Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5400 in astronomical counting style is the year 5401 BCE in historical counting style. -5400 Apr 07 j 16:50 24°M57'22 -5394 Mar 11 j 22:05 9°**≈**42'24 2°22'19 desc. node minimum elong -5400 Apr 17 j 04:53 -5394 Mar 12 j 14:42 9°**≈**47'57 retrograde 25°M,01'58 max. Earth dist. 9 83338 AU -5400 Jun 26 j 00:30 -5394 Mar 30 j 00:22 21°M34'28 -0°08'41 morning rise 12° 206'32 opposition min. Earth dist. -5400 Jun 26 j 07:37 21°M33'04 8.33274 AU -5394 Apr 22 j 00:37 15°≈ -5400 Sep 01 j 10:13 -5394 Jul 15 j 06:23 direct 18°M11'56 retrograde 20°≈45'35 -5394 Sep 19 j 10:50 evening set -5400 Dec 10 j 16:28 25°M51'23 min. Earth dist. 17°≈16'30 7.84213 AU opposition -5394 Sep 20 j 00:41 17°≈13'35 -3°00'33 conjunction -5400 Dec 27 j 21:41 28°M02'59 -0°23'16 -5394 Oct 18 j 18:44 15°R≈ minimum elong -5400 Dec 27 j 21:40 28°M02'59 0°23'32 direct -5394 Nov 24 j 21:48 13°≈43′52 max. Earth dist. -5400 Dec 27 j 13:49 28°ML00'28 10.25877 AU -5394 Dec 31 j 17:08 15°≈ -5399 Jan 12 j 04:24 0° **₹** evening set -5393 Mar 09 j 17:19 22°≈11'18 0°**х** 16′21 morning rise -5399 Jan 14 j 08:18 retrograde -5399 May 01 j 14:26 8°**∡**¹27'54 conjunction -5393 Mar 27 j 19:07 24°≈34'42 -2°23'11 opposition -5399 Jul 09 j 22:32 4°**₹**58'42 -0°50'10 minimum elong -5393 Mar 27 j 19:08 24°≈34'42 2°23'23 min. Earth dist. -5399 Jul 10 j 02:30 4°**∡**¹57'55 8.18591 AU max. Earth dist. -5393 Mar 28 j 14:50 24°**≈**41'16 9.85643 AU direct -5399 Sep 14 j 18:38 1°×34'48 morning rise -5393 Apr 14 j 22:08 26°≈58'28 evening set -5399 Dec 24 j 12:32 9°×25'07 -5393 May 09 j 04:29 0°**)**€ retrograde -5393 Jul 30 j 05:29 5°\ 31'11 conjunction -5398 Jan 10 j 22:09 11°**≯**40'04 -0°56'09 opposition -5393 Oct 04 j 17:10 2°\mathbf{1}00'07 -2°55'45 minimum elong -5398 Jan 10 j 22:07 11°**х** 40′03 0°56′27 min. Earth dist. -5393 Oct 04 j 01:51 2°**升**03′20 7.88484 AU max. Earth dist. -5398 Jan 10 j 18:28 11°**✗**38'53 10.11875 AU -5393 Oct 30 j 03:19 30°R≈ morning rise -5398 Jan 28 j 13:22 13°**х** 56′50 direct -5393 Dec 09 i 22:27 28°≈29'57 retrograde -5398 May 16 j 08:54 22°×19'48 -5392 Jan 19 i 09:36 0°**∀** opposition -5398 Jul 24 j 04:26 18°**∡**¹49'11 -1°30'12 -5392 Mar 24 j 10:34 6°\ 56'12 evening set min. Earth dist. -5398 Jul 24 j 04:56 18°**х** 49'05 8.05572 AU -5398 Sep 28 j 13:00 15°**х** 23′53 -5392 Apr 11 j 13:34 9°\ 18'47 -2°14'55 direct conjunction -5397 Jan 07 j 22:21 -5392 Apr 11 j 13:37 9°\ 18'48 2°15'04 23°×725'02 evening set minimum elong -5392 Apr 12 j 10:46 9°**)** 25'47 9.91857 AU max. Earth dist. -5397 Jan 25 j 12:12 -5392 Apr 29 j 16:28 25°**х** 43′02 -1°26′40 11°\ 41'16 conjunction morning rise -5397 Jan 25 j 12:09 -5392 Aug 12 j 20:05 20°\ 04'01 25° × 43'01 1°26'58 minimum elong retrograde -5392 Oct 18 j 04:38 16°**)** 34'21 -2°39'37 max. Earth dist. -5397 Jan 25 j 13:47 25°**х** 43'33 9.99917 AU opposition -5397 Feb 12 j 07:24 28°**₹**'02'46 min. Earth dist. -5392 Oct 17 j 12:59 16°**₭**37'37 7.96442 AU morning rise -5397 Feb 27 j 20:08 0°ಕ -5392 Dec 23 j 21:47 13°**)** 04'09 direct -5391 Apr 08 j 21:43 21°**¥**25'47 -5397 May 31 j 10:47 6°**る**35'08 retrograde evening set -5397 Aug 07 j 16:49 opposition 3°る03'26 -2°05'58 -5397 Aug 07 j 13:25 -5391 Apr 27 j 00:57 23°\(\dagger46'44\) -1°58'14 min. Earth dist. 3°る04'08 7.95015 AU conjunction -5397 Sep 22 j 11:31 30°₽**⋌**7 minimum elong -5391 Apr 27 j 01:01 23°**)** 46'46 1°58'18 direct -5397 Oct 12 j 16:26 29°**х** 36'46 max. Earth dist. -5391 Apr 27 j 22:08 23°¥53'39 10.01539 AU -5397 Nov 01 j 16:57 0°ರ morning rise -5391 May 15 j 02:47 26°**₩**07'09 evening set -5396 Jan 22 j 21:08 7°る47'57 -5391 Jun 16 j 16:03 $0^{\circ}\Upsilon$ retrograde -5391 Aug 27 j 00:14 4°Υ17'23 -5396 Feb 09 j 14:50 10°る08'28 -1°52'30 -5391 Nov 01 j 09:02 0°Y49'25 -2°13'55 conjunction opposition -5396 Feb 09 j 14:46 10°る08'27 1°52'49 min. Earth dist. -5391 Oct 31 j 17:43 0°Υ52'35 8.07537 AU minimum elong -5396 Feb 09 j 21:50 10°る10'48 9.90775 AU -5391 Nov 11 j 10:19 max. Earth dist. 30°₽**,**₩ -5396 Feb 27 j 13:12 12°**る**30'32 -5390 Jan 07 j 17:09 27°**¥**19'31 morning rise direct $0^{\circ}\Upsilon$ retrograde -5396 Jun 14 i 17:12 21°**る**09'11 -5390 Mar 04 i 19:56 opposition -5396 Aug 21 i 09:45 17°る36'52 -2°34'31 evening set -5390 Apr 23 j 23:48 5°Y33'50 min. Earth dist. -5396 Aug 21 i 02:20 17°る38'25 7.87621 AU 7°Y52'27 -1°34'46 direct -5396 Oct 26 i 03:56 14°る08'58 conjunction -5390 May 12 j 02:12 -5395 Feb 06 j 06:22 22°る28'27 minimum elong -5390 May 12 i 02:15 7°Υ52'29 1°34'45 evening set -5390 May 12 j 22:03 7°**Υ**58'50 10.14016 AU max Earth dist -5395 Feb 24 i 03:22 24°る50'47 -2°11'32 -5390 May 30 j 02:00 10°**Y**10′08 conjunction morning rise -5395 Feb 24 j 03:19 24°₹50'46 2°11'50 -5390 Sep 09 j 16:25 18°**Y**06′28 minimum elong retrograde 14°\bar 40'25 -1°41'05 max. Earth dist. -5395 Feb 24 j 15:30 24°る54'50 9.85101 AU opposition -5390 Nov 15 j 04:58 morning rise -5395 Mar 14 j 04:05 27°る14'20 min. Earth dist. -5390 Nov 14 j 14:34 14°**Y**43'21 8.21025 AU -5395 Apr 05 j 02:23 0°≈ direct -5389 Jan 22 j 06:56 11°Y11'09 19°Y16'15 -5395 Jun 30 j 01:11 5°≈55'22 -5389 May 08 j 14:32 retrograde evening set -5395 Sep 05 j 05:17 2°≈22'56 -2°53'17 opposition 21° **Y** $31'59 -1^{\circ}06'30$ -5395 Sep 04 j 18:14 2°≈25'16 7.83924 AU -5389 May 26 j 14:57 min. Earth dist. conjunction -5395 Oct 06 j 13:37 21°**Υ**'32'00 1°06'25 30°Ŗる minimum elong -5389 May 26 j 15:00 28°る54'00 21°**Υ**37'31 10.28452 AU direct -5395 Nov 09 j 22:38 max. Earth dist. -5389 May 27 j 08:28 23°Y46'28 -5395 Dec 13 j 23:34 0°≈ morning rise -5389 Jun 13 j 11:41 evening set -5394 Feb 21 j 22:23 7°≈19'06 -5389 Aug 13 j 05:20 0° 8 retrograde -5389 Sep 22 j 20:35 1°**8**28'42 conjunction -5394 Mar 11 j 22:06 9°≈42'24 -2°22'04 -5389 Nov 03 j 05:55 30°**Ŗ**♈

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5389 in astronomical counting style is the year 5390 BCE in historical counting style. 28°Y04'37 -1°03'48 morning rise -5389 Nov 28 i 16:09 -5383 Aug 25 j 09:07 6°533'34 opposition -5389 Nov 28 j 02:58 28°Υ07'16 8.36040 AU -5383 Dec 01 j 16:57 13°922'03 min. Earth dist. retrograde -5388 Feb 05 j 12:12 24°Y36'17 opposition -5382 Feb 08 j 23:28 10°9506'20 direct 2°18'49 0°8 9.13661 AU -5388 Apr 30 j 04:12 min. Earth dist. -5382 Feb 09 j 04:55 10°905'20 evening set -5388 May 21 j 16:32 2°**8**31'04 direct -5382 Apr 21 j 18:58 6°9545'05 evening set -5382 Aug 03 j 06:15 13°9549'36 conjunction -5388 Jun 08 j 13:52 4°**8**43'33 -0°35'32 -5388 Jun 08 j 13:54 minimum elong 4°**8**43'34 0°35'22 conjunction -5382 Aug 19 j 23:30 15°**©**45'11 2°02'22 max. Earth dist. -5388 Jun 09 j 04:44 4°**8**48'10 10.43941 AU minimum elong -5382 Aug 19 j 23:28 15°9545'11 2°02'41 morning rise -5388 Jun 26 j 06:34 6°**8**54'35 max. Earth dist. -5382 Aug 19 j 15:01 15°9542'44 11.16828 AU retrograde -5388 Oct 04 j 15:14 14°**8**23'30 morning rise -5382 Sep 05 j 12:39 17°539'40 -5382 Dec 13 j 00:05 opposition -5388 Dec 10 j 18:30 11°**8**01'18 -0°24'35 retrograde 24°925'47 min. Earth dist. -5388 Dec 10 j 07:38 11°**8**03'27 8.51680 AU opposition -5381 Feb 20 j 16:56 21°9510'25 2°37'37 direct -5387 Feb 18 j 07:09 7°**8**34'05 min. Earth dist. -5381 Feb 21 j 02:00 21°9508'45 9.19600 AU -5387 Jun 01 j 16:13 15°8 direct -5381 May 03 j 14:10 17°950'02 evening set -5387 Jun 04 j 05:42 15°**8**18'20 evening set -5381 Aug 14 j 12:24 24°950'15 conjunction -5387 Jun 21 j 23:02 17°**8**27'27 -0°03'46 conjunction -5381 Aug 31 j 01:51 26°5544'24 2°15'29 minimum elong -5387 Jun 21 j 23:03 17°**8**27'27 0°03'33 minimum elong -5381 Aug 31 j 01:49 26°9544'23 2°15'47 behind sun begin -5387 Jun 21 j 15:54 17°**8**25'18 max. Earth dist. -5381 Aug 30 j 13:33 26°9540'50 11.21351 AU behind sun end -5387 Jun 22 j 06:12 17°**8**29'37 morning rise -5381 Sep 16 j 12:09 28°937'42 max. Earth dist. -5387 Jun 22 j 10:31 17°**8**30'57 10.59572 AU -5381 Sep 28 i 21:13 $0^{\circ}\Omega$ morning rise -5387 Jul 09 i 11:07 19°**8**34'59 retrograde -5381 Dec 24 i 06:02 5°**Ω**23'19 asc. node -5387 Aug 05 j 06:12 22°**8**36'48 opposition -5380 Mar 03 i 09:15 2°**Ω**07'55 2°50'31 retrograde -5387 Oct 17 j 00:58 26°**8**51'57 min. Earth dist. -5380 Mar 03 j 20:46 2°**Ω**05'49 9.22775 AU -5387 Dec 23 j 12:28 23°**8**31'34 0°14'23 -5380 Apr 04 j 02:03 30°R95 opposition -5387 Dec 23 j 05:12 23°**8**32'59 -5380 May 14 j 06:58 28°9548'14 min. Earth dist. 8 67065 AU direct 20°805'33 -5380 Jun 22 j 15:59 -5386 Mar 03 j 15:10 $0^{\circ}\Omega$ direct -5380 Aug 24 j 14:22 -5386 Jun 17 j 06:35 27°**8**39'48 evening set 5°**Ω**45'28 evening set max. Earth dist. -5380 Sep 09 j 10:38 7°**Ω**34'36 11.23070 AU -5386 Jul 04 j 19:12 conjunction 29°**8**45'37 0°27'22 7°**Ω**38'46 2°23'34 -5386 Jul 04 j 19:11 -5380 Sep 10 j 01:02 minimum elong 29°**8**45'37 0°27'38 conjunction -5386 Jul 05 j 01:57 max. Earth dist. 29°**8**47'39 10.74509 AU -5380 Sep 10 j 01:00 7°**Ω**38'46 2°23'50 minimum elong -5386 Jul 06 j 18:55 -5380 Sep 26 j 09:21 9°**Ω**31′26 $0^{\circ}\Pi$ morning rise -5386 Jul 22 j 02:22 -5380 Nov 24 j 04:38 morning rise 1°**Ⅱ**49′50 15°**Ω** -5386 Oct 29 j 00:10 8°II56'42 -5379 Jan 03 j 15:11 retrograde retrograde 16°**Ω**18'21 -5379 Feb 14 j 06:12 opposition -5385 Jan 04 j 23:16 5°**I**37′59 0°51′23 15°Ŗ**Ω** min. Earth dist. -5385 Jan 04 j 19:59 5°**Ц**38'37 8.81440 AU opposition -5379 Mar 15 j 01:28 13°**Ω**02'36 2°57'15 -5385 Mar 16 j 16:28 2°**Ⅱ**13'13 min. Earth dist. -5379 Mar 15 j 14:21 13°**Ω**00'15 9.23085 AU direct -5385 Jun 29 j 20:13 9°**Ⅲ**38′23 direct -5379 May 25 j 21:24 9°**Ω**43'27 evening set -5379 Aug 20 j 14:42 15°€ -5385 Jul 17 j 03:40 11°**II**41'05 0°56'23 -5379 Sep 04 j 14:09 16°**Ω**39'06 conjunction evening set -5385 Jul 17 j 03:38 11°**II**41'04 0°56'40 minimum elong -5385 Jul 17 j 05:18 11°**Д**41'34 10.88120 AU -5379 Sep 20 j 23:05 18°**Ω**32'09 2°26'27 max. Earth dist. conjunction -5385 Aug 03 j 05:55 13°**Ⅲ**42'15 -5379 Sep 20 j 23:05 morning rise minimum elong 18°**Q**32'09 2°26'40 -5379 Sep 20 i 07:37 retrograde -5385 Nov 09 i 17:56 20°II41'03 max. Earth dist. 18°Ω27'39 11.21927 AU opposition -5384 Jan 17 i 03:55 17°**Ⅲ**23'40 1°25'05 morning rise -5379 Oct 07 i 06:16 20°**Ω**24'47 min. Earth dist. -5384 Jan 17 i 03:45 17°**Ⅲ**23'42 8.94269 AU retrograde -5378 Jan 15 j 02:19 27°Ω14'42 direct -5384 Mar 28 j 08:57 14°**Ⅱ**00'11 opposition -5378 Mar 26 i 18:55 23°Ω58'19 2°57'39 -5384 Jul 10 j 23:46 21°**Ⅲ**17'17 min. Earth dist. -5378 Mar 27 j 09:09 23°Ω55'43 9.20519 AU evening set direct -5378 Jun 06 j 08:39 20°**Ω**39'32 -5384 Jul 28 j 02:08 23°II17'11 1°22'21 -5378 Sep 15 j 13:34 27°**Ω**35′03 conjunction evening set -5384 Jul 28 j 02:05 minimum elong 23° II 17'10 1°22'39 max. Earth dist. -5384 Jul 27 j 23:45 23°**Ⅱ**16'29 10.99956 AU conjunction -5378 Oct 01 j 21:36 29°Ω28'24 2°24'01 -5384 Aug 13 j 23:35 25°**Ⅱ**15'39 minimum elong -5378 Oct 01 j 21:37 29°**Ω**28'25 2°24'11 morning rise -5384 Sep 30 j 01:53 0ಂತಾ max. Earth dist. -5378 Oct 01 j 04:15 29° **Ω**23'21 11.17969 AU -5384 Nov 20 j 06:34 2°908'20 -5378 Oct 06 j 10:07 0° m retrograde -5383 Jan 12 j 15:52 30°RⅡ -5378 Oct 18 j 04:54 morning rise 1° m 21'38 28°**II**51'57 1°54'28 -5377 Jan 26 j 18:39 opposition -5383 Jan 28 j 03:32 retrograde 8° m 16'16 -5383 Jan 28 j 05:57 28°**Ⅲ**51'30 4° m 59'01 min. Earth dist. 9.05129 AU opposition -5377 Apr 07 j 15:14 2°51'34 25°**Ⅲ**29'39 direct -5383 Apr 09 j 16:46 min. Earth dist. -5377 Apr 08 j 07:05 4° Mp 56'07 9.15169 AU -5383 Jun 28 j 05:34 0 \circ \odot direct -5377 Jun 17 j 20:37 1° m/40'24 evening set -5383 Jul 22 j 18:30 2°539'49 evening set -5377 Sep 26 j 14:09 8° m 37'11 conjunction -5383 Aug 08 j 16:09 4°937'20 1°44'32 conjunction -5377 Oct 12 j 22:21 10°Mp31'28 2°16'12 minimum elong -5383 Aug 08 j 16:07 4°9537'19 -5377 Oct 12 j 22:23 10° mg 31'28 2°16'19 1°44'50 minimum elong

max. Earth dist.

-5383 Aug 08 j 10:55

4°535'49 11.09630 AU

max. Earth dist.

-5377 Oct 12 j 03:38

10° m 25'58 11.11324 AU

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5377 in astronomical counting style is the year 5378 BCE in historical counting style. -5377 Oct 29 i 06:59 12° m 25'55 behind sun begin -5371 Dec 22 i 06:31 22°M36'39 morning rise -5376 Feb 07 j 14:25 19° m 26'56 behind sun end -5371 Dec 22 j 18:32 22°M-40'26 retrograde 16°Mp08'31 2°39'00 -5376 Apr 18 j 15:23 -5371 Dec 22 j 04:49 22°M36'06 max. Earth dist. 10.33203 AU opposition -5370 Jan 08 j 20:55 9.07198 AU 24°M50'16 min. Earth dist. -5376 Apr 19 j 07:56 16° M 05′29 morning rise 12° m/49'53 -5370 Feb 24 j 10:05 0°×7 direct -5376 Jun 28 j 09:58 -5376 Oct 06 j 18:00 -5370 Apr 25 j 18:54 2°**∡**¹56'21 evening set 19° m/49'27 retrograde -5370 Jun 27 j 16:49 max. Earth dist. -5376 Oct 22 j 09:16 21° m/39'48 11.02187 AU 30°RM -5370 Jul 04 j 09:26 opposition 29°M28'19 -0°32'29 conjunction -5376 Oct 23 j 03:35 21° m 45'14 2°03'04 min. Earth dist. -5370 Jul 04 j 14:02 29°M27'25 8.25856 AU minimum elong -5376 Oct 23 j 03:38 21°M/45'14 2°03'09 direct -5370 Sep 09 j 12:01 26° M 05'32morning rise -5376 Nov 08 j 14:26 23° m 41'28 -5370 Nov 16 j 05:16 0°×7 -5375 Jan 17 j 10:56 -5370 Dec 18 j 23:28 0∘**⊽** evening set 3°**х** 50′50 retrograde -5375 Feb 18 j 19:39 0°**ჲ**50'28 -5375 Mar 23 j 19:03 30°R, Mp conjunction -5369 Jan 05 j 07:15 6°**₹**04'15 -0°42'17 opposition -5375 Apr 30 j 20:16 27° m 30'41 2°20'01 minimum elong -5369 Jan 05 j 07:12 6°**х**¹04'15 0°42'34 min. Earth dist. -5375 May 01 j 12:01 27° m 27'46 8.96854 AU max. Earth dist. -5369 Jan 05 j 03:58 6°**尽**03'12 10.18998 AU morning rise direct -5375 Jul 10 j 03:45 24° m 11'50 -5369 Jan 22 j 20:17 8°**х** 19′26 -5375 Oct 07 j 04:06 0∘**⊽** retrograde -5369 May 10 j 10:52 16°**х** 37′19 13°**∡**¹07'50 -1°13'26 evening set -5375 Oct 18 j 03:01 1°**≏**15'39 opposition -5369 Jul 18 j 12:06 min. Earth dist. -5369 Jul 18 j 12:42 13°**₹**07'42 8.12411 AU conjunction -5375 Nov 03 j 14:55 3°**₽**13'30 1°44'48 direct -5369 Sep 23 j 01:05 9°**х** 43′46 minimum elong -5375 Nov 03 j 14:58 3°**₽**13'31 1°44'49 evening set -5368 Jan 02 j 03:36 17°**∡**39'46 max. Earth dist. -5375 Nov 02 j 21:40 3°**₽**08'19 10.90845 AU morning rise -5375 Nov 20 j 04:52 5°**♀**12'05 conjunction -5368 Jan 19 i 15:36 19°**₹**56'19 -1°14'04 retrograde -5374 Mar 03 j 10:03 12°**♀**30'32 -5368 Jan 19 j 15:33 19°**∡** 56'18 1°14'22 minimum elong opposition -5374 May 13 j 07:30 9°**2**09'13 1°54'51 max. Earth dist. -5368 Jan 19 j 16:24 19°**₹** 56'35 10.06393 AU -5374 May 13 j 21:54 9°**£**06'32 -5368 Feb 06 j 08:54 22°**х** 14′38 min. Earth dist. 8 84489 AU morning rise -5374 Jul 21 j 23:51 5°**Ω**49'59 -5368 Apr 26 j 01:10 0°궁 direct -5374 Oct 29 j 19:07 12°**♀**59'30 -5368 May 24 j 11:01 0°る42'40 retrograde evening set 30°R.**✓** -5368 Jun 21 j 23:08 14°**£**59'53 1°21'43 27°**∡**12'00 -1°51'20 -5374 Nov 15 j 10:00 -5368 Jul 31 j 21:44 conjunction opposition -5368 Jul 31 j 18:50 -5374 Nov 15 j 10:03 14°**£**59'54 1°21'41 min. Earth dist. 27°**∡**12'36 8.00945 AU minimum elong max. Earth dist. -5374 Nov 14 j 17:33 14°**£**54'53 10.77710 AU direct -5368 Oct 05 j 23:29 23°**х** 46′35 -5374 Dec 02 j 03:58 -5368 Dec 31 j 23:26 0°궁 morning rise 17°**♀**01'19 -5373 Mar 16 j 08:27 -5367 Jan 15 j 20:57 1°る52'55 retrograde 24°**£**30'34 evening set -5373 May 26 j 01:58 opposition 21°**♀**07'36 1°24'00 8.70579 AU -5367 Feb 02 j 12:47 4°る12'10 -1°42'09 min. Earth dist. -5373 May 26 j 15:00 21°**≏**05'08 conjunction direct -5373 Aug 03 j 02:21 17°**£**47'44 minimum elong -5367 Feb 02 j 12:43 4°る12'09 1°42'27 -5373 Nov 10 j 20:27 25°**2**04'26 max. Earth dist. -5367 Feb 02 j 17:19 4°る13'41 9.96081 AU evening set morning rise -5367 Feb 20 j 09:39 6°る33'04 conjunction -5373 Nov 27 j 15:00 27°**2**07'47 0°54'26 retrograde -5367 Jun 08 j 16:20 15°**る**08'47 -5373 Nov 27 j 15:02 27°**2**07'48 0°54'19 -5367 Aug 15 j 12:48 11°る37'20 -2°23'14 minimum elong opposition -5373 Nov 26 j 23:55 27°**£**03'08 10.63301 AU min. Earth dist. -5367 Aug 15 j 07:05 11°る38'30 7.92101 AU max. Earth dist. -5373 Dec 14 j 13:40 29°**♀**12'27 -5367 Oct 20 j 07:13 8°る10'35 morning rise direct -5373 Dec 21 j 04:33 -5366 Jan 31 j 01:44 16°る26'09 0°M evening set retrograde -5372 Mar 28 j 17:31 6°M53'31 -5366 Feb 17 i 21:02 18°る47'32 -2°04'18 opposition -5372 Jun 07 i 04:09 3°M28'50 0°48'15 conjunction -5366 Feb 17 i 20:59 min. Earth dist. -5372 Jun 07 j 15:32 3°M26'39 8.55710 AU minimum elong 18°る47'31 2°04'36 direct -5372 Aug 14 j 12:47 0°M08'09 max. Earth dist. -5366 Feb 18 i 05:35 18°る50'23 9.88708 AU -5372 Nov 22 j 08:38 7°M33'23 -5366 Mar 07 j 20:45 21°る10'21 evening set morning rise retrograde -5366 Jun 24 j 00:11 29°る50'22 -5372 Dec 09 j 07:27 9°ML40'00 0°23'47 -5366 Aug 30 j 07:28 26° **ප**18'35 -2°46'26 conjunction opposition -5372 Dec 09 j 07:28 9°ML40'00 0°23'36 min. Earth dist. -5366 Aug 29 j 23:01 26°る20'21 7.86511 AU minimum elong 22°る50'39 max. Earth dist. -5372 Dec 08 j 19:32 9°MJ36'16 10.48232 AU direct -5366 Nov 03 j 23:47 morning rise -5372 Dec 26 j 11:01 11°ML48'10 -5365 Feb 06 j 04:03 0°22 -5371 Jan 22 j 23:59 15°M evening set -5365 Feb 15 j 15:12 1°≈13'18 retrograde -5371 Apr 11 j 13:10 19°M41'41 -5371 Jun 20 j 14:36 16°M15'18 0°08'50 -5365 Mar 05 j 13:34 3°≈36'06 -2°18'36 opposition conjunction -5371 Jun 20 j 23:06 -5365 Mar 05 j 13:32 2°18'53 min. Earth dist. 16°**™**13'39 8.40552 AU minimum elong 3°≈36'06 -5371 Jul 07 j 02:09 -5365 Mar 06 j 02:11 9.84898 AU 15°RM max. Earth dist. 3°≈40'19 direct -5371 Aug 27 j 07:25 12°M53'38 morning rise -5365 Mar 23 j 15:19 5°≈59'58 desc. node -5371 Sep 10 j 09:57 13°ML04'32 retrograde -5365 Jul 09 j 06:02 14°≈40'07 -5371 Oct 15 j 09:38 15°M⋅ opposition -5365 Sep 14 j 03:16 11°≈08'27 -2°58'46 evening set -5371 Dec 05 j 09:13 20°M28'31 min. Earth dist. -5365 Sep 13 j 16:12 11°**≈**10'47 7.84688 AU direct -5365 Nov 18 j 22:22 7°≈39'31 -5371 Dec 22 j 12:32 22°M38'33 -0°09'03 -5364 Feb 22 j 20:27 15°**≈** conjunction -5371 Dec 22 j 12:31 22°M38'32 0°09'18 -5364 Mar 02 j 09:32 minimum elong evening set 16°≈06'11

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5364 in astronomical counting style is the year 5365 BCE in historical counting style. -5364 Mar 20 i 10:19 18°≈29'32 -2°23'48 -5358 Jul 08 i 13:07 15°8 conjunction -5364 Mar 20 j 10:20 18°≈29'32 2°24'01 -5358 Oct 12 j 03:41 21°**8**51'43 minimum elong retrograde max. Earth dist. -5364 Mar 21 j 02:31 -5358 Dec 18 j 12:42 18°830'03 -0°02'14 18°≈34'56 9.85042 AU opposition -5364 Apr 07 j 13:12 -5358 Dec 18 j 04:10 20°≈53'29 min. Earth dist. 18°**8**31'43 8.59267 AU morning rise -5364 Jul 23 j 06:50 -5357 Jan 09 j 04:33 retrograde 29°≈29'19 asc. node 16°**8**52'06 -5364 Sep 27 j 21:21 opposition 25°≈58'13 -2°59'09 direct -5357 Feb 26 j 10:39 15°**8**02'55 -5364 Sep 27 j 08:00 min. Earth dist. 26°≈01'01 7.86848 AU evening set -5357 Jun 12 j 04:05 22°**8**41'35 direct -5364 Dec 02 j 23:09 22°≈28'33 24°**8**48'54 -5363 Mar 10 j 22:49 0°**)** conjunction -5357 Jun 29 j 18:50 0°14'12 -5357 Jun 29 j 18:50 evening set -5363 Mar 18 j 03:59 0°**¥**55'39 minimum elong 24°**8**48'54 0°14'26 -5357 Jun 29 j 15:41 behind sun begin 24°**8**47'57 -5363 Apr 05 j 06:30 -5357 Jun 29 j 21:58 24°849'50 conjunction 3°**升**18'39 -2°19'30 behind sun end -5357 Jun 30 j 03:09 minimum elong -5363 Apr 05 j 06:33 3°**升**18'40 2°19'40 max. Earth dist. 24°**8**51'25 10.66988 AU max. Earth dist. -5363 Apr 06 j 01:30 3°**)**€24'57 9.89192 AU morning rise -5357 Jul 17 j 04:23 26°854'38 morning rise -5363 Apr 23 j 09:37 5°**)**41'45 -5357 Aug 13 j 19:21 $0^{\circ}\Pi$ retrograde -5363 Aug 07 j 00:59 14°\(\mathbf{H}\) 09'13 retrograde -5357 Oct 24 j 06:32 4°**Ⅱ**05'44 opposition -5363 Oct 12 j 11:17 10°**升**39'07 -2°47'45 opposition -5357 Dec 31 j 02:17 0°**Ⅱ**45'44 0°35'47 min. Earth dist. -5363 Oct 11 j 20:09 10°**)**42'16 7.92859 AU min. Earth dist. -5357 Dec 30 j 20:02 0°**Ⅱ**46'57 8.74292 AU direct -5363 Dec 17 j 23:30 7°**)**€09'02 -5356 Jan 10 j 00:44 30°R₩ evening set -5362 Apr 02 j 18:05 15°**)** 32'59 direct -5356 Mar 10 j 15:34 27°819'54 -5356 May 08 j 12:24 $0^{\circ}\Pi$ conjunction -5362 Apr 20 j 21:29 17°\ 54'46 -2°06'17 evening set -5356 Jun 23 j 21:58 4°**Ⅱ**48'49 minimum elong -5362 Apr 20 j 21:32 17°**) (**54'47 2°06'22 max. Earth dist. -5362 Apr 21 i 18:05 18°**₩**01'31 9.97045 AU conjunction -5356 Jul 11 i 07:52 6°**I**52'54 0°44'11 -5362 May 08 j 23:55 20°¥16′09 -5356 Jul 11 i 07:50 6°**Ⅱ**52'53 0°44'27 morning rise minimum elong -5362 Aug 21 j 10:00 28°¥32'09 max. Earth dist. -5356 Jul 11 j 13:05 6°**I**I54'27 10.81499 AU retrograde opposition -5362 Oct 26 j 18:50 25°\(\mathbf{H}\)03'22 -2°25'56 -5356 Jul 28 j 12:17 8°**Ⅱ**55'23 morning rise -5362 Oct 26 j 03:11 25°**)**€06'37 8.02279 AU -5356 Nov 04 j 03:45 15°**I**157'22 min. Earth dist. retrograde -5361 Jan 01 j 20:25 -5355 Jan 11 j 09:06 12°**耳**38'53 1°11'01 21°\(\dagger)33'15 opposition direct 8.88197 AU 29°**)**51'01 -5355 Jan 11 j 05:55 12°**Ⅲ**39'29 -5361 Apr 18 j 00:29 min. Earth dist. evening set -5361 Apr 19 j 04:48 $0^{\circ}\Upsilon$ -5355 Mar 23 j 09:58 9°∏14'24 direct -5355 Jul 06 j 05:19 16°**Ⅲ**34'34 evening set -5361 May 06 j 03:36 2°Y10'47 -1°45'31 conjunction -5355 Jul 23 j 10:05 -5361 May 06 j 03:40 2°Υ10'48 1°45'32 18°**耳**35'39 1°11'33 minimum elong conjunction -5361 May 07 j 00:06 2°Υ17'25 10.08011 AU -5355 Jul 23 j 10:02 18°**耳**35'38 1°11'50 max. Earth dist. minimum elong 18°**耳**36′07 10.94578 AU -5361 May 24 j 04:20 4°**Y**29'45 -5355 Jul 23 j 11:39 morning rise max. Earth dist. $12^{\circ} \mathbf{\Upsilon}' 32' 18$ -5361 Sep 04 j 08:21 retrograde morning rise -5355 Aug 09 j 09:30 20°**Ⅲ**35′13 opposition -5361 Nov 09 j 18:26 9°Y05'10 -1°55'53 retrograde -5355 Nov 15 j 17:41 27°**Ⅲ**30′00 min. Earth dist. -5361 Nov 09 j 03:36 9°**Υ**08'13 8.14440 AU opposition -5354 Jan 23 j 10:09 24°**Ⅱ**12'49 1°42'19 -5360 Jan 16 j 12:25 5°Y35'20 min. Earth dist. -5354 Jan 23 j 10:52 24°**Ⅲ**12'41 9.00435 AU direct -5360 May 01 j 20:14 13° **Y** 44'39 direct -5354 Apr 04 j 19:45 20°**Ⅱ**49'40 evening set -5354 Jul 18 j 03:24 28°**Ⅲ**02'19 evening set -5360 May 19 j 21:49 16°Υ01'47 -1°19'05 conjunction -5360 May 19 j 21:53 16°Υ01'48 1°19'01 -5354 Aug 04 j 03:01 0°9500'45 1°35'24 minimum elong conjunction -5360 May 20 j 16:41 16°**Y**07'47 10.21330 AU -5354 Aug 04 j 02:58 0°9500'44 1°35'42 max. Earth dist. minimum elong -5354 Aug 03 i 23:55 29°**Ц**59'50 11.05738 AU morning rise -5360 Jun 06 j 19:53 18°**Y**17'45 max. Earth dist. -5354 Aug 04 i 00:28 retrograde -5360 Sep 16 i 17:35 26°Y06'12 0ಂತಾ opposition -5360 Nov 22 j 09:27 22°Y40'53 -1°20'13 morning rise -5354 Aug 20 j 21:55 1°957'51 min. Earth dist. -5360 Nov 21 j 20:28 22°**Υ**43'31 8.28552 AU retrograde -5354 Nov 27 j 03:10 8°9547'26 -5359 Jan 29 j 21:15 19°**Y**11'42 opposition -5353 Feb 04 i 07:00 5°931'16 2°08'52 direct -5359 May 16 j 03:31 27°**Y**11′07 min. Earth dist. -5353 Feb 04 j 10:51 5°930'33 9.10552 AU evening set direct 2°909'23 -5353 Apr 17 j 00:36 -5359 Jun 03 j 02:24 29°Y25'08 -0°49'03 -5353 Jul 29 j 17:30 9°915'45 conjunction evening set minimum elong -5359 Jun 03 i 02:26 29°**Y**25'09 0°48'55 29°**Υ**'30'06 10.36157 AU max. Earth dist. -5359 Jun 03 j 18:15 conjunction -5353 Aug 15 j 12:29 11°9512'00 1°55'09 -5359 Jun 07 j 17:45 0°8 minimum elong -5353 Aug 15 j 12:26 11°**©**11'59 1°55'27 -5359 Jun 20 j 20:59 morning rise 1°**8**37'47 max. Earth dist. -5353 Aug 15 j 05:48 11°5510'04 11.14591 AU -5359 Sep 29 j 15:38 9°812'31 -5353 Sep 01 j 03:19 retrograde morning rise 13°907'04 -5359 Dec 05 j 15:28 5°**8**49'03 -0°41'33 -5353 Dec 08 j 11:00 19°953'27 opposition retrograde

5°**8**51'11 8.43770 AU

12°**8**20'27 -0°17'25

12°**8**20'27 0°17'13

12°**8**24'05 10.51641 AU

2°**8**20'46

10°**8**09'45

14°**8**29'37

opposition

evening set

conjunction

minimum elong

max. Earth dist.

direct

min. Earth dist.

-5352 Feb 16 j 00:51

-5352 Feb 16 j 06:54

-5352 Apr 27 j 22:31

-5352 Aug 09 j 01:22

-5352 Aug 25 j 16:26

-5352 Aug 25 j 16:24

-5352 Aug 25 j 07:34

16°**©**37'57

16°**©**36'50

13°917'16

20°9518'39

22°9513'12

22°513'13 2°10'19

22°510'39 11.20841 AU

2°30'04

2°10'37

9.18195 AU

min. Earth dist.

evening set

conjunction

minimum elong

max. Earth dist.

morning rise

direct

-5359 Dec 05 j 04:47

-5358 Feb 12 j 20:51

-5358 May 29 j 22:08

-5358 Jun 16 j 17:18

-5358 Jun 16 j 17:19

-5358 Jun 17 j 05:08

-5358 Jul 04 j 07:40

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Attention, astronomical year style is used: The year -5352 in astronomical counting style is the year 5353 BCE in historical counting style.

morning rise

-5352 Sep 11 j 03:49

24°506'49

-5352 Nov 16 j 05:09

0° Ω morning rise

-5346 Nov 12 j 17:36

0° Ω

	nical year style is used: Th	•	n astronomical co	unting style is the year			
morning rise	-5352 Sep 11 j 03:49	24°9506'49			-5346 Nov 12 j 17:36	0∘ ⊽	
	-5352 Nov 16 j 05:09	0 $^{\circ}$ Ω		morning rise	-5346 Nov 15 j 10:38	0° ჲ 19'02	
retrograde	-5352 Dec 18 j 18:24	0° Ω 51'50		retrograde	-5345 Feb 26 j 04:35	7° ≏ 32'25	
	-5351 Jan 20 j 23:50	30° ₹ 5		opposition	-5345 May 08 j 03:46	4° ₽ 12'22	2°06'36
opposition	-5351 Feb 26 j 16:52	27° © 36'41	2°45'31	min. Earth dist.	-5345 May 08 j 20:49	4° ₽ 09'12	8.91971 AU
min. Earth dist.	-5351 Feb 27 j 01:31	27° © 35'06	9.23113 AU	direct	-5345 Jul 17 j 02:13	0° ჲ 53'46	
direct	-5351 May 09 j 15:33	24°\$\$17'00		evening set	-5345 Oct 25 j 00:02	8° ഫ 00'01	
	-5351 Aug 08 j 22:38	$0^{\circ}\Omega$		-			
evening set	-5351 Aug 20 j 04:39	1° Ω 14'46		conjunction	-5345 Nov 10 j 13:22	9° ≏ 59'02	1°32'28
8				minimum elong	-5345 Nov 10 j 13:25	9° ₽ 59'03	1°32'26
conjunction	-5351 Sep 05 j 16:30	3°Ω08'13	2°20'35	max. Earth dist.	-5345 Nov 09 j 18:42		10.85263 AU
minimum elong	-5351 Sep 05 j 16:29	3°Ω08'12		morning rise	-5345 Nov 27 j 05:27	11° ⊆ 58'59	10.03203 AC
· ·			11.24289 AU	Č	-		
max. Earth dist.	-5351 Sep 05 j 04:45		11.24289 AU	retrograde	-5344 Mar 09 j 21:44	19° Ω 22'44	1000115
morning rise	-5351 Sep 22 j 01:24	5° Ω 00'54		opposition	-5344 May 19 j 18:32	16° ≏ 00'53	1°38'17
retrograde	-5351 Dec 30 j 02:15	11° Ω 46′20		min. Earth dist.	-5344 May 20 j 10:04	15° ≏ 57'57	8.78162 AU
opposition	-5350 Mar 10 j 08:36	8° Ω 31'12	2°54'55	direct	-5344 Jul 28 j 03:13	12° ≏ 41'34	
min. Earth dist.	-5350 Mar 10 j 20:18	8° Ω 29'05	9.25145 AU	evening set	-5344 Nov 04 j 20:42	19° ≏ 54'28	
direct	-5350 May 21 j 04:36	5° Ω 12'19					
evening set	-5350 Aug 31 j 05:02	12° Ω 07'51		conjunction	-5344 Nov 21 j 13:36	21° ≏ 56'21	1°07'01
•	• •			minimum elong	-5344 Nov 21 j 13:39	21° ≏ 56'22	1°06'56
conjunction	-5350 Sep 16 j 14:26	14° Ω 00'44	2°25'45	max. Earth dist.	-5344 Nov 20 j 21:04	21° Ω 51'17	10.70785 AU
minimum elong	-5350 Sep 16 j 14:25	14°Ω00'44		morning rise	-5344 Dec 08 j 09:55	23° £ 59'23	
max. Earth dist.	-5350 Sep 15 j 23:29	• • • •	11.24822 AU	morning risc	-5343 Feb 06 j 19:57	0°M	
max. Earth dist.			11.24622 AU		3	1°M34'40	
	-5350 Sep 25 j 03:54	15° Ω		retrograde	-5343 Mar 23 j 03:03		
morning rise	-5350 Oct 02 j 21:58	15° Ω 53'07			-5343 May 07 j 11:33	30° ₹ Ω	
retrograde	-5349 Jan 10 j 10:16	22° Ω 40'44		opposition	-5343 Jun 01 j 16:38	28° ≙ 10'54	
opposition	-5349 Mar 22 j 01:07	19° Ω 25'15		min. Earth dist.	-5343 Jun 02 j 05:44	28° ≏ 08'24	8.63049 AU
min. Earth dist.	-5349 Mar 22 j 15:09	19° Ω 22'42	9.24214 AU	direct	-5343 Aug 09 j 09:50	24° ≏ 50'40	
direct	-5349 Jun 01 j 17:06	16° Ω 06'55			-5343 Oct 29 j 10:57	0° M	
evening set	-5349 Sep 11 j 04:06	23° Ω 01′38		evening set	-5343 Nov 17 j 03:29	2°M11'37	
				max. Earth dist.	-5343 Dec 03 j 09:56	4° M ₊12'12	10.55311 AU
conjunction	-5349 Sep 27 j 12:13	24° Ω 54'31	2°25'38				
minimum elong	-5349 Sep 27 j 12:14	24° Ω 54'32	2°25'49	conjunction	-5343 Dec 04 j 00:21	4° ጤ 16'41	0°37'49
max. Earth dist.	-5349 Sep 26 j 19:36	24°Ω49'42	11.22408 AU	minimum elong	-5343 Dec 04 j 00:23	4° M 16'42	0°37'39
morning rise	-5349 Oct 13 j 19:22	26° Ω 47'11		morning rise	-5343 Dec 21 j 01:28	6°M23'11	
morning rise	-5349 Nov 13 j 03:37	0° m)		retrograde	-5342 Apr 05 j 18:09	14°M10'50	
ratragrada	-5348 Jan 22 j 00:41	3°Mo38'45		opposition	-5342 Jun 14 j 23:08	10°M45'07	0°26'50
retrograde	-5348 Apr 01 j 19:36	•	2054140	min. Earth dist.	-		
opposition	1 3	0° m/22'32	2°54'49		-5342 Jun 15 j 09:28	10°M43'07	8.47305 AU
min. Earth dist.	-5348 Apr 02 j 10:32	0° Tp 19'50	9.20310 AU	direct	-5342 Aug 21 j 23:10	7°M23'46	
	-5348 Apr 06 j 23:44	30°R Ω		evening set	-5342 Nov 29 j 21:57	14°M54'03	
direct	-5348 Jun 12 j 05:56	27° Ω 04'31			-5342 Nov 30 j 17:11	15° ™	
	-5348 Aug 13 j 10:12	0° m ⁄					
evening set	-5348 Sep 21 j 03:31	3° m 59'47		conjunction	-5342 Dec 16 j 23:06	17° ™ 02'32	0°05'55
				minimum elong	-5342 Dec 16 j 23:07	17° M ₀02'32	0°05'42
conjunction	-5348 Oct 07 j 11:34	5° m 53′21	2°20'11	behind sun begin	-5342 Dec 16 j 16:17	17° M 00'24	
minimum elong	-5348 Oct 07 j 11:35	5° m 53'21	2°20'19	behind sun end	-5342 Dec 17 j 05:57	17° M 04'40	
max. Earth dist.	-5348 Oct 06 j 18:09	5° Mp 48'16	11.17056 AU	max. Earth dist.	-5342 Dec 16 j 11:17	16°M58'48	10.39552 AU
morning rise	-5348 Oct 23 j 19:17	7° Mp 46'56		morning rise	-5341 Jan 03 j 05:20	19° M ₊12'39	
retrograde	-5347 Feb 01 j 18:49	14° m) 44'05		desc. node	-5341 Feb 22 j 05:57	24°M38'16	
opposition	-5347 Apr 13 j 17:20	11° m)26'51	2°45'07	retrograde	-5341 Apr 19 j 18:58	27°M13'06	
min. Earth dist.	-5347 Apr 14 j 09:10	11° mp 23'58	9.13477 AU	opposition	-5341 Jun 28 j 14:07	23°M45'30	-0°13'//0
direct	-5347 Jun 23 j 16:51	8° Mp 08'54	7.13477 AU	min. Earth dist.	-5341 Jun 28 j 21:44	23°M43'59	8.31687 AU
					-	20°M22'50	6.51067 AU
evening set	-5347 Oct 02 j 05:28	15°Mp06'18		direct	-5341 Sep 03 j 22:46		
				evening set	-5341 Dec 13 j 05:45	28°M03'30	
conjunction	-5347 Oct 18 j 14:14	17°Mp01'06	2°09'24		-5341 Dec 28 j 11:14	0° ∡	
minimum elong	-5347 Oct 18 j 14:17	17° m y 01'07	2°09'29				
max. Earth dist.	-5347 Oct 17 j 19:18		11.08867 AU	conjunction	-5341 Dec 30 j 11:24	0° ∡ 15′29	-0°27'24
morning rise	-5347 Nov 03 j 23:45	18° m 56'13		minimum elong	-5341 Dec 30 j 11:23	0° ∡ 15′28	0°27'39
retrograde	-5346 Feb 13 j 20:07	26° Mp 00'41		max. Earth dist.	-5341 Dec 30 j 03:25	0° ∡ 12'55	10.24280 AU
opposition	-5346 Apr 25 j 19:38	22° m 42'11	2°29'00	morning rise	-5340 Jan 16 j 22:34	2° ∡ ′29'14	
min. Earth dist.	-5346 Apr 26 j 12:30	22° m 39'05	9.03903 AU	retrograde	-5340 May 03 j 05:38	10° ∡ ¹42'09	
direct	-5346 Jul 05 j 07:55	19° m/24'02	-	opposition	-5340 Jul 11 j 13:12	7° ∡ 12'50	-0°55'14
evening set	-5346 Oct 13 j 11:43	26° m/25'07		min. Earth dist.	-5340 Jul 11 j 17:32	7°×11'58	8.17003 AU
o ronning set	55 10 500 15 j 11.45	20 mg 23 0 /		direct	-5340 Sep 16 j 08:29	3° ∡ 1138	5.17005 AU
aaniumatian	5246 Oct 20:22:12	200 ms 21147	1°53'24			11° √ 40'25	
conjunction	-5346 Oct 29 j 22:13	28° Mp 21'46		evening set	-5340 Dec 26 j 03:27	11 X.40.72	
minimum elong	-5346 Oct 29 j 22:16	28° Mp 21'47	1°53'27		5220 Y 15 115 5 =	100 75	1000107
max. Earth dist.	-5346 Oct 29 j 02:18	28° II) 15'50	10.98128 AU	conjunction	-5339 Jan 12 j 13:35	13° ₹ 55'45	-1~00'06

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5339 in astronomical counting style is the year 5340 BCE in historical counting style. -5339 Jan 12 j 13:32 13°**₹**55'44 1°00'23 retrograde -5333 Aug 15 j 13:36 22°\(\frac{1}{27}\)'19 minimum elong -5339 Jan 12 j 10:32 13°**₹**'54'45 10.10319 AU -5333 Oct 20 j 21:51 18°¥57'43 -2°36'46 max. Earth dist. opposition -5339 Jan 30 j 05:12 16°**х** 12′53 min. Earth dist. -5333 Oct 20 j 06:20 19°**)** €00'58 7.97032 AU morning rise -5339 May 18 j 01:57 24°**х** 37′10 -5333 Dec 26 j 16:37 direct 15°**)**€27'26 retrograde -5339 Jul 25 j 20:02 21°**∡**06'25 -1°34'54 -5332 Apr 10 j 17:11 opposition evening set 23°**)** 48'41 -5339 Jul 25 j 20:22 min. Earth dist. 21°**х** 06'20 8.04083 AU 26°\mathbf{1}09'30 -1°55'30 direct -5339 Sep 30 j 03:25 17°**х** 40′57 conjunction -5332 Apr 28 j 20:25 -5338 Jan 09 j 14:52 -5332 Apr 28 j 20:29 evening set 25°**х¹**43′26 minimum elong 26°**₭**09'31 1°55'32 -5332 Apr 29 j 17:13 max. Earth dist. 26°**¥**16'17 10.02317 AU conjunction -5338 Jan 27 j 05:11 28°**₹**'01'46 -1°30'08 morning rise -5332 May 16 j 22:13 28°**)** 29'45 $0^{\circ}\Upsilon$ minimum elong -5338 Jan 27 j 05:07 28°**х** 01'45 1°30'26 -5332 May 28 j 22:49 -5338 Jan 27 j 07:49 28°**₹**02'38 9.98504 AU -5332 Aug 28 j 16:06 6° Y38'48 max. Earth dist. retrograde -5338 Feb 11 j 05:13 -5332 Nov 02 j 09:51 3°Υ14'12 8.08470 AU 0°ಕ min. Earth dist. morning rise -5338 Feb 14 j 00:37 0°る21'50 opposition -5332 Nov 03 j 01:31 3°Y10'57 -2°09'58 retrograde -5338 Jun 02 j 05:08 8°る55'20 -5332 Dec 21 j 20:59 30°**₹**₩ opposition -5338 Aug 09 j 09:18 5°る23'31 -2°09'55 direct -5331 Jan 09 j 12:29 29°\ 41'03 min. Earth dist. -5338 Aug 09 j 05:09 5°る24'22 7.93727 AU -5331 Jan 28 j 02:49 $0^{\circ}\Upsilon$ direct -5338 Oct 14 j 07:57 1°る56'42 evening set -5331 Apr 25 j 18:16 7°Υ54'41 evening set -5337 Jan 24 j 15:07 10°る09'08 conjunction -5331 May 13 j 20:36 10°Υ13'05 -1°31'16 conjunction -5337 Feb 11 j 09:11 12°る29'56 -1°55'14 minimum elong -5331 May 13 j 20:40 10°Υ13'07 1°31'14 minimum elong -5337 Feb 11 i 09:07 12°**る**29'55 1°55'32 max. Earth dist. -5331 May 14 j 16:36 10°**Y**19'30 10.15110 AU max. Earth dist. -5337 Feb 11 i 17:10 12°**る**32'35 9.89613 AU morning rise -5331 May 31 j 20:11 12° Y 30'32 morning rise -5337 Mar 01 i 07:44 14°る52'14 retrograde -5331 Sep 11 i 06:37 20°Y25'36 retrograde -5337 Jun 17 j 12:24 23°る31'43 opposition -5331 Nov 16 j 20:42 16°**Y**′59'40 -1°36'22 opposition -5337 Aug 24 j 02:58 19°る59'18 -2°37'22 min. Earth dist. -5331 Nov 16 j 05:37 17°**Y**02'45 8.22243 AU -5337 Aug 23 j 18:44 20°**ප**01'01 7.86630 AU -5330 Jan 24 j 00:50 13°Y30'30 min. Earth dist. direct -5337 Oct 28 j 20:45 16°る31'14 -5330 May 10 j 07:43 21° Y 34'40 evening set direct -5336 Feb 09 j 01:35 24°る51'46 evening set -5330 May 28 j 08:02 23°Y'50'08 -1°02'31 conjunction -5336 Feb 26 j 22:52 27°る14'19 -2°13'17 -5330 May 28 j 08:05 23°Y50'09 1°02'24 conjunction minimum elong -5336 Feb 26 j 22:50 -5330 May 29 j 02:16 23°Y55'53 10.29804 AU minimum elong 27°る14'18 2°13'34 max. Earth dist. morning rise -5330 Jun 15 j 04:23 26° Y 04' 19 max. Earth dist. -5336 Feb 27 j 11:34 27°る18'34 9.84278 AU -5336 Mar 15 j 23:46 29°る38'03 -5330 Jul 19 j 13:04 morning rise 0° 8 -5336 Mar 18 j 19:07 -5330 Sep 24 j 11:27 3°**8**45'17 0°≈ retrograde -5336 Jul 01 j 20:17 -5330 Nov 30 j 07:01 0°**8**21'21 -0°58'39 retrograde 8°≈19'29 opposition -5330 Nov 29 j 17:29 0°**8**24'04 8.37487 AU opposition -5336 Sep 06 j 22:57 4°≈46'59 -2°54'47 min. Earth dist. min. Earth dist. -5336 Sep 06 j 11:31 4°≈49'24 7.83298 AU -5330 Dec 04 j 17:33 30°RY direct -5336 Nov 11 j 15:59 1°≈17'53 direct -5329 Feb 07 j 03:45 26°Y53'08 -5335 Feb 23 j 18:29 9°≈43'44 -5329 Apr 10 j 15:08 0°8 evening set evening set -5329 May 24 j 08:36 4°**8**46'54 -5335 Mar 13 j 18:22 12°≈07'11 -2°22'40 conjunction -5335 Mar 13 j 18:21 12°≈07'10 2°22'55 conjunction -5329 Jun 11 j 05:40 6°859'05 -0°31'18 minimum elong -5335 Mar 14 j 11:02 12°≈12'45 9.82907 AU -5329 Jun 11 j 05:42 6°859'05 0°31'07 max. Earth dist. minimum elong -5335 Mar 31 j 20:46 14°≈31'23 max. Earth dist. -5329 Jun 11 j 21:15 7°**と**03'55 10.45494 AU morning rise 9°809'45 -5335 Apr 04 j 12:38 15°**≈** morning rise -5329 Jun 28 j 21:53 retrograde -5335 Jul 17 i 01:10 23°≈10'21 -5329 Aug 25 i 03:59 15°8 opposition -5335 Sep 21 j 18:30 19°≈38'21 -3°00'33 retrograde -5329 Oct 07 i 05:24 16°**8**37'23 min. Earth dist. -5335 Sep 21 i 04:45 19°≈41'14 7.83991 AU -5329 Nov 20 i 04:01 15°R₩ direct -5335 Nov 26 j 15:25 16°≈08'28 -5329 Dec 13 i 08:32 13°**8**15'25 -0°19'19 opposition -5334 Mar 11 j 13:37 24°≈36'16 min. Earth dist. -5329 Dec 12 j 21:56 13°**8**17'31 8.53317 AU evening set direct -5328 Feb 20 j 21:31 9°848'21 -5334 Mar 29 j 15:29 26°≈59'43 -2°22'35 -5328 May 14 j 20:00 15°8 conjunction minimum elong -5334 Mar 29 j 15:31 26°≈59'43 2°22'46 evening set -5328 Jun 05 j 20:35 17°831'30 max. Earth dist. -5334 Mar 30 j 10:55 27°≈06'10 9.85632 AU asc. node -5328 Jun 17 j 03:18 18°**8**53'16 morning rise -5334 Apr 16 j 18:38 29°≈23'28 -5334 Apr 21 j 11:32 0°**)**€ conjunction -5328 Jun 23 j 13:25 19°840'16 0°00'34 -5328 Jun 23 j 13:25 -5334 Jul 31 j 23:57 7°****55'39 19°**8**40'16 0°00'47 retrograde minimum elong -5334 Oct 06 j 10:52 4°**H**24'38 -2°54'15 -5328 Jun 23 j 06:13 19°**8**38'06 opposition behind sun begin -5334 Oct 05 j 19:53 4°**₭**27'47 7.88681 AU -5328 Jun 23 j 20:37 19°**8**42'26 min. Earth dist. behind sun end -5328 Jun 24 j 00:57 19°**8**43'46 10.61299 AU direct -5334 Dec 11 j 16:40 0°**)** 54′20 max. Earth dist. evening set -5333 Mar 27 j 06:35 9°**∺**20'32 morning rise -5328 Jul 11 j 00:59 21°**8**47'26 retrograde -5328 Oct 18 j 12:03 29°**8**03'09 conjunction -5333 Apr 14 j 09:39 11°**)** 43′05 -2°13′10 opposition -5328 Dec 25 j 01:47 25°**8**43'00 0°19'29 minimum elong -5333 Apr 14 j 09:42 11°**)** 43'06 2°13'18 min. Earth dist. -5328 Dec 24 j 18:47 25°**8**44'21 8.68874 AU -5333 Apr 15 j 06:20 11°**)** 49′54 9.92262 AU -5327 Mar 05 j 06:42 22°817'08 max. Earth dist. direct -5333 May 02 j 12:38 14°**)**€05'29 -5327 Jun 18 j 20:01 29°850'11 morning rise evening set

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 7 Attention, astronomical year style is used: The year -5327 in astronomical counting style is the year 5328 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	ie year -5327 i	n astronomical co	unting style is the year	r 5328 BCE in historical c	ounting style.	
	-5327 Jun 20 j 05:21	$\Pi^{\circ}0$		minimum elong	-5321 Sep 12 j 08:06	9° Ω 36′02	2°24'25
				max. Earth dist.	-5321 Sep 11 j 17:59	9° Ω 31'57	11.23905 AU
conjunction	-5327 Jul 06 j 08:00	1° Ⅱ 55'35	0°31'23	morning rise	-5321 Sep 28 j 16:08	11° Ω 28'34	
minimum elong	-5327 Jul 06 j 07:59	1° Ⅲ 55'35	0°31'39		-5321 Nov 01 j 11:53	15° Ω	
max. Earth dist.	-5327 Jul 06 j 14:18	1° Ⅱ 57'29	10.76381 AU	retrograde	-5320 Jan 05 j 22:51	18° Ω 15'15	
morning rise	-5327 Jul 23 j 14:44	3° Ⅱ 59'25		opposition	-5320 Mar 16 j 09:57	14° Ω 59'33	2°57'32
retrograde	-5327 Oct 30 j 11:13	11° Ⅱ 05'06		••	-5320 Mar 16 j 07:26	15°R Ω	
opposition	-5326 Jan 06 j 11:35	7° Ⅱ 46'33	0°56'06	min. Earth dist.	-5320 Mar 16 j 22:58	14° Ω 57'10	9.23744 AU
min. Earth dist.	-5326 Jan 06 j 08:03	7° Ⅱ 47'14	8.83356 AU	direct	-5320 May 27 j 05:04	11° Ω 40'32	
direct	-5326 Mar 18 j 06:36	4° Ⅲ 21'59			-5320 Aug 02 j 08:37	15° Ω	
evening set	-5326 Jul 01 j 08:16	11° Ⅱ 45'53		evening set	-5320 Sep 05 j 21:00	18° Ω 35'41	
<i>8</i>	, , , , , , , , , , , , , , , , , , ,			3			
conjunction	-5326 Jul 18 j 15:09	13° Ⅱ 48'11	1°00'01	conjunction	-5320 Sep 22 j 05:45	20° Ω 28'37	2°26'21
minimum elong	-5326 Jul 18 j 15:07	13° Ⅱ 48'10	1°00'18	minimum elong	-5320 Sep 22 j 05:45	20° Ω 28'37	2°26'34
max. Earth dist.	-5326 Jul 18 j 16:39		10.90040 AU	max. Earth dist.	-5320 Sep 21 j 13:42		11.22408 AU
morning rise	-5326 Aug 04 j 16:54	15° Ⅱ 48'57		morning rise	-5320 Oct 08 j 12:54	22° Ω 21'11	
retrograde	-5326 Nov 11 j 03:36	22° I I46'39		retrograde	-5319 Jan 16 j 10:26	29° Ω 11'03	
opposition	-5325 Jan 18 j 15:10	19° Ⅲ 29'25	1°29'13	opposition	-5319 Mar 28 j 03:17	25° Ω 54'41	2°57'06
min. Earth dist.	-5325 Jan 18 j 14:26	19° Ⅱ 29'34	8.96166 AU	min. Earth dist.	-5319 Mar 28 j 18:30	25° Ω 51'54	9.20818 AU
direct	-5325 Mar 30 j 21:19	16° Ⅱ 06'09	6.70100 AC	direct	-5319 Jun 07 j 16:34	22° Ω 35'57	7.20010 AC
evening set	-5325 Jul 13 j 10:32	23° II 22'02		evening set	-5319 Sep 16 j 20:07	29° Q 31'09	
evening set	-5525 Jul 15 j 10.52	23 1122 02		evening set	-5319 Sep 21 j 00:53	0° m	
conjunction	-5325 Jul 30 j 12:26	25° Ⅱ 21'34	1°25'30	max. Earth dist.	-5319 Oct 02 j 09:38	•	11.18087 AU
minimum elong	-5325 Jul 30 j 12:23	25° I [21'33		max. Larm dist.	-3317 Oct 02 j 07.30	1 11/1707	11.16007 AC
max. Earth dist.	-5325 Jul 30 j 10:38		11.01798 AU	conjunction	-5319 Oct 03 j 04:03	1° Mp 24'29	2°23'14
morning rise	-5325 Aug 16 j 09:16	27° Ⅱ 19'41	11.01776 AC	minimum elong	-5319 Oct 03 j 04:05	1° m) 24'29	2°23'24
morning risc	-5325 Aug 10 j 09:10 -5325 Sep 09 j 20:39	0°95		morning rise	-5319 Oct 05 j 04:03	3° M) 17'44	2 23 24
ratra ara da		4°9511'26		Č	,		
retrograde	-5325 Nov 22 j 16:24		1057157	retrograde	-5318 Jan 28 j 00:48	10° Mp 12'29 6° Mp 55'10	2°50'13
opposition	-5324 Jan 30 j 14:05			opposition	-5318 Apr 08 j 23:29		
min. Earth dist.	-5324 Jan 30 j 16:36	0°954'45	9.06900 AU	min. Earth dist.	-5318 Apr 09 j 16:05	6° Mp 52'08	9.15096 AU
1' '	-5324 Feb 12 j 01:57	30°Ŗ Ⅱ		direct	-5318 Jun 19 j 03:54	3° Mp 36'34	
direct	-5324 Apr 11 j 04:46	27° Ⅱ 33'07		evening set	-5318 Sep 27 j 20:35	10° Mp 33'15	11 11060 411
	-5324 Jun 07 j 07:13	0°©		max. Earth dist.	-5318 Oct 13 j 10:08	12° 110/22'03	11.11068 AU
evening set	-5324 Jul 24 j 04:10	4° © 42'12		:	5210 O-+ 14:04.54	100 m 07/24	2014147
	5224 4 10:01 17	(0520122	1047106	conjunction	-5318 Oct 14 j 04:54	12° Mp 27'34	
conjunction	-5324 Aug 10 j 01:17	6°539'22		minimum elong	-5318 Oct 14 j 04:57	12° Mp 27'34	2°14'53
minimum elong	-5324 Aug 10 j 01:14	6°539'21		morning rise	-5318 Oct 30 j 13:41	14° Mp 22'05	
max. Earth dist.	-5324 Aug 09 j 19:59		11.11301 AU	retrograde	-5317 Feb 08 j 23:10	21° m/23'28	2027152
morning rise	-5324 Aug 26 j 17:43	8°535'16		opposition	-5317 Apr 20 j 23:41		
retrograde	-5324 Dec 03 j 01:28	15°S22'59		min. Earth dist.	-5317 Apr 21 j 16:07		9.06751 AU
opposition	-5323 Feb 10 j 09:24	12° © 07'26		direct	-5317 Jun 30 j 19:01	14° Mp 46'17	
min. Earth dist.	-5323 Feb 10 j 15:39	12° © 06'17	9.15235 AU	evening set	-5317 Oct 09 j 00:32	21° Mp 45'54	
direct	-5323 Apr 23 j 04:02	8°5946'22					
evening set	-5323 Aug 04 j 15:00	15° © 49'56		conjunction	-5317 Oct 25 j 10:22	23° m 41'49	2°01'01
				minimum elong	-5317 Oct 25 j 10:25	23° m 41'50	2°01'05
conjunction	-5323 Aug 21 j 07:42	17° © 45'14	2°04'19	max. Earth dist.	-5317 Oct 24 j 16:16	•	11.01564 AU
minimum elong	-5323 Aug 21 j 07:40	17° © 45'13	2°04'37	morning rise	-5317 Nov 10 j 21:23	25° m 38'11	
max. Earth dist.	-5323 Aug 20 j 22:11		11.18274 AU		-5317 Dec 22 j 19:36	0∘ ⊽	
morning rise	-5323 Sep 06 j 20:33	19° 5 39'27		retrograde	-5316 Feb 21 j 05:04	2° £ 47'45	
retrograde	-5323 Dec 14 j 06:54	26° © 24'59			-5316 Apr 24 j 22:41	30°R, Mp	
opposition	-5322 Feb 22 j 02:08	23° © 09'44	2°39'33	opposition	-5316 May 02 j 04:58	29° m 27'49	2°17'10
min. Earth dist.	-5322 Feb 22 j 11:40	23° © 07'59	9.20920 AU	min. Earth dist.	-5316 May 02 j 20:33	29° m 24'56	8.96053 AU
direct	-5322 May 05 j 00:21	19° 5 49'30		direct	-5316 Jul 11 j 10:41	26° Mp 08′56	
evening set	-5322 Aug 15 j 20:18	26° 5 48'56			-5316 Sep 20 j 02:25	0∘ ⊽	
				evening set	-5316 Oct 19 j 09:56	3° ₾ 13'00	
conjunction	-5322 Sep 01 j 09:24	28°5542'52					
minimum elong	-5322 Sep 01 j 09:22	28° 5 42'51		conjunction	-5316 Nov 04 j 22:04	5° ≏ 11'02	1°42'10
max. Earth dist.	-5322 Aug 31 j 20:44		11.22517 AU	minimum elong	-5316 Nov 04 j 22:07	5° £ 11′03	1°42'11
	-5322 Sep 12 j 13:07	0 $^{\circ}\Omega$		max. Earth dist.	-5316 Nov 04 j 04:02		10.89887 AU
morning rise	-5322 Sep 17 j 19:26	0° Ω 35'57		morning rise	-5316 Nov 21 j 12:24	7° ഫ 09'50	
retrograde	-5322 Dec 25 j 14:39	7° Ω 21'10		retrograde	-5315 Mar 04 j 18:53	14° ≏ 29'03	
opposition	-5321 Mar 05 j 17:55	4° Ω 05'51	2°51'37	opposition	-5315 May 14 j 16:38	11° ≏ 07'35	1°51'20
min. Earth dist.	3321 Mai 03 j 17.33						0.00065.444
mm. Earm dist.	-5321 Mar 06 j 05:15	4° Ω 03'47	9.23782 AU	min. Earth dist.	-5315 May 15 j 07:37	11° ≏ 04'46	8.83367 AU
direct		0° Ω 46'19	9.23782 AU	min. Earth dist. direct	-5315 May 15 j 07:37 -5315 Jul 23 j 07:22	11° Ω 04'46 7° Ω 48'15	8.83367 AU
	-5321 Mar 06 j 05:15		9.23782 AU				8.83367 AU
direct evening set	-5321 May 16 j 17:03 -5321 Aug 26 j 21:37	0° Ω 46'19 7° Ω 42'54		direct evening set	-5315 Jul 23 j 07:22 -5315 Oct 31 j 02:43	7° £ 48'15 14° £ 58'17	
direct	-5321 Mar 06 j 05:15 -5321 May 16 j 17:03	0° Ω 46'19		direct	-5315 Jul 23 j 07:22	7° ≏ 48'15	

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5315 in astronomical counting style is the year 5316 BCE in historical counting style. -5315 Nov 16 i 17:54 16°**♀**58'56 1°18'32 min. Earth dist. -5309 Aug 03 j 09:17 29°**₹**27'19 7.99503 AU minimum elong -5315 Nov 16 j 00:29 16°**£**53'38 10.76454 AU direct -5309 Oct 08 j 12:55 26°**х** 01′09 max. Earth dist. -5315 Dec 03 j 12:19 19°**♀**00'37 -5309 Dec 15 j 00:37 0°궁 morning rise -5314 Mar 17 j 18:46 -5308 Jan 18 j 12:35 4°る08'53 26°**£**30′50 retrograde evening set -5314 May 27 j 11:37 opposition 23°**£**07'42 1°19'54 -5308 Feb 05 j 04:44 6°る28'26 -1°45'05 min. Earth dist. -5314 May 28 j 01:27 23°**₽**05'04 8.69181 AU conjunction -5308 Feb 05 j 04:41 direct -5314 Aug 04 j 10:53 19°**£**47'42 minimum elong 6°**る**28'25 1°45'23 evening set -5314 Nov 12 j 04:48 27°**Ω**05'09 max. Earth dist. -5308 Feb 05 j 09:36 6°**る**30'03 9.94825 AU morning rise -5308 Feb 23 j 01:59 8°**る**49'37 conjunction -5314 Nov 28 j 23:46 29°**≙**08'49 0°50'53 retrograde -5308 Jun 10 j 08:27 17°る26'14 minimum elong -5314 Nov 28 j 23:48 29°**₽**08'49 0°50'46 opposition -5308 Aug 17 j 03:57 13°る54'43 -2°26'27 -5314 Nov 28 j 08:45 29°**♀**04'10 10.61795 AU max. Earth dist. min. Earth dist. -5308 Aug 16 j 22:11 13°る55'55 7.91075 AU -5308 Oct 21 j 23:01 -5314 Dec 05 j 21:27 0° M direct 10°る27'50 morning rise -5314 Dec 15 j 22:52 1°M13'48 evening set -5307 Feb 01 j 18:37 18°る44'28 retrograde -5313 Mar 31 j 04:07 8°M56'04 opposition -5313 Jun 09 j 14:35 5°MJ31'11 0°43'41 conjunction -5307 Feb 19 j 14:16 21°る06'05 -2°06'23 min. Earth dist. -5313 Jun 10 j 02:05 5° M28'58 8.54099 AU minimum elong -5307 Feb 19 j 14:13 21°る06'04 2°06'40 direct -5313 Aug 16 j 21:58 2°M10'21 max. Earth dist. -5307 Feb 19 j 23:33 21°**る**09'11 9.87902 AU evening set -5313 Nov 24 j 18:02 9°M36'34 morning rise -5307 Mar 09 j 14:12 23°る29'03 -5307 May 07 j 02:05 0°≈ 2°≈09'30 conjunction -5313 Dec 11 j 17:22 11°M43'32 0°19'58 retrograde -5307 Jun 25 j 15:32 minimum elong -5313 Dec 11 j 17:23 11°M43'33 0°19'46 -5307 Aug 15 j 01:36 30°Rる max. Earth dist. -5313 Dec 11 i 06:05 11°M-40'00 10.46541 AU opposition -5307 Aug 31 j 23:04 28°る37'41 -2°48'25 morning rise -5313 Dec 28 i 21:18 13°ML52'03 min. Earth dist. -5307 Aug 31 i 14:14 28°**る**39'32 7.85935 AU -5312 Jan 07 j 05:29 15°M direct -5307 Nov 05 j 16:06 25°る09'39 -5312 Apr 13 j 00:57 -5306 Jan 19 j 16:47 retrograde 21°M-46'58 0°≈≈ -5312 Jun 22 j 01:54 0°04'00 -5306 Feb 17 j 08:46 3°≈32'59 opposition 18°M,20'21 evening set -5312 Jun 22 j 09:48 min. Earth dist. 18°ML18'48 8.38803 AU -5312 Jul 28 j 22:02 -5306 Mar 07 j 07:27 5°≈55'57 -2°19'38 desc node 15°M48'00 conjunction -5312 Aug 23 j 14:01 -5306 Mar 07 j 07:25 15°RM minimum elong 5°≈55'56 2°19'54 -5312 Aug 28 j 18:05 -5306 Mar 07 j 21:04 direct 14°M58'33 max. Earth dist. 6°≈00'30 9.84530 AU -5306 Mar 25 j 09:18 -5312 Sep 02 j 21:19 15°M 8°≈19'53 morning rise -5312 Dec 06 j 20:07 22°M34'37 -5306 May 24 j 13:56 evening set 15°≈ 17°≈00'03 -5306 Jul 10 j 21:30 retrograde -5312 Dec 23 j 23:53 -5306 Aug 27 j 23:01 conjunction 24°M45'02 -0°12'59 15°R≈ 13°≈28'25 -2°59'20 -5312 Dec 23 j 23:52 -5306 Sep 15 j 19:02 minimum elong 24°M45'02 0°13'14 opposition -5306 Sep 15 j 07:16 behind sun begin -5312 Dec 23 j 19:40 24°M43'43 min. Earth dist. 13°≈30'53 7.84530 AU behind sun end -5312 Dec 24 j 04:04 24°M46'22 direct -5306 Nov 20 j 13:53 9°≈59'25 max. Earth dist. -5312 Dec 23 j 16:20 24°M42'39 10.31417 AU -5305 Feb 05 j 09:23 15°**≈** -5311 Jan 10 j 08:40 26°M57'09 evening set -5305 Mar 05 j 03:28 18°≈26'26 morning rise -5311 Feb 04 j 23:47 0°**√** -5311 Apr 27 j 09:11 5°**х**¹04'41 -5305 Mar 23 j 04:35 20°≈49'52 -2°23'41 retrograde conjunction -5311 Jul 05 j 21:36 1°**∡**¹36'28 -0°37'23 -5305 Mar 23 j 04:36 20°≈49'52 2°23'53 opposition minimum elong min. Earth dist. -5311 Jul 06 j 01:40 1°**≯**35'40 8.24067 AU max. Earth dist. -5305 Mar 23 j 21:51 20°≈55'38 9.85081 AU -5311 Jul 27 j 00:13 -5305 Apr 10 j 07:29 23°≈13'49 30°R,ML morning rise -5311 Sep 10 j 22:12 direct 28°M13'32 -5305 Jun 11 i 02:43 0°**)** -5311 Oct 25 i 07:53 0°×7 retrograde -5305 Jul 25 i 23:25 1°**)**49'16 evening set -5311 Dec 20 j 11:57 6°**х** 00′12 -5305 Sep 09 i 10:36 30°R≈ opposition -5305 Sep 30 j 13:00 28°≈18'15 -2°58'16 -5310 Jan 06 j 20:03 8°**₹**14'00 -0°46'09 min. Earth dist. -5305 Sep 29 j 22:55 28°≈21'12 7.87074 AU conjunction -5310 Jan 06 j 20:01 8°**х** 14′00 0°46′26 direct -5305 Dec 05 j 14:37 24°≈48'33 minimum elong -5310 Jan 06 j 16:25 8° ₹12'50 10.17232 AU -5304 Feb 22 j 12:43 0°\ max. Earth dist. -5310 Jan 24 j 09:32 10°**х** 29'35 -5304 Mar 19 j 22:01 3°) 15'41 morning rise evening set retrograde -5310 May 12 j 03:17 18°**∡**¹48'55 opposition -5310 Jul 20 j 01:26 15° ₹ 19'18 -1°18'07 conjunction -5304 Apr 07 j 00:46 5°\(\)38'41 -2°18'15 min. Earth dist. -5310 Jul 20 j 01:50 15°**✗**19'13 8.10712 AU minimum elong -5304 Apr 07 j 00:49 5°\(\)38'42 2°18'24 -5304 Apr 07 j 20:40 -5310 Sep 24 j 11:42 11°**∡** 55′05 max. Earth dist. 5°**升**45'16 9.89605 AU direct -5309 Jan 03 j 17:38 19°**х** 52′33 -5304 Apr 25 j 03:49 8°\dagger 01'43 evening set morning rise -5304 Aug 08 j 17:54 16°**¥**28′26 retrograde -5309 Jan 21 j 05:55 22°**₹**09'27 -1°17'36 -5304 Oct 13 j 11:15 13°**₭**01'42 7.93437 AU conjunction min. Earth dist. -5309 Jan 21 j 05:52 minimum elong 22°**₹**09'26 1°17'54 opposition -5304 Oct 14 j 02:45 12°**)** 58'27 -2°45'29 max. Earth dist. -5309 Jan 21 j 06:27 22°**₹**09'38 10.04795 AU direct -5304 Dec 19 j 15:20 9°**∺**28'24 morning rise -5309 Feb 07 j 23:40 24°×28'08 evening set -5303 Apr 04 j 11:47 17°**)** 52'04 -5309 Mar 28 j 13:43 0°궁

retrograde

opposition

-5309 May 27 j 03:37

-5309 Jul 27 j 16:44

-5309 Aug 03 j 12:08

2°る57'29

29°**∡**¹26'44 -1°55'27

30°R*x*7

conjunction

minimum elong

max. Earth dist.

-5303 Apr 22 j 15:14

-5303 Apr 22 j 15:17

-5303 Apr 23 j 12:22

20° **★**13'45 -2°04'00

20°\ 13'46 2°04'04

20°**)** 20'40 9.97796 AU

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		-	in astronomical cou		5304 BCE in historical c		00.4515.5
morning rise	-5303 May 10 j 17:32	22°) ₹35'00		conjunction	-5297 Jul 13 j 19:03	8° Ⅱ 58'18	0°47'55
	-5303 Jul 24 j 03:20	0° Υ		minimum elong	-5297 Jul 13 j 19:01	8° Ⅱ 58'17	0°48'12
retrograde	-5303 Aug 23 j 01:56	0° Y 49'59		max. Earth dist.	-5297 Jul 14 j 00:20		10.83071 AU
	-5303 Sep 22 j 03:11	30° ₹		morning rise	-5297 Jul 30 j 22:54	11° Ⅱ 00′26	
opposition	-5303 Oct 28 j 09:56	27° ∺ 21'24	-2°22'29	retrograde	-5297 Nov 06 j 13:00	18° Ⅱ 01'27	
min. Earth dist.	-5303 Oct 27 j 18:27	27°) €24'37	8.03175 AU	opposition	-5296 Jan 13 j 19:54	14° Ⅱ 43'09	1°15'20
direct	-5302 Jan 03 j 12:52	23° ¥ 51′20		min. Earth dist.	-5296 Jan 13 j 17:30	14° Ⅱ 43'36	8.89742 AU
	-5302 Apr 02 j 07:22	$0^{\circ}\mathbf{\Upsilon}$		direct	-5296 Mar 24 j 21:01	11° Ⅱ 18'47	
evening set	-5302 Apr 19 j 17:29	2° Y 08'32		evening set	-5296 Jul 07 j 15:56	18° Ⅱ 38′00	
C	1 ,			C	v		
conjunction	-5302 May 07 j 20:30	4° Υ ′28'07	-1°42'24	conjunction	-5296 Jul 24 j 20:02	20° Ⅲ 38'44	1°14'51
minimum elong	-5302 May 07 j 20:34		1°42'24	minimum elong	-5296 Jul 24 j 20:00	20° I I38'43	
max. Earth dist.	-5302 May 08 j 16:57		10.09061 AU	max. Earth dist.	-5296 Jul 24 j 20:46		10.96066 AU
	-5302 May 25 j 21:06	6°Υ46'52	10.07001 AC			22° I 38'00	10.70000 AC
morning rise	, ,	14° Y 48'15		morning rise	-5296 Aug 10 j 19:02		
retrograde	-5302 Sep 05 j 22:10		1051124	retrograde	-5296 Nov 17 j 01:44	29° Ⅱ 31'58	1046100
opposition	-5302 Nov 11 j 08:57	11° Υ 21'20		opposition	-5295 Jan 24 j 20:19		1°46'02
min. Earth dist.	-5302 Nov 10 j 18:37		8.15611 AU	min. Earth dist.	-5295 Jan 24 j 21:14	26° Ⅱ 14'45	9.01878 AU
direct	-5301 Jan 18 j 04:38	7° Y 51'36		direct	-5295 Apr 06 j 07:57	22° Ⅱ 51'53	
evening set	-5301 May 04 j 12:25	16° Ƴ 00'09		evening set	-5295 Jul 19 j 12:48	0° © 03'36	
					-5295 Jul 19 j 00:10	0 \circ \odot	
conjunction	-5301 May 22 j 13:45	18° Ƴ 17'01	-1°15'22				
minimum elong	-5301 May 22 j 13:49	18° Ƴ 17'02	1°15'18	conjunction	-5295 Aug 05 j 11:54	2°501'44	1°38'11
max. Earth dist.	-5301 May 23 j 07:57	18° Ƴ 22'48	10.22622 AU	minimum elong	-5295 Aug 05 j 11:51	2° © 01'43	1°38'29
morning rise	-5301 Jun 09 j 11:40	20° Y ′32'44		max. Earth dist.	-5295 Aug 05 j 08:25		11.07103 AU
retrograde	-5301 Sep 19 j 06:43	28° Υ 19'57		morning rise	-5295 Aug 22 j 06:25	3°958'32	11.07105710
opposition	-5301 Nov 24 j 23:16	24° Υ 54'51	101520	retrograde	-5295 Nov 28 j 11:38	10°9547'28	
**	•		8.29934 AU	-	3		2011152
min. Earth dist.	-5301 Nov 24 j 10:34		8.29934 AU	opposition	-5294 Feb 05 j 16:25	7°931'22	2°11'52
direct	-5300 Feb 01 j 12:28	21° Y 25'47		min. Earth dist.	-5294 Feb 05 j 19:48	7° © 30'44	9.11842 AU
evening set	-5300 May 17 j 18:42	29° Y ′24'17		direct	-5294 Apr 18 j 10:51	4° 5 09'38	
	-5300 May 22 j 14:46	$0^{\circ}B$		evening set	-5294 Jul 31 j 01:55	11° © 15'08	
conjunction	-5300 Jun 04 j 17:14	1° 8 38'01		conjunction	-5294 Aug 16 j 20:33	13° © 11'08	1°57'20
minimum elong	-5300 Jun 04 j 17:16	1° 8 38'02	0°44'51	minimum elong	-5294 Aug 16 j 20:30	13° © 11'07	
max. Earth dist.	-5300 Jun 05 j 08:23	1° 8 42'45	10.37622 AU	max. Earth dist.	-5294 Aug 16 j 14:22	13° © 09'20	11.15783 AU
morning rise	-5300 Jun 22 j 11:32	3° 8 50'21		morning rise	-5294 Sep 02 j 10:55	15° © 05'57	
retrograde	-5300 Oct 01 j 03:41	11° 8 23'51		retrograde	-5294 Dec 09 j 19:05	21°951'48	
opposition	-5300 Dec 07 i 04:30	8° 8 00'35	-0°36'26	opposition	-5293 Feb 17 j 09:39	18° © 36'22	2°32'19
min. Earth dist.	-5300 Dec 06 j 17:29		8.45292 AU	min. Earth dist.	-5293 Feb 17 j 15:38	18° © 35'16	9.19292 AU
direct	-5299 Feb 14 j 11:45	4° 8 32'29	0.102/2110	direct	-5293 Apr 30 j 07:56	15° © 15'48).1, 2 ,2110
evening set	-5299 May 31 j 12:05	12° 8 20'27		evening set	-5293 Aug 11 j 09:00	22°916'25	
evening set	32)) Way 31 j 12.03	12 02027		evening set	32)3 Aug 11 j 09.00	22 31023	
conjunction	-5299 Jun 18 j 06:54	14° 8 30'49	0°13'16	conjunction	-5293 Aug 27 j 23:43	24°©10'47	2°11'52
5	-5299 Jun 18 j 06:55	14° 8 30'49	0°13'04	-		24°9510'46	2°12'10
minimum elong		_	0 13 04	minimum elong	-5293 Aug 27 j 23:41		
behind sun begin	-5299 Jun 18 j 02:40	14° 8 29'32		max. Earth dist.	-5293 Aug 27 j 14:49		11.21829 AU
behind sun end	-5299 Jun 18 j 11:09	14° 8 32'07		morning rise	-5293 Sep 13 j 10:44	26°9504'10	
max. Earth dist.	-5299 Jun 18 j 18:48		10.53213 AU		-5293 Oct 21 j 20:05	$0^{\circ}\Omega$	
	-5299 Jun 22 j 05:46	15° 8		retrograde	-5293 Dec 21 j 02:19	2° Ω 48'47	
morning rise	-5299 Jul 05 j 20:50	16° 8 39'39			-5292 Feb 23 j 01:00	30° ₹ ∽	
retrograde	-5299 Oct 13 j 14:28	24° 8 00'36		opposition	-5292 Feb 29 j 01:23	29° © 33'42	2°46'58
asc. node	-5299 Nov 22 j 15:30	22° 8 39'29		min. Earth dist.	-5292 Feb 29 j 10:42	29° 5 32'00	9.23998 AU
opposition	-5299 Dec 20 j 00:57	20° 8 39'07	0°02'50	direct	-5292 May 10 j 23:45	26° © 14'07	
min. Earth dist.	-5299 Dec 19 j 15:56	20° 8 40'53	8.60862 AU		-5292 Jul 22 j 05:07	$0^{\circ}\Omega$	
direct	-5298 Feb 28 j 01:08	17° 8 12'09		evening set	-5292 Aug 21 j 11:33	3° Ω 11'14	
evening set	-5298 Jun 13 j 16:49	24° 8 49'46		Č	e j		
8				conjunction	-5292 Sep 06 j 23:00	5° Ω 04'30	2°21'28
		26° 8 56'45	0°18'13	minimum elong	-5292 Sep 06 j 22:59	5° Ω 04'30	2°21'44
conjunction	-5298 Jul 01 i 07·13		J 10 10				
conjunction	-5298 Jul 01 j 07:13		0°18'28	max Earth diet	-5292 Sen 116 i 110-26	5°1)00'53	
minimum elong	-5298 Jul 01 j 07:12	26° 8 56'44	0°18'28	max. Earth dist.	-5292 Sep 06 j 10:26	5° Ω 00'53	11.23000 AU
minimum elong max. Earth dist.	-5298 Jul 01 j 07:12 -5298 Jul 01 j 16:09	26° 8 56'44 26° 8 59'26	0°18′28 10.68596 AU	morning rise	-5292 Sep 23 j 07:48	6° Ω 57'04	11.23000 AU
minimum elong	-5298 Jul 01 j 07:12 -5298 Jul 01 j 16:09 -5298 Jul 18 j 16:11	26°856'44 26°859'26 29°802'07		morning rise retrograde	-5292 Sep 23 j 07:48 -5292 Dec 31 j 07:43	6° Ω 57'04 13° Ω 42'15	
minimum elong max. Earth dist. morning rise	-5298 Jul 01 j 07:12 -5298 Jul 01 j 16:09 -5298 Jul 18 j 16:11 -5298 Jul 26 j 22:13	26°\856'44 26°\859'26 29°\802'07 0°\II		morning rise retrograde opposition	-5292 Sep 23 j 07:48 -5292 Dec 31 j 07:43 -5291 Mar 11 j 16:41	6°Ω57'04 13°Ω42'15 10°Ω27'08	2°55'33
minimum elong max. Earth dist. morning rise retrograde	-5298 Jul 01 j 07:12 -5298 Jul 01 j 16:09 -5298 Jul 18 j 16:11 -5298 Jul 26 j 22:13 -5298 Oct 25 j 18:17	26°\\$56'44 26°\\$59'26 29°\\$02'07 0°\\$\\$6°\\$112'10	10.68596 AU	morning rise retrograde opposition min. Earth dist.	-5292 Sep 23 j 07:48 -5292 Dec 31 j 07:43 -5291 Mar 11 j 16:41 -5291 Mar 12 j 04:45	6° \$\Omega 57'04 13° \$\Omega 42'15 10° \$\Omega 27'08 10° \$\Omega 24'56	
minimum elong max. Earth dist. morning rise retrograde opposition	-5298 Jul 01 j 07:12 -5298 Jul 01 j 16:09 -5298 Jul 18 j 16:11 -5298 Jul 26 j 22:13 -5298 Oct 25 j 18:17 -5297 Jan 01 j 13:46	26°₩56'44 26°₩59'26 29°₩02'07 0°Ⅲ 6°Ⅲ12'10 2°Ⅲ52'21	10.68596 AU 0°40'35	morning rise retrograde opposition min. Earth dist. direct	-5292 Sep 23 j 07:48 -5292 Dec 31 j 07:43 -5291 Mar 11 j 16:41 -5291 Mar 12 j 04:45 -5291 May 22 j 12:19	6°\$\Omega_57'04 13°\$\Omega_42'15 10°\$\Omega_27'08 10°\$\Omega_24'56 7°\$\Omega_08'20	2°55'33
minimum elong max. Earth dist. morning rise retrograde	-5298 Jul 01 j 07:12 -5298 Jul 01 j 16:09 -5298 Jul 18 j 16:11 -5298 Jul 26 j 22:13 -5298 Oct 25 j 18:17 -5297 Jan 01 j 13:46 -5297 Jan 01 j 07:44	26°\\$56'44 26°\\$59'26 29°\\$02'07 0°\\$\\$6°\\$112'10	10.68596 AU	morning rise retrograde opposition min. Earth dist.	-5292 Sep 23 j 07:48 -5292 Dec 31 j 07:43 -5291 Mar 11 j 16:41 -5291 Mar 12 j 04:45	6° \$\Omega 57'04 13° \$\Omega 42'15 10° \$\Omega 27'08 10° \$\Omega 24'56	2°55'33
minimum elong max. Earth dist. morning rise retrograde opposition	-5298 Jul 01 j 07:12 -5298 Jul 01 j 16:09 -5298 Jul 18 j 16:11 -5298 Jul 26 j 22:13 -5298 Oct 25 j 18:17 -5297 Jan 01 j 13:46	26°₩56'44 26°₩59'26 29°₩02'07 0°Ⅲ 6°Ⅲ12'10 2°Ⅲ52'21	10.68596 AU 0°40'35	morning rise retrograde opposition min. Earth dist. direct	-5292 Sep 23 j 07:48 -5292 Dec 31 j 07:43 -5291 Mar 11 j 16:41 -5291 Mar 12 j 04:45 -5291 May 22 j 12:19	6°\$\Omega_57'04 13°\$\Omega_42'15 10°\$\Omega_27'08 10°\$\Omega_24'56 7°\$\Omega_08'20	2°55'33
minimum elong max. Earth dist. morning rise retrograde opposition	-5298 Jul 01 j 07:12 -5298 Jul 01 j 16:09 -5298 Jul 18 j 16:11 -5298 Jul 26 j 22:13 -5298 Oct 25 j 18:17 -5297 Jan 01 j 13:46 -5297 Jan 01 j 07:44	26° 856'44 26° 859'26 29° 802'07 0° Π 6° Π12'10 2° Π52'21 2° Π53'31	10.68596 AU 0°40'35	morning rise retrograde opposition min. Earth dist. direct	-5292 Sep 23 j 07:48 -5292 Dec 31 j 07:43 -5291 Mar 11 j 16:41 -5291 Mar 12 j 04:45 -5291 May 22 j 12:19 -5291 Sep 01 j 11:21	6° N 57'04 13° N 42'15 10° N 27'08 10° N 24'56 7° N 08'20 14° N 03'21	2°55'33
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-5298 Jul 01 j 07:12 -5298 Jul 01 j 16:09 -5298 Jul 18 j 16:11 -5298 Jul 26 j 22:13 -5298 Oct 25 j 18:17 -5297 Jan 01 j 13:46 -5297 Jan 01 j 07:44 -5297 Feb 14 j 22:35	26° 856'44 26° 859'26 29° 802'07 0° Π 6° Π12'10 2° Π52'21 2° Π53'31 30° R8	10.68596 AU 0°40'35	morning rise retrograde opposition min. Earth dist. direct	-5292 Sep 23 j 07:48 -5292 Dec 31 j 07:43 -5291 Mar 11 j 16:41 -5291 Mar 12 j 04:45 -5291 May 22 j 12:19 -5291 Sep 01 j 11:21	6° N 57'04 13° N 42'15 10° N 27'08 10° N 24'56 7° N 08'20 14° N 03'21	2°55'33 9.25808 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-5298 Jul 01 j 07:12 -5298 Jul 01 j 16:09 -5298 Jul 18 j 16:11 -5298 Jul 26 j 22:13 -5298 Oct 25 j 18:17 -5297 Jan 01 j 13:46 -5297 Jan 01 j 07:44 -5297 Feb 14 j 22:35 -5297 Mar 13 j 03:37	26° 856'44 26° 859'26 29° 802'07 0° Π 6° Π12'10 2° Π52'21 2° Π53'31 30° R8 29° 826'40	10.68596 AU 0°40'35	morning rise retrograde opposition min. Earth dist. direct evening set	-5292 Sep 23 j 07:48 -5292 Dec 31 j 07:43 -5291 Mar 11 j 16:41 -5291 Mar 12 j 04:45 -5291 May 22 j 12:19 -5291 Sep 01 j 11:21 -5291 Sep 09 j 18:03	6° \$\Omega 57'04 13° \$\Omega 42'15 10° \$\Omega 27'08 10° \$\Omega 24'56 7° \$\Omega 08'20 14° \$\Omega 03'21 15° \$\Omega\$	2°55'33 9.25808 AU 2°25'57

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5291 in astronomical counting style is the year 5292 BCE in historical counting style. -5291 Sep 17 j 05:35 15°**Ω**51'47 11.25369 AU retrograde -5284 Mar 24 j 12:01 3°M31'43 max. Earth dist. 17°**Ω**48'24 -5291 Oct 04 i 04:02 -5284 Jun 03 j 00:51 0°ML07'54 1°00'30 morning rise opposition -5290 Jan 11 j 18:02 24°Ω35'56 min. Earth dist. -5284 Jun 03 j 14:01 0°M05'23 8.62313 AU retrograde -5290 Mar 23 j 08:44 -5284 Jun 04 j 18:13 21°Ω20'26 2°57'52 30°R<u>₽</u> opposition -5290 Mar 23 j 22:18 21°**Ω**17'58 9.24643 AU direct -5284 Aug 10 j 15:29 26°**-**47'39 min. Earth dist. direct -5290 Jun 03 j 01:48 18°**Ω**02'11 -5284 Oct 11 j 23:56 0°M -5284 Nov 18 j 10:38 4°ML09'04 24° **Q**56'29 evening set -5290 Sep 12 j 09:58 evening set 26°**Ω**49'20 2°25'09 conjunction -5290 Sep 28 j 18:07 conjunction -5284 Dec 05 j 07:46 6°M₁14'20 0°34'16 minimum elong -5290 Sep 28 j 18:08 26°**Ω**49'21 2°25'20 minimum elong -5284 Dec 05 j 07:47 6° M 14'200°34'06 max. Earth dist. -5290 Sep 28 j 02:10 26°**Ω**44'42 11.22725 AU max. Earth dist. -5284 Dec 04 j 16:25 6°**™**09'34 10.54500 AU -5290 Oct 15 j 01:09 -5284 Dec 22 j 09:23 morning rise 28°**Ω**41'58 morning rise 8°M21'03 -5290 Oct 26 j 17:41 -5283 Feb 28 j 14:53 0° M 15°M retrograde -5289 Jan 23 j 07:21 5° m 33'32 retrograde -5283 Apr 07 j 02:44 16°M₀09'28 opposition -5289 Apr 04 j 03:06 2° m/17'18 2°53'49 -5283 May 15 j 04:38 15°RM min. Earth dist. -5289 Apr 04 j 17:40 2° Mp 14'39 9.20516 AU opposition -5283 Jun 16 j 07:51 12°**™**43'42 0°22'20 -5289 May 08 j 21:50 30°R€ min. Earth dist. -5283 Jun 16 j 18:55 12°M41'33 8.46411 AU direct -5289 Jun 14 j 12:00 28°**Ω**59'23 direct -5283 Aug 23 j 07:07 9°M22'17 -5289 Jul 20 j 06:15 -5283 Nov 15 j 13:41 15°M evening set -5289 Sep 23 j 09:13 5° m 54'21 evening set -5283 Dec 01 j 05:58 16°M53'14 conjunction -5289 Oct 09 i 17:13 7° mp 47'54 2°19'03 conjunction -5283 Dec 18 i 07:28 19°ML01'57 0°02'13 minimum elong -5289 Oct 09 i 17:15 7° mp 47'54 2°19'11 minimum elong -5283 Dec 18 i 07:28 19°ML01'57 0°01'59 max. Earth dist. -5289 Oct 08 i 23:36 7° Mp 42'45 11.17172 AU behind sun begin -5283 Dec 18 j 00:20 18°M59'43 morning rise -5289 Oct 26 j 01:03 9° m 41'30 behind sun end -5283 Dec 18 j 14:35 19°ML04'11 -5288 Feb 04 j 02:26 16° m 38'46 max. Earth dist. -5283 Dec 17 j 19:24 18°**M**⋅58'09 10.38601 AU retrograde opposition -5288 Apr 15 j 00:54 13° m 21'31 2°43'21 -5282 Jan 04 j 14:06 21°M12'20 morning rise -5288 Apr 15 j 17:07 13° m 18'33 -5282 Jan 12 j 03:13 min. Earth dist. 9.13503 AU desc. node 22°M₂07'51 -5288 Jun 25 j 00:06 10° m 03'37 -5282 Apr 21 j 04:34 retrograde 29°M13'39 direct -5288 Oct 03 j 11:06 17° m 00'47 -5282 Jun 29 j 23:25 25°M45'59 -0°18'26 evening set opposition -5282 Jun 30 j 07:32 25°M44'23 8.30687 AU min. Earth dist. -5282 Sep 05 j 07:36 -5288 Oct 19 j 19:55 18° m 55'38 2°07'39 conjunction direct 22°M23'16 -5288 Oct 19 j 19:58 18° m 55'38 2°07'44 -5282 Dec 13 j 23:43 0°×7 minimum elong -5288 Oct 19 j 00:26 18° Mp 49'53 11.08822 AU -5282 Dec 14 j 14:45 0°**х** 04'43 max. Earth dist. evening set -5288 Nov 05 j 05:45 20° m 50'49 morning rise -5287 Feb 15 j 02:24 27° m 55'27 -5282 Dec 31 j 20:50 2°**х** 16′57 -0°31′04 retrograde conjunction -5287 Apr 27 j 03:04 -5282 Dec 31 j 20:48 opposition 24° m 36'54 2°26'30 minimum elong 2°**х** 16'57 0°31'20 min. Earth dist. -5287 Apr 27 j 20:27 24° m 33'42 9.03766 AU max. Earth dist. -5282 Dec 31 j 13:23 2° ₹ 14'34 10.23248 AU direct -5287 Jul 06 j 14:06 21° Mp 18'46 morning rise -5281 Jan 18 j 08:16 4°**х**³30'58 -5287 Oct 14 j 17:21 28° Mp 19'46 retrograde -5281 May 05 j 16:54 12°**х** 44'51 evening set -5287 Oct 28 j 20:48 0∘**⊽** opposition -5281 Jul 13 j 23:12 9°**х** 15'27 -0°59'43 max. Earth dist. -5287 Oct 30 j 08:31 0°**2**10'39 10.97904 AU min. Earth dist. -5281 Jul 14 j 03:20 9°**х** 14'37 8.15964 AU -5281 Sep 18 j 17:23 5°**х** 51′20 direct -5287 Oct 31 j 04:07 0°**2**16'29 1°51'05 -5281 Dec 28 j 13:40 13°**х¹**43'52 conjunction evening set -5287 Oct 31 j 04:10 0°**2**16'30 1°51'07 minimum elong -5287 Nov 16 i 16:47 -5280 Jan 15 i 00:13 15°**₹**59'28 -1°03'32 morning rise 2°**£**13'51 conjunction retrograde -5286 Feb 27 i 11:06 9°**₽**27'33 minimum elong -5280 Jan 15 i 00:10 15°**₹**59'27 1°03'50 opposition -5286 May 09 j 11:13 6°**2**07'25 2°03'27 max. Earth dist. -5280 Jan 14 j 21:53 15° ₹ 58'43 10.09279 AU min. Earth dist. -5286 May 10 j 04:04 6°**♀**04'17 8.91638 AU morning rise -5280 Feb 01 i 16:02 18°**∡**16'51 direct -5286 Jul 18 i 09:49 2°**£**48'50 retrograde -5280 May 19 i 13:52 26°**х** 42′04 -5286 Oct 26 j 05:55 9°**£**55'10 opposition -5280 Jul 27 j 06:40 23°**₹**11'14 -1°38'58 evening set min. Earth dist. -5280 Jul 27 j 06:24 23°**✗**11'17 8.03076 AU -5286 Nov 11 j 19:35 11°**£**54'19 1°29'38 direct -5280 Oct 01 j 13:29 19°**х** 45'42 conjunction 27°**х** 49′10 minimum elong -5286 Nov 11 j 19:38 11°**≏**54'20 1°29'37 evening set -5279 Jan 11 j 02:27 max. Earth dist. -5286 Nov 11 j 01:24 11°**♀**48'50 10.84829 AU -5279 Jan 27 j 17:33 0°궁 morning rise -5286 Nov 28 j 11:52 13°**♀**54'23 retrograde -5285 Mar 12 j 07:19 21°**♀**18'37 conjunction -5279 Jan 28 j 17:03 0°る07'46 -1°33'07 -5285 May 22 j 02:15 17°**♀**56'42 minimum elong -5279 Jan 28 j 16:59 0°る07'45 1°33'25 opposition 1°34'33 0°る08'44 9.97530 AU -5285 May 22 j 17:18 17°**♀**53'52 -5279 Jan 28 j 19:59 min. Earth dist. 8.77618 AU max. Earth dist. -5285 Jul 30 j 10:16 -5279 Feb 15 j 12:39 2°る28'02 direct 14°**₽**37'25 morning rise -5285 Nov 07 j 03:07 21°**♀**50'33 -5279 Jun 03 j 17:41 11°**る**02'21 evening set retrograde opposition -5279 Aug 10 j 20:30 7°る30'28 -2°13'16 conjunction -5285 Nov 23 j 20:17 23°**♀**52'36 1°03'47 min. Earth dist. -5279 Aug 10 j 15:52 7°**る**31'25 7.92825 AU minimum elong -5285 Nov 23 j 20:19 23°**♀**52'36 1°03'41 direct -5279 Oct 15 j 18:24 4°る03'33 max. Earth dist. -5285 Nov 23 j 03:21 23°**△**47'25 10.70149 AU evening set -5278 Jan 26 j 03:49 12°る16'57 -5285 Dec 10 j 16:58 25°**♀**55'50 morning rise -5284 Jan 16 j 16:51 0°M -5278 Feb 12 j 22:04 14°₹37′58 -1°57′31 conjunction

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5278 in astronomical counting style is the year 5279 BCE in historical counting style. -5278 Feb 12 j 22:00 14°る37'57 1°57'49 retrograde -5272 Sep 12 j 18:18 22°Y33'03 minimum elong 9.88785 AU -5278 Feb 13 j 05:53 14°る40'35 -5272 Nov 18 j 07:46 19°**Y**'07'12 -1°32'04 max. Earth dist. opposition -5278 Mar 02 j 20:48 17°る00'28 min. Earth dist. -5272 Nov 17 j 16:24 19°**Υ**10'20 8.23014 AU morning rise 15°**Ƴ**38′03 25°る40'33 -5271 Jan 25 j 11:39 -5278 Jun 19 j 01:35 direct retrograde 23°Y41'37 22°る08'06 -2°39'43 -5271 May 11 j 20:04 opposition -5278 Aug 25 j 14:46 evening set min. Earth dist. -5278 Aug 25 j 06:31 22°**る**09'50 7.85909 AU -5278 Oct 30 j 07:28 25°**Y**'56'55 -0°58'52 direct 18°**る**39'55 conjunction -5271 May 29 j 20:14 25°**Y**56′56 -5271 May 29 j 20:17 0°58'45 evening set -5277 Feb 10 j 15:09 27°る01'18 minimum elong -5271 May 30 j 15:07 max. Earth dist. 26°**Y**02'52 10.30674 AU 28°Y10'53 conjunction -5277 Feb 28 j 12:35 29°る24'01 -2°14'41 morning rise -5271 Jun 16 j 16:15 minimum elong -5277 Feb 28 j 12:32 29°**る**24'00 2°14'57 -5271 Jul 01 j 19:28 0°8 -5277 Mar 01 j 00:48 29°る28'06 9.83667 AU -5271 Sep 25 j 22:23 5°**8**50'56 max. Earth dist. retrograde -5271 Dec 01 j 17:36 -5277 Mar 05 j 00:12 0°≈ opposition 2°**8**27'08 -0°53'59 morning rise -5277 Mar 18 j 13:42 1°≈47'54 min. Earth dist. -5271 Dec 01 j 04:23 2°**8**29'47 8.38433 AU retrograde -5277 Jul 04 j 09:56 10°≈29'38 -5270 Jan 04 j 20:17 30°RY opposition -5277 Sep 09 j 11:08 6°≈57'08 -2°55'55 direct -5270 Feb 08 j 14:51 28°Y58'58 min. Earth dist. -5277 Sep 09 j 00:05 6°≈59'28 7.82815 AU -5270 Mar 15 j 08:18 0°8 direct -5277 Nov 14 j 03:25 3°**≈**27'53 evening set -5270 May 25 j 20:08 6°852'03 11°**≈**54'25 evening set -5276 Feb 26 j 08:46 conjunction -5270 Jun 12 j 16:53 9°804'00 -0°27'27 conjunction -5276 Mar 15 j 08:47 14°≈17'58 -2°23'02 minimum elong -5270 Jun 12 j 16:54 9°804'01 0°27'16 minimum elong -5276 Mar 15 i 08:46 14°≈17'58 2°23'16 max. Earth dist. -5270 Jun 13 j 08:26 9°808'49 10.46522 AU max. Earth dist. -5276 Mar 16 i 00:47 14°≈23'19 9.82555 AU morning rise -5270 Jun 30 i 08:47 11°814'28 -5276 Mar 20 j 14:34 15°≈ -5270 Aug 02 j 19:24 15°8 morning rise -5276 Apr 02 j 11:24 16°≈42'17 retrograde -5270 Oct 08 j 13:51 18°**8**41'11 -5276 Jul 18 j 15:01 25°≈21'10 opposition -5270 Dec 14 j 18:31 15°819'22 -0°14'33 retrograde opposition -5276 Sep 23 j 06:47 21°≈49′11 -3°00′21 min. Earth dist. -5270 Dec 14 j 08:22 15°**8**21'22 8.54417 AU -5276 Sep 22 j 17:31 -5270 Dec 18 j 20:42 15°R₩ min. Earth dist. 21°251'59 7.83777 AU -5269 Feb 22 j 09:23 11°**8**52'22 -5276 Nov 28 j 04:25 18°≈19'11 direct direct -5275 Mar 13 j 04:07 26°≈47'24 -5269 Apr 26 j 18:10 15°8 evening set -5269 May 04 j 07:52 asc. node 15°**8**43'00 29°≈10'53 -2°21'53 -5275 Mar 31 j 06:07 -5269 Jun 08 j 07:16 conjunction 19°**8**34'49 evening set -5275 Mar 31 j 06:09 29°≈10'53 2°22'04 minimum elong 29°≈17'10 9.85559 AU -5275 Apr 01 j 01:00 -5269 Jun 25 j 23:39 21°**8**43'18 0°04'26 max. Earth dist. conjunction -5275 Apr 06 j 09:52 0°**∀** -5269 Jun 25 j 23:39 21°**8**43'18 0°04'40 minimum elong -5275 Apr 18 j 09:25 -5269 Jun 25 j 16:36 21°**8**41'11 morning rise 1°**)** 34'40 behind sun begin -5275 Aug 02 j 12:47 10°**)**€06'28 -5269 Jun 26 j 06:41 retrograde behind sun end 21°**8**45'25 opposition -5275 Oct 07 j 23:06 6°\(\)35'30 -2°52'44 max. Earth dist. -5269 Jun 26 j 10:34 21°**8**46'37 10.62470 AU min. Earth dist. -5275 Oct 07 j 08:15 6°**升**38'37 7.88746 AU morning rise -5269 Jul 13 j 10:55 23°**8**50'13 direct -5275 Dec 13 j 06:45 3°**¥**05'07 -5269 Sep 15 j 15:26 $0^{\circ}II$ -5274 Mar 28 j 20:47 11°\ 31'23 retrograde -5269 Oct 20 j 20:22 1°**I**I05′05 evening set -5269 Nov 25 j 15:57 30°R₩ -5274 Apr 16 j 00:00 13°**¥**53'55 -2°11'29 -5269 Dec 27 j 11:13 27°845'04 0°24'07 conjunction opposition -5274 Apr 16 j 00:04 13°¥53'56 2°11'35 min. Earth dist. -5269 Dec 27 j 03:55 27°**8**46'28 8.70118 AU minimum elong -5274 Apr 16 j 20:33 14°**₭**00'42 9.92469 AU direct -5268 Mar 06 j 17:53 24°**8**19'20 max. Earth dist. -5274 May 04 i 03:04 morning rise 16°**¥**16′17 -5268 Jun 03 j 23:04 $0^{\circ}II$ retrograde -5274 Aug 17 i 00:47 24° **)** 37'30 evening set -5268 Jun 20 j 05:43 1°**I**51'33 -5274 Oct 22 i 09:47 opposition 21°\(\)407'57 -2°34'04 -5268 Jul 07 i 17:13 min. Earth dist. -5274 Oct 21 j 17:53 21°**)** 11'16 7.97365 AU conjunction 3°II56'39 0°35'02 direct -5274 Dec 28 j 06:41 17°**₩**37'37 minimum elong -5268 Jul 07 i 17:12 3°II56'39 0°35'18 -5273 Apr 13 j 07:00 25°**)** 58'39 max. Earth dist. -5268 Jul 07 j 23:36 3°**I**I58'34 10.77697 AU evening set -5268 Jul 24 j 23:32 6°**Ⅱ**00'11 morning rise -5273 May 01 j 10:23 28° ¥ 19'25 -1°52'57 -5268 Oct 31 j 18:36 13°**Ⅱ**05'02 conjunction retrograde 9°**Ⅱ**46'35 minimum elong -5273 May 01 j 10:27 28°¥19'26 1°52'58 opposition -5267 Jan 07 j 20:24 1°00'22 -5273 May 02 j 07:30 9°**Ⅱ**47'26 max. Earth dist. 28°¥26'17 10.02783 AU min. Earth dist. -5267 Jan 07 j 15:59 8.84736 AU $0^{\circ}\Upsilon$ -5273 May 14 j 08:34 -5267 Mar 19 j 16:29 6°**Ⅲ**22′10 direct morning rise -5273 May 19 j 12:06 0°Y39'33 evening set -5267 Jul 02 j 16:53 13°**Ⅱ**45'07 -5273 Aug 31 j 02:34 8°Y47'48 retrograde -5273 Nov 05 j 12:58 5°Υ20'01 -2°06'20 -5267 Jul 19 j 23:23 15°**Ⅱ**47'06 1°03'20 opposition conjunction 5°**Υ**23'22 8.09039 AU -5267 Jul 19 j 23:21 15°**Ⅱ**47'06 min. Earth dist. -5273 Nov 04 j 20:43 minimum elong 1°03'36 1°**Y**50'06 15°**Ⅱ**47'50 10.91467 AU direct -5272 Jan 12 j 01:12 max. Earth dist. -5267 Jul 20 j 01:49 10°**Y**03'18 evening set -5272 Apr 27 j 07:29 morning rise -5267 Aug 06 j 00:35 17°**Ⅱ**47'34 retrograde -5267 Nov 12 j 11:06 24°**Ⅱ**44'28 conjunction -5272 May 15 j 09:52 12°**Υ**21'36 -1°28'03 opposition -5266 Jan 19 j 23:18 21°**Ⅲ**27′20 1°32'59 minimum elong -5272 May 15 j 09:56 12°**Υ**21'37 1°28'01 min. Earth dist. -5266 Jan 19 j 22:16 21°**Ⅲ**27'32 8.97617 AU -5272 May 16 j 06:32 12°**Y**28'13 10.15796 AU -5266 Apr 01 j 06:48 18°**Ⅲ**04'12 max. Earth dist. direct

-5272 Jun 02 j 09:12

morning rise

14°**Y**38'51

-5266 Jul 14 j 18:12

evening set

25°**Ⅱ**19'09

-	nical year style is used: Th					_	gc 12
conjunction	-5266 Jul 31 j 19:40	-			-5260 Sep 05 j 23:33	0° m)	
minimum elong	-5266 Jul 31 j 19:37	27° Ⅱ 18′21	1°28'38	evening set	-5260 Sep 17 j 23:53	1° Mp 20'20	
max. Earth dist.	-5266 Jul 31 j 18:20	27° Ⅱ 17'59	11.03244 AU				
morning rise	-5266 Aug 17 j 15:58	29° Ⅱ 16′10		conjunction	-5260 Oct 04 j 07:49	3° m 13'36	2°22'26
	-5266 Aug 24 j 02:17	0 \circ \mathfrak{S}		minimum elong	-5260 Oct 04 j 07:51	3° m 13'36	2°22'34
retrograde	-5266 Nov 23 j 23:23	6° © 07'10		max. Earth dist.	-5260 Oct 03 j 13:24	3°Mp08'14	11.18495 AU
opposition	-5265 Jan 31 j 21:37	2° 9 51'04	2°01'03	morning rise	-5260 Oct 20 j 15:24	5° Mp 06'49	
min. Earth dist.	-5265 Feb 01 j 00:41	2° 9 50'30	9.08331 AU	retrograde	-5259 Jan 29 j 06:01	12° m 01'35	
	-5265 Mar 18 j 18:45	30°Ŗ Ⅱ		opposition	-5259 Apr 10 j 04:51	8° m 44'14	2°48'51
direct	-5265 Apr 13 j 12:03	29° Ⅱ 29'08		min. Earth dist.	-5259 Apr 10 j 21:12	8° m)41'15	9.15365 AU
	-5265 May 09 j 02:14	0 \circ 50		direct	-5259 Jun 20 j 10:18	5° Mg 25'43	
evening set	-5265 Jul 26 j 11:01	6° 5 37'18		evening set	-5259 Sep 29 j 00:10	12° m 22'05	
	5065 1 10:07.24	00624111	1040/05		5050 0 + 15 100 40	1.40 % 1.610.4	2012122
conjunction	-5265 Aug 12 j 07:34	8°934'11	1°49'25	conjunction	-5259 Oct 15 j 08:40	14° Mp 16'24	
minimum elong	-5265 Aug 12 j 07:31	8°934'11	1°49'42	minimum elong	-5259 Oct 15 j 08:42	14° Mp 16'25	
max. Earth dist.	-5265 Aug 12 j 01:39		11.12686 AU	max. Earth dist.	-5259 Oct 14 j 14:19		11.11200 AU
morning rise	-5265 Aug 28 j 23:39	10°529'50		morning rise	-5259 Oct 31 j 17:28	16° Mp 10'56	
retrograde	-5265 Dec 05 j 05:57	17°516'54	2022157	retrograde	-5258 Feb 10 j 04:32	23° M) 12'24	2°34'49
opposition min. Earth dist.	-5264 Feb 12 j 16:24	14° © 01'28 14° © 00'15	9.16577 AU	opposition min. Earth dist.	-5258 Apr 22 j 04:49 -5258 Apr 22 j 21:00	19° m 53'51 19° m 50'52	9.06739 AU
direct	-5264 Feb 12 j 22:59 -5264 Apr 24 j 11:58	14°900°13	9.103// AU	direct			9.06/39 AU
		10 940 33 17°943'19			-5258 Jul 01 j 22:53 -5258 Oct 10 j 04:06	16° M 35'15 23° M 34'42	
evening set	-5264 Aug 05 j 20:57	1/ 3943 19		evening set	-3238 Oct 10 J 04.00	23 IIJ 34 42	
conjunction	-5264 Aug 22 j 13:13	19° 5 38'21	2°06'01	conjunction	-5258 Oct 26 j 14:02	25° m 30'39	1°59'04
minimum elong	-5264 Aug 22 j 13:11	19° 5 38'20	2°06'19	minimum elong	-5258 Oct 26 j 14:05	25° m) 30'40	1°59'08
max. Earth dist.	-5264 Aug 22 j 03:25		11.19545 AU	max. Earth dist.	-5258 Oct 25 j 19:24		11.01419 AU
morning rise	-5264 Sep 08 j 01:47	21° © 32'20		morning rise	-5258 Nov 12 j 01:15	27° Mp 27'06	
retrograde	-5264 Dec 15 j 12:56	28° © 17'22		8	-5258 Dec 05 j 00:55	0∘ ⊽	
opposition	-5263 Feb 23 j 08:37	25° © 02'12	2°41'13	retrograde	-5257 Feb 22 j 09:55	4° ≏ 36'54	
min. Earth dist.	-5263 Feb 23 j 17:38	25°900'33	9.22118 AU	opposition	-5257 May 04 j 10:14	1° Ω 16'55	2°14'28
direct	-5263 May 06 j 08:04	21° 5 642'10		min. Earth dist.	-5257 May 05 j 02:18	1° ≏ 13'56	8.95765 AU
evening set	-5263 Aug 17 j 01:28	28°\$40'50			-5257 May 22 j 03:56	30°R, Mp	
	-5263 Aug 28 j 14:39	$0^{\circ}\Omega$		direct	-5257 Jul 13 j 14:55	27° m 58'01	
					-5257 Sep 01 j 19:48	0∘ ⊽	
conjunction	-5263 Sep 02 j 14:22	0° Ω 34'34	2°17'50	evening set	-5257 Oct 21 j 13:34	5° ₾ 02'06	
minimum elong	-5263 Sep 02 j 14:20	0° Ω 34'33	2°18'07	max. Earth dist.	-5257 Nov 06 j 06:50	6° ჲ 54'31	10.89479 AU
max. Earth dist.	-5263 Sep 02 j 02:21	0° Ω 31′05	11.23621 AU				
morning rise	-5263 Sep 19 j 00:05	2° Ω 27'27		conjunction	-5257 Nov 07 j 01:49	7° ഫ 00'13	1°39'44
retrograde	-5263 Dec 26 j 19:38	9° Ω 12'16		minimum elong	-5257 Nov 07 j 01:52	7° ≏ 00'14	1°39'44
opposition	-5262 Mar 06 j 23:58	5° Ω 57'02	2°52'32	morning rise	-5257 Nov 23 j 16:32	8° ₽ 59'09	
min. Earth dist.	-5262 Mar 07 j 11:04	5° Ω 55'01	9.24786 AU	retrograde	-5256 Mar 06 j 00:19	16° ≏ 18'46	
direct	-5262 May 17 j 22:32	2° Ω 37'41		opposition	-5256 May 15 j 22:04	12° ≏ 57'12	1°48'05
evening set	-5262 Aug 28 j 02:17	9° Ω 33'37		min. Earth dist.	-5256 May 16 j 13:53	12° ≏ 54'14	8.82821 AU
				direct	-5256 Jul 24 j 12:11	9° ≏ 37'48	
conjunction	-5262 Sep 13 j 12:34	11° Ω 26'36		evening set	-5256 Nov 01 j 06:38	16° ≏ 48'01	
minimum elong	-5262 Sep 13 j 12:34	11° Ω 26'35	2°24'51	_			
max. Earth dist.	-5262 Sep 12 j 22:20		11.24797 AU	conjunction	-5256 Nov 17 j 22:05	18° ≏ 48'48	1°15'45
morning rise	-5262 Sep 29 j 20:24	13° Ω 18'59		minimum elong	-5256 Nov 17 j 22:08	18° Ω 48'49	1°15'40
	-5262 Oct 15 j 04:10	15° Ω		max. Earth dist.	-5256 Nov 17 j 04:38		10.75792 AU
retrograde	-5261 Jan 07 j 04:32	20° Ω 05'23	2057140	morning rise	-5256 Dec 04 j 16:54	20° £ 50'41	
opposition	-5261 Mar 18 j 15:44	16° Ω 49'45	2°57'40	retrograde	-5255 Mar 18 j 23:22	28° £ 21'26	1017110
min. Earth dist.	-5261 Mar 19 j 05:24	16° Ω 47'16	9.24521 AU	opposition	-5255 May 28 j 17:04	24° £ 58'10	1°16'10
	-5261 Apr 14 j 06:47	15°R€		min. Earth dist.	-5255 May 29 j 07:10	24° £ 55'30	8.68392 AU
direct	-5261 May 29 j 10:46	13° Ω 30′52		direct	-5255 Aug 05 j 15:34	21° Ω 38'06	
	-5261 Jul 12 j 08:30	15° Ω		evening set	-5255 Nov 13 j 09:11	28° £ 55'56	
evening set	-5261 Sep 08 j 01:15	20° Ω 25′29			-5255 Nov 22 j 03:00	0° M ,	
conjunction	-5261 Sep 24 j 09:47	22° Ω 18'19	2°26'10	conjunction	-5255 Nov 30 j 04:33	0° ጤ 59'48	0°47'43
minimum elong	-5261 Sep 24 j 09:47	$22^{\circ}\Omega_{18'19}$		minimum elong	-5255 Nov 30 j 04:35	0°M59'49	0°47'35
max. Earth dist.	-5261 Sep 23 j 16:48		11.23068 AU	max. Earth dist.	-5255 Nov 29 j 13:57	0°M55'17	10.60893 AU
morning rise	-5261 Oct 10 j 16:58	24°Ω10'49	11.23000 AU	morning rise	-5255 Dec 17 j 03:53	3°M 05'00	10.000/J AU
morning risc	-5261 Dec 14 j 01:13	0°m)		retrograde	-5254 Apr 01 j 10:25	10°M47'59	
retrograde	-5260 Jan 18 j 14:01	1°1000'31		opposition	-5254 Jun 10 j 20:22	7°M22'56	0°39'38
	-5260 Feb 24 j 00:21	30°RΩ		min. Earth dist.	-5254 Jun 11 j 07:29	7°M20'48	8.53086 AU
opposition	-5260 Mar 29 j 08:56	27° Ω 44'11	2°56'28	direct	-5254 Aug 18 j 03:48	4°ML02'01	
min. Earth dist.	-5260 Mar 30 j 00:44	27° Ω 41'18	9.21352 AU	evening set	-5254 Nov 25 j 23:06	11°M28'47	
direct	-5260 Jun 08 j 21:22	24°Ω25'34	-	<u>5</u>	- <i>j</i> ==0		
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•	cal year style is used: Th		•	, , , , , , , , , , , , , , , , , , ,	5255 BCE in historical c		50 13
conjunction	-5254 Dec 12 j 22:44	13°MJ36'01		evening set	-5247 Feb 18 j 20:24	5° ≈ 38'03	
minimum elong	-5254 Dec 12 j 22:45	13°MJ36'01	0°16'24	C	,		
max. Earth dist.	-5254 Dec 12 j 11:18	13°M32'26	10.45434 AU	conjunction	-5247 Mar 08 j 19:20	8° ≈ 01'08	-2°20'24
	-5254 Dec 24 j 02:30	15° M ₊		minimum elong	-5247 Mar 08 j 19:19	8° ≈ 01'08	2°20'39
morning rise	-5254 Dec 30 j 02:58	15°M44'47		max. Earth dist.	-5247 Mar 09 j 10:02	8° ≈ 06'03	9.84037 AU
retrograde	-5253 Apr 15 j 09:21	23°M40'34		morning rise	-5247 Mar 26 j 21:11	10° ≈ 25'11	
desc. node	-5253 Jun 22 j 01:43	20°M24'28		•	-5247 May 03 j 19:56	15° ≈	
opposition	-5253 Jun 24 j 08:16	20°ML13'48	-0°00'15	retrograde	-5247 Jul 12 j 09:10	19° ≈ 05'29	
min. Earth dist.	-5253 Jun 24 j 15:55	20°ML12'18	8.37612 AU	opposition	-5247 Sep 17 j 05:06	15° ≈ 33'49	-2°59'41
direct	-5253 Aug 30 j 22:36	16°M51'52		min. Earth dist.	-5247 Sep 16 j 16:39	15° ≈ 36′26	7.84197 AU
evening set	-5253 Dec 09 j 02:09	24°M28'43			-5247 Sep 23 j 23:00	15° R ≈	
•	·			direct	-5247 Nov 21 j 23:47	12° ≈ 04'44	
conjunction	-5253 Dec 26 j 06:10	26°M39'24	-0°16'25		-5246 Jan 18 j 01:06	15° ≈	
minimum elong	-5253 Dec 26 j 06:09	26°M39'24	0°16'39	evening set	-5246 Mar 06 j 15:33	20° ≈ 32'13	
max. Earth dist.	-5253 Dec 25 j 21:46	26°M36'44	10.30165 AU		· ·		
morning rise	-5252 Jan 12 j 15:23	28°M51'49		conjunction	-5246 Mar 24 j 16:51	22° ≈ 55'43	-2°23'26
	-5252 Jan 21 j 20:29	0° ∡ ¹		minimum elong	-5246 Mar 24 j 16:52	22° ≈ 55'43	2°23'38
retrograde	-5252 Apr 28 j 18:20	7° ∡ 100'20		max. Earth dist.	-5246 Mar 25 j 10:48	23° ≈ 01'42	9.84896 AU
opposition	-5252 Jul 07 j 04:37	3° ∡ 31'58	-0°41'37	morning rise	-5246 Apr 11 j 19:45	25° ≈ 19'44	
min. Earth dist.	-5252 Jul 07 j 09:04	3° ∡ ³31′05	8.22764 AU	C	-5246 May 20 j 18:35	0°) €	
direct	-5252 Sep 12 j 03:03	0° ∡ ¹08'51		retrograde	-5246 Jul 27 j 11:20	3° ¥ 55'00	
evening set	-5252 Dec 21 j 19:06	7° ∡ ¹56'34		opposition	-5246 Oct 01 j 23:15	0°) 24′01	-2°57'19
		, , , , , , , , , , , , , , , , , , , ,		min. Earth dist.	-5246 Oct 01 j 08:56		7.87028 AU
conjunction	-5251 Jan 08 j 03:27	10° ∡ 10'38	-0°49'27	mm. Barm and	-5246 Oct 06 j 17:56	30°R≈	7.07020110
minimum elong	-5251 Jan 08 j 03:25	10° х 10′37		direct	-5246 Dec 07 j 01:13	26°≈54'16	
max. Earth dist.	-5251 Jan 07 j 23:02		10.15905 AU		-5245 Feb 04 j 07:37	0° ∀	
morning rise	-5251 Jan 25 j 17:22	12° × ⁷ 26'31	10.15705 110	evening set	-5245 Mar 22 j 10:20	5° ∺ 21'40	
retrograde	-5251 May 13 j 11:47	20° × ⁷ 46'54		evening sec	32 13 War 22 j 10.20	3 7(21 10	
opposition	-5251 Jul 21 j 09:12	17° х 17'10	-1°22'05	conjunction	-5245 Apr 09 j 13:12	7°) 44'41	-2°17'00
min. Earth dist.	-5251 Jul 21 j 10:14		8.09381 AU	minimum elong	-5245 Apr 09 j 13:15	7°)(44'42	
direct	-5251 Sep 25 j 19:24	13° × 752'47	0.07301 710	max. Earth dist.	-5245 Apr 10 j 09:14	7°) 51'18	9.89699 AU
evening set	-5250 Jan 05 j 01:56	21° × ⁷ 51'24		morning rise	-5245 Apr 27 j 16:17	10° ∺ 07'43).0)0)) / NO
evening sec	3230 Juli 03 j 01.30	21 7 3121		retrograde	-5245 Aug 11 j 04:51	18°) 34'00	
conjunction	-5250 Jan 22 j 14:31	24° ∡ °08'36	-1°20'35	opposition	-5245 Oct 16 j 13:00	15° ∺ 04'08	-2°43'20
minimum elong	-5250 Jan 22 j 14:27	24° × ⁷ 08'35		min. Earth dist.	-5245 Oct 15 j 21:53	15° ₩ 07'18	7.93655 AU
max. Earth dist.	-5250 Jan 22 j 15:00		10.03491 AU	direct	-5245 Dec 22 j 02:10	11°) 34'04	7.93033 110
morning rise	-5250 Feb 09 j 08:35	26°×727'34	10.05471710	evening set	-5244 Apr 06 j 00:09	19° ¥ 57'47	
morning rise	-5250 Mar 10 j 11:58	0°중		evening set	3244 Apr 00 J 00.07	1) (3) 4)	
retrograde	-5250 May 28 j 12:08	4° る 57'59		conjunction	-5244 Apr 24 j 03:35	22° ∺ 19'25	-2°01'51
opposition	-5250 Aug 04 j 20:44	1°る27'08	-1°58'53	minimum elong	-5244 Apr 24 j 03:39	22° X 19'26	2°01'55
min. Earth dist.	-5250 Aug 04 j 18:06		7.98265 AU	max. Earth dist.	-5244 Apr 25 j 00:15	22° H 26'11	9.98143 AU
iiiii. Lattii dist.	-5250 Aug 23 j 04:18	30°R ✓	7.90203710	morning rise	-5244 May 12 j 05:54	24°\(\frac{1}{40}\)'36	7.70143710
direct	-5250 Oct 09 j 21:30	28° × 701'26		morning risc	-5244 Jun 27 j 20:27	0° Υ	
direct	-5250 Nov 25 j 03:58	0°る		retrograde	-5244 Aug 24 j 12:05	2° Υ '54'58	
evening set	-5249 Jan 19 j 22:07	6° ප 10'18		retrograde	-5244 Oct 23 j 02:04	30° R ₩	
evening set	-324) Jan 1) j 22.07	0 01010		opposition	-5244 Oct 29 j 20:05	29° ¥ 26'32	2010/10
conjunction	-5249 Feb 06 j 14:39	8° ප 30'09	-10/17/31	min. Earth dist.	-5244 Oct 29 j 05:10	29°\(\frac{1}{2}\)29'38	
minimum elong	-5249 Feb 06 j 14:35		1°47'48	direct	-5243 Jan 04 j 23:48	25°\(\frac{1}{2}\)56'30	0.03030710
max. Earth dist.	-5249 Feb 06 j 20:21	8° ろ 32'03	9.93684 AU	ancet	-5243 Mar 16 j 04:08	0°Υ	
morning rise	-5249 Feb 24 j 12:06	10°පි51'36).)300 i iie	evening set	-5243 Apr 21 j 05:30	4° Υ 13'32	
retrograde	-5249 Jun 12 j 18:04	19° る 29'06		evening set	3243 Apr 21 J 03.30	7 11332	
opposition	-5249 Aug 19 j 13:15	15° る 57'31	-2°29'04	conjunction	-5243 May 09 j 08:23	6° Ƴ 33'01	-1°39'31
min. Earth dist.	-5249 Aug 19 j 07:01	15° ප් 58'48	7.90080 AU	minimum elong	-5243 May 09 j 08:27	6° Υ 33'02	
direct	-5249 Oct 24 j 07:51	13° ろ 30'30	1.50000 AC	max. Earth dist.	-5243 May 10 j 04:04		10.09645 AU
evening set	-5248 Feb 04 j 05:24	12 3 3030 20° る 48'06		morning rise	-5243 May 27 j 08:58	8° Υ 51'39	10.09043 AO
evening set	-3248 FC0 04 J 03.24	20 04800		retrograde	-5243 Sep 07 j 07:53	16° Υ 52'18	
conjunction	-5248 Feb 22 j 01:24	23° る 09'57	-2°08'04	opposition	-5243 Nov 12 j 18:51	13° Υ 25'34	-1°47'36
minimum elong	-5248 Feb 22 j 01:24 -5248 Feb 22 j 01:21	23° る 09'56		min. Earth dist.	-5243 Nov 12 j 18.31 -5243 Nov 12 j 04:39	13 γ 23 34 13° γ 28'28	8.16301 AU
max. Earth dist.	-5248 Feb 22 j 11:58	23°る13'28	9.87067 AU	direct	-5243 Nov 12 j 04:39 -5242 Jan 19 j 15:25	9° Υ 55'54	0.10301 AU
morning rise	-5248 Mar 11 j 01:26	25° る 33'06	7.07007 AU	evening set	-5242 Jan 19 j 13.23 -5242 May 05 j 23:47	9 γ 33 34 18° Υ 04'04	
morning 115¢	v	23° ⊘ 33'06		evening set	-3242 Iviay US J 23.4/	10 1 04 04	
ratrogrado	-5248 Apr 16 j 20:27 -5248 Jun 27 j 02:09	0°≈ 4°≈14'03		conjugation	5242 May 24 : 01:00	20° Y 20'48	1011150
retrograde	•	4°≈14'03 0°≈42'10	20/10/50	conjunction minimum elong	-5242 May 24 j 01:00	20° γ ′20′48 20° γ ′20′49	1°11'58
opposition min. Earth dist.	-5248 Sep 02 j 08:51 -5248 Sep 01 j 23:12	0°≈42′10 0°≈44′11	7.85281 AU	max. Earth dist.	-5242 May 24 j 01:03 -5242 May 24 j 18:41		10.23420 AU
mm. Earm alst.	-5248 Sep 01 j 23:12 -5248 Sep 10 j 20:08	0°≈44°11 30°Rる	1.03201 AU	max. Earth dist.	-5242 May 24 j 18:41 -5242 Jun 10 j 22:49	20°° \ ′26'25 22° \ ′36'21	10.23420 AU
direct	-5248 Sep 10 j 20:08 -5248 Nov 07 j 01:13	30°KO 27° る 14'00		morning rise	-5242 Jun 10 j 22:49	0° 8	
direct	•	2/° ⊘ 14′00		ratrograda	0 3	0° 8 22'46	
	-5247 Jan 01 j 06:00	U ~~		retrograde	-5242 Sep 20 j 15:33	0 02240	

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 14 Attention, astronomical year style is used: The year -5242 in astronomical counting style is the year 5243 BCE in historical counting style.

Attention, astronomi	cal year style is used: Th	e year -5242 i	n astronomical cou	inting style is the year	5243 BCE in historical co	ounting style.	6
	-5242 Oct 10 j 23:55	30° ₹Ƴ		max. Earth dist.	-5236 Aug 06 j 15:09	3° © 55'03	11.08241 AU
opposition	-5242 Nov 26 j 08:45	26° Ƴ 57'51	-1°10'53	morning rise	-5236 Aug 23 j 12:00	5° 9 52'26	
min. Earth dist.	-5242 Nov 25 j 19:36	27° Y 00'30	8.30815 AU	retrograde	-5236 Nov 29 j 17:01	12°540'51	
direct	-5241 Feb 02 j 23:55	23° Y 28'54		opposition	-5235 Feb 06 j 23:02	9° 5 24'47	2°14'35
	-5241 May 08 j 03:53	9° 8		min. Earth dist.	-5235 Feb 07 j 02:02	9° 5 24'14	9.12942 AU
evening set	-5241 May 20 j 05:29	1° 8 26'54		direct	-5235 Apr 19 j 18:03	6° © 03'10	
				evening set	-5235 Aug 01 j 07:34	13° © 07'54	
conjunction	-5241 Jun 07 j 03:52	3° 8 40'26					
minimum elong	-5241 Jun 07 j 03:54	3° 8 40'27		conjunction	-5235 Aug 18 j 01:51	15°903'40	1°59'17
max. Earth dist.	-5241 Jun 07 j 19:11		10.38590 AU	minimum elong	-5235 Aug 18 j 01:48	15° © 03'39	
morning rise	-5241 Jun 24 j 21:53	5° 8 52'34		max. Earth dist.	-5235 Aug 17 j 20:04		11.16830 AU
retrograde	-5241 Oct 03 j 11:52	13° 8 25'17		morning rise	-5235 Sep 03 j 15:48	16°958'16	
opposition	-5241 Dec 09 j 13:32	10° 8 02'11		retrograde	-5235 Dec 11 j 00:51	23° © 43'37	
min. Earth dist.	-5241 Dec 09 j 01:55		8.46319 AU	opposition	-5234 Feb 18 j 15:41	20°528'14	
direct	-5240 Feb 16 j 22:29	6° 8 34'13		min. Earth dist.	-5234 Feb 18 j 22:10	20° © 27'02	9.20289 AU
evening set	-5240 Jun 01 j 22:07	14° 8 21'34		direct	-5234 May 01 j 13:47	17° © 07'45	
	-5240 Jun 07 j 05:15	15° 8		evening set	-5234 Aug 12 j 13:57	24° © 07'40	
conjunction	-5240 Jun 19 j 16:42	16° 8 31'42	-0°09'30	conjunction	-5234 Aug 29 j 04:14	26°901'50	2°13'13
minimum elong	-5240 Jun 19 j 16:43	16° 8 31'43		minimum elong	-5234 Aug 29 j 04:12	26°501'49	
behind sun begin	-5240 Jun 19 j 10:40	16° 8 29'52		max. Earth dist.	-5234 Aug 28 j 18:38		11.22759 AU
behind sun end	-5240 Jun 19 j 22:45	16° 8 33'33		morning rise	-5234 Sep 14 j 15:03	27°955'03	
max. Earth dist.	-5240 Jun 20 j 05:22		10.54304 AU	. <i>8</i>	-5234 Oct 03 j 18:22	$0^{\circ}\Omega$	
morning rise	-5240 Jul 07 j 06:10	18° 8 40'17		retrograde	-5234 Dec 22 j 05:10	4° Ω 39'14	
asc. node	-5240 Oct 10 j 04:25	25° 8 59'14		opposition	-5233 Mar 02 j 06:57	1° Ω 24'09	2°48'12
retrograde	-5240 Oct 14 j 23:38	26° 8 00'29		min. Earth dist.	-5233 Mar 02 j 16:41	1° Ω 22'23	9.24865 AU
opposition	-5240 Dec 21 j 09:41	22° 8 39'10	0°07'27		-5233 Mar 22 j 02:54	30° ℝ ∽	
min. Earth dist.	-5240 Dec 21 j 00:39	22° 8 40'56	8.61995 AU	direct	-5233 May 13 j 05:05	28° © 04'39	
direct	-5239 Mar 01 j 09:55	19° 8 12'22			-5233 Jul 02 j 16:25	$0^{\circ}\Omega$	
evening set	-5239 Jun 15 j 01:58	26° 8 49'15		evening set	-5233 Aug 23 j 15:44	5° Ω 01′08	
conjunction	-5239 Jul 02 j 15:58	28° 8 56'00		conjunction	-5233 Sep 09 j 02:54	6° Ω 54'13	
minimum elong	-5239 Jul 02 j 15:57	28° 8 55'59		minimum elong	-5233 Sep 09 j 02:53	6° Ω 54'13	
max. Earth dist.	-5239 Jul 03 j 01:18		10.69765 AU	max. Earth dist.	-5233 Sep 08 j 14:08		11.25851 AU
	-5239 Jul 11 j 11:51	Π $^{\circ}$ 0		morning rise	-5233 Sep 25 j 11:34	8° Ω 46'38	
morning rise	-5239 Jul 20 j 00:29	1° Ⅱ 01'07			-5233 Dec 08 j 02:06	15° Ω	
retrograde	-5239 Oct 27 j 01:41	8° Ⅱ 10′25		retrograde	-5232 Jan 02 j 12:41	15° Ω 31'32	
opposition	-5238 Jan 02 j 22:01	4° Ⅱ 50'46			-5232 Jan 28 j 08:55	15°R Ω	
min. Earth dist.	-5238 Jan 02 j 16:30		8.77089 AU	opposition	-5232 Mar 12 j 21:48	12° Ω 16′23	2°56'01
direct	-5238 Mar 14 j 11:49	1° Ⅱ 25'13		min. Earth dist.	-5232 Mar 13 j 09:25	12° Ω 14'17	9.26520 AU
evening set	-5238 Jun 27 j 18:03	8° Ⅱ 52'23		direct	-5232 May 23 j 19:26	8° Ω 57'39	
					-5232 Aug 25 j 19:58	15° Ω	
conjunction	-5238 Jul 15 j 02:53	10° I 55'51	0°51'20	evening set	-5232 Sep 02 j 14:52	15° Ω 52'05	
minimum elong	-5238 Jul 15 j 02:50	10° II 55'50	0°51'36	max. Earth dist.	-5232 Sep 18 j 09:47	17° {\} 40'36	11.26000 AU
max. Earth dist.	-5238 Jul 15 j 07:35		10.84274 AU			_	
morning rise	-5238 Aug 01 j 06:22	12° ∏ 57'44		conjunction	-5232 Sep 19 j 00:04	17° Ω 44'44	2°26'02
retrograde	-5238 Nov 07 j 19:07	19° Ⅱ 58'04		minimum elong	-5232 Sep 19 j 00:04	17° Ω 44'43	2°26'15
opposition	-5237 Jan 15 j 03:31	16° Ⅲ 39'53	1°19'16	morning rise	-5232 Oct 05 j 07:22	19° Ω 36'55	
min. Earth dist.	-5237 Jan 15 j 01:20	16° Ⅱ 40'18	8.90953 AU	retrograde	-5231 Jan 12 j 21:56	26° Ω 24'12	
direct	-5237 Mar 27 j 06:39	13° Ⅱ 15'39		opposition	-5231 Mar 24 j 13:27	23° Ω 08'40	2°57'36
evening set	-5237 Jul 09 j 23:24	20° Ⅱ 34'07		min. Earth dist.	-5231 Mar 25 j 02:34	23° Ω 06'18	9.25187 AU
				direct	-5231 Jun 04 j 05:27	19° Ω 50'30	
conjunction	-5237 Jul 27 j 03:00	22° I I34'35	1°17'52	evening set	-5231 Sep 13 j 13:07	26° Ω 44'17	
minimum elong	-5237 Jul 27 j 02:57	22° Ⅱ 34'34	1°18'09				
max. Earth dist.	-5237 Jul 27 j 03:16		10.97259 AU	conjunction	-5231 Sep 29 j 21:14	28° Ω 37'04	
morning rise	-5237 Aug 13 j 01:37	24° Ⅱ 33'35		minimum elong	-5231 Sep 29 j 21:15	28° Ω 37'04	
	-5237 Oct 08 j 15:24	0°9		max. Earth dist.	-5231 Sep 29 j 05:17		11.23186 AU
retrograde	-5237 Nov 19 j 08:02	1°526'57			-5231 Oct 11 j 20:20	0° M)	
.	-5236 Jan 01 j 05:12	30°RⅡ	1040104	morning rise	-5231 Oct 16 j 04:15	0° Mp 29'38	
opposition	-5236 Jan 27 j 03:27	28° I 109'58	1°49'24	retrograde	-5230 Jan 24 j 11:30	7° Mp 21'03	2052112
min. Earth dist.	-5236 Jan 27 j 03:45	28° Ⅱ 09'54	9.03053 AU	opposition	-5230 Apr 05 j 07:37	4° Mp 04'49	2°52'48
direct	-5236 Apr 07 j 15:59	24° Ⅱ 47'04		min. Earth dist.	-5230 Apr 05 j 22:36	4° Mp 02'05	9.20891 AU
	-5236 Jul 03 j 00:03	0.22		direct	-5230 Jun 15 j 16:14	0° Mp 46'56	
evening set	-5236 Jul 20 j 19:14	1°958'00		evening set	-5230 Sep 24 j 12:05	7° Mp 41'30	
conjunction	-5236 Aug 06 j 17:59	3° 9 55'53	1°40'42	conjunction	-5230 Oct 10 j 20:01	9° m 35'00	2°17'56
minimum elong	-5236 Aug 06 j 17:56		1°40'59	minimum elong	-5230 Oct 10 j 20:01	9° mg 35'01	2°18'03
mmmum ciong	5250 Mug 00 j 17.50	J -32 JZ	1 70 37	minimum ciong	3230 Oct 10 j 20.03) US CC VIII	2 10 05

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5230 in astronomical counting style is the year 5231 BCE in historical counting style. -5230 Oct 10 j 01:43 9° m 29'40 11.17478 AU minimum elong -5224 Dec 19 j 11:49 20°M50'54 0°01'24 max. Earth dist. behind sun begin -5230 Oct 27 j 04:02 11° m 28'36 -5224 Dec 19 j 04:41 morning rise 20°M,48'40 18° **m** 25'48 -5229 Feb 05 j 05:22 -5224 Dec 19 j 18:56 behind sun end 20°M53'08 retrograde -5229 Apr 17 j 05:17 15°Mp08'31 2°41'38 max. Earth dist. -5224 Dec 19 j 00:13 20°M47'15 10.38004 AU opposition -5229 Apr 17 j 21:57 -5223 Jan 05 j 18:39 min. Earth dist. 15° Mp 05'29 9.13737 AU morning rise 23°M01'27 -5229 Jun 27 j 03:44 0°**∡**7 direct 11° m 50'40 -5223 Mar 17 j 22:48 -5229 Oct 05 j 13:43 1°**х** 03′25 evening set 18° m/47'31 retrograde -5223 Apr 22 j 10:02 -5223 May 28 j 08:02 30°RM conjunction -5229 Oct 21 j 22:38 20° Mp 42'202°05'59 opposition -5223 Jul 01 j 04:18 27°M35'43 -0°22'31 minimum elong -5229 Oct 21 j 22:41 20° Mp 42'212°06'04 min. Earth dist. -5223 Jul 01 j 12:16 27° M $_{3}4'09$ 8.30031 AU max. Earth dist. -5229 Oct 21 j 03:30 20° Mp 36'4211.09003 AU direct -5223 Sep 06 j 11:54 24°M13'00 -5229 Nov 07 j 08:39 morning rise 22° m/37'33 -5223 Nov 30 j 03:52 0°×7 -5223 Dec 15 j 19:34 retrograde -5228 Feb 17 j 05:41 29° Mp 42'13evening set 1° 🗷 55'04 opposition -5228 Apr 28 j 07:20 26° Mp 23'35 2°24'08 min. Earth dist. -5228 Apr 29 j 00:21 26° Mp 20'279.03884 AU conjunction -5222 Jan 02 j 01:57 4°**₹**07'30 -0°34'18 direct -5228 Jul 07 j 18:54 23° m 05'29 minimum elong -5222 Jan 02 j 01:56 4°**х**¹07′29 0°34'34 -5228 Oct 14 j 22:29 0∘**⊽** max. Earth dist. -5222 Jan 01 j 18:54 4° ₹ 05'13 10.22540 AU evening set -5228 Oct 15 j 19:49 0°₽06'12 morning rise -5222 Jan 19 j 13:32 6°**х** 21′40 retrograde -5222 May 06 j 22:55 14°**∡**³36′18 conjunction -5228 Nov 01 j 06:52 2°**₽**02'58 1°48'55 opposition -5222 Jul 15 j 04:36 11°**₹**06'52 -1°03'38 min. Earth dist. minimum elong -5228 Nov 01 j 06:55 2°**2**02'59 1°48'57 -5222 Jul 15 j 08:13 11°**∡**°06′08 8.15230 AU max. Earth dist. -5228 Oct 31 i 12:05 1°**2**57'22 10.97958 AU direct -5222 Sep 19 j 22:26 7°**х** 42'45 morning rise -5228 Nov 17 j 19:41 4°**₽**00'22 evening set -5222 Dec 29 j 19:24 15°**х** 36′00 retrograde -5227 Feb 28 i 16:21 11°**£**14'09 opposition -5227 May 10 j 15:18 7°**£**53'58 2°00'30 conjunction -5221 Jan 16 j 06:08 17°**∡**751'48 -1°06'32 -5227 May 11 j 07:31 -5221 Jan 16 j 06:05 17°**∡**751'47 1°06'49 min. Earth dist. 7°**♀**50'57 8.91612 AU minimum elong -5227 Jul 19 j 13:31 max. Earth dist. -5221 Jan 16 j 03:41 17°**₹**51'00 10.08524 AU 4°£35'26 direct -5227 Oct 27 j 08:34 11°**£**41'35 -5221 Feb 02 j 22:10 20°**₹**09'22 morning rise evening set retrograde -5221 May 21 j 21:20 28°**₹**35'21 25°**₹**04'29 -1°42'28 -5227 Nov 12 j 22:24 13°**△**40'48 1°27'02 -5221 Jul 29 j 12:38 conjunction opposition -5221 Jul 29 j 12:06 25°**尽**04'36 8.02327 AU -5227 Nov 12 j 22:27 13°**₽**40'49 1°27'00 min. Earth dist. minimum elong 21°**х** 38′55 max. Earth dist. -5227 Nov 12 j 03:56 13°**೨**35'13 10.84722 AU -5221 Oct 03 j 17:43 direct -5227 Nov 29 j 14:56 15°**£**40'57 -5220 Jan 13 j 09:17 29°**х** 43′12 morning rise evening set -5226 Mar 13 j 11:24 -5220 Jan 15 j 13:04 0°ರ retrograde 23°**♀**05'23 -5226 May 23 j 06:23 opposition 19°**≏**43'26 1°31'08 -5220 Jan 31 j 00:01 2°る01'59 -1°35'40 min. Earth dist. -5226 May 23 j 21:32 19°**≏**40'34 8.77418 AU conjunction -5220 Jan 30 j 23:57 direct -5226 Jul 31 j 12:17 16°**₽**24'11 minimum elong 2°る01'57 1°35'58 evening set -5226 Nov 08 j 06:01 23°**△**37'21 max. Earth dist. -5220 Jan 31 j 02:13 2°る02'42 9.96795 AU morning rise -5220 Feb 17 j 19:52 4°る22'27 conjunction -5226 Nov 24 j 23:18 25°**△**39'29 1°00'50 retrograde -5220 Jun 05 j 02:24 12°る57'24 -5226 Nov 24 j 23:20 25°**♀**39'30 1°00'44 opposition -5220 Aug 12 j 02:55 9°**ප**25'31 -2°16'06 minimum elong -5226 Nov 24 j 05:30 25°**♀**34'02 10.69869 AU min. Earth dist. -5220 Aug 11 j 22:36 9°る26'25 7.92128 AU max. Earth dist. -5226 Dec 11 j 20:22 27°**-**42′50 -5220 Oct 16 j 23:15 5°₹58'31 morning rise direct -5226 Dec 31 j 14:27 -5219 Jan 27 j 11:33 14°る12'47 evening set retrograde -5225 Mar 26 j 16:05 5°M19′05 -5219 Feb 14 i 05:54 16°る33'58 -1°59'27 opposition -5225 Jun 05 i 05:15 1°M55'15 0°56'42 conjunction min. Earth dist. -5225 Jun 05 j 19:06 1°M52'36 8.61941 AU minimum elong -5219 Feb 14 i 05:50 16°る33'56 1°59'44 -5225 Jul 02 i 00:11 max. Earth dist. -5219 Feb 14 i 12:50 16°る36'16 9.88135 AU direct -5225 Aug 12 j 19:35 28°**♀**35'01 morning rise -5219 Mar 04 i 04:53 18°**る**56'38 -5225 Sep 22 j 08:29 0°M retrograde -5219 Jun 20 j 10:29 27°る37'12 -5225 Nov 20 j 13:54 5°M56'38 -5219 Aug 26 j 21:42 24°る04'46 -2°41'39 evening set opposition min. Earth dist. -5219 Aug 26 j 14:04 24°る06'22 7.85326 AU -5225 Dec 07 j 11:18 8°ML02'03 0°31'05 -5219 Oct 31 j 14:04 20°る36'29 conjunction direct 28°る58'38 minimum elong -5225 Dec 07 j 11:19 8°ML02'04 0°30'55 evening set -5218 Feb 11 j 23:29 -5218 Feb 19 j 17:13 max. Earth dist. -5225 Dec 06 j 19:43 7°ML57'12 10.54054 AU 0°≈ -5225 Dec 24 j 13:17 10° ML 08'56morning rise -5224 Feb 07 j 01:00 15°M⋅ conjunction -5218 Mar 01 j 21:03 1°≈21'29 -2°15'48 17°M57'51 -5218 Mar 01 j 21:01 2°16'03 retrograde -5224 Apr 08 j 07:48 minimum elong 1°≈21'28 -5224 Jun 11 j 11:57 -5218 Mar 02 j 08:43 9.83159 AU 15°RM max. Earth dist. 1°≈25'23 -5224 Jun 17 j 12:30 14°M32'04 0°18'18 opposition morning rise -5218 Mar 19 j 22:23 3°≈45'30 -5218 Jul 05 j 18:19 min. Earth dist. -5224 Jun 18 j 00:04 14°M29'49 8.45883 AU retrograde 12°≈27'30 direct -5224 Aug 24 j 11:01 11°M10'39 opposition -5218 Sep 10 j 18:22 8°≈55'02 -2°56'46 -5224 Oct 31 j 06:06 15°M⋅ min. Earth dist. -5218 Sep 10 j 07:46 8°**≈**57'15 7.82397 AU evening set -5224 Dec 02 j 09:57 18°M42'01 direct -5218 Nov 15 j 11:50 5°≈25'42 desc. node -5224 Dec 06 j 10:06 19°M11'56 evening set -5217 Feb 27 j 17:37 13°≈52'48 -5217 Mar 08 j 05:00 15°**≈**

-5224 Dec 19 j 11:49 20°M 50'54 -0°01'11

conjunction

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 16 Attention, astronomical year style is used: The year -5217 in astronomical counting style is the year 5218 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	ie year -5217 i	in astronomical co	unting style is the year	5218 BCE in historical c	ounting style.	
conjunction	-5217 Mar 17 j 17:52	16° ≈ 16′27	-2°23'15		-5211 Jul 17 j 09:43	15° 8	
minimum elong	-5217 Mar 17 j 17:52	16° ≈ 16′27	2°23'28	retrograde	-5211 Oct 09 j 19:04	20° 8 34'38	
max. Earth dist.	-5217 Mar 18 j 09:41	16° ≈ 21'45	9.82235 AU	opposition	-5211 Dec 16 j 00:21	17° 8 12'53	-0°10'17
morning rise	-5217 Apr 04 j 20:39	18° ≈ 40′51		min. Earth dist.	-5211 Dec 15 j 14:06	17° 8 14'55	8.55145 AU
retrograde	-5217 Jul 20 j 22:11	27° ≈ 19'45			-5210 Jan 15 j 15:04	15° ₹ 8	
opposition	-5217 Sep 25 j 14:06	23° ≈ 47'47	-3°00'02	direct	-5210 Feb 23 j 16:19	13° 8 45'55	
min. Earth dist.	-5217 Sep 25 j 00:52	23° ≈ 50'35	7.83555 AU	asc. node	-5210 Mar 25 j 04:56	14° 8 29'24	
direct	-5217 Nov 30 j 13:20	20° ≈ 17'43			-5210 Apr 03 j 11:51	15° 8	
evening set	-5216 Mar 14 j 13:17	28° ≈ 46′16		evening set	-5210 Jun 09 j 13:43	21° 8 27'52	
	-5216 Mar 23 j 21:29	0° ∀					
				conjunction	-5210 Jun 27 j 05:48	23° 8 36'10	0°07'51
conjunction	-5216 Apr 01 j 15:32	1° ∺ 09'50		minimum elong	-5210 Jun 27 j 05:47	23° 8 36'10	0°08'05
minimum elong	-5216 Apr 01 j 15:34	1° ∺ 09'50	2°21'19	behind sun begin	-5210 Jun 26 j 23:24	23° 8 34'14	
max. Earth dist.	-5216 Apr 02 j 10:37	1° ∺ 16′11	9.85442 AU	behind sun end	-5210 Jun 27 j 12:10	23° 8 38'05	
morning rise	-5216 Apr 19 j 18:52	3° ∺ 33'39		max. Earth dist.	-5210 Jun 27 j 16:29		10.63246 AU
retrograde	-5216 Aug 03 j 19:08	12° 米 05′12		morning rise	-5210 Jul 14 j 16:48	25° 8 42'53	
opposition	-5216 Oct 09 j 06:27	8°) 34'14	-2°51'16		-5210 Aug 23 j 10:17	Π °0	
min. Earth dist.	-5216 Oct 08 j 15:08	8°) 37′27	7.88724 AU	retrograde	-5210 Oct 22 j 00:54	2° Ⅱ 57'09	
direct	-5216 Dec 14 j 14:41	5°) 03′49			-5210 Dec 23 j 18:53	30° ₹ 8	
evening set	-5215 Mar 30 j 05:50	13° ¥ 30′09		opposition	-5210 Dec 28 j 16:38	29° 8 37'12	0°28'15
				min. Earth dist.	-5210 Dec 28 j 08:37	29° 8 38'45	8.70938 AU
conjunction	-5215 Apr 17 j 09:15	15° ¥ 52'43	-2°09'53	direct	-5209 Mar 09 j 00:25	26° 8 11'33	
minimum elong	-5215 Apr 17 j 09:19	15°) 52'44	2°09'58		-5209 May 19 j 06:54	$\Pi^{\circ}0$	
max. Earth dist.	-5215 Apr 18 j 06:27	15° ¥ 59'42	9.92554 AU	evening set	-5209 Jun 22 j 11:33	3° Ⅱ 43'14	
morning rise	-5215 May 05 j 12:14	18° ¥ 15′02					
retrograde	-5215 Aug 18 j 08:01	26° ¥ 35'49		conjunction	-5209 Jul 09 j 22:46	5° Ⅱ 48′08	0°38'18
opposition	-5215 Oct 23 j 16:59	23° ¥ 06′17	-2°31'35	minimum elong	-5209 Jul 09 j 22:45	5° Ⅱ 48'07	0°38'33
min. Earth dist.	-5215 Oct 23 j 00:29	23° ¥ 09'43	7.97538 AU	max. Earth dist.	-5209 Jul 10 j 05:58	5° Ⅱ 50'17	10.78571 AU
direct	-5215 Dec 29 j 13:46	19° ¥ 35'53		morning rise	-5209 Jul 27 j 04:38	7° Ⅱ 51'27	
evening set	-5214 Apr 14 j 15:46	27°) 56'47		retrograde	-5209 Nov 02 j 23:17	14° Ⅱ 55'45	
Č	-5214 Apr 30 j 13:28	$0^{\circ}\Upsilon$		opposition	-5208 Jan 10 j 01:31	11° Ⅱ 37'22	1°04'11
	1 3			min. Earth dist.	-5208 Jan 09 j 20:39	11° Ⅱ 38'18	8.85662 AU
conjunction	-5214 May 02 j 19:18	0° Υ 17'31	-1°50'36	direct	-5208 Mar 20 j 23:00	8° Ⅱ 13'03	
minimum elong	-5214 May 02 j 19:22	0° Υ 17'33		evening set	-5208 Jul 03 j 22:02	15° Ⅲ 35'22	
max. Earth dist.	-5214 May 03 j 17:11		10.03058 AU	8			
morning rise	-5214 May 20 j 20:53	2° Y '37'34		conjunction	-5208 Jul 21 j 04:10	17° Ⅱ 37'08	1°06'16
retrograde	-5214 Sep 01 j 10:36	10° Ƴ 45'14		minimum elong	-5208 Jul 21 j 04:08	17° Ⅱ 37'07	1°06'32
opposition	-5214 Nov 06 j 19:54	7° Υ 17'28	-2°03'01	max. Earth dist.	-5208 Jul 21 j 07:28	17° Ⅱ 38'06	10.92446 AU
min. Earth dist.	-5214 Nov 06 j 03:35		8.09388 AU	morning rise	-5208 Aug 07 j 04:53	19° Ⅲ 37′21	
direct	-5213 Jan 13 j 07:55	3° Y '47'30		retrograde	-5208 Nov 13 j 15:40	26° Ⅲ 33'40	
evening set	-5213 Apr 29 j 15:53	12° Y ′00'24		opposition	-5207 Jan 21 j 04:07	23° Ⅱ 16'38	1°36'20
Č	1 3			min. Earth dist.	-5207 Jan 21 j 03:24	23° Ⅱ 16'47	8.98646 AU
conjunction	-5213 May 17 j 18:16	14° Ƴ 18'37	-1°25'09	direct	-5207 Apr 02 j 10:52	19° Ⅱ 53'37	
minimum elong	-5213 May 17 j 18:19	14° Y 18'38		evening set	-5207 Jul 15 j 22:38	27° Ⅲ 07'52	
max. Earth dist.	-5213 May 18 j 15:17		10.16233 AU	C	,		
morning rise	-5213 Jun 04 j 17:25	16° Ƴ 35'46		conjunction	-5207 Aug 01 j 23:36	29° Ⅱ 06'51	1°30'52
retrograde	-5213 Sep 15 j 01:24	24° Y ′29'15		minimum elong	-5207 Aug 01 j 23:33	29° Ⅱ 06'50	1°31'09
opposition	-5213 Nov 20 j 14:25	21° Y ′03'28	-1°28'12	max. Earth dist.	-5207 Aug 01 j 21:59	29° Ⅱ 06′23	11.04292 AU
min. Earth dist.	-5213 Nov 19 j 23:34		8.23511 AU		-5207 Aug 09 j 13:11	0°©	
direct	-5212 Jan 27 j 19:28	17° Ƴ 34'16		morning rise	-5207 Aug 18 j 19:36	1°504'26	
evening set	-5212 May 13 j 03:58	25° Ƴ 37'27		retrograde	-5207 Nov 25 j 01:21	7°954'53	
C	, ,			opposition	-5206 Feb 02 j 01:58	4°538'53	2°03'50
conjunction	-5212 May 31 j 03:54	27° Y ′52'36	-0°55'36	min. Earth dist.	-5206 Feb 02 j 05:16	4°538'16	9.09398 AU
minimum elong	-5212 May 31 j 03:56	27° Y ′52'37		direct	-5206 Apr 14 j 17:02	1°517'03	
max. Earth dist.	-5212 May 31 j 22:26		10.31239 AU	evening set	-5206 Jul 27 j 14:47	8°524'35	
morning rise	-5212 Jun 17 j 23:42	0° 8 06'26		C	,		
2 -	-5212 Jun 17 j 02:52	0°8		conjunction	-5206 Aug 13 j 10:53	10° © 21'14	1°51'27
retrograde	-5212 Sep 27 j 03:24	7° 8 45'47		minimum elong	-5206 Aug 13 j 10:50	10°521'13	
opposition	-5212 Dec 02 j 23:56	4° 8 22'03	-0°49'47	max. Earth dist.	-5206 Aug 13 j 04:34		11.13736 AU
min. Earth dist.	-5212 Dec 02 j 11:14		8.39055 AU	morning rise	-5206 Aug 30 j 02:42	12°516'40	
direct	-5211 Feb 09 j 22:53	0° 8 53'52	-	retrograde	-5206 Dec 06 j 09:29	19° © 03'18	
evening set	-5211 May 27 j 03:18	8° 8 46'30		opposition	-5205 Feb 13 j 20:15	15°9547'57	2°26'05
	J . J			min. Earth dist.	-5205 Feb 14 j 02:18	15°9546'50	9.17608 AU
conjunction	-5211 Jun 13 j 23:43	10° 8 58'17	-0°24'01	direct	-5205 Apr 26 j 17:33	12° © 27'11	
minimum elong	•			evening set		19° 5 29'19	
minimum elong max. Earth dist.	-5211 Jun 13 j 23:44	10° 8 58'17	0°23'50		-5205 Aug 08 j 00:01	19° 5 29'19	
C	•	10° 8 58'17				19°529'19 21°524'10	2°07'31

Planetary Pheno		5005		and the second second	500 C D CE 1 1 1 1 1 1		
	nical year style is used: Th	-					1055115
minimum elong	-5205 Aug 24 j 15:59	21°5524'09		minimum elong	-5199 Oct 27 j 15:11	27° m 13'13	
max. Earth dist.	-5205 Aug 24 j 06:52		11.20536 AU	max. Earth dist.	-5199 Oct 26 j 19:39	-•	11.01518 AU
morning rise	-5205 Sep 10 j 04:15	23° © 17'58		morning rise	-5199 Nov 13 j 02:40	29° m 09'41	
	-5205 Dec 10 j 09:16	0 $^{\circ}\Omega$			-5199 Nov 20 j 09:55	0∘ ⊽	
retrograde	-5205 Dec 17 j 15:49	0° Ω 02'39		retrograde	-5198 Feb 23 j 12:07	6° ≏ 19'32	
	-5205 Dec 24 j 23:34	30° ₹ 🥯		opposition	-5198 May 05 j 12:41	2° ₽ 59'32	2°11'54
opposition	-5204 Feb 25 j 12:16	26° © 47'34	2°42'39	min. Earth dist.	-5198 May 06 j 05:29	2° £ 56′25	8.95764 AU
min. Earth dist.	-5204 Feb 25 j 20:43	26°9546'02	9.23067 AU		-5198 Jun 24 j 20:38	30°R, Mp	
direct	-5204 May 07 j 11:20	23° 5 27'43		direct	-5198 Jul 14 j 16:40	29° Mp 40'40	
	-5204 Aug 14 j 07:58	$0^{\circ}\Omega$			-5198 Aug 03 j 08:10	0∘ ত	
evening set	-5204 Aug 18 j 03:55	0° Ω 25'47		evening set	-5198 Oct 22 j 14:31	6° ≙ 44'35	
		• •••		max. Earth dist.	-5198 Nov 07 j 07:59		10.89399 AU
conjunction	-5204 Sep 03 j 16:36	2° Ω 19'21	2°18'45	max. Earth dist.	5170110V 07 J 07.57	0 - 37 03	10.07577710
minimum elong	-5204 Sep 03 j 16:35	2°Ω19'21	2°19'01	conjunction	-5198 Nov 08 j 02:56	8° - 42'45	1°37'26
max. Earth dist.	-5204 Sep 03 j 05:02		11.24513 AU	minimum elong	-5198 Nov 08 j 02:30	8° - 42'46	1°37'25
			11.24313 AU	-	,		1 3/23
morning rise	-5204 Sep 20 j 02:03	4° Ω 12'06		morning rise	-5198 Nov 24 j 17:55	10° 2 41'45	
retrograde	-5204 Dec 27 j 23:02	10° Ω 56'39		retrograde	-5197 Mar 08 j 01:19	18° ≏ 01'32	
opposition	-5203 Mar 08 j 03:22	7° Ω 41'31	2°53'16	opposition	-5197 May 18 j 00:27	14° ≏ 39'53	1°45'02
min. Earth dist.	-5203 Mar 08 j 14:49	7° Ω 39'26	9.25623 AU	min. Earth dist.	-5197 May 18 j 16:21	14° ≏ 36'54	8.82645 AU
direct	-5203 May 19 j 01:44	4° £ 22′20		direct	-5197 Jul 26 j 14:15	11° ≏ 20'29	
evening set	-5203 Aug 29 j 04:23	11° Ω 17'45		evening set	-5197 Nov 03 j 07:39	18° ≏ 30'39	
conjunction	-5203 Sep 14 j 14:24	13° Ω 10′36	2°24'56	conjunction	-5197 Nov 19 j 23:26	20° ♀ 31'32	1°13'06
minimum elong	-5203 Sep 14 j 14:23	13° Ω 10′36	2°25'10	minimum elong	-5197 Nov 19 j 23:29	20° ₽ 31'33	1°13'01
max. Earth dist.	-5203 Sep 13 j 23:27	13° Ω 06′18	11.25567 AU	max. Earth dist.	-5197 Nov 19 j 06:36	20° ≏ 26'24	10.75535 AU
morning rise	-5203 Sep 30 j 22:12	15° Ω 02'54		morning rise	-5197 Dec 06 j 18:26	22° ₽ 33'30	
	-5203 Sep 30 j 11:57	15° Ω		8	-5196 Mar 10 j 14:08	0°M	
retrograde	-5202 Jan 08 j 05:23	21° Ω 49'04		retrograde	-5196 Mar 20 j 02:07	0° M ₊04'31	
opposition	-5202 Mar 19 j 18:46	18° Ω 33'32	2°57'41	retrograde	-5196 Mar 29 j 15:38	30°R ≏	
min. Earth dist.	-5202 Mar 20 j 08:58	$18^{\circ} \Omega 30'57$	9.25222 AU	opposition	-5196 May 29 j 19:23	26° ₽ 41'08	1°12'44
direct	-5202 May 30 j 12:43	15° Ω 14'48	9.23222 AU	min. Earth dist.	-5196 May 29 j 19:23	26° ♀ 38'33	8.68048 AU
		22°Ω09'00				20 = 38 33 23° £ 21'01	6.06046 AU
evening set	-5202 Sep 09 j 02:54	22 860900		direct	-5196 Aug 06 j 18:34	0°M	
:	5202 C 25 : 11.10	249 001142	2025154		-5196 Nov 09 j 00:47		
conjunction	-5202 Sep 25 j 11:18	24° Ω 01'43		evening set	-5196 Nov 14 j 10:30	0°M38'55	
minimum elong	-5202 Sep 25 j 11:19	24° Ω 01'43	2°26'05				
max. Earth dist.	-5202 Sep 24 j 18:08		11.23694 AU	conjunction	-5196 Dec 01 j 06:08	2°M42'54	0°44'49
morning rise	-5202 Oct 11 j 18:31	25° Ω 54′09	11.23694 AU	minimum elong	-5196 Dec 01 j 06:10	2°M42'55	0°44'40
			11.23694 AU		J	2°M42'55	
	-5202 Oct 11 j 18:31	25° Ω 54′09	11.23694 AU	minimum elong	-5196 Dec 01 j 06:10	2°M42'55	0°44'40
morning rise	-5202 Oct 11 j 18:31 -5202 Nov 20 j 23:22	25° Ω 54'09 0° M	11.23694 AU	minimum elong max. Earth dist.	-5196 Dec 01 j 06:10 -5196 Nov 30 j 15:26	2°M42'55 2°M38'21	0°44'40
morning rise	-5202 Oct 11 j 18:31 -5202 Nov 20 j 23:22 -5201 Jan 19 j 16:40	25° Ω 54'09 0° Mp 2° Mp43'45	11.23694 AU 2°55'47	minimum elong max. Earth dist. morning rise	-5196 Dec 01 j 06:10 -5196 Nov 30 j 15:26 -5196 Dec 18 j 05:43	2°M42'55 2°M38'21 4°M48'14	0°44'40
morning rise	-5202 Oct 11 j 18:31 -5202 Nov 20 j 23:22 -5201 Jan 19 j 16:40 -5201 Mar 24 j 00:09	$25^{\circ}\Omega 54'09$ 0° My 2° My $43'45$ 30° R Ω		minimum elong max. Earth dist. morning rise retrograde	-5196 Dec 01 j 06:10 -5196 Nov 30 j 15:26 -5196 Dec 18 j 05:43 -5195 Apr 02 j 14:43	2°M42'55 2°M38'21 4°M48'14 12°M31'32	0°44'40 10.60468 AU
morning rise retrograde opposition	-5202 Oct 11 j 18:31 -5202 Nov 20 j 23:22 -5201 Jan 19 j 16:40 -5201 Mar 24 j 00:09 -5201 Mar 31 j 11:46	25° N 54'09 0° M 2° M 43'45 30° R N 29° N 27'28	2°55'47	minimum elong max. Earth dist. morning rise retrograde opposition	-5196 Dec 01 j 06:10 -5196 Nov 30 j 15:26 -5196 Dec 18 j 05:43 -5195 Apr 02 j 14:43 -5195 Jun 11 j 22:44	2°M42'55 2°M38'21 4°M48'14 12°M31'32 9°M06'23	0°44'40 10.60468 AU 0°35'56
morning rise retrograde opposition min. Earth dist.	-5202 Oct 11 j 18:31 -5202 Nov 20 j 23:22 -5201 Jan 19 j 16:40 -5201 Mar 24 j 00:09 -5201 Mar 31 j 11:46 -5201 Apr 01 j 03:15 -5201 Jun 11 j 01:24	25° Ω54'09 0° Mp 2° Mp43'45 30° RΩ 29° Ω27'28 29° Ω24'39 26° Ω08'59	2°55'47	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-5196 Dec 01 j 06:10 -5196 Nov 30 j 15:26 -5196 Dec 18 j 05:43 -5195 Apr 02 j 14:43 -5195 Jun 11 j 22:44 -5195 Jun 12 j 09:40 -5195 Aug 19 j 04:09	2°M42'55 2°M38'21 4°M48'14 12°M31'32 9°M06'23 9°M04'16 5°M45'23	0°44'40 10.60468 AU 0°35'56
morning rise retrograde opposition min. Earth dist.	-5202 Oct 11 j 18:31 -5202 Nov 20 j 23:22 -5201 Jan 19 j 16:40 -5201 Mar 24 j 00:09 -5201 Mar 31 j 11:46 -5201 Apr 01 j 03:15	25° \$\Omega 54'09\\ 0° \$\mathbf{m}\\ 2° \$\mathbf{m}\ta3'45\\ 30° \$\mathbf{R}\Omega \\ 29° \$\Omega 27'28\\ 29° \$\Omega 24'39\\ 26° \$\Omega 08'59\\ 0° \$\mathbf{m}\\	2°55'47	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-5196 Dec 01 j 06:10 -5196 Nov 30 j 15:26 -5196 Dec 18 j 05:43 -5195 Apr 02 j 14:43 -5195 Jun 11 j 22:44 -5195 Jun 12 j 09:40 -5195 Aug 19 j 04:09 -5195 Nov 27 j 00:48	2°M42'55 2°M38'21 4°M48'14 12°M31'32 9°M06'23 9°M04'16	0°44'40 10.60468 AU 0°35'56
morning rise retrograde opposition min. Earth dist. direct	-5202 Oct 11 j 18:31 -5202 Nov 20 j 23:22 -5201 Jan 19 j 16:40 -5201 Mar 24 j 00:09 -5201 Mar 31 j 11:46 -5201 Apr 01 j 03:15 -5201 Jun 11 j 01:24 -5201 Aug 22 j 09:11	25° Ω54'09 0° Mp 2° Mp43'45 30° RΩ 29° Ω27'28 29° Ω24'39 26° Ω08'59	2°55'47	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-5196 Dec 01 j 06:10 -5196 Nov 30 j 15:26 -5196 Dec 18 j 05:43 -5195 Apr 02 j 14:43 -5195 Jun 11 j 22:44 -5195 Jun 12 j 09:40 -5195 Aug 19 j 04:09	2°M42'55 2°M38'21 4°M48'14 12°M31'32 9°M06'23 9°M04'16 5°M45'23 13°M12'23	0°44'40 10.60468 AU 0°35'56
retrograde opposition min. Earth dist. direct evening set	-5202 Oct 11 j 18:31 -5202 Nov 20 j 23:22 -5201 Jan 19 j 16:40 -5201 Mar 24 j 00:09 -5201 Mar 31 j 11:46 -5201 Apr 01 j 03:15 -5201 Jun 11 j 01:24 -5201 Aug 22 j 09:11 -5201 Sep 20 j 01:07	25° \$\Omega 54'09 0° \$\text{m}\$ 2° \$\text{m} 43'45\$ 30° \$\Omega \Omega 27'28\$ 29° \$\Omega 24'39\$ 26° \$\Omega 08'59 0° \$\text{m}\$ 3° \$\text{m} 03'21\$	2°55'47 9.21892 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-5196 Dec 01 j 06:10 -5196 Nov 30 j 15:26 -5196 Dec 18 j 05:43 -5195 Apr 02 j 14:43 -5195 Jun 11 j 22:44 -5195 Jun 12 j 09:40 -5195 Aug 19 j 04:09 -5195 Nov 27 j 00:48 -5195 Dec 11 j 09:52	2°M42'55 2°M38'21 4°M48'14 12°M31'32 9°M06'23 9°M04'16 5°M45'23 13°M12'23	0°44'40 10.60468 AU 0°35'56 8.52580 AU
retrograde opposition min. Earth dist. direct evening set conjunction	-5202 Oct 11 j 18:31 -5202 Nov 20 j 23:22 -5201 Jan 19 j 16:40 -5201 Mar 24 j 00:09 -5201 Mar 31 j 11:46 -5201 Apr 01 j 03:15 -5201 Jun 11 j 01:24 -5201 Aug 22 j 09:11 -5201 Sep 20 j 01:07	25° \$\Omega 54'09\\ 0° m\tag{200}\tag{200}\tag{43'45}\\ 30° R\Omega 29° \Omega 27'28\\ 29° \Omega 24'39\\ 26° \Omega 08'59\\ 0° m\tag{300}\tag{21}\\ 4° m\tag 56'35	2°55'47 9.21892 AU 2°21'36	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-5196 Dec 01 j 06:10 -5196 Nov 30 j 15:26 -5196 Dec 18 j 05:43 -5195 Apr 02 j 14:43 -5195 Jun 11 j 22:44 -5195 Jun 12 j 09:40 -5195 Aug 19 j 04:09 -5195 Nov 27 j 00:48 -5195 Dec 11 j 09:52	2°M42'55 2°M38'21 4°M48'14 12°M31'32 9°M06'23 9°M04'16 5°M45'23 13°M12'23 15°M	0°44'40 10.60468 AU 0°35'56 8.52580 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-5202 Oct 11 j 18:31 -5202 Nov 20 j 23:22 -5201 Jan 19 j 16:40 -5201 Mar 24 j 00:09 -5201 Mar 31 j 11:46 -5201 Apr 01 j 03:15 -5201 Jun 11 j 01:24 -5201 Aug 22 j 09:11 -5201 Sep 20 j 01:07 -5201 Oct 06 j 09:09 -5201 Oct 06 j 09:11	25° \$\Omega 54'09\\ 0° \$\mathbf{m}\\ 2° \$\mathbf{m}\text{43'45}\\ 30° \mathbf{k}\Omega \\ 29° \$\Omega 24'39\\ 26° \$\Omega 08'59\\ 0° \$\mathbf{m}\\ 3° \$\mathbf{m}\text{03'21}\\ 4° \$\mathbf{m}\text{56'35}\\ 4° \$\mathbf{m}\text{56'35}\\	2°55'47 9.21892 AU 2°21'36 2°21'43	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-5196 Dec 01 j 06:10 -5196 Nov 30 j 15:26 -5196 Dec 18 j 05:43 -5195 Apr 02 j 14:43 -5195 Jun 11 j 22:44 -5195 Jun 12 j 09:40 -5195 Nov 27 j 00:48 -5195 Dec 11 j 09:52 -5195 Dec 14 j 00:35 -5195 Dec 14 j 00:35	2°M.42'55 2°M.38'21 4°M.48'14 12°M.31'32 9°M.06'23 9°M.04'16 5°M.45'23 13°M.12'23 15°M.	0°44'40 10.60468 AU 0°35'56 8.52580 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-5202 Oct 11 j 18:31 -5202 Nov 20 j 23:22 -5201 Jan 19 j 16:40 -5201 Mar 24 j 00:09 -5201 Mar 31 j 11:46 -5201 Apr 01 j 03:15 -5201 Jun 11 j 01:24 -5201 Aug 22 j 09:11 -5201 Oct 06 j 09:09 -5201 Oct 06 j 09:11 -5201 Oct 05 j 15:30	25° Ω 54'09 0° M 2° M 43'45 30° R Ω 29° Ω 27'28 29° Ω 24'39 26° Ω 08'59 0° M 3° M 03'21 4° M 56'35 4° M 56'35 4° M 55'35 4° M 55'27	2°55'47 9.21892 AU 2°21'36	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin	-5196 Dec 01 j 06:10 -5196 Nov 30 j 15:26 -5196 Dec 18 j 05:43 -5195 Apr 02 j 14:43 -5195 Jun 11 j 22:44 -5195 Jun 12 j 09:40 -5195 Aug 19 j 04:09 -5195 Nov 27 j 00:48 -5195 Dec 11 j 09:52 -5195 Dec 14 j 00:35 -5195 Dec 13 j 20:28	2°M.42'55 2°M.38'21 4°M.48'14 12°M.31'32 9°M.06'23 9°M.04'16 5°M.45'23 13°M.12'23 15°M.	0°44'40 10.60468 AU 0°35'56 8.52580 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-5202 Oct 11 j 18:31 -5202 Nov 20 j 23:22 -5201 Jan 19 j 16:40 -5201 Mar 24 j 00:09 -5201 Mar 31 j 11:46 -5201 Apr 01 j 03:15 -5201 Jun 11 j 01:24 -5201 Aug 22 j 09:11 -5201 Oct 06 j 09:09 -5201 Oct 06 j 09:11 -5201 Oct 05 j 15:30 -5201 Oct 22 j 16:40	25° \$\Omega 54'09\\ 0° \$\mathbf{m}\\ 2° \$\mathbf{m}\ta43'45\\ 30° \$\Rankle \Omega 27'28\\ 29° \$\Omega 24'39\\ 26° \$\Omega 08'59\\ 0° \$\mathbf{m}\\ 3° \$\mathbf{m}\ta93'21\\ 4° \$\mathbf{m}\ta56'35\\ 4° \$\mathbf{m}\ta56'35\\ 4° \$\mathbf{m}\ta51'27\\ 6° \$\mathbf{m}\ta9'46\end{array}	2°55'47 9.21892 AU 2°21'36 2°21'43	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end	-5196 Dec 01 j 06:10 -5196 Nov 30 j 15:26 -5196 Dec 18 j 05:43 -5195 Apr 02 j 14:43 -5195 Jun 11 j 22:44 -5195 Jun 12 j 09:40 -5195 Aug 19 j 04:09 -5195 Nov 27 j 00:48 -5195 Dec 11 j 09:52 -5195 Dec 14 j 00:35 -5195 Dec 13 j 20:28 -5195 Dec 14 j 04:42	2°M.42'55 2°M.38'21 4°M.48'14 12°M.31'32 9°M.06'23 9°M.04'16 5°M.45'23 13°M.12'23 15°M. 15°M.19'43 15°M.19'43 15°M.19'43	0°44'40 10.60468 AU 0°35'56 8.52580 AU 0°13'34 0°13'22
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-5202 Oct 11 j 18:31 -5202 Nov 20 j 23:22 -5201 Jan 19 j 16:40 -5201 Mar 24 j 00:09 -5201 Mar 31 j 11:46 -5201 Apr 01 j 03:15 -5201 Jun 11 j 01:24 -5201 Aug 22 j 09:11 -5201 Oct 06 j 09:09 -5201 Oct 06 j 09:11 -5201 Oct 05 j 15:30 -5201 Oct 22 j 16:40 -5200 Jan 31 j 08:54	25° \$\Omega 54'09\\ 0° \$\mathrm{m}\\ 2° \$\mathrm{m}\ta3'45\\ 30° \$\Rank \Omega 27'28\\ 29° \$\Omega 24'39\\ 26° \$\Omega 08'59\\ 0° \$\mathrm{m}\\ 3° \$\mathrm{m}\ta3'21\\ 4° \$\mathrm{m}\ta56'35\\ 4° \$\mathrm{m}\ta5'27\\ 6° \$\mathrm{m}\ta4'28\\ 13° \$\mathrm{m}\ta44'28\\	2°55'47 9.21892 AU 2°21'36 2°21'43 11.18951 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist.	-5196 Dec 01 j 06:10 -5196 Nov 30 j 15:26 -5196 Dec 18 j 05:43 -5195 Apr 02 j 14:43 -5195 Jun 11 j 22:44 -5195 Jun 12 j 09:40 -5195 Aug 19 j 04:09 -5195 Nov 27 j 00:48 -5195 Dec 11 j 09:52 -5195 Dec 14 j 00:35 -5195 Dec 13 j 20:28 -5195 Dec 14 j 04:42 -5195 Dec 13 j 12:11	2°M.42'55 2°M.38'21 4°M.48'14 12°M.31'32 9°M.06'23 9°M.04'16 5°M.45'23 13°M.12'23 15°M. 15°M.19'43 15°M.19'43 15°M.19'43 15°M.19'43 15°M.19'43	0°44'40 10.60468 AU 0°35'56 8.52580 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-5202 Oct 11 j 18:31 -5202 Nov 20 j 23:22 -5201 Jan 19 j 16:40 -5201 Mar 24 j 00:09 -5201 Mar 31 j 11:46 -5201 Apr 01 j 03:15 -5201 Jun 11 j 01:24 -5201 Aug 22 j 09:11 -5201 Oct 06 j 09:09 -5201 Oct 06 j 09:11 -5201 Oct 06 j 09:11 -5201 Oct 22 j 16:40 -5200 Jan 31 j 08:54 -5200 Apr 11 j 07:32	25° \$\Omega 54'09\\ 0° \$\mathbf{m}\\ 2° \$\mathbf{m}\text{43'45}\\ 30° \$\Rangle \Omega 27'28\\ 29° \$\Omega 24'39\\ 26° \$\Omega 08'59\\ 0° \$\mathbf{m}\\ 3° \$\mathbf{m}\text{03'21}\\ 4° \$\mathbf{m}\text{56'35}\\ 4° \$\mathbf{m}\text{56'35}\\ 4° \$\mathbf{m}\text{56'35}\\ 4° \$\mathbf{m}\text{54'27}\\ 6° \$\mathbf{m}\text{49'46}\\ 13° \$\mathbf{m}\text{44'28}\\ 10° \$\mathbf{m}\text{27'09}\end{array}	2°55'47 9.21892 AU 2°21'36 2°21'43 11.18951 AU 2°47'29	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise	-5196 Dec 01 j 06:10 -5196 Nov 30 j 15:26 -5196 Dec 18 j 05:43 -5195 Apr 02 j 14:43 -5195 Jun 11 j 22:44 -5195 Jun 12 j 09:40 -5195 Aug 19 j 04:09 -5195 Nov 27 j 00:48 -5195 Dec 11 j 09:52 -5195 Dec 14 j 00:35 -5195 Dec 14 j 00:35 -5195 Dec 13 j 20:28 -5195 Dec 14 j 04:42 -5195 Dec 13 j 12:11 -5195 Dec 31 j 05:08	2°M.42'55 2°M.38'21 4°M.48'14 12°M.31'32 9°M.06'23 9°M.04'16 5°M.45'23 13°M.12'23 15°M. 15°M.19'43 15°M.19'43 15°M.19'43 15°M.19'43 15°M.19'43 15°M.19'43	0°44'40 10.60468 AU 0°35'56 8.52580 AU 0°13'34 0°13'22
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-5202 Oct 11 j 18:31 -5202 Nov 20 j 23:22 -5201 Jan 19 j 16:40 -5201 Mar 24 j 00:09 -5201 Mar 31 j 11:46 -5201 Apr 01 j 03:15 -5201 Jun 11 j 01:24 -5201 Aug 22 j 09:11 -5201 Oct 06 j 09:09 -5201 Oct 06 j 09:11 -5201 Oct 06 j 09:11 -5201 Oct 22 j 16:40 -5200 Jan 31 j 08:54 -5200 Apr 11 j 07:32 -5200 Apr 11 j 23:19	25° \$\Omega 54'09\\ 0° \$\mathbf{m}\\ 2° \$\mathbf{m}\text{43'45}\\ 30° \$\Rangle \Omega 27'28\\ 29° \$\Omega 24'39\\ 26° \$\Omega 08'59\\ 0° \$\mathbf{m}\\ 3° \$\mathbf{m}\text{03'21}\\ 4° \$\mathbf{m}\text{56'35}\\ 4° \$\mathbf{m}\text{56'35}\\ 4° \$\mathbf{m}\text{56'35}\\ 4° \$\mathbf{m}\text{54'27}\\ 6° \$\mathbf{m}\text{49'46}\\ 13° \$\mathbf{m}\text{44'28}\\ 10° \$\mathbf{m}\text{27'09}\\ 10° \$\mathbf{m}\text{24'16}\end{array}	2°55'47 9.21892 AU 2°21'36 2°21'43 11.18951 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde	-5196 Dec 01 j 06:10 -5196 Nov 30 j 15:26 -5196 Dec 18 j 05:43 -5195 Apr 02 j 14:43 -5195 Jun 11 j 22:44 -5195 Jun 12 j 09:40 -5195 Aug 19 j 04:09 -5195 Nov 27 j 00:48 -5195 Dec 11 j 09:52 -5195 Dec 14 j 00:35 -5195 Dec 14 j 00:35 -5195 Dec 14 j 04:42 -5195 Dec 13 j 12:11 -5195 Dec 31 j 05:08 -5194 Apr 16 j 12:21	2°M.42'55 2°M.38'21 4°M.48'14 12°M.31'32 9°M.06'23 9°M.04'16 5°M.45'23 13°M.12'23 15°M. 15°M.19'43 15°M.19'43 15°M.19'43 15°M.19'43 15°M.19'43 15°M.19'43 15°M.21'00 15°M.21'00 15°M.21'50 17°M.28'38 25°M.24'51	0°44'40 10.60468 AU 0°35'56 8.52580 AU 0°13'34 0°13'22
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-5202 Oct 11 j 18:31 -5202 Nov 20 j 23:22 -5201 Jan 19 j 16:40 -5201 Mar 24 j 00:09 -5201 Mar 31 j 11:46 -5201 Apr 01 j 03:15 -5201 Jun 11 j 01:24 -5201 Aug 22 j 09:11 -5201 Sep 20 j 01:07 -5201 Oct 06 j 09:09 -5201 Oct 06 j 09:11 -5201 Oct 05 j 15:30 -5201 Oct 22 j 16:40 -5200 Jan 31 j 08:54 -5200 Apr 11 j 07:32 -5200 Jun 21 j 12:12	25° \$\Omega 54'09\) 0° \$\mathbf{m}\) 2° \$\mathbf{m}\text{43'45}\] 30° \$\Rangle \Omega 27'28\] 29° \$\Omega 24'39\] 26° \$\Omega 08'59\] 0° \$\mathbf{m}\] 3° \$\mathbf{m}\text{03'21}\] 4° \$\mathbf{m}\text{56'35}\] 4° \$\mathbf{m}\text{56'35}\] 4° \$\mathbf{m}\text{56'35}\] 4° \$\mathbf{m}\text{56'35}\] 4° \$\mathbf{m}\text{54'27}\] 6° \$\mathbf{m}\text{44'28}\] 10° \$\mathbf{m}\text{27'09}\] 10° \$\mathbf{m}\text{24'16}\] 7° \$\mathbf{m}\text{08'46}\]	2°55'47 9.21892 AU 2°21'36 2°21'43 11.18951 AU 2°47'29	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde desc. node	-5196 Dec 01 j 06:10 -5196 Nov 30 j 15:26 -5196 Dec 18 j 05:43 -5195 Apr 02 j 14:43 -5195 Jun 11 j 22:44 -5195 Jun 12 j 09:40 -5195 Aug 19 j 04:09 -5195 Nov 27 j 00:48 -5195 Dec 11 j 09:52 -5195 Dec 14 j 00:35 -5195 Dec 14 j 00:35 -5195 Dec 14 j 04:42 -5195 Dec 13 j 12:11 -5195 Dec 31 j 05:08 -5194 Apr 16 j 12:21 -5194 May 19 j 06:21	2°M.42'55 2°M.38'21 4°M.48'14 12°M.31'32 9°M.06'23 9°M.04'16 5°M.45'23 13°M.12'23 15°M. 15°M.19'43 15°M.19'43 15°M.18'26 15°M.21'00 15°M.21'00 15°M.21'50 17°M.28'38 25°M.24'51 24°M.32'05	0°44'40 10.60468 AU 0°35'56 8.52580 AU 0°13'34 0°13'22 10.44860 AU
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retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-5202 Oct 11 j 18:31 -5202 Nov 20 j 23:22 -5201 Jan 19 j 16:40 -5201 Mar 24 j 00:09 -5201 Mar 31 j 11:46 -5201 Apr 01 j 03:15 -5201 Jun 11 j 01:24 -5201 Aug 22 j 09:11 -5201 Sep 20 j 01:07 -5201 Oct 06 j 09:09 -5201 Oct 06 j 09:11 -5201 Oct 05 j 15:30 -5201 Oct 22 j 16:40 -5200 Jan 31 j 08:54 -5200 Apr 11 j 07:32 -5200 Apr 11 j 23:19 -5200 Sep 30 j 01:17 -5200 Oct 16 j 09:52	25° \$\alpha 54'09\\ 0° \$\text{m}\$ 43'45\\ 30° \$\alpha \alpha 27'28\\ 29° \$\alpha 24'39\\ 26° \$\alpha 03'21\\ 4° \$\text{m}\$ 56'35\\ 4° \$\text{m}\$ 56'35\\ 4° \$\text{m}\$ 56'35\\ 4° \$\text{m}\$ 51'27\\ 6° \$\text{m}\$ 49'46\\ 13° \$\text{m}\$ 27'09\\ 10° \$\text{m}\$ 27'09\\ 10° \$\text{m}\$ 24'16\\ 7° \$\text{m}\$ 08'46\\ 15° \$\text{m}\$ 59'05\\ 15° \$\text{m}\$ 59'06\\ 15° \$\text{m}\$ 59'06\\ 15° \$\text{m}\$ 53'40\\	2°55'47 9.21892 AU 2°21'36 2°21'43 11.18951 AU 2°47'29 9.15726 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde desc. node opposition min. Earth dist. direct evening set	-5196 Dec 01 j 06:10 -5196 Nov 30 j 15:26 -5196 Dec 18 j 05:43 -5195 Apr 02 j 14:43 -5195 Jun 11 j 22:44 -5195 Jun 12 j 09:40 -5195 Aug 19 j 04:09 -5195 Nov 27 j 00:48 -5195 Dec 11 j 09:52 -5195 Dec 14 j 00:35 -5195 Dec 14 j 00:35 -5195 Dec 13 j 20:28 -5195 Dec 13 j 12:11 -5195 Dec 31 j 05:08 -5194 Apr 16 j 12:21 -5194 Jun 25 j 10:52 -5194 Aug 31 j 23:59 -5194 Dec 10 j 04:17	2°M.42'55 2°M.38'21 4°M.48'14 12°M.31'32 9°M.06'23 9°M.04'16 5°M.45'23 13°M.12'23 15°M. 15°M.19'43 15°M.19'43 15°M.19'43 21'00 15°M.15'50 17°M.28'38 25°M.24'51 24°M.32'05 21°M.57'58 21°M.56'22 18°M.35'55 26°M.13'10	0°44'40 10.60468 AU 0°35'56 8.52580 AU 0°13'34 0°13'22 10.44860 AU -0°04'02 8.36970 AU
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retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-5202 Oct 11 j 18:31 -5202 Nov 20 j 23:22 -5201 Jan 19 j 16:40 -5201 Mar 24 j 00:09 -5201 Mar 31 j 11:46 -5201 Apr 01 j 03:15 -5201 Jun 11 j 01:24 -5201 Aug 22 j 09:11 -5201 Sep 20 j 01:07 -5201 Oct 06 j 09:09 -5201 Oct 06 j 09:11 -5201 Oct 05 j 15:30 -5201 Oct 22 j 16:40 -5200 Jan 31 j 08:54 -5200 Apr 11 j 07:32 -5200 Apr 11 j 23:19 -5200 Sep 30 j 01:17 -5200 Oct 16 j 09:52 -5200 Oct 16 j 09:54 -5200 Oct 16 j 09:54 -5200 Nov 01 j 18:47 -5199 Feb 11 j 06:39 -5199 Apr 23 j 07:20 -5199 Apr 23 j 23:50	25° \$\Omega 54'09 0° \$\text{my}\$ 2° \$\text{my}\$43'45 30° \$\Rangle \Omega\$ 29° \$\Omega 24'39 26° \$\Omega 03'21\$ 4° \$\text{my}\$56'35 4° \$\text{my}\$56'35 4° \$\text{my}\$56'35 4° \$\text{my}\$51'27 6° \$\text{my}\$49'46 13° \$\text{my}\$27'09 10° \$\text{my}\$24'16 7° \$\text{my}\$08'46 14° \$\text{my}\$04'46 15° \$\text{my}\$59'05 15° \$\text{my}\$59'06 15° \$\text{my}\$53'38 24° \$\text{my}\$55'06 21° \$\text{my}\$36'32 21° \$\text{my}\$33'30	2°55'47 9.21892 AU 2°21'36 2°21'43 11.18951 AU 2°47'29 9.15726 AU 2°12'00 2°12'05 11.11477 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde desc. node opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set	-5196 Dec 01 j 06:10 -5196 Nov 30 j 15:26 -5196 Dec 18 j 05:43 -5195 Apr 02 j 14:43 -5195 Jun 11 j 22:44 -5195 Jun 12 j 09:40 -5195 Aug 19 j 04:09 -5195 Nov 27 j 00:48 -5195 Dec 11 j 09:52 -5195 Dec 14 j 00:35 -5195 Dec 14 j 00:35 -5195 Dec 13 j 20:28 -5195 Dec 13 j 12:11 -5195 Dec 13 j 12:11 -5195 Dec 31 j 05:08 -5194 Apr 16 j 12:21 -5194 May 19 j 06:21 -5194 Jun 25 j 10:52 -5194 Jun 25 j 10:52 -5194 Dec 10 j 04:17 -5194 Dec 27 j 08:27 -5194 Dec 27 j 08:27 -5194 Dec 26 j 23:22 -5193 Jan 08 j 21:49 -5193 Jan 13 j 18:01	2°M.42'55 2°M.38'21 4°M.48'14 12°M.31'32 9°M.06'23 9°M.04'16 5°M.45'23 13°M.12'23 15°M. 15°M.19'43 15°M.19'43 15°M.18'26 15°M.21'00 15°M.15'50 17°M.28'38 25°M.24'51 24°M.32'05 21°M.57'58 21°M.56'22 18°M.35'55 26°M.13'10 28°M.24'00 28°M.23'59 28°M.21'06 0° 🗷	0°44'40 10.60468 AU 0°35'56 8.52580 AU 0°13'34 0°13'22 10.44860 AU -0°04'02 8.36970 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min Earth dist. direct evening rise retrograde opposition min. Earth dist. morning rise retrograde opposition minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-5202 Oct 11 j 18:31 -5202 Nov 20 j 23:22 -5201 Jan 19 j 16:40 -5201 Mar 24 j 00:09 -5201 Mar 31 j 11:46 -5201 Apr 01 j 03:15 -5201 Jun 11 j 01:24 -5201 Aug 22 j 09:11 -5201 Sep 20 j 01:07 -5201 Oct 06 j 09:09 -5201 Oct 06 j 09:11 -5201 Oct 05 j 15:30 -5201 Oct 22 j 16:40 -5200 Jan 31 j 08:54 -5200 Apr 11 j 07:32 -5200 Apr 11 j 23:19 -5200 Sep 30 j 01:17 -5200 Oct 16 j 09:52 -5200 Oct 16 j 09:54 -5200 Oct 16 j 09:54 -5200 Nov 01 j 18:47 -5199 Feb 11 j 06:39 -5199 Apr 23 j 07:20 -5199 Apr 23 j 23:50 -5199 Jul 03 j 00:22	25° \$\alpha 54'09 0° \$\text{my}\$ 2° \$\text{my}\$43'45 30° \$\alpha \alpha\$ 29° \$\alpha 227'28 29° \$\alpha 24'39 26° \$\alpha 03'21\$ 4° \$\text{my}\$56'35 4° \$\text{my}\$51'27 6° \$\text{my}\$51'27 6° \$\text{my}\$49'46 13° \$\text{my}\$49'46 13° \$\text{my}\$27'09 10° \$\text{my}\$24'16 7° \$\text{my}\$24'16 7° \$\text{my}\$3'40 14° \$\text{my}\$04'46 15° \$\text{my}\$59'05 15° \$\text{my}\$53'38 24° \$\text{my}\$55'06 21° \$\text{my}\$36'32 21° \$\text{my}\$33'30 18° \$\text{my}\$18'00	2°55'47 9.21892 AU 2°21'36 2°21'43 11.18951 AU 2°47'29 9.15726 AU 2°12'00 2°12'05 11.11477 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde desc. node opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-5196 Dec 01 j 06:10 -5196 Nov 30 j 15:26 -5196 Dec 18 j 05:43 -5195 Apr 02 j 14:43 -5195 Jun 11 j 22:44 -5195 Jun 12 j 09:40 -5195 Aug 19 j 04:09 -5195 Nov 27 j 00:48 -5195 Dec 11 j 09:52 -5195 Dec 14 j 00:35 -5195 Dec 14 j 00:35 -5195 Dec 13 j 20:28 -5195 Dec 13 j 12:11 -5195 Dec 13 j 12:11 -5195 Dec 31 j 05:08 -5194 Apr 16 j 12:21 -5194 May 19 j 06:21 -5194 Jun 25 j 10:52 -5194 Jun 25 j 10:52 -5194 Dec 27 j 08:27 -5194 Dec 27 j 08:27 -5194 Dec 27 j 08:26 -5194 Dec 26 j 23:22 -5193 Jan 08 j 21:49	2°M.42'55 2°M.38'21 4°M.48'14 12°M.31'32 9°M.06'23 9°M.04'16 5°M.45'23 13°M.12'23 15°M. 15°M.19'43 15°M.19'43 15°M.18'26 15°M.21'00 15°M.15'50 17°M.28'38 25°M.24'51 24°M.32'05 21°M.57'58 21°M.56'22 18°M.35'55 26°M.13'10 28°M.24'00 28°M.23'59 28°M.21'06 0° 🗷 0° 🗷 36'34	0°44'40 10.60468 AU 0°35'56 8.52580 AU 0°13'34 0°13'22 10.44860 AU -0°04'02 8.36970 AU -0°19'27 0°19'41 10.29474 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min Earth dist. direct evening rise retrograde opposition min. Earth dist. morning rise retrograde opposition minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-5202 Oct 11 j 18:31 -5202 Nov 20 j 23:22 -5201 Jan 19 j 16:40 -5201 Mar 24 j 00:09 -5201 Mar 31 j 11:46 -5201 Apr 01 j 03:15 -5201 Jun 11 j 01:24 -5201 Aug 22 j 09:11 -5201 Sep 20 j 01:07 -5201 Oct 06 j 09:09 -5201 Oct 06 j 09:11 -5201 Oct 05 j 15:30 -5201 Oct 22 j 16:40 -5200 Jan 31 j 08:54 -5200 Apr 11 j 07:32 -5200 Apr 11 j 23:19 -5200 Sep 30 j 01:17 -5200 Oct 16 j 09:52 -5200 Oct 16 j 09:54 -5200 Oct 16 j 09:54 -5200 Nov 01 j 18:47 -5199 Feb 11 j 06:39 -5199 Apr 23 j 07:20 -5199 Apr 23 j 23:50 -5199 Jul 03 j 00:22	25° \$\alpha 54'09 0° \$\text{my}\$ 2° \$\text{my}\$43'45 30° \$\alpha \alpha\$ 29° \$\alpha 227'28 29° \$\alpha 24'39 26° \$\alpha 03'21\$ 4° \$\text{my}\$56'35 4° \$\text{my}\$51'27 6° \$\text{my}\$51'27 6° \$\text{my}\$49'46 13° \$\text{my}\$49'46 13° \$\text{my}\$27'09 10° \$\text{my}\$24'16 7° \$\text{my}\$24'16 7° \$\text{my}\$3'40 14° \$\text{my}\$04'46 15° \$\text{my}\$59'05 15° \$\text{my}\$53'38 24° \$\text{my}\$55'06 21° \$\text{my}\$36'32 21° \$\text{my}\$33'30 18° \$\text{my}\$18'00	2°55'47 9.21892 AU 2°21'36 2°21'43 11.18951 AU 2°47'29 9.15726 AU 2°12'00 2°12'05 11.11477 AU 2°32'49 9.06919 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde desc. node opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set	-5196 Dec 01 j 06:10 -5196 Nov 30 j 15:26 -5196 Dec 18 j 05:43 -5195 Apr 02 j 14:43 -5195 Jun 11 j 22:44 -5195 Jun 12 j 09:40 -5195 Aug 19 j 04:09 -5195 Nov 27 j 00:48 -5195 Dec 11 j 09:52 -5195 Dec 14 j 00:35 -5195 Dec 14 j 00:35 -5195 Dec 13 j 20:28 -5195 Dec 13 j 12:11 -5195 Dec 13 j 12:11 -5195 Dec 31 j 05:08 -5194 Apr 16 j 12:21 -5194 May 19 j 06:21 -5194 Jun 25 j 10:52 -5194 Jun 25 j 10:52 -5194 Jun 25 j 10:52 -5194 Dec 10 j 04:17 -5194 Dec 27 j 08:27 -5194 Dec 27 j 08:26 -5194 Dec 26 j 23:22 -5193 Jan 08 j 21:49 -5193 Jan 13 j 18:01 -5193 Apr 30 j 20:32	2°M.42'55 2°M.38'21 4°M.48'14 12°M.31'32 9°M.06'23 9°M.04'16 5°M.45'23 13°M.12'23 15°M. 15°M.19'43 15°M.19'43 15°M.21'00 15°M.21'00 15°M.21'50 17°M.28'38 25°M.24'51 24°M.32'05 21°M.57'58 21°M.56'22 18°M.35'55 26°M.13'10 28°M.24'00 28°M.23'59 28°M.21'06 0° 🗷 0° 🗷 36'34 8° 🗷 45'36 5° 🗷 17'08	0°44'40 10.60468 AU 0°35'56 8.52580 AU 0°13'34 0°13'22 10.44860 AU -0°04'02 8.36970 AU -0°19'27 0°19'41 10.29474 AU

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5193 in astronomical counting style is the year 5194 BCE in historical counting style. direct -5193 Sep 14 i 06:21 1°**х** 53′52 retrograde -5187 Jul 28 i 16:15 5° **\(**45'59 -5193 Dec 23 j 21:51 9°**∡**¹42'07 -5187 Oct 03 j 03:52 2°\dagger15'03 -2°56'23 evening set opposition min. Earth dist. -5187 Oct 02 j 14:05 2°**升**17'57 7.87055 AU 11°**₹**56′22 -0°52′20 -5192 Jan 10 j 06:29 -5187 Nov 01 j 08:35 30°R≈ conjunction 11°**₹**¹56′21 0°52′36 -5187 Dec 08 j 05:33 28°≈45'15 -5192 Jan 10 j 06:26 minimum elong direct 0°**)**€ -5192 Jan 10 j 02:05 max. Earth dist. 11°**✗**′54′57 10.15136 AU -5186 Jan 13 j 21:52 -5192 Jan 27 j 20:39 morning rise 14°**х** 12′25 evening set -5186 Mar 23 j 16:25 7°**)** 12'47 -5192 May 14 j 14:33 22°**х** 33′25 retrograde opposition -5192 Jul 22 j 12:25 19°**х** 03'33 -1°25'30 conjunction -5186 Apr 10 j 19:18 9°\(\pm\)35'49 -2°15'51 9°**¥**35'50 2°15'58 min. Earth dist. -5192 Jul 22 j 13:47 19°**✗**03'17 8.08594 AU minimum elong -5186 Apr 10 j 19:21 -5186 Apr 11 j 14:30 direct -5192 Sep 26 j 22:28 15°**х** 39′02 max. Earth dist. 9°**)** 42′10 9.89806 AU -5191 Jan 06 j 05:29 23°**х** 38'19 -5186 Apr 28 j 22:31 evening set morning rise 11°**)** 58'51 -5186 Aug 12 j 10:01 retrograde 20°**)** 24'49 conjunction -5191 Jan 23 j 18:22 25°**₹**'55'42 -1°23'07 opposition -5186 Oct 17 j 17:34 16°\\$55'03 -2°41'24 minimum elong -5191 Jan 23 j 18:18 25° ₹ 55'41 1°23'25 min. Earth dist. -5186 Oct 17 j 03:03 16°**¥**58′05 7.93828 AU max. Earth dist. -5191 Jan 23 j 19:27 25°**尽**56'04 10.02693 AU direct -5186 Dec 23 j 07:06 13° **X** 24'57 morning rise -5191 Feb 10 j 12:31 28°**х** 14′50 evening set -5185 Apr 08 j 06:15 21°**)**(48'44 -5191 Feb 24 j 10:30 0°る retrograde -5191 May 29 j 16:40 6°**る**45'53 conjunction -5185 Apr 26 j 09:42 24°\(\mathbf{H}\) 10'22 -1°59'56 3°る14'57 -2°01'47 opposition -5191 Aug 06 j 00:18 minimum elong -5185 Apr 26 j 09:45 24°**)** 10′23 1°59'59 min. Earth dist. -5191 Aug 05 j 21:21 3°る15'33 7.97491 AU max. Earth dist. -5185 Apr 27 j 05:23 24°**)**€ 16'49 9.98382 AU -5191 Sep 27 i 05:50 30°R*x* morning rise -5185 May 14 j 12:06 26°\ 31'32 direct -5191 Oct 11 i 00:21 29°**х** 49′08 -5185 Jun 12 j 04:44 $0^{\circ}\Upsilon$ -5191 Oct 24 j 16:52 0°정 retrograde -5185 Aug 26 i 16:49 4°Υ45'28 evening set -5190 Jan 21 j 02:30 7°る58'44 min. Earth dist. -5185 Oct 31 j 09:48 1°Υ20'14 8.03928 AU -5185 Nov 01 j 00:30 1°Υ17'11 -2°16'30 opposition -5190 Feb 07 j 19:16 10°**ට**18'45 -1°49'33 -5185 Nov 16 j 22:05 30°**₹**₩ conjunction -5190 Feb 07 j 19:13 10°る18'44 1°49'50 -5184 Jan 07 j 05:32 27° **)** 47'11 minimum elong direct -5190 Feb 08 j 01:52 10°る20'57 9.92945 AU -5184 Feb 26 j 18:19 $0^{\circ}\Upsilon$ max. Earth dist. -5190 Feb 25 j 16:46 12°る40'21 -5184 Apr 22 j 11:26 6°**Y**04'11 morning rise evening set -5190 Jun 13 j 23:32 21°**る**18'27 retrograde -5190 Aug 20 j 17:18 -5184 May 10 j 14:20 8°Y23'38 -1°36'59 17°**ප්**46'47 -2°31'14 conjunction opposition min. Earth dist. -5184 May 10 j 14:24 -5190 Aug 20 j 10:15 17°る48'14 7.89425 AU 8°**Υ**23'39 1°36'58 minimum elong -5184 May 11 j 09:29 -5190 Oct 25 j 11:24 14°**る**19'41 8°**Y**29'49 10.09993 AU direct max. Earth dist. -5189 Feb 05 j 10:35 22°**る**37'59 -5184 May 28 j 14:53 10°**Y**42'14 evening set morning rise -5184 Sep 08 j 11:39 18°**Y**42'27 retrograde -5189 Feb 23 j 06:47 24°る59'58 -2°09'25 -5184 Nov 13 j 23:14 15°**Y**15′51 -1°44′09 conjunction opposition minimum elong -5189 Feb 23 j 06:44 24°る59'57 2°09'41 min. Earth dist. -5184 Nov 13 j 08:37 15°Υ18'51 8.16690 AU max. Earth dist. -5189 Feb 23 j 18:09 25°る03'46 9.86511 AU direct -5183 Jan 20 j 21:38 11°**Y**46'17 morning rise -5189 Mar 13 j 06:53 27°る23'15 evening set -5183 May 07 j 05:19 19°**Y**54'19 -5189 Apr 02 j 23:44 0°≈ -5189 Jun 29 j 07:55 6°≈04'31 -5183 May 25 j 06:33 22°Y10'59 -1°09'00 retrograde conjunction -5189 Sep 04 j 13:16 2°≈32'35 -2°51'12 -5183 May 25 j 06:37 22° Y 11'00 1° 08' 54 opposition minimum elong min. Earth dist. -5189 Sep 04 j 02:58 2°≈34'45 7.84860 AU max. Earth dist. -5183 May 26 j 00:30 22°Υ16'41 10.23862 AU -5189 Oct 08 j 18:31 30°Ŗる -5183 Jun 12 j 04:11 24°\bar{Y}26'27 morning rise 29°る04'20 direct -5189 Nov 09 i 05:33 -5183 Aug 02 j 17:41 0°8 -5189 Dec 10 i 09:55 0°≈ retrograde -5183 Sep 21 i 19:14 2°812'29 evening set -5188 Feb 21 j 02:19 7°≈28'53 -5183 Nov 12 j 07:23 30°RY opposition -5183 Nov 27 j 13:00 28° Y 47'42 -1°07'00 -5188 Mar 10 j 01:21 9°≈52'03 -2°20'57 min. Earth dist. -5183 Nov 26 i 23:23 28°**Y**50'27 8.31290 AU conjunction -5188 Mar 10 i 01:20 9°≈52'03 2°21'11 direct -5182 Feb 04 i 04:59 25°**Y**18'52 minimum elong max. Earth dist. -5188 Mar 10 j 16:15 9°≈57'02 9.83745 AU -5182 Apr 23 j 02:27 0°8 -5188 Mar 28 j 03:15 12°≈16'08 -5182 May 21 j 10:48 3°816'39 morning rise evening set -5188 Apr 18 j 18:56 15°22 retrograde -5188 Jul 13 j 14:34 20°≈56'25 conjunction -5182 Jun 08 j 09:08 5°830'07 -0°38'04 -5188 Sep 18 j 09:37 17°≈24'45 -2°59'50 minimum elong -5182 Jun 08 j 09:10 5°830'07 0°37'54 opposition min. Earth dist. -5188 Sep 17 j 21:12 17°≈27'22 7.84029 AU max. Earth dist. -5182 Jun 09 j 01:05 5°835'05 10.39113 AU -5188 Oct 20 j 05:00 -5182 Jun 26 j 02:51 7°**8**42'07 15°R≈ morning rise -5182 Sep 18 j 12:11 15°8 direct -5188 Nov 23 j 04:23 13°≈55'35 -5182 Oct 04 j 17:26 15°**8**14'25 -5188 Dec 26 j 22:07 15°≈ retrograde 15°₹**8** evening set -5187 Mar 07 j 21:42 22°≈23'21 -5182 Oct 20 j 22:42 opposition -5182 Dec 10 j 17:40 11°**8**51'29 -0°27'42 conjunction -5187 Mar 25 j 23:01 24°≈46'54 -2°23'08 min. Earth dist. -5182 Dec 10 j 06:10 11°**8**53'47 8.46869 AU minimum elong -5187 Mar 25 j 23:02 24°≈46'54 2°23'19 direct -5181 Feb 18 j 01:41 8°**8**23'39 max. Earth dist. -5187 Mar 26 j 16:32 24°≈52'44 9.84832 AU -5181 May 25 j 04:09 15°8 -5187 Apr 13 j 01:59 27°≈10'55 -5181 Jun 04 j 03:12 16°810'44 morning rise evening set

-5187 May 05 j 12:56

0°**)**€

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conjunction	-5181 Jun 21 j 21:32	18° 8 20'46		conjunction	-5175 Aug 30 j 05:49	27° © 45'25	2°14'22
minimum elong	-5181 Jun 21 j 21:33	18° 8 20'47	0°05'59	minimum elong	-5175 Aug 30 j 05:47	27° © 45'24	
behind sun begin	-5181 Jun 21 j 14:41	18° 8 18'41		max. Earth dist.	-5175 Aug 29 j 19:54	27° © 42'33	11.23366 AU
behind sun end	-5181 Jun 22 j 04:25	18° 8 22'52		morning rise	-5175 Sep 15 j 16:31	29° © 38'30	
max. Earth dist.	-5181 Jun 22 j 10:29	18° 8 24'44	10.54889 AU		-5175 Sep 18 j 20:58	$0^{\circ}\Omega$	
morning rise	-5181 Jul 09 j 10:39	20° 8 29'13		retrograde	-5175 Dec 23 j 07:07	6° Ω 22'26	
asc. node	-5181 Sep 03 j 01:20	26° 8 07'56		opposition	-5174 Mar 03 j 09:21	3° Ω 07'19	2°49'15
retrograde	-5181 Oct 17 j 03:25	27° 8 49'00		min. Earth dist.	-5174 Mar 03 j 18:37	3° Ω 05'38	9.25451 AU
opposition	-5181 Dec 23 j 13:49	24° 8 27'51	0°11'30		-5174 Apr 28 j 05:03	30° ₹ 5	
min. Earth dist.	-5181 Dec 23 j 05:25	24° 8 29'30	8.62605 AU	direct	-5174 May 14 j 09:19	29° 5 47'50	
direct	-5180 Mar 02 j 14:09	21° 8 01'10			-5174 May 30 j 09:43	$0^{\circ}\Omega$	
evening set	-5180 Jun 16 j 06:35	28° 8 37'46		evening set	-5174 Aug 24 j 17:06	6° Ω 43'50	
	-5180 Jun 27 j 17:24	$\Pi^{\circ}0$					
				conjunction	-5174 Sep 10 j 04:09	8° Ω 36'49	2°22'47
conjunction	-5180 Jul 03 j 20:10	0° Ⅱ 44′20	0°25'07	minimum elong	-5174 Sep 10 j 04:08	8° Ω 36'48	2°23'02
minimum elong	-5180 Jul 03 j 20:08	0° Ⅱ 44'20	0°25'22	max. Earth dist.	-5174 Sep 09 j 16:10	8° £ 33′21	11.26405 AU
max. Earth dist.	-5180 Jul 04 j 04:57	0° Ⅱ 46'59	10.70397 AU	morning rise	-5174 Sep 26 j 12:35	10° Ω 29'06	
morning rise	-5180 Jul 21 j 04:25	2° Ⅱ 49'19			-5174 Nov 11 j 02:17	15° Ω	
retrograde	-5180 Oct 28 j 04:04	9° Ⅱ 58'16		retrograde	-5173 Jan 03 j 14:09	17° Ω 13'45	
opposition	-5179 Jan 04 j 01:58	6° Ⅱ 38'45	0°48'46	•	-5173 Feb 28 j 16:09	15° R Ω	
min. Earth dist.	-5179 Jan 03 j 20:38	6° Ⅱ 39'46	8.77746 AU	opposition	-5173 Mar 14 j 23:56	13° Ω 58'33	2°56'23
direct	-5179 Mar 15 j 17:31	3° Ⅱ 13'18		min. Earth dist.	-5173 Mar 15 j 10:50	13° Ω 56'34	9.27041 AU
evening set	-5179 Jun 28 j 22:08	10° Ⅱ 40′07		direct	-5173 May 25 j 21:15	10° Ω 39'53	
<i>8</i> - 11					-5173 Aug 11 j 18:14	15° Ω	
conjunction	-5179 Jul 16 j 06:33	12° Ⅱ 43'24	0°54'19	evening set	-5173 Sep 04 j 15:47	17° Ω 33'48	
minimum elong	-5179 Jul 16 j 06:31	12° ∏ 43'23	0°54'35	max. Earth dist.	-5173 Sep 20 j 11:05		11.26488 AU
max. Earth dist.	-5179 Jul 16 j 10:45	12° Ⅱ 44'39		man. Darvir dige.	2173 Sep 20 j 11.00	19 0022 22	11.20.00110
morning rise	-5179 Aug 02 j 09:48	14° II 45'07	10.01713710	conjunction	-5173 Sep 21 j 00:53	19° Ω 26'21	2°26'03
retrograde	-5179 Nov 08 j 22:20	21° II 45'07		minimum elong	-5173 Sep 21 j 00:53	19° Ω 26'21	2°26'15
opposition	-5178 Jan 16 j 07:04	18° Ⅲ 27'01	1°22'43	morning rise	-5173 Oct 07 j 08:03	21° Ω 18'27	2 20 13
min. Earth dist.	-5178 Jan 16 j 04:20		8.91632 AU	retrograde	-5172 Jan 14 j 23:45	28°Ω05'32	
direct	-5178 Mar 28 j 10:37	15° Ⅱ 02'53	6.71032 AO	opposition	-5172 Mar 25 j 15:27	24°Ω49'58	2°57'15
evening set	-5178 Jul 11 j 02:54	22° II 20'56		min. Earth dist.	-5172 Mar 26 j 04:41	24° Ω 47'34	9.25644 AU
evening set	3170 Jul 11 J 02.54	22 120 30		direct	-5172 Jun 05 j 07:17	21°Ω31'50	7.23044710
conjunction	-5178 Jul 28 j 06:12	24° Ⅱ 21'14	1°20'30	evening set	-5172 Sep 14 j 13:38	$28^{\circ}\Omega 25'09$	
minimum elong	-5178 Jul 28 j 06:10	24° I I21'14		evening set	-5172 Sep 14 j 13:38 -5172 Sep 28 j 07:58	0° m)	
max. Earth dist.	-5178 Jul 28 j 06:59		10.97937 AU		-3172 Sep 26 J 07.36	V III	
morning rise	-5178 Aug 14 j 04:27	26° I I20'04	10.97937 AU	conjunction	-5172 Sep 30 j 21:37	0° mp 17'51	2024/05
morning rise	-5178 Aug 14 j 04.27 -5178 Sep 17 j 18:40	20 H 20 04 0° ©		•	-5172 Sep 30 j 21:37	0° mg 17'51	
retrograde	-5178 Nov 20 j 10:35	3°9513'07		minimum elong max. Earth dist.	-5172 Sep 30 j 21:38		11.23615 AU
retrograde	·						11.23013 AU
	-5177 Jan 27 j 10:26	30°₹ Ⅱ	1°52'21	morning rise	-5172 Oct 17 j 04:46	2° Th 10'23	
opposition	-5177 Jan 28 j 06:47	29° Ⅱ 56'11		retrograde	-5171 Jan 25 j 11:49	9° Mp 01'35	2051147
min. Earth dist.	-5177 Jan 28 j 06:35	29° Ⅱ 56'13	9.03725 AU	opposition	-5171 Apr 06 j 09:18	5° Mp 45'20	2°51'47
direct	-5177 Apr 09 j 20:07	26° Ⅱ 33'23		min. Earth dist.	-5171 Apr 07 j 00:44	5° Mp 42'31	9.21289 AU
	-5177 Jun 17 j 08:58	0°©		direct	-5171 Jun 16 j 17:08	2° m/27'28	
evening set	-5177 Jul 22 j 22:14	3° © 43'51		evening set	-5171 Sep 25 j 12:15	9° m 21'38	
agniumation	5177 Av. 00: 20:40	500541124	1942154	agniumation	5171 Oct 11: 20:12	11° m ₂ 15'05	2016/51
conjunction	-5177 Aug 08 j 20:40	5°9541'34		conjunction	-5171 Oct 11 j 20:12		
minimum elong	-5177 Aug 08 j 20:37	5°9541'33	1°43'11	minimum elong	-5171 Oct 11 j 20:14	11° m) 15'05	2°16'57
max. Earth dist.	-5177 Aug 08 j 18:34		11.08902 AU	max. Earth dist.	-5171 Oct 11 j 02:05		11.17851 AU
morning rise	-5177 Aug 25 j 14:14	7°537'56		morning rise	-5171 Oct 28 j 04:22	13° Mp 08'38	
retrograde	-5177 Dec 01 j 20:29	14°526'03		retrograde	-5170 Feb 06 j 05:15	20° m 05'43	
opposition	-5176 Feb 09 j 02:13	11°5510'02		opposition	-5170 Apr 18 j 06:37	16° Mp 48'24	2°39'58
min. Earth dist.	-5176 Feb 09 j 05:31	11° © 09'25	9.13598 AU	min. Earth dist.	-5170 Apr 18 j 22:52	16° Mp 45'25	9.14082 AU
direct	-5176 Apr 20 j 21:29	7° 5 48'28		direct	-5170 Jun 28 j 05:35	13° m 30'35	
evening set	-5176 Aug 02 j 10:03	14° © 52'43		evening set	-5170 Oct 06 j 13:34	20° m 27'03	
	5176 A 10:00 5	1600 4000	2000150		5170 0 + 22 + 22 + 2	220m-21151	200.412.4
conjunction	-5176 Aug 19 j 03:55	16°5548'19	2°00'59	conjunction	-5170 Oct 22 j 22:42	22° m/21'51	2°04'24
minimum elong	-5176 Aug 19 j 03:52	16°5548'18	2°01'16	minimum elong	-5170 Oct 22 j 22:45	22° m/21'52	
max. Earth dist.	-5176 Aug 18 j 21:50	16°9546'33	11.17469 AU	max. Earth dist.	-5170 Oct 22 j 04:33		11.09335 AU
morning rise	-5176 Sep 04 j 17:38	18°9542'46		morning rise	-5170 Nov 08 j 08:45	24° m) 17'02	
retrograde	-5176 Dec 12 j 01:11	25°\$27'49	000 (100		-5169 Jan 07 j 18:49	0∘ ⊽	
opposition	-5175 Feb 19 j 18:32	22°9512'26	2°36'02	retrograde	-5169 Feb 18 j 07:53	1° 2 21'36	
min. Earth dist.	-5175 Feb 20 j 01:22	22°5511'10	9.20921 AU		-5169 Apr 01 j 23:00	30°R, Mp	
direct	-5175 May 02 j 15:59	18°©51'59		opposition	-5169 Apr 30 j 08:32	28° Mp 02'56	2°21'54
evening set	-5175 Aug 13 j 15:51	25° © 51'25		min. Earth dist.	-5169 May 01 j 00:38	27° m 59'59	9.04201 AU
				direct	-5169 Jul 09 j 20:12	24° m 44'55	

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 20 Attention, astronomical year style is used: The year -5169 in astronomical counting style is the year 5170 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ne year -5169 i	in astronomical co	unting style is the year	r 5170 BCE in historical c	counting style.	
	-5169 Oct 02 j 07:14	0∘ ⊽		retrograde	-5163 May 08 j 01:24	16° ∤ 716'11	
evening set	-5169 Oct 17 j 19:31	1° ≏ 45'13		opposition	-5163 Jul 16 j 05:19	12° х 46′48	
				min. Earth dist.	-5163 Jul 16 j 09:01		8.14995 AU
conjunction	-5169 Nov 03 j 06:42	3° ≏ 41'58	1°46'54	direct	-5163 Sep 20 j 21:17	9° ∡ 22'42	
minimum elong	-5169 Nov 03 j 06:45	3° Ω 41'59	1°46'54	evening set	-5163 Dec 30 j 20:17	17° ∡ 16'19	
max. Earth dist.	-5169 Nov 02 j 12:12		10.98270 AU				
morning rise	-5169 Nov 19 j 19:41	5° Ω 39'22		conjunction	-5162 Jan 17 j 07:03	19° ₹ 32'11	
retrograde	-5168 Mar 01 j 16:52	12° £ 53'02	1057146	minimum elong	-5162 Jan 17 j 07:00	19° ∡ ³32′10	
opposition	-5168 May 11 j 16:20	9° £ 32'50	1°57'46	max. Earth dist.	-5162 Jan 17 j 03:34		10.08244 AU
min. Earth dist.	-5168 May 12 j 08:20 -5168 Jul 20 j 13:02	9° £ 29'51	8.91904 AU	morning rise	-5162 Feb 03 j 23:18	21° メ 49'52 0°る	
direct	,	6° ≙ 14'20 13° ≙ 20'11		retrograde	-5162 May 05 j 13:06	0° 중 16'11	
evening set	-5168 Oct 28 j 08:16	13 == 20 11		retrograde	-5162 May 23 j 00:14 -5162 Jun 09 j 09:27	0 01011 30°R.∡7	
conjunction	-5168 Nov 13 j 22:10	15° £ 19'23	1°24'39	opposition	-5162 Jul 30 j 13:36	26° ₹ 45'22	1045122
minimum elong	-5168 Nov 13 j 22:13	15° ⊆ 19'24		min. Earth dist.	-5162 Jul 30 j 13:42		8.02009 AU
max. Earth dist.	-5168 Nov 13 j 03:00		10.84994 AU	direct	-5162 Oct 04 j 17:41	23°× 19'47	0.02007 AC
morning rise	-5168 Nov 30 j 15:01	17° ⊆ 19'33	10.04/)4 AO	direct	-5161 Jan 03 j 08:47	0°る	
retrograde	-5167 Mar 14 j 11:33	24° Ω 43'53		evening set	-5161 Jan 14 j 10:39	1° る 24'33	
opposition	-5167 May 24 j 07:08	21° ⊆ 21'57	1°28'00	evening sec	5101 sun 11 j 10.57	1 02133	
min. Earth dist.	-5167 May 24 j 22:56	21° Ω 18'58	8.77645 AU	conjunction	-5161 Feb 01 j 01:29	3° る 43'25	-1°37'47
direct	-5167 Aug 01 j 12:59	18° ≏ 02'44		minimum elong	-5161 Feb 01 j 01:25	3° る 43'24	
evening set	-5167 Nov 09 j 05:39	25° Ω 15'42		max. Earth dist.	-5161 Feb 01 i 02:47	3° ප 43'51	
8	,			morning rise	-5161 Feb 18 j 21:35	6° る 03'59	
conjunction	-5167 Nov 25 j 23:06	27° Ω 17'51	0°58'10	retrograde	-5161 Jun 07 j 04:22	14° る 39'17	
minimum elong	-5167 Nov 25 j 23:09	27° Ω 17'51	0°58'03	opposition	-5161 Aug 14 j 04:05	11° る 07'28	-2°18'25
max. Earth dist.	-5167 Nov 25 j 05:13	27° ≏ 12'22	10.70056 AU	min. Earth dist.	-5161 Aug 14 j 00:37	11° 8 0 8 ′11	7.91765 AU
morning rise	-5167 Dec 12 j 20:27	29° £ 21'15		direct	-5161 Oct 19 j 01:05	7° る 40'25	
	-5167 Dec 18 j 06:38	0° M		evening set	-5160 Jan 29 j 13:32	15° る 55'14	
retrograde	-5166 Mar 27 j 16:32	6°M57'30					
opposition	-5166 Jun 06 j 05:55	3°M33'41	0°53'17	conjunction	-5160 Feb 16 j 08:03	18° る 16'31	-2°00'59
min. Earth dist.	-5166 Jun 06 j 20:07	3°M30'58	8.62067 AU	minimum elong	-5160 Feb 16 j 08:00	18° る 16'30	2°01'16
direct	-5166 Aug 13 j 19:38	0°M13'30		max. Earth dist.	-5160 Feb 16 j 14:31	18° る 18'41	9.87759 AU
evening set	-5166 Nov 21 j 13:32	7°M35'02		morning rise	-5160 Mar 05 j 07:12	20° る 39'17	
				retrograde	-5160 Jun 21 j 11:33	29° る 20'09	
conjunction	-5166 Dec 08 j 11:14	9°M40'30		opposition	-5160 Aug 27 j 23:07	25° る 47'46	
minimum elong	-5166 Dec 08 j 11:15	9°M40'30	0°28'04	min. Earth dist.	-5160 Aug 27 j 16:01		7.84948 AU
max. Earth dist.	-5166 Dec 07 j 20:17		10.54123 AU	direct	-5160 Nov 01 j 16:26	22° る 19'27	
morning rise	-5166 Dec 25 j 13:21	11°M47'25			-5159 Feb 07 j 16:35	0° ≈	
	-5165 Jan 22 j 09:45			evening set	-5159 Feb 13 j 01:57	0° ≈ 42'07	
retrograde	-5165 Apr 10 j 07:53	19°M36'30					
opposition	-5165 Jun 19 j 13:07	16°M10'43	0°14'45	conjunction	-5159 Mar 02 j 23:43	3°≈05'04	
min. Earth dist.	-5165 Jun 20 j 00:22	16°M08'32	8.45889 AU	minimum elong	-5159 Mar 02 j 23:41	3°≈05'04	2°16'54
Ľ .	-5165 Jul 05 j 01:22	15°RM		max. Earth dist.	-5159 Mar 03 j 11:28	3°≈09'01	9.82785 AU
direct	-5165 Aug 26 j 11:51	12°M49'23		morning rise	-5159 Mar 21 j 01:05 -5159 Jul 06 j 19:15	5°≈29'10 14°≈11'25	
daga mada	-5165 Oct 15 j 14:04 -5165 Nov 05 j 03:02	15°M		retrograde	-5159 Sep 11 j 20:00	14 ≈11 23 10°≈38'58	2057122
desc. node evening set	-5165 Dec 04 j 09:58	16°M56'42 20°M20'47		opposition min. Earth dist.	-5159 Sep 11 j 20:00	10 ≈38 38 10°≈41'12	7.82041 AU
evening set	-3103 DCC 04 J 09.38	20 1162047		direct	-5159 Nov 16 j 13:49	7°≈09'35	7.82041 AU
conjunction	-5165 Dec 21 j 12:05	22°M29'45	-0°04'05	direct	-5158 Feb 24 j 02:29	7 ≈0933 15°≈	
minimum elong	-5165 Dec 21 j 12:05	22°M29'45		evening set	-5158 Feb 28 j 20:28	15°≈37'08	
behind sun begin	-5165 Dec 21 j 05:04	22°M27'34	5 5.10	c.c.iiig set	2.201.20 20 j 20.20	15.5.5700	
behind sun end	-5165 Dec 21 j 19:06	22°M31'57		conjunction	-5158 Mar 18 j 20:58	18° ≈ 00'54	-2°23'20
max. Earth dist.	-5165 Dec 21 j 00:44		10.37945 AU	minimum elong	-5158 Mar 18 j 20:57	18° ≈ 00'54	
morning rise	-5164 Jan 07 j 19:03	24°M40'22		max. Earth dist.	-5158 Mar 19 j 13:18	18° ≈ 06'22	9.81900 AU
3	-5164 Feb 25 j 12:44	0° ∡ 7		morning rise	-5158 Apr 05 j 23:45	20° ≈ 25'22	
retrograde	-5164 Apr 23 j 11:17	2° х 42′33		retrograde	-5158 Jul 21 j 23:47	29° ≈ 04'24	
-	-5164 Jun 22 j 14:15	30°RM₊		opposition	-5158 Sep 26 j 15:54	25° ≈ 32'26	-2°59'39
opposition	-5164 Jul 02 j 04:50	29°M14'53	-0°26'03	min. Earth dist.	-5158 Sep 26 j 02:16	25° ≈ 35'18	7.83250 AU
min. Earth dist.	-5164 Jul 02 j 12:21	29°M13'24	8.29911 AU	direct	-5158 Dec 01 j 14:29	22° ≈ 02'17	
direct	-5164 Sep 07 j 12:01	25°M52'13			-5157 Mar 12 j 16:20	0° ∀	
	-5164 Nov 16 j 11:55	0° ∡ ¹		evening set	-5157 Mar 16 j 16:30	0°) 31′12	
evening set	-5164 Dec 16 j 20:02	3° х 34′29					
				conjunction	-5157 Apr 03 j 18:59	2°) 54′51	
conjunction	-5163 Jan 03 j 02:32	5° х 47′00		minimum elong	-5157 Apr 03 j 19:01	2° ¥ 54'52	
minimum elong	-5163 Jan 03 j 02:30	5° ∡ ¹46'59		max. Earth dist.	-5157 Apr 04 j 14:39	3° ∺ 01′24	9.85172 AU
max. Earth dist.	-5163 Jan 02 j 18:50		10.22360 AU	morning rise	-5157 Apr 21 j 22:18	5°) 18'44	
morning rise	-5163 Jan 20 j 14:18	8° ₹ 01'16		retrograde	-5157 Aug 05 j 22:21	13° ¥ 50′17	

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5157 in astronomical counting style is the year 5158 BCE in historical counting style. opposition -5157 Oct 11 j 08:24 10°**)** 19'17 -2°49'55 -5151 Dec 29 j 18:31 1°**Ⅱ**20′05 0°31'56 opposition -5157 Oct 10 j 16:50 10°**)** €22'33 7.88486 AU min. Earth dist. -5151 Dec 29 j 10:05 1°**Д**21'43 8.71242 AU min. Earth dist. -5157 Dec 16 j 16:08 -5150 Jan 16 j 11:22 direct 6°**)** 48′46 30°R₩ -5156 Mar 31 j 09:18 15°**)** 15′22 -5150 Mar 10 j 03:04 27°854'29 direct evening set -5150 Apr 30 j 18:21 Π $^{\circ}0$ -5150 Jun 23 j 13:49 conjunction -5156 Apr 18 j 12:51 17° **★**38'00 -2°08'26 evening set 5°**Ⅱ**25'56 -5156 Apr 18 j 12:54 minimum elong 17°**)** 38'01 2°08'31 -5150 Jul 11 j 00:49 7°**II**30'44 0°41'12 max. Earth dist. -5156 Apr 19 j 10:27 17°**)** 45'07 9.92359 AU conjunction -5150 Jul 11 j 00:47 morning rise -5156 May 06 j 15:45 20°\(\pi\)00'21 minimum elong 7°**Ⅲ**30'43 0°41'28 10.78933 AU retrograde -5156 Aug 19 j 11:40 28°**H**20'59 max. Earth dist. -5150 Jul 11 j 08:54 7°**Ⅲ**33′09 opposition -5156 Oct 24 j 19:05 24°\frac{1}{26} -2°29'22 morning rise -5150 Jul 28 j 06:16 9°**Ⅲ**33'55 -5156 Oct 24 j 02:45 -5150 Nov 04 j 01:37 min. Earth dist. 24°**¥**54′50 7.97380 AU retrograde 16°**Ⅲ**37'58 -5149 Jan 11 j 03:22 direct -5156 Dec 30 j 16:10 21°**H**20'56 opposition 13°**Ⅲ**19'39 1°07'36 evening set -5155 Apr 15 j 19:12 29°**)**41'58 min. Earth dist. -5149 Jan 10 j 22:43 13°**Ⅲ**20′33 8.86090 AU -5155 Apr 18 j 03:38 $0^{\circ}\Upsilon$ direct -5149 Mar 22 j 23:54 9°**I**55'24 evening set -5149 Jul 06 j 00:03 17°**Ⅲ**17'27 conjunction -5155 May 03 j 22:44 2°Y02'44 -1°48'32 minimum elong -5155 May 03 j 22:48 2°Y02'45 1°48'32 conjunction -5149 Jul 23 j 05:45 19°**Ⅱ**19'04 1°08'55 max. Earth dist. -5155 May 04 j 20:39 2°Υ09'52 10.02950 AU minimum elong -5149 Jul 23 j 05:43 19°**Ⅱ**19′03 1°09'11 morning rise -5155 May 22 j 00:16 4°Y22'48 max. Earth dist. -5149 Jul 23 j 09:05 19°**Ⅲ**20′03 10.92946 AU retrograde -5155 Sep 02 j 12:58 12° Y 30'13 morning rise -5149 Aug 09 j 06:10 21°**Ⅱ**19'10 opposition -5155 Nov 07 j 22:04 9°Y02'26 -2°00'06 retrograde -5149 Nov 15 i 15:37 28°**Ⅱ**15'12 min. Earth dist. -5155 Nov 07 i 06:23 9°**Υ**05'41 8.09324 AU opposition -5148 Jan 23 i 05:56 24°**Ⅱ**58'14 1°39'20 direct -5154 Jan 14 j 11:00 5°**Y**32′22 min. Earth dist. -5148 Jan 23 i 05:15 24°**Ⅱ**58'22 8.99229 AU evening set -5154 Apr 30 j 19:11 13°Y45'19 direct -5148 Apr 03 j 13:29 21°II35'16 evening set -5148 Jul 17 j 00:04 28°**Ⅱ**49'09 -5154 May 18 j 21:28 16°**Y**'03'30 -1°22'35 -5148 Jul 27 j 04:43 0ಂತಾ conjunction -5154 May 18 j 21:32 16°**Υ**'03'31 1°22'31 minimum elong -5154 May 19 j 17:52 16°**Y**10′02 10.16219 AU -5148 Aug 03 j 00:37 1°33'08 max. Earth dist. conjunction 0°9547'58 -5154 Jun 05 j 20:37 18°Y20'38 -5148 Aug 03 j 00:34 morning rise minimum elong 0°9547'57 1°33'25 -5148 Aug 02 j 22:49 0°547'26 11.04941 AU -5154 Sep 16 j 02:41 26°**Y**13'49 max. Earth dist. retrograde -5154 Nov 21 j 16:32 22° Y 48'02 -1° 24'46 -5148 Aug 19 j 20:24 2°9545'24 opposition morning rise min. Earth dist. 22°Υ50'57 8.23541 AU -5148 Nov 26 j 02:17 -5154 Nov 21 j 02:13 9°935'34 retrograde -5153 Jan 28 j 22:42 19°**Y**18'45 -5147 Feb 03 j 03:26 6°9519'37 2°06'19 direct opposition -5153 May 15 j 07:08 27°**Y**21'54 -5147 Feb 03 j 05:59 6°9519'08 9.10106 AU evening set min. Earth dist. -5147 Apr 15 j 19:47 direct 2°957'53 -5153 Jun 02 j 06:53 29°**Y**'37'00 -0°52'42 -5147 Jul 28 j 15:40 conjunction evening set 10°904'58 minimum elong -5153 Jun 02 j 06:56 29°**Y**37'01 0°52'34 max. Earth dist. -5153 Jun 03 j 00:32 29°Υ42'33 10.31315 AU conjunction -5147 Aug 14 j 11:30 12°9501'28 1°53'15 -5153 Jun 05 j 07:57 0°8 minimum elong -5147 Aug 14 j 11:28 12°9501'27 1°53'32 morning rise -5153 Jun 20 j 02:39 1°850'46 max. Earth dist. -5147 Aug 14 j 05:57 11°559'51 11.14478 AU -5153 Sep 29 j 05:09 9°829'50 -5147 Aug 31 j 03:01 13°956'44 retrograde morning rise -5153 Dec 05 j 01:57 6°806'05 -0°46'04 -5147 Dec 07 j 09:44 20°5543'04 opposition retrograde min. Earth dist. -5153 Dec 04 j 13:08 6°808'39 8.39172 AU -5146 Feb 14 j 21:18 17°**5**27'47 opposition 2°27'59 -5152 Feb 12 j 01:33 2°**8**37'52 min. Earth dist. -5146 Feb 15 j 02:35 17°**©**26'48 9.18374 AU direct evening set -5152 May 28 j 06:10 10°**8**30'22 direct -5146 Apr 27 i 18:26 14°9507'10 evening set -5146 Aug 09 j 00:25 21°908'50 12°842'05 -0°20'58 conjunction -5152 Jun 15 i 02:24 minimum elong -5152 Jun 15 i 02:25 12°**8**42'05 0°20'46 conjunction -5146 Aug 25 i 16:13 23°503'31 2°08'50 max. Earth dist. -5152 Jun 15 j 16:58 12°846'35 10.47364 AU minimum elong -5146 Aug 25 i 16:10 23°903'30 2°09'06 -5152 Jul 02 j 17:57 14°**8**52'17 max. Earth dist. -5146 Aug 25 j 07:52 23°501'06 11.21309 AU morning rise -5152 Jul 03 j 19:28 15°8 -5146 Sep 11 j 04:05 24°957'10 morning rise -5152 Oct 10 j 20:06 22°818'06 -5146 Nov 02 j 16:02 $0^{\circ}\Omega$ retrograde opposition -5152 Dec 17 j 02:20 18°**8**56'21 -0°06'29 retrograde -5146 Dec 18 j 17:08 1°**Ω**41'35 -5145 Feb 04 j 08:26 min. Earth dist. -5152 Dec 16 j 15:19 18°**8**58'31 8.55351 AU 30°R95 -5145 Feb 26 j 13:11 -5151 Feb 17 j 13:58 15°**8**32'03 opposition 28°926'37 2°43'55 asc. node -5151 Feb 24 j 19:38 15°**8**29'23 min. Earth dist. -5145 Feb 26 j 21:42 28°525'04 9.23842 AU direct -5151 Jun 10 j 16:10 23°**8**11'08 direct -5145 May 09 j 12:21 25°906'55 evening set -5145 Aug 01 j 01:21 0° Ω -5151 Jun 28 j 08:07 25°**8**19'21 0°10'53 -5145 Aug 20 j 03:54 conjunction evening set 2°**Ω**04'31 -5151 Jun 28 j 08:06 25°**8**19'21 minimum elong 0°11'08 behind sun begin -5151 Jun 28 j 02:47 25°**8**17'45 conjunction -5145 Sep 05 j 16:15 3°**Ω**57'57 2°19'32 behind sun end -5151 Jun 28 j 13:25 25°**8**20'57 minimum elong -5145 Sep 05 j 16:14 3°**Ω**57'57 2°19'48 max. Earth dist. -5151 Jun 28 j 19:33 25°**8**22'50 10.63505 AU max. Earth dist. -5145 Sep 05 j 04:22 3°**Ω**54'31 11.25281 AU morning rise -5151 Jul 15 j 18:48 27°**8**25'58 morning rise -5145 Sep 22 j 01:34 5°**Ω**50'34 -5151 Aug 07 j 07:27 $\mathbb{I}^{\circ 0}$ -5145 Dec 29 j 21:52 12°**Ω**34'52 retrograde -5151 Oct 23 j 02:41 4°**Ⅱ**40′01 -5144 Mar 09 j 04:04 9°Ω19'51 2°53'51 retrograde opposition

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 22 Attention, astronomical year style is used: The year -5144 in astronomical counting style is the year 5145 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	ne year -5144 i	n astronomical co	unting style is the year	5145 BCE in historical c	counting style.	
min. Earth dist.	-5144 Mar 09 j 15:56	9° Ω 17'41	9.26383 AU	evening set	-5138 Nov 04 j 05:39	20° ≏ 05'31	
direct	-5144 May 20 j 01:19	6° Ω 00'48					
evening set	-5144 Aug 30 j 03:55	12° Ω 55'47		conjunction	-5138 Nov 20 j 21:37	22° ჲ 06′25	1°10'41
•				minimum elong	-5138 Nov 20 j 21:39	22° ≏ 06'26	1°10'36
conjunction	-5144 Sep 15 j 13:44	14° Ω 48'31	2°25'10	max. Earth dist.	-5138 Nov 20 j 04:44		10.75598 AU
minimum elong	-5144 Sep 15 j 13:43	14° Ω 48'31		morning rise	-5138 Dec 07 j 16:45	24° ≏ 08'25	
max. Earth dist.	-5144 Sep 14 j 22:34		11.26308 AU		-5137 Feb 04 j 12:55	0°M	
man. Baran alou.	-5144 Sep 17 j 05:33	15° Ω	11.20000110	retrograde	-5137 Mar 22 j 02:15	1°M39'25	
morning rise	-5144 Oct 01 j 21:31	16° Ω 40'43		renograde	-5137 May 07 j 18:28	30° ₹ Ω	
retrograde	-5143 Jan 09 j 05:11	23°Ω26'41		opposition	-5137 May 31 j 18:21	28° £ 15'57	1°00'38
opposition	-5143 Mar 20 j 19:01	20° Ω 11'14	2°57'37	min. Earth dist.	-5137 Jun 01 j 07:46	28° ⊆ 13'24	8.68034 AU
min. Earth dist.	-5143 Mar 21 j 08:51		9.25934 AU	direct	-5137 Aug 08 j 15:57	24° £ 55'49	0.00054710
direct	-5143 May 31 j 14:18	16° Ω 52'38	7.23754 AU	direct	-5137 Aug 08 j 15:57 -5137 Oct 28 j 06:12	0°M	
evening set	-5143 Sep 10 j 02:00	23°Ω46'23		evening set	-5137 Nov 16 j 08:33	2°M13'34	
evening set	-5145 Sep 10 J 02.00	23 6640 23		evening set	-3137 NOV 10 J 06.33	2 11613 34	
agniumation	5142 Can 26: 10:26	25° Ω 39'02	2025126	aaniumatian	5127 Dec. 02 : 04:17	4° ጤ 17'35	0942112
conjunction minimum elong	-5143 Sep 26 j 10:26 -5143 Sep 26 j 10:27	$25^{\circ} \Omega 39'02$		conjunction minimum elong	-5137 Dec 03 j 04:17	4°M17'35	
_				_	-5137 Dec 03 j 04:19		
max. Earth dist.	-5143 Sep 25 j 18:01		11.24368 AU	max. Earth dist.	-5137 Dec 02 j 12:41		10.60388 AU
morning rise	-5143 Oct 12 j 17:33	27° Ω 31′23		morning rise	-5137 Dec 20 j 04:11	6°M22'58	
	-5143 Nov 04 j 16:02	0° m/y		retrograde	-5136 Apr 03 j 12:47	14°M06'18	
retrograde	-5142 Jan 20 j 16:41	4° Mp 20′46		opposition	-5136 Jun 12 j 21:37	10°M41'04	
opposition	-5142 Apr 01 j 11:44	1°Mp 04'34		min. Earth dist.	-5136 Jun 13 j 09:09	10°M38'50	8.52420 AU
min. Earth dist.	-5142 Apr 02 j 02:33	1°m/01'52	9.22516 AU	direct	-5136 Aug 20 j 02:32	7° ™ 19'59	
	-5142 Apr 16 j 13:07	30° R Ω		evening set	-5136 Nov 27 j 23:01	14° M 46'59	
direct	-5142 Jun 12 j 00:49	27° Ω 46'14			-5136 Nov 29 j 17:14	15° M	
	-5142 Aug 04 j 23:57	0° m y					
evening set	-5142 Sep 20 j 23:55	4° ™ 40′09		conjunction	-5136 Dec 14 j 22:54	16°M54'23	0°10'52
				minimum elong	-5136 Dec 14 j 22:55	16°M54'24	0°10'40
conjunction	-5142 Oct 07 j 07:58	6° Mp 33′19	2°20'46	behind sun begin	-5136 Dec 14 j 17:25	16°M52'41	
minimum elong	-5142 Oct 07 j 08:00	6° ™ 33'19	2°20'54	behind sun end	-5136 Dec 15 j 04:25	16°M56'06	
max. Earth dist.	-5142 Oct 06 j 14:35	6° Mp 28′15	11.19528 AU	max. Earth dist.	-5136 Dec 14 j 09:48	16°M50'17	10.44633 AU
morning rise	-5142 Oct 23 j 15:28	8° Mp 26'26		morning rise	-5135 Jan 01 j 03:46	19° ™ 03'23	
retrograde	-5141 Feb 01 j 08:12	15° m 20'58		retrograde	-5135 Apr 17 j 10:34	26°M59'44	
opposition	-5141 Apr 13 j 07:23	12° Mp 03'42	2°46'10	desc. node	-5135 Apr 19 j 08:01	26°M59'33	
min. Earth dist.	-5141 Apr 13 j 23:18	12° Mp 00'48	9.16246 AU	opposition	-5135 Jun 26 j 09:40	23°M32'45	-0°07'22
direct	-5141 Jun 23 j 11:18	8° m/45'25		min. Earth dist.	-5135 Jun 26 j 18:38	23°M30'59	8.36668 AU
evening set	-5141 Oct 01 j 23:50	15° m 41'02		direct	-5135 Sep 01 j 23:14	20°M10'35	
Č	,	7		evening set	-5135 Dec 11 j 02:40	27° M 47'58	
conjunction	-5141 Oct 18 j 08:22	17° m 35'17	2°10'41				
minimum elong	-5141 Oct 18 j 08:25	17° mp 35'18		conjunction	-5135 Dec 28 j 07:04	29°M58'53	-0°22'06
max. Earth dist.	-5141 Oct 17 j 13:12	17° m 29'40		minimum elong	-5135 Dec 28 j 07:03	29°M58'53	0°22'20
morning rise	-5141 Nov 03 j 17:32	19° m 29'48	11.11700110	max. Earth dist.	-5135 Dec 27 j 22:06		10.29107 AU
retrograde	-5140 Feb 13 j 06:05	26° m/31'06		max. Lartii dist.	-5135 Dec 28 j 10:34	0° √	10.27107 110
opposition	-5140 Apr 24 j 06:58	23° m/ 12'34	2°30'56	morning rise	-5134 Jan 14 j 16:47	2° ✓ 11'33	
min. Earth dist.	-5140 Apr 25 j 00:08	23° m 09'25	9.07328 AU	retrograde	-5134 May 01 j 19:33	10° ₹ 20'52	
direct	-5140 Jul 03 j 23:53	19° m 54'05	7.07520710	opposition	-5134 Jul 10 j 06:26	6° ₹ 52'16	0048133
evening set	-5140 Oct 12 j 03:26	26° m 52'56		min. Earth dist.	-5134 Jul 10 j 11:53	6° x 52 10	8.21599 AU
evening set	-5140 Oct 12 j 05.20	20 11/32 30		direct	-5134 Sep 15 j 05:05	3° ₹ ⁷ 28'54	0.21377 AO
conjunction	-5140 Oct 28 j 13:31	28° Mp 48'53	1°55'28	evening set	-5134 Sep 13 j 05:03	3 x ·28 34 11° x 17'25	
minimum elong	-5140 Oct 28 j 13:34	28° m) 48'54	1°55'30	evening set	-3134 DCC 24 J 20.33	11 × 1/23	
max. Earth dist.	-5140 Oct 28 j 13.34 -5140 Oct 27 j 17:57	•	1 33 30 11.01871 AU	conjunction	-5133 Jan 11 j 05:28	13° ∡ ³31'46	-0°54'40
max. Earm dist.			11.018/1 AU		-		
	-5140 Nov 07 j 14:02	0∘ ი 45:23		minimum elong	-5133 Jan 11 j 05:25	13° x 31'46	
morning rise	-5140 Nov 14 j 01:16	0° Ω 45'23		max. Earth dist.	-5133 Jan 11 j 01:36		10.14648 AU
retrograde	-5139 Feb 24 j 09:41	7° Ω 55'06	2000121	morning rise	-5133 Jan 28 j 19:42	15° 🖈 47'56	
opposition	-5139 May 06 j 11:58	4° Ω 35'03	2°09'31	retrograde	-5133 May 16 j 14:20	24° × ⁷ 09'18	1000106
min. Earth dist.	-5139 May 07 j 04:54	4° Ω 31'55	8.96044 AU	opposition	-5133 Jul 24 j 11:27	20° ₹39'20	
direct	-5139 Jul 15 j 15:48	1° 2 16'13		min. Earth dist.	-5133 Jul 24 j 12:30	20° ₹ 39'07	8.08062 AU
evening set	-5139 Oct 23 j 12:34	8° Ω 19'49	10.00.500	direct	-5133 Sep 28 j 21:16	17° 🖈 14'43	
max. Earth dist.	-5139 Nov 08 j 06:59	10° £ 12'31	10.89609 AU	evening set	-5132 Jan 08 j 04:53	25° ∡ 14'26	
aoni	5120 NI 00 101 15	100 0 10100	1925120	aani	5120 I 25 : 17 57	270.721155	1025110
conjunction	-5139 Nov 09 j 01:15	10° Ω 18'00	1°35'20	conjunction	-5132 Jan 25 j 17:57	27° ∡ ³31'57	
minimum elong	-5139 Nov 09 j 01:18	10° Ω 18'01	1°35'18	minimum elong	-5132 Jan 25 j 17:53	27° 🗷 31'56	
morning rise	-5139 Nov 25 j 16:18	12° Ω 17'00		max. Earth dist.	-5132 Jan 25 j 19:15		10.02117 AU
retrograde	-5138 Mar 09 j 00:54	19° Ω 36'43		morning rise	-5132 Feb 12 j 12:09	29° ₹ 51'11	
opposition	-5138 May 18 j 23:27	16° Ω 15'00	1°42'14	_	-5132 Feb 13 j 15:34	0°る	
min. Earth dist.	-5138 May 19 j 14:47	16° ≏ 12'08	8.82779 AU	retrograde	-5132 May 30 j 16:38	8°る22'41	
direct	-5138 Jul 27 j 14:05	12° £ 55'37		opposition	-5132 Aug 06 j 23:29	4° る 51'39	-2°04'14

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5132 in astronomical counting style is the year 5133 BCE in historical counting style. 4°る52'19 7.96898 AU min. Earth dist. -5132 Aug 06 j 20:09 -5125 Feb 01 i 15:20 $0^{\circ}\Upsilon$ -5132 Oct 11 j 23:23 1°る25'45 -5125 Apr 24 j 12:49 7°**Y**44'35 direct evening set -5131 Jan 22 j 02:30 9°**る**35'56 evening set -5125 May 12 j 15:52 10°Υ04'03 -1°34'44 conjunction -5131 Feb 08 j 19:22 -5125 May 12 j 15:56 10°**Υ**04'04 1°34'41 conjunction 11°る56'05 -1°51'15 minimum elong minimum elong -5131 Feb 08 j 19:18 -5125 May 13 j 11:27 10°**Y**10′22 10.10141 AU 11°る56'04 1°51'32 max. Earth dist. 12°Y22'37 max. Earth dist. -5131 Feb 09 j 01:47 11°**る**58'13 9.92342 AU morning rise -5125 May 30 j 16:18 20°**Y**22'39 -5125 Sep 10 j 12:13 morning rise -5131 Feb 26 j 16:56 14°**る**17'48 retrograde 16°Υ56'10 -1°41'04 retrograde -5131 Jun 15 j 00:01 22°**る**56'22 opposition -5125 Nov 15 j 23:35 opposition -5131 Aug 21 j 16:55 19°る24'39 -2°33'01 min. Earth dist. -5125 Nov 15 j 08:36 16°**Y**59'14 8.16850 AU min. Earth dist. -5131 Aug 21 j 09:42 19°**る**26'09 7.88846 AU direct -5124 Jan 22 j 21:36 13°**Y**26'41 -5131 Oct 26 j 09:59 15°**る**57'30 -5124 May 08 j 06:37 21°**Y**34'42 direct evening set -5130 Feb 06 j 11:09 24°る16'25 evening set conjunction -5124 May 26 j 07:52 23°Y51'21 -1°06'21 conjunction -5130 Feb 24 j 07:23 26°る38'32 -2°10'31 minimum elong -5124 May 26 j 07:55 23°**Y**51′22 1°06'14 minimum elong -5130 Feb 24 j 07:20 26°る38'31 2°10'47 max. Earth dist. -5124 May 27 j 02:31 23°**Y**57'17 10.24051 AU max. Earth dist. -5130 Feb 24 j 18:19 26°**ප්**42'11 9.85977 AU morning rise -5124 Jun 13 j 05:17 26°\bar{0}6'46 morning rise -5130 Mar 14 j 07:38 29°る01'56 -5124 Jul 16 j 21:51 0°8 -5130 Mar 21 j 19:04 retrograde -5124 Sep 22 j 21:08 3°**8**52'38 0°**8**27'57 -1°03'33 retrograde -5130 Jun 30 j 09:06 7°≈43'36 opposition -5124 Nov 28 j 13:28 0°**と**30'39 8.31494 AU opposition -5130 Sep 05 j 13:17 4°≈11'40 -2°52'10 min. Earth dist. -5124 Nov 28 j 00:04 min. Earth dist. -5130 Sep 05 i 03:11 4°≈13'47 7.84408 AU -5124 Dec 04 i 08:20 30°RY direct -5130 Nov 10 j 04:33 0°≈43'20 direct -5123 Feb 05 i 04:14 26°Y59'13 evening set -5129 Feb 22 j 03:29 9°≈08'25 -5123 Apr 07 i 07:37 0°8 evening set -5123 May 22 j 12:00 4°856'58 -5129 Mar 12 j 02:34 11°≈31'41 -2°21'22 conjunction -5129 Mar 12 j 02:33 -5123 Jun 09 j 10:12 7°**8**10'23 -0°35'11 11°2631'41 2°21'35 conjunction minimum elong -5129 Mar 12 j 16:53 -5123 Jun 09 j 10:14 7°**8**10'23 0°35'02 max. Earth dist. 11°≈36'28 9.83396 AU minimum elong -5129 Mar 30 j 04:40 max. Earth dist. -5123 Jun 10 j 02:17 7°**と**15'24 10.39341 AU morning rise 13°≈55'52 -5129 Apr 07 j 10:49 -5123 Jun 27 j 03:42 9°822'20 15°≈ morning rise -5129 Jul 15 j 15:50 -5123 Aug 20 j 00:26 retrograde 22°≈36'15 15°8 -5129 Sep 20 j 09:49 -5123 Oct 05 j 17:35 19°≈04'36 -2°59'53 retrograde 16°**8**54'27 opposition -5123 Nov 22 j 14:14 min. Earth dist. -5129 Sep 19 j 21:55 19°**≈**07'06 7.83789 AU 15°R₩ -5123 Dec 11 j 18:09 -5129 Nov 25 j 04:21 13°**8**31'39 -0°24'05 direct 15°≈35'20 opposition -5128 Mar 08 j 23:11 -5123 Dec 11 j 07:18 13°**8**33'48 8.47116 AU evening set 24°≈03'28 min. Earth dist. -5122 Feb 19 j 02:49 10°**8**03'52 direct -5128 Mar 27 j 00:33 conjunction 26°≈27'03 -2°22'48 -5122 May 11 j 07:44 15°**8** minimum elong -5128 Mar 27 j 00:34 26°≈27'04 2°22'58 evening set -5122 Jun 05 j 04:19 17°**8**50'56 max. Earth dist. -5128 Mar 27 j 17:22 26°≈32'40 9.84690 AU morning rise -5128 Apr 14 j 03:41 28°≈51'08 conjunction -5122 Jun 22 j 22:21 20°800'52 -0°03'15 -5128 Apr 23 j 01:23 0°**)**€ minimum elong -5122 Jun 22 j 22:23 20°800'53 0°03'03 -5128 Jul 29 j 17:22 7°**¥**26′05 behind sun begin -5122 Jun 22 j 15:11 19°858'42 retrograde -5128 Oct 04 j 04:11 3°**¥**55'12 -2°55'30 behind sun end -5122 Jun 23 j 05:34 20°**8**03'04 opposition min. Earth dist. -5128 Oct 03 j 14:47 3°**¥**58'01 7.86989 AU max. Earth dist. -5122 Jun 23 j 10:40 20°804'38 10.55150 AU -5128 Dec 09 j 06:54 0°**¥**25′22 -5122 Jul 10 j 11:21 22°**8**09'16 direct morning rise evening set -5127 Mar 24 j 17:49 8° **¥** 53'05 asc. node -5122 Jul 30 i 23:52 24°831'30 retrograde -5122 Oct 18 i 03:06 29°828'53 conjunction -5127 Apr 11 j 20:47 11°\(\)16'08 -2°14'47 opposition -5122 Dec 24 i 14:18 26°**8**07'51 0°15'06 minimum elong -5127 Apr 11 j 20:50 11°\(\)16'09 2°14'53 min. Earth dist. -5122 Dec 24 j 06:12 26°**8**09'26 8.62882 AU max. Earth dist. -5127 Apr 12 j 15:29 11°**)** 22'20 9.89804 AU direct -5121 Mar 04 j 15:51 22°841'13 -5127 Apr 30 j 00:06 13°**¥**39'12 -5121 Jun 15 j 19:20 $\Pi^{\circ}0$ morning rise -5127 Aug 13 j 10:07 22°\ 04'59 -5121 Jun 18 j 07:33 0°**I**17'45 retrograde evening set -5127 Oct 18 j 17:52 18°**)** 35'18 -2°39'37 opposition min. Earth dist. -5127 Oct 18 j 03:19 18°**升**38′20 7.93872 AU conjunction -5121 Jul 05 j 20:47 2°**I**24'13 0°27'59 -5127 Dec 24 j 09:04 15°**)** 05'14 minimum elong -5121 Jul 05 j 20:46 2°**Ⅲ**24'13 0°28'14 direct -5126 Apr 09 j 07:37 23°**¥**29′06 max. Earth dist. -5121 Jul 06 j 04:54 2°**Ⅲ**26'40 10.70682 AU evening set morning rise -5121 Jul 23 j 04:51 4°**Ⅱ**29'06 -5126 Apr 27 j 11:13 25°**¥**50'45 -1°58'13 -5121 Oct 30 j 04:23 11°**Ⅲ**37'56 conjunction retrograde -5126 Apr 27 j 11:17 -5120 Jan 06 j 02:27 8°**Ⅱ**18′28 0°52'11 minimum elong 25°**¥**50'47 1°58'15 opposition 9.98471 AU -5120 Jan 05 j 20:36 8°**Ⅱ**19'36 8.78039 AU max. Earth dist. -5126 Apr 28 j 06:49 25°**米**57'10 min. Earth dist. -5120 Mar 16 j 18:27 4°**I**I53′06 morning rise -5126 May 15 j 13:40 28°**)** 11'56 direct $0^{\circ}\Upsilon$ -5126 May 29 j 22:53 evening set -5120 Jun 29 j 22:48 12°**Ⅲ**19'47 retrograde -5126 Aug 27 j 16:09 6°**Y**25'41 min. Earth dist. -5126 Nov 01 j 09:35 3°**Y**00'37 8.04041 AU conjunction -5120 Jul 17 j 06:59 14°**Ⅲ**22'58 0°56'59 opposition -5126 Nov 02 j 00:44 2°**Υ**57'29 -2°14'00 minimum elong -5120 Jul 17 j 06:57 14°**Ⅲ**22'57 0°57'15 -5126 Dec 14 j 20:20 max. Earth dist. -5120 Jul 17 j 11:37 14°**Ⅲ**24'21 10.85240 AU 30°R ₩

direct

-5125 Jan 08 j 06:38

29°**)**€27'32

-5120 Aug 03 j 09:55

morning rise

 $16^{\circ} \Pi 24'36$

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5120 in astronomical counting style is the year 5121 BCE in historical counting style. -5120 Nov 09 j 22:00 23°**Ⅲ**24'29 retrograde -5113 Jan 15 i 22:23 29°**Ω**41'45 retrograde -5119 Jan 17 j 07:32 20°II06'24 1°25'49 -5113 Mar 27 j 15:25 26°**Ω**26′09 2°56'52 opposition opposition min. Earth dist. -5119 Jan 17 j 04:17 20°**П**07'02 8.91929 AU min. Earth dist. -5113 Mar 28 j 04:59 26°**Ω**23'41 9.25849 AU -5119 Mar 29 j 11:50 16°**Ⅱ**42'20 -5113 Jun 07 j 06:35 23°**Ω**08′02 direct direct -5113 Sep 16 j 12:13 -5119 Jul 12 j 03:19 24°**Ⅱ**00'13 evening set evening set 0° Mp 01'02 -5113 Sep 16 j 08:32 0° m 1°22'52 -5119 Jul 29 j 06:24 conjunction 26°**Ⅱ**00'24 -5119 Jul 29 j 06:21 -5113 Oct 02 j 20:08 minimum elong 26°**Ⅱ**00′23 1°23'08 conjunction 1° m 53'42 2°23'31 -5119 Jul 29 j 07:58 -5113 Oct 02 j 20:09 2°23'39 max. Earth dist. 26°**Ⅲ**00'51 10.98230 AU minimum elong 1° Mp 53'42 morning rise -5119 Aug 15 j 04:15 27°**I**59′07 max. Earth dist. -5113 Oct 02 j 03:39 1° Mp 48'55 11.23818 AU -5119 Sep 02 j 06:32 0ಂತಾ morning rise -5113 Oct 19 j 03:24 3°M 46'13 -5119 Nov 21 j 11:48 -5112 Jan 27 j 10:23 retrograde 4°952'03 retrograde 10° m 37'24 -5112 Apr 07 j 09:03 opposition -5118 Jan 29 j 07:13 1°935'09 1°55'01 opposition 7° Mp 21'04 2°50'46 min. Earth dist. -5118 Jan 29 j 07:20 1°935'08 9.04016 AU min. Earth dist. -5112 Apr 08 j 00:05 7° **₪** 18'20 9.21485 AU -5118 Feb 20 j 08:21 30°RⅡ direct -5112 Jun 17 j 17:27 4° m 03'15 direct -5118 Apr 10 j 20:17 28°**Ⅲ**12'22 evening set -5112 Sep 26 j 10:37 10° m 57'07 -5118 May 29 j 07:03 0ಂತಾ evening set -5118 Jul 23 j 22:31 5°522'38 conjunction -5112 Oct 12 j 18:43 12° m 50'34 2°15'46 minimum elong -5112 Oct 12 j 18:46 12° m 50'34 2°15'52 conjunction -5118 Aug 09 j 20:34 7°520'14 1°44'53 max. Earth dist. -5112 Oct 12 j 01:38 12° Mp 45'35 11.18047 AU minimum elong -5118 Aug 09 j 20:31 7°9520'14 1°45'09 morning rise -5112 Oct 29 j 02:54 14° m/ 44'07 max. Earth dist. -5118 Aug 09 j 18:18 7°519'35 11.09180 AU retrograde -5111 Feb 07 i 05:33 21°m/41'09 morning rise -5118 Aug 26 j 13:53 9°9516'31 opposition -5111 Apr 19 i 06:02 18° m 23'47 2°38'21 retrograde -5118 Dec 02 i 19:05 16°9504'29 min. Earth dist. -5111 Apr 19 j 21:19 18° m 21'00 9.14276 AU opposition -5117 Feb 10 j 02:38 12°9548'28 2°19'05 direct -5111 Jun 29 j 05:17 15° m 06'03 -5117 Feb 10 j 06:26 -5111 Oct 07 j 11:50 22° m 02'13 min. Earth dist. 12°9647'46 9.13879 AU evening set -5117 Apr 22 j 21:12 9°926'55 direct -5117 Aug 04 j 10:01 16°930'56 -5111 Oct 23 j 21:04 23° m 57'02 2°02'51 conjunction evening set -5111 Oct 23 j 21:07 23° m 57'03 2°02'54 minimum elong 23° M 51'50 11.09541 AU -5117 Aug 21 j 03:30 -5111 Oct 23 j 03:25 conjunction 18°526'24 2°02'30 max. Earth dist. -5117 Aug 21 j 03:28 -5111 Nov 09 j 07:13 18°526'24 2°02'47 25° m 52'14 minimum elong morning rise -5117 Aug 20 j 20:55 max. Earth dist. 18°524'30 11.17737 AU -5111 Dec 18 j 23:30 0∘ಹ -5117 Sep 06 j 17:04 2°**£**56'44 -5110 Feb 19 j 06:34 morning rise 20°9 20'47 retrograde -5117 Dec 14 j 00:58 -5110 Apr 26 j 08:36 retrograde 27°905'45 30°R M -5116 Feb 21 j 18:52 -5110 May 01 j 07:56 29° m/38'04 2°19'44 opposition 23°950'18 2°37'35 opposition -5116 Feb 22 j 01:16 -5110 May 01 j 23:39 min. Earth dist. 23°549'08 9.21190 AU min. Earth dist. 29° m 35'10 9.04422 AU -5110 Jul 10 j 17:54 direct -5116 May 03 j 18:11 20°529'51 direct 26° m 20'08 evening set -5116 Aug 14 j 15:20 27°529'01 -5110 Sep 17 j 21:49 0∘**⊽** evening set -5110 Oct 18 j 17:41 3°**£**20′09 conjunction -5116 Aug 31 j 05:09 29°522'56 2°15'23 max. Earth dist. -5110 Nov 03 j 10:05 5°**£**11'18 10.98528 AU -5116 Aug 31 j 05:07 29°522'55 2°15'39 minimum elong max. Earth dist. -5116 Aug 30 j 19:52 29°520'15 11.23622 AU -5110 Nov 04 j 04:52 5°**2**16'53 1°44'56 conjunction -5116 Sep 05 j 13:43 -5110 Nov 04 j 04:55 5°**£**16'54 $0^{\circ}\Omega$ minimum elong 1°44'56 -5116 Sep 16 j 15:39 1°**Ω**15′56 -5110 Nov 20 j 18:08 7°**£**14'19 morning rise morning rise -5116 Dec 24 j 06:50 7°**Ω**59'46 -5109 Mar 03 j 15:57 14°**£**27'53 retrograde retrograde 4°Ω44'36 2°50'10 opposition -5115 Mar 04 i 09:28 opposition -5109 May 13 j 15:38 11°**♀**07'42 1°55'09 min. Earth dist. -5115 Mar 04 i 17:55 4°**Ω**43'03 9.25697 AU min. Earth dist. -5109 May 14 i 07:55 11°**≏**04'40 8.92189 AU direct -5115 May 15 i 09:04 1°**Ω**25′08 direct -5109 Jul 22 i 12:09 7°**£**49'15 evening set -5115 Aug 25 j 16:17 8°**Ω**20'48 evening set -5109 Oct 30 j 06:18 14°**£**54'47 -5115 Sep 11 j 03:16 10°Ω13'43 2°23'16 conjunction -5109 Nov 15 j 20:21 16°**♀**54'00 1°22'22 conjunction -5115 Sep 11 j 03:15 10°Ω13'43 2°23'30 minimum elong -5109 Nov 15 i 20:24 16°**♀**54'01 1°22'18 minimum elong max. Earth dist. -5115 Sep 10 j 16:01 10°**Ω**10'29 11.26636 AU max. Earth dist. -5109 Nov 15 j 01:24 16°**△**48'17 10.85315 AU morning rise -5115 Sep 27 j 11:29 12°**Ω**05'56 morning rise -5109 Dec 02 j 13:29 18°**♀**54'11 -5108 Mar 15 j 09:42 -5115 Oct 24 j 19:44 15°Ω retrograde 26°**♀**18'22 22°**♀**56'27 retrograde -5114 Jan 04 j 13:47 18°**Ω**50′29 opposition -5108 May 25 j 06:03 1°25'01 opposition -5114 Mar 15 j 23:53 15°**Ω**35'16 2°56'39 min. Earth dist. -5108 May 25 j 21:57 22°**≏**53'28 8.77976 AU -5114 Mar 16 j 10:49 15°**Ω**33'16 9.27261 AU 19°**♀**37'18 min. Earth dist. direct -5108 Aug 02 j 11:32 -5114 Mar 24 j 02:51 15°R€ -5108 Nov 10 j 03:35 26°**♀**50'00 evening set 12°**Ω**16'35 direct -5114 May 26 j 20:56 15°€ -5108 Nov 26 j 21:19 -5114 Jul 26 j 08:29 conjunction 28°**♀**52'09 0°55'38 evening set -5114 Sep 05 j 14:45 19°**ん**10′13 minimum elong -5108 Nov 26 j 21:21 28°**♀**52'10 0°55'31 max. Earth dist. -5108 Nov 26 j 04:16 28°**£**46'56 10.70387 AU conjunction -5114 Sep 21 j 23:40 21°**Ω**02'42 2°26'01 -5108 Dec 06 j 03:04 0°M minimum elong -5114 Sep 21 j 23:40 21°**Ω**02'42 2°26'12 morning rise -5108 Dec 13 j 18:46 0°M55'33 -5114 Sep 21 j 09:28 20°**Ω**58'37 11.26700 AU -5107 Mar 28 j 14:19 max. Earth dist. retrograde 8°MJ31'41 -5114 Oct 08 j 06:51 22°**Ω**54'45 -5107 Jun 07 j 04:31 5°ML07'54 0°50'04 morning rise opposition

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5107 in astronomical counting style is the year 5108 BCE in historical counting style. min. Earth dist. -5107 Jun 07 j 18:10 5°ML05'18 8.62387 AU minimum elong -5101 Feb 17 j 06:49 19°중51'04 2°02'36 direct -5107 Aug 14 j 18:57 1°**M**47'49 max. Earth dist. -5101 Feb 17 j 13:50 19°る53'25 9.87811 AU ev c e c

direct	-5107 Aug 14 j 18:57	1° M 47'49		max. Earth dist.	-5101 Feb 17 j 13:50	19° る 53'25	9.87811 AU
evening set	-5107 Nov 22 j 11:27	9° M .09'08		morning rise	-5101 Mar 07 j 06:00	22° る 13'51	
					-5101 May 22 j 17:13	0° ≈	
conjunction	-5107 Dec 09 j 09:20	11°ML14'36	0°25'35	retrograde	-5101 Jun 23 j 09:53	0°≈54'42	
minimum elong	-5107 Dec 09 j 09:21	11°ML14'37	0°25'24	retrograde	-5101 Jul 25 j 06:00	30°Rる	
	•			***			2044120
max. Earth dist.	-5107 Dec 08 j 18:48		10.54423 AU	opposition	-5101 Aug 29 j 21:09	27°る22'20	
morning rise	-5107 Dec 26 j 11:31	13°M21'32		min. Earth dist.	-5101 Aug 29 j 13:50		7.84985 AU
	-5106 Jan 09 j 06:01	15° M ₊		direct	-5101 Nov 03 j 14:04	23° る 54'00	
retrograde	-5106 Apr 11 j 07:52	21°M10'32			-5100 Jan 28 j 03:07	0° ≈	
opposition	-5106 Jun 20 j 11:32	17° M 44'48	0°11'25	evening set	-5100 Feb 15 j 00:51	2° ≈ 16'48	
min. Earth dist.	-5106 Jun 20 j 22:13	17° M 42'44	8.46169 AU				
	-5106 Jul 31 j 23:09	15°RML		conjunction	-5100 Mar 03 j 22:46	4° ≈ 39'47	-2°17'22
direct	-5106 Aug 27 j 09:30	14°M23'34		minimum elong	-5100 Mar 03 j 22:44	4° ≈ 39'46	2°17'36
direct	-5106 Sep 22 j 09:17	15°M		max. Earth dist.	-5100 Mar 04 j 11:02	4°≈43'53	9.82799 AU
					•		9.62/99 AU
desc. node	-5106 Oct 05 j 19:56	15°M45'59		morning rise	-5100 Mar 22 j 00:04	7°≈03'52	
evening set	-5106 Dec 05 j 07:59	21°M54'49			-5100 Jun 08 j 22:25	15° ≈	
				retrograde	-5100 Jul 07 j 18:15	15° ≈ 46′02	
conjunction	-5106 Dec 22 j 10:11	24°M03'47	-0°06'45		-5100 Aug 05 j 15:54	15°R ≈	
minimum elong	-5106 Dec 22 j 10:10	24°ML03'47	0°06'58	opposition	-5100 Sep 12 j 17:57	12° ≈ 13'36	-2°57'50
behind sun begin	-5106 Dec 22 j 03:33	24°ML01'43		min. Earth dist.	-5100 Sep 12 j 06:55	12°≈15'55	7.82042 AU
behind sun end	-5106 Dec 22 j 16:47	24°ML05'51		direct	-5100 Nov 17 j 11:24	8° ≈ 44'11	
max. Earth dist.	-5106 Dec 21 j 22:17		10.38201 AU	4.1.000	-5099 Feb 12 j 13:46	15° ≈	
	•		10.38201 AU		-5099 Mar 01 j 19:26	15 ≈ 17° ≈ 11'52	
morning rise	-5105 Jan 08 j 17:21	26°M14'25		evening set	-3099 Mai 01 j 19.20	17 ≈1132	
	-5105 Feb 10 j 05:08	0° ∡ ¹					
retrograde	-5105 Apr 25 j 11:17	4° ≯ 16'32		conjunction	-5099 Mar 19 j 20:02	19° ≈ 35'39	-2°23'22
opposition	-5105 Jul 04 j 03:12	0° ∡ ¹48'57	-0°29'19	minimum elong	-5099 Mar 19 j 20:02	19° ≈ 35'39	2°23'33
min. Earth dist.	-5105 Jul 04 j 10:48	0° ∡ ¹47'27	8.30140 AU	max. Earth dist.	-5099 Mar 20 j 12:37	19° ≈ 41'12	9.81887 AU
	-5105 Jul 14 j 13:45	30°RML		morning rise	-5099 Apr 06 j 22:45	22° ≈ 00'08	
direct	-5105 Sep 09 j 08:37	27°M26'21		Č	-5099 Jun 26 j 13:55	0°) €	
	-5105 Nov 02 j 10:52	0° ∡ 7		retrograde	-5099 Jul 22 j 23:08	0°) 39′02	
evening set	-5105 Dec 18 j 18:13	5° × 7'08'35		retrograde	-5099 Aug 18 j 09:00	30°R≈	
evening set	-5105 Dec 16 j 16.15	J X 00 JJ			• •		2050114
				opposition	-5099 Sep 27 j 13:52	27°≈07'03	
conjunction	-5104 Jan 05 j 00:46	7° ∡ ¹21'05		min. Earth dist.	-5099 Sep 27 j 00:15		7.83227 AU
minimum elong	-5104 Jan 05 j 00:44		0°39'54	direct	-5099 Dec 02 j 12:34	23° ≈ 36′52	
max. Earth dist.	-5104 Jan 04 j 16:05	7° ∡ 18'17	10.22564 AU		-5098 Mar 01 j 03:07	0° ℋ	
morning rise	-5104 Jan 22 j 12:47	9° ∡ ³35′22		evening set	-5098 Mar 17 j 15:29	2° ₩ 05'53	
retrograde	-5104 May 09 j 00:06	17° ∡ ′50′14					
opposition	-5104 Jul 17 j 03:34	14° ∡ ¹20'56	-1°10'00	conjunction	-5098 Apr 04 j 18:02	4°) €29'33	-2°19'48
min. Earth dist.	-5104 Jul 17 j 08:03		8.15166 AU	minimum elong	-5098 Apr 04 j 18:04	4°) €29'34	
direct	-5104 Sep 21 j 19:26	10° ₹ 56'52	0.13100710	max. Earth dist.	-5098 Apr 05 j 13:29		9.85140 AU
					1 0		9.83140 AU
evening set	-5104 Dec 31 j 18:35	18° ∡ 50′32		morning rise	-5098 Apr 22 j 21:22	6° ¥ 53′27	
				retrograde	-5098 Aug 06 j 21:11	15°) 24'49	
conjunction	-5103 Jan 18 j 05:26	21° ≯ 06′24	-1°11'21	opposition	-5098 Oct 12 j 06:22	11° ∺ 53'49	-2°48'41
minimum elong	-5103 Jan 18 j 05:23	21° ≯ 06′23	1°11'38	min. Earth dist.	-5098 Oct 11 j 15:22	11° ∺ 56'59	7.88443 AU
max. Earth dist.	-5103 Jan 18 j 01:27	21° ₹ 05'06	10.08388 AU	direct	-5098 Dec 17 j 14:40	8°) 23′13	
morning rise	-5103 Feb 04 j 21:50	23° х 24'04		evening set	-5097 Apr 02 j 08:25	16°) 49′55	
C	-5103 Apr 07 j 11:33	0°ಕ		Č	1 3		
retrograde	-5103 May 23 j 21:26	1°る50'22		conjunction	-5097 Apr 20 j 11:57	19°) 12'34	-2°07'08
Total OBTAIN	-5103 Jul 10 j 01:29	30°R. ₹		minimum elong	-5097 Apr 20 j 12:00	19°) 12'35	
	·	28° ∡ 19'39	1949100	_			
opposition	-5103 Jul 31 j 11:47			max. Earth dist.	-5097 Apr 21 j 08:46	19° ¥ 19′26	9.92307 AU
min. Earth dist.	-5103 Jul 31 j 12:36	28° √ 19'29	8.02127 AU	morning rise	-5097 May 08 j 14:54	21°) 34′56	
direct	-5103 Oct 05 j 16:59	24° ₹ 54'04		retrograde	-5097 Aug 21 j 09:25	29° ∺ 55'21	
	-5103 Dec 22 j 06:00	0° ප		opposition	-5097 Oct 26 j 17:02	26° ∺ 25'48	-2°27'24
evening set	-5102 Jan 15 j 09:05	2° る 58'55		min. Earth dist.	-5097 Oct 26 j 01:36	26°) 29′01	7.97316 AU
				direct	-5096 Jan 01 j 14:24	22° 升 55'13	
conjunction	-5102 Feb 02 j 00:03	5° る 17'49	-1°39'40		-5096 Apr 06 j 15:07	$0^{\circ}\Upsilon$	
minimum elong	-5102 Feb 01 j 24:00	5° ਰ 17'47		evening set	-5096 Apr 16 j 18:15	1° Y 16'19	
•				evening set	-5070 Apr 10 j 10.15	1 11017	
max. Earth dist.	-5102 Feb 02 j 01:28		9.96544 AU		500634 04:21 /2	20002710	1046141
morning rise	-5102 Feb 19 j 20:12	7° る 38'23		conjunction	-5096 May 04 j 21:43	3° Y 37'06	
retrograde	-5102 Jun 08 j 01:30	16° පි 13'41		minimum elong	-5096 May 04 j 21:47	3° Ƴ 37′07	
opposition	-5102 Aug 15 j 02:14	12° る 41'54	-2°20'26	max. Earth dist.	-5096 May 05 j 18:27	3° Ƴ 43'51	10.02878 AU
min. Earth dist.	-5102 Aug 14 j 23:00	12° る 42'34	7.91840 AU	morning rise	-5096 May 22 j 23:19	5° Y 57′10	
direct	-5102 Oct 19 j 23:12	9° ට 14'52		retrograde	-5096 Sep 03 j 10:54	14° Ƴ 04'23	
evening set	-5101 Jan 30 j 12:09	17° ට 29'46		opposition	-5096 Nov 08 j 20:05	10° Ƴ 36'36	-1°57'32
. 3				min. Earth dist.	-5096 Nov 08 j 05:02	10° Y 39'43	8.09244 AU
conjunction	-5101 Feb 17 j 06:53	19° る 51'05	2002120		-5095 Jan 15 j 09:27	7° Υ 06'26	5.572TT AU
conjunction	-5101 1°CU 1/J U0.55	19 00100	-Z UZ ZU	direct	-5075 Jan 15 J 09.2/	/ 10020	

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 26 Attention, astronomical year style is used: The year -5095 in astronomical counting style is the year 5096 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -5095 i	n astronomical co	unting style is the year	5096 BCE in historical c	ounting style.	
evening set	-5095 May 01 j 17:58	15° Y 19′25		direct	-5089 Apr 05 j 12:54	23° Ⅱ 09'31	
					-5089 Jul 15 j 12:25	0ಂಣ	
conjunction	-5095 May 19 j 20:12	17° Ƴ 37'37	-1°20'19	evening set	-5089 Jul 18 j 22:26	0°ණ23'22	
minimum elong	-5095 May 19 j 20:16	17° Y '37'39					
max. Earth dist.	-5095 May 20 j 15:32	17° Ƴ 43'49	10.16131 AU	conjunction	-5089 Aug 04 j 22:44	2°522'07	1°35'09
morning rise	-5095 Jun 06 j 19:26	19° Ƴ 54'46		minimum elong	-5089 Aug 04 j 22:41	2°522'06	1°35'25
retrograde	-5095 Sep 17 j 00:27	27° Y 47'48		max. Earth dist.	-5089 Aug 04 j 21:38	2° 5 21'48	11.05060 AU
opposition	-5095 Nov 22 j 14:31	24° Y 21'59	-1°21'47	morning rise	-5089 Aug 21 j 18:15	4° 5 919'29	
min. Earth dist.	-5095 Nov 22 j 00:08	24° Y ′24'55	8.23443 AU	retrograde	-5089 Nov 28 j 00:22	11° © 09'43	
direct	-5094 Jan 29 j 21:36	20° Y ′52'37		opposition	-5088 Feb 05 j 02:05	7° 9 53'46	2°08'32
evening set	-5094 May 16 j 05:52	28° Y 55'49		min. Earth dist.	-5088 Feb 05 j 03:38	7° 9 53'29	9.10285 AU
	-5094 May 24 j 20:11	9° 8		direct	-5088 Apr 16 j 18:17	4° 5 32'08	
				evening set	-5088 Jul 29 j 13:50	11° 5 39'05	
conjunction	-5094 Jun 03 j 05:37	1° 8 10'56	-0°50'10				
minimum elong	-5094 Jun 03 j 05:40	1° 8 10'56	0°50'02	conjunction	-5088 Aug 15 j 09:31	13° © 35'30	
max. Earth dist.	-5094 Jun 03 j 22:54	1° 8 16'22	10.31212 AU	minimum elong	-5088 Aug 15 j 09:29	13° © 35'29	1°55'09
morning rise	-5094 Jun 21 j 01:20	3° 8 24'42		max. Earth dist.	-5088 Aug 15 j 05:10	13° © 34'14	11.14712 AU
retrograde	-5094 Sep 30 j 02:17	11° 8 03'40		morning rise	-5088 Sep 01 j 00:42	15° © 30'41	
opposition	-5094 Dec 05 j 23:53	7° 8 39'53	-0°42'50	retrograde	-5088 Dec 08 j 08:56	22° © 17'01	
min. Earth dist.	-5094 Dec 05 j 10:38	7° と 42'33	8.39055 AU	opposition	-5087 Feb 15 j 19:56	19° © 01'47	2°29'40
direct	-5093 Feb 13 j 01:04	4° 8 11'38		min. Earth dist.	-5087 Feb 16 j 01:08	19° © 00'50	9.18653 AU
evening set	-5093 May 30 j 04:50	12° 8 04'12		direct	-5087 Apr 28 j 17:10	15° 9 641'15	
				evening set	-5087 Aug 09 j 22:29	22°5642'46	
conjunction	-5093 Jun 17 j 01:04	14° 8 15'54	-0°18'18				
minimum elong	-5093 Jun 17 j 01:04	14° 8 15'55	0°18'06	conjunction	-5087 Aug 26 j 13:59	24° © 37'22	2°09'59
max. Earth dist.	-5093 Jun 17 j 16:06	14° 8 20'33	10.47248 AU	minimum elong	-5087 Aug 26 j 13:57	24° 5 37'21	2°10'16
	-5093 Jun 22 j 23:26	15°₩		max. Earth dist.	-5087 Aug 26 j 05:40	24° © 34'57	11.21621 AU
morning rise	-5093 Jul 04 j 16:24	16° 8 26'05		morning rise	-5087 Sep 12 j 01:42	26°930'57	
retrograde	-5093 Oct 12 j 18:55	23° 8 51'54		-	-5087 Oct 15 j 11:25	$0^{\circ}\Omega$	
opposition	-5093 Dec 19 j 00:31	20° 8 30'08	-0°03'10	retrograde	-5087 Dec 19 j 14:09	3° Ω 15'19	
min. Earth dist.	-5093 Dec 18 j 13:18		8.55229 AU	opposition	-5086 Feb 27 j 11:47	0° Ω 00′25	2°45'02
asc. node	-5092 Jan 18 j 11:22	18° 8 17'52		11	-5086 Feb 27 j 14:02	30° ℝ ∽	
direct	-5092 Feb 26 j 17:35	17° 8 03'09		min. Earth dist.	-5086 Feb 27 j 20:39	29°958'48	9.24189 AU
evening set	-5092 Jun 11 j 14:42	24° 8 44'58		direct	-5086 May 10 j 09:27	26°9540'48	
C	J				-5086 Jul 16 j 22:26	$0^{\circ}\Omega$	
conjunction	-5092 Jun 29 j 06:32	26° 8 53'11	0°13'34	evening set	-5086 Aug 21 j 01:47	3° Ω 38′13	
minimum elong	-5092 Jun 29 j 06:31						
behind sun begin	-5092 Jun 29 j 02:48			conjunction	-5086 Sep 06 j 13:52	5° Ω 31'34	2°20'13
behind sun end	-5092 Jun 29 j 10:14			minimum elong	-5086 Sep 06 j 13:50	5° Ω 31'33	
max. Earth dist.	-5092 Jun 29 j 18:37		10.63390 AU	max. Earth dist.			
morning rise					-5086 Sep 06 101:43	5° Ω 28'04	11.25649 AU
C	-5092 Jul 16 16:56	28° 8 59'45			-5086 Sep 06 j 01:43 -5086 Sep 22 j 23:07		11.25649 AU
	-5092 Jul 16 j 16:56 -5092 Jul 25 i 05:55	28° ႘ 59'45 0° Ⅱ		morning rise	-5086 Sep 22 j 23:07	7° Ω 24'08	11.25649 AU
retrograde	-5092 Jul 25 j 05:55	Π°		morning rise retrograde		7° Ω 24'08 14° Ω 08'25	
retrograde opposition	-5092 Jul 25 j 05:55 -5092 Oct 24 j 01:41	0° П 6° П 13'51	0°35'10	morning rise retrograde opposition	-5086 Sep 22 j 23:07 -5086 Dec 30 j 19:41 -5085 Mar 11 j 02:35	7°Ω24'08 14°Ω08'25 10°Ω53'26	2°54'22
retrograde opposition min. Earth dist.	-5092 Jul 25 j 05:55 -5092 Oct 24 j 01:41 -5092 Dec 30 j 16:53	0°Щ 6°Щ13'51 2°Щ53'57	0°35'10 8.71141 AU	morning rise retrograde opposition min. Earth dist.	-5086 Sep 22 j 23:07 -5086 Dec 30 j 19:41 -5085 Mar 11 j 02:35 -5085 Mar 11 j 14:01	7°Ω24'08 14°Ω08'25 10°Ω53'26 10°Ω51'21	
opposition	-5092 Jul 25 j 05:55 -5092 Oct 24 j 01:41 -5092 Dec 30 j 16:53 -5092 Dec 30 j 08:55	0°П 6°П13'51 2°П53'57 2°П55'30		morning rise retrograde opposition min. Earth dist. direct	-5086 Sep 22 j 23:07 -5086 Dec 30 j 19:41 -5085 Mar 11 j 02:35 -5085 Mar 11 j 14:01 -5085 May 22 j 01:03	7°Ω24'08 14°Ω08'25 10°Ω53'26 10°Ω51'21 7°Ω34'30	2°54'22
opposition min. Earth dist.	-5092 Jul 25 j 05:55 -5092 Oct 24 j 01:41 -5092 Dec 30 j 16:53 -5092 Dec 30 j 08:55 -5091 Feb 13 j 14:11	0°П 6°П13'51 2°П53'57 2°П55'30 30°R		morning rise retrograde opposition min. Earth dist.	-5086 Sep 22 j 23:07 -5086 Dec 30 j 19:41 -5085 Mar 11 j 02:35 -5085 Mar 11 j 14:01 -5085 May 22 j 01:03 -5085 Sep 01 j 01:30	7°Ω24'08 14°Ω08'25 10°Ω53'26 10°Ω51'21 7°Ω34'30 14°Ω29'15	2°54'22
opposition	-5092 Jul 25 j 05:55 -5092 Oct 24 j 01:41 -5092 Dec 30 j 16:53 -5092 Dec 30 j 08:55 -5091 Feb 13 j 14:11 -5091 Mar 11 j 00:12	0°П 6°П13'51 2°П53'57 2°П55'30		morning rise retrograde opposition min. Earth dist. direct	-5086 Sep 22 j 23:07 -5086 Dec 30 j 19:41 -5085 Mar 11 j 02:35 -5085 Mar 11 j 14:01 -5085 May 22 j 01:03	7°Ω24'08 14°Ω08'25 10°Ω53'26 10°Ω51'21 7°Ω34'30	2°54'22
opposition min. Earth dist.	-5092 Jul 25 j 05:55 -5092 Oct 24 j 01:41 -5092 Dec 30 j 16:53 -5092 Dec 30 j 08:55 -5091 Feb 13 j 14:11 -5091 Mar 11 j 00:12 -5091 Apr 05 j 10:29	0°П 6°П13'51 2°П53'57 2°П55'30 30°R8 29°828'21 0°П		morning rise retrograde opposition min. Earth dist. direct	-5086 Sep 22 j 23:07 -5086 Dec 30 j 19:41 -5085 Mar 11 j 02:35 -5085 Mar 11 j 14:01 -5085 May 22 j 01:03 -5085 Sep 01 j 01:30	7°Ω24'08 14°Ω08'25 10°Ω53'26 10°Ω51'21 7°Ω34'30 14°Ω29'15	2°54'22 9.26774 AU
opposition min. Earth dist. direct	-5092 Jul 25 j 05:55 -5092 Oct 24 j 01:41 -5092 Dec 30 j 16:53 -5092 Dec 30 j 08:55 -5091 Feb 13 j 14:11 -5091 Mar 11 j 00:12	0°∏ 6°∏13'51 2°∏53'57 2°∏55'30 30°R♂ 29°♂28'21		morning rise retrograde opposition min. Earth dist. direct evening set	-5086 Sep 22 j 23:07 -5086 Dec 30 j 19:41 -5085 Mar 11 j 02:35 -5085 Mar 11 j 14:01 -5085 May 22 j 01:03 -5085 Sep 01 j 01:30 -5085 Sep 05 j 14:04	7° \Omega 24'08 14° \Omega 08'25 10° \Omega 53'26 10° \Omega 51'21 7° \Omega 34'30 14° \Omega 29'15 15° \Omega	2°54'22 9.26774 AU 2°25'20
opposition min. Earth dist. direct evening set	-5092 Jul 25 j 05:55 -5092 Oct 24 j 01:41 -5092 Dec 30 j 16:53 -5092 Dec 30 j 08:55 -5091 Feb 13 j 14:11 -5091 Mar 11 j 00:12 -5091 Apr 05 j 10:29 -5091 Jun 24 j 12:23	0°∏ 6°∏13'51 2°∏53'57 2°∏55'30 30°R്Ø 29°Ø28'21 0°∏ 6°∏59'54	8.71141 AU	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-5086 Sep 22 j 23:07 -5086 Dec 30 j 19:41 -5085 Mar 11 j 02:35 -5085 Mar 11 j 14:01 -5085 May 22 j 01:03 -5085 Sep 01 j 01:30 -5085 Sep 05 j 14:04 -5085 Sep 17 j 11:16 -5085 Sep 17 j 11:15	7°\O24'08 14°\O08'25 10°\O53'26 10°\O55'21 7°\O34'30 14°\O29'15 15°\O 16°\O21'55 16°\O21'55	2°54'22 9.26774 AU 2°25'20 2°25'33
opposition min. Earth dist. direct evening set conjunction	-5092 Jul 25 j 05:55 -5092 Oct 24 j 01:41 -5092 Dec 30 j 16:53 -5092 Dec 30 j 08:55 -5091 Feb 13 j 14:11 -5091 Mar 11 j 00:12 -5091 Apr 05 j 10:29 -5091 Jul 24 j 12:23	0°П 6°П13'51 2°П53'57 2°П55'30 30°R8 29°828'21 0°П	8.71141 AU 0°43'46	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-5086 Sep 22 j 23:07 -5086 Dec 30 j 19:41 -5085 Mar 11 j 02:35 -5085 Mar 11 j 14:01 -5085 May 22 j 01:03 -5085 Sep 01 j 01:30 -5085 Sep 05 j 14:04 -5085 Sep 17 j 11:16 -5085 Sep 17 j 11:15 -5085 Sep 16 j 21:00	7°\O24'08 14°\O8'25 10°\O53'26 10°\O51'21 7°\O34'30 14°\O29'15 15°\O 16°\O21'55 16°\O21'55 16°\O17'48	2°54'22 9.26774 AU 2°25'20
opposition min. Earth dist. direct evening set	-5092 Jul 25 j 05:55 -5092 Oct 24 j 01:41 -5092 Dec 30 j 16:53 -5092 Dec 30 j 08:55 -5091 Feb 13 j 14:11 -5091 Mar 11 j 00:12 -5091 Apr 05 j 10:29 -5091 Jun 24 j 12:23 -5091 Jul 11 j 23:06 -5091 Jul 11 j 23:04	0°∏ 6°∏13'51 2°∏53'57 2°∏55'30 30°R♂ 29°♂28'21 0°∏ 6°∏59'54 9°∏04'40 9°∏04'39	8.71141 AU 0°43'46 0°44'01	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-5086 Sep 22 j 23:07 -5086 Dec 30 j 19:41 -5085 Mar 11 j 02:35 -5085 Mar 11 j 14:01 -5085 May 22 j 01:03 -5085 Sep 01 j 01:30 -5085 Sep 05 j 14:04 -5085 Sep 17 j 11:16 -5085 Sep 17 j 11:15 -5085 Sep 16 j 21:00 -5085 Oct 03 j 18:55	7° \Omega24'08 14° \Omega08'25 10° \Omega53'26 10° \Omega51'21 7° \Omega34'30 14° \Omega29'15 15° \Omega 16° \Omega21'55 16° \Omega21'55 16° \Omega17'48 18° \Omega14'02	2°54'22 9.26774 AU 2°25'20 2°25'33
opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-5092 Jul 25 j 05:55 -5092 Oct 24 j 01:41 -5092 Dec 30 j 16:53 -5092 Dec 30 j 08:55 -5091 Feb 13 j 14:11 -5091 Mar 11 j 00:12 -5091 Jun 24 j 12:23 -5091 Jul 11 j 23:06 -5091 Jul 11 j 23:04 -5091 Jul 12 j 07:00	0°∏ 6°∏13'51 2°∏53'57 2°∏55'30 30°R♥ 29°♥28'21 0°∏ 6°∏59'54 9°∏04'40 9°∏04'39 9°∏07'02	8.71141 AU 0°43'46	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-5086 Sep 22 j 23:07 -5086 Dec 30 j 19:41 -5085 Mar 11 j 02:35 -5085 Mar 11 j 14:01 -5085 May 22 j 01:03 -5085 Sep 01 j 01:30 -5085 Sep 05 j 14:04 -5085 Sep 17 j 11:16 -5085 Sep 17 j 11:15 -5085 Sep 16 j 21:00 -5085 Oct 03 j 18:55 -5084 Jan 11 j 04:02	7° \Omega24'08 14° \Omega08'25 10° \Omega53'26 10° \Omega51'21 7° \Omega34'30 14° \Omega29'15 15° \Omega 16° \Omega21'55 16° \Omega21'55 16° \Omega17'48 18° \Omega14'02 24° \Omega59'58	2°54'22 9.26774 AU 2°25'20 2°25'33 11.26713 AU
opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-5092 Jul 25 j 05:55 -5092 Oct 24 j 01:41 -5092 Dec 30 j 16:53 -5092 Dec 30 j 08:55 -5091 Feb 13 j 14:11 -5091 Mar 11 j 00:12 -5091 Jun 24 j 12:23 -5091 Jul 11 j 23:06 -5091 Jul 11 j 23:04 -5091 Jul 12 j 07:00 -5091 Jul 29 j 04:23	0°∏ 6°∏13'51 2°∏53'57 2°∏55'30 30°R♥ 29°♥28'21 0°∏ 6°∏59'54 9°∏04'40 9°∏04'39 9°∏07'02 11°∏07'49	8.71141 AU 0°43'46 0°44'01	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-5086 Sep 22 j 23:07 -5086 Dec 30 j 19:41 -5085 Mar 11 j 02:35 -5085 Mar 11 j 14:01 -5085 May 22 j 01:03 -5085 Sep 01 j 01:30 -5085 Sep 05 j 14:04 -5085 Sep 17 j 11:16 -5085 Sep 17 j 11:15 -5085 Sep 16 j 21:00 -5085 Oct 03 j 18:55 -5084 Jan 11 j 04:02 -5084 Mar 21 j 17:25	7° \Omega24'08 14° \Omega08'25 10° \Omega53'26 10° \Omega51'21 7° \Omega34'30 14° \Omega29'15 15° \Omega 16° \Omega21'55 16° \Omega12'55 16° \Omega14'02 24° \Omega59'58 21° \Omega44'33	2°54'22 9.26774 AU 2°25'20 2°25'33 11.26713 AU 2°57'30
opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-5092 Jul 25 j 05:55 -5092 Oct 24 j 01:41 -5092 Dec 30 j 16:53 -5092 Dec 30 j 08:55 -5091 Feb 13 j 14:11 -5091 Mar 11 j 00:12 -5091 Apr 05 j 10:29 -5091 Jul 24 j 12:23 -5091 Jul 11 j 23:06 -5091 Jul 11 j 23:04 -5091 Jul 12 j 07:00 -5091 Jul 29 j 04:23 -5091 Nov 04 j 22:37	0°∏ 6°∏13'51 2°∏53'57 2°∏55'30 30°R♥ 29°♥28'21 0°∏ 6°∏59'54 9°∏04'40 9°∏04'39 9°∏07'02	8.71141 AU 0°43'46 0°44'01	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-5086 Sep 22 j 23:07 -5086 Dec 30 j 19:41 -5085 Mar 11 j 02:35 -5085 Mar 11 j 14:01 -5085 May 22 j 01:03 -5085 Sep 01 j 01:30 -5085 Sep 05 j 14:04 -5085 Sep 17 j 11:16 -5085 Sep 17 j 11:15 -5085 Sep 16 j 21:00 -5085 Oct 03 j 18:55 -5084 Jan 11 j 04:02 -5084 Mar 21 j 17:25 -5084 Mar 22 j 06:17	7° \Omega24'08 14° \Omega08'25 10° \Omega53'26 10° \Omega51'21 7° \Omega34'30 14° \Omega29'15 15° \Omega 16° \Omega21'55 16° \Omega21'55 16° \Omega11'48 18° \Omega14'02 24° \Omega59'58 21° \Omega44'33 21° \Omega42'13	2°54'22 9.26774 AU 2°25'20 2°25'33 11.26713 AU
opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-5092 Jul 25 j 05:55 -5092 Oct 24 j 01:41 -5092 Dec 30 j 16:53 -5092 Dec 30 j 08:55 -5091 Feb 13 j 14:11 -5091 Mar 11 j 00:12 -5091 Apr 05 j 10:29 -5091 Jul 24 j 12:23 -5091 Jul 11 j 23:04 -5091 Jul 12 j 07:00 -5091 Jul 29 j 04:23 -5091 Nov 04 j 22:37 -5090 Jan 12 j 01:49	0°∏ 6°∏13'51 2°∏53'57 2°∏55'30 30°R♥ 29°♥28'21 0°∏ 6°∏59'54 9°∏04'40 9°∏04'39 9°∏07'02 11°∏07'49 18°∏11'57 14°∏53'41	8.71141 AU 0°43'46 0°44'01 10.78852 AU 1°10'37	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-5086 Sep 22 j 23:07 -5086 Dec 30 j 19:41 -5085 Mar 11 j 02:35 -5085 Mar 11 j 14:01 -5085 May 22 j 01:03 -5085 Sep 01 j 01:30 -5085 Sep 05 j 14:04 -5085 Sep 17 j 11:16 -5085 Sep 17 j 11:15 -5085 Sep 16 j 21:00 -5085 Oct 03 j 18:55 -5084 Jan 11 j 04:02 -5084 Mar 21 j 17:25 -5084 Jun 01 j 12:44	7°\O24'08 14°\O8'25 10°\O53'26 10°\O51'21 7°\O34'30 14°\O29'15 15°\O 16°\O21'55 16°\O21'55 16°\O17'48 18°\O14'02 24°\O59'58 21°\O44'33 21°\O42'13 18°\O26'06	2°54'22 9.26774 AU 2°25'20 2°25'33 11.26713 AU 2°57'30
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opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-5092 Jul 25 j 05:55 -5092 Oct 24 j 01:41 -5092 Dec 30 j 16:53 -5092 Dec 30 j 08:55 -5091 Feb 13 j 14:11 -5091 Mar 11 j 00:12 -5091 Apr 05 j 10:29 -5091 Jul 24 j 12:23 -5091 Jul 11 j 23:06 -5091 Jul 11 j 23:04 -5091 Jul 12 j 07:00 -5091 Jul 29 j 04:23 -5091 Jul 29 j 04:23 -5090 Jul 29 j 04:23 -5090 Jun 12 j 01:49 -5090 Jan 11 j 21:27 -5090 Jul 06 j 22:37 -5090 Jul 24 j 03:58 -5090 Jul 24 j 03:56 -5090 Jul 24 j 03:56	0° II 6° II 13'51 2° II 55'30 30° R♂ 29° ♂28'21 0° II 6° II 59'54 9° II 04'40 9° II 04'39 9° II 07'49 18° II 11'57 14° II 53'41 14° II 54'31 11° II 29'27 18° II 51'36 20° II 53'09 20° II 53'09 20° II 54'01	8.71141 AU 0°43'46 0°44'01 10.78852 AU 1°10'37 8.86048 AU	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. direct evening set	-5086 Sep 22 j 23:07 -5086 Dec 30 j 19:41 -5085 Mar 11 j 02:35 -5085 Mar 11 j 14:01 -5085 May 22 j 01:03 -5085 Sep 01 j 01:30 -5085 Sep 05 j 14:04 -5085 Sep 17 j 11:16 -5085 Sep 17 j 11:15 -5085 Sep 16 j 21:00 -5085 Oct 03 j 18:55 -5084 Jan 11 j 04:02 -5084 Mar 21 j 17:25 -5084 Mar 22 j 06:17 -5084 Sep 10 j 23:22 -5084 Sep 27 j 07:51 -5084 Sep 27 j 07:51 -5084 Sep 26 j 16:07 -5084 Oct 13 j 14:52 -5084 Oct 21 j 21:53	7° \(\Omega 24'08 \) 14° \(\Omega 08'25 \) 10° \(\Omega 53'26 \) 10° \(\Omega 51'21 \) 7° \(\Omega 34'30 \) 14° \(\Omega 29'15 \) 15° \(\Omega 21'55 \) 16° \(\Omega 11'02 \) 24° \(\Omega 15'55 \) 21° \(\Omega 14'02 \) 24° \(\Omega 59'58 \) 21° \(\Omega 44'33 \) 21° \(\Omega 42'13 \) 18° \(\Omega 26'06 \) 25° \(\Omega 19'33 \) 27° \(\Omega 12'09 \) 27° \(\Omega 12'09 \) 27° \(\Omega 00'36 \) 29° \(\Omega 04'28 \) 0° \(\Omega 00'4'28 \) 0° \(\Omega 00'7)	2°54'22 9.26774 AU 2°25'20 2°25'33 11.26713 AU 2°57'30 9.26349 AU 2°25'16 2°25'26
opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-5092 Jul 25 j 05:55 -5092 Oct 24 j 01:41 -5092 Dec 30 j 16:53 -5092 Dec 30 j 08:55 -5091 Feb 13 j 14:11 -5091 Mar 11 j 00:12 -5091 Apr 05 j 10:29 -5091 Jul 24 j 12:23 -5091 Jul 11 j 23:06 -5091 Jul 11 j 23:04 -5091 Jul 12 j 07:00 -5091 Jul 29 j 04:23 -5091 Jul 29 j 04:23 -5090 Jul 29 j 04:23 -5090 Jun 12 j 01:49 -5090 Jan 12 j 01:49 -5090 Jul 24 j 03:58 -5090 Jul 24 j 03:58 -5090 Jul 24 j 03:56 -5090 Jul 24 j 06:52 -5090 Aug 10 j 04:16	0° II 6° II 13'51 2° II 53'57 2° II 55'30 30° R♂ 29° ♂28'21 0° II 6° II 59'54 9° II 04'40 9° II 04'39 9° II 07'02 11° II 07'49 18° II 11'57 14° II 53'41 14° II 54'31 11° II 29'27 18° II 51'36 20° II 53'09 20° II 53'09 20° II 54'01 22° II 53'13	8.71141 AU 0°43'46 0°44'01 10.78852 AU 1°10'37 8.86048 AU 1°11'15 1°11'15	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. direct evening set	-5086 Sep 22 j 23:07 -5086 Dec 30 j 19:41 -5085 Mar 11 j 02:35 -5085 Mar 11 j 14:01 -5085 May 22 j 01:03 -5085 Sep 01 j 01:30 -5085 Sep 05 j 14:04 -5085 Sep 17 j 11:16 -5085 Sep 17 j 11:15 -5085 Sep 16 j 21:00 -5085 Oct 03 j 18:55 -5084 Jan 11 j 04:02 -5084 Mar 21 j 17:25 -5084 Mar 22 j 06:17 -5084 Jun 01 j 12:44 -5084 Sep 10 j 23:22 -5084 Sep 27 j 07:51 -5084 Sep 27 j 07:51 -5084 Sep 26 j 16:07 -5084 Oct 13 j 14:52 -5084 Oct 21 j 21:53 -5083 Jan 21 j 14:45	7° \(\Omega 24'08 \) 14° \(\Omega 08'25 \) 10° \(\Omega 53'26 \) 10° \(\Omega 51'21 \) 7° \(\Omega 34'30 \) 14° \(\Omega 29'15 \) 15° \(\Omega 21'55 \) 16° \(\Omega 17'48 \) 18° \(\Omega 14'02 \) 24° \(\Omega 59'58 \) 21° \(\Omega 44'33 \) 21° \(\Omega 42'13 \) 18° \(\Omega 26'06 \) 25° \(\Omega 19'33 \) 27° \(\Omega 12'09 \) 27° \(\Omega 00'36 \) 29° \(\Omega 00'34 \) 5° \(\Omega 53'45 \)	2°54'22 9.26774 AU 2°25'20 2°25'33 11.26713 AU 2°57'30 9.26349 AU 2°25'16 2°25'26 11.24789 AU
opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-5092 Jul 25 j 05:55 -5092 Oct 24 j 01:41 -5092 Dec 30 j 16:53 -5092 Dec 30 j 08:55 -5091 Feb 13 j 14:11 -5091 Mar 11 j 00:12 -5091 Apr 05 j 10:29 -5091 Jul 24 j 12:23 -5091 Jul 11 j 23:06 -5091 Jul 12 j 07:00 -5091 Jul 29 j 04:23 -5091 Jul 29 j 04:23 -5091 Jul 29 j 04:23 -5090 Jul 29 j 04:23 -5090 Jul 12 j 01:49 -5090 Jun 12 j 01:49 -5090 Jul 24 j 03:58 -5090 Jul 24 j 03:58 -5090 Jul 24 j 03:56 -5090 Jul 24 j 06:52 -5090 Aug 10 j 04:16 -5090 Nov 16 j 14:12	0° II 6° II 13'51 2° II 53'57 2° II 55'30 30° R8 29° 828'21 0° II 6° II 59'54 9° II 04'40 9° II 04'39 9° II 07'49 18° II 11'57 14° II 53'41 14° II 54'31 11° II 29'27 18° II 51'36 20° II 53'09 20° II 53'09 20° II 53'13 29° II 49'21	8.71141 AU 0°43'46 0°44'01 10.78852 AU 1°10'37 8.86048 AU 1°11'15 1°11'30 10.92945 AU	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-5086 Sep 22 j 23:07 -5086 Dec 30 j 19:41 -5085 Mar 11 j 02:35 -5085 Mar 11 j 14:01 -5085 May 22 j 01:03 -5085 Sep 01 j 01:30 -5085 Sep 05 j 14:04 -5085 Sep 17 j 11:16 -5085 Sep 17 j 11:15 -5085 Sep 16 j 21:00 -5085 Oct 03 j 18:55 -5084 Jan 11 j 04:02 -5084 Mar 21 j 17:25 -5084 Mar 22 j 06:17 -5084 Jun 01 j 12:44 -5084 Sep 10 j 23:22 -5084 Sep 27 j 07:51 -5084 Sep 27 j 07:51 -5084 Sep 26 j 16:07 -5084 Oct 13 j 14:52 -5084 Oct 21 j 21:53 -5083 Jan 21 j 14:45 -5083 Apr 02 j 10:01	7° \Partial 24'08 14° \Partial 08'25 10° \Partial 53'26 10° \Partial 51'21 7° \Partial 34'30 14° \Partial 22'155 16° \Partial 21'55 16° \Partial 21'55 16° \Partial 14'02 24° \Partial 59'58 21° \Partial 44'33 21° \Partial 42'13 18° \Partial 26'06 25° \Partial 19'33 27° \Partial 12'09	2°54'22 9.26774 AU 2°25'20 2°25'33 11.26713 AU 2°57'30 9.26349 AU 2°25'16 2°25'26 11.24789 AU
opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-5092 Jul 25 j 05:55 -5092 Oct 24 j 01:41 -5092 Dec 30 j 16:53 -5092 Dec 30 j 08:55 -5091 Feb 13 j 14:11 -5091 Mar 11 j 00:12 -5091 Apr 05 j 10:29 -5091 Jul 24 j 12:23 -5091 Jul 11 j 23:06 -5091 Jul 11 j 23:04 -5091 Jul 12 j 07:00 -5091 Jul 29 j 04:23 -5091 Jul 29 j 04:23 -5090 Jul 29 j 04:23 -5090 Jun 12 j 01:49 -5090 Jan 12 j 01:49 -5090 Jul 24 j 03:58 -5090 Jul 24 j 03:58 -5090 Jul 24 j 03:56 -5090 Jul 24 j 06:52 -5090 Aug 10 j 04:16	0° II 6° II 13'51 2° II 53'57 2° II 55'30 30° R♂ 29° ♂28'21 0° II 6° II 59'54 9° II 04'40 9° II 04'39 9° II 07'02 11° II 07'49 18° II 11'57 14° II 53'41 14° II 54'31 11° II 29'27 18° II 51'36 20° II 53'09 20° II 53'09 20° II 54'01 22° II 53'13	8.71141 AU 0°43'46 0°44'01 10.78852 AU 1°10'37 8.86048 AU 1°11'15 1°11'15	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. direct evening set	-5086 Sep 22 j 23:07 -5086 Dec 30 j 19:41 -5085 Mar 11 j 02:35 -5085 Mar 11 j 14:01 -5085 May 22 j 01:03 -5085 Sep 01 j 01:30 -5085 Sep 05 j 14:04 -5085 Sep 17 j 11:16 -5085 Sep 17 j 11:15 -5085 Sep 16 j 21:00 -5085 Oct 03 j 18:55 -5084 Jan 11 j 04:02 -5084 Mar 21 j 17:25 -5084 Mar 22 j 06:17 -5084 Jun 01 j 12:44 -5084 Sep 10 j 23:22 -5084 Sep 27 j 07:51 -5084 Sep 27 j 07:51 -5084 Sep 26 j 16:07 -5084 Oct 13 j 14:52 -5084 Oct 21 j 21:53 -5083 Jan 21 j 14:45	7° \(\Omega \) 24'08 14° \(\Omega \) 08'25 10° \(\Omega \) 53'26 10° \(\Omega \) 51'21 7° \(\Omega \) 34'30 14° \(\Omega \) 29'15 15° \(\Omega \) 16° \(\Omega \) 21'55 16° \(\Omega \) 17'48 18° \(\Omega \) 14'02 24° \(\Omega \) 59'58 21° \(\Omega \) 44'33 21° \(\Omega \) 42'13 18° \(\Omega \) 26'06 25° \(\Omega \) 19'33 27° \(\Omega \) 12'09 27° \(\Omega \) 07'36 29° \(\Omega \) 04'28 0° \(\Omega \) 5° \(\Omega \) 53'45	2°54'22 9.26774 AU 2°25'20 2°25'33 11.26713 AU 2°57'30 9.26349 AU 2°25'16 2°25'26 11.24789 AU

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5083 in astronomical counting style is the year 5084 BCE in historical counting style. 29°**Ω**19'22 direct -5083 Jun 12 j 22:06 direct -5077 Aug 21 j 23:57 8°M49'28 -5083 Jul 12 j 04:05 0° m -5077 Nov 19 j 06:55 15°M₀ -5083 Sep 21 j 21:11 -5077 Nov 29 j 19:09 16°M16'11 evening set 6° m 12'59 evening set -5083 Oct 07 j 11:19 8° Mp 00'55 11.19953 AU max. Earth dist. conjunction -5077 Dec 16 j 19:16 18°M23'34 0°08'23 -5083 Oct 08 j 05:08 8° m 06'05 2°19'57 -5077 Dec 16 j 19:17 conjunction minimum elong 18°M23'35 0°08'10 8°M/06'06 -5083 Oct 08 j 05:10 -5077 Dec 16 j 12:58 minimum elong 2°20'04 behind sun begin 18°M21'37 -5077 Dec 17 j 01:35 morning rise -5083 Oct 24 j 12:46 9° m 59'11 behind sun end 18°M25'32 18°ML19'35 retrograde -5082 Feb 02 j 05:57 16° m 53'34 max. Earth dist. -5077 Dec 16 j 06:32 10.44838 AU opposition -5082 Apr 14 j 05:32 13°M)36'21 2°44'51 morning rise -5076 Jan 03 j 00:13 20° M $_32'33$ min. Earth dist. -5082 Apr 14 j 21:56 13°M)33'22 9.16665 AU desc. node -5076 Mar 22 j 11:57 27°M52'24 -5082 Jun 24 j 08:59 -5076 Apr 18 j 06:37 direct 10° Mp 18'08 retrograde 28° ML28'42-5082 Oct 02 j 20:50 -5076 Jun 27 j 06:00 evening set 17° m 13'24 opposition 25°M01'39 -0°10'27 max. Earth dist. -5082 Oct 18 j 10:12 19° My 02'00 11.12371 AUmin. Earth dist. -5076 Jun 27 j 15:03 24°M59'53 8.36831 AU direct -5076 Sep 02 j 19:44 21°M39'26 conjunction -5082 Oct 19 j 05:22 19°**№**07'37 2°09'24 evening set -5076 Dec 11 j 22:45 29°M16'38 minimum elong -5082 Oct 19 j 05:25 19°M)07'38 2°09'29 -5076 Dec 17 j 16:36 0°**⊼** morning rise -5082 Nov 04 j 14:42 21° Mp 02'07 retrograde -5081 Feb 14 j 02:03 28° m 03'16 conjunction -5076 Dec 29 j 03:21 1°**≯**27'33 -0°24'32 opposition -5081 Apr 26 j 04:58 24° m 44'43 2°29'05 minimum elong -5076 Dec 29 j 03:20 1°**҂**27'32 0°24'46 min. Earth dist. -5081 Apr 26 j 21:57 24° m 41'36 9.07738 AU max. Earth dist. -5076 Dec 28 j 18:54 1° ₹24'51 10.29218 AU direct -5081 Jul 05 i 21:40 21° m 26'18 morning rise -5075 Jan 15 j 13:03 3°**∡**′40′10 evening set -5081 Oct 14 i 00:06 28° m 24'46retrograde -5075 May 02 j 15:21 11°**∡** 49'22 -5081 Oct 27 j 12:34 0∘∙თ opposition -5075 Jul 11 i 02:30 8°**х** 20'42 -0°51'27 min. Earth dist. -5075 Jul 11 j 07:29 8° **₹**19'42 8.21664 AU -5081 Oct 30 j 10:24 0°**£**20'41 1°53'46 -5075 Sep 16 j 01:37 4°×757'17 conjunction direct -5081 Oct 30 j 10:27 0°**£**20'42 1°53'48 -5075 Dec 25 j 16:35 12°**х** 45'42 evening set minimum elong -5081 Oct 29 j 15:46 0°**2**15'10 11.02272 AU max. Earth dist. -5081 Nov 15 j 22:14 -5074 Jan 12 j 01:35 15°**₹**00'04 -0°57'03 2° £ 17'09 conjunction morning rise -5074 Jan 12 j 01:32 -5080 Feb 26 j 08:22 9°**₽**26'42 15°**₹**00'04 0°57'19 retrograde minimum elong -5080 May 07 j 09:37 -5074 Jan 11 j 21:33 14°**₹**'58'46 10.14656 AU 6°**£**06'38 2°07'12 max. Earth dist. opposition -5080 May 08 j 01:46 -5074 Jan 29 j 15:50 min. Earth dist. 6°**೨**03'38 8.96427 AU morning rise 17°**х** 16′13 -5074 May 17 j 10:27 -5080 Jul 16 j 14:46 2°**£**47'50 25°**х** 37'34 direct retrograde 22°**₹**07'31 -1°31'02 -5080 Oct 24 j 09:10 9°**£**51'02 -5074 Jul 25 j 07:21 evening set opposition -5074 Jul 25 j 08:10 22°**尽**07'21 8.08022 AU min. Earth dist. -5080 Nov 09 j 22:00 11°**△**49'12 1°33'17 -5074 Sep 29 j 16:54 conjunction direct 18°**∡** 42′50 -5080 Nov 09 j 22:03 -5073 Jan 09 j 01:04 minimum elong 11°**△**49'13 1°33'15 evening set 26°**х** 42′37 max. Earth dist. -5080 Nov 09 j 04:04 11°**º**43'49 10.89974 AU morning rise -5080 Nov 26 j 13:09 13°**≏**48'11 conjunction -5073 Jan 26 j 14:09 29°**₹**00'09 -1°27'12 retrograde -5079 Mar 09 j 22:34 21°**♀**07'38 minimum elong -5073 Jan 26 j 14:06 29°**∡**00'07 1°27'28 -5079 May 19 j 20:46 17°**2**45'55 1°39'33 max. Earth dist. -5073 Jan 26 j 14:35 29°**✗**00'17 10.02026 AU opposition min. Earth dist. -5079 May 20 j 11:44 17°**£**43′06 -5073 Feb 03 j 04:22 0°궁 8.83121 AU -5079 Jul 28 j 09:57 14°**£**26'32 morning rise -5073 Feb 13 j 08:28 1°る19'25 direct -5079 Nov 05 j 02:07 21°**♀**36'04 -5073 Jun 01 j 13:30 9°る50'56 evening set retrograde -5073 Aug 08 j 19:18 6°る19'52 -2°06'22 opposition -5079 Nov 21 j 18:06 conjunction 23°**△**36'56 1°08'24 min. Earth dist. -5073 Aug 08 j 16:23 6°る20'28 7.96758 AU -5079 Nov 21 j 18:09 minimum elong 23°**₽**36'56 1°08'18 direct -5073 Oct 13 i 17:49 2°る53'53 max. Earth dist. -5079 Nov 21 i 00:31 23°**△**31'35 10.75922 AU evening set -5072 Jan 23 j 22:55 11°る04'18 morning rise -5079 Dec 08 i 13:29 25°**♀**38'55 -5078 Jan 17 i 21:33 0°M -5072 Feb 10 j 15:46 13°る24'29 -1°52'43 conjunction -5078 Mar 22 j 22:11 3°ML09'40 minimum elong -5072 Feb 10 i 15:42 13°る24'28 1°52'59 retrograde -5078 May 29 j 14:44 30°R**≏** max. Earth dist. -5072 Feb 10 j 20:58 13°る26'13 9.92159 AU -5078 Jun 01 j 15:30 29°**£**46'10 1°06'41 -5072 Feb 28 j 13:29 15°**る**46'15 opposition morning rise min. Earth dist. -5078 Jun 02 j 05:23 29°**₽**43'32 8.68329 AU retrograde -5072 Jun 15 j 21:32 24°る24'55 direct -5078 Aug 09 j 12:51 26°**£**26′00 opposition -5072 Aug 22 j 12:49 20°る53'13 -2°34'32 -5078 Oct 14 j 20:24 0°M min. Earth dist. -5072 Aug 22 j 06:24 20°る54'33 7.88629 AU evening set -5078 Nov 17 j 04:46 3°M43'25 direct -5072 Oct 27 j 05:31 17°る25'59 max. Earth dist. -5078 Dec 03 j 08:38 5°M42'28 10.60663 AU -5071 Feb 07 j 07:42 25°る45'16 evening set -5078 Dec 04 j 00:35 5°ML47'24 0°39'45 -5071 Feb 25 j 03:57 28°**る**07'25 -2°11'26 conjunction conjunction -5071 Feb 25 j 03:54 minimum elong -5078 Dec 04 j 00:37 5°**M**47′25 0°39'36 minimum elong 28°る07'24 2°11'41

morning rise

retrograde

opposition

min. Earth dist.

-5078 Dec 21 j 00:44

-5077 Mar 09 j 12:30

-5077 Apr 05 j 09:04

-5077 May 02 j 11:27

-5077 Jun 14 j 18:27

-5077 Jun 15 j 06:33

7°M52'46

15°M35'54

12°M10'36 0°29'34

12°ML08'16 8.52660 AU

15°M⋅

15°RM

max. Earth dist.

morning rise

retrograde

opposition

min. Earth dist.

-5071 Feb 25 j 13:54

-5071 Mar 11 j 06:20

-5071 Mar 15 j 04:21

-5071 Jul 01 j 06:06

-5071 Sep 06 j 09:21

-5071 Sep 05 j 23:57

28°る10'45 9.85743 AU

5°≈40'50 -2°52'57

5°≈42'48 7.84178 AU

0°≈

0°≈30'54

9°≈12'43

3	ical year style is used: Th		•	//		, 1	50 2 0
direct	-5071 Nov 11 j 01:24	2°≈12'28		evening set	-5064 May 23 j 09:31	6° 8 28'24	
evening set	-5070 Feb 23 j 00:17	10°≈37'55		evening sec	200 : 11 11	0 0202.	
evening sec	50701 c 0 25 j 00.17	10 / 4 3 / 3 3		conjunction	-5064 Jun 10 j 07:31	8° 8 41'49	-0°32'39
conjunction	-5070 Mar 12 j 23:29	13° ≈ 01'15	-2°21'40	minimum elong	-5064 Jun 10 j 07:33	8° 8 41'49	
minimum elong	-5070 Mar 12 j 23:28	13°≈01'15		max. Earth dist.	-5064 Jun 10 j 22:42	_	10.39185 AU
max. Earth dist.	-5070 Mar 13 j 13:26		9.83196 AU	morning rise	-5064 Jun 28 j 01:00	10° 8 53'48	10.57165 AC
max. Earth dist.	-5070 Mar 13 j 13:20 -5070 Mar 27 j 20:07	15 ≈ 05 55	9.83190 AU	morning risc	-5064 Aug 03 j 14:46	15° 8	
morning rise	-5070 Mar 31 j 01:43	15 ≈ 15° ≈ 25'30		retrograde	-5064 Oct 06 j 14:05	18° 8 26'02	
retrograde	-5070 Jul 16 j 11:52	24°≈05'59		opposition	-5064 Dec 12 j 15:13	15° 8 03'18	0°20'52
opposition	-5070 Sep 21 j 05:58	24 ≈03 39 20°≈34'22	2050/52	min. Earth dist.	-5064 Dec 12 j 04:39	15° 8 05'23	
min. Earth dist.	-5070 Sep 20 j 18:14	20 ≈34 22 20°≈36'50	7.83637 AU	min. Earm dist.	-5064 Dec 13 j 07:46	15°R 8	6.4093 / AU
direct	-5070 Nov 26 j 01:57	20 ≈30 30 17°≈05'05	7.83037 AU	direct	-5063 Feb 20 j 00:24	11° 8 35'32	
evening set	-5069 Mar 10 j 20:12	25°≈33'27		direct	-5063 Apr 27 j 02:20	15° 8	
evening set	-300) Wai 10 j 20.12	23 ~33 21		evening set	-5063 Jun 06 j 01:54	19° 8 22'50	
conjunction	-5069 Mar 28 j 21:45	27° ≈ 57'06	_2°22'27	evening set	-3003 Juli 00 j 01.34	1) 02230	
minimum elong	-5069 Mar 28 j 21:46	27°≈57'06		conjunction	-5063 Jun 23 j 19:47	21° 8 32'47	-0°00'35
max. Earth dist.	-5069 Mar 29 j 14:42		9.84591 AU	minimum elong	-5063 Jun 23 j 19:47	21° 8 32'47	
max. Earth dist.	-5069 Apr 13 j 08:12	0° H	9.04391 AU	behind sun begin	-5063 Jun 23 j 12:36	21° 8 30'36	0 00 22
morning rise	-5069 Apr 16 j 00:57	0° X 21'12		behind sun end	-5063 Jun 24 j 02:59	21° 8 34'58	
retrograde	-5069 Jul 31 j 12:33	8° \(\frac{1}{56}\) 56'05		max. Earth dist.	-5063 Jun 24 j 07:21	_	10.54987 AU
min. Earth dist.	·		7.86926 AU	asc. node		21° 8 22'37	10.54987 AU
	-5069 Oct 05 j 10:43 -5069 Oct 06 j 00:22				-5063 Jun 30 j 14:08		
opposition	,	5°\(\frac{1}{25}\)'14 1°\(\frac{1}{55}\)'23	-2*34*40	morning rise	-5063 Jul 11 j 08:44	23° 8 41'11 0° Ⅱ	
direct	-5069 Dec 11 j 04:06	10°\(\frac{1}{23}\)'14			-5063 Sep 15 j 02:39		
evening set	-5068 Mar 25 j 14:51	10°π25'14		retrograde	-5063 Oct 19 j 00:22	1° I I00'57	
	50(0 A 12:10.00	1201/46/20	2012140	•,•	-5063 Nov 22 j 10:54	30°R8	0010120
conjunction	-5068 Apr 12 j 18:00	12°) 46′20		opposition	-5063 Dec 25 j 11:33	27° 8 39'57	
minimum elong	-5068 Apr 12 j 18:03	12°\ 46'21		min. Earth dist.	-5063 Dec 25 j 02:59	27° 8 41'37	8.62718 AU
max. Earth dist.	-5068 Apr 13 j 13:06	12° ¥ 52'39	9.89762 AU	direct	-5062 Mar 05 j 13:10	24° 8 13'21	
morning rise	-5068 Apr 30 j 21:17	15°) €09'23			-5062 Jun 03 j 06:55	0°II	
retrograde	-5068 Aug 14 j 05:35	23°) ₹35'07	2020104	evening set	-5062 Jun 19 j 05:19	1° Ⅱ 50'05	
opposition	-5068 Oct 19 j 14:03	20° ₩ 05'27			50/0 X 1 0/:10 05	20 H 5 (12.4	0020122
min. Earth dist.	-5068 Oct 18 j 23:06		7.93828 AU	conjunction	-5062 Jul 06 j 18:27	3° Ⅱ 56'34	0°30'33
direct	-5068 Dec 25 j 04:37	16°) ₹35'24		minimum elong	-5062 Jul 06 j 18:26	3° Ⅱ 56'34	
evening set	-5067 Apr 10 j 04:37	24°) 59′23		max. Earth dist.	-5062 Jul 07 j 02:47		10.70518 AU
	5065 4 20:00 22	250)/2405	1056141	morning rise	-5062 Jul 24 j 02:18	6° Ⅱ 01'27	
conjunction	-5067 Apr 28 j 08:23	27° ₩ 21'05		retrograde	-5062 Oct 31 j 01:36	13° Ⅱ 10′26	0055116
minimum elong	-5067 Apr 28 j 08:27	27° ₩ 21'07		opposition	-5061 Jan 06 j 23:59	9° Ⅱ 51'00	
max. Earth dist.	-5067 Apr 29 j 04:31		9.98423 AU	min. Earth dist.	-5061 Jan 06 j 17:38	9° Ⅱ 52'13	8.77873 AU
morning rise	-5067 May 16 j 10:45	29°) 42'17		direct	-5061 Mar 18 j 16:39	6° Ⅱ 25'40	
	-5067 May 18 j 18:16	0°Υ 7° 9 656100		evening set	-5061 Jul 01 j 20:41	13° Ⅱ 52'30	
retrograde	-5067 Aug 28 j 13:48	7° Y 56'00	2011110		5061 X 1 10:04 44	1.50 H 5.512.0	0050104
opposition	-5067 Nov 02 j 21:00	4° Y 27'51		conjunction	-5061 Jul 19 j 04:44	15° Ⅱ 55'39	0°59'24
min. Earth dist.	-5067 Nov 02 j 05:45	4° Υ 31'00	8.03971 AU	minimum elong	-5061 Jul 19 j 04:41	15° Ⅱ 55'39	0°59'40
direct	-5066 Jan 09 j 01:48	0° Y 57'54		max. Earth dist.	-5061 Jul 19 j 10:14		10.85081 AU
evening set	-5066 Apr 25 j 09:57	9° Ƴ 15′08		morning rise	-5061 Aug 05 j 07:19	17° Ⅱ 57'15	
				retrograde	-5061 Nov 11 j 21:03	24° Ⅱ 57'19	
conjunction	-5066 May 13 j 13:05	11° Y 34'40		opposition	-5060 Jan 19 j 05:31	21° Ⅱ 39'15	1°28'38
minimum elong	-5066 May 13 j 13:09		1°32'42	min. Earth dist.	-5060 Jan 19 j 02:28	21° Ⅱ 39'50	8.91781 AU
max. Earth dist.	-5066 May 14 j 08:58		10.10055 AU	direct	-5060 Mar 30 j 09:24	18° Ⅱ 15'12	
morning rise	-5066 May 31 j 13:27	13° Y 53'15		evening set	-5060 Jul 13 j 01:12	25° Ⅱ 33'09	
retrograde	-5066 Sep 11 j 10:10	21°Υ′53'17					
opposition	-5066 Nov 16 j 20:04	18° Y 26'52		conjunction	-5060 Jul 30 j 04:01	27° Ⅲ 33'19	1°25'01
min. Earth dist.	-5066 Nov 16 j 05:38	18° Y 29'49	8.16739 AU	minimum elong	-5060 Jul 30 j 03:58	27° Ⅲ 33'18	1°25'17
direct	-5065 Jan 23 j 17:43	14° Y ′57′24		max. Earth dist.	-5060 Jul 30 j 05:37		10.98089 AU
evening set	-5065 May 10 j 04:01	23° Y '05'39		morning rise	-5060 Aug 16 j 01:40	29° Ⅲ 32'01	
	506534 2010511	2500025	100.4101		-5060 Aug 20 j 03:24	0.22 0.22	
conjunction	-5065 May 28 j 05:11	25° Y 22'20		retrograde	-5060 Nov 22 j 08:38	6°\$25'05	105575
minimum elong	-5065 May 28 j 05:14	25° Y 22'21	1°03'54	opposition	-5059 Jan 30 j 05:25	3°508'10	1°57'26
max. Earth dist.	-5065 May 28 j 23:30		10.23922 AU	min. Earth dist.	-5059 Jan 30 j 05:57	3°508'04	9.03896 AU
morning rise	-5065 Jun 15 j 02:31	27° Y '37'47			-5059 Mar 25 j 05:05	30°RⅡ	
_	-5065 Jul 04 j 20:52	0°8		direct	-5059 Apr 11 j 17:31	29° Ⅱ 45'22	
retrograde	-5065 Sep 24 j 17:45	5° 8 23'41	100012		-5059 Apr 29 j 06:41	0.22 0.22	
opposition	-5065 Nov 30 j 10:15	1° 8 59'07		evening set	-5059 Jul 24 j 20:28	6° © 55'42	
min. Earth dist.	-5065 Nov 29 j 21:39	2° 8 01'39	8.31350 AU		5050 / 1011011	00-55	104640
	-5065 Dec 26 j 16:12	30° ₹ Υ		conjunction	-5059 Aug 10 j 18:10	8°953'15	1°46'40
direct	-5064 Feb 07 j 01:49	28° Y 30′23		minimum elong	-5059 Aug 10 j 18:08		1°46'57
	-5064 Mar 20 j 05:00	0°8		max. Earth dist.	-5059 Aug 10 j 15:21	8°°°52'25	11.09068 AU

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5059 in astronomical counting style is the year 5060 BCE in historical counting style. morning rise -5059 Aug 27 j 11:23 10°9549'30 -5053 Oct 31 i 00:01 16° Mp 16'06 morning rise -5059 Dec 03 j 16:35 -5052 Feb 09 j 03:02 23° m 13'06 17°937'36 retrograde retrograde 19° **m** 55'43 -5058 Feb 11 j 00:50 14°521'32 2°21'03 opposition -5052 Apr 20 j 04:02 2°36'47 opposition -5052 Apr 20 j 18:52 19°**m** 53'00 min. Earth dist. -5058 Feb 11 j 04:16 14°520'54 9.13787 AU min. Earth dist. 9.14428 AU -5052 Jun 30 j 01:56 direct -5058 Apr 23 j 20:50 10°959'58 direct 16° m 38'01 -5052 Oct 08 j 08:43 evening set -5058 Aug 05 j 07:51 18°903'59 evening set 23° m 33'59 2°01'21 -5052 Oct 24 j 17:58 conjunction -5058 Aug 22 j 01:08 19°**©**59'25 2°03'53 conjunction 25° Mp 28'47 -5052 Oct 24 j 18:01 19°**9**59'24 minimum elong -5058 Aug 22 j 01:06 2°04'09 minimum elong 25° Mp 28'47 2°01'24 max. Earth dist. -5058 Aug 21 j 19:02 19°**9**57'38 11.17656 AU max. Earth dist. -5052 Oct 24 j 00:01 25° Mp 23'30 11.09731 AU morning rise -5058 Sep 07 j 14:31 21°953'44 morning rise -5052 Nov 10 j 04:21 27° m 23'59 retrograde -5058 Dec 14 j 23:14 28°938'49 -5052 Dec 03 j 21:19 0°Ω opposition -5057 Feb 22 j 17:14 25°**©**23'18 2°39'00 retrograde -5051 Feb 20 j 04:27 4°**£**28'25 min. Earth dist. -5057 Feb 22 j 22:43 25°522'18 9.21124 AU opposition -5051 May 02 j 05:45 1°**₽**09'46 2°17'39 direct -5057 May 05 j 16:32 22°9502'52 min. Earth dist. -5051 May 02 j 21:46 1°**≏**06'49 9.04646 AU evening set -5057 Aug 16 j 12:56 29°901'55 -5051 May 18 j 09:06 30°R, M) -5057 Aug 25 j 00:56 $0^{\circ}\Omega$ direct -5051 Jul 11 j 15:46 27° m 51'52 -5051 Sep 01 j 11:08 0°Ω conjunction -5057 Sep 02 j 02:39 0°Ω55'47 2°16'18 evening set -5051 Oct 19 j 14:22 4°**£**51'38 minimum elong -5057 Sep 02 j 02:37 0°**Ω**55'47 2°16'33 max. Earth dist. -5051 Nov 04 j 07:03 6°**£**42'50 10.98806 AU max. Earth dist. -5057 Sep 01 j 18:25 0°**Ω**53'25 11.23572 AU morning rise -5057 Sep 18 j 12:54 2°**Ω**48'45 conjunction -5051 Nov 05 i 01:38 6°**₽**48'22 1°43'03 retrograde -5057 Dec 26 i 05:28 9°**Ω**32'42 minimum elong -5051 Nov 05 i 01:41 6°**₽**48'23 1°43'03 opposition -5056 Mar 05 i 07:57 6°**Ω**17'27 2°51'00 morning rise -5051 Nov 21 i 15:07 8°**£**45'48 min. Earth dist. -5056 Mar 05 j 16:09 6°**Ω**15'57 9.25667 AU retrograde -5050 Mar 04 j 12:00 15°**£**59'16 2°Ω57'59 -5050 May 14 j 13:14 12°**♀**39'04 direct -5056 May 16 j 07:20 opposition 1°52'37 9°**Ω**53'32 -5050 May 15 j 05:22 12°**♀**36'04 8.92515 AU -5056 Aug 26 j 13:52 min. Earth dist. evening set -5050 Jul 23 j 09:05 9°**£**20'42 direct -5056 Sep 12 j 00:40 11°**Ω**46'24 2°23'42 -5050 Oct 31 j 02:45 conjunction evening set 16° € 25'55 -5056 Sep 12 j 00:39 minimum elong 11° Ω 46'24 2°23'55 -5050 Nov 16 j 17:02 1°20'10 max. Earth dist. -5056 Sep 11 j 13:21 11°**Ω**43'09 11.26626 AU conjunction 18°**£**25'06 -5056 Sep 28 j 08:50 13°**£**38′36 minimum elong -5050 Nov 16 j 17:04 18°**£**25'07 1°20'06 morning rise -5056 Oct 10 j 15:57 -5050 Nov 15 j 23:20 15°€ max. Earth dist. 18°**£**19'46 10.85696 AU -5055 Jan 05 j 11:15 20°**Ω**23'11 -5050 Dec 03 j 10:15 retrograde morning rise 20°**£**25′16 -5055 Mar 16 j 22:16 -5049 Mar 17 j 06:29 opposition 17°**Ω**07'54 2°56'51 retrograde 27°**£**49'17 -5055 Mar 17 j 09:35 -5049 May 27 j 03:20 min. Earth dist. 17°**Ω**05'51 9.27277 AU opposition 24°**£**27'21 1°22'10 -5049 May 27 j 18:21 -5055 Apr 17 j 19:37 15°**Ŗ**Ω min. Earth dist. 24°**£**24'31 8.78400 AU direct -5055 May 27 j 18:24 13°**Ω**49'13 direct -5049 Aug 04 j 09:46 21°**2**08'16 -5055 Jul 05 j 20:48 15°€ -5049 Nov 11 j 23:53 28°**♀**20'35 evening set evening set -5055 Sep 06 j 12:09 20°**Ω**42'42 -5049 Nov 25 j 15:38 $0^{\circ}M$ -5055 Sep 22 j 20:55 22°Ω35'09 2°25'56 -5049 Nov 28 j 17:50 0°M22'43 0°53'14 conjunction conjunction -5055 Sep 22 j 20:55 -5049 Nov 28 j 17:52 0°M22'44 0°53'06 minimum elong 22°**Ω**35'09 2°26'06 minimum elong -5055 Sep 22 j 06:32 -5049 Nov 28 j 01:25 0°M17'42 10.70837 AU max. Earth dist. 22°**Ω**31'00 11.26739 AU max. Earth dist. -5055 Oct 09 j 04:10 24°**Ω**27'12 -5049 Dec 15 j 15:22 morning rise morning rise 2° ML26'05-5055 Dec 08 i 07:35 0° m retrograde -5048 Mar 29 j 12:40 10°M01'59 retrograde -5054 Jan 16 j 19:08 1° m 14'14 opposition -5048 Jun 08 i 01:24 6°ML38'13 0°47'00 -5054 Feb 26 i 11:12 30°RΩ min. Earth dist. -5048 Jun 08 j 14:22 6°M35'44 8.62851 AU opposition -5054 Mar 28 j 13:40 27°Ω58'34 2°56'28 direct -5048 Aug 15 j 15:16 3°M18'13 min. Earth dist. -5054 Mar 29 j 02:51 27°Ω56'10 9.25907 AU -5048 Nov 23 j 07:44 10°MJ39'11 evening set direct -5054 Jun 08 j 05:12 24°Ω40'26 -5054 Sep 03 j 07:13 0°m -5048 Dec 10 j 05:38 12°M44'36 0°23'04 conjunction -5054 Sep 17 j 09:20 -5048 Dec 10 j 05:39 0°22'54 evening set 1° Tp 33'17 minimum elong 12°M,44'36 max. Earth dist. -5048 Dec 09 j 14:37 12°M39'56 10.54887 AU -5048 Dec 27 j 07:59 14°M51'30 conjunction -5054 Oct 03 j 17:19 3° m 25'55 2°22'56 morning rise minimum elong -5054 Oct 03 j 17:21 3° m 25'56 2°23'04 -5048 Dec 28 j 11:56 15°M -5054 Oct 03 j 01:49 3° Mg 21'26 11.23899 AU retrograde -5047 Apr 12 j 04:52 22°M40'13 max. Earth dist. -5054 Oct 20 j 00:33 -5047 Jun 21 j 08:08 19°M14'34 0°08'17 morning rise 5° m 18'25 opposition -5053 Jan 28 j 09:10 -5047 Jun 21 j 18:58 retrograde 12° m 09'38 min. Earth dist. 19°**M**⋅12'28 8.46623 AU opposition -5053 Apr 09 j 07:12 8° **m** 53'15 2°49'46 direct -5047 Aug 28 j 04:34 15°M53'23 min. Earth dist. -5053 Apr 09 j 21:12 8° **m** 50'429.21585 AU desc. node -5047 Sep 07 j 10:04 15°M59'01 -5053 Jun 19 j 15:59 5° m 35'28 evening set -5047 Dec 06 j 04:08 23°M24'23 direct evening set -5053 Sep 28 j 07:35 12° m 29'05 conjunction -5047 Dec 23 j 06:19 25°M33'17 -0°09'15 conjunction -5053 Oct 14 j 15:48 14° m 22'32 2°14'43 minimum elong -5047 Dec 23 j 06:18 25°M33'17 0°09'28 minimum elong -5053 Oct 14 j 15:50 14° m/22'33 2°14'48 behind sun begin -5047 Dec 23 j 00:21 25°M31'25 max. Earth dist. -5053 Oct 13 j 23:31 behind sun end -5047 Dec 23 j 12:16 14° Mp 17'47 11.18175 AU 25°M35'09

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 30 Attention, astronomical year style is used: The year -5047 in astronomical counting style is the year 5048 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	e year -5047	in astronomical co	unting style is the year	r 5048 BCE in historical c	counting style.	
max. Earth dist.	-5047 Dec 22 j 17:41	25°M29'18	10.38644 AU		-5040 Feb 02 j 00:56	15° ≈	
morning rise	-5046 Jan 09 j 13:41	27°M43'52		evening set	-5040 Mar 02 j 15:57	18° ≈ 40′02	
	-5046 Jan 28 j 11:54	0° ∡ ¹					
retrograde	-5046 Apr 26 j 06:36	5° ∡ ¹45'46		conjunction	-5040 Mar 20 j 16:31	21° ≈ 03'49	
opposition	-5046 Jul 04 j 23:36	2° ≯ 18'15		minimum elong	-5040 Mar 20 j 16:31	21° ≈ 03'50	
min. Earth dist.	-5046 Jul 05 j 07:54		8.30559 AU	max. Earth dist.	-5040 Mar 21 j 08:08	21° ≈ 09'03	9.81919 AU
	-5046 Aug 06 j 02:59	30°RM		morning rise	-5040 Apr 07 j 19:18	23° ≈ 28'17	
direct	-5046 Sep 10 j 05:41	28°M55'42			-5040 Jun 05 j 05:07	0° ∀	
	-5046 Oct 14 j 13:58	0° ∡		retrograde	-5040 Jul 23 j 19:03	2° ∺ 07'03	
evening set	-5046 Dec 19 j 14:15	6° ∡ ³37'43			-5040 Sep 11 j 02:31	30° ₹ ≈	
		_		opposition	-5040 Sep 28 j 09:23	28° ≈ 35'06	
conjunction	-5045 Jan 05 j 20:54	8° ∡ 750′10		min. Earth dist.	-5040 Sep 27 j 20:36		7.83228 AU
minimum elong	-5045 Jan 05 j 20:52	8° ∡ 750′10		direct	-5040 Dec 03 j 07:54	25°≈04'51	
max. Earth dist.	-5045 Jan 05 j 12:07		10.22959 AU		-5039 Feb 17 j 14:32	0° ∀	
morning rise	-5045 Jan 23 j 09:02	11° ₹ 04'25		evening set	-5039 Mar 18 j 11:53	3°) 33′58	
retrograde	-5045 May 10 j 19:22	19° √ 19'05				>/	
opposition	-5045 Jul 18 j 23:41	15° √ 49'51		conjunction	-5039 Apr 05 j 14:24	5°) 57'40	
min. Earth dist.	-5045 Jul 19 j 04:43		8.15530 AU	minimum elong	-5039 Apr 05 j 14:27	5°) 57'41	
direct	-5045 Sep 23 j 16:15	12° ₹ 25'49		max. Earth dist.	-5039 Apr 06 j 08:37		9.85113 AU
evening set	-5044 Jan 02 j 14:43	20° ∡ 19'20		morning rise	-5039 Apr 23 j 17:53	8° ∺ 21'35	
		.		retrograde	-5039 Aug 07 j 16:56	16°) 52'48	
conjunction	-5044 Jan 20 j 01:43	22° × 35'10		min. Earth dist.	-5039 Oct 12 j 11:50		7.88386 AU
minimum elong	-5044 Jan 20 j 01:40	22° ∡ 35′09		opposition	-5039 Oct 13 j 01:55	13° ∺ 21'50	-2°47'31
max. Earth dist.	-5044 Jan 19 j 22:06		10.08711 AU	direct	-5039 Dec 18 j 10:07	9°) €51'10	
morning rise	-5044 Feb 06 j 18:05	24° 🗷 52'48		evening set	-5038 Apr 03 j 04:50	18° 升 17'59	
	-5044 Mar 22 j 06:15	0°る			5000 4 01:00 04	2001/10110	2005155
retrograde	-5044 May 24 j 17:14	3°₹18'55		conjunction	-5038 Apr 21 j 08:24	20°) (40'40	
•,•	-5044 Jul 29 j 21:47	30°₹ ⋌ 7	1050122	minimum elong	-5038 Apr 21 j 08:28	20°) (40'41	
opposition	-5044 Aug 01 j 07:33	29° 🖈 48'15		max. Earth dist.	-5038 Apr 22 j 03:58	20°) (47'06	9.92224 AU
min. Earth dist.	-5044 Aug 01 j 08:22		8.02416 AU	morning rise	-5038 May 09 j 11:32	23°) €03'04	
direct	-5044 Oct 06 j 12:36	26° ₹ 22'43			-5038 Jul 14 j 07:54	0°Υ	
. ,	-5044 Dec 09 j 15:32	0°る		retrograde	-5038 Aug 22 j 05:22	1°Υ23'21	
evening set	-5043 Jan 16 j 05:16	4° る 27'29		•,•	-5038 Sep 30 j 10:37	30° ₹	2025122
. ,.	5042 F 1 02 : 20 21	60 Z 46100	1041122	opposition	-5038 Oct 27 j 12:32	27°) 53'48	-2°25'33 7.97202 AU
conjunction	-5043 Feb 02 j 20:21	6° る 46'20		min. Earth dist.	-5038 Oct 26 j 21:40		7.97202 AU
minimum elong	-5043 Feb 02 j 20:17	6° පි 46'19 6° පි 46'56		direct	-5037 Jan 02 j 10:51	24° ¥ 23'08 0° Ƴ	
max. Earth dist.	-5043 Feb 02 j 22:11 -5043 Feb 20 j 16:23	9° そ 06'51	9.96788 AU		-5037 Mar 27 j 06:19	0° γ 2° Υ 44'24	
morning rise	-5043 Feb 20 J 16:23 -5043 Jun 08 j 22:06			evening set	-5037 Apr 18 j 14:40	2" 44'24	
retrograde		17°84201 14° る 10'16	2022115	conjunction	5027 May 06 : 19:12	5° Y 05'12	1944!50
opposition min. Earth dist.	-5043 Aug 15 j 21:52 -5043 Aug 15 j 18:18	14 81016 14° 8 11'00	7.92052 AU	minimum elong	-5037 May 06 j 18:12	5° Υ 05'14	
	-5043 Oct 20 j 18:49	14 81100 10° る 43'16	7.92032 AU	max. Earth dist.	-5037 May 06 j 18:16 -5037 May 07 j 14:02		1 44 38 10.02737 AU
direct evening set	·	10 843 16 18° 8 58'09			-5037 May 07 j 14.02	7° Υ 25'19	10.02/3/ AU
evening set	-5042 Jan 31 j 08:21	18 03809		morning rise retrograde	-5037 Nay 24 j 19.33 -5037 Sep 05 j 05:58	15° Υ 32'28	
conjunction	-5042 Feb 18 j 03:09	21° る 19'26	2002122	opposition	-5037 Nov 10 j 15:43	13° 7° 32° 28° 12° 904° 12°	1°55'00
minimum elong	-5042 Feb 18 j 03:05	21° る 19'25		min. Earth dist.	-5037 Nov 10 j 13:43	12° 70439 12° 70747	8.09070 AU
max. Earth dist.	-5042 Feb 18 j 10:15	21° る 21'48	9.87980 AU	direct	-5036 Jan 17 j 06:34	8° Υ 34'26	8.09070 AU
morning rise	-5042 Mar 08 j 02:12	21 02148 23° る 42'09	9.87980 AU		-5036 May 02 j 14:15	16° Υ 47'33	
morning 115C	-5042 May 02 j 23:46	23 3 42 09 0° ≈		evening set	5050 May 02 J 14.13	10 14/33	
retrograde	-5042 Jun 24 j 06:22	0 ∞ 2°≈22'53		conjunction	-5036 May 20 j 16:34	19° Ƴ 05'47	1018114
renograde	-5042 Juli 24 j 00:22 -5042 Aug 16 j 13:44	2 ≈22 33 30°Rる		minimum elong	-5036 May 20 j 16:38	19 γ 05 47 19° γ 05'48	
opposition	-5042 Aug 30 j 16:41	30 KO 28°る50'32	2015136	max. Earth dist.	-5036 May 20 j 10:38		10.15933 AU
min. Earth dist.	-5042 Aug 30 j 09:11		7.85122 AU	morning rise	-5036 Jun 07 j 15:46	21° Υ 22'57	10.13933 AO
direct	-5042 Nov 04 j 09:43	25° පි 22'12	7.03122 AU	retrograde	-5036 Sep 17 j 19:30	29° Υ 16'01	
direct	-5041 Jan 16 j 12:01	0° ≈		opposition	-5036 Nov 23 j 10:12	25° Υ 50'09	-1°19'01
evening set	-5041 Feb 15 j 21:16	3° ≈ 45'03		min. Earth dist.	-5036 Nov 22 j 19:22	25° Υ 53'11	8.23214 AU
ovening set	5071100 15 J 21.10	J ~ +J ∪J		direct	-5035 Jan 30 j 18:05	23° $\Upsilon 20'45$	0.23217 AU
conjunction	-5041 Mar 05 j 19:14	6° ≈ 08'01	-2°17'59	uncei	-5035 May 13 j 19:42	0° 8	
minimum elong	-5041 Mar 05 j 19:14	6°≈08'01	2°18'12	evening set	-5035 May 13 j 19:42 -5035 May 17 j 02:07	0° 8 24'05	
max. Earth dist.	-5041 Mar 06 j 07:03	6°≈11'59	9.82898 AU	evening set	5055 Iviay 1/J 02.0/	0 02403	
max. Earth dist.	-5041 Mar 06 j 07:03	8°≈32'05	7.02070 AU	conjunction	-5035 Jun 04 j 01:58	2° 8 39'14	-0°47'40
morning rise	•			minimum elong	-5035 Jun 04 j 01:38	2° 8 39'15	
retrograde	-5041 May 20 j 09:17 -5041 Jul 09 j 14:22	15° ≈ 17° ≈ 14'06		minimum elong max. Earth dist.	-5035 Jun 04 j 02:01 -5035 Jun 04 j 19:47	_	10.30965 AU
renograde	-5041 Jul 09 j 14:22 -5041 Aug 29 j 15:46	17°≈1406 15°R≈		max. Earth dist.	-5035 Jun 04 j 19:47 -5035 Jun 21 j 21:33	4° 8 53'01	10.50503 AU
opposition	-5041 Aug 29 j 15:46 -5041 Sep 14 j 13:23	13° ≈ 41'42	-2°58'12	retrograde	-5035 Jun 21 j 21:33 -5035 Sep 30 j 22:55	12° 8 32'04	
min. Earth dist.	-5041 Sep 14 j 13.23		7.82107 AU	opposition	-5035 Sep 30 j 22.33	9° 8 08'15	-0°30'50
direct	-5041 Sep 14 J 02:43 -5041 Nov 19 J 06:48	13°≈43′56 10°≈12'15	7.041U/ AU	opposition min. Earth dist.	-5035 Dec 06 j 06:29		-0°39′50 8.38781 AU
uncci	-3041 NOV 19 J 00:48	10 2012 13		mm. Earm dist.	-3033 Dec 00 J 00:29	9 O 1034	0.30/01 AU

•			•		AG 18-Feb-2025 14		ge 31
Attention, astronom direct	-5034 Feb 13 j 19:59	1e year -5034 5° 8 39'56	in astronomical co	unting style is the year min. Earth dist.	r 5035 BCE in historical c -5028 Feb 17 j 22:39	ounting style. 20°531'16	9.18610 AU
evening set	-5034 Feb 13 j 19.39	13° 8 32'42		direct	-5028 Apr 29 j 12:52	20 931 10 17°9511'48	9.18010 AU
evening set	-5034 May 31 J 01:13	15° 8		evening set	-5028 Apr 29 j 12:32	24°5913'18	
	-3034 Juli 11 j 21.34	13 0		evening set	-3028 Aug 10 j 19.04	24 5913 16	
conjunction	-5034 Jun 17 j 21:24	15° 8 44'27	-0°15'49	conjunction	-5028 Aug 27 j 10:18	26°907'51	2°11'04
minimum elong	-5034 Jun 17 j 21:25	15° 8 44'27		minimum elong	-5028 Aug 27 j 10:16	26°907'51	2°11'20
behind sun begin	-5034 Jun 17 j 20:09	15° 8 44'04		max. Earth dist.	-5028 Aug 27 j 01:35	26° © 05'20	11.21612 AU
behind sun end	-5034 Jun 17 j 22:41	15° 8 44'50		morning rise	-5028 Sep 12 j 22:00	28°901'26	
max. Earth dist.	-5034 Jun 18 j 12:48	15° 8 49'12	10.46959 AU		-5028 Oct 01 j 00:10	$0^{\circ}\Omega$	
morning rise	-5034 Jul 05 j 12:33	17° 8 54'38		retrograde	-5028 Dec 20 j 10:23	4° Ω 45'56	
retrograde	-5034 Oct 13 j 15:42	25° 8 20'33		opposition	-5027 Feb 28 j 08:56	1° Ω 31′01	2°46'04
opposition	-5034 Dec 19 j 20:34	21° 8 58'47		min. Earth dist.	-5027 Feb 28 j 17:27	1° Ω 29'27	9.24214 AU
min. Earth dist.	-5034 Dec 19 j 10:01		8.54923 AU		-5027 Mar 21 j 22:20	30° ₹ 5	
asc. node	-5034 Dec 20 j 20:04	21° 8 54'08		direct	-5027 May 11 j 07:34	28°9511'26	
direct	-5033 Feb 27 j 12:42	18° 8 31'45			-5027 Jun 29 j 04:57	0° Ω	
evening set	-5033 Jun 13 j 11:12	26° 8 13'48		evening set	-5027 Aug 21 j 22:17	5° Ω 08'50	
conjunction	-5033 Jul 01 j 02:46	28° 8 22'01	0°16'02	conjunction	5027 S 07 : 10-16	7° Ω 02'09	2°20'50
minimum elong	-5033 Jul 01 j 02:45	28° 8 22'01	0°16'16	minimum elong	-5027 Sep 07 j 10:16 -5027 Sep 07 j 10:14	$7^{\circ}\Omega_{02'08}$	
max. Earth dist.	-5033 Jul 01 j 14:28	_	10.63073 AU	max. Earth dist.	-5027 Sep 06 j 22:43	. •••	11.25692 AU
max. Daruf dist.	-5033 Jul 14 j 13:31	0°П	10.03073110	morning rise	-5027 Sep 23 j 19:24	8° Ω 54'41	11.23072710
morning rise	-5033 Jul 18 j 13:03	0° П 28'38		morning rise	-5027 Dec 03 j 09:10	15° Ω	
retrograde	-5033 Oct 25 j 20:54	7° ∏ 42'54		retrograde	-5027 Dec 31 j 17:16	15° Ω 39'05	
opposition	-5032 Jan 01 j 13:12	4° Ⅱ 23'00	0°38'10	C	-5026 Jan 29 j 13:21	15°RΩ	
min. Earth dist.	-5032 Jan 01 j 05:42	4° Ⅱ 24'27	8.70828 AU	opposition	-5026 Mar 11 j 23:47	12° Ω 24'06	2°54'49
direct	-5032 Mar 11 j 21:26	0° Ⅱ 57′21		min. Earth dist.	-5026 Mar 12 j 10:15	12° Ω 22'12	9.26832 AU
evening set	-5032 Jun 25 j 08:53	8° Ⅱ 29′09		direct	-5026 May 22 j 22:08	9° Ω 05′16	
					-5026 Aug 23 j 22:15	15° Ω	
conjunction	-5032 Jul 12 j 19:20	10° Ⅱ 33'55		evening set	-5026 Sep 01 j 21:58	15° Ω 59'54	
minimum elong	-5032 Jul 12 j 19:18	10° Ⅲ 33'54				_	
max. Earth dist.	-5032 Jul 13 j 02:30		10.78541 AU	conjunction	-5026 Sep 18 j 07:43	17° Ω 52'34	2°25'28
morning rise	-5032 Jul 30 j 00:33	12° Ⅲ 37'05		minimum elong	-5026 Sep 18 j 07:42		2°25'40
retrograde	-5032 Nov 05 j 19:02	19° ∏ 41'27	1012125	max. Earth dist.	-5026 Sep 17 j 18:25		11.26784 AU
opposition	-5031 Jan 12 j 22:13 -5031 Jan 12 j 17:26	16° Ⅱ 23'10	1°13'25	morning rise	-5026 Oct 04 j 15:12	19° Ω 44'40	
min. Earth dist. direct	-5031 Jan 12 j 17:26 -5031 Mar 24 j 19:55	16° Ⅲ 24'05 12° Ⅲ 58'57	8.85754 AU	retrograde opposition	-5025 Jan 12 j 01:03 -5025 Mar 23 j 14:55	26° Ω 30'42 23° Ω 15'18	2°57'22
evening set	-5031 Jul 07 j 19:08	20° Ⅱ 21'19		min. Earth dist.	-5025 Mar 24 j 03:28	23°Ω13'01	9.26432 AU
evening set	3031 Jul 07 J 17.00	20 112117		direct	-5025 Jun 03 j 09:06	19° Ω 56'56	7.20432 110
conjunction	-5031 Jul 25 j 00:21	22° I I22'53	1°13'24	evening set	-5025 Sep 12 j 19:48	26° Ω 50'15	
minimum elong	-5031 Jul 25 j 00:18	22° II 22'52	1°13'40	3	j		
max. Earth dist.	-5031 Jul 25 j 03:33	22° I I23'50	10.92671 AU	conjunction	-5025 Sep 29 j 04:10	28° Ω 42'51	2°24'55
morning rise	-5031 Aug 11 j 00:27	24° Ⅱ 22'56		minimum elong	-5025 Sep 29 j 04:11	28° Ω 42'51	2°25'04
	-5031 Oct 08 j 18:59	0 \circ \odot		max. Earth dist.	-5025 Sep 28 j 12:17	28° Ω 38'15	11.24886 AU
retrograde	-5031 Nov 17 j 10:22	1° © 19'19			-5025 Oct 10 j 07:50	0° ™	
	-5031 Dec 28 j 02:58	30°RⅡ		morning rise	-5025 Oct 15 j 11:16	0° m 35'09	
opposition	-5030 Jan 25 j 01:06	28° ∏ 02'22	1°44'29	retrograde	-5024 Jan 23 j 12:19	7° m 24'31	
min. Earth dist.	-5030 Jan 24 j 22:59	28° Ⅱ 02'46	8.99043 AU	opposition	-5024 Apr 03 j 07:36	4° Mp 08'23	2°53'36
direct	-5030 Apr 06 j 09:17	24° ∏ 39'30		min. Earth dist.	-5024 Apr 03 j 22:35	4° My 05'39	9.23046 AU
avanin =t	-5030 Jul 02 j 18:26	0°©		direct	-5024 Jun 13 j 19:25	0° Mp 50'14	
evening set	-5030 Jul 19 j 19:04	1° © 53'32		evening set max. Earth dist.	-5024 Sep 22 j 17:38	7° Mp 43'41	11 20074 AII
conjunction	-5030 Aug 05 j 19:14	3° © 52'16	1°37'01	max. Earth tist.	-5024 Oct 08 j 07:33	2 10 km	11.20074 AU
minimum elong	-5030 Aug 05 j 19:11	3°952'15	1°37'17	conjunction	-5024 Oct 09 j 01:33	9° m 36'47	2°19'07
max. Earth dist.	-5030 Aug 05 j 19:14		11.04859 AU	minimum elong	-5024 Oct 09 j 01:35	9° m) 36'48	2°19'13
morning rise	-5030 Aug 22 j 14:26	5° 5 210		morning rise	-5024 Oct 25 j 09:21	11° m) 29'54	· -=
retrograde	-5030 Nov 28 j 22:19	12° © 40'02		retrograde	-5023 Feb 03 j 01:47	18° m 24'20	
opposition	-5029 Feb 05 j 23:02	9° 5 24'06	2°10'37	opposition	-5023 Apr 15 j 02:59	15° m 07'07	2°43'33
min. Earth dist.	-5029 Feb 06 j 00:23	9° © 23'51	9.10136 AU	min. Earth dist.	-5023 Apr 15 j 19:16	15° m 04'08	9.16790 AU
direct	-5029 Apr 18 j 15:16	6° © 02'30		direct	-5023 Jun 25 j 06:06	11° m)48'57	
evening set	-5029 Jul 31 j 10:31	13° © 09'31		evening set	-5023 Oct 03 j 17:10	18° m 44'03	
				max. Earth dist.	-5023 Oct 19 j 07:40	20° m 32'56	11.12504 AU
conjunction	-5029 Aug 17 j 05:57	15° © 05'54	1°56'23				
minimum elong	-5029 Aug 17 j 05:54	15°505'53	1°56'39	conjunction	-5023 Oct 20 j 01:52	20° Mp 38'16	2°08'07
max. Earth dist.	-5029 Aug 17 j 01:56		11.14613 AU	minimum elong	-5023 Oct 20 j 01:55	20° m/38'17	2°08'11
morning rise	-5029 Sep 02 j 20:56	17°501'04		morning rise	-5023 Nov 05 j 11:14	22° m/32'47	
retrograde	-5029 Dec 10 j 05:13	23°547'32	2021116	retrograde	-5022 Feb 15 j 00:15	29° Mp 33'57	2027115
opposition	-5028 Feb 17 j 17:06	20° © 32'17	2-31-16	opposition	-5022 Apr 27 j 02:24	26° Mp 15'24	2°27'15

•			•	* *	5023 BCE in historical c		ge 32
min. Earth dist.	-5022 Apr 27 j 18:25		9.07871 AU	max. Earth dist.	-5017 Dec 30 j 14:59		10.29384 AU
direct	-5022 Apr 27 j 18.23	20° m) 57'02	9.07871 AU		-5017 Dec 30 j 14.39	2 x 33 34 5° x 08'56	10.29364 AU
	,	22 m/ 57 02 29° m/ 55' 15		morning rise	3	3 x · 08 30 13° x 17'57	
evening set	-5022 Oct 14 j 20:24 -5022 Oct 15 j 12:46	0° ⊽		retrograde opposition	-5016 May 03 j 12:44	9° ∡ 749'15	0954122
	-3022 Oct 13 j 12.46	0 ==			-5016 Jul 11 j 22:34 -5016 Jul 12 j 03:19		
	5022 0 4 21 : 06 52	10 0 51110	1050104	min. Earth dist.	,		8.21820 AU
conjunction	-5022 Oct 31 j 06:52	1° £ 51'12		direct	-5016 Sep 16 j 20:34	6° 🗷 25'48	
minimum elong	-5022 Oct 31 j 06:54	1° £ 51'12	11.02413 AU	evening set	-5016 Dec 26 j 12:40	14° ∡ 14'05	
max. Earth dist.	-5022 Oct 30 j 12:51		11.02413 AU	:	5015 I 12:21-26	1.00.70005	0950117
morning rise	-5022 Nov 16 j 18:45	3° ₽ 47'41		conjunction	-5015 Jan 12 j 21:36	16° × 28'25	
retrograde	-5021 Feb 27 j 05:46	10° £ 57'12	200454	minimum elong	-5015 Jan 12 j 21:33	16° ₹ 28'24	
opposition	-5021 May 09 j 07:02	7° £ 37'06	2°04'54	max. Earth dist.	-5015 Jan 12 j 16:40		10.14797 AU
min. Earth dist.	-5021 May 09 j 22:40	7° 2 34'12	8.96570 AU	morning rise	-5015 Jan 30 j 11:59	18° ₹ 44'33	
direct	-5021 Jul 18 j 10:31	4° △ 18'21		retrograde	-5015 May 18 j 07:33	27° ₹ 05'44	
evening set	-5021 Oct 26 j 05:33	11° ≏ 21'18		opposition	-5015 Jul 26 j 03:12	23° ∡ 35'40	
				min. Earth dist.	-5015 Jul 26 j 04:27		8.08147 AU
conjunction	-5021 Nov 11 j 18:26	13° ≙ 19'28	1°31'15	direct	-5015 Sep 30 j 11:50	20° ∡ 10′56	
minimum elong	-5021 Nov 11 j 18:29		1°31'12	evening set	-5014 Jan 09 j 21:00	28° ∡ 10'40	
max. Earth dist.	-5021 Nov 11 j 00:04		10.90131 AU		-5014 Jan 23 j 20:26	0°₹	
morning rise	-5021 Nov 28 j 09:51	15° ≏ 18'28					
retrograde	-5020 Mar 10 j 19:09	22° ≏ 37'51		conjunction	-5014 Jan 27 j 10:04	0°る28'09	
opposition	-5020 May 20 j 17:58	19° ≏ 16′05	1°36'52	minimum elong	-5014 Jan 27 j 10:00		1°29'21
min. Earth dist.	-5020 May 21 j 09:17	19° 亞 13'13	8.83280 AU	max. Earth dist.	-5014 Jan 27 j 09:38		10.02136 AU
direct	-5020 Jul 29 j 06:58	15° ≏ 56'43		morning rise	-5014 Feb 14 j 04:32	2° る 47'24	
evening set	-5020 Nov 05 j 22:27	23° ഫ 06'02		retrograde	-5014 Jun 02 j 09:41	11° ට 18'46	
				opposition	-5014 Aug 09 j 14:57	7° る 47'43	-2°08'27
conjunction	-5020 Nov 22 j 14:31	25° ≙ 06'54	1°06'06	min. Earth dist.	-5014 Aug 09 j 12:49	7° る 48'09	7.96850 AU
minimum elong	-5020 Nov 22 j 14:34	25° ≏ 06'55	1°05'59	direct	-5014 Oct 14 j 14:12	4° る 21'40	
max. Earth dist.	-5020 Nov 21 j 20:45	25° ≏ 01'29	10.76096 AU	evening set	-5013 Jan 24 j 18:49	12° る 32'06	
morning rise	-5020 Dec 09 j 10:10	27° ♀ 08'54					
	-5019 Jan 03 j 14:33	0° M.		conjunction	-5013 Feb 11 j 11:44	14° පි 52'16	-1°54'09
retrograde	-5019 Mar 23 j 18:48	4°M39'32		minimum elong	-5013 Feb 11 j 11:40	14° ප 52'15	1°54'24
opposition	-5019 Jun 02 j 12:29	1° M .16'00	1°03'44	max. Earth dist.	-5013 Feb 11 j 16:26	14° る 53'50	9.92233 AU
min. Earth dist.	-5019 Jun 03 j 02:45	1°ML13'18	8.68502 AU	morning rise	-5013 Mar 01 j 09:34	17° る 14'02	
	-5019 Jun 19 j 14:20	30° ₹ Ω		retrograde	-5013 Jun 17 j 16:09	25° る 52'34	
direct	-5019 Aug 10 j 09:57	27° ≏ 55'49		opposition	-5013 Aug 24 j 08:14	22° る 20'53	-2°35'59
	-5019 Sep 29 j 00:08	0°M		min. Earth dist.	-5013 Aug 24 j 02:26	22° る 22'05	7.88685 AU
evening set	-5019 Nov 18 j 00:55	5°M13'00		direct	-5013 Oct 29 j 02:16	18° る 53'37	
				evening set	-5012 Feb 09 j 03:38	27° ප 12'57	
conjunction	-5019 Dec 04 j 20:57	7°M16'59	0°37'17				
minimum elong	-5019 Dec 04 j 20:58	7°M17'00	0°37'08	conjunction	-5012 Feb 26 j 23:59	29° る 35'08	-2°12'19
max. Earth dist.	-5019 Dec 04 j 05:45	7° II L12'17	10.60842 AU	minimum elong	-5012 Feb 26 j 23:56	29° る 35'07	2°12'34
morning rise	-5019 Dec 21 j 21:11	9°M22'21		max. Earth dist.	-5012 Feb 27 j 09:57	29° る 38'28	9.85785 AU
	-5018 Feb 14 j 03:41	15° M ₊			-5012 Mar 01 j 02:24	0° ≈	
retrograde	-5018 Apr 06 j 04:59	17°ML05'22		morning rise	-5012 Mar 16 j 00:22	1° ≈ 58'35	
	-5018 May 28 j 20:44	15°RM		retrograde	-5012 Jul 02 j 00:03	10° ≈ 40′19	
opposition	-5018 Jun 15 j 15:10	13°ML40'01	0°26'28	opposition	-5012 Sep 07 j 04:35	7° ≈ 08'28	-2°53'40
min. Earth dist.	-5018 Jun 16 j 02:54	13°M37'45	8.52841 AU	min. Earth dist.	-5012 Sep 06 j 19:14	7°≈10'26	7.84219 AU
direct	-5018 Aug 22 j 20:52	10°ML18'53		direct	-5012 Nov 11 j 20:59	3° ≈ 40'06	
	-5018 Nov 07 j 02:28	15° M ₊		evening set	-5011 Feb 23 j 20:11	12° ≈ 05'38	
evening set	-5018 Nov 30 j 15:16	17° M 45'22		-	, , , , , , , , , , , , , , , , , , ,		
C	v			conjunction	-5011 Mar 13 j 19:32	14° ≈ 29'00	-2°21'56
conjunction	-5018 Dec 17 j 15:36	19°M52'46	0°05'52	minimum elong	-5011 Mar 13 j 19:31	14° ≈ 28'59	2°22'08
minimum elong	-5018 Dec 17 j 15:37	19°M52'46	0°05'41	max. Earth dist.	-5011 Mar 14 j 10:08	14° ≈ 33'53	9.83249 AU
behind sun begin	-5018 Dec 17 j 08:48	19°M50'39			-5011 Mar 17 j 16:12	15° ≈	
behind sun end	-5018 Dec 17 j 22:26	19°M54'53		morning rise	-5011 Mar 31 j 21:42	16° ≈ 53'14	
max. Earth dist.	-5018 Dec 17 j 03:36	19° M .49'00	10.45017 AU	retrograde	-5011 Jul 17 j 06:37	25° ≈ 33'37	
morning rise	-5017 Jan 03 j 20:36	22°ML01'43		opposition	-5011 Sep 22 j 01:09	22° ≈ 02'02	-2°59'48
desc. node	-5017 Feb 23 j 07:48	27°M27'20		min. Earth dist.	-5011 Sep 21 j 12:49	22° ≈ 04'37	7.83725 AU
retrograde	-5017 Apr 20 j 02:53	29°M57'44		direct	-5011 Nov 26 j 20:42	18°≈32'45	
opposition	-5017 Jun 29 j 02:21	26°M30'37	-0°13'32	evening set	-5010 Mar 11 j 16:07	27°≈01'07	
min. Earth dist.	-5017 Jun 29 j 10:45	26°M28'59	8.37009 AU			/	
direct	-5017 Sep 04 j 16:37	23°M08'23		conjunction	-5010 Mar 29 j 17:50	29° ≈ 24'47	-2°22'07
	-5017 Dec 07 j 16:15	0° ⊼ ¹		minimum elong	-5010 Mar 29 j 17:52	29°≈24'47	2°22'15
evening set	-5017 Dec 13 j 18:54	0° ∡ 745′24		max. Earth dist.	-5010 Mar 30 j 11:45	29°≈30'46	9.84729 AU
	301, 200 13 j 10.34	5 A 15 AT		Zartii dist.	-5010 Apr 03 j 03:26	0° ∺	J.O. 125 110
conjunction	-5017 Dec 30 j 23:35	2° ∡ 756'19	-0°26'58	morning rise	-5010 Apr 16 j 20:58	1° ∺ 48'51	
minimum elong	-5017 Dec 30 j 23:34	2° x ⁷ 56'18		retrograde	-5010 Apr 10 j 20:38	10° ∺ 23'30	
	301, 200 30 j 23.34	- 7. 50 10	, <u>_, , , _</u>		2010 11ug 01 J 00.07	10 /(2330	

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 33 Attention, astronomical year style is used: The year -5010 in astronomical counting style is the year 5011 BCE in historical counting style.

Attention, astronomi	cal year style is used: Th	e year -5010 i	n astronomical cou	nting style is the year	5011 BCE in historical co	ounting style.	6
opposition	-5010 Oct 06 j 19:22	6° ¥ 52′39		max. Earth dist.	-5004 Jun 25 j 02:49		10.54839 AU
min. Earth dist.	-5010 Oct 06 j 05:11		7.87112 AU	morning rise	-5004 Jul 12 j 03:59	25° 8 07'45	
direct	-5010 Dec 11 j 22:28	3° ¥ 22'48			-5004 Aug 26 j 23:56	0°II	
evening set	-5009 Mar 27 j 10:48	11° ¥ 50′31		retrograde	-5004 Oct 19 j 19:28	2° I I27'41	
agnismation	5000 Amr 14: 14:02	14° ¥ 13'36	2012152	annagition	-5004 Dec 14 j 19:12 -5004 Dec 26 j 06:48	30°R と 29° と 06'42	0°21'17
conjunction minimum elong	-5009 Apr 14 j 14:02 -5009 Apr 14 j 14:05	14 X 13 36 14° X 13'37		opposition min. Earth dist.	-5004 Dec 25 j 21:57	29° 8 08'26	8.62520 AU
max. Earth dist.	-5009 Apr 14 j 14:05 -5009 Apr 15 j 09:40		9.89984 AU	direct	-5004 Dec 25 j 21:57	25° 8 40'09	6.02320 AC
morning rise	-5009 May 02 j 17:12	16° ¥ 36'37	7.07701710	uncer	-5003 May 21 j 12:59	0°II	
retrograde	-5009 Aug 16 j 01:50	25°) €01'58		evening set	-5003 Jun 20 j 00:58	3° Ⅱ 17'06	
opposition	-5009 Oct 21 j 08:53	21°) 32′20	-2°36'33	<i>5</i>			
min. Earth dist.	-5009 Oct 20 j 18:04		7.94058 AU	conjunction	-5003 Jul 07 j 14:04	5° Ⅱ 23'36	0°32'55
direct	-5009 Dec 26 j 23:29	18°) €02'15		minimum elong	-5003 Jul 07 j 14:02	5° Ⅲ 23'35	0°33'10
evening set	-5008 Apr 11 j 00:20	26° ∺ 26′07		max. Earth dist.	-5003 Jul 07 j 22:53	5° Ⅱ 26'16	10.70277 AU
				morning rise	-5003 Jul 24 j 21:40	7° Ⅱ 28'28	
conjunction	-5008 Apr 29 j 04:05	28°) (47′47	-1°55'15	retrograde	-5003 Oct 31 j 22:32	14° Ⅲ 37'41	
minimum elong	-5008 Apr 29 j 04:09	28°) (47′48		opposition	-5002 Jan 07 j 19:34	11° Ⅱ 18'17	0°58'06
max. Earth dist.	-5008 Apr 30 j 00:04		9.98645 AU	min. Earth dist.	-5002 Jan 07 j 13:42	11° Ⅱ 19'25	8.77592 AU
	-5008 May 08 j 09:03	0° Υ		direct	-5002 Mar 19 j 11:07	7° Ⅱ 52'59	
morning rise	-5008 May 17 j 06:23	1° Y 08'57		evening set	-5002 Jul 02 j 16:39	15° Ⅱ 20′05	
retrograde	-5008 Aug 29 j 09:06	9° Υ 22'20	2000142		5002 1 1 20:00 20	170 T 22116	1001127
opposition min. Earth dist.	-5008 Nov 03 j 15:47	5° Y 54'14	-2°09'43 8.04166 AU	conjunction	-5002 Jul 20 j 00:29		1°01'37
direct	-5008 Nov 03 j 01:16 -5007 Jan 09 j 21:16	2° Y 24'18	8.04100 AU	minimum elong max. Earth dist.	-5002 Jul 20 j 00:26 -5002 Jul 20 j 05:47	17° Ⅱ 23'15	10153 10.84761 AU
evening set	-5007 Apr 26 j 05:24	10° Υ 41'27		morning rise	-5002 Jul 20 j 03.47 -5002 Aug 06 j 02:53	17 Ⅱ 2431 19° Ⅱ 24'52	10.84701 AU
evening set	-3007 Apr 20 J 03.24	10 412/		retrograde	-5002 Nov 12 j 16:27	26° I I25'11	
conjunction	-5007 May 14 j 08:29	13° Y ′00′57	-1°30'53	opposition	-5001 Jan 20 j 01:37	23° I I07'10	1°31'13
minimum elong	-5007 May 14 j 08:33	13° Υ 00'58		min. Earth dist.	-5001 Jan 19 j 23:14	23° I 107'37	8.91436 AU
max. Earth dist.	-5007 May 15 j 03:32		10.10212 AU	direct	-5001 Apr 01 j 04:33	19° Ⅱ 43'07	
morning rise	-5007 Jun 01 j 08:52	15° Ƴ 19'31		evening set	-5001 Jul 14 j 21:18	27° Ⅲ 01'21	
retrograde	-5007 Sep 12 j 04:23	23° Υ 19'21		•	·		
opposition	-5007 Nov 17 j 14:48	19° Ƴ 53'00	-1°35'51	conjunction	-5001 Jul 31 j 23:48	29° Ⅱ 01'31	1°26'59
min. Earth dist.	-5007 Nov 17 j 01:21	19° Ƴ 55'46	8.16850 AU	minimum elong	-5001 Jul 31 j 23:45	29° I I01'30	1°27'15
direct	-5006 Jan 24 j 13:01	16° Ƴ 23'31		max. Earth dist.	-5001 Aug 01 j 00:36		10.97712 AU
evening set	-5006 May 10 j 23:30	24° Ƴ 31'49			-5001 Aug 09 j 06:29	0 \circ	
				morning rise	-5001 Aug 17 j 21:22	1° © 00'15	
conjunction	-5006 May 29 j 00:33	26° Y 48'30		retrograde	-5001 Nov 24 j 04:40	7°953'39	
minimum elong	-5006 May 29 j 00:36	26° Y 48'31		opposition	-5000 Feb 01 j 01:49	4°536'43	
max. Earth dist.	-5006 May 29 j 17:29		10.23980 AU	min. Earth dist.	-5000 Feb 01 j 02:14		9.03504 AU
morning rise	-5006 Jun 15 j 21:56	29° Y 03'56 0° と		direct evening set	-5000 Apr 12 j 15:10 -5000 Jul 25 j 16:39	1°©13'55 8°©24'31	
retrograde	-5006 Jun 23 j 12:22 -5006 Sep 25 j 12:20	6° 8 49'44		evening set	-3000 Jul 23 J 10.39	8 292431	
opposition	-5006 Sep 23 j 12.20 -5006 Dec 01 j 05:00	3° 8 25'14	-0°57'42	conjunction	-5000 Aug 11 j 14:12	10°922'05	1°48'20
min. Earth dist.	-5006 Nov 30 j 16:50	3° 8 27'41	8.31357 AU	minimum elong	-5000 Aug 11 j 14:12	10°922'04	1°48'36
mm. Burur dige.	-5005 Jan 30 j 18:23	30°RY	0.51507110	max. Earth dist.	-5000 Aug 11 j 11:26		11.08654 AU
direct	-5005 Feb 07 j 20:58	29° Y ′56'31		morning rise	-5000 Aug 28 j 07:18	12°5018'21	
	-5005 Feb 16 j 00:04	0°8		retrograde	-5000 Dec 04 j 13:20	19° 5 06'48	
evening set	-5005 May 25 j 05:00	7° 8 54'39		opposition	-4999 Feb 11 j 21:25	15° © 50'41	2°22'51
				min. Earth dist.	-4999 Feb 12 j 00:06	15° © 50'12	9.13359 AU
conjunction	-5005 Jun 12 j 02:54	10° 8 08'05		direct	-4999 Apr 24 j 17:03	12° 5 29'07	
minimum elong	-5005 Jun 12 j 02:56	10° 8 08'05		evening set	-4999 Aug 06 j 04:10	19° © 33'22	
max. Earth dist.	-5005 Jun 12 j 17:06		10.39137 AU				
morning rise	-5005 Jun 29 j 20:22	12° 8 20'03		conjunction	-4999 Aug 22 j 21:24	21°528'50	2°05'10
. 1	-5005 Jul 22 j 15:18	15° 8		minimum elong	-4999 Aug 22 j 21:22		2°05'25
retrograde	-5005 Oct 08 j 09:02	19° 8 52'20	0017155	max. Earth dist.	-4999 Aug 22 j 16:14	21°92/20 23°923'10	11.17215 AU
opposition min. Earth dist.	-5005 Dec 14 j 10:13 -5005 Dec 13 j 23:22	16° 8 29'38	8.46858 AU	morning rise	-4999 Sep 08 j 10:32 -4999 Dec 02 j 17:20	23 23 10 0° Ω	
mm. Latin uist.	-5003 Dec 13 j 23:22 -5004 Jan 02 j 21:21	16 03147 15°R8	0.700J0 AU	retrograde	-4999 Dec 02 j 17.20 -4999 Dec 15 j 20:27	0° Ω 08'36	
direct	-5004 Feb 21 j 19:52	13° 8 01'55		Tonograde	-4999 Dec 29 j 01:07	0 3 2 0 8 3 0	
	-5004 Apr 11 j 01:28	15° 8		opposition	-4998 Feb 23 j 14:13	26°953'03	2°40'19
asc. node	-5004 Jun 02 j 16:35	20° 8 19'16		min. Earth dist.	-4998 Feb 23 j 19:35	26°952'04	9.20676 AU
evening set	-5004 Jun 06 j 21:19	20° 8 49'22		direct	-4998 May 06 j 13:08	23° © 32'36	
S	,				-4998 Aug 12 j 15:48	0°N	
conjunction	-5004 Jun 24 j 15:12	22° 8 59'20	0°01'54	evening set	-4998 Aug 17 j 09:27	0° £ 31′52	
minimum elong	-5004 Jun 24 j 15:12	22° 8 59'20	0°02'07				
behind sun begin	-5004 Jun 24 j 07:59	22° 8 57'09		conjunction	-4998 Sep 02 j 22:59	2° Ω 25'45	
behind sun end	-5004 Jun 24 j 22:24	23° 8 01'32		minimum elong	-4998 Sep 02 j 22:57	2° Ω 25'45	2°17'23

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	ical year style is used: Th	-					10.00700 ATT
max. Earth dist.	-4998 Sep 02 j 14:48		11.23124 AU	max. Earth dist.	-4992 Nov 05 j 05:13		10.98798 AU
morning rise	-4998 Sep 19 j 09:06	4°Ω18'45		morning rise	-4992 Nov 22 j 12:09	10° ⊆ 17'43	
retrograde	-4998 Dec 27 j 02:19	11° Ω 03'01		retrograde	-4991 Mar 05 j 09:52	17° ≏ 31'15	
opposition	-4997 Mar 07 j 05:18	7° Ω 47'44		opposition	-4991 May 15 j 10:58	14° ≙ 11'01	1°50'03
min. Earth dist.	-4997 Mar 07 j 13:53	7° Ω 46'10	9.25232 AU	min. Earth dist.	-4991 May 16 j 02:00	14° ≙ 08'13	8.92586 AU
direct	-4997 May 18 j 03:25	4° Ω 28'15		direct	-4991 Jul 24 j 08:01	10° ≏ 52'41	
evening set	-4997 Aug 28 j 10:28	11° Ω 23'57		evening set	-4991 Oct 31 j 23:26	17° £ 57'42	
conjunction	-4997 Sep 13 j 21:04	13° Ω 16'51	2°24'05	conjunction	-4991 Nov 17 j 13:55	19° ≏ 56'55	1°17'56
minimum elong	-4997 Sep 13 j 21:03	13° Ω 16′51	2°24'17	minimum elong	-4991 Nov 17 j 13:58	19° ≙ 56'55	1°17'51
max. Earth dist.	-4997 Sep 13 j 09:26	13° Ω 13′29	11.26206 AU	max. Earth dist.	-4991 Nov 16 j 21:20	19° ≏ 51'55	10.85855 AU
	-4997 Sep 28 j 21:07	15° Ω		morning rise	-4991 Dec 04 j 07:13	21° ≏ 57'05	
morning rise	-4997 Sep 30 j 05:19	15° Ω 09'06		retrograde	-4990 Mar 18 j 05:24	29° ≙ 21'01	
retrograde	-4996 Jan 07 j 07:33	21° Ω 54'00		opposition	-4990 May 28 j 01:01	25° ≙ 59'04	1°19'15
opposition	-4996 Mar 17 j 19:44	18° Ω 38'39	2°57'02	min. Earth dist.	-4990 May 28 j 14:55	25° ≙ 56'27	8.78652 AU
min. Earth dist.	-4996 Mar 18 j 06:49	18° Ω 36'38	9.26879 AU	direct	-4990 Aug 05 j 06:14	22° ₽ 40'03	
direct	-4996 May 28 j 16:04	15° Ω 19'56		evening set	-4990 Nov 12 j 20:34	29° ≙ 52'02	
evening set	-4996 Sep 07 j 08:44	22° Ω 13'33			-4990 Nov 13 j 23:09	0° M	
		_			·		
conjunction	-4996 Sep 23 j 17:32	24° Ω 06′02	2°25'49	conjunction	-4990 Nov 29 j 14:33	1° M 54′08	0°50'46
minimum elong	-4996 Sep 23 j 17:33	24° Ω 06′03		minimum elong	-4990 Nov 29 j 14:35	1°M54'09	0°50'38
max. Earth dist.	-4996 Sep 23 j 03:55		11.26363 AU	max. Earth dist.	-4990 Nov 28 j 22:09		10.71177 AU
morning rise	-4996 Oct 10 j 00:47	25° Ω 58′08		morning rise	-4990 Dec 16 j 12:19	3°M57'30	
	-4996 Nov 18 j 15:06	0° m)		retrograde	-4989 Mar 31 j 09:37	11°M33'10	
retrograde	-4995 Jan 17 j 17:41	2° Mp 45'28		opposition	-4989 Jun 09 j 22:50	8° ™ 09'24	0°43'53
	-4995 Mar 22 j 11:41	30° R Ω		min. Earth dist.	-4989 Jun 10 j 11:40	8°M06'58	8.63263 AU
opposition	-4995 Mar 29 j 11:11	29° Ω 29'42		direct	-4989 Aug 17 j 11:31	4° M 49′27	
min. Earth dist.	-4995 Mar 29 j 23:23	29° Ω 27'30	9.25553 AU	evening set	-4989 Nov 25 j 04:22	12°M10'04	
direct	-4995 Jun 09 j 03:25	26° Ω 11'36		max. Earth dist.	-4989 Dec 11 j 11:02	14° M ₊10'41	10.55361 AU
	-4995 Aug 20 j 05:50	0° ™					
evening set	-4995 Sep 18 j 05:58	3° Mp 04′28		conjunction	-4989 Dec 12 j 02:18	14°M15'26	0°20'30
				minimum elong	-4989 Dec 12 j 02:19	14°M15'26	0°20'19
conjunction	-4995 Oct 04 j 14:03	4° ™ 57'10	2°22'20		-4989 Dec 18 j 01:42	15° M ₊	
minimum elong	-4995 Oct 04 j 14:04	4° m 57'11	2°22'28	morning rise	-4989 Dec 29 j 04:53	16°M22'17	
max. Earth dist.	-4995 Oct 03 j 23:30	4° m 52'58	11.23575 AU	retrograde	-4988 Apr 13 j 00:27	24°M10'41	
morning rise	-4995 Oct 20 j 21:14	6° Mp49'44		opposition	-4988 Jun 22 j 05:06	20°M45'04	0°05'06
retrograde	-4994 Jan 29 j 06:29	13° m)41'11		min. Earth dist.	-4988 Jun 22 j 16:20	20°M42'53	8.47141 AU
opposition	-4994 Apr 10 j 04:57	10° m 24'43	2°48'45	desc. node	-4988 Aug 09 j 08:24	17°M44'36	
min. Earth dist.	-4994 Apr 10 j 18:23	10° m 22'17	9.21292 AU	direct	-4988 Aug 29 j 02:29	17°M23'55	
direct	-4994 Jun 20 j 12:01	7° Mp 06'58		evening set	-4988 Dec 07 j 00:34	24°M54'33	
evening set	-4994 Sep 29 j 04:19	14° Mp 00'36				m	
				conjunction	-4988 Dec 24 j 02:52	27°M03'24	
conjunction	-4994 Oct 15 j 12:31	15° m 54'05	2°13'38	minimum elong	-4988 Dec 24 j 02:51	27°M03'24	0°12'00
minimum elong	-4994 Oct 15 j 12:34	15° m 54'06	2°13'43	behind sun begin	-4988 Dec 23 j 21:56	27°M01'51	
max. Earth dist.	-4994 Oct 14 j 20:11		11.17929 AU	behind sun end	-4988 Dec 24 j 07:46	27°M04'56	
morning rise	-4994 Oct 31 j 20:55	17° Mp 47'42		max. Earth dist.	-4988 Dec 23 j 14:38		10.39197 AU
retrograde	-4993 Feb 10 j 01:04	24° m/44'54	2025111	morning rise	-4987 Jan 10 j 10:19	29°M13'55	
opposition	-4993 Apr 22 j 02:00	21° m) 27'29	2°35'11		-4987 Jan 16 j 16:28	0° ∕ 7	
min. Earth dist.	-4993 Apr 22 j 17:01	21° m) 24'44	9.14230 AU	retrograde	-4987 Apr 27 j 03:06	7°×715'27	
direct	-4993 Jul 01 j 23:25	18° Mp 09'47		opposition	-4987 Jul 05 j 20:12	3°×747'59	
evening set	-4993 Oct 10 j 05:24	25° Mp 05'41		min. Earth dist.	-4987 Jul 06 j 04:35	3° ∡ ¹46'20	8.31138 AU
				direct	-4987 Sep 11 j 02:16	0° ∡ ¹25'29	
conjunction	-4993 Oct 26 j 14:44		1°59'49	evening set	-4987 Dec 20 j 10:27	8° ∡ 107'07	
minimum elong	-4993 Oct 26 j 14:47	27° m 00'33	1°59'52			_	
max. Earth dist.	-4993 Oct 25 j 20:56		11.09595 AU	conjunction	-4986 Jan 06 j 17:15	10° √ 19'29 −	
morning rise	-4993 Nov 12 j 01:23	28° m 55'49		minimum elong	-4986 Jan 06 j 17:13	10° ∡ 19'29 −	
	-4993 Nov 21 j 11:44	0∘ ⊽		max. Earth dist.	-4986 Jan 06 j 09:23		10.23549 AU
retrograde	-4992 Feb 22 j 00:50	6° ♀ 00'23		morning rise	-4986 Jan 24 j 05:20	12° ∡ ′33'38	
opposition	-4992 May 03 j 03:39	2° £ 41'41	2°15'32	retrograde	-4986 May 11 j 15:37	20° ∡ ¹47'55	
min. Earth dist.	-4992 May 03 j 19:25	2° ≏ 38'47	9.04567 AU	opposition	-4986 Jul 19 j 19:50	17° ∡ 18'44	
	-4992 Jun 15 j 00:16	30°R, Mp		min. Earth dist.	-4986 Jul 20 j 00:24	17° ∡ 17'49	8.16133 AU
direct	-4992 Jul 12 j 12:52	29° m 23'48		direct	-4986 Sep 24 j 12:32	13° ₹ ′54'47	
	-4992 Aug 08 j 14:54	0∘ ⊽		evening set	-4985 Jan 03 j 10:53	21° ₹ '47'55	
evening set	-4992 Oct 20 j 11:03	6° ჲ 23'29					
				conjunction	-4985 Jan 20 j 21:59	24° ₹ 03'40	-1°15'33
conjunction	-4992 Nov 05 j 22:33	8° ≏ 20'15	1°41'08	minimum elong	-4985 Jan 20 j 21:56	24° ₹ 03'39	
minimum elong	-4992 Nov 05 j 22:36	8° ≏ 20'16	1°41'07	max. Earth dist.	-4985 Jan 20 j 18:49	24° ∡ °02'38	10.09307 AU

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	nical year style is used: Th	-	in astronomical co				
morning rise	-4985 Feb 07 j 14:16	26° ₹ 21'10		evening set	-4979 Apr 03 j 23:34	19° ¥ 42′25	
ratra ara da	-4985 Mar 09 j 22:07	0°궁 4° 궁 46'51		aaniumatian	4070 Apr. 22:02:17	22° ₩ 05'06	2004146
retrograde opposition	-4985 May 26 j 13:05 -4985 Aug 03 j 03:10	1°る16'14	1052144	conjunction minimum elong	-4979 Apr 22 j 03:17 -4979 Apr 22 j 03:21	22°\(\chi\)05'07	
min. Earth dist.	-4985 Aug 03 j 03:10		8.03009 AU	max. Earth dist.	-4979 Apr 22 j 22:23	22° H 11'24	9.92333 AU
IIIII. Eartii dist.	-4985 Aug 03 j 03.28	30°R. ✓	8.03009 AU	morning rise	-4979 Apr 22 j 22.23 -4979 May 10 j 06:27	24°\(\chi\)27'30	9.92333 AU
direct	-4985 Oct 08 j 08:37	27° ₹ 50'46		morning rise	-4979 Jun 27 j 18:22	24 γ (2/30	
direct	-4985 Nov 25 j 21:27	0°る		retrograde	-4979 Aug 22 j 22:18	2° Υ 47'36	
evening set	-4984 Jan 18 j 01:18	5° පි 55'12		renograde	-4979 Aug 22 j 22:18 -4979 Oct 19 j 20:16	2 1 4 / 30 30°R 	
evening set	-4704 Jan 10 J 01.10	3 033 12		opposition	-4979 Oct 28 j 06:31	29° ₩ 18'05	-2°23'48
conjunction	-4984 Feb 04 j 16:22	8° ට 13'57	-1°/3'03	min. Earth dist.	-4979 Oct 28 j 00:31		7.97237 AU
minimum elong	-4984 Feb 04 j 16:18	8° ප 13'56		direct	-4978 Jan 03 j 05:58	25°) 47'25	1.51251 AU
max. Earth dist.	-4984 Feb 04 j 17:53		9.97358 AU	direct	-4978 Mar 15 j 10:28	0° Υ	
morning rise	-4984 Feb 22 j 12:21	10°る34'21).) / JJJ 0 110	evening set	-4978 Apr 19 j 09:22	4° Υ 08'41	
retrograde	-4984 Jun 09 j 17:27	19° る 09'03		evening sec	1970 Hpt 19 J 09:22		
opposition	-4984 Aug 16 j 17:08	15° る 37'23	-2°24'01	conjunction	-4978 May 07 j 13:04	6° Y 29'32	-1°43'22
min. Earth dist.	-4984 Aug 16 j 13:32		7.92603 AU	minimum elong	-4978 May 07 j 13:08	6°Υ29'33	
direct	-4984 Oct 21 j 13:55	12° る 10'26	7.92003 110	max. Earth dist.	-4978 May 08 j 08:54		10.02704 AU
evening set	-4983 Feb 01 j 04:05	20°පි25'00		morning rise	-4978 May 25 j 14:43	8° Υ 49'39	10.02704710
evening set	47031 c 0 01 j 04.03	20 023 00		retrograde	-4978 Sep 05 j 23:52	16° Υ 56'44	
conjunction	-4983 Feb 18 j 22:46	22° ප් 46'11	-2°04'42	opposition	-4978 Nov 11 j 09:42	13° Y ′28'55	-1°52'55
minimum elong	-4983 Feb 18 j 22:43	22°る46'10		min. Earth dist.	-4978 Nov 10 j 18:26	13° Υ 32'04	8.08957 AU
max. Earth dist.	-4983 Feb 19 j 04:59	22°る48'15	9.88501 AU	direct	-4977 Jan 17 j 24:00	9° Υ 58'41	0.00 <i>)31 A</i> C
morning rise	-4983 Mar 08 j 21:50	25° පි 08'48	7.00301 AU	evening set	-4977 May 04 j 09:00	18° Υ 11'54	
morning 1130	-4983 Apr 18 j 14:58	0°≈		evening set	4911 May 04 J 09.00	10 11 54	
retrograde	-4983 Jun 25 j 01:38	3°≈49'04		conjunction	-4977 May 22 j 11:25	20° Ƴ 30'12	-1°16'16
opposition	-4983 Aug 31 j 11:37	0°≈16'49	-2°46'41	minimum elong	-4977 May 22 j 11:28	20° γ '30'13	
min. Earth dist.	-4983 Aug 31 j 04:41	0°≈18'16		max. Earth dist.	-4977 May 23 j 06:52		10.15751 AU
iiiii. Lartii dist.	-4983 Sep 03 j 20:11	30°Ŗ ප	7.03010 AC	morning rise	-4977 Jun 09 j 10:27	22° Υ '47'22	10.13731 AC
direct	-4983 Nov 05 j 03:53	26°る48'30		morning risc	-4977 Aug 23 j 14:20	0°8	
direct	-4982 Jan 03 j 18:22	20° ≈		retrograde	-4977 Sep 19 j 15:08	0° 8 40'29	
evening set	-4982 Feb 16 j 16:46	5°≈11'05		renograde	-4977 Oct 16 j 18:59	0 04029 30°RΥ	
evening set	-47021C0 10 j 10.40	J ~11 0J		opposition	-4977 Nov 25 j 04:22	27° Υ 14'36	-1°16'25
conjunction	-4982 Mar 06 j 14:38	7° ≈ 33'59	-2°18'34	min. Earth dist.	-4977 Nov 24 j 13:56	27° Υ 17'33	8.22960 AU
minimum elong	-4982 Mar 06 j 14:37	7°≈33'58		direct	-4976 Feb 01 j 11:11	23° Y 45'09	8.22900 AU
max. Earth dist.	-4982 Mar 07 j 01:11	7°≈37'30	9.83350 AU	direct	-4976 May 02 j 20:02	0° 8	
morning rise	7/02 Mai 0/ 01.11						
		0°∞57'58	7.03330 110	evening set	, ,		
morning rise	-4982 Mar 24 j 16:02	9°≈57'58	7.03330710	evening set	-4976 May 17 j 20:54	1° 8 48'41	
	-4982 Mar 24 j 16:02 -4982 May 05 j 22:01	15° ≈	7.03330 110	C	-4976 May 17 j 20:54	1° 8 48'41	-0°45'37
retrograde	-4982 Mar 24 j 16:02 -4982 May 05 j 22:01 -4982 Jul 10 j 09:48	15° ≈ 18° ≈ 39'32		conjunction	-4976 May 17 j 20:54 -4976 Jun 04 j 20:43	1°848'41 4°803'54	
retrograde opposition	-4982 May 05 j 22:01 -4982 Jul 10 j 09:48 -4982 Sep 15 j 07:59	15°≈ 18°≈39'32 15°≈07'13	-2°58'31	conjunction minimum elong	-4976 May 17 j 20:54 -4976 Jun 04 j 20:43 -4976 Jun 04 j 20:46	1°848'41 4°803'54 4°803'55	0°45'29
retrograde	-4982 Mar 24 j 16:02 -4982 May 05 j 22:01 -4982 Jul 10 j 09:48 -4982 Sep 15 j 07:59 -4982 Sep 14 j 22:20	15°≈ 18°≈39'32 15°≈07'13 15°≈09'15		conjunction minimum elong max. Earth dist.	-4976 May 17 j 20:54 -4976 Jun 04 j 20:43 -4976 Jun 04 j 20:46 -4976 Jun 05 j 14:31	1°848'41 4°803'54 4°803'55 4°809'31	
retrograde opposition min. Earth dist.	-4982 Mar 24 j 16:02 -4982 May 05 j 22:01 -4982 Jul 10 j 09:48 -4982 Sep 15 j 07:59 -4982 Sep 14 j 22:20 -4982 Sep 16 j 18:20	15°≈ 18°≈39'32 15°≈07'13 15°≈09'15 15°R≈	-2°58'31	conjunction minimum elong max. Earth dist. morning rise	-4976 May 17 j 20:54 -4976 Jun 04 j 20:43 -4976 Jun 04 j 20:46 -4976 Jun 05 j 14:31 -4976 Jun 22 j 16:11	1°848'41 4°803'54 4°803'55 4°809'31 6°817'43	0°45'29
retrograde opposition	-4982 Mar 24 j 16:02 -4982 May 05 j 22:01 -4982 Jul 10 j 09:48 -4982 Sep 15 j 07:59 -4982 Sep 14 j 22:20 -4982 Sep 16 j 18:20 -4982 Nov 20 j 01:30	15°≈ 18°≈39'32 15°≈07'13 15°≈09'15 15°R≈ 11°≈37'46	-2°58'31	conjunction minimum elong max. Earth dist. morning rise retrograde	-4976 May 17 j 20:54 -4976 Jun 04 j 20:43 -4976 Jun 04 j 20:46 -4976 Jun 05 j 14:31 -4976 Jun 22 j 16:11 -4976 Oct 01 j 17:51	1°848'41 4°803'54 4°803'55 4°809'31 6°817'43 13°856'53	0°45'29 10.30649 AU
retrograde opposition min. Earth dist. direct	-4982 Mar 24 j 16:02 -4982 May 05 j 22:01 -4982 Jul 10 j 09:48 -4982 Sep 15 j 07:59 -4982 Sep 14 j 22:20 -4982 Sep 16 j 18:20 -4982 Nov 20 j 01:30 -4981 Jan 20 j 13:50	15°≈ 18°≈39'32 15°≈07'13 15°≈09'15 15°R≈ 11°≈37'46 15°≈	-2°58'31	conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-4976 May 17 j 20:54 -4976 Jun 04 j 20:43 -4976 Jun 04 j 20:46 -4976 Jun 05 j 14:31 -4976 Jun 22 j 16:11 -4976 Oct 01 j 17:51 -4976 Dec 07 j 14:03	1°848'41 4°803'54 4°803'55 4°809'31 6°817'43 13°856'53 10°833'04	0°45'29 10.30649 AU -0°37'01
retrograde opposition min. Earth dist.	-4982 Mar 24 j 16:02 -4982 May 05 j 22:01 -4982 Jul 10 j 09:48 -4982 Sep 15 j 07:59 -4982 Sep 14 j 22:20 -4982 Sep 16 j 18:20 -4982 Nov 20 j 01:30	15°≈ 18°≈39'32 15°≈07'13 15°≈09'15 15°R≈ 11°≈37'46	-2°58'31	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-4976 May 17 j 20:54 -4976 Jun 04 j 20:43 -4976 Jun 04 j 20:46 -4976 Jun 05 j 14:31 -4976 Jun 22 j 16:11 -4976 Oct 01 j 17:51 -4976 Dec 07 j 14:03 -4976 Dec 07 j 01:46	1°848'41 4°803'54 4°803'55 4°809'31 6°817'43 13°856'53 10°833'04 10°835'32	0°45'29 10.30649 AU
retrograde opposition min. Earth dist. direct evening set	-4982 Mar 24 j 16:02 -4982 May 05 j 22:01 -4982 Jul 10 j 09:48 -4982 Sep 15 j 07:59 -4982 Sep 14 j 22:20 -4982 Sep 16 j 18:20 -4982 Nov 20 j 01:30 -4981 Jan 20 j 13:50 -4981 Mar 04 j 11:14	15°≈ 18°≈39'32 15°≈07'13 15°≈09'15 15°R≈ 11°≈37'46 15°≈ 20°≈05'23	-2°58'31 7.82512 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-4976 May 17 j 20:54 -4976 Jun 04 j 20:43 -4976 Jun 04 j 20:46 -4976 Jun 05 j 14:31 -4976 Jun 22 j 16:11 -4976 Oct 01 j 17:51 -4976 Dec 07 j 14:03 -4976 Dec 07 j 01:46 -4975 Feb 14 j 14:13	1°848'41 4°803'54 4°803'55 4°809'31 6°817'43 13°856'53 10°833'04 10°835'32 7°804'40	0°45'29 10.30649 AU -0°37'01
retrograde opposition min. Earth dist. direct evening set conjunction	-4982 Mar 24 j 16:02 -4982 May 05 j 22:01 -4982 Jul 10 j 09:48 -4982 Sep 15 j 07:59 -4982 Sep 14 j 22:20 -4982 Sep 16 j 18:20 -4982 Nov 20 j 01:30 -4981 Jan 20 j 13:50 -4981 Mar 04 j 11:14	15°≈ 18°≈39'32 15°≈07'13 15°≈09'15 15°R≈ 11°≈37'46 15°≈ 20°≈05'23 22°≈29'06	-2°58'31 7.82512 AU -2°23'19	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-4976 May 17 j 20:54 -4976 Jun 04 j 20:43 -4976 Jun 04 j 20:46 -4976 Jun 05 j 14:31 -4976 Jun 22 j 16:11 -4976 Oct 01 j 17:51 -4976 Dec 07 j 14:03 -4976 Dec 07 j 01:46 -4975 Feb 14 j 14:13 -4975 May 31 j 20:07	1°848'41 4°803'54 4°803'55 4°809'31 6°817'43 13°856'53 10°833'04 10°835'32 7°804'40 14°857'45	0°45'29 10.30649 AU -0°37'01
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-4982 Mar 24 j 16:02 -4982 May 05 j 22:01 -4982 Jul 10 j 09:48 -4982 Sep 15 j 07:59 -4982 Sep 14 j 22:20 -4982 Sep 16 j 18:20 -4982 Nov 20 j 01:30 -4981 Jan 20 j 13:50 -4981 Mar 04 j 11:14 -4981 Mar 22 j 11:47 -4981 Mar 22 j 11:47	15°≈ 18°≈39'32 15°≈07'13 15°≈09'15 15°R≈ 11°≈37'46 15°≈ 20°≈05'23 22°≈29'06 22°≈29'06	-2°58'31 7.82512 AU -2°23'19 2°23'29	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-4976 May 17 j 20:54 -4976 Jun 04 j 20:43 -4976 Jun 04 j 20:46 -4976 Jun 05 j 14:31 -4976 Jun 22 j 16:11 -4976 Oct 01 j 17:51 -4976 Dec 07 j 14:03 -4976 Dec 07 j 01:46 -4975 Feb 14 j 14:13	1°848'41 4°803'54 4°803'55 4°809'31 6°817'43 13°856'53 10°833'04 10°835'32 7°804'40	0°45'29 10.30649 AU -0°37'01
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retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-4982 Mar 24 j 16:02 -4982 May 05 j 22:01 -4982 Jul 10 j 09:48 -4982 Sep 15 j 07:59 -4982 Sep 14 j 22:20 -4982 Sep 16 j 18:20 -4982 Nov 20 j 01:30 -4981 Jan 20 j 13:50 -4981 Mar 04 j 11:14 -4981 Mar 22 j 11:47 -4981 Mar 22 j 11:47 -4981 Mar 23 j 02:02 -4981 Apr 09 j 14:41 -4981 May 22 j 15:11 -4981 Jul 25 j 13:53 -4981 Sep 30 j 03:45 -4981 Sep 30 j 03:52 -4981 Dec 05 j 03:18 -4980 Feb 06 j 06:53 -4980 Mar 19 j 06:51	15°≈ 18°≈39'32 15°≈07'13 15°≈09'15 15°R≈ 11°≈37'46 15°≈ 20°≈05'23 22°≈29'06 22°≈29'06 22°≈33'52 24°≈53'31 0° ★ 3° ★31'52 0° ★00'01 0° ★02'32 30°R≈ 26°≈29'46 0° ★ 4° ★58'46	-2°58'31 7.82512 AU -2°23'19 2°23'29 9.82275 AU -2°58'23 7.83524 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde asc. node opposition min. Earth dist.	-4976 May 17 j 20:54 -4976 Jun 04 j 20:43 -4976 Jun 05 j 14:31 -4976 Jun 22 j 16:11 -4976 Oct 01 j 17:51 -4976 Dec 07 j 14:03 -4976 Dec 07 j 01:46 -4975 Feb 14 j 14:13 -4975 May 31 j 20:07 -4975 Jun 18 j 16:10 -4975 Jun 18 j 16:11 -4975 Jun 18 j 16:11 -4975 Jun 18 j 20:15 -4975 Jun 19 j 06:43 -4975 Jul 06 j 07:17 -4975 Nov 23 j 22:33 -4975 Dec 20 j 15:09 -4975 Dec 20 j 05:17	1°848'41 4°803'54 4°803'55 4°809'31 6°817'43 13°856'53 10°833'04 10°835'32 7°804'40 14°857'45 15°8 17°809'32 17°809'32 17°809'32 17°809'32 17°809'32 17°809'32 21°810'47 26°845'56 25°822'18 23°824'08 23°826'04	0°45'29 10.30649 AU -0°37'01 8.38409 AU -0°13'30 0°13'19 10.46529 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-4982 Mar 24 j 16:02 -4982 May 05 j 22:01 -4982 Jul 10 j 09:48 -4982 Sep 15 j 07:59 -4982 Sep 14 j 22:20 -4982 Sep 16 j 18:20 -4982 Nov 20 j 01:30 -4981 Jan 20 j 13:50 -4981 Mar 04 j 11:14 -4981 Mar 22 j 11:47 -4981 Mar 22 j 11:47 -4981 Mar 23 j 02:02 -4981 Apr 09 j 14:41 -4981 May 22 j 15:11 -4981 Jul 25 j 13:53 -4981 Sep 30 j 03:45 -4981 Sep 30 j 03:52 -4981 Sep 30 j 03:52 -4981 Pec 05 j 03:18 -4980 Feb 06 j 06:53 -4980 Apr 06 j 09:25	15°≈ 18°≈39'32 15°≈07'13 15°≈09'15 15°R≈ 11°≈37'46 15°≈ 20°≈05'23 22°≈29'06 22°≈33'52 24°≈53'31 0° ₩ 3° ₩31'52 0° ₩00'01 0° ₩02'32 30°R≈ 26°≈29'46 0° ₩ 4° ₩58'46	-2°58'31 7.82512 AU -2°23'19 2°23'29 9.82275 AU -2°58'23 7.83524 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde asc. node opposition min. Earth dist. direct	-4976 May 17 j 20:54 -4976 Jun 04 j 20:43 -4976 Jun 05 j 14:31 -4976 Jun 22 j 16:11 -4976 Oct 01 j 17:51 -4976 Dec 07 j 01:46 -4975 Feb 14 j 14:13 -4975 May 31 j 20:07 -4975 Jun 18 j 16:10 -4975 Jun 18 j 16:11 -4975 Jun 18 j 16:11 -4975 Jun 18 j 20:15 -4975 Jun 19 j 06:43 -4975 Nov 23 j 22:33 -4975 Dec 20 j 15:09 -4975 Dec 20 j 05:17 -4974 Feb 28 j 08:27	1°848'41 4°803'54 4°803'55 4°809'31 6°817'43 13°856'53 10°833'04 10°835'32 7°804'40 14°857'45 15°8 17°809'32 17°809'32 17°809'32 17°809'32 17°809'32 17°809'32 21°810'47 26°845'56 25°822'18 23°824'08 23°826'04 19°857'01	0°45'29 10.30649 AU -0°37'01 8.38409 AU -0°13'30 0°13'19 10.46529 AU 0°02'48
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-4982 Mar 24 j 16:02 -4982 May 05 j 22:01 -4982 Jul 10 j 09:48 -4982 Sep 15 j 07:59 -4982 Sep 14 j 22:20 -4982 Sep 16 j 18:20 -4982 Nov 20 j 01:30 -4981 Jan 20 j 13:50 -4981 Mar 04 j 11:14 -4981 Mar 22 j 11:47 -4981 Mar 22 j 11:41 -4981 Mar 22 j 15:11 -4981 Jul 25 j 13:53 -4981 Sep 30 j 03:45 -4981 Sep 30 j 03:52 -4981 Sep 30 j 03:52 -4980 Feb 06 j 06:53 -4980 Apr 06 j 09:25 -4980 Apr 06 j 09:25	15°≈ 18°≈39'32 15°≈07'13 15°≈09'15 15°R≈ 11°≈37'46 15°≈ 20°≈05'23 22°≈29'06 22°≈29'06 22°≈33'52 24°≈53'31 0° ★ 3° ★31'52 0° ★00'01 0° ★02'32 30°R≈ 26°≈29'46 0° ★ 4° ★58'46	-2°58'31 7.82512 AU -2°23'19 2°23'29 9.82275 AU -2°58'23 7.83524 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde asc. node opposition min. Earth dist.	-4976 May 17 j 20:54 -4976 Jun 04 j 20:43 -4976 Jun 05 j 14:31 -4976 Jun 22 j 16:11 -4976 Oct 01 j 17:51 -4976 Dec 07 j 14:03 -4976 Dec 07 j 01:46 -4975 Feb 14 j 14:13 -4975 May 31 j 20:07 -4975 Jun 18 j 16:10 -4975 Jun 18 j 16:11 -4975 Jun 18 j 12:06 -4975 Jun 18 j 20:15 -4975 Jun 19 j 06:43 -4975 Jul 06 j 07:17 -4975 Nov 23 j 22:33 -4975 Dec 20 j 15:09 -4975 Dec 20 j 05:17	1°848'41 4°803'54 4°803'55 4°809'31 6°817'43 13°856'53 10°833'04 10°835'32 7°804'40 14°857'45 15°8 17°809'32 17°809'32 17°809'32 17°809'32 17°809'32 17°809'32 21°810'47 26°845'56 25°822'18 23°824'08 23°826'04	0°45'29 10.30649 AU -0°37'01 8.38409 AU -0°13'30 0°13'19 10.46529 AU 0°02'48
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-4982 Mar 24 j 16:02 -4982 May 05 j 22:01 -4982 Jul 10 j 09:48 -4982 Sep 15 j 07:59 -4982 Sep 14 j 22:20 -4982 Sep 16 j 18:20 -4982 Nov 20 j 01:30 -4981 Jan 20 j 13:50 -4981 Mar 04 j 11:14 -4981 Mar 22 j 11:47 -4981 Mar 22 j 11:47 -4981 Mar 22 j 11:47 -4981 Mar 22 j 15:11 -4981 May 22 j 15:11 -4981 Jul 25 j 13:53 -4981 Sep 30 j 03:45 -4981 Sep 30 j 03:52 -4981 Sep 30 j 03:52 -4981 Sep 30 j 03:52 -4980 Feb 06 j 06:53 -4980 Mar 19 j 06:51 -4980 Apr 06 j 09:25 -4980 Apr 06 j 09:27 -4980 Apr 07 j 02:37	15°≈ 18°≈39'32 15°≈07'13 15°≈09'15 15°R≈ 11°≈37'46 15°≈ 20°≈05'23 22°≈29'06 22°≈33'52 24°≈53'31 0° ₩ 3° ₩31'52 0° ₩00'01 0° ₩02'32 30°R≈ 26°≈29'46 0° ₩ 4° ₩58'46 7° ₩22'25 7° ₩22'26 7° ₩22'09	-2°58'31 7.82512 AU -2°23'19 2°23'29 9.82275 AU -2°58'23 7.83524 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde asc. node opposition min. Earth dist. direct evening set	-4976 May 17 j 20:54 -4976 Jun 04 j 20:43 -4976 Jun 05 j 14:31 -4976 Jun 22 j 16:11 -4976 Oct 01 j 17:51 -4976 Dec 07 j 01:46 -4975 Feb 14 j 14:13 -4975 May 31 j 20:07 -4975 Jun 01 j 03:34 -4975 Jun 18 j 16:10 -4975 Jun 18 j 16:11 -4975 Jun 18 j 20:15 -4975 Jun 18 j 20:15 -4975 Jun 19 j 06:43 -4975 Jul 06 j 07:17 -4975 Oct 14 j 09:15 -4975 Dec 20 j 15:09 -4975 Dec 20 j 05:17 -4974 Feb 28 j 08:27 -4974 Jun 14 j 06:20	1°848'41 4°803'54 4°803'55 4°809'31 6°817'43 13°856'53 10°833'04 10°835'32 7°804'40 14°857'45 15°8 17°809'32 17°809'32 17°809'32 17°809'32 21°809'32 21°809'32 21°809'32 21°809'32 21°809'32 21°809'32 21°809'32 21°809'32 21°809'32 21°809'32 21°809'32 21°809'32 21°809'32 21°809'32 21°809'32 21°809'32 21°809'32 22°809'32 23°809'32 23°809'32 23°809'32 23°809'32	0°45'29 10.30649 AU -0°37'01 8.38409 AU -0°13'30 0°13'19 10.46529 AU 0°02'48 8.54451 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-4982 Mar 24 j 16:02 -4982 May 05 j 22:01 -4982 Jul 10 j 09:48 -4982 Sep 15 j 07:59 -4982 Sep 14 j 22:20 -4982 Sep 16 j 18:20 -4982 Nov 20 j 01:30 -4981 Jan 20 j 13:50 -4981 Mar 22 j 11:47 -4981 Mar 22 j 15:11 -4981 May 22 j 15:11 -4981 Jul 25 j 13:53 -4981 Sep 30 j 03:45 -4981 Sep 30 j 03:52 -4981 Sep 30 j 03:52 -4981 Sep 30 j 03:52 -4980 Mar 19 j 06:51 -4980 Apr 06 j 09:27 -4980 Apr 06 j 09:27 -4980 Apr 07 j 02:37 -4980 Apr 24 j 12:57	15°≈ 18°≈39'32 15°≈07'13 15°≈09'15 15°R≈ 11°≈37'46 15°≈ 20°≈05'23 22°≈29'06 22°≈33'52 24°≈53'31 0° ₩ 3° ₩31'52 0° ₩00'01 0° ₩02'32 30°R≈ 26°≈29'46 0° ₩ 4° ₩58'46 7° ₩22'25 7° ₩22'26 7° ₩28'09 9° ₩46'18	-2°58'31 7.82512 AU -2°23'19 2°23'29 9.82275 AU -2°58'23 7.83524 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde asc. node opposition min. Earth dist. direct evening set	-4976 May 17 j 20:54 -4976 Jun 04 j 20:43 -4976 Jun 05 j 14:31 -4976 Jun 22 j 16:11 -4976 Oct 01 j 17:51 -4976 Dec 07 j 01:46 -4975 Feb 14 j 14:13 -4975 May 31 j 20:07 -4975 Jun 18 j 16:10 -4975 Jun 18 j 16:11 -4975 Jun 18 j 20:15 -4975 Jun 18 j 20:15 -4975 Jun 19 j 06:43 -4975 Jul 06 j 07:17 -4975 Oct 14 j 09:15 -4975 Dec 20 j 15:09 -4975 Dec 20 j 05:17 -4974 Feb 28 j 08:27 -4974 Jul 01 j 21:42	1°848'41 4°803'54 4°803'55 4°809'31 6°817'43 13°856'53 10°833'04 10°835'32 7°804'40 14°857'45 15°8 17°809'32 17°809'32 17°809'32 17°809'32 17°809'32 17°809'32 21°810'47 26°845'56 25°822'18 23°824'08 23°826'04 19°857'01	0°45'29 10.30649 AU -0°37'01 8.38409 AU -0°13'30 0°13'19 10.46529 AU 0°02'48 8.54451 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-4982 Mar 24 j 16:02 -4982 May 05 j 22:01 -4982 Jul 10 j 09:48 -4982 Sep 15 j 07:59 -4982 Sep 14 j 22:20 -4982 Sep 16 j 18:20 -4982 Nov 20 j 01:30 -4981 Jan 20 j 13:50 -4981 Mar 22 j 11:47 -4981 Mar 22 j 15:11 -4981 May 22 j 15:11 -4981 Jul 25 j 13:53 -4981 Sep 30 j 03:45 -4981 Sep 30 j 03:45 -4981 Sep 30 j 03:52 -4981 Sep 30 j 03:52 -4980 Peb 06 j 06:53 -4980 Apr 06 j 09:25 -4980 Apr 06 j 09:27 -4980 Apr 07 j 02:37 -4980 Apr 24 j 12:57 -4980 Aug 08 j 10:47	15°≈ 18°≈39'32 15°≈07'13 15°≈09'15 15°R≈ 11°≈37'46 15°≈ 20°≈05'23 22°≈29'06 22°≈33'52 24°≈53'31 0° ₩ 3° ₩31'52 0° ₩00'01 0° ₩02'32 30°R≈ 26°≈29'46 0° ₩ 4° ₩58'46 7° ₩22'25 7° ₩22'26 7° ₩22'09	-2°58'31 7.82512 AU -2°23'19 2°23'29 9.82275 AU -2°58'23 7.83524 AU -2°18'32 2°18'39 9.85351 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde asc. node opposition min. Earth dist. direct evening set	-4976 May 17 j 20:54 -4976 Jun 04 j 20:43 -4976 Jun 05 j 14:31 -4976 Jun 22 j 16:11 -4976 Oct 01 j 17:51 -4976 Dec 07 j 14:03 -4976 Dec 07 j 01:46 -4975 Feb 14 j 14:13 -4975 May 31 j 20:07 -4975 Jun 18 j 16:10 -4975 Jun 18 j 16:11 -4975 Jun 18 j 20:15 -4975 Jun 18 j 20:15 -4975 Jun 19 j 06:43 -4975 Jul 06 j 07:17 -4975 Oct 14 j 09:15 -4975 Dec 20 j 05:17 -4974 Feb 28 j 08:27 -4974 Jul 01 j 21:42 -4974 Jul 01 j 21:41	1°848'41 4°803'54 4°803'55 4°809'31 6°817'43 13°856'53 10°833'04 10°835'32 7°804'40 14°857'45 15°8 17°809'32 17°809'32 17°808'17 17°810'47 17°814'02 19°819'47 26°845'56 25°822'18 23°826'04 19°857'01 27°839'28	0°45'29 10.30649 AU -0°37'01 8.38409 AU -0°13'30 0°13'19 10.46529 AU 0°02'48 8.54451 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-4982 Mar 24 j 16:02 -4982 May 05 j 22:01 -4982 Jul 10 j 09:48 -4982 Sep 15 j 07:59 -4982 Sep 14 j 22:20 -4982 Sep 16 j 18:20 -4982 Nov 20 j 01:30 -4981 Jan 20 j 13:50 -4981 Mar 22 j 11:47 -4981 Mar 22 j 11:47 -4981 Mar 22 j 11:47 -4981 Mar 22 j 15:11 -4981 May 22 j 15:11 -4981 Jul 25 j 13:53 -4981 Sep 30 j 03:45 -4981 Sep 30 j 03:45 -4981 Sep 29 j 15:52 -4981 Sep 30 j 03:52 -4980 Sep 30 j 03:52 -4980 Apr 06 j 09:25 -4980 Apr 06 j 09:25 -4980 Apr 06 j 09:27 -4980 Apr 07 j 02:37 -4980 Aug 08 j 10:47 -4980 Oct 13 j 20:04	15°≈ 18°≈39'32 15°≈07'13 15°≈09'15 15°R≈ 11°≈37'46 15°≈ 20°≈05'23 22°≈29'06 22°≈29'06 22°≈33'52 24°≈53'31 0°₩ 3°₩31'52 0°₩00'01 0°₩02'32 30°R≈ 26°≈29'46 0°₩ 4°₩58'46 7°₩22'25 7°₩22'26 7°₩22'26 7°₩22'26 1° ₩28'09 9°₩46'18 18°₩17'14 14°₩46'20	-2°58'31 7.82512 AU -2°23'19 2°23'29 9.82275 AU -2°58'23 7.83524 AU -2°18'32 2°18'39 9.85351 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde asc. node opposition min. Earth dist. direct evening set conjunction min Earth dist.	-4976 May 17 j 20:54 -4976 Jun 04 j 20:43 -4976 Jun 05 j 14:31 -4976 Jun 22 j 16:11 -4976 Oct 01 j 17:51 -4976 Dec 07 j 14:03 -4976 Dec 07 j 01:46 -4975 Feb 14 j 14:13 -4975 May 31 j 20:07 -4975 Jun 18 j 16:10 -4975 Jun 18 j 16:11 -4975 Jun 18 j 16:11 -4975 Jun 18 j 20:15 -4975 Jun 19 j 06:43 -4975 Jul 06 j 07:17 -4975 Oct 14 j 09:15 -4975 Dec 20 j 05:17 -4974 Feb 28 j 08:27 -4974 Jul 01 j 21:42 -4974 Jul 01 j 21:41 -4974 Jul 01 j 21:41 -4974 Jul 02 j 08:21	1°848'41 4°803'54 4°803'55 4°809'31 6°817'43 13°856'53 10°833'04 10°835'32 7°804'40 14°857'45 15°8 17°809'32 17°809'32 17°809'32 17°809'32 17°809'32 17°809'32 17°809'32 21°809'32 21°809'32 21°809'32 21°810'47 21°819'47 26°845'56 25°822'18 23°826'04 19°857'01 27°839'28 29°847'43 29°847'42 29°850'57	0°45'29 10.30649 AU -0°37'01 8.38409 AU -0°13'30 0°13'19 10.46529 AU 0°02'48 8.54451 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-4982 Mar 24 j 16:02 -4982 May 05 j 22:01 -4982 Jul 10 j 09:48 -4982 Sep 15 j 07:59 -4982 Sep 14 j 22:20 -4982 Sep 16 j 18:20 -4982 Nov 20 j 01:30 -4981 Jan 20 j 13:50 -4981 Mar 22 j 11:47 -4981 Mar 22 j 15:11 -4981 May 22 j 15:11 -4981 Jul 25 j 13:53 -4981 Sep 30 j 03:45 -4981 Sep 30 j 03:45 -4981 Sep 30 j 03:52 -4981 Sep 30 j 03:52 -4980 Peb 06 j 06:53 -4980 Apr 06 j 09:25 -4980 Apr 06 j 09:27 -4980 Apr 07 j 02:37 -4980 Apr 24 j 12:57 -4980 Aug 08 j 10:47	15°≈ 18°≈39'32 15°≈07'13 15°≈09'15 15°R≈ 11°≈37'46 15°≈ 20°≈05'23 22°≈29'06 22°≈33'52 24°≈53'31 0°ℋ 3°ℋ31'52 0°ℋ00'01 0°ℋ02'32 30°R≈ 26°≈29'46 0°ℋ 4°ℋ58'46 7°ℋ22'25 7°ℋ22'26 7°ℋ22'26 7°ℋ28'09 9°ℋ46'18 18°ℋ17'14	-2°58'31 7.82512 AU -2°23'19 2°23'29 9.82275 AU -2°58'23 7.83524 AU -2°18'32 2°18'39 9.85351 AU -2°46'22	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde asc. node opposition min. Earth dist. direct evening set conjunction min Earth dist.	-4976 May 17 j 20:54 -4976 Jun 04 j 20:43 -4976 Jun 05 j 14:31 -4976 Jun 22 j 16:11 -4976 Oct 01 j 17:51 -4976 Dec 07 j 14:03 -4976 Dec 07 j 01:46 -4975 Feb 14 j 14:13 -4975 May 31 j 20:07 -4975 Jun 18 j 16:10 -4975 Jun 18 j 16:11 -4975 Jun 18 j 16:11 -4975 Jun 18 j 20:15 -4975 Jun 19 j 06:43 -4975 Jul 06 j 07:17 -4975 Oct 14 j 09:15 -4975 Dec 20 j 05:17 -4974 Feb 28 j 08:27 -4974 Jul 01 j 21:42 -4974 Jul 01 j 21:41 -4974 Jul 01 j 21:41 -4974 Jul 02 j 08:21	1°848'41 4°803'54 4°803'55 4°809'31 6°817'43 13°856'53 10°833'04 10°835'32 7°804'40 14°857'45 15°8 17°809'32 17°809'32 17°808'17 17°810'47 17°814'02 19°819'47 26°845'56 25°822'18 23°826'04 19°857'01 27°839'28	0°45'29 10.30649 AU -0°37'01 8.38409 AU -0°13'30 0°13'19 10.46529 AU 0°02'48 8.54451 AU

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -4974 in astronomical counting style is the year 4975 BCE in historical counting style. -4974 Oct 26 i 16:02 9°**Ⅱ**08'57 retrograde -4967 Jan 01 i 14:14 17°**Ω**08'57 retrograde -4973 Jan 02 j 08:02 5°**II**49'00 0°41'01 -4967 Feb 25 j 10:21 15°RΩ opposition -4973 Jan 02 j 00:23 5°**П**50'30 8.70277 AU -4967 Mar 12 j 20:45 13°Ω53'57 2°55'16 min. Earth dist. opposition 2°**Ⅲ**23'19 -4967 Mar 13 j 06:45 13°**Q**52'08 9.26599 AU -4973 Mar 13 j 16:13 min. Earth dist. direct -4967 May 23 j 18:07 10°**Ω**35′08 -4973 Jun 27 j 04:08 9°**I**55'31 evening set direct -4967 Aug 10 j 12:21 15°Ω 12°**Ⅲ**00′20 0°48'23 -4967 Sep 02 j 18:17 conjunction -4973 Jul 14 j 14:28 evening set 17°**Ω**29'51 -4973 Jul 14 j 14:26 minimum elong 12°**Ⅱ**00′19 0°48'37 max. Earth dist. -4973 Jul 14 j 21:33 12°**Ⅱ**02'28 10.77964 AU conjunction -4967 Sep 19 j 03:55 19°**Ω**22'31 2°25'35 14°**Ⅲ**03'33 -4967 Sep 19 j 03:55 morning rise -4973 Jul 31 j 19:33 minimum elong 19°**Ω**22'31 2°25'46 retrograde -4973 Nov 07 j 14:02 21°**Ⅲ**08′19 max. Earth dist. -4967 Sep 18 j 14:45 19°**Ω**18'43 11.26585 AU -4972 Jan 14 j 17:30 17°**Ⅱ**49'58 -4967 Oct 05 j 11:24 opposition 1°16'05 morning rise 21°**Ω**14'39 -4966 Jan 12 j 22:22 min. Earth dist. -4972 Jan 14 j 12:03 17°**Ⅲ**51'01 8.85162 AU retrograde 28°**Ω**00'54 direct -4972 Mar 25 j 15:13 14°**Ⅲ**25'43 opposition -4966 Mar 24 j 12:14 24°**Ω**45'30 2°57'12 evening set -4972 Jul 08 j 14:32 21°**Ⅱ**48'29 min. Earth dist. -4966 Mar 25 j 01:05 24°**Ω**43'10 9.26270 AU direct -4966 Jun 04 j 05:41 21° **Q**27'11 conjunction -4972 Jul 25 j 19:42 23°**Ⅱ**50′06 1°15'28 evening set -4966 Sep 13 j 16:11 28° **Q**20'31 minimum elong -4972 Jul 25 j 19:39 23°**II**50'05 1°15'44 -4966 Sep 28 j 03:05 max. Earth dist. -4972 Jul 25 j 23:50 23°**Д**51'19 10.92076 AU max. Earth dist. -4966 Sep 29 j 08:20 0° Mp 08'27 11.24763 AU morning rise -4972 Aug 11 j 19:34 25°**Ⅲ**50′12 -4972 Sep 20 j 14:31 0ಂತಾ conjunction -4966 Sep 30 j 00:26 0° m 13'07 2°24'32 retrograde -4972 Nov 18 i 07:05 2°9547'01 minimum elong -4966 Sep 30 i 00:27 0° m 13'07 2°24'41 -4971 Jan 19 j 04:58 30°RⅡ morning rise -4966 Oct 16 i 07:40 2° m 05'28opposition -4971 Jan 25 i 20:49 29°**Ⅲ**30′01 1°46'53 retrograde -4965 Jan 24 i 07:52 8° m 55'02 min. Earth dist. -4971 Jan 25 j 18:41 29°**Ⅲ**30′25 8.98458 AU opposition -4965 Apr 05 j 05:06 5° m 38'52 2°52'51 -4971 Apr 07 j 05:04 26°**Ⅱ**07'08 -4965 Apr 05 j 19:50 5° m 36'11 9.22955 AU direct min. Earth dist. -4971 Jun 19 j 05:25 0ಂತಾ -4965 Jun 15 j 16:10 2° m 20'47 direct -4971 Jul 20 j 14:51 3°521'32 evening set -4965 Sep 24 j 14:02 9° m 14'13 evening set -4971 Aug 06 j 14:50 5°520'18 1°38'49 -4965 Oct 10 j 22:06 11° Mp 07'20 2°18'15 conjunction conjunction 11° Mp 07'21 2°18'21 -4971 Aug 06 j 14:47 -4965 Oct 10 j 22:08 5°\$20'18 1°39'05 minimum elong minimum elong 11°M)02'22 11.20020 AU -4971 Aug 06 j 15:09 -4965 Oct 10 j 04:59 max. Earth dist. 5°520'24 11.04297 AU max. Earth dist. -4971 Aug 23 j 09:51 -4965 Oct 27 j 05:57 7°917'41 13° Mp 00'29 morning rise morning rise -4971 Nov 29 j 17:58 -4964 Feb 05 j 00:18 19° m 55'04 retrograde 14°9508'30 retrograde -4970 Feb 06 j 19:11 -4964 Apr 16 j 00:26 16° Mp 37'50 2°42'13 opposition 10°952'32 2°12'37 opposition -4964 Apr 16 j 15:45 -4970 Feb 06 j 20:55 16° Mp 35'02 9.16762 AU min. Earth dist. 10°952'13 9.09621 AU min. Earth dist. 13° m 19'45 direct -4970 Apr 19 j 09:32 7°930'54 direct -4964 Jun 26 j 04:32 evening set -4970 Aug 01 j 06:35 14°938'14 evening set -4964 Oct 04 j 13:40 20° m 14'45 conjunction -4970 Aug 18 j 01:43 16°934'38 1°57'50 conjunction -4964 Oct 20 j 22:33 22° m/09'01 2°06'48 -4970 Aug 18 j 01:40 16°934'37 1°58'06 minimum elong -4964 Oct 20 j 22:36 22° m/09'02 2°06'51 minimum elong -4970 Aug 17 j 21:19 max. Earth dist. -4964 Oct 20 j 05:14 22° M 03'56 11.12506 AU max. Earth dist. 16°533'21 11.14148 AU -4970 Sep 03 j 16:39 18°9529'50 -4964 Nov 06 j 07:58 24° M 03'33 morning rise morning rise -4970 Dec 11 j 00:39 -4963 Jan 09 j 23:56 0∘**ত** retrograde 25°5516'39 -4969 Feb 18 j 13:41 -4963 Feb 15 j 21:56 1°**£**04'49 opposition 22°901'21 2°32'48 retrograde min. Earth dist. -4969 Feb 18 i 18:51 22°9500'24 9.18207 AU -4963 Mar 25 i 15:36 30°R M direct -4969 May 01 j 10:16 18°9540'49 opposition -4963 Apr 27 j 23:58 27° m 46'15 2°25'22 evening set -4969 Aug 12 j 15:06 25°5542'31 min. Earth dist. -4963 Apr 28 i 15:20 27° m 43'25 9.07896 AU direct -4963 Jul 07 i 16:03 24° m 27'59 -4969 Aug 29 j 06:12 27°537'05 2°12'07 -4963 Oct 03 j 00:48 0∘**⊽** conjunction -4969 Aug 29 j 06:10 27°537'04 2°12'22 -4963 Oct 15 j 16:58 1°**£**26′03 minimum elong evening set 27°534'44 11.21259 AU -4969 Aug 28 j 22:02 max. Earth dist. -4963 Oct 31 j 09:16 3°**2**16'37 11.02474 AU max. Earth dist. -4969 Sep 14 j 17:47 29°930'40 morning rise -4969 Sep 19 j 02:08 $0^{\circ}\Omega$ conjunction -4963 Nov 01 j 03:28 3°**£**22'01 1°50'20 retrograde -4969 Dec 22 j 07:51 6°**Ω**15′28 minimum elong -4963 Nov 01 j 03:31 3°**₽**22'01 1°50'21 3°**Ω**00'29 2°47'05 -4968 Mar 01 j 05:43 morning rise -4963 Nov 17 j 15:35 5°**£**18'32 opposition min. Earth dist. -4968 Mar 01 j 13:12 2°**Ω**59'07 9.23907 AU retrograde -4962 Feb 28 j 02:58 12°**2**28′05 -4968 Apr 21 j 21:03 30°Rூ -4962 May 10 j 04:44 9°**₽**08'00 2°02'33 opposition -4968 May 12 j 04:50 29°9540'56 -4962 May 10 j 20:32 9°**£**05'04 direct min. Earth dist. 8.96656 AU -4968 Jun 01 j 07:08 $0^{\circ}\Omega$ -4962 Jul 19 j 07:46 5°**£**49'17 direct -4968 Aug 22 j 18:25 -4962 Oct 27 j 02:07 12°**£**52'04 evening set 6°**£**38′26 evening set conjunction -4968 Sep 08 j 06:24 8°**Ω**31'46 2°21'25 conjunction -4962 Nov 12 j 15:05 14°**£**50'15 1°29'10 minimum elong -4968 Sep 08 j 06:23 8°**Ω**31'45 2°21'38 minimum elong -4962 Nov 12 j 15:08 14°**£**50′16 1°29'07 max. Earth dist. -4968 Sep 07 j 19:58 8°**Ω**28'45 11.25423 AU max. Earth dist. -4962 Nov 11 j 20:42 14°**2**44'44 10.90258 AU -4968 Sep 24 j 15:21 10°**Ω**24'19 -4962 Nov 29 j 06:48 16°**-**49′18 morning rise morning rise

-4961 Mar 12 j 16:10

retrograde

24°**£**08'38

-4968 Nov 10 j 04:25

15°**Ω**

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -4961 in astronomical counting style is the year 4962 BCE in historical counting style. -4961 May 22 j 15:32 20°**£**46'53 1°34'07 conjunction -4955 Jan 28 j 06:01 1°る56'15 -1°30'59 opposition -4961 May 23 j 07:01 20°**£**43′58 -4955 Jan 28 j 05:57 1°る56'13 1°31'14 min. Earth dist. 8.83433 AU minimum elong -4961 Jul 31 j 03:59 -4955 Jan 28 j 05:39 1°る56'08 10.02380 AU direct 17°**£**27'31 max. Earth dist. -4961 Nov 07 j 18:55 24°**≏**36'37 -4955 Feb 15 j 00:29 4°**ප**15'26 evening set morning rise -4955 Jun 03 j 03:46 12°る46'33 retrograde -4955 Aug 10 j 10:27 -4961 Nov 24 j 11:15 1°03'44 conjunction 26°**₽**37'30 opposition 9°**ට**15'28 -2°10'31 -4961 Nov 24 j 11:17 min. Earth dist. minimum elong 26°**♀**37'31 1°03'38 -4955 Aug 10 j 08:36 9°**る**15'50 7.97077 AU max. Earth dist. -4961 Nov 23 j 18:23 26°**₽**32'23 10.76279 AU direct -4955 Oct 15 j 10:34 5°**る**49'22 morning rise -4961 Dec 11 j 07:03 28°**₽**39'32 evening set -4954 Jan 25 j 14:28 13°**る**59'38 -4961 Dec 22 j 18:21 0°M retrograde -4960 Mar 24 j 15:05 6° ML10'05conjunction -4954 Feb 12 j 07:31 16°る19'46 -1°55'34 -4954 Feb 12 j 07:28 16°る19'45 1°55'49 opposition -4960 Jun 03 j 09:44 2°M46'31 1°00'43 minimum elong -4954 Feb 12 j 12:41 min. Earth dist. -4960 Jun 03 j 23:28 2° M43'54 8.68708 AU max. Earth dist. 16°**る**21'29 9.92430 AU -4960 Jul 16 j 12:16 30°**₽**Ω morning rise -4954 Mar 02 j 05:17 18°る41'28 direct -4960 Aug 11 j 07:40 29°**♀**26'22 retrograde -4954 Jun 18 j 10:45 27°る19'47 -4960 Sep 05 j 16:01 0°M opposition -4954 Aug 25 j 03:22 23°る48'05 -2°37'24 evening set -4960 Nov 18 j 21:21 6°M43'19 min. Earth dist. -4954 Aug 24 j 21:23 23°る49'19 7.88858 AU direct -4954 Oct 29 j 21:05 20°る20'46 conjunction -4960 Dec 05 j 17:35 8°**ጤ**47'18 0°34'47 evening set -4953 Feb 09 j 23:19 28°る40'01 minimum elong -4960 Dec 05 j 17:36 8°ML47'19 0°34'37 -4953 Feb 20 j 01:26 max. Earth dist. -4960 Dec 05 j 03:14 8°M42'52 10.61065 AU morning rise -4960 Dec 22 j 17:52 10°M52'39 conjunction -4953 Feb 27 i 19:48 1°≈02'11 -2°13'11 -4959 Jan 28 i 21:27 15°M minimum elong -4953 Feb 27 i 19:45 1°≈02'10 2°13'25 retrograde -4959 Apr 07 i 02:19 18°M35'33 max. Earth dist. -4953 Feb 28 i 06:12 1°≈05'39 9.85924 AU -4959 Jun 16 j 12:06 15°M10'09 0°23'19 morning rise -4953 Mar 17 j 20:04 3°≈25'35 opposition min. Earth dist. -4959 Jun 16 j 22:58 -4953 Jul 03 j 19:49 12°≈07'07 15°M,08'03 8 53085 AU retrograde -4959 Jun 18 j 16:45 opposition -4953 Sep 08 j 23:24 8°≈35'15 -2°54'22 15°R M. -4959 Aug 23 j 18:09 -4953 Sep 08 j 13:41 direct 11°M49'03 min. Earth dist. 8°≈37'17 7.84336 AU -4959 Oct 24 j 09:06 -4953 Nov 13 j 15:39 15°M. direct 5°≈06'52 -4959 Dec 01 j 11:37 evening set -4952 Feb 25 j 15:49 19°M15'16 13°≈32'23 evening set -4952 Mar 07 j 16:27 15°≈ -4959 Dec 18 j 12:01 21°M22'38 0°03'19 conjunction -4959 Dec 18 j 12:01 21°M22'38 conjunction -4952 Mar 14 j 15:14 15°≈55'44 -2°22'12 minimum elong 0°03'08 -4959 Dec 18 j 04:56 -4952 Mar 14 j 15:13 behind sun begin 21°M20'26 minimum elong 15°≈55'44 2°22'23 -4959 Dec 18 j 19:05 -4952 Mar 15 j 06:10 behind sun end 21°M24'50 max. Earth dist. 16°≈00'44 9.83348 AU -4959 Dec 17 j 23:55 -4952 Apr 01 j 17:18 max. Earth dist. 21°ML18'51 10.45274 AU morning rise 18°≈19'56 -4952 Jul 18 j 02:39 morning rise -4958 Jan 04 j 17:08 23°M31'35 retrograde 27°≈00'09 desc. node -4958 Jan 25 j 13:27 25°M59'40 opposition -4952 Sep 22 j 19:53 23°≈28'34 -2°59'44 -4958 Mar 09 j 23:38 0°**∡**¹ min. Earth dist. -4952 Sep 22 j 07:20 23°≈31'13 7.83824 AU -4958 Apr 21 j 01:08 1°×727'24 direct -4952 Nov 27 j 15:31 19°≈59'18 retrograde -4958 Jun 02 j 17:49 30°RML -4951 Mar 12 j 11:36 28°≈27'40 evening set -4958 Jun 29 j 23:03 28°ML00'16 -0°16'40 -4951 Mar 24 j 03:18 0°**)**€ opposition min. Earth dist. -4958 Jun 30 j 07:12 27°M58'40 8.37280 AU -4958 Sep 05 j 11:30 24°M38'01 -4951 Mar 30 j 13:22 0°\\$51'19 -2°21'45 direct conjunction -4958 Nov 26 j 00:14 -4951 Mar 30 j 13:23 0°**¥**51'19 2°21'53 0° **₹** minimum elong -4951 Mar 31 i 07:24 evening set -4958 Dec 14 j 15:10 2°**х** 14'47 max. Earth dist. 0°**)** 57'20 9.84847 AU morning rise -4951 Apr 17 j 16:28 3°¥15'22 conjunction -4958 Dec 31 i 19:50 4°**₹**25'38 -0°29'26 retrograde -4951 Aug 02 j 03:33 11°**)**(49'47 minimum elong -4958 Dec 31 i 19:48 4°**₹**25'38 0°29'40 opposition -4951 Oct 07 j 14:04 max. Earth dist. -4958 Dec 31 i 10:28 4° ₹ 22'39 10.29664 AU min. Earth dist. -4951 Oct 07 j 00:05 8°**¥**21'54 7.87263 AU -4957 Jan 18 j 05:50 6°**х** 38′14 direct -4951 Dec 12 j 17:35 4° # 49'05 morning rise evening set -4957 May 05 j 09:03 14°**∡** 46'59 -4950 Mar 28 j 06:17 13°**)**€ 16'44 retrograde opposition -4957 Jul 13 j 18:53 11°**≯**18'16 -0°57'19 min. Earth dist. -4957 Jul 14 j 00:08 11°**✗**17'13 8.22099 AU conjunction -4950 Apr 15 j 09:30 15°\(\mathbf{3}\)9'46 -2°11'57 7°**∡**°54'46 -4957 Sep 18 j 16:52 minimum elong -4950 Apr 15 j 09:33 15°\ 39'47 2°12'01 direct -4957 Dec 28 j 08:47 15°**∡**¹42'52 max. Earth dist. -4950 Apr 16 j 04:42 15°**)** 46'07 9.90178 AU evening set morning rise -4950 May 03 j 12:44 18°¥02'45 -4956 Jan 14 j 17:43 17°**₹**57'09 -1°01'31 -4950 Aug 16 j 20:13 26°**)** 27'43 conjunction retrograde -4956 Jan 14 j 17:40 -4950 Oct 22 j 03:24 minimum elong 17°**₹**57'08 1°01'47 opposition 22°**)** 58'07 -2°35'03 -4956 Jan 14 j 12:15 17°**尽**55'22 10.15071 AU -4950 Oct 21 j 13:19 23°**₭**01'04 7.94275 AU max. Earth dist. min. Earth dist. 20°**х** 13′13 19°**¥**28′00 morning rise -4956 Feb 01 j 08:13 direct -4950 Dec 27 j 18:35 retrograde -4956 May 19 j 02:13 28°**х** 34′07 evening set -4949 Apr 12 j 19:38 27°**)** 51'42 $0^{\circ}\Upsilon$ opposition -4956 Jul 26 j 23:04 25°**₹**04'03 -1°36'11 -4949 Apr 29 j 06:34 min. Earth dist. -4956 Jul 27 j 01:03 25°**₹**03'39 8.08410 AU direct -4956 Oct 01 j 08:57 21°**х** 39′15 conjunction -4949 Apr 30 j 23:18 0°**Υ**13'20 -1°53'49 -4955 Jan 10 j 16:53 29°**∡**38'48 minimum elong -4949 Apr 30 j 23:23 0°Υ13'21 1°53'49 evening set -4955 Jan 13 j 10:36 0°る max. Earth dist. -4949 May 01 j 18:13 0°Υ19'31 9.98868 AU

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -4949 in astronomical counting style is the year 4950 BCE in historical counting style. 2°**Y**34'26 -4949 May 19 j 01:41 conjunction -4943 Jul 20 i 19:48 18°**Ⅱ**49'49 morning rise -4949 Aug 31 j 03:03 10°**Y**47′28 -4943 Jul 20 j 19:45 18°**Ⅱ**49'48 1°04'03 retrograde minimum elong -4949 Nov 05 j 10:13 7°**Y**19'25 -2°07'39 -4943 Jul 21 j 00:01 18°**Ⅱ**51'05 10.84350 AU max. Earth dist. opposition -4943 Aug 06 j 22:08 -4949 Nov 04 j 20:27 20°**I**51′29 min. Earth dist. 7°**Υ**22'16 8.04369 AU morning rise -4948 Jan 11 j 15:49 3°Y49'26 -4943 Nov 13 j 11:37 27°**I**52′10 direct retrograde $24^{\circ} \Pi 34'09$ 1°33'47 12°Υ06'27 -4942 Jan 20 j 21:11 evening set -4948 Apr 27 j 00:20 opposition -4942 Jan 20 j 18:53 8.90986 AU min. Earth dist. 24°**Ⅲ**34'35 14°Y25'56 -1°29'03 conjunction -4948 May 15 j 03:20 direct -4942 Apr 02 j 01:11 21°**Ⅱ**10′07 -4948 May 15 j 03:24 minimum elong 14°**Y**25'57 1°28'59 evening set -4942 Jul 15 j 17:07 28°**Ⅲ**28'46 max. Earth dist. -4948 May 15 j 21:13 14°**Y**31'42 10.10379 AU -4942 Jul 28 j 17:17 0ಂತಾ morning rise -4948 Jun 02 j 03:49 16°**Y**44′29 24° **Y**44' 05 -4942 Aug 01 j 19:24 retrograde -4948 Sep 12 j 22:46 conjunction 0°9528'58 1°28'56 -4942 Aug 01 j 19:21 opposition -4948 Nov 18 j 09:08 21°**Y**17'46 -1°33'21 minimum elong 0°ഇ28'57 1°29'12 min. Earth dist. -4948 Nov 17 j 19:56 21°**Υ**20'28 8.16968 AU max. Earth dist. -4942 Aug 01 j 19:56 0°9529'07 10.97216 AU direct -4947 Jan 25 j 08:03 17°**Y**48'18 morning rise -4942 Aug 18 j 16:49 2°527'43 evening set -4947 May 11 j 18:20 25°Y56'34 retrograde -4942 Nov 25 j 00:52 9°521'34 opposition -4941 Feb 01 j 21:48 6°904'37 2°01'54 conjunction -4947 May 29 j 19:24 28° Y 13'14 -0° 59'43 min. Earth dist. -4941 Feb 01 j 21:40 6°9504'38 9.02970 AU minimum elong -4947 May 29 j 19:27 28°Υ13'15 0°59'36 direct -4941 Apr 14 j 10:45 2°541'51 max. Earth dist. -4947 May 30 j 11:33 28°**Y**18'22 10.24042 AU evening set -4941 Jul 27 j 12:37 9°952'48 -4947 Jun 12 j 20:56 0°8 morning rise -4947 Jun 16 j 16:48 0°**8**28'40 conjunction -4941 Aug 13 j 10:05 11°950'25 1°49'58 retrograde -4947 Sep 26 i 06:06 8°814'23 -4941 Aug 13 j 10:02 11°950'24 1°50'14 minimum elong opposition -4947 Dec 01 i 23:18 4°849'55 -0°54'56 max. Earth dist. -4941 Aug 13 i 08:04 11°9549'50 11.08084 AU min. Earth dist. -4947 Dec 01 j 10:52 4°**8**52′26 8.31353 AU morning rise -4941 Aug 30 j 02:55 13°9546'44 -4946 Feb 08 j 16:25 1°821'14 -4941 Dec 06 j 10:37 20°935'39 direct retrograde 9°819'27 opposition -4940 Feb 13 j 17:52 -4946 May 25 j 23:55 17°9319'31 2°24'39 evening set -4940 Feb 13 j 20:28 min. Earth dist. 17°9319'02 9.12760 AU 11°832'54 -0°28'00 conjunction -4946 Jun 12 j 21:52 -4940 Apr 25 j 13:22 13°957'56 direct -4946 Jun 12 j 21:53 11°**8**32'54 0°27'50 -4940 Aug 07 j 00:24 minimum elong 21°902'33 evening set -4946 Jun 13 j 12:07 max. Earth dist. 11°**8**37'21 10.39071 AU 22°958'04 2°06'25 -4946 Jun 30 j 15:11 -4940 Aug 23 j 17:29 13°**8**44'52 conjunction morning rise -4940 Aug 23 j 17:27 -4946 Jul 11 j 01:03 15°8 22°958'03 2°06'41 minimum elong -4940 Aug 23 j 12:28 -4946 Oct 09 j 03:31 21°**8**17'14 retrograde max. Earth dist. 22°956'36 11.16586 AU -4946 Dec 15 j 04:48 -4940 Sep 09 j 06:27 24°952'28 opposition 17°**8**54'35 -0°15'00 morning rise 17°**8**56'45 8.46720 AU -4940 Nov 01 j 14:27 min. Earth dist. -4946 Dec 14 j 17:52 0 $^{\circ}\Omega$ -4940 Dec 16 j 17:30 -4945 Jan 28 j 00:20 15°₹**႘** retrograde 1°**£**38′21 direct -4945 Feb 22 j 14:53 14°**8**26'54 -4939 Feb 01 j 09:01 30°Rூ -4945 Mar 20 j 03:37 15°8 opposition -4939 Feb 24 j 11:04 28°522'45 2°41'37 asc. node -4945 May 07 j 06:12 18°**8**35'58 min. Earth dist. -4939 Feb 24 j 17:05 28°521'38 9.20031 AU -4945 Jun 08 j 16:22 22°**8**14'32 direct -4939 May 07 j 08:41 25°902'16 evening set -4939 Jul 30 j 14:40 0° Ω -4945 Jun 26 j 10:12 24°**8**24'32 0°04'17 -4939 Aug 18 j 05:59 2°₽01'53 conjunction evening set -4945 Jun 26 j 10:12 24°**8**24'32 0°04'29 minimum elong -4945 Jun 26 j 03:07 24°**8**22'23 -4939 Sep 03 j 19:16 3°**Ω**55'50 2°17'59 behind sun begin conjunction -4939 Sep 03 j 19:14 behind sun end -4945 Jun 26 i 17:16 24°**8**26'41 minimum elong 3°Ω55'49 2°18'13 -4939 Sep 03 i 10:24 max. Earth dist. -4945 Jun 26 j 22:14 24°**8**28'13 10.54640 AU max. Earth dist. 3°Ω53'16 11.22457 AU morning rise -4945 Jul 13 j 22:44 26°**8**32'56 morning rise -4939 Sep 20 i 05:24 5°**Ω**48'55 -4945 Aug 13 i 15:36 $0^{\circ}II$ retrograde -4939 Dec 27 j 22:03 12°**Ω**33'39 -4945 Oct 21 j 15:55 3°**Ⅱ**53'05 -4938 Mar 08 i 02:31 9°Ω18'16 2°52'31 retrograde opposition -4945 Dec 28 j 01:46 0°II32'09 0°24'12 min. Earth dist. -4938 Mar 08 j 11:08 9°Ω16'42 9.24558 AU opposition min. Earth dist. -4945 Dec 27 j 17:29 0°**П**33'46 8.62264 AU -4938 May 19 j 00:23 5°**Ω**58'44 direct -4938 Aug 29 j 07:06 -4944 Jan 03 j 22:49 30°R₩ 12°**Ω**54'46 evening set 27°**8**05'38 direct -4944 Mar 07 j 02:24 -4944 May 07 j 08:52 Π °0 conjunction -4938 Sep 14 j 17:39 14°Ω47'44 2°24'26 -4944 Jun 20 j 20:17 4°**I**I42'51 minimum elong -4938 Sep 14 j 17:38 14°Ω47'44 2°24'38 evening set -4938 Sep 14 j 06:21 max. Earth dist. 14°**Ω**44'28 11.25523 AU -4944 Jul 08 j 09:11 6°II49'23 0°35'15 -4938 Sep 16 j 12:11 15°**Ω** conjunction -4944 Jul 08 j 09:09 0°35'29 -4938 Oct 01 j 01:51 16°**Ω**40′03 minimum elong 6°**Ⅱ**49'23 morning rise -4944 Jul 08 j 17:42 6°**Д**51'58 10.69964 AU 23°**Ω**25′27 max. Earth dist. retrograde -4937 Jan 08 j 06:00 8°**Ⅱ**54'18 morning rise -4944 Jul 25 j 16:37 opposition -4937 Mar 19 j 17:20 20°**Ω**09'59 2°57'12 retrograde -4944 Nov 01 j 17:09 16°**Ⅲ**03'46 min. Earth dist. -4937 Mar 20 j 03:31 20°**Ω**08′07 9.26194 AU opposition -4943 Jan 08 j 14:49 12°**Ⅱ**44'26 1°00'54 direct -4937 May 30 j 14:08 16°**Ω**51'14 min. Earth dist. -4943 Jan 08 j 09:48 12°**Ⅱ**45'24 8.77235 AU evening set -4937 Sep 09 j 05:26 23°**Ω**45′05 direct -4943 Mar 20 j 06:08 9°**Ⅱ**19′08 -4943 Jul 03 j 12:15 16°**Ⅱ**46'37 -4937 Sep 25 j 14:21 25°**Ω**37'40 2°25'42 evening set conjunction

-4937 Sep 25 j 14:21

minimum elong

25°**Ω**37'40 2°25'51

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Attention, astronomical year style is used: The year -4937 in astronomical counting style is the year 4938 BCE in historical counting style.

max. Earth dist. -4937 Sep 25 j 01:45 25° \(\Omega 34'02 \) 11.25677 AU max. Earth dist. -4931 Nov 29 j 20:26 3° \(\Omega 24'01 \) 10.71082

Attention, astronom	ical year style is used: Th	ie year -4937 i	n astronomical co	unting style is the year	4938 BCE in historical co	ounting style.	
max. Earth dist.	-4937 Sep 25 j 01:45	25° Ω 34'02	11.25677 AU	max. Earth dist.	-4931 Nov 29 j 20:26	3°M24'01	10.71082 AU
morning rise	-4937 Oct 11 j 21:31	27° Ω 29'51		morning rise	-4931 Dec 17 j 10:48	5°M32'25	
	-4937 Nov 04 j 03:18	o∘ m y		retrograde	-4930 Apr 01 j 08:03	13°MJ08'09	
retrograde	-4936 Jan 19 j 15:14	4° m) 17'38		opposition	-4930 Jun 10 j 21:55	9° M 44'20	0°40'34
opposition	-4936 Mar 30 j 09:06	1° m) 01'45	2°55'36	min. Earth dist.	-4930 Jun 11 j 10:51	9° M 41'52	8.63266 AU
min. Earth dist.	-4936 Mar 30 j 20:47	0° m 59'38	9.24872 AU	direct	-4930 Aug 18 j 10:52	6° M 24'21	
min. Darun Gige.	-4936 Apr 13 j 18:47	30°R Ω	y. <u>2.1072110</u>	evening set	-4930 Nov 26 j 02:35	13°M44'51	
direct	-4936 Jun 09 j 23:45	27° Ω 43'36		evening sec	-4930 Dec 06 j 07:06	15°M₁	
direct	-4936 Aug 03 j 15:57	0° m)		max. Earth dist.	-4930 Dec 12 j 10:24		10.55457 AU
avanina aat	-4936 Sep 19 j 02:59	4° Mp 36'43		max. Earm dist.	-4930 DCC 12 J 10.24	13 1164347	10.33437 AO
evening set	-4930 Sep 19 J 02.39	4 11/3043			4020 D 12:00.45	150 m 50114	0017147
	4026 0 4 05 : 11 02	60 m- 20120	2021142	conjunction	-4930 Dec 13 j 00:45	15°M50'14	
conjunction	-4936 Oct 05 j 11:03	6° m 29'30		minimum elong	-4930 Dec 13 j 00:46	15°M50'14	0°17'36
minimum elong	-4936 Oct 05 j 11:05	6° Mp 29'31		morning rise	-4930 Dec 30 j 03:33	17° M ₅57'08	
max. Earth dist.	-4936 Oct 04 j 20:27		11.22906 AU	retrograde	-4929 Apr 14 j 23:19	25° M 45′27	
morning rise	-4936 Oct 21 j 18:21	8° Mg 22'09		opposition	-4929 Jun 24 j 03:55	22° ™ 19'49	0°01'43
retrograde	-4935 Jan 30 j 05:17	15° m) 14'01		min. Earth dist.	-4929 Jun 24 j 14:50	22°M17'42	8.47317 AU
opposition	-4935 Apr 11 j 03:09	11° m 57'28	2°47'42	desc. node	-4929 Jul 10 j 06:23	21°M06'33	
min. Earth dist.	-4935 Apr 11 j 16:51	11° m 54'59	9.20639 AU	direct	-4929 Aug 31 j 01:08	18° M 58'41	
direct	-4935 Jun 21 j 10:03	8° m 39'39		evening set	-4929 Dec 08 j 22:54	26° M 29′09	
evening set	-4935 Sep 30 j 01:31	15° m 33'29					
				conjunction	-4929 Dec 26 j 01:26	28°M38'00	-0°14'30
conjunction	-4935 Oct 16 j 09:43	17° m) 27'04	2°12'31	minimum elong	-4929 Dec 26 j 01:26	28°M38'00	0°14'43
minimum elong	-4935 Oct 16 i 09:46	17° m) 27'05	2°12'36	behind sun begin	-4929 Dec 25 j 22:26	28°M37'04	
max. Earth dist.	-4935 Oct 15 j 17:12		11.17307 AU	behind sun end	-4929 Dec 26 j 04:25	28°M38'56	
morning rise	-4935 Nov 01 j 18:21	19° m 20'49		max. Earth dist.	-4929 Dec 25 j 14:19		10.39434 AU
retrograde	-4934 Feb 10 j 22:00	26° m) 18'24		man. Darun dige.	-4928 Jan 05 j 21:18	0° ₹	10.55 15 1110
opposition	-4934 Apr 23 j 00:33	23° m) 00'52	2°33'33	morning rise	-4928 Jan 12 j 08:56	0° ∡ ¹48'30	
min. Earth dist.	-4934 Apr 23 j 15:27	22° m 58'08	9.13635 AU	retrograde	-4928 Apr 28 j 01:21	8° × 49'53	
direct	-4934 Jul 02 j 20:46	19° Mp 43'07	9.13033 AU	opposition	-4928 Jul 06 j 18:47	5° × 22'26	0020145
	-						
evening set	-4934 Oct 11 j 02:40	26° Mp 39'11		min. Earth dist.	-4928 Jul 07 j 02:21	5° ×720'56	8.31439 AU
	10010 . 07:1010	200 - 2400	1050115	direct	-4928 Sep 12 j 01:14	2°×700'00	
conjunction	-4934 Oct 27 j 12:13		1°58'15	evening set	-4928 Dec 21 j 08:49	9° ∡ ′41′25	
minimum elong	-4934 Oct 27 j 12:16	28° m/34'09				_	
max. Earth dist.	-4934 Oct 26 j 19:28	-	11.09043 AU	conjunction	-4927 Jan 07 j 15:44	11° ₹ ′53'47	
	-4934 Nov 08 j 17:02	0∘ ⊽		minimum elong	-4927 Jan 07 j 15:41	11° ₹ ′53'46	
morning rise	-4934 Nov 12 j 23:02	0° ჲ 29'31		max. Earth dist.	-4927 Jan 07 j 08:25	11° ₹ '51'26	10.23894 AU
retrograde	-4933 Feb 22 j 23:34	7° ≏ 34'29		morning rise	-4927 Jan 25 j 03:49	14° ∡ ¹07'52	
opposition	-4933 May 05 j 02:21	4° ₽ 15'39	2°13'21	retrograde	-4927 May 12 j 14:12	22° × 21'57	
min. Earth dist.	-4933 May 05 j 17:04	4° £ 12'57	9.04058 AU	opposition	-4927 Jul 20 j 18:11	18° ∡ 52'48	-1°18'37
direct	-4933 Jul 14 j 12:17	0° ≙ 57'45		min. Earth dist.	-4927 Jul 20 j 22:00	18° ∡ 52′02	8.16533 AU
evening set	-4933 Oct 22 j 08:39	7° ≙ 57'33		direct	-4927 Sep 25 j 10:34	15° ∡ ¹28'55	
	•			evening set	-4926 Jan 04 j 09:16	23° ∡ ′21′50	
conjunction	-4933 Nov 07 j 20:25	9° ≏ 54'25	1°39'08	S	,		
minimum elong	-4933 Nov 07 j 20:28	9° ≏ 54'26	1°39'06	conjunction	-4926 Jan 21 j 20:22	25° х ³37'31	-1°17'49
max. Earth dist.	-4933 Nov 07 j 04:08		10.98345 AU	minimum elong	-4926 Jan 21 j 20:18	25° х 37'30	
morning rise	-4933 Nov 24 j 10:09	11° ≏ 52'00	10.505 15 110	max. Earth dist.	-4926 Jan 21 j 16:55		10.09746 AU
retrograde	-4932 Mar 06 j 10:06	19° Ω 05'49		morning rise	-4926 Feb 08 j 12:45	27° x 54'59	10.07740710
opposition	-4932 May 16 j 09:45	15° 2 45'30	1°47'23	morning risc	-4926 Feb 25 j 07:30	2/ ス 34 39	
min. Earth dist.		15° 2 42'53		ratra ara da		6° る 20'20	
	-4932 May 16 j 23:47		8.92199 AU	retrograde	-4926 May 27 j 12:07		1055110
direct	-4932 Jul 25 j 05:38	12° £ 27'11		opposition	-4926 Aug 04 j 01:14	2°る49'48	
evening set	-4932 Nov 01 j 21:22	19° ≏ 32'14		min. Earth dist.	-4926 Aug 04 j 01:28		8.03490 AU
					-4926 Sep 14 j 00:00	30°₽ ⋌ ¹	
conjunction	-4932 Nov 18 j 11:58	21° ≏ 31'32		direct	-4926 Oct 09 j 05:39	29° ∡ ¹24'23	
minimum elong	-4932 Nov 18 j 12:00	21° ≏ 31'32			-4926 Nov 03 j 06:19	0°₹	
max. Earth dist.	-4932 Nov 17 j 19:31	21° ≏ 26'34	10.85555 AU	evening set	-4925 Jan 18 j 23:40	7° る 28'36	
morning rise	-4932 Dec 05 j 05:32	23° ≏ 31'49					
	-4931 Feb 13 j 03:23	0° M		conjunction	-4925 Feb 05 j 14:41	9° ප 47'15	-1°44'53
retrograde	-4931 Mar 19 j 03:40	0°M55'56		minimum elong	-4925 Feb 05 j 14:38	9° ⋜ 47'14	1°45'08
	-4931 Apr 22 j 17:12	30° ₽ Ω		max. Earth dist.	-4925 Feb 05 j 15:23	9° る 47'29	9.97871 AU
opposition	-4931 May 29 j 00:02	27° ₽ 33'55	1°16'11	morning rise	-4925 Feb 23 j 10:48	12° る 07'35	
min. Earth dist.	-4931 May 29 j 13:38	27° ≏ 31'21	8.78446 AU	retrograde	-4925 Jun 11 j 16:18	20° ප් 41'51	
direct	-4931 Aug 06 j 04:02	24° ≏ 14'53		opposition	-4925 Aug 18 j 14:51	17° る 10'18	-2°25'57
	-4931 Nov 01 j 09:49	0°M		min. Earth dist.	-4925 Aug 18 j 11:49		7.93143 AU
evening set	-4931 Nov 13 j 18:38	1°M26'51		direct	-4925 Oct 23 j 11:10	13° る 43'23	
	.,51.1107 15 J 10.50	. 1102031		evening set	-4924 Feb 03 j 02:14	13 3 43 23 21° 3 57'43	
conjunction	-4931 Nov 30 j 12:43	3°M29'00	0°48'11	overning set	1,2,1100 03 j 02.14	21 00/40	
conjunction	-4931 NOV 30 J 12.43	3 11629 00	0 48 11		4024 F. L. 20 : 20 51		

-4931 Nov 30 j 12:45

3°M29'01 0°48'02

conjunction

-4924 Feb 20 j 20:51 24°정18'47 -2°05'58

minimum elong

•	nical year style is used: Th		•	/ /		, .	ge 40
minimum elong	-4924 Feb 20 j 20:48	ie year -4924 i 24° る 18'46		min. Earth dist.	-4919 Nov 11 j 14:21		8.09241 AU
max. Earth dist.	-4924 Feb 20 j 20:48	24°る1840 24°る20'36		direct	-4918 Jan 18 j 19:21	14 γ 39 39	6.09241 AU
morning rise	-4924 Mar 09 j 20:00	24 3 2036 26° 3 41'19	9.89003 AU	evening set	-4918 May 05 j 05:01	11 γ 20 22 19° γ 39'25	
morning rise	-4924 Mai 09 j 20:00	20° ≈		evening set	-4916 Way 05 J 05.01	19 1 39 23	
retrograde	-4924 Jun 25 j 23:39	0 ∞ 5°≈21'05		conjunction	-4918 May 23 j 07:21	21° Y ′57'40	-1°14'13
opposition	-4924 Sep 01 j 08:56	1°≈48'57	2947!50	minimum elong	-4918 May 23 j 07:24	21° Y 57'41	
min. Earth dist.	-4924 Sep 01 j 08:30		7.86188 AU	max. Earth dist.	-4918 May 24 j 02:16		10.15964 AU
mm. Larm dist.	-4924 Sep 24 j 06:43	30°Rる	7.00100710	morning rise	-4918 Jun 10 j 06:17	24°Υ14'48	10.13704710
direct	-4924 Nov 06 j 02:20	28° る 20'41		morning rise	-4918 Aug 02 j 10:57	0°8	
	-4924 Dec 18 j 03:19	0° ≈		retrograde	-4918 Sep 20 j 09:53	2° 8 07'35	
evening set	-4923 Feb 17 j 14:33	6°≈42'59			-4918 Nov 09 j 13:10	30°RY	
8				opposition	-4918 Nov 25 j 23:30	28° Y ′41'45	-1°13'42
conjunction	-4923 Mar 07 j 12:27	9° ≈ 05'46	-2°19'11	min. Earth dist.	-4918 Nov 25 j 10:10	28° Y '44'29	8.23097 AU
minimum elong	-4923 Mar 07 j 12:25	9° ≈ 05'45	2°19'23	direct	-4917 Feb 02 j 07:20	25° Y °12'14	
max. Earth dist.	-4923 Mar 07 j 22:31	9° ≈ 09'08	9.83939 AU		-4917 Apr 21 j 19:05	0°8	
morning rise	-4923 Mar 25 j 13:53	11° ≈ 29'39		evening set	-4917 May 19 j 16:40	3° 8 15'43	
	-4923 Apr 22 j 19:45	15° ≈			, ,		
retrograde	-4923 Jul 11 j 06:04	20° ≈ 10'40		conjunction	-4917 Jun 06 j 16:18	5° 8 30'53	-0°43'21
opposition	-4923 Sep 16 j 04:50	16° ≈ 38′28	-2°58'51	minimum elong	-4917 Jun 06 j 16:20	5° 8 30'53	0°43'13
min. Earth dist.	-4923 Sep 15 j 19:37	16° ≈ 40′24	7.83104 AU	max. Earth dist.	-4917 Jun 07 j 08:51	5° ႘ 36′05	10.30705 AU
	-4923 Oct 06 j 13:06	15°R ≈		morning rise	-4917 Jun 24 j 11:43	7° 8 44'40	
direct	-4923 Nov 20 j 23:55	13° ≈ 09'04			-4917 Sep 12 j 18:59	15° 8	
	-4922 Jan 04 j 14:25	15° ≈		retrograde	-4917 Oct 03 j 12:05	15° 8 23'41	
evening set	-4922 Mar 05 j 08:40	21° ≈ 36′21			-4917 Oct 24 j 08:06	15° ₹ 8	
				opposition	-4917 Dec 09 j 09:10	11° 8 59'52	-0°34'08
conjunction	-4922 Mar 23 j 09:19	23° ≈ 59'59	-2°23'17	min. Earth dist.	-4917 Dec 08 j 21:37	12° 8 02'11	8.38393 AU
minimum elong	-4922 Mar 23 j 09:20	23° ≈ 59'59	2°23'26	direct	-4916 Feb 16 j 10:18	8° 8 31'24	
max. Earth dist.	-4922 Mar 23 j 23:25	24° ≈ 04'42	9.82861 AU		-4916 May 20 j 19:50	15° 8	
morning rise	-4922 Apr 10 j 12:13	26° ≈ 24'17		evening set	-4916 Jun 01 j 15:35	16° 8 24'29	
	-4922 May 09 j 13:16	0°) €					
retrograde	-4922 Jul 26 j 08:57	5°) €02'04		conjunction	-4916 Jun 19 j 11:28	18° 8 36'15	-0°11'08
opposition	-4922 Oct 01 j 00:05	1°) 30′20	-2°57'54	minimum elong	-4916 Jun 19 j 11:28	18° 8 36'15	0°10'57
min. Earth dist.	-4922 Sep 30 j 12:13	1°) 32′49	7.84091 AU	behind sun begin	-4916 Jun 19 j 06:03	18° 8 34'36	
	-4922 Oct 19 j 11:44	30° R ≈		behind sun end	-4916 Jun 19 j 16:53	18° 8 37'55	
direct	-4922 Dec 06 j 00:40	28° ≈ 00'07		max. Earth dist.	-4916 Jun 20 j 00:42	18° 8 40'21	10.46429 AU
	-4921 Jan 21 j 17:50	0° ∀		morning rise	-4916 Jul 07 j 02:34	20° 8 46'30	
evening set	-4921 Mar 21 j 03:57	6° ∺ 28'47		retrograde	-4916 Oct 15 j 04:18	28° 8 12'39	
				asc. node	-4916 Oct 27 j 17:06	28° 8 04'07	
conjunction	-4921 Apr 08 j 06:38	8° ¥ 52′22		opposition	-4916 Dec 21 j 10:13	24° 8 50'47	0°05'44
minimum elong	-4921 Apr 08 j 06:40	8° ¥ 52′22		min. Earth dist.	-4916 Dec 21 j 00:18	24° 8 52'45	8.54275 AU
max. Earth dist.	-4921 Apr 09 j 00:02	8° ¥ 58′09	9.85892 AU	direct	-4915 Mar 01 j 03:47	21° 8 23'38	
morning rise	-4921 Apr 26 j 10:04	11° ∺ 16′07		evening set	-4915 Jun 15 j 01:47	29° 8 06'10	
retrograde	-4921 Aug 10 j 05:54	19°) 46′31			-4915 Jun 22 j 12:40	Π \circ 0	
opposition	-4921 Oct 15 j 15:57	16° 米 15'41				_	
min. Earth dist.	-4921 Oct 15 j 01:55	16°) 18′38	7.89060 AU	conjunction	-4915 Jul 02 j 17:05	1° Ⅱ 14'26	0°20'44
direct	-4921 Dec 21 j 01:58	12°) 45′04		minimum elong	-4915 Jul 02 j 17:04	1° Ⅱ 14'26	0°20'57
evening set	-4920 Apr 04 j 20:11	21°) (11′29		max. Earth dist.	-4915 Jul 03 j 03:20		10.62298 AU
	4000 4 00 10 10 1	2201/2	2002121	morning rise	-4915 Jul 20 j 03:12	3° Ⅱ 21'06	
conjunction	-4920 Apr 22 j 24:00	23°) (34′06		retrograde	-4915 Oct 27 j 10:33	10° Ⅱ 35'49	
minimum elong	-4920 Apr 23 j 00:04	23°) (34′07		opposition	-4914 Jan 03 j 03:13	7° Ⅱ 15'48	0°43'52
max. Earth dist.	-4920 Apr 23 j 19:30	23°) (40'31	9.92796 AU	min. Earth dist.	-4914 Jan 02 j 19:16	7° Ⅱ 17'21	8.69943 AU
morning rise	-4920 May 11 j 03:01	25°) € 56′24		direct	-4914 Mar 14 j 12:21	3° Ⅱ 50'03	
	-4920 Jun 13 j 21:57	0°Υ 4° Ω Ω (102		evening set	-4914 Jun 27 j 23:41	11° Ⅱ 22'28	
retrograde	-4920 Aug 23 j 18:22	4°Υ16'02	7.07646.444		4014 7 1 15 100 56	120Ж27110	0050120
min. Earth dist.	-4920 Oct 28 j 11:08	0° Υ 49'40	7.97646 AU	conjunction	-4914 Jul 15 j 09:56	13° Ⅱ 27'18	0°50'38
opposition	-4920 Oct 29 j 02:04	0° Υ 46'33	-2°21'55	minimum elong	-4914 Jul 15 j 09:54	13° Ⅱ 27'18	0°50'53
4:4	-4920 Nov 07 j 11:13	30° ₹ ₩		max. Earth dist.	-4914 Jul 15 j 17:26	13° Ⅱ 29'33	10.77558 AU
direct	-4919 Jan 04 j 00:39	27°) € 15'54		morning rise	-4914 Aug 01 j 14:44	15° Ⅱ 30'32	
		0° Υ		retrograde opposition	-4914 Nov 08 j 10:38 -4913 Jan 15 j 13:07	22° Ⅲ 35'34 19° Ⅲ 17'10	1°18'45
	-4919 Mar 01 j 08:04	50000005			_/IVI3 Ian 15 i 13:07	10°1117'10	1" 1X'45
evening set	-4919 Mar 01 J 08:04 -4919 Apr 20 J 05:33	5° Y 36'53			-		
evening set	-4919 Apr 20 j 05:33		1041122	min. Earth dist.	-4913 Jan 15 j 07:58	19° Ⅱ 18′09	8.84692 AU
evening set	-4919 Apr 20 j 05:33 -4919 May 08 j 09:19	7° Υ ′57'41		min. Earth dist.	-4913 Jan 15 j 07:58 -4913 Mar 27 j 10:35	19° Ⅱ 18′09 15° Ⅱ 52′52	
evening set conjunction minimum elong	-4919 Apr 20 j 05:33 -4919 May 08 j 09:19 -4919 May 08 j 09:23	7° Υ 57'41 7° Υ 57'43	1°41'38	min. Earth dist.	-4913 Jan 15 j 07:58	19° Ⅱ 18′09	
evening set conjunction minimum elong max. Earth dist.	-4919 Apr 20 j 05:33 -4919 May 08 j 09:19 -4919 May 08 j 09:23 -4919 May 09 j 05:16	7° Y 57'41 7° Y 57'43 8° Y 04'11		min. Earth dist. direct evening set	-4913 Jan 15 j 07:58 -4913 Mar 27 j 10:35 -4913 Jul 10 j 10:11	19°Д18'09 15°Д52'52 23°Д15'54	8.84692 AU
evening set conjunction minimum elong max. Earth dist. morning rise	-4919 Apr 20 j 05:33 -4919 May 08 j 09:19 -4919 May 08 j 09:23 -4919 May 09 j 05:16 -4919 May 26 j 10:51	7° Υ 57'41 7° Υ 57'43 8° Υ 04'11 10° Υ 17'44	1°41'38	min. Earth dist. direct evening set conjunction	-4913 Jan 15 j 07:58 -4913 Mar 27 j 10:35 -4913 Jul 10 j 10:11 -4913 Jul 27 j 15:10	19°Д18'09 15°Д52'52 23°Д15'54 25°Д17'33	8.84692 AU 1°17'32
evening set conjunction minimum elong max. Earth dist.	-4919 Apr 20 j 05:33 -4919 May 08 j 09:19 -4919 May 08 j 09:23 -4919 May 09 j 05:16	7° Y 57'41 7° Y 57'43 8° Y 04'11	1°41'38 10.03058 AU	min. Earth dist. direct evening set	-4913 Jan 15 j 07:58 -4913 Mar 27 j 10:35 -4913 Jul 10 j 10:11	19°Д18'09 15°Д52'52 23°Д15'54 25°Д17'33 25°Д17'32	8.84692 AU

-	iical year style is used: Th		•	, , ,			ge 41
morning rise	-4913 Aug 13 j 14:49	e year -4913 i 27° ∏ 17'40	n astronomicai cot	max. Earth dist.	-4907 Sep 30 j 06:04		11.24225 AU
morning rise	-4913 Aug 13 j 14.49 -4913 Sep 07 j 03:36	27 H 1740			-4907 Oct 17 j 04:50		11.24223 AU
				morning rise	3	3° M) 37'37	
retrograde	-4913 Nov 20 j 03:05	4°©14'51 0°©57'48	1940115	retrograde	-4906 Jan 25 j 07:10	10° Mp 27'41	2052102
opposition min. Earth dist.	-4912 Jan 27 j 16:50		1°49'15 8.97894 AU	opposition min. Earth dist.	-4906 Apr 06 j 03:23	7° M) 11'29	2°52'03
min. Earth dist.	-4912 Jan 27 j 15:25	0°958'04	8.97894 AU		-4906 Apr 06 j 17:13	7° Mp 08'58	9.22427 AU
1.	-4912 Feb 09 j 16:11	30°RⅡ 27°₩2,4152		direct	-4906 Jun 16 j 15:13	3° Mp 53'27	
direct	-4912 Apr 07 j 23:32	27° Ⅱ 34'52 0° ©		evening set	-4906 Sep 25 j 11:26	10° Mp 47'07	
	-4912 Jun 03 j 13:35			· · · · · · · · · · · · ·	4006 0-4 11:10:20	120 m 40122	2017/10
evening set	-4912 Jul 21 j 10:48	4° 5 49'37		conjunction	-4906 Oct 11 j 19:39	12° Mp 40'22	
	4012 4 07:10.20	60 6 4010 5	1040126	minimum elong	-4906 Oct 11 j 19:41	12° Mp 40'22	
conjunction	-4912 Aug 07 j 10:30	6°9548'25	1°40'36	max. Earth dist.	-4906 Oct 11 j 03:34		11.19510 AU
minimum elong	-4912 Aug 07 j 10:27	6°9548'25	1°40'51	morning rise	-4906 Oct 28 j 03:31	14° Mp 33'37	
max. Earth dist.	-4912 Aug 07 j 10:02		11.03698 AU	retrograde	-4905 Feb 05 j 23:12	21° m, 28'39	20.40140
morning rise	-4912 Aug 24 j 05:27	8°9545'52		opposition	-4905 Apr 17 j 23:10	18° Mp 11'24	
retrograde	-4912 Nov 30 j 13:09	15°937'06	201.412.5	min. Earth dist.	-4905 Apr 18 j 13:46	18° Mp 08'44	9.16271 AU
opposition	-4911 Feb 07 j 15:26	12°521'04	2°14'37	direct	-4905 Jun 28 j 01:14	14° Mp 53'24	
min. Earth dist.	-4911 Feb 07 j 17:14	12°520'44	9.09014 AU	evening set	-4905 Oct 06 j 11:25	21° m 48'37	
direct	-4911 Apr 20 j 06:45	8°959'23					
evening set	-4911 Aug 02 j 02:44	16° © 07'06		conjunction	-4905 Oct 22 j 20:23	23° m 42'59	2°05'23
				minimum elong	-4905 Oct 22 j 20:26	23° m 43'00	2°05'26
conjunction	-4911 Aug 18 j 21:41	18° © 03'32	1°59'16	max. Earth dist.	-4905 Oct 22 j 03:02	-•	11.12043 AU
minimum elong	-4911 Aug 18 j 21:39	18° © 03'31	1°59'31	morning rise	-4905 Nov 08 j 06:02	25° m 37'39	
max. Earth dist.	-4911 Aug 18 j 17:17		11.13536 AU		-4905 Dec 20 j 22:16	0∘ ত	
morning rise	-4911 Sep 04 j 12:31	19° © 58'46		retrograde	-4904 Feb 17 j 21:14	2° ≏ 39'19	
retrograde	-4911 Dec 11 j 21:51	26° © 46'02			-4904 Apr 20 j 00:04	30° ₽,™)	
opposition	-4910 Feb 19 j 10:23	23° © 30'39	2°34'20	opposition	-4904 Apr 28 j 23:02	29° m 20'45	2°23'23
min. Earth dist.	-4910 Feb 19 j 14:40	23° © 29'52	9.17602 AU	min. Earth dist.	-4904 Apr 29 j 14:36	29° m 17'54	9.07458 AU
direct	-4910 May 02 j 07:03	20° © 10'07		direct	-4904 Jul 08 j 14:17	26° Mp 02'31	
evening set	-4910 Aug 13 j 11:24	27° © 12'06			-4904 Sep 18 j 22:28	0∘ ত	
				evening set	-4904 Oct 16 j 15:02	3° ♀ 00'49	
conjunction	-4910 Aug 30 j 02:27	29° © 06'43	2°13'08	max. Earth dist.	-4904 Nov 01 j 07:16	4° £ 51'25	11.02077 AU
minimum elong	-4910 Aug 30 j 02:25	29° © 06'43	2°13'23				
max. Earth dist.	-4910 Aug 29 j 19:23		11.20665 AU	conjunction	-4904 Nov 02 j 01:37	4° ≏ 56'52	1°48'28
	-4910 Sep 06 j 18:44	0 \circ Ω		minimum elong	-4904 Nov 02 j 01:40	4° £ 56'52	1°48'28
morning rise	-4910 Sep 15 j 13:49	1° Ω 00'21		morning rise	-4904 Nov 18 j 14:02	6° ≏ 53'31	
retrograde	-4910 Dec 23 j 04:46	7° Ω 45'35		retrograde	-4903 Mar 01 j 01:53	14° £ 03'25	
opposition	-4909 Mar 03 j 02:53	4° Ω 30'32		opposition	-4903 May 11 j 04:03	10° ≙ 43'19	2°00'01
min. Earth dist.	-4909 Mar 03 j 09:57		9.23324 AU	min. Earth dist.	-4903 May 11 j 19:57	10° ≏ 40'22	8.96294 AU
direct	-4909 May 14 j 01:00	1° Ω 10'59		direct	-4903 Jul 20 j 06:15	7° ≏ 24'39	
evening set	-4909 Aug 24 j 15:01	8° Ω 08'45		evening set	-4903 Oct 28 j 00:21	14° ≏ 27'35	
	1000 0 10:00 50	100 00000	202200		100237 12:12.25	1.00 0 0 5151	100/154
conjunction	-4909 Sep 10 j 02:53	10° Ω 02'08	2°22'00	conjunction	-4903 Nov 13 j 13:35	16° £ 25'51	1°26'54
minimum elong	-4909 Sep 10 j 02:52	10° Ω 02'07	2°22'12	minimum elong	-4903 Nov 13 j 13:38	16° £ 25'52	1°26'51
max. Earth dist.	-4909 Sep 09 j 16:41		11.24849 AU	max. Earth dist.	-4903 Nov 12 j 20:11	16° Ω 20'38 18° Ω 25'00	10.89944 AU
morning rise	-4909 Sep 26 j 11:45	11° Ω 54'44		morning rise	-4903 Nov 30 j 05:29		
. 1	-4909 Oct 25 j 17:08	15° Ω		retrograde	-4902 Mar 13 j 14:55	25° £ 44'41	1021100
retrograde	-4908 Jan 03 j 12:13	18° Ω 39'48	2055142	opposition	-4902 May 23 j 15:03	22° £ 22'52	1°31'09
opposition min. Earth dist.	-4908 Mar 13 j 18:17	15° Ω 24'46	2°55'42 9.26036 AU	min. Earth dist.	-4902 May 24 j 05:46	22° £ 20'06 19° £ 03'33	8.83166 AU
mm. Earm dist.	-4908 Mar 14 j 04:40	15° Ω 22'53	9.20030 AU	direct	-4902 Aug 01 j 03:44		
J:4	-4908 Mar 19 j 10:37	15°R Ω		evening set	-4902 Nov 08 j 17:22	26° ≏ 12'42	
direct	-4908 May 24 j 14:55	12° Ω 05'57		agnismation	4002 Nov. 25 : 10:00	200 0 12141	1901!11
	-4908 Jul 26 j 05:27	15° Ω		conjunction	-4902 Nov 25 j 10:00	28° £ 13'41	1°01'11
evening set	-4908 Sep 03 j 15:11	19° Ω 00'57	11 26020 AII	minimum elong	-4902 Nov 25 j 10:02	28° ₽ 13'42	1°01'04
max. Earth dist.	-4908 Sep 19 j 11:01	20° 8 (49°45	11.26029 AU	max. Earth dist.	-4902 Nov 24 j 18:16		10.76063 AU
aaniumatian	4000 Cam 20 : 00:40	20° Ω 53'41	2°25'41	morning ris-	-4902 Dec 10 j 01:03	0°ጤ 0°ጤ15'47	
conjunction	-4908 Sep 20 j 00:40			morning rise	-4902 Dec 12 j 05:57		
minimum elong	-4908 Sep 20 j 00:40	20° Ω 53'41	2°25'51	retrograde	-4901 Mar 26 j 16:12	7°M46'34	0057125
morning rise	-4908 Oct 06 j 08:15	22° N 45'55		opposition	-4901 Jun 05 j 09:16	4°M22'58	0°57'25
retrograde opposition	-4907 Jan 13 j 18:53	29° £ 32'36	2057102	min. Earth dist.	-4901 Jun 05 j 21:57	4°M20'33	8.68548 AU
ODDOSITION	-4907 Mar 25 j 10:07	26° Ω 17'10	2°57'02	direct	-4901 Aug 13 j 06:44	1°M02'50	
• •	4007 Mar 25 : 22.01		9.25722 AU	evening set	-4901 Nov 20 j 20:10	8° M 19'46	
min. Earth dist.	-4907 Mar 25 j 23:01	26° Ω 14'50					
min. Earth dist.	-4907 Jun 05 j 02:48	22° Ω 58'52		agniumation	4001 Dec 07: 16:22	100 m 22140	0022101
min. Earth dist.	-4907 Jun 05 j 02:48 -4907 Sep 14 j 13:18	22° Ω 58'52 29° Ω 52'30		conjunction	-4901 Dec 07 j 16:32	10°M23'49	0°32'01
min. Earth dist.	-4907 Jun 05 j 02:48	22° Ω 58'52		minimum elong	-4901 Dec 07 j 16:33	10°M23'49	0°31'51
min. Earth dist. direct evening set	-4907 Jun 05 j 02:48 -4907 Sep 14 j 13:18 -4907 Sep 15 j 15:46	22° N 58'52 29° N 52'30 0° M	2°24'07	minimum elong max. Earth dist.	-4901 Dec 07 j 16:33 -4901 Dec 07 j 02:16	10°M23'49 10°M19'25	
min. Earth dist.	-4907 Jun 05 j 02:48 -4907 Sep 14 j 13:18	22° Ω 58'52 29° Ω 52'30	2°24'07 2°24'15	minimum elong	-4901 Dec 07 j 16:33	10°M23'49	0°31'51

Planetary Phenomena of Saturn from -5400 through -4898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 42

Attention, astronomical year style is used: The year -4900 in astronomical counting style is the year 4901 BCE in historical counting style.

Attention, astronomic	ai yeai siyi	c is used. The	ycai -4900 i	ii astronomicai v
retrograde	-4900 Apr	08 j 02:53	20° M $12'12$	
opposition	-4900 Jun	17 j 11:35	16°ML46'47	0°19'50
min. Earth dist.	-4900 Jun	17 j 22:05	16°M44'45	8.53040 AU
	-4900 Jul	11 j 18:41	15°RM	
direct	-4900 Aug	24 j 15:50	13°M25'40	
	-4900 Oct	06 j 04:19	15°ML	
evening set	-4900 Dec	02 j 10:35	20°M51'51	
conjunction	-4900 Dec	19 j 11:01	22°M59'13	0°00'26
minimum elong	-4900 Dec	19 j 11:01	22°M59'13	0°00'15
behind sun begin	-4900 Dec	19 j 03:58	22° M $_{5}7'02$	
behind sun end	-4900 Dec	19 j 18:04	23°ML01'25	
max. Earth dist.	-4900 Dec	18 j 22:34	$22^{\circ}\text{ML}55'20$	10.45293 AU
desc. node	-4900 Dec	24 j 12:01	23°M37'13	
morning rise	-4899 Jan	05 j 16:25	25°ML08'13	
	-4899 Feb	18 j 19:22	0° ∡ ¹	
retrograde	-4899 Apr	21 j 23:39	3° х ¹03'59	
	-4899 Jun	26 j 00:07	30°RML	
opposition	-4899 Jun	30 j 22:30	29°M36'49	-0°20'09
min. Earth dist.	-4899 Jul	01 j 06:53	29°MJ35'11	8.37361 AU
direct	-4899 Sep	06 j 11:08	26° ML $14'32$	
	-4899 Nov	12 j 06:13	0° ∡ ¹	
evening set	-4899 Dec	15 j 14:04	3° ∡ ′51′11	
conjunction	-4898 Jan	01 j 18:51	6° ∡ 102′02	-0°32'10
minimum elong	-4898 Jan	01 j 18:50	6° ∡ ¹02'01	0°32'24
max. Earth dist.	-4898 Jan	01 j 09:40	5° ∡ ¹59'06	10.29806 AU