 10 j 02:23	4° $\mathcal{H}$ 56'09		direct	-7939 Jun 06 j 11:30	3° $\mathcal{Q}$ 42'04	
opposition	-7945 Jan 18 j 17:57	1° $\mathcal{H}$ 41'34	1°44'01	evening set	-7939 Sep 14 j 17:08	10° $\mathcal{Q}$ 43'59	
min. Earth dist.	-7945 Jan 19 j 03:45	1° $\mathcal{H}$ 39'46	9.26728 AU	max. Earth dist.	-7939 Sep 30 j 02:18	12° $\mathcal{Q}$ 33'11	10.97106 AU
	-7945 Feb 12 j 00:32	30° $\mathcal{K}\mathcal{B}$					
direct	-7945 Mar 31 j 19:15	28° $\mathcal{B}$ 21'31		conjunction	-7939 Oct 01 j 01:36	12° $\mathcal{Q}$ 40'08	2°21'39
	-7945 May 17 j 12:35	0° $\mathcal{H}$		minimum elong	-7939 Oct 01 j 01:38	12° $\mathcal{Q}$ 40'09	2°22'05
evening set	-7945 Jul 12 j 19:09	5° $\mathcal{H}$ 17'35		morning rise	-7939 Oct 17 j 11:25	14° $\mathcal{Q}$ 36'49	
					-7939 Oct 20 j 19:10	15° $\mathcal{Q}$	
conjunction	-7945 Jul 29 j 11:49	7° $\mathcal{H}$ 11'32	1°36'41	retrograde	-7938 Jan 28 j 04:01	21° $\mathcal{Q}$ 50'40	
minimum elong	-7945 Jul 29 j 11:46	7° $\mathcal{H}$ 11'31	1°37'09	opposition	-7938 Apr 09 j 02:43	18° $\mathcal{Q}$ 30'15	2°47'25
max. Earth dist.	-7945 Jul 28 j 21:56	7° $\mathcal{H}$ 07'33	11.28909 AU	min. Earth dist.	-7938 Apr 09 j 22:36	18° $\mathcal{Q}$ 26'32	8.90328 AU
morning rise	-7945 Aug 15 j 00:44	9° $\mathcal{H}$ 04'29		direct	-7938 Jun 18 j 04:40	15° $\mathcal{Q}$ 10'54	
retrograde	-7945 Nov 21 j 04:31	15° $\mathcal{H}$ 43'51		evening set	-7938 Sep 26 j 05:38	22° $\mathcal{Q}$ 19'04	
opposition	-7944 Jan 30 j 05:18	12° $\mathcal{H}$ 29'25	2°09'36				
min. Earth dist.	-7944 Jan 30 j 18:40	12° $\mathcal{H}$ 26'59	9.30515 AU	conjunction	-7938 Oct 12 j 16:24	24° $\mathcal{Q}$ 17'43	2°10'16
direct	-7944 Apr 11 j 09:17	9° $\mathcal{H}$ 10'04		minimum elong	-7938 Oct 12 j 16:27	24° $\mathcal{Q}$ 17'44	2°10'38
evening set	-7944 Jul 22 j 18:45	16° $\mathcal{H}$ 03'15		max. Earth dist.	-7938 Oct 11 j 17:31	24° $\mathcal{Q}$ 10'47	10.82865 AU
				morning rise	-7938 Oct 29 j 05:40	26° $\mathcal{Q}$ 17'12	
conjunction	-7944 Aug 08 j 07:55	17° $\mathcal{H}$ 56'08	1°55'52		-7938 Dec 02 j 01:52	0° $\mathcal{H}$	
minimum elong	-7944 Aug 08 j 07:52	17° $\mathcal{H}$ 56'08	1°56'23	retrograde	-7937 Feb 10 j 00:27	3° $\mathcal{H}$ 42'41	
max. Earth dist.	-7944 Aug 07 j 14:39	17° $\mathcal{H}$ 51'12	11.31087 AU	opposition	-7937 Apr 21 j 18:51	0° $\mathcal{H}$ 20'29	2°30'11
morning rise	-7944 Aug 24 j 18:03	19° $\mathcal{H}$ 48'14		min. Earth dist.	-7937 Apr 22 j 13:36	0° $\mathcal{H}$ 16'57	8.75190 AU
retrograde	-7944 Dec 01 j 07:41	26° $\mathcal{H}$ 28'41			-7937 Apr 26 j 07:36	30° $\mathcal{K}\mathcal{Q}$	
opposition	-7943 Feb 09 j 16:41	23° $\mathcal{H}$ 13'59	2°30'32	direct	-7937 Jun 30 j 04:21	27° $\mathcal{Q}$ 00'28	
min. Earth dist.	-7943 Feb 10 j 08:15	23° $\mathcal{H}$ 11'10	9.31169 AU		-7937 Aug 29 j 19:58	0° $\mathcal{H}$	
direct	-7943 Apr 22 j 19:15	19° $\mathcal{H}$ 55'10		evening set	-7937 Oct 08 j 03:04	4° $\mathcal{H}$ 16'20	

## Planetary Phenomena of Saturn from -8400 through -7898 (UT), AstroDienst AG 18-Feb-2025 14:23, page 39

Attention, astronomical year style is used: The year -7937 in astronomical counting style is the year 7938 BCE in historical counting style.

conjunction	-7937 Oct 24 j 17:14	6° <u>18</u> '01	1°52'55	minimum elong	-7930 Jan 14 j 14:14	28° <u>18</u> '02'00	1°16'28
minimum elong	-7937 Oct 24 j 17:18	6° <u>18</u> '02	1°53'11	max. Earth dist.	-7930 Jan 15 j 00:23	28° <u>18</u> '05'24	9.83703 AU
max. Earth dist.	-7937 Oct 23 j 19:54	6° <u>11</u> '27	10.67114 AU		-7930 Jan 29 j 07:35	0° <u>1</u> '	
morning rise	-7937 Nov 10 j 11:02	8° <u>17</u> '20'53		morning rise	-7930 Feb 01 j 15:24	0° <u>1</u> '26'18	
retrograde	-7936 Feb 23 j 06:57	15° <u>17</u> '59'10		retrograde	-7930 May 21 j 03:43	9° <u>1</u> '11'21	
opposition	-7936 May 03 j 19:34	12° <u>17</u> '35'06	2°05'36	opposition	-7930 Jul 27 j 14:53	5° <u>1</u> '38'56	-1°55'17
min. Earth dist.	-7936 May 04 j 12:27	12° <u>17</u> '31'52	8.58847 AU	min. Earth dist.	-7930 Jul 27 j 04:40	5° <u>1</u> '41'04	7.81117 AU
direct	-7936 Jul 11 j 11:32	9° <u>17</u> '14'15		direct	-7930 Oct 01 j 03:08	2° <u>1</u> '11'13	
evening set	-7936 Oct 19 j 11:10	16° <u>17</u> '39'06		evening set	-7929 Jan 12 j 10:16	10° <u>1</u> '35'47	
conjunction	-7936 Nov 05 j 05:50	18° <u>17</u> '44'20	1°29'49	conjunction	-7929 Jan 30 j 09:34	13° <u>1</u> '00'01	-1°45'19
minimum elong	-7936 Nov 05 j 05:54	18° <u>17</u> '44'21	1°29'58	minimum elong	-7929 Jan 30 j 09:29	12° <u>1</u> '59'59	1°45'48
max. Earth dist.	-7936 Nov 04 j 12:07	18° <u>17</u> '38'47	10.50495 AU	max. Earth dist.	-7929 Jan 31 j 01:05	13° <u>1</u> '05'14	9.79376 AU
morning rise	-7936 Nov 22 j 04:53	20° <u>17</u> '51'00		morning rise	-7929 Feb 17 j 12:54	15° <u>1</u> '25'30	
retrograde	-7935 Mar 08 j 00:55	28° <u>17</u> '42'56		retrograde	-7929 Jun 05 j 15:11	24° <u>1</u> '11'34	
opposition	-7935 May 17 j 05:50	25° <u>17</u> '16'57	1°33'59	opposition	-7929 Aug 11 j 15:45	20° <u>1</u> '39'06	-2°27'56
min. Earth dist.	-7935 May 17 j 19:07	25° <u>17</u> '14'22	8.42022 AU	min. Earth dist.	-7929 Aug 11 j 02:07	20° <u>1</u> '41'58	7.78921 AU
direct	-7935 Jul 24 j 05:43	21° <u>17</u> '55'09		direct	-7929 Oct 16 j 04:25	17° <u>1</u> '10'21	
evening set	-7935 Nov 01 j 07:44	29° <u>17</u> '30'02		evening set	-7928 Jan 28 j 08:29	25° <u>1</u> '39'31	
	-7935 Nov 05 j 07:24	0° <u>1</u> '					
conjunction	-7935 Nov 18 j 07:39	1° <u>1</u> '39'08	1°01'28	conjunction	-7928 Feb 15 j 09:54	28° <u>1</u> '04'15	-2°07'36
minimum elong	-7935 Nov 18 j 07:41	1° <u>1</u> '39'09	1°01'31	minimum elong	-7928 Feb 15 j 09:50	28° <u>1</u> '04'14	2°08'08
max. Earth dist.	-7935 Nov 17 j 18:49	1° <u>1</u> '35'02	10.33778 AU	max. Earth dist.	-7928 Feb 16 j 05:59	28° <u>1</u> '11'00	9.79186 AU
morning rise	-7935 Dec 05 j 12:28	3° <u>1</u> '49'53			-7928 Feb 29 j 19:51	0° <u>1</u> '	
retrograde	-7934 Mar 22 j 08:25	11° <u>1</u> '55'41		morning rise	-7928 Mar 04 j 14:04	0° <u>1</u> '29'47	
opposition	-7934 May 31 j 01:40	8° <u>1</u> '27'51	0°56'11	retrograde	-7928 Jun 19 j 22:58	9° <u>1</u> '12'27	
min. Earth dist.	-7934 May 31 j 10:14	8° <u>1</u> '26'09	8.25548 AU	opposition	-7928 Aug 25 j 15:01	5° <u>1</u> '40'30	-2°50'27
direct	-7934 Aug 06 j 08:19	5° <u>1</u> '05'00		min. Earth dist.	-7928 Aug 24 j 22:26	5° <u>1</u> '44'00	7.80872 AU
evening set	-7934 Nov 14 j 18:35	12° <u>1</u> '50'41		direct	-7928 Oct 30 j 08:51	2° <u>1</u> '10'59	
				evening set	-7927 Feb 12 j 08:24	10° <u>1</u> '41'26	
conjunction	-7934 Dec 02 j 00:02	15° <u>1</u> '03'45	0°28'55	conjunction	-7927 Mar 02 j 10:59	13° <u>1</u> '05'38	-2°21'09
minimum elong	-7934 Dec 02 j 00:04	15° <u>1</u> '03'45	0°28'50	minimum elong	-7927 Mar 02 j 10:58	13° <u>1</u> '05'38	2°21'41
max. Earth dist.	-7934 Dec 01 j 16:25	15° <u>1</u> '01'17	10.17832 AU	max. Earth dist.	-7927 Mar 03 j 10:39	13° <u>1</u> '13'33	9.83180 AU
morning rise	-7934 Dec 19 j 10:50	17° <u>1</u> '18'38		morning rise	-7927 Mar 20 j 14:49	15° <u>1</u> '30'09	
retrograde	-7933 Apr 06 j 02:53	25° <u>1</u> '37'39		retrograde	-7927 Jul 04 j 23:34	24° <u>1</u> '05'03	
opposition	-7933 Jun 14 j 06:30	22° <u>1</u> '08'10	0°13'45	opposition	-7927 Sep 09 j 09:52	20° <u>1</u> '34'06	-3°01'12
min. Earth dist.	-7933 Jun 14 j 09:58	22° <u>1</u> '07'28	8.10338 AU	min. Earth dist.	-7927 Sep 08 j 15:08	20° <u>1</u> '38'02	7.86916 AU
direct	-7933 Aug 19 j 20:46	18° <u>1</u> '44'09		direct	-7927 Nov 14 j 13:26	17° <u>1</u> '04'07	
desc. node	-7933 Oct 09 j 12:50	21° <u>1</u> '03'11		evening set	-7926 Feb 28 j 05:07	25° <u>1</u> '32'10	
evening set	-7933 Nov 28 j 20:21	26° <u>1</u> '40'59					
conjunction	-7933 Dec 16 j 07:12	28° <u>1</u> '57'50	-0°06'24	conjunction	-7926 Mar 18 j 07:57	27° <u>1</u> '54'52	-2°25'12
minimum elong	-7933 Dec 16 j 07:11	28° <u>1</u> '57'49	0°06'37	minimum elong	-7926 Mar 18 j 07:57	27° <u>1</u> '54'53	2°25'42
behind sun begin	-7933 Dec 16 j 00:25	28° <u>1</u> '55'37		max. Earth dist.	-7926 Mar 19 j 09:42	28° <u>1</u> '03'23	9.91177 AU
behind sun end	-7933 Dec 16 j 13:58	29° <u>1</u> '00'02			-7926 Apr 03 j 04:45	0° <u>1</u> '	
max. Earth dist.	-7933 Dec 16 j 05:03	28° <u>1</u> '57'09	10.03585 AU	morning rise	-7926 Apr 05 j 10:27	0° <u>1</u> '17'24	
	-7933 Dec 24 j 04:21	0° <u>1</u> '		retrograde	-7926 Jul 19 j 14:25	8° <u>1</u> '40'50	
morning rise	-7932 Jan 02 j 23:42	1° <u>1</u> '16'34		opposition	-7926 Sep 23 j 22:07	5° <u>1</u> '11'16	-2°59'51
retrograde	-7932 Apr 20 j 06:22	9° <u>1</u> '47'16		min. Earth dist.	-7926 Sep 23 j 02:29	5° <u>1</u> '15'22	7.96700 AU
opposition	-7932 Jun 27 j 19:41	6° <u>1</u> '16'24	-0°31'03	direct	-7926 Nov 29 j 15:33	1° <u>1</u> '41'11	
min. Earth dist.	-7932 Jun 27 j 18:14	6° <u>1</u> '16'42	7.97324 AU	evening set	-7925 Mar 15 j 17:56	10° <u>1</u> '03'16	
direct	-7932 Sep 01 j 20:40	2° <u>1</u> '51'09					
evening set	-7932 Dec 12 j 12:36	10° <u>1</u> '58'44		conjunction	-7925 Apr 02 j 20:06	12° <u>1</u> '23'42	-2°19'55
conjunction	-7932 Dec 30 j 04:25	13° <u>1</u> '18'53	-0°42'11	minimum elong	-7925 Apr 02 j 20:08	12° <u>1</u> '23'43	2°20'21
minimum elong	-7932 Dec 30 j 04:23	13° <u>1</u> '18'52	0°42'30	max. Earth dist.	-7925 Apr 03 j 22:14	12° <u>1</u> '32'13	10.02653 AU
max. Earth dist.	-7932 Dec 30 j 08:23	13° <u>1</u> '20'12	9.91947 AU	morning rise	-7925 Apr 20 j 20:29	14° <u>1</u> '43'29	
	-7931 Jan 11 j 21:11	15° <u>1</u> '			-7925 Apr 23 j 00:29	15° <u>1</u> '	
morning rise	-7931 Jan 17 j 01:49	15° <u>1</u> '40'51		retrograde	-7925 Aug 02 j 16:28	22° <u>1</u> '52'54	
retrograde	-7931 May 05 j 15:54	24° <u>1</u> '20'35		min. Earth dist.	-7925 Oct 07 j 06:33	19° <u>1</u> '29'00	8.09571 AU
opposition	-7931 Jul 12 j 15:21	20° <u>1</u> '48'43	-1°15'12	opposition	-7925 Oct 08 j 01:41	19° <u>1</u> '25'03	-2°47'22
min. Earth dist.	-7931 Jul 12 j 09:14	20° <u>1</u> '49'59	7.87366 AU	direct	-7925 Dec 14 j 11:35	15° <u>1</u> '55'12	
direct	-7931 Sep 16 j 07:47	17° <u>1</u> '22'13		evening set	-7924 Mar 29 j 19:24	24° <u>1</u> '08'30	
evening set	-7931 Dec 27 j 18:15	25° <u>1</u> '39'20					
conjunction	-7930 Jan 14 j 14:18	28° <u>1</u> '02'01	-1°16'03	conjunction	-7924 Apr 16 j 20:08	26° <u>1</u> '26'06	-2°06'21
				minimum elong	-7924 Apr 16 j 20:11	26° <u>1</u> '26'07	2°06'43
				max. Earth dist.	-7924 Apr 17 j 20:50	26° <u>1</u> '34'00	10.16836 AU
				morning rise	-7924 May 04 j 17:53	28° <u>1</u> '42'40	

Attention, astronomical year style is used: The year -7924 in astronomical counting style is the year 7925 BCE in historical counting style.

	-7924 May 15 j 04:58	0°♄	minimum elong	-7918 Jul 02 j 14:54	10°♄38'04	0°36'03
retrograde	-7924 Aug 15 j 05:52	6°♄36'48	max. Earth dist.	-7918 Jul 02 j 13:09	10°♄37'33	11.09165 AU
opposition	-7924 Oct 20 j 19:29	3°♄10'51 -2°25'34	morning rise	-7918 Jul 19 j 13:09	12°♄35'23	
min. Earth dist.	-7924 Oct 20 j 02:21	3°♄14'20 8.24691 AU		-7918 Aug 10 j 17:12	15°♄	
	-7924 Dec 09 j 09:22	30°♄	retrograde	-7918 Oct 25 j 09:25	19°♄21'07	
direct	-7924 Dec 27 j 23:16	29°♄41'35	opposition	-7917 Jan 02 j 10:46	16°♄05'05	1°00'01
	-7923 Jan 15 j 14:56	0°♄	min. Earth dist.	-7917 Jan 02 j 13:59	16°♄04'29	9.14464 AU
evening set	-7923 Apr 13 j 07:28	7°♄44'15		-7917 Jan 17 j 06:59	15°♄	
			direct	-7917 Mar 15 j 06:05	12°♄43'03	
conjunction	-7923 May 01 j 06:01	9°♄58'39 -1°46'06		-7917 May 09 j 13:26	15°♄	
minimum elong	-7923 May 01 j 06:05	9°♄58'40 1°46'20	evening set	-7917 Jun 26 j 23:58	19°♄46'22	
max. Earth dist.	-7923 May 02 j 03:20	10°♄05'21 10.32805 AU				
morning rise	-7923 May 19 j 00:42	12°♄11'45	conjunction	-7917 Jul 13 j 22:46	21°♄42'51	1°02'39
retrograde	-7923 Aug 28 j 06:41	19°♄50'33	minimum elong	-7917 Jul 13 j 22:44	21°♄42'50	1°03'01
opposition	-7923 Nov 03 j 03:13	16°♄26'34 -1°56'42	max. Earth dist.	-7917 Jul 13 j 16:16	21°♄40'58	11.19149 AU
min. Earth dist.	-7923 Nov 02 j 12:39	16°♄29'30 8.41128 AU	morning rise	-7917 Jul 30 j 17:01	23°♄38'02	
direct	-7922 Jan 11 j 01:31	12°♄58'11		-7917 Oct 16 j 18:37	0°♄	
evening set	-7922 Apr 27 j 05:21	20°♄49'21	retrograde	-7917 Nov 05 j 12:08	0°♄19'34	
				-7917 Nov 25 j 12:16	30°♄	
conjunction	-7922 May 15 j 00:59	23°♄00'23 -1°20'57	opposition	-7916 Jan 14 j 00:25	27°♄04'21	1°31'10
minimum elong	-7922 May 15 j 01:02	23°♄00'24 1°21'04	min. Earth dist.	-7916 Jan 14 j 06:34	27°♄03'13	9.23158 AU
max. Earth dist.	-7922 May 15 j 17:48	23°♄05'34 10.49613 AU	direct	-7916 Mar 26 j 01:47	23°♄43'31	
morning rise	-7922 Jun 01 j 16:06	25°♄09'56		-7916 Jul 01 j 00:31	0°♄	
	-7922 Jul 16 j 19:01	0°♄	evening set	-7916 Jul 07 j 05:49	0°♄41'27	
retrograde	-7922 Sep 09 j 18:27	2°♄34'20				
	-7922 Nov 05 j 21:12	30°♄	conjunction	-7916 Jul 24 j 00:29	2°♄36'05	1°26'50
opposition	-7922 Nov 16 j 01:06	29°♄12'18 -1°23'08	minimum elong	-7916 Jul 24 j 00:27	2°♄36'05	1°27'17
min. Earth dist.	-7922 Nov 15 j 13:09	29°♄14'40 8.57968 AU	max. Earth dist.	-7916 Jul 23 j 14:47	2°♄33'18	11.26374 AU
direct	-7921 Jan 24 j 18:31	25°♄45'02	morning rise	-7916 Aug 09 j 14:54	4°♄29'37	
	-7921 Apr 09 j 21:31	0°♄	retrograde	-7916 Nov 15 j 16:02	11°♄09'04	
evening set	-7921 May 10 j 13:08	3°♄24'39	opposition	-7915 Jan 24 j 11:50	7°♄54'22	1°58'36
			min. Earth dist.	-7915 Jan 24 j 21:27	7°♄52'37	9.28970 AU
conjunction	-7921 May 28 j 05:19	5°♄32'18 -0°52'42	direct	-7915 Apr 06 j 16:17	4°♄34'35	
minimum elong	-7921 May 28 j 05:22	5°♄32'19 0°52'42	evening set	-7915 Jul 18 j 06:55	11°♄28'45	
max. Earth dist.	-7921 May 28 j 17:49	5°♄36'05 10.66377 AU				
morning rise	-7921 Jun 14 j 16:28	7°♄38'24	conjunction	-7915 Aug 03 j 21:44	13°♄22'02	1°47'41
retrograde	-7921 Sep 21 j 21:25	14°♄50'01	minimum elong	-7915 Aug 03 j 21:41	13°♄22'01	1°48'11
opposition	-7921 Nov 28 j 13:57	11°♄29'48 -0°47'00	max. Earth dist.	-7915 Aug 03 j 08:18	13°♄18'12	11.30616 AU
min. Earth dist.	-7921 Nov 28 j 04:51	11°♄31'34 8.74384 AU	morning rise	-7915 Aug 20 j 08:55	15°♄14'25	
direct	-7920 Feb 06 j 23:55	8°♄03'48	retrograde	-7915 Nov 26 j 17:13	21°♄53'50	
evening set	-7920 May 22 j 07:38	15°♄32'26	opposition	-7914 Feb 04 j 22:54	18°♄39'20	2°21'40
			min. Earth dist.	-7914 Feb 05 j 12:20	18°♄36'53	9.31730 AU
conjunction	-7920 Jun 08 j 19:58	17°♄36'52 -0°22'58	direct	-7914 Apr 18 j 00:58	15°♄20'23	
minimum elong	-7920 Jun 08 j 19:59	17°♄36'52 0°22'51	evening set	-7914 Jul 29 j 04:50	22°♄12'21	
max. Earth dist.	-7920 Jun 09 j 04:26	17°♄39'23 10.82312 AU				
morning rise	-7920 Jun 26 j 02:49	19°♄39'42	conjunction	-7914 Aug 14 j 16:15	24°♄04'47	2°04'38
retrograde	-7920 Oct 02 j 16:28	26°♄40'31	minimum elong	-7914 Aug 14 j 16:12	24°♄04'46	2°05'10
opposition	-7920 Dec 09 j 18:56	23°♄21'55 -0°10'09	max. Earth dist.	-7914 Aug 13 j 22:48	23°♄59'47	11.31764 AU
min. Earth dist.	-7920 Dec 09 j 13:43	23°♄22'55 8.89648 AU	morning rise	-7914 Aug 31 j 01:07	25°♄56'34	
direct	-7919 Feb 18 j 17:53	19°♄57'16		-7914 Oct 10 j 07:57	0°♄	
asc. node	-7919 Mar 24 j 04:26	20°♄50'26	retrograde	-7914 Dec 07 j 21:47	2°♄38'01	
evening set	-7919 Jun 03 j 14:39	27°♄16'02		-7913 Feb 07 j 22:40	30°♄	
			opposition	-7913 Feb 16 j 10:44	29°♄23'18	2°39'46
conjunction	-7919 Jun 20 j 22:36	29°♄17'28 0°06'58	min. Earth dist.	-7913 Feb 17 j 03:03	29°♄20'20	9.31354 AU
minimum elong	-7919 Jun 20 j 22:36	29°♄17'28 0°07'11	direct	-7913 Apr 29 j 10:56	26°♄04'57	
behind sun begin	-7919 Jun 20 j 16:04	29°♄15'34		-7913 Jul 12 j 05:34	0°♄	
behind sun end	-7919 Jun 21 j 05:08	29°♄19'22	evening set	-7913 Aug 09 j 01:23	2°♄56'18	
max. Earth dist.	-7919 Jun 21 j 02:24	29°♄18'34 10.96748 AU				
	-7919 Jun 26 j 23:15	0°♄	conjunction	-7913 Aug 25 j 10:22	4°♄48'27	2°17'14
morning rise	-7919 Jul 08 j 01:03	1°♄17'22	minimum elong	-7913 Aug 25 j 10:20	4°♄48'26	2°17'46
retrograde	-7919 Oct 14 j 03:07	8°♄09'30	max. Earth dist.	-7913 Aug 24 j 14:43	4°♄42'48	11.29779 AU
opposition	-7919 Dec 21 j 17:22	4°♄52'20 0°25'55	morning rise	-7913 Sep 10 j 17:37	6°♄40'11	
min. Earth dist.	-7919 Dec 21 j 16:40	4°♄52'28 9.03166 AU	retrograde	-7913 Dec 19 j 06:01	13°♄25'31	
direct	-7918 Mar 03 j 03:41	1°♄29'01	opposition	-7912 Feb 28 j 00:27	10°♄10'14	2°52'23
evening set	-7918 Jun 15 j 11:37	8°♄39'19	min. Earth dist.	-7912 Feb 28 j 18:18	10°♄07'00	9.27832 AU
			direct	-7912 May 09 j 18:37	6°♄52'16	
conjunction	-7918 Jul 02 j 14:55	10°♄38'04 0°35'46	evening set	-7912 Aug 18 j 22:14	13°♄44'30	



## Planetary Phenomena of Saturn from -8400 through -7898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 41

Attention, astronomical year style is used: The year -7912 in astronomical counting style is the year 7913 BCE in historical counting style.

max. Earth dist.	-7912 Sep 03 j 08:48	15° $\mathring{\text{E}}$ 30'54	11.24695 AU	conjunction	-7906 Nov 12 j 14:03	25° $\mathring{\text{M}}$ 49'51	1°15'14
				minimum elong	-7906 Nov 12 j 14:07	25° $\mathring{\text{M}}$ 49'52	1°15'19
conjunction	-7912 Sep 04 j 05:46	15° $\mathring{\text{E}}$ 36'58	2°25'02	max. Earth dist.	-7906 Nov 11 j 20:39	25° $\mathring{\text{M}}$ 44'22	10.43287 AU
minimum elong	-7912 Sep 04 j 05:45	15° $\mathring{\text{E}}$ 36'58	2°25'33	morning rise	-7906 Nov 29 j 16:02	27° $\mathring{\text{M}}$ 58'24	
morning rise	-7912 Sep 20 j 12:15	17° $\mathring{\text{E}}$ 29'15			-7906 Dec 16 j 13:08	0° $\mathring{\text{A}}$	
retrograde	-7912 Dec 29 j 20:26	24° $\mathring{\text{E}}$ 20'20		retrograde	-7905 Mar 16 j 01:17	5° $\mathring{\text{A}}$ 56'37	
opposition	-7911 Mar 10 j 17:52	21° $\mathring{\text{E}}$ 04'09	2°59'02	opposition	-7905 May 24 j 23:27	2° $\mathring{\text{A}}$ 29'51	1°14'29
min. Earth dist.	-7911 Mar 11 j 13:00	21° $\mathring{\text{E}}$ 00'40	9.21242 AU	min. Earth dist.	-7905 May 25 j 11:43	2° $\mathring{\text{A}}$ 27'27	8.34605 AU
direct	-7911 May 21 j 03:32	17° $\mathring{\text{E}}$ 46'18			-7905 Jun 29 j 21:34	30° $\mathring{\text{R}}$ $\mathring{\text{M}}$	
evening set	-7911 Aug 29 j 21:09	24° $\mathring{\text{E}}$ 40'55		direct	-7905 Jul 31 j 13:53	29° $\mathring{\text{M}}$ 07'37	
max. Earth dist.	-7911 Sep 14 j 05:13	26° $\mathring{\text{E}}$ 27'36	11.16641 AU		-7905 Aug 31 j 15:29	0° $\mathring{\text{A}}$	
				evening set	-7905 Nov 08 j 20:06	6° $\mathring{\text{A}}$ 47'14	
conjunction	-7911 Sep 15 j 04:05	26° $\mathring{\text{E}}$ 34'17	2°27'39				
minimum elong	-7911 Sep 15 j 04:06	26° $\mathring{\text{E}}$ 34'17	2°28'09	conjunction	-7905 Nov 25 j 22:39	8° $\mathring{\text{A}}$ 58'10	0°44'36
morning rise	-7911 Oct 01 j 11:02	28° $\mathring{\text{E}}$ 27'45		minimum elong	-7905 Nov 25 j 22:41	8° $\mathring{\text{A}}$ 58'11	0°44'34
	-7911 Oct 15 j 05:28	0° $\mathring{\text{Q}}$		max. Earth dist.	-7905 Nov 25 j 09:47	8° $\mathring{\text{A}}$ 54'03	10.26312 AU
retrograde	-7910 Jan 10 j 16:42	5° $\mathring{\text{Q}}$ 26'20		morning rise	-7905 Dec 13 j 06:38	11° $\mathring{\text{A}}$ 10'54	
opposition	-7910 Mar 22 j 16:13	2° $\mathring{\text{Q}}$ 08'56	2°59'14	retrograde	-7904 Mar 29 j 12:23	19° $\mathring{\text{A}}$ 22'52	
min. Earth dist.	-7910 Mar 23 j 12:57	2° $\mathring{\text{Q}}$ 05'08	9.11753 AU	opposition	-7904 Jun 06 j 23:19	15° $\mathring{\text{A}}$ 54'08	0°34'09
	-7910 Apr 23 j 15:56	30° $\mathring{\text{R}}$ $\mathring{\text{E}}$		min. Earth dist.	-7904 Jun 07 j 07:29	15° $\mathring{\text{A}}$ 52'31	8.18097 AU
direct	-7910 Jun 01 j 13:55	28° $\mathring{\text{E}}$ 50'55		direct	-7904 Aug 12 j 22:04	12° $\mathring{\text{A}}$ 30'32	
	-7910 Jul 09 j 11:34	0° $\mathring{\text{Q}}$		evening set	-7904 Nov 21 j 13:46	20° $\mathring{\text{A}}$ 21'22	
evening set	-7910 Sep 10 j 00:01	5° $\mathring{\text{Q}}$ 49'26					
max. Earth dist.	-7910 Sep 25 j 07:18	7° $\mathring{\text{Q}}$ 37'11	11.05827 AU	conjunction	-7904 Dec 08 j 21:57	22° $\mathring{\text{A}}$ 36'17	0°10'32
				minimum elong	-7904 Dec 08 j 21:58	22° $\mathring{\text{A}}$ 36'17	0°10'23
conjunction	-7910 Sep 26 j 07:29	7° $\mathring{\text{Q}}$ 44'20	2°24'46	behind sun begin	-7904 Dec 08 j 16:18	22° $\mathring{\text{A}}$ 34'27	
minimum elong	-7910 Sep 26 j 07:30	7° $\mathring{\text{Q}}$ 44'20	2°25'14	behind sun end	-7904 Dec 09 j 03:38	22° $\mathring{\text{A}}$ 38'07	
morning rise	-7910 Oct 12 j 16:10	9° $\mathring{\text{Q}}$ 39'39		max. Earth dist.	-7904 Dec 08 j 15:17	22° $\mathring{\text{A}}$ 34'08	10.10540 AU
	-7910 Dec 06 j 01:15	15° $\mathring{\text{Q}}$		morning rise	-7904 Dec 26 j 11:46	24° $\mathring{\text{A}}$ 53'05	
retrograde	-7909 Jan 22 j 19:36	16° $\mathring{\text{Q}}$ 47'26			-7903 Feb 08 j 23:52	0° $\mathring{\text{M}}$	
	-7909 Mar 13 j 08:31	15° $\mathring{\text{R}}$ $\mathring{\text{Q}}$		desc. node	-7903 Mar 31 j 10:14	3° $\mathring{\text{M}}$ 08'51	
opposition	-7909 Apr 03 j 20:26	13° $\mathring{\text{Q}}$ 28'30	2°52'36	retrograde	-7903 Apr 13 j 09:50	3° $\mathring{\text{M}}$ 17'50	
min. Earth dist.	-7909 Apr 04 j 17:46	13° $\mathring{\text{Q}}$ 24'34	8.99609 AU		-7903 Jun 18 j 17:33	30° $\mathring{\text{R}}$ $\mathring{\text{A}}$	
direct	-7909 Jun 13 j 04:53	10° $\mathring{\text{Q}}$ 10'03		opposition	-7903 Jun 21 j 08:03	29° $\mathring{\text{A}}$ 47'21	-0°09'44
	-7909 Sep 01 j 12:44	15° $\mathring{\text{Q}}$		min. Earth dist.	-7903 Jun 21 j 10:59	29° $\mathring{\text{A}}$ 46'46	8.03307 AU
evening set	-7909 Sep 21 j 08:32	17° $\mathring{\text{Q}}$ 14'04		direct	-7903 Aug 26 j 17:16	26° $\mathring{\text{A}}$ 22'22	
					-7903 Oct 29 j 20:26	0° $\mathring{\text{M}}$	
conjunction	-7909 Oct 07 j 17:55	19° $\mathring{\text{Q}}$ 11'09	2°16'06	evening set	-7903 Dec 05 j 22:19	4° $\mathring{\text{M}}$ 24'26	
minimum elong	-7909 Oct 07 j 17:58	19° $\mathring{\text{Q}}$ 11'10	2°16'30				
max. Earth dist.	-7909 Oct 06 j 18:18	19° $\mathring{\text{Q}}$ 04'04	10.92531 AU	conjunction	-7903 Dec 23 j 11:56	6° $\mathring{\text{M}}$ 43'02	-0°25'16
morning rise	-7909 Oct 24 j 05:22	21° $\mathring{\text{Q}}$ 08'56		minimum elong	-7903 Dec 23 j 11:54	6° $\mathring{\text{M}}$ 43'01	0°25'32
retrograde	-7908 Feb 04 j 10:43	28° $\mathring{\text{Q}}$ 27'37		max. Earth dist.	-7903 Dec 23 j 11:58	6° $\mathring{\text{M}}$ 43'03	9.96913 AU
opposition	-7908 Apr 15 j 07:55	25° $\mathring{\text{Q}}$ 06'56	2°38'47	morning rise	-7902 Jan 10 j 07:01	9° $\mathring{\text{M}}$ 03'29	
min. Earth dist.	-7908 Apr 16 j 04:12	25° $\mathring{\text{Q}}$ 03'08	8.85167 AU		-7902 Mar 03 j 18:24	15° $\mathring{\text{M}}$	
direct	-7908 Jun 24 j 02:33	21° $\mathring{\text{Q}}$ 47'51		retrograde	-7902 Apr 28 j 15:44	17° $\mathring{\text{M}}$ 39'01	
evening set	-7908 Oct 02 j 00:50	28° $\mathring{\text{Q}}$ 58'51			-7902 Jun 25 j 04:25	15° $\mathring{\text{R}}$ $\mathring{\text{M}}$	
	-7908 Oct 10 j 12:09	0° $\mathring{\text{M}}$		opposition	-7902 Jul 06 j 00:16	14° $\mathring{\text{M}}$ 07'08	-0°54'30
				min. Earth dist.	-7902 Jul 05 j 21:33	14° $\mathring{\text{M}}$ 07'42	7.91152 AU
conjunction	-7908 Oct 18 j 13:14	0° $\mathring{\text{M}}$ 58'44	2°01'32	direct	-7902 Sep 09 j 22:29	10° $\mathring{\text{M}}$ 40'45	
minimum elong	-7908 Oct 18 j 13:18	0° $\mathring{\text{M}}$ 58'45	2°01'51		-7902 Nov 19 j 03:14	15° $\mathring{\text{M}}$	
max. Earth dist.	-7908 Oct 17 j 15:15	0° $\mathring{\text{M}}$ 52'02	10.77208 AU	evening set	-7902 Dec 20 j 21:23	18° $\mathring{\text{M}}$ 53'23	
morning rise	-7908 Nov 04 j 04:29	2° $\mathring{\text{M}}$ 59'37					
retrograde	-7907 Feb 16 j 12:08	10° $\mathring{\text{M}}$ 30'37		conjunction	-7901 Jan 07 j 15:40	21° $\mathring{\text{M}}$ 15'03	-1°00'19
opposition	-7907 Apr 28 j 03:47	7° $\mathring{\text{M}}$ 07'59	2°17'41	minimum elong	-7901 Jan 07 j 15:37	21° $\mathring{\text{M}}$ 15'01	1°00'42
min. Earth dist.	-7907 Apr 28 j 21:45	7° $\mathring{\text{M}}$ 04'35	8.69006 AU	max. Earth dist.	-7901 Jan 07 j 22:19	21° $\mathring{\text{M}}$ 17'16	9.86319 AU
direct	-7907 Jul 06 j 05:03	3° $\mathring{\text{M}}$ 48'05		morning rise	-7901 Jan 25 j 15:01	23° $\mathring{\text{M}}$ 38'24	
evening set	-7907 Oct 14 j 03:03	11° $\mathring{\text{M}}$ 07'28			-7901 Mar 23 j 00:44	0° $\mathring{\text{A}}$	
				retrograde	-7901 May 14 j 03:14	2° $\mathring{\text{A}}$ 21'34	
conjunction	-7907 Oct 30 j 19:24	13° $\mathring{\text{M}}$ 10'41	1°41'07		-7901 Jul 06 j 09:08	30° $\mathring{\text{R}}$ $\mathring{\text{M}}$	
minimum elong	-7907 Oct 30 j 19:27	13° $\mathring{\text{M}}$ 10'42	1°41'20	opposition	-7901 Jul 20 j 21:52	28° $\mathring{\text{M}}$ 48'47	-1°36'56
max. Earth dist.	-7907 Oct 29 j 23:07	13° $\mathring{\text{M}}$ 04'24	10.60535 AU	min. Earth dist.	-7901 Jul 20 j 13:57	28° $\mathring{\text{M}}$ 50'26	7.82449 AU
morning rise	-7907 Nov 16 j 15:37	15° $\mathring{\text{M}}$ 15'12		direct	-7901 Sep 24 j 11:58	25° $\mathring{\text{M}}$ 21'05	
retrograde	-7906 Mar 02 j 00:44	22° $\mathring{\text{M}}$ 59'33			-7901 Dec 06 j 11:13	0° $\mathring{\text{A}}$	
opposition	-7906 May 11 j 08:52	19° $\mathring{\text{M}}$ 34'52	1°49'23	evening set	-7900 Jan 05 j 08:36	3° $\mathring{\text{A}}$ 42'41	
min. Earth dist.	-7906 May 12 j 00:18	19° $\mathring{\text{M}}$ 31'54	8.51876 AU				
direct	-7906 Jul 18 j 16:36	16° $\mathring{\text{M}}$ 13'53		conjunction	-7900 Jan 23 j 06:36	6° $\mathring{\text{A}}$ 06'30	-1°32'06
evening set	-7906 Oct 26 j 16:55	23° $\mathring{\text{M}}$ 42'53		minimum elong	-7900 Jan 23 j 06:32	6° $\mathring{\text{A}}$ 06'28	1°32'33

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

max. Earth dist.	-7900 Jan 23 j 19:34	6° $\pi$ 10'51	9.79509 AU
morning rise	-7900 Feb 10 j 08:56	8° $\pi$ 31'43	
retrograde	-7900 May 28 j 17:08	17° $\pi$ 18'30	
opposition	-7900 Aug 03 j 22:36	13° $\pi$ 45'21	-2°13'33
min. Earth dist.	-7900 Aug 03 j 10:11	13° $\pi$ 47'57	7.77826 AU
direct	-7900 Oct 08 j 09:45	10° $\pi$ 16'28	
evening set	-7899 Jan 20 j 04:25	18° $\pi$ 44'28	
conjunction	-7899 Feb 07 j 05:03	21° $\pi$ 09'20	-1°57'59
minimum elong	-7899 Feb 07 j 04:59	21° $\pi$ 09'19	1°58'29
max. Earth dist.	-7899 Feb 07 j 23:30	21° $\pi$ 15'33	9.76999 AU
morning rise	-7899 Feb 25 j 09:00	23° $\pi$ 35'15	
	-7899 Apr 22 j 18:48	0° $\pi$	
retrograde	-7899 Jun 13 j 04:29	2° $\pi$ 20'58	
	-7899 Aug 04 j 11:33	30° $\pi$	
opposition	-7899 Aug 18 j 23:21	28° $\pi$ 48'02	-2°41'13
min. Earth dist.	-7899 Aug 18 j 07:39	28° $\pi$ 51'21	7.77622 AU
direct	-7899 Oct 23 j 13:20	25° $\pi$ 18'13	
	-7898 Jan 05 j 07:53	0° $\pi$	