

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 1

Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style.

	-4400 Jan 18 j 04:03	15° $\mathbb{M}$				-4394 Feb 21 j 04:21	0° $\approx$	
retrograde	-4400 Apr 03 j 10:04	19° $\mathbb{M}$ 22'11						
opposition	-4400 Jun 12 j 22:58	15° $\mathbb{M}$ 58'09	0°36'00	conjunction	-4394 Feb 22 j 13:27	0° $\approx$ 10'58	-2°07'05	
min. Earth dist.	-4400 Jun 13 j 09:35	15° $\mathbb{M}$ 56'07	8.62501 AU	minimum elong	-4394 Feb 22 j 13:25	0° $\approx$ 10'58	2°07'16	
	-4400 Jun 25 j 19:55	15° $\mathbb{R}$ $\mathbb{M}$		max. Earth dist.	-4394 Feb 22 j 21:01	0° $\approx$ 13'29	9.93157 AU	
direct	-4400 Aug 20 j 13:58	12° $\mathbb{M}$ 37'53		morning rise	-4394 Mar 12 j 11:16	2° $\approx$ 32'30		
	-4400 Oct 12 j 14:42	15° $\mathbb{M}$		retrograde	-4394 Jun 28 j 13:35	11° $\approx$ 09'37		
evening set	-4400 Nov 28 j 07:20	19° $\mathbb{M}$ 58'42		opposition	-4394 Sep 04 j 03:05	7° $\approx$ 38'05	-2°48'32	
				min. Earth dist.	-4394 Sep 03 j 19:35	7° $\approx$ 39'39	7.90239 AU	
conjunction	-4400 Dec 15 j 05:05	22° $\mathbb{M}$ 04'01	0°14'01	direct	-4394 Nov 08 j 21:49	4° $\approx$ 10'40		
minimum elong	-4400 Dec 15 j 05:05	22° $\mathbb{M}$ 04'01	0°13'52	evening set	-4393 Feb 20 j 04:50	12° $\approx$ 29'39		
behind sun begin	-4400 Dec 15 j 01:20	22° $\mathbb{M}$ 02'51						
behind sun end	-4400 Dec 15 j 08:51	22° $\mathbb{M}$ 05'10		conjunction	-4393 Mar 10 j 01:41	14° $\approx$ 51'32	-2°19'31	
max. Earth dist.	-4400 Dec 14 j 16:55	22° $\mathbb{M}$ 00'14	10.55223 AU	minimum elong	-4393 Mar 10 j 01:40	14° $\approx$ 51'31	2°19'40	
morning rise	-4399 Jan 01 j 07:12	24° $\mathbb{M}$ 10'45		max. Earth dist.	-4393 Mar 10 j 12:36	14° $\approx$ 55'10	9.87806 AU	
	-4399 Feb 26 j 13:03	0° $\mathbb{X}$			-4393 Mar 11 j 03:08	15° $\approx$		
retrograde	-4399 Apr 17 j 00:18	1° $\mathbb{X}$ 58'22		morning rise	-4393 Mar 28 j 02:04	17° $\approx$ 14'32		
desc. node	-4399 May 29 j 21:03	0° $\mathbb{X}$ 31'34		retrograde	-4393 Jul 13 j 19:38	25° $\approx$ 53'29		
	-4399 Jun 06 j 18:56	30° $\mathbb{R}$ $\mathbb{M}$		opposition	-4393 Sep 18 j 21:19	22° $\approx$ 21'54	-2°58'37	
opposition	-4399 Jun 26 j 05:06	28° $\mathbb{M}$ 32'41	-0°02'53	min. Earth dist.	-4393 Sep 18 j 11:34	22° $\approx$ 23'56	7.86691 AU	
min. Earth dist.	-4399 Jun 26 j 13:34	28° $\mathbb{M}$ 31'02	8.47674 AU	direct	-4393 Nov 23 j 15:39	18° $\approx$ 53'23		
direct	-4399 Sep 02 j 03:32	25° $\mathbb{M}$ 11'28		evening set	-4392 Mar 06 j 20:07	27° $\approx$ 17'43		
	-4399 Nov 18 j 07:10	0° $\mathbb{X}$						
evening set	-4399 Dec 11 j 02:42	2° $\mathbb{X}$ 41'34		conjunction	-4392 Mar 24 j 19:52	29° $\approx$ 40'38	-2°22'54	
				minimum elong	-4392 Mar 24 j 19:53	29° $\approx$ 40'38	2°23'01	
conjunction	-4399 Dec 28 j 04:22	4° $\mathbb{X}$ 50'05	-0°18'08	max. Earth dist.	-4392 Mar 25 j 09:40	29° $\approx$ 45'14	9.86088 AU	
minimum elong	-4399 Dec 28 j 04:20	4° $\mathbb{X}$ 50'04	0°18'19		-4392 Mar 27 j 06:02	0° $\mathbb{H}$		
max. Earth dist.	-4399 Dec 27 j 18:40	4° $\mathbb{X}$ 47'01	10.40364 AU	morning rise	-4392 Apr 11 j 22:04	2° $\mathbb{H}$ 04'17		
morning rise	-4398 Jan 14 j 11:07	7° $\mathbb{X}$ 00'13		retrograde	-4392 Jul 27 j 22:47	10° $\mathbb{H}$ 40'48		
retrograde	-4398 May 01 j 00:36	15° $\mathbb{X}$ 00'17		opposition	-4392 Oct 02 j 15:16	7° $\mathbb{H}$ 09'37	-2°56'53	
opposition	-4398 Jul 09 j 19:31	11° $\mathbb{X}$ 32'59	-0°43'02	min. Earth dist.	-4392 Oct 02 j 03:50	7° $\mathbb{H}$ 12'01	7.86903 AU	
min. Earth dist.	-4398 Jul 10 j 01:34	11° $\mathbb{X}$ 31'47	8.32966 AU	direct	-4392 Dec 07 j 13:47	3° $\mathbb{H}$ 40'16		
direct	-4398 Sep 15 j 03:40	8° $\mathbb{X}$ 10'41		evening set	-4391 Mar 22 j 13:29	12° $\mathbb{H}$ 06'37		
evening set	-4398 Dec 24 j 11:09	15° $\mathbb{X}$ 50'59						
				conjunction	-4391 Apr 09 j 15:31	14° $\mathbb{H}$ 29'43	-2°16'54	
conjunction	-4397 Jan 10 j 16:57	18° $\mathbb{X}$ 02'46	-0°50'15	minimum elong	-4391 Apr 09 j 15:34	14° $\mathbb{H}$ 29'44	2°16'58	
minimum elong	-4397 Jan 10 j 16:55	18° $\mathbb{X}$ 02'45	0°50'27	max. Earth dist.	-4391 Apr 10 j 07:41	14° $\mathbb{H}$ 35'05	9.88256 AU	
max. Earth dist.	-4397 Jan 10 j 11:13	18° $\mathbb{X}$ 00'56	10.25972 AU	morning rise	-4391 Apr 27 j 18:46	16° $\mathbb{H}$ 53'06		
morning rise	-4397 Jan 28 j 04:09	20° $\mathbb{X}$ 16'17		retrograde	-4391 Aug 11 j 20:02	25° $\mathbb{H}$ 23'03		
retrograde	-4397 May 15 j 11:12	28° $\mathbb{X}$ 28'25		opposition	-4391 Oct 17 j 06:27	21° $\mathbb{H}$ 52'42	-2°43'30	
opposition	-4397 Jul 23 j 17:52	24° $\mathbb{X}$ 59'38	-1°22'17	min. Earth dist.	-4391 Oct 16 j 17:45	21° $\mathbb{H}$ 55'22	7.90953 AU	
min. Earth dist.	-4397 Jul 23 j 20:44	24° $\mathbb{X}$ 59'04	8.19153 AU	direct	-4391 Dec 22 j 14:13	18° $\mathbb{H}$ 22'47		
direct	-4397 Sep 28 j 12:36	21° $\mathbb{X}$ 36'07		evening set	-4390 Apr 07 j 04:35	26° $\mathbb{H}$ 47'39		
evening set	-4396 Jan 07 j 09:14	29° $\mathbb{X}$ 27'07						
	-4396 Jan 11 j 16:08	0° $\mathbb{Z}$		conjunction	-4390 Apr 25 j 08:06	29° $\mathbb{H}$ 10'02	-2°02'04	
				minimum elong	-4390 Apr 25 j 08:10	29° $\mathbb{H}$ 10'04	2°02'05	
conjunction	-4396 Jan 24 j 19:12	1° $\mathbb{Z}$ 42'02	-1°20'30	max. Earth dist.	-4390 Apr 26 j 01:40	29° $\mathbb{H}$ 15'49	9.94202 AU	
minimum elong	-4396 Jan 24 j 19:09	1° $\mathbb{Z}$ 42'01	1°20'43		-4390 May 01 j 16:04	0° $\mathbb{Y}$		
max. Earth dist.	-4396 Jan 24 j 18:05	1° $\mathbb{Z}$ 41'40	10.12827 AU	morning rise	-4390 May 13 j 11:26	1° $\mathbb{Y}$ 32'15		
morning rise	-4396 Feb 11 j 10:26	3° $\mathbb{Z}$ 58'42		retrograde	-4390 Aug 26 j 08:11	9° $\mathbb{Y}$ 52'12		
retrograde	-4396 May 29 j 06:49	12° $\mathbb{Z}$ 21'39		opposition	-4390 Oct 31 j 16:29	6° $\mathbb{Y}$ 23'02	-2°19'48	
opposition	-4396 Aug 05 j 23:31	8° $\mathbb{Z}$ 51'36	-1°58'04	min. Earth dist.	-4390 Oct 31 j 03:03	6° $\mathbb{Y}$ 25'50	7.98566 AU	
min. Earth dist.	-4396 Aug 05 j 22:38	8° $\mathbb{Z}$ 51'47	8.06992 AU	direct	-4389 Jan 06 j 13:47	2° $\mathbb{Y}$ 52'56		
direct	-4396 Oct 11 j 06:39	5° $\mathbb{Z}$ 26'46		evening set	-4389 Apr 22 j 13:51	11° $\mathbb{Y}$ 13'06		
evening set	-4395 Jan 20 j 20:39	13° $\mathbb{Z}$ 28'18						
				conjunction	-4389 May 10 j 17:41	13° $\mathbb{Y}$ 33'54	-1°39'49	
conjunction	-4395 Feb 07 j 10:30	15° $\mathbb{Z}$ 46'01	-1°46'49	minimum elong	-4389 May 10 j 17:45	13° $\mathbb{Y}$ 33'56	1°39'46	
minimum elong	-4395 Feb 07 j 10:26	15° $\mathbb{Z}$ 46'00	1°47'01	max. Earth dist.	-4389 May 11 j 11:31	13° $\mathbb{Y}$ 39'42	10.03488 AU	
max. Earth dist.	-4395 Feb 07 j 13:59	15° $\mathbb{Z}$ 47'10	10.01673 AU	morning rise	-4389 May 28 j 19:52	15° $\mathbb{Y}$ 54'05		
morning rise	-4395 Feb 25 j 05:15	18° $\mathbb{Z}$ 05'23		retrograde	-4389 Sep 09 j 09:19	24° $\mathbb{Y}$ 01'41		
retrograde	-4395 Jun 13 j 08:26	26° $\mathbb{Z}$ 36'57		opposition	-4389 Nov 14 j 19:26	20° $\mathbb{Y}$ 34'02	-1°48'02	
opposition	-4395 Aug 20 j 11:07	23° $\mathbb{Z}$ 05'58	-2°27'41	min. Earth dist.	-4389 Nov 14 j 05:39	20° $\mathbb{Y}$ 36'52	8.09203 AU	
min. Earth dist.	-4395 Aug 20 j 06:38	23° $\mathbb{Z}$ 06'53	7.97168 AU	direct	-4388 Jan 21 j 08:37	17° $\mathbb{Y}$ 04'06		
direct	-4395 Oct 25 j 10:26	19° $\mathbb{Z}$ 39'47		evening set	-4388 May 06 j 13:59	25° $\mathbb{Y}$ 17'01		
evening set	-4394 Feb 04 j 19:58	27° $\mathbb{Z}$ 50'53						

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 2

Attention, astronomical year style is used: The year -4388 in astronomical counting style is the year 4389 BCE in historical counting style.

conjunction	-4388 May 24 j 16:48	27° $\Upsilon$ 35'29	-1°12'04	min. Earth dist.	-4382 Jan 29 j 10:06	6° $\ominus$ 53'12	8.93874 AU
minimum elong	-4388 May 24 j 16:52	27° $\Upsilon$ 35'30	1°11'59	direct	-4382 Apr 10 j 18:05	3° $\ominus$ 29'07	
max. Earth dist.	-4388 May 25 j 10:12	27° $\Upsilon$ 41'03	10.15459 AU	evening set	-4382 Jul 24 j 06:29	10° $\ominus$ 46'04	
morning rise	-4388 Jun 11 j 16:37	29° $\Upsilon$ 52'56					
	-4388 Jun 12 j 15:10	0° $\mathbf{\text{B}}$		conjunction	-4382 Aug 10 j 07:18	12° $\ominus$ 45'34	1°42'36
retrograde	-4388 Sep 22 j 00:03	7° $\mathbf{\text{B}}$ 47'06		minimum elong	-4382 Aug 10 j 07:15	12° $\ominus$ 45'33	1°42'48
opposition	-4388 Nov 27 j 14:26	4° $\mathbf{\text{B}}$ 21'07	-1°10'53	max. Earth dist.	-4382 Aug 10 j 06:59	12° $\ominus$ 45'28	10.99584 AU
min. Earth dist.	-4388 Nov 27 j 01:07	4° $\mathbf{\text{B}}$ 23'50	8.22150 AU	morning rise	-4382 Aug 27 j 03:04	14° $\ominus$ 43'39	
direct	-4387 Feb 03 j 20:13	0° $\mathbf{\text{B}}$ 51'43		retrograde	-4382 Dec 03 j 13:11	21° $\ominus$ 36'47	
evening set	-4387 May 21 j 02:42	8° $\mathbf{\text{B}}$ 55'34		opposition	-4381 Feb 10 j 11:34	18° $\ominus$ 20'04	2°16'56
				min. Earth dist.	-4381 Feb 10 j 13:04	18° $\ominus$ 19'47	9.04864 AU
conjunction	-4387 Jun 08 j 03:12	11° $\mathbf{\text{B}}$ 11'08	-0°40'59	direct	-4381 Apr 23 j 01:26	14° $\ominus$ 57'37	
minimum elong	-4387 Jun 08 j 03:14	11° $\mathbf{\text{B}}$ 11'09	0°40'51	evening set	-4381 Aug 05 j 00:29	22° $\ominus$ 07'39	
max. Earth dist.	-4387 Jun 08 j 19:21	11° $\mathbf{\text{B}}$ 16'14	10.29321 AU				
morning rise	-4387 Jun 25 j 23:32	13° $\mathbf{\text{B}}$ 25'23		conjunction	-4381 Aug 21 j 20:28	24° $\ominus$ 04'47	2°00'52
	-4387 Jul 09 j 00:40	15° $\mathbf{\text{B}}$		minimum elong	-4381 Aug 21 j 20:25	24° $\ominus$ 04'46	2°01'04
retrograde	-4387 Oct 05 j 05:07	21° $\mathbf{\text{B}}$ 06'03		max. Earth dist.	-4381 Aug 21 j 16:40	24° $\ominus$ 03'40	11.09419 AU
opposition	-4387 Dec 11 j 00:49	17° $\mathbf{\text{B}}$ 41'52	-0°31'06	morning rise	-4381 Sep 07 j 11:59	26° $\ominus$ 00'39	
min. Earth dist.	-4387 Dec 10 j 13:12	17° $\mathbf{\text{B}}$ 44'12	8.36598 AU		-4381 Oct 16 j 01:27	0° $\mathbf{\text{Q}}$	
	-4386 Jan 18 j 16:29	15° $\mathbf{\text{R}}$ $\mathbf{\text{B}}$		retrograde	-4381 Dec 14 j 22:13	2° $\mathbf{\text{Q}}$ 49'43	
direct	-4386 Feb 17 j 22:30	14° $\mathbf{\text{B}}$ 13'14			-4380 Feb 16 j 09:53	30° $\mathbf{\text{R}}$ $\mathbf{\text{B}}$	
	-4386 Mar 20 j 04:57	15° $\mathbf{\text{B}}$		opposition	-4380 Feb 22 j 07:50	29° $\ominus$ 33'49	2°36'06
evening set	-4386 Jun 04 j 03:21	22° $\mathbf{\text{B}}$ 07'10		min. Earth dist.	-4380 Feb 22 j 12:43	29° $\ominus$ 32'54	9.13594 AU
				direct	-4380 May 04 j 01:21	26° $\ominus$ 12'36	
conjunction	-4386 Jun 22 j 00:14	24° $\mathbf{\text{B}}$ 19'28	-0°08'38		-4380 Jul 15 j 11:13	0° $\mathbf{\text{Q}}$	
minimum elong	-4386 Jun 22 j 00:14	24° $\mathbf{\text{B}}$ 19'28	0°08'29	evening set	-4380 Aug 15 j 11:29	3° $\mathbf{\text{Q}}$ 16'58	
behind sun begin	-4386 Jun 21 j 17:55	24° $\mathbf{\text{B}}$ 17'32					
behind sun end	-4386 Jun 22 j 06:34	24° $\mathbf{\text{B}}$ 21'25		conjunction	-4380 Sep 01 j 03:15	5° $\mathbf{\text{Q}}$ 12'13	2°14'14
max. Earth dist.	-4386 Jun 22 j 13:45	24° $\mathbf{\text{B}}$ 23'39	10.44237 AU	minimum elong	-4380 Sep 01 j 03:13	5° $\mathbf{\text{Q}}$ 12'12	2°14'25
morning rise	-4386 Jul 09 j 16:12	26° $\mathbf{\text{B}}$ 30'15		max. Earth dist.	-4380 Aug 31 j 19:38	5° $\mathbf{\text{Q}}$ 10'00	11.16847 AU
	-4386 Aug 09 j 10:30	0° $\mathbf{\text{II}}$		morning rise	-4380 Sep 17 j 15:26	7° $\mathbf{\text{Q}}$ 06'26	
asc. node	-4386 Sep 30 j 14:10	3° $\mathbf{\text{II}}$ 41'47		retrograde	-4380 Dec 25 j 05:43	13° $\mathbf{\text{Q}}$ 53'17	
retrograde	-4386 Oct 17 j 22:23	3° $\mathbf{\text{II}}$ 58'09		opposition	-4379 Mar 05 j 01:30	10° $\mathbf{\text{Q}}$ 37'50	2°49'10
opposition	-4386 Dec 24 j 02:37	0° $\mathbf{\text{II}}$ 35'46	0°08'53	min. Earth dist.	-4379 Mar 05 j 08:51	10° $\mathbf{\text{Q}}$ 36'29	9.19771 AU
min. Earth dist.	-4386 Dec 23 j 17:41	0° $\mathbf{\text{II}}$ 37'32	8.51723 AU	direct	-4379 May 15 j 22:42	7° $\mathbf{\text{Q}}$ 17'41	
	-4386 Dec 31 j 16:15	30° $\mathbf{\text{R}}$ $\mathbf{\text{B}}$		evening set	-4379 Aug 26 j 16:56	14° $\mathbf{\text{Q}}$ 17'43	
direct	-4385 Mar 03 j 17:08	27° $\mathbf{\text{B}}$ 08'09			-4379 Sep 01 j 21:21	15° $\mathbf{\text{Q}}$	
	-4385 May 03 j 01:35	0° $\mathbf{\text{II}}$		conjunction	-4379 Sep 12 j 05:30	16° $\mathbf{\text{Q}}$ 11'38	2°22'28
evening set	-4385 Jun 17 j 15:30	4° $\mathbf{\text{II}}$ 52'00		minimum elong	-4379 Sep 12 j 05:29	16° $\mathbf{\text{Q}}$ 11'38	2°22'38
conjunction	-4385 Jul 05 j 07:46	7° $\mathbf{\text{II}}$ 00'51	0°23'17	max. Earth dist.	-4379 Sep 11 j 19:30	16° $\mathbf{\text{Q}}$ 08'45	11.21622 AU
minimum elong	-4385 Jul 05 j 07:45	7° $\mathbf{\text{II}}$ 00'51	0°23'27	morning rise	-4379 Sep 28 j 15:07	18° $\mathbf{\text{Q}}$ 04'46	
max. Earth dist.	-4385 Jul 05 j 17:32	7° $\mathbf{\text{II}}$ 03'50	10.59400 AU	retrograde	-4378 Jan 05 j 14:13	24° $\mathbf{\text{Q}}$ 51'08	
morning rise	-4385 Jul 22 j 18:50	9° $\mathbf{\text{II}}$ 08'07		opposition	-4378 Mar 16 j 18:04	21° $\mathbf{\text{Q}}$ 35'49	2°55'57
retrograde	-4385 Oct 30 j 05:35	16° $\mathbf{\text{II}}$ 24'39		min. Earth dist.	-4378 Mar 17 j 03:01	21° $\mathbf{\text{Q}}$ 34'11	9.23176 AU
opposition	-4384 Jan 05 j 20:36	13° $\mathbf{\text{II}}$ 03'59	0°47'00	direct	-4378 May 27 j 14:37	18° $\mathbf{\text{Q}}$ 16'37	
min. Earth dist.	-4384 Jan 05 j 14:23	13° $\mathbf{\text{II}}$ 05'11	8.66758 AU	evening set	-4378 Sep 06 j 18:36	25° $\mathbf{\text{Q}}$ 13'33	
direct	-4384 Mar 16 j 02:57	9° $\mathbf{\text{II}}$ 37'33					
evening set	-4384 Jun 29 j 15:17	17° $\mathbf{\text{II}}$ 11'36		conjunction	-4378 Sep 23 j 04:53	27° $\mathbf{\text{Q}}$ 06'44	2°25'28
				minimum elong	-4378 Sep 23 j 04:53	27° $\mathbf{\text{Q}}$ 06'44	2°25'35
conjunction	-4384 Jul 17 j 02:22	19° $\mathbf{\text{II}}$ 17'04	0°53'07	max. Earth dist.	-4378 Sep 22 j 17:22	27° $\mathbf{\text{Q}}$ 03'24	11.23578 AU
minimum elong	-4384 Jul 17 j 02:20	19° $\mathbf{\text{II}}$ 17'03	0°53'18	morning rise	-4378 Oct 09 j 12:49	28° $\mathbf{\text{Q}}$ 59'21	
max. Earth dist.	-4384 Jul 17 j 08:01	19° $\mathbf{\text{II}}$ 18'45	10.74087 AU		-4378 Oct 18 j 14:22	0° $\mathbf{\text{P}}$	
morning rise	-4384 Aug 03 j 08:19	21° $\mathbf{\text{II}}$ 20'57		retrograde	-4377 Jan 16 j 23:35	5° $\mathbf{\text{P}}$ 47'00	
retrograde	-4384 Nov 10 j 05:47	28° $\mathbf{\text{II}}$ 27'50		opposition	-4377 Mar 28 j 10:54	2° $\mathbf{\text{P}}$ 31'29	2°56'23
opposition	-4383 Jan 17 j 07:19	25° $\mathbf{\text{II}}$ 08'41	1°21'45	min. Earth dist.	-4377 Mar 28 j 22:01	2° $\mathbf{\text{P}}$ 29'27	9.23701 AU
min. Earth dist.	-4383 Jan 17 j 03:17	25° $\mathbf{\text{II}}$ 09'28	8.81008 AU		-4377 May 06 j 23:44	30° $\mathbf{\text{R}}$ $\mathbf{\text{Q}}$	
direct	-4383 Mar 29 j 02:50	21° $\mathbf{\text{II}}$ 43'34		direct	-4377 Jun 08 j 03:19	29° $\mathbf{\text{Q}}$ 12'59	
evening set	-4383 Jul 12 j 03:51	29° $\mathbf{\text{II}}$ 08'33			-4377 Jul 09 j 18:11	0° $\mathbf{\text{P}}$	
	-4383 Jul 19 j 11:11	0° $\mathbf{\text{B}}$		evening set	-4377 Sep 17 j 18:20	6° $\mathbf{\text{P}}$ 08'12	
conjunction	-4383 Jul 29 j 09:45	1° $\mathbf{\text{B}}$ 10'52	1°19'50	conjunction	-4377 Oct 04 j 03:10	8° $\mathbf{\text{P}}$ 01'13	2°23'10
minimum elong	-4383 Jul 29 j 09:42	1° $\mathbf{\text{B}}$ 10'51	1°20'01	minimum elong	-4377 Oct 04 j 03:11	8° $\mathbf{\text{P}}$ 01'14	2°23'16
max. Earth dist.	-4383 Jul 29 j 12:13	1° $\mathbf{\text{B}}$ 11'36	10.87662 AU	max. Earth dist.	-4377 Oct 03 j 13:05	7° $\mathbf{\text{P}}$ 57'09	11.22659 AU
morning rise	-4383 Aug 15 j 10:29	3° $\mathbf{\text{B}}$ 11'39		morning rise	-4377 Oct 20 j 10:40	9° $\mathbf{\text{P}}$ 53'56	
retrograde	-4383 Nov 21 j 23:07	10° $\mathbf{\text{B}}$ 10'43		retrograde	-4376 Jan 28 j 11:45	16° $\mathbf{\text{P}}$ 44'29	
opposition	-4382 Jan 29 j 11:46	6° $\mathbf{\text{B}}$ 52'53	1°51'59	opposition	-4376 Apr 08 j 05:03	13° $\mathbf{\text{P}}$ 28'27	2°50'28

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 3

Attention, astronomical year style is used: The year -4376 in astronomical counting style is the year 4377 BCE in historical counting style.

min. Earth dist.	-4376 Apr 08 j 18:26	13° $\overline{\text{M}}$ 26'01	9.21329 AU	desc. node	-4370 Nov 10 j 22:17	24° $\overline{\text{M}}$ 16'58	
direct	-4376 Jun 18 j 15:19	10° $\overline{\text{M}}$ 10'24		evening set	-4370 Dec 05 j 16:39	27° $\overline{\text{M}}$ 09'56	
evening set	-4376 Sep 27 j 17:36	17° $\overline{\text{M}}$ 05'17					
max. Earth dist.	-4376 Oct 13 j 09:49	18° $\overline{\text{M}}$ 54'01	11.18874 AU	conjunction	-4370 Dec 22 j 16:34	29° $\overline{\text{M}}$ 16'51	-0°03'36
				minimum elong	-4370 Dec 22 j 16:34	29° $\overline{\text{M}}$ 16'51	0°03'46
conjunction	-4376 Oct 14 j 02:03	18° $\overline{\text{M}}$ 58'44	2°15'38	behind sun begin	-4370 Dec 22 j 09:32	29° $\overline{\text{M}}$ 14'41	
minimum elong	-4376 Oct 14 j 02:05	18° $\overline{\text{M}}$ 58'45	2°15'41	behind sun end	-4370 Dec 22 j 23:35	29° $\overline{\text{M}}$ 19'02	
morning rise	-4376 Oct 30 j 10:16	20° $\overline{\text{M}}$ 52'10		max. Earth dist.	-4370 Dec 22 j 05:00	29° $\overline{\text{M}}$ 13'15	10.47644 AU
retrograde	-4375 Feb 08 j 02:34	27° $\overline{\text{M}}$ 47'17			-4370 Dec 28 j 10:13	0° $\overline{\text{Z}}$	
opposition	-4375 Apr 20 j 01:37	24° $\overline{\text{M}}$ 30'22	2°38'18	morning rise	-4369 Jan 08 j 21:01	1° $\overline{\text{Z}}$ 25'18	
min. Earth dist.	-4375 Apr 20 j 16:21	24° $\overline{\text{M}}$ 27'41	9.16084 AU	retrograde	-4369 Apr 25 j 00:15	9° $\overline{\text{Z}}$ 19'16	
direct	-4375 Jun 30 j 03:58	21° $\overline{\text{M}}$ 12'29		opposition	-4369 Jul 04 j 00:46	5° $\overline{\text{Z}}$ 52'33	-0°24'51
evening set	-4375 Oct 08 j 18:21	28° $\overline{\text{M}}$ 08'33		min. Earth dist.	-4369 Jul 04 j 08:53	5° $\overline{\text{Z}}$ 50'57	8.39800 AU
max. Earth dist.	-4375 Oct 24 j 10:54	29° $\overline{\text{M}}$ 58'08	11.12269 AU	direct	-4369 Sep 09 j 17:10	2° $\overline{\text{Z}}$ 30'34	
	-4375 Oct 24 j 17:17	0° $\overline{\text{U}}$		evening set	-4369 Dec 18 j 18:38	10° $\overline{\text{Z}}$ 05'46	
conjunction	-4375 Oct 25 j 03:33	0° $\overline{\text{U}}$ 03'01	2°02'59	conjunction	-4368 Jan 04 j 22:37	12° $\overline{\text{Z}}$ 16'02	-0°35'49
minimum elong	-4375 Oct 25 j 03:36	0° $\overline{\text{U}}$ 03'02	2°02'59	minimum elong	-4368 Jan 04 j 22:35	12° $\overline{\text{Z}}$ 16'01	0°36'00
morning rise	-4375 Nov 10 j 13:15	1° $\overline{\text{U}}$ 57'43		max. Earth dist.	-4368 Jan 04 j 14:05	12° $\overline{\text{Z}}$ 13'19	10.32297 AU
retrograde	-4374 Feb 20 j 01:54	8° $\overline{\text{U}}$ 59'06		morning rise	-4368 Jan 22 j 07:38	14° $\overline{\text{Z}}$ 27'58	
opposition	-4374 May 02 j 01:46	5° $\overline{\text{U}}$ 41'01	2°20'02	retrograde	-4368 May 08 j 07:02	22° $\overline{\text{Z}}$ 34'27	
min. Earth dist.	-4374 May 02 j 16:36	5° $\overline{\text{U}}$ 38'18	9.08057 AU	opposition	-4368 Jul 16 j 19:02	19° $\overline{\text{Z}}$ 05'59	-1°04'44
direct	-4374 Jul 11 j 18:58	2° $\overline{\text{U}}$ 23'05		min. Earth dist.	-4368 Jul 16 j 23:51	19° $\overline{\text{Z}}$ 05'01	8.24833 AU
evening set	-4374 Oct 19 j 22:31	9° $\overline{\text{U}}$ 21'50		direct	-4368 Sep 21 j 20:05	15° $\overline{\text{Z}}$ 42'38	
				evening set	-4368 Dec 31 j 10:08	23° $\overline{\text{Z}}$ 28'39	
conjunction	-4374 Nov 05 j 09:21	11° $\overline{\text{U}}$ 17'54	1°45'26	conjunction	-4367 Jan 17 j 18:08	25° $\overline{\text{Z}}$ 42'12	-1°07'07
minimum elong	-4374 Nov 05 j 09:24	11° $\overline{\text{U}}$ 17'55	1°45'24	minimum elong	-4367 Jan 17 j 18:05	25° $\overline{\text{Z}}$ 42'11	1°07'19
max. Earth dist.	-4374 Nov 04 j 16:19	11° $\overline{\text{U}}$ 12'51	11.02992 AU	max. Earth dist.	-4367 Jan 17 j 12:54	25° $\overline{\text{Z}}$ 40'30	10.17843 AU
morning rise	-4374 Nov 21 j 21:30	13° $\overline{\text{U}}$ 14'29		morning rise	-4367 Feb 04 j 07:32	27° $\overline{\text{Z}}$ 57'31	
retrograde	-4373 Mar 04 j 07:14	20° $\overline{\text{U}}$ 23'46			-4367 Feb 20 j 21:29	0° $\overline{\text{Z}}$	
opposition	-4373 May 14 j 07:02	17° $\overline{\text{U}}$ 04'17	1°55'57	retrograde	-4367 May 22 j 22:59	6° $\overline{\text{Z}}$ 15'49	
min. Earth dist.	-4373 May 14 j 21:53	17° $\overline{\text{U}}$ 01'33	8.97487 AU	opposition	-4367 Jul 30 j 21:20	2° $\overline{\text{Z}}$ 45'49	-1°42'25
direct	-4373 Jul 23 j 10:03	13° $\overline{\text{U}}$ 46'03		min. Earth dist.	-4367 Jul 30 j 23:05	2° $\overline{\text{Z}}$ 45'27	8.11196 AU
evening set	-4373 Oct 31 j 08:07	20° $\overline{\text{U}}$ 49'08			-4367 Sep 08 j 19:17	30° $\overline{\text{R}}$ $\overline{\text{Z}}$	
conjunction	-4373 Nov 16 j 21:17	22° $\overline{\text{U}}$ 47'18	1°23'21	direct	-4367 Oct 05 j 09:10	29° $\overline{\text{Z}}$ 21'02	
minimum elong	-4373 Nov 16 j 21:20	22° $\overline{\text{U}}$ 47'19	1°23'17		-4367 Oct 31 j 17:01	0° $\overline{\text{Z}}$	
max. Earth dist.	-4373 Nov 16 j 03:34	22° $\overline{\text{U}}$ 42'00	10.91370 AU	evening set	-4366 Jan 14 j 15:10	7° $\overline{\text{Z}}$ 18'05	
morning rise	-4373 Dec 03 j 12:53	24° $\overline{\text{U}}$ 46'18		conjunction	-4366 Feb 01 j 03:08	9° $\overline{\text{Z}}$ 34'42	-1°35'28
	-4372 Jan 24 j 06:17	0° $\overline{\text{M}}$		minimum elong	-4366 Feb 01 j 03:04	9° $\overline{\text{Z}}$ 34'40	1°35'40
retrograde	-4372 Mar 15 j 20:31	2° $\overline{\text{M}}$ 05'03		max. Earth dist.	-4366 Feb 01 j 02:10	9° $\overline{\text{Z}}$ 34'23	10.05104 AU
	-4372 May 08 j 08:58	30° $\overline{\text{R}}$ $\overline{\text{U}}$		morning rise	-4366 Feb 18 j 20:29	11° $\overline{\text{Z}}$ 53'03	
opposition	-4372 May 25 j 18:26	28° $\overline{\text{U}}$ 43'57	1°26'31	retrograde	-4366 Jun 06 j 21:42	20° $\overline{\text{Z}}$ 21'29	
min. Earth dist.	-4372 May 26 j 09:15	28° $\overline{\text{U}}$ 41'11	8.84794 AU	opposition	-4366 Aug 14 j 06:38	16° $\overline{\text{Z}}$ 50'18	-2°15'13
direct	-4372 Aug 03 j 07:44	25° $\overline{\text{U}}$ 25'07		min. Earth dist.	-4366 Aug 14 j 05:05	16° $\overline{\text{Z}}$ 50'36	7.99699 AU
	-4372 Oct 19 j 09:23	0° $\overline{\text{M}}$		direct	-4366 Oct 19 j 09:28	13° $\overline{\text{Z}}$ 24'04	
evening set	-4372 Nov 11 j 01:11	2° $\overline{\text{M}}$ 34'07		evening set	-4365 Jan 29 j 09:19	21° $\overline{\text{Z}}$ 31'37	
conjunction	-4372 Nov 27 j 17:24	4° $\overline{\text{M}}$ 34'53	0°57'16	conjunction	-4365 Feb 16 j 01:08	23° $\overline{\text{Z}}$ 50'54	-1°58'45
minimum elong	-4372 Nov 27 j 17:26	4° $\overline{\text{M}}$ 34'53	0°57'09	minimum elong	-4365 Feb 16 j 01:05	23° $\overline{\text{Z}}$ 50'53	1°58'56
max. Earth dist.	-4372 Nov 27 j 00:13	4° $\overline{\text{M}}$ 29'39	10.77877 AU	max. Earth dist.	-4365 Feb 16 j 04:56	23° $\overline{\text{Z}}$ 52'10	9.94876 AU
morning rise	-4372 Dec 14 j 13:02	6° $\overline{\text{M}}$ 36'44		morning rise	-4365 Mar 05 j 21:54	26° $\overline{\text{Z}}$ 11'47	
retrograde	-4371 Mar 28 j 19:30	14° $\overline{\text{M}}$ 06'15			-4365 Apr 06 j 03:22	0° $\overline{\text{Z}}$	
opposition	-4371 Jun 07 j 12:36	10° $\overline{\text{M}}$ 43'22	0°52'29	retrograde	-4365 Jun 22 j 00:54	4° $\overline{\text{Z}}$ 47'36	
min. Earth dist.	-4371 Jun 08 j 02:29	10° $\overline{\text{M}}$ 40'44	8.70518 AU	opposition	-4365 Aug 28 j 21:09	1° $\overline{\text{Z}}$ 15'37	-2°40'23
direct	-4371 Aug 15 j 11:17	7° $\overline{\text{M}}$ 23'41		min. Earth dist.	-4365 Aug 28 j 16:15	1° $\overline{\text{Z}}$ 16'38	7.91074 AU
evening set	-4371 Nov 23 j 03:26	14° $\overline{\text{M}}$ 40'06			-4365 Sep 13 j 10:18	30° $\overline{\text{R}}$ $\overline{\text{Z}}$	
	-4371 Nov 25 j 21:12	15° $\overline{\text{M}}$		direct	-4365 Nov 02 j 18:12	27° $\overline{\text{Z}}$ 48'04	
conjunction	-4371 Dec 09 j 23:20	16° $\overline{\text{M}}$ 43'49	0°27'58	evening set	-4365 Dec 21 j 14:17	0° $\overline{\text{Z}}$	
minimum elong	-4371 Dec 09 j 23:22	16° $\overline{\text{M}}$ 43'49	0°27'49		-4364 Feb 13 j 14:32	6° $\overline{\text{Z}}$ 04'36	
max. Earth dist.	-4371 Dec 09 j 08:35	16° $\overline{\text{M}}$ 39'16	10.63083 AU	conjunction	-4364 Mar 02 j 09:58	8° $\overline{\text{Z}}$ 26'01	-2°14'57
morning rise	-4371 Dec 26 j 23:18	18° $\overline{\text{M}}$ 48'51		minimum elong	-4364 Mar 02 j 09:56	8° $\overline{\text{Z}}$ 26'00	2°15'07
retrograde	-4370 Apr 11 j 04:11	26° $\overline{\text{M}}$ 30'16		max. Earth dist.	-4364 Mar 02 j 18:42	8° $\overline{\text{Z}}$ 28'55	9.87845 AU
opposition	-4370 Jun 20 j 14:37	23° $\overline{\text{M}}$ 05'28	0°14'52	morning rise	-4364 Mar 20 j 09:28	10° $\overline{\text{Z}}$ 48'43	
min. Earth dist.	-4370 Jun 21 j 01:59	23° $\overline{\text{M}}$ 03'16	8.55285 AU		-4364 Apr 23 j 20:27	15° $\overline{\text{Z}}$	
direct	-4370 Aug 27 j 22:04	19° $\overline{\text{M}}$ 44'43					

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 4

Attention, astronomical year style is used: The year -4364 in astronomical counting style is the year 4365 BCE in historical counting style.

retrograde	-4364 Jul 06 j 06:59	19° $\approx$ 28'15	conjunction	-4358 Jun 02 j 03:45	5° $\approx$ 25'33	-0°55'06
opposition	-4364 Sep 11 j 15:05	15° $\approx$ 55'58 -2°55'35	minimum elong	-4358 Jun 02 j 03:48	5° $\approx$ 25'34	0°54'59
min. Earth dist.	-4364 Sep 11 j 06:42	15° $\approx$ 57'44 7.85906 AU	max. Earth dist.	-4358 Jun 02 j 21:03	5° $\approx$ 31'03	10.22715 AU
	-4364 Sep 22 j 21:58	15° $\approx$	morning rise	-4358 Jun 20 j 01:56	7° $\approx$ 41'24	
direct	-4364 Nov 16 j 09:52	12° $\approx$ 27'17		-4358 Sep 07 j 03:49	15° $\approx$	
	-4363 Jan 08 j 05:07	15° $\approx$	retrograde	-4358 Sep 29 j 19:54	15° $\approx$ 28'29	
evening set	-4363 Feb 28 j 03:33	20° $\approx$ 50'22		-4358 Oct 22 j 14:50	15° $\approx$	
			opposition	-4358 Dec 05 j 12:23	12° $\approx$ 03'45	-0°48'56
conjunction	-4363 Mar 18 j 02:12	23° $\approx$ 13'10 -2°22'33	min. Earth dist.	-4358 Dec 04 j 23:43	12° $\approx$ 06'18	8.29989 AU
minimum elong	-4363 Mar 18 j 02:12	23° $\approx$ 13'10 2°22'41	direct	-4357 Feb 12 j 01:49	8° $\approx$ 35'02	
max. Earth dist.	-4363 Mar 18 j 15:37	23° $\approx$ 17'39 9.84521 AU		-4357 May 16 j 07:58	15° $\approx$	
morning rise	-4363 Apr 05 j 03:46	25° $\approx$ 36'53	evening set	-4357 May 29 j 08:58	16° $\approx$ 33'54	
	-4363 May 11 j 08:13	0° $\approx$				
retrograde	-4363 Jul 21 j 12:09	4° $\approx$ 15'55	conjunction	-4357 Jun 16 j 07:29	18° $\approx$ 47'44	-0°23'00
opposition	-4363 Sep 26 j 09:53	0° $\approx$ 43'50 -2°59'16	minimum elong	-4357 Jun 16 j 07:30	18° $\approx$ 47'44	0°22'51
min. Earth dist.	-4363 Sep 25 j 22:16	0° $\approx$ 46'16 7.84572 AU	max. Earth dist.	-4357 Jun 16 j 22:19	18° $\approx$ 52'22	10.37684 AU
	-4363 Oct 05 j 04:05	30° $\approx$	morning rise	-4357 Jul 04 j 01:41	21° $\approx$ 00'09	
direct	-4363 Dec 01 j 06:35	27° $\approx$ 14'15	retrograde	-4357 Oct 12 j 18:01	28° $\approx$ 33'58	
	-4362 Jan 25 j 15:46	0° $\approx$	opposition	-4357 Dec 18 j 18:28	25° $\approx$ 11'10	-0°08'42
evening set	-4362 Mar 15 j 20:44	5° $\approx$ 40'47	min. Earth dist.	-4357 Dec 18 j 07:13	25° $\approx$ 13'24	8.45327 AU
			direct	-4356 Feb 26 j 01:43	21° $\approx$ 43'32	
conjunction	-4362 Apr 02 j 22:04	8° $\approx$ 04'08 -2°20'47	asc. node	-4356 Mar 10 j 04:28	21° $\approx$ 52'25	
minimum elong	-4362 Apr 02 j 22:05	8° $\approx$ 04'09 2°20'52	evening set	-4356 Jun 11 j 03:11	29° $\approx$ 32'08	
max. Earth dist.	-4362 Apr 03 j 15:06	8° $\approx$ 09'49 9.85172 AU		-4356 Jun 14 j 23:17	0° $\approx$	
morning rise	-4362 Apr 21 j 00:59	10° $\approx$ 28'00				
retrograde	-4362 Aug 05 j 13:18	19° $\approx$ 02'09	conjunction	-4356 Jun 28 j 21:36	1° $\approx$ 42'32	0°09'23
opposition	-4362 Oct 11 j 02:51	15° $\approx$ 30'48 -2°51'01	minimum elong	-4356 Jun 28 j 21:36	1° $\approx$ 42'32	0°09'34
min. Earth dist.	-4362 Oct 10 j 13:07	15° $\approx$ 33'41 7.87187 AU	behind sun begin	-4356 Jun 28 j 15:39	1° $\approx$ 40'43	
direct	-4362 Dec 16 j 06:03	12° $\approx$ 00'39	behind sun end	-4356 Jun 29 j 03:34	1° $\approx$ 44'21	
evening set	-4361 Mar 31 j 13:46	20° $\approx$ 27'11	max. Earth dist.	-4356 Jun 29 j 09:47	1° $\approx$ 46'16	10.53237 AU
			morning rise	-4356 Jul 16 j 11:01	3° $\approx$ 51'23	
conjunction	-4361 Apr 18 j 17:00	22° $\approx$ 50'13 -2°09'47	retrograde	-4356 Oct 24 j 06:37	11° $\approx$ 13'01	
minimum elong	-4361 Apr 18 j 17:03	22° $\approx$ 50'14 2°09'50	opposition	-4356 Dec 30 j 16:16	7° $\approx$ 52'03	0°30'30
max. Earth dist.	-4361 Apr 19 j 12:16	22° $\approx$ 56'36 9.89761 AU	min. Earth dist.	-4356 Dec 30 j 07:10	7° $\approx$ 53'49	8.60861 AU
morning rise	-4361 May 06 j 20:23	25° $\approx$ 13'16	direct	-4355 Mar 10 j 15:29	4° $\approx$ 25'37	
	-4361 Jun 16 j 06:19	0° $\approx$	evening set	-4355 Jun 24 j 08:48	12° $\approx$ 04'02	
retrograde	-4361 Aug 20 j 07:04	3° $\approx$ 38'45				
opposition	-4361 Oct 25 j 15:47	0° $\approx$ 08'36 -2°31'41	conjunction	-4355 Jul 11 j 22:26	14° $\approx$ 10'58	0°40'16
min. Earth dist.	-4361 Oct 25 j 01:02	0° $\approx$ 11'41 7.93570 AU	minimum elong	-4355 Jul 11 j 22:24	14° $\approx$ 10'57	0°40'28
	-4361 Oct 27 j 08:51	30° $\approx$	max. Earth dist.	-4355 Jul 12 j 07:30	14° $\approx$ 13'43	10.68536 AU
direct	-4361 Dec 31 j 06:06	26° $\approx$ 38'16	morning rise	-4355 Jul 29 j 06:36	16° $\approx$ 16'17	
	-4360 Mar 02 j 20:00	0° $\approx$	retrograde	-4355 Nov 05 j 11:33	23° $\approx$ 27'19	
evening set	-4360 Apr 15 j 02:30	5° $\approx$ 01'27	opposition	-4354 Jan 12 j 06:25	20° $\approx$ 08'00	1°06'55
			min. Earth dist.	-4354 Jan 12 j 00:52	20° $\approx$ 09'04	8.75769 AU
conjunction	-4360 May 03 j 06:28	7° $\approx$ 23'13 -1°50'37	direct	-4354 Mar 23 j 18:45	16° $\approx$ 42'50	
minimum elong	-4360 May 03 j 06:32	7° $\approx$ 23'15 1°50'36	evening set	-4354 Jul 07 j 02:50	24° $\approx$ 11'42	
max. Earth dist.	-4360 May 04 j 02:35	7° $\approx$ 29'49 9.97954 AU				
morning rise	-4360 May 21 j 09:14	9° $\approx$ 44'34	conjunction	-4354 Jul 24 j 11:07	26° $\approx$ 15'21	1°08'30
retrograde	-4360 Sep 02 j 14:05	17° $\approx$ 58'33	minimum elong	-4354 Jul 24 j 11:04	26° $\approx$ 15'20	1°08'42
opposition	-4360 Nov 07 j 22:33	14° $\approx$ 30'00 -2°03'08	max. Earth dist.	-4354 Jul 24 j 15:41	26° $\approx$ 16'42	10.82794 AU
min. Earth dist.	-4360 Nov 07 j 07:55	14° $\approx$ 33'02 8.03286 AU	morning rise	-4354 Aug 10 j 14:01	28° $\approx$ 17'25	
direct	-4359 Jan 14 j 02:55	10° $\approx$ 59'53		-4354 Aug 25 j 14:18	0° $\approx$	
evening set	-4359 Apr 30 j 07:27	19° $\approx$ 16'49	retrograde	-4354 Nov 17 j 07:13	5° $\approx$ 19'40	
			opposition	-4353 Jan 24 j 13:53	2° $\approx$ 01'48	1°39'15
conjunction	-4359 May 18 j 10:55	21° $\approx$ 36'33 -1°25'02	min. Earth dist.	-4353 Jan 24 j 12:10	2° $\approx$ 02'08	8.89323 AU
minimum elong	-4359 May 18 j 10:59	21° $\approx$ 36'34 1°24'58		-4353 Feb 22 j 06:36	30° $\approx$	
max. Earth dist.	-4359 May 19 j 06:18	21° $\approx$ 42'48 10.09188 AU	direct	-4353 Apr 05 j 13:43	28° $\approx$ 37'54	
morning rise	-4359 Jun 05 j 11:58	23° $\approx$ 55'26		-4353 May 17 j 09:14	0° $\approx$	
	-4359 Jul 31 j 22:19	0° $\approx$	evening set	-4353 Jul 19 j 10:14	5° $\approx$ 58'18	
retrograde	-4359 Sep 16 j 10:24	1° $\approx$ 56'14				
	-4359 Nov 02 j 20:34	30° $\approx$	conjunction	-4353 Aug 05 j 13:08	7° $\approx$ 58'57	1°33'06
opposition	-4359 Nov 21 j 21:38	28° $\approx$ 29'32 -1°27'57	minimum elong	-4353 Aug 05 j 13:05	7° $\approx$ 58'56	1°33'18
min. Earth dist.	-4359 Nov 21 j 07:54	28° $\approx$ 32'21 8.15691 AU	max. Earth dist.	-4353 Aug 05 j 12:48	7° $\approx$ 58'51	10.95394 AU
direct	-4358 Jan 28 j 18:04	24° $\approx$ 59'58	morning rise	-4353 Aug 22 j 11:07	9° $\approx$ 58'09	
	-4358 Apr 18 j 13:33	0° $\approx$	retrograde	-4353 Nov 28 j 22:03	16° $\approx$ 53'42	
evening set	-4358 May 15 j 02:07	3° $\approx$ 08'32	opposition	-4352 Feb 05 j 16:02	13° $\approx$ 36'57	2°06'36
			min. Earth dist.	-4352 Feb 05 j 17:19	13° $\approx$ 36'43	9.00995 AU

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 5

Attention, astronomical year style is used: The year -4352 in astronomical counting style is the year 4353 BCE in historical counting style.

direct	-4352 Apr 17 j 02:30	10°♄14'18		direct	-4346 Jun 25 j 14:13	16°♄38'57	
evening set	-4352 Jul 30 j 08:07	17°♄27'20		evening set	-4346 Oct 04 j 09:17	23°♄34'42	
conjunction	-4352 Aug 16 j 06:07	19°♄25'26	1°53'24	conjunction	-4346 Oct 20 j 18:08	25°♄28'49	2°09'08
minimum elong	-4352 Aug 16 j 06:04	19°♄25'25	1°53'36	minimum elong	-4346 Oct 20 j 18:11	25°♄28'49	2°09'10
max. Earth dist.	-4352 Aug 16 j 02:10	19°♄24'16	11.05916 AU	max. Earth dist.	-4346 Oct 20 j 01:15	25°♄23'52	11.13748 AU
morning rise	-4352 Sep 01 j 23:35	21°♄22'13		morning rise	-4346 Nov 06 j 03:05	27°♄23'01	
retrograde	-4352 Dec 09 j 09:32	28°♄12'58			-4346 Nov 30 j 03:13	0°♄	
opposition	-4351 Feb 16 j 13:53	24°♄57'01	2°28'22	retrograde	-4345 Feb 15 j 06:28	4°♄21'50	
min. Earth dist.	-4351 Feb 16 j 17:30	24°♄56'21	9.10418 AU	opposition	-4345 Apr 27 j 06:03	1°♄03'43	2°28'48
direct	-4351 Apr 29 j 06:37	21°♄35'31		min. Earth dist.	-4345 Apr 27 j 21:21	1°♄00'55	9.10099 AU
evening set	-4351 Aug 10 j 22:23	28°♄42'22			-4345 May 11 j 23:25	30°♄	
	-4351 Aug 22 j 04:03	0°♄		direct	-4345 Jul 07 j 03:27	27°♄45'14	
					-4345 Aug 29 j 17:06	0°♄	
conjunction	-4351 Aug 27 j 16:06	0°♄38'24	2°08'57	evening set	-4345 Oct 15 j 11:46	4°♄43'04	
minimum elong	-4351 Aug 27 j 16:03	0°♄38'23	2°09'08				
max. Earth dist.	-4351 Aug 27 j 09:41	0°♄36'32	11.14050 AU	conjunction	-4345 Oct 31 j 21:44	6°♄38'31	1°53'41
morning rise	-4351 Sep 13 j 05:36	2°♄33'18		minimum elong	-4345 Oct 31 j 21:47	6°♄38'31	1°53'41
retrograde	-4351 Dec 20 j 18:46	9°♄21'03		max. Earth dist.	-4345 Oct 31 j 03:57	6°♄33'15	11.05575 AU
opposition	-4350 Feb 28 j 08:43	6°♄05'33	2°44'09	morning rise	-4345 Nov 17 j 08:56	8°♄34'23	
min. Earth dist.	-4350 Feb 28 j 15:23	6°♄04'20	9.17320 AU	retrograde	-4344 Feb 27 j 07:04	15°♄40'23	
direct	-4350 May 11 j 04:54	2°♄45'01		opposition	-4344 May 08 j 08:57	12°♄20'58	2°07'12
evening set	-4350 Aug 22 j 06:30	9°♄46'59		min. Earth dist.	-4344 May 09 j 00:27	12°♄18'06	9.00678 AU
				direct	-4344 Jul 17 j 18:10	9°♄02'17	
conjunction	-4350 Sep 07 j 20:30	11°♄41'28	2°19'28	evening set	-4344 Oct 25 j 18:38	16°♄03'45	
minimum elong	-4350 Sep 07 j 20:28	11°♄41'28	2°19'38				
max. Earth dist.	-4350 Sep 07 j 10:50	11°♄38'40	11.19571 AU	conjunction	-4344 Nov 11 j 06:47	18°♄01'05	1°33'32
morning rise	-4350 Sep 24 j 07:02	13°♄35'03		minimum elong	-4344 Nov 11 j 06:50	18°♄01'06	1°33'29
	-4350 Oct 07 j 01:28	15°♄		max. Earth dist.	-4344 Nov 10 j 13:49	17°♄56'01	10.95105 AU
retrograde	-4349 Jan 01 j 02:12	20°♄21'34		morning rise	-4344 Nov 27 j 20:54	19°♄59'06	
opposition	-4349 Mar 12 j 02:03	17°♄06'11	2°53'44	retrograde	-4343 Mar 10 j 17:18	27°♄13'54	
min. Earth dist.	-4349 Mar 12 j 11:53	17°♄04'23	9.21514 AU	opposition	-4343 May 20 j 17:23	23°♄52'59	1°40'02
	-4349 Apr 12 j 05:30	15°♄		min. Earth dist.	-4343 May 21 j 07:45	23°♄50'18	8.89116 AU
direct	-4349 May 22 j 22:07	13°♄46'26		direct	-4343 Jul 29 j 14:48	20°♄33'57	
	-4349 Jul 01 j 19:40	15°♄		evening set	-4343 Nov 06 j 08:02	27°♄40'33	
evening set	-4349 Sep 02 j 09:50	20°♄44'46					
				conjunction	-4343 Nov 22 j 23:00	29°♄40'16	1°09'07
conjunction	-4349 Sep 18 j 20:57	22°♄38'16	2°24'47	minimum elong	-4343 Nov 22 j 23:03	29°♄40'17	1°09'01
minimum elong	-4349 Sep 18 j 20:56	22°♄38'16	2°24'54	max. Earth dist.	-4343 Nov 22 j 07:24	29°♄35'33	10.82682 AU
max. Earth dist.	-4349 Sep 18 j 08:02	22°♄34'32	11.22335 AU		-4343 Nov 25 j 16:16	0°♄	
morning rise	-4349 Oct 05 j 05:39	24°♄31'07		morning rise	-4343 Dec 09 j 16:42	1°♄40'55	
	-4349 Dec 03 j 01:41	0°♄		retrograde	-4342 Mar 23 j 13:22	9°♄05'54	
retrograde	-4348 Jan 12 j 09:27	1°♄18'11		opposition	-4342 Jun 02 j 08:29	5°♄43'23	1°07'52
	-4348 Feb 22 j 23:27	30°♄		min. Earth dist.	-4342 Jun 02 j 21:06	5°♄41'01	8.75831 AU
opposition	-4348 Mar 22 j 18:48	28°♄02'32	2°56'59	direct	-4342 Aug 10 j 14:11	2°♄23'48	
min. Earth dist.	-4348 Mar 23 j 06:45	28°♄00'22	9.22883 AU	evening set	-4342 Nov 18 j 06:02	9°♄37'05	
direct	-4348 Jun 02 j 13:46	24°♄43'23		max. Earth dist.	-4342 Dec 04 j 09:35	11°♄35'03	10.68787 AU
	-4348 Aug 28 j 09:15	0°♄					
evening set	-4348 Sep 12 j 10:13	1°♄39'27		conjunction	-4342 Dec 05 j 00:17	11°♄39'33	0°41'05
				minimum elong	-4342 Dec 05 j 00:18	11°♄39'33	0°40'57
conjunction	-4348 Sep 28 j 19:38	3°♄32'34	2°24'48	morning rise	-4342 Dec 21 j 22:14	13°♄43'15	
minimum elong	-4348 Sep 28 j 19:38	3°♄32'34	2°24'54		-4341 Jan 01 j 18:27	15°♄	
max. Earth dist.	-4348 Sep 28 j 05:14	3°♄28'24	11.22269 AU	retrograde	-4341 Apr 05 j 18:09	21°♄19'37	
morning rise	-4348 Oct 15 j 03:22	5°♄25'16		opposition	-4341 Jun 15 j 07:07	17°♄55'25	0°31'37
retrograde	-4347 Jan 22 j 21:08	12°♄14'34		min. Earth dist.	-4341 Jun 15 j 18:14	17°♄53'18	8.61367 AU
opposition	-4347 Apr 03 j 12:00	8°♄58'21	2°53'52		-4341 Jul 31 j 20:52	15°♄	
min. Earth dist.	-4347 Apr 04 j 00:57	8°♄55'59	9.21388 AU	direct	-4341 Aug 22 j 20:06	14°♄35'02	
direct	-4347 Jun 14 j 03:20	5°♄39'37			-4341 Sep 13 j 14:32	15°♄	
evening set	-4347 Sep 23 j 09:26	12°♄34'48		evening set	-4341 Nov 30 j 14:23	21°♄56'30	
conjunction	-4347 Oct 09 j 18:10	14°♄28'08	2°19'34	conjunction	-4341 Dec 17 j 12:23	24°♄02'03	0°10'24
minimum elong	-4347 Oct 09 j 18:11	14°♄28'08	2°19'38	minimum elong	-4341 Dec 17 j 12:23	24°♄02'03	0°10'15
max. Earth dist.	-4347 Oct 09 j 02:51	14°♄23'41	11.19374 AU	behind sun begin	-4341 Dec 17 j 06:44	24°♄00'19	
morning rise	-4347 Oct 26 j 01:54	16°♄21'17		behind sun end	-4341 Dec 17 j 18:02	24°♄03'48	
retrograde	-4346 Feb 03 j 10:57	23°♄14'30		max. Earth dist.	-4341 Dec 16 j 23:30	23°♄58'03	10.53998 AU
opposition	-4346 Apr 15 j 07:21	19°♄57'27	2°44'26	morning rise	-4340 Jan 03 j 14:58	26°♄09'04	
min. Earth dist.	-4346 Apr 15 j 21:21	19°♄54'54	9.17078 AU		-4340 Feb 06 j 15:57	0°♄	

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 6

Attention, astronomical year style is used: The year -4340 in astronomical counting style is the year 4341 BCE in historical counting style.

retrograde	-4340 Apr 18 j 08:56	3°♂57'40	morning rise	-4334 Mar 29 j 16:43	19°♂26'41	
desc. node	-4340 Apr 18 j 06:43	3°♂57'40	retrograde	-4334 Jul 15 j 09:49	28°♂05'49	
opposition	-4340 Jun 27 j 13:51	0°♂31'48 -0°07'25	opposition	-4334 Sep 20 j 10:08	24°♂34'13	-2°58'53
min. Earth dist.	-4340 Jun 27 j 23:00	0°♂30'01 8.46357 AU	min. Earth dist.	-4334 Sep 20 j 00:41	24°♂36'11	7.86275 AU
	-4340 Jul 04 j 10:15	30°♂10'26	direct	-4334 Nov 25 j 04:19	21°♂05'34	
direct	-4340 Sep 03 j 12:03	27°♂10'26	evening set	-4333 Mar 09 j 10:51	29°♂30'25	
	-4340 Oct 31 j 02:09	0°♂		-4333 Mar 13 j 05:07	0°♂	
evening set	-4340 Dec 12 j 10:46	4°♂41'22				
			conjunction	-4333 Mar 27 j 10:50	1°♂53'26	-2°22'34
conjunction	-4340 Dec 29 j 12:49	6°♂50'10 -0°21'47	minimum elong	-4333 Mar 27 j 10:51	1°♂53'26	2°22'40
minimum elong	-4340 Dec 29 j 12:48	6°♂50'10 0°21'58	max. Earth dist.	-4333 Mar 28 j 00:23	1°♂57'57	9.85857 AU
max. Earth dist.	-4340 Dec 29 j 03:13	6°♂47'09 10.38979 AU	morning rise	-4333 Apr 14 j 13:17	4°♂17'10	
morning rise	-4339 Jan 15 j 19:55	9°♂00'37	retrograde	-4333 Jul 30 j 12:40	12°♂53'30	
retrograde	-4339 May 02 j 10:55	17°♂01'46	opposition	-4333 Oct 05 j 04:09	9°♂22'22	-2°55'47
opposition	-4339 Jul 11 j 04:47	13°♂34'18 -0°47'30	min. Earth dist.	-4333 Oct 04 j 16:54	9°♂24'43	7.86840 AU
min. Earth dist.	-4339 Jul 11 j 11:03	13°♂33'04 8.31529 AU	direct	-4333 Dec 10 j 03:54	5°♂52'55	
direct	-4339 Sep 16 j 11:58	10°♂11'49	evening set	-4332 Mar 24 j 04:30	14°♂19'33	
evening set	-4339 Dec 25 j 20:23	17°♂53'10				
			conjunction	-4332 Apr 11 j 06:47	16°♂42'41	-2°15'29
conjunction	-4338 Jan 12 j 02:36	20°♂05'15 -0°53'44	minimum elong	-4332 Apr 11 j 06:50	16°♂42'42	2°15'33
minimum elong	-4338 Jan 12 j 02:34	20°♂05'14 0°53'56	max. Earth dist.	-4332 Apr 11 j 22:55	16°♂48'02	9.88358 AU
max. Earth dist.	-4338 Jan 11 j 21:31	20°♂03'37 10.24499 AU	morning rise	-4332 Apr 29 j 10:11	19°♂06'06	
morning rise	-4338 Jan 29 j 14:01	22°♂19'05	retrograde	-4332 Aug 13 j 08:56	27°♂35'33	
	-4338 Apr 21 j 23:08	0°♂	opposition	-4332 Oct 18 j 19:17	24°♂05'18	-2°41'07
retrograde	-4338 May 16 j 22:50	0°♂32'24	min. Earth dist.	-4332 Oct 18 j 06:20	24°♂08'01	7.91198 AU
	-4338 Jun 11 j 01:52	30°♂	direct	-4332 Dec 24 j 05:04	20°♂35'24	
opposition	-4338 Jul 25 j 03:57	27°♂03'27 -1°26'27	evening set	-4331 Apr 08 j 19:30	29°♂00'15	
min. Earth dist.	-4338 Jul 25 j 06:17	27°♂02'59 8.17679 AU		-4331 Apr 16 j 11:36	0°♂	
direct	-4338 Sep 29 j 21:29	23°♂39'45				
	-4338 Dec 27 j 13:23	0°♂	conjunction	-4331 Apr 26 j 23:12	1°♂22'36	-1°59'42
evening set	-4337 Jan 08 j 19:45	1°♂31'56	minimum elong	-4331 Apr 26 j 23:16	1°♂22'38	1°59'42
			max. Earth dist.	-4331 Apr 27 j 17:09	1°♂28'31	9.94599 AU
conjunction	-4337 Jan 26 j 06:03	3°♂47'10 -1°23'38	morning rise	-4331 May 15 j 02:30	3°♂44'45	
minimum elong	-4337 Jan 26 j 06:00	3°♂47'09 1°23'50	retrograde	-4331 Aug 27 j 19:59	12°♂04'02	
max. Earth dist.	-4337 Jan 26 j 05:29	3°♂46'59 10.11366 AU	opposition	-4331 Nov 02 j 05:06	8°♂35'01	-2°16'19
morning rise	-4337 Feb 12 j 21:30	6°♂04'08	min. Earth dist.	-4331 Nov 01 j 15:03	8°♂37'56	7.99090 AU
retrograde	-4337 May 31 j 19:12	14°♂28'17	direct	-4330 Jan 08 j 03:35	5°♂04'59	
opposition	-4337 Aug 08 j 10:28	10°♂58'05 -2°01'40	evening set	-4330 Apr 24 j 04:24	13°♂24'53	
min. Earth dist.	-4337 Aug 08 j 08:52	10°♂58'25 8.05593 AU				
direct	-4337 Oct 13 j 16:53	7°♂33'06	conjunction	-4330 May 12 j 08:22	15°♂45'36	-1°36'40
evening set	-4336 Jan 23 j 08:40	15°♂35'52	minimum elong	-4330 May 12 j 08:26	15°♂45'37	1°36'38
			max. Earth dist.	-4330 May 13 j 02:58	15°♂51'39	10.04153 AU
conjunction	-4336 Feb 09 j 22:48	17°♂53'54 -1°49'20	morning rise	-4330 May 30 j 10:23	18°♂05'39	
minimum elong	-4336 Feb 09 j 22:44	17°♂53'53 1°49'32	retrograde	-4330 Sep 10 j 21:44	26°♂12'26	
max. Earth dist.	-4336 Feb 10 j 02:27	17°♂55'07 10.00357 AU	opposition	-4330 Nov 16 j 07:43	22°♂44'57	-1°43'43
morning rise	-4336 Feb 27 j 17:50	20°♂13'34	min. Earth dist.	-4330 Nov 15 j 17:30	22°♂47'53	8.09976 AU
retrograde	-4336 Jun 14 j 21:32	28°♂46'08	direct	-4329 Jan 22 j 21:08	19°♂15'07	
opposition	-4336 Aug 21 j 22:52	25°♂15'03 -2°30'24	evening set	-4329 May 09 j 04:04	27°♂27'35	
min. Earth dist.	-4336 Aug 21 j 17:56	25°♂16'04 7.95990 AU				
direct	-4336 Oct 26 j 20:52	21°♂48'44	conjunction	-4329 May 27 j 06:52	29°♂45'55	-1°08'23
evening set	-4335 Feb 06 j 09:20	0°♂00'59	minimum elong	-4329 May 27 j 06:56	29°♂45'56	1°08'17
	-4335 Feb 06 j 06:19	0°♂	max. Earth dist.	-4329 May 28 j 00:58	29°♂51'43	10.16351 AU
				-4329 May 29 j 02:51	0°♂	
conjunction	-4335 Feb 24 j 03:02	2°♂21'19 -2°08'48	morning rise	-4329 Jun 14 j 06:24	2°♂03'10	
minimum elong	-4335 Feb 24 j 02:59	2°♂21'18 2°08'58	retrograde	-4329 Sep 24 j 12:56	9°♂56'25	
max. Earth dist.	-4335 Feb 24 j 10:30	2°♂23'48 9.92141 AU	opposition	-4329 Nov 30 j 02:20	6°♂30'39	-1°06'04
morning rise	-4335 Mar 14 j 01:08	4°♂43'05	min. Earth dist.	-4329 Nov 29 j 13:13	6°♂33'19	8.23130 AU
retrograde	-4335 Jun 30 j 03:38	13°♂20'50	direct	-4328 Feb 06 j 08:04	3°♂01'22	
opposition	-4335 Sep 05 j 15:32	9°♂49'15 -2°50'07	evening set	-4328 May 22 j 16:12	11°♂04'39	
min. Earth dist.	-4335 Sep 05 j 07:59	9°♂50'49 7.89424 AU				
direct	-4335 Nov 10 j 09:10	6°♂21'39	conjunction	-4328 Jun 09 j 16:25	13°♂20'01	-0°36'59
evening set	-4334 Feb 21 j 19:03	14°♂41'29	minimum elong	-4328 Jun 09 j 16:27	13°♂20'01	0°36'51
	-4334 Feb 24 j 03:37	15°♂	max. Earth dist.	-4328 Jun 10 j 08:39	13°♂25'08	10.30394 AU
				-4328 Jun 22 j 22:39	15°♂	
conjunction	-4334 Mar 11 j 16:05	17°♂03'31 -2°20'15	morning rise	-4328 Jun 27 j 12:23	15°♂34'01	
minimum elong	-4334 Mar 11 j 16:04	17°♂03'31 2°20'23	retrograde	-4328 Oct 06 j 16:17	23°♂13'45	
max. Earth dist.	-4334 Mar 12 j 02:45	17°♂07'05 9.87192 AU	opposition	-4328 Dec 12 j 12:19	19°♂49'47	-0°26'05

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodiens AG 18-Feb-2025 14:23, page 7

Attention, astronomical year style is used: The year -4328 in astronomical counting style is the year 4329 BCE in historical counting style.

min. Earth dist.	-4328 Dec 12 j 01:15	19° <b>8</b> 52'01	8.37743 AU		-4322 Sep 27 j 04:25	0° <b>Ω</b>	
direct	-4327 Feb 19 j 11:24	16° <b>8</b> 21'18		retrograde	-4322 Dec 16 j 04:12	4° <b>Ω</b> 46'57	
evening set	-4327 Jun 05 j 15:58	24° <b>8</b> 14'35		opposition	-4321 Feb 23 j 15:49	1° <b>Ω</b> 31'05	2°38'00
				min. Earth dist.	-4321 Feb 23 j 20:39	1° <b>Ω</b> 30'11	9.14655 AU
conjunction	-4327 Jun 23 j 12:23	26° <b>8</b> 26'36	-0°04'36		-4321 Mar 16 j 23:31	30° <b>℞</b> <b>☿</b>	
minimum elong	-4327 Jun 23 j 12:23	26° <b>8</b> 26'36	0°04'27	direct	-4321 May 06 j 11:11	28° <b>☿</b> 09'56	
behind sun begin	-4327 Jun 23 j 05:17	26° <b>8</b> 24'25			-4321 Jun 24 j 14:04	0° <b>Ω</b>	
behind sun end	-4327 Jun 23 j 19:30	26° <b>8</b> 28'47		evening set	-4321 Aug 17 j 18:25	5° <b>Ω</b> 13'35	
max. Earth dist.	-4327 Jun 24 j 01:20	26° <b>8</b> 30'36	10.45446 AU				
morning rise	-4327 Jul 11 j 04:01	28° <b>8</b> 37'07		conjunction	-4321 Sep 03 j 09:52	7° <b>Ω</b> 08'37	2°15'29
	-4327 Jul 22 j 18:26	0° <b>Π</b>		minimum elong	-4321 Sep 03 j 09:50	7° <b>Ω</b> 08'36	2°15'39
asc. node	-4327 Aug 15 j 18:21	2° <b>Π</b> 35'44		max. Earth dist.	-4321 Sep 03 j 02:23	7° <b>Ω</b> 06'26	11.17829 AU
retrograde	-4327 Oct 19 j 07:54	6° <b>Π</b> 04'07		morning rise	-4321 Sep 19 j 21:44	9° <b>Ω</b> 02'38	
opposition	-4327 Dec 25 j 13:31	2° <b>Π</b> 41'58	0°13'48		-4321 Nov 25 j 22:37	15° <b>Ω</b>	
min. Earth dist.	-4327 Dec 25 j 04:52	2° <b>Π</b> 43'41	8.52987 AU	retrograde	-4321 Dec 27 j 12:55	15° <b>Ω</b> 49'03	
	-4326 Feb 02 j 23:34	30° <b>℞</b> <b>8</b>			-4320 Jan 28 j 18:00	15° <b>℞</b> <b>Ω</b>	
direct	-4326 Mar 05 j 05:55	29° <b>8</b> 14'29		opposition	-4320 Mar 06 j 09:04	12° <b>Ω</b> 33'36	2°50'15
	-4326 Apr 04 j 10:09	0° <b>Π</b>		min. Earth dist.	-4320 Mar 06 j 15:48	12° <b>Ω</b> 32'22	9.20674 AU
evening set	-4326 Jun 19 j 03:07	6° <b>Π</b> 57'36		direct	-4320 May 17 j 06:45	9° <b>Ω</b> 13'34	
					-4320 Aug 17 j 00:32	15° <b>Ω</b>	
conjunction	-4326 Jul 06 j 18:53	9° <b>Π</b> 06'09	0°27'10	evening set	-4320 Aug 27 j 23:01	16° <b>Ω</b> 12'51	
minimum elong	-4326 Jul 06 j 18:52	9° <b>Π</b> 06'09	0°27'21				
max. Earth dist.	-4326 Jul 07 j 04:00	9° <b>Π</b> 08'56	10.60697 AU	conjunction	-4320 Sep 13 j 11:25	18° <b>Ω</b> 06'37	2°23'03
morning rise	-4326 Jul 24 j 05:36	11° <b>Π</b> 13'08		minimum elong	-4320 Sep 13 j 11:24	18° <b>Ω</b> 06'37	2°23'11
retrograde	-4326 Oct 31 j 15:09	18° <b>Π</b> 28'50		max. Earth dist.	-4320 Sep 13 j 02:04	18° <b>Ω</b> 03'55	11.22439 AU
opposition	-4325 Jan 07 j 06:49	15° <b>Π</b> 08'20	0°51'37	morning rise	-4320 Sep 29 j 20:44	19° <b>Ω</b> 59'35	
min. Earth dist.	-4325 Jan 07 j 00:14	15° <b>Π</b> 09'37	8.68078 AU	retrograde	-4319 Jan 06 j 20:21	26° <b>Ω</b> 45'38	
direct	-4325 Mar 18 j 14:24	11° <b>Π</b> 42'04		opposition	-4319 Mar 18 j 01:16	23° <b>Ω</b> 30'19	2°56'13
evening set	-4325 Jul 02 j 01:57	19° <b>Π</b> 15'20		min. Earth dist.	-4319 Mar 18 j 10:15	23° <b>Ω</b> 28'40	9.23905 AU
				direct	-4319 May 28 j 21:23	20° <b>Ω</b> 11'11	
conjunction	-4325 Jul 19 j 12:36	21° <b>Π</b> 20'30	0°56'41	evening set	-4319 Sep 08 j 00:10	27° <b>Ω</b> 07'29	
minimum elong	-4325 Jul 19 j 12:34	21° <b>Π</b> 20'29	0°56'52				
max. Earth dist.	-4325 Jul 19 j 18:24	21° <b>Π</b> 22'15	10.75409 AU	conjunction	-4319 Sep 24 j 10:15	29° <b>Ω</b> 00'33	2°25'22
morning rise	-4325 Aug 05 j 18:01	23° <b>Π</b> 24'05		minimum elong	-4319 Sep 24 j 10:15	29° <b>Ω</b> 00'33	2°25'28
	-4325 Oct 19 j 15:09	0° <b>☿</b>		max. Earth dist.	-4319 Sep 23 j 22:19	28° <b>Ω</b> 57'06	11.24217 AU
retrograde	-4325 Nov 12 j 14:12	0° <b>☿</b> 30'12			-4319 Oct 03 j 00:16	0° <b>℞</b>	
	-4325 Dec 06 j 20:31	30° <b>℞</b> <b>Π</b>		morning rise	-4319 Oct 10 j 18:08	0° <b>℞</b> 53'03	
opposition	-4324 Jan 19 j 16:57	27° <b>Π</b> 11'12	1°25'50	retrograde	-4318 Jan 18 j 05:49	7° <b>℞</b> 40'26	
min. Earth dist.	-4324 Jan 19 j 12:29	27° <b>Π</b> 12'03	8.82322 AU	opposition	-4318 Mar 29 j 17:41	4° <b>℞</b> 24'55	2°55'50
direct	-4324 Mar 30 j 13:41	23° <b>Π</b> 46'14		min. Earth dist.	-4318 Mar 30 j 05:28	4° <b>℞</b> 22'46	9.24250 AU
	-4324 Jul 03 j 07:22	0° <b>☿</b>		direct	-4318 Jun 09 j 10:08	1° <b>℞</b> 06'28	
evening set	-4324 Jul 13 j 13:32	1° <b>☿</b> 10'25		evening set	-4318 Sep 18 j 23:24	8° <b>℞</b> 01'10	
conjunction	-4324 Jul 30 j 18:59	3° <b>☿</b> 12'25	1°22'56	conjunction	-4318 Oct 05 j 08:06	9° <b>℞</b> 54'06	2°22'24
minimum elong	-4324 Jul 30 j 18:56	3° <b>☿</b> 12'25	1°23'08	minimum elong	-4318 Oct 05 j 08:08	9° <b>℞</b> 54'06	2°22'29
max. Earth dist.	-4324 Jul 30 j 22:07	3° <b>☿</b> 13'21	10.88953 AU	max. Earth dist.	-4318 Oct 04 j 17:28	9° <b>℞</b> 49'51	11.23120 AU
morning rise	-4324 Aug 16 j 19:07	5° <b>☿</b> 12'55		morning rise	-4318 Oct 21 j 15:44	11° <b>℞</b> 46'46	
retrograde	-4324 Nov 23 j 08:32	12° <b>☿</b> 11'17		retrograde	-4317 Jan 29 j 16:00	18° <b>℞</b> 37'11	
opposition	-4323 Jan 30 j 20:59	8° <b>☿</b> 53'36	1°55'25	opposition	-4317 Apr 10 j 11:36	15° <b>℞</b> 21'06	2°49'09
min. Earth dist.	-4323 Jan 30 j 19:35	8° <b>☿</b> 53'52	8.95142 AU	min. Earth dist.	-4317 Apr 11 j 01:02	15° <b>℞</b> 18'39	9.21696 AU
direct	-4323 Apr 12 j 03:59	5° <b>☿</b> 29'57		direct	-4317 Jun 20 j 21:23	12° <b>℞</b> 03'06	
evening set	-4323 Jul 25 j 15:10	12° <b>☿</b> 46'05		evening set	-4317 Sep 29 j 22:14	18° <b>℞</b> 57'34	
conjunction	-4323 Aug 11 j 15:28	14° <b>☿</b> 45'18	1°45'09	conjunction	-4317 Oct 16 j 06:47	20° <b>℞</b> 50'59	2°14'15
minimum elong	-4323 Aug 11 j 15:25	14° <b>☿</b> 45'17	1°45'21	minimum elong	-4317 Oct 16 j 06:49	20° <b>℞</b> 50'59	2°14'17
max. Earth dist.	-4323 Aug 11 j 15:02	14° <b>☿</b> 45'10	11.00805 AU	max. Earth dist.	-4317 Oct 15 j 15:11	20° <b>℞</b> 46'26	11.19162 AU
morning rise	-4323 Aug 28 j 10:48	16° <b>☿</b> 43'07		morning rise	-4317 Nov 01 j 15:03	22° <b>℞</b> 44'23	
retrograde	-4323 Dec 04 j 20:05	23° <b>☿</b> 35'37		retrograde	-4316 Feb 10 j 09:24	29° <b>℞</b> 39'31	
opposition	-4322 Feb 11 j 20:13	20° <b>☿</b> 18'59	2°19'38	opposition	-4316 Apr 21 j 08:00	26° <b>℞</b> 22'32	2°36'14
min. Earth dist.	-4322 Feb 11 j 22:22	20° <b>☿</b> 18'35	9.06048 AU	min. Earth dist.	-4316 Apr 21 j 21:58	26° <b>℞</b> 19'59	9.16287 AU
direct	-4322 Apr 24 j 09:32	16° <b>☿</b> 56'38		direct	-4316 Jul 01 j 11:08	23° <b>℞</b> 04'44	
evening set	-4322 Aug 06 j 08:19	24° <b>☿</b> 05'54		evening set	-4316 Oct 09 j 22:51	0° <b>Ω</b> 00'25	
					-4316 Oct 09 j 21:23	0° <b>Ω</b>	
conjunction	-4322 Aug 23 j 03:46	26° <b>☿</b> 02'45	2°02'47				
minimum elong	-4322 Aug 23 j 03:44	26° <b>☿</b> 02'45	2°02'58	conjunction	-4316 Oct 26 j 08:14	1° <b>Ω</b> 54'54	2°01'01
max. Earth dist.	-4322 Aug 22 j 23:08	26° <b>☿</b> 01'24	11.10537 AU	minimum elong	-4316 Oct 26 j 08:17	1° <b>Ω</b> 54'55	2°01'01
morning rise	-4322 Sep 08 j 19:01	27° <b>☿</b> 58'25		max. Earth dist.	-4316 Oct 25 j 16:09	1° <b>Ω</b> 50'11	11.12411 AU

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 8

Attention, astronomical year style is used: The year -4316 in astronomical counting style is the year 4317 BCE in historical counting style.

morning rise	-4316 Nov 11 j 18:04	3° $\Omega$ 49'38		conjunction	-4309 Jan 06 j 05:18	14° $\mathcal{A}$ 11'26	-0°39'13
retrograde	-4315 Feb 21 j 07:52	10° $\Omega$ 51'02		minimum elong	-4309 Jan 06 j 05:16	14° $\mathcal{A}$ 11'25	0°39'24
opposition	-4315 May 03 j 08:02	7° $\Omega$ 32'54	2°17'18	max. Earth dist.	-4309 Jan 05 j 19:54	14° $\mathcal{A}$ 08'26	10.31666 AU
min. Earth dist.	-4315 May 03 j 22:33	7° $\Omega$ 30'14	9.08134 AU	morning rise	-4309 Jan 23 j 14:41	16° $\mathcal{A}$ 23'34	
direct	-4315 Jul 12 j 23:30	4° $\Omega$ 15'02		retrograde	-4309 May 10 j 15:24	24° $\mathcal{A}$ 30'43	
evening set	-4315 Oct 21 j 03:05	11° $\Omega$ 13'31		opposition	-4309 Jul 19 j 02:28	21° $\mathcal{A}$ 02'16	-1°08'50
				min. Earth dist.	-4309 Jul 19 j 07:54	21° $\mathcal{A}$ 01'11	8.24170 AU
conjunction	-4315 Nov 06 j 14:00	13° $\Omega$ 09'36	1°42'58	direct	-4309 Sep 24 j 02:23	17° $\mathcal{A}$ 38'53	
minimum elong	-4315 Nov 06 j 14:03	13° $\Omega$ 09'37	1°42'55	evening set	-4308 Jan 02 j 17:31	25° $\mathcal{A}$ 25'35	
max. Earth dist.	-4315 Nov 05 j 20:30	13° $\Omega$ 04'26	11.03023 AU				
morning rise	-4315 Nov 23 j 02:28	15° $\Omega$ 06'14		conjunction	-4308 Jan 20 j 01:45	27° $\mathcal{A}$ 39'19	-1°10'15
retrograde	-4314 Mar 05 j 12:55	22° $\Omega$ 15'37		minimum elong	-4308 Jan 20 j 01:42	27° $\mathcal{A}$ 39'18	1°10'26
opposition	-4314 May 15 j 13:18	18° $\Omega$ 56'05	1°52'38	max. Earth dist.	-4308 Jan 19 j 20:09	27° $\mathcal{A}$ 37'30	10.17163 AU
min. Earth dist.	-4314 May 16 j 04:38	18° $\Omega$ 53'15	8.97451 AU	morning rise	-4308 Feb 06 j 15:28	29° $\mathcal{A}$ 54'48	
direct	-4314 Jul 24 j 15:53	15° $\Omega$ 37'52			-4308 Feb 07 j 07:54	0° $\mathcal{B}$	
evening set	-4314 Nov 01 j 12:41	22° $\Omega$ 40'48		retrograde	-4308 May 24 j 06:43	8° $\mathcal{B}$ 13'48	
max. Earth dist.	-4314 Nov 17 j 07:58	24° $\Omega$ 33'38	10.91280 AU	opposition	-4308 Aug 01 j 05:12	4° $\mathcal{B}$ 43'48	-1°46'03
				min. Earth dist.	-4308 Aug 01 j 07:33	4° $\mathcal{B}$ 43'20	8.10513 AU
conjunction	-4314 Nov 18 j 02:00	24° $\Omega$ 39'02	1°20'27	direct	-4308 Oct 06 j 17:24	1° $\mathcal{B}$ 18'59	
minimum elong	-4314 Nov 18 j 02:02	24° $\Omega$ 39'03	1°20'22	evening set	-4307 Jan 15 j 23:31	9° $\mathcal{B}$ 16'48	
morning rise	-4314 Dec 04 j 17:56	26° $\Omega$ 38'06					
	-4313 Jan 04 j 10:34	0° $\mathcal{M}$		conjunction	-4307 Feb 02 j 11:46	11° $\mathcal{B}$ 33'36	-1°38'07
retrograde	-4313 Mar 18 j 02:29	3° $\mathcal{M}$ 57'04		minimum elong	-4307 Feb 02 j 11:43	11° $\mathcal{B}$ 33'35	1°38'18
opposition	-4313 May 28 j 00:44	0° $\mathcal{M}$ 35'56	1°22'45	max. Earth dist.	-4307 Feb 02 j 11:04	11° $\mathcal{B}$ 33'22	10.04423 AU
min. Earth dist.	-4313 May 28 j 15:57	0° $\mathcal{M}$ 33'05	8.84625 AU	morning rise	-4307 Feb 20 j 05:17	13° $\mathcal{B}$ 52'07	
	-4313 Jun 05 j 01:40	30° $\mathcal{R}$ $\Omega$		retrograde	-4307 Jun 08 j 05:43	22° $\mathcal{B}$ 21'12	
direct	-4313 Aug 05 j 13:24	27° $\Omega$ 17'07		opposition	-4307 Aug 15 j 14:50	18° $\mathcal{B}$ 50'01	-2°18'07
	-4313 Oct 02 j 11:38	0° $\mathcal{M}$		min. Earth dist.	-4307 Aug 15 j 13:22	18° $\mathcal{B}$ 50'19	7.99048 AU
evening set	-4313 Nov 13 j 05:55	4° $\mathcal{M}$ 26'06		direct	-4307 Oct 20 j 17:23	15° $\mathcal{B}$ 23'45	
				evening set	-4306 Jan 30 j 18:30	23° $\mathcal{B}$ 32'03	
conjunction	-4313 Nov 29 j 22:27	6° $\mathcal{M}$ 26'57	0°54'02				
minimum elong	-4313 Nov 29 j 22:29	6° $\mathcal{M}$ 26'58	0°53'56	conjunction	-4306 Feb 17 j 10:38	25° $\mathcal{B}$ 51'32	-2°00'42
max. Earth dist.	-4313 Nov 29 j 05:53	6° $\mathcal{M}$ 21'55	10.77640 AU	minimum elong	-4306 Feb 17 j 10:35	25° $\mathcal{B}$ 51'30	2°00'53
morning rise	-4313 Dec 16 j 18:20	8° $\mathcal{M}$ 28'54		max. Earth dist.	-4306 Feb 17 j 15:07	25° $\mathcal{B}$ 53'01	9.94254 AU
	-4312 Feb 24 j 07:36	15° $\mathcal{M}$		morning rise	-4306 Mar 07 j 07:27	28° $\mathcal{B}$ 12'33	
retrograde	-4312 Mar 30 j 01:22	15° $\mathcal{M}$ 58'48			-4306 Mar 21 j 10:15	0° $\mathcal{A}$	
	-4312 May 04 j 10:07	15° $\mathcal{R}$ $\mathcal{M}$		retrograde	-4306 Jun 23 j 10:38	6° $\mathcal{A}$ 48'54	
opposition	-4312 Jun 08 j 18:59	12° $\mathcal{M}$ 35'52	0°48'21	opposition	-4306 Aug 30 j 05:46	3° $\mathcal{A}$ 16'55	-2°42'20
min. Earth dist.	-4312 Jun 09 j 08:32	12° $\mathcal{M}$ 33'18	8.70202 AU	min. Earth dist.	-4306 Aug 30 j 00:24	3° $\mathcal{A}$ 18'02	7.90512 AU
direct	-4312 Aug 16 j 17:11	9° $\mathcal{M}$ 16'13			-4306 Oct 21 j 11:35	30° $\mathcal{R}$ $\mathcal{B}$	
	-4312 Nov 11 j 05:53	15° $\mathcal{M}$		direct	-4306 Nov 04 j 01:55	29° $\mathcal{B}$ 49'18	
evening set	-4312 Nov 24 j 08:36	16° $\mathcal{M}$ 32'48			-4306 Nov 17 j 14:58	0° $\mathcal{A}$	
				evening set	-4305 Feb 15 j 00:27	8° $\mathcal{A}$ 06'31	
conjunction	-4312 Dec 11 j 04:52	18° $\mathcal{M}$ 36'39	0°24'31				
minimum elong	-4312 Dec 11 j 04:53	18° $\mathcal{M}$ 36'39	0°24'23	conjunction	-4305 Mar 04 j 20:11	10° $\mathcal{A}$ 28'06	-2°16'03
max. Earth dist.	-4312 Dec 10 j 14:30	18° $\mathcal{M}$ 32'13	10.62690 AU	minimum elong	-4305 Mar 04 j 20:10	10° $\mathcal{A}$ 28'05	2°16'13
morning rise	-4312 Dec 28 j 05:02	20° $\mathcal{M}$ 41'49		max. Earth dist.	-4305 Mar 05 j 05:39	10° $\mathcal{A}$ 31'15	9.87340 AU
retrograde	-4311 Apr 12 j 11:55	28° $\mathcal{M}$ 23'44		morning rise	-4305 Mar 22 j 19:45	12° $\mathcal{A}$ 50'56	
opposition	-4311 Jun 21 j 21:09	24° $\mathcal{M}$ 58'53	0°10'33		-4305 Apr 08 j 18:19	15° $\mathcal{A}$	
min. Earth dist.	-4311 Jun 22 j 08:04	24° $\mathcal{M}$ 56'47	8.54820 AU	retrograde	-4305 Jul 08 j 17:41	21° $\mathcal{A}$ 30'48	
direct	-4311 Aug 29 j 04:06	21° $\mathcal{M}$ 38'11		opposition	-4305 Sep 13 j 23:58	17° $\mathcal{A}$ 58'30	-2°56'24
desc. node	-4311 Oct 01 j 12:55	22° $\mathcal{M}$ 37'04		min. Earth dist.	-4305 Sep 13 j 15:01	18° $\mathcal{A}$ 00'22	7.85480 AU
evening set	-4311 Dec 06 j 22:30	29° $\mathcal{M}$ 03'44			-4305 Oct 26 j 18:47	15° $\mathcal{R}$ $\mathcal{A}$	
	-4311 Dec 14 j 12:20	0° $\mathcal{A}$		direct	-4305 Nov 18 j 18:17	14° $\mathcal{A}$ 29'44	
					-4305 Dec 11 j 15:08	15° $\mathcal{A}$	
conjunction	-4311 Dec 23 j 22:36	1° $\mathcal{A}$ 10'49	-0°07'06	evening set	-4304 Mar 01 j 14:13	22° $\mathcal{A}$ 53'24	
minimum elong	-4311 Dec 23 j 22:36	1° $\mathcal{A}$ 10'49	0°07'16				
behind sun begin	-4311 Dec 23 j 16:04	1° $\mathcal{A}$ 08'47		conjunction	-4304 Mar 19 j 13:06	25° $\mathcal{A}$ 16'19	-2°22'42
behind sun end	-4311 Dec 24 j 05:08	1° $\mathcal{A}$ 12'50		minimum elong	-4304 Mar 19 j 13:06	25° $\mathcal{A}$ 16'19	2°22'49
max. Earth dist.	-4311 Dec 23 j 10:33	1° $\mathcal{A}$ 07'03	10.47111 AU	max. Earth dist.	-4304 Mar 20 j 02:49	25° $\mathcal{A}$ 20'54	9.84173 AU
morning rise	-4310 Jan 10 j 03:21	3° $\mathcal{A}$ 19'26		morning rise	-4304 Apr 06 j 14:43	27° $\mathcal{A}$ 40'08	
retrograde	-4310 Apr 26 j 09:16	11° $\mathcal{A}$ 13'58			-4304 Apr 24 j 23:43	0° $\mathcal{H}$	
opposition	-4310 Jul 05 j 07:42	7° $\mathcal{A}$ 47'16	-0°29'10	retrograde	-4304 Jul 22 j 22:56	6° $\mathcal{H}$ 19'12	
min. Earth dist.	-4310 Jul 05 j 15:50	7° $\mathcal{A}$ 45'40	8.39211 AU	opposition	-4304 Sep 27 j 18:53	2° $\mathcal{H}$ 47'08	-2°58'51
direct	-4310 Sep 10 j 21:41	4° $\mathcal{A}$ 25'18		min. Earth dist.	-4304 Sep 27 j 07:09	2° $\mathcal{H}$ 49'36	7.84312 AU
evening set	-4310 Dec 20 j 01:11	12° $\mathcal{A}$ 01'01			-4304 Nov 05 j 06:39	30° $\mathcal{R}$ $\mathcal{A}$	
				direct	-4304 Dec 02 j 15:50	29° $\mathcal{A}$ 17'28	



## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 9

Attention, astronomical year style is used: The year -4304 in astronomical counting style is the year 4305 BCE in historical counting style.

	-4304 Dec 29 j 22:24	0°♄		retrograde	-4298 Oct 14 j 01:16	0°♄32'38	
evening set	-4303 Mar 17 j 07:44	7°♄44'25			-4298 Nov 07 j 17:09	30°♄8	
				opposition	-4298 Dec 20 j 02:12	27°♄09'53	-0°04'08
conjunction	-4303 Apr 04 j 09:12	10°♄07'50	-2°19'57	min. Earth dist.	-4298 Dec 19 j 14:42	27°♄12'11	8.45992 AU
minimum elong	-4303 Apr 04 j 09:14	10°♄07'51	2°20'02	asc. node	-4297 Jan 28 j 06:30	24°♄27'56	
max. Earth dist.	-4303 Apr 05 j 02:04	10°♄13'27	9.85006 AU	direct	-4297 Feb 27 j 10:27	23°♄42'17	
morning rise	-4303 Apr 22 j 12:11	12°♄31'44			-4297 May 31 j 17:22	0°♄	
retrograde	-4303 Aug 06 j 23:22	21°♄05'41		evening set	-4297 Jun 13 j 11:51	1°♄30'25	
opposition	-4303 Oct 12 j 11:59	17°♄34'21	-2°49'23				
min. Earth dist.	-4303 Oct 11 j 22:36	17°♄37'10	7.87114 AU	conjunction	-4297 Jul 01 j 06:01	3°♄40'38	0°13'02
direct	-4303 Dec 17 j 15:58	14°♄04'07		minimum elong	-4297 Jul 01 j 06:00	3°♄40'38	0°13'12
evening set	-4302 Apr 02 j 00:43	22°♄30'49		behind sun begin	-4297 Jul 01 j 01:51	3°♄39'22	
				behind sun end	-4297 Jul 01 j 10:10	3°♄41'54	
conjunction	-4302 Apr 20 j 04:00	24°♄53'52	-2°08'02	max. Earth dist.	-4297 Jul 01 j 18:50	3°♄44'34	10.53953 AU
minimum elong	-4302 Apr 20 j 04:04	24°♄53'53	2°08'03	morning rise	-4297 Jul 18 j 18:58	5°♄49'16	
max. Earth dist.	-4302 Apr 20 j 22:43	25°♄00'03	9.89787 AU	retrograde	-4297 Oct 26 j 14:43	13°♄10'17	
morning rise	-4302 May 08 j 07:30	27°♄16'55		opposition	-4296 Jan 01 j 23:47	9°♄49'25	0°34'53
	-4302 May 30 j 03:03	0°♄		min. Earth dist.	-4296 Jan 01 j 15:03	9°♄51'08	8.61622 AU
retrograde	-4302 Aug 21 j 15:54	5°♄41'58		direct	-4296 Mar 11 j 22:28	6°♄23'03	
min. Earth dist.	-4302 Oct 26 j 10:42	2°♄14'49	7.93686 AU	evening set	-4296 Jun 25 j 16:52	14°♄00'58	
opposition	-4302 Oct 27 j 00:49	2°♄11'51	-2°28'57				
	-4302 Nov 24 j 11:59	30°♄8		conjunction	-4296 Jul 13 j 06:00	16°♄07'41	0°43'43
direct	-4301 Jan 01 j 15:40	28°♄41'26		minimum elong	-4296 Jul 13 j 05:58	16°♄07'41	0°43'54
	-4301 Feb 08 j 15:09	0°♄		max. Earth dist.	-4296 Jul 13 j 15:06	16°♄10'26	10.69347 AU
evening set	-4301 Apr 17 j 13:19	7°♄04'34		morning rise	-4296 Jul 30 j 13:45	18°♄12'48	
				retrograde	-4296 Nov 06 j 17:10	25°♄23'15	
conjunction	-4301 May 05 j 17:18	9°♄26'20	-1°48'05	opposition	-4295 Jan 13 j 13:40	22°♄04'03	1°10'56
minimum elong	-4301 May 05 j 17:22	9°♄26'22	1°48'03	min. Earth dist.	-4295 Jan 13 j 08:23	22°♄05'04	8.76645 AU
max. Earth dist.	-4301 May 06 j 12:30	9°♄32'37	9.98165 AU	direct	-4295 Mar 25 j 02:47	18°♄38'57	
morning rise	-4301 May 23 j 20:09	11°♄47'38		evening set	-4295 Jul 08 j 10:10	26°♄07'17	
retrograde	-4301 Sep 04 j 22:48	20°♄01'00					
opposition	-4301 Nov 10 j 07:18	16°♄32'30	-1°59'33	conjunction	-4295 Jul 25 j 17:55	28°♄10'40	1°11'35
min. Earth dist.	-4301 Nov 09 j 17:08	16°♄35'26	8.03576 AU	minimum elong	-4295 Jul 25 j 17:52	28°♄10'39	1°11'46
direct	-4300 Jan 16 j 12:31	13°♄02'17		max. Earth dist.	-4295 Jul 25 j 22:04	28°♄11'54	10.83730 AU
evening set	-4300 May 01 j 17:55	21°♄19'01			-4295 Aug 10 j 01:48	0°♄	
				morning rise	-4295 Aug 11 j 20:30	0°♄12'31	
conjunction	-4300 May 19 j 21:19	23°♄38'41	-1°21'53	retrograde	-4295 Nov 18 j 12:38	7°♄14'14	
minimum elong	-4300 May 19 j 21:23	23°♄38'42	1°21'49	opposition	-4294 Jan 25 j 20:36	3°♄56'26	1°42'44
max. Earth dist.	-4300 May 20 j 15:54	23°♄44'41	10.09562 AU	min. Earth dist.	-4294 Jan 25 j 18:23	3°♄56'51	8.90324 AU
morning rise	-4300 Jun 06 j 22:21	25°♄57'28		direct	-4294 Apr 06 j 22:37	0°♄32'38	
	-4300 Jul 11 j 09:53	0°♄		evening set	-4294 Jul 20 j 16:45	7°♄52'24	
retrograde	-4300 Sep 17 j 18:43	3°♄57'36					
opposition	-4300 Nov 23 j 06:09	0°♄30'56	-1°23'46	conjunction	-4294 Aug 06 j 19:14	9°♄52'48	1°35'42
min. Earth dist.	-4300 Nov 22 j 16:14	0°♄33'47	8.16130 AU	minimum elong	-4294 Aug 06 j 19:11	9°♄52'47	1°35'54
	-4300 Nov 29 j 13:40	30°♄8		max. Earth dist.	-4294 Aug 06 j 19:15	9°♄52'48	10.96437 AU
direct	-4299 Jan 30 j 04:05	27°♄01'18		morning rise	-4294 Aug 23 j 16:49	11°♄51'45	
	-4299 Mar 31 j 02:46	0°♄		retrograde	-4294 Nov 30 j 03:32	18°♄46'45	
evening set	-4299 May 16 j 11:54	5°♄09'31		opposition	-4293 Feb 06 j 22:16	15°♄30'05	2°09'26
				min. Earth dist.	-4293 Feb 06 j 22:46	15°♄30'00	9.02064 AU
conjunction	-4299 Jun 03 j 13:27	7°♄26'25	-0°51'35	direct	-4293 Apr 19 j 09:05	12°♄07'35	
minimum elong	-4299 Jun 03 j 13:29	7°♄26'26	0°51'28	evening set	-4293 Aug 01 j 13:53	19°♄19'55	
max. Earth dist.	-4299 Jun 04 j 06:39	7°♄31'53	10.23227 AU				
morning rise	-4299 Jun 21 j 11:27	9°♄42'08		conjunction	-4293 Aug 18 j 11:33	21°♄17'47	1°55'27
	-4299 Aug 08 j 21:52	15°♄		minimum elong	-4293 Aug 18 j 11:30	21°♄17'46	1°55'38
retrograde	-4299 Oct 01 j 03:05	17°♄28'33		max. Earth dist.	-4293 Aug 18 j 08:33	21°♄16'54	11.06989 AU
	-4299 Nov 25 j 02:52	15°♄8		morning rise	-4293 Sep 04 j 04:31	23°♄14'20	
opposition	-4299 Dec 06 j 20:30	14°♄03'50	-0°44'26		-4293 Dec 02 j 02:30	0°♄	
min. Earth dist.	-4299 Dec 06 j 07:15	14°♄06'31	8.30552 AU	retrograde	-4293 Dec 11 j 14:52	0°♄04'37	
direct	-4298 Feb 13 j 12:02	10°♄35'07			-4293 Dec 21 j 04:10	30°♄8	
	-4298 Apr 29 j 18:59	15°♄		opposition	-4292 Feb 18 j 19:48	26°♄48'45	2°30'29
evening set	-4298 May 30 j 18:10	18°♄33'33		min. Earth dist.	-4292 Feb 18 j 23:21	26°♄48'06	9.11485 AU
				direct	-4292 Apr 30 j 12:57	23°♄27'24	
conjunction	-4298 Jun 17 j 16:34	20°♄47'13	-0°19'19		-4292 Aug 07 j 04:27	0°♄	
minimum elong	-4298 Jun 17 j 16:35	20°♄47'14	0°19'10	evening set	-4292 Aug 12 j 03:28	0°♄33'36	
max. Earth dist.	-4298 Jun 18 j 07:58	20°♄52'02	10.38309 AU				
morning rise	-4298 Jul 05 j 10:26	22°♄59'28		conjunction	-4292 Aug 28 j 20:47	2°♄29'25	2°10'23
	-4298 Sep 19 j 14:44	0°♄		minimum elong	-4292 Aug 28 j 20:45	2°♄29'24	2°10'34

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 10

Attention, astronomical year style is used: The year -4292 in astronomical counting style is the year 4293 BCE in historical counting style.

max. Earth dist.	-4292 Aug 28 j 14:29	2°♂27'35	11.15093 AU	minimum elong	-4286 Nov 02 j 00:31	8°♂25'35	1°51'33
morning rise	-4292 Sep 14 j 09:58	4°♂24'07		morning rise	-4286 Nov 18 j 11:48	10°♂21'27	
retrograde	-4292 Dec 21 j 23:38	11°♂11'27		retrograde	-4285 Feb 28 j 11:07	17°♂27'31	
opposition	-4291 Mar 01 j 14:19	7°♂56'05	2°45'30	opposition	-4285 May 10 j 13:02	14°♂08'03	2°04'19
min. Earth dist.	-4291 Mar 01 j 21:30	7°♂54'45	9.18341 AU	min. Earth dist.	-4285 May 11 j 04:02	14°♂05'17	9.00771 AU
direct	-4291 May 12 j 09:58	4°♂35'43		direct	-4285 Jul 19 j 23:11	10°♂49'25	
evening set	-4291 Aug 23 j 10:58	11°♂37'03		evening set	-4285 Oct 27 j 21:04	17°♂50'38	
conjunction	-4291 Sep 09 j 00:35	13°♂31'22	2°20'16	conjunction	-4285 Nov 13 j 09:28	19°♂48'02	1°30'59
minimum elong	-4291 Sep 09 j 00:33	13°♂31'21	2°20'25	minimum elong	-4285 Nov 13 j 09:31	19°♂48'02	1°30'55
max. Earth dist.	-4291 Sep 08 j 14:19	13°♂28'23	11.20545 AU	max. Earth dist.	-4285 Nov 12 j 16:53	19°♂43'05	10.95105 AU
	-4291 Sep 21 j 19:58	15°♂		morning rise	-4285 Nov 29 j 23:44	21°♂46'06	
morning rise	-4291 Sep 25 j 11:01	15°♂24'47		retrograde	-4284 Mar 11 j 22:26	29°♂01'00	
retrograde	-4290 Jan 02 j 05:34	22°♂10'59		opposition	-4284 May 21 j 21:25	25°♂40'02	1°36'40
opposition	-4290 Mar 13 j 07:12	18°♂55'42	2°54'18	min. Earth dist.	-4284 May 22 j 11:27	25°♂37'25	8.89015 AU
min. Earth dist.	-4290 Mar 13 j 17:04	18°♂53'54	9.22442 AU	direct	-4284 Jul 30 j 17:20	22°♂21'00	
direct	-4290 May 24 j 03:46	15°♂36'07		evening set	-4284 Nov 07 j 10:41	29°♂27'29	
evening set	-4290 Sep 03 j 13:43	22°♂33'54			-4284 Nov 12 j 00:06	0°♂	
				max. Earth dist.	-4284 Nov 23 j 09:27	1°♂22'19	10.82494 AU
conjunction	-4290 Sep 20 j 00:40	24°♂27'16	2°24'56	conjunction	-4284 Nov 24 j 01:48	1°♂27'15	1°06'13
minimum elong	-4290 Sep 20 j 00:40	24°♂27'16	2°25'04	minimum elong	-4284 Nov 24 j 01:50	1°♂27'16	1°06'07
max. Earth dist.	-4290 Sep 19 j 12:01	24°♂23'36	11.23200 AU	morning rise	-4284 Dec 10 j 19:49	3°♂28'00	
morning rise	-4290 Oct 06 j 09:13	26°♂19'59		retrograde	-4283 Mar 24 j 16:37	10°♂53'09	
	-4290 Nov 10 j 18:03	0°♂		opposition	-4283 Jun 03 j 12:27	7°♂30'34	1°04'09
retrograde	-4289 Jan 13 j 14:34	3°♂06'49		min. Earth dist.	-4283 Jun 04 j 01:36	7°♂28'05	8.75543 AU
	-4289 Mar 22 j 23:35	30°♂♂		direct	-4283 Aug 11 j 16:49	4°♂10'54	
opposition	-4289 Mar 24 j 23:36	29°♂51'15	2°56'46	evening set	-4283 Nov 19 j 08:52	11°♂24'15	
min. Earth dist.	-4289 Mar 25 j 10:52	29°♂49'12	9.23677 AU	max. Earth dist.	-4283 Dec 05 j 11:49	13°♂22'04	10.68419 AU
direct	-4289 Jun 04 j 19:22	26°♂32'17					
	-4289 Aug 12 j 10:48	0°♂		conjunction	-4283 Dec 06 j 03:17	13°♂26'48	0°37'57
evening set	-4289 Sep 14 j 13:37	3°♂27'50		minimum elong	-4283 Dec 06 j 03:18	13°♂26'49	0°37'50
conjunction	-4289 Sep 30 j 23:01	5°♂20'51	2°24'20		-4283 Dec 18 j 20:11	15°♂	
minimum elong	-4289 Sep 30 j 23:02	5°♂20'51	2°24'26	morning rise	-4283 Dec 23 j 01:37	15°♂30'37	
max. Earth dist.	-4289 Sep 30 j 09:17	5°♂16'53	11.22989 AU	retrograde	-4282 Apr 06 j 21:34	23°♂07'17	
morning rise	-4289 Oct 17 j 06:36	7°♂13'28		opposition	-4282 Jun 16 j 11:12	19°♂42'59	0°27'41
retrograde	-4288 Jan 25 j 00:53	14°♂02'36		min. Earth dist.	-4282 Jun 16 j 23:04	19°♂40'43	8.60905 AU
opposition	-4288 Apr 04 j 16:43	10°♂46'27	2°52'54	direct	-4282 Aug 24 j 00:33	16°♂22'30	
min. Earth dist.	-4288 Apr 05 j 05:31	10°♂44'07	9.22026 AU	evening set	-4282 Dec 01 j 17:26	23°♂44'08	
direct	-4288 Jun 15 j 06:30	7°♂27'53		conjunction	-4282 Dec 18 j 15:42	25°♂49'48	0°07'11
evening set	-4288 Sep 24 j 12:27	14°♂22'36		minimum elong	-4282 Dec 18 j 15:43	25°♂49'49	0°07'02
conjunction	-4288 Oct 10 j 21:08	16°♂15'52	2°18'30	behind sun begin	-4282 Dec 18 j 09:09	25°♂47'47	
minimum elong	-4288 Oct 10 j 21:09	16°♂15'52	2°18'33	behind sun end	-4282 Dec 18 j 22:16	25°♂51'50	
max. Earth dist.	-4288 Oct 10 j 05:24	16°♂11'18	11.19933 AU	max. Earth dist.	-4282 Dec 18 j 02:59	25°♂45'51	10.53458 AU
morning rise	-4288 Oct 27 j 04:59	18°♂08'59		morning rise	-4281 Jan 04 j 18:33	27°♂56'57	
retrograde	-4287 Feb 04 j 15:22	25°♂02'05			-4281 Jan 22 j 02:24	0°♂	
opposition	-4287 Apr 16 j 11:52	21°♂45'06	2°42'46	desc. node	-4281 Mar 13 j 07:02	4°♂33'38	
min. Earth dist.	-4287 Apr 17 j 02:29	21°♂42'26	9.17546 AU	retrograde	-4281 Apr 20 j 13:38	5°♂45'59	
direct	-4287 Jun 26 j 18:30	18°♂26'42		opposition	-4281 Jun 29 j 18:04	2°♂19'59	-0°11'25
evening set	-4287 Oct 05 j 12:05	25°♂22'04		min. Earth dist.	-4281 Jun 30 j 03:23	2°♂18'10	8.45739 AU
					-4281 Aug 01 j 22:41	30°♂♂	
conjunction	-4287 Oct 21 j 20:55	27°♂16'09	2°07'30	direct	-4281 Sep 05 j 15:29	28°♂58'30	
minimum elong	-4287 Oct 21 j 20:58	27°♂16'09	2°07'32		-4281 Oct 09 j 13:48	0°♂	
max. Earth dist.	-4287 Oct 21 j 03:27	27°♂11'02	11.14132 AU	evening set	-4281 Dec 14 j 14:20	6°♂29'46	
morning rise	-4287 Nov 07 j 06:06	29°♂10'22					
	-4287 Nov 14 j 13:28	0°♂		conjunction	-4281 Dec 31 j 16:44	8°♂38'43	-0°24'59
retrograde	-4286 Feb 16 j 09:01	6°♂09'06		minimum elong	-4281 Dec 31 j 16:43	8°♂38'43	0°25'09
opposition	-4286 Apr 28 j 10:14	2°♂51'00	2°26'30	max. Earth dist.	-4281 Dec 31 j 07:40	8°♂35'52	10.38289 AU
min. Earth dist.	-4286 Apr 29 j 01:52	2°♂48'08	9.10384 AU	morning rise	-4280 Jan 18 j 00:00	10°♂49'19	
	-4286 Jun 14 j 06:57	30°♂♂		retrograde	-4280 May 03 j 15:35	18°♂51'01	
direct	-4286 Jul 08 j 06:55	29°♂32'35		opposition	-4280 Jul 12 j 09:08	15°♂23'22	-0°51'23
	-4286 Jul 31 j 23:50	0°♂		min. Earth dist.	-4280 Jul 12 j 15:00	15°♂22'13	8.30779 AU
evening set	-4286 Oct 16 j 14:18	6°♂30'07		direct	-4280 Sep 17 j 16:02	12°♂00'46	
max. Earth dist.	-4286 Nov 01 j 07:09	8°♂20'28	11.05770 AU	evening set	-4280 Dec 27 j 00:38	19°♂42'38	
conjunction	-4286 Nov 02 j 00:28	8°♂25'34	1°51'34	conjunction	-4279 Jan 13 j 07:07	21°♂54'54	-0°56'45

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 11

Attention, astronomical year style is used: The year -4279 in astronomical counting style is the year 4280 BCE in historical counting style.

minimum elong	-4279 Jan 13 j 07:05	21° $\text{♁}$ 54'53	0°56'56	min. Earth dist.	-4274 Oct 05 j 23:02	11° $\text{♁}$ 21'12	7.86720 AU
max. Earth dist.	-4279 Jan 13 j 02:01	21° $\text{♁}$ 53'16	10.23689 AU	direct	-4274 Dec 11 j 11:26	7° $\text{♁}$ 49'17	
morning rise	-4279 Jan 30 j 18:43	24° $\text{♁}$ 08'53		evening set	-4273 Mar 26 j 12:37	16° $\text{♁}$ 16'09	
	-4279 Mar 25 j 12:16	0° $\text{♁}$					
retrograde	-4279 May 18 j 04:12	2° $\text{♁}$ 22'50		conjunction	-4273 Apr 13 j 15:11	18° $\text{♁}$ 39'22	-2°14'12
	-4279 Jul 12 j 07:55	30° $\text{♁}$		minimum elong	-4273 Apr 13 j 15:15	18° $\text{♁}$ 39'23	2°14'15
opposition	-4279 Jul 26 j 08:38	28° $\text{♁}$ 53'44	-1°30'00	max. Earth dist.	-4273 Apr 14 j 07:58	18° $\text{♁}$ 44'56	9.88337 AU
min. Earth dist.	-4279 Jul 26 j 10:37	28° $\text{♁}$ 53'20	8.16830 AU	morning rise	-4273 May 01 j 18:36	21° $\text{♁}$ 02'47	
direct	-4279 Oct 01 j 01:38	25° $\text{♁}$ 29'55		retrograde	-4273 Aug 15 j 15:09	29° $\text{♁}$ 32'01	
	-4279 Dec 12 j 22:47	0° $\text{♁}$		opposition	-4273 Oct 21 j 01:49	26° $\text{♁}$ 01'50	-2°38'58
evening set	-4278 Jan 10 j 00:46	3° $\text{♁}$ 22'45		min. Earth dist.	-4273 Oct 20 j 12:23	26° $\text{♁}$ 04'39	7.91256 AU
				direct	-4273 Dec 26 j 11:25	22° $\text{♁}$ 31'57	
conjunction	-4278 Jan 27 j 11:12	5° $\text{♁}$ 38'10	-1°26'16		-4272 Apr 02 j 17:17	0° $\text{♁}$	
minimum elong	-4278 Jan 27 j 11:08	5° $\text{♁}$ 38'09	1°26'27	evening set	-4272 Apr 10 j 03:47	0° $\text{♁}$ 56'55	
max. Earth dist.	-4278 Jan 27 j 10:01	5° $\text{♁}$ 37'47	10.10489 AU				
morning rise	-4278 Feb 14 j 02:53	7° $\text{♁}$ 55'19		conjunction	-4272 Apr 28 j 07:41	3° $\text{♁}$ 19'19	-1°57'36
retrograde	-4278 Jun 02 j 01:37	16° $\text{♁}$ 20'09		minimum elong	-4272 Apr 28 j 07:45	3° $\text{♁}$ 19'21	1°57'36
opposition	-4278 Aug 09 j 15:39	12° $\text{♁}$ 49'51	-2°04'39	max. Earth dist.	-4272 Apr 29 j 02:16	3° $\text{♁}$ 25'26	9.94739 AU
min. Earth dist.	-4278 Aug 09 j 14:11	12° $\text{♁}$ 50'09	8.04714 AU	morning rise	-4272 May 16 j 10:53	5° $\text{♁}$ 41'26	
direct	-4278 Oct 14 j 20:35	9° $\text{♁}$ 24'43		retrograde	-4272 Aug 29 j 03:39	14° $\text{♁}$ 00'23	
evening set	-4277 Jan 24 j 14:31	17° $\text{♁}$ 28'16		opposition	-4272 Nov 03 j 11:38	10° $\text{♁}$ 31'29	-2°13'14
				min. Earth dist.	-4272 Nov 02 j 21:21	10° $\text{♁}$ 34'27	7.99296 AU
conjunction	-4277 Feb 11 j 04:46	19° $\text{♁}$ 46'30	-1°51'25	direct	-4271 Jan 09 j 09:27	7° $\text{♁}$ 01'29	
minimum elong	-4277 Feb 11 j 04:42	19° $\text{♁}$ 46'29	1°51'36	evening set	-4271 Apr 25 j 12:36	15° $\text{♁}$ 21'24	
max. Earth dist.	-4277 Feb 11 j 07:41	19° $\text{♁}$ 47'27	9.99496 AU				
morning rise	-4277 Mar 01 j 00:06	22° $\text{♁}$ 06'22		conjunction	-4271 May 13 j 16:35	17° $\text{♁}$ 42'08	-1°33'54
	-4277 May 21 j 00:31	0° $\text{♁}$		minimum elong	-4271 May 13 j 16:39	17° $\text{♁}$ 42'09	1°33'51
retrograde	-4277 Jun 17 j 05:09	0° $\text{♁}$ 39'35		max. Earth dist.	-4271 May 14 j 11:37	17° $\text{♁}$ 48'19	10.04437 AU
	-4277 Jul 14 j 09:55	30° $\text{♁}$		morning rise	-4271 May 31 j 18:28	20° $\text{♁}$ 02'07	
opposition	-4277 Aug 24 j 04:35	27° $\text{♁}$ 08'26	-2°32'36	retrograde	-4271 Sep 12 j 05:43	28° $\text{♁}$ 08'30	
min. Earth dist.	-4277 Aug 24 j 00:08	27° $\text{♁}$ 09'22	7.95176 AU	opposition	-4271 Nov 17 j 14:15	24° $\text{♁}$ 41'10	-1°39'56
direct	-4277 Oct 29 j 01:28	23° $\text{♁}$ 41'59		min. Earth dist.	-4271 Nov 17 j 00:20	24° $\text{♁}$ 44'02	8.10323 AU
	-4276 Jan 24 j 13:24	0° $\text{♁}$		direct	-4270 Jan 24 j 03:51	21° $\text{♁}$ 11'24	
evening set	-4276 Feb 08 j 16:08	1° $\text{♁}$ 55'05		evening set	-4270 May 10 j 12:02	29° $\text{♁}$ 23'47	
					-4270 May 15 j 06:56	0° $\text{♁}$	
conjunction	-4276 Feb 26 j 10:00	4° $\text{♁}$ 15'36	-2°10'10				
minimum elong	-4276 Feb 26 j 09:57	4° $\text{♁}$ 15'35	2°10'19	conjunction	-4270 May 28 j 14:43	1° $\text{♁}$ 42'03	-1°05'08
max. Earth dist.	-4276 Feb 26 j 17:03	4° $\text{♁}$ 17'56	9.91404 AU	minimum elong	-4270 May 28 j 14:46	1° $\text{♁}$ 42'04	1°05'03
morning rise	-4276 Mar 15 j 08:24	6° $\text{♁}$ 37'33		max. Earth dist.	-4270 May 29 j 08:41	1° $\text{♁}$ 47'48	10.16769 AU
	-4276 Jun 14 j 12:23	15° $\text{♁}$		morning rise	-4270 Jun 15 j 14:06	3° $\text{♁}$ 59'15	
retrograde	-4276 Jul 01 j 11:17	15° $\text{♁}$ 15'47		retrograde	-4270 Sep 25 j 19:15	11° $\text{♁}$ 52'01	
	-4276 Jul 18 j 08:27	15° $\text{♁}$		opposition	-4270 Dec 01 j 08:47	8° $\text{♁}$ 26'27	-1°01'50
opposition	-4276 Sep 06 j 21:44	11° $\text{♁}$ 44'10	-2°51'20	min. Earth dist.	-4270 Nov 30 j 20:19	8° $\text{♁}$ 28'59	8.23606 AU
min. Earth dist.	-4276 Sep 06 j 14:33	11° $\text{♁}$ 45'40	7.88798 AU	direct	-4269 Feb 07 j 15:43	4° $\text{♁}$ 57'14	
direct	-4276 Nov 11 j 15:52	8° $\text{♁}$ 16'28		evening set	-4269 May 24 j 23:59	13° $\text{♁}$ 00'23	
	-4275 Feb 10 j 11:41	15° $\text{♁}$			-4269 Jun 09 j 22:21	15° $\text{♁}$	
evening set	-4275 Feb 23 j 02:35	16° $\text{♁}$ 37'00					
				conjunction	-4269 Jun 11 j 23:55	15° $\text{♁}$ 15'37	-0°33'29
conjunction	-4275 Mar 12 j 23:49	18° $\text{♁}$ 59'10	-2°20'46	minimum elong	-4269 Jun 11 j 23:57	15° $\text{♁}$ 15'38	0°33'21
minimum elong	-4275 Mar 12 j 23:48	18° $\text{♁}$ 59'10	2°20'54	max. Earth dist.	-4269 Jun 12 j 15:21	15° $\text{♁}$ 20'29	10.30928 AU
max. Earth dist.	-4275 Mar 13 j 10:39	19° $\text{♁}$ 02'47	9.86695 AU	morning rise	-4269 Jun 29 j 19:43	17° $\text{♁}$ 29'31	
morning rise	-4275 Mar 31 j 00:38	21° $\text{♁}$ 22'27		retrograde	-4269 Oct 08 j 21:30	25° $\text{♁}$ 08'46	
	-4275 Jul 11 j 01:46	0° $\text{♁}$		opposition	-4269 Dec 14 j 18:36	21° $\text{♁}$ 45'00	-0°21'40
retrograde	-4275 Jul 16 j 16:26	0° $\text{♁}$ 01'46		min. Earth dist.	-4269 Dec 14 j 07:48	21° $\text{♁}$ 47'10	8.38329 AU
	-4275 Jul 22 j 07:05	30° $\text{♁}$		direct	-4268 Feb 21 j 19:05	18° $\text{♁}$ 16'37	
opposition	-4275 Sep 21 j 16:37	26° $\text{♁}$ 30'09	-2°58'59	evening set	-4268 Jun 06 j 23:21	26° $\text{♁}$ 09'40	
min. Earth dist.	-4275 Sep 21 j 07:07	26° $\text{♁}$ 32'08	7.85918 AU				
direct	-4275 Nov 26 j 12:04	23° $\text{♁}$ 01'25		conjunction	-4268 Jun 24 j 19:25	28° $\text{♁}$ 21'31	-0°01'00
	-4274 Feb 27 j 12:42	0° $\text{♁}$		minimum elong	-4268 Jun 24 j 19:26	28° $\text{♁}$ 21'32	0°00'51
evening set	-4274 Mar 10 j 18:45	1° $\text{♁}$ 26'43		behind sun begin	-4268 Jun 24 j 12:11	28° $\text{♁}$ 19'18	
				behind sun end	-4268 Jun 25 j 02:40	28° $\text{♁}$ 23'45	
conjunction	-4274 Mar 28 j 18:59	3° $\text{♁}$ 49'49	-2°22'10	max. Earth dist.	-4268 Jun 25 j 07:42	28° $\text{♁}$ 25'19	10.46080 AU
minimum elong	-4274 Mar 28 j 19:00	3° $\text{♁}$ 49'49	2°22'16	asc. node	-4268 Jul 06 j 05:40	29° $\text{♁}$ 46'20	
max. Earth dist.	-4274 Mar 29 j 09:03	3° $\text{♁}$ 54'30	9.85627 AU		-4268 Jul 08 j 02:13	0° $\text{♁}$	
morning rise	-4274 Apr 15 j 21:32	6° $\text{♁}$ 13'36		morning rise	-4268 Jul 12 j 10:49	0° $\text{♁}$ 31'53	
retrograde	-4274 Jul 31 j 18:41	14° $\text{♁}$ 49'52		retrograde	-4268 Oct 20 j 13:55	7° $\text{♁}$ 58'27	
opposition	-4274 Oct 06 j 10:42	11° $\text{♁}$ 18'45	-2°54'43	opposition	-4268 Dec 26 j 19:41	4° $\text{♁}$ 36'27	0°18'09

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodiens AG 18-Feb-2025 14:23, page 12

Attention, astronomical year style is used: The year -4268 in astronomical counting style is the year 4269 BCE in historical counting style.

min. Earth dist.	-4268 Dec 26 j 10:33	4° $\Pi$ 38'14	8.53663 AU	opposition	-4261 Mar 08 j 13:26	14° $\Omega$ 21'36	2°51'10
direct	-4267 Mar 06 j 12:34	1° $\Pi$ 09'06		min. Earth dist.	-4261 Mar 08 j 19:57	14° $\Omega$ 20'24	9.21324 AU
evening set	-4267 Jun 20 j 09:52	8° $\Pi$ 51'51		direct	-4261 May 19 j 10:40	11° $\Omega$ 01'37	
					-4261 Aug 01 j 18:44	15° $\Omega$	
conjunction	-4267 Jul 08 j 01:21	11° $\Pi$ 00'15	0°30'37	evening set	-4261 Aug 30 j 02:15	18° $\Omega$ 00'20	
minimum elong	-4267 Jul 08 j 01:20	11° $\Pi$ 00'14	0°30'47				
max. Earth dist.	-4267 Jul 08 j 10:41	11° $\Pi$ 03'06	10.61409 AU	conjunction	-4261 Sep 15 j 14:23	19° $\Omega$ 53'57	2°23'30
morning rise	-4267 Jul 25 j 11:42	13° $\Pi$ 07'03		minimum elong	-4261 Sep 15 j 14:22	19° $\Omega$ 53'57	2°23'38
retrograde	-4267 Nov 01 j 20:12	20° $\Pi$ 22'20		max. Earth dist.	-4261 Sep 15 j 05:06	19° $\Omega$ 51'16	11.23050 AU
opposition	-4266 Jan 08 j 12:43	17° $\Pi$ 01'57	0°55'41	morning rise	-4261 Oct 01 j 23:30	21° $\Omega$ 46'47	
min. Earth dist.	-4266 Jan 08 j 05:32	17° $\Pi$ 03'21	8.68814 AU	retrograde	-4260 Jan 08 j 23:52	28° $\Omega$ 32'33	
direct	-4266 Mar 19 j 21:31	13° $\Pi$ 35'49		opposition	-4260 Mar 19 j 05:24	25° $\Omega$ 17'12	2°56'23
evening set	-4266 Jul 03 j 08:15	21° $\Pi$ 08'40		min. Earth dist.	-4260 Mar 19 j 14:53	25° $\Omega$ 15'29	9.24480 AU
				direct	-4260 May 30 j 01:25	21° $\Omega$ 58'06	
conjunction	-4266 Jul 20 j 18:36	23° $\Pi$ 13'39	0°59'50	evening set	-4260 Sep 09 j 02:53	28° $\Omega$ 53'51	
minimum elong	-4266 Jul 20 j 18:34	23° $\Pi$ 13'38	1°00'02		-4260 Sep 18 j 18:32	0° $\Pi$	
max. Earth dist.	-4266 Jul 21 j 01:13	23° $\Pi$ 15'38	10.76165 AU	conjunction	-4260 Sep 25 j 12:44	0° $\Pi$ 46'49	2°25'12
morning rise	-4266 Aug 06 j 23:31	25° $\Pi$ 17'02		minimum elong	-4260 Sep 25 j 12:44	0° $\Pi$ 46'49	2°25'18
	-4266 Sep 21 j 08:28	0° $\Xi$		max. Earth dist.	-4260 Sep 25 j 00:13	0° $\Pi$ 43'11	11.24752 AU
retrograde	-4266 Nov 13 j 20:06	2° $\Xi$ 22'44		morning rise	-4260 Oct 11 j 20:40	2° $\Pi$ 39'14	
	-4265 Jan 08 j 13:27	30° $\kappa$ $\Pi$		retrograde	-4259 Jan 19 j 07:06	9° $\Pi$ 26'22	
opposition	-4265 Jan 20 j 22:37	29° $\Pi$ 03'51	1°29'29	opposition	-4259 Mar 30 j 21:22	6° $\Pi$ 10'48	2°55'16
min. Earth dist.	-4265 Jan 20 j 18:19	29° $\Pi$ 04'40	8.83089 AU	min. Earth dist.	-4259 Mar 31 j 09:13	6° $\Pi$ 08'38	9.24739 AU
direct	-4265 Apr 01 j 20:00	25° $\Pi$ 38'59		direct	-4259 Jun 10 j 13:34	2° $\Pi$ 52'22	
	-4265 Jun 18 j 01:08	0° $\Xi$		evening set	-4259 Sep 20 j 01:36	9° $\Pi$ 46'35	
evening set	-4265 Jul 15 j 19:20	3° $\Xi$ 02'42					
conjunction	-4265 Aug 02 j 00:20	5° $\Xi$ 04'31	1°25'41	conjunction	-4259 Oct 06 j 10:19	11° $\Pi$ 39'27	2°21'39
minimum elong	-4265 Aug 02 j 00:17	5° $\Xi$ 04'30	1°25'53	minimum elong	-4259 Oct 06 j 10:20	11° $\Pi$ 39'27	2°21'43
max. Earth dist.	-4265 Aug 02 j 03:36	5° $\Xi$ 05'29	10.89722 AU	max. Earth dist.	-4259 Oct 05 j 20:07	11° $\Pi$ 35'20	11.23563 AU
morning rise	-4265 Aug 19 j 00:02	7° $\Xi$ 04'48		morning rise	-4259 Oct 22 j 17:57	13° $\Pi$ 32'03	
retrograde	-4265 Nov 25 j 13:07	14° $\Xi$ 02'46		retrograde	-4258 Jan 30 j 19:47	20° $\Pi$ 22'17	
opposition	-4264 Feb 02 j 02:31	10° $\Xi$ 45'09	1°58'29	opposition	-4258 Apr 11 j 14:54	17° $\Pi$ 06'09	2°47'51
min. Earth dist.	-4264 Feb 02 j 01:37	10° $\Xi$ 45'19	8.95918 AU	min. Earth dist.	-4258 Apr 12 j 03:41	17° $\Pi$ 03'50	9.22082 AU
direct	-4264 Apr 13 j 08:39	7° $\Xi$ 21'36		direct	-4258 Jun 22 j 02:18	13° $\Pi$ 48'11	
evening set	-4264 Jul 26 j 20:17	14° $\Xi$ 37'12		evening set	-4258 Oct 01 j 00:05	20° $\Pi$ 42'13	
conjunction	-4264 Aug 12 j 20:03	16° $\Xi$ 36'13	1°47'24	conjunction	-4258 Oct 17 j 08:44	22° $\Pi$ 35'36	2°12'55
minimum elong	-4264 Aug 12 j 20:00	16° $\Xi$ 36'12	1°47'36	minimum elong	-4258 Oct 17 j 08:46	22° $\Pi$ 35'36	2°12'58
max. Earth dist.	-4264 Aug 12 j 19:04	16° $\Xi$ 35'55	11.01569 AU	max. Earth dist.	-4258 Oct 16 j 17:53	22° $\Pi$ 31'16	11.19499 AU
morning rise	-4264 Aug 29 j 15:06	18° $\Xi$ 33'52		morning rise	-4258 Nov 02 j 17:00	24° $\Pi$ 28'58	
retrograde	-4264 Dec 05 j 23:26	25° $\Xi$ 25'59			-4258 Dec 31 j 07:52	0° $\Omega$	
opposition	-4263 Feb 13 j 01:23	22° $\Xi$ 09'23	2°22'02	retrograde	-4257 Feb 11 j 12:14	1° $\Omega$ 23'58	
min. Earth dist.	-4263 Feb 13 j 03:25	22° $\Xi$ 09'00	9.06810 AU		-4257 Mar 26 j 22:16	30° $\kappa$ $\Pi$	
direct	-4263 Apr 25 j 16:27	18° $\Xi$ 47'05		opposition	-4257 Apr 23 j 11:11	28° $\Pi$ 06'58	2°34'17
evening set	-4263 Aug 07 j 12:44	25° $\Xi$ 55'49		min. Earth dist.	-4257 Apr 24 j 00:43	28° $\Pi$ 04'30	9.16572 AU
				direct	-4257 Jul 03 j 12:52	24° $\Pi$ 49'13	
conjunction	-4263 Aug 24 j 07:50	27° $\Xi$ 52'28	2°04'28		-4257 Sep 26 j 08:45	0° $\Omega$	
minimum elong	-4263 Aug 24 j 07:48	27° $\Xi$ 52'28	2°04'39	evening set	-4257 Oct 12 j 00:31	1° $\Omega$ 44'32	
max. Earth dist.	-4263 Aug 24 j 03:15	27° $\Xi$ 51'08	11.11276 AU				
morning rise	-4263 Sep 09 j 22:48	29° $\Xi$ 47'57		conjunction	-4257 Oct 28 j 09:55	3° $\Omega$ 38'59	1°59'11
	-4263 Sep 11 j 17:09	0° $\Omega$		minimum elong	-4257 Oct 28 j 09:58	3° $\Omega$ 39'00	1°59'11
retrograde	-4263 Dec 17 j 08:46	6° $\Omega$ 36'09		max. Earth dist.	-4257 Oct 27 j 17:37	3° $\Omega$ 34'13	11.12664 AU
opposition	-4262 Feb 24 j 20:26	3° $\Omega$ 20'15	2°39'41	morning rise	-4257 Nov 13 j 19:57	5° $\Omega$ 33'44	
min. Earth dist.	-4262 Feb 25 j 00:31	3° $\Omega$ 19'30	9.15372 AU	retrograde	-4256 Feb 23 j 10:11	12° $\Omega$ 35'05	
	-4262 May 03 j 12:59	30° $\kappa$ $\Xi$		opposition	-4256 May 04 j 11:09	9° $\Omega$ 16'56	2°14'45
direct	-4262 May 07 j 16:51	29° $\Xi$ 59'11		min. Earth dist.	-4256 May 05 j 02:02	9° $\Omega$ 14'12	9.08353 AU
	-4262 May 11 j 20:21	0° $\Omega$		direct	-4256 Jul 14 j 02:00	5° $\Omega$ 59'06	
evening set	-4262 Aug 18 j 22:11	7° $\Omega$ 02'15		evening set	-4256 Oct 22 j 04:34	12° $\Omega$ 57'17	
conjunction	-4262 Sep 04 j 13:26	8° $\Omega$ 57'07	2°16'34	conjunction	-4256 Nov 07 j 15:35	14° $\Omega$ 53'22	1°40'40
minimum elong	-4262 Sep 04 j 13:24	8° $\Omega$ 57'06	2°16'43	minimum elong	-4256 Nov 07 j 15:38	14° $\Omega$ 53'23	1°40'38
max. Earth dist.	-4262 Sep 04 j 06:48	8° $\Omega$ 55'12	11.18514 AU	max. Earth dist.	-4256 Nov 06 j 21:49	14° $\Omega$ 48'07	11.03227 AU
morning rise	-4262 Sep 21 j 00:57	10° $\Omega$ 50'59		morning rise	-4256 Nov 24 j 04:22	16° $\Omega$ 50'02	
	-4262 Oct 31 j 20:07	15° $\Omega$		retrograde	-4255 Mar 06 j 15:05	23° $\Omega$ 59'22	
retrograde	-4262 Dec 28 j 16:06	17° $\Omega$ 37'04		opposition	-4255 May 16 j 16:11	20° $\Omega$ 39'49	1°49'36
	-4261 Feb 27 j 18:42	15° $\kappa$ $\Omega$		min. Earth dist.	-4255 May 17 j 07:47	20° $\Omega$ 36'56	8.97627 AU

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 13

Attention, astronomical year style is used: The year -4255 in astronomical counting style is the year 4256 BCE in historical counting style.

direct	-4255 Jul 25 j 18:22	17° $\Omega$ 21'39		max. Earth dist.	-4249 Jan 20 j 23:52	29° $\Upsilon$ 24'07	10.16790 AU
evening set	-4255 Nov 02 j 14:03	24° $\Omega$ 24'19			-4249 Jan 25 j 14:40	0° $\Upsilon$	
max. Earth dist.	-4255 Nov 18 j 10:15	26° $\Omega$ 17'22	10.91427 AU	morning rise	-4249 Feb 07 j 18:51	1° $\Upsilon$ 41'24	
				retrograde	-4249 May 26 j 10:41	10° $\Upsilon$ 00'53	
conjunction	-4255 Nov 19 j 03:37	26° $\Omega$ 22'34	1°17'48	opposition	-4249 Aug 03 j 08:34	6° $\Upsilon$ 30'54	-1°49'10
minimum elong	-4255 Nov 19 j 03:39	26° $\Omega$ 22'35	1°17'43	min. Earth dist.	-4249 Aug 03 j 10:52	6° $\Upsilon$ 30'26	8.10118 AU
morning rise	-4255 Dec 05 j 19:44	28° $\Omega$ 21'41		direct	-4249 Oct 08 j 20:08	3° $\Upsilon$ 06'05	
	-4255 Dec 20 j 03:18	0° $\mathbb{M}$		evening set	-4248 Jan 18 j 03:18	11° $\Upsilon$ 04'24	
retrograde	-4254 Mar 19 j 04:19	5° $\mathbb{M}$ 40'41					
opposition	-4254 May 29 j 03:23	2° $\mathbb{M}$ 19'30	1°19'18	conjunction	-4248 Feb 04 j 15:50	13° $\Upsilon$ 21'20	-1°40'21
min. Earth dist.	-4254 May 29 j 18:09	2° $\mathbb{M}$ 16'44	8.84728 AU	minimum elong	-4248 Feb 04 j 15:46	13° $\Upsilon$ 21'19	1°40'33
	-4254 Jul 02 j 13:55	30° $\mathbb{R}$ $\Omega$		max. Earth dist.	-4248 Feb 04 j 15:39	13° $\Upsilon$ 21'16	10.04006 AU
direct	-4254 Aug 06 j 16:16	29° $\Omega$ 00'45		morning rise	-4248 Feb 22 j 09:24	15° $\Upsilon$ 39'58	
	-4254 Sep 09 j 21:22	0° $\mathbb{M}$		retrograde	-4248 Jun 09 j 10:49	24° $\Upsilon$ 09'30	
evening set	-4254 Nov 14 j 07:19	6° $\mathbb{M}$ 09'35		opposition	-4248 Aug 16 j 18:20	20° $\Upsilon$ 38'18	-2°20'34
max. Earth dist.	-4254 Nov 30 j 08:09	8° $\mathbb{M}$ 05'38	10.77692 AU	min. Earth dist.	-4248 Aug 16 j 16:28	20° $\Upsilon$ 38'41	7.98631 AU
				direct	-4248 Oct 21 j 20:08	17° $\Upsilon$ 12'02	
conjunction	-4254 Dec 01 j 00:07	8° $\mathbb{M}$ 10'29	0°51'07	evening set	-4247 Jan 31 j 22:58	25° $\Upsilon$ 20'54	
minimum elong	-4254 Dec 01 j 00:09	8° $\mathbb{M}$ 10'30	0°51'00				
morning rise	-4254 Dec 17 j 20:08	10° $\mathbb{M}$ 12'29		conjunction	-4247 Feb 18 j 15:18	27° $\Upsilon$ 40'29	-2°02'20
	-4253 Feb 01 j 04:58	15° $\mathbb{M}$		minimum elong	-4247 Feb 18 j 15:15	27° $\Upsilon$ 40'28	2°02'30
retrograde	-4253 Apr 01 j 05:09	17° $\mathbb{M}$ 42'32		max. Earth dist.	-4247 Feb 18 j 20:00	27° $\Upsilon$ 42'03	9.93835 AU
	-4253 Jun 01 j 22:58	15° $\mathbb{R}$ $\mathbb{M}$		morning rise	-4247 Mar 08 j 12:10	0° $\approx$ 01'37	
opposition	-4253 Jun 10 j 21:39	14° $\mathbb{M}$ 19'35	0°44'38		-4247 Mar 08 j 07:11	0° $\approx$	
min. Earth dist.	-4253 Jun 11 j 10:33	14° $\mathbb{M}$ 17'08	8.70196 AU	retrograde	-4247 Jun 24 j 16:05	8° $\approx$ 38'20	
direct	-4253 Aug 18 j 19:24	11° $\mathbb{M}$ 00'00		opposition	-4247 Aug 31 j 09:35	5° $\approx$ 06'21	-2°43'55
	-4253 Oct 28 j 10:58	15° $\mathbb{M}$		min. Earth dist.	-4247 Aug 31 j 03:52	5° $\approx$ 07'32	7.90116 AU
evening set	-4253 Nov 26 j 10:15	18° $\mathbb{M}$ 16'33		direct	-4247 Nov 05 j 05:33	1° $\approx$ 38'43	
				evening set	-4246 Feb 16 j 05:26	9° $\approx$ 56'28	
conjunction	-4253 Dec 13 j 06:39	20° $\mathbb{M}$ 20'28	0°21'27				
minimum elong	-4253 Dec 13 j 06:40	20° $\mathbb{M}$ 20'28	0°21'18	conjunction	-4246 Mar 06 j 01:17	12° $\approx$ 18'09	-2°16'56
max. Earth dist.	-4253 Dec 12 j 15:50	20° $\mathbb{M}$ 15'53	10.62627 AU	minimum elong	-4246 Mar 06 j 01:16	12° $\approx$ 18'08	2°17'04
morning rise	-4253 Dec 30 j 07:06	22° $\mathbb{M}$ 25'44		max. Earth dist.	-4246 Mar 06 j 10:33	12° $\approx$ 21'14	9.86969 AU
	-4252 Apr 01 j 02:55	0° $\Upsilon$		morning rise	-4246 Mar 24 j 00:58	14° $\approx$ 41'04	
retrograde	-4252 Apr 13 j 16:04	0° $\Upsilon$ 07'51			-4246 Mar 26 j 11:08	15° $\approx$	
	-4252 Apr 26 j 04:16	30° $\mathbb{R}$ $\mathbb{M}$		retrograde	-4246 Jul 09 j 22:43	23° $\approx$ 21'10	
opposition	-4252 Jun 22 j 23:55	26° $\mathbb{M}$ 43'03	0°06'42	opposition	-4246 Sep 15 j 04:04	19° $\approx$ 48'53	-2°56'59
min. Earth dist.	-4252 Jun 23 j 10:56	26° $\mathbb{M}$ 40'56	8.54692 AU	min. Earth dist.	-4246 Sep 14 j 19:12	19° $\approx$ 50'44	7.85149 AU
desc. node	-4252 Aug 26 j 15:24	23° $\mathbb{M}$ 23'04		direct	-4246 Nov 19 j 22:01	16° $\approx$ 20'03	
direct	-4252 Aug 30 j 04:34	23° $\mathbb{M}$ 22'24		evening set	-4245 Mar 03 j 19:42	24° $\approx$ 44'11	
	-4252 Dec 01 j 10:06	0° $\Upsilon$					
evening set	-4252 Dec 08 j 00:36	0° $\Upsilon$ 48'07		conjunction	-4245 Mar 21 j 18:41	27° $\approx$ 07'12	-2°22'45
max. Earth dist.	-4252 Dec 24 j 11:50	2° $\Upsilon$ 51'12	10.46928 AU	minimum elong	-4245 Mar 21 j 18:41	27° $\approx$ 07'12	2°22'51
				max. Earth dist.	-4245 Mar 22 j 07:43	27° $\approx$ 11'33	9.83891 AU
conjunction	-4252 Dec 25 j 00:48	2° $\Upsilon$ 55'16	-0°10'12	morning rise	-4245 Apr 08 j 20:30	29° $\approx$ 31'06	
minimum elong	-4252 Dec 25 j 00:48	2° $\Upsilon$ 55'15	0°10'22		-4245 Apr 12 j 13:20	0° $\mathbb{H}$	
behind sun begin	-4252 Dec 24 j 19:10	2° $\Upsilon$ 53'31		retrograde	-4245 Jul 25 j 03:50	8° $\mathbb{H}$ 10'11	
behind sun end	-4252 Dec 25 j 06:25	2° $\Upsilon$ 57'00		opposition	-4245 Sep 29 j 23:07	4° $\mathbb{H}$ 38'08	-2°58'21
morning rise	-4251 Jan 11 j 05:53	5° $\Upsilon$ 03'59		min. Earth dist.	-4245 Sep 29 j 12:01	4° $\mathbb{H}$ 40'28	7.84081 AU
retrograde	-4251 Apr 27 j 11:45	12° $\Upsilon$ 58'50		direct	-4245 Dec 04 j 19:51	1° $\mathbb{H}$ 08'22	
opposition	-4251 Jul 06 j 10:33	9° $\Upsilon$ 32'11	-0°32'58	evening set	-4244 Mar 18 j 13:34	9° $\mathbb{H}$ 35'40	
min. Earth dist.	-4251 Jul 06 j 19:24	9° $\Upsilon$ 30'27	8.38967 AU				
direct	-4251 Sep 12 j 00:17	6° $\Upsilon$ 10'14		conjunction	-4244 Apr 05 j 15:07	11° $\mathbb{H}$ 59'10	-2°19'08
evening set	-4251 Dec 21 j 03:43	13° $\Upsilon$ 46'17		minimum elong	-4244 Apr 05 j 15:09	11° $\mathbb{H}$ 59'11	2°19'12
				max. Earth dist.	-4244 Apr 06 j 06:59	12° $\mathbb{H}$ 04'28	9.84835 AU
conjunction	-4250 Jan 07 j 08:00	15° $\Upsilon$ 56'48	-0°42'12	morning rise	-4244 Apr 23 j 18:18	14° $\mathbb{H}$ 23'07	
minimum elong	-4250 Jan 07 j 07:58	15° $\Upsilon$ 56'48	0°42'23	retrograde	-4244 Aug 08 j 04:06	22° $\mathbb{H}$ 56'54	
max. Earth dist.	-4250 Jan 06 j 22:15	15° $\Upsilon$ 53'42	10.31374 AU	opposition	-4244 Oct 13 j 16:22	19° $\mathbb{H}$ 25'36	-2°47'51
morning rise	-4250 Jan 24 j 17:37	18° $\Upsilon$ 09'02		min. Earth dist.	-4244 Oct 13 j 03:41	19° $\mathbb{H}$ 28'16	7.86999 AU
retrograde	-4250 May 11 j 18:15	26° $\Upsilon$ 16'37		direct	-4244 Dec 18 j 20:24	15° $\mathbb{H}$ 55'16	
opposition	-4250 Jul 20 j 05:35	22° $\Upsilon$ 48'12	-1°12'24	evening set	-4243 Apr 03 j 06:31	24° $\mathbb{H}$ 22'08	
min. Earth dist.	-4250 Jul 20 j 11:35	22° $\Upsilon$ 47'00	8.23834 AU				
direct	-4250 Sep 25 j 05:38	19° $\Upsilon$ 24'50		conjunction	-4243 Apr 21 j 09:52	26° $\mathbb{H}$ 45'13	-2°06'25
evening set	-4249 Jan 03 j 20:31	27° $\Upsilon$ 11'57		minimum elong	-4243 Apr 21 j 09:56	26° $\mathbb{H}$ 45'15	2°06'26
				max. Earth dist.	-4243 Apr 22 j 03:43	26° $\mathbb{H}$ 51'08	9.89739 AU
conjunction	-4249 Jan 21 j 05:01	29° $\Upsilon$ 25'47	-1°12'57	morning rise	-4243 May 09 j 13:31	29° $\mathbb{H}$ 08'18	
minimum elong	-4249 Jan 21 j 04:58	29° $\Upsilon$ 25'47	1°13'08		-4243 May 16 j 06:45	0° $\mathbb{Y}$	

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 14

Attention, astronomical year style is used: The year -4243 in astronomical counting style is the year 4244 BCE in historical counting style.

retrograde	-4243 Aug 22 j 20:33	7°♈33'02		minimum elong	-4237 Jul 15 j 09:27	17°♊54'20	0°46'55
opposition	-4243 Oct 28 j 05:10	4°♈02'56	-2°26'29	max. Earth dist.	-4237 Jul 15 j 17:57	17°♊56'54	10.69840 AU
min. Earth dist.	-4243 Oct 27 j 15:21	4°♈05'50	7.93697 AU	morning rise	-4237 Aug 01 j 16:59	19°♊59'18	
direct	-4242 Jan 02 j 20:57	0°♈32'25		retrograde	-4237 Nov 08 j 19:29	27°♊09'27	
evening set	-4242 Apr 18 j 18:58	8°♈55'34		opposition	-4236 Jan 15 j 16:55	23°♊50'19	1°14'28
				min. Earth dist.	-4236 Jan 15 j 11:18	23°♊51'24	8.77185 AU
conjunction	-4242 May 06 j 23:04	11°♈17'20	-1°45'47	direct	-4236 Mar 26 j 07:32	20°♊25'18	
minimum elong	-4242 May 06 j 23:08	11°♈17'21	1°45'46	evening set	-4236 Jul 09 j 13:35	27°♊53'19	
max. Earth dist.	-4242 May 07 j 17:47	11°♈23'28	9.98243 AU				
morning rise	-4242 May 25 j 02:00	13°♈38'37		conjunction	-4236 Jul 26 j 20:57	29°♊56'32	1°14'17
retrograde	-4242 Sep 06 j 02:43	21°♈51'34		minimum elong	-4236 Jul 26 j 20:54	29°♊56'31	1°14'28
opposition	-4242 Nov 11 j 11:28	18°♈23'03	-1°56'20	max. Earth dist.	-4236 Jul 27 j 01:20	29°♊57'50	10.84317 AU
min. Earth dist.	-4242 Nov 10 j 21:03	18°♈26'03	8.03703 AU		-4236 Jul 27 j 08:34	0°♊	
direct	-4241 Jan 17 j 18:38	14°♈52'46		morning rise	-4236 Aug 12 j 23:12	1°♊58'12	
evening set	-4241 May 03 j 23:22	23°♈09'23		retrograde	-4236 Nov 19 j 15:20	8°♊59'38	
				opposition	-4235 Jan 26 j 23:40	5°♊41'54	1°45'48
conjunction	-4241 May 22 j 02:52	25°♈29'00	-1°19'05	min. Earth dist.	-4235 Jan 26 j 20:32	5°♊42'30	8.90968 AU
minimum elong	-4241 May 22 j 02:56	25°♈29'02	1°19'01	direct	-4235 Apr 08 j 01:59	2°♊18'13	
max. Earth dist.	-4241 May 22 j 21:32	25°♈35'02	10.09749 AU	evening set	-4235 Jul 21 j 19:35	9°♊37'33	
morning rise	-4241 Jun 09 j 03:48	27°♈47'44					
	-4241 Jun 27 j 03:52	0°♊		conjunction	-4235 Aug 07 j 21:49	11°♊37'47	1°37'59
retrograde	-4241 Sep 19 j 21:45	5°♊47'24		minimum elong	-4235 Aug 07 j 21:46	11°♊37'46	1°38'11
opposition	-4241 Nov 25 j 10:09	2°♊20'43	-1°20'03	max. Earth dist.	-4235 Aug 07 j 22:57	11°♊38'07	10.97134 AU
min. Earth dist.	-4241 Nov 24 j 19:42	2°♊23'41	8.16355 AU	morning rise	-4235 Aug 24 j 18:58	13°♊36'34	
	-4241 Dec 26 j 22:30	30°♊		retrograde	-4235 Dec 01 j 06:14	20°♊31'15	
direct	-4240 Feb 01 j 09:34	28°♈51'04		opposition	-4234 Feb 08 j 01:04	17°♊14'40	2°11'55
	-4240 Mar 08 j 16:22	0°♊		min. Earth dist.	-4234 Feb 08 j 01:15	17°♊14'38	9.02807 AU
evening set	-4240 May 17 j 17:01	6°♊59'02		direct	-4234 Apr 20 j 12:31	13°♊52'15	
				evening set	-4234 Aug 02 j 16:20	21°♊04'08	
conjunction	-4240 Jun 04 j 18:33	9°♊15'52	-0°48'27				
minimum elong	-4240 Jun 04 j 18:35	9°♊15'53	0°48'20	conjunction	-4234 Aug 19 j 13:38	23°♊01'49	1°57'14
max. Earth dist.	-4240 Jun 05 j 12:25	9°♊21'33	10.23503 AU	minimum elong	-4234 Aug 19 j 13:35	23°♊01'48	1°57'25
morning rise	-4240 Jun 22 j 16:17	11°♊31'27		max. Earth dist.	-4234 Aug 19 j 11:05	23°♊01'04	11.07758 AU
	-4240 Jul 22 j 10:08	15°♊		morning rise	-4234 Sep 05 j 06:13	24°♊58'12	
retrograde	-4240 Oct 02 j 06:54	19°♊17'26			-4234 Oct 26 j 14:27	0°♊	
min. Earth dist.	-4240 Dec 07 j 10:57	15°♊55'26	8.30861 AU	retrograde	-4234 Dec 12 j 16:56	1°♊48'08	
opposition	-4240 Dec 08 j 00:22	15°♊52'44	-0°40'26		-4233 Jan 30 j 11:50	30°♊	
	-4240 Dec 19 j 00:38	15°♊		opposition	-4233 Feb 19 j 22:22	28°♊32'23	2°32'19
direct	-4239 Feb 14 j 16:04	12°♊23'59		min. Earth dist.	-4233 Feb 20 j 02:23	28°♊31'38	9.12276 AU
	-4239 Apr 12 j 02:16	15°♊		direct	-4233 May 02 j 14:40	25°♊11'10	
evening set	-4239 May 31 j 22:50	20°♊22'08			-4233 Jul 24 j 07:25	0°♊	
				evening set	-4233 Aug 14 j 05:25	2°♊16'53	
conjunction	-4239 Jun 18 j 21:05	22°♊35'42	-0°16'04				
minimum elong	-4239 Jun 18 j 21:06	22°♊35'43	0°15'55	conjunction	-4233 Aug 30 j 22:17	4°♊12'32	2°11'38
max. Earth dist.	-4239 Jun 19 j 13:06	22°♊40'42	10.38663 AU	minimum elong	-4233 Aug 30 j 22:15	4°♊12'31	2°11'48
morning rise	-4239 Jul 06 j 14:37	24°♊47'49		max. Earth dist.	-4233 Aug 30 j 15:24	4°♊10'32	11.15881 AU
	-4239 Aug 24 j 03:51	0°♊		morning rise	-4233 Sep 16 j 11:17	6°♊07'06	
retrograde	-4239 Oct 15 j 05:42	2°♊20'33		retrograde	-4233 Dec 23 j 23:36	12°♊54'09	
	-4239 Dec 08 j 00:01	30°♊		opposition	-4232 Mar 02 j 16:39	9°♊38'52	2°46'38
opposition	-4239 Dec 21 j 05:52	28°♊57'50	-0°00'06	min. Earth dist.	-4232 Mar 02 j 23:48	9°♊37'33	9.19129 AU
min. Earth dist.	-4239 Dec 20 j 18:48	29°♊00'02	8.46381 AU	direct	-4232 May 13 j 12:32	6°♊18'38	
asc. node	-4239 Dec 22 j 05:39	28°♊53'07		evening set	-4232 Aug 24 j 12:14	13°♊19'31	
direct	-4238 Feb 28 j 13:27	25°♊30'13			-4232 Sep 08 j 02:22	15°♊	
	-4238 May 16 j 14:04	0°♊					
evening set	-4238 Jun 14 j 16:09	3°♊18'04		conjunction	-4232 Sep 10 j 01:37	15°♊13'40	2°20'56
				minimum elong	-4232 Sep 10 j 01:36	15°♊13'40	2°21'04
conjunction	-4238 Jul 02 j 09:59	5°♊28'09	0°16'15	max. Earth dist.	-4232 Sep 09 j 15:33	15°♊10'46	11.21311 AU
minimum elong	-4238 Jul 02 j 09:58	5°♊28'09	0°16'25	morning rise	-4232 Sep 26 j 11:54	17°♊06'59	
max. Earth dist.	-4238 Jul 02 j 22:36	5°♊32'01	10.54376 AU	retrograde	-4231 Jan 03 j 08:00	23°♊52'58	
morning rise	-4238 Jul 19 j 22:39	7°♊36'40		opposition	-4231 Mar 14 j 09:10	20°♊37'45	2°54'44
retrograde	-4238 Oct 27 j 16:48	14°♊57'18		min. Earth dist.	-4231 Mar 14 j 18:18	20°♊36'06	9.23180 AU
opposition	-4237 Jan 03 j 03:14	11°♊36'29	0°38'46	direct	-4231 May 25 j 07:03	17°♊18'21	
min. Earth dist.	-4237 Jan 02 j 18:59	11°♊38'06	8.62083 AU	evening set	-4231 Sep 04 j 14:33	24°♊15'40	
direct	-4237 Mar 14 j 03:13	8°♊10'08					
evening set	-4237 Jun 27 j 20:48	15°♊47'47		conjunction	-4231 Sep 21 j 01:27	26°♊08'56	2°25'01
				minimum elong	-4231 Sep 21 j 01:27	26°♊08'56	2°25'08
conjunction	-4237 Jul 15 j 09:29	17°♊54'20	0°46'45	max. Earth dist.	-4231 Sep 20 j 13:37	26°♊05'31	11.23899 AU

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 15

Attention, astronomical year style is used: The year -4231 in astronomical counting style is the year 4232 BCE in historical counting style.

morning rise	-4231 Oct 07 j 09:47	28° $\Omega$ 01'33		morning rise	-4225 Dec 12 j 20:02	5° $\mathbb{M}$ 07'34	
	-4231 Oct 25 j 11:26	0° $\mathbb{M}$		retrograde	-4224 Mar 25 j 17:14	12° $\mathbb{M}$ 32'46	
retrograde	-4230 Jan 14 j 15:37	4° $\mathbb{M}$ 48'11		opposition	-4224 Jun 04 j 13:17	9° $\mathbb{M}$ 10'06	1°00'44
opposition	-4230 Mar 26 j 01:16	1° $\mathbb{M}$ 32'43	2°56'30	min. Earth dist.	-4224 Jun 05 j 03:07	9° $\mathbb{M}$ 07'29	8.75469 AU
min. Earth dist.	-4230 Mar 26 j 12:13	1° $\mathbb{M}$ 30'43	9.24331 AU	direct	-4224 Aug 12 j 17:55	5° $\mathbb{M}$ 50'23	
	-4230 Apr 17 j 03:12	30° $\mathbb{R}$ $\Omega$		evening set	-4224 Nov 20 j 08:41	13° $\mathbb{M}$ 03'38	
direct	-4230 Jun 05 j 19:52	28° $\Omega$ 13'55			-4224 Dec 06 j 06:59	15° $\mathbb{M}$	
	-4230 Jul 23 j 22:02	0° $\mathbb{M}$					
evening set	-4230 Sep 15 j 14:09	5° $\mathbb{M}$ 09'02		conjunction	-4224 Dec 07 j 03:21	15° $\mathbb{M}$ 06'15	0°35'06
				minimum elong	-4224 Dec 07 j 03:23	15° $\mathbb{M}$ 06'15	0°34'59
conjunction	-4230 Oct 01 j 23:26	7° $\mathbb{M}$ 01'58	2°23'51	max. Earth dist.	-4224 Dec 06 j 12:09	15° $\mathbb{M}$ 01'35	10.68289 AU
minimum elong	-4230 Oct 01 j 23:27	7° $\mathbb{M}$ 01'58	2°23'56	morning rise	-4224 Dec 24 j 01:54	17° $\mathbb{M}$ 10'07	
max. Earth dist.	-4230 Oct 01 j 09:33	6° $\mathbb{M}$ 57'57	11.23596 AU	retrograde	-4223 Apr 07 j 22:08	24° $\mathbb{M}$ 46'53	
morning rise	-4230 Oct 18 j 06:59	8° $\mathbb{M}$ 54'31		opposition	-4223 Jun 17 j 11:52	21° $\mathbb{M}$ 22'30	0°24'06
retrograde	-4229 Jan 26 j 02:30	15° $\mathbb{M}$ 43'29		min. Earth dist.	-4223 Jun 17 j 23:49	21° $\mathbb{M}$ 20'12	8.60712 AU
opposition	-4229 Apr 06 j 18:21	12° $\mathbb{M}$ 27'26	2°51'57	direct	-4223 Aug 25 j 00:58	18° $\mathbb{M}$ 01'57	
min. Earth dist.	-4229 Apr 07 j 07:39	12° $\mathbb{M}$ 25'01	9.22578 AU	evening set	-4223 Dec 02 j 17:23	25° $\mathbb{M}$ 23'36	
direct	-4229 Jun 17 j 08:05	9° $\mathbb{M}$ 09'00					
evening set	-4229 Sep 26 j 12:39	16° $\mathbb{M}$ 03'19		conjunction	-4223 Dec 19 j 15:56	27° $\mathbb{M}$ 29'20	0°04'17
				minimum elong	-4223 Dec 19 j 15:56	27° $\mathbb{M}$ 29'20	0°04'08
conjunction	-4229 Oct 12 j 21:13	17° $\mathbb{M}$ 56'31	2°17'27	behind sun begin	-4223 Dec 19 j 08:57	27° $\mathbb{M}$ 27'11	
minimum elong	-4229 Oct 12 j 21:15	17° $\mathbb{M}$ 56'32	2°17'31	behind sun end	-4223 Dec 19 j 22:55	27° $\mathbb{M}$ 31'29	
max. Earth dist.	-4229 Oct 12 j 04:55	17° $\mathbb{M}$ 51'47	11.20437 AU	max. Earth dist.	-4223 Dec 19 j 03:47	27° $\mathbb{M}$ 25'34	10.53206 AU
morning rise	-4229 Oct 29 j 05:13	19° $\mathbb{M}$ 49'37		morning rise	-4222 Jan 05 j 18:51	29° $\mathbb{M}$ 36'32	
retrograde	-4228 Feb 06 j 14:47	26° $\mathbb{M}$ 42'36			-4222 Jan 09 j 00:08	0° $\mathbb{X}$	
opposition	-4228 Apr 17 j 13:19	23° $\mathbb{M}$ 25'39	2°41'11	desc. node	-4222 Feb 07 j 17:32	3° $\mathbb{X}$ 20'55	
min. Earth dist.	-4228 Apr 18 j 04:14	23° $\mathbb{M}$ 22'56	9.17987 AU	retrograde	-4222 Apr 21 j 13:52	7° $\mathbb{X}$ 25'46	
direct	-4228 Jun 27 j 18:55	20° $\mathbb{M}$ 07'22		opposition	-4222 Jun 30 j 18:42	3° $\mathbb{X}$ 59'38	-0°15'01
evening set	-4228 Oct 06 j 12:01	27° $\mathbb{M}$ 02'23		min. Earth dist.	-4222 Jul 01 j 03:31	3° $\mathbb{X}$ 57'55	8.45434 AU
				direct	-4222 Sep 06 j 16:25	0° $\mathbb{X}$ 38'05	
conjunction	-4228 Oct 22 j 20:59	28° $\mathbb{M}$ 56'25	2°05'58	evening set	-4222 Dec 15 j 14:35	8° $\mathbb{X}$ 09'27	
minimum elong	-4228 Oct 22 j 21:02	28° $\mathbb{M}$ 56'26	2°05'59				
max. Earth dist.	-4228 Oct 22 j 03:53	28° $\mathbb{M}$ 51'25	11.14517 AU	conjunction	-4221 Jan 01 j 17:09	10° $\mathbb{X}$ 18'30	-0°27'51
	-4228 Oct 31 j 22:48	0° $\mathbb{A}$		minimum elong	-4221 Jan 01 j 17:08	10° $\mathbb{X}$ 18'30	0°28'00
morning rise	-4228 Nov 08 j 06:17	0° $\mathbb{A}$ 50'37		max. Earth dist.	-4221 Jan 01 j 08:03	10° $\mathbb{X}$ 15'38	10.37931 AU
retrograde	-4227 Feb 17 j 10:04	7° $\mathbb{A}$ 49'19		morning rise	-4221 Jan 19 j 00:34	12° $\mathbb{X}$ 29'10	
opposition	-4227 Apr 29 j 11:20	4° $\mathbb{A}$ 31'12	2°24'19	retrograde	-4221 May 05 j 17:29	20° $\mathbb{X}$ 31'08	
min. Earth dist.	-4227 Apr 30 j 02:27	4° $\mathbb{A}$ 28'26	9.10696 AU	opposition	-4221 Jul 14 j 09:54	17° $\mathbb{X}$ 03'22	-0°54'50
direct	-4227 Jul 09 j 09:05	1° $\mathbb{A}$ 12'51		min. Earth dist.	-4221 Jul 14 j 15:29	17° $\mathbb{X}$ 02'16	8.30380 AU
evening set	-4227 Oct 17 j 14:05	8° $\mathbb{A}$ 10'04		direct	-4221 Sep 19 j 15:52	13° $\mathbb{X}$ 40'41	
max. Earth dist.	-4227 Nov 02 j 07:44	10° $\mathbb{A}$ 00'36	11.06017 AU	evening set	-4221 Dec 29 j 01:20	21° $\mathbb{X}$ 22'47	
conjunction	-4227 Nov 03 j 00:28	10° $\mathbb{A}$ 05'32	1°49'35	conjunction	-4220 Jan 15 j 07:54	23° $\mathbb{X}$ 35'08	-0°59'24
minimum elong	-4227 Nov 03 j 00:31	10° $\mathbb{A}$ 05'33	1°49'33	minimum elong	-4220 Jan 15 j 07:51	23° $\mathbb{X}$ 35'07	0°59'35
morning rise	-4227 Nov 19 j 11:52	12° $\mathbb{A}$ 01'25		max. Earth dist.	-4220 Jan 15 j 01:55	23° $\mathbb{X}$ 33'13	10.23250 AU
retrograde	-4226 Mar 01 j 13:07	19° $\mathbb{A}$ 07'25		morning rise	-4220 Feb 01 j 19:45	25° $\mathbb{X}$ 49'14	
opposition	-4226 May 11 j 14:01	15° $\mathbb{A}$ 47'57	2°01'38		-4220 Mar 08 j 17:25	0° $\mathbb{B}$	
min. Earth dist.	-4226 May 12 j 04:36	15° $\mathbb{A}$ 45'15	9.00943 AU	retrograde	-4220 May 19 j 06:47	4° $\mathbb{B}$ 03'29	
direct	-4226 Jul 20 j 23:29	12° $\mathbb{A}$ 29'23		opposition	-4220 Jul 27 j 09:32	0° $\mathbb{B}$ 34'17	-1°33'06
evening set	-4226 Oct 28 j 20:50	19° $\mathbb{A}$ 30'19		min. Earth dist.	-4220 Jul 27 j 11:56	0° $\mathbb{B}$ 33'49	8.16361 AU
					-4220 Aug 03 j 13:14	30° $\mathbb{R}$ $\mathbb{X}$	
conjunction	-4226 Nov 14 j 09:18	21° $\mathbb{A}$ 27'42	1°28'37	direct	-4220 Oct 02 j 01:04	27° $\mathbb{X}$ 10'20	
minimum elong	-4226 Nov 14 j 09:21	21° $\mathbb{A}$ 27'43	1°28'32		-4220 Nov 27 j 14:23	0° $\mathbb{B}$	
max. Earth dist.	-4226 Nov 13 j 16:15	21° $\mathbb{A}$ 22'37	10.95217 AU	evening set	-4219 Jan 11 j 01:56	5° $\mathbb{B}$ 03'35	
morning rise	-4226 Nov 30 j 23:48	23° $\mathbb{A}$ 25'49					
	-4225 Feb 12 j 22:10	0° $\mathbb{M}$		conjunction	-4219 Jan 28 j 12:25	7° $\mathbb{B}$ 19'05	-1°28'33
retrograde	-4225 Mar 13 j 22:18	0° $\mathbb{M}$ 40'43		minimum elong	-4219 Jan 28 j 12:22	7° $\mathbb{B}$ 19'04	1°28'44
	-4225 Apr 12 j 08:05	30° $\mathbb{R}$ $\mathbb{A}$		max. Earth dist.	-4219 Jan 28 j 10:17	7° $\mathbb{B}$ 18'24	10.09995 AU
opposition	-4225 May 23 j 22:25	27° $\mathbb{A}$ 19'42	1°33'34	morning rise	-4219 Feb 15 j 04:21	9° $\mathbb{B}$ 36'21	
min. Earth dist.	-4225 May 24 j 12:49	27° $\mathbb{A}$ 17'00	8.89057 AU	retrograde	-4219 Jun 03 j 03:48	18° $\mathbb{B}$ 01'32	
direct	-4225 Aug 01 j 17:01	24° $\mathbb{A}$ 00'40		opposition	-4219 Aug 10 j 16:47	14° $\mathbb{B}$ 31'10	-2°07'13
	-4225 Oct 30 j 20:02	0° $\mathbb{M}$		min. Earth dist.	-4219 Aug 10 j 16:04	14° $\mathbb{B}$ 31'19	8.04209 AU
evening set	-4225 Nov 09 j 10:27	1° $\mathbb{M}$ 06'58		direct	-4219 Oct 15 j 21:27	11° $\mathbb{B}$ 05'55	
max. Earth dist.	-4225 Nov 25 j 08:41	3° $\mathbb{M}$ 01'38	10.82486 AU	evening set	-4218 Jan 25 j 16:07	19° $\mathbb{B}$ 10'00	
conjunction	-4225 Nov 26 j 01:41	3° $\mathbb{M}$ 06'46	1°03'33	conjunction	-4218 Feb 12 j 06:30	21° $\mathbb{B}$ 28'19	-1°53'12
minimum elong	-4225 Nov 26 j 01:43	3° $\mathbb{M}$ 06'47	1°03'27	minimum elong	-4218 Feb 12 j 06:26	21° $\mathbb{B}$ 28'18	1°53'23

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 16

Attention, astronomical year style is used: The year -4218 in astronomical counting style is the year 4219 BCE in historical counting style.

max. Earth dist.	-4218 Feb 12 j 09:05	21° $\text{Z}$ 29'10	9.98993 AU	direct	-4212 Jan 11 j 11:48	8° $\text{Y}$ 45'19	
morning rise	-4218 Mar 02 j 02:01	23° $\text{Z}$ 48'18		evening set	-4212 Apr 26 j 15:25	17° $\text{Y}$ 05'15	
	-4218 Apr 26 j 16:51	0° $\approx$					
retrograde	-4218 Jun 18 j 06:32	2° $\approx$ 21'54		conjunction	-4212 May 14 j 19:20	19° $\text{Y}$ 25'56	-1°31'30
	-4218 Aug 10 j 23:06	30° $\text{R}$ 3		minimum elong	-4212 May 14 j 19:24	19° $\text{Y}$ 25'57	1°31'27
opposition	-4218 Aug 25 j 06:00	28° $\text{Z}$ 50'43	-2°34'27	max. Earth dist.	-4212 May 15 j 13:39	19° $\text{Y}$ 31'53	10.04693 AU
min. Earth dist.	-4218 Aug 25 j 01:59	28° $\text{Z}$ 51'33	7.94697 AU	morning rise	-4212 Jun 01 j 21:12	21° $\text{Y}$ 45'54	
direct	-4218 Oct 30 j 03:52	25° $\text{Z}$ 24'11		retrograde	-4212 Sep 13 j 06:48	29° $\text{Y}$ 51'56	
	-4217 Jan 11 j 03:35	0° $\approx$		opposition	-4212 Nov 18 j 15:48	26° $\text{Y}$ 24'45	-1°36'40
evening set	-4217 Feb 09 j 18:12	3° $\approx$ 37'49		min. Earth dist.	-4212 Nov 18 j 02:38	26° $\text{Y}$ 27'28	8.10595 AU
				direct	-4211 Jan 25 j 06:03	22° $\text{Y}$ 55'02	
conjunction	-4217 Feb 27 j 12:20	5° $\approx$ 58'28	-2°11'17		-4211 May 02 j 12:43	0° $\text{B}$	
minimum elong	-4217 Feb 27 j 12:17	5° $\approx$ 58'27	2°11'27	evening set	-4211 May 11 j 14:33	1° $\text{B}$ 07'22	
max. Earth dist.	-4217 Feb 27 j 19:44	6° $\approx$ 00'55	9.90962 AU				
morning rise	-4217 Mar 17 j 10:51	8° $\approx$ 20'31		conjunction	-4211 May 29 j 17:06	3° $\text{B}$ 25'36	-1°02'20
	-4217 May 16 j 23:45	15° $\approx$		minimum elong	-4211 May 29 j 17:09	3° $\text{B}$ 25'37	1°02'15
retrograde	-4217 Jul 03 j 12:07	16° $\approx$ 59'05		max. Earth dist.	-4211 May 30 j 10:02	3° $\text{B}$ 31'01	10.17057 AU
	-4217 Aug 20 j 18:32	15° $\text{R}$ $\approx$		morning rise	-4211 Jun 16 j 16:29	5° $\text{B}$ 42'44	
opposition	-4217 Sep 08 j 23:22	13° $\approx$ 27'28	-2°52'18	retrograde	-4211 Sep 26 j 20:30	13° $\text{B}$ 35'14	
min. Earth dist.	-4217 Sep 08 j 16:01	13° $\approx$ 29'00	7.88424 AU	opposition	-4211 Dec 02 j 10:16	10° $\text{B}$ 09'48	-0°58'12
direct	-4217 Nov 13 j 17:45	9° $\approx$ 59'44		min. Earth dist.	-4211 Dec 01 j 22:06	10° $\text{B}$ 12'16	8.23906 AU
	-4216 Jan 29 j 06:26	15° $\approx$		direct	-4210 Feb 08 j 17:41	6° $\text{B}$ 40'38	
evening set	-4216 Feb 25 j 05:17	18° $\approx$ 20'44		evening set	-4210 May 26 j 02:22	14° $\text{B}$ 43'44	
					-4210 May 28 j 06:58	15° $\text{B}$	
conjunction	-4216 Mar 14 j 02:46	20° $\approx$ 43'01	-2°21'09				
minimum elong	-4216 Mar 14 j 02:46	20° $\approx$ 43'01	2°21'16	conjunction	-4210 Jun 13 j 02:10	16° $\text{B}$ 58'55	-0°30'28
max. Earth dist.	-4216 Mar 14 j 14:32	20° $\approx$ 46'56	9.86407 AU	minimum elong	-4210 Jun 13 j 02:11	16° $\text{B}$ 58'56	0°30'20
morning rise	-4216 Apr 01 j 03:37	23° $\approx$ 06'22		max. Earth dist.	-4210 Jun 13 j 16:48	17° $\text{B}$ 03'32	10.31238 AU
	-4216 Jun 03 j 09:24	0° $\text{H}$		morning rise	-4210 Jun 30 j 21:54	19° $\text{B}$ 12'45	
retrograde	-4216 Jul 17 j 18:01	1° $\text{H}$ 45'47		retrograde	-4210 Oct 09 j 22:54	26° $\text{B}$ 51'45	
	-4216 Aug 31 j 16:13	30° $\text{R}$ $\approx$		opposition	-4210 Dec 15 j 19:57	23° $\text{B}$ 28'06	-0°17'53
opposition	-4216 Sep 22 j 18:18	28° $\approx$ 14'11	-2°58'58	min. Earth dist.	-4210 Dec 15 j 08:49	23° $\text{B}$ 30'20	8.38642 AU
min. Earth dist.	-4216 Sep 22 j 08:05	28° $\approx$ 16'19	7.85743 AU	direct	-4209 Feb 22 j 21:05	19° $\text{B}$ 59'48	
direct	-4216 Nov 27 j 13:22	24° $\approx$ 45'26		asc. node	-4209 Jun 02 j 06:34	27° $\text{B}$ 03'49	
	-4215 Feb 14 j 08:38	0° $\text{H}$		evening set	-4209 Jun 09 j 01:35	27° $\text{B}$ 52'46	
evening set	-4215 Mar 11 j 21:41	3° $\text{H}$ 10'58					
				conjunction	-4209 Jun 26 j 21:30	0° $\text{II}$ 04'34	0°02'09
conjunction	-4215 Mar 29 j 22:08	5° $\text{H}$ 34'08	-2°21'46	minimum elong	-4209 Jun 26 j 21:32	0° $\text{II}$ 04'34	0°02'19
minimum elong	-4215 Mar 29 j 22:09	5° $\text{H}$ 34'08	2°21'51	behind sun begin	-4209 Jun 26 j 14:17	0° $\text{II}$ 02'21	
max. Earth dist.	-4215 Mar 30 j 13:14	5° $\text{H}$ 39'10	9.85562 AU	behind sun end	-4209 Jun 27 j 04:46	0° $\text{II}$ 06'47	
morning rise	-4215 Apr 17 j 00:38	7° $\text{H}$ 57'57			-4209 Jun 26 j 06:46	0° $\text{II}$	
retrograde	-4215 Aug 01 j 21:11	16° $\text{H}$ 34'04		max. Earth dist.	-4209 Jun 27 j 09:53	0° $\text{II}$ 08'23	10.46401 AU
opposition	-4215 Oct 07 j 12:23	13° $\text{H}$ 02'58	-2°53'43	morning rise	-4209 Jul 14 j 12:40	2° $\text{II}$ 14'51	
min. Earth dist.	-4215 Oct 07 j 00:05	13° $\text{H}$ 05'32	7.86751 AU	retrograde	-4209 Oct 22 j 14:39	9° $\text{II}$ 41'13	
direct	-4215 Dec 12 j 12:30	9° $\text{H}$ 33'28		opposition	-4209 Dec 28 j 21:10	6° $\text{II}$ 19'19	0°21'54
evening set	-4214 Mar 27 j 15:29	18° $\text{H}$ 00'24		min. Earth dist.	-4209 Dec 28 j 11:34	6° $\text{II}$ 21'12	8.53980 AU
				direct	-4208 Mar 07 j 15:20	2° $\text{II}$ 52'05	
conjunction	-4214 Apr 14 j 18:14	20° $\text{H}$ 23'38	-2°13'02	evening set	-4208 Jun 21 j 11:50	10° $\text{II}$ 34'42	
minimum elong	-4214 Apr 14 j 18:17	20° $\text{H}$ 23'39	2°13'04				
max. Earth dist.	-4214 Apr 15 j 11:36	20° $\text{H}$ 29'24	9.88446 AU	conjunction	-4208 Jul 09 j 03:08	12° $\text{II}$ 43'00	0°33'35
morning rise	-4214 May 02 j 21:36	22° $\text{H}$ 47'03		minimum elong	-4208 Jul 09 j 03:06	12° $\text{II}$ 42'59	0°33'45
	-4214 Jul 10 j 15:31	0° $\text{Y}$		max. Earth dist.	-4208 Jul 09 j 13:10	12° $\text{II}$ 46'03	10.61730 AU
retrograde	-4214 Aug 16 j 18:13	1° $\text{Y}$ 16'01		morning rise	-4208 Jul 26 j 13:05	14° $\text{II}$ 49'41	
	-4214 Sep 23 j 02:44	30° $\text{R}$ $\text{H}$		retrograde	-4208 Nov 02 j 22:44	22° $\text{II}$ 04'50	
opposition	-4214 Oct 22 j 03:25	27° $\text{H}$ 45'53	-2°37'03	opposition	-4207 Jan 09 j 14:18	18° $\text{II}$ 44'33	0°59'13
min. Earth dist.	-4214 Oct 21 j 13:57	27° $\text{H}$ 48'42	7.91416 AU	min. Earth dist.	-4207 Jan 09 j 07:15	18° $\text{II}$ 45'56	8.69134 AU
direct	-4214 Dec 27 j 12:51	24° $\text{H}$ 16'00		direct	-4207 Mar 20 j 22:41	15° $\text{II}$ 18'30	
	-4213 Mar 21 j 15:46	0° $\text{Y}$		evening set	-4207 Jul 04 j 10:02	22° $\text{II}$ 51'12	
evening set	-4213 Apr 12 j 06:42	2° $\text{Y}$ 41'00					
				conjunction	-4207 Jul 21 j 20:05	24° $\text{II}$ 56'04	1°02'34
conjunction	-4213 Apr 30 j 10:39	5° $\text{Y}$ 03'23	-1°55'45	minimum elong	-4207 Jul 21 j 20:03	24° $\text{II}$ 56'04	1°02'45
minimum elong	-4213 Apr 30 j 10:43	5° $\text{Y}$ 03'24	1°55'44	max. Earth dist.	-4207 Jul 22 j 02:54	24° $\text{II}$ 58'07	10.76483 AU
max. Earth dist.	-4213 May 01 j 05:07	5° $\text{Y}$ 09'27	9.94944 AU	morning rise	-4207 Aug 08 j 00:40	26° $\text{II}$ 59'21	
morning rise	-4213 May 18 j 13:50	7° $\text{Y}$ 25'30			-4207 Sep 04 j 03:24	0° $\text{B}$	
retrograde	-4213 Aug 31 j 06:10	15° $\text{Y}$ 44'05		retrograde	-4207 Nov 14 j 21:23	4° $\text{B}$ 04'54	
opposition	-4213 Nov 05 j 13:07	12° $\text{Y}$ 15'17	-2°10'33	opposition	-4206 Jan 22 j 00:10	0° $\text{B}$ 46'05	1°32'37
min. Earth dist.	-4213 Nov 04 j 23:26	12° $\text{Y}$ 18'08	7.99526 AU	min. Earth dist.	-4206 Jan 21 j 20:30	0° $\text{B}$ 46'47	8.83412 AU



## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 17

Attention, astronomical year style is used: The year -4206 in astronomical counting style is the year 4207 BCE in historical counting style.

	-4206 Feb 01 j 03:01	30° $\mathbb{R}$ II		opposition	-4200 Mar 31 j 22:21	7° $\mathbb{M}$ 49'54	2°54'40
direct	-4206 Apr 02 j 20:38	27° $\mathbb{II}$ 21'17		min. Earth dist.	-4200 Apr 01 j 09:21	7° $\mathbb{M}$ 47'54	9.24960 AU
	-4206 May 31 j 18:58	0° $\mathbb{S}$		direct	-4200 Jun 11 j 15:48	4° $\mathbb{M}$ 31'30	
evening set	-4206 Jul 16 j 20:57	4° $\mathbb{S}$ 44'50		evening set	-4200 Sep 21 j 01:14	11° $\mathbb{M}$ 25'23	
conjunction	-4206 Aug 03 j 01:31	6° $\mathbb{S}$ 46'32	1°28'04	conjunction	-4200 Oct 07 j 10:02	13° $\mathbb{M}$ 18'13	2°20'54
minimum elong	-4206 Aug 03 j 01:28	6° $\mathbb{S}$ 46'31	1°28'15	minimum elong	-4200 Oct 07 j 10:04	13° $\mathbb{M}$ 18'14	2°20'58
max. Earth dist.	-4206 Aug 03 j 04:04	6° $\mathbb{S}$ 47'17	10.90034 AU	max. Earth dist.	-4200 Oct 06 j 20:52	13° $\mathbb{M}$ 14'24	11.23775 AU
morning rise	-4206 Aug 20 j 01:00	8° $\mathbb{S}$ 46'43		morning rise	-4200 Oct 23 j 17:37	15° $\mathbb{M}$ 10'48	
retrograde	-4206 Nov 26 j 12:35	15° $\mathbb{S}$ 44'34		retrograde	-4199 Jan 31 j 20:16	22° $\mathbb{M}$ 00'58	
opposition	-4205 Feb 03 j 04:01	12° $\mathbb{S}$ 26'59	2°01'09	opposition	-4199 Apr 12 j 15:41	18° $\mathbb{M}$ 44'47	2°46'37
min. Earth dist.	-4205 Feb 03 j 03:09	12° $\mathbb{S}$ 27'09	8.96231 AU	min. Earth dist.	-4199 Apr 13 j 03:51	18° $\mathbb{M}$ 42'35	9.22282 AU
direct	-4205 Apr 15 j 11:40	9° $\mathbb{S}$ 03'27		direct	-4199 Jun 23 j 02:01	15° $\mathbb{M}$ 26'53	
evening set	-4205 Jul 28 j 21:34	16° $\mathbb{S}$ 18'52		evening set	-4199 Oct 01 j 23:34	22° $\mathbb{M}$ 20'36	
conjunction	-4205 Aug 14 j 20:58	18° $\mathbb{S}$ 17'45	1°49'21	conjunction	-4199 Oct 18 j 08:14	24° $\mathbb{M}$ 13'58	2°11'39
minimum elong	-4205 Aug 14 j 20:55	18° $\mathbb{S}$ 17'44	1°49'32	minimum elong	-4199 Oct 18 j 08:16	24° $\mathbb{M}$ 13'58	2°11'41
max. Earth dist.	-4205 Aug 14 j 19:51	18° $\mathbb{S}$ 17'25	11.01869 AU	max. Earth dist.	-4199 Oct 17 j 17:24	24° $\mathbb{M}$ 09'39	11.19696 AU
morning rise	-4205 Aug 31 j 15:46	20° $\mathbb{S}$ 15'17		morning rise	-4199 Nov 03 j 16:35	26° $\mathbb{M}$ 07'20	
retrograde	-4205 Dec 08 j 00:56	27° $\mathbb{S}$ 07'20			-4199 Dec 11 j 02:39	0° $\mathbb{A}$	
opposition	-4204 Feb 15 j 02:51	23° $\mathbb{S}$ 50'43	2°24'07	retrograde	-4198 Feb 12 j 12:32	3° $\mathbb{A}$ 02'16	
min. Earth dist.	-4204 Feb 15 j 04:08	23° $\mathbb{S}$ 50'28	9.07104 AU		-4198 Apr 21 j 02:59	30° $\mathbb{R}$ $\mathbb{M}$	
direct	-4204 Apr 26 j 18:35	20° $\mathbb{S}$ 28'28		opposition	-4198 Apr 24 j 11:48	29° $\mathbb{M}$ 45'16	2°32'26
evening set	-4204 Aug 08 j 13:38	27° $\mathbb{S}$ 36'54		min. Earth dist.	-4198 Apr 25 j 01:33	29° $\mathbb{M}$ 42'45	9.16764 AU
				direct	-4198 Jul 04 j 13:03	26° $\mathbb{M}$ 27'33	
conjunction	-4204 Aug 25 j 08:33	29° $\mathbb{S}$ 33'28	2°05'55		-4198 Sep 11 j 04:49	0° $\mathbb{A}$	
minimum elong	-4204 Aug 25 j 08:30	29° $\mathbb{S}$ 33'28	2°06'05	evening set	-4198 Oct 12 j 23:49	3° $\mathbb{A}$ 22'36	
max. Earth dist.	-4204 Aug 25 j 04:54	29° $\mathbb{S}$ 32'25	11.11559 AU				
	-4204 Aug 29 j 03:32	0° $\mathbb{Q}$		conjunction	-4198 Oct 29 j 09:12	5° $\mathbb{A}$ 17'04	1°57'26
morning rise	-4204 Sep 10 j 23:10	1° $\mathbb{Q}$ 28'51		minimum elong	-4198 Oct 29 j 09:15	5° $\mathbb{A}$ 17'04	1°57'26
retrograde	-4204 Dec 18 j 09:27	8° $\mathbb{Q}$ 16'57		max. Earth dist.	-4198 Oct 28 j 16:34	5° $\mathbb{A}$ 12'11	11.12870 AU
opposition	-4203 Feb 25 j 21:49	5° $\mathbb{Q}$ 01'01	2°41'08	morning rise	-4198 Nov 14 j 19:29	7° $\mathbb{A}$ 11'49	
min. Earth dist.	-4203 Feb 26 j 01:32	5° $\mathbb{Q}$ 00'20	9.15646 AU	retrograde	-4197 Feb 24 j 09:47	14° $\mathbb{A}$ 13'08	
direct	-4203 May 08 j 17:52	1° $\mathbb{Q}$ 39'59		opposition	-4197 May 06 j 11:44	10° $\mathbb{A}$ 54'59	2°12'22
evening set	-4203 Aug 19 j 22:49	8° $\mathbb{Q}$ 42'45		min. Earth dist.	-4197 May 07 j 02:42	10° $\mathbb{A}$ 52'14	9.08568 AU
				direct	-4197 Jul 16 j 01:59	7° $\mathbb{A}$ 37'12	
conjunction	-4203 Sep 05 j 13:51	10° $\mathbb{Q}$ 37'31	2°17'29	evening set	-4197 Oct 24 j 03:36	14° $\mathbb{A}$ 35'07	
minimum elong	-4203 Sep 05 j 13:49	10° $\mathbb{Q}$ 37'31	2°17'38				
max. Earth dist.	-4203 Sep 05 j 07:35	10° $\mathbb{Q}$ 35'42	11.18775 AU	conjunction	-4197 Nov 09 j 14:48	16° $\mathbb{A}$ 31'12	1°38'31
morning rise	-4203 Sep 22 j 01:08	12° $\mathbb{Q}$ 31'18		minimum elong	-4197 Nov 09 j 14:51	16° $\mathbb{A}$ 31'13	1°38'28
	-4203 Oct 14 j 23:10	15° $\mathbb{Q}$		max. Earth dist.	-4197 Nov 08 j 21:55	16° $\mathbb{A}$ 26'12	11.03470 AU
retrograde	-4203 Dec 29 j 17:25	19° $\mathbb{Q}$ 17'17		morning rise	-4197 Nov 26 j 03:45	18° $\mathbb{A}$ 27'53	
opposition	-4202 Mar 09 j 14:43	16° $\mathbb{Q}$ 01'48	2°51'57	retrograde	-4196 Mar 07 j 14:14	25° $\mathbb{A}$ 37'12	
min. Earth dist.	-4202 Mar 09 j 21:40	16° $\mathbb{Q}$ 00'31	9.21579 AU	opposition	-4196 May 17 j 16:29	22° $\mathbb{A}$ 17'38	1°46'44
	-4202 Mar 23 j 21:31	15° $\mathbb{R}$ $\mathbb{Q}$		min. Earth dist.	-4196 May 18 j 07:18	22° $\mathbb{A}$ 14'53	8.97894 AU
direct	-4202 May 20 j 12:06	12° $\mathbb{Q}$ 41'49		direct	-4196 Jul 26 j 18:58	18° $\mathbb{A}$ 59'31	
	-4202 Jul 14 j 22:04	15° $\mathbb{Q}$		evening set	-4196 Nov 03 j 13:04	26° $\mathbb{A}$ 01'54	
evening set	-4202 Aug 31 j 02:40	19° $\mathbb{Q}$ 40'14		max. Earth dist.	-4196 Nov 19 j 10:30	27° $\mathbb{A}$ 55'16	10.91722 AU
conjunction	-4202 Sep 16 j 14:30	21° $\mathbb{Q}$ 33'46	2°23'52	conjunction	-4196 Nov 20 j 02:52	28° $\mathbb{A}$ 00'10	1°15'20
minimum elong	-4202 Sep 16 j 14:29	21° $\mathbb{Q}$ 33'46	2°23'59	minimum elong	-4196 Nov 20 j 02:54	28° $\mathbb{A}$ 00'11	1°15'14
max. Earth dist.	-4202 Sep 16 j 04:43	21° $\mathbb{Q}$ 30'57	11.23294 AU	morning rise	-4196 Dec 06 j 19:04	29° $\mathbb{A}$ 59'16	
morning rise	-4202 Oct 02 j 23:36	23° $\mathbb{Q}$ 26'33			-4196 Dec 06 j 21:33	0° $\mathbb{M}$	
	-4202 Dec 25 j 05:06	0° $\mathbb{M}$		retrograde	-4195 Mar 20 j 05:48	7° $\mathbb{M}$ 18'10	
retrograde	-4201 Jan 09 j 22:49	0° $\mathbb{M}$ 12'13		opposition	-4195 May 30 j 03:19	3° $\mathbb{M}$ 57'00	1°16'06
	-4201 Jan 25 j 21:33	30° $\mathbb{R}$ $\mathbb{Q}$		min. Earth dist.	-4195 May 30 j 17:14	3° $\mathbb{M}$ 54'24	8.85043 AU
opposition	-4201 Mar 21 j 06:33	26° $\mathbb{Q}$ 56'49	2°56'28	direct	-4195 Aug 07 j 16:04	0° $\mathbb{M}$ 38'20	
min. Earth dist.	-4201 Mar 21 j 16:08	26° $\mathbb{Q}$ 55'04	9.24718 AU	evening set	-4195 Nov 15 j 06:19	7° $\mathbb{M}$ 46'51	
direct	-4201 Jun 01 j 02:05	23° $\mathbb{Q}$ 37'43					
	-4201 Sep 06 j 04:24	0° $\mathbb{M}$		conjunction	-4195 Dec 01 j 23:12	9° $\mathbb{M}$ 47'45	0°48'25
evening set	-4201 Sep 11 j 02:54	0° $\mathbb{M}$ 33'11		minimum elong	-4195 Dec 01 j 23:14	9° $\mathbb{M}$ 47'46	0°48'18
				max. Earth dist.	-4195 Dec 01 j 07:07	9° $\mathbb{M}$ 42'52	10.78019 AU
conjunction	-4201 Sep 27 j 12:38	2° $\mathbb{M}$ 26'04	2°25'00	morning rise	-4195 Dec 18 j 19:24	11° $\mathbb{M}$ 49'46	
minimum elong	-4201 Sep 27 j 12:39	2° $\mathbb{M}$ 26'04	2°25'05		-4194 Jan 16 j 02:33	15° $\mathbb{M}$	
max. Earth dist.	-4201 Sep 27 j 00:26	2° $\mathbb{M}$ 22'32	11.24982 AU	retrograde	-4194 Apr 02 j 05:12	19° $\mathbb{M}$ 19'40	
morning rise	-4201 Oct 13 j 20:32	4° $\mathbb{M}$ 18'27		opposition	-4194 Jun 11 j 21:28	15° $\mathbb{M}$ 56'46	0°41'13
retrograde	-4200 Jan 21 j 08:02	11° $\mathbb{M}$ 05'32		min. Earth dist.	-4194 Jun 12 j 10:17	15° $\mathbb{M}$ 54'20	8.70519 AU

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 18

Attention, astronomical year style is used: The year -4194 in astronomical counting style is the year 4195 BCE in historical counting style.

	-4194 Jun 24 j 13:03	15° $\kappa$ $\mathbb{M}$		retrograde	-4188 Jun 25 j 15:37	10° $\approx$ 15'37	
direct	-4194 Aug 19 j 17:26	12° $\mathbb{M}$ 37'16		opposition	-4188 Sep 01 j 08:40	6° $\approx$ 43'41	-2°45'12
	-4194 Oct 12 j 04:14	15° $\mathbb{M}$		min. Earth dist.	-4188 Sep 01 j 03:30	6° $\approx$ 44'45	7.90133 AU
evening set	-4194 Nov 27 j 09:11	19° $\mathbb{M}$ 53'35		direct	-4188 Nov 06 j 03:42	3° $\approx$ 16'01	
				evening set	-4187 Feb 17 j 05:22	11° $\approx$ 33'56	
conjunction	-4194 Dec 14 j 05:37	21° $\mathbb{M}$ 57'28	0°18'38				
minimum elong	-4194 Dec 14 j 05:38	21° $\mathbb{M}$ 57'28	0°18'30	conjunction	-4187 Mar 07 j 01:13	13° $\approx$ 55'38	-2°17'38
max. Earth dist.	-4194 Dec 13 j 14:09	21° $\mathbb{M}$ 52'43	10.62947 AU	minimum elong	-4187 Mar 07 j 01:12	13° $\approx$ 55'37	2°17'46
morning rise	-4194 Dec 31 j 06:20	24° $\mathbb{M}$ 02'44		max. Earth dist.	-4187 Mar 07 j 09:21	13° $\approx$ 58'20	9.86969 AU
	-4193 Feb 28 j 01:12	0° $\mathbb{A}$			-4187 Mar 15 j 02:38	15° $\approx$	
retrograde	-4193 Apr 15 j 14:30	1° $\mathbb{A}$ 44'47		morning rise	-4187 Mar 25 j 01:03	16° $\approx$ 18'35	
	-4193 Jun 02 j 07:42	30° $\kappa$ $\mathbb{M}$		retrograde	-4187 Jul 10 j 22:48	24° $\approx$ 58'35	
opposition	-4193 Jun 24 j 23:36	28° $\mathbb{M}$ 20'02	0°03'13	opposition	-4187 Sep 16 j 03:12	21° $\approx$ 26'21	-2°57'24
min. Earth dist.	-4193 Jun 25 j 11:12	28° $\mathbb{M}$ 17'48	8.54992 AU	min. Earth dist.	-4187 Sep 15 j 19:12	21° $\approx$ 28'02	7.85135 AU
desc. node	-4193 Jul 26 j 02:25	26° $\mathbb{M}$ 08'16		direct	-4187 Nov 20 j 20:45	17° $\approx$ 57'27	
direct	-4193 Sep 01 j 04:24	24° $\mathbb{M}$ 59'26		evening set	-4186 Mar 04 j 19:44	26° $\approx$ 21'45	
	-4193 Nov 19 j 11:17	0° $\mathbb{A}$					
evening set	-4193 Dec 09 j 23:36	2° $\mathbb{A}$ 25'00		conjunction	-4186 Mar 22 j 18:47	28° $\approx$ 44'48	-2°22'43
				minimum elong	-4186 Mar 22 j 18:47	28° $\approx$ 44'48	2°22'49
conjunction	-4193 Dec 26 j 23:57	4° $\mathbb{A}$ 32'09	-0°12'59	max. Earth dist.	-4186 Mar 23 j 06:45	28° $\approx$ 48'48	9.83870 AU
minimum elong	-4193 Dec 26 j 23:57	4° $\mathbb{A}$ 32'09	0°13'09		-4186 Apr 01 j 04:22	0° $\mathbb{H}$	
behind sun begin	-4193 Dec 26 j 19:41	4° $\mathbb{A}$ 30'50		morning rise	-4186 Apr 09 j 20:48	1° $\mathbb{H}$ 08'45	
behind sun end	-4193 Dec 27 j 04:12	4° $\mathbb{A}$ 33'28		retrograde	-4186 Jul 26 j 03:52	9° $\mathbb{H}$ 47'41	
max. Earth dist.	-4193 Dec 26 j 10:57	4° $\mathbb{A}$ 28'05	10.47210 AU	opposition	-4186 Sep 30 j 22:15	6° $\mathbb{H}$ 15'40	-2°57'52
morning rise	-4192 Jan 13 j 05:13	6° $\mathbb{A}$ 40'53		min. Earth dist.	-4186 Sep 30 j 11:56	6° $\mathbb{H}$ 17'51	7.84050 AU
retrograde	-4192 Apr 28 j 11:04	14° $\mathbb{A}$ 35'40		direct	-4186 Dec 05 j 19:42	2° $\mathbb{H}$ 45'50	
opposition	-4192 Jul 07 j 09:54	11° $\mathbb{A}$ 09'04	-0°36'21	evening set	-4185 Mar 20 j 13:42	11° $\mathbb{H}$ 13'17	
min. Earth dist.	-4192 Jul 07 j 19:11	11° $\mathbb{A}$ 07'15	8.39220 AU				
direct	-4192 Sep 12 j 23:51	7° $\mathbb{A}$ 47'11		conjunction	-4185 Apr 07 j 15:24	13° $\mathbb{H}$ 36'49	-2°18'24
evening set	-4192 Dec 22 j 02:48	15° $\mathbb{A}$ 23'09		minimum elong	-4185 Apr 07 j 15:27	13° $\mathbb{H}$ 36'50	2°18'27
				max. Earth dist.	-4185 Apr 08 j 06:32	13° $\mathbb{H}$ 41'52	9.84800 AU
conjunction	-4191 Jan 08 j 07:19	17° $\mathbb{A}$ 33'41	-0°44'51	morning rise	-4185 Apr 25 j 18:46	16° $\mathbb{H}$ 00'49	
minimum elong	-4191 Jan 08 j 07:17	17° $\mathbb{A}$ 33'40	0°45'02	retrograde	-4185 Aug 10 j 03:21	24° $\mathbb{H}$ 34'24	
max. Earth dist.	-4191 Jan 07 j 22:08	17° $\mathbb{A}$ 30'45	10.31593 AU	opposition	-4185 Oct 15 j 15:27	21° $\mathbb{H}$ 03'07	-2°46'29
morning rise	-4191 Jan 25 j 16:58	19° $\mathbb{A}$ 45'55		min. Earth dist.	-4185 Oct 15 j 03:06	21° $\mathbb{H}$ 05'43	7.86954 AU
retrograde	-4191 May 12 j 18:08	27° $\mathbb{A}$ 53'28		direct	-4185 Dec 20 j 21:04	17° $\mathbb{H}$ 32'43	
opposition	-4191 Jul 21 j 04:47	24° $\mathbb{A}$ 25'06	-1°15'31	evening set	-4184 Apr 04 j 06:43	25° $\mathbb{H}$ 59'43	
min. Earth dist.	-4191 Jul 21 j 10:35	24° $\mathbb{A}$ 23'57	8.24023 AU				
direct	-4191 Sep 26 j 04:23	21° $\mathbb{A}$ 01'48		conjunction	-4184 Apr 22 j 10:14	28° $\mathbb{H}$ 22'50	-2°05'01
evening set	-4190 Jan 04 j 19:43	28° $\mathbb{A}$ 48'55		minimum elong	-4184 Apr 22 j 10:18	28° $\mathbb{H}$ 22'51	2°05'02
	-4190 Jan 14 j 02:10	0° $\mathbb{B}$		max. Earth dist.	-4184 Apr 23 j 03:52	28° $\mathbb{H}$ 28'40	9.89690 AU
					-4184 May 04 j 16:56	0° $\mathbb{Y}$	
conjunction	-4190 Jan 22 j 04:23	1° $\mathbb{B}$ 02'45	-1°15'18	morning rise	-4184 May 10 j 13:55	0° $\mathbb{Y}$ 45'55	
minimum elong	-4190 Jan 22 j 04:20	1° $\mathbb{B}$ 02'44	1°15'29	retrograde	-4184 Aug 23 j 18:56	9° $\mathbb{Y}$ 10'28	
max. Earth dist.	-4190 Jan 21 j 23:40	1° $\mathbb{B}$ 01'14	10.16938 AU	opposition	-4184 Oct 29 j 04:13	5° $\mathbb{Y}$ 40'21	-2°24'22
morning rise	-4190 Feb 08 j 18:12	3° $\mathbb{B}$ 18'21		min. Earth dist.	-4184 Oct 28 j 14:09	5° $\mathbb{Y}$ 43'18	7.93639 AU
retrograde	-4190 May 27 j 10:22	11° $\mathbb{B}$ 37'50		direct	-4183 Jan 03 j 21:34	2° $\mathbb{Y}$ 09'47	
opposition	-4190 Aug 04 j 07:39	8° $\mathbb{B}$ 07'54	-1°51'50	evening set	-4183 Apr 19 j 19:03	10° $\mathbb{Y}$ 32'59	
min. Earth dist.	-4190 Aug 04 j 09:28	8° $\mathbb{B}$ 07'32	8.10241 AU				
direct	-4190 Oct 09 j 19:10	4° $\mathbb{B}$ 43'08		conjunction	-4183 May 07 j 23:18	12° $\mathbb{Y}$ 54'47	-1°43'49
evening set	-4189 Jan 19 j 02:47	12° $\mathbb{B}$ 41'31		minimum elong	-4183 May 07 j 23:22	12° $\mathbb{Y}$ 54'49	1°43'47
				max. Earth dist.	-4183 May 08 j 18:21	13° $\mathbb{Y}$ 01'01	9.98187 AU
conjunction	-4189 Feb 05 j 15:24	14° $\mathbb{B}$ 58'28	-1°42'16	morning rise	-4183 May 26 j 02:11	15° $\mathbb{Y}$ 16'04	
minimum elong	-4189 Feb 05 j 15:20	14° $\mathbb{B}$ 58'27	1°42'27	retrograde	-4183 Sep 07 j 01:06	23° $\mathbb{Y}$ 28'51	
max. Earth dist.	-4189 Feb 05 j 14:57	14° $\mathbb{B}$ 58'19	10.04095 AU	opposition	-4183 Nov 12 j 10:30	20° $\mathbb{Y}$ 00'19	-1°53'36
morning rise	-4189 Feb 23 j 09:02	17° $\mathbb{B}$ 17'05		min. Earth dist.	-4183 Nov 11 j 19:45	20° $\mathbb{Y}$ 03'22	8.03641 AU
retrograde	-4189 Jun 11 j 10:23	25° $\mathbb{B}$ 46'37		direct	-4182 Jan 18 j 17:39	16° $\mathbb{Y}$ 29'58	
opposition	-4189 Aug 18 j 17:23	22° $\mathbb{B}$ 15'28	-2°22'37	evening set	-4182 May 04 j 23:22	24° $\mathbb{Y}$ 46'36	
min. Earth dist.	-4189 Aug 18 j 15:28	22° $\mathbb{B}$ 15'52	7.98697 AU				
direct	-4189 Oct 23 j 19:07	18° $\mathbb{B}$ 49'12		conjunction	-4182 May 23 j 02:59	27° $\mathbb{Y}$ 06'16	-1°16'41
evening set	-4188 Feb 02 j 22:46	26° $\mathbb{B}$ 58'12		minimum elong	-4182 May 23 j 03:03	27° $\mathbb{Y}$ 06'17	1°16'37
				max. Earth dist.	-4182 May 23 j 22:08	27° $\mathbb{Y}$ 12'27	10.09692 AU
conjunction	-4188 Feb 20 j 15:07	29° $\mathbb{B}$ 17'49	-2°03'41	morning rise	-4182 Jun 10 j 03:48	29° $\mathbb{Y}$ 24'59	
minimum elong	-4188 Feb 20 j 15:04	29° $\mathbb{B}$ 17'48	2°03'51		-4182 Jun 14 j 19:28	0° $\mathbb{B}$	
max. Earth dist.	-4188 Feb 20 j 18:55	29° $\mathbb{B}$ 19'04	9.93875 AU	retrograde	-4182 Sep 20 j 21:58	7° $\mathbb{B}$ 24'28	
	-4188 Feb 25 j 22:35	0° $\approx$		opposition	-4182 Nov 26 j 09:12	3° $\mathbb{B}$ 57'46	-1°16'52
morning rise	-4188 Mar 09 j 12:07	1° $\approx$ 38'57		min. Earth dist.	-4182 Nov 25 j 18:51	4° $\mathbb{B}$ 00'43	8.16290 AU

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 19

Attention, astronomical year style is used: The year -4181 in astronomical counting style is the year 4182 BCE in historical counting style.

direct	-4181 Feb 02 j 07:46	0°♄28'03		retrograde	-4176 Dec 02 j 06:08	22°♄07'49	
evening set	-4181 May 19 j 17:04	8°♄36'04		opposition	-4175 Feb 09 j 00:38	18°♄51'16	2°14'07
				min. Earth dist.	-4175 Feb 09 j 01:00	18°♄51'12	9.03052 AU
conjunction	-4181 Jun 06 j 18:33	10°♄52'54	-0°45'46	direct	-4175 Apr 21 j 10:55	15°♄28'57	
minimum elong	-4181 Jun 06 j 18:35	10°♄52'55	0°45'39	evening set	-4175 Aug 03 j 15:26	22°♄40'39	
max. Earth dist.	-4181 Jun 07 j 12:36	10°♄58'39	10.23442 AU				
morning rise	-4181 Jun 24 j 16:05	13°♄08'28		conjunction	-4175 Aug 20 j 12:22	24°♄38'14	1°58'48
	-4181 Jul 10 j 00:20	15°♄		minimum elong	-4175 Aug 20 j 12:19	24°♄38'14	1°58'59
retrograde	-4181 Oct 04 j 06:49	20°♄54'18		max. Earth dist.	-4175 Aug 20 j 09:36	24°♄37'26	11.08059 AU
opposition	-4181 Dec 09 j 23:29	17°♄29'36	-0°37'01	morning rise	-4175 Sep 06 j 04:49	26°♄34'33	
min. Earth dist.	-4181 Dec 09 j 10:45	17°♄32'10	8.30802 AU		-4175 Oct 08 j 11:55	0°♄	
	-4180 Jan 13 j 13:46	15°♄♄		retrograde	-4175 Dec 13 j 14:23	3°♄24'24	
direct	-4180 Feb 16 j 15:06	14°♄00'47		opposition	-4174 Feb 20 j 21:45	0°♄08'41	2°33'56
	-4180 Mar 21 j 15:16	15°♄		min. Earth dist.	-4174 Feb 21 j 01:42	0°♄07'57	9.12634 AU
evening set	-4180 Jun 01 j 22:47	21°♄59'00			-4174 Feb 22 j 20:39	30°♄♄	
				direct	-4174 May 03 j 14:27	26°♄47'31	
conjunction	-4180 Jun 19 j 20:47	24°♄12'33	-0°13'15		-4174 Jul 08 j 16:56	0°♄	
minimum elong	-4180 Jun 19 j 20:48	24°♄12'33	0°13'07	evening set	-4174 Aug 15 j 04:12	3°♄53'02	
behind sun begin	-4180 Jun 19 j 16:35	24°♄11'15					
behind sun end	-4180 Jun 20 j 01:01	24°♄13'51		conjunction	-4174 Aug 31 j 20:48	5°♄48'35	2°12'43
max. Earth dist.	-4180 Jun 20 j 12:18	24°♄17'23	10.38609 AU	minimum elong	-4174 Aug 31 j 20:46	5°♄48'34	2°12'52
morning rise	-4180 Jul 07 j 14:11	26°♄24'38		max. Earth dist.	-4174 Aug 31 j 14:00	5°♄46'36	11.16274 AU
	-4180 Aug 08 j 00:26	0°♄♄		morning rise	-4174 Sep 17 j 09:40	7°♄43'03	
retrograde	-4180 Oct 16 j 03:54	3°♄♄57'16		retrograde	-4174 Dec 24 j 23:09	14°♄30'03	
asc. node	-4180 Nov 20 j 08:46	2°♄♄52'32		opposition	-4173 Mar 04 j 15:57	11°♄14'47	2°47'38
opposition	-4180 Dec 22 j 05:05	0°♄♄34'35	0°03'23	min. Earth dist.	-4173 Mar 04 j 22:10	11°♄13'38	9.19547 AU
min. Earth dist.	-4180 Dec 21 j 18:34	0°♄♄36'41	8.46343 AU	direct	-4173 May 15 j 13:11	7°♄54'40	
	-4180 Dec 29 j 11:53	30°♄♄		evening set	-4173 Aug 26 j 10:37	14°♄55'15	
direct	-4179 Mar 01 j 13:55	27°♄06'56			-4173 Aug 27 j 03:25	15°♄	
	-4179 Apr 30 j 22:14	0°♄♄					
evening set	-4179 Jun 15 j 15:51	4°♄♄54'51		conjunction	-4173 Sep 11 j 23:55	16°♄49'20	2°21'30
				minimum elong	-4173 Sep 11 j 23:53	16°♄49'19	2°21'38
conjunction	-4179 Jul 03 j 09:25	7°♄♄04'52	0°19'02	max. Earth dist.	-4173 Sep 11 j 14:57	16°♄46'44	11.21746 AU
minimum elong	-4179 Jul 03 j 09:24	7°♄♄04'52	0°19'12	morning rise	-4173 Sep 28 j 09:57	18°♄42'32	
max. Earth dist.	-4179 Jul 03 j 21:12	7°♄♄08'29	10.54348 AU	retrograde	-4172 Jan 05 j 06:26	25°♄28'27	
morning rise	-4179 Jul 20 j 22:00	9°♄♄13'20		opposition	-4172 Mar 15 j 08:25	22°♄13'17	2°55'05
retrograde	-4179 Oct 28 j 15:38	16°♄♄33'58		min. Earth dist.	-4172 Mar 15 j 16:54	22°♄11'44	9.23625 AU
opposition	-4178 Jan 04 j 02:26	13°♄♄13'10	0°42'07	direct	-4172 May 26 j 05:03	18°♄54'01	
min. Earth dist.	-4178 Jan 03 j 17:58	13°♄♄14'49	8.62074 AU	evening set	-4172 Sep 05 j 12:47	25°♄51'00	
direct	-4178 Mar 15 j 03:07	9°♄♄46'49					
evening set	-4178 Jun 28 j 20:25	17°♄♄24'31		conjunction	-4172 Sep 21 j 23:34	27°♄44'11	2°25'03
				minimum elong	-4172 Sep 21 j 23:34	27°♄44'11	2°25'09
conjunction	-4178 Jul 16 j 08:53	19°♄♄31'02	0°49'23	max. Earth dist.	-4172 Sep 21 j 12:08	27°♄40'53	11.24350 AU
minimum elong	-4178 Jul 16 j 08:51	19°♄♄31'01	0°49'34	morning rise	-4172 Oct 08 j 07:47	29°♄36'44	
max. Earth dist.	-4178 Jul 16 j 17:13	19°♄♄33'33	10.69850 AU		-4172 Oct 11 j 18:28	0°♄♄	
morning rise	-4178 Aug 02 j 16:11	21°♄♄35'57		retrograde	-4171 Jan 15 j 14:51	6°♄♄23'16	
retrograde	-4178 Nov 09 j 18:25	28°♄♄46'06		opposition	-4171 Mar 27 j 00:22	3°♄♄07'52	2°56'13
opposition	-4177 Jan 16 j 16:09	25°♄♄26'59	1°17'34	min. Earth dist.	-4171 Mar 27 j 11:37	3°♄♄05'49	9.24783 AU
min. Earth dist.	-4177 Jan 16 j 09:44	25°♄♄28'13	8.77219 AU		-4171 May 22 j 13:53	30°♄♄♄	
direct	-4177 Mar 28 j 07:00	22°♄♄02'02		direct	-4171 Jun 06 j 18:53	29°♄49'10	
evening set	-4177 Jul 11 j 13:04	29°♄♄30'04			-4171 Jun 21 j 21:41	0°♄♄	
	-4177 Jul 15 j 19:01	0°♄♄		evening set	-4171 Sep 16 j 12:13	6°♄♄43'58	
conjunction	-4177 Jul 28 j 20:15	1°♄♄33'14	1°16'39	conjunction	-4171 Oct 02 j 21:20	8°♄♄36'51	2°23'22
minimum elong	-4177 Jul 28 j 20:13	1°♄♄33'13	1°16'51	minimum elong	-4171 Oct 02 j 21:21	8°♄♄36'51	2°23'26
max. Earth dist.	-4177 Jul 29 j 01:37	1°♄♄34'50	10.84388 AU	max. Earth dist.	-4171 Oct 02 j 06:53	8°♄♄32'40	11.24047 AU
morning rise	-4177 Aug 14 j 22:09	3°♄♄34'50		morning rise	-4171 Oct 19 j 04:59	10°♄♄29'21	
retrograde	-4177 Nov 21 j 14:46	10°♄♄36'20		retrograde	-4170 Jan 26 j 23:44	17°♄♄18'11	
opposition	-4176 Jan 28 j 23:10	7°♄♄18'38	1°48'30	opposition	-4170 Apr 07 j 17:17	14°♄♄02'12	2°51'03
min. Earth dist.	-4176 Jan 28 j 19:39	7°♄♄19'18	8.91085 AU	min. Earth dist.	-4170 Apr 08 j 06:50	13°♄♄59'44	9.23018 AU
direct	-4176 Apr 09 j 01:48	3°♄♄55'01		direct	-4170 Jun 18 j 06:19	10°♄♄43'52	
evening set	-4176 Jul 22 j 18:51	11°♄♄14'17		evening set	-4170 Sep 27 j 10:27	17°♄♄37'51	
conjunction	-4176 Aug 08 j 20:49	13°♄♄14'26	1°39'59	conjunction	-4170 Oct 13 j 19:01	19°♄♄31'00	2°16'28
minimum elong	-4176 Aug 08 j 20:46	13°♄♄14'25	1°40'11	minimum elong	-4170 Oct 13 j 19:03	19°♄♄31'00	2°16'31
max. Earth dist.	-4176 Aug 08 j 22:44	13°♄♄15'00	10.97309 AU	max. Earth dist.	-4170 Oct 13 j 03:05	19°♄♄26'22	11.20867 AU
morning rise	-4176 Aug 25 j 17:38	15°♄♄13'08		morning rise	-4170 Oct 30 j 03:04	21°♄♄24'03	

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 20

Attention, astronomical year style is used: The year -4169 in astronomical counting style is the year 4170 BCE in historical counting style.

retrograde	-4169 Feb 07 j 13:23	28° $\mathring{\text{M}}$ 16'57		morning rise	-4163 Jan 06 j 16:12	1° $\text{X}$ 08'29	
opposition	-4169 Apr 19 j 12:06	25° $\mathring{\text{M}}$ 00'01	2°39'41	desc. node	-4163 Jan 08 j 11:55	1° $\text{X}$ 21'47	
min. Earth dist.	-4169 Apr 20 j 02:22	24° $\mathring{\text{M}}$ 57'24	9.18393 AU	retrograde	-4163 Apr 22 j 12:38	8° $\text{X}$ 57'41	
direct	-4169 Jun 29 j 18:55	21° $\mathring{\text{M}}$ 41'49		opposition	-4163 Jul 01 j 16:11	5° $\text{X}$ 31'29	-0°18'14
evening set	-4169 Oct 08 j 09:33	28° $\mathring{\text{M}}$ 36'28		min. Earth dist.	-4163 Jul 02 j 00:51	5° $\text{X}$ 29'48	8.45410 AU
	-4169 Oct 20 j 10:21	0° $\underline{\text{A}}$		direct	-4163 Sep 07 j 13:03	2° $\text{X}$ 09'53	
				evening set	-4163 Dec 16 j 11:48	9° $\text{X}$ 41'12	
conjunction	-4169 Oct 24 j 18:41	0° $\underline{\text{A}}$ 30'29	2°04'31				
minimum elong	-4169 Oct 24 j 18:44	0° $\underline{\text{A}}$ 30'30	2°04'32	conjunction	-4162 Jan 02 j 14:21	11° $\text{X}$ 50'15	-0°30'23
max. Earth dist.	-4169 Oct 24 j 02:30	0° $\underline{\text{A}}$ 25'45	11.14905 AU	minimum elong	-4162 Jan 02 j 14:20	11° $\text{X}$ 50'15	0°30'33
morning rise	-4169 Nov 10 j 03:59	2° $\underline{\text{A}}$ 24'40		max. Earth dist.	-4162 Jan 02 j 04:19	11° $\text{X}$ 47'05	10.37862 AU
retrograde	-4168 Feb 19 j 09:19	9° $\underline{\text{A}}$ 23'12		morning rise	-4162 Jan 19 j 21:58	14° $\text{X}$ 00'58	
opposition	-4168 Apr 30 j 09:55	6° $\underline{\text{A}}$ 05'06	2°22'17	retrograde	-4162 May 06 j 15:48	22° $\text{X}$ 02'57	
min. Earth dist.	-4168 May 01 j 00:23	6° $\underline{\text{A}}$ 02'27	9.11055 AU	opposition	-4162 Jul 15 j 07:23	18° $\text{X}$ 35'08	-0°57'52
direct	-4168 Jul 10 j 06:54	2° $\underline{\text{A}}$ 46'51		min. Earth dist.	-4162 Jul 15 j 13:30	18° $\text{X}$ 33'56	8.30264 AU
evening set	-4168 Oct 18 j 11:32	9° $\underline{\text{A}}$ 43'41		direct	-4162 Sep 20 j 12:15	15° $\text{X}$ 12'21	
				evening set	-4162 Dec 29 j 22:36	22° $\text{X}$ 54'32	
conjunction	-4168 Nov 03 j 21:59	11° $\underline{\text{A}}$ 39'08	1°47'44				
minimum elong	-4168 Nov 03 j 22:02	11° $\underline{\text{A}}$ 39'09	1°47'42	conjunction	-4161 Jan 16 j 05:12	25° $\text{X}$ 06'55	-1°01'43
max. Earth dist.	-4168 Nov 03 j 05:04	11° $\underline{\text{A}}$ 34'08	11.06351 AU	minimum elong	-4161 Jan 16 j 05:10	25° $\text{X}$ 06'54	1°01'54
morning rise	-4168 Nov 20 j 09:33	13° $\underline{\text{A}}$ 35'01		max. Earth dist.	-4161 Jan 15 j 22:26	25° $\text{X}$ 04'45	10.23092 AU
retrograde	-4167 Mar 02 j 10:27	20° $\underline{\text{A}}$ 40'51		morning rise	-4161 Feb 02 j 17:16	27° $\text{X}$ 21'03	
opposition	-4167 May 12 j 12:25	17° $\underline{\text{A}}$ 21'22	1°59'09		-4161 Feb 24 j 14:38	0° $\text{Z}$	
min. Earth dist.	-4167 May 13 j 03:19	17° $\underline{\text{A}}$ 18'37	9.01240 AU	retrograde	-4161 May 21 j 03:35	5° $\text{Z}$ 35'25	
direct	-4167 Jul 21 j 20:44	14° $\underline{\text{A}}$ 02'50		opposition	-4161 Jul 29 j 06:59	2° $\text{Z}$ 06'10	-1°35'48
evening set	-4167 Oct 29 j 18:09	21° $\underline{\text{A}}$ 03'27		min. Earth dist.	-4161 Jul 29 j 10:12	2° $\text{Z}$ 05'32	8.16158 AU
					-4161 Aug 26 j 12:58	30° $\text{R}$ $\text{X}$	
conjunction	-4167 Nov 15 j 06:38	23° $\underline{\text{A}}$ 00'49	1°26'26	direct	-4161 Oct 03 j 23:13	28° $\text{X}$ 42'07	
minimum elong	-4167 Nov 15 j 06:40	23° $\underline{\text{A}}$ 00'50	1°26'21		-4161 Nov 10 j 12:24	0° $\text{Z}$	
max. Earth dist.	-4167 Nov 14 j 12:59	22° $\underline{\text{A}}$ 55'34	10.95489 AU	evening set	-4160 Jan 12 j 23:28	6° $\text{Z}$ 35'35	
morning rise	-4167 Dec 01 j 21:24	24° $\underline{\text{A}}$ 58'56					
	-4166 Jan 20 j 07:48	0° $\mathring{\text{M}}$		conjunction	-4160 Jan 30 j 10:07	8° $\text{Z}$ 51'09	-1°30'32
retrograde	-4166 Mar 14 j 20:13	2° $\mathring{\text{M}}$ 13'41		minimum elong	-4160 Jan 30 j 10:03	8° $\text{Z}$ 51'08	1°30'43
	-4166 May 09 j 12:10	30° $\text{R}$ $\underline{\text{A}}$		max. Earth dist.	-4160 Jan 30 j 07:48	8° $\text{Z}$ 50'24	10.09751 AU
opposition	-4166 May 24 j 20:36	28° $\underline{\text{A}}$ 52'39	1°30'43	morning rise	-4160 Feb 17 j 02:08	11° $\text{Z}$ 08'27	
min. Earth dist.	-4166 May 25 j 11:35	28° $\underline{\text{A}}$ 49'51	8.89289 AU	retrograde	-4160 Jun 04 j 00:15	19° $\text{Z}$ 33'48	
direct	-4166 Aug 02 j 15:47	25° $\underline{\text{A}}$ 33'37		opposition	-4160 Aug 11 j 14:05	16° $\text{Z}$ 03'24	-2°09'25
	-4166 Oct 17 j 15:21	0° $\mathring{\text{M}}$		min. Earth dist.	-4160 Aug 11 j 13:51	16° $\text{Z}$ 03'27	8.03929 AU
evening set	-4166 Nov 10 j 07:33	2° $\mathring{\text{M}}$ 39'37		direct	-4160 Oct 16 j 19:34	12° $\text{Z}$ 38'05	
				evening set	-4159 Jan 26 j 13:54	20° $\text{Z}$ 42'27	
conjunction	-4166 Nov 26 j 22:57	4° $\mathring{\text{M}}$ 39'24	1°01'08				
minimum elong	-4166 Nov 26 j 22:59	4° $\mathring{\text{M}}$ 39'25	1°01'02	conjunction	-4159 Feb 13 j 04:29	23° $\text{Z}$ 00'52	-1°54'43
max. Earth dist.	-4166 Nov 26 j 06:18	4° $\mathring{\text{M}}$ 34'23	10.82687 AU	minimum elong	-4159 Feb 13 j 04:26	23° $\text{Z}$ 00'51	1°54'54
morning rise	-4166 Dec 13 j 17:28	6° $\mathring{\text{M}}$ 40'13		max. Earth dist.	-4159 Feb 13 j 07:27	23° $\text{Z}$ 01'51	9.98679 AU
retrograde	-4165 Mar 27 j 14:14	14° $\mathring{\text{M}}$ 05'19		morning rise	-4159 Mar 02 j 23:59	25° $\text{Z}$ 20'54	
opposition	-4165 Jun 06 j 11:17	10° $\mathring{\text{M}}$ 42'35	0°57'38		-4159 Apr 11 j 06:14	0° $\approx$	
min. Earth dist.	-4165 Jun 07 j 01:01	10° $\mathring{\text{M}}$ 40'00	8.75629 AU	retrograde	-4159 Jun 19 j 03:41	3° $\approx$ 54'45	
direct	-4165 Aug 14 j 15:44	7° $\mathring{\text{M}}$ 22'52		opposition	-4159 Aug 26 j 03:24	0° $\approx$ 23'32	-2°36'00
evening set	-4165 Nov 22 j 05:41	14° $\mathring{\text{M}}$ 35'52		min. Earth dist.	-4159 Aug 25 j 23:12	0° $\approx$ 24'24	7.94368 AU
	-4165 Nov 25 j 13:54	15° $\mathring{\text{M}}$			-4159 Aug 30 j 21:49	30° $\text{R}$ $\text{Z}$	
max. Earth dist.	-4165 Dec 08 j 10:10	16° $\mathring{\text{M}}$ 34'04	10.68406 AU	direct	-4159 Oct 31 j 00:54	26° $\text{Z}$ 56'57	
					-4159 Dec 28 j 07:09	0° $\approx$	
conjunction	-4165 Dec 09 j 00:37	16° $\mathring{\text{M}}$ 38'29	0°32'32	evening set	-4158 Feb 10 j 16:16	5° $\approx$ 10'58	
minimum elong	-4165 Dec 09 j 00:38	16° $\mathring{\text{M}}$ 38'30	0°32'24				
morning rise	-4165 Dec 25 j 23:14	18° $\mathring{\text{M}}$ 42'22		conjunction	-4158 Feb 28 j 10:35	7° $\approx$ 31'43	-2°12'14
retrograde	-4164 Apr 08 j 19:40	26° $\mathring{\text{M}}$ 19'04		minimum elong	-4158 Feb 28 j 10:33	7° $\approx$ 31'42	2°12'23
opposition	-4164 Jun 18 j 09:34	22° $\mathring{\text{M}}$ 54'35	0°20'52	max. Earth dist.	-4158 Feb 28 j 18:36	7° $\approx$ 34'22	9.90622 AU
min. Earth dist.	-4164 Jun 18 j 20:53	22° $\mathring{\text{M}}$ 52'25	8.60786 AU	morning rise	-4158 Mar 18 j 09:05	9° $\approx$ 53'50	
direct	-4164 Aug 25 j 23:09	19° $\mathring{\text{M}}$ 34'01			-4158 Apr 30 j 15:34	15° $\approx$	
evening set	-4164 Dec 03 j 14:31	26° $\mathring{\text{M}}$ 55'30		retrograde	-4158 Jul 04 j 10:46	18° $\approx$ 32'41	
				opposition	-4158 Sep 09 j 20:54	15° $\approx$ 01'03	-2°53'04
conjunction	-4164 Dec 20 j 13:11	29° $\mathring{\text{M}}$ 01'16	0°01'38	min. Earth dist.	-4158 Sep 09 j 13:02	15° $\approx$ 02'41	7.88100 AU
minimum elong	-4164 Dec 20 j 13:11	29° $\mathring{\text{M}}$ 01'16	0°01'29		-4158 Sep 10 j 01:57	15° $\text{R}$ $\approx$	
behind sun begin	-4164 Dec 20 j 06:05	28° $\mathring{\text{M}}$ 59'05		direct	-4158 Nov 14 j 14:31	11° $\approx$ 33'18	
behind sun end	-4164 Dec 20 j 20:16	29° $\mathring{\text{M}}$ 03'27			-4157 Jan 15 j 19:40	15° $\approx$	
max. Earth dist.	-4164 Dec 20 j 00:49	28° $\mathring{\text{M}}$ 57'25	10.53228 AU	evening set	-4157 Feb 26 j 03:52	19° $\approx$ 54'44	
	-4164 Dec 28 j 09:54	0° $\text{X}$					

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 21

Attention, astronomical year style is used: The year -4157 in astronomical counting style is the year 4158 BCE in historical counting style.

conjunction	-4157 Mar 16 j 01:32	22° $\approx$ 17'06	-2°21'26	min. Earth dist.	-4152 Dec 02 j 19:35	11° $\approx$ 46'47	8.24014 AU
minimum elong	-4157 Mar 16 j 01:32	22° $\approx$ 17'06	2°21'33	direct	-4151 Feb 09 j 16:46	8° $\approx$ 15'08	
max. Earth dist.	-4157 Mar 16 j 13:49	22° $\approx$ 21'12	9.86116 AU		-4151 May 16 j 07:08	15° $\approx$	
morning rise	-4157 Apr 03 j 02:23	24° $\approx$ 40'32		evening set	-4151 May 27 j 00:56	16° $\approx$ 18'15	
	-4157 May 18 j 09:35	0° $\approx$					
retrograde	-4157 Jul 19 j 17:35	3° $\approx$ 20'07		conjunction	-4151 Jun 14 j 00:44	18° $\approx$ 33'24	-0°27'48
	-4157 Sep 22 j 09:14	30° $\approx$		minimum elong	-4151 Jun 14 j 00:46	18° $\approx$ 33'25	0°27'40
opposition	-4157 Sep 24 j 15:59	29° $\approx$ 48'32	-2°58'54	max. Earth dist.	-4151 Jun 14 j 15:37	18° $\approx$ 38'06	10.31346 AU
min. Earth dist.	-4157 Sep 24 j 05:22	29° $\approx$ 50'46	7.85512 AU	morning rise	-4151 Jul 01 j 20:19	20° $\approx$ 47'12	
direct	-4157 Nov 29 j 10:54	26° $\approx$ 19'46		retrograde	-4151 Oct 10 j 20:26	28° $\approx$ 26'08	
	-4156 Feb 02 j 00:43	0° $\approx$		opposition	-4151 Dec 16 j 17:54	25° $\approx$ 02'33	-0°14'31
evening set	-4156 Mar 12 j 20:39	4° $\approx$ 45'39		min. Earth dist.	-4151 Dec 16 j 06:24	25° $\approx$ 04'51	8.38738 AU
				direct	-4150 Feb 23 j 19:54	21° $\approx$ 34'18	
conjunction	-4156 Mar 30 j 21:12	7° $\approx$ 08'53	-2°21'22	asc. node	-4150 May 02 j 06:39	25° $\approx$ 08'58	
minimum elong	-4156 Mar 30 j 21:13	7° $\approx$ 08'53	2°21'27	evening set	-4150 Jun 10 j 00:11	29° $\approx$ 27'18	
max. Earth dist.	-4156 Mar 31 j 12:33	7° $\approx$ 14'00	9.85411 AU		-4150 Jun 14 j 11:25	0° $\approx$	
morning rise	-4156 Apr 17 j 23:44	9° $\approx$ 32'44					
retrograde	-4156 Aug 02 j 20:08	18° $\approx$ 08'48		conjunction	-4150 Jun 27 j 20:05	1° $\approx$ 39'04	0°04'53
opposition	-4156 Oct 08 j 10:17	14° $\approx$ 37'43	-2°52'48	minimum elong	-4150 Jun 27 j 20:05	1° $\approx$ 39'04	0°05'02
min. Earth dist.	-4156 Oct 07 j 22:01	14° $\approx$ 40'18	7.86683 AU	behind sun begin	-4150 Jun 27 j 13:03	1° $\approx$ 36'55	
direct	-4156 Dec 13 j 10:39	11° $\approx$ 08'12		behind sun end	-4150 Jun 28 j 03:07	1° $\approx$ 41'13	
evening set	-4155 Mar 28 j 14:26	19° $\approx$ 35'17		max. Earth dist.	-4150 Jun 28 j 09:07	1° $\approx$ 43'06	10.46493 AU
				morning rise	-4150 Jul 15 j 10:56	3° $\approx$ 49'17	
conjunction	-4155 Apr 15 j 17:11	21° $\approx$ 58'32	-2°11'58	retrograde	-4150 Oct 23 j 13:47	11° $\approx$ 15'38	
minimum elong	-4155 Apr 15 j 17:14	21° $\approx$ 58'33	2°12'00	opposition	-4150 Dec 29 j 19:19	7° $\approx$ 53'47	0°25'13
max. Earth dist.	-4155 Apr 16 j 10:12	22° $\approx$ 04'10	9.88452 AU	min. Earth dist.	-4150 Dec 29 j 10:02	7° $\approx$ 55'37	8.54062 AU
morning rise	-4155 May 03 j 20:39	24° $\approx$ 21'57		direct	-4149 Mar 09 j 12:44	4° $\approx$ 26'37	
	-4155 Jun 21 j 20:25	0° $\approx$		evening set	-4149 Jun 23 j 10:32	12° $\approx$ 09'16	
retrograde	-4155 Aug 17 j 16:19	2° $\approx$ 50'42					
	-4155 Oct 15 j 04:08	30° $\approx$		conjunction	-4149 Jul 11 j 01:35	14° $\approx$ 11'31	0°36'13
opposition	-4155 Oct 23 j 01:20	29° $\approx$ 20'38	-2°35'19	minimum elong	-4149 Jul 11 j 01:33	14° $\approx$ 11'30	0°36'23
min. Earth dist.	-4155 Oct 22 j 12:31	29° $\approx$ 23'19	7.91472 AU	max. Earth dist.	-4149 Jul 11 j 11:42	14° $\approx$ 20'36	10.61805 AU
direct	-4155 Dec 28 j 11:10	25° $\approx$ 50'42		morning rise	-4149 Jul 28 j 11:15	16° $\approx$ 24'09	
	-4154 Mar 08 j 13:57	0° $\approx$		retrograde	-4149 Nov 04 j 20:57	23° $\approx$ 39'16	
evening set	-4154 Apr 13 j 05:35	4° $\approx$ 15'45		opposition	-4148 Jan 11 j 12:41	20° $\approx$ 19'04	1°02'20
				min. Earth dist.	-4148 Jan 11 j 06:17	20° $\approx$ 20'18	8.69211 AU
conjunction	-4154 May 01 j 09:33	6° $\approx$ 38'09	-1°54'05	direct	-4148 Mar 21 j 20:20	16° $\approx$ 53'02	
minimum elong	-4154 May 01 j 09:37	6° $\approx$ 38'11	1°54'04	evening set	-4148 Jul 05 j 08:41	24° $\approx$ 25'46	
max. Earth dist.	-4154 May 02 j 03:01	6° $\approx$ 43'54	9.95038 AU				
morning rise	-4154 May 19 j 12:53	9° $\approx$ 00'16		conjunction	-4148 Jul 22 j 18:22	26° $\approx$ 30'34	1°05'00
retrograde	-4154 Sep 01 j 03:40	17° $\approx$ 18'36		minimum elong	-4148 Jul 22 j 18:20	26° $\approx$ 30'34	1°05'11
opposition	-4154 Nov 06 j 10:57	13° $\approx$ 49'53	-2°08'10	max. Earth dist.	-4148 Jul 23 j 00:31	26° $\approx$ 32'25	10.76554 AU
min. Earth dist.	-4154 Nov 05 j 22:00	13° $\approx$ 52'35	7.99635 AU	morning rise	-4148 Aug 08 j 22:48	28° $\approx$ 33'48	
direct	-4153 Jan 12 j 09:44	10° $\approx$ 19'54			-4148 Aug 21 j 10:03	0° $\approx$	
evening set	-4153 Apr 28 j 14:16	18° $\approx$ 39'52		retrograde	-4148 Nov 15 j 18:29	5° $\approx$ 39'22	
				opposition	-4147 Jan 22 j 22:37	2° $\approx$ 20'36	1°35'26
conjunction	-4153 May 16 j 18:10	21° $\approx$ 00'34	-1°29'22	min. Earth dist.	-4147 Jan 22 j 19:04	2° $\approx$ 21'17	8.83489 AU
minimum elong	-4153 May 16 j 18:14	21° $\approx$ 00'35	1°29'19		-4147 Feb 25 j 19:49	30° $\approx$	
max. Earth dist.	-4153 May 17 j 11:24	21° $\approx$ 06'09	10.04812 AU	direct	-4147 Apr 03 j 20:26	28° $\approx$ 55'49	
morning rise	-4153 Jun 03 j 20:08	23° $\approx$ 20'31			-4147 May 10 j 12:29	0° $\approx$	
	-4153 Aug 06 j 11:04	0° $\approx$		evening set	-4147 Jul 17 j 19:27	6° $\approx$ 19'23	
retrograde	-4153 Sep 15 j 04:57	1° $\approx$ 26'20					
	-4153 Oct 25 j 10:23	30° $\approx$		conjunction	-4147 Aug 03 j 23:44	8° $\approx$ 20'59	1°30'11
opposition	-4153 Nov 20 j 13:41	27° $\approx$ 59'14	-1°33'46	minimum elong	-4147 Aug 03 j 23:41	8° $\approx$ 20'59	1°30'23
min. Earth dist.	-4153 Nov 20 j 00:44	28° $\approx$ 01'54	8.10710 AU	max. Earth dist.	-4147 Aug 04 j 01:55	8° $\approx$ 21'38	10.90103 AU
direct	-4152 Jan 27 j 04:20	24° $\approx$ 29'32		morning rise	-4147 Aug 20 j 23:04	10° $\approx$ 21'07	
	-4152 Apr 20 j 03:46	0° $\approx$		retrograde	-4147 Nov 27 j 11:19	17° $\approx$ 19'01	
evening set	-4152 May 12 j 13:14	2° $\approx$ 41'54		opposition	-4146 Feb 04 j 02:29	14° $\approx$ 01'25	2°03'31
				min. Earth dist.	-4146 Feb 04 j 00:59	14° $\approx$ 01'42	8.96296 AU
conjunction	-4152 May 30 j 15:45	5° $\approx$ 00'07	-0°59'52	direct	-4146 Apr 16 j 10:57	10° $\approx$ 37'56	
minimum elong	-4152 May 30 j 15:48	5° $\approx$ 00'08	0°59'46	evening set	-4146 Jul 29 j 19:58	17° $\approx$ 53'18	
max. Earth dist.	-4152 May 31 j 08:08	5° $\approx$ 05'22	10.17173 AU				
morning rise	-4152 Jun 17 j 15:08	7° $\approx$ 17'15		conjunction	-4146 Aug 15 j 19:12	19° $\approx$ 52'07	1°51'05
	-4152 Sep 14 j 16:38	15° $\approx$		minimum elong	-4146 Aug 15 j 19:10	19° $\approx$ 52'07	1°51'16
retrograde	-4152 Sep 27 j 18:05	15° $\approx$ 09'36		max. Earth dist.	-4146 Aug 15 j 18:48	19° $\approx$ 52'00	11.01924 AU
	-4152 Oct 10 j 20:57	15° $\approx$		morning rise	-4146 Sep 01 j 13:41	21° $\approx$ 49'35	
opposition	-4152 Dec 03 j 08:10	11° $\approx$ 44'13	-0°54'59	retrograde	-4146 Dec 08 j 23:10	28° $\approx$ 41'41	

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 22

Attention, astronomical year style is used: The year -4145 in astronomical counting style is the year 4146 BCE in historical counting style.

opposition	-4145 Feb 16 j 01:27	25°♂25'03	2°25'58	retrograde	-4139 Feb 13 j 09:51	4°♂35'37	
min. Earth dist.	-4145 Feb 16 j 02:21	25°♂24'53	9.07152 AU	opposition	-4139 Apr 25 j 10:16	1°♂18'35	2°30'41
direct	-4145 Apr 28 j 16:57	22°♂02'50		min. Earth dist.	-4139 Apr 26 j 00:15	1°♂16'02	9.16809 AU
evening set	-4145 Aug 10 j 11:56	29°♂11'11			-4139 May 13 j 21:13	30°♂	
	-4145 Aug 17 j 13:50	0°♂		direct	-4139 Jul 05 j 10:50	28°♂00'55	
					-4139 Aug 24 j 21:35	0°♂	
conjunction	-4145 Aug 27 j 06:38	1°♂07'41	2°07'12	evening set	-4139 Oct 13 j 21:01	4°♂55'48	
minimum elong	-4145 Aug 27 j 06:36	1°♂07'40	2°07'22				
max. Earth dist.	-4145 Aug 27 j 03:34	1°♂06'47	11.11599 AU	conjunction	-4139 Oct 30 j 06:32	6°♂50'16	1°55'48
morning rise	-4145 Sep 12 j 20:58	3°♂03'00		minimum elong	-4139 Oct 30 j 06:35	6°♂50'16	1°55'47
retrograde	-4145 Dec 20 j 08:28	9°♂51'09		max. Earth dist.	-4139 Oct 29 j 14:24	6°♂45'32	11.12931 AU
opposition	-4144 Feb 27 j 20:38	6°♂35'13	2°42'24	morning rise	-4139 Nov 15 j 16:57	8°♂45'03	
min. Earth dist.	-4144 Feb 28 j 00:45	6°♂34'27	9.15690 AU	retrograde	-4138 Feb 25 j 07:13	15°♂46'25	
direct	-4144 May 09 j 16:13	3°♂14'10		opposition	-4138 May 07 j 10:05	12°♂28'14	2°10'06
evening set	-4144 Aug 20 j 20:55	10°♂16'49		min. Earth dist.	-4138 May 08 j 00:22	12°♂25'36	9.08639 AU
				direct	-4138 Jul 17 j 00:48	9°♂10'31	
conjunction	-4144 Sep 06 j 11:40	12°♂11'32	2°18'17	evening set	-4138 Oct 25 j 00:42	16°♂08'14	
minimum elong	-4144 Sep 06 j 11:38	12°♂11'32	2°18'25				
max. Earth dist.	-4144 Sep 06 j 04:54	12°♂09'35	11.18812 AU	conjunction	-4138 Nov 10 j 12:07	18°♂04'22	1°36'30
morning rise	-4144 Sep 22 j 22:55	14°♂05'17		minimum elong	-4138 Nov 10 j 12:10	18°♂04'22	1°36'26
	-4144 Oct 01 j 02:27	15°♂		max. Earth dist.	-4138 Nov 09 j 20:25	17°♂59'43	11.03568 AU
retrograde	-4144 Dec 30 j 14:11	20°♂51'18		morning rise	-4138 Nov 27 j 01:07	20°♂01'03	
opposition	-4143 Mar 10 j 13:28	17°♂35'46	2°52'37	retrograde	-4137 Mar 09 j 13:53	27°♂10'24	
min. Earth dist.	-4143 Mar 10 j 20:35	17°♂34'28	9.21622 AU	opposition	-4137 May 19 j 14:46	23°♂50'49	1°44'04
	-4143 Apr 20 j 06:38	15°♂		min. Earth dist.	-4137 May 20 j 04:30	23°♂48'17	8.98023 AU
direct	-4143 May 21 j 10:10	14°♂15'47		direct	-4137 Jul 28 j 17:20	20°♂32'48	
	-4143 Jun 21 j 04:59	15°♂		evening set	-4137 Nov 05 j 10:14	27°♂34'56	
evening set	-4143 Sep 01 j 00:33	21°♂14'05		max. Earth dist.	-4137 Nov 21 j 07:59	29°♂28'23	10.91900 AU
conjunction	-4143 Sep 17 j 12:14	23°♂07'34	2°24'09	conjunction	-4137 Nov 22 j 00:09	29°♂33'13	1°13'00
minimum elong	-4143 Sep 17 j 12:13	23°♂07'34	2°24'16	minimum elong	-4137 Nov 22 j 00:11	29°♂33'14	1°12'55
max. Earth dist.	-4143 Sep 17 j 02:28	23°♂04'45	11.23332 AU		-4137 Nov 25 j 17:34	0°♂	
morning rise	-4143 Oct 03 j 21:18	25°♂00'20		morning rise	-4137 Dec 08 j 16:32	1°♂32'21	
	-4143 Nov 24 j 15:37	0°♂		retrograde	-4136 Mar 21 j 03:21	8°♂51'09	
retrograde	-4142 Jan 10 j 21:39	1°♂46'03		opposition	-4136 May 31 j 01:22	5°♂30'00	1°13'06
	-4142 Feb 28 j 23:32	30°♂		min. Earth dist.	-4136 May 31 j 15:03	5°♂27'26	8.85265 AU
opposition	-4142 Mar 22 j 05:09	28°♂30'36	2°56'30	direct	-4136 Aug 08 j 12:02	2°♂11'23	
min. Earth dist.	-4142 Mar 22 j 14:01	28°♂28'59	9.24753 AU	evening set	-4136 Nov 16 j 03:29	9°♂19'41	
direct	-4142 Jun 02 j 02:18	25°♂11'31					
	-4142 Aug 23 j 13:55	0°♂		conjunction	-4136 Dec 02 j 20:25	11°♂20'33	0°45'54
evening set	-4142 Sep 12 j 00:32	2°♂06'48		minimum elong	-4136 Dec 02 j 20:26	11°♂20'34	0°45'47
				max. Earth dist.	-4136 Dec 02 j 03:54	11°♂15'33	10.78287 AU
conjunction	-4142 Sep 28 j 10:19	3°♂59'41	2°24'46	morning rise	-4136 Dec 19 j 16:53	13°♂22'34	
minimum elong	-4142 Sep 28 j 10:19	3°♂59'41	2°24'52		-4135 Jan 02 j 16:33	15°♂	
max. Earth dist.	-4142 Sep 27 j 23:06	3°♂56'26	11.25014 AU	retrograde	-4135 Apr 03 j 02:10	20°♂52'20	
morning rise	-4142 Oct 14 j 18:05	5°♂52'02		opposition	-4135 Jun 12 j 19:19	17°♂29'27	0°38'02
retrograde	-4141 Jan 22 j 06:33	12°♂39'11		min. Earth dist.	-4135 Jun 13 j 08:34	17°♂26'56	8.70813 AU
opposition	-4141 Apr 02 j 21:01	9°♂23'29	2°54'05		-4135 Jul 19 j 22:22	15°♂	
min. Earth dist.	-4141 Apr 03 j 07:16	9°♂21'37	9.24987 AU	direct	-4135 Aug 20 j 15:43	14°♂09'59	
direct	-4141 Jun 13 j 13:25	6°♂05'08			-4135 Sep 20 j 17:14	15°♂	
evening set	-4141 Sep 22 j 22:40	12°♂58'48		evening set	-4135 Nov 28 j 06:13	21°♂26'04	
				max. Earth dist.	-4135 Dec 14 j 11:37	23°♂25'17	10.63263 AU
conjunction	-4141 Oct 09 j 07:28	14°♂51'38	2°20'10				
minimum elong	-4141 Oct 09 j 07:29	14°♂51'39	2°20'14	conjunction	-4135 Dec 15 j 02:45	23°♂29'57	0°16'01
max. Earth dist.	-4141 Oct 08 j 18:38	14°♂47'55	11.23805 AU	minimum elong	-4135 Dec 15 j 02:46	23°♂29'57	0°15'53
morning rise	-4141 Oct 25 j 15:03	16°♂44'14		behind sun begin	-4135 Dec 15 j 01:23	23°♂29'32	
retrograde	-4140 Feb 02 j 18:32	23°♂34'28		behind sun end	-4135 Dec 15 j 04:09	23°♂30'22	
opposition	-4140 Apr 13 j 14:22	20°♂18'15	2°45'26	morning rise	-4134 Jan 01 j 03:38	25°♂35'12	
min. Earth dist.	-4140 Apr 14 j 02:40	20°♂16'00	9.22313 AU		-4134 Feb 10 j 10:38	0°♂	
direct	-4140 Jun 24 j 00:03	17°♂00'21		retrograde	-4134 Apr 16 j 12:03	3°♂17'06	
evening set	-4140 Oct 02 j 20:58	23°♂53'54			-4134 Jun 24 j 05:38	30°♂	
				opposition	-4134 Jun 25 j 21:11	29°♂52'24	-0°00'01
conjunction	-4140 Oct 19 j 05:35	25°♂47'16	2°10'27	desc. node	-4134 Jun 25 j 16:26	29°♂53'19	
minimum elong	-4140 Oct 19 j 05:37	25°♂47'16	2°10'28	min. Earth dist.	-4134 Jun 26 j 08:54	29°♂50'09	8.55318 AU
max. Earth dist.	-4140 Oct 18 j 14:20	25°♂42'50	11.19736 AU	direct	-4134 Sep 02 j 02:09	26°♂31'51	
morning rise	-4140 Nov 04 j 14:09	27°♂40'40			-4134 Nov 05 j 18:15	0°♂	
	-4140 Nov 25 j 21:00	0°♂		evening set	-4134 Dec 10 j 20:34	3°♂57'12	

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), AstroDienst AG 18-Feb-2025 14:23, page 23

Attention, astronomical year style is used: The year -4134 in astronomical counting style is the year 4135 BCE in historical counting style.

conjunction	-4134 Dec 27 j 21:09	6°♌04'20	-0°15'35	minimum elong	-4127 Mar 23 j 16:12	0°♋15'37	2°22'46
minimum elong	-4134 Dec 27 j 21:08	6°♌04'20	0°15'44	max. Earth dist.	-4127 Mar 24 j 04:04	0°♋19'34	9.84053 AU
behind sun begin	-4134 Dec 27 j 19:31	6°♌03'50		morning rise	-4127 Apr 10 j 18:13	2°♋39'31	
behind sun end	-4134 Dec 27 j 22:45	6°♌04'50		retrograde	-4127 Jul 26 j 23:10	11°♋18'12	
max. Earth dist.	-4134 Dec 27 j 09:00	6°♌00'32	10.47535 AU	opposition	-4127 Oct 01 j 18:38	7°♋46'14	-2°57'23
morning rise	-4133 Jan 14 j 02:27	8°♌13'02		min. Earth dist.	-4127 Oct 01 j 08:19	7°♋48'24	7.84220 AU
retrograde	-4133 Apr 30 j 08:29	16°♌07'42		direct	-4127 Dec 06 j 17:05	4°♋16'24	
opposition	-4133 Jul 09 j 07:14	12°♌41'08	-0°39'30	evening set	-4126 Mar 21 j 10:51	12°♋43'47	
min. Earth dist.	-4133 Jul 09 j 16:01	12°♌39'25	8.39547 AU				
direct	-4133 Sep 14 j 20:59	9°♌19'19		conjunction	-4126 Apr 08 j 12:45	15°♋07'20	-2°17'42
evening set	-4133 Dec 23 j 23:54	16°♌55'07		minimum elong	-4126 Apr 08 j 12:48	15°♋07'21	2°17'46
				max. Earth dist.	-4126 Apr 09 j 04:12	15°♋12'29	9.84955 AU
conjunction	-4132 Jan 10 j 04:34	19°♌05'38	-0°47'18	morning rise	-4126 Apr 26 j 16:05	17°♋31'17	
minimum elong	-4132 Jan 10 j 04:32	19°♌05'37	0°47'28	retrograde	-4126 Aug 10 j 22:53	26°♋04'37	
max. Earth dist.	-4132 Jan 09 j 19:46	19°♌02'50	10.31904 AU	opposition	-4126 Oct 16 j 11:39	22°♋33'21	-2°45'14
morning rise	-4132 Jan 27 j 14:13	21°♌17'49		min. Earth dist.	-4126 Oct 15 j 22:56	22°♋36'02	7.87085 AU
retrograde	-4132 May 13 j 15:12	29°♌25'14		direct	-4126 Dec 21 j 17:23	19°♋02'56	
opposition	-4132 Jul 22 j 01:52	25°♌56'54	-1°18'23	evening set	-4125 Apr 06 j 03:55	27°♋29'54	
min. Earth dist.	-4132 Jul 22 j 07:10	25°♌55'51	8.24326 AU				
direct	-4132 Sep 27 j 01:41	22°♌33'41		conjunction	-4125 Apr 24 j 07:37	29°♋53'02	-2°03'44
	-4131 Jan 02 j 23:24	0°♊		minimum elong	-4125 Apr 24 j 07:41	29°♋53'03	2°03'44
evening set	-4131 Jan 05 j 16:57	0°♊20'40		max. Earth dist.	-4125 Apr 25 j 01:41	29°♋59'00	9.89801 AU
					-4125 Apr 25 j 04:40	0°♐	
conjunction	-4131 Jan 23 j 01:35	2°♊34'29	-1°17'27	morning rise	-4125 May 12 j 11:13	2°♐16'05	
minimum elong	-4131 Jan 23 j 01:32	2°♊34'28	1°17'38	retrograde	-4125 Aug 25 j 15:24	10°♐40'23	
max. Earth dist.	-4131 Jan 22 j 20:25	2°♊32'49	10.17222 AU	min. Earth dist.	-4125 Oct 30 j 10:07	7°♐13'15	7.93719 AU
morning rise	-4131 Feb 09 j 15:27	4°♊50'02		opposition	-4125 Oct 31 j 00:16	7°♐10'17	-2°22'26
retrograde	-4131 May 28 j 08:12	13°♊09'23		direct	-4124 Jan 05 j 16:55	3°♐39'41	
opposition	-4131 Aug 05 j 04:38	9°♊39'30	-1°54'16	evening set	-4124 Apr 20 j 16:09	12°♐02'52	
min. Earth dist.	-4131 Aug 05 j 06:25	9°♊39'09	8.10514 AU				
direct	-4131 Oct 10 j 15:12	6°♊14'46		conjunction	-4124 May 08 j 20:29	14°♐24'41	-1°42'02
evening set	-4130 Jan 20 j 00:03	14°♊13'05		minimum elong	-4124 May 08 j 20:33	14°♐24'42	1°42'01
				max. Earth dist.	-4124 May 09 j 15:45	14°♐30'59	9.98242 AU
conjunction	-4130 Feb 06 j 12:35	16°♊29'58	-1°44'01	morning rise	-4124 May 26 j 23:15	16°♐45'57	
minimum elong	-4130 Feb 06 j 12:32	16°♊29'57	1°44'12	retrograde	-4124 Sep 07 j 22:38	24°♐58'31	
max. Earth dist.	-4130 Feb 06 j 11:10	16°♊29'31	10.04355 AU	opposition	-4124 Nov 13 j 06:35	21°♐29'58	-1°51'08
morning rise	-4130 Feb 24 j 06:21	18°♊48'35		min. Earth dist.	-4124 Nov 12 j 16:16	21°♐32'57	8.03665 AU
retrograde	-4130 Jun 12 j 08:26	27°♊17'56		direct	-4123 Jan 19 j 13:16	17°♐59'35	
opposition	-4130 Aug 19 j 14:17	23°♊46'51	-2°24'28	evening set	-4123 May 05 j 20:15	26°♐16'14	
min. Earth dist.	-4130 Aug 19 j 12:59	23°♊47'07	7.98946 AU				
direct	-4130 Oct 24 j 15:06	20°♊20'35		conjunction	-4123 May 23 j 23:51	28°♐35'54	-1°14'32
evening set	-4129 Feb 03 j 20:05	28°♊29'33		minimum elong	-4123 May 23 j 23:55	28°♐35'55	1°14'27
	-4129 Feb 15 j 08:01	0°♑		max. Earth dist.	-4123 May 24 j 18:42	28°♐41'58	10.09687 AU
					-4123 Jun 03 j 21:01	0°♑	
conjunction	-4129 Feb 21 j 12:25	0°♑49'07	-2°04'54	morning rise	-4123 Jun 11 j 00:36	0°♑54'37	
minimum elong	-4129 Feb 21 j 12:23	0°♑49'06	2°05'04	retrograde	-4123 Sep 21 j 18:21	8°♑53'56	
max. Earth dist.	-4129 Feb 21 j 15:19	0°♑50'04	9.94113 AU	opposition	-4123 Nov 27 j 05:17	5°♑27'15	-1°14'02
morning rise	-4129 Mar 11 j 09:34	3°♑10'14		min. Earth dist.	-4123 Nov 26 j 15:49	5°♑30'01	8.16254 AU
retrograde	-4129 Jun 27 j 13:18	11°♑46'40		direct	-4122 Feb 03 j 04:38	1°♑57'27	
opposition	-4129 Sep 03 j 05:25	8°♑14'49	-2°46'20	evening set	-4122 May 20 j 13:56	10°♑05'34	
min. Earth dist.	-4129 Sep 03 j 01:05	8°♑15'42	7.90359 AU				
direct	-4129 Nov 08 j 00:56	4°♑47'07		conjunction	-4122 Jun 07 j 15:17	12°♑22'23	-0°43'23
evening set	-4128 Feb 19 j 02:46	13°♑05'03		minimum elong	-4122 Jun 07 j 15:19	12°♑22'24	0°43'16
	-4128 Mar 04 j 14:33	15°♑		max. Earth dist.	-4122 Jun 08 j 08:20	12°♑27'48	10.23373 AU
				morning rise	-4122 Jun 25 j 12:49	14°♑37'58	
conjunction	-4128 Mar 07 j 22:40	15°♑26'42	-2°18'14		-4122 Jun 28 j 11:59	15°♑	
minimum elong	-4128 Mar 07 j 22:38	15°♑26'42	2°18'22	retrograde	-4122 Oct 05 j 02:07	22°♑23'41	
max. Earth dist.	-4128 Mar 08 j 06:13	15°♑29'13	9.87180 AU	opposition	-4122 Dec 10 j 19:32	18°♑59'00	-0°33'58
morning rise	-4128 Mar 25 j 22:34	17°♑49'38		min. Earth dist.	-4122 Dec 10 j 07:31	19°♑01'25	8.30703 AU
retrograde	-4128 Jul 11 j 19:20	26°♑29'22		direct	-4121 Feb 17 j 12:06	15°♑30'07	
opposition	-4128 Sep 16 j 23:44	22°♑57'12	-2°57'44	evening set	-4121 Jun 03 j 19:33	23°♑28'28	
min. Earth dist.	-4128 Sep 16 j 16:16	22°♑58'46	7.85332 AU				
direct	-4128 Nov 21 j 18:55	19°♑28'18		conjunction	-4121 Jun 21 j 17:23	25°♑42'00	-0°10'46
evening set	-4127 Mar 05 j 17:01	27°♑52'35		minimum elong	-4121 Jun 21 j 17:24	25°♑42'00	0°10'38
	-4127 Mar 21 j 17:28	0°♒		behind sun begin	-4121 Jun 21 j 11:50	25°♑40'17	
				behind sun end	-4121 Jun 21 j 22:58	25°♑43'44	
conjunction	-4127 Mar 23 j 16:12	0°♒15'36	-2°22'40	max. Earth dist.	-4121 Jun 22 j 07:43	25°♑46'28	10.38477 AU

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 24

Attention, astronomical year style is used: The year -4121 in astronomical counting style is the year 4122 BCE in historical counting style.

morning rise	-4121 Jul 09 j 10:46	27° $\text{J}$ 54'05	conjunction	-4115 Sep 01 j 17:19	7° $\text{J}$ 19'32	2°13'40
	-4121 Jul 27 j 03:41	0° $\text{II}$	minimum elong	-4115 Sep 01 j 17:17	7° $\text{J}$ 19'31	2°13'49
retrograde	-4121 Oct 17 j 23:52	5° $\text{II}$ 26'44	max. Earth dist.	-4115 Sep 01 j 11:31	7° $\text{J}$ 17'51	11.16263 AU
asc. node	-4121 Oct 24 j 04:03	5° $\text{II}$ 24'38	morning rise	-4115 Sep 18 j 05:57	9° $\text{J}$ 13'58	
opposition	-4121 Dec 24 j 01:16	2° $\text{II}$ 04'02 0°06'28		-4115 Nov 20 j 13:42	15° $\text{J}$	
min. Earth dist.	-4121 Dec 23 j 14:37	2° $\text{II}$ 06'09 8.46185 AU	retrograde	-4115 Dec 25 j 20:00	16° $\text{J}$ 01'03	
	-4120 Jan 21 j 00:37	30° $\text{R}$ $\text{J}$		-4114 Jan 30 j 22:27	15° $\text{R}$ $\text{J}$	
direct	-4120 Mar 02 j 10:32	28° $\text{J}$ 36'21	opposition	-4114 Mar 05 j 13:04	12° $\text{J}$ 45'47	2°48'32
	-4120 Apr 12 j 12:52	0° $\text{II}$	min. Earth dist.	-4114 Mar 05 j 18:36	12° $\text{J}$ 44'46	9.19566 AU
evening set	-4120 Jun 16 j 12:24	6° $\text{II}$ 24'24	direct	-4114 May 16 j 09:23	9° $\text{J}$ 25'44	
				-4114 Aug 14 j 07:22	15° $\text{J}$	
conjunction	-4120 Jul 04 j 05:50	8° $\text{II}$ 34'26 0°21'30	evening set	-4114 Aug 27 j 07:12	16° $\text{J}$ 26'14	
minimum elong	-4120 Jul 04 j 05:49	8° $\text{II}$ 34'25 0°21'40				
max. Earth dist.	-4120 Jul 04 j 17:21	8° $\text{II}$ 37'58 10.54164 AU	conjunction	-4114 Sep 12 j 20:22	18° $\text{J}$ 20'17	2°21'59
morning rise	-4120 Jul 21 j 18:18	10° $\text{II}$ 42'53	minimum elong	-4114 Sep 12 j 20:21	18° $\text{J}$ 20'17	2°22'06
retrograde	-4120 Oct 29 j 11:37	18° $\text{II}$ 03'38	max. Earth dist.	-4114 Sep 12 j 12:05	18° $\text{J}$ 17'53	11.21791 AU
opposition	-4119 Jan 04 j 22:41	14° $\text{II}$ 42'48 0°45'06	morning rise	-4114 Sep 29 j 06:13	20° $\text{J}$ 13'28	
min. Earth dist.	-4119 Jan 04 j 13:41	14° $\text{II}$ 44'34 8.61867 AU	retrograde	-4113 Jan 06 j 04:04	26° $\text{J}$ 59'28	
direct	-4119 Mar 15 j 23:46	11° $\text{II}$ 16'27	opposition	-4113 Mar 17 j 05:47	23° $\text{J}$ 44'19	2°55'23
evening set	-4119 Jun 29 j 16:56	18° $\text{II}$ 54'19	min. Earth dist.	-4113 Mar 17 j 14:26	23° $\text{J}$ 42'45	9.23695 AU
			direct	-4113 May 28 j 02:18	20° $\text{J}$ 25'06	
conjunction	-4119 Jul 17 j 05:21	21° $\text{II}$ 00'50 0°51'43	evening set	-4113 Sep 07 j 09:21	27° $\text{J}$ 22'00	
minimum elong	-4119 Jul 17 j 05:18	21° $\text{II}$ 00'49 0°51'54				
max. Earth dist.	-4119 Jul 17 j 14:17	21° $\text{II}$ 03'32 10.69627 AU	conjunction	-4113 Sep 23 j 19:56	29° $\text{J}$ 15'10	2°25'03
morning rise	-4119 Aug 03 j 12:23	23° $\text{II}$ 05'45	minimum elong	-4113 Sep 23 j 19:56	29° $\text{J}$ 15'10	2°25'09
	-4119 Oct 24 j 05:48	0° $\text{J}$	max. Earth dist.	-4113 Sep 23 j 08:11	29° $\text{J}$ 11'46	11.24443 AU
retrograde	-4119 Nov 10 j 15:26	0° $\text{J}$ 16'05		-4113 Sep 30 j 07:21	0° $\text{J}$	
	-4119 Nov 28 j 03:29	30° $\text{R}$ $\text{II}$	morning rise	-4113 Oct 10 j 04:13	1° $\text{J}$ 07'42	
opposition	-4118 Jan 17 j 12:32	26° $\text{II}$ 56'58 1°20'19	retrograde	-4112 Jan 17 j 10:44	7° $\text{J}$ 54'17	
min. Earth dist.	-4118 Jan 17 j 06:03	26° $\text{II}$ 58'13 8.76984 AU	opposition	-4112 Mar 27 j 21:49	4° $\text{J}$ 38'54	2°55'54
direct	-4118 Mar 29 j 03:39	23° $\text{II}$ 32'00	min. Earth dist.	-4112 Mar 28 j 09:15	4° $\text{J}$ 36'49	9.24900 AU
	-4118 Jul 03 j 16:56	0° $\text{J}$	direct	-4112 Jun 07 j 15:09	1° $\text{J}$ 20'16	
evening set	-4118 Jul 12 j 09:43	1° $\text{J}$ 00'14	evening set	-4112 Sep 17 j 08:40	8° $\text{J}$ 14'57	
conjunction	-4118 Jul 29 j 16:44	3° $\text{J}$ 03'24 1°18'46	conjunction	-4112 Oct 03 j 17:45	10° $\text{J}$ 07'49	2°22'52
minimum elong	-4118 Jul 29 j 16:42	3° $\text{J}$ 03'23 1°18'57	minimum elong	-4112 Oct 03 j 17:46	10° $\text{J}$ 07'49	2°22'57
max. Earth dist.	-4118 Jul 29 j 22:36	3° $\text{J}$ 05'09 10.84152 AU	max. Earth dist.	-4112 Oct 03 j 03:30	10° $\text{J}$ 03'41	11.24182 AU
morning rise	-4118 Aug 15 j 18:21	5° $\text{J}$ 04'59	morning rise	-4112 Oct 20 j 01:29	12° $\text{J}$ 00'19	
retrograde	-4118 Nov 22 j 12:13	12° $\text{J}$ 06'40	retrograde	-4111 Jan 27 j 20:40	18° $\text{J}$ 49'14	
opposition	-4117 Jan 29 j 19:56	8° $\text{J}$ 49'00 1°50'54	opposition	-4111 Apr 08 j 14:39	15° $\text{J}$ 33'13	2°50'09
min. Earth dist.	-4117 Jan 29 j 16:55	8° $\text{J}$ 49'35 8.90864 AU	min. Earth dist.	-4111 Apr 09 j 03:30	15° $\text{J}$ 30'53	9.23164 AU
direct	-4117 Apr 10 j 21:10	5° $\text{J}$ 25'25	direct	-4111 Jun 19 j 04:33	12° $\text{J}$ 14'58	
evening set	-4117 Jul 24 j 15:34	12° $\text{J}$ 44'51	evening set	-4111 Sep 28 j 06:49	19° $\text{J}$ 08'48	
conjunction	-4117 Aug 10 j 17:12	14° $\text{J}$ 44'59 1°41'47	conjunction	-4111 Oct 14 j 15:32	21° $\text{J}$ 01'57	2°15'30
minimum elong	-4117 Aug 10 j 17:09	14° $\text{J}$ 44'58 1°41'58	minimum elong	-4111 Oct 14 j 15:34	21° $\text{J}$ 01'58	2°15'33
max. Earth dist.	-4117 Aug 10 j 18:48	14° $\text{J}$ 45'27 10.97111 AU	max. Earth dist.	-4111 Oct 14 j 00:40	20° $\text{J}$ 57'38	11.21023 AU
morning rise	-4117 Aug 27 j 13:54	16° $\text{J}$ 43'41	morning rise	-4111 Oct 30 j 23:33	22° $\text{J}$ 55'00	
retrograde	-4117 Dec 04 j 01:03	23° $\text{J}$ 38'34	retrograde	-4110 Feb 08 j 11:41	29° $\text{J}$ 47'54	
opposition	-4116 Feb 10 j 21:39	20° $\text{J}$ 22'02 2°16'05	opposition	-4110 Apr 20 j 09:30	26° $\text{J}$ 30'59	2°38'13
min. Earth dist.	-4116 Feb 10 j 22:00	20° $\text{J}$ 21'58 9.02903 AU	min. Earth dist.	-4110 Apr 20 j 22:56	26° $\text{J}$ 28'32	9.18555 AU
direct	-4116 Apr 22 j 07:54	16° $\text{J}$ 59'43	direct	-4110 Jun 30 j 16:08	23° $\text{J}$ 12'54	
evening set	-4116 Aug 04 j 12:07	24° $\text{J}$ 11'32		-4110 Oct 08 j 04:18	0° $\text{J}$	
			evening set	-4110 Oct 09 j 05:58	0° $\text{J}$ 07'19	
conjunction	-4116 Aug 21 j 08:48	26° $\text{J}$ 09'04 2°00'12				
minimum elong	-4116 Aug 21 j 08:45	26° $\text{J}$ 09'03 2°00'22	conjunction	-4110 Oct 25 j 15:09	2° $\text{J}$ 01'20	2°03'07
max. Earth dist.	-4116 Aug 21 j 05:59	26° $\text{J}$ 08'15 11.07958 AU	minimum elong	-4110 Oct 25 j 15:12	2° $\text{J}$ 01'21	2°03'07
morning rise	-4116 Sep 07 j 01:10	28° $\text{J}$ 05'22	max. Earth dist.	-4110 Oct 24 j 23:12	1° $\text{J}$ 56'41	11.15080 AU
	-4116 Sep 24 j 06:56	0° $\text{J}$	morning rise	-4110 Nov 11 j 00:33	3° $\text{J}$ 55'32	
retrograde	-4116 Dec 14 j 11:55	4° $\text{J}$ 55'23	retrograde	-4109 Feb 20 j 06:11	10° $\text{J}$ 54'04	
opposition	-4115 Feb 21 j 18:45	1° $\text{J}$ 39'38 2°35'23	opposition	-4109 May 02 j 07:29	7° $\text{J}$ 35'59	2°20'19
min. Earth dist.	-4115 Feb 21 j 21:51	1° $\text{J}$ 39'04 9.12583 AU	min. Earth dist.	-4109 May 02 j 21:57	7° $\text{J}$ 33'19	9.11238 AU
	-4115 Mar 17 j 06:26	30° $\text{R}$ $\text{J}$	direct	-4109 Jul 12 j 03:07	4° $\text{J}$ 17'47	
direct	-4115 May 04 j 12:43	28° $\text{J}$ 18'31	evening set	-4109 Oct 20 j 07:52	11° $\text{J}$ 14'24	
	-4115 Jun 20 j 13:36	0° $\text{J}$				
evening set	-4115 Aug 16 j 00:47	5° $\text{J}$ 24'01	conjunction	-4109 Nov 05 j 18:20	13° $\text{J}$ 09'50	1°45'56
			minimum elong	-4109 Nov 05 j 18:23	13° $\text{J}$ 09'51	1°45'53



## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 25

Attention, astronomical year style is used: The year -4109 in astronomical counting style is the year 4110 BCE in historical counting style.

max. Earth dist.	-4109 Nov 05 j 00:59	13° $\mathfrak{A}$ 04'43	11.06554 AU	conjunction	-4102 Jan 17 j 01:04	26° $\mathfrak{A}$ 35'16	-1°03'55
morning rise	-4109 Nov 22 j 06:11	15° $\mathfrak{A}$ 05'44		minimum elong	-4102 Jan 17 j 01:02	26° $\mathfrak{A}$ 35'15	1°04'05
retrograde	-4108 Mar 03 j 07:31	22° $\mathfrak{A}$ 11'32		max. Earth dist.	-4102 Jan 16 j 18:39	26° $\mathfrak{A}$ 33'12	10.23307 AU
opposition	-4108 May 13 j 09:53	18° $\mathfrak{A}$ 52'03	1°56'44	morning rise	-4102 Feb 03 j 13:08	28° $\mathfrak{A}$ 49'22	
min. Earth dist.	-4108 May 14 j 01:10	18° $\mathfrak{A}$ 49'14	9.01449 AU		-4102 Feb 13 j 00:49	0° $\mathfrak{B}$	
direct	-4108 Jul 22 j 18:10	15° $\mathfrak{A}$ 33'33		retrograde	-4102 May 21 j 23:02	7° $\mathfrak{B}$ 03'33	
evening set	-4108 Oct 30 j 14:26	22° $\mathfrak{A}$ 33'55		opposition	-4102 Jul 30 j 02:41	3° $\mathfrak{B}$ 34'17	-1°38'19
max. Earth dist.	-4108 Nov 15 j 09:54	24° $\mathfrak{A}$ 26'10	10.95712 AU	min. Earth dist.	-4102 Jul 30 j 06:02	3° $\mathfrak{B}$ 33'36	8.16356 AU
				direct	-4102 Oct 04 j 18:58	0° $\mathfrak{B}$ 10'12	
				evening set	-4101 Jan 13 j 19:09	8° $\mathfrak{B}$ 03'31	
conjunction	-4108 Nov 16 j 03:04	24° $\mathfrak{A}$ 31'17	1°24'19				
minimum elong	-4108 Nov 16 j 03:07	24° $\mathfrak{A}$ 31'18	1°24'13				
morning rise	-4108 Dec 02 j 18:00	26° $\mathfrak{A}$ 29'25		conjunction	-4101 Jan 31 j 05:58	10° $\mathfrak{B}$ 19'03	-1°32'22
	-4107 Jan 04 j 03:14	0° $\mathfrak{M}$		minimum elong	-4101 Jan 31 j 05:55	10° $\mathfrak{B}$ 19'02	1°32'33
retrograde	-4107 Mar 15 j 16:08	3° $\mathfrak{M}$ 44'05		max. Earth dist.	-4101 Jan 31 j 04:18	10° $\mathfrak{B}$ 18'30	10.09920 AU
opposition	-4107 May 25 j 17:46	0° $\mathfrak{M}$ 23'01	1°27'57	morning rise	-4101 Feb 17 j 21:56	12° $\mathfrak{B}$ 36'19	
min. Earth dist.	-4107 May 26 j 08:23	0° $\mathfrak{M}$ 20'17	8.89516 AU	retrograde	-4101 Jun 05 j 20:09	21° $\mathfrak{B}$ 01'30	
	-4107 May 30 j 21:25	30° $\mathfrak{R}$ $\mathfrak{A}$		opposition	-4101 Aug 13 j 09:22	17° $\mathfrak{B}$ 31'04	-2°11'26
direct	-4107 Aug 03 j 12:51	27° $\mathfrak{A}$ 04'01		min. Earth dist.	-4101 Aug 13 j 08:47	17° $\mathfrak{B}$ 31'11	8.04076 AU
	-4107 Oct 03 j 02:55	0° $\mathfrak{M}$		direct	-4101 Oct 18 j 14:42	14° $\mathfrak{B}$ 05'42	
evening set	-4107 Nov 11 j 03:43	4° $\mathfrak{M}$ 09'46		evening set	-4100 Jan 28 j 09:35	22° $\mathfrak{B}$ 10'01	
conjunction	-4107 Nov 27 j 19:20	6° $\mathfrak{M}$ 09'34	0°58'46	conjunction	-4100 Feb 15 j 00:16	24° $\mathfrak{B}$ 28'25	-1°56'06
minimum elong	-4107 Nov 27 j 19:22	6° $\mathfrak{M}$ 09'34	0°58'40	minimum elong	-4100 Feb 15 j 00:13	24° $\mathfrak{B}$ 28'23	1°56'16
max. Earth dist.	-4107 Nov 27 j 03:39	6° $\mathfrak{M}$ 04'49	10.82920 AU	max. Earth dist.	-4100 Feb 15 j 03:28	24° $\mathfrak{B}$ 29'28	9.98788 AU
morning rise	-4107 Dec 14 j 13:53	8° $\mathfrak{M}$ 10'21		morning rise	-4100 Mar 03 j 19:42	26° $\mathfrak{B}$ 48'24	
	-4106 Mar 01 j 14:02	15° $\mathfrak{M}$			-4100 Mar 29 j 18:27	0° $\mathfrak{A}$	
retrograde	-4106 Mar 28 j 11:46	15° $\mathfrak{M}$ 35'22		retrograde	-4100 Jun 19 j 23:38	5° $\mathfrak{A}$ 22'07	
	-4106 Apr 24 j 16:41	15° $\mathfrak{R}$ $\mathfrak{M}$		opposition	-4100 Aug 26 j 22:28	1° $\mathfrak{A}$ 50'53	-2°37'23
opposition	-4106 Jun 07 j 08:16	12° $\mathfrak{M}$ 12'36	0°54'38	min. Earth dist.	-4100 Aug 26 j 17:53	1° $\mathfrak{A}$ 51'49	7.94449 AU
min. Earth dist.	-4106 Jun 07 j 21:08	12° $\mathfrak{M}$ 10'10	8.75868 AU		-4100 Sep 19 j 14:16	30° $\mathfrak{R}$ $\mathfrak{B}$	
direct	-4106 Aug 15 j 13:26	8° $\mathfrak{M}$ 52'55		direct	-4100 Oct 31 j 19:59	28° $\mathfrak{B}$ 24'16	
	-4106 Nov 13 j 19:23	15° $\mathfrak{M}$			-4100 Dec 12 j 04:19	0° $\mathfrak{A}$	
evening set	-4106 Nov 23 j 01:49	16° $\mathfrak{M}$ 05'37		evening set	-4099 Feb 11 j 11:51	6° $\mathfrak{A}$ 38'18	
conjunction	-4106 Dec 09 j 20:50	18° $\mathfrak{M}$ 08'15	0°30'02	conjunction	-4099 Mar 01 j 06:10	8° $\mathfrak{A}$ 59'01	-2°13'04
minimum elong	-4106 Dec 09 j 20:51	18° $\mathfrak{M}$ 08'15	0°29'54	minimum elong	-4099 Mar 01 j 06:08	8° $\mathfrak{A}$ 59'01	2°13'13
max. Earth dist.	-4106 Dec 09 j 06:32	18° $\mathfrak{M}$ 03'52	10.68650 AU	max. Earth dist.	-4099 Mar 01 j 13:54	9° $\mathfrak{A}$ 01'35	9.90673 AU
morning rise	-4106 Dec 26 j 19:34	20° $\mathfrak{M}$ 12'07		morning rise	-4099 Mar 19 j 04:39	11° $\mathfrak{A}$ 21'08	
retrograde	-4105 Apr 10 j 17:33	27° $\mathfrak{M}$ 48'40			-4099 Apr 17 j 20:55	15° $\mathfrak{A}$	
opposition	-4105 Jun 20 j 06:20	24° $\mathfrak{M}$ 24'11	0°17'46	retrograde	-4099 Jul 05 j 06:21	19° $\mathfrak{A}$ 59'52	
min. Earth dist.	-4105 Jun 20 j 17:16	24° $\mathfrak{M}$ 22'05	8.61033 AU	opposition	-4099 Sep 10 j 15:51	16° $\mathfrak{A}$ 28'15	-2°53'44
direct	-4105 Aug 27 j 18:33	21° $\mathfrak{M}$ 03'37		min. Earth dist.	-4099 Sep 10 j 08:03	16° $\mathfrak{A}$ 29'52	7.88130 AU
evening set	-4105 Dec 05 j 10:40	28° $\mathfrak{M}$ 24'51			-4099 Sep 28 j 21:54	15° $\mathfrak{R}$ $\mathfrak{A}$	
desc. node	-4105 Dec 11 j 06:28	29° $\mathfrak{M}$ 07'43		direct	-4099 Nov 15 j 09:35	13° $\mathfrak{A}$ 00'28	
	-4105 Dec 18 j 07:07	0° $\mathfrak{A}$			-4099 Dec 31 j 19:26	15° $\mathfrak{A}$	
				evening set	-4098 Feb 26 j 23:27	21° $\mathfrak{A}$ 21'59	
conjunction	-4105 Dec 22 j 09:20	0° $\mathfrak{A}$ 30'34	-0°00'58				
minimum elong	-4105 Dec 22 j 09:19	0° $\mathfrak{A}$ 30'34	0°01'07	conjunction	-4098 Mar 16 j 21:07	23° $\mathfrak{A}$ 44'22	-2°21'40
behind sun begin	-4105 Dec 22 j 02:14	0° $\mathfrak{A}$ 28'23		minimum elong	-4098 Mar 16 j 21:07	23° $\mathfrak{A}$ 44'22	2°21'47
behind sun end	-4105 Dec 22 j 16:25	0° $\mathfrak{A}$ 32'45		max. Earth dist.	-4098 Mar 17 j 08:43	23° $\mathfrak{A}$ 48'14	9.86139 AU
max. Earth dist.	-4105 Dec 21 j 20:13	0° $\mathfrak{A}$ 26'30	10.53479 AU	morning rise	-4098 Apr 03 j 22:04	26° $\mathfrak{A}$ 07'48	
morning rise	-4104 Jan 08 j 12:34	2° $\mathfrak{A}$ 37'47			-4098 May 05 j 10:35	0° $\mathfrak{H}$	
retrograde	-4104 Apr 23 j 08:41	10° $\mathfrak{A}$ 26'46		retrograde	-4098 Jul 20 j 12:35	4° $\mathfrak{H}$ 47'18	
opposition	-4104 Jul 02 j 12:33	7° $\mathfrak{A}$ 00'34	-0°21'18	opposition	-4098 Sep 25 j 10:54	1° $\mathfrak{H}$ 15'45	-2°58'48
min. Earth dist.	-4104 Jul 02 j 21:43	6° $\mathfrak{A}$ 58'47	8.45656 AU	min. Earth dist.	-4098 Sep 25 j 00:47	1° $\mathfrak{H}$ 17'52	7.85539 AU
direct	-4104 Sep 08 j 08:50	3° $\mathfrak{A}$ 38'56			-4098 Oct 10 j 21:13	30° $\mathfrak{R}$ $\mathfrak{A}$	
evening set	-4104 Dec 17 j 07:48	11° $\mathfrak{A}$ 10'05		direct	-4098 Nov 30 j 05:14	27° $\mathfrak{A}$ 46'57	
					-4097 Jan 18 j 11:21	0° $\mathfrak{H}$	
conjunction	-4103 Jan 03 j 10:23	13° $\mathfrak{A}$ 19'06	-0°32'48	evening set	-4097 Mar 14 j 16:22	6° $\mathfrak{H}$ 12'56	
minimum elong	-4103 Jan 03 j 10:22	13° $\mathfrak{A}$ 19'05	0°32'57				
max. Earth dist.	-4103 Jan 02 j 23:57	13° $\mathfrak{A}$ 15'48	10.38104 AU	conjunction	-4097 Apr 01 j 16:54	8° $\mathfrak{H}$ 36'11	-2°20'59
morning rise	-4103 Jan 20 j 18:09	15° $\mathfrak{A}$ 29'46		minimum elong	-4097 Apr 01 j 16:55	8° $\mathfrak{H}$ 36'11	2°21'03
retrograde	-4103 May 07 j 10:22	23° $\mathfrak{A}$ 31'34		max. Earth dist.	-4097 Apr 02 j 07:23	8° $\mathfrak{H}$ 41'00	9.85467 AU
opposition	-4103 Jul 16 j 03:28	20° $\mathfrak{A}$ 03'44	-1°00'44	morning rise	-4097 Apr 19 j 19:36	11° $\mathfrak{H}$ 00'03	
min. Earth dist.	-4103 Jul 16 j 10:09	20° $\mathfrak{A}$ 02'24	8.30494 AU	retrograde	-4097 Aug 04 j 15:16	19° $\mathfrak{H}$ 35'55	
direct	-4103 Sep 21 j 09:28	16° $\mathfrak{A}$ 40'55		opposition	-4097 Oct 10 j 05:12	16° $\mathfrak{H}$ 04'54	-2°51'56
evening set	-4103 Dec 30 j 18:20	24° $\mathfrak{A}$ 22'55		min. Earth dist.	-4097 Oct 09 j 17:37	16° $\mathfrak{H}$ 07'20	7.86777 AU

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 26

Attention, astronomical year style is used: The year -4097 in astronomical counting style is the year 4098 BCE in historical counting style.

direct	-4097 Dec 15 j 05:23	12° $\text{K}$ 35'20		behind sun end	-4091 Jun 28 j 22:02	3° $\text{II}$ 07'40	
evening set	-4096 Mar 29 j 10:04	21° $\text{K}$ 02'23		max. Earth dist.	-4091 Jun 29 j 04:15	3° $\text{II}$ 09'36	10.46345 AU
				morning rise	-4091 Jul 16 j 06:09	5° $\text{II}$ 15'52	
conjunction	-4096 Apr 16 j 12:47	23° $\text{K}$ 25'38	-2°11'00	retrograde	-4091 Oct 24 j 09:10	12° $\text{II}$ 42'20	
minimum elong	-4096 Apr 16 j 12:51	23° $\text{K}$ 25'39	2°11'02	opposition	-4091 Dec 30 j 14:29	9° $\text{II}$ 20'33	0°28'10
max. Earth dist.	-4096 Apr 17 j 04:55	23° $\text{K}$ 30'58	9.88592 AU	min. Earth dist.	-4091 Dec 30 j 06:03	9° $\text{II}$ 22'13	8.53884 AU
morning rise	-4096 May 04 j 16:23	25° $\text{K}$ 49'02		direct	-4090 Mar 10 j 07:36	5° $\text{II}$ 53'23	
	-4096 Jun 08 j 07:17	0° $\text{Y}$		evening set	-4090 Jun 24 j 06:19	13° $\text{II}$ 36'19	
retrograde	-4096 Aug 18 j 11:15	4° $\text{Y}$ 17'28					
opposition	-4096 Oct 23 j 20:07	0° $\text{Y}$ 47'26	-2°33'47	conjunction	-4090 Jul 11 j 21:06	15° $\text{II}$ 44'34	0°38'33
min. Earth dist.	-4096 Oct 23 j 07:47	0° $\text{Y}$ 50'01	7.91638 AU	minimum elong	-4090 Jul 11 j 21:04	15° $\text{II}$ 44'33	0°38'43
	-4096 Nov 02 j 08:41	30° $\text{K}$		max. Earth dist.	-4090 Jul 12 j 06:12	15° $\text{II}$ 47'20	10.61588 AU
direct	-4096 Dec 29 j 06:32	27° $\text{K}$ 17'28		morning rise	-4090 Jul 29 j 06:41	17° $\text{II}$ 51'13	
	-4095 Feb 22 j 19:01	0° $\text{Y}$		retrograde	-4090 Nov 05 j 15:21	25° $\text{II}$ 06'33	
evening set	-4095 Apr 14 j 00:58	5° $\text{Y}$ 42'24		opposition	-4089 Jan 12 j 08:08	21° $\text{II}$ 46'23	1°05'08
				min. Earth dist.	-4089 Jan 12 j 01:59	21° $\text{II}$ 47'35	8.68973 AU
conjunction	-4095 May 02 j 04:58	8° $\text{Y}$ 04'47	-1°52'37	direct	-4089 Mar 23 j 17:07	18° $\text{II}$ 20'23	
minimum elong	-4095 May 02 j 05:02	8° $\text{Y}$ 04'48	1°52'37	evening set	-4089 Jul 07 j 04:36	25° $\text{II}$ 53'24	
max. Earth dist.	-4095 May 02 j 21:44	8° $\text{Y}$ 10'18	9.95213 AU				
morning rise	-4095 May 20 j 08:23	10° $\text{Y}$ 26'53		conjunction	-4089 Jul 24 j 14:03	27° $\text{II}$ 58'12	1°07'10
retrograde	-4095 Sep 01 j 22:13	18° $\text{Y}$ 44'54		minimum elong	-4089 Jul 24 j 14:00	27° $\text{II}$ 58'12	1°07'21
opposition	-4095 Nov 07 j 05:32	15° $\text{Y}$ 16'14	-2°06'03	max. Earth dist.	-4089 Jul 24 j 19:36	27° $\text{II}$ 59'53	10.76288 AU
min. Earth dist.	-4095 Nov 06 j 16:38	15° $\text{Y}$ 18'55	7.99792 AU	morning rise	-4089 Aug 10 j 18:21	0° $\text{E}$ 01'26	
direct	-4094 Jan 13 j 05:43	11° $\text{Y}$ 46'14			-4089 Aug 10 j 13:28	0° $\text{E}$	
evening set	-4094 Apr 29 j 09:30	20° $\text{Y}$ 06'08		retrograde	-4089 Nov 17 j 14:39	7° $\text{E}$ 07'18	
				opposition	-4088 Jan 24 j 18:27	3° $\text{E}$ 48'32	1°37'57
conjunction	-4094 May 17 j 13:31	22° $\text{Y}$ 26'49	-1°27'29	min. Earth dist.	-4088 Jan 24 j 14:18	3° $\text{E}$ 49'20	8.83207 AU
minimum elong	-4094 May 17 j 13:35	22° $\text{Y}$ 26'50	1°27'26	direct	-4088 Apr 04 j 16:12	0° $\text{E}$ 23'48	
max. Earth dist.	-4094 May 18 j 06:28	22° $\text{Y}$ 32'19	10.04941 AU	evening set	-4088 Jul 18 j 15:22	7° $\text{E}$ 47'36	
morning rise	-4094 Jun 04 j 15:29	24° $\text{Y}$ 46'46					
	-4094 Jul 20 j 17:00	0° $\text{B}$		conjunction	-4088 Aug 04 j 19:33	9° $\text{E}$ 49'14	1°32'06
retrograde	-4094 Sep 15 j 22:45	2° $\text{B}$ 52'23		minimum elong	-4088 Aug 04 j 19:30	9° $\text{E}$ 49'13	1°32'17
	-4094 Nov 14 j 06:48	30° $\text{K}$		max. Earth dist.	-4088 Aug 04 j 22:19	9° $\text{E}$ 50'03	10.89802 AU
opposition	-4094 Nov 21 j 08:11	29° $\text{Y}$ 25'19	-1°31'14	morning rise	-4088 Aug 21 j 18:39	11° $\text{E}$ 49'23	
min. Earth dist.	-4094 Nov 20 j 19:00	29° $\text{Y}$ 28'02	8.10792 AU	retrograde	-4088 Nov 28 j 07:29	18° $\text{E}$ 47'34	
direct	-4093 Jan 28 j 00:22	25° $\text{Y}$ 55'39		opposition	-4087 Feb 04 j 22:38	15° $\text{E}$ 29'59	2°05'40
	-4093 Apr 08 j 19:29	0° $\text{B}$		min. Earth dist.	-4087 Feb 04 j 20:47	15° $\text{E}$ 30'20	8.95980 AU
evening set	-4093 May 14 j 08:32	4° $\text{B}$ 08'02		direct	-4087 Apr 17 j 06:48	12° $\text{E}$ 06'31	
				evening set	-4087 Jul 30 j 16:06	19° $\text{E}$ 22'07	
conjunction	-4093 Jun 01 j 11:08	6° $\text{B}$ 26'15	-0°57'42				
minimum elong	-4093 Jun 01 j 11:11	6° $\text{B}$ 26'16	0°57'36	conjunction	-4087 Aug 16 j 15:13	21° $\text{E}$ 20'57	1°52'39
max. Earth dist.	-4093 Jun 02 j 03:43	6° $\text{B}$ 31'33	10.17210 AU	minimum elong	-4087 Aug 16 j 15:10	21° $\text{E}$ 20'56	1°52'49
morning rise	-4093 Jun 19 j 10:21	8° $\text{B}$ 43'21		max. Earth dist.	-4087 Aug 16 j 15:25	21° $\text{E}$ 21'01	11.01593 AU
	-4093 Aug 18 j 11:14	15° $\text{B}$		morning rise	-4087 Sep 02 j 09:26	23° $\text{E}$ 18'26	
retrograde	-4093 Sep 29 j 12:41	16° $\text{B}$ 35'39			-4087 Nov 25 j 06:11	0° $\text{E}$	
	-4093 Nov 11 j 08:43	15° $\text{K}$		retrograde	-4087 Dec 09 j 20:37	0° $\text{E}$ 10'49	
opposition	-4093 Dec 05 j 02:48	13° $\text{B}$ 10'19	-0°52'10		-4087 Dec 24 j 11:26	30° $\text{K}$	
min. Earth dist.	-4093 Dec 04 j 14:08	13° $\text{B}$ 12'54	8.23997 AU	opposition	-4086 Feb 16 j 21:55	26° $\text{E}$ 54'11	2°27'40
direct	-4092 Feb 11 j 11:08	9° $\text{B}$ 41'16		min. Earth dist.	-4086 Feb 16 j 23:16	26° $\text{E}$ 53'56	9.06818 AU
	-4092 May 04 j 16:09	15° $\text{B}$		direct	-4086 Apr 29 j 12:56	23° $\text{E}$ 31'58	
evening set	-4092 May 27 j 20:17	17° $\text{B}$ 44'29			-4086 Aug 05 j 08:49	0° $\text{E}$	
				evening set	-4086 Aug 11 j 08:15	0° $\text{E}$ 40'32	
conjunction	-4092 Jun 14 j 20:05	19° $\text{B}$ 59'39	-0°25'27				
minimum elong	-4092 Jun 14 j 20:06	19° $\text{B}$ 59'40	0°25'20	conjunction	-4086 Aug 28 j 02:41	2° $\text{E}$ 37'03	2°08'22
max. Earth dist.	-4092 Jun 15 j 11:21	20° $\text{B}$ 04'28	10.31284 AU	minimum elong	-4086 Aug 28 j 02:39	2° $\text{E}$ 37'02	2°08'32
morning rise	-4092 Jul 02 j 15:26	22° $\text{B}$ 13'26		max. Earth dist.	-4086 Aug 27 j 23:12	2° $\text{E}$ 36'02	11.11257 AU
retrograde	-4092 Oct 11 j 16:46	29° $\text{B}$ 52'25		morning rise	-4086 Sep 13 j 16:56	4° $\text{E}$ 32'23	
opposition	-4092 Dec 17 j 12:48	26° $\text{B}$ 28'53	-0°11'34	retrograde	-4086 Dec 21 j 03:46	11° $\text{E}$ 20'49	
min. Earth dist.	-4092 Dec 17 j 01:50	26° $\text{B}$ 31'05	8.38633 AU	opposition	-4085 Feb 28 j 17:29	8° $\text{E}$ 04'51	2°43'34
direct	-4091 Feb 24 j 13:29	23° $\text{B}$ 00'40		min. Earth dist.	-4085 Feb 28 j 21:54	8° $\text{E}$ 04'02	9.15356 AU
asc. node	-4091 Apr 05 j 01:03	24° $\text{B}$ 18'45		direct	-4085 May 11 j 12:08	4° $\text{E}$ 43'48	
	-4091 Jun 03 j 08:19	0° $\text{II}$		evening set	-4085 Aug 22 j 17:10	11° $\text{E}$ 46'37	
evening set	-4091 Jun 10 j 19:41	0° $\text{II}$ 53'51					
				conjunction	-4085 Sep 08 j 07:43	13° $\text{E}$ 41'20	2°19'00
conjunction	-4091 Jun 28 j 15:27	3° $\text{II}$ 05'38	0°07'16	minimum elong	-4085 Sep 08 j 07:42	13° $\text{E}$ 41'20	2°19'07
minimum elong	-4091 Jun 28 j 15:26	3° $\text{II}$ 05'38	0°07'25	max. Earth dist.	-4085 Sep 08 j 00:45	13° $\text{E}$ 39'19	11.18480 AU
behind sun begin	-4091 Jun 28 j 08:51	3° $\text{II}$ 03'37			-4085 Sep 19 j 15:57	15° $\text{E}$	

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 27

Attention, astronomical year style is used: The year -4085 in astronomical counting style is the year 4086 BCE in historical counting style.

morning rise	-4085 Sep 24 j 18:57	15° $\Omega$ 35'06		retrograde	-4078 Mar 10 j 10:37	28° $\Omega$ 41'25	
retrograde	-4084 Jan 01 j 11:06	22° $\Omega$ 21'26		opposition	-4078 May 20 j 12:04	25° $\Omega$ 21'48	1°41'28
opposition	-4084 Mar 11 j 10:27	19° $\Omega$ 05'50	2°53'13	min. Earth dist.	-4078 May 21 j 01:29	25° $\Omega$ 19'19	8.98033 AU
min. Earth dist.	-4084 Mar 11 j 16:52	19° $\Omega$ 04'39	9.21300 AU	direct	-4078 Jul 29 j 12:47	22° $\Omega$ 03'49	
direct	-4084 May 22 j 08:24	15° $\Omega$ 45'50		evening set	-4078 Nov 06 j 06:31	29° $\Omega$ 05'48	
evening set	-4084 Sep 01 j 20:47	22° $\Omega$ 44'14			-4078 Nov 13 j 22:01	0° $\mathbb{M}$	
conjunction	-4084 Sep 18 j 08:30	24° $\Omega$ 37'45	2°24'24	conjunction	-4078 Nov 22 j 20:27	1° $\mathbb{M}$ 04'05	1°10'45
minimum elong	-4084 Sep 18 j 08:29	24° $\Omega$ 37'45	2°24'30	minimum elong	-4078 Nov 22 j 20:30	1° $\mathbb{M}$ 04'06	1°10'40
max. Earth dist.	-4084 Sep 17 j 23:39	24° $\Omega$ 35'12	11.23019 AU	max. Earth dist.	-4078 Nov 22 j 04:10	0° $\mathbb{M}$ 59'13	10.91983 AU
morning rise	-4084 Oct 04 j 17:26	26° $\Omega$ 30'32		morning rise	-4078 Dec 09 j 13:09	3° $\mathbb{M}$ 03'15	
	-4084 Nov 07 j 04:46	0° $\mathbb{M}$		retrograde	-4077 Mar 22 j 23:54	10° $\mathbb{M}$ 22'02	
retrograde	-4083 Jan 11 j 18:45	3° $\mathbb{M}$ 16'30		opposition	-4077 Jun 01 j 22:39	7° $\mathbb{M}$ 00'51	1°10'12
opposition	-4083 Mar 23 j 02:09	0° $\mathbb{M}$ 00'58	2°56'31	min. Earth dist.	-4077 Jun 02 j 12:28	6° $\mathbb{M}$ 58'15	8.85419 AU
min. Earth dist.	-4083 Mar 23 j 10:16	29° $\Omega$ 59'30	9.24450 AU	direct	-4077 Aug 10 j 09:47	3° $\mathbb{M}$ 42'14	
	-4083 Mar 23 j 07:29	30° $\mathbb{R}$ $\Omega$		evening set	-4077 Nov 17 j 23:40	10° $\mathbb{M}$ 50'17	
direct	-4083 Jun 02 j 22:27	26° $\Omega$ 41'54					
	-4083 Aug 08 j 23:16	0° $\mathbb{M}$		conjunction	-4077 Dec 04 j 16:45	12° $\mathbb{M}$ 51'10	0°43'27
evening set	-4083 Sep 12 j 20:49	3° $\mathbb{M}$ 37'15		minimum elong	-4077 Dec 04 j 16:47	12° $\mathbb{M}$ 51'11	0°43'20
				max. Earth dist.	-4077 Dec 04 j 00:51	12° $\mathbb{M}$ 46'21	10.78519 AU
conjunction	-4083 Sep 29 j 06:36	5° $\mathbb{M}$ 30'08	2°24'32	morning rise	-4077 Dec 21 j 13:27	14° $\mathbb{M}$ 53'12	
minimum elong	-4083 Sep 29 j 06:37	5° $\mathbb{M}$ 30'09	2°24'37		-4077 Dec 22 j 12:23	15° $\mathbb{M}$	
max. Earth dist.	-4083 Sep 28 j 19:58	5° $\mathbb{M}$ 27'04	11.24727 AU	retrograde	-4076 Apr 03 j 22:50	22° $\mathbb{M}$ 22'48	
morning rise	-4083 Oct 15 j 14:19	7° $\mathbb{M}$ 22'32		opposition	-4076 Jun 13 j 16:16	18° $\mathbb{M}$ 59'54	0°34'57
retrograde	-4082 Jan 23 j 03:52	14° $\mathbb{M}$ 09'53		min. Earth dist.	-4076 Jun 14 j 05:22	18° $\mathbb{M}$ 57'25	8.71109 AU
opposition	-4082 Apr 03 j 18:16	10° $\mathbb{M}$ 54'08	2°53'31	direct	-4076 Aug 21 j 12:23	15° $\mathbb{M}$ 40'27	
min. Earth dist.	-4082 Apr 04 j 04:34	10° $\mathbb{M}$ 52'16	9.24716 AU	evening set	-4076 Nov 29 j 02:19	22° $\mathbb{M}$ 56'14	
direct	-4082 Jun 14 j 10:09	7° $\mathbb{M}$ 35'46					
evening set	-4082 Sep 23 j 18:58	14° $\mathbb{M}$ 29'28		conjunction	-4076 Dec 15 j 23:04	25° $\mathbb{M}$ 00'05	0°13'30
				minimum elong	-4076 Dec 15 j 23:05	25° $\mathbb{M}$ 00'05	0°13'22
conjunction	-4082 Oct 10 j 03:40	16° $\mathbb{M}$ 22'19	2°19'27	behind sun begin	-4076 Dec 15 j 18:58	24° $\mathbb{M}$ 58'50	
minimum elong	-4082 Oct 10 j 03:42	16° $\mathbb{M}$ 22'20	2°19'30	behind sun end	-4076 Dec 16 j 03:12	25° $\mathbb{M}$ 01'20	
max. Earth dist.	-4082 Oct 09 j 14:25	16° $\mathbb{M}$ 18'29	11.23561 AU	max. Earth dist.	-4076 Dec 15 j 09:07	24° $\mathbb{M}$ 55'47	10.63604 AU
morning rise	-4082 Oct 26 j 11:25	18° $\mathbb{M}$ 14'57		morning rise	-4075 Jan 01 j 23:58	27° $\mathbb{M}$ 05'18	
retrograde	-4081 Feb 03 j 15:02	25° $\mathbb{M}$ 05'22			-4075 Jan 27 j 08:57	0° $\mathbb{X}$	
opposition	-4081 Apr 15 j 11:44	21° $\mathbb{M}$ 49'05	2°44'17	retrograde	-4075 Apr 17 j 08:00	4° $\mathbb{X}$ 47'01	
min. Earth dist.	-4081 Apr 16 j 00:16	21° $\mathbb{M}$ 46'48	9.22094 AU	desc. node	-4075 May 27 j 08:48	3° $\mathbb{X}$ 31'26	
direct	-4081 Jun 25 j 20:44	18° $\mathbb{M}$ 31'11		opposition	-4075 Jun 26 j 17:47	1° $\mathbb{X}$ 22'17	-0°03'08
evening set	-4081 Oct 04 j 17:12	25° $\mathbb{M}$ 24'41		min. Earth dist.	-4075 Jun 27 j 04:42	1° $\mathbb{X}$ 20'11	8.55699 AU
max. Earth dist.	-4081 Oct 20 j 11:03	27° $\mathbb{M}$ 13'46	11.19554 AU		-4075 Jul 15 j 02:15	30° $\mathbb{R}$ $\mathbb{M}$	
				direct	-4075 Sep 02 j 23:01	28° $\mathbb{M}$ 01'47	
conjunction	-4081 Oct 21 j 01:54	27° $\mathbb{M}$ 18'05	2°09'16		-4075 Oct 20 j 18:56	0° $\mathbb{X}$	
minimum elong	-4081 Oct 21 j 01:56	27° $\mathbb{M}$ 18'05	2°09'17	evening set	-4075 Dec 11 j 16:37	5° $\mathbb{X}$ 26'50	
morning rise	-4081 Nov 06 j 10:38	29° $\mathbb{M}$ 11'33					
	-4081 Nov 13 j 14:45	0° $\Omega$		conjunction	-4075 Dec 28 j 17:17	7° $\mathbb{X}$ 33'55	-0°18'04
retrograde	-4080 Feb 15 j 06:05	6° $\Omega$ 06'39		minimum elong	-4075 Dec 28 j 17:17	7° $\mathbb{X}$ 33'55	0°18'13
opposition	-4080 Apr 26 j 07:31	2° $\Omega$ 49'32	2°29'00	max. Earth dist.	-4075 Dec 28 j 05:37	7° $\mathbb{X}$ 30'16	10.47934 AU
min. Earth dist.	-4080 Apr 26 j 20:51	2° $\Omega$ 47'06	9.16653 AU	morning rise	-4074 Jan 14 j 22:36	9° $\mathbb{X}$ 42'34	
	-4080 Jun 11 j 21:30	30° $\mathbb{R}$ $\mathbb{M}$		retrograde	-4074 May 01 j 04:55	17° $\mathbb{X}$ 37'01	
direct	-4080 Jul 06 j 08:20	29° $\mathbb{M}$ 31'51		opposition	-4074 Jul 10 j 03:37	14° $\mathbb{X}$ 10'27	-0°42'30
	-4080 Jul 30 j 10:48	0° $\Omega$		min. Earth dist.	-4074 Jul 10 j 11:43	14° $\mathbb{X}$ 08'52	8.39966 AU
evening set	-4080 Oct 14 j 17:13	6° $\Omega$ 26'40		direct	-4074 Sep 15 j 17:27	10° $\mathbb{X}$ 48'42	
max. Earth dist.	-4080 Oct 30 j 11:59	8° $\Omega$ 16'48	11.12810 AU	evening set	-4074 Dec 24 j 19:58	18° $\mathbb{X}$ 24'13	
conjunction	-4080 Oct 31 j 02:58	8° $\Omega$ 21'11	1°54'12	conjunction	-4073 Jan 11 j 00:36	20° $\mathbb{X}$ 34'40	-0°49'38
minimum elong	-4080 Oct 31 j 03:01	8° $\Omega$ 21'12	1°54'11	minimum elong	-4073 Jan 11 j 00:33	20° $\mathbb{X}$ 34'39	0°49'48
morning rise	-4080 Nov 16 j 13:27	10° $\Omega$ 16'01		max. Earth dist.	-4073 Jan 10 j 15:18	20° $\mathbb{X}$ 31'42	10.32327 AU
retrograde	-4079 Feb 26 j 05:48	17° $\Omega$ 17'28		morning rise	-4073 Jan 28 j 10:22	22° $\mathbb{X}$ 46'48	
opposition	-4079 May 08 j 07:17	13° $\Omega$ 59'14	2°07'56		-4073 Apr 12 j 22:49	0° $\mathbb{Z}$	
min. Earth dist.	-4079 May 08 j 20:33	13° $\Omega$ 56'48	9.08550 AU	retrograde	-4073 May 15 j 12:44	0° $\mathbb{Z}$ 53'58	
direct	-4079 Jul 17 j 22:02	10° $\Omega$ 41'33			-4073 Jun 17 j 07:30	30° $\mathbb{R}$ $\mathbb{X}$	
evening set	-4079 Oct 25 j 20:56	17° $\Omega$ 39'08		opposition	-4073 Jul 23 j 21:59	27° $\mathbb{X}$ 25'41	-1°21'07
				min. Earth dist.	-4073 Jul 24 j 03:23	27° $\mathbb{X}$ 24'37	8.24751 AU
conjunction	-4079 Nov 11 j 08:28	19° $\Omega$ 35'18	1°34'33	direct	-4073 Sep 28 j 20:17	24° $\mathbb{X}$ 02'29	
minimum elong	-4079 Nov 11 j 08:31	19° $\Omega$ 35'18	1°34'29		-4073 Dec 23 j 18:35	0° $\mathbb{Z}$	
max. Earth dist.	-4079 Nov 10 j 17:09	19° $\Omega$ 30'46	11.03526 AU	evening set	-4072 Jan 07 j 13:03	1° $\mathbb{Z}$ 49'16	
morning rise	-4079 Nov 27 j 21:37	21° $\Omega$ 32'03					

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 28

Attention, astronomical year style is used: The year -4072 in astronomical counting style is the year 4073 BCE in historical counting style.

conjunction	-4072 Jan 24 j 21:36	4° $\text{S}$ 03'00	-1°19'30	morning rise	-4066 May 13 j 06:46	3° $\text{Y}$ 42'26	
minimum elong	-4072 Jan 24 j 21:33	4° $\text{S}$ 02'59	1°19'41	retrograde	-4066 Aug 26 j 11:00	12° $\text{Y}$ 06'30	
max. Earth dist.	-4072 Jan 24 j 15:31	4° $\text{S}$ 01'02	10.17641 AU	opposition	-4066 Oct 31 j 18:51	8° $\text{Y}$ 36'27	-2°20'36
morning rise	-4072 Feb 11 j 11:36	6° $\text{S}$ 18'30		min. Earth dist.	-4066 Oct 31 j 05:25	8° $\text{Y}$ 39'16	7.93798 AU
retrograde	-4072 May 29 j 04:40	14° $\text{S}$ 37'33		direct	-4065 Jan 06 j 11:57	5° $\text{Y}$ 05'50	
opposition	-4072 Aug 06 j 00:25	11° $\text{S}$ 07'46	-1°56'34	evening set	-4065 Apr 22 j 11:37	13° $\text{Y}$ 29'04	
min. Earth dist.	-4072 Aug 06 j 02:55	11° $\text{S}$ 07'15	8.10923 AU				
direct	-4072 Oct 11 j 10:58	7° $\text{S}$ 43'02		conjunction	-4065 May 10 j 15:54	15° $\text{Y}$ 50'52	-1°40'22
evening set	-4071 Jan 20 j 20:01	15° $\text{S}$ 41'12		minimum elong	-4065 May 10 j 15:59	15° $\text{Y}$ 50'53	1°40'20
				max. Earth dist.	-4065 May 11 j 10:17	15° $\text{Y}$ 56'53	9.98283 AU
conjunction	-4071 Feb 07 j 08:33	17° $\text{S}$ 58'01	-1°45'39	morning rise	-4065 May 28 j 18:43	18° $\text{Y}$ 12'08	
minimum elong	-4071 Feb 07 j 08:29	17° $\text{S}$ 58'00	1°45'50	retrograde	-4065 Sep 09 j 17:07	26° $\text{Y}$ 24'32	
max. Earth dist.	-4071 Feb 07 j 06:37	17° $\text{S}$ 57'23	10.04752 AU	min. Earth dist.	-4065 Nov 14 j 11:52	22° $\text{Y}$ 58'49	8.03661 AU
morning rise	-4071 Feb 25 j 02:22	20° $\text{S}$ 16'33		opposition	-4065 Nov 15 j 01:14	22° $\text{Y}$ 56'03	-1°48'48
retrograde	-4071 Jun 13 j 03:27	28° $\text{S}$ 45'37		direct	-4064 Jan 21 j 08:43	19° $\text{Y}$ 25'37	
opposition	-4071 Aug 20 j 09:52	25° $\text{S}$ 14'38	-2°26'11	evening set	-4064 May 06 j 15:30	27° $\text{Y}$ 42'19	
min. Earth dist.	-4071 Aug 20 j 09:14	25° $\text{S}$ 14'46	7.99328 AU				
direct	-4071 Oct 25 j 11:52	21° $\text{S}$ 48'23		conjunction	-4064 May 24 j 19:00	0° $\text{S}$ 01'58	-1°12'30
evening set	-4070 Feb 04 j 15:52	29° $\text{S}$ 57'12		minimum elong	-4064 May 24 j 19:03	0° $\text{S}$ 01'59	1°12'26
	-4070 Feb 05 j 00:30	0° $\approx$			-4064 May 24 j 12:53	0° $\text{S}$	
				max. Earth dist.	-4064 May 25 j 12:38	0° $\text{S}$ 07'40	10.09640 AU
conjunction	-4070 Feb 22 j 08:19	2° $\approx$ 16'44	-2°06'01	morning rise	-4064 Jun 11 j 19:49	2° $\text{S}$ 20'42	
minimum elong	-4070 Feb 22 j 08:16	2° $\approx$ 16'43	2°06'11	retrograde	-4064 Sep 22 j 12:25	10° $\text{S}$ 19'57	
max. Earth dist.	-4070 Feb 22 j 11:17	2° $\approx$ 17'43	9.94475 AU	opposition	-4064 Nov 27 j 23:56	6° $\text{S}$ 53'17	-1°11'21
morning rise	-4070 Mar 12 j 05:27	4° $\approx$ 37'46		min. Earth dist.	-4064 Nov 27 j 11:03	6° $\text{S}$ 55'55	8.16167 AU
retrograde	-4070 Jun 28 j 07:26	13° $\approx$ 13'57		direct	-4063 Feb 03 j 23:26	3° $\text{S}$ 23'26	
opposition	-4070 Sep 04 j 00:42	9° $\approx$ 42'10	-2°47'22	evening set	-4063 May 21 j 09:05	11° $\text{S}$ 31'37	
min. Earth dist.	-4070 Sep 03 j 20:34	9° $\approx$ 43'01	7.90702 AU				
direct	-4070 Nov 08 j 21:25	6° $\approx$ 14'31		conjunction	-4063 Jun 08 j 10:22	13° $\text{S}$ 48'28	-0°41'08
evening set	-4069 Feb 19 j 22:35	14° $\approx$ 32'18		minimum elong	-4063 Jun 08 j 10:24	13° $\text{S}$ 48'28	0°41'02
	-4069 Feb 23 j 11:10	15° $\approx$		max. Earth dist.	-4063 Jun 09 j 02:22	13° $\text{S}$ 53'32	10.23243 AU
					-4063 Jun 17 j 19:51	15° $\text{S}$	
conjunction	-4069 Mar 09 j 18:39	16° $\approx$ 53'56	-2°18'46	morning rise	-4063 Jun 26 j 07:58	16° $\text{S}$ 04'03	
minimum elong	-4069 Mar 09 j 18:38	16° $\approx$ 53'56	2°18'54	retrograde	-4063 Oct 05 j 20:48	23° $\text{S}$ 49'45	
max. Earth dist.	-4069 Mar 10 j 02:32	16° $\approx$ 56'34	9.87495 AU	opposition	-4063 Dec 11 j 14:08	20° $\text{S}$ 25'03	-0°31'06
morning rise	-4069 Mar 27 j 18:29	19° $\approx$ 16'48		min. Earth dist.	-4063 Dec 11 j 02:02	20° $\text{S}$ 27'29	8.30531 AU
retrograde	-4069 Jul 13 j 13:25	27° $\approx$ 56'16		direct	-4062 Feb 18 j 07:13	16° $\text{S}$ 56'08	
opposition	-4069 Sep 18 j 18:40	24° $\approx$ 24'10	-2°58'01	evening set	-4062 Jun 04 j 14:43	24° $\text{S}$ 54'36	
min. Earth dist.	-4069 Sep 18 j 11:01	24° $\approx$ 25'46	7.85621 AU				
direct	-4069 Nov 23 j 13:41	20° $\approx$ 55'18		conjunction	-4062 Jun 22 j 12:32	27° $\text{S}$ 08'10	-0°08'26
evening set	-4068 Mar 06 j 12:45	29° $\approx$ 19'29		minimum elong	-4062 Jun 22 j 12:32	27° $\text{S}$ 08'10	0°08'18
	-4068 Mar 11 j 16:00	0° $\text{H}$		behind sun begin	-4062 Jun 22 j 06:09	27° $\text{S}$ 06'11	
				behind sun end	-4062 Jun 22 j 18:55	27° $\text{S}$ 10'09	
conjunction	-4068 Mar 24 j 12:05	1° $\text{H}$ 42'30	-2°22'36	max. Earth dist.	-4062 Jun 23 j 02:32	27° $\text{S}$ 12'32	10.38264 AU
minimum elong	-4068 Mar 24 j 12:05	1° $\text{H}$ 42'30	2°22'42	morning rise	-4062 Jul 10 j 05:48	29° $\text{S}$ 20'15	
max. Earth dist.	-4068 Mar 25 j 00:20	1° $\text{H}$ 46'35	9.84311 AU		-4062 Jul 15 j 16:46	0° $\text{II}$	
morning rise	-4068 Apr 11 j 14:00	4° $\text{H}$ 06'21		asc. node	-4062 Sep 27 j 16:23	6° $\text{II}$ 28'36	
retrograde	-4068 Jul 27 j 18:34	12° $\text{H}$ 44'47		retrograde	-4062 Oct 18 j 18:05	6° $\text{II}$ 52'59	
opposition	-4068 Oct 02 j 13:25	9° $\text{H}$ 12'52	-2°56'54	opposition	-4062 Dec 24 j 19:59	3° $\text{II}$ 30'15	0°09'22
min. Earth dist.	-4068 Oct 02 j 02:49	9° $\text{H}$ 15'06	7.84445 AU	min. Earth dist.	-4062 Dec 24 j 08:55	3° $\text{II}$ 32'27	8.45926 AU
direct	-4068 Dec 07 j 11:15	5° $\text{H}$ 43'04		direct	-4061 Mar 04 j 06:14	0° $\text{II}$ 02'31	
evening set	-4067 Mar 22 j 06:22	14° $\text{H}$ 10'22		evening set	-4061 Jun 18 j 07:35	7° $\text{II}$ 50'44	
conjunction	-4067 Apr 09 j 08:23	16° $\text{H}$ 33'54	-2°17'02	conjunction	-4061 Jul 06 j 00:59	10° $\text{II}$ 00'47	0°23'50
minimum elong	-4067 Apr 09 j 08:26	16° $\text{H}$ 33'55	2°17'05	minimum elong	-4061 Jul 06 j 00:57	10° $\text{II}$ 00'46	0°23'59
max. Earth dist.	-4067 Apr 10 j 00:05	16° $\text{H}$ 39'08	9.85149 AU	max. Earth dist.	-4061 Jul 06 j 13:04	10° $\text{II}$ 04'30	10.53871 AU
morning rise	-4067 Apr 27 j 11:39	18° $\text{H}$ 57'50		morning rise	-4061 Jul 23 j 13:10	12° $\text{II}$ 09'14	
retrograde	-4067 Aug 11 j 19:00	27° $\text{H}$ 30'56		retrograde	-4061 Oct 31 j 06:50	19° $\text{II}$ 30'09	
opposition	-4067 Oct 17 j 06:19	23° $\text{H}$ 59'43	-2°44'02	opposition	-4060 Jan 06 j 17:40	16° $\text{II}$ 09'17	0°47'55
min. Earth dist.	-4067 Oct 16 j 17:42	24° $\text{H}$ 02'22	7.87241 AU	min. Earth dist.	-4060 Jan 06 j 08:46	16° $\text{II}$ 11'02	8.61540 AU
direct	-4067 Dec 22 j 11:50	20° $\text{H}$ 29'19		direct	-4060 Mar 16 j 18:59	12° $\text{II}$ 42'54	
evening set	-4066 Apr 06 j 23:24	28° $\text{H}$ 56'15		evening set	-4060 Jun 30 j 12:12	20° $\text{II}$ 20'58	
	-4066 Apr 15 j 02:38	0° $\text{Y}$					
				conjunction	-4060 Jul 18 j 00:28	22° $\text{II}$ 27'30	0°53'55
conjunction	-4066 Apr 25 j 03:10	1° $\text{Y}$ 19'23	-2°02'31	minimum elong	-4060 Jul 18 j 00:25	22° $\text{II}$ 27'29	0°54'05
minimum elong	-4066 Apr 25 j 03:14	1° $\text{Y}$ 19'24	2°02'31	max. Earth dist.	-4060 Jul 18 j 09:45	22° $\text{II}$ 30'18	10.69276 AU
max. Earth dist.	-4066 Apr 25 j 20:57	1° $\text{Y}$ 25'16	9.89924 AU	morning rise	-4060 Aug 04 j 07:15	24° $\text{II}$ 32'24	

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), AstroDienst AG 18-Feb-2025 14:23, page 29

Attention, astronomical year style is used: The year -4060 in astronomical counting style is the year 4061 BCE in historical counting style.

	-4060 Sep 27 j 14:05	0°♄		minimum elong	-4054 Sep 24 j 15:31	0°♎43'41	2°25'07
retrograde	-4060 Nov 11 j 11:27	1°♄42'57		max. Earth dist.	-4054 Sep 24 j 03:44	0°♎40'17	11.24356 AU
	-4060 Dec 27 j 13:52	30°♎II		morning rise	-4054 Oct 10 j 23:49	2°♎36'15	
opposition	-4059 Jan 18 j 07:44	28°♎23'48	1°22'54	retrograde	-4053 Jan 18 j 06:53	9°♎23'01	
min. Earth dist.	-4059 Jan 18 j 01:54	28°♎24'56	8.76620 AU	opposition	-4053 Mar 29 j 18:21	6°♎07'36	2°55'35
direct	-4059 Mar 29 j 21:05	24°♎58'48		min. Earth dist.	-4053 Mar 30 j 05:08	6°♎05'38	9.24833 AU
	-4059 Jun 21 j 08:12	0°♄		direct	-4053 Jun 09 j 12:34	2°♎49'00	
evening set	-4059 Jul 13 j 05:09	2°♄27'17		evening set	-4053 Sep 19 j 04:14	9°♎43'39	
conjunction	-4059 Jul 30 j 11:54	4°♄30'27	1°20'45	conjunction	-4053 Oct 05 j 13:25	11°♎36'32	2°22'22
minimum elong	-4059 Jul 30 j 11:51	4°♄30'26	1°20'56	minimum elong	-4053 Oct 05 j 13:26	11°♎36'32	2°22'27
max. Earth dist.	-4059 Jul 30 j 17:12	4°♄32'02	10.83772 AU	max. Earth dist.	-4053 Oct 05 j 00:13	11°♎32'43	11.24131 AU
morning rise	-4059 Aug 16 j 13:24	6°♄32'04		morning rise	-4053 Oct 21 j 21:06	13°♎29'03	
retrograde	-4059 Nov 23 j 06:08	13°♄33'59		retrograde	-4052 Jan 29 j 18:03	20°♎18'07	
opposition	-4058 Jan 30 j 15:21	10°♄16'18	1°53'10	opposition	-4052 Apr 09 j 11:16	17°♎02'07	2°49'15
min. Earth dist.	-4058 Jan 30 j 12:38	10°♄16'48	8.90491 AU	min. Earth dist.	-4052 Apr 09 j 23:12	16°♎59'57	9.23124 AU
direct	-4058 Apr 11 j 17:11	6°♄52'39		direct	-4052 Jun 20 j 00:39	13°♎43'56	
evening set	-4058 Jul 25 j 11:08	14°♄12'23		evening set	-4052 Sep 29 j 02:32	20°♎37'42	
conjunction	-4058 Aug 11 j 12:30	16°♄12'30	1°43'28	conjunction	-4052 Oct 15 j 11:19	22°♎30'53	2°14'33
minimum elong	-4058 Aug 11 j 12:27	16°♄12'29	1°43'39	minimum elong	-4052 Oct 15 j 11:21	22°♎30'53	2°14'35
max. Earth dist.	-4058 Aug 11 j 13:37	16°♄12'50	10.96744 AU	max. Earth dist.	-4052 Oct 14 j 20:52	22°♎26'41	11.20996 AU
morning rise	-4058 Aug 28 j 09:05	18°♄11'13		morning rise	-4052 Oct 31 j 19:22	24°♎23'58	
retrograde	-4058 Dec 04 j 20:58	25°♄06'23			-4052 Dec 31 j 00:03	0°♄	
opposition	-4057 Feb 11 j 17:19	21°♄49'48	2°17'56	retrograde	-4051 Feb 09 j 07:50	1°♄17'00	
min. Earth dist.	-4057 Feb 11 j 16:57	21°♄49'52	9.02563 AU		-4051 Mar 22 j 18:12	30°♎♎	
direct	-4057 Apr 24 j 04:58	18°♄27'29		opposition	-4051 Apr 21 j 06:13	28°♎00'06	2°36'47
evening set	-4057 Aug 06 j 07:41	25°♄39'29		min. Earth dist.	-4051 Apr 21 j 19:41	27°♎57'38	9.18536 AU
				direct	-4051 Jul 01 j 11:23	24°♎42'04	
conjunction	-4057 Aug 23 j 04:15	27°♄37'02	2°01'31		-4051 Sep 25 j 14:55	0°♄	
minimum elong	-4057 Aug 23 j 04:12	27°♄37'01	2°01'41	evening set	-4051 Oct 10 j 01:47	1°♄36'27	
max. Earth dist.	-4057 Aug 23 j 02:21	27°♄36'28	11.07654 AU				
morning rise	-4057 Sep 08 j 20:24	29°♄33'19		conjunction	-4051 Oct 26 j 10:57	3°♄30'29	2°01'43
	-4057 Sep 12 j 18:10	0°♏		minimum elong	-4051 Oct 26 j 10:59	3°♄30'30	2°01'43
retrograde	-4057 Dec 16 j 07:40	6°♏23'34		max. Earth dist.	-4051 Oct 25 j 18:32	3°♄25'42	11.15078 AU
opposition	-4056 Feb 23 j 14:43	3°♏07'47	2°36'45	morning rise	-4051 Nov 11 j 20:34	5°♄24'44	
min. Earth dist.	-4056 Feb 23 j 17:02	3°♏07'21	9.12325 AU	retrograde	-4050 Feb 21 j 02:53	12°♄23'22	
	-4056 Apr 18 j 11:14	30°♎♄		opposition	-4050 May 03 j 04:23	9°♄05'18	2°18'22
direct	-4056 May 05 j 07:42	29°♄46'40		min. Earth dist.	-4050 May 03 j 19:11	9°♄02'35	9.11242 AU
	-4056 May 22 j 02:01	0°♏		direct	-4050 Jul 12 j 23:48	5°♄47'11	
evening set	-4056 Aug 16 j 20:23	6°♏52'14		evening set	-4050 Oct 21 j 03:37	12°♄43'42	
conjunction	-4056 Sep 02 j 12:50	8°♏47'45	2°14'35	conjunction	-4050 Nov 06 j 14:12	14°♄39'10	1°44'09
minimum elong	-4056 Sep 02 j 12:48	8°♏47'45	2°14'43	minimum elong	-4050 Nov 06 j 14:15	14°♄39'11	1°44'06
max. Earth dist.	-4056 Sep 02 j 07:57	8°♏46'20	11.16048 AU	max. Earth dist.	-4050 Nov 05 j 21:11	14°♄34'08	11.06577 AU
morning rise	-4056 Sep 19 j 01:16	10°♏42'11		morning rise	-4050 Nov 23 j 02:15	16°♄35'07	
	-4056 Oct 31 j 11:02	15°♏		retrograde	-4049 Mar 05 j 03:15	23°♄41'01	
retrograde	-4056 Dec 26 j 16:33	17°♏29'27		opposition	-4049 May 15 j 06:46	20°♄21'32	1°54'21
	-4055 Feb 23 j 21:10	15°♎♏		min. Earth dist.	-4049 May 15 j 21:40	20°♄18'47	9.01478 AU
opposition	-4055 Mar 06 j 09:15	14°♏14'09	2°49'22	direct	-4049 Jul 24 j 14:50	17°♄03'05	
min. Earth dist.	-4055 Mar 06 j 14:55	14°♏13'06	9.19394 AU	evening set	-4049 Nov 01 j 10:16	24°♄03'22	
direct	-4055 May 17 j 05:21	10°♏54'05					
	-4055 Jul 31 j 20:04	15°♏		conjunction	-4049 Nov 17 j 23:10	26°♄00'46	1°22'13
evening set	-4055 Aug 28 j 02:56	17°♏54'38		minimum elong	-4049 Nov 17 j 23:12	26°♄00'47	1°22'08
				max. Earth dist.	-4049 Nov 17 j 07:03	25°♄55'58	10.95752 AU
conjunction	-4055 Sep 13 j 15:53	19°♏48'41	2°22'26	morning rise	-4049 Dec 04 j 14:11	27°♄58'55	
minimum elong	-4055 Sep 13 j 15:52	19°♏48'40	2°22'33		-4049 Dec 22 j 11:06	0°♎	
max. Earth dist.	-4055 Sep 13 j 07:17	19°♏46'11	11.21649 AU	retrograde	-4048 Mar 16 j 13:42	5°♎13'40	
morning rise	-4055 Sep 30 j 01:43	21°♏41'52		opposition	-4048 May 26 j 14:27	1°♎52'35	1°25'13
retrograde	-4054 Jan 06 j 23:15	28°♏27'59		min. Earth dist.	-4048 May 27 j 04:10	1°♎50'02	8.89563 AU
opposition	-4054 Mar 18 j 02:07	25°♏12'50	2°55'39		-4048 Jun 22 j 07:35	30°♎♄	
min. Earth dist.	-4054 Mar 18 j 11:03	25°♏11'12	9.23585 AU	direct	-4048 Aug 04 j 10:09	28°♄33'39	
direct	-4054 May 28 j 21:45	21°♏53'38			-4048 Sep 15 j 01:53	0°♎	
evening set	-4054 Sep 08 j 05:03	28°♏50'32		evening set	-4048 Nov 11 j 23:41	5°♎39'16	
	-4054 Sep 18 j 08:11	0°♎					
conjunction	-4054 Sep 24 j 15:31	0°♎43'41	2°25'02	conjunction	-4048 Nov 28 j 15:26	7°♎39'06	0°56'26
				minimum elong	-4048 Nov 28 j 15:29	7°♎39'06	0°56'20

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 30

Attention, astronomical year style is used: The year -4048 in astronomical counting style is the year 4049 BCE in historical counting style.

max. Earth dist.	-4048 Nov 27 j 23:56	7° $\mathbb{M}$ 34'25	10.82977 AU	minimum elong	-4041 Feb 15 j 20:01	25° $\mathfrak{Z}$ 56'29	1°57'38
morning rise	-4048 Dec 15 j 10:08	9° $\mathbb{M}$ 39'56		max. Earth dist.	-4041 Feb 15 j 22:36	25° $\mathfrak{Z}$ 57'20	9.98896 AU
	-4047 Feb 05 j 21:30	15° $\mathbb{M}$		morning rise	-4041 Mar 05 j 15:36	28° $\mathfrak{Z}$ 16'28	
retrograde	-4047 Mar 29 j 09:22	17° $\mathbb{M}$ 04'56			-4041 Mar 19 j 07:22	0° $\approx$	
	-4047 May 21 j 13:43	15° $\mathbb{R}$ $\mathbb{M}$		retrograde	-4041 Jun 21 j 19:16	6° $\approx$ 49'59	
opposition	-4047 Jun 08 j 04:57	13° $\mathbb{M}$ 42'11	0°51'39	opposition	-4041 Aug 28 j 17:46	3° $\approx$ 18'43	-2°38'45
min. Earth dist.	-4047 Jun 08 j 17:29	13° $\mathbb{M}$ 39'49	8.75933 AU	min. Earth dist.	-4041 Aug 28 j 13:31	3° $\approx$ 19'36	7.94547 AU
direct	-4047 Aug 16 j 08:12	10° $\mathbb{M}$ 22'32			-4041 Oct 21 j 21:15	30° $\mathbb{R}$ $\mathfrak{Z}$	
	-4047 Nov 01 j 07:14	15° $\mathbb{M}$		direct	-4041 Nov 02 j 14:47	29° $\mathfrak{Z}$ 52'02	
evening set	-4047 Nov 23 j 21:48	17° $\mathbb{M}$ 35'07			-4041 Nov 14 j 08:16	0° $\approx$	
				evening set	-4040 Feb 13 j 07:38	8° $\approx$ 06'01	
conjunction	-4047 Dec 10 j 16:50	19° $\mathbb{M}$ 37'45	0°27'33				
minimum elong	-4047 Dec 10 j 16:51	19° $\mathbb{M}$ 37'45	0°27'26	conjunction	-4040 Mar 02 j 01:52	10° $\approx$ 26'43	-2°13'53
max. Earth dist.	-4047 Dec 10 j 01:58	19° $\mathbb{M}$ 33'12	10.68732 AU	minimum elong	-4040 Mar 02 j 01:50	10° $\approx$ 26'42	2°14'02
morning rise	-4047 Dec 27 j 15:49	21° $\mathbb{M}$ 41'38		max. Earth dist.	-4040 Mar 02 j 08:33	10° $\approx$ 28'56	9.90760 AU
retrograde	-4046 Apr 11 j 13:13	29° $\mathbb{M}$ 18'11		morning rise	-4040 Mar 20 j 00:28	12° $\approx$ 48'48	
opposition	-4046 Jun 21 j 02:59	25° $\mathbb{M}$ 53'41	0°14'40		-4040 Apr 06 j 07:18	15° $\approx$	
min. Earth dist.	-4046 Jun 21 j 14:20	25° $\mathbb{M}$ 51'30	8.61124 AU	retrograde	-4040 Jul 06 j 01:55	21° $\approx$ 27'21	
direct	-4046 Aug 28 j 14:58	22° $\mathbb{M}$ 33'06		opposition	-4040 Sep 11 j 11:00	17° $\approx$ 55'43	-2°54'23
desc. node	-4046 Nov 12 j 00:20	27° $\mathbb{M}$ 05'45		min. Earth dist.	-4040 Sep 11 j 03:56	17° $\approx$ 57'12	7.88212 AU
evening set	-4046 Dec 06 j 06:40	29° $\mathbb{M}$ 54'14			-4040 Oct 23 j 11:44	15° $\mathbb{R}$ $\approx$	
	-4046 Dec 07 j 01:35	0° $\mathfrak{Z}$		direct	-4040 Nov 16 j 04:07	14° $\approx$ 27'53	
					-4040 Dec 09 j 19:12	15° $\approx$	
conjunction	-4046 Dec 23 j 05:26	1° $\mathfrak{Z}$ 59'58	-0°03'30	evening set	-4039 Feb 27 j 19:06	22° $\approx$ 49'22	
minimum elong	-4046 Dec 23 j 05:25	1° $\mathfrak{Z}$ 59'58	0°03'39				
behind sun begin	-4046 Dec 22 j 22:24	1° $\mathfrak{Z}$ 57'48		conjunction	-4039 Mar 17 j 16:44	25° $\approx$ 11'44	-2°21'53
behind sun end	-4046 Dec 23 j 12:27	2° $\mathfrak{Z}$ 02'08		minimum elong	-4039 Mar 17 j 16:44	25° $\approx$ 11'44	2°22'00
max. Earth dist.	-4046 Dec 22 j 16:15	1° $\mathfrak{Z}$ 55'53	10.53590 AU	max. Earth dist.	-4039 Mar 18 j 03:27	25° $\approx$ 15'19	9.86222 AU
morning rise	-4045 Jan 09 j 08:53	4° $\mathfrak{Z}$ 07'11		morning rise	-4039 Apr 04 j 17:49	27° $\approx$ 35'11	
retrograde	-4045 Apr 25 j 04:24	11° $\mathfrak{Z}$ 56'07			-4039 Apr 23 j 19:42	0° $\mathfrak{H}$	
opposition	-4045 Jul 04 j 08:57	8° $\mathfrak{Z}$ 29'53	-0°24'21	retrograde	-4039 Jul 21 j 08:18	6° $\mathfrak{H}$ 14'28	
min. Earth dist.	-4045 Jul 04 j 18:32	8° $\mathfrak{Z}$ 28'01	8.45776 AU	opposition	-4039 Sep 26 j 05:56	2° $\mathfrak{H}$ 42'56	-2°58'40
direct	-4045 Sep 10 j 05:58	5° $\mathfrak{Z}$ 08'13		min. Earth dist.	-4039 Sep 25 j 20:26	2° $\mathfrak{H}$ 44'56	7.85631 AU
evening set	-4045 Dec 19 j 03:45	12° $\mathfrak{Z}$ 39'15			-4039 Nov 02 j 13:05	30° $\mathbb{R}$ $\approx$	
				direct	-4039 Dec 01 j 00:46	29° $\approx$ 14'06	
conjunction	-4044 Jan 05 j 06:33	14° $\mathfrak{Z}$ 48'16	-0°35'12		-4039 Dec 29 j 09:17	0° $\mathfrak{H}$	
minimum elong	-4044 Jan 05 j 06:31	14° $\mathfrak{Z}$ 48'15	0°35'22	evening set	-4038 Mar 15 j 11:54	7° $\mathfrak{H}$ 40'04	
max. Earth dist.	-4044 Jan 04 j 20:47	14° $\mathfrak{Z}$ 45'11	10.38229 AU				
morning rise	-4044 Jan 22 j 14:22	16° $\mathfrak{Z}$ 58'56		conjunction	-4038 Apr 02 j 12:32	10° $\mathfrak{H}$ 03'18	-2°20'35
retrograde	-4044 May 08 j 06:47	25° $\mathfrak{Z}$ 00'38		minimum elong	-4038 Apr 02 j 12:33	10° $\mathfrak{H}$ 03'19	2°20'40
opposition	-4044 Jul 16 j 23:32	21° $\mathfrak{Z}$ 32'45	-1°03'36	max. Earth dist.	-4038 Apr 03 j 02:33	10° $\mathfrak{H}$ 07'59	9.85584 AU
min. Earth dist.	-4044 Jul 17 j 06:01	21° $\mathfrak{Z}$ 31'28	8.30626 AU	morning rise	-4038 Apr 20 j 15:21	12° $\mathfrak{H}$ 27'11	
direct	-4044 Sep 22 j 05:21	18° $\mathfrak{Z}$ 09'55		retrograde	-4038 Aug 05 j 10:21	21° $\mathfrak{H}$ 02'48	
evening set	-4044 Dec 31 j 14:14	25° $\mathfrak{Z}$ 51'47		opposition	-4038 Oct 11 j 00:04	17° $\mathfrak{H}$ 31'49	-2°51'04
				min. Earth dist.	-4038 Oct 10 j 12:37	17° $\mathfrak{H}$ 34'13	7.86930 AU
conjunction	-4043 Jan 17 j 21:06	28° $\mathfrak{Z}$ 04'07	-1°06'06	direct	-4038 Dec 16 j 01:50	14° $\mathfrak{H}$ 02'14	
minimum elong	-4043 Jan 17 j 21:04	28° $\mathfrak{Z}$ 04'07	1°06'16	evening set	-4037 Mar 31 j 05:38	22° $\mathfrak{H}$ 29'13	
max. Earth dist.	-4043 Jan 17 j 15:24	28° $\mathfrak{Z}$ 02'17	10.23431 AU				
	-4043 Feb 01 j 23:28	0° $\mathfrak{Z}$		conjunction	-4037 Apr 18 j 08:29	24° $\mathfrak{H}$ 52'25	-2°10'02
morning rise	-4043 Feb 04 j 09:07	0° $\mathfrak{Z}$ 18'11		minimum elong	-4037 Apr 18 j 08:32	24° $\mathfrak{H}$ 52'26	2°10'03
retrograde	-4043 May 22 j 19:04	8° $\mathfrak{Z}$ 32'16		max. Earth dist.	-4037 Apr 19 j 00:42	24° $\mathfrak{H}$ 57'48	9.88800 AU
opposition	-4043 Jul 30 j 22:28	5° $\mathfrak{Z}$ 02'56	-1°40'50	morning rise	-4037 May 06 j 12:05	27° $\mathfrak{H}$ 15'48	
min. Earth dist.	-4043 Jul 31 j 01:13	5° $\mathfrak{Z}$ 02'23	8.16486 AU		-4037 May 28 j 10:00	0° $\mathfrak{Y}$	
direct	-4043 Oct 05 j 15:01	1° $\mathfrak{Z}$ 38'49		retrograde	-4037 Aug 20 j 04:54	5° $\mathfrak{Y}$ 43'51	
evening set	-4042 Jan 14 j 14:59	9° $\mathfrak{Z}$ 32'01		opposition	-4037 Oct 25 j 14:44	2° $\mathfrak{Y}$ 13'50	-2°32'14
				min. Earth dist.	-4037 Oct 25 j 01:58	2° $\mathfrak{Y}$ 16'30	7.91897 AU
conjunction	-4042 Feb 01 j 01:50	11° $\mathfrak{Z}$ 47'32	-1°34'13		-4037 Nov 23 j 14:24	30° $\mathbb{R}$ $\mathfrak{H}$	
minimum elong	-4042 Feb 01 j 01:47	11° $\mathfrak{Z}$ 47'31	1°34'23	direct	-4037 Dec 31 j 02:41	28° $\mathfrak{H}$ 43'51	
max. Earth dist.	-4042 Feb 01 j 00:19	11° $\mathfrak{Z}$ 47'02	10.10040 AU		-4036 Feb 06 j 07:54	0° $\mathfrak{Y}$	
morning rise	-4042 Feb 18 j 17:48	14° $\mathfrak{Z}$ 04'46		evening set	-4036 Apr 14 j 20:15	7° $\mathfrak{Y}$ 08'33	
retrograde	-4042 Jun 06 j 15:45	22° $\mathfrak{Z}$ 29'48					
opposition	-4042 Aug 14 j 04:55	18° $\mathfrak{Z}$ 59'19	-2°13'26	conjunction	-4036 May 03 j 00:22	9° $\mathfrak{Y}$ 30'53	-1°51'09
min. Earth dist.	-4042 Aug 14 j 03:58	18° $\mathfrak{Z}$ 59'30	8.04195 AU	minimum elong	-4036 May 03 j 00:26	9° $\mathfrak{Y}$ 30'54	1°51'09
direct	-4042 Oct 19 j 10:15	15° $\mathfrak{Z}$ 33'53		max. Earth dist.	-4036 May 03 j 17:39	9° $\mathfrak{Y}$ 36'34	9.95515 AU
evening set	-4041 Jan 29 j 05:25	23° $\mathfrak{Z}$ 38'08		morning rise	-4036 May 21 j 03:42	11° $\mathfrak{Y}$ 52'53	
				retrograde	-4036 Sep 02 j 15:38	20° $\mathfrak{Y}$ 10'30	
conjunction	-4041 Feb 15 j 20:05	25° $\mathfrak{Z}$ 56'30	-1°57'28	opposition	-4036 Nov 07 j 23:55	16° $\mathfrak{Y}$ 41'50	-2°03'57

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 31

Attention, astronomical year style is used: The year -4036 in astronomical counting style is the year 4037 BCE in historical counting style.

min. Earth dist.	-4036 Nov 07 j 10:30	16° $\Upsilon$ 44'37	8.00104 AU	minimum elong	-4030 Jul 25 j 08:53	29° $\Pi$ 23'40	1°09'24
direct	-4035 Jan 14 j 00:39	13° $\Upsilon$ 11'50		max. Earth dist.	-4030 Jul 25 j 14:41	29° $\Pi$ 25'25	10.76026 AU
evening set	-4035 Apr 30 j 04:24	21° $\Upsilon$ 31'27			-4030 Jul 30 j 09:29	0° $\Theta$	
				morning rise	-4030 Aug 11 j 13:00	1° $\Theta$ 26'56	
conjunction	-4035 May 18 j 08:31	23° $\Upsilon$ 52'05	-1°25'38	retrograde	-4030 Nov 18 j 09:51	8° $\Theta$ 33'06	
minimum elong	-4035 May 18 j 08:35	23° $\Upsilon$ 52'07	1°25'35	opposition	-4029 Jan 25 j 13:29	5° $\Theta$ 14'23	1°40'21
max. Earth dist.	-4035 May 19 j 02:03	23° $\Upsilon$ 57'47	10.05247 AU	min. Earth dist.	-4029 Jan 25 j 09:08	5° $\Theta$ 15'12	8.82885 AU
morning rise	-4035 Jun 05 j 10:22	26° $\Upsilon$ 11'57		direct	-4029 Apr 06 j 11:23	1° $\Theta$ 49'42	
	-4035 Jul 07 j 09:43	0° $\mathcal{B}$		evening set	-4029 Jul 20 j 10:30	9° $\Theta$ 13'49	
retrograde	-4035 Sep 16 j 17:10	4° $\mathcal{B}$ 17'14					
opposition	-4035 Nov 22 j 02:21	0° $\mathcal{B}$ 50'12	-1°28'45	conjunction	-4029 Aug 06 j 14:33	11° $\Theta$ 15'28	1°33'54
min. Earth dist.	-4035 Nov 21 j 13:14	0° $\mathcal{B}$ 52'53	8.11063 AU	minimum elong	-4029 Aug 06 j 14:30	11° $\Theta$ 15'27	1°34'05
	-4035 Dec 02 j 08:59	30° $\mathcal{R}\Upsilon$		max. Earth dist.	-4029 Aug 06 j 17:47	11° $\Theta$ 16'26	10.89425 AU
direct	-4034 Jan 28 j 17:35	27° $\Upsilon$ 20'32		morning rise	-4029 Aug 23 j 13:22	13° $\Theta$ 15'37	
	-4034 Mar 25 j 21:40	0° $\mathcal{B}$		retrograde	-4029 Nov 30 j 04:02	20° $\Theta$ 14'13	
evening set	-4034 May 15 j 03:22	5° $\mathcal{B}$ 32'45		opposition	-4028 Feb 06 j 18:07	16° $\Theta$ 56'39	2°07'42
				min. Earth dist.	-4028 Feb 06 j 16:52	16° $\Theta$ 56'54	8.95558 AU
conjunction	-4034 Jun 02 j 05:57	7° $\mathcal{B}$ 50'56	-0°55'34	direct	-4028 Apr 18 j 01:18	13° $\Theta$ 33'14	
minimum elong	-4034 Jun 02 j 06:00	7° $\mathcal{B}$ 50'57	0°55'29	evening set	-4028 Jul 31 j 11:31	20° $\Theta$ 49'10	
max. Earth dist.	-4034 Jun 02 j 22:37	7° $\mathcal{B}$ 56'16	10.17438 AU				
morning rise	-4034 Jun 20 j 05:00	10° $\mathcal{B}$ 07'58		conjunction	-4028 Aug 17 j 10:23	22° $\Theta$ 48'03	1°54'08
	-4034 Aug 02 j 10:17	15° $\mathcal{B}$		minimum elong	-4028 Aug 17 j 10:20	22° $\Theta$ 48'02	1°54'18
retrograde	-4034 Sep 30 j 08:12	18° $\mathcal{B}$ 00'02		max. Earth dist.	-4028 Aug 17 j 10:01	22° $\Theta$ 47'56	11.01122 AU
	-4034 Nov 30 j 16:29	15° $\mathcal{R}\mathcal{B}$		morning rise	-4028 Sep 03 j 04:30	24° $\Theta$ 45'33	
opposition	-4034 Dec 05 j 20:56	14° $\mathcal{B}$ 34'47	-0°49'25		-4028 Oct 27 j 00:10	0° $\mathcal{O}$	
min. Earth dist.	-4034 Dec 05 j 09:01	14° $\mathcal{B}$ 37'12	8.24169 AU	retrograde	-4028 Dec 10 j 15:04	1° $\mathcal{O}$ 38'21	
direct	-4033 Feb 12 j 04:40	11° $\mathcal{B}$ 05'43			-4027 Jan 25 j 17:44	30° $\mathcal{R}\mathcal{B}$	
	-4033 Apr 23 j 05:56	15° $\mathcal{B}$		opposition	-4027 Feb 17 j 17:40	28° $\Theta$ 21'43	2°29'16
evening set	-4033 May 29 j 15:04	19° $\mathcal{B}$ 08'55		min. Earth dist.	-4027 Feb 17 j 19:35	28° $\Theta$ 21'21	9.06315 AU
				direct	-4027 Apr 30 j 07:31	24° $\Theta$ 59'30	
conjunction	-4033 Jun 16 j 14:42	21° $\mathcal{B}$ 24'04	-0°23'11		-4027 Jul 23 j 16:46	0° $\mathcal{O}$	
minimum elong	-4033 Jun 16 j 14:43	21° $\mathcal{B}$ 24'04	0°23'04	evening set	-4027 Aug 12 j 03:53	2° $\mathcal{O}$ 08'26	
max. Earth dist.	-4033 Jun 17 j 05:20	21° $\mathcal{B}$ 28'41	10.31394 AU				
morning rise	-4033 Jul 04 j 09:56	23° $\mathcal{B}$ 37'50		conjunction	-4027 Aug 28 j 22:05	4° $\mathcal{O}$ 04'59	2°09'28
	-4033 Sep 05 j 16:16	0° $\mathcal{O}$		minimum elong	-4027 Aug 28 j 22:02	4° $\mathcal{O}$ 04'58	2°09'36
retrograde	-4033 Oct 13 j 10:35	1° $\mathcal{O}$ 16'43		max. Earth dist.	-4027 Aug 28 j 17:57	4° $\mathcal{O}$ 03'47	11.10714 AU
	-4033 Nov 20 j 18:53	30° $\mathcal{R}\mathcal{B}$		morning rise	-4027 Sep 14 j 12:18	6° $\mathcal{O}$ 00'23	
opposition	-4033 Dec 19 j 07:07	27° $\mathcal{B}$ 53'16	-0°08'43	retrograde	-4027 Dec 22 j 00:09	12° $\mathcal{O}$ 49'16	
min. Earth dist.	-4033 Dec 18 j 21:05	27° $\mathcal{B}$ 55'17	8.38687 AU	opposition	-4026 Mar 01 j 13:34	9° $\mathcal{O}$ 33'15	2°44'41
direct	-4032 Feb 26 j 08:28	24° $\mathcal{B}$ 25'04		min. Earth dist.	-4026 Mar 01 j 17:37	9° $\mathcal{O}$ 32'30	9.14784 AU
asc. node	-4032 Mar 09 j 22:44	24° $\mathcal{B}$ 33'19		direct	-4026 May 12 j 09:40	6° $\mathcal{O}$ 12'11	
	-4032 May 22 j 22:29	0° $\mathcal{O}$		evening set	-4026 Aug 23 j 12:55	13° $\mathcal{O}$ 15'20	
evening set	-4032 Jun 11 j 14:21	2° $\mathcal{O}$ 18'21			-4026 Sep 07 j 16:34	15° $\mathcal{O}$	
conjunction	-4032 Jun 29 j 09:53	4° $\mathcal{O}$ 30'07	0°09'34	conjunction	-4026 Sep 09 j 03:24	15° $\mathcal{O}$ 10'07	2°19'40
minimum elong	-4032 Jun 29 j 09:52	4° $\mathcal{O}$ 30'06	0°09'43	minimum elong	-4026 Sep 09 j 03:23	15° $\mathcal{O}$ 10'06	2°19'47
behind sun begin	-4032 Jun 29 j 03:57	4° $\mathcal{O}$ 28'18		max. Earth dist.	-4026 Sep 08 j 21:02	15° $\mathcal{O}$ 08'16	11.17879 AU
behind sun end	-4032 Jun 29 j 15:47	4° $\mathcal{O}$ 31'55		morning rise	-4026 Sep 25 j 14:28	17° $\mathcal{O}$ 03'56	
max. Earth dist.	-4032 Jun 29 j 21:27	4° $\mathcal{O}$ 33'41	10.46331 AU	retrograde	-4025 Jan 02 j 07:56	23° $\mathcal{O}$ 50'43	
morning rise	-4032 Jul 17 j 00:33	6° $\mathcal{O}$ 40'20		opposition	-4025 Mar 13 j 06:55	20° $\mathcal{O}$ 35'02	2°53'47
retrograde	-4032 Oct 25 j 02:47	14° $\mathcal{O}$ 06'53		min. Earth dist.	-4025 Mar 13 j 12:38	20° $\mathcal{O}$ 33'59	9.20677 AU
opposition	-4032 Dec 31 j 08:54	10° $\mathcal{O}$ 45'11	0°30'58	direct	-4025 May 24 j 03:59	17° $\mathcal{O}$ 15'02	
min. Earth dist.	-4032 Dec 31 j 00:45	10° $\mathcal{O}$ 46'47	8.53813 AU	evening set	-4025 Sep 03 j 16:42	24° $\mathcal{O}$ 13'42	
direct	-4031 Mar 11 j 02:59	7° $\mathcal{O}$ 18'02					
evening set	-4031 Jun 25 j 01:07	15° $\mathcal{O}$ 01'11		conjunction	-4025 Sep 20 j 04:25	26° $\mathcal{O}$ 07'18	2°24'36
				minimum elong	-4025 Sep 20 j 04:24	26° $\mathcal{O}$ 07'18	2°24'42
conjunction	-4031 Jul 12 j 15:44	17° $\mathcal{O}$ 09'26	0°40'46	max. Earth dist.	-4025 Sep 19 j 20:16	26° $\mathcal{O}$ 04'56	11.22383 AU
minimum elong	-4031 Jul 12 j 15:42	17° $\mathcal{O}$ 09'25	0°40'57	morning rise	-4025 Oct 06 j 13:15	28° $\mathcal{O}$ 00'09	
max. Earth dist.	-4031 Jul 12 j 23:59	17° $\mathcal{O}$ 11'57	10.61450 AU		-4025 Oct 24 j 19:59	0° $\mathcal{O}$	
morning rise	-4031 Jul 30 j 01:14	19° $\mathcal{O}$ 16'05		retrograde	-4024 Jan 13 j 15:42	4° $\mathcal{O}$ 46'33	
retrograde	-4031 Nov 06 j 10:19	26° $\mathcal{O}$ 31'37		opposition	-4024 Mar 23 j 23:00	1° $\mathcal{O}$ 30'56	2°56'31
opposition	-4030 Jan 13 j 02:42	23° $\mathcal{O}$ 11'30	1°07'47	min. Earth dist.	-4024 Mar 24 j 07:15	1° $\mathcal{O}$ 29'26	9.23808 AU
min. Earth dist.	-4030 Jan 12 j 20:14	23° $\mathcal{O}$ 12'45	8.68773 AU		-4024 Apr 14 j 13:03	30° $\mathcal{R}\mathcal{O}$	
direct	-4030 Mar 24 j 11:35	19° $\mathcal{O}$ 45'34		direct	-4024 Jun 03 j 18:28	28° $\mathcal{O}$ 11'49	
evening set	-4030 Jul 07 j 23:34	27° $\mathcal{O}$ 18'51			-4024 Jul 22 j 09:24	0° $\mathcal{O}$	
				evening set	-4024 Sep 13 j 17:00	5° $\mathcal{O}$ 07'26	
conjunction	-4030 Jul 25 j 08:56	29° $\mathcal{O}$ 23'41	1°09'13				

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 32

Attention, astronomical year style is used: The year -4024 in astronomical counting style is the year 4025 BCE in historical counting style.

conjunction	-4024 Sep 30 j 02:42	7° <u>൬</u> 00'24	2°24'16			-4018 Dec 10 j 12:04	15° <u>൬</u>	
minimum elong	-4024 Sep 30 j 02:42	7° <u>൬</u> 00'24	2°24'21	morning rise		-4018 Dec 22 j 10:59	16° <u>൬</u> 26'17	
max. Earth dist.	-4024 Sep 29 j 15:38	6° <u>൬</u> 57'12	11.24085 AU	retrograde		-4017 Apr 05 j 20:23	23° <u>൬</u> 55'59	
morning rise	-4024 Oct 16 j 10:31	8° <u>൬</u> 52'53		opposition		-4017 Jun 15 j 14:24	20° <u>൬</u> 32'59	0°31'44
retrograde	-4023 Jan 24 j 00:20	15° <u>൬</u> 40'37		min. Earth dist.		-4017 Jun 16 j 02:18	20° <u>൬</u> 30'44	8.71130 AU
opposition	-4023 Apr 04 j 15:23	12° <u>൬</u> 24'47	2°52'55	direct		-4017 Aug 23 j 10:59	17° <u>൬</u> 13'33	
min. Earth dist.	-4023 Apr 05 j 02:06	12° <u>൬</u> 22'50	9.24081 AU	evening set		-4017 Nov 30 j 23:45	24° <u>൬</u> 29'12	
direct	-4023 Jun 15 j 06:18	9° <u>൬</u> 06'21						
evening set	-4023 Sep 24 j 15:19	16° <u>൬</u> 00'17		conjunction		-4017 Dec 17 j 20:40	26° <u>൬</u> 33'04	0°10'51
max. Earth dist.	-4023 Oct 10 j 10:46	17° <u>൬</u> 49'23	11.22939 AU	minimum elong		-4017 Dec 17 j 20:40	26° <u>൬</u> 33'04	0°10'43
				behind sun begin		-4017 Dec 17 j 15:13	26° <u>൬</u> 31'24	
				behind sun end		-4017 Dec 18 j 02:08	26° <u>൬</u> 34'44	
conjunction	-4023 Oct 11 j 00:00	17° <u>൬</u> 53'13	2°18'42	max. Earth dist.		-4017 Dec 17 j 07:31	26° <u>൬</u> 29'01	10.63717 AU
minimum elong	-4023 Oct 11 j 00:02	17° <u>൬</u> 53'13	2°18'46	morning rise		-4016 Jan 03 j 21:39	28° <u>൬</u> 38'17	
morning rise	-4023 Oct 27 j 07:53	19° <u>൬</u> 45'57				-4016 Jan 15 j 09:39	0° <u>ੜ</u>	
retrograde	-4022 Feb 04 j 11:17	26° <u>൬</u> 36'45		retrograde		-4016 Apr 18 j 07:04	6° <u>ੜ</u> 19'54	
opposition	-4022 Apr 16 j 09:07	23° <u>൬</u> 20'21	2°43'06	desc. node		-4016 Apr 26 j 12:22	6° <u>ੜ</u> 16'30	
min. Earth dist.	-4022 Apr 16 j 21:06	23° <u>൬</u> 18'10	9.21486 AU	opposition		-4016 Jun 27 j 15:40	2° <u>ੜ</u> 55'09	-0°06'24
direct	-4022 Jun 26 j 18:17	20° <u>൬</u> 02'23		min. Earth dist.		-4016 Jun 28 j 01:42	2° <u>ੜ</u> 53'13	8.55904 AU
evening set	-4022 Oct 05 j 13:38	26° <u>൬</u> 56'05				-4016 Aug 12 j 18:58	30° <u>ੜ</u>	
				direct		-4016 Sep 03 j 20:19	29° <u>൬</u> 34'41	
conjunction	-4022 Oct 21 j 22:31	28° <u>൬</u> 49'34	2°08'03			-4016 Sep 25 j 14:42	0° <u>ੜ</u>	
minimum elong	-4022 Oct 21 j 22:34	28° <u>൬</u> 49'35	2°08'05	evening set		-4016 Dec 12 j 14:09	6° <u>ੜ</u> 59'32	
max. Earth dist.	-4022 Oct 21 j 08:51	28° <u>൬</u> 45'35	11.18971 AU					
	-4022 Nov 01 j 01:00	0° <u>ੜ</u>		conjunction		-4016 Dec 29 j 14:49	9° <u>ੜ</u> 06'35	-0°20'41
morning rise	-4022 Nov 07 j 07:18	0° <u>ੜ</u> 43'07		minimum elong		-4016 Dec 29 j 14:48	9° <u>ੜ</u> 06'35	0°20'50
retrograde	-4021 Feb 16 j 05:23	7° <u>ੜ</u> 38'36		max. Earth dist.		-4016 Dec 29 j 02:53	9° <u>ੜ</u> 02'51	10.48213 AU
opposition	-4021 Apr 28 j 05:11	4° <u>ੜ</u> 21'21	2°27'16	morning rise		-4015 Jan 15 j 20:18	11° <u>ੜ</u> 15'13	
min. Earth dist.	-4021 Apr 28 j 17:28	4° <u>ੜ</u> 19'07	9.16097 AU	retrograde		-4015 May 02 j 03:44	19° <u>ੜ</u> 09'28	
direct	-4021 Jul 08 j 06:29	1° <u>ੜ</u> 03'39		opposition		-4015 Jul 11 j 01:25	15° <u>ੜ</u> 42'57	-0°45'39
evening set	-4021 Oct 16 j 13:51	7° <u>ੜ</u> 58'34		min. Earth dist.		-4015 Jul 11 j 09:27	15° <u>ੜ</u> 41'23	8.40314 AU
				direct		-4015 Sep 16 j 13:51	12° <u>ੜ</u> 21'13	
conjunction	-4021 Nov 01 j 23:46	9° <u>ੜ</u> 53'11	1°52'33	evening set		-4015 Dec 25 j 17:24	19° <u>ੜ</u> 56'32	
minimum elong	-4021 Nov 01 j 23:49	9° <u>ੜ</u> 53'12	1°52'32					
max. Earth dist.	-4021 Nov 01 j 09:21	9° <u>ੜ</u> 48'57	11.12291 AU	conjunction		-4014 Jan 11 j 22:01	22° <u>ੜ</u> 06'55	-0°52'05
morning rise	-4021 Nov 18 j 10:24	11° <u>ੜ</u> 48'07		minimum elong		-4014 Jan 11 j 21:59	22° <u>ੜ</u> 06'54	0°52'15
retrograde	-4020 Feb 28 j 03:05	18° <u>ੜ</u> 49'53		max. Earth dist.		-4014 Jan 11 j 12:25	22° <u>ੜ</u> 03'51	10.32735 AU
opposition	-4020 May 09 j 05:10	15° <u>ੜ</u> 31'32	2°05'41	morning rise		-4014 Jan 29 j 07:59	24° <u>ੜ</u> 19'01	
min. Earth dist.	-4020 May 09 j 18:06	15° <u>ੜ</u> 29'10	9.08072 AU			-4014 Mar 22 j 19:55	0° <u>ੜ</u>	
direct	-4020 Jul 18 j 17:42	12° <u>ੜ</u> 13'49		retrograde		-4014 May 16 j 09:45	2° <u>ੜ</u> 25'55	
evening set	-4020 Oct 26 j 17:51	19° <u>ੜ</u> 11'31				-4014 Jul 11 j 13:02	30° <u>ੜ</u>	
				opposition		-4014 Jul 24 j 19:35	28° <u>ੜ</u> 57'42	-1°23'58
conjunction	-4020 Nov 12 j 05:26	21° <u>ੜ</u> 07'45	1°32'31	min. Earth dist.		-4014 Jul 25 j 01:24	28° <u>ੜ</u> 56'33	8.25210 AU
minimum elong	-4020 Nov 12 j 05:29	21° <u>ੜ</u> 07'46	1°32'27	direct		-4014 Sep 29 j 18:20	25° <u>ੜ</u> 34'33	
max. Earth dist.	-4020 Nov 11 j 13:49	21° <u>ੜ</u> 03'08	11.03106 AU			-4014 Dec 11 j 07:28	0° <u>ੜ</u>	
morning rise	-4020 Nov 28 j 18:54	23° <u>ੜ</u> 04'36		evening set		-4013 Jan 08 j 10:29	3° <u>ੜ</u> 21'06	
	-4019 Feb 22 j 04:58	0° <u>൬</u>						
retrograde	-4019 Mar 11 j 08:16	0° <u>൬</u> 14'14		conjunction		-4013 Jan 25 j 19:09	5° <u>ੜ</u> 34'47	-1°21'38
	-4019 Mar 28 j 14:40	30° <u>ੜ</u>		minimum elong		-4013 Jan 25 j 19:06	5° <u>ੜ</u> 34'46	1°21'49
opposition	-4019 May 21 j 10:06	26° <u>ੜ</u> 54'33	1°38'48	max. Earth dist.		-4013 Jan 25 j 13:12	5° <u>ੜ</u> 32'51	10.18142 AU
min. Earth dist.	-4019 May 21 j 23:44	26° <u>ੜ</u> 52'01	8.97673 AU	morning rise		-4013 Feb 12 j 09:13	7° <u>ੜ</u> 50'12	
direct	-4019 Jul 30 j 10:47	23° <u>ੜ</u> 36'30		retrograde		-4013 May 31 j 00:33	16° <u>ੜ</u> 08'54	
	-4019 Nov 01 j 14:37	0° <u>൬</u>		opposition		-4013 Aug 07 j 21:32	12° <u>ੜ</u> 39'12	-1°58'57
evening set	-4019 Nov 07 j 03:34	0° <u>൬</u> 38'34		min. Earth dist.		-4013 Aug 08 j 00:20	12° <u>ੜ</u> 38'38	8.11463 AU
				direct		-4013 Oct 13 j 09:00	9° <u>ੜ</u> 14'32	
conjunction	-4019 Nov 23 j 17:40	2° <u>൬</u> 36'55	1°08'25	evening set		-4012 Jan 22 j 17:18	17° <u>ੜ</u> 12'26	
minimum elong	-4019 Nov 23 j 17:42	2° <u>൬</u> 36'56	1°08'20					
max. Earth dist.	-4019 Nov 23 j 02:01	2° <u>൬</u> 32'14	10.91706 AU	conjunction		-4012 Feb 09 j 05:59	19° <u>ੜ</u> 29'11	-1°47'21
morning rise	-4019 Dec 10 j 10:36	4° <u>൬</u> 36'11		minimum elong		-4012 Feb 09 j 05:55	19° <u>ੜ</u> 29'10	1°47'31
retrograde	-4018 Mar 23 j 21:40	11° <u>൬</u> 55'09		max. Earth dist.		-4012 Feb 09 j 04:42	19° <u>ੜ</u> 28'46	10.05313 AU
opposition	-4018 Jun 02 j 20:51	8° <u>൬</u> 33'53	1°07'11	morning rise		-4012 Feb 26 j 23:44	21° <u>ੜ</u> 47'37	
min. Earth dist.	-4018 Jun 03 j 10:10	8° <u>൬</u> 31'23	8.85231 AU			-4012 May 27 j 14:57	0° <u>ੜ</u>	
direct	-4018 Aug 11 j 07:38	5° <u>൬</u> 15'16		retrograde		-4012 Jun 13 j 23:49	0° <u>ੜ</u> 16'17	
evening set	-4018 Nov 18 j 20:49	12° <u>൬</u> 23'17				-4012 Jul 01 j 10:20	30° <u>ੜ</u>	
				opposition		-4012 Aug 21 j 06:35	26° <u>ੜ</u> 45'23	-2°27'57
conjunction	-4018 Dec 05 j 14:11	14° <u>൬</u> 24'13	0°40'54	min. Earth dist.		-4012 Aug 21 j 05:43	26° <u>ੜ</u> 45'34	7.99916 AU
minimum elong	-4018 Dec 05 j 14:12	14° <u>൬</u> 24'13	0°40'47	direct		-4012 Oct 26 j 08:38	23° <u>ੜ</u> 19'14	
max. Earth dist.	-4018 Dec 04 j 23:46	14° <u>൬</u> 19'50	10.78432 AU					



## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodiens AG 18-Feb-2025 14:23, page 33

Attention, astronomical year style is used: The year -4011 in astronomical counting style is the year 4012 BCE in historical counting style.

	-4011 Jan 25 j 01:07	0°♊	conjunction	-4005 May 26 j 13:58	1°♏27'35	-1°10'30
evening set	-4011 Feb 05 j 12:52	1°♊27'44	minimum elong	-4005 May 26 j 14:01	1°♏27'36	1°10'26
			max. Earth dist.	-4005 May 27 j 06:39	1°♏32'58	10.09831 AU
conjunction	-4011 Feb 23 j 05:25	3°♊47'09 -2°07'11	morning rise	-4005 Jun 13 j 14:47	3°♏46'16	
minimum elong	-4011 Feb 23 j 05:22	3°♊47'08 2°07'20	retrograde	-4005 Sep 24 j 06:26	11°♏45'15	
max. Earth dist.	-4011 Feb 23 j 09:09	3°♊48'24 9.95070 AU	opposition	-4005 Nov 29 j 18:10	8°♏18'36	-1°08'44
morning rise	-4011 Mar 13 j 02:26	6°♊08'05	min. Earth dist.	-4005 Nov 29 j 05:14	8°♏21'15	8.16280 AU
retrograde	-4011 Jun 29 j 04:11	14°♊43'49	direct	-4004 Feb 05 j 19:07	4°♏48'44	
opposition	-4011 Sep 04 j 20:57	11°♊12'07 -2°48'24	evening set	-4004 May 22 j 03:46	12°♏56'50	
min. Earth dist.	-4011 Sep 04 j 16:15	11°♊13'06 7.91309 AU		-4004 Jun 07 j 10:11	15°♏	
direct	-4011 Nov 09 j 17:17	7°♊44'34				
	-4010 Feb 12 j 18:56	15°♊	conjunction	-4004 Jun 09 j 05:05	15°♏13'39	-0°38'56
evening set	-4010 Feb 20 j 19:19	16°♊02'01	minimum elong	-4004 Jun 09 j 05:07	15°♏13'39	0°38'50
			max. Earth dist.	-4004 Jun 09 j 20:55	15°♏18'41	10.23280 AU
conjunction	-4010 Mar 10 j 15:28	18°♊23'33 -2°19'19	morning rise	-4004 Jun 27 j 02:34	17°♏29'13	
minimum elong	-4010 Mar 10 j 15:27	18°♊23'33 2°19'27	retrograde	-4004 Oct 06 j 14:07	25°♏14'49	
max. Earth dist.	-4010 Mar 10 j 23:39	18°♊26'16 9.88101 AU	opposition	-4004 Dec 12 j 08:17	21°♏50'05	-0°28'19
morning rise	-4010 Mar 28 j 15:14	20°♊46'18	min. Earth dist.	-4004 Dec 11 j 20:00	21°♏52'33	8.30487 AU
retrograde	-4010 Jul 14 j 10:21	29°♊25'15	direct	-4003 Feb 19 j 02:26	18°♏21'07	
opposition	-4010 Sep 19 j 14:26	25°♊53'15 -2°58'16	evening set	-4003 Jun 05 j 09:17	26°♏19'36	
min. Earth dist.	-4010 Sep 19 j 06:34	25°♊54'53 7.86220 AU				
direct	-4010 Nov 24 j 09:29	22°♊24'27	conjunction	-4003 Jun 23 j 07:08	28°♏33'09	-0°06'10
	-4009 Mar 02 j 04:09	0°♋	minimum elong	-4003 Jun 23 j 07:08	28°♏33'09	0°06'02
evening set	-4009 Mar 08 j 09:14	0°♋48'19	behind sun begin	-4003 Jun 23 j 00:14	28°♏31'01	
			behind sun end	-4003 Jun 23 j 14:02	28°♏35'17	
conjunction	-4009 Mar 26 j 08:35	3°♋11'14 -2°22'31	max. Earth dist.	-4003 Jun 23 j 21:26	28°♏37'37	10.38143 AU
minimum elong	-4009 Mar 26 j 08:35	3°♋11'14 2°22'36		-4003 Jul 04 j 21:24	0°♌	
max. Earth dist.	-4009 Mar 26 j 20:31	3°♋15'13 9.84894 AU	morning rise	-4003 Jul 11 j 00:11	0°♌45'13	
morning rise	-4009 Apr 13 j 10:29	5°♋34'59	asc. node	-4003 Sep 01 j 22:54	6°♌19'10	
retrograde	-4009 Jul 29 j 14:49	14°♋12'51	retrograde	-4003 Oct 19 j 13:10	8°♌17'59	
opposition	-4009 Oct 04 j 08:49	10°♋41'03 -2°56'22	opposition	-4003 Dec 25 j 14:12	4°♌55'12	0°12'11
min. Earth dist.	-4009 Oct 03 j 22:34	10°♋43'12 7.85002 AU	min. Earth dist.	-4003 Dec 25 j 03:33	4°♌57'19	8.45726 AU
direct	-4009 Dec 09 j 07:02	7°♋11'18	direct	-4002 Mar 04 j 23:50	1°♌27'24	
evening set	-4008 Mar 23 j 02:24	15°♋38'17	evening set	-4002 Jun 19 j 02:17	9°♌15'45	
conjunction	-4008 Apr 10 j 04:21	18°♋01'44 -2°16'20	conjunction	-4002 Jul 06 j 19:33	11°♌25'48	0°26'05
minimum elong	-4008 Apr 10 j 04:24	18°♋01'44 2°16'23	minimum elong	-4002 Jul 06 j 19:31	11°♌25'48	0°26'14
max. Earth dist.	-4008 Apr 10 j 19:13	18°♋06'40 9.85677 AU	max. Earth dist.	-4002 Jul 07 j 07:36	11°♌29'31	10.53595 AU
morning rise	-4008 Apr 28 j 07:39	20°♋25'34	morning rise	-4002 Jul 24 j 07:30	13°♌34'15	
retrograde	-4008 Aug 12 j 13:54	28°♋58'08	retrograde	-4002 Nov 01 j 02:04	20°♌55'17	
opposition	-4008 Oct 18 j 01:21	25°♋27'02 -2°42'47	opposition	-4001 Jan 07 j 12:08	17°♌34'23	0°50'38
min. Earth dist.	-4008 Oct 17 j 13:37	25°♋29'30 7.87729 AU	min. Earth dist.	-4001 Jan 07 j 04:09	17°♌35'57	8.61202 AU
direct	-4008 Dec 23 j 07:02	21°♋56'39	direct	-4001 Mar 18 j 12:17	14°♌07'55	
	-4007 Apr 04 j 18:49	0°♍	evening set	-4001 Jul 02 j 07:00	21°♌46'13	
evening set	-4007 Apr 07 j 19:01	0°♍23'17				
			conjunction	-4001 Jul 19 j 18:59	23°♌52'45	0°56'03
conjunction	-4007 Apr 25 j 22:43	2°♍46'21 -2°01'16	minimum elong	-4001 Jul 19 j 18:57	23°♌52'44	0°56'13
minimum elong	-4007 Apr 25 j 22:47	2°♍46'22 2°01'17	max. Earth dist.	-4001 Jul 20 j 03:24	23°♌55'18	10.68871 AU
max. Earth dist.	-4007 Apr 26 j 15:13	2°♍51'48 9.90370 AU	morning rise	-4001 Aug 06 j 01:40	25°♌57'41	
morning rise	-4007 May 14 j 02:26	5°♍09'20		-4001 Sep 12 j 08:35	0°♎	
retrograde	-4007 Aug 27 j 05:25	13°♍32'54	retrograde	-4001 Nov 13 j 04:30	3°♎08'28	
opposition	-4007 Nov 01 j 13:32	10°♍02'58 -2°18'45		-4000 Jan 17 j 18:44	30°♎♌	
min. Earth dist.	-4007 Nov 01 j 01:08	10°♍05'34 7.94190 AU	opposition	-4000 Jan 20 j 02:30	29°♌49'16	1°25'25
direct	-4006 Jan 07 j 06:55	6°♍32'20	min. Earth dist.	-4000 Jan 19 j 21:08	29°♌50'18	8.76173 AU
evening set	-4006 Apr 23 j 06:54	14°♍55'19	direct	-4000 Mar 30 j 16:55	26°♌24'11	
				-4000 Jun 07 j 23:29	0°♎	
conjunction	-4006 May 11 j 11:09	17°♍17'05 -1°38'41	evening set	-4000 Jul 13 j 23:59	3°♎52'58	
minimum elong	-4006 May 11 j 11:14	17°♍17'06 1°38'39				
max. Earth dist.	-4006 May 12 j 04:05	17°♍22'37 9.98616 AU	conjunction	-4000 Jul 31 j 06:30	5°♎56'09	1°22'40
morning rise	-4006 May 29 j 14:05	19°♍38'18	minimum elong	-4000 Jul 31 j 06:27	5°♎56'08	1°22'51
retrograde	-4006 Sep 10 j 11:22	27°♍50'18	max. Earth dist.	-4000 Jul 31 j 11:02	5°♎57'30	10.83275 AU
opposition	-4006 Nov 15 j 19:39	24°♍21'52 -1°46'29	morning rise	-4000 Aug 17 j 07:58	7°♎57'48	
min. Earth dist.	-4006 Nov 15 j 06:50	24°♍24'31 8.03924 AU	retrograde	-4000 Nov 24 j 01:24	15°♎00'05	
direct	-4005 Jan 22 j 03:44	20°♍51'25	opposition	-3999 Jan 31 j 10:20	11°♎42'18	1°55'22
evening set	-4005 May 08 j 10:30	29°♍07'58	min. Earth dist.	-3999 Jan 31 j 07:11	11°♎42'54	8.89963 AU
	-4005 May 15 j 06:01	0°♏	direct	-3999 Apr 12 j 12:49	8°♎18'37	
			evening set	-3999 Jul 26 j 06:13	15°♎38'40	

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 34

Attention, astronomical year style is used: The year -3999 in astronomical counting style is the year 4000 BCE in historical counting style.

conjunction	-3999 Aug 12 j 07:29	17° $\mathfrak{D}$ 38'50	1°45'06	max. Earth dist.	-3993 Oct 16 j 16:42	23° $\mathfrak{M}$ 56'49	11.20688 AU
minimum elong	-3999 Aug 12 j 07:26	17° $\mathfrak{D}$ 38'49	1°45'16	morning rise	-3993 Nov 02 j 15:48	25° $\mathfrak{M}$ 54'18	
max. Earth dist.	-3999 Aug 12 j 08:59	17° $\mathfrak{D}$ 39'17	10.96187 AU		-3993 Dec 12 j 15:10	0° $\mathfrak{D}$	
morning rise	-3999 Aug 29 j 03:52	19° $\mathfrak{D}$ 37'35		retrograde	-3992 Feb 11 j 05:10	2° $\mathfrak{D}$ 47'38	
retrograde	-3999 Dec 05 j 16:30	26° $\mathfrak{D}$ 33'09			-3992 Apr 15 j 10:34	30° $\mathfrak{R}$ $\mathfrak{M}$	
opposition	-3998 Feb 12 j 12:42	23° $\mathfrak{D}$ 16'29	2°19'45	opposition	-3992 Apr 22 j 03:34	29° $\mathfrak{M}$ 30'46	2°35'17
min. Earth dist.	-3998 Feb 12 j 11:47	23° $\mathfrak{D}$ 16'40	9.01992 AU	min. Earth dist.	-3992 Apr 22 j 17:24	29° $\mathfrak{M}$ 28'14	9.18248 AU
direct	-3998 Apr 24 j 23:41	19° $\mathfrak{D}$ 54'09		direct	-3992 Jul 02 j 08:08	26° $\mathfrak{M}$ 12'48	
evening set	-3998 Aug 07 j 03:03	27° $\mathfrak{D}$ 06'29			-3992 Sep 11 j 17:07	0° $\mathfrak{D}$	
				evening set	-3992 Oct 10 j 22:14	3° $\mathfrak{D}$ 07'19	
conjunction	-3998 Aug 23 j 23:31	29° $\mathfrak{D}$ 04'04	2°02'48				
minimum elong	-3998 Aug 23 j 23:29	29° $\mathfrak{D}$ 04'04	2°02'57	conjunction	-3992 Oct 27 j 07:29	5° $\mathfrak{D}$ 01'25	2°00'16
max. Earth dist.	-3998 Aug 23 j 22:29	29° $\mathfrak{D}$ 03'46	11.07086 AU	minimum elong	-3992 Oct 27 j 07:31	5° $\mathfrak{D}$ 01'26	2°00'16
	-3998 Aug 31 j 22:38	0° $\mathfrak{D}$		max. Earth dist.	-3992 Oct 26 j 15:14	4° $\mathfrak{D}$ 56'40	11.14820 AU
morning rise	-3998 Sep 09 j 15:25	1° $\mathfrak{D}$ 00'24		morning rise	-3992 Nov 12 j 17:18	6° $\mathfrak{D}$ 55'45	
retrograde	-3998 Dec 17 j 04:17	7° $\mathfrak{D}$ 51'05		retrograde	-3991 Feb 21 j 23:06	13° $\mathfrak{D}$ 54'42	
opposition	-3997 Feb 24 j 10:43	4° $\mathfrak{D}$ 35'14	2°38'06	opposition	-3991 May 04 j 01:54	10° $\mathfrak{D}$ 36'37	2°16'21
min. Earth dist.	-3997 Feb 24 j 13:07	4° $\mathfrak{D}$ 34'47	9.11780 AU	min. Earth dist.	-3991 May 04 j 16:19	10° $\mathfrak{D}$ 33'59	9.11000 AU
direct	-3997 May 07 j 03:25	1° $\mathfrak{D}$ 14'06		direct	-3991 Jul 13 j 20:42	7° $\mathfrak{D}$ 18'34	
evening set	-3997 Aug 18 j 15:57	8° $\mathfrak{D}$ 19'57		evening set	-3991 Oct 22 j 00:10	14° $\mathfrak{D}$ 15'11	
conjunction	-3997 Sep 04 j 08:11	10° $\mathfrak{D}$ 15'29	2°15'27	conjunction	-3991 Nov 07 j 10:59	16° $\mathfrak{D}$ 10'44	1°42'18
minimum elong	-3997 Sep 04 j 08:09	10° $\mathfrak{D}$ 15'29	2°15'34	minimum elong	-3991 Nov 07 j 11:02	16° $\mathfrak{D}$ 10'44	1°42'15
max. Earth dist.	-3997 Sep 04 j 03:16	10° $\mathfrak{D}$ 14'04	11.15534 AU	max. Earth dist.	-3991 Nov 06 j 19:04	16° $\mathfrak{D}$ 06'02	11.06362 AU
morning rise	-3997 Sep 20 j 20:33	12° $\mathfrak{D}$ 09'58		morning rise	-3991 Nov 23 j 23:06	18° $\mathfrak{D}$ 06'45	
	-3997 Oct 17 j 05:36	15° $\mathfrak{D}$		retrograde	-3990 Mar 06 j 02:21	25° $\mathfrak{D}$ 12'56	
retrograde	-3997 Dec 28 j 11:54	18° $\mathfrak{D}$ 57'36		opposition	-3990 May 16 j 04:29	21° $\mathfrak{D}$ 53'26	1°51'53
opposition	-3996 Mar 07 j 05:35	15° $\mathfrak{D}$ 42'15	2°50'10	min. Earth dist.	-3990 May 16 j 18:22	21° $\mathfrak{D}$ 50'52	9.01284 AU
min. Earth dist.	-3996 Mar 07 j 11:32	15° $\mathfrak{D}$ 41'09	9.18922 AU	direct	-3990 Jul 25 j 13:00	18° $\mathfrak{D}$ 35'04	
	-3996 Mar 16 j 21:15	15° $\mathfrak{R}$ $\mathfrak{D}$		evening set	-3990 Nov 02 j 07:03	25° $\mathfrak{D}$ 35'21	
direct	-3996 May 18 j 00:20	12° $\mathfrak{D}$ 22'10					
	-3996 Jul 16 j 11:39	15° $\mathfrak{D}$		conjunction	-3990 Nov 18 j 20:08	27° $\mathfrak{D}$ 32'51	1°20'02
evening set	-3996 Aug 28 j 22:41	19° $\mathfrak{D}$ 22'56		minimum elong	-3990 Nov 18 j 20:11	27° $\mathfrak{D}$ 32'52	1°19'57
conjunction	-3996 Sep 14 j 11:28	21° $\mathfrak{D}$ 17'00	2°22'51	max. Earth dist.	-3990 Nov 18 j 04:31	27° $\mathfrak{D}$ 28'11	10.95590 AU
minimum elong	-3996 Sep 14 j 11:27	21° $\mathfrak{D}$ 17'00	2°22'57	morning rise	-3990 Dec 05 j 11:19	29° $\mathfrak{D}$ 31'05	
max. Earth dist.	-3996 Sep 14 j 02:37	21° $\mathfrak{D}$ 14'27	11.21208 AU		-3990 Dec 09 j 15:03	0° $\mathfrak{M}$	
morning rise	-3996 Sep 30 j 21:20	23° $\mathfrak{D}$ 10'15		retrograde	-3989 Mar 18 j 12:13	6° $\mathfrak{M}$ 46'00	
retrograde	-3995 Jan 07 j 18:57	29° $\mathfrak{D}$ 56'44		opposition	-3989 May 28 j 12:18	3° $\mathfrak{M}$ 24'55	1°22'22
opposition	-3995 Mar 18 j 22:33	26° $\mathfrak{D}$ 41'31	2°55'53	min. Earth dist.	-3989 May 29 j 01:35	3° $\mathfrak{M}$ 22'27	8.89428 AU
min. Earth dist.	-3995 Mar 19 j 06:56	26° $\mathfrak{D}$ 39'59	9.23173 AU	direct	-3989 Aug 06 j 06:04	0° $\mathfrak{M}$ 06'02	
direct	-3995 May 29 j 18:53	23° $\mathfrak{D}$ 22'18		evening set	-3989 Nov 13 j 20:42	7° $\mathfrak{M}$ 11'39	
	-3995 Sep 06 j 03:51	0° $\mathfrak{M}$		conjunction	-3989 Nov 30 j 12:32	9° $\mathfrak{M}$ 11'31	0°53'59
evening set	-3995 Sep 09 j 00:53	0° $\mathfrak{M}$ 19'26		minimum elong	-3989 Nov 30 j 12:34	9° $\mathfrak{M}$ 11'32	0°53'53
conjunction	-3995 Sep 25 j 11:23	2° $\mathfrak{M}$ 12'38	2°24'59	max. Earth dist.	-3989 Nov 29 j 20:38	9° $\mathfrak{M}$ 06'44	10.82880 AU
minimum elong	-3995 Sep 25 j 11:23	2° $\mathfrak{M}$ 12'38	2°25'04	morning rise	-3989 Dec 17 j 07:32	11° $\mathfrak{M}$ 12'26	
max. Earth dist.	-3995 Sep 25 j 00:30	2° $\mathfrak{M}$ 09'29	11.23966 AU		-3988 Jan 21 j 02:05	15° $\mathfrak{M}$	
morning rise	-3995 Oct 11 j 19:36	4° $\mathfrak{M}$ 05'14		retrograde	-3988 Mar 30 j 06:09	18° $\mathfrak{M}$ 37'33	
retrograde	-3994 Jan 19 j 04:36	10° $\mathfrak{M}$ 52'20		opposition	-3988 Jun 09 j 02:48	15° $\mathfrak{M}$ 14'47	0°48'33
opposition	-3994 Mar 30 j 15:08	7° $\mathfrak{M}$ 36'54	2°55'15	min. Earth dist.	-3988 Jun 09 j 15:41	15° $\mathfrak{M}$ 12'21	8.75865 AU
min. Earth dist.	-3994 Mar 31 j 01:00	7° $\mathfrak{M}$ 35'06	9.24459 AU		-3988 Jun 12 j 09:01	15° $\mathfrak{R}$ $\mathfrak{M}$	
direct	-3994 Jun 10 j 09:12	4° $\mathfrak{M}$ 18'23		direct	-3988 Aug 17 j 05:46	11° $\mathfrak{M}$ 55'08	
evening set	-3994 Sep 20 j 00:14	11° $\mathfrak{M}$ 13'10			-3988 Oct 17 j 19:40	15° $\mathfrak{M}$	
conjunction	-3994 Oct 06 j 09:27	13° $\mathfrak{M}$ 06'06	2°21'50	evening set	-3988 Nov 24 j 18:53	19° $\mathfrak{M}$ 07'42	
minimum elong	-3994 Oct 06 j 09:28	13° $\mathfrak{M}$ 06'06	2°21'54	conjunction	-3988 Dec 11 j 14:02	21° $\mathfrak{M}$ 10'22	0°24'58
max. Earth dist.	-3994 Oct 05 j 21:00	13° $\mathfrak{M}$ 02'30	11.23777 AU	minimum elong	-3988 Dec 11 j 14:03	21° $\mathfrak{M}$ 10'22	0°24'51
morning rise	-3994 Oct 22 j 17:05	14° $\mathfrak{M}$ 58'41		max. Earth dist.	-3988 Dec 10 j 23:15	21° $\mathfrak{M}$ 05'50	10.68703 AU
retrograde	-3993 Jan 30 j 15:08	21° $\mathfrak{M}$ 48'06		morning rise	-3988 Dec 28 j 13:15	23° $\mathfrak{M}$ 14'18	
opposition	-3993 Apr 11 j 08:26	18° $\mathfrak{M}$ 32'06	2°48'20		-3987 Mar 11 j 06:29	0° $\mathfrak{X}$	
min. Earth dist.	-3993 Apr 11 j 20:12	18° $\mathfrak{M}$ 29'57	9.22789 AU	retrograde	-3987 Apr 12 j 11:06	0° $\mathfrak{X}$ 50'53	
direct	-3993 Jun 21 j 20:24	15° $\mathfrak{M}$ 13'59			-3987 May 15 j 01:16	30° $\mathfrak{R}$ $\mathfrak{M}$	
evening set	-3993 Sep 30 j 22:49	22° $\mathfrak{M}$ 07'54		opposition	-3987 Jun 22 j 00:45	27° $\mathfrak{M}$ 26'21	0°11'26
conjunction	-3993 Oct 17 j 07:34	24° $\mathfrak{M}$ 01'08	2°13'32	min. Earth dist.	-3987 Jun 22 j 12:16	27° $\mathfrak{M}$ 24'09	8.61128 AU
minimum elong	-3993 Oct 17 j 07:36	24° $\mathfrak{M}$ 01'09	2°13'34	direct	-3987 Aug 29 j 12:52	24° $\mathfrak{M}$ 05'46	
				desc. node	-3987 Oct 12 j 06:43	25° $\mathfrak{M}$ 44'32	
					-3987 Nov 25 j 00:27	0° $\mathfrak{X}$	

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 35

Attention, astronomical year style is used: The year -3987 in astronomical counting style is the year 3988 BCE in historical counting style.

evening set	-3987 Dec 07 j 03:45	1°♂26'49		conjunction	-3980 Mar 18 j 13:36	26°♂41'18	-2°22'06
				minimum elong	-3980 Mar 18 j 13:36	26°♂41'18	2°22'12
conjunction	-3987 Dec 24 j 02:44	3°♂32'34	-0°06'07	max. Earth dist.	-3980 Mar 19 j 00:15	26°♂44'51	9.86382 AU
minimum elong	-3987 Dec 24 j 02:43	3°♂32'34	0°06'15	morning rise	-3980 Apr 05 j 14:42	29°♂04'41	
behind sun begin	-3987 Dec 23 j 20:01	3°♂30'30			-3980 Apr 12 j 17:50	0°♂	
behind sun end	-3987 Dec 24 j 09:26	3°♂34'38		retrograde	-3980 Jul 22 j 03:10	7°♂43'40	
max. Earth dist.	-3987 Dec 23 j 14:35	3°♂28'48	10.53625 AU	opposition	-3980 Sep 27 j 01:48	4°♂12'08	-2°58'31
morning rise	-3986 Jan 10 j 06:15	5°♂39'48		min. Earth dist.	-3980 Sep 26 j 16:17	4°♂14'08	7.85787 AU
retrograde	-3986 Apr 26 j 01:56	13°♂28'43		direct	-3980 Dec 01 j 22:09	0°♂43'15	
opposition	-3986 Jul 05 j 06:33	10°♂02'26	-0°27'33	evening set	-3979 Mar 16 j 08:21	9°♂09'08	
min. Earth dist.	-3986 Jul 05 j 15:37	10°♂00'40	8.45849 AU				
direct	-3986 Sep 11 j 03:20	6°♂40'45		conjunction	-3979 Apr 03 j 09:11	11°♂32'22	-2°20'09
evening set	-3986 Dec 20 j 00:55	14°♂11'39		minimum elong	-3979 Apr 03 j 09:13	11°♂32'22	2°20'13
				max. Earth dist.	-3979 Apr 03 j 23:39	11°♂37'11	9.85742 AU
conjunction	-3985 Jan 06 j 03:54	16°♂20'40	-0°37'44	morning rise	-3979 Apr 21 j 12:00	13°♂56'12	
minimum elong	-3985 Jan 06 j 03:52	16°♂20'40	0°37'53	retrograde	-3979 Aug 06 j 04:49	22°♂31'32	
max. Earth dist.	-3985 Jan 05 j 18:55	16°♂17'50	10.38323 AU	opposition	-3979 Oct 11 j 19:41	19°♂00'34	-2°50'08
morning rise	-3985 Jan 23 j 11:45	18°♂31'19		min. Earth dist.	-3979 Oct 11 j 07:47	19°♂03'04	7.87099 AU
retrograde	-3985 May 10 j 03:50	26°♂32'55		direct	-3979 Dec 16 j 21:25	15°♂31'00	
opposition	-3985 Jul 18 j 20:50	23°♂04'58	-1°06'36	evening set	-3978 Apr 01 j 02:03	23°♂57'52	
min. Earth dist.	-3985 Jul 19 j 02:33	23°♂03'51	8.30751 AU				
direct	-3985 Sep 24 j 03:03	19°♂42'06		conjunction	-3978 Apr 19 j 05:06	26°♂21'05	-2°09'00
evening set	-3984 Jan 02 j 11:32	27°♂23'50		minimum elong	-3978 Apr 19 j 05:10	26°♂21'06	2°09'01
				max. Earth dist.	-3978 Apr 19 j 22:04	26°♂26'43	9.89000 AU
conjunction	-3984 Jan 19 j 18:25	29°♂36'09	-1°08'23	morning rise	-3978 May 07 j 08:39	28°♂44'25	
minimum elong	-3984 Jan 19 j 18:23	29°♂36'08	1°08'33		-3978 May 17 j 05:05	0°♀	
max. Earth dist.	-3984 Jan 19 j 12:35	29°♂34'16	10.23568 AU	retrograde	-3978 Aug 21 j 00:37	7°♀12'09	
	-3984 Jan 22 j 20:41	0°♂		opposition	-3978 Oct 26 j 10:09	3°♀42'09	-2°30'36
morning rise	-3984 Feb 06 j 06:28	1°♂50'10		min. Earth dist.	-3978 Oct 25 j 20:54	3°♀44'55	7.92135 AU
retrograde	-3984 May 23 j 16:19	10°♂04'04		direct	-3978 Dec 31 j 21:28	0°♀12'10	
opposition	-3984 Jul 31 j 19:29	6°♂34'40	-1°43'27	evening set	-3977 Apr 16 j 16:33	8°♀36'40	
min. Earth dist.	-3984 Jul 31 j 21:59	6°♂34'10	8.16645 AU				
direct	-3984 Oct 06 j 11:34	3°♂10'29		conjunction	-3977 May 04 j 20:46	10°♀58'59	-1°49'37
evening set	-3983 Jan 15 j 12:13	11°♂03'32		minimum elong	-3977 May 04 j 20:50	10°♀59'00	1°49'36
				max. Earth dist.	-3977 May 05 j 14:43	11°♀04'53	9.95803 AU
conjunction	-3983 Feb 01 j 23:00	13°♂19'01	-1°36'07	morning rise	-3977 May 22 j 23:59	13°♀20'56	
minimum elong	-3983 Feb 01 j 22:56	13°♂19'00	1°36'17	retrograde	-3977 Sep 04 j 12:05	21°♀38'07	
max. Earth dist.	-3983 Feb 01 j 20:40	13°♂18'15	10.10209 AU	opposition	-3977 Nov 09 j 19:14	18°♀09'28	-2°01'46
morning rise	-3983 Feb 19 j 15:03	15°♂36'12		min. Earth dist.	-3977 Nov 09 j 05:53	18°♀12'14	8.00420 AU
retrograde	-3983 Jun 07 j 13:44	24°♂00'59		direct	-3976 Jan 15 j 19:31	14°♀39'28	
opposition	-3983 Aug 15 j 01:44	20°♂30'27	-2°15'31	evening set	-3976 May 01 j 00:17	22°♀58'49	
min. Earth dist.	-3983 Aug 15 j 01:12	20°♂30'33	8.04376 AU				
direct	-3983 Oct 20 j 06:05	17°♂04'55		conjunction	-3976 May 19 j 04:23	25°♀19'24	-1°23'43
evening set	-3982 Jan 30 j 02:27	25°♂09'01		minimum elong	-3976 May 19 j 04:26	25°♀19'25	1°23'39
				max. Earth dist.	-3976 May 19 j 21:53	25°♀25'05	10.05575 AU
conjunction	-3982 Feb 16 j 17:05	27°♂27'19	-1°58'53	morning rise	-3976 Jun 06 j 06:09	27°♀39'12	
minimum elong	-3982 Feb 16 j 17:02	27°♂27'18	1°59'03		-3976 Jun 25 j 08:36	0°♂	
max. Earth dist.	-3982 Feb 16 j 18:43	27°♂27'51	9.99081 AU	retrograde	-3976 Sep 17 j 12:59	5°♂44'05	
morning rise	-3982 Mar 06 j 12:45	29°♂47'15		opposition	-3976 Nov 22 j 21:29	2°♂17'06	-1°26'09
	-3982 Mar 08 j 04:20	0°♂		min. Earth dist.	-3976 Nov 22 j 09:08	2°♂19'39	8.11374 AU
retrograde	-3982 Jun 22 j 16:30	8°♂20'28			-3976 Dec 23 j 07:07	30°♀	
opposition	-3982 Aug 29 j 14:18	4°♂49'10	-2°40'10	direct	-3975 Jan 29 j 13:15	28°♀47'26	
min. Earth dist.	-3982 Aug 29 j 10:50	4°♂49'53	7.94732 AU		-3975 Mar 07 j 16:31	0°♂	
direct	-3982 Nov 03 j 11:45	1°♂22'21		evening set	-3975 May 15 j 23:01	6°♂59'29	
evening set	-3981 Feb 14 j 04:36	9°♂36'14					
				conjunction	-3975 Jun 03 j 01:29	9°♂17'36	-0°53'23
conjunction	-3981 Mar 03 j 22:54	11°♂56'53	-2°14'44	minimum elong	-3975 Jun 03 j 01:32	9°♂17'37	0°53'17
minimum elong	-3981 Mar 03 j 22:52	11°♂56'52	2°14'52	max. Earth dist.	-3975 Jun 03 j 17:14	9°♂22'38	10.17715 AU
max. Earth dist.	-3981 Mar 04 j 05:00	11°♂58'55	9.90938 AU	morning rise	-3975 Jun 21 j 00:32	11°♂34'36	
morning rise	-3981 Mar 21 j 21:35	14°♂18'56			-3975 Jul 20 j 00:39	15°♂	
	-3981 Mar 27 j 04:45	15°♂		retrograde	-3975 Oct 01 j 02:21	19°♂26'23	
retrograde	-3981 Jul 07 j 21:56	22°♂57'07		opposition	-3975 Dec 06 j 15:53	16°♂01'13	-0°46'35
opposition	-3981 Sep 13 j 07:06	19°♂25'29	-2°55'02	min. Earth dist.	-3975 Dec 06 j 04:51	16°♂03'27	8.24399 AU
min. Earth dist.	-3981 Sep 13 j 00:37	19°♂26'50	7.88381 AU		-3975 Dec 19 j 10:07	15°♂	
direct	-3981 Nov 18 j 01:54	15°♂57'33		direct	-3974 Feb 13 j 00:41	12°♂32'11	
evening set	-3980 Feb 29 j 15:49	24°♂18'57			-3974 Apr 08 j 14:02	15°♂	
				evening set	-3974 May 30 j 10:36	20°♂35'21	

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 36

Attention, astronomical year style is used: The year -3974 in astronomical counting style is the year 3975 BCE in historical counting style.

conjunction	-3974 Jun 17 j 10:03	22° <b>8</b> 50'26	-0°20'51			-3968 Jul 09 j 11:43	0° <b>Ω</b>	
minimum elong	-3974 Jun 17 j 10:04	22° <b>8</b> 50'27	0°20'44	evening set		-3968 Aug 13 j 00:03	3° <b>Ω</b> 38'12	
max. Earth dist.	-3974 Jun 17 j 23:24	22° <b>8</b> 54'38	10.31563 AU					
morning rise	-3974 Jul 05 j 05:17	25° <b>8</b> 04'09		conjunction		-3968 Aug 29 j 18:10	5° <b>Ω</b> 34'48	2°10'34
	-3974 Aug 19 j 02:22	0° <b>Π</b>		minimum elong		-3968 Aug 29 j 18:07	5° <b>Ω</b> 34'47	2°10'42
retrograde	-3974 Oct 14 j 05:23	2° <b>Π</b> 42'57		max. Earth dist.		-3968 Aug 29 j 14:20	5° <b>Ω</b> 33'41	11.10138 AU
	-3974 Dec 11 j 14:40	30° <b>8</b> 8		morning rise		-3968 Sep 15 j 08:14	7° <b>Ω</b> 30'14	
opposition	-3974 Dec 20 j 02:07	29° <b>8</b> 19'36	-0°05'48	retrograde		-3968 Dec 22 j 21:23	14° <b>Ω</b> 19'35	
min. Earth dist.	-3974 Dec 19 j 16:22	29° <b>8</b> 21'33	8.38793 AU	opposition		-3967 Mar 02 j 10:20	11° <b>Ω</b> 03'31	2°45'47
asc. node	-3973 Feb 12 j 06:44	26° <b>8</b> 02'57		min. Earth dist.		-3967 Mar 02 j 13:51	11° <b>Ω</b> 02'52	9.14162 AU
direct	-3973 Feb 27 j 03:45	25° <b>8</b> 51'27		direct		-3967 May 13 j 05:35	7° <b>Ω</b> 42'27	
	-3973 May 11 j 07:37	0° <b>Π</b>		evening set		-3967 Aug 24 j 09:23	14° <b>Ω</b> 45'54	
evening set	-3973 Jun 13 j 09:42	3° <b>Π</b> 44'47				-3967 Aug 26 j 10:53	15° <b>Ω</b>	
conjunction	-3973 Jul 01 j 05:05	5° <b>Π</b> 56'32	0°11'55	conjunction		-3967 Sep 09 j 23:50	16° <b>Ω</b> 40'45	2°20'19
minimum elong	-3973 Jul 01 j 05:04	5° <b>Π</b> 56'31	0°12'03	minimum elong		-3967 Sep 09 j 23:48	16° <b>Ω</b> 40'45	2°20'26
behind sun begin	-3973 Jul 01 j 00:12	5° <b>Π</b> 55'02		max. Earth dist.		-3967 Sep 09 j 18:07	16° <b>Ω</b> 39'06	11.17214 AU
behind sun end	-3973 Jul 01 j 09:56	5° <b>Π</b> 58'01		morning rise		-3967 Sep 26 j 10:41	18° <b>Ω</b> 34'39	
max. Earth dist.	-3973 Jul 01 j 15:53	5° <b>Π</b> 59'52	10.46366 AU	retrograde		-3966 Jan 03 j 05:27	25° <b>Ω</b> 21'54	
morning rise	-3973 Jul 18 j 19:39	8° <b>Π</b> 06'43		opposition		-3966 Mar 14 j 04:14	22° <b>Ω</b> 06'08	2°54'19
retrograde	-3973 Oct 26 j 21:50	15° <b>Π</b> 33'22		min. Earth dist.		-3966 Mar 14 j 10:07	22° <b>Ω</b> 05'03	9.19979 AU
opposition	-3972 Jan 02 j 04:00	12° <b>Π</b> 11'43	0°33'51	direct		-3966 May 25 j 00:44	18° <b>Ω</b> 46'05	
min. Earth dist.	-3972 Jan 01 j 19:28	12° <b>Π</b> 13'24	8.53778 AU	evening set		-3966 Sep 04 j 13:29	25° <b>Ω</b> 45'04	
direct	-3972 Mar 11 j 22:17	8° <b>Π</b> 44'39						
evening set	-3972 Jun 25 j 20:27	16° <b>Π</b> 27'57		conjunction		-3966 Sep 21 j 01:01	27° <b>Ω</b> 38'44	2°24'47
conjunction	-3972 Jul 13 j 11:01	18° <b>Π</b> 36'12	0°43'03	minimum elong		-3966 Sep 21 j 01:01	27° <b>Ω</b> 38'44	2°24'53
minimum elong	-3972 Jul 13 j 10:59	18° <b>Π</b> 36'11	0°43'13	max. Earth dist.		-3966 Sep 20 j 16:32	27° <b>Ω</b> 36'16	11.21656 AU
max. Earth dist.	-3972 Jul 13 j 19:30	18° <b>Π</b> 38'47	10.61346 AU	morning rise		-3966 Oct 07 j 09:52	29° <b>Ω</b> 31'39	
morning rise	-3972 Jul 30 j 20:17	20° <b>Π</b> 42'50				-3966 Oct 11 j 14:33	0° <b>Π</b>	
retrograde	-3972 Nov 07 j 05:31	27° <b>Π</b> 58'36		retrograde		-3965 Jan 14 j 13:17	6° <b>Π</b> 18'32	
opposition	-3971 Jan 13 j 21:58	24° <b>Π</b> 38'32	1°10'30	opposition		-3965 Mar 25 j 20:49	3° <b>Π</b> 02'49	2°56'28
min. Earth dist.	-3971 Jan 13 j 15:28	24° <b>Π</b> 39'48	8.68599 AU	min. Earth dist.		-3965 Mar 26 j 05:33	3° <b>Π</b> 01'13	9.23068 AU
direct	-3971 Mar 25 j 07:16	21° <b>Π</b> 12'39				-3965 May 17 j 22:15	30° <b>8</b> 8	
evening set	-3971 Jul 08 j 19:07	28° <b>Π</b> 46'13		direct		-3965 Jun 05 j 15:30	29° <b>Ω</b> 43'37	
	-3971 Jul 19 j 02:48	0° <b>☾</b>				-3965 Jun 24 j 06:10	0° <b>Π</b>	
conjunction	-3971 Jul 26 j 04:22	0° <b>☾</b> 51'03	1°11'19	evening set		-3965 Sep 15 j 13:55	6° <b>Π</b> 39'30	
minimum elong	-3971 Jul 26 j 04:19	0° <b>☾</b> 51'02	1°11'30	conjunction		-3965 Oct 01 j 23:32	8° <b>Π</b> 32'33	2°23'57
max. Earth dist.	-3971 Jul 26 j 10:27	0° <b>☾</b> 52'53	10.75781 AU	minimum elong		-3965 Oct 01 j 23:33	8° <b>Π</b> 32'33	2°24'02
morning rise	-3971 Aug 12 j 08:09	2° <b>☾</b> 54'17		max. Earth dist.		-3965 Oct 01 j 12:12	8° <b>Π</b> 29'16	11.23330 AU
retrograde	-3971 Nov 19 j 06:58	10° <b>☾</b> 00'46		morning rise		-3965 Oct 18 j 07:29	10° <b>Π</b> 25'10	
opposition	-3970 Jan 26 j 09:08	6° <b>☾</b> 42'06	1°42'46	retrograde		-3964 Jan 25 j 21:08	17° <b>Π</b> 13'22	
min. Earth dist.	-3970 Jan 26 j 05:31	6° <b>☾</b> 42'48	8.82577 AU	opposition		-3964 Apr 05 j 13:25	13° <b>Π</b> 57'22	2°52'16
direct	-3970 Apr 07 j 05:36	3° <b>☾</b> 17'28		min. Earth dist.		-3964 Apr 05 j 23:47	13° <b>Π</b> 55'29	9.23316 AU
evening set	-3970 Jul 21 j 06:20	10° <b>☾</b> 41'54		direct		-3964 Jun 16 j 04:09	10° <b>Π</b> 38'51	
conjunction	-3970 Aug 07 j 10:06	12° <b>☾</b> 43'35	1°35'44	evening set		-3964 Sep 25 j 12:24	17° <b>Π</b> 33'03	
minimum elong	-3970 Aug 07 j 10:03	12° <b>☾</b> 43'34	1°35'55	conjunction		-3964 Oct 11 j 21:14	19° <b>Π</b> 26'05	2°17'54
max. Earth dist.	-3970 Aug 07 j 12:47	12° <b>☾</b> 44'23	10.89051 AU	minimum elong		-3964 Oct 11 j 21:16	19° <b>Π</b> 26'06	2°17'57
morning rise	-3970 Aug 24 j 08:44	14° <b>☾</b> 43'46		max. Earth dist.		-3964 Oct 11 j 08:51	19° <b>Π</b> 22'30	11.22167 AU
retrograde	-3970 Nov 30 j 23:01	21° <b>☾</b> 42'43		morning rise		-3964 Oct 28 j 05:08	21° <b>Π</b> 18'55	
opposition	-3969 Feb 07 j 14:13	18° <b>☾</b> 25'12	2°09'46	retrograde		-3963 Feb 05 j 10:46	28° <b>Π</b> 10'12	
min. Earth dist.	-3969 Feb 07 j 13:40	18° <b>☾</b> 25'19	8.95135 AU	opposition		-3963 Apr 17 j 07:22	24° <b>Π</b> 53'38	2°41'52
direct	-3969 Apr 19 j 20:39	15° <b>☾</b> 01'47		min. Earth dist.		-3963 Apr 17 j 18:25	24° <b>Π</b> 51'37	9.20709 AU
evening set	-3969 Aug 02 j 07:32	22° <b>☾</b> 18'06		direct		-3963 Jun 27 j 16:54	21° <b>Π</b> 35'36	
conjunction	-3969 Aug 19 j 06:07	24° <b>☾</b> 16'59	1°55'37	evening set		-3963 Oct 06 j 10:59	28° <b>Π</b> 29'31	
minimum elong	-3969 Aug 19 j 06:04	24° <b>☾</b> 16'58	1°55'47			-3963 Oct 19 j 12:36	0° <b>♄</b>	
max. Earth dist.	-3969 Aug 19 j 04:55	24° <b>☾</b> 16'38	11.00642 AU	conjunction		-3963 Oct 22 j 20:01	0° <b>♄</b> 23'08	2°06'47
morning rise	-3969 Sep 05 j 00:12	26° <b>☾</b> 14'33		minimum elong		-3963 Oct 22 j 20:03	0° <b>♄</b> 23'08	2°06'48
	-3969 Oct 10 j 14:39	0° <b>♄</b>		max. Earth dist.		-3963 Oct 22 j 06:57	0° <b>♄</b> 19'19	11.18199 AU
retrograde	-3969 Dec 12 j 11:14	3° <b>♄</b> 07'48		morning rise		-3963 Nov 08 j 04:51	2° <b>♄</b> 16'48	
	-3968 Feb 17 j 14:30	30° <b>8</b> 8		retrograde		-3962 Feb 17 j 03:32	9° <b>♄</b> 12'44	
opposition	-3968 Feb 19 j 14:04	29° <b>☾</b> 51'08	2°30'52	opposition		-3962 Apr 29 j 03:57	5° <b>♄</b> 55'20	2°25'27
min. Earth dist.	-3968 Feb 19 j 15:45	29° <b>☾</b> 50'49	9.05791 AU	min. Earth dist.		-3962 Apr 29 j 15:56	5° <b>♄</b> 53'08	9.15334 AU
direct	-3968 May 01 j 05:19	26° <b>☾</b> 28'54		direct		-3962 Jul 09 j 03:14	2° <b>♄</b> 37'33	
				evening set		-3962 Oct 17 j 11:28	9° <b>♄</b> 32'41	

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 37

Attention, astronomical year style is used: The year -3962 in astronomical counting style is the year 3963 BCE in historical counting style.

conjunction	-3962 Nov 02 j 21:26	11°♂27'25	1°50'50	conjunction	-3955 Jan 12 j 21:32	23°♂44'09	-0°54'41
minimum elong	-3962 Nov 02 j 21:29	11°♂27'25	1°50'48	minimum elong	-3955 Jan 12 j 21:29	23°♂44'08	0°54'51
max. Earth dist.	-3962 Nov 02 j 06:45	11°♂23'06	11.11555 AU	max. Earth dist.	-3955 Jan 12 j 12:35	23°♂41'18	10.32841 AU
morning rise	-3962 Nov 19 j 08:21	13°♂22'29		morning rise	-3955 Jan 30 j 07:34	25°♂56'15	
retrograde	-3961 Mar 01 j 02:11	20°♂24'41			-3955 Mar 06 j 12:42	0°♂	
opposition	-3961 May 11 j 04:15	17°♂06'12	2°03'21	retrograde	-3955 May 17 j 08:44	4°♂03'09	
min. Earth dist.	-3961 May 11 j 17:25	17°♂03'47	9.07359 AU	opposition	-3955 Jul 25 j 19:06	0°♂34'59	-1°27'01
direct	-3961 Jul 20 j 16:45	13°♂48'23		min. Earth dist.	-3955 Jul 26 j 00:48	0°♂33'51	8.25386 AU
evening set	-3961 Oct 28 j 15:48	20°♂46'19			-3955 Aug 02 j 03:52	30°♂♂	
				direct	-3955 Sep 30 j 18:13	27°♂11'53	
conjunction	-3961 Nov 14 j 03:32	22°♂42'40	1°30'24		-3955 Nov 26 j 06:44	0°♂	
minimum elong	-3961 Nov 14 j 03:35	22°♂42'41	1°30'19	evening set	-3954 Jan 09 j 09:58	4°♂58'24	
max. Earth dist.	-3961 Nov 13 j 12:09	22°♂38'07	11.02434 AU				
morning rise	-3961 Nov 30 j 17:17	24°♂39'40		conjunction	-3954 Jan 26 j 18:50	7°♂12'05	-1°23'55
	-3960 Jan 23 j 22:29	0°♂		minimum elong	-3954 Jan 26 j 18:47	7°♂12'04	1°24'05
retrograde	-3960 Mar 12 j 06:46	1°♂49'42		max. Earth dist.	-3954 Jan 26 j 13:54	7°♂10'29	10.18370 AU
	-3960 May 01 j 07:56	30°♂♂		morning rise	-3954 Feb 13 j 08:54	9°♂27'29	
opposition	-3960 May 22 j 09:18	28°♂29'53	1°36'00	retrograde	-3954 Jun 01 j 00:42	17°♂46'06	
min. Earth dist.	-3960 May 22 j 22:40	28°♂27'25	8.97040 AU	opposition	-3954 Aug 08 j 20:49	14°♂16'27	-2°01'30
direct	-3960 Jul 31 j 09:19	25°♂11'47		min. Earth dist.	-3954 Aug 08 j 23:03	14°♂16'00	8.11752 AU
	-3960 Oct 19 j 05:32	0°♂		direct	-3954 Oct 14 j 07:47	10°♂51'51	
evening set	-3960 Nov 08 j 01:47	2°♂14'04		evening set	-3953 Jan 23 j 16:58	18°♂49'42	
conjunction	-3960 Nov 24 j 16:11	4°♂12'32	1°05'58	conjunction	-3953 Feb 10 j 05:47	21°♂06'26	-1°49'10
minimum elong	-3960 Nov 24 j 16:13	4°♂12'33	1°05'52	minimum elong	-3953 Feb 10 j 05:44	21°♂06'25	1°49'20
max. Earth dist.	-3960 Nov 24 j 01:48	4°♂08'14	10.91128 AU	max. Earth dist.	-3953 Feb 10 j 05:11	21°♂06'14	10.05642 AU
morning rise	-3960 Dec 11 j 09:15	6°♂11'55		morning rise	-3953 Feb 27 j 23:30	23°♂24'48	
retrograde	-3959 Mar 24 j 20:52	13°♂31'18			-3953 Apr 30 j 02:47	0°♂	
opposition	-3959 Jun 03 j 20:17	10°♂09'55	1°04'02	retrograde	-3953 Jun 15 j 23:48	1°♂53'16	
min. Earth dist.	-3959 Jun 04 j 08:27	10°♂07'38	8.84717 AU		-3953 Aug 02 j 13:55	30°♂♂	
direct	-3959 Aug 12 j 07:15	6°♂51'17		opposition	-3953 Aug 23 j 05:36	28°♂22'27	-2°29'50
evening set	-3959 Nov 19 j 19:24	13°♂59'28		min. Earth dist.	-3953 Aug 23 j 04:07	28°♂22'45	8.00295 AU
	-3959 Nov 28 j 05:23	15°♂		direct	-3953 Oct 28 j 07:40	24°♂56'22	
					-3952 Jan 13 j 13:44	0°♂	
conjunction	-3959 Dec 06 j 12:58	16°♂00'30	0°38'13	evening set	-3952 Feb 07 j 12:33	3°♂04'46	
minimum elong	-3959 Dec 06 j 13:00	16°♂00'31	0°38'06				
max. Earth dist.	-3959 Dec 05 j 23:28	15°♂56'24	10.77999 AU	conjunction	-3952 Feb 25 j 05:07	5°♂24'08	-2°08'24
morning rise	-3959 Dec 23 j 09:55	18°♂02'41		minimum elong	-3952 Feb 25 j 05:04	5°♂24'07	2°08'33
retrograde	-3958 Apr 06 j 21:48	25°♂32'42		max. Earth dist.	-3952 Feb 25 j 08:53	5°♂25'23	9.95485 AU
opposition	-3958 Jun 16 j 14:05	22°♂09'38	0°28'20	morning rise	-3952 Mar 14 j 02:07	7°♂44'59	
min. Earth dist.	-3958 Jun 17 j 01:00	22°♂07'34	8.70795 AU		-3952 May 22 j 06:54	15°♂	
direct	-3958 Aug 24 j 09:35	18°♂50'12		retrograde	-3952 Jun 30 j 03:32	16°♂20'23	
evening set	-3958 Dec 01 j 22:47	26°♂05'56			-3952 Aug 08 j 07:06	15°♂♂	
				opposition	-3952 Sep 05 j 19:44	12°♂48'48	-2°49'30
conjunction	-3958 Dec 18 j 19:47	28°♂09'51	0°08'04	min. Earth dist.	-3952 Sep 05 j 14:51	12°♂49'49	7.91766 AU
minimum elong	-3958 Dec 18 j 19:48	28°♂09'52	0°07'56	direct	-3952 Nov 10 j 16:08	9°♂21'18	
behind sun begin	-3958 Dec 18 j 13:27	28°♂07'56			-3951 Jan 31 j 17:38	15°♂	
behind sun end	-3958 Dec 19 j 02:08	28°♂11'48		evening set	-3951 Feb 21 j 18:51	17°♂38'34	
max. Earth dist.	-3958 Dec 18 j 06:37	28°♂05'49	10.63487 AU				
	-3957 Jan 02 j 18:55	0°♂♂		conjunction	-3951 Mar 11 j 14:58	20°♂00'02	-2°19'53
morning rise	-3957 Jan 04 j 21:03	0°♂♂15'10		minimum elong	-3951 Mar 11 j 14:57	20°♂00'02	2°20'00
desc. node	-3957 Mar 25 j 18:55	7°♂24'40		max. Earth dist.	-3951 Mar 11 j 22:35	20°♂02'35	9.88593 AU
retrograde	-3957 Apr 20 j 06:57	7°♂56'56		morning rise	-3951 Mar 29 j 14:49	22°♂22'43	
opposition	-3957 Jun 29 j 15:22	4°♂32'09	-0°09'52		-3951 Jun 11 j 21:02	0°♂♂	
min. Earth dist.	-3957 Jun 30 j 01:16	4°♂30'14	8.55774 AU	retrograde	-3951 Jul 15 j 09:05	1°♂01'12	
direct	-3957 Sep 05 j 18:35	1°♂11'39			-3951 Aug 18 j 00:07	30°♂♂	
evening set	-3957 Dec 14 j 13:26	8°♂36'35		opposition	-3951 Sep 20 j 12:56	27°♂29'18	-2°58'30
				min. Earth dist.	-3951 Sep 20 j 05:30	27°♂30'52	7.86743 AU
conjunction	-3957 Dec 31 j 14:11	10°♂43'40	-0°23'27	direct	-3951 Nov 25 j 07:52	24°♂00'34	
minimum elong	-3957 Dec 31 j 14:10	10°♂43'40	0°23'36		-3950 Feb 18 j 08:37	0°♂♂	
max. Earth dist.	-3957 Dec 31 j 02:10	10°♂39'55	10.48173 AU	evening set	-3950 Mar 09 j 08:32	2°♂24'09	
morning rise	-3956 Jan 17 j 19:54	12°♂52'20					
retrograde	-3956 May 03 j 02:26	20°♂46'38		conjunction	-3950 Mar 27 j 07:52	4°♂47'00	-2°22'23
opposition	-3956 Jul 12 j 01:04	17°♂20'08	-0°49'00	minimum elong	-3950 Mar 27 j 07:53	4°♂47'00	2°22'28
min. Earth dist.	-3956 Jul 12 j 09:26	17°♂18'30	8.40353 AU	max. Earth dist.	-3950 Mar 27 j 18:49	4°♂50'39	9.85444 AU
direct	-3956 Sep 17 j 13:57	13°♂58'25		morning rise	-3950 Apr 14 j 09:54	7°♂10'40	
evening set	-3956 Dec 26 j 16:45	21°♂33'45		retrograde	-3950 Jul 30 j 12:59	15°♂47'57	

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), AstroDienst AG 18-Feb-2025 14:23, page 38

Attention, astronomical year style is used: The year -3950 in astronomical counting style is the year 3951 BCE in historical counting style.

opposition	-3950 Oct 05 j 06:56	12° $\text{X}$ 16'17	-2°55'44	asc. node	-3944 Aug 05 j 03:13	5° $\text{II}$ 04'50	
min. Earth dist.	-3950 Oct 04 j 21:31	12° $\text{X}$ 18'15	7.85565 AU	retrograde	-3944 Oct 20 j 09:23	9° $\text{II}$ 47'25	
direct	-3950 Dec 10 j 04:58	8° $\text{X}$ 46'33		opposition	-3944 Dec 26 j 10:23	6° $\text{II}$ 24'37	0°15'14
evening set	-3949 Mar 25 j 01:24	17° $\text{X}$ 13'12		min. Earth dist.	-3944 Dec 26 j 00:46	6° $\text{II}$ 26'32	8.45816 AU
				direct	-3943 Mar 05 j 20:04	2° $\text{II}$ 56'44	
conjunction	-3949 Apr 12 j 03:20	19° $\text{X}$ 36'34	-2°15'31	evening set	-3943 Jun 19 j 22:53	10° $\text{II}$ 45'01	
minimum elong	-3949 Apr 12 j 03:23	19° $\text{X}$ 36'35	2°15'34				
max. Earth dist.	-3949 Apr 12 j 17:07	19° $\text{X}$ 41'09	9.86250 AU	conjunction	-3943 Jul 07 j 15:52	12° $\text{II}$ 55'00	0°28'30
morning rise	-3949 Apr 30 j 06:44	22° $\text{X}$ 00'19		minimum elong	-3943 Jul 07 j 15:51	12° $\text{II}$ 55'00	0°28'40
	-3949 Jul 21 j 13:26	0° $\text{Y}$		max. Earth dist.	-3943 Jul 08 j 02:45	12° $\text{II}$ 58'21	10.53597 AU
retrograde	-3949 Aug 14 j 11:59	0° $\text{Y}$ 32'14		morning rise	-3943 Jul 25 j 03:44	15° $\text{II}$ 03'25	
	-3949 Sep 07 j 09:50	30° $\text{X}$		retrograde	-3943 Nov 01 j 20:39	22° $\text{II}$ 24'21	
opposition	-3949 Oct 19 j 23:01	27° $\text{X}$ 01'15	-2°41'21	opposition	-3942 Jan 08 j 08:14	19° $\text{II}$ 03'25	0°53'32
min. Earth dist.	-3949 Oct 19 j 11:58	27° $\text{X}$ 03'34	7.88300 AU	min. Earth dist.	-3942 Jan 08 j 00:52	19° $\text{II}$ 04'51	8.61130 AU
direct	-3949 Dec 25 j 05:32	23° $\text{X}$ 30'53		direct	-3942 Mar 19 j 09:56	15° $\text{II}$ 36'51	
	-3948 Mar 24 j 06:21	0° $\text{Y}$		evening set	-3942 Jul 03 j 03:27	23° $\text{II}$ 15'13	
evening set	-3948 Apr 08 j 17:27	1° $\text{Y}$ 57'08					
				conjunction	-3942 Jul 20 j 15:10	25° $\text{II}$ 21'41	0°58'19
conjunction	-3948 Apr 26 j 21:10	4° $\text{Y}$ 20'07	-1°59'52	minimum elong	-3942 Jul 20 j 15:08	25° $\text{II}$ 21'41	0°58'29
minimum elong	-3948 Apr 26 j 21:14	4° $\text{Y}$ 20'08	1°59'53	max. Earth dist.	-3942 Jul 20 j 22:27	25° $\text{II}$ 23'54	10.68711 AU
max. Earth dist.	-3948 Apr 27 j 12:51	4° $\text{Y}$ 25'17	9.90936 AU	morning rise	-3942 Aug 06 j 21:45	27° $\text{II}$ 26'35	
morning rise	-3948 May 15 j 00:57	6° $\text{Y}$ 43'00			-3942 Aug 29 j 10:21	0° $\text{E}$	
retrograde	-3948 Aug 28 j 02:34	15° $\text{Y}$ 05'56		retrograde	-3942 Nov 14 j 00:42	4° $\text{E}$ 37'29	
opposition	-3948 Nov 02 j 10:45	11° $\text{Y}$ 36'04	-2°16'40	opposition	-3941 Jan 20 j 22:44	1° $\text{E}$ 18'13	1°28'03
min. Earth dist.	-3948 Nov 01 j 22:32	11° $\text{Y}$ 38'38	7.94736 AU	min. Earth dist.	-3941 Jan 20 j 17:10	1° $\text{E}$ 19'17	8.75937 AU
direct	-3947 Jan 08 j 05:50	8° $\text{Y}$ 05'28			-3941 Feb 07 j 08:00	30° $\text{X}$ II	
evening set	-3947 Apr 24 j 04:46	16° $\text{Y}$ 28'03		direct	-3941 Apr 01 j 14:00	27° $\text{II}$ 53'04	
					-3941 May 23 j 15:44	0° $\text{E}$	
conjunction	-3947 May 12 j 09:07	18° $\text{Y}$ 49'43	-1°36'48	evening set	-3941 Jul 15 j 20:13	5° $\text{E}$ 21'58	
minimum elong	-3947 May 12 j 09:11	18° $\text{Y}$ 49'45	1°36'46				
max. Earth dist.	-3947 May 13 j 01:41	18° $\text{Y}$ 55'08	9.99138 AU	conjunction	-3941 Aug 02 j 02:36	7° $\text{E}$ 25'09	1°24'41
morning rise	-3947 May 30 j 12:02	21° $\text{Y}$ 10'51		minimum elong	-3941 Aug 02 j 02:33	7° $\text{E}$ 25'08	1°24'51
retrograde	-3947 Sep 11 j 07:14	29° $\text{Y}$ 22'15		max. Earth dist.	-3941 Aug 02 j 07:10	7° $\text{E}$ 26'31	10.82956 AU
opposition	-3947 Nov 16 j 16:23	25° $\text{Y}$ 53'52	-1°43'54	morning rise	-3941 Aug 19 j 03:50	9° $\text{E}$ 26'48	
min. Earth dist.	-3947 Nov 16 j 03:20	25° $\text{Y}$ 56'34	8.04402 AU	retrograde	-3941 Nov 25 j 21:39	16° $\text{E}$ 29'19	
direct	-3946 Jan 23 j 02:16	22° $\text{Y}$ 23'25		opposition	-3940 Feb 02 j 06:47	13° $\text{E}$ 11'28	1°57'40
	-3946 May 04 j 01:43	0° $\text{E}$		min. Earth dist.	-3940 Feb 02 j 03:19	13° $\text{E}$ 12'07	8.89570 AU
evening set	-3946 May 09 j 08:01	0° $\text{E}$ 39'36		direct	-3940 Apr 13 j 09:02	9° $\text{E}$ 47'45	
				evening set	-3940 Jul 27 j 02:33	17° $\text{E}$ 08'01	
conjunction	-3946 May 27 j 11:33	2° $\text{E}$ 59'08	-1°08'17				
minimum elong	-3946 May 27 j 11:36	2° $\text{E}$ 59'09	1°08'13	conjunction	-3940 Aug 13 j 03:43	19° $\text{E}$ 08'12	1°46'47
max. Earth dist.	-3946 May 28 j 04:21	3° $\text{E}$ 04'33	10.10263 AU	minimum elong	-3940 Aug 13 j 03:40	19° $\text{E}$ 08'11	1°46'57
morning rise	-3946 Jun 14 j 12:12	5° $\text{E}$ 17'43		max. Earth dist.	-3940 Aug 13 j 05:44	19° $\text{E}$ 08'48	10.95723 AU
retrograde	-3946 Sep 25 j 02:03	13° $\text{E}$ 16'13		morning rise	-3940 Aug 29 j 23:50	21° $\text{E}$ 06'58	
opposition	-3946 Nov 30 j 14:34	9° $\text{E}$ 49'34	-1°05'49	retrograde	-3940 Dec 06 j 13:52	28° $\text{E}$ 02'53	
min. Earth dist.	-3946 Nov 30 j 01:35	9° $\text{E}$ 52'14	8.16649 AU	opposition	-3939 Feb 13 j 09:25	24° $\text{E}$ 46'12	2°21'37
direct	-3945 Feb 06 j 16:14	6° $\text{E}$ 19'41		min. Earth dist.	-3939 Feb 13 j 08:58	24° $\text{E}$ 46'17	9.01472 AU
evening set	-3945 May 24 j 00:54	14° $\text{E}$ 27'29		direct	-3939 Apr 25 j 20:02	21° $\text{E}$ 23'50	
	-3945 May 28 j 08:57	15° $\text{E}$		evening set	-3939 Aug 07 j 23:38	28° $\text{E}$ 36'29	
conjunction	-3945 Jun 11 j 02:10	16° $\text{E}$ 44'13	-0°36'31		-3939 Aug 19 j 23:27	0° $\text{E}$	
minimum elong	-3945 Jun 11 j 02:12	16° $\text{E}$ 44'14	0°36'25	conjunction	-3939 Aug 24 j 19:53	0° $\text{E}$ 34'07	2°04'07
max. Earth dist.	-3945 Jun 11 j 18:15	16° $\text{E}$ 49'19	10.23587 AU	minimum elong	-3939 Aug 24 j 19:50	0° $\text{E}$ 34'06	2°04'15
morning rise	-3945 Jun 28 j 23:24	18° $\text{E}$ 59'40		max. Earth dist.	-3939 Aug 24 j 18:30	0° $\text{E}$ 33'42	11.06515 AU
retrograde	-3945 Oct 08 j 11:30	26° $\text{E}$ 44'55		morning rise	-3939 Sep 10 j 11:39	2° $\text{E}$ 30'29	
opposition	-3945 Dec 14 j 04:34	23° $\text{E}$ 20'10	-0°25'16	retrograde	-3939 Dec 18 j 00:54	9° $\text{E}$ 21'35	
min. Earth dist.	-3945 Dec 13 j 16:49	23° $\text{E}$ 22'33	8.30725 AU	opposition	-3938 Feb 25 j 07:57	6° $\text{E}$ 05'43	2°39'28
direct	-3944 Feb 20 j 21:34	19° $\text{E}$ 51'09		min. Earth dist.	-3938 Feb 25 j 10:53	6° $\text{E}$ 05'10	9.11183 AU
evening set	-3944 Jun 06 j 06:00	27° $\text{E}$ 49'25		direct	-3938 May 07 j 23:17	2° $\text{E}$ 44'34	
	-3944 Jun 23 j 18:20	0° $\text{II}$		evening set	-3938 Aug 19 j 12:43	9° $\text{E}$ 50'46	
conjunction	-3944 Jun 24 j 03:43	0° $\text{II}$ 02'55	-0°03'42	conjunction	-3938 Sep 05 j 04:42	11° $\text{E}$ 46'21	2°16'19
minimum elong	-3944 Jun 24 j 03:42	0° $\text{II}$ 02'55	0°03'34	minimum elong	-3938 Sep 05 j 04:40	11° $\text{E}$ 46'20	2°16'26
behind sun begin	-3944 Jun 23 j 20:30	0° $\text{II}$ 00'41		max. Earth dist.	-3938 Sep 04 j 23:17	11° $\text{E}$ 44'47	11.14917 AU
behind sun end	-3944 Jun 24 j 10:54	0° $\text{II}$ 05'08		morning rise	-3938 Sep 21 j 17:04	13° $\text{E}$ 40'55	
max. Earth dist.	-3944 Jun 24 j 17:43	0° $\text{II}$ 07'17	10.38304 AU		-3938 Oct 03 j 12:32	15° $\text{E}$	
morning rise	-3944 Jul 11 j 20:34	2° $\text{II}$ 14'54		retrograde	-3938 Dec 29 j 08:58	20° $\text{E}$ 29'02	

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 39

Attention, astronomical year style is used: The year -3937 in astronomical counting style is the year 3938 BCE in historical counting style.

opposition	-3937 Mar 09 j 03:13	17° $\Omega$ 13'37	2°50'59	retrograde	-3931 Mar 07 j 02:53	26° $\Omega$ 51'00	
min. Earth dist.	-3937 Mar 09 j 08:47	17° $\Omega$ 12'36	9.18302 AU	opposition	-3931 May 17 j 04:39	23° $\Omega$ 31'28	1°49'10
	-3937 Apr 11 j 09:38	15° $\kappa\Omega$		min. Earth dist.	-3931 May 17 j 18:03	23° $\Omega$ 29'00	9.00627 AU
direct	-3937 May 19 j 22:45	13° $\Omega$ 53'32		direct	-3931 Jul 26 j 10:37	20° $\Omega$ 13'09	
	-3937 Jun 26 j 18:26	15° $\Omega$		evening set	-3931 Nov 03 j 06:17	27° $\Omega$ 13'45	
evening set	-3937 Aug 30 j 19:37	20° $\Omega$ 54'39					
conjunction	-3937 Sep 16 j 08:23	22° $\Omega$ 48'47	2°23'16	conjunction	-3931 Nov 19 j 19:26	29° $\Omega$ 11'22	1°17'37
minimum elong	-3937 Sep 16 j 08:22	22° $\Omega$ 48'46	2°23'21	minimum elong	-3931 Nov 19 j 19:29	29° $\Omega$ 11'23	1°17'32
max. Earth dist.	-3937 Sep 16 j 00:09	22° $\Omega$ 46'23	11.20584 AU	max. Earth dist.	-3931 Nov 19 j 03:30	29° $\Omega$ 06'37	10.94964 AU
morning rise	-3937 Oct 02 j 18:10	24° $\Omega$ 42'05			-3931 Nov 26 j 14:35	0° $\mathbb{M}$	
	-3937 Nov 27 j 16:15	0° $\mathbb{M}$		morning rise	-3931 Dec 06 j 10:57	1° $\mathbb{M}$ 09'45	
retrograde	-3936 Jan 09 j 17:43	1° $\mathbb{M}$ 29'04		retrograde	-3930 Mar 19 j 12:20	8° $\mathbb{M}$ 25'12	
	-3936 Feb 23 j 05:02	30° $\kappa\Omega$		opposition	-3930 May 29 j 13:00	5° $\mathbb{M}$ 04'04	1°19'13
opposition	-3936 Mar 19 j 20:29	28° $\Omega$ 13'47	2°56'07	min. Earth dist.	-3930 May 30 j 02:31	5° $\mathbb{M}$ 01'33	8.88831 AU
min. Earth dist.	-3936 Mar 20 j 03:59	28° $\Omega$ 12'25	9.22540 AU	direct	-3930 Aug 07 j 05:59	1° $\mathbb{M}$ 45'10	
direct	-3936 May 30 j 16:25	24° $\Omega$ 54'37		evening set	-3930 Nov 14 j 20:18	8° $\mathbb{M}$ 51'04	
	-3936 Aug 23 j 21:07	0° $\mathbb{M}$		conjunction	-3930 Dec 01 j 12:18	10° $\mathbb{M}$ 51'05	0°51'17
evening set	-3936 Sep 09 j 22:05	1° $\mathbb{M}$ 52'02		minimum elong	-3930 Dec 01 j 12:20	10° $\mathbb{M}$ 51'05	0°51'11
				max. Earth dist.	-3930 Nov 30 j 20:38	10° $\mathbb{M}$ 46'21	10.82330 AU
conjunction	-3936 Sep 26 j 08:37	3° $\mathbb{M}$ 45'20	2°24'53	morning rise	-3930 Dec 18 j 07:39	12° $\mathbb{M}$ 52'08	
minimum elong	-3936 Sep 26 j 08:38	3° $\mathbb{M}$ 45'20	2°24'58		-3929 Jan 05 j 23:07	15° $\mathbb{M}$	
max. Earth dist.	-3936 Sep 25 j 22:33	3° $\mathbb{M}$ 42'25	11.23321 AU	retrograde	-3929 Apr 01 j 07:24	20° $\mathbb{M}$ 17'42	
morning rise	-3936 Oct 12 j 16:45	5° $\mathbb{M}$ 38'01		opposition	-3929 Jun 11 j 03:44	16° $\mathbb{M}$ 54'52	0°45'05
retrograde	-3935 Jan 20 j 02:48	12° $\mathbb{M}$ 25'39		min. Earth dist.	-3929 Jun 11 j 16:35	16° $\mathbb{M}$ 52'26	8.75358 AU
opposition	-3935 Mar 31 j 13:33	9° $\mathbb{M}$ 10'11	2°54'51		-3929 Jul 08 j 02:54	15° $\kappa\mathbb{M}$	
min. Earth dist.	-3935 Mar 31 j 23:22	9° $\mathbb{M}$ 08'23	9.23799 AU	direct	-3929 Aug 19 j 06:35	13° $\mathbb{M}$ 35'11	
direct	-3935 Jun 11 j 05:59	5° $\mathbb{M}$ 51'42			-3929 Sep 29 j 02:54	15° $\mathbb{M}$	
evening set	-3935 Sep 20 j 21:51	12° $\mathbb{M}$ 46'50		evening set	-3929 Nov 26 j 18:55	20° $\mathbb{M}$ 47'59	
conjunction	-3935 Oct 07 j 06:58	14° $\mathbb{M}$ 39'51	2°21'14	conjunction	-3929 Dec 13 j 14:22	22° $\mathbb{M}$ 50'45	0°22'04
minimum elong	-3935 Oct 07 j 07:00	14° $\mathbb{M}$ 39'52	2°21'18	minimum elong	-3929 Dec 13 j 14:23	22° $\mathbb{M}$ 50'45	0°21'57
max. Earth dist.	-3935 Oct 06 j 18:13	14° $\mathbb{M}$ 36'10	11.23108 AU	max. Earth dist.	-3929 Dec 13 j 00:41	22° $\mathbb{M}$ 46'34	10.68244 AU
morning rise	-3935 Oct 23 j 14:42	16° $\mathbb{M}$ 32'33		morning rise	-3929 Dec 30 j 13:44	24° $\mathbb{M}$ 54'49	
retrograde	-3934 Jan 31 j 14:15	23° $\mathbb{M}$ 22'31			-3928 Feb 16 j 19:34	0° $\mathbb{X}$	
opposition	-3934 Apr 12 j 07:25	20° $\mathbb{M}$ 06'31	2°47'19	retrograde	-3928 Apr 13 j 11:42	2° $\mathbb{X}$ 31'46	
min. Earth dist.	-3934 Apr 12 j 19:36	20° $\mathbb{M}$ 04'18	9.22111 AU		-3928 Jun 11 j 10:41	30° $\kappa\mathbb{M}$	
direct	-3934 Jun 22 j 18:29	16° $\mathbb{M}$ 48'26		opposition	-3928 Jun 23 j 01:45	29° $\mathbb{M}$ 07'08	0°07'48
evening set	-3934 Oct 01 j 20:46	23° $\mathbb{M}$ 42'42		min. Earth dist.	-3928 Jun 23 j 12:30	29° $\mathbb{M}$ 05'05	8.60728 AU
				direct	-3928 Aug 30 j 13:25	25° $\mathbb{M}$ 46'31	
conjunction	-3934 Oct 18 j 05:31	25° $\mathbb{M}$ 36'03	2°12'26	desc. node	-3928 Sep 07 j 15:53	25° $\mathbb{M}$ 50'01	
minimum elong	-3934 Oct 18 j 05:33	25° $\mathbb{M}$ 36'04	2°12'28		-3928 Nov 10 j 21:37	0° $\mathbb{X}$	
max. Earth dist.	-3934 Oct 17 j 14:34	25° $\mathbb{M}$ 31'42	11.20010 AU	evening set	-3928 Dec 08 j 04:12	3° $\mathbb{X}$ 07'45	
morning rise	-3934 Nov 03 j 13:58	27° $\mathbb{M}$ 29'22					
	-3934 Nov 26 j 17:20	0° $\Omega$		conjunction	-3928 Dec 25 j 03:25	5° $\mathbb{X}$ 13'35	-0°09'03
retrograde	-3933 Feb 12 j 03:23	4° $\Omega$ 23'17		minimum elong	-3928 Dec 25 j 03:24	5° $\mathbb{X}$ 13'35	0°09'12
opposition	-3933 Apr 24 j 02:56	1° $\Omega$ 06'23	2°33'40	behind sun begin	-3928 Dec 24 j 21:23	5° $\mathbb{X}$ 11'44	
min. Earth dist.	-3933 Apr 24 j 16:30	1° $\Omega$ 03'54	9.17567 AU	behind sun end	-3928 Dec 25 j 09:24	5° $\mathbb{X}$ 15'26	
	-3933 May 09 j 13:51	30° $\kappa\mathbb{M}$		max. Earth dist.	-3928 Dec 24 j 16:13	5° $\mathbb{X}$ 10'07	10.53281 AU
direct	-3933 Jul 04 j 06:39	27° $\mathbb{M}$ 48'27		morning rise	-3927 Jan 11 j 07:01	7° $\mathbb{X}$ 20'54	
	-3933 Aug 26 j 12:03	0° $\Omega$		retrograde	-3927 Apr 27 j 03:25	15° $\mathbb{X}$ 10'05	
evening set	-3933 Oct 12 j 20:30	4° $\Omega$ 43'20		opposition	-3927 Jul 06 j 07:44	11° $\mathbb{X}$ 43'41	-0°31'10
				min. Earth dist.	-3927 Jul 06 j 15:45	11° $\mathbb{X}$ 42'07	8.45578 AU
conjunction	-3933 Oct 29 j 05:59	6° $\Omega$ 37'35	1°58'41	direct	-3927 Sep 12 j 04:30	8° $\mathbb{X}$ 21'58	
minimum elong	-3933 Oct 29 j 06:02	6° $\Omega$ 37'35	1°58'40	evening set	-3927 Dec 21 j 01:43	15° $\mathbb{X}$ 52'57	
max. Earth dist.	-3933 Oct 28 j 14:43	6° $\Omega$ 33'07	11.14141 AU				
morning rise	-3933 Nov 14 j 15:55	8° $\Omega$ 32'03		conjunction	-3926 Jan 07 j 04:47	18° $\mathbb{X}$ 02'02	-0°40'35
retrograde	-3932 Feb 24 j 00:30	15° $\Omega$ 31'35		minimum elong	-3926 Jan 07 j 04:45	18° $\mathbb{X}$ 02'01	0°40'44
opposition	-3932 May 05 j 01:37	12° $\Omega$ 13'28	2°14'09	max. Earth dist.	-3926 Jan 06 j 19:53	17° $\mathbb{X}$ 59'13	10.38117 AU
min. Earth dist.	-3932 May 05 j 15:06	12° $\Omega$ 11'00	9.10321 AU	morning rise	-3926 Jan 24 j 12:48	20° $\mathbb{X}$ 12'45	
direct	-3932 Jul 14 j 20:58	8° $\Omega$ 55'28		retrograde	-3926 May 11 j 06:16	28° $\mathbb{X}$ 14'27	
evening set	-3932 Oct 22 j 22:55	15° $\Omega$ 52'24		opposition	-3926 Jul 19 j 22:02	24° $\mathbb{X}$ 46'25	-1°10'00
				min. Earth dist.	-3926 Jul 20 j 03:21	24° $\mathbb{X}$ 45'22	8.30623 AU
conjunction	-3932 Nov 08 j 09:56	17° $\Omega$ 48'06	1°40'16	direct	-3926 Sep 25 j 03:07	21° $\mathbb{X}$ 23'28	
minimum elong	-3932 Nov 08 j 09:59	17° $\Omega$ 48'07	1°40'13	evening set	-3925 Jan 03 j 12:42	29° $\mathbb{X}$ 05'14	
max. Earth dist.	-3932 Nov 07 j 18:37	17° $\Omega$ 43'35	11.05692 AU		-3925 Jan 10 j 17:34	0° $\mathbb{Z}$	
morning rise	-3932 Nov 24 j 22:11	19° $\Omega$ 44'17					

## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 40

Attention, astronomical year style is used: The year -3925 in astronomical counting style is the year 3926 BCE in historical counting style.

conjunction	-3925 Jan 20 j 19:36	1° $\text{Z}$ 17'33	-1°10'58	morning rise	-3919 May 08 j 08:32	0° $\text{Y}$ 20'53	
minimum elong	-3925 Jan 20 j 19:34	1° $\text{Z}$ 17'32	1°11'08	retrograde	-3919 Aug 22 j 00:11	8° $\text{Y}$ 47'57	
max. Earth dist.	-3925 Jan 20 j 13:18	1° $\text{Z}$ 15'32	10.23511 AU	opposition	-3919 Oct 27 j 08:36	5° $\text{Y}$ 18'02	-2°28'44
morning rise	-3925 Feb 07 j 07:52	3° $\text{Z}$ 31'37		min. Earth dist.	-3919 Oct 26 j 19:39	5° $\text{Y}$ 20'45	7.92709 AU
retrograde	-3925 May 25 j 18:26	11° $\text{Z}$ 45'25		direct	-3918 Jan 01 j 20:32	1° $\text{Y}$ 48'05	
opposition	-3925 Aug 02 j 20:28	8° $\text{Z}$ 15'58	-1°46'26	evening set	-3918 Apr 17 j 16:00	10° $\text{Y}$ 12'14	
min. Earth dist.	-3925 Aug 02 j 23:16	8° $\text{Z}$ 15'24	8.16664 AU				
direct	-3925 Oct 08 j 11:48	4° $\text{Z}$ 51'40		conjunction	-3918 May 05 j 20:11	12° $\text{Y}$ 34'25	-1°47'53
evening set	-3924 Jan 17 j 13:26	12° $\text{Z}$ 44'43		minimum elong	-3918 May 05 j 20:15	12° $\text{Y}$ 34'27	1°47'52
				max. Earth dist.	-3918 May 06 j 13:47	12° $\text{Y}$ 40'12	9.96435 AU
conjunction	-3924 Feb 04 j 00:16	15° $\text{Z}$ 00'09	-1°38'17	morning rise	-3918 May 23 j 23:25	14° $\text{Y}$ 56'16	
minimum elong	-3924 Feb 04 j 00:12	15° $\text{Z}$ 00'08	1°38'28	retrograde	-3918 Sep 05 j 09:54	23° $\text{Y}$ 12'42	
max. Earth dist.	-3924 Feb 03 j 21:41	14° $\text{Z}$ 59'19	10.10296 AU	opposition	-3918 Nov 10 j 17:19	19° $\text{Y}$ 44'10	-1°59'18
morning rise	-3924 Feb 21 j 16:28	17° $\text{Z}$ 17'19		min. Earth dist.	-3918 Nov 10 j 04:41	19° $\text{Y}$ 46'48	8.01097 AU
retrograde	-3924 Jun 08 j 14:05	25° $\text{Z}$ 41'52		direct	-3917 Jan 16 j 18:35	16° $\text{Y}$ 14'12	
opposition	-3924 Aug 16 j 02:28	22° $\text{Z}$ 11'16	-2°17'53	evening set	-3917 May 02 j 23:06	24° $\text{Y}$ 33'03	
min. Earth dist.	-3924 Aug 16 j 02:20	22° $\text{Z}$ 11'18	8.04535 AU				
direct	-3924 Oct 21 j 08:04	18° $\text{Z}$ 45'39		conjunction	-3917 May 21 j 03:03	26° $\text{Y}$ 53'29	-1°21'34
evening set	-3923 Jan 31 j 03:28	26° $\text{Z}$ 49'37		minimum elong	-3917 May 21 j 03:07	26° $\text{Y}$ 53'30	1°21'30
				max. Earth dist.	-3917 May 21 j 19:35	26° $\text{Y}$ 58'51	10.06289 AU
conjunction	-3923 Feb 17 j 18:14	29° $\text{Z}$ 07'53	-2°00'30	morning rise	-3917 Jun 08 j 04:49	29° $\text{Y}$ 13'09	
minimum elong	-3923 Feb 17 j 18:11	29° $\text{Z}$ 07'52	2°00'39		-3917 Jun 14 j 09:47	0° $\text{Z}$	
max. Earth dist.	-3923 Feb 17 j 20:10	29° $\text{Z}$ 08'31	9.99299 AU	retrograde	-3917 Sep 19 j 09:37	7° $\text{Z}$ 17'17	
	-3923 Feb 24 j 08:37	0° $\approx$		opposition	-3917 Nov 24 j 19:02	3° $\text{Z}$ 50'25	-1°23'18
morning rise	-3923 Mar 07 j 13:57	1° $\approx$ 27'45		min. Earth dist.	-3917 Nov 24 j 07:20	3° $\text{Z}$ 52'49	8.12093 AU
retrograde	-3923 Jun 23 j 15:28	10° $\approx$ 00'35		direct	-3916 Jan 31 j 11:46	0° $\text{Z}$ 20'47	
opposition	-3923 Aug 30 j 14:37	6° $\approx$ 29'15	-2°41'44	evening set	-3916 May 16 j 21:06	8° $\text{Z}$ 32'19	
min. Earth dist.	-3923 Aug 30 j 11:13	6° $\approx$ 29'57	7.95011 AU				
direct	-3923 Nov 04 j 13:19	3° $\approx$ 02'22		conjunction	-3916 Jun 03 j 23:25	10° $\text{Z}$ 50'18	-0°50'59
evening set	-3922 Feb 15 j 05:29	11° $\approx$ 16'00		minimum elong	-3916 Jun 03 j 23:27	10° $\text{Z}$ 50'19	0°50'54
				max. Earth dist.	-3916 Jun 04 j 13:59	10° $\text{Z}$ 54'58	10.18409 AU
conjunction	-3922 Mar 04 j 24:00	13° $\approx$ 36'37	-2°15'40	morning rise	-3916 Jun 21 j 22:27	13° $\text{Z}$ 07'10	
minimum elong	-3922 Mar 04 j 23:58	13° $\approx$ 36'36	2°15'48		-3916 Jul 07 j 08:36	15° $\text{Z}$	
max. Earth dist.	-3922 Mar 05 j 06:45	13° $\approx$ 38'51	9.91265 AU	retrograde	-3916 Oct 01 j 23:00	20° $\text{Z}$ 58'20	
	-3922 Mar 15 j 11:44	15° $\approx$		opposition	-3916 Dec 07 j 12:54	17° $\text{Z}$ 33'16	-0°43'31
morning rise	-3922 Mar 22 j 22:39	15° $\approx$ 58'34		min. Earth dist.	-3916 Dec 07 j 02:02	17° $\text{Z}$ 35'28	8.25043 AU
retrograde	-3922 Jul 08 j 20:47	24° $\approx$ 36'15			-3915 Jan 12 j 01:49	15° $\text{R}$ $\text{Z}$	
opposition	-3922 Sep 14 j 06:51	21° $\approx$ 04'36	-2°55'43	direct	-3915 Feb 13 j 22:20	14° $\text{Z}$ 04'18	
min. Earth dist.	-3922 Sep 14 j 00:01	21° $\approx$ 06'01	7.88754 AU		-3915 Mar 18 j 17:17	15° $\text{Z}$	
direct	-3922 Nov 19 j 02:08	17° $\approx$ 36'36		evening set	-3915 May 31 j 08:06	22° $\text{Z}$ 07'05	
evening set	-3921 Mar 02 j 16:27	25° $\approx$ 57'43					
				conjunction	-3915 Jun 18 j 07:28	24° $\text{Z}$ 22'04	-0°18'20
conjunction	-3921 Mar 20 j 14:25	28° $\approx$ 20'00	-2°22'18	minimum elong	-3915 Jun 18 j 07:29	24° $\text{Z}$ 22'04	0°18'13
minimum elong	-3921 Mar 20 j 14:25	28° $\approx$ 20'00	2°22'24	max. Earth dist.	-3915 Jun 18 j 20:07	24° $\text{Z}$ 26'03	10.32134 AU
max. Earth dist.	-3921 Mar 21 j 01:44	28° $\approx$ 23'47	9.86788 AU	morning rise	-3915 Jul 06 j 02:35	26° $\text{Z}$ 35'40	
	-3921 Apr 02 j 03:28	0° $\text{X}$			-3915 Aug 04 j 11:53	0° $\text{II}$	
morning rise	-3921 Apr 07 j 15:26	0° $\text{X}$ 43'17		retrograde	-3915 Oct 15 j 01:29	4° $\text{II}$ 14'04	
retrograde	-3921 Jul 24 j 02:25	9° $\text{X}$ 21'41		opposition	-3915 Dec 20 j 22:46	0° $\text{II}$ 50'48	-0°02'41
opposition	-3921 Sep 29 j 01:05	5° $\text{X}$ 50'10	-2°58'17	min. Earth dist.	-3915 Dec 20 j 12:54	0° $\text{II}$ 52'47	8.39273 AU
min. Earth dist.	-3921 Sep 28 j 15:04	5° $\text{X}$ 52'16	7.86223 AU		-3915 Dec 31 j 15:46	30° $\text{R}$ $\text{Z}$	
direct	-3921 Dec 03 j 21:04	2° $\text{X}$ 21'16		asc. node	-3914 Jan 14 j 22:13	28° $\text{Z}$ 57'46	
evening set	-3920 Mar 17 j 08:33	10° $\text{X}$ 46'48		direct	-3914 Feb 28 j 01:45	27° $\text{Z}$ 22'45	
					-3914 Apr 26 j 01:58	0° $\text{II}$	
conjunction	-3920 Apr 04 j 09:29	13° $\text{X}$ 09'58	-2°19'38	evening set	-3914 Jun 14 j 06:53	5° $\text{II}$ 15'52	
minimum elong	-3920 Apr 04 j 09:31	13° $\text{X}$ 09'59	2°19'42				
max. Earth dist.	-3920 Apr 05 j 00:26	13° $\text{X}$ 14'56	9.86209 AU	conjunction	-3914 Jul 02 j 02:10	7° $\text{II}$ 27'31	0°14'25
morning rise	-3920 Apr 22 j 12:14	15° $\text{X}$ 33'42		minimum elong	-3914 Jul 02 j 02:09	7° $\text{II}$ 27'31	0°14'33
retrograde	-3920 Aug 07 j 04:48	24° $\text{X}$ 08'27		behind sun begin	-3914 Jul 01 j 23:09	7° $\text{II}$ 26'35	
opposition	-3920 Oct 12 j 18:33	20° $\text{X}$ 37'31	-2°49'01	behind sun end	-3914 Jul 02 j 05:08	7° $\text{II}$ 28'26	
min. Earth dist.	-3920 Oct 12 j 06:28	20° $\text{X}$ 40'03	7.87593 AU	max. Earth dist.	-3914 Jul 02 j 12:59	7° $\text{II}$ 30'52	10.46746 AU
direct	-3920 Dec 17 j 20:10	17° $\text{X}$ 07'57		morning rise	-3914 Jul 19 j 16:26	9° $\text{II}$ 37'37	
evening set	-3919 Apr 02 j 01:53	25° $\text{X}$ 34'29		retrograde	-3914 Oct 27 j 18:30	17° $\text{II}$ 04'05	
				opposition	-3913 Jan 03 j 00:37	13° $\text{II}$ 42'32	0°36'53
conjunction	-3919 Apr 20 j 05:00	27° $\text{X}$ 57'38	-2°07'49	min. Earth dist.	-3913 Jan 02 j 16:19	13° $\text{II}$ 44'11	8.54054 AU
minimum elong	-3919 Apr 20 j 05:03	27° $\text{X}$ 57'39	2°07'50	direct	-3913 Mar 13 j 19:23	10° $\text{II}$ 15'34	
max. Earth dist.	-3919 Apr 20 j 22:04	28° $\text{X}$ 03'17	9.89535 AU	evening set	-3913 Jun 27 j 17:26	17° $\text{II}$ 58'48	
	-3919 May 05 j 16:19	0° $\text{Y}$					



## Planetary Phenomena of Saturn from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 41

Attention, astronomical year style is used: The year -3913 in astronomical counting style is the year 3914 BCE in historical counting style.

conjunction	-3913 Jul 15 j 07:50	20°II06'59	0°45'26	conjunction	-3907 Sep 21 j 23:02	29°Q13'43	2°24'56
minimum elong	-3913 Jul 15 j 07:48	20°II06'59	0°45'36	minimum elong	-3907 Sep 21 j 23:02	29°Q13'43	2°25'01
max. Earth dist.	-3913 Jul 15 j 16:26	20°II09'37	10.61511 AU	max. Earth dist.	-3907 Sep 21 j 13:49	29°Q11'03	11.20724 AU
morning rise	-3913 Aug 01 j 16:46	22°II13'33			-3907 Sep 28 j 14:55	0°P	
retrograde	-3913 Nov 09 j 03:30	29°II29'20		morning rise	-3907 Oct 08 j 07:57	1°P06'47	
opposition	-3912 Jan 15 j 18:44	26°II09'22	1°13'19	retrograde	-3906 Jan 15 j 11:08	7°P54'17	
min. Earth dist.	-3912 Jan 15 j 13:10	26°II10'27	8.68663 AU	opposition	-3906 Mar 26 j 20:10	4°P38'24	2°56'21
direct	-3912 Mar 26 j 02:50	22°II43'33		min. Earth dist.	-3906 Mar 27 j 04:47	4°P36'50	9.22085 AU
	-3912 Jul 07 j 05:35	0°Q		direct	-3906 Jun 06 j 14:31	1°P19'07	
evening set	-3912 Jul 09 j 16:06	0°Q17'12		evening set	-3906 Sep 16 j 12:16	8°P15'26	
conjunction	-3912 Jul 27 j 01:04	2°Q22'01	1°13'30	conjunction	-3906 Oct 02 j 21:57	10°P08'36	2°23'35
minimum elong	-3912 Jul 27 j 01:01	2°Q22'00	1°13'41	minimum elong	-3906 Oct 02 j 21:58	10°P08'37	2°23'39
max. Earth dist.	-3912 Jul 27 j 06:18	2°Q23'35	10.75730 AU	max. Earth dist.	-3906 Oct 02 j 11:13	10°P05'30	11.22303 AU
morning rise	-3912 Aug 13 j 04:40	4°Q25'14		morning rise	-3906 Oct 19 j 05:56	12°P01'20	
retrograde	-3912 Nov 20 j 02:45	11°Q31'53		retrograde	-3905 Jan 26 j 22:23	18°P50'14	
opposition	-3911 Jan 27 j 06:06	8°Q13'17	1°45'17	opposition	-3905 Apr 07 j 13:17	15°P34'03	2°51'31
min. Earth dist.	-3911 Jan 27 j 03:23	8°Q13'48	8.82430 AU	min. Earth dist.	-3905 Apr 07 j 22:51	15°P32'19	9.22249 AU
direct	-3911 Apr 08 j 02:13	4°Q48'40		direct	-3905 Jun 18 j 04:45	12°P15'28	
evening set	-3911 Jul 22 j 03:30	12°Q13'23		evening set	-3905 Sep 27 j 11:13	19°P10'03	
conjunction	-3911 Aug 08 j 06:57	14°Q15'02	1°37'37	conjunction	-3905 Oct 13 j 20:12	21°P03'15	2°17'00
minimum elong	-3911 Aug 08 j 06:54	14°Q15'01	1°37'48	minimum elong	-3905 Oct 13 j 20:14	21°P03'16	2°17'02
max. Earth dist.	-3911 Aug 08 j 08:24	14°Q15'28	10.88789 AU	max. Earth dist.	-3905 Oct 13 j 08:31	20°P59'52	11.21072 AU
morning rise	-3911 Aug 25 j 05:29	16°Q15'14		morning rise	-3905 Oct 30 j 04:08	22°P56'15	
retrograde	-3911 Dec 01 j 20:09	23°Q14'31		retrograde	-3904 Feb 07 j 10:57	29°P48'10	
opposition	-3910 Feb 08 j 11:29	19°Q57'01	2°11'53	opposition	-3904 Apr 18 j 07:43	26°P31'26	2°40'29
min. Earth dist.	-3910 Feb 08 j 11:00	19°Q57'07	8.94778 AU	min. Earth dist.	-3904 Apr 18 j 18:29	26°P29'28	9.19590 AU
direct	-3910 Apr 20 j 19:15	16°Q33'37		direct	-3904 Jun 28 j 15:10	23°P13'20	
evening set	-3910 Aug 03 j 04:49	23°Q50'15			-3904 Oct 06 j 07:22	0°Q	
conjunction	-3910 Aug 20 j 03:14	25°Q49'10	1°57'09	evening set	-3904 Oct 07 j 10:19	0°Q07'40	
minimum elong	-3910 Aug 20 j 03:11	25°Q49'09	1°57'18	conjunction	-3904 Oct 23 j 19:23	2°Q01'27	2°05'22
max. Earth dist.	-3910 Aug 20 j 01:50	25°Q48'45	11.00182 AU	minimum elong	-3904 Oct 23 j 19:25	2°Q01'27	2°05'22
morning rise	-3910 Sep 05 j 21:06	27°Q46'45		max. Earth dist.	-3904 Oct 23 j 05:58	1°Q57'32	11.17074 AU
	-3910 Sep 25 j 21:48	0°Q		morning rise	-3904 Nov 09 j 04:28	3°Q55'18	
retrograde	-3910 Dec 13 j 09:36	4°Q40'27		retrograde	-3903 Feb 18 j 04:23	10°Q51'55	
opposition	-3909 Feb 20 j 11:50	1°Q23'45	2°32'31	opposition	-3903 Apr 30 j 04:56	7°Q34'21	2°23'27
min. Earth dist.	-3909 Feb 20 j 13:06	1°Q23'31	9.05238 AU	min. Earth dist.	-3903 Apr 30 j 17:17	7°Q32'06	9.14202 AU
	-3909 Mar 11 j 19:09	30°RQ		direct	-3903 Jul 10 j 03:32	4°Q16'28	
direct	-3909 May 03 j 02:25	28°Q01'33		evening set	-3903 Oct 18 j 11:13	11°Q12'03	
	-3909 Jun 22 j 23:13	0°Q		conjunction	-3903 Nov 03 j 21:17	13°Q06'57	1°48'56
evening set	-3909 Aug 14 j 21:27	5°Q11'10		minimum elong	-3903 Nov 03 j 21:20	13°Q06'57	1°48'53
conjunction	-3909 Aug 31 j 15:31	7°Q07'50	2°11'40	max. Earth dist.	-3903 Nov 03 j 06:39	13°Q02'39	11.10440 AU
minimum elong	-3909 Aug 31 j 15:28	7°Q07'49	2°11'48	morning rise	-3903 Nov 20 j 08:30	15°Q02'13	
max. Earth dist.	-3909 Aug 31 j 12:14	7°Q06'52	11.09493 AU	retrograde	-3902 Mar 02 j 02:40	22°Q05'08	
morning rise	-3909 Sep 17 j 05:22	9°Q03'20		opposition	-3902 May 12 j 05:47	18°Q46'29	2°00'46
	-3909 Nov 22 j 01:54	15°Q		min. Earth dist.	-3902 May 12 j 18:41	18°Q44'06	9.06257 AU
retrograde	-3909 Dec 24 j 19:47	15°Q53'13		direct	-3902 Jul 21 j 17:14	15°Q28'35	
	-3908 Jan 27 j 05:36	15°RQ		evening set	-3902 Oct 29 j 16:00	22°Q26'57	
opposition	-3908 Mar 03 j 08:37	12°Q37'04	2°46'53	conjunction	-3902 Nov 15 j 04:04	24°Q23'30	1°28'03
min. Earth dist.	-3908 Mar 03 j 12:26	12°Q36'22	9.13436 AU	minimum elong	-3902 Nov 15 j 04:07	24°Q23'31	1°27'59
direct	-3908 May 14 j 03:08	9°Q15'58		max. Earth dist.	-3902 Nov 14 j 13:49	24°Q19'16	11.01366 AU
	-3908 Aug 13 j 08:32	15°Q		morning rise	-3902 Dec 01 j 18:01	26°Q20'41	
evening set	-3908 Aug 25 j 07:12	16°Q19'50			-3901 Jan 04 j 21:05	0°P	
conjunction	-3908 Sep 10 j 21:29	18°Q14'45	2°20'58	retrograde	-3901 Mar 14 j 09:09	3°P31'27	
minimum elong	-3908 Sep 10 j 21:28	18°Q14'44	2°21'04	opposition	-3901 May 24 j 11:10	0°P11'28	1°32'54
max. Earth dist.	-3908 Sep 10 j 15:23	18°Q12'58	11.16407 AU	min. Earth dist.	-3901 May 24 j 23:28	0°P09'11	8.96007 AU
morning rise	-3908 Sep 27 j 08:17	20°Q08'43			-3901 May 27 j 01:02	30°RQ	
retrograde	-3907 Jan 04 j 04:10	26°Q56'32		direct	-3901 Aug 02 j 11:22	26°Q53'19	
opposition	-3907 Mar 15 j 03:00	23°Q40'41	2°54'50		-3901 Oct 04 j 06:25	0°P	
min. Earth dist.	-3907 Mar 15 j 09:39	23°Q39'28	9.19109 AU	evening set	-3901 Nov 10 j 02:36	3°P56'02	
direct	-3907 May 25 j 22:20	20°Q20'34		conjunction	-3901 Nov 26 j 17:17	5°P54'43	1°03'16
evening set	-3907 Sep 05 j 11:39	27°Q19'58		minimum elong	-3901 Nov 26 j 17:20	5°P54'43	1°03'10

Attention, astronomical year style is used: The year -3901 in astronomical counting style is the year 3902 BCE in historical counting style.

max. Earth dist.	-3901 Nov 26 j 03:48	5° <del>ℓ</del> 50'40	10.90145 AU
morning rise	-3901 Dec 13 j 10:34	7° <del>ℓ</del> 54'17	
	-3900 Mar 08 j 21:30	15° <del>ℓ</del>	
retrograde	-3900 Mar 26 j 00:51	15° <del>ℓ</del> 14'19	
	-3900 Apr 12 j 05:25	15° <del>κ</del> <del>ℓ</del>	
opposition	-3900 Jun 04 j 22:36	11° <del>ℓ</del> 52'50	1°00'32
min. Earth dist.	-3900 Jun 05 j 09:49	11° <del>ℓ</del> 50'44	8.83799 AU
direct	-3900 Aug 13 j 08:00	8° <del>ℓ</del> 34'11	
	-3900 Nov 14 j 19:24	15° <del>ℓ</del>	
evening set	-3900 Nov 20 j 20:49	15° <del>ℓ</del> 42'47	
conjunction	-3900 Dec 07 j 14:30	17° <del>ℓ</del> 43'59	0°35'14
minimum elong	-3900 Dec 07 j 14:31	17° <del>ℓ</del> 43'59	0°35'08
max. Earth dist.	-3900 Dec 07 j 01:05	17° <del>ℓ</del> 39'55	10.77168 AU
morning rise	-3900 Dec 24 j 11:47	19° <del>ℓ</del> 46'21	
retrograde	-3899 Apr 08 j 00:25	27° <del>ℓ</del> 16'58	
opposition	-3899 Jun 17 j 16:52	23° <del>ℓ</del> 53'50	0°24'34
min. Earth dist.	-3899 Jun 18 j 03:30	23° <del>ℓ</del> 51'49	8.70067 AU
direct	-3899 Aug 25 j 10:27	20° <del>ℓ</del> 34'22	
evening set	-3899 Dec 03 j 00:43	27° <del>ℓ</del> 50'30	
conjunction	-3899 Dec 19 j 21:51	29° <del>ℓ</del> 54'33	0°04'58
minimum elong	-3899 Dec 19 j 21:52	29° <del>ℓ</del> 54'33	0°04'51
behind sun begin	-3899 Dec 19 j 14:58	29° <del>ℓ</del> 52'27	
behind sun end	-3899 Dec 20 j 04:45	29° <del>ℓ</del> 56'40	
max. Earth dist.	-3899 Dec 19 j 09:05	29° <del>ℓ</del> 50'38	10.62888 AU
	-3899 Dec 20 j 15:32	0° <del>χ</del>	
morning rise	-3898 Jan 05 j 23:29	2° <del>χ</del> 00'01	