Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -2400 in astronomical counting style is the year 2401 BCE in historical counting style. -2400 Mar 10 j 11:54 11°MJ36'23 minimum elong -2394 Jan 22 i 19:49 14°る12'07 1°09'09 retrograde opposition -2400 May 20 j 13:19 1°44'37 -2394 Jan 22 j 13:01 14°る09'59 10.39843 AU 8°M.17'47 max. Earth dist. -2400 May 21 j 01:30 8°M15'32 9.07238 AU -2394 Feb 09 j 03:07 16°る22'22 min. Earth dist. morning rise -2400 Jul 30 j 06:11 24°る22'58 4°M59'24 -2394 May 26 j 18:31 direct retrograde -2400 Nov 07 j 09:20 -2394 Aug 04 j 10:33 20°る55'21 -1°42'58 evening set 11°M57'23 opposition min. Earth dist. -2394 Aug 04 j 14:26 20°る54'35 8.32852 AU conjunction -2400 Nov 23 j 21:59 13°M 53'49 1°14'06 direct -2394 Oct 10 j 17:04 17°**る**32'41 minimum elong -2400 Nov 23 j 22:02 13°M53'49 1°14'04 evening set -2393 Jan 19 j 03:53 25°**る**13'45 -2400 Nov 23 j 08:28 max. Earth dist. 13°M49'49 11.03016 AU -2400 Dec 03 j 06:07 15°M conjunction -2393 Feb 05 j 09:54 27°る25'25 -1°35'26 morning rise -2400 Dec 10 j 11:53 15°M50'43 minimum elong -2393 Feb 05 j 09:51 27°る25'24 1°35'30 -2393 Feb 05 j 05:35 retrograde -2399 Mar 22 j 16:45 22°M58'20 max. Earth dist. 27°る24'02 10.26127 AU opposition -2399 Jun 01 j 17:10 19°M38'28 1°15'09 morning rise -2393 Feb 22 j 21:01 29°る38'45 min. Earth dist. -2399 Jun 02 j 04:49 19°M36'18 8.98300 AU -2393 Feb 25 j 17:05 0°≈ direct -2399 Aug 10 j 23:19 16°M₁19'52 retrograde -2393 Jun 10 j 05:11 7°≈50'50 evening set -2399 Nov 18 j 18:03 23°M21'15 opposition -2393 Aug 18 j 07:43 4°≈21'54 -2°13'26 min. Earth dist. -2393 Aug 18 j 09:10 4°**≈**21'36 8.19746 AU conjunction -2399 Dec 05 j 08:39 25° M $_{1}9'29$ 0°48'21 direct -2393 Oct 24 j 00:41 0°≈58'00 minimum elong -2399 Dec 05 j 08:41 25°M19'29 0°48'18 evening set -2392 Feb 02 j 03:33 8°≈49'43 max. Earth dist. -2399 Dec 04 j 19:02 25°M15'24 10.93074 AU morning rise -2399 Dec 22 j 01:27 27°M18'27 conjunction -2392 Feb 19 j 13:12 11°≈04'17 -1°57'13 -2398 Jan 15 i 05:53 0°×7 minimum elong -2392 Feb 19 i 13:09 11°≈04'16 1°57'16 retrograde -2398 Apr 04 i 03:05 4°**х** 34′26 max. Earth dist. -2392 Feb 19 i 11:54 11°≈03'52 10.13702 AU -2398 Jun 14 j 02:14 1°**∡**13'07 0°41'59 morning rise -2392 Mar 08 i 04:04 13°≈20'32 opposition min. Earth dist. -2398 Jun 14 j 13:35 1°**х** 11′00 8.87340 AU -2392 Mar 21 j 11:52 15°≈ -2398 Jun 30 j 18:36 -2392 Jun 23 j 23:27 30°RM. retrograde 21° 22'39 27°ML54'05 -2392 Aug 31 j 11:43 direct -2398 Aug 22 j 17:54 18° \$\approx 12'39 \ -2°37'11 opposition 0°×7 -2392 Aug 31 j 10:46 -2398 Oct 12 j 10:53 min. Earth dist. 18°≈12'50 8.08322 AU -2398 Nov 30 j 09:29 5°**х** 00′33 -2392 Oct 21 j 22:25 15°R≈ evening set -2392 Nov 05 j 18:22 14°≈47'29 direct -2398 Dec 17 j 02:29 7°**х** 00′57 0°20′04 -2392 Nov 20 j 14:04 conjunction 15°≈ -2398 Dec 17 j 02:29 7°**∡**'00'57 0°20'01 -2391 Feb 15 j 15:28 22°≈49'26 minimum elong evening set -2398 Dec 16 j 12:45 6°**≯**56'49 10.81297 AU max. Earth dist. -2397 Jan 02 j 22:43 9°**х** 02′23 -2391 Mar 05 j 05:01 25°≈06'42 -2°12'41 morning rise conjunction -2397 Apr 16 j 21:38 -2391 Mar 05 j 04:58 retrograde 16°**∡**°28′10 minimum elong 25°≈06'41 2°12'43 -2397 Jun 26 j 17:25 -2391 Mar 05 j 07:20 opposition 13°**∡**°05′18 0°06′08 max. Earth dist. 25°≈07'28 10.03325 AU -2397 Jun 27 j 04:23 min. Earth dist. 13°**尽**03'13 8.74772 AU morning rise -2391 Mar 22 j 23:27 27°≈25'31 desc. node -2397 Aug 28 j 14:44 9°**х** 47′35 -2391 Apr 12 j 18:21 0°**)**€ -2397 Sep 03 j 19:20 9°**х¹**45'35 retrograde -2391 Jul 08 j 22:06 5°**)** 55'14 direct -2397 Dec 12 j 09:20 16°**₹**'58'44 -2391 Sep 14 j 21:28 2°\ 24'30 -2°52'03 evening set opposition min. Earth dist. -2391 Sep 14 j 17:57 2°**升**25'14 7.99288 AU -2397 Dec 29 j 05:17 19°**₹**01'41 -0°09'50 -2391 Oct 17 j 09:00 conjunction 30°R≈ -2397 Dec 29 j 05:16 19°**∡**'01'40 -2391 Nov 19 j 22:17 28°≈58'06 minimum elong 0°09'54 direct -2397 Dec 28 j 23:31 18°**∡** 59'56 -2391 Dec 23 j 00:34 0°) behind sun begin -2397 Dec 29 j 11:01 19°**х** 03′25 7°**)**€08'57 behind sun end evening set -2390 Mar 02 j 14:02 max. Earth dist. -2397 Dec 28 i 17:07 18°**₹**57'58 10.68124 AU morning rise -2396 Jan 15 i 05:09 21°× 05'52 conjunction -2390 Mar 20 i 07:36 9°\ 28'32 -2°20'19 retrograde -2396 Apr 29 i 02:44 28°×42'38 minimum elong -2390 Mar 20 i 07:36 9°\ 28'32 2°20'20 opposition -2396 Jul 08 j 15:30 25° ₹18'08 -0°31'06 max. Earth dist. -2390 Mar 20 j 13:53 9°**升**30'37 9.95658 AU min. Earth dist. -2396 Jul 09 j 00:50 25°**х** 16′21 8.61086 AU -2390 Apr 07 j 05:22 11°\ 49'28 morning rise -2396 Sep 15 j 03:08 21°×757'35 -2390 Jul 23 j 23:19 20°\ 23'29 direct retrograde evening set -2396 Dec 23 j 19:28 29°**х** 18′55 -2390 Sep 29 j 11:01 16°¥52'22 -2°56'22 opposition -2396 Dec 29 j 09:41 0°궁 min. Earth dist. -2390 Sep 29 j 04:55 16°**)** 53'38 7.93196 AU direct -2390 Dec 04 j 09:31 13° **X** 24'49 conjunction -2395 Jan 09 j 18:37 1°る24'38 -0°40'00 evening set -2389 Mar 17 j 21:01 21° ¥42'30 minimum elong -2395 Jan 09 j 18:36 1°る24'37 0°40'04 -2395 Jan 09 j 09:04 1°る21'40 10.54087 AU conjunction -2389 Apr 04 j 18:31 24°\(\mathbf{H}\) 03'53 -2°19'10 max. Earth dist. -2395 Jan 26 j 22:07 3°る31'47 -2389 Apr 04 j 18:32 24°**₭**03'53 2°19'10 morning rise minimum elong -2395 May 12 j 17:25 11°る20'21 -2389 Apr 05 j 04:17 24°**₭**07'07 9.91159 AU retrograde max. Earth dist. -2395 Jul 21 j 21:03 7°る54'15 -1°08'07 -2389 Apr 22 j 19:07 opposition morning rise 26°**¥**26′15 7°**る**52'56 $0^{\circ}\Upsilon$ min. Earth dist. -2395 Jul 22 j 03:49 8.46879 AU -2389 May 21 j 19:34 direct -2395 Sep 27 j 17:57 4°る32'42 retrograde -2389 Aug 08 j 00:40 5°**Y**00'43 evening set -2394 Jan 05 j 17:21 12°**る**03'28 opposition -2389 Oct 14 j 02:03 1°**Y**29'39 -2°49'20 min. Earth dist. -2389 Oct 13 j 17:41 1°**Y**31'24 7.90371 AU conjunction -2394 Jan 22 j 19:52 14°る12'08 -1°09'06 -2389 Nov 01 j 14:23 30°**₹**₩

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 2 Attention, astronomical year style is used: The year -2389 in astronomical counting style is the year 2390 BCE in historical counting style.

Attention, astronomi	ical year style is used: Th	e year -2389 i	n astronomical cou	unting style is the year	2390 BCE in historical c	ounting style.	5
direct	-2389 Dec 19 j 01:48	28° ₩ 01′08		behind sun end	-2383 Jul 03 j 05:39	19° Ⅱ 45'42	
	-2388 Feb 03 j 14:14	0° Υ		max. Earth dist.	-2383 Jul 03 j 12:07	19° Ⅱ 47'44	10.31131 AU
evening set	-2388 Apr 01 j 08:59	6° Y 23′04		morning rise	-2383 Jul 20 j 19:34	21° Ⅱ 57'49	
				retrograde	-2383 Oct 29 j 20:48	29° Ⅱ 37′05	
conjunction	-2388 Apr 19 j 09:57	8° Ƴ 45'33		opposition	-2382 Jan 04 j 18:18	26° Ⅱ 13'35	
minimum elong	-2388 Apr 19 j 10:00	8° Y 45'34		min. Earth dist.	-2382 Jan 04 j 09:14	26° Ⅱ 15'24	8.38002 AU
max. Earth dist.	-2388 Apr 19 j 22:13	8° Ƴ 49'37	9.90037 AU	direct	-2382 Mar 14 j 20:10	22° Ⅱ 45'17	
morning rise	-2388 May 07 j 12:43	11° Y 08'37			-2382 Jun 23 j 15:16	0ංම	
retrograde	-2388 Aug 21 j 23:47	19° Ƴ 39'50		evening set	-2382 Jun 29 j 00:56	0° © 39'07	
opposition	-2388 Oct 27 j 16:44	16° Y 09'17					
min. Earth dist.	-2388 Oct 27 j 06:45		7.90924 AU	conjunction	-2382 Jul 16 j 19:46	2°950'52	0°43'05
direct	-2387 Jan 01 j 20:46	12° Υ 40'03		minimum elong	-2382 Jul 16 j 19:44	2°950'52	
evening set	-2387 Apr 16 j 22:20	21° Y 03'26		max. Earth dist.	-2382 Jul 17 j 05:41		10.45204 AU
	2207 M 05 : 01.54	2200026112	1050124	morning rise	-2382 Aug 03 j 09:46	5° © 01'06 12° © 28'52	
conjunction	-2387 May 05 j 01:54 -2387 May 05 j 01:57	23° Y 26'12 23° Y 26'14		retrograde	-2382 Nov 11 j 14:35	9°906'58	1°11'08
minimum elong max. Earth dist.	-2387 May 05 j 15:56		9.92354 AU	opposition min. Earth dist.	-2381 Jan 17 j 20:54 -2381 Jan 17 j 13:00	9°508'32	8.52310 AU
morning rise	-2387 May 03 j 15.50 -2387 May 23 j 05:53	25° Υ 49'07	9.92334 AU	direct	-2381 Mar 28 j 14:41	5°939'40	6.32310 AU
morning risc	-2387 Jun 27 j 01:22	0° 8		evening set	-2381 Jul 12 j 12:31	13° 9 24'03	
retrograde	-2387 Sep 05 j 18:27	4° 8 13'41		evening set	-2381 Jul 12 J 12.31	13 32403	
opposition	-2387 Nov 11 j 04:52	0° 8 44'05	-2°03'26	conjunction	-2381 Jul 30 j 02:11	15°932'18	1°11'51
min. Earth dist.	-2387 Nov 10 j 17:56		7.94887 AU	minimum elong	-2381 Jul 30 j 02:08	15°932'17	
mm. Latti dist.	-2387 Nov 20 j 01:53	30°RΥ	7.54007 710	max. Earth dist.	-2381 Jul 30 j 10:23		10.59527 AU
direct	-2386 Jan 16 j 17:52	27° Y ′14′26		morning rise	-2381 Aug 16 j 10:33	17°538'58	10.59527 110
4.1.001	-2386 Mar 13 j 23:44	0°8		retrograde	-2381 Nov 24 j 00:06	24°956'27	
evening set	-2386 May 02 j 09:54	5° 8 36'19		opposition	-2380 Jan 30 j 16:10	21°536'03	1°43'57
				min. Earth dist.	-2380 Jan 30 j 10:27	21° © 37'10	8.66539 AU
conjunction	-2386 May 20 j 14:46	7° と 58'27	-1°25'12	direct	-2380 Apr 09 j 23:46	18°909'52	
minimum elong	-2386 May 20 j 14:50	7° 8 58'28		evening set	-2380 Jul 24 j 12:19	25°5644'57	
max. Earth dist.	-2386 May 21 j 05:40		9.98051 AU	C	J		
morning rise	-2386 Jun 07 j 18:41	10° 8 20'15		conjunction	-2380 Aug 10 j 20:28	27°549'49	1°36'29
-	-2386 Jul 17 j 13:56	15° 8		minimum elong	-2380 Aug 10 j 20:24	27°5549'48	1°36'32
retrograde	-2386 Sep 20 j 04:17	18° 8 35'19		max. Earth dist.	-2380 Aug 11 j 02:01	27° © 51'29	10.73411 AU
opposition	-2386 Nov 25 j 12:21	15° 8 06'59	-1°28'14	morning rise	-2380 Aug 27 j 23:19	29° © 53'08	
min. Earth dist.	-2386 Nov 25 j 01:22	15° 8 09'16	8.02099 AU		-2380 Aug 28 j 22:36	$0^{\circ}\Omega$	
	-2386 Nov 26 j 22:04	15° ₹ 8		retrograde	-2380 Dec 05 j 02:29	7° Ω 01'44	
direct	-2385 Jan 31 j 14:16	11° 8 37'13		opposition	-2379 Feb 11 j 04:37	3° Ω 42'41	2°11'02
	-2385 Apr 04 j 22:23	15° 8		min. Earth dist.	-2379 Feb 11 j 01:39		8.80037 AU
evening set	-2385 May 17 j 16:07	19° 8 54'52		direct	-2379 Apr 22 j 23:06	0° Ω 17'42	
				evening set	-2379 Aug 06 j 01:00	7° Ω 44'01	
conjunction	-2385 Jun 04 j 20:41	22° 8 15'25					
minimum elong	-2385 Jun 04 j 20:43	22° 8 15'26		conjunction	-2379 Aug 23 j 03:43	9° Ω 45'48	1°56'14
max. Earth dist.	-2385 Jun 05 j 11:17		10.06811 AU	minimum elong	-2379 Aug 23 j 03:41	9° Ω 45'47	1°56'17
morning rise	-2385 Jun 22 j 23:01	24° 8 35'12		max. Earth dist.	-2379 Aug 23 j 05:41		10.86256 AU
	-2385 Aug 10 j 06:49	0°II		morning rise	-2379 Sep 09 j 01:35	11° Ω 46′08	
retrograde	-2385 Oct 04 j 03:55	2° Ⅱ 38'54			-2379 Oct 08 j 14:43	15° Ω	
•,•	-2385 Nov 29 j 18:18	30°R8	0040125	retrograde	-2379 Dec 16 j 20:11	18° Ω 47'27	2021146
opposition min. Earth dist.	-2385 Dec 09 j 13:52	29° 8 12'05		opposition min. Earth dist.	-2378 Feb 23 j 11:16	15° Ω 29'32	2°31'46
	-2385 Dec 09 j 03:25 -2384 Feb 15 j 07:05	25° 8 42'31	8.12132 AU	min. Earth dist.	-2378 Feb 23 j 10:42	15° Ω 29'39 15°R Ω	8.92224 AU
direct	-2384 Feb 15 J 07:05 -2384 Apr 28 J 06:40	0° Ⅱ		direct	-2378 Mar 01 j 23:56	13° R3 € 12° Ω 05'50	
avaning sat	-2384 May 31 j 13:48	3° Ⅱ 53'37		direct	-2378 May 05 j 16:11 -2378 Jul 06 j 18:02	12 δ l 03 30	
evening set	-2364 May 31 J 13.46	э шэээг		evening set	-2378 Aug 18 j 03:40	13 % 19° Ω 24'11	
conjunction	-2384 Jun 18 j 16:25	6° Ⅱ 11'44	0°22'04	evening set	-2378 Aug 18 J 03.40	19 062411	
minimum elong	-2384 Jun 18 j 16:26	6° Ⅱ 11'44		conjunction	-2378 Sep 04 j 01:29	21° Ω 23'16	2°10'42
max. Earth dist.	-2384 Jun 19 j 05:45		10.18074 AU	minimum elong	-2378 Sep 04 j 01:27	21° Ω 23'15	
morning rise	-2384 Jul 06 j 15:45	8° Ⅱ 28'47	10.10074710	max. Earth dist.	-2378 Sep 04 j 00:21		10.97548 AU
retrograde	-2384 Oct 16 j 16:59	16° Ⅱ 20'15		morning rise	-2378 Sep 04 j 00:21 -2378 Sep 20 j 18:56	23° Ω 21'04	-0.7,010710
opposition	-2384 Dec 22 j 08:04	12° I 55'05	-0°06'55		-2378 Dec 10 j 08:17	0° M)	
min. Earth dist.	-2384 Dec 21 j 22:11		8.24349 AU	retrograde	-2378 Dec 28 j 11:23	0° m) 16'51	
asc. node	-2383 Feb 23 j 17:29	9° Ⅱ 27'21			-2377 Jan 15 j 19:19	30°RΩ	
direct	-2383 Feb 28 j 17:42	9° Ⅱ 26'01		opposition	-2377 Mar 07 j 13:08	26° Ω 59'48	2°45'51
evening set	-2383 Jun 15 j 01:10	17° Ⅱ 28'57		min. Earth dist.	-2377 Mar 07 j 14:05	26° Ω 59'38	9.02628 AU
Č	,			direct	-2377 May 18 j 01:55	23° Ω 37'24	
conjunction	-2383 Jul 03 j 00:25	19° Ⅱ 44'04	0°11'18		-2377 Aug 22 j 17:49	0° m)	
minimum elong	-2383 Jul 03 j 00:25	19° Ⅱ 44′03	0°11'22	evening set	-2377 Aug 29 j 21:41	0° m 48'44	
behind sun begin	-2383 Jul 02 j 19:10	19° Ⅱ 42'25			-		

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -2377 in astronomical counting style is the year 2378 BCE in historical counting style. -2377 Sep 15 j 15:29 2°m/45'39 2°19'39 morning rise -2371 Dec 05 i 19:22 11°ML01'40 conjunction 2° m/45'39 2°19'41 -2370 Jan 12 j 18:43 -2377 Sep 15 j 15:27 15°M₀ minimum elong 18°ML04'51 max. Earth dist. -2377 Sep 15 j 12:37 2° m/44'49 11.06874 AU -2370 Mar 17 j 14:17 retrograde -2377 Oct 02 j 05:15 -2370 May 24 j 12:51 4° m 41'27 15°RM morning rise 14°ML46'19 1°28'42 -2376 Jan 08 j 23:34 11° m/33'21 -2370 May 27 j 15:19 retrograde opposition 2°53'12 -2370 May 28 j 03:23 opposition -2376 Mar 18 j 11:24 8° Mp 16'57 min. Earth dist. 14°M44'06 9.05571 AU min. Earth dist. -2376 Mar 18 j 14:20 8° Mp 16'24 9.10879 AU direct -2370 Aug 06 j 02:03 11°M28'34 direct -2376 May 29 j 03:10 4° M 55'46 -2370 Oct 12 j 21:01 15°M 18°M27'05 evening set -2376 Sep 09 j 08:37 12°Mp01'12 evening set -2370 Nov 14 j 00:44 conjunction -2376 Sep 25 j 23:11 13° Mp 56'31 2°23'06 conjunction -2370 Nov 30 j 14:08 20°M24'05 1°00'11 -2376 Sep 25 j 23:11 -2370 Nov 30 j 14:10 1°00'09 minimum elong 13° Mp 56'30 2°23'08 minimum elong 20° ML24'06-2376 Sep 25 j 18:09 -2370 Nov 30 j 00:24 11.00929 AU max. Earth dist. 13° Mp 55'03 11.13909 AU max. Earth dist. 20°M20'00 morning rise -2376 Oct 12 j 10:19 15° m 50'54 morning rise -2370 Dec 17 j 05:29 22°M21'43 retrograde -2375 Jan 19 j 09:52 22° m 40'35 retrograde -2369 Mar 29 j 19:38 29°M32'27 opposition -2375 Mar 30 j 07:15 19° Mp 24'34 2°53'57 opposition -2369 Jun 08 j 21:09 26°M12'34 0°57'11 min. Earth dist. -2375 Mar 30 j 12:51 19° m 23'32 9.16692 AU min. Earth dist. -2369 Jun 09 j 09:06 26° ML10'218.95722 AU direct -2375 Jun 10 j 00:15 16° Mp 04'28 -2369 Aug 17 j 19:40 22°M54'29 evening set -2375 Sep 20 j 14:22 23° m 05'17 evening set -2369 Nov 25 j 12:10 29°M57'13 -2369 Nov 25 j 21:40 0°×7 conjunction -2375 Oct 07 j 02:27 24° m 59'31 2°21'09 minimum elong -2375 Oct 07 i 02:28 24° m 59'31 2°21'09 conjunction -2369 Dec 12 i 03:57 1°**х** 56′12 0°33′02 max. Earth dist. -2375 Oct 06 j 18:24 24° m 57'11 11.18418 AU minimum elong -2369 Dec 12 i 03:58 1°**х** 56′12 0°32'59 morning rise -2375 Oct 23 j 12:06 26° m 53'04 max. Earth dist. -2369 Dec 11 j 14:51 1°**∡** 52′17 10.90050 AU -2375 Nov 21 j 19:02 0∘∇ -2369 Dec 28 j 22:18 3°**х** 56′04 morning rise -2374 Jan 30 j 18:50 3°**£**42'11 -2368 Apr 10 j 10:37 11°**₹**15'52 retrograde retrograde -2374 Apr 11 j 01:49 -2368 Jun 20 j 08:19 7°**∡**754'28 0°**Ω**26'15 2°48'17 opposition 0°22'33 opposition -2374 Apr 11 j 09:44 0°**2**24'49 9.19878 AU -2368 Jun 20 j 19:22 7°**х** 52′24 min. Earth dist. min. Earth dist. 8.83810 AU -2374 Apr 17 j 01:49 -2368 Aug 28 j 18:15 4°×35'49 30°R M direct -2374 Jun 21 j 17:10 11°**х** 44'29 27° m 07'05 -2368 Dec 06 j 07:15 direct evening set -2374 Aug 22 j 20:44 0∘∙ -2374 Oct 01 j 16:27 4°**£**04'35 -2368 Dec 23 j 01:43 13°**∡**¹45'52 0°03'55 evening set conjunction -2368 Dec 23 j 01:42 13°**∡**¹45'51 0°03'51 minimum elong 13°**∡**¹43'46 -2374 Oct 18 j 03:08 5° 258'19 2°13'59 -2368 Dec 22 j 18:44 conjunction behind sun begin -2374 Oct 18 j 03:09 -2368 Dec 23 j 08:39 minimum elong 5°**£**58'19 2°13'58 behind sun end 13°**∡**¹47'56 13°**尽**41'54 10.77298 AU -2374 Oct 17 j 17:10 -2368 Dec 22 j 12:39 max. Earth dist. 5°**£**55'25 11.20265 AU max. Earth dist. -2374 Nov 03 j 12:14 morning rise 7°**£**51'38 morning rise -2367 Jan 08 j 23:31 15°**∡**¹48'21 retrograde -2373 Feb 11 j 05:53 14°**£**41'52 desc. node -2367 Feb 09 j 14:48 19°**∡**18'52 opposition -2373 Apr 22 j 20:23 11°**2**25'41 2°36'30 retrograde -2367 Apr 23 j 11:38 23°**∡**18'37 min. Earth dist. -2373 Apr 23 j 05:15 11°**£**24'04 9.20339 AU opposition -2367 Jul 03 j 02:17 19°**₹**55'35 -0°14'04 -2373 Jul 03 j 08:48 8°**£**07'15 min. Earth dist. -2367 Jul 03 j 12:31 19°**✗**53'38 8.70298 AU direct -2373 Oct 12 j 16:32 15°**♀**02'46 -2367 Sep 09 j 20:33 16°**х** 36′06 evening set direct -2367 Dec 18 j 11:38 23°**х** 52'18 evening set -2373 Oct 29 j 02:52 16°**♀**56'34 2°01'54 conjunction -2373 Oct 29 j 02:54 -2366 Jan 04 j 08:59 25°**₹** 56'21 -0°26'16 minimum elong 16°**♀**56'34 2°01'52 conjunction -2366 Jan 04 i 08:57 max. Earth dist. -2373 Oct 28 j 16:16 16°**£**53'29 11.19382 AU minimum elong 25° ₹ 56'21 0°26'19 morning rise -2373 Nov 14 j 12:16 18°**♀**50'10 max. Earth dist. -2366 Jan 03 i 20:29 25° ₹ 52'30 10.63233 AU retrograde -2372 Feb 22 i 21:06 25°**-**43′08 morning rise -2366 Jan 21 j 10:36 28°×701'46 opposition -2372 May 03 j 16:03 22°**£**26'27 2°18'59 -2366 Feb 07 i 06:16 0°궁 min. Earth dist. -2372 May 04 i 01:41 22°**£**24'41 9.18051 AU retrograde -2366 May 06 j 19:59 5°₹43'34 opposition direct -2372 Jul 13 j 21:59 19°**₽**08'32 -2366 Jul 16 i 03:40 2°**궁**18'48 -0°51'16 -2372 Oct 22 j 16:51 26°**₽**03'29 min. Earth dist. -2366 Jul 16 j 12:50 2°る17'02 8.55827 AU evening set -2366 Aug 18 j 07:16 30°R*x*7 -2366 Sep 22 j 06:43 28°**х** 58′12 conjunction -2372 Nov 08 j 03:30 27°**♀**57'52 1°45'15 direct -2372 Nov 08 j 03:33 minimum elong 27°**♀**57'53 1°45'13 -2366 Oct 26 j 12:37 0°중 27°**△**54'25 11.15784 AU max. Earth dist. -2372 Nov 07 j 15:40 evening set -2366 Dec 31 j 03:05 6°る23'23 -2372 Nov 24 j 14:07 29°**♀**52'20 morning rise -2372 Nov 25 j 17:00 0°M -2365 Jan 17 j 03:43 8°る30'21 -0°55'57 conjunction -2371 Mar 05 j 14:28 -2365 Jan 17 j 03:41 8°る30'20 0°56'01 retrograde 6°**I**L49'36 minimum elong -2371 May 15 j 13:53 1°56'12 -2365 Jan 16 j 17:05 8°る27'01 10.48533 AU opposition 3°MJ32'07 max. Earth dist. 9.13079 AU -2365 Feb 03 j 09:12 10°る38'50 min. Earth dist. -2371 May 16 j 00:56 3°M30'06 morning rise direct -2371 Jul 25 j 10:23 0°M14'26 retrograde -2365 May 20 j 14:14 18°る32'42 evening set -2371 Nov 02 j 19:02 7°M10'24 opposition -2365 Jul 29 j 12:38 15°**る**06'11 -1°27'15 min. Earth dist. -2365 Jul 29 j 20:03 15°る04'44 8.41111 AU

conjunction

minimum elong

max. Earth dist.

-2371 Nov 19 j 06:39

-2371 Nov 19 j 06:41

-2371 Nov 18 j 17:05

9°M05'51 1°24'30

1°24'28

9°ML01'52 11.09579 AU

9°**™**05'52

direct

evening set

-2365 Oct 05 j 02:36

-2364 Jan 13 j 06:44

11°**ප්**44'18

19°る19'31

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -2364 in astronomical counting style is the year 2365 BCE in historical counting style. 21°る29'32 -1°23'42 -2364 Jan 30 j 10:57 conjunction -2358 Apr 28 j 02:10 16°Y46'27 -2°00'21 conjunction -2364 Jan 30 j 10:54 21°**ට**29'31 1°23'46 -2358 Apr 28 j 02:13 16°**Y**46'28 2°00'19 minimum elong minimum elong -2364 Jan 30 j 03:39 21°る27'12 10.33923 AU -2358 Apr 28 j 14:24 16°**℃**50'30 9.89135 AU max. Earth dist. max. Earth dist. -2364 Feb 16 j 20:11 23°る41'10 -2358 May 16 j 06:00 19°**Y**09'47 morning rise morning rise -2364 Apr 17 j 11:13 27° **Y**38'32 -2358 Aug 30 j 05:45 0°≈ retrograde -2364 Jun 02 j 19:05 1°≈47'00 -2358 Nov 04 j 19:16 24° Y 07'46 -2° 17'49 retrograde opposition 24°**Y**09'52 7.90926 AU -2364 Jul 20 j 00:46 min. Earth dist. -2358 Nov 04 j 09:15 30°Ŗる -2357 Jan 10 j 05:03 20°**Y**37'36 opposition -2364 Aug 11 j 05:21 28°る18'48 -1°59'57 direct 29°**Y**01′07 28°**る**17'54 min. Earth dist. -2364 Aug 11 j 09:56 8.26894 AU evening set -2357 Apr 25 j 12:50 direct -2364 Oct 17 j 06:07 24°る55'31 -2357 May 03 j 02:08 0°8 -2363 Jan 03 j 16:42 0°≈ -2363 Jan 25 j 23:10 -2357 May 13 j 17:16 1°823'51 -1°38'00 evening set 2°≈41'25 conjunction -2357 May 13 j 17:20 minimum elong 1°**8**23'52 1°37'57 conjunction -2363 Feb 12 j 07:05 4°≈54'27 -1°47'47 max. Earth dist. -2357 May 14 j 07:25 1°**8**28'30 9.93350 AU minimum elong -2363 Feb 12 j 07:02 4°≈54'26 1°47'50 morning rise -2357 May 31 j 21:38 3°**8**46'30 max. Earth dist. -2363 Feb 12 j 03:30 4°≈53'17 10.20176 AU retrograde -2357 Sep 13 j 18:38 12°806'53 morning rise -2363 Mar 01 j 19:57 7°≈09'08 opposition -2357 Nov 19 j 05:18 8°837'17 -1°45'44 -2363 May 26 j 02:35 min. Earth dist. -2357 Nov 18 j 17:55 8°**と**39'40 7.96805 AU retrograde -2363 Jun 17 j 09:03 15°≈26'02 direct -2356 Jan 25 j 02:32 5°806'57 -2363 Jul 09 j 16:50 15°R≈ evening set -2356 May 09 j 21:59 13°**8**27'22 opposition -2363 Aug 25 j 05:27 11°≈56'23 -2°27'06 -2356 May 21 j 20:56 15°8 min. Earth dist. -2363 Aug 25 j 06:40 11°**≈**56′08 8.13951 AU direct -2363 Oct 30 j 18:15 8°≈31'39 conjunction -2356 May 28 i 03:00 15°848'56 -1°09'45 -2362 Jan 28 j 10:56 15°≈ minimum elong -2356 May 28 i 03:03 15°848'57 1°09'42 -2362 Feb 09 j 04:31 16°≈28'13 max. Earth dist. -2356 May 28 j 18:20 15°853'56 10.00934 AU evening set -2356 Jun 15 j 06:25 18°**と**09'57 morning rise -2362 Feb 26 j 16:15 18°≈44'09 -2°06'23 -2356 Sep 26 j 23:22 26°819'41 conjunction retrograde -2362 Feb 26 j 16:12 18°≈44'08 2°06'25 -2356 Dec 02 j 09:55 22°851'36 -1°07'40 minimum elong opposition 22°**8**54'07 8.05821 AU -2362 Feb 26 j 16:17 18°**≈**44'09 10.08089 AU -2356 Dec 01 j 21:45 max. Earth dist. min. Earth dist. -2362 Mar 16 j 08:46 21°≈01'40 -2355 Feb 07 j 20:26 19°**8**21'28 morning rise direct -2362 Jul 02 j 05:29 -2355 May 25 j 00:01 29°≈27'44 27°**8**36'15 retrograde evening set -2362 Sep 08 j 11:59 25°≈56'57 -2°46'23 opposition 29°**8**55'47 -0°37'47 min. Earth dist. -2362 Sep 08 j 10:09 -2355 Jun 12 j 04:00 25°**≈**57'19 8.03046 AU conjunction -2355 Jun 12 j 04:02 -2362 Nov 13 j 16:15 22°≈30'45 29°**8**55'47 0°37'43 direct minimum elong -2361 Feb 19 j 01:19 0°**∀** -2355 Jun 12 j 17:07 $0^{\circ}\Pi$ 0°**Д**00'50 10.11373 AU -2361 Feb 23 j 21:40 -2355 Jun 12 j 19:41 evening set 0°**)**37'16 max. Earth dist. -2355 Jun 30 j 05:01 morning rise 2°**Ⅱ**14'20 conjunction -2361 Mar 13 j 13:21 2°\f55'48 -2°17'51 retrograde -2355 Oct 10 j 19:14 10°**Ⅲ**12'07 minimum elong -2361 Mar 13 j 13:20 2°**H**55'48 2°17'52 opposition -2355 Dec 16 j 07:49 6°**II**45'47 -0°26'33 max. Earth dist. -2361 Mar 13 j 16:46 2°**升**56'56 9.98404 AU min. Earth dist. -2355 Dec 15 j 20:05 6°**Ц**48'11 8.17380 AU morning rise -2361 Mar 31 j 09:26 5°**)** 15'47 direct -2354 Feb 22 j 08:47 3°**Ⅱ**16'12 -2361 Jul 17 j 06:09 13°**)**(48'10 -2354 Jun 08 j 16:54 11°**Ⅲ**23'32 retrograde evening set -2361 Sep 22 j 23:32 10°**升**16'40 -2°55'52 opposition -2361 Sep 22 j 19:08 10°**光**17'34 7.94852 AU -2354 Jun 26 j 18:09 13°**耳**40'17 -0°04'25 min. Earth dist. conjunction -2361 Nov 27 j 22:35 6°**)**49'07 -2354 Jun 26 j 18:10 13°**Ⅱ**40'17 0°04'22 direct minimum elong 15°**)**€03'55 -2354 Jun 26 i 10:59 13°**Ⅱ**38′02 evening set -2360 Mar 10 j 00:39 behind sun begin 13°**Ⅱ**42'33 behind sun end -2354 Jun 27 j 01:21 13°**Ц**44'55 10.23979 AU conjunction -2360 Mar 27 j 20:13 17°\ 24'37 -2°20'56 max. Earth dist. -2354 Jun 27 i 08:48 -2360 Mar 27 j 20:14 minimum elong 17°**)** 24'37 2°20'56 morning rise -2354 Jul 14 i 15:23 15°**I**55'45 max. Earth dist. -2360 Mar 28 i 02:46 17°**¥**26'47 9.91746 AU asc. node -2354 Aug 15 j 06:17 19°**Ⅲ**36′13 -2360 Apr 14 i 19:32 19°**)** 46'29 retrograde -2354 Oct 24 j 05:22 23°**Ⅱ**41'12 morning rise -2360 Jul 31 j 08:27 28°¥21'35 -2354 Dec 29 j 22:10 20°II16'45 0°14'49 retrograde opposition opposition -2360 Oct 06 j 14:06 24°\(\dagger49'51\) -2°54'16 min. Earth dist. -2354 Dec 29 j 11:51 20°**Ⅱ**18'50 8.30765 AU min. Earth dist. -2360 Oct 06 j 07:41 24°**)**51'11 7.89912 AU direct -2353 Mar 08 j 14:34 16°**Ⅱ**48'02 -2360 Dec 11 j 12:06 21°\ 21'08 evening set -2353 Jun 22 j 22:49 24°**Ⅱ**46'41 direct -2359 Mar 25 j 10:30 29°**)**41'50 evening set $0^{\circ}\Upsilon$ -2359 Mar 27 j 18:14 conjunction -2353 Jul 10 j 19:56 27°**I**100'10 0°28'26 -2353 Jul 10 j 19:55 27°**Ⅱ**00'09 0°28'30 minimum elong -2359 Apr 12 j 09:46 2°Y04'03 -2°15'01 -2353 Jul 11 j 08:20 27°**Д**04'02 10.37996 AU conjunction max. Earth dist. -2359 Apr 12 j 09:49 2°\bar{\gamma}04'04 2°15'00 -2353 Jul 28 j 12:25 29°**Ⅱ**12'11 minimum elong morning rise 2°**Y**07'14 9.88583 AU -2353 Aug 04 j 02:05 0ಂಪ max. Earth dist. -2359 Apr 12 j 19:22 morning rise -2359 Apr 30 j 11:46 4°**Y**27′06 retrograde -2353 Nov 06 j 03:36 6°9545'42 retrograde -2359 Aug 15 j 09:19 13°**Y**00′57 opposition -2352 Jan 12 j 05:00 3°923'10 0°54'03 opposition -2359 Oct 21 j 05:27 9°**Y**29'27 -2°41'17 min. Earth dist. -2352 Jan 11 j 20:25 3°**©**24'52 8.45209 AU min. Earth dist. -2359 Oct 20 j 21:08 9°**Y**31'12 7.88574 AU -2352 Mar 12 j 06:34 30°RⅡ -2359 Dec 26 j 06:53 5°Y59'51 -2352 Mar 21 j 14:08 29°**Ⅲ**55'31 direct direct

-2358 Apr 09 j 23:45

evening set

14°**Y**23'30

-2352 Mar 30 j 21:19

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Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 5 Attention, astronomical year style is used: The year -2352 in astronomical counting style is the year 2353 BCE in historical counting style.

Attention, astronomic	cal year style is used: Th	e year -2352 i	n astronomical cou	nting style is the year	2353 BCE in historical co	ounting style.	5
evening set	-2352 Jul 05 j 16:39	7°5544'50		conjunction	-2346 Oct 02 j 11:43	20° m 15'22	2°22'35
				minimum elong	-2346 Oct 02 j 11:43	20° Mp 15'22	2°22'36
conjunction	-2352 Jul 23 j 08:45	9° 9 54'48	0°58'50	max. Earth dist.	-2346 Oct 02 j 04:10	20° m 13'10	11.16686 AU
minimum elong	-2352 Jul 23 j 08:43	9° 9 54'47	0°58'53	morning rise	-2346 Oct 18 j 21:56	22° m 09'18	
max. Earth dist.	-2352 Jul 23 j 18:16	9° 9 57'44	10.52650 AU	retrograde	-2345 Jan 26 j 02:13	28° m 58'52	
morning rise	-2352 Aug 09 j 19:57	12° © 03'14		opposition	-2345 Apr 06 j 03:33	25° Mp 43'08	2°51'31
retrograde	-2352 Nov 17 j 16:54	19° 5 25'50		min. Earth dist.	-2345 Apr 06 j 10:30	25° ™ 41'52	9.18563 AU
opposition	-2351 Jan 24 j 04:08	16° © 05'02	1°29'15	direct	-2345 Jun 16 j 20:05	22° m 23'44	
min. Earth dist.	-2351 Jan 23 j 21:09	16°506'24	8.59931 AU	evening set	-2345 Sep 27 j 02:34	29° m 22'59	
direct	-2351 Apr 04 j 04:35	12° © 38'38			-2345 Oct 02 j 12:02	0∘ ত	
evening set	-2351 Jul 18 j 22:39	20°5518'30					
				conjunction	-2345 Oct 13 j 13:59	1° ≏ 16'58	2°17'46
conjunction	-2351 Aug 05 j 09:21	22° 5 24'59	1°25'33	minimum elong	-2345 Oct 13 j 14:00	1° ≏ 16'59	2°17'46
minimum elong	-2351 Aug 05 j 09:17	22°524'58	1°25'35	max. Earth dist.	-2345 Oct 13 j 04:40	1° ≏ 14'16	11.19357 AU
max. Earth dist.	-2351 Aug 05 j 16:00	22°527'01	10.67184 AU	morning rise	-2345 Oct 29 j 23:08	3° ₽ 10′25	
morning rise	-2351 Aug 22 j 14:59	24°529'55		retrograde	-2344 Feb 06 j 12:32	10° ≏ 00'19	
	-2351 Oct 16 j 04:14	$0^{\circ}\Omega$		opposition	-2344 Apr 16 j 22:25	6° ≏ 44'19	2°42'29
retrograde	-2351 Nov 29 j 23:13	1° Ω 42'53		min. Earth dist.	-2344 Apr 17 j 07:44	6° £ 42'37	9.19857 AU
	-2350 Jan 15 j 01:44	30° ₹ 5		direct	-2344 Jun 27 j 11:48	3° £ 25'31	
opposition	-2350 Feb 05 j 20:03	28° © 23'37	1°59'09	evening set	-2344 Oct 07 j 03:51	10° £ 22'11	
min. Earth dist.	-2350 Feb 05 j 14:41	28° © 24'39	8.74187 AU				
direct	-2350 Apr 17 j 09:13	24°958'33		conjunction	-2344 Oct 23 j 14:16	12° ≏ 16′00	2°07'53
	-2350 Jul 09 j 15:12	$0^{\circ}\Omega$		minimum elong	-2344 Oct 23 j 14:18	12° ≏ 16′00	2°07'52
evening set	-2350 Jul 31 j 17:08	2° Ω 29'16		max. Earth dist.	-2344 Oct 23 j 02:19	12° ♀ 12'31	11.19297 AU
8	, , , , , , , , , , , , , , , , , , ,			morning rise	-2344 Nov 08 j 23:32	14° ≏ 09'31	
conjunction	-2350 Aug 17 j 22:27	4° Ω 32'29	1°47'40	retrograde	-2343 Feb 17 j 00:54	21° ≏ 01'22	
minimum elong	-2350 Aug 17 j 22:24		1°47'42	opposition	-2343 Apr 28 j 17:47	17° £ 44'48	2°27'33
max. Earth dist.	-2350 Aug 18 j 02:53		10.80895 AU	min. Earth dist.	-2343 Apr 29 j 04:58	17° £ 42'45	9.18397 AU
morning rise	-2350 Sep 03 j 22:37	6° Ω 34'12	10.00073 110	direct	-2343 Jul 09 j 02:33	14° £ 26'22).103)/ 1 1 0
retrograde	-2350 Dec 11 j 21:53	13° Ω 39'02		evening set	-2343 Oct 18 j 04:04	21° £ 21'51	
opposition	-2349 Feb 18 j 05:55	$10^{\circ}\Omega 21'05$	2°22'54	evening set	2545 Oct 10 j 04.04	21 =2131	
min. Earth dist.	-2349 Feb 18 j 02:59		8.87305 AU	conjunction	-2343 Nov 03 j 14:27	23° ≏ 16′01	1°53'16
direct	-2349 Apr 30 j 05:37	6°Ω57'20	0.07505 AC	minimum elong	-2343 Nov 03 j 14:29	23° ⊆ 16'02	
evening set	-2349 Aug 13 j 00:51	14° Ω 19'33		max. Earth dist.	-2343 Nov 03 j 01:13		11.16520 AU
evening set	-2349 Aug 18 j 19:13	14 % 1933		morning rise	-2343 Nov 20 j 00:36	25° ⊆ 1210	11.10320 AU
	-2349 Aug 10 J 19.13	13 06		morning rise	-2342 Jan 07 j 18:56	0°M	
conjunction	-2349 Aug 30 j 01:02	16° Ω 19'51	2004/37	retrograde	-2342 Feb 28 j 15:56	2°M05'39	
minimum elong	-2349 Aug 30 j 00:59	16° Ω 19'51		retrograde	-2342 Feb 28 j 13:36 -2342 Apr 23 j 20:47	2 11603 39 30°R ≏	
max. Earth dist.	-2349 Aug 30 j 00:39		2 04 39 10.93151 AU	opposition	-2342 Apr 23 j 20.47 -2342 May 10 j 14:45	30 K== 28° Ω 48'10	2007107
		18° Ω 18'46	10.93131 AU	min. Earth dist.			
morning rise	-2349 Sep 15 j 20:19				-2342 May 11 j 02:28	28° Ω 46'01	9.14243 AU
retrograde	-2349 Dec 23 j 15:54	25° Ω 17'11	2040104	direct	-2342 Jul 20 j 16:47	25° Ω 29'55	
opposition	-2348 Mar 01 j 10:30	22° Ω 00'17	2°40'04	. ,	-2342 Oct 07 j 00:57	0°M	
min. Earth dist.	-2348 Mar 01 j 10:54	22° Ω 00'12	8.98687 AU	evening set	-2342 Oct 29 j 05:10	2°M25'42	
direct	-2348 May 11 j 18:04	18° Ω 37'47			2242.31 14:16.26	40 m 20145	1024110
evening set	-2348 Aug 23 j 23:23	25° Ω 52′29		conjunction	-2342 Nov 14 j 16:26		1°34'19
	22.40.0	270 0 50122	201 (107	minimum elong	-2342 Nov 14 j 16:29		1°34'17
conjunction	-2348 Sep 09 j 18:57	27° Ω 50′22	2°16'07	max. Earth dist.	-2342 Nov 14 j 03:23		11.11120 AU
minimum elong	-2348 Sep 09 j 18:55	27° Ω 50′22	2°16'09	morning rise	-2342 Dec 01 j 04:08	6°M16'01	
max. Earth dist.	-2348 Sep 09 j 16:30		11.03419 AU	retrograde	-2341 Mar 12 j 14:08	13°M16'46	1044100
morning rise	-2348 Sep 26 j 10:20	29° Ω 47'03		opposition	-2341 May 22 j 14:31	9°M58'10	1°41'39
	-2348 Sep 28 j 07:26	0° m		min. Earth dist.	-2341 May 23 j 02:02	9°M56'03	9.07540 AU
retrograde	-2347 Jan 03 j 04:08	6° Mp 40'46		direct	-2341 Aug 01 j 07:41	6°M39'53	
opposition	-2347 Mar 13 j 10:40	3° Mp 24'35	2°50'31	evening set	-2341 Nov 09 j 09:04	13°M37'29	
min. Earth dist.	-2347 Mar 13 j 14:06	3° m 23'57	9.07861 AU		-2341 Nov 21 j 03:02	15° M ₊	
direct	-2347 May 23 j 23:20	0°Mp03′16					
evening set	-2347 Sep 04 j 14:07	7° Mp 11'39		conjunction	-2341 Nov 25 j 21:48	15°M33'55	1°11'32
				minimum elong	-2341 Nov 25 j 21:50	15°M33'55	1°11'30
conjunction	-2347 Sep 21 j 05:58	9° ™ 07'40	2°22'05	max. Earth dist.	-2341 Nov 25 j 08:11		11.03274 AU
minimum elong	-2347 Sep 21 j 05:57	9° ™ 07'40	2°22'07	morning rise	-2341 Dec 12 j 11:52	17°ML30'50	
max. Earth dist.	-2347 Sep 21 j 00:08		11.11334 AU	retrograde	-2340 Mar 23 j 17:07	24°M38'24	
morning rise	-2347 Oct 07 j 18:21	11°Mp02'41		opposition	-2340 Jun 02 j 18:18	21°ML18'30	1°11'51
retrograde	-2346 Jan 14 j 15:15	17° m 53'30		min. Earth dist.	-2340 Jun 03 j 06:10	21°M16'19	8.98505 AU
opposition	-2346 Mar 25 j 07:58	14° m 37'43	2°54'16	direct	-2340 Aug 11 j 22:22	17°M59'57	
min. Earth dist.	-2346 Mar 25 j 13:17	14° Mp 36'44	9.14539 AU	evening set	-2340 Nov 19 j 17:52	25°M01'05	
direct	-2346 Jun 05 j 01:07	11°M)17'26					
evening set	-2346 Sep 15 j 22:32	18° m 20'39		conjunction	-2340 Dec 06 j 08:29	26°M59'18	0°45'33
				minimum elong	-2340 Dec 06 j 08:31	26°M59'19	0°45'30

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 6

Attention, astronomical year style is used: The year -2340 in astronomical counting style is the year 2341 BCE in historical counting style.

max. Earth dist. -2340 Dec 05 j 18:10 26° 15:502 10.93238 AU conjunction -2333 Feb 20 j 14:00 12° 45:09 -1°58'45.

Attention, astronomi	cal year style is used: Th	e year -2340 i	n astronomical cou	nting style is the year	2341 BCE in historical co	ounting style.	
max. Earth dist.	-2340 Dec 05 j 18:10	26°M55'02	10.93238 AU	conjunction	-2333 Feb 20 j 14:00	12° ≈ 45′09	-1°58'47
morning rise	-2340 Dec 23 j 01:34	28°ML58'18		minimum elong	-2333 Feb 20 j 13:57	12° ≈ 45′08	1°58'49
	-2340 Dec 31 j 23:35	0° ∡ ¹		max. Earth dist.	-2333 Feb 20 j 12:33	12° ≈ 44'41	10.13337 AU
retrograde	-2339 Apr 05 j 03:00	6° ≯ 14'16		morning rise	-2333 Mar 10 j 05:02	15°≈01'28	
opposition	-2339 Jun 15 i 03:07	2° ∡ 52'56	0°38'28	C	-2333 Mar 10 j 00:24	15° ≈	
min. Earth dist.	-2339 Jun 15 j 15:06	2° ₹ 50'41	8.87451 AU	retrograde	-2333 Jun 25 j 23:08	23° ≈ 23'51	
Time Darwi Gibt.	-2339 Jul 31 j 19:55	30°RML	0.07.01110	opposition	-2333 Sep 02 j 12:14	19°≈53'49	-2°38'45
direct	-2339 Aug 23 j 19:04	29°M33'53		min. Earth dist.	-2333 Sep 02 j 11:43		8.07937 AU
direct	-2339 Sep 15 j 10:55	29 110 33 33		direct	-2333 Nov 07 j 20:08	16°≈28'33	0.07737 AC
evening set	-2339 Dec 01 j 09:14	6° ∡ 740'11		evening set	-2332 Feb 17 j 16:28	24°≈30'54	
evening set	-2339 Dec 01 J 09.14	0 X 40 11		evening set	-2332 Feb 17 J 10.28	24 ≈30 34	
conjunction	-2339 Dec 18 j 02:23	8° ∡ 140'37	0°17'10	conjunction	-2332 Mar 06 j 06:18	26° ≈ 48'17	-2°13'36
minimum elong	-2339 Dec 18 j 02:24	8° ₰ 40'37	0°17'07	minimum elong	-2332 Mar 06 j 06:16	26° ≈ 48'17	2°13'37
max. Earth dist.	-2339 Dec 17 j 12:52	8° ∡ 136'32	10.81363 AU	max. Earth dist.	-2332 Mar 06 j 09:01	26° ≈ 49'11	10.02922 AU
morning rise	-2338 Jan 03 j 22:47	10° ∡ °42'04		morning rise	-2332 Mar 24 j 00:49	29° ≈ 07'12	
retrograde	-2338 Apr 17 j 22:21	18° ∡ 07'53		Č	-2332 Mar 30 j 22:51	0°) €	
opposition	-2338 Jun 27 j 18:08	14° ∡ ¹44'58	0°02'33	retrograde	-2332 Jul 09 j 22:01	7°) € 37'12	
min. Earth dist.	-2338 Jun 28 j 05:03	14° ∡ 742'54	8.74786 AU	opposition	-2332 Sep 15 j 22:04	4°) €06'25	-2°52'45
desc. node	-2338 Jul 23 j 22:27	12° 🖈 52'56	0.74700 AC	min. Earth dist.	-2332 Sep 15 j 18:26	4°)(07'10	7.98883 AU
	-2338 Sep 04 j 20:14	11° × ⁷ 25'15		direct		0° ₩ 39'58	1.90003 AU
direct					-2332 Nov 20 j 22:56		
evening set	-2338 Dec 13 j 09:06	18° ∡ ³38'18		evening set	-2331 Mar 03 j 15:27	8° ¥ 51'14	
conjunction	-2338 Dec 30 j 05:15	20° ∡ ′41′16	-0°12'43	conjunction	-2331 Mar 21 j 09:18	11° ₩ 10'58	-2°20'31
minimum elong	-2338 Dec 30 j 05:14	20° х 41′16	0°12'47	minimum elong	-2331 Mar 21 j 09:17	11° ₩ 10'58	2°20'31
behind sun begin	-2338 Dec 30 j 00:46	20° ∡ ³39'54		max. Earth dist.	-2331 Mar 21 j 16:17	11°) 13′16	9.95260 AU
behind sun end	-2338 Dec 30 j 09:42	20° ∡ ¹42'37		morning rise	-2331 Apr 08 j 07:04	13°) €31'59	
max. Earth dist.	-2338 Dec 29 j 17:47		10.68087 AU	retrograde	-2331 Jul 25 j 00:41	22°\(\frac{1}{2}\)06'16	
morning rise	-2337 Jan 16 j 05:09	22° х 45'29	10.06067 AU	opposition	-2331 Sep 30 j 11:48	18° \(\frac{1}{35}\)'07	2056100
morning rise	v	22 x ・43 29		• •			
	-2337 Apr 09 j 22:38			min. Earth dist.	-2331 Sep 30 j 05:06	18° ¥ 36'31	7.92831 AU
retrograde	-2337 May 01 j 03:06	0°る22'21		direct	-2331 Dec 05 j 09:18	15°) €07'33	
	-2337 May 22 j 12:05	30°₹ ⋌ 7		evening set	-2330 Mar 18 j 22:50	23° ∺ 25'37	
opposition	-2337 Jul 10 j 16:04	26° ₹ 57'47					
min. Earth dist.	-2337 Jul 11 j 00:50		8.61003 AU	conjunction	-2330 Apr 05 j 20:34	25°) 47′07	
direct	-2337 Sep 17 j 03:26	23° ҂ 37'13		minimum elong	-2330 Apr 05 j 20:36	25°) 47′08	2°18'36
	-2337 Dec 17 j 16:28	0°る		max. Earth dist.	-2330 Apr 06 j 07:01	25°) € 50'35	9.90848 AU
evening set	-2337 Dec 25 j 19:28	0° る 58'33		morning rise	-2330 Apr 23 j 21:14	28° ∺ 09'36	
					-2330 May 08 j 09:14	0 ° Υ	
conjunction	-2336 Jan 11 j 18:44	3° ප 04'19	-0°42'46	retrograde	-2330 Aug 09 j 03:14	6° Ƴ 44'12	
minimum elong	-2336 Jan 11 j 18:43	3° ට 04'18	0°42'49	opposition	-2330 Oct 15 j 03:04	3° Y 13′08	-2°48'10
max. Earth dist.	-2336 Jan 11 j 09:09		10.53954 AU	min. Earth dist.	-2330 Oct 14 j 18:13		7.90140 AU
morning rise	-2336 Jan 28 j 22:20	5° ට 11'30	10.55751110	mm. Earth tist.	-2330 Dec 03 j 16:18	30° R ₩	7.50110710
retrograde	-2336 May 13 j 18:49	13°る00'12		direct	-2330 Dec 20 j 01:42	29°) 44'34	
•	-2336 Jul 22 j 21:27	9°ප34'02	1011122	unect		29 Λ 44 34 0° Υ	
opposition	-				-2329 Jan 05 j 11:26	0 1 8° Υ 06'47	
min. Earth dist. direct	-2336 Jul 23 j 04:00 -2336 Sep 28 j 17:49	9° る 32'46 6° る 12'27	8.46703 AU	evening set	-2329 Apr 03 j 11:12	85 1 064/	
evening set	-2335 Jan 06 j 17:36	13°る43'20		conjunction	-2329 Apr 21 j 12:19	10° Y 29'20	-2°07'44
				minimum elong	-2329 Apr 21 j 12:22	10° Υ 29'21	2°07'43
conjunction	-2335 Jan 23 j 20:08	15° ප 52'03	-1°11'35	max. Earth dist.	-2329 Apr 22 j 00:50	10° Υ 33'29	9.89907 AU
minimum elong	-2335 Jan 23 j 20:05	15°る52'02		morning rise	-2329 May 09 j 15:12	12° Υ 52'28	7.07707 TEC
max. Earth dist.	-2335 Jan 23 j 20:03		10.39620 AU	C		21° Y 23'32	
	-		10.39620 AU	retrograde	-2329 Aug 24 j 02:42		2020112
morning rise	-2335 Feb 10 j 03:35	18°る02'21		opposition	-2329 Oct 29 j 17:50	17° Y 53′00	
retrograde	-2335 May 27 j 20:18	26° る 03'07		min. Earth dist.	-2329 Oct 29 j 07:59	17° Y 55′03	7.90886 AU
opposition	-2335 Aug 05 j 10:57	22° る 35'27		direct	-2328 Jan 03 j 22:12	14° Y 23'42	
min. Earth dist.	-2335 Aug 05 j 15:22		8.32586 AU	evening set	-2328 Apr 18 j 00:44	22° Ƴ 47'11	
direct	-2335 Oct 11 j 16:06	19° る 12'42					
evening set	-2334 Jan 20 j 04:17	26° පි 54'00		conjunction	-2328 May 06 j 04:19	25° Y 09'58	
				minimum elong	-2328 May 06 j 04:23	25° Y 10′00	
conjunction	-2334 Feb 06 j 10:20	29° る 05'43		max. Earth dist.	-2328 May 06 j 17:53	25° Ƴ 14'27	9.92399 AU
minimum elong	-2334 Feb 06 j 10:16	29° る 05'42	1°37'34	morning rise	-2328 May 24 j 08:22	27° Y 32'54	
max. Earth dist.	-2334 Feb 06 j 05:10	29° る 04'04	10.25824 AU		-2328 Jun 12 j 23:25	9° 8	
	-2334 Feb 13 j 11:57	0° ≈		retrograde	-2328 Sep 06 j 19:59	5° 8 57'08	
morning rise	-2334 Feb 23 j 21:39	1° ≈ 19'07		opposition	-2328 Nov 12 j 05:56	2° 8 27'35	-2°00'40
retrograde	-2334 Jun 11 j 06:14	9° ≈ 31'26		min. Earth dist.	-2328 Nov 11 j 19:39		7.94987 AU
opposition	-2334 Aug 19 j 08:12	6° ≈ 02'27	-2°15'43		-2328 Dec 15 j 01:59	30° R Υ	
min. Earth dist.	-2334 Aug 19 j 10:26		8.19409 AU	direct	-2327 Jan 17 j 20:04	28° Y 57'53	
direct	-2334 Oct 25 j 00:52	2°≈38'27			-2327 Feb 20 j 10:52	0°8	
	-2334 Oct 23 j 00.32	10020120		. ,	-2327 PCU 20 j 10.32	70 🔾 10140	

-2327 May 03 j 12:11

evening set

7°**8**19'48

-2333 Feb 03 j 04:09 10°≈30'30

evening set

	ical year style is used: Th						ge /
conjunction	-2327 May 21 j 16:59	9° 8 41'54		opposition	-2321 Jan 31 j 17:24	23°©18'12	1946'52
minimum elong		9° 8 41'56		min. Earth dist.	-2321 Jan 31 j 17:24	23°519'11	8.66769 AU
Č	-2327 May 21 j 17:03	9° 8 46'28	9.98197 AU			19°952'05	8.00/09 AU
max. Earth dist.	-2327 May 22 j 06:56	12° 8 03'41	9.98197 AU	direct	-2321 Apr 12 j 00:20		
morning rise	-2327 Jun 08 j 20:58	15° 8		evening set	-2321 Jul 26 j 14:00	27° © 27'08	
	-2327 Jul 02 j 19:57 -2327 Sep 21 j 04:34	20° 8 18'25			2221 A 12:21.42	209621154	1020120
retrograde		_	1024155	conjunction	-2321 Aug 12 j 21:43	29°531'54	
opposition	-2327 Nov 26 j 13:22	16° 8 50'10	8.02273 AU	minimum elong max. Earth dist.	-2321 Aug 12 j 21:40	29°531'53	
min. Earth dist.	-2327 Nov 26 j 03:02		8.022/3 AU	max. Earth dist.	-2321 Aug 13 j 02:29	29° ω 33°20	10.73637 AU
Ji	-2327 Dec 19 j 22:25 -2326 Feb 01 j 16:15	15°₹ ႘			-2321 Aug 16 j 18:44	1° Ω 35'08	
direct	-2326 Feb 01 j 16:15 -2326 Mar 17 j 00:38	13° 8 20'23		morning rise	-2321 Aug 30 j 00:21 -2321 Dec 07 j 01:58	8° Ω 43'40	
evening set	-2326 May 18 j 18:13	21° 8 38'01		retrograde opposition	-2321 Dec 07 j 01:38 -2320 Feb 13 j 06:02	5° Ω 24'41	2°13'24
evening set	-2320 Way 10 J 10.13	21 03601		min. Earth dist.	-2320 Feb 13 j 00:02 -2320 Feb 13 j 03:03	5°Ω25'16	8.80273 AU
conjunction	-2326 Jun 05 j 22:43	23° 8 58'32	0.52100	direct	-2320 Peb 13 j 03:03	1° Ω 59'47	6.60273 AU
minimum elong	-2326 Jun 05 j 22:46	23° 8 58'32		evening set	-2320 Apr 24 j 01:31 -2320 Aug 07 j 02:18	9° Ω 26'00	
max. Earth dist.	-2326 Jun 06 j 12:18	_	10.07004 AU	evening set	-2320 Aug 07 J 02.18	9 862000	
morning rise	-2326 Jun 24 j 01:05	26° 8 18'17	10.07004 AU	conjunction	-2320 Aug 24 j 04:41	11° Ω 27'40	1°57'55
morning risc	-2326 Jul 25 j 02:45	20 С 1817		minimum elong	-2320 Aug 24 j 04:41	$11^{\circ}\Omega 27'40$	1°57'57
retrograde	-2326 Oct 05 j 04:17	4° Ⅱ 21'40		max. Earth dist.	-2320 Aug 24 j 04:38		10.86489 AU
opposition	-2326 Dec 10 j 14:46	0° П 54'57	-0°44'47	morning rise	-2320 Sep 10 j 02:20	$13^{\circ}\Omega 27'55$	10.00 4 07 AC
min. Earth dist.	-2326 Dec 10 j 04:28		8.12335 AU	morning rise	-2320 Sep 10 j 02:20	15° Ω	
mm. Earth dist.	-2326 Dec 21 j 21:44	30°R ႘	0.12555710	retrograde	-2320 Dec 17 j 21:44	20° Ω 29'15	
direct	-2325 Feb 16 j 08:43	27° 8 25'24		opposition	-2319 Feb 24 j 12:39	17°Ω11'21	2°33'30
direct	-2325 Apr 12 j 15:08	0° Ⅱ		min. Earth dist.	-2319 Feb 24 j 11:19		8.92460 AU
evening set	-2325 Jun 02 j 15:55	5° Ⅱ 36'29		mm. Earth dist.	-2319 Mar 28 j 01:54	15°R Ω	0.92 100 110
e venning see	2525 Juli 02 j 15.55	3 4302)		direct	-2319 May 06 j 18:31	13° Ω 47'44	
conjunction	-2325 Jun 20 j 18:26	7° Ⅱ 54'34	-0°19'04	uncer	-2319 Jun 14 j 20:55	15° Ω	
minimum elong	-2325 Jun 20 j 18:27	7° П 54'35		evening set	-2319 Aug 19 j 04:39	21° Ω 05'54	
max. Earth dist.	-2325 Jun 21 j 07:17		10.18283 AU	evening sec	2317 Mag 17 J 0 1.37	21 000551	
morning rise	-2325 Jul 08 j 17:39	10° Ⅱ 11'32		conjunction	-2319 Sep 05 j 02:19	23° Ω 04'55	2°11'50
retrograde	-2325 Oct 18 j 18:06	18° Ⅱ 02'47		minimum elong	-2319 Sep 05 j 02:17	23° Ω 04'55	
opposition	-2325 Dec 24 j 08:57	14° Ⅲ 37'41	-0°03'11	max. Earth dist.	-2319 Sep 05 j 02:00	23° Ω 04'49	10.97779 AU
min. Earth dist.	-2325 Dec 23 j 22:42	14° Ⅱ 39'46	8.24558 AU	morning rise	-2319 Sep 21 j 19:28	25° Ω 02'38	
asc. node	-2324 Jan 22 j 11:23	12° Ⅲ 27′04			-2319 Nov 10 j 09:41	0° m)	
direct	-2324 Mar 01 j 19:09	11° Ⅱ 08'41		retrograde	-2319 Dec 29 j 12:34	1° m 58'23	
evening set	-2324 Jun 16 j 03:09	19° Ⅱ 11'36			-2318 Feb 18 j 13:41	30°R Ω	
				opposition	-2318 Mar 08 j 14:26	28° Ω 41'21	2°46'54
conjunction	-2324 Jul 04 j 02:19	21° Ⅱ 26'39		min. Earth dist.	-2318 Mar 08 j 14:59		9.02855 AU
minimum elong	-2324 Jul 04 j 02:18	21° Ⅲ 26'39	0°14'21	direct	-2318 May 19 j 02:29	25° Ω 19'01	
behind sun begin	-2324 Jul 03 j 23:07	21° II 25'39			-2318 Aug 08 j 02:16	0° Mp	
behind sun end	-2324 Jul 04 j 05:28	21° Ⅱ 27'38		evening set	-2318 Aug 30 j 22:27	2° Mp 30'08	
max. Earth dist.	-2324 Jul 04 j 14:18		10.31344 AU		2210 0 16:16.02	40 m 0 (150	202011.4
morning rise	-2324 Jul 21 j 21:08	23° Ⅱ 40′20		conjunction	-2318 Sep 16 j 16:03	4° M) 26'59	2°20'14
	-2324 Sep 22 j 11:17	0°©		minimum elong	-2318 Sep 16 j 16:02	4° M) 26'59	2°20'15
retrograde	-2324 Oct 30 j 21:38 -2324 Dec 09 j 00:04	1°519'26		max. Earth dist.	-2318 Sep 16 j 13:44		11.07096 AU
	3	30°RⅡ 27°₩56'01	0027117	morning rise	-2318 Oct 03 j 05:35	6° Mp 22'43	
opposition	-2323 Jan 05 j 19:20	27° Ⅲ 56'01 27° Ⅲ 57'54	0°37'17 8.38216 AU	retrograde	-2317 Jan 10 j 00:39 -2317 Mar 20 j 12:46	13° Mp 14'35	2°53'33
min. Earth dist. direct	-2323 Jan 05 j 09:55 -2323 Mar 15 j 22:02	27 Ⅲ 3734 24° Ⅲ 27'47	8.38210 AU	opposition min. Earth dist.	-2317 Mar 20 j 12:46	9° Mp 58'12 9° Mp 57'35	2 33 33 9.11099 AU
direct	-2323 Jun 10 j 00:11	0°95		direct	•	6° m 37'03	9.11099 AU
evening set	-2323 Jun 30 j 02:45	0 9 2°9521'36		evening set	-2317 May 31 j 04:35 -2317 Sep 11 j 09:06	13°Mp42'16	
evening set	-2323 Juli 30 J 02.43	2 3021 30		evening set	-2317 Sep 11 J 09.00	13 111/4210	
conjunction	-2323 Jul 17 j 21:25	4° © 33'16	0°45'56	conjunction	-2317 Sep 27 j 23:24	15° m 37'30	2°23'06
minimum elong	-2323 Jul 17 j 21:23	4° 9 33'15	0°46'00	minimum elong	-2317 Sep 27 j 23:24	15° m 37'30	2°23'07
max. Earth dist.	-2323 Jul 18 j 07:56		10.45421 AU	max. Earth dist.	-2317 Sep 27 j 17:59		11.14126 AU
morning rise	-2323 Aug 04 j 11:02	6°5543'24		morning rise	-2317 Oct 14 j 10:30	17° m ₂ 31'50	
retrograde	-2323 Nov 12 j 16:19	14° 5 011'04		retrograde	-2316 Jan 21 j 09:37	24° m/21'28	
opposition	-2322 Jan 18 j 22:04	10°5549'16	1°14'29	opposition	-2316 Mar 31 j 08:33	21° Mp 05'26	2°53'35
min. Earth dist.	-2322 Jan 18 j 14:27	10°950'46	8.52531 AU	min. Earth dist.	-2316 Mar 31 j 14:18	21° Mp 04'23	9.16911 AU
direct	-2322 Mar 29 j 15:35	7°\$22'01		direct	-2316 Jun 11 j 00:49	17° m) 45'23	
evening set	-2322 Jul 13 j 14:20	15°506'23		evening set	-2316 Sep 21 j 14:30	24° m/45'56	
Č	, in the second second			Č	. ,	•	
conjunction	-2322 Jul 31 j 03:41	17° © 14'33	1°14'25	conjunction	-2316 Oct 08 j 02:29	26° m 40'07	2°20'34
minimum elong	-2322 Jul 31 j 03:38	17° © 14'32	1°14'28	minimum elong	-2316 Oct 08 j 02:30	26° Mp 40° 07	2°20'35
max. Earth dist.	-2322 Jul 31 j 11:52	17° © 17'03	10.59746 AU	max. Earth dist.	-2316 Oct 07 j 18:29	26° M 37'47	11.18637 AU
morning rise	-2322 Aug 17 j 11:42	19° © 21'07		morning rise	-2316 Oct 24 j 12:10	28° m 33'38	
retrograde	-2322 Nov 25 j 01:41	26° © 38'30			-2316 Nov 06 j 10:59	0∘ ⊽	

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -2315 in astronomical counting style is the year 2316 BCE in historical counting style. -2315 Jan 31 j 18:52 5°**£**22'43 max. Earth dist. -2310 Dec 12 j 14:14 3°**∡**³30'51 10.90295 AU retrograde opposition -2315 Apr 12 j 02:49 2°**2**06'44 2°47'15 -2310 Dec 29 j 21:33 5°**х** 34'33 morning rise 2°**≏**05'26 12°**∡**′54'14 -2315 Apr 12 j 09:59 9.20091 AU -2309 Apr 12 j 11:32 min. Earth dist. retrograde -2309 Jun 22 j 08:24 0°19'05 -2315 May 13 j 11:25 30°R M 9°**∡**32'50 opposition 28° Mp 47'36 -2315 Jun 22 j 19:08 -2309 Jun 22 j 19:09 9°**х¹**30'49 8.84083 AU direct min. Earth dist. 6°**х** 14′13 -2315 Aug 01 j 04:01 0∘ଫ direct -2309 Aug 30 j 16:46 evening set -2315 Oct 02 j 16:15 5°**£**44'49 evening set -2309 Dec 08 j 06:13 13°**х** 22'34 15°**₹**19'49 max. Earth dist. -2309 Dec 24 j 11:10 10.77595 AU conjunction -2315 Oct 19 j 03:01 7°**£**38'31 2°12'53 minimum elong -2315 Oct 19 j 03:03 7°**₽**38'32 2°12'52 conjunction -2309 Dec 25 j 00:41 15°**х**⁴23'54 0°01'03 max. Earth dist. -2315 Oct 18 j 18:04 7°**♀**35'55 11.20474 AU minimum elong -2309 Dec 25 j 00:39 15°**х**⁴23'54 0°00'59 -2309 Dec 24 j 17:38 morning rise -2315 Nov 04 j 12:05 9°**£**31'48 behind sun begin 15°**х** 21'48 -2309 Dec 25 j 07:41 retrograde -2314 Feb 12 j 07:35 16°**≙**21'58 behind sun end 15°**х** 26′01 opposition -2314 Apr 23 j 21:13 13°**♀**05'46 2°34'51 desc. node -2308 Jan 06 j 21:02 16°**х** 57′12 min. Earth dist. -2314 Apr 24 j 05:23 13°**♀**04'17 9.20534 AU morning rise -2308 Jan 10 j 22:45 17°**∡**¹26'24 direct -2314 Jul 04 j 09:47 9°**£**47'24 retrograde -2308 Apr 24 j 10:02 24°**х** 56'31 evening set -2314 Oct 13 j 16:08 16°**-**42'35 opposition -2308 Jul 04 j 02:08 21°**渘**³33′29 -0°17'31 min. Earth dist. -2308 Jul 04 j 12:51 21°**∡**31′27 8.70601 AU 18°**∡**14′00 conjunction -2314 Oct 30 j 02:29 18°**≏**36'21 2°00'18 direct -2308 Sep 10 j 19:43 minimum elong -2314 Oct 30 j 02:32 18°**♀**36'22 2°00'17 evening set -2308 Dec 19 j 10:36 25°**х** 29′59 max. Earth dist. -2314 Oct 29 j 16:14 18°**♀**33'22 11.19574 AU morning rise -2314 Nov 15 j 11:56 20°**₽**29'58 conjunction -2307 Jan 05 i 08:02 27°**х** 34′00 -0°29′00 retrograde -2313 Feb 23 i 20:41 27°**£**22'52 -2307 Jan 05 i 08:00 27°**∡**34′00 0°29′04 minimum elong opposition -2313 May 05 j 16:50 24°**₽**06'09 2°16'46 max. Earth dist. -2307 Jan 04 i 19:35 27°**х** 30′11 10.63530 AU min. Earth dist. -2313 May 06 j 02:36 24°**₽**04'22 9.18234 AU morning rise -2307 Jan 22 j 09:47 29°**х** 39′23 -2313 Jul 15 j 21:14 20°**£**48'16 -2307 Jan 25 j 06:24 0°궁 direct -2313 Oct 24 j 16:15 27°**-**42'56 -2307 May 07 j 18:40 7°る21'05 retrograde evening set -2307 Jul 17 j 03:11 3°₹56'19 -0°54'32 opposition -2313 Nov 10 j 02:53 29°**♀**37'18 1°43'14 -2307 Jul 17 j 12:38 3°る54'30 8.56108 AU conjunction min. Earth dist. -2313 Nov 10 j 02:56 -2307 Sep 23 j 07:17 0°る35'45 minimum elong 29°**£**37'18 1°43'13 direct -2313 Nov 09 j 14:37 29°**♀**33'43 11.15973 AU -2306 Jan 01 j 02:02 max. Earth dist. 8°**る**00'45 evening set -2313 Nov 13 j 08:42 0°M 10°る07'42 -0°58'29 -2306 Jan 18 j 02:49 morning rise -2313 Nov 26 j 13:45 conjunction 1°M31'46 -2312 Mar 06 j 14:38 -2306 Jan 18 j 02:47 10°る07'41 0°58'33 retrograde 8°M28'58 minimum elong -2312 May 16 j 14:31 -2306 Jan 17 j 16:53 10°る04'36 10.48782 AU opposition 5°M11'28 1°53'30 max. Earth dist. -2312 May 17 j 01:51 -2306 Feb 04 j 08:17 min. Earth dist. 5°M09'24 9.13265 AU morning rise 12°**る**16'10 20°**る**09'59 direct -2312 Jul 26 j 11:19 1°M53'48 retrograde -2306 May 21 j 14:14 evening set -2312 Nov 03 j 18:11 8°M49'29 -2306 Jul 30 j 11:58 16°る43'28 -1°30'12 opposition min. Earth dist. -2306 Jul 30 j 19:02 16°る42'05 8.41334 AU conjunction -2312 Nov 20 j 05:57 10°M44'56 1°22'08 direct -2306 Oct 06 j 01:26 13°る21'38 -2312 Nov 20 j 06:00 10°M44'57 1°22'06 -2305 Jan 14 j 05:47 20°る56'46 minimum elong evening set -2312 Nov 19 j 16:52 10°M41'05 11.09772 AU max. Earth dist. -2312 Dec 06 j 18:53 12°ML40'47 -2305 Jan 31 j 10:08 23°る06'45 -1°25'54 morning rise conjunction -2312 Dec 27 j 19:38 -2305 Jan 31 j 10:04 23°る06'44 1°25'57 15°M minimum elong -2311 Mar 18 j 13:21 max. Earth dist. -2305 Jan 31 j 03:12 23°る04'33 10.34102 AU retrograde 19°M43'55 opposition -2311 May 28 j 15:39 16°M25'20 1°25'37 morning rise -2305 Feb 17 i 19:20 25°る18'22 min. Earth dist. -2311 May 29 j 03:09 16°M23'13 9.05763 AU -2305 Mar 31 j 11:01 0°≈ -2311 Jun 17 j 15:18 15°RM retrograde -2305 Jun 04 i 19:09 3°≈24'12 direct -2311 Aug 07 j 01:56 13°ML07'38 -2305 Aug 12 j 08:33 30°Rる -2311 Sep 24 j 12:27 15°M -2305 Aug 13 j 04:34 29° ප් 56'01 -2°02'24 opposition -2311 Nov 14 j 23:46 20°M05'53 min. Earth dist. -2305 Aug 13 i 08:38 29°る55'13 8.27041 AU evening set direct -2305 Oct 19 j 04:44 26°る32'46 -2311 Dec 01 j 13:23 22°M02'53 0°57'34 -2305 Dec 21 j 13:36 0°**≈** conjunction minimum elong -2311 Dec 01 j 13:25 22°ML02'53 0°57'31 evening set -2304 Jan 27 j 22:33 4°≈18'41 max. Earth dist. -2311 Dec 01 j 00:42 21°M59'07 11.01131 AU -2311 Dec 18 j 04:48 24°M00'31 conjunction -2304 Feb 14 j 06:30 6°≈31'43 -1°49'31 morning rise -2310 Feb 20 j 04:23 0°×7 minimum elong -2304 Feb 14 j 06:27 6°≈31'42 1°49'33 1°**∡**11'12 -2304 Feb 14 j 02:21 6°≈30'23 10.20278 AU retrograde -2310 Mar 30 j 20:33 max. Earth dist. -2310 May 09 j 09:12 -2304 Mar 02 j 19:27 30°RM morning rise 8°≈46'24 -2310 Jun 09 j 21:18 -2304 Apr 29 j 20:39 opposition 27°M51'17 0°53'51 15°≈ -2304 Jun 18 j 08:36 min. Earth dist. -2310 Jun 10 j 08:16 27°M49'15 8.95941 AU retrograde 17°≈03'17 direct -2310 Aug 18 j 20:27 24°M33'16 -2304 Aug 07 j 19:25 15°R≈ -2310 Nov 12 j 12:10 0°**∡** opposition -2304 Aug 26 j 04:31 13°≈33'41 -2°28'54 evening set -2310 Nov 26 j 11:11 1°**х** 35′42 min. Earth dist. -2304 Aug 26 j 05:52 13°**≈**33'25 8.14019 AU direct -2304 Oct 31 j 17:11 10°≈08'57 -2310 Dec 13 j 03:03 3°**∡**³34'41 0°30'14 -2303 Jan 15 j 16:33 15°**≈** conjunction -2310 Dec 13 j 03:04 3°**∡**34'41 0°30'11 -2303 Feb 10 j 04:08 minimum elong evening set 18°≈05'39

Attantian astronom	riaal room strola is maad. Th			untina atrila ia tha rican	2204 DCE in historical a	aumtima atrola	
	nical year style is used: The -2303 Feb 27 j 15:51	e year -2303 i 20°≈21'36		minimum elong		17° 8 28'07	1907!11
conjunction				•	-2297 May 30 j 03:42		
minimum elong	-2303 Feb 27 j 15:48	20°≈21'35		max. Earth dist.	-2297 May 30 j 19:14	_	10.00851 AU
max. Earth dist.	-2303 Feb 27 j 14:46		10.08121 AU	morning rise	-2297 Jun 17 j 06:57	19° 8 49'07	
morning rise	-2303 Mar 17 j 08:31	22°≈39'08		retrograde	-2297 Sep 29 j 00:22	27° 8 58'43	
	-2303 May 28 j 23:36	0°)		opposition	-2297 Dec 04 j 09:23	24° 8 30'40	
retrograde	-2303 Jul 03 j 05:13	1° ∺ 05'12		min. Earth dist.	-2297 Dec 03 j 21:36	_	8.05736 AU
	-2303 Aug 07 j 15:18	30° ₹ ≈		direct	-2296 Feb 09 j 19:06	21° 8 00'29	
opposition	-2303 Sep 09 j 11:08	27° ≈ 34′29	-2°47'26	evening set	-2296 May 26 j 00:34	29° 8 15'23	
min. Earth dist.	-2303 Sep 09 j 09:58	27° ≈ 34'43	8.03046 AU		-2296 May 31 j 21:02	Π $^{\circ}0$	
direct	-2303 Nov 14 j 14:35	24° ≈ 08'16					
	-2302 Feb 06 j 21:30	0°) €		conjunction	-2296 Jun 13 j 04:26	1° Ⅱ 34'56	-0°35'01
evening set	-2302 Feb 24 j 21:23	2°) 14′57		minimum elong	-2296 Jun 13 j 04:28	1° Ⅱ 34'56	0°34'58
e venning see	2502100 2., 21.25	2 /(1.0)		max. Earth dist.	-2296 Jun 13 j 19:53		10.11296 AU
conjunction	-2302 Mar 14 j 13:07	4°) 33'31	2010122	morning rise	-2296 Jul 01 j 05:18	3° П 53'29	10.112/0710
	3	4°\(\frac{7}{33'31}\)		_	•	11° I 51'08	
minimum elong	-2302 Mar 14 j 13:05			retrograde	-2296 Oct 11 j 19:37		0022102
max. Earth dist.	-2302 Mar 14 j 15:28	4°) ₹34'18	9.98380 AU	opposition	-2296 Dec 17 j 07:23	8° Ⅱ 24'49	
morning rise	-2302 Apr 01 j 09:24	6° ¥ 53'33		min. Earth dist.	-2296 Dec 16 j 20:24		8.17312 AU
retrograde	-2302 Jul 18 j 06:17	15° ¥ 25'56		direct	-2295 Feb 23 j 08:41	4° Ⅱ 55'11	
opposition	-2302 Sep 23 j 22:44	11° ¥ 54'30	-2°56'04	evening set	-2295 Jun 09 j 17:20	13° Ⅱ 02'36	
min. Earth dist.	-2302 Sep 23 j 19:12	11° ∺ 55'14	7.94805 AU				
direct	-2302 Nov 28 j 21:39	8° ∺ 26'55		conjunction	-2295 Jun 27 j 18:20	15° Ⅱ 19'19	-0°01'34
evening set	-2301 Mar 12 j 00:37	16°) 41′57		minimum elong	-2295 Jun 27 j 18:21	15° Ⅱ 19'20	0°01'30
Ç	J			behind sun begin	-2295 Jun 27 j 11:02	15° Ⅱ 17'02	
conjunction	-2301 Mar 29 j 20:22	19°) 02'42	-2°20'44	behind sun end	-2295 Jun 28 j 01:40	15° Ⅱ 21'38	
minimum elong	-2301 Mar 29 j 20:22	19°) €02'42		max. Earth dist.	-2295 Jun 28 j 08:10		10.23920 AU
max. Earth dist.	-2301 Mar 30 j 02:15	19° H 04'39	9.91686 AU	asc. node	-2295 Jul 14 j 22:28	17° Ⅱ 29'29	10.23720 AC
	·		9.91080 AU		,		
morning rise	-2301 Apr 16 j 19:52	21°\(\frac{1}{2}24'38		morning rise	-2295 Jul 15 j 15:29	17° Ⅱ 34'47	
retrograde	-2301 Aug 02 j 08:10	29° ¥ 59'41		retrograde	-2295 Oct 25 j 03:43	25° Ⅱ 20'07	
opposition	-2301 Oct 08 j 13:16	26° ¥ 28′01		opposition	-2295 Dec 30 j 21:43	21° Ⅱ 55'42	0°18'19
min. Earth dist.	-2301 Oct 08 j 07:24		7.89835 AU	min. Earth dist.	-2295 Dec 30 j 11:52	21° I 57'41	8.30721 AU
direct	-2301 Dec 13 j 12:09	22° ¥ 59'17		direct	-2294 Mar 09 j 15:54	18° Ⅱ 26'54	
	-2300 Mar 16 j 00:03	0 ° Υ		evening set	-2294 Jun 23 j 23:06	26° Ⅱ 25'39	
evening set	-2300 Mar 26 j 10:41	1° Ƴ 20'14					
				conjunction	-2294 Jul 11 j 19:58	28° Ⅲ 39'04	0°31'12
conjunction	-2300 Apr 13 j 10:13	3° Ƴ 42'31	-2°14'08	minimum elong	-2294 Jul 11 j 19:56	28° Ⅲ 39'04	0°31'15
minimum elong	-2300 Apr 13 j 10:15	3° Y 42'32	2°14'06	max. Earth dist.	-2294 Jul 12 j 07:30	28°∏42'41	10.37958 AU
max. Earth dist.	-2300 Apr 13 j 19:40	3° Y 45'40	9.88499 AU		-2294 Jul 22 j 14:59	0ಂತಿ	
morning rise	-2300 May 01 j 12:20	6° Υ 05'37	7.004777110	morning rise	-2294 Jul 29 j 12:19	0° © 51'03	
	, ,	14° Υ 39'24		Č	-2294 Nov 07 j 02:31	8° 9 24'31	
retrograde	-2300 Aug 16 j 08:30	14 γ 39 24 11° γ 07'58	2020145	retrograde			0°57'21
opposition	-2300 Oct 22 j 04:41	11-10/38			2202 1 12:04.20		
min. Earth dist.	2200 0 4 21 : 20 21	1100000142		opposition	-2293 Jan 13 j 04:29	5°901'57	
direct	-2300 Oct 21 j 20:21	11° Y 09'43	7.88479 AU	min. Earth dist.	-2293 Jan 12 j 19:41	5° © 03'42	8.45181 AU
	-2300 Dec 27 j 07:32	7° Ƴ 38'22		min. Earth dist. direct	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27	5° © 03'42 1° © 34'17	
evening set				min. Earth dist.	-2293 Jan 12 j 19:41	5° © 03'42	
evening set	-2300 Dec 27 j 07:32	7° Υ 38'22 16° Υ 02'13	7.88479 AU	min. Earth dist. direct	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27	5° © 03'42 1° © 34'17	
conjunction	-2300 Dec 27 j 07:32	7° Ƴ 38'22	7.88479 AU	min. Earth dist. direct	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27	5° © 03'42 1° © 34'17	8.45181 AU
	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00	7° Υ 38'22 16° Υ 02'13	7.88479 AU -1°58'48	min. Earth dist. direct evening set	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49	5°\$03'42 1°\$34'17 9°\$23'38	8.45181 AU 1°01'23
conjunction	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00 -2299 Apr 29 j 02:40	7° Υ 38'22 16° Υ 02'13 18° Υ 25'14	7.88479 AU -1°58'48	min. Earth dist. direct evening set conjunction	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49 -2293 Jul 25 j 08:41	5°903'42 1°934'17 9°923'38 11°933'34 11°933'33	8.45181 AU 1°01'23
conjunction minimum elong	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00 -2299 Apr 29 j 02:40 -2299 Apr 29 j 02:44	7° Υ 38'22 16° Υ 02'13 18° Υ 25'14 18° Υ 25'15	7.88479 AU -1°58'48 1°58'46	min. Earth dist. direct evening set conjunction minimum elong	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49 -2293 Jul 25 j 08:41 -2293 Jul 25 j 08:38	5°903'42 1°934'17 9°923'38 11°933'34 11°933'33	8.45181 AU 1°01'23 1°01'26
conjunction minimum elong max. Earth dist. morning rise	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00 -2299 Apr 29 j 02:40 -2299 Apr 29 j 02:44 -2299 Apr 29 j 15:15 -2299 May 17 j 06:32	7° Y 38'22 16° Y 02'13 18° Y 25'14 18° Y 25'15 18° Y 29'24	7.88479 AU -1°58'48 1°58'46	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49 -2293 Jul 25 j 08:41 -2293 Jul 25 j 08:38 -2293 Jul 25 j 18:07 -2293 Aug 11 j 19:36	5°903'42 1°934'17 9°923'38 11°933'34 11°933'33 11°936'29	8.45181 AU 1°01'23 1°01'26
conjunction minimum elong max. Earth dist. morning rise retrograde	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00 -2299 Apr 29 j 02:40 -2299 Apr 29 j 02:44 -2299 Apr 29 j 15:15 -2299 May 17 j 06:32 -2299 Aug 31 j 04:30	7°Y38'22 16°Y02'13 18°Y25'14 18°Y25'15 18°Y29'24 20°Y48'37 29°Y17'18	7.88479 AU -1°58'48 1°58'46 9.89041 AU	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49 -2293 Jul 25 j 08:41 -2293 Jul 25 j 08:38 -2293 Jul 25 j 18:07 -2293 Aug 11 j 19:36 -2293 Nov 19 j 16:41	5°\$03'42 1°\$34'17 9°\$23'38 11°\$33'34 11°\$36'29 13°\$41'55 21°\$04'30	8.45181 AU 1°01'23 1°01'26 10.52630 AU
conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00 -2299 Apr 29 j 02:40 -2299 Apr 29 j 02:44 -2299 Apr 29 j 15:15 -2299 May 17 j 06:32 -2299 Aug 31 j 04:30 -2299 Nov 05 j 18:33	7°Y38'22 16°Y02'13 18°Y25'14 18°Y25'15 18°Y29'24 20°Y48'37 29°Y17'18 25°Y46'34	7.88479 AU -1°58'48 1°58'46 9.89041 AU -2°15'31	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49 -2293 Jul 25 j 08:41 -2293 Jul 25 j 08:38 -2293 Jul 25 j 18:07 -2293 Aug 11 j 19:36 -2293 Nov 19 j 16:41 -2292 Jan 26 j 03:40	5°\$03'42 1°\$34'17 9°\$23'38 11°\$33'34 11°\$33'33 11°\$36'29 13°\$41'55 21°\$04'30 17°\$43'41	8.45181 AU 1°01'23 1°01'26 10.52630 AU 1°32'13
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00 -2299 Apr 29 j 02:40 -2299 Apr 29 j 02:44 -2299 Apr 29 j 15:15 -2299 May 17 j 06:32 -2299 Aug 31 j 04:30 -2299 Nov 05 j 18:33 -2299 Nov 05 j 08:11	7°Y38'22 16°Y02'13 18°Y25'14 18°Y25'15 18°Y29'24 20°Y48'37 29°Y17'18 25°Y46'34 25°Y48'44	7.88479 AU -1°58'48 1°58'46 9.89041 AU	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49 -2293 Jul 25 j 08:41 -2293 Jul 25 j 08:38 -2293 Jul 25 j 18:07 -2293 Aug 11 j 19:36 -2293 Nov 19 j 16:41 -2292 Jan 26 j 03:40 -2292 Jan 25 j 20:01	5°S03'42 1°S34'17 9°S23'38 11°S33'34 11°S36'29 13°S41'55 21°S04'30 17°S43'41 17°S45'11	8.45181 AU 1°01'23 1°01'26 10.52630 AU
conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00 -2299 Apr 29 j 02:40 -2299 Apr 29 j 02:44 -2299 Apr 29 j 15:15 -2299 May 17 j 06:32 -2299 Aug 31 j 04:30 -2299 Nov 05 j 18:33 -2299 Nov 05 j 08:11 -2298 Jan 11 j 04:47	7°Y38'22 16°Y02'13 18°Y25'14 18°Y25'15 18°Y29'24 20°Y48'37 29°Y17'18 25°Y46'34 25°Y48'44 22°Y16'24	7.88479 AU -1°58'48 1°58'46 9.89041 AU -2°15'31	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49 -2293 Jul 25 j 08:41 -2293 Jul 25 j 08:38 -2293 Jul 25 j 18:07 -2293 Aug 11 j 19:36 -2293 Nov 19 j 16:41 -2292 Jan 26 j 03:40 -2292 Jan 25 j 20:01 -2292 Apr 05 j 04:07	5°\$03'42 1°\$34'17 9°\$23'38 11°\$33'34 11°\$33'33 11°\$36'29 13°\$41'55 21°\$04'30 17°\$43'41 17°\$45'11 14°\$17'18	8.45181 AU 1°01'23 1°01'26 10.52630 AU 1°32'13
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00 -2299 Apr 29 j 02:40 -2299 Apr 29 j 02:44 -2299 Apr 29 j 15:15 -2299 May 17 j 06:32 -2299 Aug 31 j 04:30 -2299 Nov 05 j 18:33 -2299 Nov 05 j 08:11 -2298 Jan 11 j 04:47 -2298 Apr 21 j 08:06	7°Y38'22 16°Y02'13 18°Y25'14 18°Y25'15 18°Y29'24 20°Y48'37 29°Y17'18 25°Y46'34 25°Y48'44 22°Y16'24 0°8	7.88479 AU -1°58'48 1°58'46 9.89041 AU -2°15'31	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49 -2293 Jul 25 j 08:41 -2293 Jul 25 j 08:38 -2293 Jul 25 j 18:07 -2293 Aug 11 j 19:36 -2293 Nov 19 j 16:41 -2292 Jan 26 j 03:40 -2292 Jan 25 j 20:01	5°S03'42 1°S34'17 9°S23'38 11°S33'34 11°S36'29 13°S41'55 21°S04'30 17°S43'41 17°S45'11	8.45181 AU 1°01'23 1°01'26 10.52630 AU 1°32'13
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00 -2299 Apr 29 j 02:40 -2299 Apr 29 j 02:44 -2299 Apr 29 j 15:15 -2299 May 17 j 06:32 -2299 Aug 31 j 04:30 -2299 Nov 05 j 18:33 -2299 Nov 05 j 08:11 -2298 Jan 11 j 04:47	7°Y38'22 16°Y02'13 18°Y25'14 18°Y25'15 18°Y29'24 20°Y48'37 29°Y17'18 25°Y46'34 25°Y48'44 22°Y16'24	7.88479 AU -1°58'48 1°58'46 9.89041 AU -2°15'31	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49 -2293 Jul 25 j 08:41 -2293 Jul 25 j 08:38 -2293 Jul 25 j 18:07 -2293 Aug 11 j 19:36 -2293 Nov 19 j 16:41 -2292 Jan 26 j 03:40 -2292 Jan 25 j 20:01 -2292 Apr 05 j 04:07 -2292 Jul 19 j 22:35	5°903'42 1°934'17 9°923'38 11°933'34 11°933'33 11°936'29 13°941'55 21°904'30 17°943'41 17°945'11 14°917'18 21°957'09	8.45181 AU 1°01'23 1°01'26 10.52630 AU 1°32'13 8.59921 AU
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00 -2299 Apr 29 j 02:40 -2299 Apr 29 j 02:44 -2299 Apr 29 j 15:15 -2299 May 17 j 06:32 -2299 Aug 31 j 04:30 -2299 Nov 05 j 18:33 -2299 Nov 05 j 08:11 -2298 Apr 21 j 08:06 -2298 Apr 26 j 13:13	7°Y38'22 16°Y'02'13 18°Y25'14 18°Y25'15 18°Y29'24 20°Y48'37 29°Y17'18 25°Y46'34 25°Y46'44 22°Y16'24 0°8 0°840'04	7.88479 AU -1°58'48 1°58'46 9.89041 AU -2°15'31 7.90827 AU	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49 -2293 Jul 25 j 08:41 -2293 Jul 25 j 08:38 -2293 Jul 25 j 18:07 -2293 Aug 11 j 19:36 -2293 Nov 19 j 16:41 -2292 Jan 26 j 03:40 -2292 Jan 25 j 20:01 -2292 Apr 05 j 04:07 -2292 Jul 19 j 22:35 -2292 Aug 06 j 09:05	5°\$03'42 1°\$34'17 9°\$23'38 11°\$33'34 11°\$33'33 11°\$36'29 13°\$41'55 21°\$04'30 17°\$43'41 17°\$45'11 14°\$17'18 21°\$57'09	8.45181 AU 1°01'23 1°01'26 10.52630 AU 1°32'13 8.59921 AU 1°27'46
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00 -2299 Apr 29 j 02:40 -2299 Apr 29 j 02:44 -2299 Apr 29 j 15:15 -2299 May 17 j 06:32 -2299 Aug 31 j 04:30 -2299 Nov 05 j 18:33 -2299 Nov 05 j 08:11 -2298 Jan 11 j 04:47 -2298 Apr 21 j 08:06 -2298 Apr 26 j 13:13	7°Y38'22 16°Y'02'13 18°Y25'14 18°Y25'15 18°Y29'24 20°Y48'37 29°Y17'18 25°Y46'34 25°Y46'34 22°Y16'24 0°8 0°840'04 3°802'53	7.88479 AU -1°58'48 1°58'46 9.89041 AU -2°15'31 7.90827 AU	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	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49 -2293 Jul 25 j 08:41 -2293 Jul 25 j 08:38 -2293 Jul 25 j 18:07 -2293 Aug 11 j 19:36 -2293 Nov 19 j 16:41 -2292 Jan 26 j 03:40 -2292 Jan 25 j 20:01 -2292 Apr 05 j 04:07 -2292 Jul 19 j 22:35 -2292 Aug 06 j 09:05 -2292 Aug 06 j 09:05 -2292 Aug 06 j 09:02	5°903'42 1°934'17 9°923'38 11°933'34 11°936'29 13°941'55 21°904'30 17°943'41 17°945'11 14°917'18 21°957'09 24°903'35 24°903'34	1°01'23 1°01'26 10.52630 AU 1°32'13 8.59921 AU 1°27'46 1°27'49
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00 -2299 Apr 29 j 02:40 -2299 Apr 29 j 02:44 -2299 Apr 29 j 15:15 -2299 May 17 j 06:32 -2299 Aug 31 j 04:30 -2299 Nov 05 j 18:33 -2299 Nov 05 j 08:11 -2298 Apr 21 j 08:06 -2298 Apr 26 j 13:13 -2298 May 14 j 17:53 -2298 May 14 j 17:57	7°Y38'22 16°Y02'13 18°Y25'14 18°Y25'15 18°Y29'24 20°Y48'37 29°Y17'18 25°Y46'34 25°Y46'44 22°Y16'24 0°8 0°840'04 3°802'53 3°802'54	7.88479 AU -1°58'48 1°58'46 9.89041 AU -2°15'31 7.90827 AU -1°35'54 1°35'51	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.	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49 -2293 Jul 25 j 08:41 -2293 Jul 25 j 08:38 -2293 Jul 25 j 18:07 -2293 Aug 11 j 19:36 -2293 Nov 19 j 16:41 -2292 Jan 26 j 03:40 -2292 Jan 25 j 20:01 -2292 Apr 05 j 04:07 -2292 Jul 19 j 22:35 -2292 Aug 06 j 09:05 -2292 Aug 06 j 09:05 -2292 Aug 06 j 09:02 -2292 Aug 06 j 16:38	5°903'42 1°934'17 9°923'38 11°933'34 11°933'33 11°936'29 13°941'55 21°904'30 17°943'41 17°945'11 14°917'18 21°957'09 24°903'35 24°903'34 24°905'53	8.45181 AU 1°01'23 1°01'26 10.52630 AU 1°32'13 8.59921 AU 1°27'46
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00 -2299 Apr 29 j 02:40 -2299 Apr 29 j 02:44 -2299 Apr 29 j 15:15 -2299 May 17 j 06:32 -2299 Aug 31 j 04:30 -2299 Nov 05 j 18:33 -2299 Nov 05 j 08:11 -2298 Apr 21 j 08:06 -2298 Apr 26 j 13:13 -2298 May 14 j 17:53 -2298 May 14 j 17:57 -2298 May 15 j 08:30	7°Y38'22 16°Y02'13 18°Y25'14 18°Y25'15 18°Y29'24 20°Y48'37 29°Y17'18 25°Y46'34 25°Y46'34 22°Y16'24 0°8 0°840'04 3°802'53 3°802'54 3°807'42	7.88479 AU -1°58'48 1°58'46 9.89041 AU -2°15'31 7.90827 AU	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	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49 -2293 Jul 25 j 08:41 -2293 Jul 25 j 08:38 -2293 Jul 25 j 18:07 -2293 Aug 11 j 19:36 -2293 Nov 19 j 16:41 -2292 Jan 26 j 03:40 -2292 Jan 26 j 03:40 -2292 Apr 05 j 04:07 -2292 Jul 19 j 22:35 -2292 Aug 06 j 09:05 -2292 Aug 06 j 09:05 -2292 Aug 06 j 16:38 -2292 Aug 23 j 14:20	5°903'42 1°934'17 9°923'38 11°933'34 11°933'33 11°936'29 13°941'55 21°904'30 17°943'41 17°945'11 14°917'18 21°957'09 24°903'35 24°903'35 24°903'35 24°905'53 26°908'27	1°01'23 1°01'26 10.52630 AU 1°32'13 8.59921 AU 1°27'46 1°27'49
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00 -2299 Apr 29 j 02:40 -2299 Apr 29 j 02:44 -2299 Apr 29 j 15:15 -2299 May 17 j 06:32 -2299 Aug 31 j 04:30 -2299 Nov 05 j 18:33 -2299 Nov 05 j 08:11 -2298 Apr 21 j 08:06 -2298 Apr 26 j 13:13 -2298 May 14 j 17:53 -2298 May 14 j 17:57	7°Y38'22 16°Y02'13 18°Y25'14 18°Y25'15 18°Y29'24 20°Y48'37 29°Y17'18 25°Y46'34 25°Y46'34 22°Y16'24 0°8 0°840'04 3°802'53 3°802'54 3°807'42 5°825'33	7.88479 AU -1°58'48 1°58'46 9.89041 AU -2°15'31 7.90827 AU -1°35'54 1°35'51	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.	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49 -2293 Jul 25 j 08:41 -2293 Jul 25 j 08:38 -2293 Jul 25 j 18:07 -2293 Aug 11 j 19:36 -2293 Nov 19 j 16:41 -2292 Jan 26 j 03:40 -2292 Jan 25 j 20:01 -2292 Apr 05 j 04:07 -2292 Jul 19 j 22:35 -2292 Aug 06 j 09:05 -2292 Aug 06 j 09:05 -2292 Aug 06 j 09:02 -2292 Aug 06 j 16:38	5°\$03'42 1°\$34'17 9°\$23'38 11°\$33'34 11°\$33'33 11°\$36'29 13°\$41'55 21°\$04'30 17°\$43'41 17°\$45'11 14°\$17'18 21°\$57'09 24°\$03'35 24°\$03'34 24°\$05'53 26°\$08'27 0°\$Ω	1°01'23 1°01'26 10.52630 AU 1°32'13 8.59921 AU 1°27'46 1°27'49
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00 -2299 Apr 29 j 02:40 -2299 Apr 29 j 02:44 -2299 Apr 29 j 15:15 -2299 May 17 j 06:32 -2299 Aug 31 j 04:30 -2299 Nov 05 j 18:33 -2299 Nov 05 j 08:11 -2298 Apr 21 j 08:06 -2298 Apr 26 j 13:13 -2298 May 14 j 17:53 -2298 May 14 j 17:57 -2298 May 15 j 08:30	7°Y38'22 16°Y02'13 18°Y25'14 18°Y25'15 18°Y29'24 20°Y48'37 29°Y17'18 25°Y46'34 25°Y46'34 22°Y16'24 0°8 0°840'04 3°802'53 3°802'54 3°807'42	7.88479 AU -1°58'48 1°58'46 9.89041 AU -2°15'31 7.90827 AU -1°35'54 1°35'51	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.	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49 -2293 Jul 25 j 08:41 -2293 Jul 25 j 08:38 -2293 Jul 25 j 18:07 -2293 Aug 11 j 19:36 -2293 Nov 19 j 16:41 -2292 Jan 26 j 03:40 -2292 Jan 26 j 03:40 -2292 Apr 05 j 04:07 -2292 Jul 19 j 22:35 -2292 Aug 06 j 09:05 -2292 Aug 06 j 09:05 -2292 Aug 06 j 16:38 -2292 Aug 23 j 14:20	5°903'42 1°934'17 9°923'38 11°933'34 11°933'33 11°936'29 13°941'55 21°904'30 17°943'41 17°945'11 14°917'18 21°957'09 24°903'35 24°903'35 24°903'35 24°905'53 26°908'27	1°01'23 1°01'26 10.52630 AU 1°32'13 8.59921 AU 1°27'46 1°27'49
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00 -2299 Apr 29 j 02:40 -2299 Apr 29 j 02:44 -2299 Apr 29 j 15:15 -2299 May 17 j 06:32 -2299 Aug 31 j 04:30 -2299 Nov 05 j 18:33 -2299 Nov 05 j 08:11 -2298 Apr 21 j 08:06 -2298 Apr 26 j 13:13 -2298 May 14 j 17:53 -2298 May 14 j 17:57 -2298 May 15 j 08:30 -2298 Jun 01 j 22:12	7°Y38'22 16°Y02'13 18°Y25'14 18°Y25'15 18°Y29'24 20°Y48'37 29°Y17'18 25°Y46'34 25°Y46'34 22°Y16'24 0°8 0°840'04 3°802'53 3°802'54 3°807'42 5°825'33	7.88479 AU -1°58'48 1°58'46 9.89041 AU -2°15'31 7.90827 AU -1°35'54 1°35'51 9.93260 AU	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	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49 -2293 Jul 25 j 08:41 -2293 Jul 25 j 08:38 -2293 Jul 25 j 18:07 -2293 Aug 11 j 19:36 -2293 Nov 19 j 16:41 -2292 Jan 26 j 03:40 -2292 Jan 26 j 03:40 -2292 Apr 05 j 04:07 -2292 Aug 06 j 09:05 -2292 Aug 06 j 09:05 -2292 Aug 06 j 09:02 -2292 Aug 06 j 16:38 -2292 Aug 23 j 14:20 -2292 Sep 27 j 20:31	5°\$03'42 1°\$34'17 9°\$23'38 11°\$33'34 11°\$33'33 11°\$36'29 13°\$41'55 21°\$04'30 17°\$43'41 17°\$45'11 14°\$17'18 21°\$57'09 24°\$03'35 24°\$03'34 24°\$05'53 26°\$08'27 0°\$Ω	1°01'23 1°01'26 10.52630 AU 1°32'13 8.59921 AU 1°27'46 1°27'49
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	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00 -2299 Apr 29 j 02:40 -2299 Apr 29 j 02:44 -2299 Apr 29 j 15:15 -2299 May 17 j 06:32 -2299 Aug 31 j 04:30 -2299 Nov 05 j 18:33 -2299 Nov 05 j 08:11 -2298 Jan 11 j 04:47 -2298 Apr 21 j 08:06 -2298 Apr 26 j 13:13 -2298 May 14 j 17:53 -2298 May 14 j 17:57 -2298 May 15 j 08:30 -2298 Jun 01 j 22:12 -2298 Sep 14 j 18:15	7°Y38'22 16°Y02'13 18°Y25'14 18°Y25'15 18°Y29'24 20°Y48'37 29°Y17'18 25°Y46'34 25°Y46'34 22°Y16'24 0°8 0°840'04 3°802'53 3°802'54 3°807'42 5°825'33 13°845'51	7.88479 AU -1°58'48 1°58'46 9.89041 AU -2°15'31 7.90827 AU -1°35'54 1°35'51 9.93260 AU	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	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49 -2293 Jul 25 j 08:41 -2293 Jul 25 j 08:38 -2293 Jul 25 j 18:07 -2293 Aug 11 j 19:36 -2293 Nov 19 j 16:41 -2292 Jan 26 j 03:40 -2292 Jan 26 j 03:40 -2292 Jul 19 j 22:35 -2292 Aug 06 j 09:05 -2292 Aug 06 j 09:02 -2292 Aug 06 j 16:38 -2292 Aug 23 j 14:20 -2292 Sep 27 j 20:31 -2292 Nov 30 j 22:22	5°\$03'42 1°\$34'17 9°\$23'38 11°\$33'34 11°\$33'33 11°\$36'29 13°\$41'55 21°\$04'30 17°\$43'41 17°\$45'11 14°\$17'18 21°\$57'09 24°\$03'35 24°\$03'34 24°\$05'53 26°\$08'27 0°\$\Omega\$ 3°\$\Omega\$21'25	8.45181 AU 1°01'23 1°01'26 10.52630 AU 1°32'13 8.59921 AU 1°27'46 1°27'49 10.67190 AU
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 opposition	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00 -2299 Apr 29 j 02:40 -2299 Apr 29 j 02:44 -2299 Apr 29 j 15:15 -2299 May 17 j 06:32 -2299 Aug 31 j 04:30 -2299 Nov 05 j 18:33 -2299 Nov 05 j 08:11 -2298 Jan 11 j 04:47 -2298 Apr 21 j 08:06 -2298 Apr 26 j 13:13 -2298 May 14 j 17:53 -2298 May 14 j 17:57 -2298 May 15 j 08:30 -2298 Jun 01 j 22:12 -2298 Nov 20 j 04:37 -2298 Nov 19 j 17:05	7°Y38'22 16°Y02'13 18°Y25'14 18°Y25'15 18°Y29'24 20°Y48'37 29°Y17'18 25°Y46'34 25°Y46'34 22°Y16'24 0°8 0°840'04 3°802'53 3°802'54 3°807'42 5°825'33 13°845'51 10°816'17	7.88479 AU -1°58'48 1°58'46 9.89041 AU -2°15'31 7.90827 AU -1°35'54 1°35'51 9.93260 AU -1°42'50	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 opposition	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49 -2293 Jul 25 j 08:41 -2293 Jul 25 j 08:38 -2293 Jul 25 j 18:07 -2293 Aug 11 j 19:36 -2293 Nov 19 j 16:41 -2292 Jan 26 j 03:40 -2292 Jan 25 j 20:01 -2292 Apr 05 j 04:07 -2292 Jul 19 j 22:35 -2292 Aug 06 j 09:05 -2292 Aug 06 j 09:02 -2292 Aug 06 j 16:38 -2292 Aug 23 j 14:20 -2292 Sep 27 j 20:31 -2292 Nov 30 j 22:22 -2291 Feb 06 j 19:43	5°\$03'42 1°\$34'17 9°\$23'38 11°\$33'34 11°\$33'33 11°\$36'29 13°\$41'55 21°\$04'30 17°\$43'41 17°\$45'11 14°\$17'18 21°\$57'09 24°\$03'35 24°\$03'34 24°\$05'53 26°\$08'27 0°\$\Omega\$ 3°\$\Omega\$21'25 0°\$\Omega\$02'09	8.45181 AU 1°01'23 1°01'26 10.52630 AU 1°32'13 8.59921 AU 1°27'46 1°27'49 10.67190 AU 2°01'38
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 opposition min. Earth dist. direct	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00 -2299 Apr 29 j 02:40 -2299 Apr 29 j 02:44 -2299 Apr 29 j 15:15 -2299 May 17 j 06:32 -2299 Aug 31 j 04:30 -2299 Nov 05 j 18:33 -2299 Nov 05 j 08:11 -2298 Jan 11 j 04:47 -2298 Apr 21 j 08:06 -2298 Apr 26 j 13:13 -2298 May 14 j 17:53 -2298 May 14 j 17:57 -2298 May 15 j 08:30 -2298 Jun 01 j 22:12 -2298 Sep 14 j 18:15 -2298 Nov 20 j 04:37 -2298 Nov 19 j 17:05 -2297 Jan 26 j 00:58	7°Y38'22 16°Y02'13 18°Y25'14 18°Y25'15 18°Y29'24 20°Y48'37 29°Y17'18 25°Y46'34 25°Y46'34 22°Y16'24 0°8 0°840'04 3°802'53 3°802'54 3°807'42 5°825'33 13°845'51 10°816'17 10°818'41 6°845'55	7.88479 AU -1°58'48 1°58'46 9.89041 AU -2°15'31 7.90827 AU -1°35'54 1°35'51 9.93260 AU -1°42'50	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 opposition minimum elong max. Earth dist.	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49 -2293 Jul 25 j 08:41 -2293 Jul 25 j 08:38 -2293 Jul 25 j 18:07 -2293 Aug 11 j 19:36 -2293 Nov 19 j 16:41 -2292 Jan 26 j 03:40 -2292 Jan 26 j 03:40 -2292 Apr 05 j 04:07 -2292 Aug 06 j 09:05 -2292 Aug 06 j 09:05 -2292 Aug 06 j 09:02 -2292 Aug 06 j 16:38 -2292 Aug 23 j 14:20 -2292 Sep 27 j 20:31 -2292 Nov 30 j 22:22 -2291 Feb 06 j 19:43 -2291 Feb 06 j 14:12 -2291 Feb 07 j 06:54	5°\$03'42 1°\$34'17 9°\$23'38 11°\$33'34 11°\$33'33 11°\$36'29 13°\$41'55 21°\$04'30 17°\$45'11 14°\$17'18 21°\$57'09 24°\$03'35 24°\$03'35 24°\$03'34 24°\$05'53 26°\$08'27 0°\$\Omega\$0\$\text{2}\$0\text{2}\$\text{0}\$\t	8.45181 AU 1°01'23 1°01'26 10.52630 AU 1°32'13 8.59921 AU 1°27'46 1°27'49 10.67190 AU 2°01'38
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 opposition min. Earth dist.	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00 -2299 Apr 29 j 02:40 -2299 Apr 29 j 02:44 -2299 Apr 29 j 15:15 -2299 May 17 j 06:32 -2299 Aug 31 j 04:30 -2299 Nov 05 j 08:11 -2298 Jan 11 j 04:47 -2298 Apr 21 j 08:06 -2298 Apr 26 j 13:13 -2298 May 14 j 17:53 -2298 May 14 j 17:57 -2298 May 14 j 17:57 -2298 May 15 j 08:30 -2298 Jun 01 j 22:12 -2298 Sep 14 j 18:15 -2298 Nov 20 j 04:37 -2298 Nov 19 j 17:05 -2297 Jan 26 j 00:58 -2297 May 11 j 22:31	7°Y38'22 16°Y02'13 18°Y25'14 18°Y25'15 18°Y29'24 20°Y48'37 29°Y17'18 25°Y46'34 22°Y16'24 0°8 0°840'04 3°802'53 3°802'54 3°807'42 5°825'33 13°845'51 10°816'17 10°818'41 6°845'55 15°806'28	7.88479 AU -1°58'48 1°58'46 9.89041 AU -2°15'31 7.90827 AU -1°35'54 1°35'51 9.93260 AU -1°42'50	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 opposition	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49 -2293 Jul 25 j 08:41 -2293 Jul 25 j 08:38 -2293 Jul 25 j 18:07 -2293 Aug 11 j 19:36 -2293 Nov 19 j 16:41 -2292 Jan 26 j 03:40 -2292 Jan 25 j 20:01 -2292 Apr 05 j 04:07 -2292 Jul 19 j 22:35 -2292 Aug 06 j 09:05 -2292 Aug 06 j 09:05 -2292 Aug 06 j 16:38 -2292 Aug 23 j 14:20 -2292 Sep 27 j 20:31 -2292 Nov 30 j 22:22 -2291 Feb 06 j 19:43 -2291 Feb 07 j 06:54 -2291 Apr 18 j 09:05	5°\$03'42 1°\$34'17 9°\$23'38 11°\$33'34 11°\$33'33 11°\$36'29 13°\$41'55 21°\$04'30 17°\$43'41 17°\$45'11 14°\$17'18 21°\$57'09 24°\$03'35 24°\$03'34 24°\$05'53 26°\$08'27 0°\$\Omega\$0\tilde{Omega}0	8.45181 AU 1°01'23 1°01'26 10.52630 AU 1°32'13 8.59921 AU 1°27'46 1°27'49 10.67190 AU 2°01'38
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 opposition min. Earth dist. direct	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00 -2299 Apr 29 j 02:40 -2299 Apr 29 j 02:44 -2299 Apr 29 j 15:15 -2299 May 17 j 06:32 -2299 Aug 31 j 04:30 -2299 Nov 05 j 18:33 -2299 Nov 05 j 08:11 -2298 Jan 11 j 04:47 -2298 Apr 21 j 08:06 -2298 Apr 26 j 13:13 -2298 May 14 j 17:53 -2298 May 14 j 17:57 -2298 May 15 j 08:30 -2298 Jun 01 j 22:12 -2298 Sep 14 j 18:15 -2298 Nov 20 j 04:37 -2298 Nov 19 j 17:05 -2297 Jan 26 j 00:58	7°Y38'22 16°Y02'13 18°Y25'14 18°Y25'15 18°Y29'24 20°Y48'37 29°Y17'18 25°Y46'34 25°Y46'34 22°Y16'24 0°8 0°840'04 3°802'53 3°802'54 3°807'42 5°825'33 13°845'51 10°816'17 10°818'41 6°845'55	7.88479 AU -1°58'48 1°58'46 9.89041 AU -2°15'31 7.90827 AU -1°35'54 1°35'51 9.93260 AU -1°42'50	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 opposition minimum elong max. Earth dist. morning rise	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49 -2293 Jul 25 j 08:41 -2293 Jul 25 j 08:38 -2293 Jul 25 j 18:07 -2293 Aug 11 j 19:36 -2293 Nov 19 j 16:41 -2292 Jan 26 j 03:40 -2292 Jan 25 j 20:01 -2292 Apr 05 j 04:07 -2292 Jul 19 j 22:35 -2292 Aug 06 j 09:05 -2292 Aug 06 j 09:05 -2292 Aug 06 j 16:38 -2292 Aug 23 j 14:20 -2292 Aug 23 j 14:20 -2292 Sep 27 j 20:31 -2292 Nov 30 j 22:22 -2291 Feb 06 j 19:43 -2291 Feb 07 j 06:54 -2291 Apr 18 j 09:05 -2291 Jun 24 j 05:20	5°\$03'42 1°\$34'17 9°\$23'38 11°\$33'34 11°\$33'33 11°\$36'29 13°\$41'55 21°\$04'30 17°\$43'41 17°\$45'11 14°\$17'18 21°\$57'09 24°\$03'35 24°\$03'34 24°\$05'53 26°\$08'27 0°\$\Omega\$0\$'\Omega\$0'\O	8.45181 AU 1°01'23 1°01'26 10.52630 AU 1°32'13 8.59921 AU 1°27'46 1°27'49 10.67190 AU 2°01'38
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 opposition min. Earth dist. direct	-2300 Dec 27 j 07:32 -2299 Apr 11 j 00:00 -2299 Apr 29 j 02:40 -2299 Apr 29 j 02:44 -2299 Apr 29 j 15:15 -2299 May 17 j 06:32 -2299 Aug 31 j 04:30 -2299 Nov 05 j 08:11 -2298 Jan 11 j 04:47 -2298 Apr 21 j 08:06 -2298 Apr 26 j 13:13 -2298 May 14 j 17:53 -2298 May 14 j 17:57 -2298 May 14 j 17:57 -2298 May 15 j 08:30 -2298 Jun 01 j 22:12 -2298 Sep 14 j 18:15 -2298 Nov 20 j 04:37 -2298 Nov 19 j 17:05 -2297 Jan 26 j 00:58 -2297 May 11 j 22:31	7°Y38'22 16°Y02'13 18°Y25'14 18°Y25'15 18°Y29'24 20°Y48'37 29°Y17'18 25°Y46'34 22°Y16'24 0°8 0°840'04 3°802'53 3°802'54 3°807'42 5°825'33 13°845'51 10°816'17 10°818'41 6°845'55 15°806'28	7.88479 AU -1°58'48 1°58'46 9.89041 AU -2°15'31 7.90827 AU -1°35'54 1°35'51 9.93260 AU -1°42'50 7.96713 AU	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 opposition minimum elong max. Earth dist.	-2293 Jan 12 j 19:41 -2293 Mar 23 j 14:27 -2293 Jul 07 j 16:49 -2293 Jul 25 j 08:41 -2293 Jul 25 j 08:38 -2293 Jul 25 j 18:07 -2293 Aug 11 j 19:36 -2293 Nov 19 j 16:41 -2292 Jan 26 j 03:40 -2292 Jan 25 j 20:01 -2292 Apr 05 j 04:07 -2292 Jul 19 j 22:35 -2292 Aug 06 j 09:05 -2292 Aug 06 j 09:05 -2292 Aug 06 j 16:38 -2292 Aug 23 j 14:20 -2292 Sep 27 j 20:31 -2292 Nov 30 j 22:22 -2291 Feb 06 j 19:43 -2291 Feb 07 j 06:54 -2291 Apr 18 j 09:05	5°\$03'42 1°\$34'17 9°\$23'38 11°\$33'34 11°\$33'33 11°\$36'29 13°\$41'55 21°\$04'30 17°\$43'41 17°\$45'11 14°\$17'18 21°\$57'09 24°\$03'35 24°\$03'34 24°\$05'53 26°\$08'27 0°\$\Omega\$0\tilde{Omega}0	8.45181 AU 1°01'23 1°01'26 10.52630 AU 1°32'13 8.59921 AU 1°27'46 1°27'49 10.67190 AU 2°01'38

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -2291 in astronomical counting style is the year 2292 BCE in historical counting style. -2291 Aug 18 j 21:58 6°Ω10'56 1°49'28 conjunction -2285 Oct 25 i 12:25 13°**£**51'51 2°06'34 conjunction -2291 Aug 18 j 21:55 6°Ω10'56 -2285 Oct 25 j 12:27 13°**£**51'52 2°06'33 minimum elong 1°49'30 minimum elong -2291 Aug 19 j 02:59 6°**Ω**12'27 10.80947 AU -2285 Oct 25 j 00:37 11.19733 AU max. Earth dist. max. Earth dist. 13°<u>₽</u>48'26 -2291 Sep 04 j 21:49 -2285 Nov 10 j 21:46 8°**Ω**12'35 15°**-**45′21 morning rise morning rise -2291 Nov 24 j 14:58 15°€ retrograde -2284 Feb 18 j 22:44 22°**2**37'06 2°25'40 -2291 Dec 12 j 22:14 15°**Ω**17'26 -2284 Apr 29 j 17:03 retrograde opposition 19°**≙**20'33 9.18820 AU -2291 Dec 31 j 07:10 15°RΩ min. Earth dist. -2284 Apr 30 j 03:37 19°**£**18'37 16°**≏**02'14 opposition -2290 Feb 19 j 05:40 11°**Ω**59'30 2°24'49 direct -2284 Jul 10 j 01:47 min. Earth dist. -2290 Feb 19 j 03:07 11°**Ω**59'59 8.87398 AU evening set -2284 Oct 19 j 02:02 22°**£**57'22 direct -2290 May 01 j 05:06 8°**Ω**35'46 -2290 Aug 05 j 14:28 15°€ conjunction -2284 Nov 04 j 12:36 24°**₽**51'31 1°51'31 -2284 Nov 04 j 12:38 1°51'29 evening set -2290 Aug 14 j 00:34 15°**Ω**57'55 minimum elong 24°**♀**51'31 -2284 Nov 04 j 00:17 max. Earth dist. 24°**2**47'55 11.16931 AU conjunction -2290 Aug 31 j 00:22 17°**Ω**58'09 2°05'56 morning rise -2284 Nov 20 j 22:45 26°**-**45'37 minimum elong -2290 Aug 31 j 00:20 17°**Ω**58'08 2°05'58 -2284 Dec 21 j 09:32 0°M max. Earth dist. -2290 Aug 31 j 01:41 17°**Ω**58'32 10.93286 AU retrograde -2283 Mar 01 j 16:01 3°ML41'00 morning rise -2290 Sep 16 j 19:29 19°**Ω**57'00 opposition -2283 May 11 j 13:44 0°M23'34 2°04'44 retrograde -2290 Dec 24 j 14:01 26°**Ω**55′22 min. Earth dist. -2283 May 12 j 00:43 0°M21'33 9.14628 AU opposition -2289 Mar 03 j 10:15 23°**Ω**38′27 2°41'21 -2283 May 16 j 22:51 30°R <u>Ω</u> min. Earth dist. -2289 Mar 03 j 10:37 23°**Ω**38'23 8.98884 AU direct -2283 Jul 21 j 16:06 27°**♀**05'26 direct -2289 May 13 j 17:35 20°**Ω**16′00 -2283 Sep 21 j 09:02 0°M evening set -2289 Aug 25 j 22:48 27°**Ω**30'32 evening set -2283 Oct 30 i 03:04 4°ML00'52 conjunction -2289 Sep 11 j 18:05 29°Ω28'19 2°16'55 conjunction -2283 Nov 15 i 14:25 5°M55'54 1°32'12 -2289 Sep 11 j 18:03 29°Ω28'19 2°16'56 -2283 Nov 15 j 14:28 5°M55'55 1°32'10 minimum elong minimum elong max. Earth dist. -2289 Sep 11 j 15:40 29°**Ω**27'37 11.03675 AU max. Earth dist. -2283 Nov 15 i 01:29 5°ML52'06 11.11485 AU -2289 Sep 16 j 05:47 -2283 Dec 02 j 02:14 0° m morning rise 7°M.51'11 -2289 Sep 28 j 09:20 -2282 Mar 13 j 12:33 14°ML51'47 morning rise 1° m 24'56 retrograde -2288 Jan 05 j 03:01 8° m 18'34 opposition -2282 May 23 j 13:29 11°ML33'14 1°38'53 retrograde 5° Mp 02'22 $2^{\circ}51'08$ -2288 Mar 14 j 10:25 -2282 May 24 j 01:08 min. Earth dist. 11°M31'06 9.07873 AU opposition 5° Mp 01'55 min. Earth dist. -2288 Mar 14 j 12:54 9.08176 AU direct -2282 Aug 02 j 04:56 8°ML15'03 -2282 Nov 08 j 11:54 15°M -2288 May 25 j 00:44 1° Mp 41'06 direct 8° m/49'11 -2288 Sep 05 j 13:03 -2282 Nov 10 j 06:52 15°M12'23 evening set evening set 10° Mp 45'06 $2^{\circ}22'20$ 1°09'08 -2288 Sep 22 j 04:50 -2282 Nov 26 j 19:35 17°MJ08'46 conjunction conjunction 10° Mp 45'06 $2^{\circ}22'21$ -2282 Nov 26 j 19:37 minimum elong -2288 Sep 22 j 04:49 minimum elong 17°ML08'47 1°09'06 -2282 Nov 26 j 05:22 max. Earth dist. -2288 Sep 22 j 00:06 10° Mp 43'44 11.11694 AU max. Earth dist. 17°M04'34 11.03590 AU morning rise -2288 Oct 08 j 17:01 12° Mp 40'02 morning rise -2282 Dec 13 j 09:54 19°M05'42 retrograde -2287 Jan 15 j 15:13 19° m 30'43 retrograde -2281 Mar 25 j 15:14 26°M13'12 -2287 Mar 26 j 07:34 16° Mp 14'56 2°54'13 opposition -2281 Jun 04 j 17:11 22°M53'20 1°08'46 opposition min. Earth dist. -2287 Mar 26 j 12:08 16° Mp 14'05 9.14929 AU min. Earth dist. -2281 Jun 05 j 05:33 22°M51'02 8.98789 AU -2287 Jun 06 j 00:16 12° m 54'44 19°M34'50 direct direct -2281 Aug 13 j 21:33 -2287 Sep 16 j 21:14 -2281 Nov 21 j 15:32 26°M35'42 evening set 19° m 57'35 evening set -2287 Oct 03 j 10:21 21° m 52'14 2°22'17 -2281 Dec 08 j 06:19 28°M33'55 0°42'58 conjunction conjunction -2281 Dec 08 i 06:20 minimum elong -2287 Oct 03 i 10:21 21° m 52'14 2°22'17 minimum elong 28°M33'56 0°42'55 max. Earth dist. -2287 Oct 03 i 03:27 21° m 50'13 11.17097 AU max. Earth dist. -2281 Dec 07 i 16:10 28°M29'42 10.93500 AU morning rise -2287 Oct 19 i 20:26 23° m 46'06 -2281 Dec 20 i 07:32 0°×7 -2287 Dec 31 i 03:39 0∘**⊽** morning rise -2281 Dec 24 i 23:35 0°**х** 32′56 -2286 Jan 27 j 00:54 0°**£**35'29 -2280 Apr 06 i 01:14 7°**∡**'48'50 retrograde retrograde -2286 Feb 23 j 08:12 30°R № -2280 Jun 16 i 01:41 4°**҂**27'30 0°35'13 opposition -2286 Apr 07 j 03:01 27° m 19'48 2°50'48 min. Earth dist. -2280 Jun 16 j 13:36 4°**₹**25'16 8.87680 AU opposition -2286 Apr 07 j 10:10 27° m 18'29 9.18987 AU direct -2280 Aug 24 j 17:21 1°**х** 08′29 min. Earth dist. direct -2286 Jun 17 j 18:53 24° m 00'28 evening set -2280 Dec 02 j 06:52 8°×14'36 -2286 Sep 19 j 04:48 0∘**⊽** max. Earth dist. -2280 Dec 18 j 11:32 10° ₹ 11'11 10.81556 AU -2286 Sep 28 j 01:05 0°**£**59'23 evening set conjunction -2280 Dec 19 j 00:14 10°**∡**15′01 0°14'30 -2286 Oct 14 j 12:19 2°**2**53'18 2°16'56 -2280 Dec 19 j 00:15 10°**₹**15′01 0°14'26 conjunction minimum elong -2286 Oct 14 j 12:20 -2280 Dec 18 j 20:56 10°**х** 14′02 minimum elong 2°**2**53'19 2°16'56 behind sun begin -2286 Oct 14 j 02:31 2°**≏**50'28 11.19790 AU -2280 Dec 19 j 03:34 10°**х** 16′00 max. Earth dist. behind sun end -2279 Jan 04 j 20:41 12°**х** 16′28 morning rise -2286 Oct 30 j 21:33 4°**₽**46'42 morning rise retrograde -2285 Feb 07 j 11:16 11°**£**36′27 retrograde -2279 Apr 18 j 20:23 19°**х** 42′16 desc. node opposition -2285 Apr 18 j 21:52 8°**₽**20'30 2°41'10 -2279 Jun 21 j 00:22 16°**₹**53'58 min. Earth dist. -2285 Apr 19 j 07:25 8°**£**18'45 9.20292 AU opposition -2279 Jun 28 j 16:26 16°**х** 19'19 -0°00'45 direct -2285 Jun 29 j 11:16 5°**2**01'48 min. Earth dist. -2279 Jun 29 j 02:41 16°**х** 17′22 8.74944 AU

-2285 Oct 09 j 02:01

evening set

11°**≏**58'06

direct

evening set

-2279 Sep 05 j 18:36

-2279 Dec 14 j 06:44

12°**х** 59'38

20°**∡**12'32

Attention astronom	ical year style is used: Th	o woor 2270 i	n actronomical ac	unting style is the year	2200 DCE in historical a	ounting style	
conjunction	-2279 Dec 31 j 02:57	22° × 15'30		conjunction	-2272 Mar 22 j 07:49	12° H 45'46	2020138
minimum elong	-2279 Dec 31 j 02:56	22° x 15'30		minimum elong	-2272 Mar 22 j 07:49	12 X 45 46	
2	,		0-15/26	U	3	12° X 43'46	9.94996 AU
behind sun begin	-2279 Dec 31 j 00:44	22° 🖈 14'50		max. Earth dist.	-2272 Mar 22 j 14:38	15° H 06'51	9.94996 AU
behind sun end	-2279 Dec 31 j 05:08	22° 🖈 16'10	10 (0205 ATT	morning rise	-2272 Apr 09 j 05:39		
max. Earth dist.	-2279 Dec 30 j 15:30		10.68205 AU	retrograde	-2272 Jul 26 j 00:04	23°) 41'13	2055152
morning rise	-2278 Jan 17 j 02:56	24° х 19'43		opposition	-2272 Oct 01 j 09:30	20°) 10′03	
	-2278 Mar 13 j 17:31	0°궁 1°궁56'36		min. Earth dist.	-2272 Oct 01 j 02:48	16° H 42'24	7.92568 AU
retrograde	-2278 May 02 j 02:24			direct	-2272 Dec 06 j 06:51		
• • •	-2278 Jun 21 j 19:18	30°₹ ৴	0027140	evening set	-2271 Mar 19 j 21:30	25° ₭ 00'48	
opposition	-2278 Jul 11 j 14:15	28° 🗷 32'00			2271 4 06:10.17	270\/22122	2010104
min. Earth dist.	-2278 Jul 11 j 22:47	28° 🗷 30'22	8.61087 AU	conjunction	-2271 Apr 06 j 19:17	27° ₩ 22'22	
direct	-2278 Sep 18 j 01:15	25° ∡ 11′26		minimum elong	-2271 Apr 06 j 19:19	27° ¥ 22′23	2°18'03
	-2278 Dec 04 j 20:33	0°る		max. Earth dist.	-2271 Apr 07 j 05:09	27° ¥ 25'38	9.90605 AU
evening set	-2278 Dec 26 j 17:08	2° る 32'40		morning rise	-2271 Apr 24 j 20:05	29°) 44′55	
	2277 12:1621	40-700105	0045115		-2271 Apr 26 j 18:41	0° Υ	
conjunction	-2277 Jan 12 j 16:24	4°₹38'25		retrograde	-2271 Aug 10 j 02:01	8° Y 19'34	20.4510.4
minimum elong	-2277 Jan 12 j 16:22	4° る 38'25		opposition	-2271 Oct 16 j 01:00	4° Y 48'30	
max. Earth dist.	-2277 Jan 12 j 06:02		10.54004 AU	min. Earth dist.	-2271 Oct 15 j 16:32	4° Y 50'16	7.89936 AU
morning rise	-2277 Jan 29 j 20:12	6° ප 45'38		direct	-2271 Dec 20 j 23:59	1° Y 19'53	
retrograde	-2277 May 15 j 17:49	14° පි 34'20		evening set	-2270 Apr 04 j 10:00	9° Ƴ 42'22	
opposition	-2277 Jul 24 j 19:33	11° ⋜ 08'09					
min. Earth dist.	-2277 Jul 25 j 02:38	11° る 06'46	8.46719 AU	conjunction	-2270 Apr 22 j 11:11	12° Y ′04'58	
direct	-2277 Sep 30 j 14:17	7° る 46'30		minimum elong	-2270 Apr 22 j 11:14	12° Y 05′00	
evening set	-2276 Jan 08 j 15:18	15° る 17'24		max. Earth dist.	-2270 Apr 22 j 23:00	12° Y 08′54	9.89772 AU
				morning rise	-2270 May 10 j 14:16	14° Y 28′10	
conjunction	-2276 Jan 25 j 17:53	17° පි 26'06		retrograde	-2270 Aug 25 j 00:33	22° Y 59'07	
minimum elong	-2276 Jan 25 j 17:50	17° ට 26'05	1°13'53	opposition	-2270 Oct 30 j 15:52	19° Ƴ 28'37	-2°27'20
max. Earth dist.	-2276 Jan 25 j 09:26	17° ට 23'26	10.39602 AU	min. Earth dist.	-2270 Oct 30 j 06:32		7.90829 AU
morning rise	-2276 Feb 12 j 01:32	19° ට 36'25		direct	-2269 Jan 04 j 20:48	15° Y 59'15	
retrograde	-2276 May 28 j 17:17	27° る 37'13		evening set	-2269 Apr 19 j 23:44	24° Y 22'49	
opposition	-2276 Aug 06 j 08:52	24° ප 09'31	-1°48'24				
min. Earth dist.	-2276 Aug 06 j 14:04	24° පි 08'29	8.32530 AU	conjunction	-2269 May 08 j 03:22	26° Y 45'38	-1°46'52
direct	-2276 Oct 12 j 14:39	20° ප් 46'41		minimum elong	-2269 May 08 j 03:26	26° Ƴ 45'39	1°46'49
evening set	-2275 Jan 21 j 02:03	28° る 28'05		max. Earth dist.	-2269 May 08 j 16:13	26° Ƴ 49'52	9.92427 AU
	-2275 Feb 02 j 03:57	0° ≈		morning rise	-2269 May 26 j 07:36	29° Ƴ 08'33	
					-2269 Jun 02 j 00:22	9° 8	
conjunction	-2275 Feb 07 j 08:14	0° ≈ 39'49	-1°39'24	retrograde	-2269 Sep 08 j 17:11	7° 8 32'29	
minimum elong	-2275 Feb 07 j 08:11	0° ≈ 39'48	1°39'26	opposition	-2269 Nov 14 j 03:50	4° 8 02'58	-1°58'10
max. Earth dist.	-2275 Feb 07 j 03:13	0° ≈ 38'12	10.25727 AU	min. Earth dist.	-2269 Nov 13 j 17:56	4° 8 05'02	7.95077 AU
morning rise	-2275 Feb 24 j 19:36	2° ≈ 53'13		direct	-2268 Jan 19 j 18:21	0° 8 33'13	
retrograde	-2275 Jun 12 j 02:44	11° ≈ 05'37		evening set	-2268 May 04 j 11:04	8° 8 55'04	
opposition	-2275 Aug 20 j 05:56	70 - 26124				0 05501	
min. Earth dist.		/° ≈ 36′34	-2°17'45		, ,	0 033 01	
direct	-2275 Aug 20 j 08:25	7°≈36'34 7°≈36'04	-2°17'45 8.19279 AU	conjunction	-2268 May 22 j 15:55	11° 8 17'11	-1°20'32
	-2275 Aug 20 j 08:25 -2275 Oct 25 j 23:50			conjunction minimum elong			
evening set		7° ≈ 36'04			-2268 May 22 j 15:55	11° 8 17'11	
evening set	-2275 Oct 25 j 23:50	7°≈36'04 4°≈12'30		minimum elong max. Earth dist.	-2268 May 22 j 15:55 -2268 May 22 j 15:59	11° 8 17'11 11° 8 17'12	1°20'29
evening set	-2275 Oct 25 j 23:50	7°≈36'04 4°≈12'30	8.19279 AU	minimum elong	-2268 May 22 j 15:55 -2268 May 22 j 15:59 -2268 May 23 j 05:17	11° 8 17'11 11° 8 17'12 11° 8 21'33	1°20'29
	-2275 Oct 25 j 23:50 -2274 Feb 04 j 01:59	7°≈36'04 4°≈12'30 12°≈04'40	8.19279 AU	minimum elong max. Earth dist.	-2268 May 22 j 15:55 -2268 May 22 j 15:59 -2268 May 23 j 05:17 -2268 Jun 09 j 19:57	11°817'11 11°817'12 11°821'33 13°838'56	1°20'29
conjunction	-2275 Oct 25 j 23:50 -2274 Feb 04 j 01:59 -2274 Feb 21 j 12:01	7°≈36'04 4°≈12'30 12°≈04'40 14°≈19'22 14°≈19'21	8.19279 AU -2°00'09	minimum elong max. Earth dist. morning rise	-2268 May 22 j 15:55 -2268 May 22 j 15:59 -2268 May 23 j 05:17 -2268 Jun 09 j 19:57 -2268 Jun 20 j 13:02	11°817'11 11°817'12 11°821'33 13°838'56 15°8	1°20'29 9.98332 AU
conjunction minimum elong	-2275 Oct 25 j 23:50 -2274 Feb 04 j 01:59 -2274 Feb 21 j 12:01 -2274 Feb 21 j 11:58	7°≈36'04 4°≈12'30 12°≈04'40 14°≈19'22 14°≈19'21	8.19279 AU -2°00'09 2°00'11	minimum elong max. Earth dist. morning rise retrograde	-2268 May 22 j 15:55 -2268 May 22 j 15:59 -2268 May 23 j 05:17 -2268 Jun 09 j 19:57 -2268 Jun 20 j 13:02 -2268 Sep 22 j 02:24	11°\dagger*17'11 11°\dagger*17'12 11°\dagger*21'33 13°\dagger*38'56 15°\dagger*21°\dagger*35'20 18°\dagger*25'08	1°20'29 9.98332 AU
conjunction minimum elong max. Earth dist.	-2275 Oct 25 j 23:50 -2274 Feb 04 j 01:59 -2274 Feb 21 j 12:01 -2274 Feb 21 j 11:58 -2274 Feb 21 j 11:06 -2274 Feb 26 j 17:13	7°≈36'04 4°≈12'30 12°≈04'40 14°≈19'22 14°≈19'21 14°≈19'04	8.19279 AU -2°00'09 2°00'11	minimum elong max. Earth dist. morning rise retrograde opposition	-2268 May 22 j 15:55 -2268 May 22 j 15:59 -2268 May 23 j 05:17 -2268 Jun 09 j 19:57 -2268 Jun 20 j 13:02 -2268 Sep 22 j 02:24 -2268 Nov 27 j 11:12 -2268 Nov 27 j 00:47	11°&17'11 11°&17'12 11°&21'33 13°&38'56 15°& 21°&53'20 18°&25'08 18°&27'17	1°20'29 9.98332 AU -1°21'57
conjunction minimum elong max. Earth dist. morning rise	-2275 Oct 25 j 23:50 -2274 Feb 04 j 01:59 -2274 Feb 21 j 12:01 -2274 Feb 21 j 11:58 -2274 Feb 21 j 11:06 -2274 Feb 26 j 17:13 -2274 Mar 11 j 03:01	7°≈36'04 4°≈12'30 12°≈04'40 14°≈19'22 14°≈19'04 15°≈ 16°≈35'43	8.19279 AU -2°00'09 2°00'11	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-2268 May 22 j 15:55 -2268 May 22 j 15:59 -2268 May 23 j 05:17 -2268 Jun 09 j 19:57 -2268 Jun 20 j 13:02 -2268 Sep 22 j 02:24 -2268 Nov 27 j 11:12 -2268 Nov 27 j 00:47 -2267 Jan 24 j 11:02	11°&17'11 11°&17'12 11°&21'33 13°&38'56 15°& 21°&53'20 18°&25'08 18°&27'17	1°20'29 9.98332 AU -1°21'57
conjunction minimum elong max. Earth dist. morning rise retrograde	-2275 Oct 25 j 23:50 -2274 Feb 04 j 01:59 -2274 Feb 21 j 12:01 -2274 Feb 21 j 11:58 -2274 Feb 21 j 11:06 -2274 Feb 26 j 17:13 -2274 Mar 11 j 03:01 -2274 Jun 26 j 20:47	7°≈36'04 4°≈12'30 12°≈04'40 14°≈19'22 14°≈19'21 14°≈19'04 15°≈	8.19279 AU -2°00'09 2°00'11 10.13166 AU	minimum elong max. Earth dist. morning rise retrograde opposition	-2268 May 22 j 15:55 -2268 May 22 j 15:59 -2268 May 23 j 05:17 -2268 Jun 09 j 19:57 -2268 Jun 20 j 13:02 -2268 Sep 22 j 02:24 -2268 Nov 27 j 11:12 -2268 Nov 27 j 00:47 -2267 Jan 24 j 11:02 -2267 Feb 02 j 14:54	11°&17'11 11°&17'12 11°&21'33 13°&38'56 15°& 21°&53'20 18°&25'08 18°&27'17 15°R& 14°&55'19	1°20'29 9.98332 AU -1°21'57
conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-2275 Oct 25 j 23:50 -2274 Feb 04 j 01:59 -2274 Feb 21 j 12:01 -2274 Feb 21 j 11:58 -2274 Feb 21 j 11:06 -2274 Feb 26 j 17:13 -2274 Mar 11 j 03:01 -2274 Jun 26 j 20:47 -2274 Sep 03 j 09:55	7°≈36'04 4°≈12'30 12°≈04'40 14°≈19'22 14°≈19'04 15°≈ 16°≈35'43 24°≈58'13 21°≈28'06	8.19279 AU -2°00'09 2°00'11 10.13166 AU -2°40'06	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-2268 May 22 j 15:55 -2268 May 22 j 15:59 -2268 May 23 j 05:17 -2268 Jun 09 j 19:57 -2268 Jun 20 j 13:02 -2268 Sep 22 j 02:24 -2268 Nov 27 j 11:12 -2268 Nov 27 j 00:47 -2267 Jan 24 j 11:02 -2267 Feb 02 j 14:54 -2267 Feb 11 j 18:43	11°&17'11 11°&17'12 11°&21'33 13°&38'56 15°& 21°&53'20 18°&25'08 18°&27'17 15°&& 14°&55'19 15°&	1°20'29 9.98332 AU -1°21'57
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-2275 Oct 25 j 23:50 -2274 Feb 04 j 01:59 -2274 Feb 21 j 12:01 -2274 Feb 21 j 11:58 -2274 Feb 21 j 11:06 -2274 Feb 26 j 17:13 -2274 Mar 11 j 03:01 -2274 Jun 26 j 20:47 -2274 Sep 03 j 09:55 -2274 Sep 03 j 09:05	7°≈36'04 4°≈12'30 12°≈04'40 14°≈19'22 14°≈19'04 15°≈ 16°≈35'43 24°≈58'13 21°≈28'06 21°≈28'16	8.19279 AU -2°00'09 2°00'11 10.13166 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-2268 May 22 j 15:55 -2268 May 22 j 15:59 -2268 May 23 j 05:17 -2268 Jun 09 j 19:57 -2268 Jun 20 j 13:02 -2268 Sep 22 j 02:24 -2268 Nov 27 j 11:12 -2268 Nov 27 j 00:47 -2267 Jan 24 j 11:02 -2267 Feb 02 j 14:54	11°&17'11 11°&17'12 11°&21'33 13°&38'56 15°& 21°&53'20 18°&25'08 18°&27'17 15°R& 14°&55'19	1°20'29 9.98332 AU -1°21'57
conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-2275 Oct 25 j 23:50 -2274 Feb 04 j 01:59 -2274 Feb 21 j 12:01 -2274 Feb 21 j 11:58 -2274 Feb 21 j 11:06 -2274 Feb 26 j 17:13 -2274 Mar 11 j 03:01 -2274 Jun 26 j 20:47 -2274 Sep 03 j 09:55 -2274 Sep 03 j 09:05 -2274 Nov 08 j 17:14	7°≈36'04 4°≈12'30 12°≈04'40 14°≈19'22 14°≈19'04 15°≈ 16°≈35'43 24°≈58'13 21°≈28'06	8.19279 AU -2°00'09 2°00'11 10.13166 AU -2°40'06	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-2268 May 22 j 15:55 -2268 May 22 j 15:59 -2268 May 23 j 05:17 -2268 Jun 09 j 19:57 -2268 Jun 20 j 13:02 -2268 Sep 22 j 02:24 -2268 Nov 27 j 11:12 -2268 Nov 27 j 00:47 -2267 Jan 24 j 11:02 -2267 Feb 02 j 14:54 -2267 Feb 11 j 18:43	11°&17'11 11°&17'12 11°&21'33 13°&38'56 15°& 21°&53'20 18°&25'08 18°&27'17 15°&& 14°&55'19 15°&	1°20'29 9.98332 AU -1°21'57 8.02428 AU
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-2275 Oct 25 j 23:50 -2274 Feb 04 j 01:59 -2274 Feb 21 j 12:01 -2274 Feb 21 j 11:58 -2274 Feb 21 j 11:06 -2274 Feb 26 j 17:13 -2274 Mar 11 j 03:01 -2274 Jun 26 j 20:47 -2274 Sep 03 j 09:55 -2274 Sep 03 j 09:05	7°≈36'04 4°≈12'30 12°≈04'40 14°≈19'22 14°≈19'04 15°≈ 16°≈35'43 24°≈58'13 21°≈28'06 21°≈28'16 18°≈02'46	8.19279 AU -2°00'09 2°00'11 10.13166 AU -2°40'06	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-2268 May 22 j 15:55 -2268 May 22 j 15:59 -2268 May 23 j 05:17 -2268 Jun 09 j 19:57 -2268 Jun 20 j 13:02 -2268 Sep 22 j 02:24 -2268 Nov 27 j 11:12 -2268 Nov 27 j 00:47 -2267 Jan 24 j 11:02 -2267 Feb 02 j 14:54 -2267 Feb 11 j 18:43 -2267 May 19 j 16:50	11°&17'11 11°&17'12 11°&21'33 13°&38'56 15°& 21°&53'20 18°&25'08 18°&27'17 15°R& 14°&55'19 15°& 23°&12'52	1°20'29 9.98332 AU -1°21'57 8.02428 AU
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-2275 Oct 25 j 23:50 -2274 Feb 04 j 01:59 -2274 Feb 21 j 12:01 -2274 Feb 21 j 11:58 -2274 Feb 21 j 11:06 -2274 Feb 26 j 17:13 -2274 Mar 11 j 03:01 -2274 Jun 26 j 20:47 -2274 Sep 03 j 09:55 -2274 Sep 03 j 09:05 -2274 Nov 08 j 17:14	7°≈36'04 4°≈12'30 12°≈04'40 14°≈19'22 14°≈19'04 15°≈ 16°≈35'43 24°≈58'13 21°≈28'06 21°≈28'16 18°≈02'46	8.19279 AU -2°00'09 2°00'11 10.13166 AU -2°40'06 8.07741 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-2268 May 22 j 15:55 -2268 May 22 j 15:59 -2268 May 23 j 05:17 -2268 Jun 09 j 19:57 -2268 Jun 20 j 13:02 -2268 Sep 22 j 02:24 -2268 Nov 27 j 11:12 -2268 Nov 27 j 00:47 -2267 Jan 24 j 11:02 -2267 Feb 02 j 14:54 -2267 Feb 11 j 18:43 -2267 May 19 j 16:50 -2267 Jun 06 j 21:23 -2267 Jun 06 j 21:23	11°&17'11 11°&17'12 11°&17	1°20'29 9.98332 AU -1°21'57 8.02428 AU
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-2275 Oct 25 j 23:50 -2274 Feb 04 j 01:59 -2274 Feb 21 j 12:01 -2274 Feb 21 j 11:58 -2274 Feb 21 j 11:06 -2274 Feb 26 j 17:13 -2274 Mar 11 j 03:01 -2274 Jun 26 j 20:47 -2274 Sep 03 j 09:55 -2274 Nov 08 j 17:14 -2273 Feb 18 j 14:31 -2273 Mar 08 j 04:32	7°≈36'04 4°≈12'30 12°≈04'40 14°≈19'22 14°≈19'04 15°≈ 16°≈35'43 24°≈58'13 21°≈28'06 21°≈28'16 18°≈02'46 26°≈05'17	8.19279 AU -2°00'09 2°00'11 10.13166 AU -2°40'06 8.07741 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-2268 May 22 j 15:55 -2268 May 22 j 15:59 -2268 May 23 j 05:17 -2268 Jun 09 j 19:57 -2268 Jun 20 j 13:02 -2268 Sep 22 j 02:24 -2268 Nov 27 j 11:12 -2268 Nov 27 j 00:47 -2267 Jan 24 j 11:02 -2267 Feb 02 j 14:54 -2267 Feb 11 j 18:43 -2267 May 19 j 16:50 -2267 Jun 06 j 21:23 -2267 Jun 06 j 21:26 -2267 Jun 07 j 10:54	11°&17'11 11°&17'12 11°&21'33 13°&38'56 15°& 21°&53'20 18°&25'08 18°&27'17 15°&& 14°&55'19 15°& 23°&12'52 25°&33'22 25°&33'23 25°&37'45	1°20'29 9.98332 AU -1°21'57 8.02428 AU -0°49'37 0°49'34
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-2275 Oct 25 j 23:50 -2274 Feb 04 j 01:59 -2274 Feb 21 j 12:01 -2274 Feb 21 j 11:58 -2274 Feb 21 j 11:06 -2274 Feb 26 j 17:13 -2274 Mar 11 j 03:01 -2274 Jun 26 j 20:47 -2274 Sep 03 j 09:55 -2274 Sep 03 j 09:05 -2274 Nov 08 j 17:14 -2273 Feb 18 j 14:31 -2273 Mar 08 j 04:32 -2273 Mar 08 j 04:30	7°≈36'04 4°≈12'30 12°≈04'40 14°≈19'22 14°≈19'04 15°≈ 16°≈35'43 24°≈58'13 21°≈28'06 21°≈28'16 18°≈02'46 26°≈05'17 28°≈22'44 28°≈22'44	8.19279 AU -2°00'09 2°00'11 10.13166 AU -2°40'06 8.07741 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-2268 May 22 j 15:55 -2268 May 22 j 15:59 -2268 May 23 j 05:17 -2268 Jun 09 j 19:57 -2268 Jun 20 j 13:02 -2268 Sep 22 j 02:24 -2268 Nov 27 j 11:12 -2268 Nov 27 j 00:47 -2267 Jan 24 j 11:02 -2267 Feb 02 j 14:54 -2267 Feb 11 j 18:43 -2267 May 19 j 16:50 -2267 Jun 06 j 21:23 -2267 Jun 06 j 21:23 -2267 Jun 07 j 10:54 -2267 Jun 24 j 23:42	11°&17'11 11°&17'12 11°&21'33 13°&38'56 15°& 21°&53'20 18°&25'08 18°&27'17 15°&& 14°&55'19 15°& 23°&12'52 25°&33'22 25°&33'23 25°&37'45 27°&53'05	1°20'29 9.98332 AU -1°21'57 8.02428 AU -0°49'37 0°49'34
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-2275 Oct 25 j 23:50 -2274 Feb 04 j 01:59 -2274 Feb 21 j 12:01 -2274 Feb 21 j 11:58 -2274 Feb 21 j 11:06 -2274 Feb 26 j 17:13 -2274 Mar 11 j 03:01 -2274 Jun 26 j 20:47 -2274 Sep 03 j 09:55 -2274 Sep 03 j 09:05 -2274 Nov 08 j 17:14 -2273 Feb 18 j 14:31 -2273 Mar 08 j 04:32 -2273 Mar 08 j 04:30 -2273 Mar 08 j 07:36	7°≈36'04 4°≈12'30 12°≈04'40 14°≈19'22 14°≈19'04 15°≈ 16°≈35'43 24°≈58'13 21°≈28'06 21°≈28'16 18°≈02'46 26°≈05'17 28°≈22'44 28°≈22'44 28°≈22'44	8.19279 AU -2°00'09 2°00'11 10.13166 AU -2°40'06 8.07741 AU -2°14'23 2°14'24	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-2268 May 22 j 15:55 -2268 May 22 j 15:59 -2268 May 23 j 05:17 -2268 Jun 09 j 19:57 -2268 Jun 20 j 13:02 -2268 Sep 22 j 02:24 -2268 Nov 27 j 11:12 -2268 Nov 27 j 00:47 -2267 Jun 24 j 11:02 -2267 Feb 02 j 14:54 -2267 Feb 11 j 18:43 -2267 Jun 06 j 21:23 -2267 Jun 06 j 21:26 -2267 Jun 07 j 10:54 -2267 Jun 24 j 23:42 -2267 Jul 12 j 03:52	11°&17'11 11°&17'12 11°&21'33 13°&38'56 15°& 21°&53'20 18°&25'08 18°&27'17 15°R& 14°&55'19 15°& 23°&12'52 25°&33'22 25°&33'23 25°&37'45 27°&53'05 0°II	1°20'29 9.98332 AU -1°21'57 8.02428 AU -0°49'37 0°49'34
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conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-2275 Oct 25 j 23:50 -2274 Feb 04 j 01:59 -2274 Feb 21 j 12:01 -2274 Feb 21 j 11:58 -2274 Feb 21 j 11:06 -2274 Feb 26 j 17:13 -2274 Mar 11 j 03:01 -2274 Jun 26 j 20:47 -2274 Sep 03 j 09:55 -2274 Sep 03 j 09:05 -2274 Nov 08 j 17:14 -2273 Feb 18 j 14:31 -2273 Mar 08 j 04:32 -2273 Mar 08 j 04:30 -2273 Mar 08 j 07:36 -2273 Mar 20 j 13:59 -2273 Mar 20 j 13:59 -2273 Mar 25 j 23:04	7°≈36'04 4°≈12'30 12°≈04'40 14°≈19'22 14°≈19'04 15°≈ 16°≈35'43 24°≈58'13 21°≈28'06 21°≈28'16 18°≈02'46 26°≈05'17 28°≈22'44 28°≈22'44 0°¥ 0°¥41'42	8.19279 AU -2°00'09 2°00'11 10.13166 AU -2°40'06 8.07741 AU -2°14'23 2°14'24	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-2268 May 22 j 15:55 -2268 May 22 j 15:59 -2268 May 23 j 05:17 -2268 Jun 09 j 19:57 -2268 Jun 20 j 13:02 -2268 Sep 22 j 02:24 -2268 Nov 27 j 11:12 -2268 Nov 27 j 00:47 -2267 Jun 24 j 11:02 -2267 Feb 02 j 14:54 -2267 Feb 11 j 18:43 -2267 Jun 06 j 21:23 -2267 Jun 06 j 21:23 -2267 Jun 07 j 10:54 -2267 Jun 07 j 10:54 -2267 Jun 24 j 23:42 -2267 Jun 12 j 03:52 -2267 Oct 06 j 01:55 -2267 Dec 11 j 12:31	11° &17'11 11° &21'33 13° &38'56 15° & 21° &53'20 18° &25'08 18° &27'17 15° & 14° &55'19 15° & 23° &12'52 25° &33'22 25° &33'23 25° &37'45 27° &53'05 0° II 5° II 56'14 2° II 29'33	1°20'29 9.98332 AU -1°21'57 8.02428 AU -0°49'37 0°49'34 10.07170 AU
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	-2275 Oct 25 j 23:50 -2274 Feb 04 j 01:59 -2274 Feb 21 j 12:01 -2274 Feb 21 j 11:58 -2274 Feb 21 j 11:06 -2274 Feb 26 j 17:13 -2274 Mar 11 j 03:01 -2274 Jun 26 j 20:47 -2274 Sep 03 j 09:55 -2274 Sep 03 j 09:05 -2274 Nov 08 j 17:14 -2273 Feb 18 j 14:31 -2273 Mar 08 j 04:32 -2273 Mar 08 j 04:30 -2273 Mar 08 j 07:36 -2273 Mar 20 j 13:59 -2273 Mar 25 j 23:04 -2273 Jul 11 j 21:22	7°≈36'04 4°≈12'30 12°≈04'40 14°≈19'22 14°≈19'04 15°≈ 16°≈35'43 24°≈58'13 21°≈28'06 21°≈28'16 18°≈02'46 26°≈05'17 28°≈22'44 28°≈22'44 0°¥	8.19279 AU -2°00'09 2°00'11 10.13166 AU -2°40'06 8.07741 AU -2°14'23 2°14'24 10.02693 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-2268 May 22 j 15:55 -2268 May 22 j 15:59 -2268 May 23 j 05:17 -2268 Jun 09 j 19:57 -2268 Jun 20 j 13:02 -2268 Sep 22 j 02:24 -2268 Nov 27 j 11:12 -2268 Nov 27 j 11:12 -2267 Jan 24 j 11:02 -2267 Feb 02 j 14:54 -2267 Feb 11 j 18:43 -2267 Jun 06 j 21:23 -2267 Jun 06 j 21:23 -2267 Jun 07 j 10:54 -2267 Jun 24 j 23:42 -2267 Jun 12 j 03:52 -2267 Oct 06 j 01:55 -2267 Dec 11 j 12:31 -2267 Dec 11 j 01:45	11°&17'11 11°&17'12 11°&21'33 13°&38'56 15°& 21°&53'20 18°&25'08 18°&27'17 15°&& 14°&55'19 15°& 23°&12'52 25°&33'22 25°&33'22 25°&33'23 25°&37'45 27°&53'05 0°II 5°IL56'14 2°IL29'33 2°IL31'46	1°20'29 9.98332 AU -1°21'57 8.02428 AU -0°49'37 0°49'34 10.07170 AU
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-2275 Oct 25 j 23:50 -2274 Feb 04 j 01:59 -2274 Feb 21 j 12:01 -2274 Feb 21 j 11:58 -2274 Feb 21 j 11:06 -2274 Feb 26 j 17:13 -2274 Mar 11 j 03:01 -2274 Jun 26 j 20:47 -2274 Sep 03 j 09:55 -2274 Sep 03 j 09:05 -2274 Nov 08 j 17:14 -2273 Feb 18 j 14:31 -2273 Mar 08 j 04:32 -2273 Mar 08 j 04:30 -2273 Mar 08 j 07:36 -2273 Mar 20 j 13:59 -2273 Mar 25 j 23:04 -2273 Jul 11 j 21:22 -2273 Sep 17 j 19:44	7°≈36'04 4°≈12'30 12°≈04'40 14°≈19'22 14°≈19'04 15°≈ 16°≈35'43 24°≈58'13 21°≈28'06 21°≈28'16 18°≈02'46 26°≈05'17 28°≈22'44 28°≈22'44 28°≈22'44 0°₩ 0°₩41'42 9°₩11'49 5°₩40'58	8.19279 AU -2°00'09 2°00'11 10.13166 AU -2°40'06 8.07741 AU -2°14'23 2°14'24 10.02693 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-2268 May 22 j 15:55 -2268 May 22 j 15:59 -2268 May 23 j 05:17 -2268 Jun 09 j 19:57 -2268 Jun 20 j 13:02 -2268 Sep 22 j 02:24 -2268 Nov 27 j 11:12 -2268 Nov 27 j 11:12 -2267 Jan 24 j 11:02 -2267 Feb 02 j 14:54 -2267 Feb 11 j 18:43 -2267 May 19 j 16:50 -2267 Jun 06 j 21:23 -2267 Jun 06 j 21:23 -2267 Jun 07 j 10:54 -2267 Jun 24 j 23:42 -2267 Jul 12 j 03:52 -2267 Oct 06 j 01:55 -2267 Dec 11 j 12:31 -2267 Dec 11 j 01:45 -2266 Jan 14 j 12:15	11° &17'11 11° &21'33 13° &38'56 15° & 21° &53'20 18° &25'08 18° &27'17 15° R& 14° &55'19 15° & 23° &12'52 25° &33'22 25° &33'23 25° &37'45 27° &53'05 0° II 5° II 56'14 2° II 29'33 2° II 31'46 30° R&	1°20'29 9.98332 AU -1°21'57 8.02428 AU -0°49'37 0°49'34 10.07170 AU
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 opposition	-2275 Oct 25 j 23:50 -2274 Feb 04 j 01:59 -2274 Feb 21 j 12:01 -2274 Feb 21 j 11:58 -2274 Feb 21 j 11:06 -2274 Feb 26 j 17:13 -2274 Mar 11 j 03:01 -2274 Jun 26 j 20:47 -2274 Sep 03 j 09:55 -2274 Sep 03 j 09:05 -2274 Nov 08 j 17:14 -2273 Feb 18 j 14:31 -2273 Mar 08 j 04:32 -2273 Mar 08 j 04:30 -2273 Mar 08 j 07:36 -2273 Mar 20 j 13:59 -2273 Mar 25 j 23:04 -2273 Jul 11 j 21:22	7°≈36'04 4°≈12'30 12°≈04'40 14°≈19'22 14°≈19'04 15°≈ 16°≈35'43 24°≈58'13 21°≈28'06 21°≈28'16 18°≈02'46 26°≈05'17 28°≈22'44 28°≈22'44 28°≈22'44 0°₩ 0°₩41'42 9°₩11'49 5°₩40'58	8.19279 AU -2°00'09 2°00'11 10.13166 AU -2°40'06 8.07741 AU -2°14'23 2°14'24 10.02693 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-2268 May 22 j 15:55 -2268 May 22 j 15:59 -2268 May 23 j 05:17 -2268 Jun 09 j 19:57 -2268 Jun 20 j 13:02 -2268 Sep 22 j 02:24 -2268 Nov 27 j 11:12 -2268 Nov 27 j 11:12 -2267 Jan 24 j 11:02 -2267 Feb 02 j 14:54 -2267 Feb 11 j 18:43 -2267 Jun 06 j 21:23 -2267 Jun 06 j 21:23 -2267 Jun 07 j 10:54 -2267 Jun 24 j 23:42 -2267 Jun 12 j 03:52 -2267 Oct 06 j 01:55 -2267 Dec 11 j 12:31 -2267 Dec 11 j 01:45	11°&17'11 11°&17'12 11°&21'33 13°&38'56 15°& 21°&53'20 18°&25'08 18°&27'17 15°&& 14°&55'19 15°& 23°&12'52 25°&33'22 25°&33'22 25°&33'23 25°&37'45 27°&53'05 0°II 5°IL56'14 2°IL29'33 2°IL31'46	1°20'29 9.98332 AU -1°21'57 8.02428 AU -0°49'37 0°49'34 10.07170 AU
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 opposition min. Earth dist.	-2275 Oct 25 j 23:50 -2274 Feb 04 j 01:59 -2274 Feb 21 j 12:01 -2274 Feb 21 j 11:58 -2274 Feb 21 j 11:06 -2274 Feb 26 j 17:13 -2274 Mar 11 j 03:01 -2274 Sep 03 j 09:55 -2274 Sep 03 j 09:05 -2274 Nov 08 j 17:14 -2273 Feb 18 j 14:31 -2273 Mar 08 j 04:32 -2273 Mar 08 j 04:30 -2273 Mar 20 j 13:59 -2273 Mar 25 j 23:04 -2273 Jul 11 j 21:22 -2273 Sep 17 j 19:44 -2273 Sep 17 j 15:43	7°≈36'04 4°≈12'30 12°≈04'40 14°≈19'22 14°≈19'04 15°≈ 16°≈35'43 24°≈58'13 21°≈28'06 21°≈28'16 18°≈02'46 26°≈05'17 28°≈22'44 28°≈22'43 28°≈22'44 0° ₩ 0° ₩41'42 9° ₩11'49 5° ₩40'58 5° ₩41'48	8.19279 AU -2°00'09 2°00'11 10.13166 AU -2°40'06 8.07741 AU -2°14'23 2°14'24 10.02693 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-2268 May 22 j 15:55 -2268 May 22 j 15:59 -2268 May 23 j 05:17 -2268 Jun 09 j 19:57 -2268 Jun 20 j 13:02 -2268 Sep 22 j 02:24 -2268 Nov 27 j 11:12 -2268 Nov 27 j 11:12 -2267 Jun 24 j 11:02 -2267 Feb 02 j 14:54 -2267 Feb 11 j 18:43 -2267 Jun 06 j 21:23 -2267 Jun 06 j 21:23 -2267 Jun 07 j 10:54 -2267 Jun 24 j 23:42 -2267 Jun 24 j 23:42 -2267 Jun 12 j 03:52 -2267 Oct 06 j 01:55 -2267 Dec 11 j 12:31 -2267 Dec 11 j 01:45 -2266 Jan 14 j 12:15 -2266 Feb 17 j 07:27	11° &17'11 11° &21'33 13° &38'56 15° & 21° &53'20 18° &25'08 18° &27'17 15° R& 14° &55'19 15° & 23° &12'52 25° &33'22 25° &33'23 25° &37'45 27° &53'05 0° II 5° II 56'14 2° II 29'33 2° II 31'46 30° R& 29° &00'01	1°20'29 9.98332 AU -1°21'57 8.02428 AU -0°49'37 0°49'34 10.07170 AU

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conjunction	-2266 Jun 21 j 17:04	9° Ⅱ 29'08		minimum elong	-2260 Sep 06 j 00:38	24° Ω 40'33	
minimum elong	-2266 Jun 21 j 17:05	9° Ⅱ 29'08		max. Earth dist.	-2260 Sep 06 j 00:57		10.97684 AU
max. Earth dist.	-2266 Jun 22 j 06:21		10.18432 AU	morning rise	-2260 Sep 22 j 17:32	26° Ω 38'15	
morning rise	-2266 Jul 09 j 16:05	11° Ⅱ 46'03			-2260 Oct 23 j 23:29	0° Mp	
retrograde	-2266 Oct 19 j 15:46	19° Ⅱ 37'08		retrograde	-2260 Dec 30 j 11:41	3° Mp 34'11	2047140
asc. node	-2266 Dec 24 j 00:14	16° Ⅱ 18'18	0000100	opposition	-2259 Mar 09 j 13:20	0° Mp 17'10	2°47'49
opposition	-2266 Dec 25 j 06:43	16° Ⅱ 12'07	0°00'08	min. Earth dist.	-2259 Mar 09 j 14:22	0° Mp 16'59	9.02748 AU
min. Earth dist.	-2266 Dec 24 j 20:21	16° Ⅱ 14'13 12° Ⅱ 43'09	8.24684 AU	1	-2259 Mar 13 j 09:14	30°R Ω	
direct	-2265 Mar 03 j 17:28			direct	-2259 May 20 j 01:13	26° Ω 54'52	
evening set	-2265 Jun 18 j 01:49	20° Ⅱ 46′06			-2259 Jul 23 j 10:30	0° т) 4° т) 06'03	
conjunction	-2265 Jul 06 j 00:52	23° Ⅱ 01'07	0°16'57	evening set	-2259 Aug 31 j 20:58	4 11/00/03	
minimum elong	-2265 Jul 06 j 00:51	23° I I01'07	0°17'00	conjunction	-2259 Sep 17 j 14:20	6° m) 02'53	2°20'42
max. Earth dist.	-2265 Jul 06 j 13:16		10.31451 AU	minimum elong	-2259 Sep 17 j 14:19	6° M) 02'53	2°20'44
morning rise	-2265 Jul 23 j 19:24	25° I 14'44	10.31431 AU	max. Earth dist.	-2259 Sep 17 j 11:32	~	11.06973 AU
morning rise	3	0°95			-2259 Sep 17 j 11:32 -2259 Oct 04 j 03:48	7° m) 58'37	11.00973 AU
rotro aro do	-2265 Sep 04 j 17:21	0 95 2°953'48		morning rise			
retrograde	-2265 Nov 01 j 20:27 -2264 Jan 01 j 13:08	2 €33 48 30°R I I		retrograde	-2258 Jan 10 j 22:51 -2258 Mar 21 j 11:47	14° Mp 50'38	2°53'49
annagition	-2264 Jan 07 j 17:24	30 KII 29°II30'27	0°40'30	opposition min. Earth dist.	-2258 Mar 21 j 11:47	11° Mp 34'14 11° Mp 33'33	9.10970 AU
opposition min. Earth dist.	3	29 П 3027 29° П 32'14	8.38301 AU	direct	3	8° M) 13'07	9.10970 AU
	-2264 Jan 07 j 08:27 -2264 Mar 16 j 19:06	29 Ⅲ 32 14 26° Ⅲ 02'17	6.56501 AU		-2258 Jun 01 j 02:54	15° Mp 18'20	
direct	•	26 п 02 17		evening set	-2258 Sep 12 j 07:32	13 111/16/20	
avanina aat	-2264 May 27 j 03:51 -2264 Jul 01 j 01:21	ი°ფ 3° © 56'10		agniumation	2250 Can 20 : 21:20	170 m, 12122	2°23'03
evening set	-2204 Jul 01 J 01.21	3 203010		conjunction minimum elong	-2258 Sep 28 j 21:39	17° mp 13'33 17° mp 13'33	
agniumation	-2264 Jul 18 j 19:44	6° © 07'47	0040127	max. Earth dist.	-2258 Sep 28 j 21:39		2 23 04 11.13986 AU
conjunction					-2258 Sep 28 j 15:58	-•	11.13980 AU
minimum elong	-2264 Jul 18 j 19:41	6°907'47	0°48'30	morning rise	-2258 Oct 15 j 08:45	19° Mp 07'55	
max. Earth dist.	-2264 Jul 19 j 06:02		10.45481 AU	retrograde	-2257 Jan 22 j 07:49	25° M 57'43	2052112
morning rise	-2264 Aug 05 j 09:05	8°917'51		opposition	-2257 Apr 02 j 07:38	22° Mp 41'38	2°53'13
retrograde	-2264 Nov 13 j 14:49	15°545'34	1017127	min. Earth dist.	-2257 Apr 02 j 12:48	22° Mp 40'41	9.16764 AU
opposition	-2263 Jan 19 j 20:19	12°523'51	1°17'27	direct	-2257 Jun 13 j 00:52	19° My 21'35	
min. Earth dist.	-2263 Jan 19 j 13:25	12°525'13	8.52578 AU	evening set	-2257 Sep 23 j 12:44	26° Mg 22'06	
direct	-2263 Mar 30 j 13:19	8° © 56'39 16° © 41'09		agniumation	-2257 Oct 10 j 00:46	28° m/16'18	2020100
evening set	-2263 Jul 14 j 12:58	10 2041 09		conjunction	3	28° Mp 16'18	
. ,.	2262 4 01:01.57	100640116	1017141	minimum elong	-2257 Oct 10 j 00:46 -2257 Oct 09 j 17:40	-	
conjunction	-2263 Aug 01 j 01:57	18°549'16	1°16'41 1°16'43	max. Earth dist.	,	-•	11.18488 AU
minimum elong max. Earth dist.	-2263 Aug 01 j 01:54	18°9549'15	1 10 43 10.59769 AU	marning rise	-2257 Oct 24 j 23:49	0° ರಾ 09'50	
	-2263 Aug 01 j 09:13	20°\$55'48	10.59769 AU	morning rise	-2257 Oct 26 j 10:21	6° 2 59'04	
morning rise	-2263 Aug 18 j 09:50	20°933'48 28°9313'16		retrograde	-2256 Feb 02 j 18:58		2946115
retrograde	-2263 Nov 25 j 22:40		1940127	opposition	-2256 Apr 13 j 02:00	3° Ω 43'01	
opposition	-2262 Feb 01 j 15:43	24°\$53'03 24°\$54'00	1°49'27 8.66779 AU	min. Earth dist. direct	-2256 Apr 13 j 08:23 -2256 Jun 23 j 18:12	3° £ 41'51 0° £ 23'55	9.19937 AU
min. Earth dist.	-2262 Feb 01 j 10:49 -2262 Apr 12 j 23:54	24 \$34 00 21°\$26'59	8.00779 AU			0 <u>≈</u> 23 33 7° <u>≈</u> 21'01	
direct evening set	-2262 Apr 12 j 23.34 -2262 Jul 27 j 12:37	21 \$20 39 29°\$02'11		evening set	-2256 Oct 03 j 14:23	/ ==2101	
evening set	-2262 Aug 04 j 14:25	0°Ω		conjunction	-2256 Oct 20 j 01:14	9° ≏ 14'45	2°11'48
	2202 Mug 0+ j 14.23	0 00		minimum elong	-2256 Oct 20 j 01:15	9° ₽ 14'45	
conjunction	-2262 Aug 13 j 20:04	1° Ω 06'54	1°40'33	max. Earth dist.	-2256 Oct 19 j 16:50		11.20321 AU
minimum elong	-2262 Aug 13 j 20:00	1°Ω06'53	1°40'36	morning rise	-2256 Nov 05 j 10:17	11° ⊆ 08'04	11.20321710
max. Earth dist.	-2262 Aug 14 j 00:19		10.73622 AU	retrograde	-2255 Feb 13 j 05:41	17° ≙ 58'21	
morning rise	-2262 Aug 30 j 22:31	3°Ω10'05	10.75022110	opposition	-2255 Apr 24 j 20:27	14° £ 42'04	2°33'16
retrograde							
opposition	-2262 Dec U8 1 00:44	$10^{\circ}\Omega$ 18'48		* *			
	-2262 Dec 08 j 00:44 -2261 Feb 14 i 04:30	10°Ω18'48 6°Ω59'52	2°15'30	min. Earth dist.	-2255 Apr 25 j 04:43	14° ≏ 40'34	9.20382 AU
	-2261 Feb 14 j 04:30	6° Ω 59'52		min. Earth dist. direct	-2255 Apr 25 j 04:43 -2255 Jul 05 j 07:18	14° £ 40'34 11° £ 23'41	
min. Earth dist.	-2261 Feb 14 j 04:30 -2261 Feb 14 j 00:59	6° Ω 59'52 7° Ω 00'32	2°15'30 8.80237 AU	min. Earth dist.	-2255 Apr 25 j 04:43	14° ≏ 40'34	
min. Earth dist. direct	-2261 Feb 14 j 04:30 -2261 Feb 14 j 00:59 -2261 Apr 26 j 00:55	6°Ω59'52 7°Ω00'32 3°Ω35'03		min. Earth dist. direct evening set	-2255 Apr 25 j 04:43 -2255 Jul 05 j 07:18 -2255 Oct 14 j 14:18	14° Ω 40'34 11° Ω 23'41 18° Ω 18'48	9.20382 AU
min. Earth dist.	-2261 Feb 14 j 04:30 -2261 Feb 14 j 00:59	6° Ω 59'52 7° Ω 00'32		min. Earth dist. direct evening set conjunction	-2255 Apr 25 j 04:43 -2255 Jul 05 j 07:18 -2255 Oct 14 j 14:18 -2255 Oct 31 j 00:36	14° Ω 40'34 11° Ω 23'41 18° Ω 18'48 20° Ω 12'35	9.20382 AU 1°58'46
min. Earth dist. direct evening set	-2261 Feb 14 j 04:30 -2261 Feb 14 j 00:59 -2261 Apr 26 j 00:55 -2261 Aug 09 j 00:51	6°Ω59'52 7°Ω00'32 3°Ω35'03		min. Earth dist. direct evening set conjunction minimum elong	-2255 Apr 25 j 04:43 -2255 Jul 05 j 07:18 -2255 Oct 14 j 14:18 -2255 Oct 31 j 00:36 -2255 Oct 31 j 00:39	14° △ 40'34 11° △ 23'41 18° △ 18'48 20° △ 12'35 20° △ 12'36	9.20382 AU 1°58'46
min. Earth dist. direct evening set conjunction	-2261 Feb 14 j 04:30 -2261 Feb 14 j 00:59 -2261 Apr 26 j 00:55 -2261 Aug 09 j 00:51 -2261 Aug 26 j 03:04	6° \$\alpha 59'52 7° \$\alpha 00'32 3° \$\alpha 35'03 11° \$\alpha 01'22 13° \$\alpha 03'01	8.80237 AU 1°59'24	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-2255 Apr 25 j 04:43 -2255 Jul 05 j 07:18 -2255 Oct 14 j 14:18 -2255 Oct 31 j 00:36 -2255 Oct 31 j 00:39 -2255 Oct 30 j 13:56	14° △ 40'34 11° △ 23'41 18° △ 18'48 20° △ 12'35 20° △ 12'36	9.20382 AU 1°58'46 1°58'45
min. Earth dist. direct evening set conjunction minimum elong	-2261 Feb 14 j 04:30 -2261 Feb 14 j 00:59 -2261 Apr 26 j 00:55 -2261 Aug 09 j 00:51 -2261 Aug 26 j 03:04 -2261 Aug 26 j 03:01	6° \$\alpha 59'52 7° \alpha 00'32 3° \alpha 35'03 11° \alpha 01'22 13° \alpha 03'01 13° \alpha 03'00	8.80237 AU 1°59'24 1°59'26	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-2255 Apr 25 j 04:43 -2255 Jul 05 j 07:18 -2255 Oct 14 j 14:18 -2255 Oct 31 j 00:36 -2255 Oct 31 j 00:39 -2255 Oct 30 j 13:56 -2255 Nov 16 j 10:14	14° № 40'34 11° № 23'41 18° № 18'48 20° № 12'35 20° № 12'36 20° № 09'29 22° № 06'14	9.20382 AU 1°58'46 1°58'45
min. Earth dist. direct evening set conjunction	-2261 Feb 14 j 04:30 -2261 Feb 14 j 00:59 -2261 Apr 26 j 00:55 -2261 Aug 09 j 00:51 -2261 Aug 26 j 03:04 -2261 Aug 26 j 03:01 -2261 Aug 26 j 05:26	6° \$\lambda 59' 52 7° \$\lambda 00' 32 3° \$\lambda 35' 03 11° \$\lambda 01' 22 13° \$\lambda 03' 01 13° \$\lambda 03' 43	8.80237 AU 1°59'24	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-2255 Apr 25 j 04:43 -2255 Jul 05 j 07:18 -2255 Oct 14 j 14:18 -2255 Oct 31 j 00:36 -2255 Oct 31 j 00:39 -2255 Oct 30 j 13:56 -2255 Nov 16 j 10:14 -2254 Feb 24 j 19:50	14° № 40'34 11° № 23'41 18° № 18'48 20° № 12'35 20° № 12'36 20° № 09'29 22° № 06'14 28° № 59'13	9.20382 AU 1°58'46 1°58'45 11.19431 AU
min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-2261 Feb 14 j 04:30 -2261 Feb 14 j 00:59 -2261 Apr 26 j 00:55 -2261 Aug 09 j 00:51 -2261 Aug 26 j 03:04 -2261 Aug 26 j 03:01 -2261 Aug 26 j 05:26 -2261 Sep 11 j 13:23	6° \$6.59'52 7° \$000'32 3° \$0.35'03 11° \$001'22 13° \$0.03'01 13° \$0.03'43 15° \$0	8.80237 AU 1°59'24 1°59'26	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-2255 Apr 25 j 04:43 -2255 Jul 05 j 07:18 -2255 Oct 14 j 14:18 -2255 Oct 31 j 00:36 -2255 Oct 31 j 00:39 -2255 Oct 30 j 13:56 -2255 Nov 16 j 10:14 -2254 Feb 24 j 19:50 -2254 May 06 j 16:04	14° \(\Omega\) 40'34 11° \(\Omega\) 23'41 18° \(\Omega\) 12'35 20° \(\Omega\) 12'36 20° \(\Omega\) 09'29 22° \(\Omega\) 06'14 28° \(\Omega\) 59'13 25° \(\Omega\) 42'27	9.20382 AU 1°58'46 1°58'45 11.19431 AU 2°14'39
min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-2261 Feb 14 j 04:30 -2261 Feb 14 j 00:59 -2261 Apr 26 j 00:55 -2261 Aug 09 j 00:51 -2261 Aug 26 j 03:04 -2261 Aug 26 j 03:01 -2261 Aug 26 j 05:26 -2261 Sep 11 j 13:23 -2261 Sep 12 j 00:24	6° \$\alpha 59'52 7° \alpha 00'32 3° \alpha 35'03 11° \alpha 01'22 13° \alpha 03'01 13° \alpha 03'43 15° \alpha 15° \alpha 03'13	8.80237 AU 1°59'24 1°59'26	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-2255 Apr 25 j 04:43 -2255 Jul 05 j 07:18 -2255 Oct 14 j 14:18 -2255 Oct 31 j 00:36 -2255 Oct 31 j 00:39 -2255 Oct 30 j 13:56 -2255 Nov 16 j 10:14 -2254 Feb 24 j 19:50 -2254 May 06 j 16:04 -2254 May 07 j 02:07	14° ₾40'34 11° ₾23'41 18° ₾18'48 20° ₾12'35 20° ₾12'36 20° ₾09'29 22° ₾06'14 28° ₾59'13 25° ₾42'27 25° ₾40'37	9.20382 AU 1°58'46 1°58'45 11.19431 AU
min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-2261 Feb 14 j 04:30 -2261 Feb 14 j 00:59 -2261 Apr 26 j 00:55 -2261 Aug 09 j 00:51 -2261 Aug 26 j 03:04 -2261 Aug 26 j 03:01 -2261 Aug 26 j 05:26 -2261 Sep 11 j 13:23 -2261 Sep 12 j 00:24 -2261 Dec 19 j 20:28	6°\Lambda 59'52 7°\Lambda 00'32 3°\Lambda 35'03 11°\Lambda 01'22 13°\Lambda 03'01 13°\Lambda 03'43 15°\Lambda 15°\Lambda 03'13 22°\Lambda 04'44	8.80237 AU 1°59'24 1°59'26 10.86432 AU	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-2255 Apr 25 j 04:43 -2255 Jul 05 j 07:18 -2255 Oct 14 j 14:18 -2255 Oct 31 j 00:36 -2255 Oct 31 j 00:39 -2255 Oct 30 j 13:56 -2255 Nov 16 j 10:14 -2254 Feb 24 j 19:50 -2254 May 06 j 16:04 -2254 May 07 j 02:07 -2254 Jul 16 j 21:00	14° \(\Omega\) 40'34 11° \(\Omega\) 23'41 18° \(\Omega\) 12'35 20° \(\Omega\) 12'36 20° \(\Omega\) 09'29 22° \(\Omega\) 06'14 28° \(\Omega\) 59'13 25° \(\Omega\) 42'27 25° \(\Omega\) 40'37 22° \(\Omega\) 24'32	9.20382 AU 1°58'46 1°58'45 11.19431 AU 2°14'39
min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-2261 Feb 14 j 04:30 -2261 Feb 14 j 00:59 -2261 Apr 26 j 00:55 -2261 Aug 09 j 00:51 -2261 Aug 26 j 03:04 -2261 Aug 26 j 03:01 -2261 Aug 26 j 05:26 -2261 Sep 11 j 13:23 -2261 Sep 12 j 00:24 -2261 Dec 19 j 20:28 -2260 Feb 26 j 11:23	6°\$\lambda 59'52\\ 7°\$\lambda 00'32\\ 3°\$\lambda 35'03\\ 11°\$\lambda 01'22\\ 13°\$\lambda 03'01\\ 13°\$\lambda 03'43\\ 15°\$\lambda 03'43\\ 15°\$\lambda 03'13\\ 22°\$\lambda 04'44\\ 18°\$\lambda 46'52\\	8.80237 AU 1°59'24 1°59'26 10.86432 AU 2°35'02	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-2255 Apr 25 j 04:43 -2255 Jul 05 j 07:18 -2255 Oct 14 j 14:18 -2255 Oct 31 j 00:36 -2255 Oct 31 j 00:39 -2255 Oct 30 j 13:56 -2255 Nov 16 j 10:14 -2254 Feb 24 j 19:50 -2254 May 06 j 16:04 -2254 May 07 j 02:07 -2254 Jul 16 j 21:00 -2254 Oct 25 j 14:17	14° \(\Omega\)40'34 11° \(\Omega\)23'41 18° \(\Omega\)12'35 20° \(\Omega\)12'36 20° \(\Omega\)09'29 22° \(\Omega\)06'14 28° \(\Omega\)59'13 25° \(\Omega\)42'27 25° \(\Omega\)40'37 22° \(\Omega\)24'32 29° \(\Omega\)19'06	9.20382 AU 1°58'46 1°58'45 11.19431 AU 2°14'39
min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-2261 Feb 14 j 04:30 -2261 Feb 14 j 00:59 -2261 Apr 26 j 00:55 -2261 Aug 09 j 00:51 -2261 Aug 26 j 03:04 -2261 Aug 26 j 03:01 -2261 Aug 26 j 05:26 -2261 Sep 11 j 13:23 -2261 Sep 12 j 00:24 -2261 Dec 19 j 20:28 -2260 Feb 26 j 11:23 -2260 Feb 26 j 09:43	6°\$\lambda 59'52\\ 7°\$\lambda 00'32\\ 3°\$\lambda 35'03\\ 11°\$\lambda 03'01\\ 13°\$\lambda 03'00\\ 13°\$\lambda 03'43\\ 15°\$\lambda 03'13\\ 22°\$\lambda 04'44\\ 18°\$\lambda 46'52\\ 18°\$\lambda 47'11	8.80237 AU 1°59'24 1°59'26 10.86432 AU	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-2255 Apr 25 j 04:43 -2255 Jul 05 j 07:18 -2255 Oct 14 j 14:18 -2255 Oct 31 j 00:36 -2255 Oct 31 j 00:39 -2255 Oct 30 j 13:56 -2255 Nov 16 j 10:14 -2254 Feb 24 j 19:50 -2254 May 06 j 16:04 -2254 May 07 j 02:07 -2254 Jul 16 j 21:00	14° \(\Omega\) 40'34 11° \(\Omega\) 23'41 18° \(\Omega\) 12'35 20° \(\Omega\) 12'36 20° \(\Omega\) 09'29 22° \(\Omega\) 06'14 28° \(\Omega\) 59'13 25° \(\Omega\) 42'27 25° \(\Omega\) 40'37 22° \(\Omega\) 24'32	9.20382 AU 1°58'46 1°58'45 11.19431 AU 2°14'39
min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-2261 Feb 14 j 04:30 -2261 Feb 14 j 00:59 -2261 Apr 26 j 00:55 -2261 Aug 09 j 00:51 -2261 Aug 26 j 03:04 -2261 Aug 26 j 03:01 -2261 Aug 26 j 05:26 -2261 Sep 11 j 13:23 -2261 Sep 12 j 00:24 -2261 Dec 19 j 20:28 -2260 Feb 26 j 11:23 -2260 Feb 26 j 09:43 -2260 May 07 j 16:19	6°\Lambda 59'52 7°\Lambda 00'32 3°\Lambda 35'03 11°\Lambda 01'22 13°\Lambda 03'01 13°\Lambda 03'43 15°\Lambda 03'13 22°\Lambda 04'44 18°\Lambda 46'52 18°\Lambda 47'11 15°\Lambda 23'19	8.80237 AU 1°59'24 1°59'26 10.86432 AU 2°35'02	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-2255 Apr 25 j 04:43 -2255 Jul 05 j 07:18 -2255 Oct 14 j 14:18 -2255 Oct 31 j 00:36 -2255 Oct 31 j 00:39 -2255 Oct 30 j 13:56 -2255 Nov 16 j 10:14 -2254 Feb 24 j 19:50 -2254 May 06 j 16:04 -2254 May 07 j 02:07 -2254 Jul 16 j 21:00 -2254 Oct 25 j 14:17 -2254 Oct 31 j 12:35	14° \(\Omega\)40'34 11° \(\Omega\)23'41 18° \(\Omega\)12'35 20° \(\Omega\)12'36 20° \(\Omega\)09'29 22° \(\Omega\)06'14 28° \(\Omega\)59'13 25° \(\Omega\)42'27 25° \(\Omega\)40'37 22° \(\Omega\)24'32 29° \(\Omega\)19'06	9.20382 AU 1°58'46 1°58'45 11.19431 AU 2°14'39 9.18097 AU
min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-2261 Feb 14 j 04:30 -2261 Feb 14 j 00:59 -2261 Apr 26 j 00:55 -2261 Aug 09 j 00:51 -2261 Aug 26 j 03:04 -2261 Aug 26 j 03:01 -2261 Aug 26 j 05:26 -2261 Sep 11 j 13:23 -2261 Sep 12 j 00:24 -2261 Dec 19 j 20:28 -2260 Feb 26 j 11:23 -2260 Feb 26 j 09:43	6°\$\lambda 59'52\\ 7°\$\lambda 00'32\\ 3°\$\lambda 35'03\\ 11°\$\lambda 03'01\\ 13°\$\lambda 03'00\\ 13°\$\lambda 03'43\\ 15°\$\lambda 03'13\\ 22°\$\lambda 04'44\\ 18°\$\lambda 46'52\\ 18°\$\lambda 47'11	8.80237 AU 1°59'24 1°59'26 10.86432 AU 2°35'02	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-2255 Apr 25 j 04:43 -2255 Jul 05 j 07:18 -2255 Oct 14 j 14:18 -2255 Oct 31 j 00:36 -2255 Oct 31 j 00:39 -2255 Oct 30 j 13:56 -2255 Nov 16 j 10:14 -2254 Feb 24 j 19:50 -2254 May 06 j 16:04 -2254 May 07 j 02:07 -2254 Jul 16 j 21:00 -2254 Oct 25 j 14:17 -2254 Oct 31 j 12:35 -2254 Nov 11 j 01:00	14° \(\Omega\)40'34 11° \(\Omega\)23'41 18° \(\Omega\)12'35 20° \(\Omega\)12'36 20° \(\Omega\)09'29 22° \(\Omega\)06'14 28° \(\Omega\)59'13 25° \(\Omega\)42'27 25° \(\Omega\)40'37 22° \(\Omega\)24'32 29° \(\Omega\)19'06 0° \(\Omega\)	9.20382 AU 1°58'46 1°58'45 11.19431 AU 2°14'39 9.18097 AU
min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-2261 Feb 14 j 04:30 -2261 Feb 14 j 00:59 -2261 Apr 26 j 00:55 -2261 Aug 09 j 00:51 -2261 Aug 26 j 03:04 -2261 Aug 26 j 03:01 -2261 Aug 26 j 05:26 -2261 Sep 11 j 13:23 -2261 Sep 12 j 00:24 -2261 Dec 19 j 20:28 -2260 Feb 26 j 11:23 -2260 Feb 26 j 09:43 -2260 May 07 j 16:19	6°\Lambda 59'52 7°\Lambda 00'32 3°\Lambda 35'03 11°\Lambda 01'22 13°\Lambda 03'01 13°\Lambda 03'43 15°\Lambda 03'13 22°\Lambda 04'44 18°\Lambda 46'52 18°\Lambda 47'11 15°\Lambda 23'19	8.80237 AU 1°59'24 1°59'26 10.86432 AU 2°35'02 8.92382 AU	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-2255 Apr 25 j 04:43 -2255 Jul 05 j 07:18 -2255 Oct 14 j 14:18 -2255 Oct 31 j 00:36 -2255 Oct 31 j 00:39 -2255 Oct 30 j 13:56 -2255 Nov 16 j 10:14 -2254 Feb 24 j 19:50 -2254 May 06 j 16:04 -2254 May 07 j 02:07 -2254 Jul 16 j 21:00 -2254 Oct 25 j 14:17 -2254 Oct 31 j 12:35	14° \(\Omega 40'34\) 11° \(\Omega 23'41\) 18° \(\Omega 12'35\) 20° \(\Omega 12'36\) 20° \(\Omega 09'29\) 22° \(\Omega 06'14\) 28° \(\Omega 59'13\) 25° \(\Omega 42'27\) 25° \(\Omega 40'37\) 22° \(\Omega 24'32\) 29° \(\Omega 19'06\) 0° \(\Omega 1.3'30\) 1° \(\Omega 1.3'30\)	9.20382 AU 1°58'46 1°58'45 11.19431 AU 2°14'39 9.18097 AU

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -2254 in astronomical counting style is the year 2255 BCE in historical counting style. -2254 Nov 27 j 12:03 3°ML08'01 conjunction -2247 Jan 19 i 01:10 11°**ප්**42'41 -1°00'55 morning rise -2253 Mar 08 j 12:35 10°ML05'19 -2247 Jan 19 j 01:08 11°る42'41 1°00'58 retrograde minimum elong -2253 May 18 j 13:47 6°M47'44 1°50'55 -2247 Jan 18 j 15:45 11°る39'45 10.49140 AU max. Earth dist. opposition -2253 May 19 j 00:32 -2247 Feb 05 j 06:37 13°る51'06 min. Earth dist. 6°M45'46 9.13157 AU morning rise -2253 Jul 28 j 10:03 -2247 May 22 j 12:43 21°る44'45 direct 3°M30'03 retrograde -2247 Jul 31 j 10:16 evening set -2253 Nov 05 j 16:06 10°M25'36 opposition 18°る18'15 -1°33'00 -2247 Jul 31 j 16:40 min. Earth dist. 18°**る**17'00 8.41714 AU -2253 Nov 22 j 04:07 conjunction 12°M21'05 1°19'51 direct -2247 Oct 06 j 23:38 14°る56'29 minimum elong -2253 Nov 22 j 04:09 12°M21'06 1°19'49 evening set -2246 Jan 15 j 03:58 22°る31'25 max. Earth dist. -2253 Nov 21 j 16:13 12°M17'36 11.09685 AU morning rise -2253 Dec 08 j 17:07 14°ML16'58 conjunction -2246 Feb 01 j 08:17 24°る41'22 -1°28'00 -2246 Feb 01 j 08:14 24°る41'21 1°28'02 -2253 Dec 15 j 00:15 15°M⋅ minimum elong -2246 Feb 01 j 00:57 retrograde -2252 Mar 19 j 12:58 21° M $_{2}0'13$ max. Earth dist. 24°る39'02 10.34487 AU opposition -2252 May 29 j 14:50 18°ML01'32 1°22'40 morning rise -2246 Feb 18 j 17:35 26°る52'55 min. Earth dist. -2252 May 30 j 01:16 17°M59'37 9.05698 AU -2246 Mar 17 j 03:25 0°≈ -2252 Jul 20 j 18:46 15°RM retrograde -2246 Jun 05 j 17:59 4°≈58'34 direct -2252 Aug 08 j 01:38 14°M43'51 opposition -2246 Aug 14 j 02:43 1°≈30'27 -2°04'43 -2252 Aug 26 j 02:09 15°M₁ min. Earth dist. -2246 Aug 14 j 06:48 1°≈29'38 8.27435 AU evening set -2252 Nov 15 j 21:50 21°M41'57 -2246 Sep 02 j 18:07 30°Rる direct -2246 Oct 20 j 02:11 28°る07'15 conjunction -2252 Dec 02 j 11:35 23°M38'59 0°55'02 -2246 Dec 04 j 22:26 0°≈ minimum elong -2252 Dec 02 j 11:37 23°MJ38'59 0°54'59 evening set -2245 Jan 28 i 20:46 5°≈53'01 max. Earth dist. -2252 Dec 01 i 23:19 23°M35'21 11.01098 AU morning rise -2252 Dec 19 j 03:08 25°M36'39 conjunction -2245 Feb 15 i 04:41 8°≈05'59 -1°51'09 -2251 Jan 30 j 08:58 0°×7 -2245 Feb 15 i 04:38 8°≈05'58 1°51'11 minimum elong -2251 Mar 31 j 20:15 2°**х** 47′22 max. Earth dist. -2245 Feb 14 j 23:39 8°≈04'21 10.20677 AU retrograde -2251 Jun 03 j 11:56 30°RM -2245 Mar 04 j 17:48 morning rise 10°≈20'38 -2251 Jun 10 j 20:23 -2245 Apr 14 j 06:10 opposition 29°M-27'25 0°50'38 15°≈ -2245 Jun 20 j 07:26 min. Earth dist. -2251 Jun 11 j 07:00 29°M25'27 8 95947 AU retrograde 18°≈37'17 -2251 Aug 19 j 17:49 -2245 Aug 28 j 02:26 direct 26°M09'25 opposition 15°≈07'46 -2°30'35 -2251 Oct 29 j 05:45 -2245 Aug 28 j 04:27 0°**∡** min. Earth dist. 15°≈07'21 8.14416 AU -2251 Nov 27 j 09:22 3°**х** 11′42 -2245 Aug 29 j 16:52 15°R≈ evening set direct -2245 Nov 02 j 14:17 11°≈43'04 -2251 Dec 14 j 01:14 5° **₹**10'41 0°27'33 -2244 Jan 02 j 20:26 conjunction 15°≈ -2251 Dec 14 j 01:15 -2244 Feb 12 j 02:17 minimum elong 5° **₹**10'41 0°27'30 evening set 19°≈39'40 -2251 Dec 13 j 12:08 max. Earth dist. 5°**✗**06'46 10.90360 AU -2251 Dec 30 j 19:59 -2244 Feb 29 j 14:04 morning rise 7°**∡**10'35 conjunction 21°≈55'33 -2°08'38 retrograde -2250 Apr 13 j 09:12 14°**∡**°30′15 minimum elong -2244 Feb 29 j 14:01 21°≈55'32 2°08'39 opposition -2250 Jun 23 j 07:32 11°**₹**08'49 0°15'44 max. Earth dist. -2244 Feb 29 j 12:24 21°≈55'00 10.08514 AU min. Earth dist. -2250 Jun 23 j 18:29 11°**✗**06'46 8.84211 AU morning rise -2244 Mar 18 j 06:53 24°≈13'03 direct -2250 Aug 31 j 15:27 7°**х** 750′11 -2244 May 09 j 00:07 0°**)**€ -2250 Dec 04 j 05:31 14°**∡** 23′23 -2244 Jul 04 j 03:21 2°\ 38'50 desc. node retrograde -2250 Dec 09 j 04:20 14°**∡**°58′22 -2244 Aug 30 j 17:04 evening set 30°R≈ -2244 Sep 10 j 08:47 29°≈08'13 -2°48'22 opposition -2250 Dec 25 j 22:50 16°**₹**59'41 -0°01'46 -2244 Sep 10 j 08:18 29°≈08'19 8.03431 AU conjunction min. Earth dist. -2250 Dec 25 i 22:52 minimum elong 16°**₹**59'41 0°01'50 direct -2244 Nov 15 j 12:53 25°≈42'04 behind sun begin -2250 Dec 25 i 15:50 16°**∡** 57'35 -2243 Jan 25 i 05:10 0°) behind sun end -2250 Dec 26 i 05:54 17°**∡**01'48 evening set -2243 Feb 25 j 19:22 3°\(\)48'38 16°**₹**55'46 10.77794 AU max. Earth dist. -2250 Dec 25 i 09:53 -2249 Jan 11 i 21:07 19°**х** 02′10 -2243 Mar 15 j 11:13 6°\(\mathbf{H}\)07'10 -2°18'49 morning rise conjunction -2249 Apr 26 j 08:20 26°**х** 32′13 -2243 Mar 15 i 11:13 6°¥07'09 2°18'49 retrograde minimum elong -2249 Jul 06 j 01:04 23°×109'08 -0°20'51 -2243 Mar 15 j 13:34 6°**₩**07'56 9.98755 AU opposition max. Earth dist. -2243 Apr 02 j 07:34 -2249 Jul 06 j 11:38 23°**₹**'07'08 8.70861 AU 8°\ 27'08 min. Earth dist. morning rise -2243 Jul 19 j 02:49 direct -2249 Sep 12 j 19:33 19°**∡** 49'40 retrograde 16° **X** 59'14 -2243 Sep 24 j 20:06 evening set -2249 Dec 21 j 08:46 27°**₹**05'24 opposition 13°**)** €27'54 -2°56'12 -2243 Sep 24 j 16:48 min. Earth dist. 13°**¥**28'35 7.95169 AU conjunction -2248 Jan 07 j 06:24 29°**₹**09'24 -0°31'39 -2243 Nov 29 j 20:21 10°**)**€00'24 direct -2248 Jan 07 j 06:23 29°**₹**09'24 0°31'42 -2242 Mar 12 j 22:24 18°**升**15'16 minimum elong evening set -2248 Jan 06 j 18:59 29°**✗**05'53 10.63834 AU max. Earth dist. 0°궁 -2242 Mar 30 j 18:23 20°\dagger36'01 -2°20'32 -2248 Jan 14 j 02:45 conjunction 1°る14'46 morning rise -2248 Jan 24 j 08:11 minimum elong -2242 Mar 30 j 18:24 20°**)** ₹36′01 2°20'32 retrograde -2248 May 08 j 17:40 8°**る**56'17 max. Earth dist. -2242 Mar 31 j 00:44 20°**¥**38′07 9.92038 AU opposition -2248 Jul 18 j 01:42 5°**ප**31'31 -0°57'41 morning rise -2242 Apr 17 j 17:54 22°**H** 57'54 min. Earth dist. -2248 Jul 18 j 10:29 5°る29'50 8.56451 AU -2242 Jun 22 j 15:32 0° Υ direct -2248 Sep 24 j 05:23 2°る11'00 retrograde -2242 Aug 03 j 04:21 1°**Y**32'39

-2247 Jan 02 j 00:16

evening set

9°**る**35'47

-2242 Sep 14 j 03:44

-2242 Oct 09 j 10:19

opposition

30°₽**₩**

28°\circ\tau01'04 -2°52'54

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -2242 in astronomical counting style is the year 2243 BCE in historical counting style. min. Earth dist. -2242 Oct 09 i 04:13 28°**)** €02'20 7.90169 AU max. Earth dist. -2236 Jun 29 i 04:01 16°**I**54'40 10.23877 AU -2242 Dec 14 j 09:38 24° **)** 32'24 -2236 Jul 16 j 12:18 19°**Ⅱ**06'03 direct morning rise -2241 Mar 05 j 04:48 $0^{\circ}\Upsilon$ -2236 Oct 25 j 23:38 26°**Ⅲ**51'19 retrograde -2241 Mar 28 j 08:27 2°Y53'12 -2236 Dec 31 j 18:04 23°**Ⅱ**26′52 0°21'24 evening set opposition -2236 Dec 31 j 08:03 23°**Ⅲ**28'53 min. Earth dist. 8.30639 AU conjunction -2241 Apr 15 j 08:12 5°Υ15'29 -2°13'17 direct -2235 Mar 10 j 12:42 19°**Ⅲ**58′02 minimum elong -2241 Apr 15 j 08:15 5°**Υ**15'30 2°13'16 evening set -2235 Jun 24 j 19:57 27°**I**56'49 -2235 Jul 11 j 08:04 0ಂತಾ max. Earth dist. -2241 Apr 15 j 18:10 5°**Y**18'48 9.88814 AU morning rise -2241 May 03 j 10:18 7°**Y**38'32 retrograde -2241 Aug 18 j 05:16 16°**Y**12′00 conjunction -2235 Jul 12 j 16:44 0°9510'14 0°33'38 12°**Y**'40'39 -2°38'18 -2235 Jul 12 j 16:42 opposition -2241 Oct 24 j 01:30 minimum elong 0°9510'14 0°33'41 -2241 Oct 23 j 16:52 12°**Ƴ**42'27 -2235 Jul 13 j 04:08 min. Earth dist. 7.88766 AU max. Earth dist. 0°9513'48 10.37833 AU direct -2241 Dec 29 j 03:44 9°**Υ**11'05 morning rise -2235 Jul 30 j 08:55 2°522'10 evening set -2240 Apr 11 j 21:40 17°**Y**34'49 retrograde -2235 Nov 07 j 23:12 9°955'40 opposition -2234 Jan 14 j 00:51 6°933'04 1°00'16 conjunction -2240 Apr 30 j 00:27 19°**Y**57'49 -1°57'23 min. Earth dist. -2234 Jan 13 j 15:40 6°934'53 8.45015 AU minimum elong -2240 Apr 30 j 00:31 19°**Y**57′51 1°57'21 direct -2234 Mar 24 j 11:03 3°905'20 max. Earth dist. -2240 Apr 30 j 13:14 20°**℃**02'04 9.89303 AU evening set -2234 Jul 08 j 13:43 10°954'49 morning rise -2240 May 18 j 04:15 22° Y 21'10 -2240 Aug 02 j 06:51 0°8 conjunction -2234 Jul 26 j 05:29 13°9504'43 1°03'38 retrograde -2240 Sep 01 j 02:10 0°849'32 minimum elong -2234 Jul 26 j 05:26 13°904'43 1°03'41 -2240 Sep 30 i 23:46 30°R℃ max. Earth dist. -2234 Jul 26 i 15:25 13°907'47 10.52425 AU opposition -2240 Nov 06 j 15:12 27° Y 18'52 -2° 13'25 morning rise -2234 Aug 12 j 16:05 15°9513'03 min. Earth dist. -2240 Nov 06 i 04:58 27°**Y**21′00 7.91057 AU retrograde -2234 Nov 20 j 13:11 22°935'45 direct -2239 Jan 12 j 00:21 23°Y48'43 opposition -2233 Jan 27 j 00:14 19°9514'53 1°34'50 -2239 Apr 09 j 20:15 0°8 -2233 Jan 26 j 16:43 min. Earth dist. 19°9316'22 8 59682 AU -2239 Apr 27 j 10:41 direct -2233 Apr 07 j 01:03 2°812'17 15°9648'27 evening set evening set -2233 Jul 21 j 19:34 23°\$28'29 -2239 May 15 j 15:22 4°835'05 -1°34'00 conjunction 1°29'43 -2239 May 15 j 15:26 -2233 Aug 08 j 05:51 minimum elong 4°\(\delta\)35'06 1°33'58 conjunction 25°934'53 -2233 Aug 08 j 05:48 -2239 May 16 j 05:43 max. Earth dist. 4°**8**39'48 9.93463 AU minimum elong 25°**©**34'52 1°29'46 -2239 Jun 02 j 19:40 -2233 Aug 08 j 13:40 6°**8**57'44 max. Earth dist. 25°537'16 10.66922 AU morning rise -2239 Aug 28 j 23:29 -2233 Aug 25 j 10:48 15°**8** 27°539'43 morning rise -2239 Sep 15 j 16:26 15°**8**17'44 -2233 Sep 14 j 20:51 retrograde 0 $^{\circ}\Omega$ -2239 Oct 03 j 07:49 -2233 Dec 02 j 19:56 15°₹**8** retrograde 4°**Ω**52'52 1°**Ω**33'35 2°03'50 -2239 Nov 21 j 01:09 -2232 Feb 08 j 16:41 opposition 11°**8**48'13 -1°40'14 opposition -2239 Nov 20 j 14:19 -2232 Feb 08 j 11:48 min. Earth dist. 11°**8**50'28 7.96879 AU min. Earth dist. 1°**Ω**34'31 8.73935 AU direct -2238 Jan 26 j 21:47 8°817'49 -2232 Feb 29 j 18:05 30°Rூ -2238 Apr 29 j 17:35 15°8 direct -2232 Apr 19 j 05:19 28°908'29 evening set -2238 May 12 j 19:50 16°**8**38'20 -2232 Jun 06 j 19:47 $0^{\circ}\Omega$ evening set -2232 Aug 02 j 13:51 5°**Ω**39'21 -2238 May 31 j 00:53 18°859'56 -1°05'00 conjunction -2238 May 31 j 00:56 18°859'57 1°04'57 conjunction -2232 Aug 19 j 18:36 7°**Ω**42'29 1°51'03 minimum elong -2238 May 31 j 15:36 19°**8**04'43 10.00982 AU -2232 Aug 19 j 18:33 7°**Ω**42'28 1°51'05 max. Earth dist. minimum elong -2238 Jun 18 j 04:14 21°**8**20'57 max. Earth dist. -2232 Aug 19 j 23:04 7° **Ω**43'49 10.80653 AU morning rise 9°**Ω**44'07 retrograde -2238 Sep 29 i 20:44 29°830'17 morning rise -2232 Sep 05 i 18:19 -2232 Oct 28 i 04:21 opposition -2238 Dec 05 i 05:48 26°802'16 -1°01'26 15°€ 16°**Ω**49'11 min. Earth dist. -2238 Dec 04 j 19:02 26°804'30 8.05827 AU retrograde -2232 Dec 13 j 18:03 direct -2237 Feb 10 i 16:48 22°**8**32'02 -2231 Jan 30 j 21:57 15°RΩ -2237 May 21 j 15:39 $0^{\circ}II$ -2231 Feb 20 j 02:50 13°Ω31'13 2°26'31 opposition -2237 May 27 j 21:50 0°II46'58 min. Earth dist. -2231 Feb 20 j 00:27 13°Ω31'40 8.87116 AU evening set direct -2231 May 02 j 01:49 10°**Ω**07'28 -2237 Jun 15 j 01:32 3°II06'27 -0°32'35 -2231 Jul 23 j 11:04 15°**Ω** conjunction minimum elong -2237 Jun 15 j 01:34 3°**II**06'28 0°32'32 evening set -2231 Aug 14 j 21:36 17°**Ω**29'48 max. Earth dist. -2237 Jun 15 j 15:39 3°**Д**11'00 10.11341 AU -2237 Jul 03 j 02:24 5°**Ⅱ**24'59 conjunction -2231 Aug 31 j 21:10 19°**Q**30'00 2°07'05 morning rise 13°**Ⅲ**22'27 -2237 Oct 13 j 14:49 minimum elong -2231 Aug 31 j 21:07 19°**Q**30′00 2°07′07 retrograde -2237 Dec 19 j 03:44 9°II56'10 -0°19'57 -2231 Aug 31 j 22:09 19°**Ω**30'18 10.93014 AU opposition max. Earth dist. 9°**Ⅲ**58'18 8.17317 AU -2231 Sep 17 j 16:12 21°**Ω**28′52 min. Earth dist. -2237 Dec 18 j 17:20 morning rise direct -2236 Feb 25 j 06:25 6°**I**I26′28 retrograde -2231 Dec 25 j 11:00 28°**Ω**27'29 evening set -2236 Jun 10 j 14:23 14°**Ⅲ**33'56 opposition -2230 Mar 04 j 07:33 25°**Ω**10'32 2°42'30 asc. node -2236 Jun 17 j 09:29 15°**Ⅲ**25′03 min. Earth dist. -2230 Mar 04 j 07:09 25°**Ω**10'36 8.98644 AU direct -2230 May 14 j 16:27 21°Ω48'05 conjunction -2236 Jun 28 j 15:14 16°**I**I50'37 0°01'02 evening set -2230 Aug 26 j 19:50 29°**Ω**02'44 minimum elong -2236 Jun 28 j 15:14 16°**Ⅱ**50'37 0°01'04 -2230 Sep 04 j 01:06 0° m

behind sun begin

behind sun end

-2236 Jun 28 j 07:56

-2236 Jun 28 j 22:32

16°**Ⅱ**48'20

16°**I**I52'55

-2230 Sep 12 j 15:02

conjunction

1° m 00'31 2°17'35

•	ical year style is used: Th		•	//		, .	ge 13
minimum elong	-2230 Sep 12 j 15:01	1° M) 00'30		max. Earth dist.	-2224 Nov 15 j 21:54		11.11678 AU
max. Earth dist.	-2230 Sep 12 j 13:01 -2230 Sep 12 j 13:33		11.03478 AU		-2224 Nov 13 j 21:34 -2224 Dec 02 j 23:24	9°M23'56	11.110/8 AU
	1 3	-	11.034/8 AU	morning rise	,		
morning rise	-2230 Sep 29 j 06:05	2° M 57'06			-2223 Jan 31 j 02:50	15°M	
retrograde	-2229 Jan 06 j 01:14 -2229 Mar 16 j 08:02	9° Mp 50'56	2°51'40	retrograde	-2223 Mar 14 j 09:51	16°M24'33	
opposition	3	6° Mp 34'42			-2223 Apr 26 j 21:52	15°RM	1027112
min. Earth dist.	-2229 Mar 16 j 09:38	6° Mp 34'24	9.08025 AU	opposition	-2223 May 24 j 11:20	13°M06'04	1°36'12
direct	-2229 May 26 j 21:46	3° Mp 13'29		min. Earth dist.	-2223 May 24 j 23:27	13°M03'50	9.08076 AU
evening set	-2229 Sep 07 j 10:03	10° m 21'31		direct	-2223 Aug 03 j 02:50	9°M47'57	
	2220 0 24:01.45	100m 15105	2022121		-2223 Oct 26 j 12:52	15°M	
conjunction	-2229 Sep 24 j 01:45	12° Mp 17'27	2°22'31	evening set	-2223 Nov 11 j 03:42	16° M ₊45'07	
minimum elong	-2229 Sep 24 j 01:44	12° Mp 17'26	2°22'32		2222 1 27:16:20	1000 41121	1006140
max. Earth dist.	-2229 Sep 23 j 22:03		11.11597 AU	conjunction	-2223 Nov 27 j 16:30	18°M41'31	1°06'49
morning rise	-2229 Oct 10 j 13:45	14° m) 12'22		minimum elong	-2223 Nov 27 j 16:33	18°M41'32	1°06'47
retrograde	-2228 Jan 17 j 12:19	21°Mp03'10	205.4100	max. Earth dist.	-2223 Nov 27 j 02:32		11.03812 AU
opposition	-2228 Mar 27 j 05:25	17° Mp 47'22		morning rise	-2223 Dec 14 j 07:00	20°M38'28	
min. Earth dist.	-2228 Mar 27 j 09:59	17° Mp 46'32	9.14880 AU	retrograde	-2222 Mar 26 j 12:29	27°M45'56	1005110
direct	-2228 Jun 06 j 21:07	14° m 27'13		opposition	-2222 Jun 05 j 14:54	24°M26'06	1°05'48
evening set	-2228 Sep 17 j 18:16	21° Mp 30'00		min. Earth dist.	-2222 Jun 06 j 02:58	24°M23'52	8.99019 AU
				direct	-2222 Aug 14 j 19:11	21° M .07'41	
conjunction	-2228 Oct 04 j 07:13	23° m 24'37	2°21'57	evening set	-2222 Nov 22 j 12:15	28°M08'22	
minimum elong	-2228 Oct 04 j 07:13	23° m) 24'37	2°21'57		-2222 Dec 08 j 05:13	0° ∡ ¹	
max. Earth dist.	-2228 Oct 04 j 00:09	•	11.17092 AU				
morning rise	-2228 Oct 20 j 17:20	25° m 18'29		conjunction	-2222 Dec 09 j 03:14	0° ∡ ¹06'34	0°40'27
	-2228 Dec 06 j 22:42	0∘ ⊽		minimum elong	-2222 Dec 09 j 03:16	0° ∡ ¹06'35	0°40'25
retrograde	-2227 Jan 27 j 22:10	2° ჲ 07'58		max. Earth dist.	-2222 Dec 08 j 14:08	0° ∡ °02'40	10.93743 AU
	-2227 Mar 23 j 06:43	30°R, Mp		morning rise	-2222 Dec 25 j 20:33	2° ∡ ¹05'35	
opposition	-2227 Apr 08 j 00:49	28° m 52'17	2°50'06	retrograde	-2221 Apr 07 j 22:43	9° ∡ 721'27	
min. Earth dist.	-2227 Apr 08 j 08:11	28° m 50'56	9.19021 AU	opposition	-2221 Jun 17 j 23:16	6° ₰ ¹00'06	0°32'05
direct	-2227 Jun 18 j 16:20	25° m 33'00		min. Earth dist.	-2221 Jun 18 j 10:19	5° ∡ 758'02	8.87932 AU
	-2227 Sep 05 j 12:33	0∘ ⊽		direct	-2221 Aug 26 j 15:18	2° ∡ ′41′10	
evening set	-2227 Sep 28 j 22:02	2° ₽ 31'50		evening set	-2221 Dec 04 j 03:35	9° ∡ 747'02	
conjunction	-2227 Oct 15 j 09:12	4° ≙ 25'45	2°16'07	conjunction	-2221 Dec 20 j 21:04	11° ∡ 747'28	0°11'55
minimum elong	-2227 Oct 15 j 09:13	4° ≙ 25'46	2°16'06	minimum elong	-2221 Dec 20 j 21:05	11° ∡ ¹47'28	0°11'52
max. Earth dist.	-2227 Oct 14 j 23:23	4° £ 22'54	11.19856 AU	behind sun begin	-2221 Dec 20 j 16:08	11° ∡ ¹45'59	
morning rise	-2227 Oct 31 j 18:31	6° ₽ 19'09		behind sun end	-2221 Dec 21 j 02:02	11° ∡ ¹48'57	
retrograde	-2226 Feb 08 j 07:48	13° ₾ 09'00		max. Earth dist.	-2221 Dec 20 j 08:43	11° ∡ ¹43'44	10.81814 AU
opposition	-2226 Apr 19 j 19:40	9° £ 53'03	2°39'53	morning rise	-2220 Jan 06 j 17:37	13° ∡ ¹48'54	
min. Earth dist.	-2226 Apr 20 j 04:35	9° £ 51'25	9.20380 AU	retrograde	-2220 Apr 19 j 19:07	21° ∡ 14'35	
direct	-2226 Jun 30 j 09:10	6° £ 34'26		desc. node	-2220 May 20 j 04:32	20° х 30′36	
evening set	-2226 Oct 09 j 22:51	13° ჲ 30'38		opposition	-2220 Jun 29 j 13:47	17° ∡ ′51'39	-0°03'55
	·			min. Earth dist.	-2220 Jun 29 j 23:39	17° ∡ ¹49'47	8.75208 AU
conjunction	-2226 Oct 26 j 09:21	15° ≏ 24'24	2°05'17	direct	-2220 Sep 06 j 15:15	14° ∡ "32′00	
minimum elong	-2226 Oct 26 j 09:24	15° ≏ 24'25	2°05'16	evening set	-2220 Dec 15 j 03:28	21° ∡ ¹44'40	
max. Earth dist.	-2226 Oct 25 j 22:38	15° ≏ 21'17	11.19847 AU	C	J		
morning rise	-2226 Nov 11 j 18:41	17° £ 17'54		conjunction	-2220 Dec 31 j 23:40	23° ∡ ¹47'36	-0°17'55
retrograde	-2225 Feb 19 j 21:57	24° ♀ 09'45		minimum elong	-2220 Dec 31 j 23:39	23° ∡ ¹47'36	
opposition	-2225 May 01 j 14:55	20° ≏ 53'13	2°23'50	max. Earth dist.	-2220 Dec 31 j 11:34	23° ∡ ¹43'54	10.68473 AU
min. Earth dist.	-2225 May 02 j 00:32	20° ≏ 51'28	9.18949 AU	morning rise	-2219 Jan 17 j 23:49	25° ∡ 751'48	
direct	-2225 Jul 12 j 00:17	17° ♀ 35'02			-2219 Feb 24 j 17:00	0°⋜	
evening set	-2225 Oct 20 j 22:54	24° ♀ 30'00		retrograde	-2219 May 02 j 23:33	3° ට 28'31	
011111111111111111111111111111111111111				opposition	-2219 Jul 12 j 11:21	0° る 03'56	-0°40'53
conjunction	-2225 Nov 06 j 09:33	26° £ 24'10	1°49'49	min. Earth dist.	-2219 Jul 12 j 20:21		8.61355 AU
minimum elong	-2225 Nov 06 j 09:36	26° £ 24'10	1°49'48	min. Darm dist.	-2219 Jul 13 j 07:49	30°R ✓	0.01300110
max. Earth dist.	-2225 Nov 05 j 21:49		11.17085 AU	direct	-2219 Sep 18 j 21:00	26° ₹ '43'21	
morning rise	-2225 Nov 22 j 19:46	28° ⊆ 18'18	11.17005710	direct	-2219 Nov 20 j 21:26	0°중	
morning rise	-2225 Dec 08 j 02:28	0°M		evening set	-2219 Dec 27 j 13:44	4°る04'23	
retrograde	-2224 Mar 02 j 13:22	5°ML13'42		evening see	221) Bee 27 j 15.11	1 00123	
•	-	1°M56'19	2°02'26	conjunction	-2218 Jan 13 j 12:59	6° ප 10'05	-0°47'40
opposition	-2224 May 12 i 11:38	1 1100017		3		6°る10'04	
opposition min Farth dist	-2224 May 12 j 11:38	1°M.54'20	9 14797 AII		=// X an 1 1 1 / 1 7 / 1		
opposition min. Earth dist.	-2224 May 12 j 22:31	1°M54'20 30°R ≏	9.14797 AU	minimum elong max Earth dist	-2218 Jan 13 j 12:57		
min. Earth dist.	-2224 May 12 j 22:31 -2224 Jun 09 j 19:53	30° ₹ Ω	9.14797 AU	max. Earth dist.	-2218 Jan 13 j 02:20	6° る 06'46	10.54272 AU
**	-2224 May 12 j 22:31 -2224 Jun 09 j 19:53 -2224 Jul 22 j 11:50	30° ₹₽ 28° ₽ 38'18	9.14797 AU	max. Earth dist. morning rise	-2218 Jan 13 j 02:20 -2218 Jan 30 j 16:56	6°る06'46 8°る17'16	
min. Earth dist.	-2224 May 12 j 22:31 -2224 Jun 09 j 19:53 -2224 Jul 22 j 11:50 -2224 Sep 01 j 23:57	30°R ≏ 28° ≏ 38'18 0°M	9.14797 AU	max. Earth dist. morning rise retrograde	-2218 Jan 13 j 02:20 -2218 Jan 30 j 16:56 -2218 May 16 j 12:46	6°පි06'46 8°පි17'16 16°පි05'48	10.54272 AU
min. Earth dist.	-2224 May 12 j 22:31 -2224 Jun 09 j 19:53 -2224 Jul 22 j 11:50	30° ₹₽ 28° ₽ 38'18	9.14797 AU	max. Earth dist. morning rise retrograde opposition	-2218 Jan 30 j 16:56 -2218 May 16 j 12:46 -2218 Jul 25 j 16:26	6°පි06'46 8°පි17'16 16°පි05'48 12°පි39'34	10.54272 AU -1°17'09
min. Earth dist. direct evening set	-2224 May 12 j 22:31 -2224 Jun 09 j 19:53 -2224 Jul 22 j 11:50 -2224 Sep 01 j 23:57 -2224 Oct 30 j 23:59	30°R		max. Earth dist. morning rise retrograde opposition min. Earth dist.	-2218 Jan 3 j 02:20 -2218 Jan 3 0 j 16:56 -2218 May 16 j 12:46 -2218 Jul 25 j 16:26 -2218 Jul 26 j 00:00	6° ට 06'46 8° ට 17'16 16° ට 05'48 12° ට 39'34 12° ට 38'06	10.54272 AU
min. Earth dist.	-2224 May 12 j 22:31 -2224 Jun 09 j 19:53 -2224 Jul 22 j 11:50 -2224 Sep 01 j 23:57	30°R ≏ 28° ≏ 38'18 0°M	9.14797 AU 1°30'09 1°30'07	max. Earth dist. morning rise retrograde opposition	-2218 Jan 30 j 16:56 -2218 May 16 j 12:46 -2218 Jul 25 j 16:26	6°පි06'46 8°පි17'16 16°පි05'48 12°පි39'34	10.54272 AU -1°17'09

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -2217 in astronomical counting style is the year 2218 BCE in historical counting style. -2217 Jan 26 j 14:25 18°**ප**57'15 -1°15'58 morning rise -2211 May 11 j 10:42 15°Y57'18 conjunction -2217 Jan 26 j 14:22 18°**ප**57'14 1°16'01 -2211 Aug 25 j 20:11 24°Y28'11 minimum elong retrograde max. Earth dist. -2217 Jan 26 j 06:28 18°る54'44 10.39851 AU -2211 Oct 31 j 11:23 20°**Y**57'41 -2°25'37 opposition 20°**Υ**59'37 7.90776 AU -2217 Feb 12 j 22:05 21°る07'31 -2211 Oct 31 j 02:10 min. Earth dist. morning rise 17°**Y**28′18 -2210 Jan 05 j 16:57 retrograde -2217 May 30 j 13:27 29°る08'08 direct -2217 Aug 08 j 05:21 25°Y51'57 opposition 25°る40'22 -1°50'48 evening set -2210 Apr 20 j 19:57 25°**る**39'21 min. Earth dist. -2217 Aug 08 j 10:33 8.32766 AU -2210 May 08 j 23:47 28°Y14'48 -1°45'15 direct -2217 Oct 14 j 11:38 22°る17'29 conjunction 28°**Y**14'49 evening set -2216 Jan 22 j 22:28 29°る58'41 minimum elong -2210 May 08 j 23:51 1°45'12 -2216 Jan 23 j 02:41 0°≈ max. Earth dist. -2210 May 09 j 12:46 28°**Y**19'05 9.92423 AU -2210 May 22 j 07:48 0°8 -2216 Feb 09 j 04:47 0°837'45 conjunction 2°≈10'23 -1°41'08 morning rise -2210 May 27 j 04:07 minimum elong -2216 Feb 09 j 04:44 2°≈10'22 1°41'11 retrograde -2210 Sep 09 j 12:35 9°**8**01'30 max. Earth dist. -2216 Feb 09 j 00:22 2°≈08'58 10.25929 AU opposition -2210 Nov 14 j 23:16 5°**8**31'58 -1°55'53 morning rise -2216 Feb 26 j 16:04 4°≈23'44 min. Earth dist. -2210 Nov 14 j 12:59 5°**8**34'07 7.95113 AU retrograde -2216 Jun 12 j 23:36 12°≈35'55 direct -2209 Jan 20 j 15:12 2°802'12 opposition -2216 Aug 21 j 01:58 9°≈06'48 -2°19'37 evening set -2209 May 06 j 07:20 10°824'03 min. Earth dist. -2216 Aug 21 j 04:00 9°≈06'24 8.19458 AU direct -2216 Oct 26 j 19:24 5°≈42'41 conjunction -2209 May 24 j 12:22 12°846'10 -1°18'31 evening set -2215 Feb 04 j 22:19 13°≈34'42 minimum elong -2209 May 24 j 12:25 12°846'11 1°18'29 -2215 Feb 16 j 00:05 15°≈ max. Earth dist. -2209 May 25 j 02:10 12°**8**50'41 9.98402 AU -2209 Jun 10 j 15:42 15°8 conjunction -2215 Feb 22 i 08:24 15°≈49'22 -2°01'25 morning rise -2209 Jun 11 j 16:21 15°**8**07'54 minimum elong -2215 Feb 22 i 08:21 15°≈49'21 2°01'27 retrograde -2209 Sep 23 i 21:17 23°**8**22'05 max. Earth dist. -2215 Feb 22 j 07:25 15°≈49'03 10.13304 AU opposition -2209 Nov 29 j 06:38 19°**8**53'53 -1°19'16 -2215 Mar 11 j 23:22 18°≈05'39 min. Earth dist. -2209 Nov 28 i 19:47 19°**8**56'08 8.02500 AU morning rise -2215 Jun 27 j 17:41 -2208 Feb 04 j 11:00 retrograde 26°≈27'58 direct 16°**8**24'06 opposition -2215 Sep 04 j 05:44 22°≈57'46 -2°41'19 evening set -2208 May 20 j 12:57 24°841'37 -2215 Sep 04 j 04:39 min. Earth dist. 22°≈57'59 8.07846 AU -2215 Nov 09 j 12:49 -2208 Jun 07 j 17:35 27°802'06 -0°47'21 direct 19°≈32'23 conjunction -2214 Feb 19 j 10:41 -2208 Jun 07 j 17:37 27°≈34'48 minimum elong 27°**8**02'07 0°47'18 evening set -2208 Jun 08 j 07:39 max. Earth dist. 27°**8**06'40 10.07236 AU -2208 Jun 25 j 19:43 -2214 Mar 09 j 00:41 conjunction 29°≈52'13 -2°15'05 29°**8**21'47 morning rise -2214 Mar 09 j 00:40 -2208 Jun 30 j 21:09 minimum elong 29°≈52'13 2°15'06 $0^{\circ}\Pi$ -2214 Mar 09 j 03:02 29°≈52'59 10.02759 AU -2208 Oct 06 j 21:44 7°**Ⅱ**24'50 max. Earth dist. retrograde 3° **II** $58'11 -0^{\circ}38'37$ -2214 Mar 10 j 00:25 -2208 Dec 12 j 08:00 0°**₩** opposition -2214 Mar 26 j 19:18 4°**Д**00'24 8.12531 AU morning rise 2°**H**11'10 min. Earth dist. -2208 Dec 11 j 21:15 retrograde -2214 Jul 12 j 17:17 10°**)**41′06 direct -2207 Feb 18 j 02:12 0°**I**I28'41 opposition -2214 Sep 18 j 15:23 7°**升**10'13 -2°53'50 evening set -2207 Jun 04 j 10:37 8°**Ⅲ**39'47 min. Earth dist. -2214 Sep 18 j 11:45 7°**升**10'58 7.98662 AU -2214 Nov 23 j 15:36 3°**)** 43′35 conjunction -2207 Jun 22 j 13:09 10°**I**57'51 -0°14'01 direct -2213 Mar 06 j 10:04 11°**¥**55′07 -2207 Jun 22 j 13:09 10°**耳**57'52 0°13'58 evening set minimum elong behind sun begin -2207 Jun 22 j 09:38 10°**I**I56'45 -2213 Mar 24 j 04:03 14° **)** 14'55 -2°20'44 behind sun end -2207 Jun 22 j 16:41 10°**Ⅱ**58'59 conjunction max. Earth dist. -2213 Mar 24 j 04:03 14° **)** 14'56 2°20'44 -2207 Jun 23 j 02:37 11°**Д**02'10 10.18443 AU minimum elong -2213 Mar 24 i 09:39 13°**Ⅱ**14'45 max. Earth dist. 14°**)** 16'46 9.94988 AU morning rise -2207 Jul 10 j 11:59 21°**I**05'50 morning rise -2213 Apr 11 j 02:04 16°**¥**36′01 retrograde -2207 Oct 20 j 12:38 -2213 Jul 27 i 19:31 retrograde 25°¥10'13 asc. node -2207 Nov 27 i 08:59 19°**Ⅱ**49'51 opposition -2213 Oct 03 i 04:59 21°\(\dagger)39'03 -2°55'37 opposition -2207 Dec 26 j 02:18 17°**Ⅱ**40′52 0°03′09 min. Earth dist. -2213 Oct 02 j 23:10 21°¥40'15 7.92522 AU min. Earth dist. -2207 Dec 25 j 16:39 17°**Ⅱ**42'50 8.24660 AU -2213 Dec 08 j 02:12 18°**₩**11'18 direct -2206 Mar 04 j 11:57 14°**Ⅱ**11'55 direct -2212 Mar 20 j 17:42 26°**)** €29'48 evening set -2206 Jun 18 j 22:04 22°II15'03 evening set conjunction -2212 Apr 07 j 15:33 28°**H**51'24 -2°17'33 conjunction -2206 Jul 06 j 20:56 24° II 30'05 0° 19'21 minimum elong -2212 Apr 07 j 15:35 28°**H**51'25 2°17'32 minimum elong -2206 Jul 06 j 20:55 24°**Ⅱ**30′04 0°19'24 28°**¥**54'17 9.90537 AU max. Earth dist. -2212 Apr 08 j 00:13 max. Earth dist. -2206 Jul 07 j 08:44 24°**Д**33'47 10.31386 AU $0^{\circ}\Upsilon$ -2212 Apr 16 j 06:46 morning rise -2206 Jul 24 j 15:20 26°**Ⅱ**43'41 -2212 Apr 25 j 16:34 1°**Y**13'59 -2206 Aug 21 j 17:25 0ಂತಾ morning rise 9°**Ƴ**48'31 -2212 Aug 10 j 21:40 -2206 Nov 02 j 16:34 retrograde retrograde 4°9522'49 -2212 Oct 16 j 20:31 6°Υ17'29 -2°46'03 -2205 Jan 08 j 13:13 0°959'35 0°43'26 opposition opposition 6°**Y**19′06 7.89851 AU min. Earth dist. -2212 Oct 16 j 12:50 min. Earth dist. -2205 Jan 08 j 05:06 1°501'12 8.38202 AU direct -2212 Dec 21 j 19:35 2°**Y**48'48 -2205 Jan 21 j 03:39 30°RⅡ evening set -2211 Apr 05 j 06:09 11°**Υ**11'24 direct -2205 Mar 18 j 15:05 27°**Ⅲ**31'26 -2205 May 12 j 22:25 0ಂಣ conjunction -2211 Apr 23 j 07:27 13°**Y**34'04 -2°05'27 evening set -2205 Jul 02 j 21:45 5°925'36 minimum elong -2211 Apr 23 j 07:30 13°**Y**34'05 2°05'25 max. Earth dist. -2211 Apr 23 j 18:43 13°**Ƴ**37'48 9.89696 AU -2205 Jul 20 j 15:49 7°537'12 0°50'44 conjunction

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -2205 in astronomical counting style is the year 2206 BCE in historical counting style. morning rise -2205 Jul 20 i 15:47 7°537'11 0°50'47 -2199 Oct 16 i 05:41 20° m 41'02 minimum elong -2205 Jul 21 j 01:04 7°540'04 10.45340 AU -2198 Jan 23 j 07:01 27° m 31'07 max. Earth dist. retrograde -2205 Aug 07 j 05:04 24° Mp 14'57 9°9547'17 opposition -2198 Apr 03 j 05:27 2°52'50 morning rise -2205 Nov 15 j 09:38 -2198 Apr 03 j 09:52 24° My 14'0817°9315'11 min. Earth dist. 9.16409 AU retrograde -2204 Jan 21 j 16:25 -2198 Jun 13 j 23:15 opposition 13°**©**53'34 1°20'10 direct 20° m 54'54 -2198 Sep 24 j 09:52 min. Earth dist. -2204 Jan 21 j 09:41 13°954'53 8.52411 AU evening set 27° m 55'27 direct -2204 Mar 31 j 10:45 10°9526'25 -2198 Oct 10 j 21:54 evening set -2204 Jul 15 j 09:24 18°9511'12 conjunction 29° m 49'42 2°19'25 minimum elong -2198 Oct 10 j 21:55 29° m 49'42 2°19'25 conjunction -2204 Aug 01 j 22:10 20°519'18 1°18'44 max. Earth dist. -2198 Oct 10 j 15:35 29° Mp 47'51 11.18137 AU minimum elong -2204 Aug 01 j 22:07 20°9519'17 1°18'46 -2198 Oct 12 j 09:21 0∘**ত** -2204 Aug 02 j 04:55 -2198 Oct 27 j 07:23 max. Earth dist. 20°521'22 10.59567 AU morning rise 1°**£**43'16 -2197 Feb 03 j 16:18 morning rise -2204 Aug 19 j 05:54 22°925'50 retrograde 8°**△**32'44 retrograde -2204 Nov 26 j 19:34 29°543'37 opposition -2197 Apr 15 j 00:11 5°**≏**16'36 2°45'16 opposition -2203 Feb 02 j 12:02 26°9523'27 1°51'49 min. Earth dist. -2197 Apr 15 j 06:30 5°**£**15′26 9.19593 AU min. Earth dist. -2203 Feb 02 j 06:34 26°9524'30 8.66552 AU direct -2197 Jun 25 j 14:41 1°**£**57'27 direct -2203 Apr 13 j 20:06 22°957'27 evening set -2197 Oct 05 j 11:32 8°**£**54'34 -2203 Jul 23 j 17:07 $0^{\circ}\Omega$ evening set -2203 Jul 28 j 09:11 0°**£**32′56 conjunction -2197 Oct 21 j 22:17 10°**≏**48'19 2°10'45 minimum elong -2197 Oct 21 j 22:19 10°**≏**48'20 2°10'44 1°42'18 conjunction -2203 Aug 14 j 16:31 2°**Ω**37'40 max. Earth dist. -2197 Oct 21 j 13:36 10°**≏**45'48 11.19993 AU minimum elong -2203 Aug 14 j 16:28 2°**Ω**37'39 1°42'20 morning rise -2197 Nov 07 i 07:29 12°**£**41'42 max. Earth dist. -2203 Aug 14 j 21:17 2°Ω39'07 10.73369 AU retrograde -2196 Feb 15 i 03:34 19°**£**32'10 morning rise -2203 Aug 31 j 18:42 4°Ω40'51 opposition -2196 Apr 25 j 18:44 16°**♀**15'48 2°31'42 retrograde -2203 Dec 08 j 21:40 11°**Ω**49'53 min. Earth dist. -2196 Apr 26 j 03:19 16°**♀**14'14 9.20069 AU -2202 Feb 15 j 01:09 8°Ω30'59 2°17'25 -2196 Jul 06 j 05:45 12°**♀**57'22 opposition direct -2202 Feb 14 j 21:23 8°**Ω**31'42 8.79957 AU -2196 Oct 15 j 11:27 19°**£**52'27 min. Earth dist. evening set 5°**Ω**06'14 direct -2202 Apr 26 j 20:47 -2196 Oct 31 j 21:47 -2202 Aug 09 j 21:40 12°**Ω**32'50 conjunction 21°**2**46'16 1°57'17 evening set -2196 Oct 31 j 21:49 minimum elong 21°**£**46'17 1°57'15 -2202 Aug 26 j 23:44 14°**Ω**34'29 2°00'45 conjunction max. Earth dist. -2196 Oct 31 j 11:07 21°**♀**43'10 11.19139 AU -2202 Aug 26 j 23:41 23°**♀**40'00 minimum elong $14^{\circ}\Omega 34'28 \quad 2^{\circ}00'47$ -2196 Nov 17 j 07:35 morning rise -2202 Aug 27 j 02:41 14°**Ω**35'22 10.86129 AU max. Earth dist. -2195 Jan 30 j 12:25 0°M 15°**Ω** -2202 Aug 30 j 13:04 -2195 Feb 25 j 16:23 0°M33'08 retrograde -2202 Sep 12 j 20:46 16°**Ω**34'42 -2195 Mar 24 j 07:39 morning rise 30°R <u>Ω</u> $23^{\circ}\Omega 36'33$ -2202 Dec 20 j 18:06 -2195 May 07 j 14:13 retrograde opposition 27°**£**16'14 2°12'35 -2201 Feb 27 j 08:30 -2195 May 07 j 23:47 opposition 20°**Ω**18'43 2°36'26 min. Earth dist. 27°**£**14'29 9.17820 AU min. Earth dist. -2201 Feb 27 j 07:17 20°**Ω**18'57 8.92064 AU direct -2195 Jul 17 j 18:43 23°**♀**58'17 -2201 May 09 j 13:26 16°**Ω**55'12 -2195 Oct 18 j 16:01 0°M direct -2201 Aug 22 j 00:10 24°**Ω**13'42 evening set -2195 Oct 26 j 11:23 0°M52'48 evening set -2201 Sep 07 j 21:24 26°Ω12'41 2°13'44 -2195 Nov 11 j 22:18 2°M47'14 1°39'24 conjunction conjunction -2201 Sep 07 j 21:22 26°Ω12'41 2°13'45 -2195 Nov 11 j 22:21 2°M47'15 1°39'23 minimum elong minimum elong -2201 Sep 07 j 21:21 26°**Ω**12'41 10.97351 AU max. Earth dist. -2195 Nov 11 j 11:18 2°M44'01 11.15599 AU max. Earth dist. -2201 Sep 24 j 14:09 28°**Ω**10′24 -2195 Nov 28 j 09:23 4°M41'48 morning rise morning rise -2201 Oct 10 j 20:31 retrograde -2194 Mar 09 j 11:32 11°MJ39'16 retrograde -2200 Jan 01 i 08:33 5° m 06'39 opposition -2194 May 19 j 12:01 8°M21'33 1°48'25 opposition -2200 Mar 10 j 10:50 1° m 49'38 2°48'38 min. Earth dist. -2194 May 19 j 21:43 8°ML19'47 9.12919 AU min. Earth dist. -2200 Mar 10 j 12:16 1° Mp 49'22 9.02414 AU direct -2194 Jul 29 i 09:06 5°M03'51 -2200 Apr 05 i 07:50 30°RΩ -2194 Nov 06 j 13:14 11°M59'18 evening set direct -2200 May 20 j 21:29 28°Ω27'20 -2200 Jul 04 j 14:21 0°m -2194 Nov 23 j 01:23 13°ML54'51 1°17'38 conjunction -2200 Sep 01 j 17:58 -2194 Nov 23 j 01:25 evening set 5° m 38'42 minimum elong 13°M,54'52 1°17'36 max. Earth dist. -2194 Nov 22 j 14:06 13°M51'32 11.09477 AU -2200 Sep 18 j 11:08 conjunction 7° mp 35'33 2°21'07 -2194 Dec 02 j 07:27 15°M minimum elong -2200 Sep 18 j 11:07 7° m 35'33 2°21'09 morning rise -2194 Dec 09 j 14:28 15°M50'46 max. Earth dist. -2200 Sep 18 j 07:53 7° My 34'36 11.06629 AU retrograde -2193 Mar 21 j 11:47 22°M54'07 -2200 Oct 05 j 00:36 9° m 31'20 -2193 May 31 j 13:10 19°M35'22 1°19'48 morning rise opposition -2199 Jan 11 j 19:13 16° m 23'39 9.05517 AU retrograde min. Earth dist. -2193 May 31 j 23:15 19°**M**⋅33'31 opposition -2199 Mar 22 j 09:26 13°**m** 07'11 2°54'02 direct -2193 Aug 09 j 22:34 16°ML17'40 -2193 Nov 17 j 19:09 23°M15'40 min. Earth dist. -2199 Mar 22 j 12:34 13° Mp 06'36 9.10623 AU evening set direct -2199 Jun 02 j 01:21 9° m 46'03 evening set -2199 Sep 13 j 04:36 16° Mp 51'25 conjunction -2193 Dec 04 j 08:56 25°M12'44 0°52'34 minimum elong -2193 Dec 04 j 08:57 25°M12'45 0°52'31 conjunction -2199 Sep 29 j 18:42 18° m 46'40 2°22'58 max. Earth dist. -2193 Dec 03 j 20:21 25°M09'01 11.00963 AU minimum elong -2199 Sep 29 j 18:42 18° Mp 46'40 -2193 Dec 21 j 00:45 27°M10'28 2°22'59 morning rise max. Earth dist. -2199 Sep 29 j 13:44 -2192 Jan 15 j 17:32 0°**∡**7 18° Mp 45'13 11.13635 AU

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -2192 in astronomical counting style is the year 2193 BCE in historical counting style. -2192 Apr 01 i 17:03 4°**₹**21'15 max. Earth dist. -2186 Feb 15 j 20:57 9°**≈**36'51 10.21092 AU retrograde opposition -2192 Jun 11 j 18:39 1°**₹**'01'14 0°47'31 -2186 Mar 05 j 15:14 morning rise 11°253'04 min. Earth dist. -2192 Jun 12 j 05:31 0°**尽**59'13 8.95855 AU -2186 Mar 31 j 14:36 15°≈ -2186 Jun 21 j 03:40 -2192 Jun 25 j 18:08 30°RML 20°≈09'30 retrograde 27°ML43'13 16°≈40'05 -2°32'10 direct -2192 Aug 20 j 15:28 opposition -2186 Aug 28 j 23:30 -2192 Oct 12 j 21:38 0°⊀ min. Earth dist. -2186 Aug 29 j 01:58 16°≈39'35 8.14838 AU evening set -2192 Nov 28 j 06:43 4°**х** 45′26 -2186 Sep 19 j 13:31 15°R≈ 13°≈15'27 direct -2186 Nov 03 j 12:31 conjunction -2192 Dec 14 j 22:42 6°**х** 44′27 0°24'57 -2186 Dec 17 j 05:39 15°≈ minimum elong -2192 Dec 14 j 22:43 6°**∡¹**44'27 0°24'53 evening set -2185 Feb 12 j 23:31 21°≈11'55 max. Earth dist. -2192 Dec 14 j 09:55 6°**҂**40'38 10.90327 AU -2185 Mar 02 j 11:28 morning rise -2192 Dec 31 j 17:40 8°**∡**¹44'23 conjunction 23°≈27'46 -2°09'38 -2185 Mar 02 j 11:26 retrograde -2191 Apr 14 j 07:17 16°**₹**'04'06 minimum elong 23°≈27'45 2°09'39 opposition -2191 Jun 24 j 05:43 12°**∡**°42'37 0°12'30 max. Earth dist. -2185 Mar 02 j 10:15 23°**≈**27'22 10.08933 AU min. Earth dist. -2191 Jun 24 j 16:27 12°**х**⁴40'37 8.84240 AU morning rise -2185 Mar 20 j 04:18 25°≈45'12 direct -2191 Sep 01 j 14:02 9°×24'00 -2185 Apr 25 j 02:29 0°**)**€ desc. node -2191 Nov 01 j 13:50 12°**х** 23′52 retrograde -2185 Jul 05 j 22:53 4° > 10'43 evening set -2191 Dec 10 j 01:40 16°**∡**³32′03 opposition -2185 Sep 12 j 05:30 0°**)**(40'12 -2°49'13 min. Earth dist. -2185 Sep 12 j 04:58 0°****40'19 8.03848 AU conjunction -2191 Dec 26 j 20:23 18°**₹**33'23 -0°04'25 -2185 Sep 20 j 11:10 30°R≈ minimum elong -2191 Dec 26 j 20:23 18°**∡**33'23 0°04'29 direct -2185 Nov 17 j 10:33 27°≈14'08 behind sun begin -2191 Dec 26 i 13:30 18°**х** 31′19 -2184 Jan 11 j 23:08 0°) behind sun end -2191 Dec 27 i 03:17 18°**∡**35'27 evening set -2184 Feb 27 j 16:35 5°**¥**20'32 max. Earth dist. -2191 Dec 26 i 08:45 18°**✗**29'52 10.77893 AU morning rise -2190 Jan 12 j 18:40 20°**х** 35′52 conjunction -2184 Mar 16 j 08:38 7°\(\)39'03 -2°19'13 -2190 Apr 27 j 06:15 28°×05'53 -2184 Mar 16 j 08:37 7°**¥**39'03 2°19'13 retrograde minimum elong opposition -2190 Jul 06 j 23:06 max. Earth dist. -2184 Mar 16 j 11:29 7°**)**€39'59 9.99158 AU 24° **2**'42'47 -0°24'03 -2190 Jul 07 j 08:39 -2184 Apr 03 j 04:54 9° ¥ 58'58 min. Earth dist. 24°**∡**¹40'58 8.71040 AU morning rise -2190 Sep 13 j 17:18 -2184 Jul 19 j 23:15 21°×23'20 retrograde 18° **X** 30'45 direct -2190 Dec 22 j 06:11 -2184 Sep 25 j 16:31 14°\\$59'31 -2°56'16 28°**х** 38′54 opposition evening set -2189 Jan 02 j 08:34 -2184 Sep 25 j 12:50 0°ಕ min. Earth dist. 15°**₭**00'16 7.95563 AU -2184 Nov 30 j 15:58 11°**)** 32'05 direct -2189 Jan 08 j 03:56 -2183 Mar 13 j 19:31 conjunction 0°る42'52 -0°34'12 19°**)** 46'48 evening set -2189 Jan 08 j 03:54 0°る42'52 0°34'15 minimum elong -2189 Jan 07 j 17:18 0°**궁**39'36 10.64074 AU -2183 Mar 31 j 15:37 22°\(\overline{\pi}\) 07'31 -2°20'18 max. Earth dist. conjunction -2189 Jan 25 j 05:45 morning rise 2°る48'12 minimum elong -2183 Mar 31 j 15:38 22°\(\mathbf{H}\)07'31 2°20'18 -2189 May 10 j 15:32 -2183 Mar 31 j 22:15 retrograde 10°る29'37 max. Earth dist. 22°**₭**09'42 9.92417 AU opposition -2189 Jul 19 j 23:28 7°る04'50 -1°00'43 morning rise -2183 Apr 18 j 15:05 24°\ 29'21 min. Earth dist. -2189 Jul 20 j 07:28 7°る03'18 8.56752 AU -2183 Jun 05 j 07:48 $0^{\circ}\Upsilon$ -2189 Sep 26 j 03:08 3°る44'21 retrograde -2183 Aug 04 j 02:04 3°Y03'46 direct -2188 Jan 03 j 21:45 11°**る**08'57 -2183 Oct 04 j 17:15 30°**₹**₩ evening set -2183 Oct 10 j 06:32 29°\ 32'16 -2°52'11 opposition -2188 Jan 20 j 22:38 13°る15'49 -1°03'15 min. Earth dist. -2183 Oct 10 j 00:12 29°**)** 33'35 7.90534 AU conjunction -2188 Jan 20 j 22:36 13°る15'48 1°03'18 -2183 Dec 15 j 05:05 26°**₭**03'39 minimum elong direct -2188 Jan 20 j 12:53 13°る12'46 10.49477 AU -2182 Feb 20 j 12:27 $0^{\circ}\Upsilon$ max. Earth dist. 4°Υ24'17 morning rise -2188 Feb 07 i 04:13 15°る24'12 evening set -2182 Mar 29 i 05:22 retrograde -2188 May 23 j 11:34 23°る17'39 6°Y46'33 -2°12'26 opposition -2188 Aug 01 i 07:48 19°**ප**51'14 -1°35'41 conjunction -2182 Apr 16 j 05:13 min. Earth dist. -2188 Aug 01 j 14:17 19°る49'58 8.42083 AU minimum elong -2182 Apr 16 i 05:16 6°Υ46'34 2°12'25 direct -2188 Oct 07 j 19:48 16°る29'30 max. Earth dist. -2182 Apr 16 i 14:56 6°**Y**49'46 9.89163 AU -2187 Jan 16 j 01:24 24°る04'17 -2182 May 04 j 07:22 9°Y09'34 evening set morning rise -2182 Aug 19 j 02:51 17°**Y**42'39 retrograde -2187 Feb 02 j 05:40 26° 14'09 -1°30'00 -2182 Oct 24 j 21:30 14°Υ11'23 -2°36'52 conjunction opposition 14°**Y**13'07 7.89091 AU minimum elong -2187 Feb 02 j 05:37 26° 14'08 1°30'02 min. Earth dist. -2182 Oct 24 j 13:14 10°**Y**41′50 max. Earth dist. -2187 Feb 01 j 21:38 26°る11'36 10.34876 AU direct -2182 Dec 29 j 23:48 28°**පි**25'41 19°**Y**05′27 -2187 Feb 19 j 15:05 evening set -2181 Apr 13 j 18:33 morning rise -2187 Mar 04 j 13:07 0°≈ -2181 May 01 j 21:21 21°**Y**28'25 -1°55'59 retrograde -2187 Jun 06 j 15:40 6°≈31'06 conjunction 3°≈03'06 -2°06'55 -2181 May 01 j 21:25 $21^{\circ}\mathbf{Y}28'27$ opposition -2187 Aug 15 j 00:02 minimum elong 1°55'57 21°**Y**32'21 -2181 May 02 j 09:14 9.89606 AU min. Earth dist. -2187 Aug 15 j 04:44 3°≈02'09 8.27840 AU max. Earth dist. 23°**Υ**51'44 -2187 Oct 01 j 20:36 30°Ŗる morning rise -2181 May 20 j 01:14 direct -2187 Oct 20 j 23:09 29°**る**39'56 -2181 Jul 13 j 19:08 0° 8 -2187 Nov 08 j 22:55 0°≈ retrograde -2181 Sep 02 j 22:41 2°**8**19'41 evening set -2186 Jan 29 j 18:04 7°≈25'35 -2181 Oct 25 j 01:32 30°**₹**Υ opposition -2181 Nov 08 j 10:58 28°**Y**49'07 -2°11'22 -2186 Feb 16 j 02:02 9°≈38'29 -1°52'42 -2181 Nov 08 j 01:38 28°**Y**51′05 7.91328 AU conjunction min. Earth dist.

-2186 Feb 16 j 01:59

minimum elong

9°≈38'28 1°52'44

direct

-2180 Jan 13 j 21:13

25°**Y**18'58

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 19 Attention, astronomical year style is used: The year -2180 in astronomical counting style is the year 2181 BCE in historical counting style.

Attention, astronom		ie year -2180 i	in astronomical co	unting style is the year	r 2181 BCE in historical c	ounting style.	
	-2180 Mar 28 j 18:19	0°8		retrograde	-2175 Nov 21 j 09:39	24° © 04'18	
evening set	-2180 Apr 28 j 07:20	3° 8 42'26		opposition	-2174 Jan 27 j 19:52	20° © 43'24	
				min. Earth dist.	-2174 Jan 27 j 13:11	20°5544'42	8.59424 AU
conjunction	-2180 May 16 j 11:57	6° 8 05'11		direct	-2174 Apr 07 j 19:35	17° © 16'52	
minimum elong	-2180 May 16 j 12:01	6° 8 05'13		evening set	-2174 Jul 22 j 15:32	24°957'04	
max. Earth dist.	-2180 May 17 j 01:03	6° 8 09'30	9.93705 AU				
morning rise	-2180 Jun 03 j 16:21	8° 8 27'49		conjunction	-2174 Aug 09 j 01:31	27°503'28	
. 1	-2180 Aug 03 j 00:18	15° 8		minimum elong	-2174 Aug 09 j 01:28	27°503'27	
retrograde	-2180 Sep 16 j 11:21	16° と 47'27 15° Rと		max. Earth dist.	-2174 Aug 09 j 08:30		10.66616 AU
	-2180 Oct 31 j 13:05		1927/42	morning rise	-2174 Aug 26 j 06:20	29°508'18	
opposition	-2180 Nov 21 j 20:49	13° 8 18'00			-2174 Sep 02 j 13:56	0°Ω	
min. Earth dist.	-2180 Nov 21 j 10:51		7.97087 AU	retrograde	-2174 Dec 03 j 14:37	6° Ω 21'37	2005154
direct	-2179 Jan 27 j 18:25 -2179 Apr 17 j 22:35	9° と 47'35 15° と		opposition min. Earth dist.	-2173 Feb 09 j 12:35 -2173 Feb 09 j 08:04	3° Ω 02'17 3° Ω 03'09	2°05'54 8.73599 AU
evening set	-2179 Apr 17 j 22.33	18° 8 07'59		min. Earth dist.	-2173 Feb 09 j 08.04 -2173 Mar 30 j 10:32	30°R.55	8.73399 AU
evening set	-21/9 May 13 J 10.09	18 00/39		direct	-2173 Mar 30 j 10.32 -2173 Apr 21 j 01:35	29° © 37'07	
conjunction	-2179 May 31 j 21:09	20° 8 29'33	-1°02'50	direct	-2173 Apr 21 j 01:33	29 3 3/0/ 0° Ω	
minimum elong	-2179 May 31 j 21:10	20° 8 29'34		evening set	-2173 Aug 04 j 09:46	7° Ω 08'12	
max. Earth dist.	-2179 Jun 01 j 10:40	_	10.01154 AU	evening set	-21/3 Aug 04 J 09.40	7 0 600 12	
morning rise	-2179 Jun 19 j 00:35	22° 8 50'32	10.01154710	conjunction	-2173 Aug 21 j 14:14	9° Ω 11'19	1°52'32
morning rise	-2179 Aug 28 j 21:16	0°П		minimum elong	-2173 Aug 21 j 14:11	9° Ω 11'18	
retrograde	-2179 Sep 30 j 15:28	0° П 59'36		max. Earth dist.	-2173 Aug 21 j 18:01		10.80282 AU
remograde	-2179 Nov 02 j 15:49	30°R₩		morning rise	-2173 Sep 07 j 13:52	11° Ω 12'58	10.00202 110
opposition	-2179 Dec 06 j 01:16	27° 8 31'37	-0°58'35	morning rise	-2173 Oct 12 j 13:37	15° Ω	
min. Earth dist.	-2179 Dec 05 j 14:55	_	8.05957 AU	retrograde	-2173 Dec 15 j 13:29	18° Ω 18'20	
direct	-2178 Feb 11 j 12:41	24° 8 01'19	0.0090771	opposition	-2172 Feb 21 j 22:57	15° Ω 00'18	2°28'06
	-2178 May 10 j 04:35	0°II		min. Earth dist.	-2172 Feb 21 j 20:02	15° Ω 00'51	8.86724 AU
evening set	-2178 May 28 j 18:01	2° Ⅱ 16'11		mm. Darum dist.	-2172 Feb 22 j 00:32	15°R Ω	0.00721110
evening sec	2170 11111 20 1 10:01			direct	-2172 May 02 j 23:27	11° Ω 36'31	
conjunction	-2178 Jun 15 j 21:42	4° Ⅱ 35'40	-0°30'14		-2172 Jul 09 j 06:53	15° Ω	
minimum elong	-2178 Jun 15 j 21:43	4° Ⅱ 35'40		evening set	-2172 Aug 15 j 17:31	18° Ω 59'05	
max. Earth dist.	-2178 Jun 16 j 11:00		10.11425 AU	Ü	e j		
morning rise	-2178 Jul 03 j 22:33	6° Ⅱ 54'09		conjunction	-2172 Sep 01 j 17:00	20° Ω 59'19	2°08'09
retrograde	-2178 Oct 14 j 10:15	14° Ⅱ 51′25		minimum elong	-2172 Sep 01 j 16:57	20° Ω 59'18	2°08'11
opposition	-2178 Dec 19 j 23:03	11° Ⅲ 25′07	-0°16'59	max. Earth dist.	-2172 Sep 01 j 18:30	20° Ω 59'45	10.92608 AU
min. Earth dist.	-2178 Dec 19 j 12:28	11° Ⅱ 27'16	8.17351 AU	morning rise	-2172 Sep 18 j 11:52	22° Ω 58'11	
direct	-2177 Feb 26 j 02:20	7° Ⅱ 55′21		retrograde	-2172 Dec 26 j 08:04	29° Ω 57′07	
asc. node	-2177 May 23 j 00:40	13° Ⅱ 35'45		opposition	-2171 Mar 05 j 03:52	26° Ω 40'07	2°43'33
evening set	-2177 Jun 12 j 10:27	16° Ⅱ 02'48		min. Earth dist.	-2171 Mar 05 j 02:52	26° Ω 40′19	8.98231 AU
				direct	-2171 May 15 j 11:49	23° Ω 17'42	
conjunction	-2177 Jun 30 j 11:17	18° Ⅱ 19′28	0°03'27		-2171 Aug 22 j 22:05	0° ™	
minimum elong	-2177 Jun 30 j 11:16	18° Ⅱ 19′28	0°03'30	evening set	-2171 Aug 27 j 15:55	0° Mp 32′33	
behind sun begin	-2177 Jun 30 j 04:02	18° Ⅱ 17'12					
behind sun end	-2177 Jun 30 j 18:31	18° Ⅲ 21'45		conjunction	-2171 Sep 13 j 11:04	2°m/30'22	2°18'12
max. Earth dist.	-2177 Jul 01 j 00:01	18° Ⅲ 23'31	10.23861 AU	minimum elong	-2171 Sep 13 j 11:03	2°M/30'22	2°18'14
morning rise	-2177 Jul 18 j 08:09	20° Ⅲ 34'51		max. Earth dist.	-2171 Sep 13 j 10:27	2° m 30'12	11.03075 AU
retrograde	-2177 Oct 27 j 18:59	28° Ⅲ 20′02		morning rise	-2171 Sep 30 j 01:55	4° Mp 27′00	
opposition	-2176 Jan 02 j 13:29	24° Ⅱ 55'31	0°24'21	retrograde	-2170 Jan 06 j 21:53	11° m)21'09	
min. Earth dist.	-2176 Jan 02 j 03:10	24° Ⅱ 57'36	8.30569 AU	opposition	-2170 Mar 17 j 04:45	8° Mp 04'54	2°52'09
direct	-2176 Mar 11 j 08:49	21° Ⅲ 26′38		min. Earth dist.	-2170 Mar 17 j 06:28	8° Mp 04'35	9.07643 AU
evening set	-2176 Jun 25 j 15:47	29° Ⅱ 25'26		direct	-2170 May 27 j 17:49	4° m 43'41	
	-2176 Jun 30 j 07:57	0 \circ ∞		evening set	-2170 Sep 08 j 06:19	11° m 51'55	
	A186 Y 1 16 1 1 1 1	10	00051		21806	120	2022:20
conjunction	-2176 Jul 13 j 12:30	1° © 38'49	0°35'57	conjunction	-2170 Sep 24 j 21:50	13° m 47'52	2°22'39
minimum elong	-2176 Jul 13 j 12:29	1°538'49	0°36'00	minimum elong	-2170 Sep 24 j 21:49	13° m 47'51	2°22'40
max. Earth dist.	-2176 Jul 14 j 00:25		10.37712 AU	max. Earth dist.	-2170 Sep 24 j 18:04		11.11249 AU
morning rise	-2176 Jul 31 j 04:25	3°550'43		morning rise	-2170 Oct 11 j 09:48	15° Mp 42'49	
retrograde	-2176 Nov 08 j 18:30	11°524'15	1902102	retrograde	-2169 Jan 18 j 09:11	22° Mp 33'55	2054102
opposition	-2175 Jan 14 j 20:23	8°501'34	1°03'02	opposition	-2169 Mar 29 j 02:30	19° Mp 18'05	2°54'02
min. Earth dist.	-2175 Jan 14 j 11:30	8° © 03'20 4° © 33'47	8.44846 AU	min. Earth dist.	-2169 Mar 29 j 07:20	19°Mp17'12	9.14571 AU
direct	-2175 Mar 25 j 06:50	12°S23'20		direct	-2169 Jun 08 j 17:44 -2169 Sep 19 j 14:36	15° Mp 57'58 23° Mp 00'51	
evening set	-2175 Jul 09 j 09:36	12 2025 20		evening set	-2109 Sep 19 J 14:36	25 الإ00 ا	
conjunction	-2175 Jul 27 j 01:12	14° © 33'14	1°05'45	conjunction	-2169 Oct 06 j 03:25	24° Mp 55'31	2°21'37
minimum elong	-2175 Jul 27 j 01:12 -2175 Jul 27 j 01:09	14°933'13	1°05'48	minimum elong	-2169 Oct 06 j 03:25	24° my 55'31	
max. Earth dist.	-2175 Jul 27 j 11:07		10.52205 AU	max. Earth dist.	-2169 Oct 05 j 20:13		11.16817 AU
morning rise	-2175 Aug 13 j 11:34	16°9541'31	10.52205 AU	morning rise	-2169 Oct 22 j 13:38	26° Mp 49'26	11.1001/ AU
		1131				==	

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 20 Attention, astronomical year style is used: The year -2169 in astronomical counting style is the year 2170 BCE in historical counting style.

Attention, astronomi	cal year style is used: Th	e year -2169 i	n astronomical cou	nting style is the year	2170 BCE in historical c	ounting style.	6
	-2169 Nov 21 j 10:15	0∘ ⊽		morning rise	-2163 Dec 26 j 17:54	3° ₹ ³39'31	
retrograde	-2168 Jan 29 j 18:03	3° ₽ 39'11		retrograde	-2162 Apr 08 j 22:35	10° ₹ 755'32	
opposition	-2168 Apr 08 j 22:02	0° £ 23′28	2°49'24	opposition	-2162 Jun 18 j 21:25	7° ∡ ³34'11	0°28'54
min. Earth dist.	-2168 Apr 09 j 04:53	0° £ 22'13	9.18770 AU	min. Earth dist.	-2162 Jun 19 j 07:57	7° ∡ ³32′13	8.87873 AU
	-2168 Apr 14 j 06:35	30°R Mp		direct	-2162 Aug 27 j 12:35	4° ∡ 15'18	
direct	-2168 Jun 19 j 13:19	27° mp 04'14		evening set	-2162 Dec 05 j 00:53	11° ∡ ¹21′06	
	-2168 Aug 21 j 06:32	0∘ ত				=	
evening set	-2168 Sep 29 j 18:22	4° ჲ 03'10		conjunction	-2162 Dec 21 j 18:23	13° ∡ 21'33	0°09'18
	21600 . 1610525	50 0 5 51 00	2015110	minimum elong	-2162 Dec 21 j 18:24	13° х 21'33	0°09'14
conjunction	-2168 Oct 16 j 05:37	5° £ 57'08		behind sun begin	-2162 Dec 21 j 12:27	13° 🖈 19'46	
minimum elong	-2168 Oct 16 j 05:39	5° Ω 57'08	2°15′17 11.19625 AU	behind sun end max. Earth dist.	-2162 Dec 22 j 00:21	13° × 23'20	10.01706 ATT
max. Earth dist. morning rise	-2168 Oct 15 j 20:41 -2168 Nov 01 j 14:56	5° ≗ 54'32 7° £ 50'34	11.19025 AU	max. Earth dist.	-2162 Dec 21 j 05:38 -2161 Jan 07 j 15:10	15° × 1742	10.81786 AU
retrograde	-2167 Feb 09 j 06:23	7 = 30 34 14° £ 40'42		desc. node	-2161 Apr 18 j 18:32	13 x 23 02 22° x 48'23	
opposition	-2167 Apr 20 j 17:02	14 = 40 42 11° £ 24'45	2°38'36	retrograde	-2161 Apr 21 j 16:32	22° x ⁷ 48'48	
min. Earth dist.	-2167 Apr 21 j 01:01	11° ⊆ 23'18	9.20158 AU	opposition	-2161 Jul 01 j 11:58	19° × ⁷ 25'51	-0°07'09
direct	-2167 Jul 01 j 06:55	8° £ 06'14).20130 NO	min. Earth dist.	-2161 Jul 01 j 22:08		8.75208 AU
evening set	-2167 Oct 10 j 19:22	15° Ω 02'29		direct	-2161 Sep 08 j 12:00	16° ₹ 06'11	0.75200710
evening sec	210, 000 10, 15.22	10 -022)		evening set	-2161 Dec 17 j 00:58	23° × ⁷ 18'49	
conjunction	-2167 Oct 27 j 05:58	16° ≏ 56'19	2°04'01			, ,	
minimum elong	-2167 Oct 27 j 06:00	16° ≏ 56'20		conjunction	-2160 Jan 02 j 21:12	25° ∡ ¹21'45	-0°20'31
max. Earth dist.	-2167 Oct 26 j 19:59	16° ≏ 53'25	11.19638 AU	minimum elong	-2160 Jan 02 j 21:12	25° ∡ ¹21'45	0°20'35
morning rise	-2167 Nov 12 j 15:16	18° ≏ 49'52		max. Earth dist.	-2160 Jan 02 j 09:03	25° ∡ 18′02	10.68506 AU
retrograde	-2166 Feb 20 j 19:13	25° ≏ 41'58		morning rise	-2160 Jan 19 j 21:34	27° ∡ ¹25'58	
opposition	-2166 May 02 j 12:35	22° ≏ 25'28	2°22'02		-2160 Feb 11 j 05:59	0°ರ	
min. Earth dist.	-2166 May 02 j 22:04	22° ≏ 23'44	9.18749 AU	retrograde	-2160 May 03 j 20:07	5° ට 02'41	
direct	-2166 Jul 12 j 19:53	19° ≏ 07'23		opposition	-2160 Jul 13 j 09:19	1° る 38'03	-0°44'01
evening set	-2166 Oct 21 j 19:38	26° ≏ 02'25		min. Earth dist.	-2160 Jul 13 j 18:37	1° ප 36'16	8.61419 AU
					-2160 Aug 04 j 15:04	30°₹ ҂ 7	
conjunction	-2166 Nov 07 j 06:15	27° £ 56'38	1°48'08	direct	-2160 Sep 19 j 19:59	28° ∡ 17′26	
minimum elong	-2166 Nov 07 j 06:17	27° ≏ 56'38			-2160 Nov 03 j 10:13	0°ਰ	
max. Earth dist.	-2166 Nov 06 j 18:12		11.16904 AU	evening set	-2160 Dec 28 j 11:15	5° る 38'24	
morning rise	-2166 Nov 23 j 16:39	29° £ 50'51					
	-2166 Nov 25 j 00:47	0°M		conjunction	-2159 Jan 14 j 10:40	7°る44'06	
retrograde	-2165 Mar 04 j 11:22	6°M46'31	2000100	minimum elong	-2159 Jan 14 j 10:38	7°る44'05	
opposition	-2165 May 14 j 09:37	3°M29'10	2°00'08 9.14630 AU	max. Earth dist.	-2159 Jan 14 j 00:48	/°541'02 9° る 51'16	10.54362 AU
min. Earth dist.	-2165 May 14 j 20:48		9.14030 AU	morning rise	-2159 Jan 31 j 14:37 -2159 May 17 j 10:54	9° ろ 31°16 17° ろ 39'44	
direct evening set	-2165 Jul 24 j 09:46 -2165 Nov 01 j 20:46	0° I L11'13 7° I L06'33		retrograde opposition	-2159 May 17 j 10:54 -2159 Jul 26 j 14:12	17° る 3944 14° る 13'28	1020102
evening set	-2103 NOV 01 J 20.40	/ 1160033		min. Earth dist.	-2159 Jul 26 j 21:21		8.47106 AU
conjunction	-2165 Nov 18 j 08:13	9° M .01'40	1°28'06	direct	-2159 Oct 02 j 10:23	14 812 04 10°る51'45	8.47100 AC
minimum elong	-2165 Nov 18 j 08:16	9° M .01'40	1°28'05	evening set	-2158 Jan 10 j 09:11	18° පි 22'16	
max. Earth dist.	-2165 Nov 17 j 18:51		11.11534 AU	evening sec	2130 3411 10 3 07.11	10 022 10	
morning rise	-2165 Dec 04 j 20:30	10°M57'02		conjunction	-2158 Jan 27 j 12:02	20° ට 30'55	-1°18'09
Ü	-2164 Jan 12 j 19:49	15° M ₊		minimum elong	-2158 Jan 27 j 11:59	20° ට 30'54	1°18'11
retrograde	-2164 Mar 15 j 07:16	17°M57'53		max. Earth dist.	-2158 Jan 27 j 04:56	20° ට 28'41	10.39994 AU
	-2164 May 20 j 17:00	15°RM₊		morning rise	-2158 Feb 13 j 19:39	22° ප් 41'09	
opposition	-2164 May 25 j 09:19	14°M39'25	1°33'30		-2158 May 02 j 20:27	0° ≈	
min. Earth dist.	-2164 May 25 j 21:10	14°MJ37'14	9.07945 AU	retrograde	-2158 May 31 j 11:35	0° ≈ 41'38	
direct	-2164 Aug 04 j 00:09	11°M21'22			-2158 Jun 29 j 07:05	30°Ŗる	
	-2164 Oct 12 j 05:25	15°M		opposition	-2158 Aug 09 j 02:53	27° る 13'48	-1°53'16
evening set	-2164 Nov 12 j 00:38	18°M18'34		min. Earth dist.	-2158 Aug 09 j 07:19		8.32942 AU
				direct	-2158 Oct 15 j 08:47	23° る 50'53	
conjunction	-2164 Nov 28 j 13:40	20°M15'01	1°04'29		-2157 Jan 11 j 08:20	0° ≈	
minimum elong	-2164 Nov 28 j 13:42		1°04'26	evening set	-2157 Jan 23 j 20:02	1° ≈ 31'54	
max. Earth dist.	-2164 Nov 28 j 00:46		11.03696 AU				
morning rise	-2164 Dec 15 j 04:14	22°M12'02		conjunction	-2157 Feb 10 j 02:24	3°≈43'34	
retrograde	-2163 Mar 27 j 10:16	29°M19'43	1002140	minimum elong	-2157 Feb 10 j 02:21	3°≈43'33	
opposition	-2163 Jun 06 j 12:52	25°M59'52	1°02'49	max. Earth dist.	-2157 Feb 09 j 21:58		10.26121 AU
min. Earth dist.	-2163 Jun 06 j 23:59	25°M57'49	8.98918 AU	morning rise	-2157 Feb 27 j 13:43	5°≈56'52	
direct	-2163 Aug 15 j 17:16	22°M41'31		retrograde	-2157 Jun 14 j 20:59	14°≈08'48	2021121
evening set	-2163 Nov 23 j 09:24 -2163 Nov 25 j 22:12	29° M .42'12 0° ₹		opposition min. Earth dist.	-2157 Aug 22 j 23:07 -2157 Aug 23 j 00:52	10°≈39'38 10°≈39'17	
max. Earth dist.	-2163 Nov 23 j 22.12 -2163 Dec 09 j 11:56		10.93661 AU	direct	-2157 Aug 25 j 00.32 -2157 Oct 28 j 16:39	7°≈15'26	0.17073 AU
max. Darui dist.	2103 Dec 07 J 11.30	1 7 30 43	10.75001 AU	anoct	-2156 Feb 05 j 20:50	7 ≈13 20 15°≈	
conjunction	-2163 Dec 10 j 00:31	1° ∡ ′40′28	0°37'56	evening set	-2156 Feb 06 j 19:49	15 ≈ 15° ≈ 07'17	
minimum elong	-2163 Dec 10 j 00:32	1°× 40'28	0°37'53				
3.08	, 00.52	20					

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -2156 in astronomical counting style is the year 2157 BCE in historical counting style. -2156 Feb 24 i 05:52 17°≈21'54 -2°02'42 morning rise -2150 Jun 12 j 12:30 16°**8**36'32 conjunction -2156 Feb 24 j 05:49 -2150 Sep 24 j 17:20 24°850'16 minimum elong 17°≈21'53 2°02'43 retrograde max. Earth dist. -2156 Feb 24 j 04:04 -2150 Nov 30 j 01:50 21°822'07 -1°16'37 17°≈21'19 10.13529 AU opposition -2150 Nov 29 j 15:11 -2156 Mar 12 j 20:56 19°≈38'08 min. Earth dist. 21°**8**24'20 8.02878 AU morning rise -2156 Jun 28 j 14:38 -2149 Feb 05 j 05:08 retrograde 28°≈00'07 direct 17°**8**52'20 -2156 Sep 05 j 02:36 opposition 24°≈29'53 -2°42'33 evening set -2149 May 22 j 08:54 26°**8**09'36 min. Earth dist. -2156 Sep 05 j 01:57 24°**≈**30′01 8.08081 AU -2149 Jun 09 j 13:26 28°830'02 -0°45'08 direct -2156 Nov 10 j 09:38 21°≈04'24 conjunction -2149 Jun 09 j 13:28 evening set -2155 Feb 20 j 07:52 29°≈06'37 minimum elong 28°**8**30'02 0°45'05 -2149 Jun 10 j 03:18 -2155 Feb 27 j 05:00 0°\ max. Earth dist. 28°**8**34'31 10.07612 AU -2149 Jun 21 j 03:57 $0^{\circ}\Pi$ -2155 Mar 09 j 21:52 1°**¥**23'59 -2°15'47 -2149 Jun 27 j 15:26 0°**Ⅱ**49'37 conjunction morning rise -2155 Mar 09 j 21:50 -2149 Oct 08 j 17:50 8°**Ⅱ**52'16 minimum elong 1°**¥**23'59 2°15'48 retrograde max. Earth dist. -2155 Mar 09 j 23:17 1°**¥**24'27 10.03001 AU opposition -2149 Dec 14 j 02:59 5°**I**25'42 -0°35'47 morning rise -2155 Mar 27 j 16:38 3°**)** 42′54 min. Earth dist. -2149 Dec 13 j 17:04 5°**Ⅲ**27'44 8.12881 AU retrograde -2155 Jul 13 j 13:59 12°**升** 12′28 direct -2148 Feb 19 j 21:23 1°**I**I56'12 opposition -2155 Sep 19 j 11:57 8°\(\frac{1}{41}\)'32 -2°54'18 evening set -2148 Jun 05 j 06:12 10°**Ⅲ**07'10 min. Earth dist. -2155 Sep 19 j 09:03 8°**¥**42'08 7.98905 AU direct -2155 Nov 24 j 11:59 5°**)** 14'50 conjunction -2148 Jun 23 j 08:30 12°**I**125′09 -0°11′43 evening set -2154 Mar 07 j 06:59 13°**¥**26′10 minimum elong -2148 Jun 23 j 08:30 12°**Ⅲ**25′09 0°11'40 behind sun begin -2148 Jun 23 j 03:24 12°**Ⅲ**23'32 conjunction -2154 Mar 25 i 01:04 15°\(\frac{1}{45}\)'55 -2°20'49 behind sun end -2148 Jun 23 i 13:37 12°**Ⅲ**26'46 minimum elong -2154 Mar 25 i 01:05 15°**)** 45′55 2°20'49 max. Earth dist. -2148 Jun 23 j 21:01 12°**Ⅱ**29'09 10.18745 AU max. Earth dist. -2154 Mar 25 i 06:04 15°**)** € 47'34 9.95234 AU morning rise -2148 Jul 11 i 07:15 14°**Ⅱ**41'59 morning rise -2154 Apr 11 j 23:16 18°**)**€06'59 retrograde -2148 Oct 21 j 06:49 22°**Ⅲ**32'48 -2154 Jul 28 j 16:01 26°\ 40'47 -2148 Nov 01 j 23:51 22°II25'10 retrograde asc. node opposition -2154 Oct 04 j 01:10 23°\(\frac{1}{2}\)09'36 -2°55'18 -2148 Dec 26 j 21:08 19°**Ⅱ**07'58 opposition 0°06'01 -2154 Oct 03 j 19:56 23°**)** 10'42 7.92761 AU min. Earth dist. -2148 Dec 26 j 12:23 19°**Ⅱ**09'44 min. Earth dist. 8.24911 AU -2154 Dec 08 j 23:26 -2147 Mar 05 j 08:01 19°**)**41'48 direct 15° TT 39'02 direct -2153 Mar 22 j 14:27 28°\(\)00'08 -2147 Jun 19 j 17:23 23°**Ⅱ**42'09 evening set evening set -2153 Apr 06 j 18:59 $0^{\circ}\Upsilon$ -2147 Jul 07 j 16:01 25°**I**57'06 0°21'38 conjunction -2153 Apr 09 j 12:29 0°Y21'43 -2°17'00 -2147 Jul 07 j 16:00 conjunction minimum elong 25°**I**57'06 0°21'41 -2147 Jul 08 j 02:27 -2153 Apr 09 j 12:31 0°**Υ**21'44 2°16'59 max. Earth dist. 26°П00'23 10.31563 AU minimum elong 0°**Υ**24'32 9.90774 AU -2153 Apr 09 j 21:00 -2147 Jul 25 j 10:23 28°**Ⅱ**10'40 max. Earth dist. morning rise -2153 Apr 27 j 13:35 2°Y44'16 -2147 Aug 09 j 13:54 morning rise 0ಂತಾ -2153 Aug 12 j 17:04 11°Υ18'24 -2147 Nov 03 j 10:11 retrograde retrograde 5°9349'45 opposition -2153 Oct 18 j 16:22 7°**Y**'47'24 -2°44'59 opposition -2146 Jan 09 j 07:57 2°526'36 0°46'12 min. Earth dist. -2153 Oct 18 j 08:46 7°**Y**48'59 7.90078 AU min. Earth dist. -2146 Jan 09 j 00:07 2°528'10 8.38311 AU direct -2153 Dec 23 j 16:54 4° **Y**18'43 -2146 Feb 12 j 09:59 30°RⅡ -2152 Apr 06 j 02:41 12° **Y**41'10 direct -2146 Mar 19 j 11:10 28°II58'30 evening set -2146 Apr 23 j 07:33 0ಂತಾ -2152 Apr 24 j 04:10 15°Υ03'50 -2°04'19 -2146 Jul 03 j 17:03 6°952'46 conjunction evening set -2152 Apr 24 j 04:14 15°**Y**03'51 2°04'17 minimum elong -2152 Apr 24 j 15:54 15°Υ07'43 9.89929 AU -2146 Jul 21 j 10:57 9°**©**04'20 0°52'53 max. Earth dist. conjunction -2146 Jul 21 i 10:55 morning rise -2152 May 12 j 07:25 17°Y27'01 minimum elong 9°9504'19 0°52'56 -2152 Aug 26 i 15:05 retrograde 25°**Y**57'34 max. Earth dist. -2146 Jul 21 i 19:27 9°906'59 10.45365 AU opposition -2152 Nov 01 i 07:02 22°Y27'07 -2°23'52 morning rise -2146 Aug 08 i 00:03 11°9514'22 min. Earth dist. -2152 Oct 31 i 21:18 22°**Y**29'10 7.91020 AU retrograde -2146 Nov 16 i 05:14 18°9542'24 direct -2151 Jan 06 j 13:25 18°**Y**57'47 opposition -2145 Jan 22 j 11:16 15°920'50 1°22'41 -2151 Apr 21 j 16:18 27°Y21'16 min. Earth dist. -2145 Jan 22 j 04:17 15°922'12 8.52359 AU evening set direct -2145 Apr 02 j 05:15 11°953'46 -2151 May 09 j 20:19 29°Y44'07 -1°43'38 -2145 Jul 17 j 04:44 19°538'44 conjunction evening set minimum elong -2151 May 09 j 20:23 29°Y44'08 1°43'36 -2151 May 10 j 10:10 29°**Υ**48'41 9.92702 AU max. Earth dist. conjunction -2145 Aug 03 j 17:23 21°5946'50 1°20'39 -2151 May 11 j 20:29 0°8 minimum elong -2145 Aug 03 j 17:20 21°5546'49 1°20'42 morning rise -2151 May 28 j 00:35 2°807'00 max. Earth dist. -2145 Aug 04 j 00:20 21°**©**48'58 10.59435 AU -2151 Sep 10 j 07:41 10°830'24 -2145 Aug 21 j 00:51 23°953'21 retrograde morning rise -2151 Nov 15 j 18:41 7°**8**00'55 -1°53'36 -2145 Oct 22 j 17:42 $0^{\circ}\Omega$ opposition 7°**8**03'10 7.95428 AU min. Earth dist. -2151 Nov 15 j 07:55 retrograde -2145 Nov 28 j 14:54 1°**Ω**11'23 3°**8**31'11 -2144 Jan 05 j 06:12 direct -2150 Jan 21 j 10:16 30°R,55 evening set -2150 May 07 j 03:31 11°**8**52'47 opposition -2144 Feb 04 j 07:17 27°**9**51'15 1°54'00 min. Earth dist. -2144 Feb 04 j 01:46 27°952'19 8.66347 AU

conjunction

minimum elong

max. Earth dist.

-2150 May 25 j 08:38

-2150 May 25 j 08:41

-2150 May 25 j 23:02

-2150 May 31 j 02:35

14°**8**14'52 -1°16'32

14°**8**14'53 1°16'30

15°8

14°**8**19'35 9.98764 AU

direct

evening set

-2144 Apr 14 j 15:08

-2144 Jul 11 j 14:45

-2144 Jul 29 j 04:36

24°925'20

2°Ω01'04

0 $^{\circ}$ Ω

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		-			2145 BCE in historical co		
conjunction	-2144 Aug 15 j 11:49	4° Ω 05'49		max. Earth dist.	-2138 Oct 22 j 10:13		11.19290 AU
minimum elong	-2144 Aug 15 j 11:46	4° Ω 05'48		morning rise	-2138 Nov 08 j 04:30	14° ≏ 14'41	
max. Earth dist.	-2144 Aug 15 j 16:55		10.73089 AU	retrograde	-2137 Feb 16 j 00:29	21° ≏ 05'35	
morning rise	-2144 Sep 01 j 13:44	6° Ω 09'01		opposition	-2137 Apr 27 j 16:54	17° ≏ 49'04	2°30'07
retrograde	-2144 Dec 09 j 17:57	13° Ω 18′23		min. Earth dist.	-2137 Apr 28 j 01:05	17° ≏ 47'35	9.19373 AU
opposition	-2143 Feb 15 j 20:48	9° £ 59′32	2°19'11	direct	-2137 Jul 08 j 03:23	14° ≏ 30'34	
min. Earth dist.	-2143 Feb 15 j 17:44	10° Ω 00'07	8.79615 AU	evening set	-2137 Oct 17 j 08:32	21° ≏ 25'51	
direct	-2143 Apr 27 j 16:05	6° Ω 34'49		<i>8</i>	- · · · · · · · · · · · · · · · · · · ·		
evening set	-2143 Aug 10 j 17:26	14° Ω 01'45		conjunction	-2137 Nov 02 j 19:03	23° ♀ 19'47	1°55'44
evening set	-2143 Aug 18 j 22:45	15° Ω		minimum elong	-2137 Nov 02 j 19:05	23° ⊆ 19'48	1°55'43
	-2143 Aug 18 J 22.43	13 86		_			
				max. Earth dist.	-2137 Nov 02 j 09:21		11.18463 AU
conjunction	-2143 Aug 27 j 19:16	16° Ω 03′26		morning rise	-2137 Nov 19 j 04:57	25° ≏ 13'36	
minimum elong	-2143 Aug 27 j 19:13	16° Ω 03'25	2°02'01		-2136 Jan 06 j 09:33	0°M₊	
max. Earth dist.	-2143 Aug 27 j 21:34	16° Ω 04'08	10.85718 AU	retrograde	-2136 Feb 27 j 15:27	2°ML07'10	
morning rise	-2143 Sep 13 j 16:11	18° Ω 03'41			-2136 Apr 22 j 05:12	30° ₹ ₽	
retrograde	-2143 Dec 21 j 14:06	25° Ω 05'54		opposition	-2136 May 08 j 12:34	28° ≏ 50'07	2°10'29
opposition	-2142 Feb 28 j 04:32	21° Ω 48′05	2°37'42	min. Earth dist.	-2136 May 08 j 21:08	28° ≏ 48'33	9.17159 AU
min. Earth dist.	-2142 Feb 28 i 04:00	21° Ω 48'11	8.91603 AU	direct	-2136 Jul 18 j 17:43	25° £ 32'06	
direct	-2142 May 10 j 08:15	18° Ω 24'35	0.91000110		-2136 Oct 04 j 22:04	0° M .	
evening set	-2142 Aug 22 j 20:11	25° Ω 43'26		evening set	-2136 Oct 27 j 08:45	2°M26'47	
evening set	-2142 Aug 22 J 20.11	23 6643 20		evening set	-2130 OCt 27 J 08.43	2 1162047	
conjunction	-2142 Sep 08 j 17:10	27° Ω 42′28	2°14'32	conjunction	-2136 Nov 12 j 19:51	4°M21'20	1°37'28
minimum elong	-2142 Sep 08 j 17:09	27° Ω 42′28	2°14'34	minimum elong	-2136 Nov 12 j 19:54	4°M21'21	1°37'27
max. Earth dist.	-2142 Sep 08 j 16:18	27° Ω 42′13	10.96832 AU	max. Earth dist.	-2136 Nov 12 j 09:38	4° ጤ 18'21	11.14966 AU
morning rise	-2142 Sep 25 j 09:55	29° Ω 40′16		morning rise	-2136 Nov 29 j 07:01	6°M16'01	
	-2142 Sep 28 j 06:22	0° m)		retrograde	-2135 Mar 10 j 10:30	13°ML13'49	
retrograde	-2141 Jan 02 j 04:04	6° m 36'57		opposition	-2135 May 20 j 10:40	9°M56'00	1°45'51
opposition	-2141 Mar 12 j 07:22	3° m 19'54	2°49'22	min. Earth dist.	-2135 May 20 j 19:56	9° M 54'19	9.12314 AU
min. Earth dist.	-2141 Mar 12 j 08:32	3° Mp 19'41		direct	-2135 Jul 30 j 05:57	6°M38'16	J.1231.110
iiiii. Lartii dist.	-2141 May 15 j 17:04	30°R€	7.01032710	evening set	-2135 Nov 07 j 10:55	13°MJ33'52	
T' /				evening set	•		
direct	-2141 May 22 j 18:58	29° Ω 57'35			-2135 Nov 19 j 18:43	15° M ₊	
	-2141 May 29 j 20:03	0° m/y					
evening set	-2141 Sep 03 j 14:03	7° m 09'17		conjunction	-2135 Nov 23 j 23:05	15°M29'30	1°15'22
				minimum elong	-2135 Nov 23 j 23:07	15°M29'30	1°15'21
conjunction	-2141 Sep 20 j 07:10	9°№06'12	2°21'28	max. Earth dist.	-2135 Nov 23 j 11:35	15° M 26′07	11.08918 AU
minimum elong	-2141 Sep 20 j 07:09	9° ™ 06'11	2°21'29	morning rise	-2135 Dec 10 j 12:26	17°M25'32	
max. Earth dist.	-2141 Sep 20 j 04:17	9° № 05'21	11.06024 AU	retrograde	-2134 Mar 22 j 09:39	24°M29'13	
morning rise	-2141 Oct 06 j 20:33	11°M)02'02		opposition	-2134 Jun 01 j 12:09	21°ML10'23	1°16'52
retrograde	-2140 Jan 13 j 17:21	17° m 54'50		min. Earth dist.	-2134 Jun 01 j 22:26	21°ML08'29	9.05004 AU
opposition	-2140 Mar 23 j 06:22	14° mp 38'17	2°54'12	direct	-2134 Aug 10 j 20:42	17°ML52'37	2.0000.110
min. Earth dist.	-2140 Mar 23 j 08:48	14° mp 37'50	9.09981 AU	evening set	-2134 Nov 18 j 17:00	24°M50'46	
	v	-	9.09981 AU	evening set	-2134 NOV 10 J 17.00	24 11630 40	
direct	-2140 Jun 02 j 22:22	11° m) 17'08			01017	0.60M 45155	0050102
evening set	-2140 Sep 14 j 00:57	18° m 22'47		conjunction	-2134 Dec 05 j 06:53	26° M 47′55	0°50'03
				minimum elong	-2134 Dec 05 j 06:55	26° M 47′56	0°50'00
conjunction	-2140 Sep 30 j 15:06	20° Mp 18′07	2°22'50	max. Earth dist.	-2134 Dec 04 j 18:39	26°M44'18	11.00514 AU
minimum elong	-2140 Sep 30 j 15:06	20°M/18'07	2°22'50	morning rise	-2134 Dec 21 j 22:59	28°M45'46	
max. Earth dist.	-2140 Sep 30 j 10:54	20° № 16'53	11.12965 AU		-2133 Jan 01 j 19:22	0° ≯ ¹	
morning rise	-2140 Oct 17 j 01:59	22°M 12'35		retrograde	-2133 Apr 03 j 16:08	5° ∡ ¹56'51	
retrograde	-2139 Jan 24 j 03:42	29° Mp 03'06		opposition	-2133 Jun 13 j 17:45	2° ∡ ³36'46	0°44'19
opposition	-2139 Apr 04 j 02:47	25° m/46'50	2°52'24	min. Earth dist.	-2133 Jun 14 j 04:18	2° ∡ ³34'48	8.95470 AU
min. Earth dist.	-2139 Apr 04 j 07:17	25° m/46'00	9.15716 AU		-2133 Jul 24 j 08:35	30°RM₁	
direct	-2139 Jun 14 j 18:43	22° m/26'44).15/10/10	direct	-2133 Aug 22 j 14:49	29°M18'42	
	-	-		direct			
evening set	-2139 Sep 25 j 06:33	29° m/27'34			-2133 Sep 20 j 07:43	0° ₹	
	-2139 Sep 29 j 23:55	0∘ ⊽		evening set	-2133 Nov 30 j 04:45	6° ∡ 721′02	
conjunction	-2139 Oct 11 j 18:31	1° ഫ 21'53	2°18'48	conjunction	-2133 Dec 16 j 20:59	8° ∡ ′20′08	0°22'16
minimum elong	-2139 Oct 11 j 18:32	1° ≏ 21'53	2°18'47	minimum elong	-2133 Dec 16 j 21:00	8° ₹ ¹20'08	0°22'13
max. Earth dist.	-2139 Oct 11 j 11:56	1° ≏ 19'58	11.17432 AU	max. Earth dist.	-2133 Dec 16 j 09:29	8° ∡ 16'41	10.90015 AU
morning rise	-2139 Oct 28 j 04:05	3° £ 15'34	~	morning rise	-2132 Jan 02 j 16:04	10° ∡ ′20′09	
retrograde	-2138 Feb 04 j 14:10	10° ⊆ 05'27		retrograde	-2132 Apr 15 j 06:00	17° × 40'07	
	v		2011/15	•			0°09'10
opposition	-2138 Apr 15 j 22:00	6° Ω 49'13	2°44'15	opposition	-2132 Jun 25 j 04:46	14° 🗷 18'34	
min. Earth dist.	-2138 Apr 16 j 04:45	6° £ 47'59	9.18883 AU	min. Earth dist.	-2132 Jun 25 j 14:24	14° ₹ 16'46	8.84014 AU
direct	-2138 Jun 26 j 12:32	3° ≏ 30'00		direct	-2132 Sep 02 j 12:37	10° ∡ 59'59	
evening set	-2138 Oct 06 j 08:24	10° ≏ 27'21		desc. node	-2132 Sep 28 j 19:49	11° ∡ ³35′23	
					2122 D 10:22 57	100.70005	
				evening set	-2132 Dec 10 j 23:57	18° ∡ ¹08'05	
conjunction	-2138 Oct 22 j 19:07	12° ≙ 21'12	2°09'40	evening set	-2132 Dec 10 J 23:57	18-8,0802	
conjunction minimum elong	-2138 Oct 22 j 19:07 -2138 Oct 22 j 19:09	12° £ 21'12 12° £ 21'12		conjunction	-2132 Dec 10 j 23:57 -2132 Dec 27 j 18:50	20°×109'28	-0°07'08

•	inel year style is used: Th		•	/ /	2133 BCE in historical c		O
	-2132 Dec 27 j 18:50	20° ₹ 09'28		evening set	-2125 Feb 28 j 14:40	6° H 54'31	
minimum elong	-		0 0/11	evening set	-2123 Feb 28 j 14.40	0 Ж3431	
behind sun begin	-2132 Dec 27 j 12:21	20° 🗷 07'32			2125 14 10:06 45	001/10155	2010125
behind sun end	-2132 Dec 28 j 01:19	20° ₹ 11'25	10.55555.444	conjunction	-2125 Mar 18 j 06:45	9° ¥ 12'55	
max. Earth dist.	-2132 Dec 27 j 08:15		10.77757 AU	minimum elong	-2125 Mar 18 j 06:44	9°) 12'55	
morning rise	-2131 Jan 13 j 17:10	22° ∡ 12'00		max. Earth dist.	-2125 Mar 18 j 09:29	9°) 13'49	9.99766 AU
retrograde	-2131 Apr 28 j 06:09	29° ∡ ¹42'10 −		morning rise	-2125 Apr 05 j 03:00	11°) € 32'44	
opposition	-2131 Jul 07 j 22:07	26° ₹ 19'02		retrograde	-2125 Jul 21 j 21:47	20°) €04'00	
min. Earth dist.	-2131 Jul 08 j 06:35	26° ∡ 17'25	8.71017 AU	opposition	-2125 Sep 27 j 13:32	16°) 32′51	
direct	-2131 Sep 14 j 16:02	22° ₹ ′59'38		min. Earth dist.	-2125 Sep 27 j 09:49		7.96173 AU
	-2131 Dec 21 j 02:15	0°ಕ		direct	-2125 Dec 02 j 13:08	13° ¥ 05′29	
evening set	-2131 Dec 23 j 04:39	0°る15'08		evening set	-2124 Mar 14 j 17:18	21° 米 19′53	
conjunction	-2130 Jan 09 j 02:23	2° る 19'06	-0°36'50	conjunction	-2124 Apr 01 j 13:22	23°) 40′29	-2°20'02
minimum elong	-2130 Jan 09 j 02:21	2°る19'06	0°36'52	minimum elong	-2124 Apr 01 j 13:24	23°) 40′30	2°20'02
max. Earth dist.	-2130 Jan 08 j 15:51	2° る 15'52	10.64160 AU	max. Earth dist.	-2124 Apr 01 j 19:13	23°) 42′25	9.93022 AU
morning rise	-2130 Jan 26 j 04:21	4° る 24'27		morning rise	-2124 Apr 19 j 12:54	26°) 02′14	
retrograde	-2130 May 11 j 15:40	12° る 05'51			-2124 May 22 j 04:59	0° Υ	
opposition	-2130 Jul 20 j 22:30	8° ප් 41'05	-1°03'50	retrograde	-2124 Aug 04 j 23:07	4° Ƴ 36′03	
min. Earth dist.	-2130 Jul 21 j 06:16	8° ප 39'35	8.56950 AU	opposition	-2124 Oct 11 j 03:12	1° Y 04'40	-2°51'25
direct	-2130 Sep 27 j 00:39	5° る 20'37		min. Earth dist.	-2124 Oct 10 j 21:25	1° Y 05'52	7.91125 AU
evening set	-2129 Jan 04 j 20:15	12° る 45'05			-2124 Oct 24 j 06:32	30° ₹ ₩	
Č	3			direct	-2124 Dec 16 j 02:20	27°) € 36'05	
conjunction	-2129 Jan 21 j 21:07	14° ⋜ 51'54	-1°05'40		-2123 Feb 05 j 13:24	0°Υ	
minimum elong	-2129 Jan 21 j 21:04	14° る 51'54		evening set	-2123 Mar 30 j 02:41	5° Υ 56'22	
max. Earth dist.	-2129 Jan 21 j 11:16		10.49766 AU	evening set	2125 Mai 50 j 02.41	3 1 30 22	
morning rise	-2129 Feb 08 j 02:53	17°る00'16	10.47700 AC	conjunction	-2123 Apr 17 j 02:30	8° Υ 18'33	2011/22
retrograde	-2129 May 25 j 09:37	17 800 10 24°る53'34		minimum elong	-2123 Apr 17 j 02:33	8° Υ 18'34	
-			1020127	•			9.89741 AU
opposition	-2129 Aug 03 j 06:33	21° る 27'11		max. Earth dist.	-2123 Apr 17 j 11:01		9.89/41 AU
min. Earth dist.	-2129 Aug 03 j 13:20		8.42454 AU	morning rise	-2123 May 05 j 04:47	10° Y 41′29	
direct	-2129 Oct 09 j 18:31	18°る05'29		retrograde	-2123 Aug 19 j 22:41	19° Y 13'57	2025122
evening set	-2128 Jan 17 j 23:53	25° る 40'07		opposition	-2123 Oct 25 j 17:46	15° Y 42'48	
				min. Earth dist.	-2123 Oct 25 j 10:28		7.89639 AU
conjunction	-2128 Feb 04 j 04:13	27° る 49'56		direct	-2123 Dec 30 j 20:39	12° Y 13′16	
minimum elong	-2128 Feb 04 j 04:10	27° る 49'55		evening set	-2122 Apr 14 j 15:34	20° Ƴ 36'32	
max. Earth dist.	-2128 Feb 03 j 20:37		10.35306 AU				
morning rise	-2128 Feb 21 j 13:41	0° ≈ 01'22		conjunction	-2122 May 02 j 18:23	22° Y 59′27	
	-2128 Feb 21 j 09:16	0° ≈		minimum elong	-2122 May 02 j 18:27	22° Ƴ 59'28	1°54'32
retrograde	-2128 Jun 07 j 12:38	8° ≈ 06'33		max. Earth dist.	-2122 May 03 j 04:54		9.90127 AU
opposition	-2128 Aug 15 j 22:21	4° ≈ 38'37	-2°09'09	morning rise	-2122 May 20 j 22:25	25° Y 22'41	
min. Earth dist.	-2128 Aug 16 j 03:08	4° ≈ 37'40	8.28328 AU		-2122 Jun 28 j 19:00	9° 8	
direct	-2128 Oct 21 j 22:39	1° ≈ 15'32		retrograde	-2122 Sep 03 j 17:59	3° 8 50'02	
evening set	-2127 Jan 30 j 16:24	9° ≈ 00'55		opposition	-2122 Nov 09 j 06:49	0° 8 19'34	-2°09'17
				min. Earth dist.	-2122 Nov 08 j 22:19	0° 8 21'21	7.91805 AU
conjunction	-2127 Feb 17 j 00:30	11° ≈ 13'47	-1°54'16		-2122 Nov 13 j 04:25	30° ŖƳ	
minimum elong	-2127 Feb 17 j 00:27	11° ≈ 13'46	1°54'18	direct	-2121 Jan 14 j 17:43	26° Ƴ 49'24	
max. Earth dist.	-2127 Feb 16 j 20:20	11° ≈ 12'26	10.21614 AU		-2121 Mar 16 i 04:27	0°8	
morning rise	-2127 Mar 06 j 13:37	13° ≈ 28'16		evening set	-2121 Apr 30 j 04:02	5° 8 12'35	
C	-2127 Mar 18 j 22:38	15° ≈		C	1 3		
retrograde	-2127 Jun 22 j 01:32	21° ≈ 44'23		conjunction	-2121 May 18 j 08:42	7° 8 35'17	-1°30'18
opposition	-2127 Aug 29 j 21:28	18° ≈ 15'02	-2°33'44	minimum elong	-2121 May 18 j 08:46	7° 8 35'18	
min. Earth dist.	-2127 Aug 29 j 23:26		8.15403 AU	max. Earth dist.	-2121 May 18 j 20:47	7° 8 39'15	9.94138 AU
mm. Earth dist.		10 /0(1+3)	0.13403710	max. Darm dist.			
		15°P~		morning rise		_	
direct	-2127 Oct 22 j 10:06	15°R≈ 14°2250'30		morning rise	-2121 Jun 05 j 13:10	9° 8 57'50	
direct	-2127 Oct 22 j 10:06 -2127 Nov 04 j 10:25	14° ≈ 50'30		_	-2121 Jun 05 j 13:10 -2121 Jul 18 j 20:30	9° 8 57'50 15° 8	
	-2127 Oct 22 j 10:06 -2127 Nov 04 j 10:25 -2127 Nov 17 j 08:32	14°≈50'30 15°≈		morning rise	-2121 Jun 05 j 13:10 -2121 Jul 18 j 20:30 -2121 Sep 18 j 06:38	9°857'50 15°8 18°816'57	
direct evening set	-2127 Oct 22 j 10:06 -2127 Nov 04 j 10:25	14° ≈ 50'30		retrograde	-2121 Jun 05 j 13:10 -2121 Jul 18 j 20:30 -2121 Sep 18 j 06:38 -2121 Nov 21 j 04:42	9°857'50 15°8 18°816'57 15°88	1025110
evening set	-2127 Oct 22 j 10:06 -2127 Nov 04 j 10:25 -2127 Nov 17 j 08:32 -2126 Feb 13 j 21:39	14°≈50'30 15°≈ 22°≈46'38	2010/20	retrograde	-2121 Jun 05 j 13:10 -2121 Jul 18 j 20:30 -2121 Sep 18 j 06:38 -2121 Nov 21 j 04:42 -2121 Nov 23 j 16:24	9°857'50 15°8 18°816'57 15°88 14°847'35	
evening set	-2127 Oct 22 j 10:06 -2127 Nov 04 j 10:25 -2127 Nov 17 j 08:32 -2126 Feb 13 j 21:39 -2126 Mar 03 j 09:44	14°≈50'30 15°≈ 22°≈46'38 25°≈02'24		retrograde opposition min. Earth dist.	-2121 Jun 05 j 13:10 -2121 Jul 18 j 20:30 -2121 Sep 18 j 06:38 -2121 Nov 21 j 04:42 -2121 Nov 23 j 16:24 -2121 Nov 23 j 06:40	9°\delta57'50 15°\delta 18°\delta16'57 15°\delta\delta 14°\delta47'35 14°\delta49'36	-1°35'10 7.97462 AU
evening set conjunction minimum elong	-2127 Oct 22 j 10:06 -2127 Nov 04 j 10:25 -2127 Nov 17 j 08:32 -2126 Feb 13 j 21:39 -2126 Mar 03 j 09:44 -2126 Mar 03 j 09:42	14°≈50'30 15°≈ 22°≈46'38 25°≈02'24 25°≈02'24	2°10'39	retrograde	-2121 Jun 05 j 13:10 -2121 Jul 18 j 20:30 -2121 Sep 18 j 06:38 -2121 Nov 21 j 04:42 -2121 Nov 23 j 16:24 -2121 Nov 23 j 06:40 -2120 Jan 29 j 14:46	9°857'50 15°8 18°816'57 15°88 14°847'35 14°849'36 11°817'09	
evening set conjunction minimum elong max. Earth dist.	-2127 Oct 22 j 10:06 -2127 Nov 04 j 10:25 -2127 Nov 17 j 08:32 -2126 Feb 13 j 21:39 -2126 Mar 03 j 09:44 -2126 Mar 03 j 09:42 -2126 Mar 03 j 09:10	14°≈50'30 15°≈ 22°≈46'38 25°≈02'24 25°≈02'24 25°≈02'13		retrograde opposition min. Earth dist. direct	-2121 Jun 05 j 13:10 -2121 Jul 18 j 20:30 -2121 Sep 18 j 06:38 -2121 Nov 21 j 04:42 -2121 Nov 23 j 16:24 -2121 Nov 23 j 06:40 -2120 Jan 29 j 14:46 -2120 Apr 04 j 23:56	9°857'50 15°8' 18°816'57 15°88' 14°847'35 14°849'36 11°817'09 15°8'	
evening set conjunction minimum elong	-2127 Oct 22 j 10:06 -2127 Nov 04 j 10:25 -2127 Nov 17 j 08:32 -2126 Feb 13 j 21:39 -2126 Mar 03 j 09:44 -2126 Mar 03 j 09:42 -2126 Mar 03 j 09:10 -2126 Mar 21 j 02:29	14°≈50'30 15°≈ 22°≈46'38 25°≈02'24 25°≈02'24 25°≈02'13 27°≈19'45	2°10'39	retrograde opposition min. Earth dist.	-2121 Jun 05 j 13:10 -2121 Jul 18 j 20:30 -2121 Sep 18 j 06:38 -2121 Nov 21 j 04:42 -2121 Nov 23 j 16:24 -2121 Nov 23 j 06:40 -2120 Jan 29 j 14:46	9°857'50 15°8 18°816'57 15°88 14°847'35 14°849'36 11°817'09	
evening set conjunction minimum elong max. Earth dist.	-2127 Oct 22 j 10:06 -2127 Nov 04 j 10:25 -2127 Nov 17 j 08:32 -2126 Feb 13 j 21:39 -2126 Mar 03 j 09:44 -2126 Mar 03 j 09:42 -2126 Mar 21 j 02:29 -2126 Apr 11 j 20:55	14°≈50'30 15°≈ 22°≈46'38 25°≈02'24 25°≈02'24 25°≈02'13 27°≈19'45 0°¥	2°10'39	retrograde opposition min. Earth dist. direct evening set	-2121 Jun 05 j 13:10 -2121 Jul 18 j 20:30 -2121 Sep 18 j 06:38 -2121 Nov 21 j 04:42 -2121 Nov 23 j 16:24 -2121 Nov 23 j 06:40 -2120 Jan 29 j 14:46 -2120 Apr 04 j 23:56 -2120 May 14 j 12:25	9°\S57'50 15°\S 18°\S16'57 15°\R\S 14°\S47'35 14°\S49'36 11°\S17'09 15°\S 19°\S37'18	7.97462 AU
evening set conjunction minimum elong max. Earth dist.	-2127 Oct 22 j 10:06 -2127 Nov 04 j 10:25 -2127 Nov 17 j 08:32 -2126 Feb 13 j 21:39 -2126 Mar 03 j 09:44 -2126 Mar 03 j 09:42 -2126 Mar 03 j 09:10 -2126 Mar 21 j 02:29	14°≈50'30 15°≈ 22°≈46'38 25°≈02'24 25°≈02'24 25°≈02'13 27°≈19'45	2°10'39	retrograde opposition min. Earth dist. direct	-2121 Jun 05 j 13:10 -2121 Jul 18 j 20:30 -2121 Sep 18 j 06:38 -2121 Nov 21 j 04:42 -2121 Nov 23 j 16:24 -2121 Nov 23 j 06:40 -2120 Jan 29 j 14:46 -2120 Apr 04 j 23:56	9°&57'50 15°& 18°&16'57 15°R& 14°&47'35 14°&49'36 11°&17'09 15°& 19°&37'18	7.97462 AU -1°00'40
evening set conjunction minimum elong max. Earth dist. morning rise	-2127 Oct 22 j 10:06 -2127 Nov 04 j 10:25 -2127 Nov 17 j 08:32 -2126 Feb 13 j 21:39 -2126 Mar 03 j 09:44 -2126 Mar 03 j 09:42 -2126 Mar 21 j 02:29 -2126 Apr 11 j 20:55	14°≈50'30 15°≈ 22°≈46'38 25°≈02'24 25°≈02'24 25°≈02'13 27°≈19'45 0°¥	2°10'39 10.09515 AU	retrograde opposition min. Earth dist. direct evening set	-2121 Jun 05 j 13:10 -2121 Jul 18 j 20:30 -2121 Sep 18 j 06:38 -2121 Nov 21 j 04:42 -2121 Nov 23 j 16:24 -2121 Nov 23 j 06:40 -2120 Jan 29 j 14:46 -2120 Apr 04 j 23:56 -2120 May 14 j 12:25	9°\S57'50 15°\S 18°\S16'57 15°\R\S 14°\S47'35 14°\S49'36 11°\S17'09 15°\S 19°\S37'18	7.97462 AU -1°00'40
evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-2127 Oct 22 j 10:06 -2127 Nov 04 j 10:25 -2127 Nov 17 j 08:32 -2126 Feb 13 j 21:39 -2126 Mar 03 j 09:44 -2126 Mar 03 j 09:42 -2126 Mar 03 j 09:10 -2126 Mar 21 j 02:29 -2126 Apr 11 j 20:55 -2126 Jul 06 j 21:29	14°≈50'30 15°≈ 22°≈46'38 25°≈02'24 25°≈02'24 25°≈02'13 27°≈19'45 0° ₩ 5° ₩44'52	2°10'39 10.09515 AU	retrograde opposition min. Earth dist. direct evening set conjunction	-2121 Jun 05 j 13:10 -2121 Jul 18 j 20:30 -2121 Sep 18 j 06:38 -2121 Nov 21 j 04:42 -2121 Nov 23 j 16:24 -2121 Nov 23 j 06:40 -2120 Jan 29 j 14:46 -2120 Apr 04 j 23:56 -2120 May 14 j 12:25 -2120 Jun 01 j 17:29	9°857'50 15°8 18°816'57 15°88 14°847'35 14°849'36 11°817'09 15°8 19°837'18 21°858'49 21°858'50	7.97462 AU -1°00'40
evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-2127 Oct 22 j 10:06 -2127 Nov 04 j 10:25 -2127 Nov 17 j 08:32 -2126 Feb 13 j 21:39 -2126 Mar 03 j 09:44 -2126 Mar 03 j 09:42 -2126 Mar 03 j 09:10 -2126 Mar 21 j 02:29 -2126 Apr 11 j 20:55 -2126 Jul 06 j 21:29 -2126 Sep 13 j 03:01	14°≈50'30 15°≈ 22°≈46'38 25°≈02'24 25°≈02'24 25°≈02'13 27°≈19'45 0° ₩ 5° ₩ 44'52 2° ₩ 14'52	2°10'39 10.09515 AU -2°50'03	retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-2121 Jun 05 j 13:10 -2121 Jul 18 j 20:30 -2121 Sep 18 j 06:38 -2121 Nov 21 j 04:42 -2121 Nov 23 j 16:24 -2121 Nov 23 j 06:40 -2120 Jan 29 j 14:46 -2120 Apr 04 j 23:56 -2120 May 14 j 12:25 -2120 Jun 01 j 17:29 -2120 Jun 01 j 17:32 -2120 Jun 02 j 06:38 -2120 Jun 19 j 20:52	9°857'50 15°8 18°816'57 15°88 14°847'35 14°849'36 11°817'09 15°8 19°837'18 21°858'49 21°858'50	7.97462 AU -1°00'40 1°00'38
evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-2127 Oct 22 j 10:06 -2127 Nov 04 j 10:25 -2127 Nov 17 j 08:32 -2126 Feb 13 j 21:39 -2126 Mar 03 j 09:44 -2126 Mar 03 j 09:42 -2126 Mar 03 j 09:10 -2126 Mar 21 j 02:29 -2126 Apr 11 j 20:55 -2126 Jul 06 j 21:29 -2126 Sep 13 j 03:01 -2126 Sep 13 j 01:54	14°≈50'30 15°≈ 22°≈46'38 25°≈02'24 25°≈02'24 25°≈02'13 27°≈19'45 0° ₩ 5° ₩ 44'52 2° ₩ 14'25 2° ₩ 14'39	2°10'39 10.09515 AU -2°50'03	retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-2121 Jun 05 j 13:10 -2121 Jul 18 j 20:30 -2121 Sep 18 j 06:38 -2121 Nov 21 j 04:42 -2121 Nov 23 j 16:24 -2121 Nov 23 j 06:40 -2120 Jan 29 j 14:46 -2120 Apr 04 j 23:56 -2120 May 14 j 12:25 -2120 Jun 01 j 17:29 -2120 Jun 01 j 17:32 -2120 Jun 02 j 06:38	9°&57'50 15°& 18°&16'57 15°R& 14°&47'35 14°&49'36 11°&17'09 15°& 19°&37'18 21°&58'49 21°&58'50 22°&03'06	7.97462 AU -1°00'40 1°00'38
evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-2127 Oct 22 j 10:06 -2127 Nov 04 j 10:25 -2127 Nov 17 j 08:32 -2126 Feb 13 j 21:39 -2126 Mar 03 j 09:44 -2126 Mar 03 j 09:42 -2126 Mar 03 j 09:10 -2126 Mar 21 j 02:29 -2126 Apr 11 j 20:55 -2126 Jul 06 j 21:29 -2126 Sep 13 j 03:01 -2126 Sep 13 j 01:54 -2126 Oct 12 j 23:24	14°≈50'30 15°≈ 22°≈46'38 25°≈02'24 25°≈02'24 25°≈02'13 27°≈19'45 0° ₩ 5° ₩ 44'52 2° ₩ 14'25 2° ₩ 14'39 30° R≈	2°10'39 10.09515 AU -2°50'03	retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-2121 Jun 05 j 13:10 -2121 Jul 18 j 20:30 -2121 Sep 18 j 06:38 -2121 Nov 21 j 04:42 -2121 Nov 23 j 16:24 -2121 Nov 23 j 06:40 -2120 Jan 29 j 14:46 -2120 Apr 04 j 23:56 -2120 May 14 j 12:25 -2120 Jun 01 j 17:29 -2120 Jun 01 j 17:32 -2120 Jun 02 j 06:38 -2120 Jun 19 j 20:52	9°&57'50 15°& 18°&16'57 15°R& 14°&47'35 14°&49'36 11°&17'09 15°& 19°&37'18 21°&58'49 21°&58'50 22°&03'06 24°&19'44	7.97462 AU -1°00'40 1°00'38

3			•	//	2121 BCE in historical c	, 1	80 24
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-2120 Nov 24 j 16:18	30°R₩		retrograde	-2114 Dec 16 j 10:11	19° Ω 47'25	
opposition	-2120 Dec 06 j 20:38	29° 8 00'26	-0°55'46	opposition	-2113 Feb 22 j 18:58	16° Ω 29'19	2°29'39
min. Earth dist.	-2120 Dec 06 j 10:07	29° 8 02'37	8.06208 AU	min. Earth dist.	-2113 Feb 22 j 15:39	16° Ω 29'57	8.86182 AU
direct	-2119 Feb 12 j 09:23	25° 8 30'09			-2113 Mar 15 j 02:27	15°R Ω	
	-2119 Apr 27 j 22:02	Π °0		direct	-2113 May 04 j 18:43	13° Ω 05′32	
evening set	-2119 May 29 j 14:03	3° Ⅱ 44'50			-2113 Jun 23 j 07:31	15° Ω	
				evening set	-2113 Aug 17 j 13:30	20° Ω 28'26	
conjunction	-2119 Jun 16 j 17:49	6° Ⅱ 04'16					
minimum elong	-2119 Jun 16 j 17:50	6° Ⅱ 04'16		conjunction	-2113 Sep 03 j 12:54	22° Ω 28'43	2°09'11
max. Earth dist.	-2119 Jun 17 j 07:13		10.11611 AU	minimum elong	-2113 Sep 03 j 12:51	22° Ω 28'42	
morning rise	-2119 Jul 04 j 18:31	8° Ⅱ 22'42		max. Earth dist.	-2113 Sep 03 j 15:09		10.92031 AU
retrograde	-2119 Oct 15 j 05:06	16° Ⅱ 19'42		morning rise	-2113 Sep 20 j 07:31	24° Ω 27'38	
opposition	-2119 Dec 20 j 18:14	12° Ⅱ 53'23			-2113 Nov 16 j 11:49	0° m)	
min. Earth dist.	-2119 Dec 20 j 07:40		8.17459 AU	retrograde	-2113 Dec 28 j 04:37	1° m/27'01	
direct	-2118 Feb 26 j 22:12	9° Ⅱ 23'36		:	-2112 Feb 09 j 01:57	30°R€	2044124
asc. node evening set	-2118 Apr 27 j 02:06 -2118 Jun 13 j 06:24	12° Ⅱ 17'25 17° Ⅱ 30'59		opposition min. Earth dist.	-2112 Mar 06 j 00:21 -2112 Mar 05 j 23:37	28°Ω09'59 28°Ω10'08	
evening set	-2116 Juli 13 J 00.24	17 113039		direct	-2112 May 16 j 07:44	24°Ω47'33	6.97033 AU
conjunction	-2118 Jul 01 j 07:13	19° Ⅱ 47'37	0°05'49	direct	-2112 May 10 j 07:44 -2112 Aug 10 j 03:20	0°m)	
minimum elong	-2118 Jul 01 j 07:12	19° Ⅱ 47'37		evening set	-2112 Aug 28 j 12:09	ربات 2° ال 02'47	
behind sun begin	-2118 Jul 01 j 00:14	19° Ⅱ 45'25	0 03 31	evening set	2112 Aug 20 j 12.0)	2 110/02 47	
behind sun end	-2118 Jul 01 j 14:10	19° Ⅱ 49'48		conjunction	-2112 Sep 14 j 07:08	4° m) 00'40	2°18'47
max. Earth dist.	-2118 Jul 01 j 20:09		10.23895 AU	minimum elong	-2112 Sep 14 j 07:07	4° m 00'39	
morning rise	-2118 Jul 19 j 03:51	22° I I02'56		max. Earth dist.	-2112 Sep 14 j 06:24	-	11.02468 AU
retrograde	-2118 Oct 28 j 14:47	29° Ⅱ 48′00		morning rise	-2112 Sep 30 j 21:56	5° m 57'21	
opposition	-2117 Jan 03 j 08:47	26° Ⅲ 23'29	0°27'14	retrograde	-2111 Jan 07 j 18:52	12° m 51'58	
min. Earth dist.	-2117 Jan 02 j 23:06	26° Ⅱ 25'26	8.30526 AU	opposition	-2111 Mar 18 j 01:39	9° m/35'42	2°52'36
direct	-2117 Mar 13 j 03:41	22° Ⅱ 54'31		min. Earth dist.	-2111 Mar 18 j 03:49	9° m 35'18	9.07049 AU
	-2117 Jun 20 j 03:48	0ංම		direct	-2111 May 28 j 13:35	6° Mp 14′29	
evening set	-2117 Jun 27 j 11:38	0° © 53'21		evening set	-2111 Sep 09 j 02:51	13° M 23'04	
conjunction	-2117 Jul 15 j 08:09	3° © 06'43	0°38'13	conjunction	-2111 Sep 25 j 18:11	15° m) 19'05	2°22'45
minimum elong	-2117 Jul 15 j 08:07	3°506'43	0°38'16	minimum elong	-2111 Sep 25 j 18:11	15° m 19'05	2°22'46
max. Earth dist.	-2117 Jul 15 j 19:43	3°510'21	10.37590 AU	max. Earth dist.	-2111 Sep 25 j 14:01	15° m)17'51	11.10674 AU
morning rise	-2117 Aug 01 j 23:50	5° © 18'35		morning rise	-2111 Oct 12 j 06:13	17° m 14'07	
retrograde	-2117 Nov 10 j 14:39	12° © 52'07		retrograde	-2110 Jan 19 j 04:59	24° m 05'39	
opposition	-2116 Jan 16 j 15:48	9° 5 29'25	1°05'45	opposition	-2110 Mar 29 j 23:44	20° m 49'47	2°53'52
min. Earth dist.	-2116 Jan 16 j 07:52	9° 5 31'00	8.44660 AU	min. Earth dist.	-2110 Mar 30 j 04:05	20° m 48'59	9.14029 AU
direct	-2116 Mar 26 j 01:28	6° © 01'32		direct	-2110 Jun 09 j 14:53	17° m 29'40	
evening set	-2116 Jul 10 j 05:21	13° © 51'15		evening set	-2110 Sep 20 j 11:14	24° Mp 32'51	
conjunction	-2116 Jul 27 j 20:40	16° © 01'07	1°07'50	conjunction	-2110 Oct 07 j 00:04	26° m 27'33	2°21'13
minimum elong	-2116 Jul 27 j 20:38	16°901'06	1°07'52	minimum elong	-2110 Oct 07 j 00:05	26° m 27'34	2°21'13
max. Earth dist.	-2116 Jul 28 j 05:32	16° © 03'51	10.51944 AU	max. Earth dist.	-2110 Oct 06 j 17:40	26° Mp 25'42	11.16310 AU
morning rise	-2116 Aug 14 j 06:56	18° © 09'25		morning rise	-2110 Oct 23 j 10:15	28° m 21'33	
retrograde	-2116 Nov 22 j 03:43	25°532'20			-2110 Nov 07 j 05:06	0∘ ⊽	
opposition	-2115 Jan 28 j 15:22	22° © 11'23	1°39'43	retrograde	-2109 Jan 30 j 17:13	5° ≏ 11'44	
min. Earth dist.	-2115 Jan 28 j 09:12	22°5512'36	8.59107 AU	opposition	-2109 Apr 10 j 19:42	1° ≏ 55'57	2°48'39
direct	-2115 Apr 08 j 16:13	18° 5 44'46		min. Earth dist.	-2109 Apr 11 j 01:32	1° ≏ 54'53	9.18293 AU
evening set	-2115 Jul 23 j 11:17	26° © 25'14			-2109 May 09 j 00:43	30°R, Mp	
				direct	-2109 Jun 21 j 11:53	28° m/36'46	
conjunction	-2115 Aug 09 j 21:02	28°931'38	1°33'22		-2109 Aug 02 j 18:53	0∘ ʊ	
minimum elong	-2115 Aug 09 j 20:59	28°931'37	1°33'24	evening set	-2109 Oct 01 j 15:05	5° £ 35'52	
max. Earth dist.	-2115 Aug 10 j 03:06		10.66230 AU		2100 0 / 10 : 02 27	70 0 2015 1	2014/25
	-2115 Aug 22 j 00:09	0°N		conjunction	-2109 Oct 18 j 02:27	7° Ω 29'54	2°14'25
morning rise	-2115 Aug 27 j 01:47	0° Ω 36'28 7° Ω 50'04		minimum elong max. Earth dist.	-2109 Oct 18 j 02:28	7° Ω 29'55	2°14'24 11.19176 AU
retrograde	-2115 Dec 04 j 10:05	4°Ω30'40	2°07'55		-2109 Oct 17 j 18:31 -2109 Nov 03 j 11:43	9° £ 27'36	11.171/0 AU
opposition min. Earth dist.	-2114 Feb 10 j 08:13 -2114 Feb 10 j 03:25	4° Ω 31'36	8.73158 AU	morning rise retrograde	-2109 Nov 03 j 11:43 -2108 Feb 11 j 04:05	9° ± 23′26 16° £ 13′56	
direct	-2114 Feb 10 J 03.23 -2114 Apr 21 j 22:11	1°Ω05'28	5.73136 AU	opposition	-2108 Feb 11 j 04.03	10 ≥ 13 30 12° ♀ 57'57	2°37'16
evening set	-2114 Apr 21 j 22.11 -2114 Aug 05 j 05:36	8° Ω 36'51		min. Earth dist.	-2108 Apr 21 j 13:00 -2108 Apr 21 j 22:40	12 2 56'33	9.19730 AU
evening set	2117 /1ug 00 J 00.00	0 063031		direct	-2108 Apr 21 j 22:40 -2108 Jul 02 j 02:36	9° £ 39'29	7.17/30 AU
conjunction	-2114 Aug 22 j 09:57	10° Ω 40'00	1°53'59	evening set	-2108 Oct 11 j 16:25	16° Ω 35'55	
minimum elong	-2114 Aug 22 j 09:54	10° Ω 39'59	1°54'01				
max. Earth dist.	-2114 Aug 22 j 13:55		10.79786 AU	conjunction	-2108 Oct 28 j 02:59	18° ≏ 29'48	2°02'41
morning rise	-2114 Sep 08 j 09:21	12° Ω 41'40		minimum elong	-2108 Oct 28 j 03:02	18° ≏ 29'49	
Č	-2114 Sep 28 j 18:24	15° Ω		max. Earth dist.	-2108 Oct 27 j 16:50		11.19232 AU
	- •				-		

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -2108 in astronomical counting style is the year 2109 BCE in historical counting style. -2108 Nov 13 j 12:27 20°**₽**23'27 conjunction -2101 Jan 03 i 19:51 26°**₹**58'17 -0°23'12 morning rise minimum elong -2107 Feb 21 j 17:09 27°**£**15'55 -2101 Jan 03 j 19:50 26°**₹**58'16 0°23'15 retrograde -2107 May 03 j 10:50 23°**£**59'25 2°20'09 -2101 Jan 03 j 08:41 26°**₹**'54'52 10.68439 AU max. Earth dist. opposition -2107 May 03 j 20:41 -2101 Jan 20 j 20:17 29°**х** 02′32 min. Earth dist. 23°**♀**57'37 9.18363 AU morning rise -2107 Jul 13 j 17:45 -2101 Jan 28 j 22:27 0°궁 direct 20°**£**41'21 -2107 Oct 22 j 16:53 -2101 May 05 j 19:41 6°**る**39'19 evening set 27°**£**36'34 retrograde -2101 Jul 15 j 08:25 3°る14'38 -0°47'14 opposition -2107 Nov 08 j 03:32 conjunction 29°**₽**30'51 1°46'22 min. Earth dist. -2101 Jul 15 j 17:08 3°る12'58 8.61397 AU minimum elong -2107 Nov 08 j 03:34 29°**♀**30'52 1°46'21 -2101 Sep 11 j 02:41 30°₽.**✓** -2101 Sep 21 j 18:53 29°**х** 54′00 max. Earth dist. -2107 Nov 07 j 15:24 29°**£**27'19 11.16545 AU direct -2107 Nov 12 j 07:29 0°M -2101 Oct 02 j 09:21 0°궁 -2101 Dec 30 j 09:54 morning rise -2107 Nov 24 j 14:09 1°M25'10 evening set 7°る14'53 retrograde -2106 Mar 05 j 09:07 8° ML21'11 opposition -2106 May 15 j 08:12 5°M03'49 1°57'46 conjunction -2100 Jan 16 j 09:29 9°る20'36 -0°52'39 min. Earth dist. -2106 May 15 j 19:03 5°M01'50 9.14290 AU minimum elong -2100 Jan 16 j 09:27 9°**ප්**20'35 0°52'41 direct -2106 Jul 25 j 07:41 1°M45'56 max. Earth dist. -2100 Jan 16 j 00:29 9°**る**17'48 10.54370 AU morning rise evening set -2106 Nov 02 j 18:09 8°M41'23 -2100 Feb 02 j 13:26 11°る27'46 retrograde -2100 May 18 j 10:01 19°る16'14 conjunction -2106 Nov 19 j 05:48 10°M36'34 1°25'59 opposition -2100 Jul 27 j 13:06 15°る49'53 -1°22'59 minimum elong -2106 Nov 19 j 05:51 10°M36'34 1°25'57 min. Earth dist. -2100 Jul 27 j 19:24 15°**る**48'39 8.47160 AU max. Earth dist. -2106 Nov 18 j 17:29 10°M32'57 11.11219 AU direct -2100 Oct 03 j 08:56 12°る28'09 morning rise -2106 Dec 05 j 18:12 12°M32'02 evening set -2099 Jan 11 i 07:55 19°る58'34 -2106 Dec 28 i 05:47 15°M retrograde -2105 Mar 17 i 06:17 19°M33'15 conjunction -2099 Jan 28 i 10:46 22°る07'12 -1°20'23 -2105 May 27 j 08:09 16°M₁14'44 1°30'44 minimum elong -2099 Jan 28 j 10:43 22°る07'12 1°20'25 opposition min. Earth dist. -2105 May 27 j 18:56 16°ML12'45 9.07648 AU max. Earth dist. -2099 Jan 28 j 03:39 22°る04'58 10.40079 AU -2105 Jun 13 j 17:01 -2099 Feb 14 j 18:26 24°る17'25 15°RM. morning rise -2105 Aug 05 j 23:13 -2099 Apr 09 j 07:02 direct 12°M56'45 0°≈≈ -2105 Sep 25 j 21:14 -2099 Jun 01 j 10:32 2°≈17'48 15°M. retrograde -2105 Nov 13 j 22:24 -2099 Jul 25 j 23:57 30°Rる evening set 19°M54'01 -2099 Aug 10 j 01:37 28°る49'54 -1°55'47 opposition -2105 Nov 30 j 11:38 21°M 50'34 1°02'04 -2099 Aug 10 j 05:46 28°る49'05 8.33070 AU conjunction min. Earth dist. -2105 Nov 30 j 11:40 -2099 Oct 16 j 07:15 21°ML50'35 1°02'01 direct 25°**る**26'56 minimum elong -2105 Nov 29 j 23:27 21°M46'58 11.03426 AU -2099 Dec 29 j 09:05 max. Earth dist. 0°≈ -2105 Dec 17 j 02:18 -2098 Jan 24 j 18:45 morning rise 23°M47'39 evening set 3°≈07'50 -2104 Feb 23 j 08:02 0°**∡** 0°**∡**¹55'36 -2098 Feb 11 j 01:04 5°≈19'27 -1°44'44 retrograde -2104 Mar 28 j 10:46 conjunction -2104 May 02 j 03:06 30°RML minimum elong -2098 Feb 11 j 01:01 5°≈19'26 1°44'46 opposition -2104 Jun 07 j 11:50 27°M35'44 0°59'43 max. Earth dist. -2098 Feb 10 j 20:00 5°≈17'50 10.26283 AU min. Earth dist. -2104 Jun 07 j 22:24 27°M33'47 8.98671 AU morning rise -2098 Feb 28 j 12:33 7°≈32'44 direct -2104 Aug 16 j 15:20 24°M17'26 -2098 May 17 j 11:33 15°**≈** -2104 Nov 12 j 22:18 0°×7 -2098 Jun 15 j 20:19 15°≈44'27 retrograde -2104 Nov 24 j 07:30 1°**х¹**18′09 -2098 Jul 15 j 07:12 evening set 15°R≈ -2098 Aug 23 j 21:37 12°≈15'14 -2°23'27 opposition -2104 Dec 10 j 22:39 3°**∡**16'28 0°35'19 -2098 Aug 23 j 23:48 12°≈14'48 8.19870 AU conjunction min. Earth dist. -2104 Dec 10 j 22:40 -2098 Oct 29 j 14:22 minimum elong 3°**х** 16'29 0°35'15 direct 8°≈50'57 -2104 Dec 10 i 09:47 max. Earth dist. 3°**х** 12'38 10.93447 AU -2097 Jan 24 i 23:12 15°**≈** morning rise -2104 Dec 27 i 16:17 5° **₹**15'37 evening set -2097 Feb 07 j 18:27 16°≈42'40 -2103 Apr 09 j 20:42 retrograde 12°**х** 31′50 -2103 Jun 19 j 20:38 9°×10'28 0°25'37 conjunction -2097 Feb 25 i 04:32 18°≈57'13 -2°03'59 opposition min. Earth dist. -2103 Jun 20 j 07:22 9°**х** 08′27 8.87688 AU minimum elong -2097 Feb 25 i 04:29 18°≈57'12 2°04'00 max. Earth dist. -2103 Aug 28 j 10:01 5°**х** 51'35 -2097 Feb 25 i 02:11 18°≈56'28 10.13753 AU direct -2103 Dec 05 j 23:09 12°**х** 57′26 -2097 Mar 14 j 19:46 21°≈13'26 evening set morning rise retrograde -2097 Jun 30 j 12:59 29°2235'05 conjunction -2103 Dec 22 j 16:42 14°**∡** 57'54 0°06'36 opposition -2097 Sep 07 j 00:44 26°≈04'50 -2°43'47 minimum elong -2103 Dec 22 j 16:43 14°**₹**57'54 0°06'33 min. Earth dist. -2097 Sep 07 j 00:46 26°≈04'49 8.08326 AU 14°**∡**¹55'56 -2097 Nov 12 j 08:12 behind sun begin -2103 Dec 22 j 10:07 direct 22°≈39'16 -2103 Dec 22 j 23:19 14°**∡** 59′52 -2096 Feb 16 j 20:25 0°**)**€ behind sun end -2103 Dec 22 j 03:59 14°**尽**54′04 10.81642 AU -2096 Feb 22 j 06:18 0°**)**(41'20 max. Earth dist. evening set -2102 Jan 08 j 13:43 16°**₹**59'27 morning rise 23°**х¹**17'52 -2096 Mar 10 j 20:24 2°\£58'38 -2°16'28 desc. node -2102 Mar 16 j 05:52 conjunction retrograde -2102 Apr 22 j 15:14 24°×725'23 minimum elong -2096 Mar 10 j 20:22 2°**H** 58'38 2°16'29 opposition -2102 Jul 02 j 11:17 21°**₹**02'23 -0°10'29 max. Earth dist. -2096 Mar 10 j 21:50 2° **€**59'07 10.03259 AU min. Earth dist. -2102 Jul 02 j 21:32 21°**₹**'00'26 8.75101 AU morning rise -2096 Mar 28 j 15:13 5°**)** 17'29 direct -2102 Sep 09 j 12:03 17°**∡**¹42'42 retrograde -2096 Jul 14 j 11:02 13°**)** 46'41 -2102 Dec 17 j 23:24 24°**₹**55'18 -2096 Sep 20 j 09:39 10°\(\)15'45 -2°54'44 evening set opposition

min. Earth dist.

-2096 Sep 20 j 07:00

10°**¥**16'17 7.99174 AU

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 26 Attention, astronomical year style is used: The year -2096 in astronomical counting style is the year 2097 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -2096 i	n astronomical co	unting style is the year	2097 BCE in historical c	ounting style.	
direct	-2096 Nov 25 j 11:23	6°) 48′59		conjunction	-2089 Jun 25 j 04:58	13° Ⅱ 55'07	-0°09'19
evening set	-2095 Mar 08 j 05:06	15°) €00'07		minimum elong	-2089 Jun 25 j 04:58	13° Ⅱ 55′07	0°09'17
				behind sun begin	-2089 Jun 24 j 22:51	13° Ⅲ 53'11	
conjunction	-2095 Mar 25 j 23:22	17° ∺ 19'50	-2°20'51	behind sun end	-2089 Jun 25 j 11:05	13° Ⅱ 57′03	
minimum elong	-2095 Mar 25 j 23:22	17° ∺ 19'50	2°20'51	max. Earth dist.	-2089 Jun 25 j 16:22		10.19142 AU
max. Earth dist.	-2095 Mar 26 j 04:49	17° ∺ 21'38	9.95508 AU	morning rise	-2089 Jul 13 j 03:39	16° Ⅱ 11'50	
morning rise	-2095 Apr 12 j 21:33	19°) 40′50		asc. node	-2089 Oct 07 j 17:19	23° Ⅱ 49'06	
retrograde	-2095 Jul 29 j 12:02	28° ∺ 14'15		retrograde	-2089 Oct 23 j 02:02	24° Ⅱ 02'20	
opposition	-2095 Oct 04 j 22:29	24°) 43′04	-2°54'56	opposition	-2089 Dec 28 j 16:52	20° Ⅱ 37'33	0°08'59
min. Earth dist.	-2095 Oct 04 j 17:00		7.93037 AU	min. Earth dist.	-2089 Dec 28 j 08:11	20° Ⅲ 39′18	8.25267 AU
direct	-2095 Dec 09 j 21:38	21° ∺ 15′14		direct	-2088 Mar 06 j 04:16	17° Ⅱ 08'39	
evening set	-2094 Mar 23 j 12:18	29° ∺ 33'20		evening set	-2088 Jun 20 j 13:35	25° Ⅱ 11'36	
	-2094 Mar 26 j 22:11	0 ° $\mathbf{\Upsilon}$					
				conjunction	-2088 Jul 08 j 12:06	27° Ⅱ 26′29	0°23'59
conjunction	-2094 Apr 10 j 10:34	1° Y 54'55		minimum elong	-2088 Jul 08 j 12:05	27° Ⅱ 26′28	
minimum elong	-2094 Apr 10 j 10:36	1° Ƴ 54'55		max. Earth dist.	-2088 Jul 08 j 22:01		10.31857 AU
max. Earth dist.	-2094 Apr 10 j 19:39	1° Y 57'55	9.91047 AU	morning rise	-2088 Jul 26 j 06:18	29° Ⅱ 39'57	
morning rise	-2094 Apr 28 j 11:40	4° Υ 17'24			-2088 Jul 28 j 23:32	0 \circ	
retrograde	-2094 Aug 13 j 13:37	12° Y 51′10		retrograde	-2088 Nov 04 j 06:06	7° © 18'52	
opposition	-2094 Oct 19 j 13:18	9° Ƴ 20′10	-2°43'49	opposition	-2087 Jan 10 j 03:32	3° 9 55'45	0°49'01
min. Earth dist.	-2094 Oct 19 j 05:18	9° Ƴ 21'50	7.90345 AU	min. Earth dist.	-2087 Jan 09 j 19:23	3° 9 57'23	8.38535 AU
direct	-2094 Dec 24 j 13:19	5° Y 51′28		direct	-2087 Mar 20 j 06:51	0°927'43	
evening set	-2093 Apr 08 j 00:26	14° Ƴ 13'45		evening set	-2087 Jul 04 j 13:09	8°921'56	
conjunction	-2093 Apr 26 j 02:04	16° Ƴ 36'24	-2°03'06	conjunction	-2087 Jul 22 j 06:58	10°533'27	0°55'05
minimum elong	-2093 Apr 26 j 02:08	16° Υ 36'25	2°03'05	minimum elong	-2087 Jul 22 j 06:56	10°933'27	0°55'07
max. Earth dist.	-2093 Apr 26 j 14:10	16° Υ 40'25	9.90193 AU	max. Earth dist.	-2087 Jul 22 j 15:40		10.45509 AU
morning rise	-2093 May 14 j 05:16	18° Υ 59'33	7.70175710	morning rise	-2087 Aug 08 j 19:47	12°9543'26	10.43307710
retrograde	-2093 Aug 28 j 12:45	27° Υ 29'43		retrograde	-2087 Nov 17 j 00:39	20°911'26	
	-2093 Nov 03 j 03:39	23° Υ 59'20	2022100	-	-2086 Jan 23 j 06:53	16°9549'55	1°25'15
opposition	-2093 Nov 03 j 03.39 -2093 Nov 02 j 17:48	23 γ 39 20 24° γ 01'23	7.91282 AU	opposition	-2086 Jan 23 j 00:05	16°951'15	
min. Earth dist.	-2093 Nov 02 j 17.48 -2092 Jan 08 j 09:17	24 1 01 23 20° Υ 29'59	7.91282 AU	min. Earth dist.	•	13°931'13	8.52420 AU
direct		20 γ 29 39 28° γ 53'22		direct	-2086 Apr 03 j 01:20	13 3 22 33 21° 5 07'58	
evening set	-2092 Apr 22 j 13:50			evening set	-2086 Jul 18 j 00:53	21 2007 38	
	-2092 May 01 j 02:25	0°8				_	
					2006 4 04:12:22		
	2002 M 10:17.52	10017111	1041155	conjunction	-2086 Aug 04 j 13:22		1°22'36
conjunction	-2092 May 10 j 17:52	1°816'11		minimum elong	-2086 Aug 04 j 13:19	23°516'00	1°22'38
minimum elong	-2092 May 10 j 17:57	1° 8 16'12	1°41'53	minimum elong max. Earth dist.	-2086 Aug 04 j 13:19 -2086 Aug 04 j 20:24	23°©16'00 23°©18'11	
minimum elong max. Earth dist.	-2092 May 10 j 17:57 -2092 May 11 j 07:47	1° 8 16'12 1° 8 20'46		minimum elong	-2086 Aug 04 j 13:19 -2086 Aug 04 j 20:24 -2086 Aug 21 j 20:30	23°\$16'00 23°\$18'11 25°\$22'30	1°22'38
minimum elong max. Earth dist. morning rise	-2092 May 10 j 17:57 -2092 May 11 j 07:47 -2092 May 28 j 22:06	1°816'12 1°820'46 3°839'02	1°41'53	minimum elong max. Earth dist. morning rise	-2086 Aug 04 j 13:19 -2086 Aug 04 j 20:24 -2086 Aug 21 j 20:30 -2086 Oct 03 j 23:57	23°\$16'00 23°\$18'11 25°\$22'30 0°\$\Omega\$	1°22'38
minimum elong max. Earth dist. morning rise retrograde	-2092 May 10 j 17:57 -2092 May 11 j 07:47 -2092 May 28 j 22:06 -2092 Sep 11 j 05:36	1°816'12 1°820'46 3°839'02 12°802'04	1°41'53 9.92981 AU	minimum elong max. Earth dist.	-2086 Aug 04 j 13:19 -2086 Aug 04 j 20:24 -2086 Aug 21 j 20:30 -2086 Oct 03 j 23:57 -2086 Nov 29 j 11:48	23°\$16'00 23°\$18'11 25°\$22'30 0°\$\Omega\$ 2°\$\Omega\$40'39	1°22'38
minimum elong max. Earth dist. morning rise retrograde opposition	-2092 May 10 j 17:57 -2092 May 11 j 07:47 -2092 May 28 j 22:06 -2092 Sep 11 j 05:36 -2092 Nov 16 j 15:11	1°816'12 1°820'46 3°839'02 12°802'04 8°832'40	1°41'53 9.92981 AU -1°51'11	minimum elong max. Earth dist. morning rise retrograde	-2086 Aug 04 j 13:19 -2086 Aug 04 j 20:24 -2086 Aug 21 j 20:30 -2086 Oct 03 j 23:57 -2086 Nov 29 j 11:48 -2085 Jan 27 j 14:49	23°\$16'00 23°\$18'11 25°\$22'30 0°\$\Omega\$ 2°\$\Omega\$40'39 30°\$\S	1°22'38 10.59408 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-2092 May 10 j 17:57 -2092 May 11 j 07:47 -2092 May 28 j 22:06 -2092 Sep 11 j 05:36 -2092 Nov 16 j 15:11 -2092 Nov 16 j 04:44	1°816'12 1°820'46 3°839'02 12°802'04 8°832'40 8°834'50	1°41'53 9.92981 AU -1°51'11	minimum elong max. Earth dist. morning rise retrograde opposition	-2086 Aug 04 j 13:19 -2086 Aug 04 j 20:24 -2086 Aug 21 j 20:30 -2086 Oct 03 j 23:57 -2086 Nov 29 j 11:48 -2085 Jan 27 j 14:49 -2085 Feb 05 j 03:16	23°\$16'00 23°\$18'11 25°\$22'30 0°\$0 2°\$040'39 30°\$\$20'35	1°22'38 10.59408 AU 1°56'13
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-2092 May 10 j 17:57 -2092 May 11 j 07:47 -2092 May 28 j 22:06 -2092 Sep 11 j 05:36 -2092 Nov 16 j 15:11 -2092 Nov 16 j 04:44 -2091 Jan 22 j 06:37	1°816'12 1°820'46 3°839'02 12°802'04 8°832'40 8°834'50 5°802'56	1°41'53 9.92981 AU -1°51'11	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-2086 Aug 04 j 13:19 -2086 Aug 04 j 20:24 -2086 Aug 21 j 20:30 -2086 Oct 03 j 23:57 -2086 Nov 29 j 11:48 -2085 Jan 27 j 14:49 -2085 Feb 05 j 03:16 -2085 Feb 04 j 22:34	23°\$16'00 23°\$18'11 25°\$22'30 0°\$1 2°\$40'39 30°\$\$20'35 29°\$20'35	1°22'38 10.59408 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-2092 May 10 j 17:57 -2092 May 11 j 07:47 -2092 May 28 j 22:06 -2092 Sep 11 j 05:36 -2092 Nov 16 j 15:11 -2092 Nov 16 j 04:44 -2091 Jan 22 j 06:37 -2091 May 08 j 00:46	1°816'12 1°820'46 3°839'02 12°802'04 8°832'40 8°834'50 5°802'56 13°824'24	1°41'53 9.92981 AU -1°51'11	minimum elong max. Earth dist. morning rise retrograde opposition	-2086 Aug 04 j 13:19 -2086 Aug 04 j 20:24 -2086 Aug 21 j 20:30 -2086 Oct 03 j 23:57 -2086 Nov 29 j 11:48 -2085 Jan 27 j 14:49 -2085 Feb 05 j 03:16 -2085 Feb 04 j 22:34 -2085 Apr 16 j 10:24	23°\$16'00 23°\$18'11 25°\$22'30 0°\$1 2°\$40'39 30°\$\$2 29°\$20'35 29°\$21'30 25°\$54'41	1°22'38 10.59408 AU 1°56'13
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-2092 May 10 j 17:57 -2092 May 11 j 07:47 -2092 May 28 j 22:06 -2092 Sep 11 j 05:36 -2092 Nov 16 j 15:11 -2092 Nov 16 j 04:44 -2091 Jan 22 j 06:37	1°816'12 1°820'46 3°839'02 12°802'04 8°832'40 8°834'50 5°802'56	1°41'53 9.92981 AU -1°51'11	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-2086 Aug 04 j 13:19 -2086 Aug 04 j 20:24 -2086 Aug 21 j 20:30 -2086 Oct 03 j 23:57 -2086 Nov 29 j 11:48 -2085 Jan 27 j 14:49 -2085 Feb 05 j 03:16 -2085 Feb 04 j 22:34 -2085 Apr 16 j 10:24 -2085 Jun 29 j 07:31	23°\$16'00 23°\$18'11 25°\$22'30 0°\$\Omega\$ 2°\$\Omega\$40'39 30°\$\Omega\$ 29°\$\Omega\$20'35 29°\$\Omega\$21'30 25°\$\Omega\$54'41 0°\$\Omega\$	1°22'38 10.59408 AU 1°56'13
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-2092 May 10 j 17:57 -2092 May 11 j 07:47 -2092 May 28 j 22:06 -2092 Sep 11 j 05:36 -2092 Nov 16 j 15:11 -2092 Nov 16 j 04:44 -2091 Jan 22 j 06:37 -2091 May 08 j 00:46 -2091 May 20 j 07:51	1°816'12 1°820'46 3°839'02 12°802'04 8°832'40 8°834'50 5°802'56 13°824'24	1°41'53 9.92981 AU -1°51'11 7.95735 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-2086 Aug 04 j 13:19 -2086 Aug 04 j 20:24 -2086 Aug 21 j 20:30 -2086 Oct 03 j 23:57 -2086 Nov 29 j 11:48 -2085 Jan 27 j 14:49 -2085 Feb 05 j 03:16 -2085 Feb 04 j 22:34 -2085 Apr 16 j 10:24	23°\$16'00 23°\$18'11 25°\$22'30 0°\$1 2°\$40'39 30°\$\$2 29°\$20'35 29°\$21'30 25°\$54'41	1°22'38 10.59408 AU 1°56'13
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-2092 May 10 j 17:57 -2092 May 11 j 07:47 -2092 May 28 j 22:06 -2092 Sep 11 j 05:36 -2092 Nov 16 j 15:11 -2092 Nov 16 j 04:44 -2091 Jan 22 j 06:37 -2091 May 08 j 00:46 -2091 May 20 j 07:51 -2091 May 26 j 05:49	1°816'12 1°820'46 3°839'02 12°802'04 8°832'40 8°834'50 5°802'56 13°824'24 15°8	1°41'53 9.92981 AU -1°51'11 7.95735 AU -1°14'26	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-2086 Aug 04 j 13:19 -2086 Aug 04 j 20:24 -2086 Aug 21 j 20:30 -2086 Oct 03 j 23:57 -2086 Nov 29 j 11:48 -2085 Jan 27 j 14:49 -2085 Feb 05 j 03:16 -2085 Feb 04 j 22:34 -2085 Apr 16 j 10:24 -2085 Jun 29 j 07:31 -2085 Jul 31 j 00:45	23°\$16'00 23°\$18'11 25°\$22'30 0°\$\Omega\$ 2°\$\Omega\$40'39 30°\$\Omega\$ 29°\$20'35 29°\$21'30 25°\$54'41 0°\$\Omega\$ 3°\$\Omega\$30'36	1°22'38 10.59408 AU 1°56'13 8.66242 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-2092 May 10 j 17:57 -2092 May 11 j 07:47 -2092 May 28 j 22:06 -2092 Sep 11 j 05:36 -2092 Nov 16 j 15:11 -2092 Nov 16 j 04:44 -2091 Jan 22 j 06:37 -2091 May 08 j 00:46 -2091 May 20 j 07:51 -2091 May 26 j 05:49 -2091 May 26 j 05:52	1°816'12 1°820'46 3°839'02 12°802'04 8°832'40 8°834'50 5°802'56 13°824'24 15°8	1°41'53 9.92981 AU -1°51'11 7.95735 AU -1°14'26 1°14'24	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-2086 Aug 04 j 13:19 -2086 Aug 04 j 20:24 -2086 Aug 21 j 20:30 -2086 Oct 03 j 23:57 -2086 Nov 29 j 11:48 -2085 Jan 27 j 14:49 -2085 Feb 05 j 03:16 -2085 Feb 04 j 22:34 -2085 Apr 16 j 10:24 -2085 Jun 29 j 07:31 -2085 Jul 31 j 00:45 -2085 Aug 17 j 07:40	23°\$16'00 23°\$18'11 25°\$22'30 0°\$\Omega\$ 2°\$\Omega\$40'39 30°\$\Omega\$ 29°\$20'35 29°\$21'30 25°\$54'41 0°\$\Omega\$ 3°\$\Omega\$30'36	1°22'38 10.59408 AU 1°56'13 8.66242 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-2092 May 10 j 17:57 -2092 May 11 j 07:47 -2092 May 28 j 22:06 -2092 Sep 11 j 05:36 -2092 Nov 16 j 15:11 -2092 Nov 16 j 04:44 -2091 Jan 22 j 06:37 -2091 May 08 j 00:46 -2091 May 20 j 07:51 -2091 May 26 j 05:49 -2091 May 26 j 05:52 -2091 May 26 j 19:50	1°816'12 1°820'46 3°839'02 12°802'04 8°832'40 8°834'50 5°802'56 13°824'24 15°8 15°846'24 15°846'26 15°851'00	1°41'53 9.92981 AU -1°51'11 7.95735 AU -1°14'26 1°14'24	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-2086 Aug 04 j 13:19 -2086 Aug 04 j 20:24 -2086 Aug 21 j 20:30 -2086 Oct 03 j 23:57 -2086 Nov 29 j 11:48 -2085 Jan 27 j 14:49 -2085 Feb 05 j 03:16 -2085 Feb 04 j 22:34 -2085 Apr 16 j 10:24 -2085 Jun 29 j 07:31 -2085 Jul 31 j 00:45	23°\$16'00 23°\$18'11 25°\$22'30 0°\$\Omega\$ 2°\$\Omega\$40'39 30°\$\Omega\$ 29°\$20'35 29°\$21'30 25°\$54'41 0°\$\Omega\$ 3°\$\Omega\$30'36 5°\$\Omega\$35'20 5°\$\Omega\$35'19	1°22'38 10.59408 AU 1°56'13 8.66242 AU 1°45'31 1°45'33
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-2092 May 10 j 17:57 -2092 May 11 j 07:47 -2092 May 28 j 22:06 -2092 Sep 11 j 05:36 -2092 Nov 16 j 15:11 -2092 Nov 16 j 04:44 -2091 Jan 22 j 06:37 -2091 May 08 j 00:46 -2091 May 20 j 07:51 -2091 May 26 j 05:49 -2091 May 26 j 05:52	1°816'12 1°820'46 3°839'02 12°802'04 8°832'40 8°834'50 5°802'56 13°824'24 15°8	1°41'53 9.92981 AU -1°51'11 7.95735 AU -1°14'26 1°14'24	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-2086 Aug 04 j 13:19 -2086 Aug 04 j 20:24 -2086 Aug 21 j 20:30 -2086 Oct 03 j 23:57 -2086 Nov 29 j 11:48 -2085 Jan 27 j 14:49 -2085 Feb 05 j 03:16 -2085 Feb 04 j 22:34 -2085 Apr 16 j 10:24 -2085 Jun 29 j 07:31 -2085 Jul 31 j 00:45 -2085 Aug 17 j 07:40	23°\$16'00 23°\$18'11 25°\$22'30 0°\$\Omega\$ 2°\$\Omega\$40'39 30°\$\Omega\$ 29°\$20'35 29°\$21'30 25°\$54'41 0°\$\Omega\$ 3°\$\Omega\$30'36 5°\$\Omega\$35'20 5°\$\Omega\$35'19	1°22'38 10.59408 AU 1°56'13 8.66242 AU
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minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-2092 May 10 j 17:57 -2092 May 11 j 07:47 -2092 May 28 j 22:06 -2092 Sep 11 j 05:36 -2092 Nov 16 j 15:11 -2092 Nov 16 j 04:44 -2091 Jan 22 j 06:37 -2091 May 08 j 00:46 -2091 May 20 j 07:51 -2091 May 26 j 05:49 -2091 May 26 j 05:52 -2091 May 26 j 19:50 -2091 Jun 13 j 09:42 -2091 Sep 25 j 14:04 -2091 Nov 30 j 22:05 -2091 Nov 30 j 22:05 -2091 Nov 30 j 12:04 -2090 Feb 06 j 02:46 -2090 May 23 j 05:57 -2090 Jun 10 j 10:19 -2090 Jun 10 j 07:48 -2090 Jun 10 j 07:48 -2090 Jun 10 j 07:48 -2090 Jun 28 j 12:18 -2090 Oct 09 j 12:27 -2090 Dec 14 j 22:54 -2090 Dec 14 j 13:38	1°816'12 1°820'46 3°839'02 12°802'04 8°832'40 8°834'50 5°802'56 13°824'24 15°846'24 15°851'00 18°808'01 26°821'19 22°853'15 22°855'19 19°823'27 27°840'30 0°П00'49	1°41'53 9.92981 AU -1°51'11 7.95735 AU -1°14'26 1°14'24 9.99116 AU -1°13'50 8.03272 AU -0°42'49 0°42'46 10.08033 AU -0°32'49	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-2086 Aug 04 j 13:19 -2086 Aug 04 j 20:24 -2086 Aug 21 j 20:30 -2086 Oct 03 j 23:57 -2086 Nov 29 j 11:48 -2085 Jan 27 j 14:49 -2085 Feb 05 j 03:16 -2085 Feb 04 j 22:34 -2085 Apr 16 j 10:24 -2085 Jul 29 j 07:31 -2085 Jul 31 j 00:45 -2085 Aug 17 j 07:40 -2085 Aug 17 j 07:37 -2085 Aug 17 j 12:05 -2085 Aug 17 j 12:05 -2085 Sep 03 j 09:25 -2085 Dec 11 j 13:55 -2084 Feb 17 j 17:03 -2084 Feb 17 j 14:47 -2084 Apr 28 j 11:25 -2084 Aug 07 j 00:16 -2084 Aug 28 j 15:13 -2084 Aug 28 j 15:13 -2084 Aug 28 j 15:13 -2084 Aug 28 j 16:27 -2084 Sep 14 j 12:08 -2084 Dec 22 j 09:10 -2083 Mar 01 j 00:59	23°\$16'00 23°\$18'11 25°\$22'30 0°\$\Omega\$2'\00'85 29°\$20'35 29°\$21'30 25°\$54'41 0°\$\Omega\$3'\00'36'40 7°\$\Omega\$3'1 4°\$\Omega\$48'08 11°\$\Omega\$29'19 11°\$\Omega\$29'19 11°\$\Omega\$29'19 11°\$\Omega\$29'19 11°\$\Omega\$29'19 11°\$\Omega\$29'19 11°\$\Omega\$29'19 11°\$\Omega\$3'45 8°\$\Omega\$31'48 17°\$\Omega\$33'51 19°\$\Omega\$33'51 19°\$\Omega\$33'47 26°\$\Omega\$36'20 23°\$\Omega\$18'31 23°\$\Omega\$18'37	1°22'38 10.59408 AU 1°56'13 8.66242 AU 1°45'31 1°45'33 10.72895 AU 2°20'57 8.79353 AU 2°03'12 2°03'14 10.85371 AU

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -2083 in astronomical counting style is the year 2084 BCE in historical counting style. -2083 Sep 09 i 13:30 29°Ω13'15 2°15'19 conjunction -2077 Nov 14 j 18:14 5°**M**57'47 1°35'28 conjunction -2083 Sep 09 j 13:28 29°Ω13'14 2°15'21 -2077 Nov 14 j 18:17 5°ML57'48 1°35'27 minimum elong minimum elong 5°M54'43 11.13975 AU -2083 Sep 09 j 12:35 29° **Ω**12'59 10.96337 AU -2077 Nov 14 j 07:47 max. Earth dist. max. Earth dist. -2083 Sep 16 j 03:27 0° m -2077 Dec 01 j 05:41 7°M52'39 morning rise -2083 Sep 26 j 06:07 -2076 Mar 11 j 09:46 morning rise 1° Mp 11'04 retrograde 14°M51'04 -2082 Jan 03 j 02:18 -2076 May 21 j 10:28 retrograde 8° m 08'11 opposition 11°ML33'07 1°43'11 9.11323 AU opposition -2082 Mar 13 j 04:16 4° m 51'05 2°50'04 min. Earth dist. -2076 May 21 j 20:04 11°M31'22 -2076 Jul 31 j 04:38 min. Earth dist. -2082 Mar 13 j 05:00 4° **m** 50'57 9.01281 AU direct 8°M15'17 -2082 May 23 j 16:04 direct 1° Mp 28'47 -2076 Nov 06 j 18:12 15°M 15°M11'19 evening set -2082 Sep 04 j 10:39 8° Tp 40'47 evening set -2076 Nov 08 j 09:39 -2082 Sep 21 j 03:45 10° m/37'46 2°21'47 -2076 Nov 24 j 21:55 conjunction conjunction 17°ML07'07 1°13'00 -2082 Sep 21 j 03:45 -2076 Nov 24 j 21:58 minimum elong 10° Mp 37'46 $2^{\circ}21'48$ minimum elong 17°ML07'07 1°12'59 max. Earth dist. -2082 Sep 21 j 01:29 10° Mp 37'06 11.05384 AU max. Earth dist. -2076 Nov 24 j 10:18 17°M03'42 11.07944 AU morning rise -2082 Oct 07 j 16:57 12° m 33'40 morning rise -2076 Dec 11 j 11:35 19°M03'20 retrograde -2081 Jan 14 j 14:41 19° m 26'57 retrograde -2075 Mar 23 j 09:50 26°M07'40 opposition -2081 Mar 25 j 03:51 16° To 10'202°54'19 opposition -2075 Jun 02 j 12:20 22°M48'41 1°13'49 min. Earth dist. -2081 Mar 25 j 06:29 16°Mp09'50 9.09277 AU min. Earth dist. -2075 Jun 02 j 22:31 22°ML46'49 9.04047 AU direct -2081 Jun 04 j 18:23 12° m/49'09 direct -2075 Aug 11 j 20:29 19°MJ30'51 evening set -2081 Sep 15 j 21:54 19° m 55'07 evening set -2075 Nov 19 j 16:07 26°M29'25 0°47'25 conjunction -2081 Oct 02 j 11:58 21° m 50'33 2°22'39 conjunction -2075 Dec 06 i 06:16 28°M26'45 minimum elong -2081 Oct 02 j 11:58 21° m 50'33 2°22'39 minimum elong -2075 Dec 06 i 06:17 28°M26'45 0°47'22 max. Earth dist. -2081 Oct 02 i 07:30 21° m 49'14 11.12204 AU max. Earth dist. -2075 Dec 05 i 19:06 28°M23'26 10.99589 AU morning rise -2081 Oct 18 j 22:51 23° m 45'06 -2075 Dec 19 j 09:39 0° **₹** -2081 Dec 30 j 00:33 0∘**⊽** -2075 Dec 22 j 22:31 0°**х** 24′46 morning rise -2080 Jan 26 j 01:42 0°**£**36′08 -2074 Apr 04 j 16:26 7°**х** 36'31 retrograde retrograde -2080 Feb 22 j 12:34 opposition -2074 Jun 14 j 18:23 4°**∡**16'17 0°40'58 30°R M opposition -2080 Apr 05 j 00:43 -2074 Jun 15 j 03:53 4°**҂**14'31 8.94584 AU 27° m 19'47 2°51'54 min. Earth dist. -2074 Aug 23 j 14:42 -2080 Apr 05 j 05:55 27° m 18'49 0°**х** 58′12 min. Earth dist. 9.14907 AU direct -2080 Jun 15 j 16:24 -2074 Dec 01 j 04:21 8°**х¹**00′56 23° m 59'36 direct evening set -2080 Sep 17 j 02:54 0∘ଫ -2080 Sep 26 j 03:49 -2074 Dec 17 j 20:50 10°**∡**00'11 0°19'27 1°**₽**00'49 conjunction evening set -2074 Dec 17 j 20:50 10° ₹ 00'12 0°19'24 minimum elong 9°**≯**57'03 10.89181 AU -2080 Oct 12 j 15:43 2°**2**55'14 2°18'08 -2074 Dec 17 j 10:21 conjunction max. Earth dist. 12°**х** 00′22 -2080 Oct 12 j 15:44 -2073 Jan 03 j 16:04 minimum elong 2°**£**55'14 2°18'07 morning rise -2080 Oct 12 j 08:28 -2073 Apr 17 j 08:45 max. Earth dist. 2°**£**53'07 11.16579 AU retrograde 19°**х** 20′59 morning rise -2080 Oct 29 j 01:27 4°**£**49'02 -2073 Jun 27 j 05:48 15°**₹**′59'19 0°05'39 opposition retrograde -2079 Feb 05 j 11:09 11°**≏**39'28 min. Earth dist. -2073 Jun 27 j 14:27 15°**∡**757'42 8.83248 AU -2079 Apr 16 j 20:19 8°**2**3'06 2°43'10 desc. node -2073 Aug 25 j 04:23 12°**х** 46′08 opposition min. Earth dist. -2079 Apr 17 j 03:03 8°**£**21'52 9.17988 AU direct -2073 Sep 04 j 13:10 12°**х** 40'43 -2079 Jun 27 j 10:04 5°**≏**03'48 -2073 Dec 13 j 00:15 19°**х** 49′12 direct evening set -2079 Oct 07 j 05:56 12°**♀**01'32 evening set -2073 Dec 29 j 19:12 21°**₹**50'43 -0°10'00 conjunction -2079 Oct 23 j 16:46 13°**♀**55'31 2°08'31 -2073 Dec 29 j 19:12 21°**х** 50'43 0°10'03 conjunction minimum elong -2079 Oct 23 j 16:48 -2073 Dec 29 i 13:30 minimum elong 13°**♀**55'31 2°08'29 behind sun begin 21°**₹**′49′01 -2079 Oct 23 i 08:22 max. Earth dist. 13°**≙**53'04 11.18362 AU behind sun end -2073 Dec 30 i 00:54 21°**₹**′52′26 morning rise -2079 Nov 09 i 02:12 15°**-**49′08 max. Earth dist. -2073 Dec 29 i 08:43 21° 🗷 47'33 10.77073 AU 23°×753'25 retrograde -2078 Feb 16 i 23:59 22°**₽**40'39 morning rise -2072 Jan 15 i 17:48 -2078 Apr 28 j 15:42 19°**£**23′59 2°28′28 -2072 Mar 18 j 12:00 0°궁 opposition min. Earth dist. -2078 Apr 28 j 23:02 19°**2**22'38 9.18413 AU -2072 Apr 29 j 08:24 1°る24'05 retrograde -2078 Jul 09 j 02:47 16°**♀**05'24 -2072 Jun 10 j 24:00 30°R*X* direct -2078 Oct 18 j 06:24 23°**₽**01'03 -2072 Jul 08 j 23:29 28°**₹**00'54 -0°30'54 evening set opposition 27°**₹**′59'21 min. Earth dist. -2072 Jul 09 j 07:40 8.70437 AU -2072 Sep 15 j 15:02 24°**∡**′41′28 conjunction -2078 Nov 03 j 17:06 24°**£**55'09 1°54'08 direct minimum elong -2078 Nov 03 j 17:09 24°**♀**55'09 1°54'07 -2072 Dec 07 j 11:18 0°정 max. Earth dist. -2078 Nov 03 j 08:14 24°**£**52'34 11.17486 AU -2072 Dec 24 j 05:25 1°る57'20 evening set -2078 Nov 20 j 03:03 26°**₽**49'07 morning rise -2078 Dec 20 j 00:09 0°M -2071 Jan 10 j 03:12 4°る01'23 -0°39'38 conjunction -2071 Jan 10 j 03:10 4°る01'23 0°39'41 retrograde -2077 Feb 28 j 15:29 3°M43'16 minimum elong -2071 Jan 09 j 16:51 3°る58'12 10.63701 AU opposition -2077 May 10 j 11:55 0°**M**26′05 2°08'18 max. Earth dist. min. Earth dist. -2077 May 10 j 20:10 0°M24'35 9.16167 AU morning rise -2071 Jan 27 j 05:26 6°る06'50 -2077 May 16 j 11:06 30°R<u>₽</u> retrograde -2071 May 12 j 16:12 13°る48'37 direct -2077 Jul 20 j 15:27 27°**₽**08'01 opposition -2071 Jul 22 j 00:09 10°る23'48 -1°07'11 -2077 Sep 20 j 00:24 0°M min. Earth dist. -2071 Jul 22 j 07:55 10°**る**22'18 8.56622 AU -2077 Oct 29 j 07:04 4°ML03'04 -2071 Sep 28 j 02:06 7°る03'19

direct

evening set

-2070 Jan 05 j 21:17

14°る28'00

evening set

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -2070 in astronomical counting style is the year 2071 BCE in historical counting style. -2070 Jan 22 i 22:19 16°**ප**34'52 -1°08'14 minimum elong -2064 Apr 18 i 03:32 9°**Y**59'04 2°10'28 conjunction -2070 Jan 22 j 22:17 16°**ප**34'52 1°08'17 -2064 Apr 18 j 11:28 10°Υ01'42 9.90482 AU minimum elong max Earth dist max. Earth dist. -2070 Jan 22 j 13:31 16°る32'07 10.49560 AU -2064 May 06 j 05:52 12°Y21'53 morning rise -2070 Feb 09 j 04:12 -2064 Aug 20 j 22:25 20°**Y**53'32 18°る43'17 morning rise retrograde -2064 Oct 26 j 17:25 17°**Υ**22'30 -2°33'39 26°る36'49 retrograde -2070 May 26 j 10:28 opposition 17° Y23'58 -2070 Aug 04 j 08:12 min. Earth dist. -2064 Oct 26 j 10:27 7.90410 AU opposition 23°る10'23 -1°41'25 13°Y53'00 min. Earth dist. -2070 Aug 04 j 14:32 23°**る**09'09 8.42372 AU direct -2064 Dec 31 j 21:26 22°Y15'43 direct -2070 Oct 10 j 21:03 19°**る**48'41 evening set -2063 Apr 15 j 15:54 -2069 Jan 19 j 01:18 evening set 27°る23'23 conjunction -2063 May 03 j 18:52 24°**Y**38'30 -1°52'55 1°52'53 conjunction -2069 Feb 05 j 05:51 29°**る**33'14 -1°34'15 minimum elong -2063 May 03 j 18:56 24°**Ƴ**38'32 -2069 Feb 05 j 05:48 -2063 May 04 j 05:16 24° Y41'579.90928 AU minimum elong 29°**る**33'13 1°34'16 max. Earth dist. -2069 Feb 04 j 23:30 -2063 May 21 j 22:57 27°**Y**01'36 max. Earth dist. 29°る31'14 10.35319 AU morning rise -2069 Feb 08 j 18:13 -2063 Jun 14 j 22:53 0°8 morning rise -2069 Feb 22 j 15:19 1°≈44'42 retrograde -2063 Sep 04 j 16:38 5°**8**28'06 retrograde -2069 Jun 09 j 15:16 9°≈49'55 opposition -2063 Nov 10 j 05:49 1°**8**57'44 -2°06'53 opposition -2069 Aug 17 j 23:45 6°≈21'59 -2°11'35 min. Earth dist. -2063 Nov 09 j 21:11 1°**8**59'32 7.92610 AU min. Earth dist. -2069 Aug 18 j 03:41 6°≈21'12 8.28449 AU -2063 Dec 05 j 04:31 30°RY direct -2069 Oct 23 j 23:07 2°≈58'56 direct -2062 Jan 15 j 18:22 28°Y27'37 10°**≈**44′20 evening set -2068 Feb 01 j 18:03 -2062 Feb 25 j 21:39 0°8 evening set -2062 May 01 j 03:51 6°850'12 conjunction -2068 Feb 19 i 02:17 12°≈57'10 -1°55'57 minimum elong -2068 Feb 19 i 02:14 12°≈57'09 1°55'59 conjunction -2062 May 19 j 08:40 9°812'46 -1°28'12 max. Earth dist. -2068 Feb 18 j 22:50 12°≈56'03 10.21812 AU minimum elong -2062 May 19 i 08:44 9°812'47 1°28'10 -2062 May 19 j 20:59 -2068 Mar 06 j 02:30 15°≈ max. Earth dist. 9°**8**16'49 9.94946 AU -2068 Mar 07 j 15:23 -2062 Jun 06 j 13:03 11°**8**35'10 morning rise 15°≈11'38 morning rise -2068 Jun 23 j 03:57 -2062 Jul 04 j 13:32 15°8 23°≈27'36 retrograde -2068 Aug 30 j 22:42 -2062 Sep 19 j 04:23 19°**8**53'26 19°≈58'18 -2°35'27 retrograde opposition -2068 Aug 30 j 23:52 -2062 Nov 24 j 14:48 min. Earth dist. 19°≈58'04 8.15694 AU 16°**8**24'09 -1°32'18 opposition -2068 Nov 05 j 11:11 min. Earth dist. -2062 Nov 24 j 04:48 16°**8**26'14 7.98245 AU 16°≈33'49 direct -2067 Feb 14 j 23:18 -2062 Dec 11 j 23:06 24°≈29'51 15°R₩ evening set 12°**8**53'47 direct -2061 Jan 30 j 14:41 -2067 Mar 04 j 11:24 26°≈45'34 -2°11'41 -2061 Mar 20 j 11:43 conjunction 15°8 -2067 Mar 04 j 11:22 -2061 May 16 j 11:39 21°**8**13'21 minimum elong 26°≈45'34 2°11'42 evening set -2067 Mar 04 j 10:47 max. Earth dist. 26°≈45'22 10.09881 AU 29°**≈**02'52 -2067 Mar 22 j 04:13 -2061 Jun 03 j 16:45 23°**8**34'42 -0°58'16 morning rise conjunction -2061 Jun 03 j 16:48 -2067 Mar 29 j 17:32 0°**₩** minimum elong 23°**8**34'43 0°58'14 retrograde -2067 Jul 07 j 23:00 7°**¥**27'39 max. Earth dist. -2061 Jun 04 j 06:16 23°**8**39'07 10.02230 AU -2067 Sep 14 j 04:02 3°**升**57'17 -2°50'55 morning rise -2061 Jun 21 j 19:55 25°**8**55'26 opposition min. Earth dist. -2067 Sep 14 j 02:44 3°**升**57'33 8.04899 AU -2061 Jul 26 j 06:15 $0^{\circ}II$ -2067 Nov 19 j 08:26 0°**)**31′20 retrograde -2061 Oct 03 j 08:11 4°**Ⅲ**03'23 direct -2066 Mar 01 j 16:16 8°**¥**37'12 -2061 Dec 08 j 18:33 0°Д35'30 -0°52'39 evening set opposition min. Earth dist. -2061 Dec 08 j 08:09 0°**Д**37'39 8.06919 AU -2066 Mar 19 j 08:23 10°¥55'33 -2°19'56 -2061 Dec 15 j 23:18 30°R₩ conjunction -2066 Mar 19 j 08:22 10°**¥**55'33 2°19'57 -2060 Feb 14 j 07:22 27°805'14 minimum elong direct -2066 Mar 19 j 10:28 max. Earth dist. 10°**)** € 56'14 10.00286 AU -2060 Apr 13 j 01:53 $0^{\circ}II$ morning rise -2066 Apr 06 j 04:48 13°**¥**15'18 evening set -2060 May 30 j 12:40 5°**Ⅱ**19'23 -2066 Jul 22 j 22:18 retrograde 21°**)**(46'01 -2060 Jun 17 j 16:20 7°**Д**38'41 -0°25'22 opposition -2066 Sep 28 i 14:09 18°\(\)14'59 -2°56'15 conjunction min. Earth dist. -2066 Sep 28 j 10:55 18°**¥**15'39 7.96758 AU minimum elong -2060 Jun 17 i 16:21 7°II38'41 0°25'20 -2066 Dec 03 j 13:57 14°\ 47'38 max. Earth dist. -2060 Jun 18 j 05:48 7°**П**43'00 10.12272 AU direct -2065 Mar 16 j 18:41 23°**)** 01'42 -2060 Jul 05 j 16:47 9°**I**I56′56 evening set morning rise -2060 Oct 16 j 03:33 17°**Ⅲ**53'19 retrograde 14°**Ⅲ**27'05 -0°10'52 conjunction -2065 Apr 03 j 14:49 25°\ 22'13 -2°19'39 opposition -2060 Dec 21 j 15:44 14°**Д**29'05 8.18058 AU minimum elong -2065 Apr 03 j 14:51 25°\ 22'14 2°19'39 min. Earth dist. -2060 Dec 21 j 05:55 max. Earth dist. -2065 Apr 03 j 19:53 25°**)** 23'54 9.93669 AU direct -2059 Feb 27 j 19:03 10°**I**57'17 -2065 Apr 21 j 14:31 27°**)** €43′52 -2059 Mar 30 j 03:59 11°**Ⅱ**45'39 morning rise asc. node 0°**Υ** -2065 May 09 j 16:04 -2059 Jun 14 j 04:30 19°**Ⅱ**04'15 evening set -2065 Aug 06 j 23:08 6°**Y**16′59 retrograde -2065 Oct 13 j 03:24 2°**Y**45'43 -2°50'29 -2059 Jul 02 j 05:06 21°**II**20'46 0°08'20 opposition conjunction 2°**Υ**46'48 7.91819 AU -2059 Jul 02 j 05:05 21°**Ⅲ**20'45 0°08'22 min. Earth dist. -2065 Oct 12 j 22:14 minimum elong -2065 Nov 20 j 13:04 30°**₹** behind sun begin -2059 Jul 01 j 22:41 21°**Ⅲ**18'45 direct -2065 Dec 18 j 02:41 29°**)** 17'10 behind sun end -2059 Jul 02 j 11:28 21°**Ⅲ**22'46 -2064 Jan 14 j 13:45 0° γ max. Earth dist. -2059 Jul 02 j 17:20 21°**Ⅲ**24'38 10.24417 AU evening set -2064 Mar 31 j 03:34 7°**Y**36′59 morning rise -2059 Jul 20 j 01:31 23°**Ⅲ**35'56 -2059 Sep 20 j 21:06 0ಂತಾ

-2064 Apr 18 j 03:29

conjunction

9°Y59'03 -2°10'30

retrograde

-2059 Oct 29 j 11:57

1°520'30

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 29 Attention, astronomical year style is used: The year -2059 in astronomical counting style is the year 2060 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ne year -2059 i	n astronomical co	ounting style is the year	r 2060 BCE in historical c	ounting style.	
	-2059 Dec 07 j 16:21	30°Ŗ Ⅱ		morning rise	-2053 Oct 02 j 18:45	7° m 29'55	
opposition	-2058 Jan 04 j 05:56	27° Ⅱ 56′03	0°30'19	retrograde	-2052 Jan 09 j 15:05	14° m 25'00	
min. Earth dist.	-2058 Jan 03 j 21:24	27° ∏ 57'46	8.30972 AU	opposition	-2052 Mar 18 j 23:21	11° m)08'40	2°52'59
direct	-2058 Mar 14 j 01:28	24° Ⅱ 27'03		min. Earth dist.	-2052 Mar 19 j 01:27	11° m)08'17	9.06422 AU
	-2058 Jun 07 j 20:34	0ა ௐ		direct	-2052 May 29 j 11:14	7° m) 47'27	
evening set	-2058 Jun 28 j 09:23	2° © 25'39		evening set	-2052 Sep 10 j 00:03	14° m 56'25	
conjunction	-2058 Jul 16 j 05:34	4° © 38'52	0°40'37	conjunction	-2052 Sep 26 j 15:21	16° m 52'30	2°22'48
minimum elong	-2058 Jul 16 j 05:32	4°938'52	0°40'39	minimum elong	-2052 Sep 26 j 15:21	16° m 52'30	
max. Earth dist.	-2058 Jul 16 j 15:41		10.37938 AU	max. Earth dist.	-2052 Sep 26 j 11:22		11.10005 AU
morning rise	-2058 Aug 02 j 21:04	6°950'37		morning rise	-2052 Oct 13 j 03:21	18° m) 47'38	
retrograde	-2058 Nov 11 j 09:58	14° © 23'51		retrograde	-2051 Jan 20 j 04:08	25° m/39'42	
opposition	-2057 Jan 17 j 12:43	11° © 01'12	1°08'34	opposition	-2051 Mar 30 j 21:46	22° m 23'46	2°53'39
min. Earth dist.	-2057 Jan 17 j 05:23	11° © 02'39	8.44923 AU	min. Earth dist.	-2051 Mar 31 j 01:18	22° m 23'07	9.13331 AU
direct	-2057 Mar 28 j 00:17	7° 5 33'17		direct	-2051 Jun 10 j 13:36	19° m 03'39	
evening set	-2057 Jul 12 j 02:40	15° © 22'52		evening set	-2051 Sep 21 j 08:42	26° Mp 07'10	
conjunction	-2057 Jul 29 j 17:41	17° © 32'38	1°10'00	conjunction	-2051 Oct 07 j 21:36	28° m 02'00	2°20'46
minimum elong	-2057 Jul 29 j 17:38	17°932'37		minimum elong	-2051 Oct 07 j 21:36	28° mg 02'00	2°20'45
max. Earth dist.	-2057 Jul 30 j 01:26		10.52101 AU	max. Earth dist.	-2051 Oct 07 j 16:08		11.15601 AU
morning rise	-2057 Aug 16 j 03:46	19°5540'51	10.52101110	morning rise	-2051 Oct 24 j 07:41	29° m 56'05	11.13001710
retrograde	-2057 Nov 24 j 00:15	27° © 03'41			-2051 Oct 24 j 21:27	0∘ ⊽	
opposition	-2056 Jan 30 j 12:08	23° © 42'43	1°42'11	retrograde	-2050 Jan 31 j 15:39	6° Ω 46'46	
min. Earth dist.	-2056 Jan 30 j 05:51	23° © 43'57	8.59171 AU	opposition	-2050 Apr 11 j 18:20	3° ≏ 30'56	2°47'49
direct	-2056 Apr 09 j 13:52	20°916'05		min. Earth dist.	-2050 Apr 11 j 23:57	3° ₽ 29'54	9.17572 AU
evening set	-2056 Jul 24 j 08:15	27° © 56'31		direct	-2050 Jun 22 j 08:27	0° Ω 11'46	
				evening set	-2050 Oct 02 j 12:51	7° ≏ 11'09	
conjunction	-2056 Aug 10 j 17:51	0° Ω 02'52	1°35'12				
minimum elong	-2056 Aug 10 j 17:48	0° Ω 02'51	1°35'14	conjunction	-2050 Oct 19 j 00:10		
	-2056 Aug 10 j 08:26	$0^{\circ}\Omega$		minimum elong	-2050 Oct 19 j 00:12		
max. Earth dist.	-2056 Aug 10 j 23:47		10.66188 AU	max. Earth dist.	-2050 Oct 18 j 16:13		11.18452 AU
morning rise	-2056 Aug 27 j 22:20	2° Ω 07'40		morning rise	-2050 Nov 04 j 09:32	10° ≏ 58'57	
retrograde	-2056 Dec 05 j 07:04	9° Ω 21′20		retrograde	-2049 Feb 12 j 03:19	17° Ω 49'59	
opposition	-2055 Feb 11 j 04:58	6°Ω01'55		opposition	-2049 Apr 23 j 14:11	14° £ 33'57	
min. Earth dist.	-2055 Feb 11 j 00:05	6° Ω 02'51	8.73015 AU	min. Earth dist.	-2049 Apr 23 j 22:15	14° △ 32'28	9.19000 AU
direct	-2055 Apr 22 j 18:34	2° Ω 36'41 10° Ω 08'12		direct	-2049 Jul 04 j 01:27	11° Ω 15'27 18° Ω 12'13	
evening set	-2055 Aug 06 j 02:33	10 0600 12		evening set	-2049 Oct 13 j 14:34	16 = 12 13	
conjunction	-2055 Aug 23 j 06:46	12° Ω 11'20	1°55'26	conjunction	-2049 Oct 30 j 01:08	20° ≏ 06'14	2°01'15
minimum elong	-2055 Aug 23 j 06:43	12° Ω 11′20		minimum elong	-2049 Oct 30 j 01:11	20° ჲ 06'15	2°01'13
max. Earth dist.	-2055 Aug 23 j 11:01	12° Ω 12'37	10.79538 AU	max. Earth dist.	-2049 Oct 29 j 14:35	20° ≏ 03'10	11.18502 AU
morning rise	-2055 Sep 09 j 05:51	14° Ω 12′59		morning rise	-2049 Nov 15 j 10:51	22° ≏ 00'01	
	-2055 Sep 15 j 23:16	15° Ω		retrograde	-2048 Feb 23 j 16:06	28° ჲ 53'01	
retrograde	-2055 Dec 17 j 07:14	21° Ω 18'57		opposition	-2048 May 04 j 10:19	25° ≏ 36′27	2°18'08
opposition	-2054 Feb 23 j 15:57	18° Ω 00'51	2°31'11	min. Earth dist.	-2048 May 04 j 20:05	25° ≏ 34'40	9.17626 AU
min. Earth dist.	-2054 Feb 23 j 13:18	18° Ω 01'22	8.85841 AU	direct	-2048 Jul 14 j 16:28	22° ≏ 18'24	
	-2054 Apr 13 j 19:00	15°R€		evening set	-2048 Oct 23 j 15:24	29° ≙ 13'57	
direct	-2054 May 05 j 15:39	14° Ω 37'03			-2048 Oct 30 j 07:29	0°M₊	
avanie+	-2054 May 27 j 09:39	15° Ω		aamiyti	2040 NI 00 : 02 14	1000 00100	1944/20
evening set	-2054 Aug 18 j 10:31	22° Ω 00′11		conjunction minimum elong	-2048 Nov 09 j 02:14	1°M08'22 1°M08'23	1°44'29 1°44'28
conjunction	-2054 Sep 04 j 09:41	24° Ω 00′29	2°10'12	minimum elong max. Earth dist.	-2048 Nov 09 j 02:17 -2048 Nov 08 j 14:51		1°44'28 11.15807 AU
minimum elong	-2054 Sep 04 j 09:39	24°Ω00'28		morning rise	-2048 Nov 25 j 12:59	3°M02'50	11.13607 AU
max. Earth dist.	-2054 Sep 04 j 09:39		10.91597 AU	retrograde	-2047 Mar 06 j 09:00	9°M59'26	
morning rise	-2054 Sep 21 j 04:08	25° Ω 59'26	10.71371 AU	opposition	-2047 May 16 j 08:10	6°M42'00	1°55'15
morning rise	-2054 Oct 29 j 01:11	0° m)		min. Earth dist.	-2047 May 16 j 18:06	6°M40'11	9.13546 AU
retrograde	-2054 Dec 29 j 02:26	2° m/59'10		direct	-2047 Jul 26 j 07:34	3°M24'08	
-	-2053 Mar 03 j 22:21	30°R Ω		evening set	-2047 Nov 03 j 17:07	10° ™ 19'55	
opposition	-2053 Mar 07 j 21:47	29° Ω 42'07	2°45'32	-	,		
min. Earth dist.	-2053 Mar 07 j 21:50	29° Ω 42′07	8.97131 AU	conjunction	-2047 Nov 20 j 05:00	12° M 15'15	1°23'42
direct	-2053 May 18 j 04:17	26° Ω 19'40		minimum elong	-2047 Nov 20 j 05:02	12°M15'16	1°23'41
	-2053 Jul 27 j 19:20	0° m/		max. Earth dist.	-2047 Nov 19 j 17:32	12°M11'53	11.10483 AU
evening set	-2053 Aug 30 j 09:11	3°M 35'13		morning rise	-2047 Dec 06 j 17:29	14°M10'52	
					-2047 Dec 13 j 22:30	15° ™	
conjunction	-2053 Sep 16 j 03:56	5° m 33'09	2°19'19	retrograde	-2046 Mar 18 j 08:26	21°M12'39	1005:15
minimum elong	-2053 Sep 16 j 03:55	5° Mp 33'08	2°19'21	opposition	-2046 May 28 j 08:43	17°M54'06	1°27'45
max. Earth dist.	-2053 Sep 16 j 02:21	5~110/32'40	11.01891 AU	min. Earth dist.	-2046 May 28 j 18:52	17°M52'14	9.06921 AU

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 30 Attention, astronomical year style is used: The year -2046 in astronomical counting style is the year 2047 BCE in historical counting style.

Attention, astronomi	cal year style is used: Th	e year -2046 i	n astronomical cou	inting style is the year	2047 BCE in historical co	ounting style.	
	-2046 Jul 15 j 15:08	15°RM		retrograde	-2040 Jun 02 j 13:36	4° ≈ 01'47	
direct	-2046 Aug 06 j 22:35	14°M36'09		opposition	-2040 Aug 11 j 03:39	0° ≈ 33'51	-1°58'33
	-2046 Aug 28 j 22:24	15° M ₊		min. Earth dist.	-2040 Aug 11 j 08:02		8.33002 AU
evening set	-2046 Nov 14 j 21:59	21°M33'44			-2040 Aug 18 j 07:20	30°Ŗる	
				direct	-2040 Oct 17 j 08:09	27° る 10'49	
conjunction	-2046 Dec 01 j 11:19	23°M30'25	0°59'28		-2040 Dec 13 j 09:03	0° ≈	
minimum elong	-2046 Dec 01 j 11:21	23°M30'25	0°59'26	evening set	-2039 Jan 25 j 20:41	4° ≈ 51'46	
max. Earth dist.	-2046 Nov 30 j 22:58	23°M26'46	11.02725 AU				
morning rise	-2046 Dec 18 j 02:17	25°M27'40		conjunction	-2039 Feb 12 j 03:04	7° ≈ 03'23	-1°46'44
	-2045 Jan 31 j 05:34	0° ∡ ¹		minimum elong	-2039 Feb 12 j 03:01	7° ≈ 03'22	1°46'45
retrograde	-2045 Mar 30 j 11:07	2° ∡ ³36′09		max. Earth dist.	-2039 Feb 11 j 22:06	7° ≈ 01'48	10.26294 AU
	-2045 May 30 j 14:45	30°RML		morning rise	-2039 Mar 01 j 14:43	9° ≈ 16'40	
opposition	-2045 Jun 09 j 12:53	29°M16'14	0°56'24		-2039 Apr 23 j 02:41	15° ≈	
min. Earth dist.	-2045 Jun 09 j 23:39	29° M .14'15	8.97994 AU	retrograde	-2039 Jun 16 j 21:30	17° ≈ 28′21	
direct	-2045 Aug 18 j 14:23	25°M57'55			-2039 Aug 12 j 03:33	15°R≈	
	-2045 Oct 30 j 04:27	0° ∡ ¹		opposition	-2039 Aug 24 j 23:32	13° ≈ 59'05	-2°25'34
evening set	-2045 Nov 26 j 07:35	2° ∡ ¹59'00		min. Earth dist.	-2039 Aug 25 j 01:55	13° ≈ 58'37	8.19965 AU
				direct	-2039 Oct 30 j 17:08	10° ≈ 34'45	
conjunction	-2045 Dec 12 j 22:52	4° ∡ ¹57'26	0°32'30		-2038 Jan 11 j 01:07	15° ≈	
minimum elong	-2045 Dec 12 j 22:53	4° ҂ ¹57′27	0°32'27	evening set	-2038 Feb 08 j 20:21	18° ≈ 26'24	
max. Earth dist.	-2045 Dec 12 j 09:57	4° ∡ ¹53'35	10.92810 AU		·		
morning rise	-2045 Dec 29 j 16:50	6° ∡ 756'43		conjunction	-2038 Feb 26 j 06:37	20° ≈ 40'57	-2°05'23
retrograde	-2044 Apr 10 j 21:47	14° ∡ 13′28		minimum elong	-2038 Feb 26 j 06:35	20° ≈ 40'56	
opposition	-2044 Jun 20 j 22:02	10° ≯ 52'02	0°22'04	max. Earth dist.	-2038 Feb 26 j 05:00		10.13918 AU
min. Earth dist.	-2044 Jun 21 j 08:50	10° ≯ 50'00	8.87087 AU	morning rise	-2038 Mar 15 j 21:55	22° ≈ 57'07	
direct	-2044 Aug 29 j 11:45	7° ∡ ³33'07			-2038 May 23 j 15:46	0°) €	
evening set	-2044 Dec 06 j 23:39	14° ₹ ³39'16		retrograde	-2038 Jul 01 j 13:20	1° ¥ 18'33	
e vennig see	2011 200 00 j 25.55	1. 7. 35 10		101108111110	-2038 Aug 09 j 20:41	30°R≈	
conjunction	-2044 Dec 23 j 17:27	16° ∡ ³39'52	0°03'41	opposition	-2038 Sep 08 j 02:14	27° ≈ 48'16	-2°45'05
minimum elong	-2044 Dec 23 j 17:28	16° х 39′52		min. Earth dist.	-2038 Sep 08 j 02:04	27°≈48'18	
behind sun begin	-2044 Dec 23 j 10:30	16° × 37'37'47	0 03 30	direct	-2038 Nov 13 j 10:47	24°≈22'39	0.00307710
behind sun end	-2044 Dec 24 j 00:25	16° × 41'57		uncet	-2037 Feb 03 j 21:24	0° ∺	
max. Earth dist.	-2044 Dec 23 j 05:45		10.81087 AU	evening set	-2037 Feb 23 j 08:10	2° ∺ 24'32	
morning rise	-2043 Jan 09 j 14:37	18° х 41'32	10.01007 710	evening set	2037100 23 3 00.10	2 /(2+32	
desc. node	-2043 Feb 07 j 18:54	21° × 56'06		conjunction	-2037 Mar 12 j 22:29	4° ₩ 41'49	2017!11
retrograde	-2043 Apr 23 j 17:18	26° × 07'56		minimum elong	-2037 Mar 12 j 22:28	4°) (41'49	
opposition	-2043 Jul 03 j 12:58	22° × ⁷ 44'51	-0°14'07	max. Earth dist.	-2037 Mar 12 j 22:28		10.03551 AU
min. Earth dist.	-2043 Jul 03 j 22:27		8.74602 AU	morning rise	-2037 Mar 30 j 17:16	7° ₩ 00'36	10.03331 AC
direct	-2043 Sep 10 j 12:57		6.74002 AU	retrograde	-2037 Jul 16 j 11:30	7 ★ 00 30	
	-2043 Sep 10 j 12.37 -2043 Dec 19 j 00:22	26° × 38'01		opposition	-2037 Sep 22 j 10:34	13 X 29 24 11° X 58'26	2055!10
evening set	-2043 Dec 19 j 00.22	20 × 3601		min. Earth dist.	-2037 Sep 22 j 10:34 -2037 Sep 22 j 07:20	11° X 59'06	7.99526 AU
	-2042 Jan 04 j 21:03	28° ҂ 41'05	002/107	direct	-2037 Sep 22 j 07.20 -2037 Nov 27 j 12:20	8° H 31'38	7.99326 AU
conjunction minimum elong	-2042 Jan 04 j 21:03	28° × 41'05			-2037 Nov 27 j 12.20 -2036 Mar 09 j 06:42	8 X 3138 16° X 42'29	
max. Earth dist.	•		10.67994 AU	evening set	-2030 Mai 09 J 00.42	10 X 42 29	
max. Earm dist.	-2042 Jan 04 j 11:02	28 x ·3801	10.07994 AU	agnismation	-2036 Mar 27 j 01:07	19° ₩ 02'09	2920150
	-2042 Jan 15 j 15:09			conjunction	,	19° X 02'09	
morning rise	-2042 Jan 21 j 21:35	0° る 45'26 8° る 22'37		minimum elong	-2036 Mar 27 j 01:08	19° X 02'10	2°20'51
retrograde	-2042 May 06 j 21:59	8°る22'37' 4°る57'50	0050146	max. Earth dist.	-2036 Mar 27 j 07:08	21° H 23'05	9.95900 AU
opposition	-2042 Jul 16 j 10:21 -2042 Jul 16 j 18:00		8.61025 AU	morning rise	-2036 Apr 13 j 23:16	21 H 25 05 29° H 55'58	
min. Earth dist.			8.01023 AU	retrograde	-2036 Jul 30 j 13:12		2054126
direct	-2042 Sep 22 j 20:20	1°る37'11		opposition	-2036 Oct 05 j 22:55	26°) € 24'46	
evening set	-2042 Dec 31 j 11:20	8° පි 58'16		min. Earth dist.	-2036 Oct 05 j 16:58	26° ∺ 26'00	7.93470 AU
	2041 1 17:11.02	11070400	0055105	direct	-2036 Dec 10 j 21:16	22°) ₹56'54	
conjunction	-2041 Jan 17 j 11:02	11°る04'03			-2035 Mar 14 j 19:52	0° Υ	
minimum elong	-2041 Jan 17 j 11:00	11° る 04'03		evening set	-2035 Mar 24 j 13:25	1° Ƴ 14'39	
max. Earth dist.	-2041 Jan 17 j 02:12		10.54065 AU				
morning rise	-2041 Feb 03 j 15:11	13° ろ 11'18		conjunction	-2035 Apr 11 j 11:48	3° Y 36′09	
retrograde	-2041 May 20 j 13:06	21° පි 00'01		minimum elong	-2035 Apr 11 j 11:50		
opposition	-2041 Jul 29 j 15:10	17° る 33'36		max. Earth dist.	-2035 Apr 11 j 20:54	3° Υ 39'10	9.91510 AU
min. Earth dist.	-2041 Jul 29 j 21:05		8.46934 AU	morning rise	-2035 Apr 29 j 12:55	5° Y 58'35	
direct	-2041 Oct 05 j 10:07	14° ろ 11'49		retrograde	-2035 Aug 14 j 15:07	14° Y 31'42	
evening set	-2040 Jan 13 j 09:45	21° る 42'23		opposition	-2035 Oct 20 j 13:12	11° Y 00'44	
				min. Earth dist.	-2035 Oct 20 j 05:16	11° Y 02'23	7.90828 AU
conjunction	-2040 Jan 30 j 12:36	23° ප් 51'03		direct	-2035 Dec 25 j 13:29	7° Y 32′00	
minimum elong	-2040 Jan 30 j 12:33	23° る 51'02		evening set	-2034 Apr 09 j 01:14	15° Ƴ 53'57	
max. Earth dist.	-2040 Jan 30 j 05:11		10.39927 AU				
morning rise	-2040 Feb 16 j 20:29	26° පි 01'19		conjunction	-2034 Apr 27 j 02:55	18° Y 16'31	
	-2040 Mar 22 j 14:51	0° ≈		minimum elong	-2034 Apr 27 j 02:59	18° Y 16′32	2°01'42

Attantian astronomi	ical vices style is used. Th	a rraam 2024 i	n aatronomiaal aa	unting style is the year	2035 BCE in historical c	aumtina atrila	
		•		max. Earth dist.			10 45001 ATT
max. Earth dist.	-2034 Apr 27 j 14:22		9.90696 AU		-2028 Jul 23 j 13:17		10.45891 AU
morning rise	-2034 May 15 j 06:11	20° Y 39'35		morning rise	-2028 Aug 09 j 17:05	14° © 16'37	
retrograde	-2034 Aug 29 j 12:45	29° Y 09′03		retrograde	-2028 Nov 17 j 22:37	21°5544'25	
opposition	-2034 Nov 04 j 03:01	25° Ƴ 38'45	-2°19'54	opposition	-2027 Jan 24 j 04:16	18° © 22'59	1°27'57
min. Earth dist.	-2034 Nov 03 j 17:52	25° Ƴ 40'40	7.91792 AU	min. Earth dist.	-2027 Jan 23 j 22:26	18° © 24'08	8.52710 AU
direct	-2033 Jan 09 j 09:40	22° Ƴ 09′23		direct	-2027 Apr 03 j 22:12	14° © 55'59	
	-2033 Apr 20 j 09:05	$8^{\circ 0}$		evening set	-2027 Jul 18 j 22:35	22°540'58	
evening set	-2033 Apr 24 j 14:12	0° 8 32'27		C	· ·		
3	r ,			conjunction	-2027 Aug 05 j 10:44	24°548'57	1°24'37
conjunction	-2033 May 12 j 18:13	2° 8 55'10	1°40'00	minimum elong	-2027 Aug 05 j 10:41	24°548'56	1°24'39
3	, ,	2° 8 55'11		_	-2027 Aug 05 j 16:48		
minimum elong	-2033 May 12 j 18:17			max. Earth dist.	<i>U</i> 3		10.59586 AU
max. Earth dist.	-2033 May 13 j 07:02	2° 8 59'23	9.93509 AU	morning rise	-2027 Aug 22 j 17:39	26°955'20	
morning rise	-2033 May 30 j 22:31	5° 8 17'56			-2027 Sep 18 j 21:20	$0^{\circ}\Omega$	
retrograde	-2033 Sep 13 j 04:04	13° 8 40'18		retrograde	-2027 Nov 30 j 08:46	4° Ω 13'27	
opposition	-2033 Nov 18 j 14:12	10° 8 11'01	-1°48'30	opposition	-2026 Feb 06 j 00:44	0° Ω 53'27	1°58'29
min. Earth dist.	-2033 Nov 18 j 04:32	10° 8 13'02	7.96278 AU	min. Earth dist.	-2026 Feb 05 j 20:57	0° Ω 54'11	8.66322 AU
direct	-2032 Jan 24 j 06:51	6° 8 41'18			-2026 Feb 17 j 15:32	30° ₹ 🥯	
	-2032 May 08 j 17:01	15° 8		direct	-2026 Apr 17 j 07:36	27° © 27'35	
evening set	-2032 May 09 j 00:34	15° 8 02'25			-2026 Jun 13 j 09:44	$0^{\circ}\Omega$	
				evening set	-2026 Jul 31 j 22:25	5° Ω 03'35	
conjunction	-2032 May 27 j 05:32	17° 8 24'20	-1°12'08	evening set	2020 341 31 1 22.23	3 0 0 03 33	
5	-2032 May 27 j 05:36	17° 8 24'21	1°12'05		2026 4 10:04-50	7° Ω 08'15	1047!11
minimum elong	, ,			conjunction	-2026 Aug 18 j 04:58		1°47'11
max. Earth dist.	-2032 May 27 j 18:36	17° 8 28'36	9.99691 AU	minimum elong	-2026 Aug 18 j 04:55	7° Ω 08'14	
morning rise	-2032 Jun 14 j 09:29	19° 8 45'50		max. Earth dist.	-2026 Aug 18 j 08:08		10.72858 AU
retrograde	-2032 Sep 26 j 11:29	27° 8 58'29		morning rise	-2026 Sep 04 j 06:34	9° Ω 11'25	
opposition	-2032 Dec 01 j 20:41	24° 8 30'31	-1°10'46		-2026 Nov 02 j 17:17	15° Ω	
min. Earth dist.	-2032 Dec 01 j 10:55	24° 8 32'33	8.03882 AU	retrograde	-2026 Dec 12 j 10:25	16° Ω 21'12	
direct	-2031 Feb 07 j 02:18	21° 8 00'45			-2025 Jan 22 j 04:46	15° ŖΩ	
evening set	-2031 May 24 j 05:17	29° 8 17'21		opposition	-2025 Feb 18 j 14:44	13° Ω 02'24	2°22'44
	-2031 May 29 j 19:10	Π°		min. Earth dist.	-2025 Feb 18 j 12:33	13° Ω 02'49	8.79217 AU
		-		direct	-2025 Apr 30 j 10:33	9° Ω 37'43	
conjunction	-2031 Jun 11 j 09:35	1° Ⅱ 37'33	-0°40'17	ancer	-2025 Jul 26 j 01:37	15° Ω	
	•	1° I 37'33		avanina aat	-	17° Ω 05'06	
minimum elong	-2031 Jun 11 j 09:38			evening set	-2025 Aug 13 j 11:20	17 860300	
max. Earth dist.	-2031 Jun 11 j 21:57		10.08683 AU				
morning rise	-2031 Jun 29 j 11:33	3° Ⅱ 56'55		conjunction	-2025 Aug 30 j 12:43	19° Ω 06'47	2°04'26
retrograde	-2031 Oct 10 j 10:12	11° ∏ 58′23		minimum elong	-2025 Aug 30 j 12:40	19° Ω 06'46	2°04'28
opposition	-2031 Dec 15 j 20:58	8° Ⅱ 31'59		max. Earth dist.	-2025 Aug 30 j 13:35		10.85125 AU
min. Earth dist.	-2031 Dec 15 j 11:30	8° Ⅱ 33'55	8.13968 AU	morning rise	-2025 Sep 16 j 09:24	21° Ω 07′03	
direct	-2030 Feb 21 j 17:30	5° Ⅱ 02'30		retrograde	-2025 Dec 24 j 08:00	28° Ω 09'57	
evening set	-2030 Jun 08 j 01:38	13° Ⅱ 12'45		opposition	-2024 Mar 01 j 22:54	24° Ω 52'06	2°40'12
C	J			min. Earth dist.	-2024 Mar 01 j 22:00	24° Ω 52'16	8.90837 AU
conjunction	-2030 Jun 26 j 03:42	15° Ⅱ 30′29	-0°06'44		-		
minimum elong	-2030 Jun 26 j 03:41		0 00 11	direct	-2024 May 12 i 03:50	21° 47 28'38	
· ·	-2030 Juli 20 J 03.71	15° 1130'29	0°06'42	direct	-2024 May 12 j 03:50	21° Ω 28'38	
behind sun begin behind sun end	2020 Jun 25 : 20:52	15° Ⅱ 30′29	0°06'42	evening set	-2024 Aug 24 j 14:23	28° Ω 48'04	
nening siin eng	-2030 Jun 25 j 20:52	15° Ⅱ 28′20	0°06'42		, ,		
	-2030 Jun 26 j 10:30	15°Щ28'20 15°Щ32'38		evening set	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54	28° Ω 48'04 0° m	
max. Earth dist.	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01	15°Щ28'20 15°Щ32'38 15°Щ34'05	0°06'42 10.19798 AU	evening set	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14	28° \Omega 48'04 0° m y 0° m y47'11	2°16′05
	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01 -2030 Jul 14 j 02:10	15°Щ28'20 15°Щ32'38 15°Щ34'05 17°Щ47'03		evening set	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14 -2024 Sep 10 j 11:12	28° Ω 48'04 0° m	2°16'05 2°16'07
max. Earth dist.	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01	15°Щ28'20 15°Щ32'38 15°Щ34'05		evening set	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14	28° \Omega 48'04 0° m y 0° m y47'11	
max. Earth dist. morning rise	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01 -2030 Jul 14 j 02:10	15°Щ28'20 15°Щ32'38 15°Щ34'05 17°Щ47'03		evening set conjunction minimum elong	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14 -2024 Sep 10 j 11:12	28° Q 48'04 0° m 0° m 47'11 0° m 47'11	2°16'07
max. Earth dist. morning rise asc. node	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01 -2030 Jul 14 j 02:10 -2030 Sep 09 j 11:07	15°Щ28'20 15°Щ32'38 15°Щ34'05 17°Щ47'03 23°Щ50'38		conjunction minimum elong max. Earth dist.	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14 -2024 Sep 10 j 11:12 -2024 Sep 10 j 10:45	28° \$\Omega 48'04\\ 0° my\) 0° my\) 47'11\\ 0° my\)47'11\\ 0° my\)47'03	2°16'07
max. Earth dist. morning rise asc. node retrograde	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01 -2030 Jul 14 j 02:10 -2030 Sep 09 j 11:07 -2030 Oct 23 j 23:28 -2030 Dec 29 j 14:35	15°Щ28'20 15°Щ32'38 15°Щ34'05 17°Щ47'03 23°Щ50'38 25°Щ36'56	10.19798 AU	conjunction minimum elong max. Earth dist. morning rise	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14 -2024 Sep 10 j 11:12 -2024 Sep 10 j 10:45 -2024 Sep 27 j 03:37 -2023 Jan 04 j 00:30	28° \$\Omega 48'04\\ 0° my\) 0° my\) 47'11\\ 0° my\)47'11\\ 0° my\)47'03\\ 2° my\)45'03	2°16'07
max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist.	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01 -2030 Jul 14 j 02:10 -2030 Sep 09 j 11:07 -2030 Oct 23 j 23:28 -2030 Dec 29 j 14:35 -2030 Dec 29 j 05:36	15° M 28'20 15° M 32'38 15° M 34'05 17° M 47'03 23° M 50'38 25° M 36'56 22° M 12'13 22° M 14'02	10.19798 AU 0°12'10	conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14 -2024 Sep 10 j 11:12 -2024 Sep 10 j 10:45 -2024 Sep 27 j 03:37 -2023 Jan 04 j 00:30 -2023 Mar 14 j 02:37	28° \$\alpha 48'04\\ 0° my 47'11\\ 0° my 47'11\\ 0° my 47'03\\ 2° my 45'03\\ 9° my 42'35\\ 6° my 25'28	2°16'07 10.95883 AU 2°50'43
max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01 -2030 Jul 14 j 02:10 -2030 Sep 09 j 11:07 -2030 Oct 23 j 23:28 -2030 Dec 29 j 14:35 -2030 Dec 29 j 05:36 -2029 Mar 08 j 03:10	15° M 28'20 15° M 32'38 15° M 34'05 17° M 47'03 23° M 50'38 25° M 36'56 22° M 12'13 22° M 14'02 18° M 43'22	10.19798 AU 0°12'10	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14 -2024 Sep 10 j 11:12 -2024 Sep 10 j 10:45 -2024 Sep 27 j 03:37 -2023 Jan 04 j 00:30 -2023 Mar 14 j 02:37 -2023 Mar 14 j 03:45	28° \$\alpha 48'04\\ 0° m 47'11\\ 0° m 47'11\\ 0° m 47'11\\ 0° m 47'03\\ 2° m 45'03\\ 9° m 42'35\\ 6° m 25'28\\ 6° m 25'15	2°16'07 10.95883 AU
max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist.	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01 -2030 Jul 14 j 02:10 -2030 Sep 09 j 11:07 -2030 Oct 23 j 23:28 -2030 Dec 29 j 14:35 -2030 Dec 29 j 05:36	15° M 28'20 15° M 32'38 15° M 34'05 17° M 47'03 23° M 50'38 25° M 36'56 22° M 12'13 22° M 14'02	10.19798 AU 0°12'10	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14 -2024 Sep 10 j 11:12 -2024 Sep 10 j 10:45 -2024 Sep 27 j 03:37 -2023 Jan 04 j 00:30 -2023 Mar 14 j 02:37 -2023 May 24 j 13:03	28° \$\alpha 48'04\\ 0° my 47'11\\ 0° my 47'11\\ 0° my 47'03\\ 2° my 45'03\\ 9° my 42'35\\ 6° my 25'28\\ 6° my 25'15\\ 3° my 03'10	2°16'07 10.95883 AU 2°50'43
max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct evening set	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01 -2030 Jul 14 j 02:10 -2030 Sep 09 j 11:07 -2030 Oct 23 j 23:28 -2030 Dec 29 j 14:35 -2030 Dec 29 j 05:36 -2029 Mar 08 j 03:10 -2029 Jun 22 j 11:46	15°	10.19798 AU 0°12'10 8.25880 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14 -2024 Sep 10 j 11:12 -2024 Sep 10 j 10:45 -2024 Sep 27 j 03:37 -2023 Jan 04 j 00:30 -2023 Mar 14 j 02:37 -2023 Mar 14 j 03:45	28° \$\alpha 48'04\\ 0° m 47'11\\ 0° m 47'11\\ 0° m 47'11\\ 0° m 47'03\\ 2° m 45'03\\ 9° m 42'35\\ 6° m 25'28\\ 6° m 25'15	2°16'07 10.95883 AU 2°50'43
max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct evening set conjunction	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01 -2030 Jul 14 j 02:10 -2030 Sep 09 j 11:07 -2030 Oct 23 j 23:28 -2030 Dec 29 j 14:35 -2030 Dec 29 j 05:36 -2029 Mar 08 j 03:10 -2029 Jun 22 j 11:46	15° M 28'20 15° M 32'38 15° M 34'05 17° M 47'03 23° M 50'38 25° M 36'56 22° M 12'13 22° M 14'02 18° M 43'22 26° M 45'53 29° M 00'37	10.19798 AU 0°12'10 8.25880 AU 0°26'30	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14 -2024 Sep 10 j 11:12 -2024 Sep 10 j 10:45 -2024 Sep 27 j 03:37 -2023 Jan 04 j 00:30 -2023 Mar 14 j 02:37 -2023 Mar 14 j 03:45 -2023 May 24 j 13:03 -2023 Sep 05 j 08:48	28° \$\alpha 48'04\\ 0° \$\mathrm{m}\pm 47'11\\ 0° \$\mathrm{m}\pm 47'11\\ 0° \$\mathrm{m}\pm 47'03\\ 2° \$\mathrm{m}\pm 45'03\\ 9° \$\mathrm{m}\pm 42'35\\ 6° \$\mathrm{m}\pm 25'15\\ 3° \$\mathrm{m}\pm 03'10\\ 10° \$\mathrm{m}\pm 15'32\end{array}	2°16'07 10.95883 AU 2°50'43 9.00727 AU
max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01 -2030 Jul 14 j 02:10 -2030 Sep 09 j 11:07 -2030 Oct 23 j 23:28 -2030 Dec 29 j 14:35 -2030 Dec 29 j 05:36 -2029 Mar 08 j 03:10 -2029 Jun 22 j 11:46 -2029 Jul 10 j 10:09 -2029 Jul 10 j 10:08	15° M 28'20 15° M 32'38 15° M 34'05 17° M 47'03 23° M 50'38 25° M 36'56 22° M 12'13 22° M 14'02 18° M 43'22 26° M 45'53 29° M 00'37 29° M 00'37	10.19798 AU 0°12'10 8.25880 AU 0°26'30 0°26'32	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14 -2024 Sep 10 j 11:12 -2024 Sep 10 j 10:45 -2024 Sep 27 j 03:37 -2023 Jan 04 j 00:30 -2023 Mar 14 j 02:37 -2023 Mar 14 j 03:45 -2023 May 24 j 13:03 -2023 Sep 05 j 08:48	28° \$\alpha 48'04\\ 0° \$\mathrm{m}\qquad 47'11\\ 0° \$\mathrm{m}\qquad 47'11\\ 0° \$\mathrm{m}\qquad 47'03\\ 2° \$\mathrm{m}\qquad 45'03\\ 9° \$\mathrm{m}\qquad 42'35\\ 6° \$\mathrm{m}\qquad 25'15\\ 3° \$\mathrm{m}\qquad 03'10\\ 10° \$\mathrm{m}\qquad 15'35\\ 12° \$\mathrm{m}\qquad 12'35\\	2°16'07 10.95883 AU 2°50'43 9.00727 AU 2°22'03
max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct evening set conjunction	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01 -2030 Jul 14 j 02:10 -2030 Sep 09 j 11:07 -2030 Oct 23 j 23:28 -2030 Dec 29 j 14:35 -2030 Dec 29 j 05:36 -2029 Mar 08 j 03:10 -2029 Jun 22 j 11:46 -2029 Jul 10 j 10:09 -2029 Jul 10 j 10:08 -2029 Jul 10 j 0:224	15° M 28'20 15° M 32'38 15° M 34'05 17° M 47'03 23° M 50'38 25° M 36'56 22° M 12'13 22° M 14'02 18° M 43'22 26° M 45'53 29° M 00'37 29° M 00'37 29° M 00'37 29° M 00'351	10.19798 AU 0°12'10 8.25880 AU 0°26'30	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14 -2024 Sep 10 j 11:12 -2024 Sep 10 j 10:45 -2024 Sep 27 j 03:37 -2023 Jan 04 j 00:30 -2023 Mar 14 j 02:37 -2023 Mar 14 j 03:45 -2023 May 24 j 13:03 -2023 Sep 05 j 08:48 -2023 Sep 22 j 01:45 -2023 Sep 22 j 01:44	28° \$\alpha 48'04\\ 0° \$\mathrm{m}\qquad 47'11\\ 0° \$\mathrm{m}\qquad 47'11\\ 0° \$\mathrm{m}\qquad 47'03\\ 2° \$\mathrm{m}\qquad 45'03\\ 9° \$\mathrm{m}\qquad 42'35\\ 6° \$\mathrm{m}\qquad 25'15\\ 3° \$\mathrm{m}\qquad 03'10\\ 10° \$\mathrm{m}\qquad 15'35\\ 12° \$\mathrm{m}\qquad 12'35\\ 12° \$\mathrm{m}\qquad 12'34\\	2°16'07 10.95883 AU 2°50'43 9.00727 AU 2°22'03 2°22'04
max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01 -2030 Sep 09 j 11:07 -2030 Oct 23 j 23:28 -2030 Dec 29 j 14:35 -2030 Dec 29 j 05:36 -2029 Mar 08 j 03:10 -2029 Jun 22 j 11:46 -2029 Jul 10 j 10:09 -2029 Jul 10 j 10:08 -2029 Jul 10 j 20:24 -2029 Jul 18 j 06:38	15° Ш28'20 15° Ш32'38 15° Ш34'05 17° Щ47'03 23° Ш50'38 25° Ш36'56 22° Ш12'13 22° Ш14'02 18° Щ43'22 26° Ш45'53 29° Щ00'37 29° Щ00'37 29° Щ00'351 0° ©	10.19798 AU 0°12'10 8.25880 AU 0°26'30 0°26'32	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14 -2024 Sep 10 j 11:12 -2024 Sep 10 j 10:45 -2024 Sep 27 j 03:37 -2023 Jan 04 j 00:30 -2023 Mar 14 j 02:37 -2023 Mar 14 j 03:45 -2023 May 24 j 13:03 -2023 Sep 05 j 08:48 -2023 Sep 22 j 01:45 -2023 Sep 22 j 01:44 -2023 Sep 21 j 23:09	28° \$\alpha 48'04\\ 0° \$\mathbf{m}\qquad 47'11\\ 0° \$\mathbf{m}\qquad 47'11\\ 0° \$\mathbf{m}\qquad 47'03\\ 2° \$\mathbf{m}\qquad 42'35\\ 6° \$\mathbf{m} 25'15\\ 3° \$\mathbf{m} 03'10\\ 10° \$\mathbf{m} 15'35\\ 12° \$\mathbf{m} 12'35\\ 12° \$\mathbf{m} 12'34\\ 12° \$\mathbf{m} 11'49\\ \end{array}	2°16'07 10.95883 AU 2°50'43 9.00727 AU 2°22'03
max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01 -2030 Jul 14 j 02:10 -2030 Sep 09 j 11:07 -2030 Oct 23 j 23:28 -2030 Dec 29 j 14:35 -2030 Dec 29 j 05:36 -2029 Mar 08 j 03:10 -2029 Jun 22 j 11:46 -2029 Jul 10 j 10:09 -2029 Jul 10 j 10:08 -2029 Jul 10 j 0:224	15° M 28'20 15° M 32'38 15° M 34'05 17° M 47'03 23° M 50'38 25° M 36'56 22° M 12'13 22° M 14'02 18° M 43'22 26° M 45'53 29° M 00'37 29° M 00'37 29° M 00'37 29° M 00'351	10.19798 AU 0°12'10 8.25880 AU 0°26'30 0°26'32	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14 -2024 Sep 10 j 11:12 -2024 Sep 10 j 10:45 -2024 Sep 27 j 03:37 -2023 Jan 04 j 00:30 -2023 Mar 14 j 02:37 -2023 Mar 14 j 03:45 -2023 May 24 j 13:03 -2023 Sep 05 j 08:48 -2023 Sep 22 j 01:45 -2023 Sep 22 j 01:44	28° \$\alpha 48'04\\ 0° \$\mathrm{m}\qquad 47'11\\ 0° \$\mathrm{m}\qquad 47'11\\ 0° \$\mathrm{m}\qquad 47'03\\ 2° \$\mathrm{m}\qquad 45'03\\ 9° \$\mathrm{m}\qquad 42'35\\ 6° \$\mathrm{m}\qquad 25'15\\ 3° \$\mathrm{m}\qquad 03'10\\ 10° \$\mathrm{m}\qquad 15'35\\ 12° \$\mathrm{m}\qquad 12'35\\ 12° \$\mathrm{m}\qquad 12'34\\	2°16'07 10.95883 AU 2°50'43 9.00727 AU 2°22'03 2°22'04
max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01 -2030 Sep 09 j 11:07 -2030 Oct 23 j 23:28 -2030 Dec 29 j 14:35 -2030 Dec 29 j 05:36 -2029 Mar 08 j 03:10 -2029 Jun 22 j 11:46 -2029 Jul 10 j 10:09 -2029 Jul 10 j 10:08 -2029 Jul 10 j 20:24 -2029 Jul 18 j 06:38	15° Ш28'20 15° Ш32'38 15° Ш34'05 17° Щ47'03 23° Ш50'38 25° Ш36'56 22° Ш12'13 22° Ш14'02 18° Щ43'22 26° Ш45'53 29° Щ00'37 29° Щ00'37 29° Щ00'351 0° ©	10.19798 AU 0°12'10 8.25880 AU 0°26'30 0°26'32	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14 -2024 Sep 10 j 11:12 -2024 Sep 10 j 10:45 -2024 Sep 27 j 03:37 -2023 Jan 04 j 00:30 -2023 Mar 14 j 02:37 -2023 Mar 14 j 03:45 -2023 May 24 j 13:03 -2023 Sep 05 j 08:48 -2023 Sep 22 j 01:45 -2023 Sep 22 j 01:44 -2023 Sep 21 j 23:09	28° \$\alpha 48'04\\ 0° \$\mathbf{m}\qquad 47'11\\ 0° \$\mathbf{m}\qquad 47'11\\ 0° \$\mathbf{m}\qquad 47'03\\ 2° \$\mathbf{m}\qquad 42'35\\ 6° \$\mathbf{m} 25'15\\ 3° \$\mathbf{m} 03'10\\ 10° \$\mathbf{m} 15'35\\ 12° \$\mathbf{m} 12'35\\ 12° \$\mathbf{m} 12'34\\ 12° \$\mathbf{m} 11'49\\ \end{array}	2°16'07 10.95883 AU 2°50'43 9.00727 AU 2°22'03 2°22'04
max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01 -2030 Sep 09 j 11:07 -2030 Oct 23 j 23:28 -2030 Dec 29 j 14:35 -2030 Dec 29 j 05:36 -2029 Mar 08 j 03:10 -2029 Jun 22 j 11:46 -2029 Jul 10 j 10:08 -2029 Jul 10 j 20:24 -2029 Jul 18 j 06:38 -2029 Jul 28 j 04:01	15° M28'20 15° M32'38 15° M34'05 17° M47'03 23° M50'38 25° M36'56 22° M12'13 22° M14'02 18° M43'22 26° M45'53 29° M00'37 29° M00'37 29° M00'37 29° M05'51 0° M10'557	10.19798 AU 0°12'10 8.25880 AU 0°26'30 0°26'32	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14 -2024 Sep 10 j 11:12 -2024 Sep 10 j 10:45 -2024 Sep 27 j 03:37 -2023 Jan 04 j 00:30 -2023 Mar 14 j 02:37 -2023 May 24 j 13:03 -2023 Sep 05 j 08:48 -2023 Sep 22 j 01:45 -2023 Sep 22 j 01:44 -2023 Sep 21 j 23:09 -2023 Oct 08 j 14:50	28° \$\alpha 48'04\\ 0° \$\mathrm{m}\perp 47'11\\ 0° \$\mathrm{m}\perp 47'11\\ 0° \$\mathrm{m}\perp 47'03\\ 2° \$\mathrm{m}\perp 45'03\\ 9° \$\mathrm{m}\perp 42'35\\ 6° \$\mathrm{m}\perp 25'15\\ 3° \$\mathrm{m}\perp 03'10\\ 10° \$\mathrm{m}\perp 15'32\\ 12° \$\mathrm{m}\perp 12'35\\ 12° \$\mathrm{m}\perp 12'34\\ 12° \$\mathrm{m}\perp 11'49\\ 14° \$\mathrm{m}\perp 08'33\end{array}	2°16'07 10.95883 AU 2°50'43 9.00727 AU 2°22'03 2°22'04
max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01 -2030 Sep 09 j 11:07 -2030 Oct 23 j 23:28 -2030 Dec 29 j 14:35 -2030 Dec 29 j 05:36 -2029 Mar 08 j 03:10 -2029 Jun 22 j 11:46 -2029 Jul 10 j 10:09 -2029 Jul 10 j 10:08 -2029 Jul 10 j 20:24 -2029 Jul 18 j 06:38 -2029 Jul 28 j 04:01 -2029 Nov 06 j 03:12	15° M28'20 15° M32'38 15° M34'05 17° M47'03 23° M50'38 25° M36'56 22° M12'13 22° M14'02 18° M43'22 26° M45'53 29° M00'37 29° M00'37 29° M00'37 29° M05'51 0° M05'51 0° M05'51 1° M13'57 8° M52'28	10.19798 AU 0°12'10 8.25880 AU 0°26'30 0°26'32 10.32410 AU	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	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14 -2024 Sep 10 j 11:12 -2024 Sep 10 j 10:45 -2024 Sep 27 j 03:37 -2023 Jan 04 j 00:30 -2023 Mar 14 j 02:37 -2023 May 24 j 13:03 -2023 Sep 05 j 08:48 -2023 Sep 22 j 01:45 -2023 Sep 22 j 01:44 -2023 Sep 21 j 23:09 -2023 Oct 08 j 14:50 -2022 Jan 15 j 13:54	28° \$\alpha 48'04\\ 0° \$\mathbf{m}\perp 47'11\\ 0° \$\mathbf{m}\perp 47'11\\ 0° \$\mathbf{m}\perp 47'03\\ 2° \$\mathbf{m}\perp 45'03\\ 9° \$\mathbf{m}\perp 42'35\\ 6° \$\mathbf{m}\perp 25'28\\ 6° \$\mathbf{m}\perp 25'15\\ 3° \$\mathbf{m}\perp 03'10\\ 10° \$\mathbf{m}\perp 15'32\\ 12° \$\mathbf{m}\perp 12'35\\ 12° \$\mathbf{m}\perp 12'34\\ 12° \$\mathbf{m}\perp 11'49\\ 14° \$\mathbf{m}\perp 08'33\\ 21° \$\mathbf{m}\perp 02'21\\	2°16'07 10.95883 AU 2°50'43 9.00727 AU 2°22'03 2°22'04 11.04733 AU
max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01 -2030 Sep 09 j 11:07 -2030 Oct 23 j 23:28 -2030 Dec 29 j 14:35 -2030 Dec 29 j 05:36 -2029 Mar 08 j 03:10 -2029 Jun 22 j 11:46 -2029 Jul 10 j 10:09 -2029 Jul 10 j 10:08 -2029 Jul 10 j 20:24 -2029 Jul 18 j 06:38 -2029 Jul 28 j 04:01 -2029 Nov 06 j 03:12 -2028 Jan 12 j 01:03 -2028 Jan 11 j 17:09	15° M28'20 15° M32'38 15° M34'05 17° M47'03 23° M50'38 25° M36'56 22° M12'13 22° M14'02 18° M43'22 26° M45'53 29° M00'37 29° M00'37 29° M00'37 29° M05'51 0° M05'51 0° M05'51 1° M13'57 8° M52'28 5° M29'26	10.19798 AU 0°12'10 8.25880 AU 0°26'30 0°26'32 10.32410 AU 0°52'01	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 opposition	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14 -2024 Sep 10 j 11:12 -2024 Sep 10 j 10:45 -2024 Sep 27 j 03:37 -2023 Jan 04 j 00:30 -2023 Mar 14 j 02:37 -2023 May 24 j 13:03 -2023 Sep 05 j 08:48 -2023 Sep 22 j 01:44 -2023 Sep 22 j 01:44 -2023 Sep 21 j 23:09 -2023 Oct 08 j 14:50 -2022 Jan 15 j 13:54 -2022 Mar 26 j 06:18	28° \$\mathcal{Q}48'04\) 0° \$\mathcal{m}\pm47'11\) 0° \$\mathcal{m}\pm47'11\) 0° \$\mathcal{m}\pm47'03\) 2° \$\mathcal{m}\pm42'35\) 6° \$\mathcal{m}\pm25'15\) 3° \$\mathcal{m}\pm3'10\) 10° \$\mathcal{m}\pm15'32\) 12° \$\mathcal{m}\pm12'35\) 12° \$\mathcal{m}\pm12'34\) 12° \$\mathcal{m}\pm11'49\) 14° \$\mathcal{m}\pm8'33\) 21° \$\mathcal{m}\pm2'21\) 17° \$\mathcal{m}\pm45'42\) 17° \$\mathcal{m}\pm45'03\)	2°16'07 10.95883 AU 2°50'43 9.00727 AU 2°22'03 2°22'04 11.04733 AU 2°54'21
max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01 -2030 Sep 09 j 11:07 -2030 Oct 23 j 23:28 -2030 Dec 29 j 14:35 -2030 Dec 29 j 05:36 -2029 Mar 08 j 03:10 -2029 Jun 22 j 11:46 -2029 Jul 10 j 10:09 -2029 Jul 10 j 10:08 -2029 Jul 10 j 20:24 -2029 Jul 18 j 06:38 -2029 Jul 28 j 04:01 -2029 Nov 06 j 03:12 -2028 Jan 12 j 01:03 -2028 Jan 11 j 17:09 -2028 Mar 21 j 04:58	15° M28'20 15° M32'38 15° M34'05 17° M47'03 23° M50'38 25° M36'56 22° M12'13 22° M14'02 18° M43'22 26° M45'53 29° M00'37 29° M00'37 29° M03'51 0° 9 1° 913'57 8° 952'28 5° 929'26 5° 931'00 2° 901'25	10.19798 AU 0°12'10 8.25880 AU 0°26'30 0°26'32 10.32410 AU 0°52'01	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 opposition min. Earth dist. direct	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14 -2024 Sep 10 j 11:12 -2024 Sep 10 j 10:45 -2024 Sep 27 j 03:37 -2023 Jan 04 j 00:30 -2023 Mar 14 j 02:37 -2023 Mar 14 j 03:45 -2023 May 24 j 13:03 -2023 Sep 05 j 08:48 -2023 Sep 22 j 01:45 -2023 Sep 22 j 01:44 -2023 Sep 22 j 01:44 -2023 Sep 21 j 23:09 -2023 Oct 08 j 14:50 -2022 Jan 15 j 13:54 -2022 Mar 26 j 06:18 -2022 Jun 05 j 16:48	28° \$\alpha 48'04\\ 0° \$\mathbf{m}\qquad 47'11\\ 0° \$\mathbf{m}\qquad 47'11\\ 0° \$\mathbf{m}\qquad 47'11\\ 0° \$\mathbf{m}\qquad 47'03\\ 2° \$\mathbf{m}\qquad 42'35\\ 6° \$\mathbf{m}\qquad 25'15\\ 3° \$\mathbf{m}\qquad 03'10\\ 10° \$\mathbf{m}\qquad 12'35\\ 12° \$\mathbf{m}\qquad 12'35\\ 12° \$\mathbf{m}\qquad 12'35\\ 12° \$\mathbf{m}\qquad 12'35\\ 12° \$\mathbf{m}\qquad 12'34\\ 12° \$\mathbf{m}\qquad 12'34\\ 12° \$\mathbf{m}\qquad 08'33\\ 21° \$\mathbf{m}\qquad 02'21\\ 17° \$\mathbf{m}\qqquad 45'03\\ 14° \$\mathbf{m}\qqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq	2°16'07 10.95883 AU 2°50'43 9.00727 AU 2°22'03 2°22'04 11.04733 AU 2°54'21
max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01 -2030 Sep 09 j 11:07 -2030 Oct 23 j 23:28 -2030 Dec 29 j 14:35 -2030 Dec 29 j 05:36 -2029 Mar 08 j 03:10 -2029 Jun 22 j 11:46 -2029 Jul 10 j 10:09 -2029 Jul 10 j 10:08 -2029 Jul 10 j 20:24 -2029 Jul 18 j 06:38 -2029 Jul 28 j 04:01 -2029 Nov 06 j 03:12 -2028 Jan 12 j 01:03 -2028 Jan 11 j 17:09	15° M28'20 15° M32'38 15° M34'05 17° M47'03 23° M50'38 25° M36'56 22° M12'13 22° M14'02 18° M43'22 26° M45'53 29° M00'37 29° M00'37 29° M03'51 0° 9 1° 913'57 8° 952'28 5° 929'26 5° 931'00	10.19798 AU 0°12'10 8.25880 AU 0°26'30 0°26'32 10.32410 AU 0°52'01	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 opposition min. Earth dist.	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14 -2024 Sep 10 j 11:12 -2024 Sep 10 j 10:45 -2024 Sep 27 j 03:37 -2023 Jan 04 j 00:30 -2023 Mar 14 j 02:37 -2023 May 24 j 13:03 -2023 Sep 05 j 08:48 -2023 Sep 22 j 01:44 -2023 Sep 22 j 01:44 -2023 Sep 21 j 23:09 -2023 Oct 08 j 14:50 -2022 Jan 15 j 13:54 -2022 Mar 26 j 06:18	28° \$\mathcal{Q}48'04\) 0° \$\mathcal{m}\pm47'11\) 0° \$\mathcal{m}\pm47'11\) 0° \$\mathcal{m}\pm47'03\) 2° \$\mathcal{m}\pm42'35\) 6° \$\mathcal{m}\pm25'15\) 3° \$\mathcal{m}\pm3'10\) 10° \$\mathcal{m}\pm15'32\) 12° \$\mathcal{m}\pm12'35\) 12° \$\mathcal{m}\pm12'34\) 12° \$\mathcal{m}\pm11'49\) 14° \$\mathcal{m}\pm8'33\) 21° \$\mathcal{m}\pm2'21\) 17° \$\mathcal{m}\pm45'42\) 17° \$\mathcal{m}\pm45'03\)	2°16'07 10.95883 AU 2°50'43 9.00727 AU 2°22'03 2°22'04 11.04733 AU 2°54'21
max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01 -2030 Sep 09 j 11:07 -2030 Oct 23 j 23:28 -2030 Dec 29 j 14:35 -2030 Dec 29 j 05:36 -2029 Mar 08 j 03:10 -2029 Jun 22 j 11:46 -2029 Jul 10 j 10:09 -2029 Jul 10 j 10:08 -2029 Jul 10 j 20:24 -2029 Jul 18 j 06:38 -2029 Jul 28 j 04:01 -2029 Jul 28 j 04:01 -2029 Jun 12 j 01:03 -2028 Jan 12 j 01:03 -2028 Jan 11 j 17:09 -2028 Mar 21 j 04:58 -2028 Jul 05 j 10:59	15° M28'20 15° M32'38 15° M34'05 17° M47'03 23° M50'38 25° M36'56 22° M12'13 22° M14'02 18° M43'22 26° M45'53 29° M00'37 29° M00'37 29° M03'51 0° 9 1° 9313'57 8° 952'28 5° 929'26 5° 931'00 2° 901'25 9° 9555'23	10.19798 AU 0°12'10 8.25880 AU 0°26'30 0°26'32 10.32410 AU 0°52'01 8.39010 AU	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 opposition min. Earth dist. direct evening set	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14 -2024 Sep 10 j 11:12 -2024 Sep 10 j 10:45 -2024 Sep 27 j 03:37 -2023 Jan 04 j 00:30 -2023 Mar 14 j 02:37 -2023 Mar 24 j 13:03 -2023 Sep 05 j 08:48 -2023 Sep 22 j 01:45 -2023 Sep 22 j 01:45 -2023 Sep 22 j 01:44 -2023 Sep 21 j 23:09 -2023 Oct 08 j 14:50 -2022 Jan 15 j 13:54 -2022 Mar 26 j 06:18 -2022 Jun 05 j 16:48 -2022 Sep 16 j 20:21	28° \$\alpha 48'04\\ 0° \$\mathbf{m}\) 0° \$\mathbf{m}\) 47'11\\ 0° \$\mathbf{m}\) 47'11\\ 0° \$\mathbf{m}\) 47'03\\ 2° \$\mathbf{m}\) 45'03\\ 9° \$\mathbf{m}\) 42'35\\ 6° \$\mathbf{m}\) 25'15\\ 3° \$\mathbf{m}\) 03'10\\ 10° \$\mathbf{m}\) 15'32\\ 12° \$\mathbf{m}\) 12'35\\ 12° \$\mathbf{m}\) 12'35\\ 12° \$\mathbf{m}\) 12'34\\ 12° \$\mathbf{m}\) 11'49\\ 14° \$\mathbf{m}\) 08'33\\ 21° \$\mathbf{m}\) 02'21\\ 17° \$\mathbf{m}\) 45'03\\ 14° \$\mathbf{m}\) 24'30\\ 21° \$\mathbf{m}\) 30'54\	2°16'07 10.95883 AU 2°50'43 9.00727 AU 2°22'03 2°22'04 11.04733 AU 2°54'21 9.08541 AU
max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-2030 Jun 26 j 10:30 -2030 Jun 26 j 15:01 -2030 Sep 09 j 11:07 -2030 Oct 23 j 23:28 -2030 Dec 29 j 14:35 -2030 Dec 29 j 05:36 -2029 Mar 08 j 03:10 -2029 Jun 22 j 11:46 -2029 Jul 10 j 10:09 -2029 Jul 10 j 10:08 -2029 Jul 10 j 20:24 -2029 Jul 18 j 06:38 -2029 Jul 28 j 04:01 -2029 Nov 06 j 03:12 -2028 Jan 12 j 01:03 -2028 Jan 11 j 17:09 -2028 Mar 21 j 04:58	15° M28'20 15° M32'38 15° M34'05 17° M47'03 23° M50'38 25° M36'56 22° M12'13 22° M14'02 18° M43'22 26° M45'53 29° M00'37 29° M00'37 29° M03'51 0° 9 1° 913'57 8° 952'28 5° 929'26 5° 931'00 2° 901'25	10.19798 AU 0°12'10 8.25880 AU 0°26'30 0°26'32 10.32410 AU 0°52'01	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 opposition min. Earth dist. direct	-2024 Aug 24 j 14:23 -2024 Sep 03 j 19:54 -2024 Sep 10 j 11:14 -2024 Sep 10 j 11:12 -2024 Sep 10 j 10:45 -2024 Sep 27 j 03:37 -2023 Jan 04 j 00:30 -2023 Mar 14 j 02:37 -2023 Mar 14 j 03:45 -2023 May 24 j 13:03 -2023 Sep 05 j 08:48 -2023 Sep 22 j 01:45 -2023 Sep 22 j 01:44 -2023 Sep 22 j 01:44 -2023 Sep 21 j 23:09 -2023 Oct 08 j 14:50 -2022 Jan 15 j 13:54 -2022 Mar 26 j 06:18 -2022 Jun 05 j 16:48	28° \$\alpha 48'04\\ 0° \$\mathbf{m}\qquad 47'11\\ 0° \$\mathbf{m}\qquad 47'11\\ 0° \$\mathbf{m}\qquad 47'11\\ 0° \$\mathbf{m}\qquad 47'03\\ 2° \$\mathbf{m}\qquad 42'35\\ 6° \$\mathbf{m}\qquad 25'15\\ 3° \$\mathbf{m}\qquad 03'10\\ 10° \$\mathbf{m}\qquad 12'35\\ 12° \$\mathbf{m}\qquad 12'35\\ 12° \$\mathbf{m}\qquad 12'35\\ 12° \$\mathbf{m}\qquad 12'35\\ 12° \$\mathbf{m}\qquad 12'34\\ 12° \$\mathbf{m}\qquad 12'34\\ 12° \$\mathbf{m}\qquad 08'33\\ 21° \$\mathbf{m}\qquad 02'21\\ 17° \$\mathbf{m}\qqquad 45'03\\ 14° \$\mathbf{m}\qqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq	2°16'07 10.95883 AU 2°50'43 9.00727 AU 2°22'03 2°22'04 11.04733 AU 2°54'21

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max. Earth dist.	-2022 Oct 03 j 04:52	•	11.11386 AU	conjunction	-2016 Dec 07 j 07:39	0° ₹ 10'54	0°44'34
morning rise	-2022 Oct 19 j 21:13	25° m/21'05	11.11300110	minimum elong	-2016 Dec 07 j 07:40	0° ۶۰ 10'54	
morning rise	-2022 Dec 05 j 05:49	0° ⊽		max. Earth dist.	-2016 Dec 06 j 21:26		10.98404 AU
retrograde	-2021 Jan 27 j 00:04	° - 2° - 12'43		morning rise	-2016 Dec 24 j 00:03	2° × ⁷ 09'07	10.50101710
retrograde	-2021 Mar 23 j 07:24	30°RM)		retrograde	-2015 Apr 05 j 20:44	9° × ⁷ 21'41	
opposition	-2021 Mar 23 j 07:24 -2021 Apr 07 j 00:11	28° m) 56'16	2°51'19	opposition	-2015 Jun 15 j 21:09	6° × ⁷ 01'18	0°37'22
min. Earth dist.	-2021 Apr 07 j 05:32	28° m 55'17		min. Earth dist.	-2015 Jun 16 j 05:43	5° × 759'42	8.93427 AU
direct	-2021 Apr 07 j 05:32	25° m/36'03).1401) AO	direct	-2015 Aug 24 j 16:51	2° × ⁷ 43'08	6.75427 AU
uncet	-2021 Sep 03 j 20:13	0∘ ⊽		evening set	-2015 Aug 24 j 10:51 -2015 Dec 02 j 06:07	9° × ⁷ 46'24	
evening set	-2021 Sep 03 j 20:13	0 = 2° £ 37'43		evening set	-2013 Dec 02 j 00.07	9 X 40 24	
evening set	-2021 Sep 26 J 02.26	2 = 3/43		conjunction	-2015 Dec 18 j 22:43	11° ∡ 745'51	0°16'26
conjunction	-2021 Oct 14 j 14:24	4° £ 32'15	2017/22	minimum elong	-2015 Dec 18 j 22:44	11° x 45'51	0°16'22
minimum elong	-2021 Oct 14 j 14:24	4° <u>₽</u> 32'16		max. Earth dist.	-2015 Dec 18 j 12:19		10.88071 AU
max. Earth dist.	-2021 Oct 14 j 14.20 -2021 Oct 14 j 07:20		11.15622 AU	morning rise	-2013 Dec 18 j 12.19	13° х 46'16	10.880/1 AU
	-2021 Oct 14 j 07.20 -2021 Oct 31 j 00:13	4 2 230 12 6° 2 26'13	11.13022 AU	•	3	21° × ⁷ 07'38	
morning rise	3	13° £ 17'20		retrograde	-2014 Apr 18 j 12:51 -2014 Jun 28 j 09:12	21 x ·0/38 17° x 45′51	0°01'53
retrograde	-2020 Feb 07 j 11:52		2041157	opposition	-2014 Jun 28 j 17:39	17 x 43 31	8.82197 AU
opposition	-2020 Apr 17 j 20:12	10° Ω 00'50	2°41'57	min. Earth dist.			6.62197 AU
min. Earth dist.	-2020 Apr 18 j 02:19	9° ₽ 59'42	9.16966 AU	desc. node	-2014 Jul 17 j 21:38	16° × 20'41	
direct	-2020 Jun 28 j 10:44	6° ₽ 41'29		direct	-2014 Sep 05 j 13:57	14° 🗷 27'10	
evening set	-2020 Oct 08 j 04:59	13° ≏ 39'41		evening set	-2014 Dec 14 j 02:46	21° ∡ ³36′13	
agniumation	2020 Oct 24: 15:59	15° ≏ 33'50	2007!14	conjunction	-2014 Dec 30 j 21:51	220.727154	0012105
conjunction	-2020 Oct 24 j 15:58			,	-2014 Dec 30 j 21:51	23° x ⁷ 37'54	
minimum elong	-2020 Oct 24 j 16:01	15° £ 33'51	2°07'13 11.17285 AU	minimum elong	,	23° 🗷 37'54	0-1308
max. Earth dist.	-2020 Oct 24 j 08:16		11.1/285 AU	behind sun begin	-2014 Dec 30 j 17:36	23°× 7 36'37	
morning rise	-2020 Nov 10 j 01:25	17° £ 27'37		behind sun end	-2014 Dec 31 j 02:07	23° 🗷 39'10	10.76102 ATT
retrograde	-2019 Feb 18 j 01:04	24° ₽ 19'49	2027120	max. Earth dist.	-2014 Dec 30 j 11:23		10.76103 AU
opposition	-2019 Apr 29 j 16:09	21° ♀ 03'02		morning rise	-2013 Jan 16 j 20:49	25° х 40'47	
min. Earth dist.	-2019 Apr 29 j 23:12	21° 2 01'45	9.17285 AU	. 1	-2013 Feb 25 j 22:07	0°る	
direct	-2019 Jul 10 j 01:22	17° £ 44′25		retrograde	-2013 May 01 j 11:13	3°る12'10	
evening set	-2019 Oct 19 j 05:57	24° ≏ 40'33			-2013 Jul 08 j 16:40	30°₹ ⋌ ¹	002444
	201037 04:16.42	260 2 2 440	1050100	opposition	-2013 Jul 11 j 03:14	29° 🖈 48'52	
conjunction	-2019 Nov 04 j 16:42	26° ₽ 34'49	1°52'23	min. Earth dist.	-2013 Jul 11 j 11:25	29° х 47'18	8.69563 AU
minimum elong	-2019 Nov 04 j 16:45	26° ₽ 34'50		direct	-2013 Sep 17 j 18:40	26° ∡ ¹29'21	
max. Earth dist.	-2019 Nov 04 j 07:39		11.16325 AU		-2013 Nov 22 j 12:10	0°る	
morning rise	-2019 Nov 21 j 02:51	28° ≏ 29'00		evening set	-2013 Dec 26 j 08:34	3° ⋜ 45'44	
	-2019 Dec 04 j 17:37	0°M,					
retrograde	-2018 Mar 01 j 16:01	5° M 23'54		conjunction	-2012 Jan 12 j 06:35	5°₹49'57	
opposition	-2018 May 11 j 13:07	2°M06'35		minimum elong	-2012 Jan 12 j 06:33	5°₹49'57	
min. Earth dist.	-2018 May 11 j 21:46		9.14978 AU	max. Earth dist.	-2012 Jan 11 j 21:17		10.62937 AU
	-2018 Jun 11 j 20:25	30° Ŗ Ω		morning rise	-2012 Jan 29 j 09:01	7° る 55'33	
direct	-2018 Jul 21 j 15:16	28° ≏ 48'25		retrograde	-2012 May 13 j 20:39	15° る 37'55	
_	-2018 Aug 29 j 10:33	0° M ₊		opposition	-2012 Jul 23 j 04:14	12° る 13'00	
evening set	-2018 Oct 30 j 07:01	5° M ₊44'01		min. Earth dist.	-2012 Jul 23 j 11:20	12° ろ 11'38	8.55996 AU
		======================================		direct	-2012 Sep 29 j 06:13	8° 궁 52'28	
conjunction	-2018 Nov 15 j 18:17	7° M 38′54	1°33'17	evening set	-2011 Jan 07 j 00:58	16° る 17'30	
minimum elong	-2018 Nov 15 j 18:19	7° M 38'55	1°33'16			🚤	
max. Earth dist.	-2018 Nov 15 j 07:30		11.12776 AU	conjunction	-2011 Jan 24 j 02:15	18° る 24'29	
morning rise	-2018 Dec 02 j 06:03	9° ™ 33'59		minimum elong	-2011 Jan 24 j 02:12	18° る 24'28	
_	-2017 Jan 28 j 00:23	15° ™		max. Earth dist.	-2011 Jan 23 j 19:02		10.49066 AU
retrograde	-2017 Mar 13 j 11:35	16°M33'12		morning rise	-2011 Feb 10 j 08:11	20° る 33'00	
	-2017 Apr 28 j 08:40	15°RM		retrograde	-2011 May 27 j 15:56	28° පි 26'54	
opposition	-2017 May 23 j 12:12	13°M15'05	1°40'19	opposition	-2011 Aug 05 j 12:28	25° る 00'23	
min. Earth dist.	-2017 May 23 j 21:47	13°M.13'19	9.10112 AU	min. Earth dist.	-2011 Aug 05 j 17:35	24°る59'23	8.42028 AU
direct	-2017 Aug 02 j 06:02	9° ™ 57'10		direct	-2011 Oct 12 j 00:14	21° ට 38'39	
	-2017 Oct 24 j 10:10	15° M ₊		evening set	-2010 Jan 20 j 05:30	29° る 13'35	
evening set	-2017 Nov 10 j 10:08	16° M ₅53'44			-2010 Jan 26 j 10:06	0° ≈	
	201731 26:22:5	100 m 4044	101007		2010 F 1 06:10.12	10 - 22/20	1027/27
conjunction	-2017 Nov 26 j 22:41	18°M49'44	1°10'27	conjunction	-2010 Feb 06 j 10:13	1°≈23'29	
minimum elong	-2017 Nov 26 j 22:43	18°M49'44	1°10'25	minimum elong	-2010 Feb 06 j 10:10	1°≈23'28	
max. Earth dist.	-2017 Nov 26 j 11:50		11.06736 AU	max. Earth dist.	-2010 Feb 06 j 04:43		10.35097 AU
morning rise	-2017 Dec 13 j 12:33	20°M46'10		morning rise	-2010 Feb 23 j 19:47	3°≈35'00	
retrograde	-2016 Mar 24 j 11:38	27°M.51'18	101012	retrograde	-2010 Jun 10 j 20:10	11°≈40'23	201.41.5
opposition	-2016 Jun 03 j 14:26	24°M32'09	1°10'31	opposition	-2010 Aug 19 j 04:02	8°≈12'23	
min. Earth dist.	-2016 Jun 03 j 23:46	24°M30'25	9.02843 AU	min. Earth dist.	-2010 Aug 19 j 07:06	8°≈11'47	8.28359 AU
direct	-2016 Aug 12 j 21:54	21°M14'14		direct	-2010 Oct 25 j 03:01	4°≈49'19	
evening set	-2016 Nov 20 j 17:13	28°M13'22		evening set	-2009 Feb 02 j 22:40	12° ≈ 34'51	
	-2016 Dec 05 j 18:58	0° ⊼ ¹					

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 33 Attention, astronomical year style is used: The year -2009 in astronomical counting style is the year 2010 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	ne year -2009 i	in astronomical co	unting style is the year	2010 BCE in historical c	ounting style.	
conjunction	-2009 Feb 20 j 06:58	14° ≈ 47'43	-1°57'45	morning rise	-2003 Jun 07 j 16:05	13° 8 20'14	
minimum elong	-2009 Feb 20 j 06:55	14° ≈ 47'42			-2003 Jun 20 j 21:10	15° 8	
max. Earth dist.	-2009 Feb 20 j 03:25	14° ≈ 46′34	10.21828 AU	retrograde	-2003 Sep 20 j 06:23	21° 8 37'37	
	-2009 Feb 21 j 21:13	15° ≈		opposition	-2003 Nov 25 j 16:16	18° 8 08'28	
morning rise	-2009 Mar 09 j 20:16	17° ≈ 02'12		min. Earth dist.	-2003 Nov 25 j 06:28		7.99140 AU
retrograde	-2009 Jun 25 j 08:42	25°≈18′06			-2002 Jan 11 j 19:58	15° ₹8	
opposition	-2009 Sep 02 j 02:57	21°≈48'49		direct	-2002 Jan 31 j 15:47	14° 8 38'09	
min. Earth dist.	-2009 Sep 02 j 03:58		8.15822 AU	•	-2002 Feb 20 j 13:02	15° 8	
direct	-2009 Nov 07 j 14:51	18°≈24'19		evening set	-2002 May 17 j 14:12	22° 8 57'06	
evening set	-2008 Feb 17 j 04:03	26° ≈ 20'22			2002 I 04: 10:12	250 1 10110	0955122
· · · · · · · · · · · ·	2000 M 05 : 16:12	28° ≈ 36'05	2012/47	conjunction	-2002 Jun 04 j 19:13 -2002 Jun 04 j 19:15	25° 8 18'19 25° 8 18'20	
conjunction minimum elong	-2008 Mar 05 j 16:12 -2008 Mar 05 j 16:10	28°≈36'04		minimum elong max. Earth dist.	-2002 Jun 04 j 19:13 -2002 Jun 05 j 08:27		10.03122 AU
max. Earth dist.	-2008 Mar 05 j 15:05		10.10109 AU	morning rise	-2002 Jun 22 j 22:12	27° 8 38'51	10.03122 AU
max. Earth dist.	-2008 Mar 16 j 10:54	20 ≈33 43 0°) (10.10109 AU	morning rise	-2002 Jul 12 j 00:36	27 O 3831	
morning rise	-2008 Mar 23 j 09:14	0°) 53′22		retrograde	-2002 Jul 12 j 00:30	5° ∏ 45'55	
retrograde	-2008 Jul 09 j 03:46	9° X 17'53		opposition	-2002 Dec 09 j 19:27	2° П 18'10	-0°49'09
opposition	-2008 Sep 15 j 08:09	5°) (1735	-2°51'46	min. Earth dist.	-2002 Dec 09 j 09:52		8.07789 AU
min. Earth dist.	-2008 Sep 15 j 07:15		8.05228 AU	mm. Earth dist.	-2001 Jan 09 j 08:52	30°R₩	0.07707110
direct	-2008 Nov 20 j 12:05	2° \ 21'37	0.00220110	direct	-2001 Feb 15 j 08:33	28° 8 47'57	
evening set	-2007 Mar 02 j 20:58	10°) €27'22			-2001 Mar 24 j 06:06	0°II	
Č	,			evening set	-2001 Jun 01 j 14:31	7° Ⅱ 01'33	
conjunction	-2007 Mar 20 j 13:12	12°)(45'40	-2°20'15	C	,		
minimum elong	-2007 Mar 20 j 13:12	12°) 45′40	2°20'16	conjunction	-2001 Jun 19 j 17:55	9°Ⅱ20′38	-0°22'31
max. Earth dist.	-2007 Mar 20 j 15:06	12°) 46′18	10.00711 AU	minimum elong	-2001 Jun 19 j 17:56	9°Ⅱ20′39	0°22'29
morning rise	-2007 Apr 07 j 09:50	15°) €05'23		max. Earth dist.	-2001 Jun 20 j 06:25	9° Ⅱ 24'39	10.13109 AU
retrograde	-2007 Jul 24 j 02:32	23°) €35'37		morning rise	-2001 Jul 07 j 18:11	11° Ⅱ 38'43	
opposition	-2007 Sep 29 j 17:57	20°) 04'40	-2°56'07	retrograde	-2001 Oct 18 j 03:29	19° Ⅲ 34′20	
min. Earth dist.	-2007 Sep 29 j 15:04	20° ∺ 05'16	7.97273 AU	opposition	-2001 Dec 23 j 16:08	16° Ⅱ 08'13	-0°07'19
direct	-2007 Dec 04 j 18:13	16°) ₹37′20		min. Earth dist.	-2001 Dec 23 j 07:16		8.18855 AU
evening set	-2006 Mar 17 j 23:13	24°) €51′08		asc. node	-2000 Feb 28 j 00:45	12° Ⅱ 38′38	
				direct	-2000 Feb 29 j 21:12	12° Ⅱ 38′27	
conjunction	-2006 Apr 04 j 19:36	27° ¥ 11'35		evening set	-2000 Jun 15 j 05:33	20° ∏ 44'56	
minimum elong	-2006 Apr 04 j 19:37	27°) 11′36				🗨	
max. Earth dist.	-2006 Apr 05 j 00:51		9.94267 AU	conjunction	-2000 Jul 03 j 05:50	23° Ⅱ 01'14	
morning rise	-2006 Apr 22 j 19:26	29°) €33'10		minimum elong	-2000 Jul 03 j 05:49	23° Ⅱ 01'14	0°11'11
1	-2006 Apr 26 j 06:50	0° Υ		behind sun begin	-2000 Jul 03 j 00:28	22° I 59'33	
retrograde	-2006 Aug 08 j 02:22	8° Υ 05'36 4° Υ 34'26	2940122	behind sun end	-2000 Jul 03 j 11:09	23° Ⅱ 02'54	10.25151 ATT
opposition	-2006 Oct 14 j 06:41 -2006 Oct 14 j 01:29		7.92489 AU	max. Earth dist.	-2000 Jul 03 j 16:45 -2000 Jul 21 j 02:07	25° П 16'15	10.25151 AU
min. Earth dist. direct	-2006 Oct 14 j 01.29 -2006 Dec 19 j 07:45	4 γ 33 31 1° Υ 05'56	7.92489 AU	morning rise	-2000 Jul 21 J 02.07 -2000 Sep 01 j 08:38	23 π 1613	
evening set	-2006 Dec 19 j 07:43 -2005 Apr 02 j 07:48	9° Υ 25'21		retrograde	-2000 Sep 01 j 08:38	3°500'12	
evening set	-2003 Apr 02 J 07.48	9 1 23 21		retrograde	-2000 Oct 30 j 10:24 -2000 Dec 31 j 05:29	30°R∏	
conjunction	-2005 Apr 20 j 07:56	11° Ƴ 47'19	-2°09'15	opposition	-1999 Jan 05 j 05:49	29° ∏ 35'51	0°33'43
minimum elong	-2005 Apr 20 j 07:59	11° Υ 47'20	2°09'14	min. Earth dist.	-1999 Jan 04 j 21:46	29° I 37'28	8.31643 AU
max. Earth dist.	-2005 Apr 20 j 16:25	11° Y ′50'07	9.91217 AU	direct	-1999 Mar 15 j 03:02	26° Ⅱ 06'51	
morning rise	-2005 May 08 j 10:20	14° Ƴ 10'01			-1999 May 24 j 08:15	0ಂತಾ	
retrograde	-2005 Aug 23 j 00:11	22° Y '40'51		evening set	-1999 Jun 29 j 09:51	4° © 05'03	
opposition	-2005 Oct 28 j 20:06	19° Ƴ 09'56	-2°31'38		-		
min. Earth dist.	-2005 Oct 28 j 12:43	19° Y 11'29	7.91197 AU	conjunction	-1999 Jul 17 j 05:45	6°9518'06	0°43'16
direct	-2004 Jan 03 j 01:22	15° Y 40′32		minimum elong	-1999 Jul 17 j 05:42	6°9518'06	0°43'18
evening set	-2004 Apr 16 j 19:35	24° Y ′02'41		max. Earth dist.	-1999 Jul 17 j 14:49	6° 5 20'57	10.38522 AU
				morning rise	-1999 Aug 03 j 21:02	8° 5 29'41	
conjunction	-2004 May 04 j 22:44	26° Y 25'22	-1°51'01	retrograde	-1999 Nov 12 j 09:11	16° © 02'29	
minimum elong	-2004 May 04 j 22:48	26° Y 25'23	1°51'00	opposition	-1998 Jan 18 j 12:09	12° © 39'52	1°11'41
max. Earth dist.	-2004 May 05 j 09:48	26° Y 29'01	9.91765 AU	min. Earth dist.	-1998 Jan 18 j 04:43	12° 5 641'21	8.45420 AU
morning rise	-2004 May 23 j 02:44	28° Y 48'18		direct	-1998 Mar 29 j 00:28	9° © 11'58	
	-2004 Jun 01 j 11:41	0°8		evening set	-1998 Jul 13 j 02:35	17° © 01'15	
retrograde	-2004 Sep 05 j 18:13	7° 8 13'55			4000 V		
opposition	-2004 Nov 11 j 07:54	3° 8 43'40		conjunction	-1998 Jul 30 j 17:23	19°510'53	1°12'21
min. Earth dist.	-2004 Nov 10 j 22:52		7.93477 AU	minimum elong	-1998 Jul 30 j 17:20	19°5510'52	
direct	-2003 Jan 16 j 20:36	0° 8 13'38		max. Earth dist.	-1998 Jul 31 j 00:59		10.52497 AU
evening set	-2003 May 02 j 06:55	8° 8 35'36		morning rise	-1998 Aug 17 j 03:06	21°5018'57	
aonius sti su	2002 M 20 : 11 70	1000 50100	1025140	retrograde	-1998 Nov 24 j 23:28	28°541'32	1044152
conjunction	-2003 May 20 j 11:50 -2003 May 20 j 11:54	10° 8 58'02		opposition min. Earth dist.	-1997 Jan 31 j 11:28 -1997 Jan 31 j 05:09	25° © 20'35 25° © 21'49	1°44'52 8.59467 AU
minimum elong max. Earth dist.	-2003 May 20 j 11:54 -2003 May 21 j 00:32		9.95840 AU	direct	-1997 Jan 31 J 05:09 -1997 Apr 11 j 13:19	25°921'49 21°953'58	0.3740 / AU
						/ L = U 17 1X	

-	nical year style is used: Th		_			_	gc 34
evening set	-1997 Jul 26 j 07:37	-		conjunction	-1991 Oct 19 j 23:42	10° ♀ 45'09	2°12'24
	-1997 Jul 29 j 21:52	$0^{\circ}\Omega$		minimum elong	-1991 Oct 19 j 23:44	10° ≙ 45'10	2°12'23
	·			max. Earth dist.	-1991 Oct 19 j 15:12	10° ≏ 42'40	11.17694 AU
conjunction	-1997 Aug 12 j 17:01	1° Ω 40′26	1°37'11	morning rise	-1991 Nov 05 j 09:14	12° ≏ 38'55	
minimum elong	-1997 Aug 12 j 16:58	1° Ω 40′25	1°37'13	retrograde	-1990 Feb 13 j 03:23	19° ≏ 30'28	
max. Earth dist.	-1997 Aug 12 j 23:11	1° Ω 42'19	10.66374 AU	opposition	-1990 Apr 24 j 15:12	16° ≙ 14'20	2°34'15
morning rise	-1997 Aug 29 j 21:07	3° Ω 45′07		min. Earth dist.	-1990 Apr 24 j 23:22	16° £ 12'51	9.18209 AU
retrograde	-1997 Dec 07 j 06:21	10° Ω 58'44		direct	-1990 Jul 05 j 01:45	12° ≏ 55'49	
opposition	-1996 Feb 13 j 04:15	7° Ω 39'18	2°12'08	evening set	-1990 Oct 14 j 14:27	19° ≙ 52'53	
min. Earth dist.	-1996 Feb 13 j 00:01	7° Ω 40'07	8.73100 AU				
direct	-1996 Apr 23 j 18:10	4° Ω 14′03		conjunction	-1990 Oct 31 j 01:08	21° ≏ 47'02	1°59'40
evening set	-1996 Aug 07 j 01:45	11° Ω 45'30		minimum elong	-1990 Oct 31 j 01:11	21° ≏ 47'02	
				max. Earth dist.	-1990 Oct 30 j 15:01		11.17682 AU
conjunction	-1996 Aug 24 j 05:40	13° Ω 48'35		morning rise	-1990 Nov 16 j 10:59	23° △ 40'58	
minimum elong	-1996 Aug 24 j 05:37	13° Ω 48'34			-1989 Jan 29 j 00:41	0° ™	
max. Earth dist.	-1996 Aug 24 j 09:22		10.79508 AU	retrograde	-1989 Feb 24 j 17:23	0°M34'34	
	-1996 Sep 03 j 03:27	15° Ω		•.•	-1989 Mar 23 j 21:31	30° ₹ Ω	2015155
morning rise	-1996 Sep 10 j 04:30	15° Ω 50'10		opposition	-1989 May 06 j 11:44	27° Ω 17'53	
retrograde	-1996 Dec 18 j 06:30	22° Ω 56'12	2022147	min. Earth dist.	-1989 May 06 j 20:44	27° Ω 16'14	9.16764 AU
opposition	-1995 Feb 24 j 15:12	19° Ω 38'05 19° Ω 38'24		direct	-1989 Jul 16 j 17:56	23° Ω 59'48	
min. Earth dist.	-1995 Feb 24 j 13:33	19° δ (38′24′16° Ω 14'14′	8.85714 AU		-1989 Oct 17 j 09:57 -1989 Oct 25 j 15:41	0°M	
direct	-1995 May 06 j 14:02 -1995 Aug 19 j 09:36	23°Ω37'27		evening set	-1989 Oct 25 J 15:41	0° ™ 55'44	
evening set	-1993 Aug 19 J 09.30	23 863121		conjunction	-1989 Nov 11 j 02:46	2°M50'19	1042127
conjunction	-1995 Sep 05 j 08:26	25° Ω 37'44	2011/15	minimum elong	-1989 Nov 11 j 02:48	2°M50'20	1°42'26
minimum elong	-1995 Sep 05 j 08:24	25° Ω 37'43		max. Earth dist.	-1989 Nov 10 j 16:12		11.14909 AU
max. Earth dist.	-1995 Sep 05 j 08:57		10.91358 AU	morning rise	-1989 Nov 27 j 13:36	4°M44'56	11.14909 AU
morning rise	-1995 Sep 22 j 02:47	27° Ω 36'41	10.71336 AC	retrograde	-1988 Mar 07 j 12:31	11°M42'11	
morning rise	-1995 Oct 13 j 12:18	0° m)		opposition	-1988 May 17 j 10:06	8°M24'40	1°52'31
retrograde	-1995 Dec 29 j 23:52	4° mp 36'39		min. Earth dist.	-1988 May 17 j 19:35	8°M22'56	9.12607 AU
opposition	-1994 Mar 08 j 21:14	1° mp 19'32	2°46'32	direct	-1988 Jul 27 j 08:40	5°M06'49	y.12007 110
min. Earth dist.	-1994 Mar 08 j 21:26	1° mp 19'30	8.96797 AU	evening set	-1988 Nov 04 j 18:03	12°M03'01	
	-1994 Mar 27 j 01:09	30°R Ω		Ü	,		
direct	-1994 May 19 j 04:04	27° Ω 57′03		conjunction	-1988 Nov 21 j 06:01	13°M58'31	1°21'15
	-1994 Jul 09 j 19:49	0° m		minimum elong	-1988 Nov 21 j 06:03	13°M58'32	1°21'14
evening set	-1994 Aug 31 j 08:08	5° m 12'47		max. Earth dist.	-1988 Nov 20 j 18:20	13°M55'05	11.09517 AU
					-1988 Nov 29 j 23:32	15° ™	
conjunction	-1994 Sep 17 j 02:44	7° Mp 10'43	2°19'51	morning rise	-1988 Dec 07 j 18:44	15°M54'20	
minimum elong	-1994 Sep 17 j 02:42	7° m 10'42	2°19'52	retrograde	-1987 Mar 19 j 10:21	22°M56'50	
max. Earth dist.	-1994 Sep 17 j 00:56	7° Mp 10'11	11.01461 AU	opposition	-1987 May 29 j 11:21	19°M38'12	1°24'33
morning rise	-1994 Oct 03 j 17:26	9° m 07'31		min. Earth dist.	-1987 May 29 j 21:47	19°M36'17	9.05926 AU
retrograde	-1993 Jan 10 j 15:45	16°Mp03'00		direct	-1987 Aug 07 j 22:49	16°M20'14	
opposition	-1993 Mar 20 j 23:05	12°Mp46'35	2°53'20	evening set	-1987 Nov 15 j 23:31	23°M18'21	
min. Earth dist.	-1993 Mar 21 j 00:40	12°Mp46'18	9.05906 AU				
direct	-1993 May 31 j 12:10	9° TD 25'22		conjunction	-1987 Dec 02 j 12:57	25°M15'12	0°56'41
evening set	-1993 Sep 11 j 23:05	16° Mp 34'33		minimum elong	-1987 Dec 02 j 12:59	25°M15'13	0°56'39
	1002 C 20 : 1424	100 m- 20142	2022147	max. Earth dist.	-1987 Dec 02 j 00:16		11.01721 AU
conjunction	-1993 Sep 28 j 14:24	-	2°22'47	morning rise	-1987 Dec 19 j 04:16	27°M12'40	
minimum elong	-1993 Sep 28 j 14:24	18° Mp 30'42	2°22'47	rotro c 1-	-1986 Jan 13 j 13:12	0° 🗷 4° ⋅ 🗷 21/57	
max. Earth dist.	-1993 Sep 28 j 11:05 -1993 Oct 15 j 02:14	18° llp 29'44 20° llp 25'54	11.09416 AU	retrograde	-1986 Mar 31 j 14:34	4° ҂ 21'57 1° ҂ 01'57	0°52'49
morning rise retrograde	-1993 Oct 15 j 02:14 -1992 Jan 22 j 04:15	20° llp 25'54 27° llp 18'24		opposition min. Earth dist.	-1986 Jun 10 j 16:13 -1986 Jun 11 j 03:10	1°×'01'5/ 0°× 7 '59'56	0°52′49 8.96977 AU
opposition	-1992 Mar 31 j 21:49	24° Mp 02'24	2°53'20	iiiii. Eatui dist.	-1986 Jun 24 j 19:49	30°RM	6.909// AU
min. Earth dist.	-1992 Mai 31 j 21:49 -1992 Apr 01 j 01:17	24° Mp 01'45	9.12680 AU	direct	-1986 Aug 19 j 17:25	27°M43'37	
direct	-1992 Apr 01 j 01:17 -1992 Jun 11 j 11:53	20° Mp 42'17	9.12080 AU	uncet	-1986 Oct 11 j 22:58	27 11 0 4337	
evening set	-1992 Sep 22 j 08:03	20 m/4217 27° m/46'04		evening set	-1986 Nov 27 j 09:43	4° ∡ ¹45'13	
e venning see	1992 Sep 22 j 00.03	27 11001		evening sec	1700 1101 27 1 07.13	1 7 13 13	
conjunction	-1992 Oct 08 j 20:53	29° m 40'59	2°20'13	conjunction	-1986 Dec 14 j 01:18	6° ∡ ¹43'53	0°29'28
minimum elong	-1992 Oct 08 j 20:54	29° Mp 40'59	2°20'12	minimum elong	-1986 Dec 14 j 01:19	6° х 43′53	0°29'25
max. Earth dist.	-1992 Oct 08 j 15:25		11.14905 AU	max. Earth dist.	-1986 Dec 13 j 13:08		10.91795 AU
	-1992 Oct 11 j 14:05	0ം ರ		morning rise	-1986 Dec 30 j 19:30	8° ₹ 43'23	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
morning rise	-1992 Oct 25 j 06:58	1° Ω 35'10		retrograde	-1985 Apr 13 j 02:04	16° ₹ 00'56	
retrograde	-1991 Feb 01 j 15:47	8° ≏ 26′20		opposition	-1985 Jun 23 j 01:52	12° ∡ ³39'24	0°18'15
opposition	-1991 Apr 12 j 18:53	5° ≏ 10′26	2°46'51	min. Earth dist.	-1985 Jun 23 j 12:01	12° х ³37'30	8.86076 AU
min. Earth dist.	-1991 Apr 13 j 01:04	5° ≏ 09'18	9.16840 AU	direct	-1985 Aug 31 j 14:36	9° ∡ ¹20'29	
direct	-1991 Jun 23 j 08:32	1° ≏ 51'12		evening set	-1985 Dec 09 j 02:36	16° ∡ ¹27'13	
evening set	-1991 Oct 03 j 12:29	8° ≏ 50'55					

•	inella of Saturn 110		•	* *	1986 BCE in historical c		ge 33
conjunction	-1985 Dec 25 j 20:41	e year -1983 i 18° ⊼ '28'01		opposition	-1979 Sep 09 j 08:01	29° ≈ 43'04	2016128
minimum elong	-1985 Dec 25 j 20:42	18° × 28'01	0°00'24	min. Earth dist.	-1979 Sep 09 j 06:57		8.08413 AU
U	•		0 00 24		1 3		6.06413 AU
behind sun begin	-1985 Dec 25 j 13:43 -1985 Dec 26 j 03:42	18° ₹ 25'56		direct	-1979 Nov 14 j 15:39	26°≈17'22 0°¥	
behind sun end		18° 🗷 30'06	10 00007 ATT		-1978 Jan 18 j 23:20	0 K 4°₩19'25	
max. Earth dist.	-1985 Dec 25 j 09:56		10.80087 AU	evening set	-1978 Feb 24 j 14:46	4°π19′25	
desc. node	-1985 Dec 31 j 13:19	19° ∡ 09'22			1070 M 14:05 10	60 V 26145	2017154
morning rise	-1984 Jan 11 j 18:01	20° 🗷 29'53		conjunction minimum elong	-1978 Mar 14 j 05:18 -1978 Mar 14 j 05:17	6° ¥ 36'45 6° ¥ 36'45	
retrograde	-1984 Apr 24 j 22:24	27° 🖈 57'07	0010101	2	J		
opposition	-1984 Jul 04 j 17:19	24° 🗷 33'56		max. Earth dist.	-1978 Mar 14 j 08:09		10.03500 AU
min. Earth dist.	-1984 Jul 05 j 01:53		8.73630 AU	morning rise	-1978 Apr 01 j 00:12	8°¥55'33	
direct	-1984 Sep 11 j 16:40	21° 🖈 14'13		retrograde	-1978 Jul 17 j 18:38	17°) 24'10	2055122
evening set	-1984 Dec 20 j 04:10	28° ∡ ¹27'40		opposition	-1978 Sep 23 j 16:06	13° ¥ 53'10	
	-1983 Jan 01 j 20:07	0°₹		min. Earth dist.	-1978 Sep 23 j 12:20		7.99587 AU
	1002 1 06:00 50	00720156	0020116	direct	-1978 Nov 28 j 17:33	10° ¥ 26′16	
conjunction	-1983 Jan 06 j 00:59	0° る 30'56		evening set	-1977 Mar 11 j 13:20	18° ¥ 37′08	
minimum elong	-1983 Jan 06 j 00:58	0°る30'55			1077.14 20:07.55	2001/56140	2020144
max. Earth dist.	-1983 Jan 05 j 15:05		10.67058 AU	conjunction	-1977 Mar 29 j 07:55	20° ¥ 56'48	
morning rise	-1983 Jan 23 j 01:45	2°る35'28		minimum elong	-1977 Mar 29 j 07:55	20° H 56'48	
retrograde	-1983 May 08 j 04:53	10°る13'25	0054125	max. Earth dist.	-1977 Mar 29 j 13:43	20°) ₹58'43	9.96062 AU
opposition	-1983 Jul 17 j 15:23	6°る48'34		morning rise	-1977 Apr 16 j 06:13	23°) 17'43	
min. Earth dist.	-1983 Jul 17 j 22:38		8.60143 AU		-1977 Jun 17 j 03:06	0° Υ	
direct	-1983 Sep 23 j 23:20	3° る 27'52		retrograde	-1977 Aug 01 j 19:24	1° Y 50′08	
evening set	-1982 Jan 01 j 15:53	10° る 49'32			-1977 Sep 17 j 00:08	30° ₹	
				opposition	-1977 Oct 08 j 04:11	28° ₩ 18'55	
conjunction	-1982 Jan 18 j 15:39	12° る 55'29		min. Earth dist.	-1977 Oct 07 j 22:18		7.93731 AU
minimum elong	-1982 Jan 18 j 15:37	12° ろ 55'28		direct	-1977 Dec 13 j 03:20	24° ¥ 50′58	
max. Earth dist.	-1982 Jan 18 j 06:32		10.53245 AU		-1976 Feb 29 j 09:27	0°Υ	
morning rise	-1982 Feb 04 j 20:08	15° පි 02'55		evening set	-1976 Mar 25 j 19:44	3° Y 08'32	
retrograde	-1982 May 21 j 19:12	22° る 52'18					
opposition	-1982 Jul 30 j 20:41	19° る 25'49		conjunction	-1976 Apr 12 j 18:12	5° Ƴ 30′00	
min. Earth dist.	-1982 Jul 31 j 02:49		8.46191 AU	minimum elong	-1976 Apr 12 j 18:14	5° Ƴ 30'01	2°14'42
direct	-1982 Oct 06 j 14:10	16° පි 03'57		max. Earth dist.	-1976 Apr 13 j 02:41	5° Ƴ 32'48	9.91870 AU
evening set	-1981 Jan 14 j 15:04	23° る 35'07		morning rise	-1976 Apr 30 j 19:31	7° Y 52'22	
				retrograde	-1976 Aug 15 j 19:39	16° Y 24'50	
conjunction	-1981 Jan 31 j 18:06	25° ⋜ 43'54	-1°25'29	opposition	-1976 Oct 21 j 18:01	12° Y 53′53	
minimum elong	-1981 Jan 31 j 18:03	25° る 43'53		min. Earth dist.	-1976 Oct 21 j 10:36	12° Y 55′26	7.91272 AU
max. Earth dist.	-1981 Jan 31 j 11:01		10.39263 AU	direct	-1976 Dec 26 j 19:06	9° Ƴ 25'04	
morning rise	-1981 Feb 18 j 02:13	27° る 54'18		evening set	-1975 Apr 10 j 07:06	17° Ƴ 46'39	
	-1981 Mar 07 j 13:32	0° ≈					
retrograde	-1981 Jun 04 j 18:24	5° ≈ 55'18		conjunction	-1975 Apr 28 j 08:54	20° Y 09′10	
opposition	-1981 Aug 13 j 09:20	2° ≈ 27'18	-2°01'34	minimum elong	-1975 Apr 28 j 08:58	20° Ƴ 09'11	2°00'01
min. Earth dist.	-1981 Aug 13 j 13:45	2° ≈ 26′25	8.32434 AU	max. Earth dist.	-1975 Apr 28 j 19:32	20° Y 12'41	9.91229 AU
	-1981 Sep 17 j 01:28	30°Ŗる		morning rise	-1975 May 16 j 12:23	22° Y 32'09	
direct	-1981 Oct 19 j 14:31	29° ට 04'11			-1975 Jul 28 j 11:54	$0^{\circ}S$	
	-1981 Nov 20 j 13:12	0° ≈		retrograde	-1975 Aug 30 j 16:21	1° 8 00'47	
evening set	-1980 Jan 28 j 02:32	6° ≈ 45'37			-1975 Oct 03 j 00:27	30° ₹Ƴ	
				opposition	-1975 Nov 05 j 07:15	27° Y 30'32	-2°17'22
conjunction	-1980 Feb 14 j 09:12	8° ≈ 57'22	-1°48'53	min. Earth dist.	-1975 Nov 04 j 22:39	27° Y 32'20	7.92393 AU
minimum elong	-1980 Feb 14 j 09:09	8° ≈ 57'21	1°48'54	direct	-1974 Jan 10 j 14:32	24° Y 01'08	
max. Earth dist.	-1980 Feb 14 j 05:14	8° ≈ 56'06	10.25814 AU		-1974 Apr 06 j 15:05	8° 0	
morning rise	-1980 Mar 02 j 20:56	11° ≈ 10'45		evening set	-1974 Apr 25 j 19:35	2° 8 23'43	
	-1980 Apr 04 j 12:25	15° ≈					
retrograde	-1980 Jun 18 j 03:11	19° ≈ 22'47		conjunction	-1974 May 13 j 23:40	4° 8 46'21	-1°37'41
opposition	-1980 Aug 26 j 05:21	15° ≈ 53'27	-2°27'51	minimum elong	-1974 May 13 j 23:44	4° 8 46'22	1°37'39
min. Earth dist.	-1980 Aug 26 j 07:10	15° ≈ 53'05	8.19598 AU	max. Earth dist.	-1974 May 14 j 11:51	4° 8 50'21	9.94184 AU
	-1980 Sep 06 j 10:12	15°R ≈		morning rise	-1974 Jun 01 j 04:06	7° 8 09'00	
direct	-1980 Oct 31 j 22:54	12° ≈ 29′02			-1974 Aug 22 j 01:04	15° 8	
	-1980 Dec 24 j 03:44	15° ≈		retrograde	-1974 Sep 14 j 07:28	15° 8 30'27	
evening set	-1979 Feb 10 j 02:34	20° ≈ 20′59			-1974 Oct 07 j 14:55	15°R₩	
				opposition	-1974 Nov 19 j 17:50	12° 8 01'16	-1°45'18
conjunction	-1979 Feb 27 j 13:07	22° ≈ 35'38	-2°06'53	min. Earth dist.	-1974 Nov 19 j 08:16	12° 8 03'15	7.97008 AU
minimum elong	-1979 Feb 27 j 13:04	22° ≈ 35'37	2°06'54	direct	-1973 Jan 25 j 11:32	8° 8 31'33	
max. Earth dist.	-1979 Feb 27 j 12:38	22° ≈ 35′29	10.13646 AU		-1973 Apr 26 j 06:14	15° 8	
morning rise	-1979 Mar 17 j 04:28	24° ≈ 51'52		evening set	-1973 May 11 j 05:14	16° 8 52'06	
	-1979 May 01 j 06:13	0° ∀					
retrograde	-1979 Jul 02 j 20:29	3° ¥ 13′26		conjunction	-1973 May 29 j 10:14	19° 8 13'53	-1°09'23
retrograde		3°) 13′26 30°R≈		conjunction minimum elong	-1973 May 29 j 10:14 -1973 May 29 j 10:18	19° 8 13'53 19° 8 13'54	

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 36 Attention, astronomical year style is used: The year -1973 in astronomical counting style is the year 1974 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -1973 i	n astronomical cou	inting style is the year	r 1974 BCE in historical c	ounting style.	0
max. Earth dist.	-1973 May 29 j 23:16	19° 8 18'08	10.00491 AU	minimum elong	-1967 Aug 19 j 05:01	8° Ω 47'45	1°48'59
morning rise	-1973 Jun 16 j 14:07	21° 8 35'13		max. Earth dist.	-1967 Aug 19 j 07:39	8° Ω 48'33	10.73338 AU
retrograde	-1973 Sep 28 j 14:16	29° 8 46'57		morning rise	-1967 Sep 05 j 06:21	10° Ω 50'48	
opposition	-1973 Dec 03 j 23:42	26° 8 19'06	-1°07'09		-1967 Oct 13 j 21:12	15° Ω	
min. Earth dist.	-1973 Dec 03 j 13:25	26° 8 21'13	8.04744 AU	retrograde	-1967 Dec 13 j 11:05	18° Ω 00′27	
direct	-1972 Feb 09 j 06:49	22° 8 49'23			-1966 Feb 15 j 15:08	15°R Ω	
	-1972 May 16 j 16:05	Π °0		opposition	-1966 Feb 19 j 14:53	14° Ω 41'43	2°24'37
evening set	-1972 May 25 j 09:13	1° Ⅱ 05'19		min. Earth dist.	-1966 Feb 19 j 12:35	14° N 42'10	8.79563 AU
				direct	-1966 May 01 j 10:38	11° Ω 17′08	
conjunction	-1972 Jun 12 j 13:31	3° Ⅱ 25′19	-0°37'18		-1966 Jul 10 j 22:45	15° Ω	
minimum elong	-1972 Jun 12 j 13:33	3° Ⅲ 25′20	0°37'16	evening set	-1966 Aug 14 j 11:25	18° Ω 44'22	
max. Earth dist.	-1972 Jun 13 j 02:33	3° Ⅱ 29'32	10.09624 AU				
morning rise	-1972 Jun 30 j 15:15	5° Ⅱ 44'28		conjunction	-1966 Aug 31 j 12:37	20° Ω 45'59	2°05'43
retrograde	-1972 Oct 11 j 11:53	13° Ⅱ 44'59		minimum elong	-1966 Aug 31 j 12:34	20° Ω 45'58	2°05'45
opposition	-1972 Dec 16 j 23:19	10° Ⅱ 18'40	-0°25'50	max. Earth dist.	-1966 Aug 31 j 13:40	20° Ω 46′18	10.85326 AU
min. Earth dist.	-1972 Dec 16 j 13:18	10° Ⅱ 20'43	8.14971 AU	morning rise	-1966 Sep 17 j 08:56	22° Ω 46'11	
direct	-1971 Feb 22 j 21:36	6° Ⅱ 49'14		retrograde	-1966 Dec 25 j 08:12	29° Ω 49'09	
evening set	-1971 Jun 09 j 04:48	14° Ⅱ 58'42		opposition	-1965 Mar 03 j 23:16	26° Ω 31'22	2°41'28
				min. Earth dist.	-1965 Mar 03 j 22:51	26° Ω 31'27	8.90899 AU
conjunction	-1971 Jun 27 j 06:44	17° Ⅱ 16'12	-0°03'44	direct	-1965 May 14 j 03:32	23° Ω 07'59	
minimum elong	-1971 Jun 27 j 06:44	17° I I16'11	0°03'43		-1965 Aug 22 j 15:10	0° m)	
behind sun begin	-1971 Jun 26 j 23:29	17° Ⅱ 13'54		evening set	-1965 Aug 26 j 14:19	0° m/27'26	
behind sun end	-1971 Jun 27 j 13:58	17° Ⅱ 18'29		•			
max. Earth dist.	-1971 Jun 27 j 18:44	17° Ⅲ 20′00	10.20852 AU	conjunction	-1965 Sep 12 j 10:58	2° m/26'32	2°16'50
morning rise	-1971 Jul 15 j 04:51	19° Ⅱ 32'29		minimum elong	-1965 Sep 12 j 10:56	2° m/26'31	2°16'52
asc. node	-1971 Aug 07 j 18:17	22° I [21'15		max. Earth dist.	-1965 Sep 12 j 10:02	2° m/26'15	10.95795 AU
retrograde	-1971 Oct 25 j 00:40	27° Ⅲ 21'25		morning rise	-1965 Sep 29 j 03:09	4° m/24'23	
opposition	-1971 Dec 30 j 16:16	23° Ⅱ 56'47	0°15'50	retrograde	-1964 Jan 06 j 01:27	11° m ,22'11	
min. Earth dist.	-1971 Dec 30 j 07:29	23° II 58'33	8.26946 AU	opposition	-1964 Mar 15 j 03:14	8° m 05'06	2°51'20
direct	-1970 Mar 09 j 05:16	20° Ⅲ 27'58		min. Earth dist.	-1964 Mar 15 j 05:25	8° Mp 04'42	9.00501 AU
evening set	-1970 Jun 23 j 14:08	28° Ⅲ 29'42		direct	-1964 May 25 j 13:26	4° m 42'51	
C	-1970 Jul 05 j 15:48	0ං ම		evening set	-1964 Sep 06 j 08:53	11° m 55'25	
	J			C	1 3	•	
conjunction	-1970 Jul 11 j 12:13	0°9544'11	0°29'22	conjunction	-1964 Sep 23 j 01:35	13° m 52'29	2°22'15
minimum elong	-1970 Jul 11 j 12:11	0°9544'11	0°29'23	minimum elong	-1964 Sep 23 j 01:35	13° m 52'29	2°22'16
max. Earth dist.	-1970 Jul 11 j 22:27	0°9647'24	10.33455 AU	max. Earth dist.	-1964 Sep 22 j 21:45	13° m 51'21	11.04358 AU
morning rise	-1970 Jul 29 j 05:39	2°957'14		morning rise	-1964 Oct 09 j 14:41	15° m 48'31	
retrograde	-1970 Nov 07 j 04:45	10°934'55		retrograde	-1963 Jan 16 j 13:23	22° m/42'43	
opposition	-1969 Jan 13 j 02:11	7°511'59	0°55'24	opposition	-1963 Mar 27 j 03:40	19° m 26'04	2°54'18
min. Earth dist.	-1969 Jan 12 j 19:14	7°9513'23	8.40012 AU	min. Earth dist.	-1963 Mar 27 j 07:46	19° m 25'18	9.08027 AU
direct	-1969 Mar 23 j 05:53	3°5544'02		direct	-1963 Jun 06 j 16:46	16° Mp 04'53	
evening set	-1969 Jul 07 j 12:31	11° © 37'19		evening set	-1963 Sep 17 j 20:31	23° TD 11'36	
conjunction	-1969 Jul 25 j 05:41	13°5548'30	0°59'59	conjunction	-1963 Oct 04 j 10:21	25° Mp 07'11	2°22'04
minimum elong	-1969 Jul 25 j 05:39	13° 5 548'29	1°00'01	minimum elong	-1963 Oct 04 j 10:21	25° Mp 07'11	2°22'03
max. Earth dist.	-1969 Jul 25 j 13:24		10.46814 AU	max. Earth dist.	-1963 Oct 04 j 04:30		11.10733 AU
morning rise	-1969 Aug 11 j 17:52	15° © 58'07		morning rise	-1963 Oct 20 j 21:20	27° m 01'58	
retrograde	-1969 Nov 19 j 22:14	23° © 25'16			-1963 Nov 17 j 10:04	0∘ ⊽	
opposition	-1968 Jan 26 j 04:54	20° © 03'57	1°30'55	retrograde	-1962 Jan 28 j 01:44	3° ≏ 54'12	
min. Earth dist.	-1968 Jan 25 j 23:57	20° © 04'55	8.53555 AU	opposition	-1962 Apr 08 j 01:36		2°50'36
direct	-1968 Apr 04 j 23:42	16° © 37'00		min. Earth dist.	-1962 Apr 08 j 06:35	0° ჲ 36'46	9.13229 AU
evening set	-1968 Jul 19 j 23:25	24° © 21'31			-1962 Apr 16 j 15:35	30°R, MD	
				direct	-1962 Jun 18 j 17:16	27° m 17'29	
conjunction	-1968 Aug 06 j 11:09	26°529'17	1°26'50		-1962 Aug 17 j 16:51	0∘ ⊽	
minimum elong	-1968 Aug 06 j 11:06	26°529'16	1°26'52	evening set	-1962 Sep 29 j 02:49	4° ≏ 19'31	
max. Earth dist.	-1968 Aug 06 j 15:50		10.60315 AU				
morning rise	-1968 Aug 23 j 17:51	28° © 35'31		conjunction	-1962 Oct 15 j 14:53	6° ≏ 14'12	
	-1968 Sep 04 j 17:17	0 $^{\circ}\Omega$		minimum elong	-1962 Oct 15 j 14:54	6° ₽ 14'13	
retrograde	-1968 Dec 01 j 07:22	5° Ω 53'15		max. Earth dist.	-1962 Oct 15 j 08:21		11.14704 AU
opposition	-1967 Feb 07 j 00:59	2° Ω 33'20	2°00'57	morning rise	-1962 Nov 01 j 00:38	8° ഫ 08'18	
min. Earth dist.	-1967 Feb 06 j 21:26	2° Ω 34'02	8.66940 AU	retrograde	-1961 Feb 08 j 14:42	15° ≏ 00'07	
	-1967 Mar 16 j 10:00	30° ₹ 5		opposition	-1961 Apr 19 j 22:12	11° ≏ 43'31	2°40'34
direct	-1967 Apr 18 j 10:00	29° © 07'32		min. Earth dist.	-1961 Apr 20 j 04:14	11° ≏ 42'24	9.15924 AU
	-1967 May 21 j 03:27	0 $^{\circ}\Omega$		direct	-1961 Jun 30 j 11:20	8° ≏ 24'10	
evening set	-1967 Aug 01 j 22:48	6° Ω 43'15		evening set	-1961 Oct 10 j 05:52	15° ≏ 22'50	
	1007 4 10:07 0:	00 0 47:45	1040157		10/10 + 2/11/25	170 0 17:00	2005140
conjunction	-1967 Aug 19 j 05:04	8° Ω 47'46	1~48.57	conjunction	-1961 Oct 26 j 16:55	17° ≏ 17'09	2*05'49

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 37 Attention, astronomical year style is used: The year -1961 in astronomical counting style is the year 1962 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -1961 i	n astronomical cou	inting style is the year		ounting style.	
minimum elong	-1961 Oct 26 j 16:57	17° ≏ 17'10	2°05'47	conjunction	-1954 Jan 01 j 03:35	25° х 32′48	-0°16'28
max. Earth dist.	-1961 Oct 26 j 08:56	17° ≏ 14'49	11.16134 AU	minimum elong	-1954 Jan 01 j 03:34	25° х 32′48	0°16'30
morning rise	-1961 Nov 12 j 02:28	19° 亞 11'08		max. Earth dist.	-1955 Dec 31 j 18:00	25° ∡ ¹29'54	10.74595 AU
retrograde	-1960 Feb 20 j 03:20	26° ♀ 04'07		morning rise	-1954 Jan 18 j 02:50	27° ∡ ³35'58	
opposition	-1960 Apr 30 j 18:42	22° ≏ 47'13	2°24'38		-1954 Feb 08 j 01:49	0°ರ	
min. Earth dist.	-1960 May 01 j 02:26	22° ≏ 45'48	9.16030 AU	retrograde	-1954 May 02 j 19:23	5° る 08'26	
direct	-1960 Jul 11 j 02:29	19° ≙ 28'31		opposition	-1954 Jul 12 j 10:20	1° る 44'56	-0°38'50
evening set	-1960 Oct 20 j 07:24	26° ≙ 25'15		min. Earth dist.	-1954 Jul 12 j 17:54	1° る 43'30	8.68139 AU
					-1954 Aug 05 j 14:14	30°₽ ⋌ ¹	
conjunction	-1960 Nov 05 j 18:11	28° ≙ 19'43	1°50'27	direct	-1954 Sep 19 j 01:13	28° ∡ ¹25'18	
minimum elong	-1960 Nov 05 j 18:14	28° ₽ 19'44	1°50'26		-1954 Nov 01 j 00:20	0°⋜	
max. Earth dist.	-1960 Nov 05 j 08:19	28° ≙ 16'50	11.14985 AU	evening set	-1954 Dec 27 j 15:00	5° ⋜ 42'31	
	-1960 Nov 20 j 03:21	0°M		C	J		
morning rise	-1960 Nov 22 j 04:37	0°ML14'07		conjunction	-1953 Jan 13 j 13:23	7° る 46'59	-0°45'57
retrograde	-1959 Mar 02 j 19:19	7° M L09'55		minimum elong	-1953 Jan 13 j 13:21	7° る 46'59	0°45'59
opposition	-1959 May 12 j 16:23	3°M52'26	2°03'18	max. Earth dist.	-1953 Jan 13 j 05:36	7°る44'35	10.61611 AU
min. Earth dist.	-1959 May 13 j 01:24	3°M50'48	9.13554 AU	morning rise	-1953 Jan 30 j 16:00	9° ප 52'51	
direct	-1959 Jul 22 j 17:55	0°M34'11		retrograde	-1953 May 16 j 05:26	17° ට 36'11	
evening set	-1959 Oct 31 j 08:59	7°M30'25		opposition	-1953 Jul 25 j 11:56	14°る11'06	-1°14'44
evening sec	1909 000 31 1 00.09	7 1103023		min. Earth dist.	-1953 Jul 25 j 17:44	14°る09'59	8.54809 AU
conjunction	-1959 Nov 16 j 20:27	9°M25'33	1°30'53	direct	-1953 Oct 01 j 12:32	10°る50'28	0.5 1005 110
minimum elong	-1959 Nov 16 j 20:29	9°M25'34	1°30'52	evening set	-1952 Jan 09 j 08:27	18° ろ 16'16	
max. Earth dist.	-1959 Nov 16 j 10:01		11.11290 AU	evening set	-1932 Jan 09 J 08.27	18 01010	
morning rise	-1959 Dec 03 j 08:26	11°M20'53	11.11290 AU	conjunction	-1952 Jan 26 j 09:56	20° る 23'27	1014'02
morning risc	-1958 Jan 06 j 22:36	15°M		minimum elong	-1952 Jan 26 j 09:54	20° ろ 23'27	
ratra ara da	-1958 Mar 14 j 14:50	18°M21'06		max. Earth dist.	-1952 Jan 26 j 03:45		10.48023 AU
retrograde	3		1927!10		•		10.48023 AU
opposition	-1958 May 24 j 16:09	15°M02'46	1°37'10	morning rise	-1952 Feb 12 j 16:04	22° る 32'10	
min. Earth dist.	-1958 May 25 j 01:07	15°M01'08	9.08566 AU	matria arrada	-1952 May 06 j 00:36	0° ≈ 0° ≈ 26'51	
J: 4	-1958 May 25 j 07:16	15°RM		retrograde	-1952 May 29 j 00:56	0 ≈2031 30°Rる	
direct	-1958 Aug 03 j 08:59	11°M44'45			-1952 Jun 21 j 04:07	•	1040100
	-1958 Oct 07 j 13:19	15°M		opposition	-1952 Aug 06 j 20:45	27° る 00'11	
evening set	-1958 Nov 11 j 12:51	18° M .42'02		min. Earth dist.	-1952 Aug 07 j 00:44		8.41170 AU
	1050 N	200 M 20110	1007140	direct	-1952 Oct 13 j 07:42	23° る 38'22	
conjunction	-1958 Nov 28 j 01:44	20°M38'18	1°07'40		-1951 Jan 11 j 11:54	0°≈	
minimum elong	-1958 Nov 28 j 01:46	20°M38'19	1°07'38	evening set	-1951 Jan 21 j 13:51	1°≈13'52	
max. Earth dist.	-1958 Nov 27 j 15:41		11.05150 AU		1051 E 1 07 : 10 20	20 22155	1020111
morning rise	-1958 Dec 14 j 15:46	22°M35'00		conjunction	-1951 Feb 07 j 18:39	3°≈23'55	
retrograde	-1957 Mar 26 j 18:26	29°M41'11	100055	minimum elong	-1951 Feb 07 j 18:36	3°≈23'54	
opposition	-1957 Jun 05 j 19:04	26°M21'49		max. Earth dist.	-1951 Feb 07 j 13:28		10.34407 AU
min. Earth dist.	-1957 Jun 06 j 03:42		9.01224 AU	morning rise	-1951 Feb 25 j 04:30	5°≈35'35	
direct	-1957 Aug 15 j 02:04	23°M 03'47		retrograde	-1951 Jun 12 j 05:52	13° ≈ 41'27	
evening set	-1957 Nov 22 j 20:51	0° ∡ 03'41		opposition	-1951 Aug 20 j 12:45	10°≈13'22	
	-1957 Nov 22 j 08:11	0° ∡ ¹		min. Earth dist.	-1951 Aug 20 j 15:26		8.27853 AU
				direct	-1951 Oct 26 j 10:33	6° ≈ 50'12	
conjunction	-1957 Dec 09 j 11:28	2° ∡ 01'30	0°41'28				
minimum elong		_		evening set	-1950 Feb 04 j 07:39	14° ≈ 36′09	
max. Earth dist.	-1957 Dec 09 j 11:30	2° ∡ '01'30	0°41'25	evening set	-1950 Feb 04 j 07:39 -1950 Feb 07 j 11:12	14°≈36'09 15°≈	
	-1957 Dec 09 j 01:13	1° ∡ 758′27	0°41'25		-1950 Feb 07 j 11:12	15° ≈	
morning rise	-1957 Dec 09 j 01:13 -1957 Dec 26 j 04:12	1° х 58′27 4° х 00′01	0°41'25	conjunction	-1950 Feb 07 j 11:12 -1950 Feb 21 j 16:05	15° ≈ 16° ≈ 49'06	
morning rise retrograde	-1957 Dec 09 j 01:13 -1957 Dec 26 j 04:12 -1956 Apr 07 j 02:47	1° х 58′27 4° х 00′01 11° х 13′38	0°41'25 10.96773 AU	conjunction minimum elong	-1950 Feb 07 j 11:12 -1950 Feb 21 j 16:05 -1950 Feb 21 j 16:02	15°≈ 16°≈49'06 16°≈49'05	1°59'42
morning rise	-1957 Dec 09 j 01:13 -1957 Dec 26 j 04:12 -1956 Apr 07 j 02:47 -1956 Jun 17 j 02:38	1° х 58′27 4° х 00′01	0°41'25 10.96773 AU	conjunction minimum elong max. Earth dist.	-1950 Feb 07 j 11:12 -1950 Feb 21 j 16:05 -1950 Feb 21 j 16:02 -1950 Feb 21 j 12:37	15°≈ 16°≈49'06 16°≈49'05	
morning rise retrograde	-1957 Dec 09 j 01:13 -1957 Dec 26 j 04:12 -1956 Apr 07 j 02:47 -1956 Jun 17 j 02:38 -1956 Jun 17 j 11:12	1° ₹ 58'27 4° ₹ 00'01 11° ₹ 13'38 7° ₹ 53'03 7° ₹ 51'27	0°41'25 10.96773 AU	conjunction minimum elong	-1950 Feb 07 j 11:12 -1950 Feb 21 j 16:05 -1950 Feb 21 j 16:02	15°≈ 16°≈49'06 16°≈49'05	1°59'42
morning rise retrograde opposition	-1957 Dec 09 j 01:13 -1957 Dec 26 j 04:12 -1956 Apr 07 j 02:47 -1956 Jun 17 j 02:38	1° ₹ 58'27 4° ₹ 00'01 11° ₹ 13'38 7° ₹ 53'03	0°41'25 10.96773 AU 0°33'25	conjunction minimum elong max. Earth dist.	-1950 Feb 07 j 11:12 -1950 Feb 21 j 16:05 -1950 Feb 21 j 16:02 -1950 Feb 21 j 12:37	15°≈ 16°≈49'06 16°≈49'05 16°≈47'59	1°59'42
morning rise retrograde opposition min. Earth dist.	-1957 Dec 09 j 01:13 -1957 Dec 26 j 04:12 -1956 Apr 07 j 02:47 -1956 Jun 17 j 02:38 -1956 Jun 17 j 11:12	1° ₹ 58'27 4° ₹ 00'01 11° ₹ 13'38 7° ₹ 53'03 7° ₹ 51'27	0°41'25 10.96773 AU 0°33'25	conjunction minimum elong max. Earth dist. morning rise	-1950 Feb 07 j 11:12 -1950 Feb 21 j 16:05 -1950 Feb 21 j 16:02 -1950 Feb 21 j 12:37 -1950 Mar 11 j 05:41	15°≈ 16°≈49'06 16°≈49'05 16°≈47'59 19°≈03'42	1°59'42 10.21485 AU
morning rise retrograde opposition min. Earth dist. direct	-1957 Dec 09 j 01:13 -1957 Dec 26 j 04:12 -1956 Apr 07 j 02:47 -1956 Jun 17 j 02:38 -1956 Jun 17 j 11:12 -1956 Aug 25 j 19:35 -1956 Dec 03 j 10:37	1° ₹ 58'27 4° ₹ 00'01 11° ₹ 13'38 7° ₹ 53'03 7° ₹ 51'27 4° ₹ 34'45	0°41'25 10.96773 AU 0°33'25	conjunction minimum elong max. Earth dist. morning rise retrograde	-1950 Feb 07 j 11:12 -1950 Feb 21 j 16:05 -1950 Feb 21 j 16:02 -1950 Feb 21 j 12:37 -1950 Mar 11 j 05:41 -1950 Jun 26 j 18:50 -1950 Sep 03 j 11:47 -1950 Sep 03 j 12:54	15°≈ 16°≈49'06 16°≈49'05 16°≈47'59 19°≈03'42 27°≈19'48 23°≈50'30 23°≈50'16	1°59'42 10.21485 AU
morning rise retrograde opposition min. Earth dist. direct	-1957 Dec 09 j 01:13 -1957 Dec 26 j 04:12 -1956 Apr 07 j 02:47 -1956 Jun 17 j 02:38 -1956 Jun 17 j 11:12 -1956 Aug 25 j 19:35 -1956 Dec 03 j 10:37	1° \$\times 58'27 4° \$\times 00'01 11° \$\times 13'38 7° \$\times 53'03 7° \$\times 51'27 4° \$\times 34'45 11° \$\times 38'52 13° \$\times 38'34	0°41'25 10.96773 AU 0°33'25 8.91794 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-1950 Feb 07 j 11:12 -1950 Feb 21 j 16:05 -1950 Feb 21 j 16:02 -1950 Feb 21 j 12:37 -1950 Mar 11 j 05:41 -1950 Jun 26 j 18:50 -1950 Sep 03 j 11:47 -1950 Sep 03 j 12:54 -1950 Nov 08 j 23:00	15°≈ 16°≈49'06 16°≈49'05 16°≈47'59 19°≈03'42 27°≈19'48 23°≈50'30 23°≈50'16 20°≈25'56	1°59'42 10.21485 AU -2°39'10
morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-1957 Dec 09 j 01:13 -1957 Dec 26 j 04:12 -1956 Apr 07 j 02:47 -1956 Jun 17 j 02:38 -1956 Jun 17 j 11:12 -1956 Aug 25 j 19:35 -1956 Dec 03 j 10:37 -1956 Dec 20 j 03:23 -1956 Dec 20 j 03:24	1° \$\times 58'27 4° \$\times 00'01 11° \$\times 13'38 7° \$\times 53'03 7° \$\times 51'27 4° \$\times 34'45 11° \$\times 38'52	0°41'25 10.96773 AU 0°33'25 8.91794 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-1950 Feb 07 j 11:12 -1950 Feb 21 j 16:05 -1950 Feb 21 j 16:02 -1950 Feb 21 j 12:37 -1950 Mar 11 j 05:41 -1950 Jun 26 j 18:50 -1950 Sep 03 j 11:47 -1950 Sep 03 j 12:54 -1950 Nov 08 j 23:00 -1949 Feb 18 j 13:32	15°≈ 16°≈49'06 16°≈49'05 16°≈47'59 19°≈03'42 27°≈19'48 23°≈50'30 23°≈50'16 20°≈25'56 28°≈22'15	1°59'42 10.21485 AU -2°39'10
morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-1957 Dec 09 j 01:13 -1957 Dec 26 j 04:12 -1956 Apr 07 j 02:47 -1956 Jun 17 j 02:38 -1956 Jun 17 j 11:12 -1956 Aug 25 j 19:35 -1956 Dec 03 j 10:37	1° \$\times 58'27 4° \$\times 00'01 11° \$\times 13'38 7° \$\times 53'03 7° \$\times 51'27 4° \$\times 34'45 11° \$\times 38'52 13° \$\times 38'34	0°41'25 10.96773 AU 0°33'25 8.91794 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-1950 Feb 07 j 11:12 -1950 Feb 21 j 16:05 -1950 Feb 21 j 16:02 -1950 Feb 21 j 12:37 -1950 Mar 11 j 05:41 -1950 Jun 26 j 18:50 -1950 Sep 03 j 11:47 -1950 Sep 03 j 12:54 -1950 Nov 08 j 23:00	15°≈ 16°≈49'06 16°≈49'05 16°≈47'59 19°≈03'42 27°≈19'48 23°≈50'30 23°≈50'16 20°≈25'56	1°59'42 10.21485 AU -2°39'10
morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-1957 Dec 09 j 01:13 -1957 Dec 26 j 04:12 -1956 Apr 07 j 02:47 -1956 Jun 17 j 02:38 -1956 Jun 17 j 11:12 -1956 Aug 25 j 19:35 -1956 Dec 03 j 10:37 -1956 Dec 20 j 03:23 -1956 Dec 20 j 03:24	1° \$\times 58'27 4° \$\times 00'01 11° \$\times 13'38 7° \$\times 53'03 7° \$\times 51'27 4° \$\times 34'45 11° \$\times 38'52 13° \$\times 38'34 13° \$\times 38'34	0°41'25 10.96773 AU 0°33'25 8.91794 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-1950 Feb 07 j 11:12 -1950 Feb 21 j 16:05 -1950 Feb 21 j 16:02 -1950 Feb 21 j 12:37 -1950 Mar 11 j 05:41 -1950 Jun 26 j 18:50 -1950 Sep 03 j 11:47 -1950 Sep 03 j 12:54 -1950 Nov 08 j 23:00 -1949 Feb 18 j 13:32	15°≈ 16°≈49'06 16°≈49'05 16°≈47'59 19°≈03'42 27°≈19'48 23°≈50'30 23°≈50'16 20°≈25'56 28°≈22'15	1°59'42 10.21485 AU -2°39'10
morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin	-1957 Dec 09 j 01:13 -1957 Dec 26 j 04:12 -1956 Apr 07 j 02:47 -1956 Jun 17 j 02:38 -1956 Jun 17 j 11:12 -1956 Aug 25 j 19:35 -1956 Dec 03 j 10:37 -1956 Dec 20 j 03:23 -1956 Dec 20 j 03:24 -1956 Dec 19 j 23:06	1° \$\times 58'27 4° \$\times 00'01 11° \$\times 13'38 7° \$\times 53'03 7° \$\times 51'27 4° \$\times 34'45 11° \$\times 38'52 13° \$\times 38'34 13° \$\times 33'18 13° \$\times 33'51	0°41'25 10.96773 AU 0°33'25 8.91794 AU	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-1950 Feb 07 j 11:12 -1950 Feb 21 j 16:05 -1950 Feb 21 j 16:02 -1950 Feb 21 j 12:37 -1950 Mar 11 j 05:41 -1950 Jun 26 j 18:50 -1950 Sep 03 j 11:47 -1950 Sep 03 j 12:54 -1950 Nov 08 j 23:00 -1949 Feb 18 j 13:32	15°≈ 16°≈49'06 16°≈49'05 16°≈47'59 19°≈03'42 27°≈19'48 23°≈50'30 23°≈50'16 20°≈25'56 28°≈22'15	1°59'42 10.21485 AU -2°39'10 8.15647 AU
morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end	-1957 Dec 09 j 01:13 -1957 Dec 26 j 04:12 -1956 Apr 07 j 02:47 -1956 Jun 17 j 02:38 -1956 Jun 17 j 11:12 -1956 Aug 25 j 19:35 -1956 Dec 03 j 10:37 -1956 Dec 20 j 03:23 -1956 Dec 20 j 03:24 -1956 Dec 19 j 23:06 -1956 Dec 20 j 07:41	1° \$\times 58'27 4° \$\times 00'01 11° \$\times 13'38 7° \$\times 53'03 7° \$\times 51'27 4° \$\times 34'45 11° \$\times 38'52 13° \$\times 38'34 13° \$\times 33'18 13° \$\times 33'51	0°41'25 10.96773 AU 0°33'25 8.91794 AU 0°13'08 0°13'05	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-1950 Feb 07 j 11:12 -1950 Feb 21 j 16:05 -1950 Feb 21 j 16:02 -1950 Feb 21 j 12:37 -1950 Mar 11 j 05:41 -1950 Jun 26 j 18:50 -1950 Sep 03 j 11:47 -1950 Sep 03 j 12:54 -1950 Nov 08 j 23:00 -1949 Feb 18 j 13:32 -1949 Mar 03 j 04:59	15°≈ 16°≈49'06 16°≈49'05 16°≈47'59 19°≈03'42 27°≈19'48 23°≈50'30 23°≈50'16 20°≈25'56 28°≈22'15 0°)€	1°59'42 10.21485 AU -2°39'10 8.15647 AU -2°13'55
morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist.	-1957 Dec 09 j 01:13 -1957 Dec 26 j 04:12 -1956 Apr 07 j 02:47 -1956 Jun 17 j 02:38 -1956 Jun 17 j 11:12 -1956 Aug 25 j 19:35 -1956 Dec 03 j 10:37 -1956 Dec 20 j 03:23 -1956 Dec 20 j 03:24 -1956 Dec 20 j 07:41 -1956 Dec 19 j 16:44	1° \$\times 58'27 4° \$\times 00'01 11° \$\times 13'38 7° \$\times 53'03 7° \$\times 51'27 4° \$\times 34'45 11° \$\times 38'52 13° \$\times 38'34 13° \$\times 33'18 13° \$\times 33'51 13° \$\times 35'23	0°41'25 10.96773 AU 0°33'25 8.91794 AU 0°13'08 0°13'05	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-1950 Feb 07 j 11:12 -1950 Feb 21 j 16:05 -1950 Feb 21 j 16:02 -1950 Feb 21 j 12:37 -1950 Mar 11 j 05:41 -1950 Jun 26 j 18:50 -1950 Sep 03 j 11:47 -1950 Sep 03 j 12:54 -1950 Nov 08 j 23:00 -1949 Feb 18 j 13:32 -1949 Mar 03 j 04:59	15°≈ 16°≈49'06 16°≈49'05 16°≈47'59 19°≈03'42 27°≈19'48 23°≈50'16 20°≈25'56 28°≈22'15 0°₩ 0°₩38'01 0°₩38'01	1°59'42 10.21485 AU -2°39'10 8.15647 AU -2°13'55
morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise	-1957 Dec 09 j 01:13 -1957 Dec 26 j 04:12 -1956 Apr 07 j 02:47 -1956 Jun 17 j 02:38 -1956 Jun 17 j 11:12 -1956 Aug 25 j 19:35 -1956 Dec 03 j 10:37 -1956 Dec 20 j 03:23 -1956 Dec 20 j 03:24 -1956 Dec 20 j 07:41 -1956 Dec 19 j 16:44 -1955 Jan 05 j 23:19	1° \$\times 58'27 4° \$\times 00'01 11° \$\times 13'38 7° \$\times 53'03 7° \$\times 51'27 4° \$\times 34'45 11° \$\times 38'52 13° \$\times 38'34 13° \$\times 33'18 13° \$\times 33'51 13° \$\times 35'23 15° \$\times 39'16	0°41'25 10.96773 AU 0°33'25 8.91794 AU 0°13'08 0°13'05	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-1950 Feb 07 j 11:12 -1950 Feb 21 j 16:05 -1950 Feb 21 j 16:02 -1950 Feb 21 j 12:37 -1950 Mar 11 j 05:41 -1950 Jun 26 j 18:50 -1950 Sep 03 j 11:47 -1950 Sep 03 j 12:54 -1950 Nov 08 j 23:00 -1949 Feb 18 j 13:32 -1949 Mar 08 j 01:53 -1949 Mar 08 j 01:53 -1949 Mar 08 j 01:52	15°≈ 16°≈49'06 16°≈49'05 16°≈47'59 19°≈03'42 27°≈19'48 23°≈50'16 20°≈25'56 28°≈22'15 0°₩ 0°₩38'01 0°₩38'01	1°59'42 10.21485 AU -2°39'10 8.15647 AU -2°13'55 2°13'56
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	-1957 Dec 09 j 01:13 -1957 Dec 26 j 04:12 -1956 Apr 07 j 02:47 -1956 Jun 17 j 02:38 -1956 Jun 17 j 11:12 -1956 Aug 25 j 19:35 -1956 Dec 03 j 10:37 -1956 Dec 20 j 03:23 -1956 Dec 20 j 03:24 -1956 Dec 20 j 07:41 -1956 Dec 19 j 16:44 -1955 Jan 05 j 23:19 -1955 Apr 19 j 18:10	1° \$\times 58'27 4° \$\times 00'01 11° \$\times 13'38 7° \$\times 53'03 7° \$\times 51'27 4° \$\times 34'45 11° \$\times 38'34 13° \$\times 38'34 13° \$\times 39'51 13° \$\times 35'23 15° \$\times 39'16 23° \$\times 01'45	0°41'25 10.96773 AU 0°33'25 8.91794 AU 0°13'08 0°13'05	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-1950 Feb 07 j 11:12 -1950 Feb 21 j 16:05 -1950 Feb 21 j 16:02 -1950 Feb 21 j 12:37 -1950 Mar 11 j 05:41 -1950 Jun 26 j 18:50 -1950 Sep 03 j 11:47 -1950 Sep 03 j 12:54 -1950 Nov 08 j 23:00 -1949 Feb 18 j 13:32 -1949 Mar 08 j 01:53 -1949 Mar 08 j 01:53 -1949 Mar 08 j 01:52 -1949 Mar 08 j 01:52	15°≈ 16°≈49'06 16°≈49'05 16°≈47'59 19°≈03'42 27°≈19'48 23°≈50'16 20°≈25'56 28°≈22'15 0°₩ 0°₩38'01 0°₩38'01 0°₩38'147	1°59'42 10.21485 AU -2°39'10 8.15647 AU -2°13'55 2°13'56
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	-1957 Dec 09 j 01:13 -1957 Dec 26 j 04:12 -1956 Apr 07 j 02:47 -1956 Jun 17 j 02:38 -1956 Jun 17 j 11:12 -1956 Aug 25 j 19:35 -1956 Dec 03 j 10:37 -1956 Dec 20 j 03:23 -1956 Dec 20 j 03:24 -1956 Dec 19 j 23:06 -1956 Dec 19 j 16:44 -1955 Jan 05 j 23:19 -1955 Apr 19 j 18:10 -1955 Jun 06 j 04:03	1° \$\times 58'27 4° \$\times 00'01 11° \$\times 13'38 7° \$\times 53'03 7° \$\times 51'27 4° \$\times 34'45 11° \$\times 38'52 13° \$\times 38'34 13° \$\times 39'51 13° \$\times 39'51 13° \$\times 39'16 23° \$\times 01'45 21° \$\times 20'48	0°41'25 10.96773 AU 0°33'25 8.91794 AU 0°13'08 0°13'05	conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-1950 Feb 07 j 11:12 -1950 Feb 21 j 16:05 -1950 Feb 21 j 16:02 -1950 Feb 21 j 12:37 -1950 Mar 11 j 05:41 -1950 Jun 26 j 18:50 -1950 Sep 03 j 11:47 -1950 Sep 03 j 12:54 -1950 Nov 08 j 23:00 -1949 Feb 18 j 13:32 -1949 Mar 08 j 01:53 -1949 Mar 08 j 01:52 -1949 Mar 08 j 01:52 -1949 Mar 08 j 01:52 -1949 Mar 08 j 01:52 -1949 Mar 08 j 01:52	15°≈ 16°≈49'06 16°≈49'05 16°≈47'59 19°≈03'42 27°≈19'48 23°≈50'30 23°≈50'16 20°≈25'56 28°≈22'15 0°₩ 0°₩38'01 0°₩38'01 0°₩37'47 2°₩55'20	1°59'42 10.21485 AU -2°39'10 8.15647 AU -2°13'55 2°13'56 10.10084 AU
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	-1957 Dec 09 j 01:13 -1957 Dec 26 j 04:12 -1956 Apr 07 j 02:47 -1956 Jun 17 j 02:38 -1956 Jun 17 j 11:12 -1956 Aug 25 j 19:35 -1956 Dec 03 j 10:37 -1956 Dec 20 j 03:23 -1956 Dec 20 j 03:24 -1956 Dec 19 j 23:06 -1956 Dec 19 j 16:44 -1955 Jan 05 j 23:19 -1955 Apr 19 j 18:10 -1955 Jun 06 j 04:03 -1955 Jun 29 j 15:34	1° \$\times 58'27 4° \$\times 00'01 11° \$\times 13'38 7° \$\times 53'03 7° \$\times 51'27 4° \$\times 38'52 13° \$\times 38'34 13° \$\times 38'34 13° \$\times 39'51 13° \$\times 39'51 13° \$\times 39'16 23° \$\times 01'45 21° \$\times 20'48 19° \$\times 39'46	0°41'25 10.96773 AU 0°33'25 8.91794 AU 0°13'08 0°13'05 10.86464 AU	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	-1950 Feb 07 j 11:12 -1950 Feb 21 j 16:05 -1950 Feb 21 j 16:02 -1950 Feb 21 j 12:37 -1950 Mar 11 j 05:41 -1950 Jun 26 j 18:50 -1950 Sep 03 j 11:47 -1950 Sep 03 j 12:54 -1950 Nov 08 j 23:00 -1949 Feb 18 j 13:32 -1949 Mar 08 j 01:53 -1949 Mar 08 j 01:52 -1949 Mar 08 j 01:52 -1949 Mar 08 j 01:52 -1949 Mar 08 j 01:12 -1949 Mar 25 j 19:08 -1949 Jul 11 j 12:38	15°≈ 16°≈49'06 16°≈49'05 16°≈47'59 19°≈03'42 27°≈19'48 23°≈50'16 20°≈25'56 28°≈22'15 0° ₩ 0° ₩38'01 0° ₩38'01 0° ₩37'47 2° ₩55'20 11° ₩19'45	1°59'42 10.21485 AU -2°39'10 8.15647 AU -2°13'55 2°13'56 10.10084 AU
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.	-1957 Dec 09 j 01:13 -1957 Dec 26 j 04:12 -1956 Apr 07 j 02:47 -1956 Jun 17 j 02:38 -1956 Jun 17 j 11:12 -1956 Aug 25 j 19:35 -1956 Dec 03 j 10:37 -1956 Dec 20 j 03:23 -1956 Dec 20 j 03:24 -1956 Dec 20 j 07:41 -1956 Dec 19 j 16:44 -1955 Jan 05 j 23:19 -1955 Apr 19 j 18:10 -1955 Jun 06 j 04:03 -1955 Jun 29 j 15:34 -1955 Jun 30 j 00:09	1° \$\stack*58'27 4° \$\tilde{\mathcal{A}}00'01 11° \$\tilde{\mathcal{A}}13'38 7° \$\tilde{\mathcal{A}}51'27 4° \$\tilde{\mathcal{A}}34'45 11° \$\tilde{\mathcal{A}}38'52 13° \$\tilde{\mathcal{A}}38'34 13° \$\tilde{\mathcal{A}}39'51 13° \$\tilde{\mathcal{A}}39'51 13° \$\tilde{\mathcal{A}}39'16 23° \$\tilde{\mathcal{A}}01'45 21° \$\tilde{\mathcal{A}}20'48 19° \$\tilde{\mathcal{A}}38'09	0°41'25 10.96773 AU 0°33'25 8.91794 AU 0°13'08 0°13'05 10.86464 AU	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 opposition	-1950 Feb 07 j 11:12 -1950 Feb 21 j 16:05 -1950 Feb 21 j 16:02 -1950 Feb 21 j 12:37 -1950 Mar 11 j 05:41 -1950 Jun 26 j 18:50 -1950 Sep 03 j 11:47 -1950 Sep 03 j 12:54 -1950 Nov 08 j 23:00 -1949 Feb 18 j 13:32 -1949 Mar 03 j 04:59 -1949 Mar 08 j 01:53 -1949 Mar 08 j 01:52 -1949 Mar 08 j 01:52 -1949 Mar 08 j 01:12 -1949 Mar 25 j 19:08 -1949 Jul 11 j 12:38 -1949 Sep 17 j 16:51	15°≈ 16°≈49'06 16°≈49'05 16°≈47'59 19°≈03'42 27°≈19'48 23°≈50'16 20°≈25'56 28°≈22'15 0° ₩ 0° ₩ 38'01 0° ₩ 38'01 0° ₩ 37'47 2° ₩ 55'20 11° ₩ 19'45 7° ₩ 49'29	1°59'42 10.21485 AU -2°39'10 8.15647 AU -2°13'55 2°13'56 10.10084 AU -2°52'38

evening set

-1948 Mar 04 j 06:36 12°**米**29'20

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1948 in astronomical counting style is the year 1949 BCE in historical counting style. -1948 Mar 21 i 23:07 14°**)**(47'38 -2°20'30 morning rise -1942 Jul 08 j 23:56 13°**Ⅱ**30′56 conjunction -1948 Mar 21 j 23:07 14°\(\dagger47'38\) 2°20'31 -1942 Oct 19 j 06:14 21°**Ⅲ**25'28 minimum elong retrograde max. Earth dist. -1948 Mar 22 j 01:55 14°**)** 48'33 10.00991 AU -1942 Dec 24 j 20:24 17°**I**I59'32 -0°03'17 opposition -1948 Apr 08 j 19:51 -1942 Dec 24 j 11:51 17°**₩**07'19 min. Earth dist. 18°**耳**01'17 8.20047 AU morning rise 15°**Ⅱ**45'29 -1948 Jul 25 j 10:23 -1941 Jan 23 j 16:35 retrograde 25°**)** 37'10 asc. node 14°**Ⅱ**29'51 -1948 Oct 01 j 02:23 22°\cdot\06'18 -2°55'50 opposition direct -1941 Mar 03 j 02:55 -1941 Jun 17 j 10:33 min. Earth dist. -1948 Sep 30 j 23:00 22°**₭**07'00 7.97703 AU evening set 22°**Ⅲ**35'31 direct -1948 Dec 06 j 03:53 18°**)** 39'01 -1941 Jul 05 j 10:33 evening set -1947 Mar 19 j 08:46 26°**¥**52'37 conjunction 24°**Ⅲ**51'34 0°14'19 -1941 Jul 05 j 10:32 $24^{\circ} \Pi 51'33$ minimum elong 0°14'21 -1941 Jul 05 j 07:22 conjunction -1947 Apr 06 j 05:27 29°\(\pi\)13'03 -2°18'31 behind sun begin 24°II50'34 -1947 Apr 06 j 05:29 -1941 Jul 05 j 13:43 minimum elong 29°\ 13'03 2°18'31 behind sun end 24°**Ⅲ**52'33 -1947 Apr 06 j 11:45 -1941 Jul 05 j 20:43 max. Earth dist. 29°**₭**15'07 9.94834 AU max. Earth dist. 24°**Ⅲ**54'47 10.26292 AU -1947 Apr 12 j 03:51 $0^{\circ}\Upsilon$ morning rise -1941 Jul 23 j 06:34 27°**Ⅱ**06'18 morning rise -1947 Apr 24 j 05:21 1°Y34'32 -1941 Aug 16 j 17:58 0ಂತಾ retrograde -1947 Aug 09 j 09:48 10°**Y**06′17 retrograde -1941 Nov 01 j 13:46 4°9549'22 opposition -1947 Oct 15 j 14:38 6°Y35'15 -2°47'57 opposition -1940 Jan 07 j 09:19 1°525'06 0°37'32 min. Earth dist. -1947 Oct 15 j 08:44 6°**Y**36′29 7.93185 AU min. Earth dist. -1940 Jan 07 j 01:08 1°9526'45 8.32717 AU direct -1947 Dec 20 j 16:00 3°Y06'49 -1940 Jan 25 j 13:41 30°RⅡ evening set -1946 Apr 03 j 17:12 11°Y25'49 direct -1940 Mar 16 j 07:24 27°II56'12 -1940 May 05 j 06:48 0ಂತಾ conjunction -1946 Apr 21 i 17:35 13°**Y**47'43 -2°07'44 evening set -1940 Jun 30 i 13:55 5°953'39 minimum elong -1946 Apr 21 i 17:38 13°**Y**47'44 2°07'43 max. Earth dist. -1946 Apr 22 i 02:46 13°**Y**50'45 9.92034 AU conjunction -1940 Jul 18 i 09:35 8°906'29 0°46'13 -1946 May 09 j 19:58 morning rise 16°**Y**10′16 -1940 Jul 18 i 09:33 8°9506'28 0°46'15 minimum elong -1946 Aug 24 j 08:00 24°\bar{Y}40'10 max. Earth dist. -1940 Jul 18 j 18:33 10.39512 AU retrograde 8°909'17 opposition -1946 Oct 30 j 03:23 21°**Υ**09'24 -2°29'12 -1940 Aug 05 j 00:27 morning rise 10°9317'49 -1946 Oct 29 j 19:36 21°**Υ**11'02 7.92117 AU -1940 Nov 13 j 11:27 min. Earth dist. retrograde 17°9549'53 -1945 Jan 04 j 08:08 17°**Y**40′04 -1939 Jan 19 j 15:01 opposition 14°9527'20 1°15'06 direct -1945 Apr 19 j 04:26 26°**Y**01'39 -1939 Jan 19 j 07:42 min. Earth dist. 14°9528'47 8.46314 AU evening set -1939 Mar 30 j 04:29 10°959'29 direct -1945 May 07 j 07:41 28°\bar{\gamma}24'11 -1°48'46 -1939 Jul 14 j 05:54 conjunction evening set 18°9548'09 -1945 May 07 j 07:45 28°**Y**24'12 1°48'45 minimum elong -1945 May 07 j 18:56 28°**Y**27'54 9.92783 AU -1939 Jul 31 j 20:24 20°957'35 1°14'57 max. Earth dist. conjunction -1945 May 19 j 11:06 -1939 Jul 31 j 20:21 0° 8 minimum elong 20°957'34 1°14'58 -1945 May 25 j 11:37 0°**8**46'56 -1939 Aug 01 j 04:05 morning rise max. Earth dist. 20°959'57 10.53278 AU -1945 Sep 08 j 02:22 -1939 Aug 18 j 05:39 retrograde 9°**8**11'26 morning rise 23°905'25 opposition -1945 Nov 13 j 14:33 5°**8**41'22 -2°00'55 -1939 Nov 03 j 10:52 0° Ω min. Earth dist. -1945 Nov 13 j 05:41 5°**8**43'14 7.94570 AU retrograde -1939 Nov 26 j 01:34 0°Ω27'29 direct -1944 Jan 19 j 03:35 2°811'25 -1939 Dec 18 j 20:45 30°Rூ -1944 May 03 j 14:53 10°**8**32'39 opposition -1938 Feb 01 j 14:00 27°506'35 1°47'47 evening set min. Earth dist. -1938 Feb 01 j 08:32 27°9507'39 8.60135 AU -1944 May 21 j 19:46 12°854'53 -1°23'00 direct -1938 Apr 12 j 16:40 23°539'58 conjunction -1944 May 21 j 19:49 12°**8**54'55 1°22'58 -1938 Jul 16 j 01:43 minimum elong 0° Ω max. Earth dist. -1944 May 22 j 08:02 12°**8**58'55 9.97002 AU -1938 Jul 27 j 10:16 1°**Ω**19'44 evening set -1944 Jun 06 i 19:26 15°8 -1944 Jun 08 i 23:58 morning rise 15°**8**16'54 conjunction -1938 Aug 13 j 19:14 3°Ω25'48 1°39'19 retrograde -1944 Sep 21 i 12:42 23°**8**33'03 minimum elong -1938 Aug 13 j 19:11 3°Ω25'47 1°39'21 opposition -1944 Nov 26 j 22:07 20°804'07 -1°25'18 max. Earth dist. -1938 Aug 14 j 00:42 3°Ω27'28 10.66909 AU min. Earth dist. -1944 Nov 26 i 13:06 20°805'59 8.00343 AU morning rise -1938 Aug 30 j 22:57 5°Ω30'18 direct -1943 Feb 01 j 23:06 16°833'53 retrograde -1938 Dec 08 j 08:37 12°Ω43'36 -1943 May 18 j 21:20 24°852'03 -1937 Feb 14 j 06:33 9°Ω24'11 2°14'27 evening set opposition min. Earth dist. -1937 Feb 14 j 03:22 9°**Ω**24'48 8.73519 AU conjunction -1943 Jun 06 j 02:11 27°813'01 -0°52'25 direct -1937 Apr 25 j 19:51 5°**Ω**58'55 -1937 Aug 09 j 03:49 minimum elong -1943 Jun 06 j 02:13 27°**8**13'02 0°52'23 evening set 13°**Ω**30'03 max. Earth dist. -1943 Jun 06 j 14:16 27°816'56 10.04355 AU -1937 Aug 21 j 17:35 15°**Ω** -1943 Jun 24 j 05:05 29°**8**33'19 morning rise -1943 Jun 27 j 17:26 $0^{\circ}\Pi$ -1937 Aug 26 j 07:19 15°**Ω**33'01 1°58'36 conjunction -1943 Oct 05 j 14:02 7°**Ⅲ**39'10 -1937 Aug 26 j 07:17 retrograde minimum elong 15°**£**33′00 1°58'37 4°II1'38 -0°45'07 -1937 Aug 26 j 09:43 15°**Ω**33'44 10.79787 AU opposition -1943 Dec 11 j 00:26 max. Earth dist. 8.09026 AU min. Earth dist. -1943 Dec 10 j 15:42 4°**Ⅱ**13'26 morning rise -1937 Sep 12 j 05:58 17°**£**34′30 direct -1942 Feb 16 j 15:46 0°**Ⅱ**41'30 retrograde -1937 Dec 20 j 06:28 24°**Ω**40'24 evening set -1942 Jun 02 j 20:41 8°**Ⅲ**54'18 opposition -1936 Feb 26 j 17:13 21°**Ω**22'15 2°34'27 min. Earth dist. -1936 Feb 26 j 16:00 21°**Ω**22'29 8.85869 AU conjunction -1942 Jun 20 j 23:49 11°**Ⅲ**13'07 -0°19'16 direct -1936 May 07 j 17:17 17°**Ω**58'22 minimum elong -1942 Jun 20 j 23:50 11°**I**13'08 0°19'14 -1936 Aug 20 j 11:17 25°**Ω**21'27 evening set

max. Earth dist.

-1942 Jun 21 j 11:01

11°**Д**16'43 10.14333 AU

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1936 in astronomical counting style is the year 1937 BCE in historical counting style. -1936 Sep 06 j 09:51 27°Ω21'39 2°12'20 conjunction -1930 Nov 12 j 05:40 4°**ጤ**38'27 1°40'10 conjunction -1936 Sep 06 j 09:49 27°Ω21'38 2°12'21 -1930 Nov 12 j 05:42 4°MJ38'28 1°40'10 minimum elong minimum elong -1936 Sep 06 j 09:41 27°**Ω**21'36 10.91371 AU -1930 Nov 11 j 19:07 4°M35'22 11.13864 AU max. Earth dist. max. Earth dist. -1936 Sep 23 j 04:02 29°**Ω**20'32 -1930 Nov 28 j 16:43 6°M33'16 morning rise morning rise -1936 Sep 28 j 20:39 -1929 Mar 09 j 16:50 0° m retrograde 13°MJ31'18 -1929 May 19 j 14:58 retrograde -1936 Dec 31 j 01:58 6° Mp 20'35 opposition 10° M 13'421°49'29 -1935 Mar 09 j 23:12 min. Earth dist. 9.11505 AU opposition 3° Mp 03'25 2°47'30 -1929 May 20 j 00:45 10° ML11'54-1929 Jul 29 j 11:10 min. Earth dist. 8.96676 AU -1935 Mar 09 j 23:11 3° Mp 03'25 direct 6°M55'49 -1935 Apr 30 j 05:41 30°RΩ evening set -1929 Nov 06 j 21:31 13°M52'36 direct -1935 May 20 j 07:26 29°**Ω**40'55 -1929 Nov 16 j 13:18 15°M -1935 Jun 09 j 04:20 0° m -1929 Nov 23 j 09:34 evening set -1935 Sep 01 j 09:38 6° m 56'37 conjunction 15°M48'18 1°18'32 -1929 Nov 23 j 09:37 minimum elong 15°M48'18 1°18'31 conjunction -1935 Sep 18 j 04:07 8° m 54'33 2°20'21 max. Earth dist. -1929 Nov 22 j 21:21 15°M44'42 11.08372 AU minimum elong -1935 Sep 18 j 04:06 8° m 54'33 2°20'22 morning rise -1929 Dec 09 j 22:39 17°M44'20 max. Earth dist. -1935 Sep 18 j 02:40 8° m 54'08 11.01205 AU retrograde -1928 Mar 20 j 16:04 24°M47'44 morning rise -1935 Oct 04 j 18:33 10° Mp 51'20 opposition -1928 May 30 j 16:50 21°M29'01 1°21'01 retrograde -1934 Jan 11 j 17:54 17° mp 47'04 min. Earth dist. -1928 May 31 j 03:35 21° ML27'029.04735 AU opposition -1934 Mar 22 j 01:22 14° Mp 30'35 2°53'36 direct -1928 Aug 09 j 03:56 18°M11'02 min. Earth dist. -1934 Mar 22 j 03:05 14° Mp 30'16 9.05523 AU evening set -1928 Nov 17 j 03:40 25°M09'47 direct -1934 Jun 01 j 13:02 11° Mp 09'22 evening set -1934 Sep 13 i 00:37 18° m 18'39 conjunction -1928 Dec 03 i 17:21 27°ML06'53 0°53'36 -1928 Dec 03 i 17:23 27°M06'54 0°53'34 minimum elong conjunction -1934 Sep 29 i 15:49 20° m 14'50 2°22'42 max. Earth dist. -1928 Dec 03 i 05:07 27° ML03'16 11.00500 AU -1934 Sep 29 i 15:49 20° m 14'50 2°22'42 morning rise -1928 Dec 20 j 08:55 29°M04'35 minimum elong -1934 Sep 29 j 12:26 20° m 13'51 11.08918 AU -1928 Dec 28 j 10:17 max. Earth dist. 0°×7 -1934 Oct 16 j 03:33 22° m 10'05 -1927 Apr 01 j 20:48 6°**х** 14′52 morning rise retrograde -1933 Jan 23 j 06:43 -1927 Jun 11 j 22:28 29° m 03'00 2° x7 54'47 0°48'53 retrograde opposition -1933 Apr 03 j 00:30 -1927 Jun 12 j 08:51 25° m 46'55 2°52'54 min. Earth dist. 2° \$752'52 8 95727 AU opposition -1933 Apr 03 j 04:44 -1927 Jul 29 j 23:53 min. Earth dist. 25° Mp 46'09 9.12083 AU 30°RML 29°M36'27 direct -1927 Aug 20 j 22:11 -1933 Jun 13 j 14:08 22° M 26'46 direct -1933 Sep 24 j 09:45 29° m 30'48 -1927 Sep 11 j 13:38 0°×7 evening set 6°**х** 38'46 -1933 Sep 28 j 15:28 0∘ଫ evening set -1927 Nov 28 j 14:39 -1933 Oct 10 j 22:28 1°**2**25'47 2°19'33 -1927 Dec 15 j 06:33 8°**х** 37'40 0°26'08 conjunction conjunction -1933 Oct 10 j 22:29 -1927 Dec 15 j 06:34 minimum elong 1°**2**25'48 2°19'32 minimum elong 8°**∡**37'40 0°26'04 -1933 Oct 10 j 16:09 -1927 Dec 14 j 19:25 8°**₰**34'20 10.90529 AU max. Earth dist. 1°**£**23'57 11.14221 AU max. Earth dist. morning rise -1933 Oct 27 j 08:41 3°**£**20'05 morning rise -1926 Jan 01 j 00:57 10°**х** 37'24 retrograde -1932 Feb 03 j 18:12 10°**£**11'46 retrograde -1926 Apr 14 j 10:01 17°**х** 56′03 -1932 Apr 13 j 21:58 6° **2**55'46 2° 45'43 opposition -1926 Jun 24 j 08:52 14°**∡**°34'24 0°14'03 opposition min. Earth dist. -1932 Apr 14 j 04:27 6°**£**54'34 9.16085 AU min. Earth dist. -1926 Jun 24 j 18:03 14°**∡**³32'41 8.84806 AU -1932 Jun 24 j 10:58 3°**△**36'30 -1926 Sep 01 j 20:42 11°**х** 15′29 direct direct -1932 Oct 04 j 14:27 10°**≏**36'32 -1926 Nov 18 j 13:26 15°**₹**'54'44 evening set desc. node -1926 Dec 10 j 08:38 18°**₹**¹22'58 evening set -1932 Oct 21 j 01:43 12°**△**30'52 2°11'09 conjunction -1932 Oct 21 i 01:44 20°×724'02 -0°03'05 minimum elong 12°**△**30'53 2°11'08 conjunction -1926 Dec 27 i 02:58 max. Earth dist. -1932 Oct 20 j 17:18 12°**2**28'25 11.16878 AU minimum elong -1926 Dec 27 i 02:57 20°**х** 24′01 0°03'09 morning rise -1932 Nov 06 j 11:21 14°**£**24'47 behind sun begin -1926 Dec 26 i 19:57 20°**х** 21′56 retrograde -1931 Feb 14 i 06:21 21°**2**16'56 behind sun end -1926 Dec 27 j 09:56 20°**х** 26′07 -1931 Apr 25 j 18:44 18°**£**00'40 2°32'25 max. Earth dist. -1926 Dec 26 j 16:17 20° ₹20'49 10.78825 AU opposition min. Earth dist. -1931 Apr 26 j 02:18 17°**£**59'17 9.17331 AU morning rise -1925 Jan 13 j 00:33 22°×26'09 -1931 Jul 06 j 05:19 14°**£**42'07 retrograde -1925 Apr 27 j 08:12 29°×754'25 direct -1931 Oct 15 j 16:43 21°**₽**39'33 -1925 Jul 07 j 01:01 26°**₹**31'09 -0°22'18 evening set opposition min. Earth dist. -1925 Jul 07 j 09:18 26° ₹ 29'34 8.72390 AU -1925 Sep 13 j 22:13 23°**х** 11′25 conjunction -1931 Nov 01 j 03:36 23°**♀**33'50 1°57'53 direct minimum elong -1931 Nov 01 j 03:38 23°**₽**33'51 1°57'53 -1925 Dec 18 j 21:14 0°궁 max. Earth dist. -1931 Oct 31 j 18:19 23°**೨**31'08 11.16750 AU -1925 Dec 22 j 11:12 0°る25'40 evening set -1931 Nov 17 j 13:28 morning rise 25°**2**27'55 -1930 Jan 01 j 14:26 0°M -1924 Jan 08 j 08:09 2°る29'09 -0°32'43 conjunction -1924 Jan 08 j 08:08 2°る29'08 retrograde -1930 Feb 25 j 22:52 2°M22'13 minimum elong 0°32'46 -1924 Jan 07 j 21:58 2°る26'01 10.65855 AU -1930 Apr 25 j 01:14 30°**₹**Ω max. Earth dist. opposition -1930 May 07 j 15:56 29°**2**05'26 2°13'30 morning rise -1924 Jan 25 j 09:17 4°る33'57 min. Earth dist. -1930 May 08 j 00:24 29°**♀**03'53 9.15771 AU retrograde -1924 May 09 j 13:26 12°る12'53 opposition direct -1930 Jul 17 j 21:07 25°**£**47'21 -1924 Jul 18 j 23:52 8°る47'57 -0°58'46

min. Earth dist.

evening set

direct

-1924 Jul 19 j 07:17

-1924 Sep 25 j 06:07

-1923 Jan 02 j 23:46

8°**る**46'32

5°る27'11

12°る49'40

8.58992 AU

-1930 Oct 01 j 14:04

-1930 Oct 26 j 18:28

evening set

0°M

2°M43'41

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1923 in astronomical counting style is the year 1924 BCE in historical counting style. -1923 Jan 19 i 23:46 14°**ප**55'50 -1°01'39 -1917 Feb 11 j 08:58 $0^{\circ}\Upsilon$ conjunction -1923 Jan 19 i 23:43 14°**ප**55'49 1°01'41 -1917 Mar 28 j 06:27 5°Y12'57 minimum elong evening set max. Earth dist. -1923 Jan 19 j 15:07 14°る53'08 10.52159 AU -1923 Feb 06 j 04:32 17°る03'28 -1917 Apr 15 j 05:05 7°Y34'23 -2°13'33 conjunction morning rise -1923 May 23 j 03:54 24°る53'48 -1917 Apr 15 j 05:08 7°**Υ**'34'24 2°13'33 retrograde minimum elong 7°**Y**37'03 -1917 Apr 15 j 13:09 opposition -1923 Aug 01 j 05:45 21°る27'13 -1°33'36 max. Earth dist. 9.92219 AU -1917 May 03 j 06:37 21°る26'02 8.45189 AU 9°Y56'43 min. Earth dist. -1923 Aug 01 j 11:46 morning rise -1917 Aug 18 j 04:26 18°**Y**28'25 direct -1923 Oct 07 j 23:24 18°**ප**05'16 retrograde 14°Υ57'28 -2°38'45 evening set -1922 Jan 15 j 23:54 25°**る**37'09 opposition -1917 Oct 24 j 02:56 min. Earth dist. -1917 Oct 23 j 19:48 14°**Y**58'58 7.91734 AU 11°**Y**28'34 conjunction -1922 Feb 02 j 03:17 27°る46'10 -1°28'22 direct -1917 Dec 29 j 04:49 -1922 Feb 02 j 03:14 27°る46'09 -1916 Apr 11 j 17:19 19°**Y**49'46 minimum elong 1°28'23 evening set max. Earth dist. -1922 Feb 01 j 21:24 27°る44'18 10.38346 AU morning rise -1922 Feb 19 j 11:35 29°る56'45 conjunction -1916 Apr 29 j 19:20 22°Y12'11 -1°58'02 -1922 Feb 19 j 22:05 0°≈ minimum elong -1916 Apr 29 j 19:23 22°**Υ**12'13 1°58'01 retrograde -1922 Jun 06 j 04:45 7°≈58'30 max. Earth dist. -1916 Apr 30 j 05:56 22°**Υ**15'42 9.91805 AU opposition -1922 Aug 14 j 18:43 4°≈30'24 -2°04'49 morning rise -1916 May 17 j 22:56 24° Y 35' 05 min. Earth dist. -1922 Aug 14 j 22:25 4°≈29'40 8.31630 AU -1916 Jul 03 j 20:07 0°8 direct -1922 Oct 20 j 23:19 1°≈07'12 retrograde -1916 Sep 01 j 00:36 3°**8**02'46 evening set -1921 Jan 29 j 12:15 8°≈49'16 -1916 Nov 01 j 03:37 30°R℃ opposition -1916 Nov 06 j 15:29 29°**Y**32'33 -2°14'23 conjunction -1921 Feb 15 i 19:13 11°≈01'10 -1°51'11 min. Earth dist. -1916 Nov 06 i 06:45 29°**Y**34'23 7.93060 AU minimum elong -1921 Feb 15 i 19:10 11°≈01'09 1°51'12 direct -1915 Jan 12 i 00:42 26°Y03'05 max. Earth dist. -1921 Feb 15 i 16:19 11°≈00'15 10.25109 AU -1915 Mar 21 i 01:13 0°8 morning rise -1921 Mar 05 j 07:04 13°≈14'43 -1915 Apr 27 j 05:12 4°825'08 evening set -1921 Mar 19 j 14:53 15°≈ -1921 Jun 20 j 14:49 -1915 May 15 j 09:31 6°847'38 -1°35'01 retrograde 21°≈27'14 conjunction -1921 Aug 28 j 15:00 -1915 May 15 j 09:35 6°847'39 1°34'59 17°≈57'48 -2°30'17 minimum elong opposition -1921 Aug 28 j 15:51 max. Earth dist. -1915 May 15 j 22:00 6°**8**51'45 9.94945 AU min. Earth dist. 17°≈57'38 8 19024 AU -1915 Jun 02 j 13:55 -1921 Oct 12 j 07:44 9°810'08 15°R≈ morning rise -1921 Nov 03 j 07:18 -1915 Jul 24 j 09:31 direct 14°≈33'19 15°8 -1915 Sep 15 j 14:21 -1921 Nov 25 j 02:36 15°≈ retrograde 17°**8**30'32 -1915 Nov 09 j 03:52 -1920 Feb 12 j 12:54 22°≈25'45 15°R₩ evening set -1915 Nov 21 j 01:21 14°**8**01'25 -1°41'37 opposition -1920 Feb 29 j 23:38 24°≈40'30 -2°08'26 -1915 Nov 20 j 15:20 14°**8**03'30 7.97838 AU conjunction min. Earth dist. -1920 Feb 29 j 23:36 -1914 Jan 26 j 20:59 minimum elong 24°≈40'30 2°08'27 direct 10°**8**31'42 -1920 Feb 29 j 23:38 max. Earth dist. 24°≈40'30 10.13190 AU -1914 Apr 10 j 08:10 15°**8** morning rise -1920 Mar 18 j 15:09 26°≈56'51 evening set -1914 May 12 j 14:16 18°**8**51'37 -1920 Apr 12 j 20:03 0°**)**€ retrograde -1920 Jul 04 j 07:25 5°¥18'37 conjunction -1914 May 30 j 19:21 21°813'13 -1°06'15 -1920 Sep 10 j 17:49 1°**)**(48'10 -2°47'54 minimum elong -1914 May 30 j 19:24 21°813'15 1°06'13 opposition min. Earth dist. -1920 Sep 10 j 16:10 1°**)**48'30 8.08099 AU max. Earth dist. -1914 May 31 j 09:00 21°817'41 10.01397 AU -1920 Oct 04 j 00:25 -1914 Jun 17 j 23:01 23°**8**34'21 30°R≈ morning rise -1920 Nov 16 j 01:15 28°≈22'22 -1914 Aug 16 j 20:56 $0^{\circ}II$ direct -1920 Dec 28 j 03:23 0°**)**€ -1914 Sep 29 j 20:27 1°**I**I45′02 retrograde evening set -1919 Feb 26 j 01:30 6°**)** 24'42 -1914 Nov 13 i 13:49 30°R₩ opposition -1914 Dec 05 i 06:32 28°817'17 -1°03'03 -1919 Mar 15 j 16:12 28°819'29 8.05710 AU conjunction 8°\(\pm\)42'07 -2°18'36 min. Earth dist. -1914 Dec 04 i 19:54 minimum elong -1919 Mar 15 j 16:11 8°\(\pm\)42'07 2°18'36 direct -1913 Feb 10 i 14:45 24°**8**47'37 max. Earth dist. -1919 Mar 15 i 18:51 8°¥42'59 10.03320 AU -1913 May 02 j 10:50 $0^{\circ}II$ -1919 Apr 02 j 11:22 11°\(\cent{H}\) 00'59 -1913 May 27 j 17:25 3°**I**I02'51 morning rise evening set -1919 Jul 19 j 04:47 19°**¥**29'27 retrograde opposition -1919 Sep 25 j 01:48 15°**)** 58'24 -2°55'48 conjunction -1913 Jun 14 j 21:38 5°II22'38 -0°33'55 min. Earth dist. -1919 Sep 24 j 22:07 15°**¥**59'09 7.99547 AU minimum elong -1913 Jun 14 j 21:39 5°**I**22'39 0°33'53 -1919 Nov 30 j 03:20 12°**)**€31'22 max. Earth dist. -1913 Jun 15 j 11:20 5°**I**27'03 10.10667 AU direct -1918 Mar 13 j 00:14 20°**)** 42′18 morning rise -1913 Jul 02 j 23:02 7°**Ⅱ**41'31 evening set retrograde -1913 Oct 13 j 18:08 15°**Ⅱ**41'00 -1918 Mar 30 j 19:00 23°¥02'00 -2°20'29 -1913 Dec 19 j 05:33 12°**Ⅱ**14'48 -0°21'35 conjunction opposition -1918 Mar 30 j 19:01 -1913 Dec 18 j 19:39 12°**Ⅱ**16'49 8.16086 AU minimum elong 23°**X**02'01 2°20'29 min. Earth dist. 23°**₭**03'44 9.96157 AU -1912 Feb 25 j 03:53 8°**Ⅱ**45'26 max. Earth dist. -1918 Mar 31 j 00:14 direct -1912 Jun 10 j 12:05 16°**Ⅲ**54'04 morning rise -1918 Apr 17 j 17:36 25°**)** €22'56 evening set -1918 May 26 j 16:14 $0^{\circ}\Upsilon$ retrograde -1918 Aug 03 j 04:51 3°**Y**54'52 conjunction -1912 Jun 28 j 13:44 19°**Ⅱ**11'19 -0°00'17 opposition -1918 Oct 09 j 13:35 0° **Y**23'38 -2°52'50 minimum elong -1912 Jun 28 j 13:44 19°**Ⅱ**11'19 0°00'15 min. Earth dist. -1918 Oct 09 j 08:13 0°**Υ**24'45 7.93954 AU behind sun begin -1912 Jun 28 j 06:29 19°**Ⅲ**09'01 -1918 Oct 14 j 07:25 behind sun end -1912 Jun 28 j 21:00 19°**Ⅱ**13'36 30°R ₩ direct -1918 Dec 14 j 13:04 26°**)** 55'34 max. Earth dist. -1912 Jun 29 j 01:50 19°**Ⅲ**15'09 10.22040 AU

Planetary Phenomena of Saturn from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1912 in astronomical counting style is the year 1913 BCE in historical counting style. -1912 Jul 01 j 16:09 19°**Ⅲ**35′01 minimum elong -1906 Sep 13 j 13:21 4° m 13'02 2°17'38 asc. node 4° mg 12'23 10.96004 AU -1912 Jul 16 j 11:31 21°**Ⅲ**27'19 -1906 Sep 13 j 11:09 morning rise max. Earth dist. -1912 Oct 26 j 06:32 29°**Ⅱ**15'09 -1906 Sep 30 j 05:26 6° m 10'50 retrograde morning rise -1912 Dec 31 j 21:45 -1905 Jan 07 j 03:21 13° Mp 08'44 25°**I**I50'38 0°19'58 opposition retrograde -1912 Dec 31 j 13:36 -1905 Mar 17 j 06:38 min. Earth dist. 25°**Ⅲ**52'17 8.28188 AU opposition 9° **m** 51'43 2°51'54 direct -1911 Mar 10 j 11:17 22°**Ⅲ**21'52 min. Earth dist. -1905 Mar 17 j 09:27 9° m 51'12 9.00561 AU -1911 Jun 21 j 18:14 0°9 direct -1905 May 27 j 16:10 6° m 29'34 evening set -1911 Jun 24 j 20:31 0°922'45 evening set -1905 Sep 08 j 11:29 13° m 42'08 conjunction -1911 Jul 12 j 18:08 2°536'56 0°32'35 conjunction -1905 Sep 25 j 04:00 15° m/39'11 2°22'24 minimum elong -1911 Jul 12 j 18:06 2°936'55 0°32'36 minimum elong -1905 Sep 25 j 04:00 15° **m** 39'11 2°22'25 -1905 Sep 24 j 23:23 max. Earth dist. -1911 Jul 13 j 03:31 2°539'52 10.34713 AU max. Earth dist. 15° **m** 37'49 11.04255 AU -1905 Oct 11 j 17:03 morning rise -1911 Jul 30 j 11:14 4°9549'41 morning rise 17° Mp 35'14 retrograde -1911 Nov 08 j 07:51 12°526'19 retrograde -1904 Jan 18 j 16:53 24° m 29'44 opposition -1910 Jan 14 j 06:54 9°503'32 0°59'11 opposition -1904 Mar 28 j 07:06 21°M) 13'05 2°54'08 min. Earth dist. -1910 Jan 14 j 00:37 9°9504'48 8.41264 AU min. Earth dist. -1904 Mar 28 j 11:06 21° My 12'219.07763 AU direct -1910 Mar 24 j 12:46 5°935'39 direct -1904 Jun 07 j 21:37 17° m 51'58 evening set -1910 Jul 08 j 17:49 13°528'09 evening set -1904 Sep 18 j 23:05 24° m 58'49 conjunction -1910 Jul 26 j 10:30 15°939'00 1°02'52 conjunction -1904 Oct 05 j 12:56 26° m 54'28 2°21'36 minimum elong -1910 Jul 26 j 10:28 15°938'59 1°02'54 minimum elong -1904 Oct 05 j 12:56 26° m 54'28 2°21'36 max. Earth dist. -1910 Jul 26 i 17:02 15°5541'02 10.48013 AU max. Earth dist. -1904 Oct 05 i 07:18 26° m 52'49 11.10306 AU morning rise -1910 Aug 12 j 22:21 17°5548'20 morning rise -1904 Oct 21 i 23:48 28° m 49'18 retrograde -1910 Nov 21 i 00:51 25°9514'42 -1904 Nov 01 i 10:54 0∘**⊽** -1909 Jan 27 j 08:59 21°953'31 1°34'11 retrograde -1903 Jan 29 j 06:19 5°**£**41'58 opposition -1909 Jan 27 j 04:06 -1903 Apr 09 j 05:28 2°**£**25'26 2°49'42 min. Earth dist. 21°954'28 8.54692 AU opposition -1909 Apr 07 j 05:44 min. Earth dist. -1903 Apr 09 j 10:28 2°**£**24'31 9.12637 AU 18°926'40 direct -1909 Jul 22 j 03:39 26°910'29 -1903 May 16 j 03:48 30°R M evening set -1903 Jun 19 j 19:51 29° m 05'16 direct -1909 Aug 08 j 15:01 -1903 Jul 23 j 21:38 0∘∙თ conjunction 28°918'01 1°29'17 -1909 Aug 08 j 14:58 -1903 Sep 30 j 05:35 28°\$18'00 1°29'19 evening set 6°**₽**07'32 minimum elong -1909 Aug 08 j 19:14 max. Earth dist. 28°519'18 10.61350 AU -1909 Aug 22 j 13:34 -1903 Oct 16 j 17:38 conjunction 8°**2**02'20 2°15'26 $0^{\circ}\Omega$ -1909 Aug 25 j 21:20 0°**Ω**23'59 -1903 Oct 16 j 17:40 morning rise minimum elong 8°**£**02'20 2°15'24 7°**Ω**41'11 -1909 Dec 03 j 11:04 -1903 Oct 16 j 10:55 retrograde max. Earth dist. 8°**♀**00'22 11.13960 AU -1908 Feb 09 j 04:32 -1903 Nov 02 j 03:24 opposition 4°**Ω**21'23 2°03'37 morning rise 9°**£**56'33 -1902 Feb 09 j 18:19 min. Earth dist. -1908 Feb 09 j 00:51 4°**Ω**22'06 8.67868 AU retrograde 16°**2**48′58 -1908 Apr 19 j 13:50 0°**Ω**55'43 opposition -1902 Apr 21 j 02:40 13°**△**32'17 2°38'58 direct -1908 Aug 03 j 02:23 8°**Ω**30'54 min. Earth dist. -1902 Apr 21 j 09:29 13°**≗**31'02 9.15029 AU evening set direct -1902 Jul 01 j 14:14 10°**♀**12'54 conjunction -1908 Aug 20 j 08:23 10°**Ω**35'15 1°50'52 -1902 Oct 11 j 09:01 17°**£**11'57 evening set -1908 Aug 20 j 08:20 10°**Ω**35'14 1°50'54 minimum elong -1908 Aug 20 j 11:04 10°**Ω**36'04 10.74134 AU -1902 Oct 27 j 20:02 19°**2**06'25 2°04'12 max. Earth dist. conjunction -1908 Sep 06 j 09:12 12°**Ω**38′05 -1902 Oct 27 j 20:05 morning rise minimum elong 19°**2**06'26 2°04'11 -1908 Sep 27 j 04:28 15°**Ω** -1902 Oct 27 j 11:05 19°**£**03'48 11.15103 AU max. Earth dist. retrograde -1908 Dec 14 i 13:51 19°**Ω**47'24 morning rise -1902 Nov 13 i 05:51 21°**♀**00'34 opposition -1907 Feb 20 i 18:09 16°Ω28'48 2°26'37 retrograde -1901 Feb 21 i 08:24 27°**£**54'18 min. Earth dist. -1907 Feb 20 i 16:22 16°Ω29'08 8.80226 AU opposition -1901 May 02 j 23:39 24°**△**37'15 2°22'22 -1907 Mar 12 j 19:41 15°RΩ min. Earth dist. -1901 May 03 j 08:03 24°**2**35'43 9.14863 AU direct -1907 May 02 j 14:03 13°Ω04'20 direct -1901 Jul 13 i 07:10 21°**♀**18'28 -1907 Jun 21 j 05:54 15°Ω -1901 Oct 22 j 10:58 28°**£**15'42 evening set -1907 Aug 15 j 14:34 20°**Ω**31'16 -1901 Nov 06 j 10:27 0°M evening set conjunction -1907 Sep 01 j 15:26 22°**Ω**32'44 2°07'04 conjunction -1901 Nov 07 j 21:54 0°M10'22 1°48'19 minimum elong -1907 Sep 01 j 15:24 $22^{\circ}\Omega_{32'43}$ $2^{\circ}07'06$ minimum elong -1901 Nov 07 j 21:57 0°M10'23 1°48'18 max. Earth dist. -1907 Sep 01 j 16:06 22°**Ω**32'56 10.85837 AU max. Earth dist. -1901 Nov 07 j 11:49 0°ML07'25 11.13696 AU -1907 Sep 18 j 11:24 24°**Ω**32'48 -1901 Nov 24 j 08:35 2°M05'00 morning rise morning rise -1907 Nov 12 j 19:53 0° m -1900 Mar 04 j 00:04 retrograde 9°M01'40 -1907 Dec 26 j 11:41 -1900 May 13 j 21:55 2°00'25 retrograde 1° m 35'40 opposition 5°M43'59 9.12138 AU -1906 Feb 09 j 10:38 30°₽**Ω** min. Earth dist. -1900 May 14 j 06:41 5°M42'23 -1900 Jul 23 j 22:33 opposition -1906 Mar 05 j 02:38 28°**Ω**18'00 2°42'45 direct 2°M25'37 min. Earth dist. -1906 Mar 05 j 03:19 28°**Ω**17'52 8.91268 AU evening set -1900 Nov 01 j 13:08 9°M22'29 direct -1906 May 15 j 06:30 24°**Ω**54'43 -1906 Aug 07 j 17:06 0° m conjunction -1900 Nov 18 j 00:53 11°ML17'51 1°28'16 evening set -1906 Aug 27 j 17:06 2° My 14'01minimum elong -1900 Nov 18 j 00:56 11°M17'52 1°28'15 -1900 Nov 17 j 15:08 11°**M**.14'59 11.09767 AU max. Earth dist.

-1906 Sep 13 j 13:22

conjunction

4° m 13'03 2°17'36

-1900 Dec 04 j 13:01

13°M13'25

morning rise

Attention, astronomical year style is used: The year -1900 in astronomical counting style is the year 1901 BCE in historical counting style.

-1900 Dec 20 j 10:48 15°ML

retrograde -1899 Mar 15 j 22:38 20° **M** 14'40

opposition -1899 May 25 j 22:30 16° 11.56'07 1°33'44 min. Earth dist. -1899 May 26 j 06:56 16° 11.54'34 9.06937 AU

-1899 Jun 23 j 01:24 15°RML

direct $-1899 \text{ Aug } 04 \text{ j } 15:02 \quad 13^{\circ}\text{M-}37'58$

-1899 Sep 14 j 20:38 15°M

evening set -1899 Nov 12 j 17:49 20° M 35'57

conjunction -1899 Nov 29 j 06:54 22° M32'29 1°04'38 minimum elong -1899 Nov 29 j 06:56 22° M32'30 1°04'36 max. Earth dist. -1899 Nov 28 j 20:47 22° M29'30 11.03440 AU

morning rise -1899 Dec 15 j 21:14 24°M29'30