Planetary Phenomena of Uranus from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11900 in astronomical counting style is the year 11901 BCE in historical counting style. direct -11900 Jan 24 i 00:57 23°≈30'39 minimum elong -11895 Jun 09 i 01:10 22° \(\) 05'01 0°05'47 evening set -11900 Apr 29 j 13:00 27°≈03'13 -11895 Jun 08 j 18:50 22°\cdot\04'02 behind sun begin -11895 Jun 09 j 07:30 22° **★** 05'59 behind sun end -11900 May 15 j 19:04 28°≈04'46 -0°24'34 -11895 Jun 24 j 21:13 23° **₭** 05'04 conjunction morning rise -11895 Sep 23 j 22:06 26°**∺**27'07 -11900 May 15 j 19:05 28°≈04'46 0°24'58 minimum elong retrograde -11900 May 14 j 14:12 28°≈00'10 19.25134 AU max. Earth dist. opposition -11895 Dec 07 j 03:45 24° **★**25'33 0°09'50 morning rise -11900 May 31 j 20:50 29°≈05'39 min. Earth dist. -11895 Dec 07 j 19:04 24° **★**23'55 17.33889 AU -11900 Jun 15 j 22:32 0°**∀** direct -11894 Feb 22 j 10:48 22° **∺** 19'55 2°**)**€28'04 retrograde -11900 Aug 30 j 19:28 evening set -11894 May 29 j 01:48 25° **★** 50'05 opposition -11900 Nov 12 j 06:50 0°**)** 26'22 -0°24'14 max. Earth dist. -11894 Jun 13 j 08:45 26° ¥ 47'58 19.35437 AU min. Earth dist. -11900 Nov 13 j 07:49 0°**∺**23'40 17.25351 AU -11900 Nov 22 j 12:44 30°R≈ -11894 Jun 14 j 00:23 26° **€** 50'27 0°11'57 conjunction -11894 Jun 14 j 00:23 26° **₭** 50'27 direct -11899 Jan 28 j 05:03 28°≈19'48 minimum elong 0°11'53 -11899 Apr 01 j 14:59 0°**)**€ behind sun begin -11894 Jun 13 j 19:44 26° **\(49'43** evening set -11899 May 04 j 16:29 1°¥52'20 behind sun end -11894 Jun 14 j 05:01 26° **∺** 51'10 morning rise -11894 Jun 29 j 19:19 27° **∺** 50'17 conjunction -11899 May 20 j 21:25 2°\f53'44 -0°18'39 -11894 Aug 08 j 06:26 0°**Υ** minimum elong -11899 May 20 j 21:26 2°**)** 53'45 0°18'59 retrograde -11894 Sep 28 j 20:20 1°**Υ**12'05 max. Earth dist. -11899 May 19 j 19:05 2°**)** 49'33 19.25607 AU -11894 Nov 22 j 08:46 30°R € morning rise -11899 Jun 05 j 21:55 3°**)** 54'31 opposition -11894 Dec 12 j 08:00 29° \times 10'31 0°16'33 retrograde -11899 Sep 04 j 21:32 7°**)**€ 16'58 min. Earth dist. -11894 Dec 12 j 21:52 29°\(\mathbf{H}\)09'03 17.37138 AU opposition -11899 Nov 17 j 10:46 5° **H** 15'20 -0°17'32 direct -11893 Feb 27 j 14:13 27° \(\) 05'07 min. Earth dist. -11899 Nov 18 j 10:01 5°**升**12'50 17.26059 AU -11893 May 24 j 14:36 $0^{\circ}\Upsilon$ direct -11898 Feb 02 i 11:15 3°**)**€08'57 evening set -11893 Jun 03 j 01:16 0°**Y**34'27 evening set -11898 May 09 j 19:43 6° **★**41'16 -11893 Jun 18 j 22:34 1° Υ 34'32 0°17'53 conjunction -11898 May 25 j 23:16 7° \(\frac{1}{42}\)'31 -0°12'37 -11893 Jun 18 j 22:33 1°Y34'32 0°17'52 conjunction minimum elong -11898 May 25 j 23:16 7° \(\frac{1}{42}\)'31 0°12'54 max. Earth dist. -11893 Jun 18 j 09:20 1°Υ32'26 19.38966 AU minimum elong -11898 May 25 j 19:09 7°**)** 41'53 -11893 Jul 04 j 16:38 2°**Y**34'09 behind sun begin morning rise -11898 May 26 j 03:23 7°**)** 43'10 -11893 Oct 03 j 20:43 5° **Y** 55'40 behind sun end retrograde -11893 Dec 17 j 11:50 3°**Υ**54'07 0°23'07 -11898 May 24 j 22:01 7° ¥ 38'30 19.26568 AU opposition max. Earth dist. -11898 Jun 10 j 22:36 8° **¥** 43'08 -11893 Dec 17 j 22:00 3°**Υ**′53'02 17.40935 AU min. Earth dist. morning rise -11892 Mar 03 j 19:21 1°**Υ**'48'59 -11898 Sep 09 j 21:23 12° **₭**05'36 retrograde direct -11898 Nov 22 j 14:59 10° **★** 04'00 -0°10'44 -11892 Jun 06 j 23:55 5°**Υ**17'23 opposition evening set -11898 Nov 23 j 13:06 10° **₭**01'37 17.27270 AU min. Earth dist. -11892 Jun 22 j 20:09 6° Υ 17'11 0°23'42 -11897 Feb 07 j 16:09 7°**米** 57'47 direct conjunction -11897 May 14 j 22:19 11°**∺** 29'47 -11892 Jun 22 j 20:09 6°**Υ**17'11 0°23'44 evening set minimum elong max. Earth dist. -11897 May 30 j 01:52 12°\mathbf{2}7'12 19.28035 AU max. Earth dist. -11892 Jun 22 j 10:26 6°**Υ**°15'39 19.43038 AU morning rise -11892 Jul 08 j 13:11 7°**Υ**16'33 conjunction -11897 May 31 j 00:38 12° ₭ 30'50 -0°06'30 retrograde -11892 Oct 07 j 18:18 10°**Y**37'45 -11897 May 31 j 00:38 12° **★** 30'50 0°06'44 opposition -11892 Dec 21 j 15:20 8°**Υ**36'14 0°29'30 minimum elong -11897 May 30 j 18:26 12° **∺**29'52 min. Earth dist. -11892 Dec 21 j 23:50 8°**Υ**35'20 17.45290 AU behind sun begin -11897 May 31 j 06:50 12° **∺** 31'47 -11891 Mar 08 j 21:15 6° **Y** 31'26 behind sun end direct -11897 Jun 15 j 22:48 13°**)** 31'17 -11891 Jun 11 j 21:47 9°**Υ**58'50 morning rise evening set -11897 Sep 14 j 22:41 16° **ਮ** 53'39 retrograde -11897 Nov 27 j 19:20 14°\ 52'05 -0°03'52 -11891 Jun 27 j 16:48 10° **Y** 58'21 0° 29'19 opposition conjunction -11897 Nov 28 j 14:54 14° **\(\)** 49'59 17.28969 AU -11891 Jun 27 j 16:48 10° **Y** 58'21 0° 29'25 min. Earth dist. minimum elong -11891 Jun 27 j 09:11 10° γ 57'09 19.47673 AU direct -11896 Feb 12 j 23:36 12° \(\)46'04 max. Earth dist. evening set -11896 May 19 j 00:10 16° ¥ 17'33 morning rise -11891 Jul 13 j 09:08 11°**γ**'57'28 max. Earth dist. -11896 Jun 03 j 04:25 17°\ 15'06 19.29990 AU retrograde -11891 Oct 12 j 18:23 15° Υ 18'19 opposition -11891 Dec 26 j 18:26 13° \begin{pmatrix} \gamma \cdot 16'52 & 0\circ 35'40 \end{pmatrix} -11896 Jun 04 j 01:15 17° **X** 18'24 -0°00'19 min. Earth dist. -11891 Dec 26 j 23:04 13° \begin{pmatrix} \gamma 16'23 & 17.50186 AU conjunction -11896 Jun 04 j 01:13 17° **H** 18'24 0°00'30 direct -11890 Mar 14 j 00:44 11°**Υ**12'27 minimum elong -11896 Jun 03 j 18:36 17°**)** € 17'23 behind sun begin evening set -11890 Jun 16 j 18:37 14°**Υ**38'47 behind sun end -11896 Jun 04 j 07:49 17° **€** 19'26 morning rise -11896 Jun 19 j 22:17 18° **∺** 18'40 conjunction -11890 Jul 02 j 12:41 15°**Υ**38'00 0°34'44 asc. node -11896 Jun 22 j 08:46 18°**∺**27'43 minimum elong -11890 Jul 02 j 12:41 15°**Υ**38'00 0°34'53 -11896 Sep 18 j 21:28 21° ¥ 40'55 -11890 Jul 02 j 08:57 15°**Υ**'37'25 19.52822 AU retrograde max. Earth dist. -11896 Dec 01 j 23:43 19° **∺** 39'21 0°03'00 -11890 Jul 18 j 04:06 16°**Υ**36'52 opposition morning rise -11896 Dec 02 j 18:07 19° ¥ 37'23 17.31177 AU -11890 Oct 17 j 15:12 19°**Υ**57'21 min. Earth dist. retrograde -11890 Dec 31 j 21:21 17°**Υ**56'01 0°41'34 direct -11895 Feb 17 j 04:07 17° **★** 33'30 opposition evening set -11895 May 24 j 01:23 21° **★** 04'24 min. Earth dist. -11889 Jan 01 j 00:04 17° Υ 55'44 17.55578 AU max. Earth dist. -11895 Jun 08 j 06:43 22° ₩ 02'05 19.32459 AU direct -11889 Mar 19 j 02:01 15°**γ**52'01 evening set -11889 Jun 21 j 14:46 19°**Υ**17'13 conjunction -11895 Jun 09 j 01:11 22° **★** 05'01 0°05'54

Planetary Pheno	omena of Uranus fro	om -11900	through -11398	8 (UT), Astrodier	nst AG 18-Feb-2025	14:23,	page 2
Attention, astronom	nical year style is used: The	e year -11889	in astronomical co	unting style is the yea	r 11890 BCE in historical	counting sty	le.
conjunction	-11889 Jul 07 j 07:43	20° Y 16′08	0°39'53	minimum elong	-11883 Aug 02 j 09:36	17° 8 29'26	1°04'26
minimum elong	-11889 Jul 07 j 07:43		0°40'06	max. Earth dist.	-11883 Aug 02 j 22:43		
max. Earth dist.	-11889 Jul 07 j 05:54			morning rise	-11883 Aug 17 j 22:12		
morning rise	-11889 Jul 22 j 22:36			retrograde	-11883 Nov 18 j 09:55		
retrograde	-11889 Oct 22 j 14:22			min. Earth dist.	-11882 Feb 02 j 10:29		18.01279 AU
opposition	-11888 Jan 05 j 23:38		0°47'09	opposition	-11882 Feb 03 j 01:02		1°12'39
min. Earth dist.	-11888 Jan 05 j 22:45			direct	-11882 Apr 20 j 22:36		1 1237
direct	-11888 Mar 23 j 04:11		17.01 120 110	evening set	-11882 Jul 22 j 10:31		
evening set	-11888 Jun 25 j 09:48			evening set	11002 Jul 22 j 10.51	20 03007	
evening set	11000 Jun 25 j 07.40	25 5405		conjunction	-11882 Aug 06 j 23:03	21025455	1°06'38
conjunction	-11888 Jul 11 j 02:02	240\$\52142	0°44'46	minimum elong	-11882 Aug 06 j 23:02		1°07'10
				_	-11882 Aug 00 j 25:02 -11882 Aug 07 j 15:20		
minimum elong	-11888 Jul 11 j 02:01		0°45'01	max. Earth dist.			20.04098 AU
max. Earth dist.	-11888 Jul 11 j 04:06		19.044/3 AU	morning rise	-11882 Aug 22 j 11:26		
morning rise	-11888 Jul 26 j 16:10			retrograde	-11882 Nov 23 j 02:26		1015100
retrograde	-11888 Oct 26 j 10:20			opposition	-11881 Feb 07 j 22:36		1°15'22
opposition	-11887 Jan 10 j 01:31		0°52'25	min. Earth dist.	-11881 Feb 07 j 05:38		18.08177 AU
min. Earth dist.	-11887 Jan 09 j 22:44		17.67608 AU	direct	-11881 Apr 25 j 19:32		
direct	-11887 Mar 28 j 04:39			evening set	-11881 Jul 26 j 23:28	25° 8 21'47	
evening set	-11887 Jun 30 j 04:16	28° Y 29'21					
				conjunction	-11881 Aug 11 j 11:34	26° 8 18'16	1°08'53
conjunction	-11887 Jul 15 j 19:28	29° Y 27'39	0°49'20	minimum elong	-11881 Aug 11 j 11:34	26° 8 18'16	1°09'26
minimum elong	-11887 Jul 15 j 19:27	29° Y 27'39	0°49'39	max. Earth dist.	-11881 Aug 12 j 05:12	26° 8 20'57	20.11602 AU
max. Earth dist.	-11887 Jul 15 j 23:05	29° Y 28′13	19.70810 AU	morning rise	-11881 Aug 27 j 00:10	27° 8 14'49	
	-11887 Jul 24 j 10:33	0° ႘		C	-11881 Oct 24 j 05:06		
morning rise	-11887 Jul 31 j 09:13	0° 8 25'43		retrograde	-11881 Nov 27 j 17:59		
retrograde	-11887 Oct 31 j 07:58	3° 8 44'57			-11880 Jan 02 j 10:21		
opposition	-11886 Jan 15 j 02:42	1° 8 44'00	0°57'18	opposition	-11880 Feb 12 j 19:11		1°17'37
min. Earth dist.	-11886 Jan 14 j 20:53	_	17.74077 AU	min. Earth dist.	-11880 Feb 12 j 00:34		
mm. Latin dist.	-11886 Mar 05 j 22:15	_	17.74077 AO	direct	-11880 Apr 29 j 13:00		10.13107 AC
direct	-11886 Apr 02 j 05:22			evening set	-11880 Jul 30 j 11:18		
unect		0° 8		evening set			
	-11886 Apr 28 j 22:47	_			-11880 Aug 04 j 03:30	υщ	
evening set	-11886 Jul 04 j 21:42	3° 8 02'55			11000 4 14:22.24	00 T 20127	1010144
	11006 7 1 20 1 2 10	40 400154	0050100	conjunction	-11880 Aug 14 j 23:24	0° Ⅱ 39'27	
conjunction	-11886 Jul 20 j 12:18	4° 8 00'54		minimum elong	-11880 Aug 14 j 23:23	0° ∏ 39'27	
minimum elong	-11886 Jul 20 j 12:17	4° 8 00'54		max. Earth dist.	-11880 Aug 15 j 20:02		20.18532 AU
max. Earth dist.	-11886 Jul 20 j 19:33	_	19.77379 AU	morning rise	-11880 Aug 30 j 12:00	1° Ⅱ 35'45	
morning rise	-11886 Aug 05 j 01:26	4° 8 58'41		retrograde	-11880 Dec 01 j 09:23	4° Ⅱ 51'01	
retrograde	-11886 Nov 05 j 02:48	8° 8 17'27		opposition	-11879 Feb 16 j 14:45	2° Ⅱ 50'31	
opposition	-11885 Jan 20 j 03:29	6° 8 16'37		min. Earth dist.	-11879 Feb 15 j 17:30		18.22047 AU
min. Earth dist.	-11885 Jan 19 j 19:37	6° 8 17'26	17.80736 AU	direct	-11879 May 04 j 07:46	0° Ⅱ 50'38	
direct	-11885 Apr 07 j 05:04	4° 8 14'28		evening set	-11879 Aug 03 j 22:24	4° ∏ 02'33	
evening set	-11885 Jul 09 j 14:19	7° 8 34'40					
				conjunction	-11879 Aug 19 j 10:13	4° Ⅱ 58'29	1°12'10
conjunction	-11885 Jul 25 j 04:05	8° 8 32'20	0°57'25	minimum elong	-11879 Aug 19 j 10:13	4° ∏ 58'29	1°12'46
minimum elong	-11885 Jul 25 j 04:04	8° 8 32'20	0°57'48	max. Earth dist.	-11879 Aug 20 j 08:16	5° Ⅱ 01'50	20.25478 AU
max. Earth dist.	-11885 Jul 25 j 12:42	8° 8 33'40	19.84108 AU	morning rise	-11879 Sep 03 j 23:08	5° Ⅱ 54'35	
morning rise	-11885 Aug 09 j 17:04			retrograde	-11879 Dec 05 j 23:30	9° Ⅱ 09'14	
retrograde	-11885 Nov 09 j 22:46			min. Earth dist.	-11878 Feb 20 j 10:51		18.29026 AU
opposition	-11884 Jan 25 j 03:31		1°05'51	opposition	-11878 Feb 21 j 09:31	7° Ⅱ 08'47	
min. Earth dist.	-11884 Jan 24 j 17:07			direct	-11878 May 08 j 23:07	5° Ⅱ 09'14	
direct	-11884 Apr 11 j 03:52		-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	evening set	-11878 Aug 08 j 08:35	8° Ⅱ 19'49	
evening set	-11884 Jul 13 j 05:59			evening sec	110/011 ug 00 j 00.55	0 117 17	
evening set	1100+3u1 15 j 05.57	12 00+31		conjunction	-11878 Aug 23 j 20:33	9° Ⅱ 15'31	1°13'11
conjunction	-11884 Jul 28 j 19:22	130\1152	1°00'53	minimum elong	-11878 Aug 23 j 20:33		
	-			_			
minimum elong	-11884 Jul 28 j 19:22			max. Earth dist.	-11878 Aug 24 j 21:22		20.32467 AU
max. Earth dist.	-11884 Jul 29 j 07:17		19.90934 AU	morning rise	-11878 Sep 08 j 09:39		
morning rise	-11884 Aug 13 j 07:56			retrograde	-11878 Dec 10 j 14:05		10.26024 : **
	-11884 Aug 30 j 19:17			min. Earth dist.	-11877 Feb 25 j 01:51		
retrograde	-11884 Nov 13 j 16:18			opposition	-11877 Feb 26 j 03:16		1°21'37
opposition	-11883 Jan 29 j 02:35			direct	-11877 May 13 j 15:26		
min. Earth dist.	-11883 Jan 28 j 14:05		17.94384 AU	evening set	-11877 Aug 12 j 18:05	12° ∏ 35′09	
	-11883 Feb 04 j 16:43						
direct	-11883 Apr 16 j 02:16	13° 8 14'54		conjunction	-11877 Aug 28 j 06:03	13° Ⅱ 30'37	1°13'48
	-11883 Jun 20 j 06:44			minimum elong	-11877 Aug 28 j 06:02	13° Ⅱ 30'37	1°14'27
evening set	-11883 Jul 17 j 20:53	16° 8 32'23		max. Earth dist.	-11877 Aug 29 j 08:10	13° Ⅱ 34'33	20.39459 AU
				morning rise	-11877 Sep 12 j 19:42	14° Ⅱ 26′20	
conjunction	-11883 Aug 02 j 09:37	17° 8 29'26	1°03'58	retrograde	-11877 Dec 15 j 03:32	17° Ⅲ 39'46	
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	omena of Uranus fro						page 3
Attention, astronom opposition	nical year style is used: The -11876 Mar 01 j 20:17	•		conjunction	-11870 Sep 25 j 11:51		
min. Earth dist.	-11876 Wai 01 j 20.17 -11876 Feb 29 j 17:54			minimum elong	-11870 Sep 25 j 11:51		1°07'54
direct	-11876 May 17 j 04:56		18.43010 AC	max. Earth dist.	-11870 Sep 26 j 21:42		
evening set	-11876 Aug 16 j 02:51			morning rise	-11870 Oct 11 j 06:16		20.03377710
evening sec	110,01148 10,102.51	10 2 .0 .5		retrograde	-11869 Jan 13 j 14:39		
conjunction	-11876 Aug 31 j 15:08	17° Ⅱ 43'58	1°14'00	min. Earth dist.	-11869 Mar 31 j 10:43		18.86150 AU
minimum elong	-11876 Aug 31 j 15:08			opposition	-11869 Apr 01 j 19:39		
max. Earth dist.	-11876 Sep 01 j 19:31	17° Ⅱ 48'13	20.46421 AU	direct	-11869 Jun 16 j 13:22		
morning rise	-11876 Sep 16 j 05:09	18° Ⅱ 39'30		evening set	-11869 Sep 14 j 02:12	15°5641'14	
retrograde	-11876 Dec 18 j 17:09	21° II 52'20					
min. Earth dist.	-11875 Mar 05 j 07:18		18.49931 AU	conjunction	-11869 Sep 29 j 18:05		1°04'51
opposition	-11875 Mar 06 j 12:05		1°22'01	minimum elong	-11869 Sep 29 j 18:06		1°05'31
direct	-11875 May 21 j 19:15			max. Earth dist.	-11869 Oct 01 j 03:55		20.88434 AU
evening set	-11875 Aug 20 j 11:05	21°Щ00'36		morning rise	-11869 Oct 15 j 13:34		
. ,.	11075 0 04:22 21	2101755140	1012140	retrograde	-11868 Jan 17 j 22:37		10.00700 411
conjunction	-11875 Sep 04 j 23:31			min. Earth dist.	-11868 Apr 03 j 22:25		18.90/80 AU 1°10'19
minimum elong max. Earth dist.	-11875 Sep 04 j 23:31 -11875 Sep 06 j 04:57			opposition direct	-11868 Apr 05 j 06:18 -11868 Jun 19 j 20:41		1 10 19
morning rise	-11875 Sep 00 j 04.37 -11875 Sep 20 j 14:12		20.33272 AU	evening set	-11868 Sep 17 j 07:17		
retrograde	-11875 Dec 23 j 05:32			evening set	-11000 Sep 17 J 07.17	17 34313	
min. Earth dist.	-11874 Mar 09 j 22:15		18.56719 AU	conjunction	-11868 Oct 03 j 00:05	20°937'24	1°02'11
opposition	-11874 Mar 11 j 03:27		1°21'34	minimum elong	-11868 Oct 03 j 00:05		
direct	-11874 May 26 j 07:13			max. Earth dist.	-11868 Oct 04 j 10:16		
evening set	-11874 Aug 24 j 18:32			morning rise	-11868 Oct 18 j 20:28		
				retrograde	-11867 Jan 21 j 08:45	24°9540'48	
conjunction	-11874 Sep 09 j 07:28	26° Ⅱ 05'49	1°13'14	min. Earth dist.	-11867 Apr 08 j 07:04	22° 5 44'29	18.94969 AU
minimum elong	-11874 Sep 09 j 07:28	26° Ⅱ 05'49	1°13'55	opposition	-11867 Apr 09 j 15:57	22° 5 641'11	1°07'11
max. Earth dist.	-11874 Sep 10 j 14:42		20.59965 AU	direct	-11867 Jun 24 j 05:57		
morning rise	-11874 Sep 24 j 22:42			evening set	-11867 Sep 21 j 12:07	23°5544'02	
	-11874 Dec 05 j 00:59						
retrograde	-11874 Dec 27 j 18:43			conjunction	-11867 Oct 07 j 05:41		0°59'14
: E 4 E 4	-11873 Jan 19 j 19:30		10 (2204 ATT	minimum elong	-11867 Oct 07 j 05:41		0°59'51
min. Earth dist.	-11873 Mar 14 j 10:36			max. Earth dist.	-11867 Oct 08 j 15:50		20.96829 AU
opposition direct	-11873 Mar 15 j 17:50 -11873 May 30 j 19:58		1°20'41	morning rise retrograde	-11867 Oct 23 j 03:10 -11866 Jan 25 j 16:04		
evening set	-11873 Aug 29 j 01:48			min. Earth dist.	-11866 Apr 12 j 17:21		18 98760 AII
evening set	-11873 Sep 09 j 12:55			opposition	-11866 Apr 14 j 01:08		
		-		direct	-11866 Jun 28 j 11:48		
conjunction	-11873 Sep 13 j 15:04	0°ഇ14'30	1°12'17	evening set	-11866 Sep 25 j 16:31		
minimum elong	-11873 Sep 13 j 15:04	0°ഇ14'30	1°12'58	C	1 3		
max. Earth dist.	-11873 Sep 14 j 22:57	0°9519'12	20.66401 AU	conjunction	-11866 Oct 11 j 11:07	28° © 37'43	0°56'00
morning rise	-11873 Sep 29 j 07:06	1° 5 09'36		minimum elong	-11866 Oct 11 j 11:07	28° 5 37'43	0°56'37
retrograde	-11872 Jan 01 j 05:22	4°9520'48		max. Earth dist.	-11866 Oct 12 j 21:32	28° 5 42'41	21.00440 AU
min. Earth dist.	-11872 Mar 18 j 00:31		18.69591 AU	morning rise	-11866 Oct 27 j 09:37		
opposition	-11872 Mar 19 j 07:25	2° © 20'59	1°19'22		-11866 Nov 04 j 18:27		
direct	-11872 Jun 03 j 06:39	0°9523'37		retrograde	-11865 Jan 30 j 01:20		
evening set	-11872 Sep 01 j 08:30	3° 5 27'12		min. Earth dist.	-11865 Apr 17 j 00:49		19.02183 AU
aaniumatian	11972 Can 16: 22:25	496521146	1°10'57	opposition	-11865 Apr 18 j 09:30		1°00'01
conjunction minimum elong	-11872 Sep 16 j 22:25 -11872 Sep 16 j 22:25	4°521'46 4°521'46	1°10'37 1°11'37	direct	-11865 May 05 j 15:00 -11865 Jul 02 j 19:39		
max. Earth dist.	-11872 Sep 16 j 22:23		20.72528 AU	uncet	-11865 Aug 27 j 01:44		
morning rise	-11872 Oct 02 j 15:07	5°916'44	20.72320 710	evening set	-11865 Sep 29 j 21:00	1° Ω 42'23	
retrograde	-11871 Jan 04 j 17:59	8°927'26					
min. Earth dist.	-11871 Mar 22 j 11:43		18.75531 AU	conjunction	-11865 Oct 15 j 16:27	2° Ω 36'24	0°52'32
opposition	-11871 Mar 23 j 20:10	6° 5 27'43	1°17'40	minimum elong	-11865 Oct 15 j 16:28		0°53'07
direct	-11871 Jun 07 j 17:57	4°530'38		max. Earth dist.	-11865 Oct 17 j 02:40	2° Ω 41'18	21.03680 AU
evening set	-11871 Sep 05 j 14:45	7°533'14		morning rise	-11865 Oct 31 j 16:06	3° Ω 30′59	
				retrograde	-11864 Feb 03 j 08:19		
conjunction	-11871 Sep 21 j 05:09	8°527'40	1°09'15	min. Earth dist.	-11864 Apr 20 j 09:50		19.05252 AU
minimum elong	-11871 Sep 21 j 05:09	8°527'40	1°09'56	opposition	-11864 Apr 21 j 17:15		0°56'01
max. Earth dist.	-11871 Sep 22 j 14:24		20.78261 AU	direct	-11864 Jul 06 j 00:25		
morning rise	-11871 Oct 06 j 22:45	9°522'32		evening set	-11864 Oct 03 j 01:12	5° Ω 40'18	
retrograde	-11870 Jan 09 j 03:02		10 010/2 411	aamine -4:	11064 0-4 10 : 21 45	60 02 4110	0040140
min. Earth dist. opposition	-11870 Mar 27 j 00:39 -11870 Mar 28 j 08:24		18.81062 AU 1°15'35	conjunction minimum elong	-11864 Oct 18 j 21:45 -11864 Oct 18 j 21:45		0°48'49 0°49'23
direct	-11870 Mar 28 j 08:24 -11870 Jun 12 j 03:06	8°936'14	1 10 30	max. Earth dist.	-11864 Oct 18 j 21:45 -11864 Oct 20 j 07:54		0°49°23 21.06584 AU
evening set	-11870 Sep 09 j 20:38			morning rise	-11864 Nov 03 j 22:26		21.00304 AU
3,06 500	110,0 5 c p 07 j 20.56	5/57			1100.1101 05 j 22.20	, 002034	

DI 4 DI	CII C	11000	41 1 1120	00 (LIT) A 4 1	4 A C 10 E 1 2025	14.22	4
-	omena of Uranus fronical year style is used: The		_	. ,,			page 4
retrograde	-11863 Feb 06 j 16:52		ili astrollollilcai c	min. Earth dist.	-11857 May 19 j 10:49		19.15178 AU
min. Earth dist.	-11863 Apr 24 j 16:21		19.07972 AU	opposition	-11857 May 20 j 12:26	2° m/2013	
opposition	-11863 Apr 26 j 00:28	8° Ω 36'35	0°51'47	direct	-11857 Aug 03 j 07:38	0° m/21'55	
direct	-11863 Jul 10 j 06:36	6° Ω 40'36		evening set	-11857 Oct 31 j 10:13	3° m/18'12	
evening set	-11863 Oct 07 j 05:18	9° Ω 37'38		-	-		
				conjunction	-11857 Nov 16 j 14:22	4° Mp 12′39	0°17'30
conjunction	-11863 Oct 23 j 02:48		0°44'52	minimum elong	-11857 Nov 16 j 14:22	4° Mp 12′39	
minimum elong	-11863 Oct 23 j 02:48		0°45'25	max. Earth dist.	-11857 Nov 17 j 17:22		21.14856 AU
max. Earth dist.	-11863 Oct 24 j 12:35		21.09120 AU	morning rise	-11857 Dec 02 j 22:57	5° Mp 07'42	
morning rise	-11863 Nov 08 j 04:40			retrograde	-11856 Mar 06 j 20:52	8° Mp 14'08	001.610.1
retrograde	-11862 Feb 10 j 23:46		10 10221 ATT	opposition	-11856 May 23 j 17:33	6° Mp 14'44	
min. Earth dist. opposition	-11862 Apr 29 j 00:46 -11862 Apr 30 j 07:26		19.10321 AU 0°47'17	min. Earth dist. direct	-11856 May 22 j 18:35 -11856 Aug 06 j 10:49	4° Mp 18'49	19.14466 AU
direct	-11862 Jul 14 j 10:38		0 4/1/	evening set	-11856 Nov 03 j 16:00	7° m) 15'13	
evening set	-11862 Oct 11 j 09:31			evening set	-11030 NOV 03 J 10.00	/ III 13 13	
e renning see	11002 000 111 09:51	15 005.50		conjunction	-11856 Nov 19 j 21:20	8° m 09'47	0°12'31
conjunction	-11862 Oct 27 j 08:11	14° Ω 28'39	0°40'43	minimum elong	-11856 Nov 19 j 21:20	8° m 09'47	0°12'48
minimum elong	-11862 Oct 27 j 08:11		0°41'14	behind sun begin	-11856 Nov 19 j 17:14	8° mp 09'13	
max. Earth dist.	-11862 Oct 28 j 17:33	14° Ω 33'24	21.11288 AU	behind sun end	-11856 Nov 20 j 01:27	8° Mp 10'21	
	-11862 Nov 05 j 12:52	15° Ω		max. Earth dist.	-11856 Nov 20 j 22:29		21.13863 AU
morning rise	-11862 Nov 12 j 11:10			morning rise	-11856 Dec 06 j 06:59	9° ™ 04'57	
retrograde	-11861 Feb 15 j 08:06			retrograde	-11855 Mar 11 j 05:43	12°M 11'22	
min. Earth dist.	-11861 May 03 j 06:50			opposition	-11855 May 27 j 22:30	-	
opposition	-11861 May 04 j 13:43		0°42'35	min. Earth dist.	-11855 May 27 j 00:24		19.13170 AU
1' 4	-11861 Jun 16 j 15:36			direct	-11855 Aug 10 j 15:25	8° Mp 15'49	
direct	-11861 Jul 18 j 15:49			evening set	-11855 Nov 07 j 22:04	11°110/12-23	
evening set	-11861 Aug 18 j 22:14 -11861 Oct 15 j 14:00			conjunction	-11855 Nov 24 j 04:30	12° m 07'06	0°07'29
evening set	-11001 Oct 15 j 14.00	17 063117		minimum elong	-11855 Nov 24 j 04:30	-	0°07'43
conjunction	-11861 Oct 31 j 13:41	18°Ω25'25	0°36'23	behind sun begin	-11855 Nov 23 j 22:28		0 07 15
minimum elong	-11861 Oct 31 j 13:41			behind sun end	-11855 Nov 24 j 10:31		
max. Earth dist.	-11861 Nov 01 j 22:13			max. Earth dist.	-11855 Nov 25 j 03:48	-	21.12284 AU
morning rise	-11861 Nov 16 j 17:51	19° Ω 20′08		morning rise	-11855 Dec 10 j 15:12	13°M 02'24	
retrograde	-11860 Feb 19 j 14:47	22° Ω 26′50		retrograde	-11854 Mar 15 j 12:06	16°№08'50	
opposition	-11860 May 07 j 19:51	20° Ω 27'23	0°37'41	min. Earth dist.	-11854 May 31 j 07:58		
min. Earth dist.	-11860 May 06 j 14:56		19.13780 AU	opposition	-11854 Jun 01 j 03:26		0°05'22
direct	-11860 Jul 21 j 19:07			direct	-11854 Aug 14 j 18:50		
evening set	-11860 Oct 18 j 18:32	21° {\} 27'57		evening set	-11854 Nov 12 j 04:36	15° m 09'48	
agniunation	11960 Nov 02 ; 10:21	22° (22207	0°21'52	agniunation	-11854 Nov 28 j 12:12	160 mm 0.4/20	0°02'25
conjunction minimum elong	-11860 Nov 03 j 19:21 -11860 Nov 03 j 19:22			conjunction minimum elong	-11854 Nov 28 j 12:11		0°02'37
max. Earth dist.	-11860 Nov 05 j 02:58			behind sun begin	-11854 Nov 28 j 05:31	-	0 0237
morning rise	-11860 Nov 20 j 00:35		21.11.001.110	behind sun end	-11854 Nov 28 j 18:52		
retrograde	-11859 Feb 22 j 23:23			max. Earth dist.	-11854 Nov 29 j 09:33		21.10189 AU
min. Earth dist.	-11859 May 10 j 20:51		19.14797 AU	morning rise	-11854 Dec 14 j 23:56		
opposition	-11859 May 12 j 01:32	24° Ω 24'05	0°32'36	retrograde	-11853 Mar 19 j 21:02	20° Mp 06'35	
direct	-11859 Jul 25 j 23:58			desc. node	-11853 May 19 j 07:23	18° ™ 47'42	
evening set	-11859 Oct 22 j 23:27	25° Ω 24'36		opposition	-11853 Jun 05 j 07:58		
				min. Earth dist.	-11853 Jun 04 j 13:30		19.08971 AU
conjunction	-11859 Nov 08 j 01:19			direct	-11853 Aug 18 j 23:41		
minimum elong	-11859 Nov 08 j 01:19			evening set	-11853 Nov 16 j 11:40	19° ID 07/32	
max. Earth dist. morning rise	-11859 Nov 09 j 07:38 -11859 Nov 24 j 07:42		21.15054 AU	conjunction	-11853 Dec 02 j 20:16	200 m 02122	0002140
morning rise	-11858 Jan 29 j 03:49			minimum elong	-11853 Dec 02 j 20:10 -11853 Dec 02 j 20:17	-	
retrograde	-11858 Feb 27 j 05:40			behind sun begin	-11853 Dec 02 j 20:17 -11853 Dec 02 j 13:36		0 0241
	-11858 Mar 28 j 17:47			behind sun end	-11853 Dec 02 j 13:30 -11853 Dec 03 j 02:58		
min. Earth dist.	-11858 May 15 j 04:48		19.15276 AU	max. Earth dist.	-11853 Dec 03 j 15:47	-	21.07611 AU
opposition	-11858 May 16 j 07:07			morning rise	-11853 Dec 19 j 08:58	-	
direct	-11858 Jul 30 j 02:57			retrograde	-11852 Mar 23 j 03:40		
evening set	-11858 Oct 27 j 04:35			opposition	-11852 Jun 08 j 12:43	22°M 04'55	
	-11858 Nov 07 j 16:59	0° m ∕		min. Earth dist.	-11852 Jun 07 j 20:47	22° Mp $06'32$	19.06178 AU
				direct	-11852 Aug 22 j 02:54		
conjunction	-11858 Nov 12 j 07:40	0° Mp 15'41		evening set	-11852 Nov 19 j 18:58	23° m 05'44	
minimum elong	-11858 Nov 12 j 07:41	0° m 15'41			11050 - 0	2.10 ***	0005:-:
max. Earth dist.	-11858 Nov 13 j 12:30	-•	21.15261 AU	conjunction	-11852 Dec 06 j 04:39		
morning rise	-11858 Nov 28 j 15:10	1° Mp 10'38		minimum elong	-11852 Dec 06 j 04:38		0~07'48
retrograde	-11857 Mar 03 j 14:45	4° m) 17'05		behind sun begin	-11852 Dec 05 j 22:37	∠4 IIJ/UU'U6	

Planetary Phenomena of Uranus from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11852 in astronomical counting style is the year 11853 BCE in historical counting style. -11852 Dec 06 i 10:40 24° m 01'45 behind sun end morning rise -11845 Jan 17 i 14:26 19° **2**08'33 max. Earth dist. -11852 Dec 06 j 22:10 24° Mp 03'24 21.04629 AU -11845 Apr 21 j 23:40 22° **△**17'16 retrograde -11852 Dec 22 j 18:14 24° m 56'41 -11845 Jul 07 j 01:55 20° **2**17'02 -0°43'43 morning rise opposition -11851 Mar 27 j 13:11 28° m 03'25 -11845 Jul 06 j 23:18 20°**2**17'19 18.76630 AU retrograde min. Earth dist. -11851 Jun 12 j 17:22 26° M 03'30 -0°11'32 -11845 Sep 19 j 15:14 18°**△**18'28 opposition direct -11851 Jun 12 j 02:19 26° M 05'02 19.03003 AU -11845 Dec 19 j 17:56 21°**2**21'28 min. Earth dist. evening set direct -11851 Aug 26 j 08:09 24° Mp 06'28 -11851 Nov 24 j 02:57 27° m 04'34 -11844 Jan 05 j 09:57 22° **2**18'17 -0°41'41 evening set conjunction -11844 Jan 05 j 09:56 22°**2**18'17 0°41'54 minimum elong max. Earth dist. conjunction -11851 Dec 10 j 13:38 27° m 59'58 -0°12'58 -11844 Jan 05 j 11:19 22°**2**18'29 20.73828 AU minimum elong -11851 Dec 10 j 13:38 27° m 59'58 0°12'54 morning rise -11844 Jan 22 j 04:13 23°**△**15'27 -11851 Dec 10 j 09:36 27° m 59'25 -11844 Apr 25 j 10:53 26° **2**24'37 behind sun begin retrograde -11851 Dec 10 j 17:39 28° m 00'31 -11844 Jul 10 j 08:50 24°**2**24'20 -0°48'34 behind sun end opposition max. Earth dist. -11851 Dec 11 j 05:20 28° m 02'11 21.01266 AU min. Earth dist. -11844 Jul 10 j 09:12 24°**2**24'18 18.70932 AU morning rise -11851 Dec 27 j 04:03 28° m 55'54 direct -11844 Sep 22 j 22:07 22°**♀**25'27 -11850 Jan 16 j 11:23 0∘**⊽** evening set -11844 Dec 23 j 07:15 25°**2**29'30 retrograde -11850 Mar 31 j 20:21 2°**♀**02'50 opposition -11850 Jun 16 j 22:09 0°**♀**02'49 -0°17'07 conjunction -11843 Jan 08 j 23:54 26°**2**26'34 -0°45'57 min. Earth dist. -11850 Jun 16 j 09:41 0°**2**04'06 18.99465 AU minimum elong -11843 Jan 08 j 23:53 26° \(\Omega\) 26'34 0°46'13 -11850 Jun 18 j 01:34 30°R M max. Earth dist. -11843 Jan 08 j 21:51 26°**2**26'16 20.67935 AU direct -11850 Aug 30 j 11:21 28° m 05'33 morning rise -11843 Jan 25 j 18:40 27° **2**23'58 -11850 Nov 08 i 02:38 0°**♀** -11843 Mar 24 j 02:31 0°M evening set -11850 Nov 28 j 11:31 1°**♀**04'15 retrograde -11843 Apr 29 j 23:16 0° ML33'38 -11843 Jun 06 i 01:27 30°R Ω conjunction -11850 Dec 14 j 23:15 1° \(\Omega 59'51 \) -0°17'59 opposition -11843 Jul 14 j 16:09 28° **2**33'14 -0°53'12 minimum elong -11850 Dec 14 j 23:15 1°**2**59'51 0°17'58 min. Earth dist. -11843 Jul 14 j 18:22 28°**2**33'00 18.64841 AU max. Earth dist. -11850 Dec 15 j 12:40 2°**2**01'45 20.97570 AU -11843 Sep 27 j 06:22 26° **△**33'58 direct -11850 Dec 31 j 14:32 2°**£**55'58 -11843 Dec 27 j 21:34 29° **△**39'07 morning rise evening set -11849 Apr 05 j 06:43 6°**೨**03'10 -11842 Jan 03 j 01:01 0°ML retrograde -11849 Jun 21 j 03:05 4°**2**03'05 -0°22'39 opposition -11849 Jun 20 j 15:43 4°**2**04'16 18.95593 AU -11842 Jan 13 j 14:55 0°M36'28 -0°50'00 min. Earth dist. conjunction -11849 Sep 03 j 17:05 2°**♀**05'34 -11842 Jan 13 j 14:54 0°M 36'28 0°50'19 direct minimum elong -11849 Dec 02 j 20:49 -11842 Jan 13 j 10:31 0°ML35'50 20.61640 AU 5°**♀**04'58 max. Earth dist. evening set -11842 Jan 30 j 09:54 1°M34'06 morning rise -11849 Dec 19 j 09:28 6° **2**00'48 -0°22'56 -11842 May 04 j 11:18 4° 1.44'14 conjunction retrograde -11849 Dec 19 j 09:28 6°**♀**00'48 0°22'58 -11842 Jul 18 j 23:56 2°M 43'43 -0°57'34 minimum elong opposition -11849 Dec 19 j 20:56 6°**⊆**02'25 20.93520 AU -11842 Jul 19 j 05:04 2°M 43'11 18.58366 AU max. Earth dist. min. Earth dist. morning rise -11848 Jan 05 j 01:26 6°**£**57'06 direct -11842 Oct 01 j 15:03 0°ML44'03 retrograde -11848 Apr 08 j 14:56 10°**♀**04'36 evening set -11841 Jan 01 j 12:47 3°M50'20 opposition -11848 Jun 24 j 08:18 8°**♀**04'29 -0°28'07 min. Earth dist. -11848 Jun 23 j 23:37 8°**♀**05'23 18.91376 AU conjunction -11841 Jan 18 j 06:38 4°ML47'57 -0°53'48 -11848 Sep 06 j 20:58 6°**£**06'44 minimum elong -11841 Jan 18 j 06:38 4°ML47'57 0°54'09 direct -11848 Dec 06 j 06:47 max. Earth dist. -11841 Jan 17 j 22:36 4°M 46'48 20.55008 AU evening set -11841 Feb 04 j 02:01 5°ML45'49 morning rise conjunction -11848 Dec 22 j 20:21 10° **2**02'58 -0°27'49 -11841 May 09 j 00:08 8°M 56'27 retrograde -11848 Dec 22 j 20:20 10° **2**02'58 0°27'55 -11841 Jul 23 j 08:14 6°ML55'47 -1°01'39 minimum elong opposition -11848 Dec 23 j 05:15 10° **2**04'13 20.89149 AU -11841 Jul 23 j 15:16 6° ML55'02 18.51588 AU max. Earth dist. min. Earth dist. morning rise -11847 Jan 08 j 13:03 10° **2**59'28 direct -11841 Oct 06 i 01:08 4°M55'39 retrograde -11847 Apr 13 i 01:59 14° \(\Omega\) 07'21 evening set -11840 Jan 06 i 04:41 8°MJ03'07 opposition -11847 Jun 28 i 13:46 12° \(\Omega\)07'11 -0°33'27 min. Earth dist. -11847 Jun 28 j 06:27 12°**2**07'56 18.86831 AU conjunction -11840 Jan 22 j 23:05 9°ML01'01 -0°57'20 direct -11847 Sep 11 j 03:07 10° **2**09'11 minimum elong -11840 Jan 22 j 23:05 9°ML01'01 0°57'45 -11847 Dec 10 j 17:31 13° **△**10'13 max. Earth dist. -11840 Jan 22 j 13:07 8°M59'34 20.48086 AU evening set morning rise -11840 Feb 08 j 18:27 9°ML59'07 conjunction -11847 Dec 27 j 07:58 14°**2**06'31 -0°32'35 retrograde -11840 May 12 j 12:47 13°ML10'15 minimum elong -11847 Dec 27 j 07:57 14° \(\Omega\) 06'31 0°32'43 opposition -11840 Jul 26 j 17:08 11°ML09'26 -1°05'27 max. Earth dist. -11847 Dec 27 j 14:48 14°**£**07'29 20.84420 AU min. Earth dist. -11840 Jul 27 j 02:43 11°ML08'24 18.44562 AU -11846 Jan 13 j 01:15 15°**♀**03'15 direct -11840 Oct 09 j 11:05 9°ML08'50 morning rise -11846 Apr 17 j 11:51 18° **2** 11'31 -11839 Jan 09 j 21:28 12° ML17'31 retrograde evening set -11846 Jul 02 j 19:44 16°**2**11'20 -0°38'40 opposition -11846 Jul 02 j 15:20 16°**≙**11'48 18.81918 AU conjunction -11839 Jan 26 j 16:10 13°ML15'42 -1°00'35 min. Earth dist. direct -11846 Sep 15 j 08:19 14° **2**13'04 minimum elong -11839 Jan 26 j 16:10 13°ML15'42 1°01'02 evening set -11846 Dec 15 j 05:17 17°**△**15'03 max. Earth dist. -11839 Jan 26 j 02:47 13°ML13'45 20.40981 AU morning rise -11839 Feb 12 j 11:46 14°ML14'02 conjunction -11846 Dec 31 j 20:31 18°**2**11'36 -0°37'13 -11839 Feb 26 j 08:38 15°M minimum elong -11846 Dec 31 j 20:31 18°**2**11'36 0°37'24 retrograde -11839 May 17 j 02:33 17° M25'42 max. Earth dist. -11845 Jan 01 j 00:16 18°**♀**12'08 20.79328 AU -11839 Jul 31 j 02:29 15°M24'42 -1°08'54 opposition

•			-		nst AG 18-Feb-2025		page 6
Attention, astronom	nical year style is used: Th	-					le.
min. Earth dist.	-11839 Jul 31 j 13:51		18.37401 AU	evening set	-11832 Feb 11 j 19:02		
	-11839 Aug 09 j 20:26			max. Earth dist.	-11832 Feb 27 j 11:30	13° ∡ ¹45'57	19.91266 AU
direct	-11839 Oct 13 j 23:06						
	-11839 Dec 15 j 23:54			conjunction	-11832 Feb 28 j 14:32		
evening set	-11838 Jan 14 j 14:58	16°11L33'34		minimum elong	-11832 Feb 28 j 14:32		1°14'03
. ,.	11020 1 21:10.11	170 m 22102	1002121	morning rise	-11832 Mar 16 j 08:09		
conjunction	-11838 Jan 31 j 10:11			retrograde	-11832 Jun 16 j 20:46		1021151
minimum elong max. Earth dist.	-11838 Jan 31 j 10:10 -11838 Jan 30 j 19:18			opposition min. Earth dist.	-11832 Aug 29 j 17:54		
morning rise	-11838 Feb 17 j 05:38		20.33737 AU	direct	-11832 Aug 30 j 17:22 -11832 Nov 13 j 05:05		17.87902 AU
retrograde	-11838 May 21 j 16:00			evening set	-11832 Nov 13 j 03:03 -11831 Feb 15 j 18:58		
opposition	-11838 Aug 04 j 12:38		-1°12'00	max. Earth dist.	-11831 Mar 03 j 08:01		10 8/1565 ATT
min. Earth dist.	-11838 Aug 05 j 02:12			max. Lartii dist.	-11031 Wai 03 j 00.01	10 × 13 +7	17.04303 AC
direct	-11838 Oct 18 j 10:22		10.50147710	conjunction	-11831 Mar 04 j 14:03	18° √ 20'21	-1°13'36
evening set	-11837 Jan 19 j 09:34			minimum elong	-11831 Mar 04 j 14:03		
max. Earth dist.	-11837 Feb 04 j 10:40		20 26492 ATT	morning rise	-11831 Mar 21 j 07:13		1 1413
max. Latur dist.	-1103/1 c 0 0+j10.+0	21 110-7/2/	20.204)2 AO	retrograde	-11831 Jun 21 j 15:45		
conjunction	-11837 Feb 05 j 04:52	21°M 50'08	-1°06'07	opposition	-11831 Sep 03 j 09:53		-1°21'50
minimum elong	-11837 Feb 05 j 04:51			min. Earth dist.	-11831 Sep 04 j 11:29		
morning rise	-11837 Feb 22 j 00:22		1 00 30	direct	-11831 Nov 17 j 22:58		17.01332 AC
retrograde	-11837 May 26 j 07:10			evening set	-11830 Feb 20 j 19:35		
opposition	-11837 Aug 08 j 23:23		101/1/12	max. Earth dist.	-11830 Mar 08 j 07:40		10 77082 AII
min. Earth dist.	-11837 Aug 08 j 23:23 -11837 Aug 09 j 14:40			max. Earth dist.	-11650 Mai 06 j 07.40	22 🗴 40 00	19.77962 AU
direct	-11837 Aug 05 j 14:40 -11837 Oct 23 j 00:11		10.22070 AU	conjunction	-11830 Mar 09 j 14:30	22° 7 5247	_1°13'10
evening set	-11836 Jan 24 j 04:50			minimum elong	-11830 Mar 09 j 14:30		
max. Earth dist.	-11836 Feb 09 j 05:12		20 19246 ATT	morning rise	-11830 Mar 26 j 06:55		1 1337
max. Earth dist.	-11630 FC0 09 J 03.12	20 11607 13	20.19240 AU	retrograde	-11830 Jun 26 j 12:50		
conjunction	-11836 Feb 10 j 00:28	26°M 10'03	1008122	opposition	-11830 Sep 08 j 02:55		1021118
minimum elong	-11836 Feb 10 j 00:28			min. Earth dist.	-11830 Sep 08 j 02:33		
morning rise	-11836 Feb 26 j 19:37		1 00 54	direct	-11830 Nov 22 j 18:46		17.74003 AC
morning risc	-11836 Apr 30 j 16:38			evening set	-11829 Feb 25 j 21:05		
retrograde	-11836 May 29 j 22:03			max. Earth dist.	-11829 Mar 13 j 05:59		19 71516 AII
retrograde	-11836 Jun 28 j 09:05			max. Lartii dist.	-1102) Wai 13 j 03.37	21 × 22 03	17.71310 AC
opposition	-11836 Aug 12 j 11:02		-1°17'02	conjunction	-11829 Mar 14 j 15:25	27° √ 27'11	-1°12'34
min. Earth dist.	-11836 Aug 12 j 11:02 -11836 Aug 13 j 04:03			minimum elong	-11829 Mar 14 j 15:25		
direct	-11836 Oct 26 j 13:15		10.13000710	morning rise	-11829 Mar 31 j 07:08		1 15 14
	-11835 Jan 28 j 00:58			morning risc	-11829 Apr 28 j 02:17		
evening set	-11835 Feb 04 j 20:51	0° x ⁷		retrograde	-11829 Jul 01 j 08:54		
	-110331C0 04 j 20.31	· ^		retrograde	-11829 Sep 06 j 13:52		
conjunction	-11835 Feb 13 j 20:33	0° ∡ ³31'54	-1°10'14	opposition	-11829 Sep 12 j 20:55		-1°20'15
minimum elong	-11835 Feb 13 j 20:32	0° х 31′54		min. Earth dist.	-11829 Sep 14 j 01:29		
max. Earth dist.	-11835 Feb 12 j 22:08		20.12080 AU	direct	-11829 Nov 27 j 14:42		17.00427710
morning rise	-11835 Mar 02 j 15:37	1°×731'09	20.12000 AC	direct	-11828 Feb 12 j 19:02	0°る	
retrograde	-11835 Jun 03 j 14:31	4° × ⁷ 45'08		evening set	-11828 Mar 01 j 23:02	1°る02'25	
opposition	-11835 Aug 16 j 23:25	2° ∡ ¹43'39	-1°18'56	max. Earth dist.	-11828 Mar 17 j 06:57		19.65231 AU
min. Earth dist.	-11835 Aug 17 j 18:09		18.08583 AU	max. Dartii dist.	11020 Mai 17 j 00.57	1 03012	17.03231110
direct	-11835 Oct 31 j 04:14	0° × ⁷ 40'49	10.00303710	conjunction	-11828 Mar 18 j 16:58	2° る 03'25	-1°11'21
evening set	-11834 Feb 01 j 22:02	3° ∡ 756'14		-			
* · · · · · · · · · · · · · · · · · · ·				minimum elong	-11828 Mar 18 i 16:58	2°る03'25	1-12/05
	,	3 7 30 14		minimum elong morning rise	-11828 Mar 18 j 16:58 -11828 Apr 04 j 07:52	2°පි03'25 3°පි04'01	1-12-03
conjunction	·		-1°11'43	morning rise	-11828 Apr 04 j 07:52	3° ප 04'01	1-1203
conjunction minimum elong	-11834 Feb 18 j 17:49	4° ₰ 55'48		morning rise retrograde	-11828 Apr 04 j 07:52 -11828 Jul 05 j 06:59	3° ට 04'01 6°ට22'15	
minimum elong	-11834 Feb 18 j 17:49 -11834 Feb 18 j 17:48	4° ₰ 55'48 4° ₰ 55'48	1°12'18	morning rise retrograde opposition	-11828 Apr 04 j 07:52 -11828 Jul 05 j 06:59 -11828 Sep 16 j 15:42	3°ප04'01 6°ප22'15 4°ප20'31	-1°18'40
minimum elong max. Earth dist.	-11834 Feb 18 j 17:49 -11834 Feb 18 j 17:48 -11834 Feb 17 j 18:34	4° ₹ 55'48 4° ₹ 55'48 4° ₹ 52'21		morning rise retrograde opposition min. Earth dist.	-11828 Apr 04 j 07:52 -11828 Jul 05 j 06:59 -11828 Sep 16 j 15:42 -11828 Sep 17 j 20:36	3°ප04'01 6°ප22'15 4°ප20'31 4°ප17'22	
minimum elong max. Earth dist. morning rise	-11834 Feb 18 j 17:49 -11834 Feb 18 j 17:48 -11834 Feb 17 j 18:34 -11834 Mar 07 j 12:23	4° \$\black \cdot 55'48 4° \$\black 55'48 4° \$\black 52'21 5° \$\black 55'16	1°12'18	morning rise retrograde opposition min. Earth dist. direct	-11828 Apr 04 j 07:52 -11828 Jul 05 j 06:59 -11828 Sep 16 j 15:42 -11828 Sep 17 j 20:36 -11828 Dec 01 j 12:13	3°පි04'01 6°පි22'15 4°පි20'31 4°පි17'22 2°පි15'10	-1°18'40
minimum elong max. Earth dist. morning rise retrograde	-11834 Feb 18 j 17:49 -11834 Feb 18 j 17:48 -11834 Feb 17 j 18:34 -11834 Mar 07 j 12:23 -11834 Jun 08 j 07:36	4° \$\black \cdot 55'48 4° \$\black 55'48 4° \$\black 52'21 5° \$\black 55'16 9° \$\black 90'51	1°12'18 20.05019 AU	morning rise retrograde opposition min. Earth dist. direct evening set	-11828 Apr 04 j 07:52 -11828 Jul 05 j 06:59 -11828 Sep 16 j 15:42 -11828 Sep 17 j 20:36 -11828 Dec 01 j 12:13 -11827 Mar 07 j 01:31	3°ব্o4'01 6°ব্o2'15 4°ব্o2'31 4°ব্o17'22 2°ব্o15'10 5°ব্o40'09	-1°18'40 17.62249 AU
minimum elong max. Earth dist. morning rise	-11834 Feb 18 j 17:49 -11834 Feb 18 j 17:48 -11834 Feb 17 j 18:34 -11834 Mar 07 j 12:23 -11834 Jun 08 j 07:36 -11834 Aug 21 j 12:35	4° \$\mathbb{A}^55'48 4° \$\mathbb{A}^55'48 4° \$\mathbb{A}^52'21 5° \$\mathbb{A}^55'16 9° \$\mathbb{A}^09'51 7° \$\mathbb{A}^08'21	1°12'18 20.05019 AU	morning rise retrograde opposition min. Earth dist. direct	-11828 Apr 04 j 07:52 -11828 Jul 05 j 06:59 -11828 Sep 16 j 15:42 -11828 Sep 17 j 20:36 -11828 Dec 01 j 12:13	3°ব্o4'01 6°ব্o2'15 4°ব্o2'31 4°ব্o17'22 2°ব্o15'10 5°ব্o40'09	-1°18'40
minimum elong max. Earth dist. morning rise retrograde opposition	-11834 Feb 18 j 17:49 -11834 Feb 18 j 17:48 -11834 Feb 17 j 18:34 -11834 Mar 07 j 12:23 -11834 Jun 08 j 07:36	4° \$\mathbb{A}^55'48 4° \$\mathbb{A}^55'48 4° \$\mathbb{A}^52'21 5° \$\mathbb{A}^55'16 9° \$\mathbb{A}^09'51 7° \$\mathbb{A}^08'21	1°12'18 20.05019 AU -1°20'23	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist.	-11828 Apr 04 j 07:52 -11828 Jul 05 j 06:59 -11828 Sep 16 j 15:42 -11828 Sep 17 j 20:36 -11828 Dec 01 j 12:13 -11827 Mar 07 j 01:31	3°ත04'01 6°ති22'15 4°ති20'31 4°ති17'22 2°ති15'10 5°ති40'09 6°ති35'50	-1°18'40 17.62249 AU 19.59174 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-11834 Feb 18 j 17:49 -11834 Feb 18 j 17:48 -11834 Feb 17 j 18:34 -11834 Mar 07 j 12:23 -11834 Jun 08 j 07:36 -11834 Aug 21 j 12:35 -11834 Aug 22 j 08:53 -11834 Nov 04 j 19:22	4° \$\tilde{\$7}\$55'48 4° \$\tilde{\$7}\$55'48 4° \$\tilde{\$7}\$52'21 5° \$\tilde{\$7}\$55'16 9° \$\tilde{\$7}\$09'51 7° \$\tilde{\$7}\$08'21 7° \$\tilde{\$7}\$06'10	1°12'18 20.05019 AU -1°20'23	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction	-11828 Apr 04 j 07:52 -11828 Jul 05 j 06:59 -11828 Sep 16 j 15:42 -11828 Sep 17 j 20:36 -11828 Dec 01 j 12:13 -11827 Mar 07 j 01:31 -11827 Mar 22 j 07:06 -11827 Mar 23 j 18:50	3°ත04'01 6°ති22'15 4°ති20'31 4°ති17'22 2°ති15'10 5°ති40'09 6°ති35'50	-1°18'40 17.62249 AU 19.59174 AU -1°09'40
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-11834 Feb 18 j 17:49 -11834 Feb 18 j 17:48 -11834 Feb 17 j 18:34 -11834 Mar 07 j 12:23 -11834 Jun 08 j 07:36 -11834 Aug 21 j 12:35 -11834 Aug 22 j 08:53	4° \$\mathrm{\text{7}} 55'48 4° \$\mathrm{\text{7}} 55'48 4° \$\mathrm{\text{7}} 55'16 9° \$\mathrm{\text{7}} 09'51 7° \$\mathrm{\text{7}} 08'21 7° \$\mathrm{\text{7}} 06'10 5° \$\mathrm{\text{7}} 05'08	1°12'18 20.05019 AU -1°20'23	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong	-11828 Apr 04 j 07:52 -11828 Jul 05 j 06:59 -11828 Sep 16 j 15:42 -11828 Sep 17 j 20:36 -11828 Dec 01 j 12:13 -11827 Mar 07 j 01:31 -11827 Mar 22 j 07:06 -11827 Mar 23 j 18:50 -11827 Mar 23 j 18:50	3°ත04'01 6°ති22'15 4°ති20'31 4°ති17'22 2°ති15'10 5°ති40'09 6°ති35'50	-1°18'40 17.62249 AU 19.59174 AU -1°09'40
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-11834 Feb 18 j 17:49 -11834 Feb 18 j 17:48 -11834 Feb 17 j 18:34 -11834 Mar 07 j 12:23 -11834 Jun 08 j 07:36 -11834 Aug 21 j 12:35 -11834 Aug 22 j 08:53 -11834 Nov 04 j 19:22 -11833 Feb 06 j 20:16	4° \$\times 55'48 4° \$\times 55'48 4° \$\times 55'16 9° \$\times 909'51 7° \$\times 96'10 5° \$\times 905'08 8° \$\times 22'00	1°12'18 20.05019 AU -1°20'23 18.01581 AU	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise	-11828 Apr 04 j 07:52 -11828 Jul 05 j 06:59 -11828 Sep 16 j 15:42 -11828 Sep 17 j 20:36 -11828 Dec 01 j 12:13 -11827 Mar 07 j 01:31 -11827 Mar 22 j 07:06 -11827 Mar 23 j 18:50 -11827 Apr 09 j 08:54	3°ත04'01 6°ති22'15 4°ති20'31 4°ත17'22 2°ති15'10 5°ති40'09 6°ති35'50 6°ති41'20 6°ති41'20 7°ති42'04	-1°18'40 17.62249 AU 19.59174 AU -1°09'40
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-11834 Feb 18 j 17:49 -11834 Feb 18 j 17:48 -11834 Feb 17 j 18:34 -11834 Mar 07 j 12:23 -11834 Jun 08 j 07:36 -11834 Aug 21 j 12:35 -11834 Aug 22 j 08:53 -11834 Nov 04 j 19:22 -11833 Feb 06 j 20:16	4° \$\times 55'48 4° \$\times 55'48 4° \$\times 55'16 9° \$\times 909'51 7° \$\times 96'10 5° \$\times 905'08 8° \$\times 22'00	1°12'18 20.05019 AU -1°20'23 18.01581 AU -1°12'47	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde	-11828 Apr 04 j 07:52 -11828 Jul 05 j 06:59 -11828 Sep 16 j 15:42 -11828 Sep 17 j 20:36 -11828 Dec 01 j 12:13 -11827 Mar 07 j 01:31 -11827 Mar 22 j 07:06 -11827 Mar 23 j 18:50 -11827 Apr 09 j 08:54 -11827 Jul 10 j 04:03	3°ත04'01 6°ති22'15 4°ති20'31 4°ති17'22 2°ති15'10 5°ති40'09 6°ති35'50 6°ති41'20 6°ති41'20 7°ති42'04 11°ති00'50	-1°18'40 17.62249 AU 19.59174 AU -1°09'40 1°10'21
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-11834 Feb 18 j 17:49 -11834 Feb 18 j 17:48 -11834 Feb 17 j 18:34 -11834 Mar 07 j 12:23 -11834 Jun 08 j 07:36 -11834 Aug 21 j 12:35 -11834 Aug 22 j 08:53 -11834 Nov 04 j 19:22 -11833 Feb 06 j 20:16 -11833 Feb 23 j 15:46 -11833 Feb 23 j 15:46	4° \$\times 55'48 4° \$\times 55'48 4° \$\times 55'48 4° \$\times 55'16 9° \$\times 90'51 7° \$\times 90'51 5° \$\times 90'508 8° \$\times 22'00 9° \$\times 21'49 9° \$\times 21'49	1°12'18 20.05019 AU -1°20'23 18.01581 AU -1°12'47	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise	-11828 Apr 04 j 07:52 -11828 Jul 05 j 06:59 -11828 Sep 16 j 15:42 -11828 Sep 17 j 20:36 -11828 Dec 01 j 12:13 -11827 Mar 07 j 01:31 -11827 Mar 22 j 07:06 -11827 Mar 23 j 18:50 -11827 Apr 09 j 08:54 -11827 Jul 10 j 04:03 -11827 Sep 21 j 11:25	3°ත04'01 6°ති22'15 4°ති20'31 4°ති17'22 2°ති15'10 5°ති40'09 6°ති35'50 6°ති41'20 6°ති41'20 7°ති42'04 11°ත00'50 8°ති59'00	-1°18'40 17.62249 AU 19.59174 AU -1°09'40 1°10'21
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-11834 Feb 18 j 17:49 -11834 Feb 18 j 17:48 -11834 Feb 17 j 18:34 -11834 Mar 07 j 12:23 -11834 Jun 08 j 07:36 -11834 Aug 21 j 12:35 -11834 Aug 22 j 08:53 -11834 Nov 04 j 19:22 -11833 Feb 06 j 20:16 -11833 Feb 23 j 15:46 -11833 Feb 22 j 13:24	4° \$\times^{5}5'48 4° \$\times^{5}5'48 4° \$\times^{5}5'16 9° \$\times^{9}55'16 9° \$\times^{9}09'51 7° \$\times^{9}08'21 7° \$\times^{9}05'08 8° \$\times^{2}22'00 9° \$\times^{2}21'49 9° \$\times^{2}17'53	1°12'18 20.05019 AU -1°20'23 18.01581 AU -1°12'47 1°13'25	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition	-11828 Apr 04 j 07:52 -11828 Jul 05 j 06:59 -11828 Sep 16 j 15:42 -11828 Sep 17 j 20:36 -11828 Dec 01 j 12:13 -11827 Mar 07 j 01:31 -11827 Mar 22 j 07:06 -11827 Mar 23 j 18:50 -11827 Apr 09 j 08:54 -11827 Jul 10 j 04:03 -11827 Sep 21 j 11:25 -11827 Sep 22 j 18:07	3°ත04'01 6°ති22'15 4°ති20'31 4°ති17'22 2°ති15'10 5°ති40'09 6°ති35'50 6°ති41'20 7°ති42'04 11°ත00'50 8°ති59'00 8°ති55'40	-1°18'40 17.62249 AU 19.59174 AU -1°09'40 1°10'21 -1°16'34
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-11834 Feb 18 j 17:49 -11834 Feb 18 j 17:48 -11834 Feb 17 j 18:34 -11834 Mar 07 j 12:23 -11834 Jun 08 j 07:36 -11834 Aug 21 j 12:35 -11834 Aug 22 j 08:53 -11834 Nov 04 j 19:22 -11833 Feb 06 j 20:16 -11833 Feb 23 j 15:46 -11833 Feb 23 j 15:46 -11833 Feb 22 j 13:24 -11833 Mar 12 j 10:04	4° \$\times^{5}5'48 4° \$\times^{5}5'48 4° \$\times^{5}5'16 9° \$\times^{9}55'16 9° \$\times^{9}5'1 7° \$\times^{9}06'10 5° \$\times^{9}05'08 8° \$\times^{2}2'00 9° \$\times^{2}1'49 9° \$\times^{1}17'53 10° \$\times^{2}21'30	1°12'18 20.05019 AU -1°20'23 18.01581 AU -1°12'47 1°13'25	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct	-11828 Apr 04 j 07:52 -11828 Jul 05 j 06:59 -11828 Sep 16 j 15:42 -11828 Sep 17 j 20:36 -11828 Dec 01 j 12:13 -11827 Mar 07 j 01:31 -11827 Mar 22 j 07:06 -11827 Mar 23 j 18:50 -11827 Apr 09 j 08:54 -11827 Jul 10 j 04:03 -11827 Sep 21 j 11:25 -11827 Sep 22 j 18:07 -11827 Dec 06 j 09:51	3°ත04'01 6°ති22'15 4°ති20'31 4°ති17'22 2°ති15'10 5°ති40'09 6°ති35'50 6°ති41'20 7°ති42'04 11°ත00'50 8°ති59'00 8°ති55'40 6°ති3'19	-1°18'40 17.62249 AU 19.59174 AU -1°09'40 1°10'21 -1°16'34
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-11834 Feb 18 j 17:49 -11834 Feb 18 j 17:48 -11834 Feb 17 j 18:34 -11834 Mar 07 j 12:23 -11834 Jun 08 j 07:36 -11834 Aug 21 j 12:35 -11834 Aug 22 j 08:53 -11834 Nov 04 j 19:22 -11833 Feb 06 j 20:16 -11833 Feb 23 j 15:46 -11833 Feb 23 j 15:46 -11833 Feb 22 j 13:24 -11833 Mar 12 j 10:04 -11833 Jun 13 j 01:28	4° \$\times^{5}5'48 4° \$\times^{5}5'48 4° \$\times^{5}5'16 9° \$\times^{9}55'16 9° \$\times^{9}51 7° \$\times^{9}06'10 5° \$\times^{9}05'08 8° \$\times^{2}2'00 9° \$\times^{2}1'49 9° \$\times^{1}7'53 10° \$\times^{2}21'30 13° \$\times^{3}36'44	1°12'18 20.05019 AU -1°20'23 18.01581 AU -1°12'47 1°13'25 19.98081 AU	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist.	-11828 Apr 04 j 07:52 -11828 Jul 05 j 06:59 -11828 Sep 16 j 15:42 -11828 Sep 17 j 20:36 -11828 Dec 01 j 12:13 -11827 Mar 07 j 01:31 -11827 Mar 22 j 07:06 -11827 Mar 23 j 18:50 -11827 Apr 09 j 08:54 -11827 Jul 10 j 04:03 -11827 Sep 21 j 11:25 -11827 Sep 22 j 18:07 -11827 Dec 06 j 09:51 -11826 Mar 12 j 04:31	3°ත04'01 6°ති22'15 4°ති20'31 4°ති17'22 2°ති15'10 5°ති40'09 6°ති35'50 6°ති41'20 7°ති42'04 11°ති00'50 8°ති59'00 8°ති55'40 6°ති53'19	-1°18'40 17.62249 AU 19.59174 AU -1°09'40 1°10'21 -1°16'34 17.56345 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	-11834 Feb 18 j 17:49 -11834 Feb 18 j 17:48 -11834 Feb 17 j 18:34 -11834 Mar 07 j 12:23 -11834 Jun 08 j 07:36 -11834 Aug 21 j 12:35 -11834 Aug 22 j 08:53 -11834 Nov 04 j 19:22 -11833 Feb 06 j 20:16 -11833 Feb 23 j 15:46 -11833 Feb 23 j 15:46 -11833 Feb 22 j 13:24 -11833 Mar 12 j 10:04	4° \$\tilde{x}^3 55'48 4° \$\tilde{x}^3 55'48 4° \$\tilde{x}^3 55'16 9° \$\tilde{x}^9 09'51 7° \$\tilde{x}^9 08'21 7° \$\tilde{x}^9 05'08 8° \$\tilde{x}^2 22'00 9° \$\tilde{x}^2 21'49 9° \$\tilde{x}^2 1'53 10° \$\tilde{x}^2 21'30 13° \$\tilde{x}^3 36'44 11° \$\tilde{x}^3 35'12	1°12'18 20.05019 AU -1°20'23 18.01581 AU -1°12'47 1°13'25 19.98081 AU	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct evening set	-11828 Apr 04 j 07:52 -11828 Jul 05 j 06:59 -11828 Sep 16 j 15:42 -11828 Sep 17 j 20:36 -11828 Dec 01 j 12:13 -11827 Mar 07 j 01:31 -11827 Mar 22 j 07:06 -11827 Mar 23 j 18:50 -11827 Apr 09 j 08:54 -11827 Jul 10 j 04:03 -11827 Sep 21 j 11:25 -11827 Sep 22 j 18:07 -11827 Dec 06 j 09:51	3°ත04'01 6°ති22'15 4°ති20'31 4°ති17'22 2°ති15'10 5°ති40'09 6°ති35'50 6°ති41'20 7°ති42'04 11°ති00'50 8°ති59'00 8°ති55'40 6°ති53'19	-1°18'40 17.62249 AU 19.59174 AU -1°09'40 1°10'21 -1°16'34 17.56345 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	-11834 Feb 18 j 17:49 -11834 Feb 18 j 17:48 -11834 Feb 17 j 18:34 -11834 Mar 07 j 12:23 -11834 Aug 21 j 12:35 -11834 Aug 22 j 08:53 -11834 Nov 04 j 19:22 -11833 Feb 06 j 20:16 -11833 Feb 23 j 15:46 -11833 Feb 23 j 15:46 -11833 Feb 22 j 13:24 -11833 Mar 12 j 10:04 -11833 Jun 13 j 01:28 -11833 Aug 26 j 02:47	4° \$\tilde{x}^3 55'48 4° \$\tilde{x}^3 55'48 4° \$\tilde{x}^3 55'16 9° \$\tilde{x}^9 09'51 7° \$\tilde{x}^9 06'10 5° \$\tilde{x}^9 05'08 8° \$\tilde{x}^2 22'00 9° \$\tilde{x}^2 21'49 9° \$\tilde{x}^2 17'53 10° \$\tilde{x}^2 35'12 11° \$\tilde{x}^3 35'12 11° \$\tilde{x}^3 32'48	1°12'18 20.05019 AU -1°20'23 18.01581 AU -1°12'47 1°13'25 19.98081 AU	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct evening set	-11828 Apr 04 j 07:52 -11828 Jul 05 j 06:59 -11828 Sep 16 j 15:42 -11828 Sep 17 j 20:36 -11828 Dec 01 j 12:13 -11827 Mar 07 j 01:31 -11827 Mar 22 j 07:06 -11827 Mar 23 j 18:50 -11827 Apr 09 j 08:54 -11827 Jul 10 j 04:03 -11827 Sep 21 j 11:25 -11827 Sep 22 j 18:07 -11827 Dec 06 j 09:51 -11826 Mar 12 j 04:31	3°ත04'01 6°ති22'15 4°ති20'31 4°ති17'22 2°ති15'10 5°ති40'09 6°ති35'50 6°ති41'20 6°ති41'20 7°ති42'04 11°ත00'50 8°ති59'00 8°ති55'40 6°ති53'19 10°ති19'28 11°ති15'13	-1°18'40 17.62249 AU 19.59174 AU -1°09'40 1°10'21 -1°16'34 17.56345 AU 19.53434 AU

Planetary Phenomena of Uranus from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11826 in astronomical counting style is the year 11827 BCE in historical counting style. -11826 Mar 28 j 21:12 11°る20'48 1°08'12 evening set -11819 Apr 15 j 08:18 13°≈29'40 minimum elong -11826 Apr 14 j 10:22 12°る21'40 max. Earth dist. -11819 Apr 30 j 09:56 14°≈26'19 19.27503 AU morning rise -11826 Jul 15 j 02:47 15°る40'54 retrograde -11826 Sep 26 j 07:48 13°₹39'00 -1°13'57 -11819 May 01 j 18:22 14°≈31'27 -0°40'44 conjunction opposition -11826 Sep 27 j 14:14 13°중35'41 17.50780 AU -11819 May 01 j 18:23 14°≈31'27 0°41'14 min. Earth dist. minimum elong -11819 May 09 j 07:02 15°**≈** -11826 Dec 11 j 09:30 11°る32'59 direct -11825 Mar 17 j 07:56 15°**⋜**00'13 evening set morning rise -11819 May 17 j 23:47 15°≈32'35 max. Earth dist. -11825 Apr 01 j 11:11 15° 궁56'01 19.48069 AU retrograde -11819 Aug 16 j 22:45 18°≈54'26 opposition -11819 Oct 29 j 05:36 16°≈52'32 -0°42'41 -11825 Apr 02 j 23:51 16°**⋜**01'42 -1°04'56 conjunction min. Earth dist. -11819 Oct 30 j 10:25 16°≈49'24 17.26840 AU minimum elong -11825 Apr 02 j 23:52 16°る01'42 1°05'36 -11819 Dec 21 j 10:54 15°R≈ -11825 Apr 19 j 12:00 17°**⋜**02'40 -11818 Jan 14 j 00:04 14°≈45'40 morning rise direct -11825 Jul 20 j 00:20 20°**궁**22'22 retrograde -11818 Feb 06 j 07:21 15°≈ opposition -11825 Oct 01 j 05:18 18°₹20'23 -1°10'51 evening set -11818 Apr 20 j 12:45 18°≈17'51 min. Earth dist. -11825 Oct 02 j 13:02 18°중16'55 17.45647 AU direct -11825 Dec 16 j 08:49 16°♂14'05 conjunction -11818 May 06 j 21:26 19°≈19'35 -0°35'29 evening set -11824 Mar 21 j 11:25 19°₹42'19 minimum elong -11818 May 06 j 21:27 19°≈19'35 0°35'57 max. Earth dist. -11824 Apr 05 j 13:44 20° 중38'11 19.43181 AU max. Earth dist. -11818 May 05 j 13:06 19°≈14'28 19.26204 AU morning rise -11818 May 23 j 01:47 20°≈20'40 conjunction -11824 Apr 07 j 02:29 20°3 43′54 -1°01′54 retrograde -11818 Aug 22 j 00:57 23°≈42'45 minimum elong -11824 Apr 07 j 02:29 20°る43'54 1°02'32 opposition -11818 Nov 03 j 08:05 21°≈40'55 -0°36'40 morning rise -11824 Apr 23 i 13:42 21°ਰੋ44'56 min. Earth dist. -11818 Nov 04 j 11:27 21°≈37'57 17.25820 AU retrograde -11824 Jul 23 j 23:37 25°る05'06 direct -11817 Jan 19 i 04:35 19°≈34'07 opposition -11824 Oct 05 j 03:22 23°る03'02 -1°07'15 evening set -11817 Apr 25 j 16:55 23°≈06'34 min. Earth dist. -11824 Oct 06 j 10:09 22°중59'40 17.41011 AU max. Earth dist. -11817 May 10 j 18:41 24°≈03'29 19.25460 AU -11824 Dec 20 j 10:31 20°る56'29 direct -11823 Mar 26 j 15:16 24°る25'38 -11817 May 12 j 00:32 24°≈08'13 -0°29'58 evening set conjunction max. Earth dist. -11823 Apr 10 j 17:21 25°**♂**21'40 19.38813 AU minimum elong -11817 May 12 j 00:32 24°≈08'13 0°30'23 -11817 May 28 j 03:30 25°≈09'13 morning rise -11823 Apr 12 j 05:31 25°る27'19 -0°58'26 -11817 Aug 27 j 02:07 28°≈31'28 conjunction retrograde -11823 Apr 12 j 05:32 25°る27'19 0°59'04 -11817 Nov 08 j 11:17 26°≈29'42 -0°30'23 minimum elong opposition -11817 Nov 09 j 13:52 26°≈26'49 17.25332 AU -11823 Apr 28 j 15:33 26°**♂**28'25 min. Earth dist. morning rise -11823 Jul 28 j 21:44 29°**정**48'58 -11816 Jan 24 j 08:29 24°≈23'00 retrograde direct -11823 Oct 10 j 02:18 27°₹46′52 -1°03′10 -11816 Apr 29 j 20:51 27°≈55'32 opposition evening set -11823 Oct 11 j 09:55 27°정43'25 17.36935 AU max. Earth dist. -11816 May 14 j 21:37 28°≈52'23 19.25240 AU min. Earth dist. -11823 Dec 25 j 11:43 25°**⋜**40'08 direct -11822 Mar 31 j 19:29 29°**궁**10'07 -11816 May 16 j 03:05 28°≈57'04 -0°24'14 evening set conjunction -11822 Apr 14 j 05:04 0°≈ minimum elong -11816 May 16 j 03:05 28°≈57'04 0°24'36 max. Earth dist. -11822 Apr 15 j 20:25 0°≈06'10 19.35045 AU morning rise -11816 Jun 01 j 04:59 29°≈57'59 -11816 Jun 01 j 18:02 0°**光** conjunction -11822 Apr 17 j 08:39 0°≈11'51 -0°54'34 retrograde -11816 Aug 31 j 03:53 3°**∺**20'20 -11822 Apr 17 j 08:39 0°≈11'51 0°55'10 -11816 Nov 12 j 14:47 1°**光** 18'37 -0°23'53 minimum elong opposition -11822 May 03 j 17:42 1°≈12'59 min. Earth dist. -11816 Nov 13 j 16:00 1°**光** 15'53 17.25368 AU morning rise -11822 Aug 02 j 21:45 4°≈33'56 -11816 Dec 15 j 08:43 30°R≈ retrograde -11822 Oct 15 j 01:59 2°≈31'49 -0°58'39 direct -11815 Jan 28 j 13:30 29°≈12'01 opposition min. Earth dist. -11822 Oct 16 j 08:12 2°≈28'31 17.33468 AU -11815 Mar 12 j 16:21 0°**)**€ direct -11822 Dec 30 j 15:03 0°≈24'58 evening set -11815 May 05 i 00:26 2°**)**(44'29 evening set -11821 Apr 05 j 23:37 3°≈55'40 max. Earth dist. -11815 May 20 j 02:39 3° \(\frac{1}{41}\)'38 19.25531 AU max. Earth dist. -11821 Apr 21 j 01:13 4°≈52'00 19.31892 AU conjunction -11815 May 21 j 05:32 3° \(\frac{1}{45}\)'54 -0°18'20 minimum elong conjunction -11821 Apr 22 i 11:53 4°≈57'26 -0°50'19 -11815 May 21 j 05:32 3°**¥**45'54 0°18'41 -11821 Apr 22 j 11:53 4°≈57'26 0°50'53 morning rise -11815 Jun 06 j 06:07 4°**¥**46'41 minimum elong -11821 May 08 j 19:37 retrograde -11815 Sep 05 j 04:51 8° **★** 09'04 morning rise 5°≈58'36 retrograde -11821 Aug 07 j 20:57 9°≈19'53 opposition -11815 Nov 17 j 18:34 6°**)**€07'23 -0°17'12 opposition -11821 Oct 20 j 02:37 7°≈17'49 -0°53'43 min. Earth dist. -11815 Nov 18 j 18:18 6°**)** 6°**)** 04'49 17.25893 AU 7°≈14'30 17.30631 AU 4°**)**€00'55 min. Earth dist. -11821 Oct 21 j 09:04 direct -11814 Feb 02 j 19:10 direct -11820 Jan 04 j 17:18 5°≈10'55 evening set -11814 May 10 j 03:44 7°**∺**33'12 -11820 Apr 10 j 04:02 max. Earth dist. -11814 May 25 j 05:30 8°**∺**30'20 19.26320 AU evening set 8°≈42'13 -11820 Apr 25 j 04:27 max. Earth dist. 9°≈38'33 19.29388 AU 8°**¥**34'27 -0°12'20 conjunction -11814 May 26 j 07:25 -11820 Apr 26 j 15:04 9°≈44'01 -0°45'42 conjunction minimum elong -11814 May 26 j 07:25 8°**¥**34'27 0°12'36 minimum elong -11820 Apr 26 j 15:04 9°≈44'01 0°46'15 behind sun begin -11814 May 26 j 03:08 8°**)** 33'47 morning rise -11820 May 12 j 21:49 10°≈45'10 behind sun end -11814 May 26 j 11:41 8°**)** 35'07 retrograde -11820 Aug 11 j 22:21 14°≈06'46 morning rise -11814 Jun 11 j 06:53 9°**)**35'05 opposition -11820 Oct 24 j 03:39 12°≈04'46 -0°48'23 retrograde -11814 Sep 10 j 05:22 12° **∺** 57'27 min. Earth dist. -11820 Oct 25 j 08:35 12°≈01'37 17.28438 AU -11814 Nov 22 j 22:44 10° **€** 55'46 -0°10'26 opposition -11819 Jan 08 j 21:19 9°≈57'51 min. Earth dist. -11814 Nov 23 j 21:07 10° **€** 53'22 17.26943 AU direct

Planetary Phenomena of Uranus from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11813 in astronomical counting style is the year 11814 BCE in historical counting style. direct -11813 Feb 08 i 00:24 8° \(\frac{1}{2}\)49'27 max. Earth dist. -11808 Jun 22 i 18:22 7°**Υ**06'10 19.42684 AU -11813 May 15 j 06:10 12°\colon 21'23 -11808 Jul 08 j 21:18 8°Y07'06 evening set morning rise max. Earth dist. -11813 May 30 j 09:33 13°**米** 18'47 19.27638 AU -11808 Oct 08 j 02:01 11° Υ 28'19 retrograde -11808 Dec 21 j 22:41 9°**Υ**26'48 opposition 0°29'37 -11813 May 31 j 08:39 13° ★ 22'27 -0°06'15 -11808 Dec 22 j 07:05 9°**Υ**25'55 17.45000 AU conjunction min. Earth dist. -11813 May 31 j 08:39 13°\H22'27 0°06'29 7°**Y**22′00 minimum elong direct -11807 Mar 09 j 05:02 -11813 May 31 j 02:24 13°**米**21'29 -11807 Jun 12 j 05:43 10°**Y**49'30 behind sun begin evening set -11813 May 31 j 14:53 13°**米**23'25 behind sun end -11807 Jun 28 j 00:51 11°**Υ**49'02 morning rise -11813 Jun 16 j 06:56 14°**米**22'55 conjunction 0°29'24 -11807 Jun 28 j 00:50 11°**Υ**49'02 retrograde -11813 Sep 15 j 06:19 17° **★** 45'13 minimum elong 0°29'31 -11807 Jun 27 j 17:24 11°**Υ**47'52 opposition -11813 Nov 28 j 02:59 15° ¥ 43'32 -0°03'36 max. Earth dist. 19.47447 AU -11813 Nov 28 j 22:59 15°**米**41'23 17.28510 AU -11807 Jul 13 j 17:14 12°**Y**48'11 min. Earth dist. morning rise -11812 Feb 13 j 07:00 13°**)** 37'23 -11807 Oct 13 j 01:37 16° Υ 09'04 direct retrograde evening set -11812 May 19 j 08:08 17°**米**08'50 opposition -11807 Dec 27 j 01:45 14° \(\gamma \) 07'41 0°35'45 min. Earth dist. -11807 Dec 27 j 06:21 14°**Υ**'07'12 17.50016 AU -11812 Jun 04 j 09:17 18°¥09'42 -0°00'05 conjunction direct -11806 Mar 14 j 08:07 12°**Υ**03'17 minimum elong -11812 Jun 04 j 09:17 18° ¥ 09'42 0°00'15 evening set -11806 Jun 17 j 02:43 15°**Υ**29'46 behind sun begin -11812 Jun 04 j 02:43 18° **米** 08'41 behind sun end -11812 Jun 04 j 15:51 18°\mathbf{H} 10'43 conjunction -11806 Jul 02 j 20:54 16°**Υ**29'01 0°34'47 max. Earth dist. -11812 Jun 03 j 12:01 18°\(\mathcal{H}\)06'19 19.29485 AU minimum elong -11806 Jul 02 j 20:53 16°**Υ**29'01 0°34'57 asc. node -11812 Jun 08 j 21:24 18° \(\)26'54 max. Earth dist. -11806 Jul 02 j 17:08 16°**Υ**28'25 19.52709 AU morning rise -11812 Jun 20 j 06:29 19°\(\mathbf{H}\) 09'58 morning rise -11806 Jul 18 j 12:23 17°**Υ**27'53 retrograde -11812 Sep 19 i 05:28 22° \(\) 32'08 retrograde $-11806 \text{ Oct } 17 \text{ j } 23:24 \ 20^{\circ} \Upsilon 48'26$ opposition -11812 Dec 02 i 07:06 20° ★ 30'27 0°03'14 opposition -11805 Jan 01 i 04:47 18°**Υ**'47'11 0°41'37 min. Earth dist. -11812 Dec 03 j 01:45 20° **€**28'28 17.30640 AU min. Earth dist. -11805 Jan 01 i 07:39 18° Υ 46'53 17.55507 AU -11811 Feb 17 j 11:41 18°\colon 24'28 direct -11805 Mar 19 j 09:18 16°**Υ**43'15 direct -11811 May 24 j 09:16 21° + 55'21 -11805 Jun 21 j 22:53 20° Υ 08'36 evening set evening set -11811 Jun 09 j 09:12 22°\\$55'59 0°06'05 conjunction -11805 Jul 07 j 15:56 21°Υ07'32 0°39'56 conjunction -11811 Jun 09 j 09:12 22° ¥55'58 0°05'59 minimum elong -11805 Jul 07 j 15:56 21°**Υ**'07'32 0°40'08 minimum elong -11811 Jun 09 j 02:53 22° X 55'00 -11805 Jul 07 j 14:10 21°**Υ**'07'15 19.58411 AU max. Earth dist. behind sun begin -11811 Jun 09 j 15:30 22° **ਮ** 56'57 -11805 Jul 23 j 06:54 22° Υ 06'10 behind sun end morning rise max. Earth dist. -11811 Jun 08 j 14:40 22°**米** 53'02 19.31904 AU -11805 Oct 22 j 22:13 25°**Y**26'20 retrograde -11811 Jun 25 j 05:21 23° **∺** 56'03 -11804 Jan 06 j 07:10 23°**Y**°25'13 0°47'11 morning rise opposition -11811 Sep 24 j 05:59 27° **光** 18'02 -11804 Jan 06 j 06:29 23°**Y**25'17 17.61391 AU retrograde min. Earth dist. -11811 Dec 07 j 11:13 25° ¥ 16'21 0°10'01 -11804 Mar 23 j 10:55 21°**Υ**21'44 opposition direct -11811 Dec 08 j 02:44 25° ¥ 14'42 17.33332 AU -11804 Jun 25 j 18:11 24°**Υ**45'55 min. Earth dist. evening set direct -11810 Feb 22 j 18:11 23° **¥** 10'36 evening set -11810 May 29 j 09:36 26° **∺** 40'45 conjunction -11804 Jul 11 j 10:28 25°**Υ**44'33 0°44'47 minimum elong -11804 Jul 11 j 10:28 25°**Υ**44'33 0°45'03 conjunction -11810 Jun 14 j 08:17 27° ¥ 41'08 0°12'06 max. Earth dist. -11804 Jul 11 j 12:19 25°**Y**44'50 19.64447 AU -11810 Jun 14 j 08:16 27° **€** 41'08 0°12'02 morning rise -11804 Jul 27 j 00:39 26°**Y**42'54 minimum elong behind sun begin -11810 Jun 14 j 03:42 27° **★**40'25 -11804 Oct 16 j 21:08 0°8 behind sun end -11810 Jun 14 j 12:50 27°**)** 41'50 retrograde -11804 Oct 26 j 19:00 0°**8**02'38 max. Earth dist. -11810 Jun 13 j 16:29 27° **€** 38'38 19.34891 AU -11804 Nov 05 j 17:49 30°R**Y** -11810 Jun 30 i 03:19 28° \(\frac{1}{40}\)'59 -11803 Jan 10 j 09:02 28° γ 01'40 0°52'25 morning rise opposition -11810 Jul 22 j 13:25 0°**Υ** -11803 Jan 10 j 06:45 28° Υ01'54 17.67570 AU min. Earth dist. $-11810 \text{ Sep } 29 \text{ i } 04:09 \quad 2^{\circ} \Upsilon 02'45$ -11803 Mar 28 j 11:56 25° Υ 58'39 retrograde direct -11803 Jun 30 j 12:48 29°**Υ**21'36 opposition -11810 Dec 12 j 15:22 0° **Y** 01'06 0° 16'42 evening set -11803 Jul 10 j 20:57 0°8 min. Earth dist. -11810 Dec 13 j 05:14 29° \(\) 59'37 17.36624 AU -11810 Dec 13 i 01:42 30°R¥ direct -11809 Feb 27 j 21:49 27° **\(\)** 55'36 -11803 Jul 16 i 04:04 0°**8**19'55 0°49'19 conjunction -11809 May 10 j 02:02 0°**Υ** minimum elong -11803 Jul 16 j 04:03 0°819'54 0°49'37 -11809 Jun 03 j 09:10 -11803 Jul 16 j 07:23 evening set 1°**Y**24'58 max. Earth dist. 0°**8**20′26 19.70748 AU morning rise -11803 Jul 31 j 17:51 1°818'00 -11809 Jun 19 j 06:35 conjunction 2°Υ25'04 0°18'01 retrograde -11803 Oct 31 j 16:17 4°**8**37'17 -11809 Jun 19 j 06:35 minimum elong 2°**Υ**25'04 0°18'01 opposition -11802 Jan 15 j 10:24 2°**8**36'25 0°57'16 max. Earth dist. -11809 Jun 18 j 17:28 2°**Υ**22'59 19.38493 AU min. Earth dist. -11802 Jan 15 j 04:56 2°836'59 17.73980 AU -11809 Jul 05 j 00:43 3°Y24'41 direct -11802 Apr 02 j 12:20 0°**8**33'51 morning rise -11809 Oct 04 j 04:18 6°**Y**46′12 -11802 Jul 05 j 06:15 3°**8**55'30 retrograde evening set -11809 Dec 17 j 19:04 4°**Υ**44'36 0°23'15 opposition -11802 Jul 20 j 20:54 min. Earth dist. -11809 Dec 18 j 05:12 4°**Υ**43'31 17.40520 AU conjunction 4°**8**53'30 0°53'30 direct -11808 Mar 04 j 02:53 2°**Y**39′25 minimum elong -11802 Jul 20 j 20:54 4°**8**53'30 0°53'52 evening set -11808 Jun 07 j 07:48 6°**Y**07'53 max. Earth dist. -11802 Jul 21 j 03:46 4°**8**54'35 19.77232 AU morning rise -11802 Aug 05 j 10:04 5°**8**51'19 -11808 Jun 23 j 04:09 7°Υ07'43 0°23'48 -11802 Nov 05 j 11:46 9°810'07 conjunction retrograde -11808 Jun 23 j 04:09 7°**Υ**07'43 0°23'51 -11801 Jan 20 j 11:17 7°**8**09'21 1°01'43 minimum elong opposition

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					ar 11802 BCE in historical		le.
min. Earth dist.	-11801 Jan 20 j 04:00		17.80535 AU	direct	-11795 May 04 j 16:11	1° Ⅱ 43'20	
direct	-11801 Apr 07 j 12:57			evening set	-11795 Aug 04 j 07:15	4° Ⅱ 55'21	
evening set	-11801 Jul 09 j 23:04	8° 8 27'31					
				conjunction	-11795 Aug 19 j 19:03	5° Ⅱ 51'18	1°11'56
conjunction	-11801 Jul 25 j 12:53	9° 8 25'13	0°57'20	minimum elong	-11795 Aug 19 j 19:03	5° Ⅱ 51'18	1°12'32
minimum elong	-11801 Jul 25 j 12:52	9° 8 25'13	0°57'44	max. Earth dist.	-11795 Aug 20 j 16:48	5° Ⅱ 54'36	20.24867 AU
max. Earth dist.	-11801 Jul 25 j 20:58	9° 8 26'28	19.83843 AU	morning rise	-11795 Sep 04 j 07:56	6° Ⅱ 47'25	
morning rise	-11801 Aug 10 j 01:53	10° 8 22'46		retrograde	-11795 Dec 06 j 08:06	10° Ⅱ 02'04	
retrograde	-11801 Nov 10 j 06:56			opposition	-11794 Feb 21 j 17:27	8° Ⅱ 01'35	1°20'29
opposition	-11800 Jan 25 j 11:12		1°05'45	min. Earth dist.	-11794 Feb 20 j 18:41	8° Ⅱ 03'54	18.28444 AU
min. Earth dist.	-11800 Jan 25 j 01:14			direct	-11794 May 09 j 07:35	6° Ⅱ 02'00	
direct	-11800 Apr 11 j 11:41		17.07202110	evening set	-11794 Aug 08 j 17:23	9° Ⅱ 12'41	
evening set	-11800 Jul 13 j 14:43			evening sec	1177111 u g 00 j 17.23) <u>H</u> 12 11	
evening sec	11000 341 15 j 11.15	12 03732		conjunction	-11794 Aug 24 j 05:22	10°π08'24	1°12'56
conjunction	-11800 Jul 29 j 04:09	120251155	1°00'47	minimum elong	-11794 Aug 24 j 05:22		
minimum elong	-11800 Jul 29 j 04:09		1°01'13	max. Earth dist.	-11794 Aug 24 j 05:22 -11794 Aug 25 j 06:06		
2							20.31916 AU
max. Earth dist.	-11800 Jul 29 j 15:33		19.90535 AU	morning rise	-11794 Sep 08 j 18:26		
morning rise	-11800 Aug 13 j 16:44			retrograde	-11794 Dec 10 j 22:39		
_	-11800 Aug 15 j 20:30			min. Earth dist.	-11793 Feb 25 j 10:05		
retrograde	-11800 Nov 14 j 00:40			opposition	-11793 Feb 26 j 11:22		1°21'20
opposition	-11799 Jan 29 j 10:26			direct	-11793 May 14 j 00:21	10° Ⅱ 18'49	
min. Earth dist.	-11799 Jan 28 j 22:31	16° 8 10'28	17.93921 AU	evening set	-11793 Aug 13 j 03:07	13° Ⅱ 28'14	
	-11799 Feb 28 j 06:47	15° ₹႘					
direct	-11799 Apr 16 j 10:34	14° 8 07'53		conjunction	-11793 Aug 28 j 15:04	14° Ⅱ 23'44	1°13'32
	-11799 May 31 j 12:52	15° 8		minimum elong	-11793 Aug 28 j 15:04	14° Ⅱ 23'44	1°14'10
evening set	-11799 Jul 18 j 05:31	17° 8 25'27		max. Earth dist.	-11793 Aug 29 j 16:55	14° Ⅱ 27'37	20.38951 AU
•	·			morning rise	-11793 Sep 13 j 04:41	15° Ⅱ 19′27	
conjunction	-11799 Aug 02 j 18:17	18° 8 22'31	1°03'49	retrograde	-11793 Dec 15 j 12:02	18° Ⅱ 32'57	
minimum elong	-11799 Aug 02 j 18:17			min. Earth dist.	-11792 Mar 01 j 02:07		18.42517 AU
max. Earth dist.	-11799 Aug 03 j 06:54			opposition	-11792 Mar 02 j 04:21		
morning rise	-11799 Aug 18 j 06:53		19.97279110	direct	-11792 May 17 j 13:14		1 21 13
retrograde	-11799 Nov 18 j 18:10			evening set	-11792 May 17 j 13:14 -11792 Aug 16 j 11:59		
opposition	-11799 Nov 18 j 18:10 -11798 Feb 03 j 08:52		1°12'29	evening set	-11/92 Aug 10 J 11.39	1/ 14200	
					-11792 Sep 01 i 00:16	100П27122	1012144
min. Earth dist.	-11798 Feb 02 j 18:36		18.00702 AU	conjunction	1 3		1°13'44 1°14'24
direct	-11798 Apr 21 j 07:05			minimum elong	-11792 Sep 01 j 00:16		
evening set	-11798 Jul 22 j 19:14	21° 8 51'10		max. Earth dist.	-11792 Sep 02 j 04:32		20.45925 AU
		4.		morning rise	-11792 Sep 16 j 14:14		
conjunction	-11798 Aug 07 j 07:48			retrograde	-11792 Dec 19 j 01:57		
minimum elong	-11798 Aug 07 j 07:48			opposition	-11791 Mar 06 j 20:30		
max. Earth dist.	-11798 Aug 07 j 23:45		20.04081 AU	min. Earth dist.	-11791 Mar 05 j 16:05		18.49422 AU
morning rise	-11798 Aug 22 j 20:11			direct	-11791 May 22 j 04:16		
retrograde	-11798 Nov 23 j 10:18	27° 8 01'14		evening set	-11791 Aug 20 j 20:20	21° Ⅱ 54'23	
opposition	-11797 Feb 08 j 06:24	25° 8 00'38	1°15'10				
min. Earth dist.	-11797 Feb 07 j 13:50	25° 8 02'19	18.07534 AU	conjunction	-11791 Sep 05 j 08:44	22° Ⅱ 49'29	1°13'31
direct	-11797 Apr 26 j 03:40	22° 8 59'57		minimum elong	-11791 Sep 05 j 08:44	22° ∏ 49'29	1°14'11
evening set	-11797 Jul 27 j 08:06	26° 8 14'42		max. Earth dist.	-11791 Sep 06 j 13:50	22° Ⅱ 53'49	20.52743 AU
				morning rise	-11791 Sep 20 j 23:22	23° II 44'52	
conjunction	-11797 Aug 11 j 20:14	27° 8 11'11	1°08'42	retrograde	-11791 Dec 23 j 14:19	26° II 57'17	
minimum elong	-11797 Aug 11 j 20:14			min. Earth dist.	-11790 Mar 10 j 07:16		18.56154 AU
max. Earth dist.	-11797 Aug 12 j 13:30			opposition	-11790 Mar 11 j 12:05		
morning rise	-11797 Aug 27 j 08:50			direct	-11790 May 26 j 15:30		-
	-11797 Oct 01 j 03:51			evening set	-11790 Aug 25 j 04:07		
retrograde	-11797 Nov 28 j 02:24			evening sec	11770 Hug 25 j 0 1.07	20 1205 11	
	-11796 Jan 28 j 19:01			conjunction	-11790 Sep 09 j 17:01	27°∏00'05	1°12'55
min. Earth dist.	-11796 Jan 28 j 19:01 -11796 Feb 12 j 08:28		10 14442 ATT	minimum elong	-11790 Sep 09 j 17:01 -11790 Sep 09 j 17:01		
				max. Earth dist.	-11790 Sep 09 j 17.01 -11790 Sep 10 j 23:59		
opposition	-11796 Feb 13 j 03:02		1 1/24				20.39333 AU
direct	-11796 Apr 29 j 21:43			morning rise	-11790 Sep 25 j 08:10		
• .	-11796 Jul 20 j 12:09				-11790 Nov 05 j 07:38		
evening set	-11796 Jul 30 j 20:01	0° Ⅱ 36′03		retrograde	-11790 Dec 28 j 03:25		
		—		. –	-11789 Feb 21 j 12:18		
conjunction	-11796 Aug 15 j 08:06			min. Earth dist.	-11789 Mar 14 j 19:59		
minimum elong	-11796 Aug 15 j 08:06	1° Ⅱ 32'17		opposition	-11789 Mar 16 j 02:36		1°20'18
max. Earth dist.	-11796 Aug 16 j 04:33		20.17873 AU	direct	-11789 May 31 j 05:02		
morning rise	-11796 Aug 30 j 20:38	2° Ⅱ 28'36			-11789 Aug 25 j 06:08		
retrograde	-11796 Dec 01 j 17:23	5° Ⅱ 43'51		evening set	-11789 Aug 29 j 11:33	0°914'30	
opposition	-11795 Feb 16 j 22:34	3° Ⅱ 43'19	1°19'10				
min. Earth dist.	-11795 Feb 16 j 01:28	3° Ⅱ 45′28	18.21407 AU	conjunction	-11789 Sep 14 j 00:47	1° 5 09'14	1°11'56

Planetary Phenomena of Uranus from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11789 in astronomical counting style is the year 11790 BCE in historical counting style. -11789 Sep 14 i 00:47 1°509'14 1°12'36 evening set -11782 Sep 26 j 02:39 28°540'33 minimum elong -11789 Sep 15 j 08:04 1°513'52 20.65668 AU max Earth dist -11789 Sep 29 j 16:45 -11782 Oct 11 j 21:10 29°534'38 0°55'34 morning rise 2°9604'22 conjunction -11788 Jan 01 j 15:04 -11782 Oct 11 j 21:11 29°534'38 0°56'09 retrograde 5°9315'43 minimum elong -11788 Mar 18 j 10:09 -11782 Oct 13 j 07:46 29°539'37 20.99047 AU min. Earth dist. 3°519'00 18.68782 AU max. Earth dist. -11782 Oct 19 j 05:31 3°915'57 opposition -11788 Mar 19 j 16:31 1°18'58 0 $^{\circ}\Omega$ 0°**Ω**29'15 direct -11788 Jun 03 j 14:58 1°9518'35 morning rise -11782 Oct 27 j 19:35 retrograde evening set -11788 Sep 01 j 18:22 4°9522'23 -11781 Jan 30 j 11:35 3°**Ω**37'19 1°**Ω**40'55 19.00831 AU min. Earth dist. -11781 Apr 17 j 10:22 conjunction -11788 Sep 17 j 08:14 5°916'59 1°10'34 opposition -11781 Apr 18 j 19:13 1°**Ω**37'37 0°59'31 minimum elong -11788 Sep 17 j 08:14 5°916'59 1°11'14 -11781 Jun 05 j 19:19 30°Rூ -11788 Sep 18 j 16:45 -11781 Jul 03 j 05:20 29°541'23 max. Earth dist. 5°521'46 20.71632 AU direct -11788 Oct 03 j 00:50 morning rise 6°9511'59 -11781 Jul 30 j 01:07 $0^{\circ}\Omega$ retrograde -11787 Jan 05 j 02:46 9°522'49 evening set -11781 Sep 30 j 07:09 2°€39'29 min. Earth dist. -11787 Mar 22 j 21:33 7°526'20 18.74546 AU opposition -11787 Mar 24 j 05:25 7°523'08 1°17'14 conjunction -11781 Oct 16 j 02:32 3°**Ω**33'32 0°52'05 direct -11787 Jun 08 j 03:10 5°526'02 minimum elong -11781 Oct 16 j 02:32 3°**£**33'32 0°52'40 evening set -11787 Sep 06 j 00:51 8°9528'50 max. Earth dist. -11781 Oct 17 j 12:47 3°**Ω**38'27 21.02371 AU morning rise -11781 Nov 01 j 02:07 4°**Ω**28'09 conjunction -11787 Sep 21 j 15:12 9°523'18 1°08'51 retrograde -11780 Feb 03 j 18:07 7°**£**35′53 minimum elong -11787 Sep 21 j 15:12 9°523'18 1°09'31 min. Earth dist. -11780 Apr 20 j 19:37 5°**Ω**39'23 19.03989 AU max. Earth dist. -11787 Sep 22 j 23:43 9°\$28'04 20.77191 AU opposition -11780 Apr 22 j 03:15 $5^{\circ}\Omega$ 36'12 $0^{\circ}55'31$ morning rise -11787 Oct 07 i 08:45 10°518'12 direct -11780 Jul 06 i 10:15 3°**Ω**40′04 retrograde -11786 Jan 09 j 13:27 13°528'33 evening set -11780 Oct 03 j 11:18 $6^{\circ}\Omega$ 37'40 min. Earth dist. -11786 Mar 27 j 10:32 11°532'01 18.79905 AU opposition -11786 Mar 28 j 17:48 11°528'53 1°15'08 -11780 Oct 19 j 07:47 $7^{\circ}\Omega$ 31'43 $0^{\circ}48'21$ conjunction -11786 Jun 12 j 12:04 9°532'01 -11780 Oct 19 j 07:47 $7^{\circ}\Omega$ 31'43 $0^{\circ}48'55$ direct minimum elong -11786 Sep 10 j 06:40 12°533'51 max. Earth dist. -11780 Oct 20 j 18:16 $7^{\circ}\Omega$ 36'39 21.05364 AU evening set -11780 Nov 04 j 08:22 8°**Ω**26'20 morning rise -11786 Sep 25 j 21:52 13°\$28'13 1°06'48 -11779 Feb 07 j 03:24 11° Ω 33'46 conjunction retrograde -11786 Sep 25 j 21:52 13°\$28'13 1°07'27 -11779 Apr 25 j 02:16 9° Ω 37'23 19.06793 AU minimum elong min. Earth dist. -11786 Sep 27 j 07:17 13°\$33'06 20.82343 AU -11779 Apr 26 j 10:35 9°**Ω**34'08 0°51'16 max. Earth dist. opposition -11786 Oct 11 j 16:14 14°523'02 -11779 Jul 10 j 16:42 7°**Ω**38'07 morning rise direct -11779 Oct 07 j 15:39 10°**Ω**35'17 -11785 Jan 14 j 00:00 17°532'52 retrograde evening set -11785 Mar 31 j 20:40 15°536'29 18.84837 AU min. Earth dist. -11779 Oct 23 j 13:03 11° Ω 29'21 0°44'24 -11785 Apr 02 j 05:12 15°533'13 1°12'39 opposition conjunction -11779 Oct 23 j 13:03 11°Ω29'21 0°44'56 direct -11785 Jun 16 j 22:36 13°536'31 minimum elong evening set -11785 Sep 14 j 12:18 16°537'28 max. Earth dist. -11779 Oct 24 j 22:54 11° Ω 34'11 21.07981 AU morning rise -11779 Nov 08 j 14:51 12°**Ω**24'00 conjunction -11785 Sep 30 j 04:08 17°531'44 1°04'26 -11778 Jan 06 j 03:36 15°**Ω** minimum elong -11785 Sep 30 j 04:08 17°931'44 1°05'05 retrograde -11778 Feb 11 j 09:39 15°**Ω**31'12 max. Earth dist. -11785 Oct 01 j 13:25 17°536'34 20.87066 AU -11778 Mar 20 j 08:36 15°R**Ω** morning rise -11785 Oct 15 j 23:34 18°526'29 min. Earth dist. -11778 Apr 29 j 10:57 13° **Ω**34'41 19.09211 AU -11784 Jan 18 j 08:48 21°535'49 -11778 Apr 30 j 17:38 13°**Ω**31'36 0°46'46 retrograde opposition -11784 Apr 04 j 08:10 19°539'20 18.89366 AU direct -11778 Jul 14 j 20:23 11°**Ω**35'41 min. Earth dist. opposition -11784 Apr 05 j 15:46 19°536'09 1°09'50 evening set -11778 Oct 11 i 19:57 $14^{\circ}\Omega$ 32'31 -11778 Oct 19 j 23:35 15° Ω direct -11784 Jun 20 j 06:38 17°539'35 evening set -11784 Sep 17 j 17:22 20°539'43 -11778 Oct 27 j 18:32 15° Ω 26'36 0°40'15 conjunction -11784 Oct 03 i 10:07 21°S33'54 1°01'45 minimum elong -11778 Oct 27 i 18:32 $15^{\circ}\Omega$ 26'36 $0^{\circ}40'45$ conjunction -11784 Oct 03 i 10:07 21°\$33'54 1°02'23 max. Earth dist. -11778 Oct 29 j 04:07 15° Ω 31'24 21.10200 AU minimum elong max. Earth dist. -11784 Oct 04 j 20:10 21°538'50 20.91409 AU morning rise -11778 Nov 12 j 21:25 $16^{\circ}\Omega$ 21'18 -11784 Oct 19 j 06:26 22°528'35 retrograde -11777 Feb 15 j 18:53 19° Ω 28'17 morning rise retrograde -11783 Jan 21 j 18:40 25°537'28 min. Earth dist. -11777 May 03 j 17:16 $17^{\circ}\Omega$ 31'51 19.11195 AU -11777 May 05 j 00:08 $17^{\circ}\Omega$ 28'45 $0^{\circ}42'04$ min. Earth dist. -11783 Apr 08 j 16:45 23°5541'04 18.93521 AU opposition opposition -11783 Apr 10 j 01:34 23°537'47 1°06'42 direct -11777 Jul 19 j 02:09 15° Ω 32'54 direct -11783 Jun 24 j 15:16 21°541'20 evening set -11777 Oct 16 j 00:36 18° **Ω**29'31 -11783 Sep 21 j 22:07 24°5540'41 evening set conjunction -11777 Nov 01 j 00:08 19° Ω 23'38 0°35'54 -11783 Oct 07 j 15:36 25°534'48 0°58'48 -11777 Nov 01 j 00:09 19°**Ω**23'38 0°36'21 conjunction minimum elong -11783 Oct 07 j 15:36 25°534'48 -11777 Nov 02 j 08:32 19° Ω 28'15 21.11942 AU minimum elong 0°59'25 max. Earth dist. max. Earth dist. -11783 Oct 09 j 01:37 25°539'43 20.95387 AU morning rise -11777 Nov 17 j 04:12 $20^{\circ}\Omega$ 18'23 morning rise -11783 Oct 23 j 13:02 26°529'28 retrograde -11776 Feb 20 j 01:15 $23^{\circ}\Omega 25'13$

min. Earth dist.

opposition

evening set

direct

-11776 May 07 j 01:35 21°**Q**28'37 19.12687 AU

-11776 May 08 j 06:19 21°**Q**25'44 0°37'09

-11776 Jul 22 j 05:23 19°**\O**29'56

-11776 Oct 19 j 05:19 22° Ω 26'22

retrograde

opposition

direct

min. Earth dist.

-11782 Jan 26 j 02:00 29°537'55

-11782 Apr 14 j 10:53 27°538'13

-11782 Jun 28 j 22:03 25°541'52

-11782 Apr 13 j 03:00 27°541'25 18.97338 AU

1°03'15

Planetary Phenomena of Uranus from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11776 in astronomical counting style is the year 11777 BCE in historical counting style. -11776 Nov 04 j 06:03 23° Ω 20'34 0°31'23 conjunction -11770 Nov 28 j 23:00 17° m 03'19 0°02'01 conjunction minimum elong -11776 Nov 04 j 06:03 23° Ω 20'34 0°31'49 -11770 Nov 28 j 23:01 17° mp 03'19 0°02'11 minimum elong -11776 Nov 05 j 13:36 23° Ω 25'03 21.13186 AU behind sun begin -11770 Nov 28 j 16:20 17° m 02'24 max. Earth dist. -11776 Nov 20 j 11:10 24°**Ω**15'22 -11770 Nov 29 j 05:42 17° m 04'14 behind sun end morning rise -11775 Feb 23 j 10:12 27° **Ω**22'05 -11770 Nov 29 j 20:46 17° m 06'23 21.08722 AU retrograde max. Earth dist. -11775 May 11 j 07:41 $25^{\circ}\Omega 25'30$ 19.13651 AU -11770 Dec 15 j 10:40 17° m 58'47 min. Earth dist. morning rise -11775 May 12 j 12:12 $25^{\circ}\Omega$ 22'38 $0^{\circ}32'04$ -11769 Mar 20 j 07:41 21° m 05'23 opposition retrograde -11775 Jul $\,$ 26 j 10:38 $\,$ 23° $\!\Omega 26$ '51 -11769 Apr 22 j 22:45 20° m/38'54 direct desc. node -11775 Oct 23 j 10:16 26° € 23'11 evening set opposition -11769 Jun 05 j 19:06 19° Mp 05'34 -0°00'41 min. Earth dist. -11769 Jun 05 j 00:16 19° M 07'30 19.07550 AU conjunction -11775 Nov 08 j 12:02 27° **Ω**17'27 0°26'43 direct -11769 Aug 19 j 11:14 17° Mp 08'58 -11775 Nov 08 j 12:02 27° Ω 17'28 0°27'06 -11769 Nov 16 j 22:30 20° m 06'14 minimum elong evening set -11775 Nov 09 j 17:59 $27^{\circ}\Omega$ 21'42 21.13864 AU max. Earth dist. -11769 Dec 03 j 06:59 21° Mp 01'17 -0°03'11 morning rise -11775 Nov 24 j 18:21 $28^{\circ}\Omega$ 12'21 conjunction -11775 Dec 30 j 20:48 0° Mp minimum elong -11769 Dec 03 j 06:59 21° Mp 01'17 0°03'03 retrograde -11774 Feb 27 j 16:59 1° m 18'58 behind sun begin -11769 Dec 03 j 00:18 21° Mp 00'22 -11774 Apr 29 j 16:23 30°R**Ω** behind sun end -11769 Dec 03 j 13:39 21° Mp 02'12 opposition -11774 May 16 j 18:00 29° Ω 19'32 0°26'50 max. Earth dist. -11769 Dec 04 j 02:50 21° m 04'05 21.06243 AU min. Earth dist. -11774 May 15 j 15:55 29° Ω 22'09 19.14034 AU morning rise -11769 Dec 19 j 19:34 21° m 56'54 direct -11774 Jul 30 j 13:51 $27^{\circ}\Omega 23'43$ retrograde -11768 Mar 23 j 14:18 25° m 03'38 -11774 Oct 21 j 12:47 0°m opposition -11768 Jun 08 j 23:50 23° m 03'44 -0°06'18 evening set -11774 Oct 27 j 15:34 0° m 20'01 min. Earth dist. -11768 Jun 08 j 07:33 23° m 05'24 19.04884 AU direct -11768 Aug 22 j 14:25 21° m 06'54 conjunction -11774 Nov 12 i 18:35 1° m 14'24 0°21'56 evening set -11768 Nov 20 j 05:50 24° m 04'36 minimum elong -11774 Nov 12 j 18:35 1° m 14'24 0°22'17 max. Earth dist. -11774 Nov 13 j 23:09 1° Mp 18'26 21.13962 AU -11768 Dec 06 j 15:27 24° m 59'50 -0°08'15 conjunction -11774 Nov 29 j 01:58 2°m09'22 -11768 Dec 06 j 15:27 24° m 59'50 0°08'10 morning rise minimum elong -11773 Mar 04 j 01:29 5° m 15'56 behind sun begin -11768 Dec 06 j 09:31 24° m 59'01 retrograde -11773 May 20 j 23:18 3° Mp 16'27 0°21'29 behind sun end -11768 Dec 06 j 21:23 25° m 00'39 opposition -11768 Dec 07 j 09:35 25° mg 02'24 21.03411 AU min. Earth dist. -11773 May 19 j 21:50 3° m 19'02 19.13820 AU max. Earth dist. 1° m 20'33 -11768 Dec 23 j 04:57 25° m 55'37 -11773 Aug 03 j 18:59 direct morning rise evening set -11773 Oct 31 j 21:13 4° Mp 16'55 -11767 Mar 27 j 23:43 29° m 02'31 retrograde -11767 Jun 13 j 04:31 27° m 02'33 -0°11'54 opposition -11773 Nov 17 j 01:16 5° Mp 11'24 0°17'03 min. Earth dist. -11767 Jun 12 j 13:00 27° m 04'08 19.01872 AU conjunction -11773 Nov 17 j 01:16 5° m 11'24 0°17'22 -11767 Aug 26 j 19:07 25° m 05'30 minimum elong direct -11767 Nov 24 j 13:47 28° m 03'44 -11773 Nov 18 j 03:54 5° m 15'09 21.13449 AU max. Earth dist. evening set -11773 Dec 03 j 09:48 6° m 06'29 morning rise retrograde -11772 Mar 07 j 08:07 9° m 13'00 conjunction -11767 Dec 11 j 00:24 28° m 59'09 -0°13'17 min. Earth dist. -11772 May 23 j 05:46 7° Mp 15'47 19.13012 AU minimum elong -11767 Dec 11 j 00:23 28° m 59'09 0°13'14 opposition -11772 May 24 j 04:37 7° m 13'28 0°16'01 behind sun begin -11767 Dec 10 j 20:34 28° m 58'38 direct -11772 Aug 06 j 22:07 5° Mp 17'26 behind sun end -11767 Dec 11 j 04:12 28° m 59'41 -11772 Nov 04 j 02:50 8° m 13'54 max. Earth dist. -11767 Dec 11 j 16:32 29° m 01'26 21.00223 AU evening set morning rise -11767 Dec 27 j 14:48 29° m 55'07 -11772 Nov 20 j 08:07 9° mg 08'30 0°12'05 -11767 Dec 29 j 02:17 0°**♀** conjunction -11772 Nov 20 j 08:07 9° m 08'30 0°12'21 retrograde -11766 Apr 01 j 07:29 3°**♀**02'14 minimum elong -11772 Nov 20 j 03:45 9° m 07'54 -11766 Jun 17 j 09:30 1°**2**02'13 -0°17'28 behind sun begin opposition -11772 Nov 20 j 12:28 -11766 Jun 16 j 20:38 1° **2**03'32 18.98512 AU behind sun end 9° m 09'06 min. Earth dist. max. Earth dist. -11772 Nov 21 j 09:18 9° m 12'03 21.12377 AU -11766 Jul 13 j 22:35 30°R M morning rise -11772 Dec 06 i 17:40 10° m 03'41 direct -11766 Aug 30 j 22:46 29° m 04'57 retrograde -11771 Mar 11 j 16:27 13° mp 10'12 -11766 Oct 16 j 20:23 0∘ಹ min. Earth dist. -11771 May 27 j 11:23 11° mp 12'50 19.11662 AU evening set -11766 Nov 28 j 22:26 2°**♀**03'47 -11771 May 28 j 09:35 11° mp 10'35 0°10'30 opposition direct -11771 Aug 11 j 03:17 9° Mp 14'23 conjunction -11766 Dec 15 j 10:06 2°**2**59'25 -0°18'17 -11766 Dec 15 j 10:06 2°**2**59'25 0°18'17 -11771 Nov 08 j 09:02 12° m 11'02 evening set minimum elong max. Earth dist. -11766 Dec 16 j 00:10 3°**2**01'24 20.96705 AU -11765 Jan 01 j 01:19 conjunction -11771 Nov 24 j 15:20 13° m 05'46 0°07'04 morning rise 3°**£**55'34 minimum elong -11771 Nov 24 j 15:20 13° Mp 05'46 0°07'19 retrograde -11765 Apr 05 j 17:43 7°**♀**02'57 behind sun begin -11771 Nov 24 j 09:13 13° Mp 04'56 -11765 Jun 21 j 14:26 5°**Ω**02'53 -0°22'59 opposition -11771 Nov 24 j 21:27 13° Mp 06'36 min. Earth dist. -11765 Jun 21 j 02:36 5°**2**04'06 18.94816 AU behind sun end -11771 Nov 25 j 14:39 13° m 09'03 21.10774 AU -11765 Sep 04 j 04:00 3°**₽**05'25 max. Earth dist. direct -11771 Dec 11 j 01:59 14° m 01'06 -11765 Dec 03 j 07:50 6°**£**04'57 morning rise evening set retrograde -11770 Mar 15 j 22:48 17° m 07'38 opposition -11770 Jun 01 j 14:26 15° Mp 07'55 0°04'55 conjunction -11765 Dec 19 j 20:24 7°**Ω**00'48 -0°23'13 min. Earth dist. -11770 May 31 j 18:52 15° m 09'55 19.09821 AU minimum elong -11765 Dec 19 j 20:24 7°**♀**00'48 0°23'17 direct -11770 Aug 15 j 06:17 13° Mp11'31 max. Earth dist. -11765 Dec 20 j 08:17 7°**⊆**02'29 20.92829 AU -11770 Nov 12 j 15:30 16° Mp 08'26 -11764 Jan 05 j 12:21 7°**£**57'08 evening set morning rise

retrograde

-11764 Apr 09 j 02:21 11°**♀**04'49

Planetary Pheno	omena of Uranus fro	om -11900	through -1139	8 (UT), Astrodie	nst AG 18-Feb-2025	14:23,	page 12
•	nical year style is used: The		•				
opposition	-11764 Jun 24 j 19:52	-		conjunction	-11757 Jan 18 j 17:58		
min. Earth dist.	-11764 Jun 24 j 10:50		18.90762 AU	minimum elong	-11757 Jan 18 j 17:58		
direct	-11764 Sep 07 j 08:05		10.50702110	max. Earth dist.	-11757 Jan 18 j 10:21		20.54627 AU
evening set	-11764 Dec 06 j 17:46			morning rise	-11757 Feb 04 j 13:18		20.5 1027 110
evening sec	11701 Bec 00 j 17.10	10 -07 21		retrograde	-11757 May 09 j 11:36		
conjunction	-11764 Dec 23 j 07:17	11° Ω 03'25	0°28'05	opposition	-11757 Jul 23 j 20:08		1001/43
minimum elong	-11764 Dec 23 j 07:16			min. Earth dist.	-11757 Jul 24 j 02:52		18.51233 AU
max. Earth dist.	-11764 Dec 23 j 07.16 -11764 Dec 23 j 16:47			direct	3		18.31233 AU
			20.88003 AU	evening set	-11757 Oct 06 j 13:39		
morning rise	-11763 Jan 08 j 23:57			evening set	-11756 Jan 06 j 16:04	9 11603 37	
retrograde	-11763 Apr 13 j 13:57		0022144	. ,.	11756 1 22:10.26	100 M 01151	0057100
opposition	-11763 Jun 29 j 01:29			conjunction	-11756 Jan 23 j 10:26		
min. Earth dist.	-11763 Jun 28 j 17:46		18.86340 AU	minimum elong	-11756 Jan 23 j 10:25		
direct	-11763 Sep 11 j 14:33			max. Earth dist.	-11756 Jan 23 j 00:50		20.47772 AU
evening set	-11763 Dec 11 j 04:47	14° ≙ 11'06		morning rise	-11756 Feb 09 j 05:47		
				retrograde	-11756 May 12 j 23:48		
conjunction	-11763 Dec 27 j 19:08	15° ≏ 07'25	-0°32'49	opposition	-11756 Jul 27 j 05:03	12°M10'08	-1°05'27
minimum elong	-11763 Dec 27 j 19:08	15° ≏ 07'25	0°32'58	min. Earth dist.	-11756 Jul 27 j 14:24	12°M09'08	18.44298 AU
max. Earth dist.	-11763 Dec 28 j 02:11	15° ≏ 08'25	20.83973 AU	direct	-11756 Oct 09 j 23:16	10°M09'28	
morning rise	-11762 Jan 13 j 12:23	16° ≙ 04'10		evening set	-11755 Jan 10 j 08:39	13°ML18'05	
retrograde	-11762 Apr 17 j 23:15	19° ≏ 12'35					
opposition	-11762 Jul 03 j 07:28		-0°38'55	conjunction	-11755 Jan 27 j 03:22	14°ML16'15	-1°00'35
min. Earth dist.	-11762 Jul 03 j 02:54			minimum elong	-11755 Jan 27 j 03:22		
direct	-11762 Sep 15 j 19:22		10.01000110	max. Earth dist.	-11755 Jan 26 j 14:39		
evening set	-11762 Dec 15 j 16:40			max. Earth dist.	-11755 Feb 08 j 16:57		20.40774710
evening set	-11/02 Dec 13 j 10.40	10 -10 10		morning rise	-11755 Feb 12 j 22:59		
:	117(1 I 01:07.50	100 0 1250	0927125	•			
conjunction	-11761 Jan 01 j 07:50			retrograde	-11755 May 17 j 14:04		1000153
minimum elong	-11761 Jan 01 j 07:50			opposition	-11755 Jul 31 j 14:27		
max. Earth dist.	-11761 Jan 01 j 11:51		20.78933 AU	min. Earth dist.	-11755 Aug 01 j 01:22		18.37255 AU
morning rise	-11761 Jan 18 j 01:41				-11755 Sep 06 j 15:30		
retrograde	-11761 Apr 22 j 12:00			direct	-11755 Oct 14 j 10:40		
opposition	-11761 Jul 07 j 13:54	21° ≏ 18'24	-0°43'56		-11755 Nov 20 j 22:01	15° M ₊	
min. Earth dist.	-11761 Jul 07 j 10:59	21° ≏ 18'43	18.76246 AU	evening set	-11754 Jan 15 j 02:14	17°M33'56	
direct	-11761 Sep 20 j 03:24	19° £ 19'51					
evening set	-11761 Dec 20 j 05:17	22° ≏ 22'53		conjunction	-11754 Jan 31 j 21:25	18°M32'23	-1°03'29
				minimum elong	-11754 Jan 31 j 21:24	18°MJ32'23	1°03'57
conjunction	-11760 Jan 05 j 21:11	23° ≙ 19'42	-0°41'51	max. Earth dist.	-11754 Jan 31 j 07:05		
3	-11760 Jan 05 j 21:11			morning rise	-11754 Feb 17 j 16:52		
max. Earth dist.	-11760 Jan 05 j 22:35			retrograde	-11754 May 22 j 03:59		
morning rise	-11760 Jan 22 j 15:25		20.75 .57 .10	opposition	-11754 Aug 05 j 00:32		-1°11'56
retrograde	-11760 Apr 25 j 21:59			min. Earth dist.	-11754 Aug 05 j 10:32		
opposition	-11760 Apr 25 j 21:55 -11760 Jul 10 j 20:52		0°48'45	direct	• •		10.30140 AC
					-11754 Oct 18 j 22:19		
min. Earth dist.	-11760 Jul 10 j 21:04		18.70539 AU	evening set	-11753 Jan 19 j 20:48	21 11651 38	
direct	-11760 Sep 23 j 09:36				11552 7 1 05:16.06	220M 20122	100000
evening set	-11760 Dec 23 j 18:43	26°1130'57		conjunction	-11753 Feb 05 j 16:06		
		_		minimum elong	-11753 Feb 05 j 16:06		
conjunction	-11759 Jan 09 j 11:19			max. Earth dist.	-11753 Feb 04 j 22:34		20.26570 AU
minimum elong	-11759 Jan 09 j 11:18			morning rise	-11753 Feb 22 j 11:38	23°M49'09	
max. Earth dist.	-11759 Jan 09 j 09:27		20.67534 AU	retrograde	-11753 May 26 j 18:58	27°M01'57	
morning rise	-11759 Jan 26 j 06:02	28° ≏ 25'26		opposition	-11753 Aug 09 j 11:23	25°M00'40	-1°14'37
	-11759 Feb 25 j 17:46	0° M		min. Earth dist.	-11753 Aug 10 j 02:05	24°M59'05	18.23056 AU
retrograde	-11759 Apr 30 j 11:07	1°MJ35'08		direct	-11753 Oct 23 j 10:59	22°M58'41	
	-11759 Jul 05 j 00:52	30° ŖΩ		evening set	-11752 Jan 24 j 15:58	26° M ₊11'17	
opposition	-11759 Jul 15 j 04:05	29° ≏ 34'40	-0°53'20				
min. Earth dist.	-11759 Jul 15 j 06:04			conjunction	-11752 Feb 10 j 11:35	27°ML10'18	-1°08'15
direct	-11759 Sep 27 j 19:07			minimum elong	-11752 Feb 10 j 11:34		
	-11759 Dec 16 j 01:15			max. Earth dist.	-11752 Feb 09 j 16:53		
evening set	-11759 Dec 28 j 09:01	0°M40'28		morning rise	-11752 Feb 27 j 06:45		20.19 101 110
o ronning set	11707 Dec 20 j 07.01	5 HU-70 40			-11752 Apr 02 j 17:03		
aaniumatian	11750 Ion 14:00:10	10 m 27140	0.50106	ratrograda			
conjunction	-11758 Jan 14 j 02:19			retrograde	-11752 May 30 j 10:36		
minimum elong	-11758 Jan 14 j 02:18			•.•	-11752 Jul 28 j 16:21		1017/54
max. Earth dist.	-11758 Jan 13 j 21:59		20.61236 AU	opposition	-11752 Aug 12 j 23:03		
morning rise	-11758 Jan 30 j 21:17			min. Earth dist.	-11752 Aug 13 j 15:42		18.15998 AU
retrograde	-11758 May 04 j 22:02	5°M45'35		direct	-11752 Oct 27 j 00:33		
opposition	-11758 Jul 19 j 11:58	3°M44'59			-11751 Jan 18 j 18:53		
min. Earth dist.	-11758 Jul 19 j 16:58		18.57968 AU	evening set	-11751 Jan 28 j 12:17	0° ∡ °33'01	
direct	-11758 Oct 02 j 03:03	1°ML45'14		max. Earth dist.	-11751 Feb 13 j 09:59	1° ∡ ¹29'05	20.12462 AU
evening set	-11757 Jan 02 j 00:10	4°ML51'27					

Planetary Phenomena of Uranus from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11751 in astronomical counting style is the year 11752 BCE in historical counting style. -11751 Feb 14 i 07:52 1° ₹32'19 -1°10'06 -11745 Oct 01 i 07:28 30°R ✓ conjunction -11751 Feb 14 j 07:51 1°**∡**³32'19 1°10'40 -11745 Nov 28 j 02:18 28° ₹ 40'44 minimum elong direct -11751 Mar 03 j 02:58 -11744 Jan 23 j 09:53 0°ಕ morning rise 2°**∡**31'34 -11751 Jun 04 j 02:42 5° ₹ 45'36 2°る04'24 retrograde evening set -11744 Mar 02 j 10:27 -11751 Aug 17 j 11:21 3°**∡**¹44'13 -1°18'46 -11744 Mar 17 j 18:33 3°る00'12 19.65489 AU opposition max. Earth dist. min. Earth dist. -11751 Aug 18 j 05:39 3°**∡**′42'15 18.09024 AU -11751 Oct 31 j 15:06 -11744 Mar 19 j 04:29 direct 1°**√**41′29 conjunction 3°る05'24 -1°10'58 4°**₹**56'56 -11744 Mar 19 j 04:30 evening set -11750 Feb 02 j 09:29 minimum elong 3°**る**05'24 1°11'38 -11750 Feb 18 j 06:22 5°**尽** 53'06 20.05512 AU max. Earth dist. morning rise -11744 Apr 04 j 19:29 4°**る**05'59 retrograde -11744 Jul 05 j 19:16 7°**궁**24'12 conjunction -11750 Feb 19 j 05:16 5° ₹ 56'30 -1°11'32 opposition -11744 Sep 17 j 03:50 5°₹22'26 -1°18'13 -11750 Feb 19 j 05:16 5°**₹**56'30 1°12'09 -11744 Sep 18 j 08:41 5°**궁**19'18 17.62483 AU minimum elong min. Earth dist. -11750 Mar 07 j 23:52 6° ₹ 55'58 morning rise direct -11744 Dec 02 j 00:36 3°**る**17'05 retrograde -11750 Jun 08 j 20:00 10° ₹ 10'38 evening set -11743 Mar 07 j 12:58 6°る41'58 opposition -11750 Aug 22 j 00:42 8°₹09'14 -1°20'10 max. Earth dist. -11743 Mar 22 j 18:37 7°る37'38 19.59401 AU min. Earth dist. -11750 Aug 22 j 20:50 8°**∡**'07'04 18.02111 AU direct -11750 Nov 05 j 06:35 6°**х** 06′10 conjunction -11743 Mar 24 j 06:20 7°₹43'08 -1°09'16 evening set -11749 Feb 07 j 07:45 9°**х** 23′03 minimum elong -11743 Mar 24 j 06:20 7°る43'08 1°09'56 max. Earth dist. -11749 Feb 23 j 01:06 10° ₹ 18'58 19.98632 AU morning rise -11743 Apr 09 j 20:31 8°る43'52 retrograde -11743 Jul 10 j 15:23 12°る02'34 conjunction -11749 Feb 24 i 03:15 10° ₹22'53 -1°12'34 opposition -11743 Sep 21 j 23:18 10° ₹ 00'42 -1°16'06 minimum elong -11749 Feb 24 i 03:15 10° ₹22'53 1°13'11 min. Earth dist. -11743 Sep 23 j 05:51 9°る57'22 17.56569 AU morning rise -11749 Mar 12 j 21:35 11° ₹ 22'34 direct -11743 Dec 06 j 21:19 7°る54'58 retrograde -11749 Jun 13 j 13:47 14° ₹37'54 evening set -11742 Mar 12 j 15:51 11°**3**21'00 opposition -11749 Aug 26 j 14:55 12° ₹36'28 -1°21'06 max. Earth dist. -11742 Mar 27 j 20:50 12°る16'48 19.53670 AU -11749 Aug 27 j 12:54 12° ₹34'06 17.95276 AU min. Earth dist. -11749 Nov 09 j 23:12 10° ₹33'02 -11742 Mar 29 j 08:38 12°る22'20 -1°07'06 direct conjunction -11748 Feb 12 j 06:44 13° ₹ 51'21 -11742 Mar 29 j 08:38 12°る22'20 1°07'46 minimum elong evening set -11748 Feb 27 j 23:15 14° **₹**47'23 19.91816 AU -11742 Apr 14 j 21:54 13° ₹23'11 max. Earth dist. morning rise -11742 Jul 15 j 14:39 16°**♂**42'21 retrograde -11742 Sep 26 j 19:42 14°ਰੋ40'22 -1°13'28 -11748 Feb 29 j 02:15 14° ₹ 51'27 -1°13'10 conjunction opposition -11748 Feb 29 j 02:15 14°**尽**51'27 1°13'48 minimum elong -11742 Sep 28 j 01:58 14°중37'04 17.51035 AU min. Earth dist. -11748 Mar 16 j 19:55 15°**尽** 51'20 -11742 Dec 11 j 21:49 12° 334'19 morning rise direct -11748 Jun 17 j 08:51 19° ₹ 07'17 -11741 Mar 17 j 19:05 16°**궁**01'25 retrograde evening set -11748 Aug 30 j 06:05 17°**尽** 05'51 -1°21'33 -11741 Apr 01 j 22:37 16°중57'14 19.48352 AU opposition max. Earth dist. -11748 Aug 31 j 05:36 17°**尽**03'18 17.88495 AU min. Earth dist. -11741 Apr 03 j 11:03 17°**⋜**02'52 -1°04'29 -11748 Nov 13 j 16:43 15°**尽** 02'03 direct conjunction evening set -11747 Feb 16 j 06:39 18° ₹21'46 minimum elong -11741 Apr 03 j 11:04 17°♂02'52 1°05'07 max. Earth dist. -11747 Mar 03 j 19:34 19°**х** 17'33 19.85065 AU morning rise -11741 Apr 19 j 23:18 18° **궁**03'49 retrograde -11741 Jul 20 j 11:20 21°**궁**23'27 conjunction -11747 Mar 05 j 01:47 19°**₹** 22'06 -1°13'18 opposition -11741 Oct 01 j 17:03 19°**궁**21'24 -1°10'20 -11747 Mar 05 j 01:47 19° ₹22'06 1°13'57 min. Earth dist. -11741 Oct 03 j 00:30 19°♂17'57 17.45968 AU minimum elong -11747 Mar 21 j 19:02 20° ₹ 22'12 -11741 Dec 16 j 20:26 17°♂15'03 morning rise direct -11747 Jun 22 j 04:07 23° ₹38'46 -11740 Mar 21 j 22:38 20°₹43'08 retrograde evening set -11747 Sep 03 j 22:13 21°**x** 37'16 -1°21'29 max. Earth dist. -11740 Apr 06 j 01:28 21° ₹39'03 19.43546 AU opposition -11747 Sep 04 j 23:42 21° ₹34'30 17.81789 AU min. Earth dist. -11740 Apr 07 j 13:47 21°る44'42 -1°01'26 direct -11747 Nov 18 j 11:01 19° ₹33'05 conjunction -11740 Apr 07 j 13:47 21°る44'42 1°02'05 evening set -11746 Feb 21 i 07:18 22° ₹ 54'11 minimum elong -11740 Apr 24 i 01:04 22° ₹45'44 max. Earth dist. -11746 Mar 08 j 19:17 23° ₹ 50'03 19.78392 AU morning rise retrograde -11740 Jul 24 i 11:16 26° ₹ 05'47 conjunction -11746 Mar 10 i 02:16 23° ₹ 54'45 -1°12'59 opposition -11740 Oct 05 j 14:57 24°る03'41 -1°06'43 -11746 Mar 10 j 02:16 23° ₹ 54'45 1°13'38 min. Earth dist. -11740 Oct 06 j 21:28 24°る00'21 17.41428 AU minimum elong -11746 Mar 26 j 18:44 24° ₹ 55'01 direct -11740 Dec 20 j 22:40 21°₹57'06 morning rise -11746 Jun 27 j 00:54 28° ₹12'09 retrograde evening set -11739 Mar 27 j 02:28 25°**♂**26'07 opposition -11746 Sep 08 j 15:10 26° ₹ 10'36 -1°20'55 max. Earth dist. -11739 Apr 11 j 04:49 26°정22'10 19.39285 AU min. Earth dist. -11746 Sep 09 j 17:45 26° ₹ 07'43 17.75167 AU direct -11746 Nov 23 j 06:54 24°**尽** 06'01 conjunction -11739 Apr 12 j 16:47 26°♂27'47 -0°57'58 -11745 Feb 26 j 08:46 27° ₹28'27 minimum elong -11739 Apr 12 j 16:48 26°♂27'47 0°58'34 evening set -11745 Mar 13 j 17:31 28° ₹24'06 19.71840 AU -11739 Apr 29 j 02:55 27°₹28'52 max. Earth dist. morning rise -11739 Jun 17 j 02:00 0°≈ -11745 Mar 15 j 03:10 28° ₹29'13 -1°12'13 -11739 Jul 29 j 08:52 conjunction retrograde 0°**≈**49'19 minimum elong -11745 Mar 15 j 03:10 28° ₹29'13 1°12'53 -11739 Sep 10 j 19:21 30°R궁 morning rise -11745 Mar 31 j 19:00 29° ₹29'40 opposition -11739 Oct 10 j 13:54 28°♂47'12 -1°02'38 -11745 Apr 09 j 10:22 0°ಕ min. Earth dist. -11739 Oct 11 j 21:15 28° ₹43'47 17.37459 AU retrograde -11745 Jul 01 j 20:57 2°る47'21 direct -11739 Dec 25 j 22:40 26°₹40'28 -11745 Sep 13 j 09:07 0°**ප්**45'42 -1°19'50 -11738 Mar 29 j 10:42 opposition min. Earth dist. -11745 Sep 14 j 13:33 0°₹42'36 17.68715 AU -11738 Apr 01 j 06:36 0°≈10'19 evening set

Planetary Phenomena of Uranus from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11738 in astronomical counting style is the year 11739 BCE in historical counting style. -11738 Apr 16 j 08:02 1°≈06'25 19.35620 AU max. Earth dist. -11732 May 17 j 12:18 0°**)**€ -11732 Jun 01 j 16:26 0°\ 57'26 morning rise -11738 Apr 17 j 19:52 1°≈12'02 -0°54'05 -11732 Aug 31 j 14:37 4°¥19'43 conjunction retrograde -11738 Apr 17 j 19:52 -11732 Nov 13 j 01:46 2° **∺** 17'58 -0°23'20 minimum elong 1°≈12'02 0°54'40 opposition -11738 May 04 j 05:00 -11732 Nov 14 j 03:17 2°**升**15'13 17.25570 AU morning rise 2°≈13'09 min. Earth dist. -11738 Aug 03 j 09:48 retrograde 5°≈34'00 direct -11731 Jan 29 j 00:59 0°**)** 11′20 -11738 Oct 15 j 13:29 opposition 3°≈31'55 -0°58'06 evening set -11731 May 05 j 11:38 3°**)** 43′46 min. Earth dist. -11738 Oct 16 j 19:28 3°≈28'38 17.34085 AU 1°≈25'05 direct -11738 Dec 31 j 02:27 conjunction -11731 May 21 j 16:51 4°**¥**45'11 -0°17'53 4°**¥**45'11 0°18'11 evening set -11737 Apr 06 j 10:50 4°≈55'40 minimum elong -11731 May 21 j 16:51 max. Earth dist. -11731 May 20 j 13:39 4°**¥**40'51 19.25656 AU -11737 Apr 22 j 23:11 5°≈57'26 -0°49'49 conjunction morning rise -11731 Jun 06 j 17:31 5°**)** 45'57 -11737 Apr 22 j 23:11 minimum elong 5°≈57'26 0°50'23 retrograde -11731 Sep 05 j 15:51 9°**)**€08'16 max. Earth dist. -11737 Apr 21 j 12:40 5°≈52'01 19.32550 AU opposition -11731 Nov 18 j 05:30 7°**升**06'33 -0°16'42 morning rise -11737 May 09 j 07:02 6°≈58'34 min. Earth dist. -11731 Nov 19 j 05:42 7°**₭**03'57 17.25950 AU retrograde -11737 Aug 08 j 08:34 10°≈19'46 direct -11730 Feb 03 j 05:57 5°**₩**00'02 opposition -11737 Oct 20 j 14:02 8°≈17'45 -0°53'09 evening set -11730 May 10 j 14:42 8°**升**32'16 min. Earth dist. -11737 Oct 21 j 20:29 8°≈14'26 17.31313 AU direct -11736 Jan 05 j 03:54 6°≈10'53 conjunction -11730 May 26 j 18:28 9°\ 33'31 -0°11'54 evening set -11736 Apr 10 j 15:08 9°**≈**42'06 minimum elong -11730 May 26 j 18:29 9°**¥**33'31 0°12'10 max. Earth dist. -11736 Apr 25 j 15:52 10°≈38'27 19.30081 AU behind sun begin -11730 May 26 j 13:59 9°**)** 32'49 behind sun end -11730 May 26 j 22:59 9°**)**(34'13 conjunction -11736 Apr 27 j 02:17 10°≈43'52 -0°45'11 max. Earth dist. -11730 May 25 j 16:13 9° \(\frac{1}{29}\)'21 19.26313 AU minimum elong -11736 Apr 27 j 02:17 10°≈43'52 0°45'42 morning rise -11730 Jun 11 j 18:04 10° **)** (34'09 morning rise -11736 May 13 j 09:09 11°≈45'01 retrograde -11730 Sep 10 j 16:31 13° ¥ 56'27 -11736 Jul 28 j 06:45 15°≈ -11730 Nov 23 j 09:27 11°\ 54'43 -0°09'58 opposition -11736 Aug 12 j 10:06 15°≈06'33 min. Earth dist. -11730 Nov 24 j 08:01 11°\(\mathbf{5}\)52'18 17.26882 AU retrograde -11736 Aug 27 j 16:37 15°R≈ -11729 Feb 08 j 11:13 9°**)** 48'19 direct -11736 Oct 24 j 15:06 13°≈04'35 -0°47'48 -11729 May 15 j 17:04 13°**米**20'13 opposition evening set -11736 Oct 25 j 20:05 13°≈01'26 17.29119 AU min. Earth dist. -11735 Jan 09 j 08:29 10°≈57'44 -11729 May 31 j 19:40 14° **★**21'17 -0°05'51 direct conjunction -11735 Apr 15 j 19:31 14°≈29'28 -11729 May 31 j 19:41 14°**米**21'18 0°06'04 minimum elong evening set -11729 May 31 j 13:22 14°**米**20'19 -11735 Apr 23 j 23:40 15°≈ behind sun begin max. Earth dist. -11729 Jun 01 j 02:00 14°**米**22'16 -11735 Apr 30 j 21:08 15°≈26'05 19.28161 AU behind sun end -11729 May 30 j 20:27 14°**光** 17'36 19.27534 AU max. Earth dist. -11735 May 02 j 05:40 15°≈31'14 -0°40'14 -11729 Jun 16 j 18:03 15°**∺**21'45 conjunction morning rise -11735 May 02 j 05:41 15°≈31'14 0°40'43 -11729 Sep 15 j 16:56 18° **★** 43'59 minimum elong retrograde morning rise -11735 May 18 j 11:10 16°≈32'21 opposition -11729 Nov 28 j 13:26 16° **★** 42'15 -0°03'10 retrograde -11735 Aug 17 j 10:02 19°≈54'09 min. Earth dist. -11729 Nov 29 j 09:44 16° **€** 40'04 17.28378 AU opposition -11735 Oct 29 j 16:57 17°≈52'16 -0°42'06 direct -11728 Feb 13 j 17:26 14° **∺** 36'00 min. Earth dist. -11735 Oct 30 j 22:05 17°≈49'06 17.27461 AU asc. node -11728 May 17 j 13:55 17°**米**59'15 -11734 Jan 14 j 11:27 15°≈45'27 -11728 May 19 j 18:47 18°**米**07'25 direct evening set -11734 Apr 21 j 00:03 19°≈17'34 evening set max. Earth dist. -11734 May 06 j 00:17 20°≈14'08 19.26775 AU -11728 Jun 04 j 20:02 19°**米**08'17 0°00'18 conjunction -11728 Jun 04 j 20:03 19°**米**08'17 0°00'09 minimum elong -11734 May 07 i 08:49 20°≈19'17 -0°34'58 -11728 Jun 04 i 13:32 19°**米**07'17 conjunction behind sun begin -11734 May 07 i 08:50 20°≈19'17 0°35'25 -11728 Jun 05 j 02:34 19°\mathbf{H} 09'18 minimum elong behind sun end -11734 May 23 j 13:16 21°≈20'22 -11728 Jun 03 j 22:33 19° **★**04'52 19.29332 AU morning rise max. Earth dist. -11728 Jun 20 j 17:23 20° \(\) 08'34 retrograde -11734 Aug 22 j 11:59 24°≈42'23 morning rise opposition -11734 Nov 03 j 19:27 22°≈40'34 -0°36'06 retrograde -11728 Sep 19 j 16:15 23°\dagger30'40 min. Earth dist. -11734 Nov 04 i 23:02 22°≈37'35 17.26331 AU opposition -11728 Dec 02 j 17:28 21° \(\)28'55 0°03'37 direct -11733 Jan 19 i 16:22 20°≈33'48 min. Earth dist. -11728 Dec 03 j 12:06 21° \(\frac{1}{2} 26'55 \) 17.30480 AU -11733 Apr 26 j 04:05 24°≈06'10 direct -11727 Feb 17 j 22:14 19° **€** 22'51 evening set -11727 May 24 j 19:45 22° **₭** 53'42 evening set max. Earth dist. -11733 May 11 j 05:40 25°≈03'02 19.25897 AU conjunction -11733 May 12 j 11:48 25°≈07'48 -0°29'28 conjunction -11727 Jun 09 j 19:47 23°\ 54'20 0°06'25 minimum elong -11733 May 12 j 11:48 25°≈07'49 0°29'52 minimum elong -11727 Jun 09 j 19:48 23°**米** 54'20 0°06'19 -11733 May 28 j 14:51 26°≈08'48 behind sun begin -11727 Jun 09 j 13:32 23°**米**53'22 morning rise -11733 Aug 27 j 12:56 29°≈30'59 -11727 Jun 10 j 02:03 23° **★** 55'18 retrograde behind sun end -11733 Nov 08 j 22:33 27°≈29'14 -0°29'49 -11727 Jun 09 j 01:21 23° ¥ 51'24 19.31745 AU opposition max. Earth dist. min. Earth dist. -11733 Nov 10 j 01:34 27°≈26'18 17.25693 AU morning rise -11727 Jun 25 j 16:00 24° **★** 54'24 direct -11732 Jan 24 j 20:15 25°≈22'32 retrograde -11727 Sep 24 j 16:05 28° **★** 16'20 evening set -11732 Apr 30 j 08:07 28°≈54'59 opposition -11727 Dec 07 j 21:26 26° ★ 14'36 0°10'22 max. Earth dist. -11732 May 15 j 08:34 29°≈51'47 19.25521 AU min. Earth dist. -11727 Dec 08 j 12:56 26° ★ 12'57 17.33191 AU direct -11726 Feb 23 j 04:39 24°**₭**08'47 -11732 May 16 j 14:26 29°≈56'32 -0°23'45 -11726 May 29 j 20:06 27° **∺** 38'56 conjunction evening set

-11732 May 16 j 14:26 29°≈56'32 0°24'07

minimum elong

Planetary Phenomena of Uranus from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11726 in astronomical counting style is the year 11727 BCE in historical counting style. -11726 Jun 14 j 18:51 28° **€** 39'19 0°12'23 max. Earth dist. -11720 Jul 11 j 22:44 26° γ 43'02 19.64440 AU conjunction -11726 Jun 14 j 18:51 28° + 39'19 0°12'21 -11720 Jul 27 j 11:35 27°**Y**41'10 minimum elong morning rise -11726 Jun 14 j 14:26 28°\mathbf{\psi}38'38 -11720 Sep 09 j 05:38 0°8 behind sun begin -11720 Oct 27 j 04:54 behind sun end retrograde 1°800'53 -11726 Jun 14 j 02:58 28° ¥ 36'48 19.34777 AU -11720 Dec 16 j 15:45 30°R**Y** max. Earth dist. -11719 Jan 10 j 19:17 28°**Υ**'59'54 0°52'31 -11726 Jun 30 j 13:59 29° **€** 39'10 morning rise opposition -11719 Jan 10 j 17:22 29° Υ 00'06 17.67524 AU -11726 Jul 06 j 05:32 $0^{\circ}\Upsilon$ min. Earth dist. -11719 Mar 28 j 21:53 26° **Y** 56'51 -11726 Sep 29 j 14:31 3°**Y**00′54 retrograde direct 0°**Υ**59'12 0°17'01 opposition -11726 Dec 13 j 01:30 -11719 Jun 25 j 12:24 ್ಣಿ ೧°႘ min. Earth dist. -11726 Dec 13 j 15:09 0° **Y** 57'45 17.36546 AU evening set -11719 Jun 30 j 23:40 0°**8**19'50 -11725 Jan 06 j 04:47 30°R € -11725 Feb 28 j 08:07 28° **∺** 53'40 -11719 Jul 16 j 14:58 1°**8**18'09 0°49'23 direct conjunction -11725 Apr 20 j 07:10 $0^{\circ}\Upsilon$ -11719 Jul 16 j 14:57 1°**8**18'09 0°49'43 minimum elong evening set -11725 Jun 03 j 19:30 2°Y23'02 max. Earth dist. -11719 Jul 16 j 17:53 1°**8**18'36 19.70653 AU morning rise -11719 Aug 01 j 04:45 2°**8**16'14 conjunction -11725 Jun 19 j 17:03 3°**Υ**23'08 0°18'17 retrograde -11719 Nov 01 j 02:45 5°**8**35'29 minimum elong -11725 Jun 19 j 17:03 3°**Y**23′08 0°18'16 opposition -11718 Jan 15 j 20:41 3°**8**34'36 0°57'19 max. Earth dist. -11725 Jun 19 j 04:05 3°**Υ**21'05 19.38452 AU min. Earth dist. -11718 Jan 15 j 15:29 3°**8**35'08 17.73838 AU morning rise -11725 Jul 05 j 11:16 4°**Y**22'46 direct -11718 Apr 02 j 23:31 1°**8**31'58 retrograde -11725 Oct 04 j 14:29 7°**Y**44'15 evening set -11718 Jul 05 j 17:16 4°**8**53'39 opposition -11725 Dec 18 j 05:11 5°Υ42'38 0°23'32 min. Earth dist. -11725 Dec 18 j 15:12 5°**Υ**41'35 17.40512 AU conjunction -11718 Jul 21 j 07:58 5°**8**51'39 0°53'32 direct -11724 Mar 04 i 13:13 3°**Y**37′27 minimum elong -11718 Jul 21 i 07:57 5°**8**51'39 0°53'54 evening set -11724 Jun 07 j 18:15 7°**Υ**05'56 max. Earth dist. -11718 Jul 21 j 14:21 5°852'39 19.77045 AU morning rise -11718 Aug 05 j 21:09 6°**8**49'28 -11724 Jun 23 j 14:41 8°Υ05'46 0°24'02 retrograde -11718 Nov 05 j 21:37 10°**8**08'13 conjunction -11724 Jun 23 j 14:40 8°**Υ**'05'46 0°24'06 opposition -11717 Jan 20 j 21:31 8°807'25 1°01'44 minimum elong max. Earth dist. -11724 Jun 23 j 04:46 8°**Υ**04'13 19.42713 AU min. Earth dist. -11717 Jan 20 j 14:41 8°**8**08'07 17.80308 AU -11724 Jul 09 j 07:54 9°**Y**05'10 -11717 Apr 07 j 22:38 6°805'12 morning rise direct -11724 Oct 08 j 12:17 12°**Υ**26'21 -11717 Jul 10 j 09:59 9°**8**25'32 retrograde evening set -11724 Dec 22 j 08:38 10° \begin{pmatrix} 24'52 & 0^{\circ}29'51 \end{pmatrix} opposition -11724 Dec 22 j 17:01 10° **Y** 23'59 17.45055 AU -11717 Jul 25 j 23:52 10°\begin{align*}23'13 0°57'20 min. Earth dist. conjunction -11723 Mar 09 j 14:48 8°**Y**20'03 -11717 Jul 25 j 23:52 10°**8**23'13 0°57'44 minimum elong direct -11723 Jun 12 j 16:15 11°**Y**47'36 -11717 Jul 26 j 07:35 10°**8**24'25 19.83583 AU max. Earth dist. evening set -11717 Aug 10 j 12:54 11°**8**20'47 morning rise -11723 Jun 28 j 11:29 12° Υ 47'09 0°29'36 -11717 Nov 10 j 17:38 14°**8**38'59 conjunction retrograde -11723 Jun 28 j 11:28 12°**Υ**'47'09 0°29'43 -11716 Jan 25 j 21:27 12°**8**38'13 1°05'43 minimum elong opposition max. Earth dist. -11723 Jun 28 j 04:02 12°**Υ**45'59 19.47527 AU min. Earth dist. -11716 Jan 25 j 11:42 12°**8**39'14 17.86911 AU morning rise -11723 Jul 14 j 03:56 13°**Y**46'18 direct -11716 Apr 11 j 22:21 10°\begin{array}{c} 336'23 \end{array} retrograde -11723 Oct 13 j 12:27 17°**Y**07'10 evening set -11716 Jul 14 j 01:37 13°**8**55'21 opposition -11723 Dec 27 j 11:50 15°**Υ**05'48 0°35'58 min. Earth dist. -11723 Dec 27 j 16:30 15°**Υ**05'19 17.50104 AU conjunction -11716 Jul 29 j 15:05 14°**8**52'45 1°00'44 -11722 Mar 14 j 18:41 13°**Y**01'26 minimum elong -11716 Jul 29 j 15:04 14°**8**52'45 1°01'11 direct -11722 Jun 17 j 13:16 16°**Υ**27'56 max. Earth dist. -11716 Jul 30 j 02:14 14°**8**54'28 19.90229 AU evening set -11716 Jul 31 j 13:55 15°8 -11722 Jul 03 i 07:30 17°**Υ**27'11 0°34'58 -11716 Aug 14 i 03:40 15°850'02 conjunction morning rise -11722 Jul 03 i 07:29 17° Υ° 27'11 0°35'08 -11716 Nov 14 i 10:58 19°**8**07'39 minimum elong retrograde -11722 Jul 03 j 03:29 17°**Υ**26'33 19.52799 AU max. Earth dist. opposition -11715 Jan 29 j 08:58 17° **8**08'08 17.93610 AU morning rise -11722 Jul 18 j 23:03 18° γ 26'04 min. Earth dist. retrograde $-11722 \text{ Oct } 18 \text{ i } 09:30 \ 21^{\circ} \Upsilon 46'36$ direct -11715 Apr 16 j 20:31 15°**8**05'30 opposition -11721 Jan 01 i 14:55 19° Υ 45'23 0° 41'48 evening set -11715 Jul 18 j 16:24 18°\begin{align*} 23'04 \end{align*} min. Earth dist. -11721 Jan 01 j 18:00 19°**Υ**45'04 17.55586 AU direct -11721 Mar 19 j 19:20 17°**Y**41'27 conjunction -11715 Aug 03 j 05:12 19°\20'08 1°03'44 -11721 Jun 22 j 09:39 21°**Υ**06'50 evening set minimum elong -11715 Aug 03 j 05:11 19°**8**20'08 1°04'13 max. Earth dist. -11715 Aug 03 j 17:43 19°**8**22'04 19.96986 AU -11721 Jul 08 j 02:46 22°**Υ**05'47 0°40'04 -11715 Aug 18 j 17:48 20°**8**17'11 conjunction morning rise -11721 Jul 08 j 02:46 22°**Y**°05'47 0°40'18 minimum elong retrograde -11715 Nov 19 j 04:40 23°**8**34'13 -11721 Jul 08 j 00:43 22°**Υ**'05'28 19.58469 AU opposition -11714 Feb 03 j 18:55 21°**8**33'32 1°12'22 max. Earth dist. -11721 Jul 23 j 17:45 23°**Y**04'25 min. Earth dist. -11714 Feb 03 j 04:38 21°**8**35'00 18.00435 AU morning rise -11721 Oct 23 j 08:54 26°**Y**24'33 direct -11714 Apr 21 j 17:41 19°**8**32'26 retrograde -11720 Jan 06 j 17:13 24°**Y**°23'27 0°47'20 -11714 Jul 23 j 05:57 22°**8**48'35 opposition evening set min. Earth dist. -11720 Jan 06 j 16:48 24°**Υ**23'30 17.61422 AU direct $-11720 \text{ Mar } 23 \text{ j } 22:01 \quad 22^{\circ} \Upsilon 19'58$ conjunction -11714 Aug 07 j 18:32 23°**8**45'23 1°06'21 evening set -11720 Jun 26 j 05:03 25°**Y**44'11 minimum elong -11714 Aug 07 j 18:31 23°**8**45'23 1°06'52 max. Earth dist. -11714 Aug 08 j 10:37 23°**8**47'51 20.03857 AU -11720 Jul 11 j 21:22 26°**Y**'42'49 0°44'53 -11714 Aug 23 j 06:54 24°**8**42'10 conjunction morning rise -11720 Jul 11 j 21:22 26°**Y**'42'49 0°45'09 retrograde -11714 Nov 23 j 21:00 27°**8**58'36 minimum elong

D 1 D 1	277	11000	1 1 1100	0.07777			4.6
•	omena of Uranus fro		•				page 16
	nical year style is used: Th -11713 Feb 08 j 16:23	-		conjunction	ar 11/14 BCE in historica -11707 Sep 05 j 19:34		
opposition min. Earth dist.	-11713 Feb 08 j 10.23 -11713 Feb 07 j 23:54			minimum elong	-11707 Sep 05 j 19:34		
direct	-11713 Apr 26 j 14:10		18.07304 AU	max. Earth dist.	-11707 Sep 03 j 19.34 -11707 Sep 07 j 00:15		
evening set	-11713 Jul 27 j 18:51			morning rise	-11707 Sep 07 j 00:13		20.33237710
evening sec	11/15 tul 2/ j 10.51	27 01200		retrograde	-11707 Dec 24 j 01:00		
conjunction	-11713 Aug 12 j 06:58	28° 8 08'30	1°08'33	opposition	-11706 Mar 11 j 22:15		1°20'52
minimum elong	-11713 Aug 12 j 06:57		1°09'05	min. Earth dist.	-11706 Mar 10 j 17:38		
max. Earth dist.	-11713 Aug 13 j 00:22		20.10840 AU	direct	-11706 May 27 j 02:09		
morning rise	-11713 Aug 27 j 19:31			evening set	-11706 Aug 25 j 15:01	27° Ⅱ 03'56	
	-11713 Sep 12 j 17:13	Π °0					
retrograde	-11713 Nov 28 j 12:29	2° Ⅱ 20'52		conjunction	-11706 Sep 10 j 03:54	27° Ⅱ 58'50	1°12'35
opposition	-11712 Feb 13 j 12:46	0° Ⅱ 20′17	1°17'13	minimum elong	-11706 Sep 10 j 03:54		
min. Earth dist.	-11712 Feb 12 j 18:00		18.14418 AU	max. Earth dist.	-11706 Sep 11 j 10:28		20.59778 AU
	-11712 Feb 21 j 20:23			morning rise	-11706 Sep 25 j 18:58		
direct	-11712 Apr 30 j 08:10				-11706 Oct 15 j 16:58		
	-11712 Jul 02 j 22:55	$0^{\circ}\Pi$		retrograde	-11706 Dec 28 j 14:13		
evening set	-11712 Jul 31 j 06:42	1° Ⅱ 33'20		min. Earth dist.	-11705 Mar 15 j 06:41		18.62996 AU
				opposition	-11705 Mar 16 j 12:55		1°19'55
conjunction	-11712 Aug 15 j 18:47	2° Ⅱ 29'34		1.	-11705 Mar 19 j 02:04		
minimum elong	-11712 Aug 15 j 18:47	2° Ⅱ 29'34		direct	-11705 May 31 j 15:20		
max. Earth dist.	-11712 Aug 16 j 15:31		20.17933 AU	. ,	-11705 Aug 07 j 11:12		
morning rise	-11712 Aug 31 j 07:17	3° Ⅱ 25'53 6° Ⅱ 41'06		evening set	-11705 Aug 29 j 22:34	1° © 13'22	
retrograde min. Earth dist.	-11712 Dec 02 j 03:47 -11711 Feb 16 j 11:16		18.21552 AU	conjunction	-11705 Sep 14 j 11:44	2°508'06	1°11'34
opposition	-11711 Feb 10 j 11.10 -11711 Feb 17 j 08:24	4° I I42'40'40'37	1°18'58	minimum elong	-11705 Sep 14 j 11:44		
direct	-11711 May 05 j 02:22	2° I I40'40	1 10 50	max. Earth dist.	-11705 Sep 15 j 18:21		20.65970 AU
evening set	-11711 May 03 j 02:22 -11711 Aug 04 j 17:47	5° I 52'44		morning rise	-11705 Sep 15 j 18:21 -11705 Sep 30 j 03:38		20.03770 AC
evening sec	11/11/11ag 01j 1/.1/	3 1132 11		retrograde	-11704 Jan 02 j 01:10		
conjunction	-11711 Aug 20 j 05:35	6° Ⅱ 48'42	1°11'44	min. Earth dist.	-11704 Mar 18 j 20:45		18.69013 AU
minimum elong	-11711 Aug 20 j 05:35		1°12'20	opposition	-11704 Mar 20 j 02:46		1°18'34
max. Earth dist.	-11711 Aug 21 j 03:32		20.25096 AU	direct	-11704 Jun 04 j 02:02		
morning rise	-11711 Sep 04 j 18:28	7° Ⅱ 44'49		evening set	-11704 Sep 02 j 05:24		
retrograde	-11711 Dec 06 j 18:18	10° Ⅱ 59'28		-			
min. Earth dist.	-11710 Feb 21 j 04:21	9° Ⅱ 01'24	18.28747 AU	conjunction	-11704 Sep 17 j 19:15	6°9515'50	1°10'12
opposition	-11710 Feb 22 j 03:19	8° Ⅱ 59'04	1°20'15	minimum elong	-11704 Sep 17 j 19:15	6° © 15'50	1°10'51
direct	-11710 May 09 j 18:01	6° Ⅱ 59'32		max. Earth dist.	-11704 Sep 19 j 03:16		20.71791 AU
evening set	-11710 Aug 09 j 04:03	10° Ⅱ 10′18		morning rise	-11704 Oct 03 j 11:46	7° © 10'50	
				retrograde	-11703 Jan 05 j 13:34	10° © 21'36	
conjunction	-11710 Aug 24 j 16:02			min. Earth dist.	-11703 Mar 23 j 08:22		18.74627 AU
minimum elong	-11710 Aug 24 j 16:02			opposition	-11703 Mar 24 j 15:48		1°16'49
max. Earth dist.	-11710 Aug 25 j 16:57		20.32287 AU	direct	-11703 Jun 08 j 14:01		
morning rise	-11710 Sep 09 j 05:04			evening set	-11703 Sep 06 j 11:44	9° © 27'34	
retrograde	-11710 Dec 11 j 08:47						
opposition	-11709 Feb 26 j 21:11			conjunction	-11703 Sep 22 j 02:02		1°08'28
min. Earth dist.	-11709 Feb 25 j 20:01		18.35921 AU	minimum elong	-11703 Sep 22 j 02:03		1°09'07
direct	-11709 May 14 j 09:48			max. Earth dist.	-11703 Sep 23 j 10:03		20.7/205 AU
evening set	-11709 Aug 13 j 13:46	14°Щ26′09		morning rise	-11703 Oct 07 j 19:34		
conjunction	-11709 Aug 29 j 01:42	150∏21/20	1012117	retrograde min. Earth dist.	-11702 Jan 09 j 22:54 -11702 Mar 27 j 21:18		10 70040 ATT
minimum elong	-11709 Aug 29 j 01:42 -11709 Aug 29 j 01:42			opposition	-11702 Mar 27 j 21.18		
max. Earth dist.	-11709 Aug 29 j 01:42 -11709 Aug 30 j 03:28			direct	-11702 Mar 29 j 04:13 -11702 Jun 12 j 23:04		1 1771
morning rise	-11709 Aug 30 j 05:28 -11709 Sep 13 j 15:18		20.57425 AO	evening set	-11702 Sun 12 j 23:04 -11702 Sep 10 j 17:34		
retrograde	-11709 Dec 15 j 22:33			evening set	11702 Sep 10 j 17.54	13 3221	
opposition	-11708 Mar 02 j 14:22		1°21'27	conjunction	-11702 Sep 26 j 08:44	14°526'42	1°06'24
min. Earth dist.	-11708 Mar 01 j 12:07			minimum elong	-11702 Sep 26 j 08:44		
direct	-11708 May 17 j 23:41			max. Earth dist.	-11702 Sep 27 j 17:57		
evening set	-11708 Aug 16 j 22:41			morning rise	-11702 Oct 12 j 03:01		
Č	Ę ,			retrograde	-11701 Jan 14 j 09:58		
conjunction	-11708 Sep 01 j 10:55	19° Ⅱ 35'37	1°13'27	min. Earth dist.	-11701 Apr 01 j 07:17		18.84684 AU
minimum elong	-11708 Sep 01 j 10:55			opposition	-11701 Apr 02 j 15:26		
max. Earth dist.	-11708 Sep 02 j 15:07			direct	-11701 Jun 17 j 09:47		
morning rise	-11708 Sep 17 j 00:48			evening set	-11701 Sep 14 j 23:06		
retrograde	-11708 Dec 19 j 12:17	23° Ⅱ 44′07					
min. Earth dist.	-11707 Mar 06 j 02:25	21° Ⅱ 46′59	18.49929 AU	conjunction	-11701 Sep 30 j 14:52	18° © 29'54	1°04'01
opposition	-11707 Mar 07 j 06:36		1°21'22	minimum elong	-11701 Sep 30 j 14:52		
direct	-11707 May 22 j 13:53			max. Earth dist.	-11701 Oct 01 j 23:57		20.86886 AU
evening set	-11707 Aug 21 j 07:14	22° Ⅱ 52'56		morning rise	-11701 Oct 16 j 10:14	19° © 24'38	

Planetary Phen	omena of Uranus fro	om -11900	through -1139	8 (UT), Astrodie	nst AG 18-Feb-2025	14:23,	page 17
Attention, astronom	nical year style is used: The	e year -11700	in astronomical co	ounting style is the year	ar 11701 BCE in historical	counting sty	le.
retrograde	-11700 Jan 18 j 18:20	22° © 33'54		opposition	-11694 May 01 j 04:16	14° Ω 29'54	0°46'16
min. Earth dist.	-11700 Apr 04 j 18:40	20°537'20	18.89171 AU	direct	-11694 Jul 15 j 06:56	12° Ω 34′03	
opposition	-11700 Apr 06 j 02:07	20°534'10	1°09'23		-11694 Oct 02 j 19:28	15° Ω	
direct	-11700 Jun 20 j 16:50	18° © 37'31		evening set	-11694 Oct 12 j 06:54	15° Ω 31′00	
evening set	-11700 Sep 18 j 04:00			Č	,		
5 · • · · · · · · · · · · · · · · · · ·				conjunction	-11694 Oct 28 j 05:24	16°Ω25'06	0°39'47
conjunction	-11700 Oct 03 j 20:41	22°631'47	1°01'20	minimum elong	-11694 Oct 28 j 05:24		0°40'15
minimum elong	-11700 Oct 03 j 20:41		1°01'58	max. Earth dist.	-11694 Oct 29 j 14:48		
max. Earth dist.	-11700 Oct 05 j 26:41			morning rise	-11694 Nov 13 j 08:09		21.10002 710
morning rise	-11700 Oct 03 j 00:32		20.71207 AO	retrograde	-11693 Feb 16 j 06:16		
-	J			•	•		10 11020 ATT
retrograde	-11699 Jan 22 j 04:04		10.02221 ATT	min. Earth dist.	-11693 May 04 j 04:07		
min. Earth dist.	-11699 Apr 09 j 03:10			opposition	-11693 May 05 j 10:45		0°41'33
opposition	-11699 Apr 10 j 11:56		1°06'14	direct	-11693 Jul 19 j 12:25		
direct	-11699 Jun 25 j 02:18			evening set	-11693 Oct 16 j 11:40	19° & <i>L</i> 28'22	
evening set	-11699 Sep 22 j 08:52	25°538'23				_	
				conjunction	-11693 Nov 01 j 11:06		0°35'26
conjunction	-11699 Oct 08 j 02:15	26°532'29	0°58'22	minimum elong	-11693 Nov 01 j 11:06	20° Ω 22'31	0°35'53
minimum elong	-11699 Oct 08 j 02:15	26°\$32'29	0°58'58	max. Earth dist.	-11693 Nov 02 j 19:04	20° Ω 27′04	21.11723 AU
max. Earth dist.	-11699 Oct 09 j 12:12	26°537'23	20.95214 AU	morning rise	-11693 Nov 17 j 15:05	21° Ω 17'16	
morning rise	-11699 Oct 23 j 23:35	27°527'08		retrograde	-11692 Feb 20 j 12:57	24° Ω 24'13	
	-11699 Dec 18 j 21:22	$0^{\circ}\Omega$		opposition	-11692 May 08 j 17:11	22° Ω 24'48	0°36'38
retrograde	-11698 Jan 26 j 12:18	0° Ω 35'33		min. Earth dist.	-11692 May 07 j 12:46	22° Ω 27'39	19.12399 AU
Z .	-11698 Mar 07 j 00:25	30°Rூ		direct	-11692 Jul 22 j 16:09		
opposition	-11698 Apr 14 j 21:10		1°02'47	evening set	-11692 Oct 19 j 16:19		
min. Earth dist.	-11698 Apr 13 j 13:17			5 · 5 · · · · · · · · · · · · · · · · ·			
direct	-11698 Jun 29 j 07:48		10.57151110	conjunction	-11692 Nov 04 j 16:58	24°Ω10'48	0°30'55
evening set	-11698 Sep 26 j 13:18			minimum elong	-11692 Nov 04 j 16:58		
evening set	-11698 Oct 02 j 23:28			max. Earth dist.	-11692 Nov 04 j 10:38		
	-11098 Oct 02 j 23.28	0 86					21.1261 / AU
	11.000 0 . 10.05 10	00 000110	0055100	morning rise	-11692 Nov 20 j 21:58		
conjunction	-11698 Oct 12 j 07:46	0° Ω 32'13		retrograde	-11691 Feb 23 j 21:53		
minimum elong	-11698 Oct 12 j 07:46	0° Ω 32'13	0°55'44	opposition	-11691 May 12 j 23:13		0°31'33
max. Earth dist.	-11698 Oct 13 j 18:27		20.98923 AU	min. Earth dist.	-11691 May 11 j 19:02		19.13191 AU
morning rise	-11698 Oct 28 j 06:04	1° Ω 26′50		direct	-11691 Jul 26 j 21:42		
retrograde	-11697 Jan 30 j 21:24	4° Ω 34'54		evening set	-11691 Oct 23 j 21:27	27° Ω 22'41	
min. Earth dist.	-11697 Apr 17 j 20:44	2° Ω 38'31	19.00729 AU				
opposition	-11697 Apr 19 j 05:38	2° Ω 35′13	0°59'02	conjunction	-11691 Nov 08 j 23:07	28° Ω 16′59	0°26'16
direct	-11697 Jul 03 j 15:37	0° Ω 38'59		minimum elong	-11691 Nov 08 j 23:07	28° Ω 16′59	0°26'39
evening set	-11697 Sep 30 j 17:50	3° Ω 37′08		max. Earth dist.	-11691 Nov 10 j 04:32	28° Ω 21'09	21.13313 AU
· ·				morning rise	-11691 Nov 25 j 05:21		
conjunction	-11697 Oct 16 j 13:05	4° Ω 31'10	0°51'38	C	-11691 Dec 10 j 05:05	0° m	
minimum elong	-11697 Oct 16 j 13:06	4° Ω 31'10		retrograde	-11690 Feb 28 j 03:53	2° m 18'36	
max. Earth dist.	-11697 Oct 17 j 23:12		21.02291 AU	min. Earth dist.	-11690 May 16 j 03:21	-	19.13388 AU
morning rise	-11697 Nov 01 j 12:34	5° Ω 25'47	21.022,1110	opposition	-11690 May 17 j 05:01	0° mp 19'09	0°26'20
retrograde	-11696 Feb 04 j 05:16	8° Ω 33'33		оррозион	-11690 May 25 j 03:26		0 2020
min. Earth dist.			19.03924 AU	direct	-11690 Jul 31 j 00:55		
opposition	-11696 Apr 21 j 05:58 -11696 Apr 22 j 13:37	6° Ω 33'55	0°55'02	direct	-11690 Jul 31 J 00:33 -11690 Oct 02 j 08:25	0°m)	
			0-33 02		-		
direct	-11696 Jul 06 j 20:19	4° Ω 37'50		evening set	-11690 Oct 28 j 02:39	1° m) 19'41	
evening set	-11696 Oct 03 j 22:04	7° Ω 35′29			11(003) 12:05:5	00 m. 1 410 1	0021120
	110000 : 10110 ::	00 00000	00.4715.4	conjunction	-11690 Nov 13 j 05:37	2° Mp 14'04	0°21'29
conjunction	-11696 Oct 19 j 18:28	8° Ω 29'32	0°47'54	minimum elong	-11690 Nov 13 j 05:37	2° m 14'04	
minimum elong	-11696 Oct 19 j 18:28		0°48'27	max. Earth dist.	-11690 Nov 14 j 09:55		21.13227 AU
max. Earth dist.	-11696 Oct 21 j 04:56		21.05311 AU	morning rise	-11690 Nov 29 j 12:55	3°Mp09'04	
morning rise	-11696 Nov 04 j 18:56	9° Ω 24'10		retrograde	-11689 Mar 04 j 12:45	6° Mp 15′42	
retrograde	-11695 Feb 07 j 14:05	12° Ω 31'40		min. Earth dist.	-11689 May 20 j 09:16	4° Mp 18'43	19.12998 AU
opposition	-11695 Apr 26 j 21:04	10° Ω 32'06	0°50'46	opposition	-11689 May 21 j 10:25	4° Mp 16′10	0°21'00
min. Earth dist.	-11695 Apr 25 j 12:46	10° Ω 35′20	19.06739 AU	direct	-11689 Aug 04 j 06:23	2° Mp 20'13	
direct	-11695 Jul 11 j 02:31	8° Ω 36′08		evening set	-11689 Nov 01 j 08:10	5° Mp 16'37	
evening set	-11695 Oct 08 j 02:25	11° Ω 33'24		-	•		
Č	,			conjunction	-11689 Nov 17 j 12:07	6° M) 11′06	0°16'37
conjunction	-11695 Oct 23 j 23:43	12°Ω27'28	0°43'57	minimum elong	-11689 Nov 17 j 12:07	6° Mp 11'06	0°16'55
minimum elong	-11695 Oct 23 j 23:43			max. Earth dist.	-11689 Nov 18 j 14:25	-•	21.12556 AU
max. Earth dist.	-11695 Oct 25 j 09:19			morning rise	-11689 Dec 03 j 20:34	7° Mp 06'12	
morning rise	-11695 Nov 09 j 01:27		21.07720 AU	retrograde	-11688 Mar 07 j 18:22		
morning fise	-11695 Nov 09 j 01:27 -11695 Dec 11 j 02:59			opposition	-11688 May 24 j 15:39	8° m 13'09	0°15'34
retrograde	-11693 Dec 11 j 02.39 -11694 Feb 11 j 21:26			min. Earth dist.	• •		19.12059 AU
retrograde					-11688 May 23 j 17:03		17.12039 AU
min Forth 3:-4	-11694 Apr 18 j 13:03		10.00127 411	direct	-11688 Aug 07 j 09:31 -11688 Nov 04 j 13:48	6° Mp 17'03	
min. Earth dist.	-11694 Apr 29 j 21:42	17 063238	19.0912/ AU	evening set	-11000 NUV U4 J 13:48	9° m 13'32	

Planetary Phenomena of Uranus from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11688 in astronomical counting style is the year 11689 BCE in historical counting style. -11688 Nov 20 j 18:59 10° m 08'08 0°11'40 -11683 Dec 11 j 22:47 conjunction -11688 Nov 20 j 18:59 10° m 08'09 0°11'56 max. Earth dist. -11683 Dec 12 j 03:18 0°**2**00'39 20.99331 AU minimum elong -11688 Nov 20 j 14:25 10° m 07'31 -11683 Dec 28 j 01:24 0°**£**54'20 behind sun begin morning rise -11688 Nov 20 j 23:33 10° Mp 08'46 4°**£**01'32 behind sun end retrograde -11682 Apr 01 j 18:19 max. Earth dist. -11688 Nov 21 j 20:10 10° Mp 11'42 21.11382 AU -11682 Jun 17 j 20:42 2°**£**01'27 -0°17'48 opposition -11688 Dec 07 j 04:27 11° Mp 03'21 -11682 Jun 17 j 07:38 morning rise min. Earth dist. 2°**2**02'48 18.97637 AU retrograde -11687 Mar 12 j 03:02 14° m 09'55 direct -11682 Aug 31 j 09:45 0°**£**04'10 0°10'03 -11682 Nov 29 j 09:15 opposition -11687 May 28 j 20:33 12° Mp 10'11 evening set 3°₽03'03 min. Earth dist. -11687 May 27 j 22:26 12° Mp 12'25 19.10640 AU 3°**£**58'42 -0°18'34 direct -11687 Aug 11 j 14:35 10° Mp 13'52 conjunction -11682 Dec 15 j 20:51 evening set -11687 Nov 08 j 19:51 13° m 10'32 minimum elong -11682 Dec 15 j 20:50 3°**2**58'42 0°18'34 -11682 Dec 16 j 11:14 max. Earth dist. 4°**2**00'44 20.95841 AU -11687 Nov 25 j 02:05 14° m 05'17 0°06'42 conjunction morning rise -11681 Jan 01 j 11:59 4°**£**54'52 minimum elong -11687 Nov 25 j 02:04 14° m 05'17 0°06'54 retrograde -11681 Apr 06 j 04:53 8°**₾**02'22 behind sun begin -11687 Nov 24 j 19:52 14° m 04'26 opposition -11681 Jun 22 j 01:48 6°**2**02'15 -0°23'18 behind sun end -11687 Nov 25 j 08:16 14° Mp 06'08 min. Earth dist. -11681 Jun 21 j 13:47 6°**೨**03'29 18.93951 AU max. Earth dist. -11687 Nov 26 j 01:17 14° My 08'34 21.09737 AU direct -11681 Sep 04 j 15:34 4°**£**04'45 morning rise -11687 Dec 11 j 12:41 15° Mp 00'38 evening set -11681 Dec 03 j 18:40 7°**£**04'22 retrograde -11686 Mar 16 j 09:17 18° m 07'13 min. Earth dist. -11686 Jun 01 j 05:53 16° Mp 09'22 19.08782 AU conjunction -11681 Dec 20 j 07:06 8° **2**00'14 -0°23'29 opposition -11686 Jun 02 j 01:29 16° Mp 07'22 minimum elong -11681 Dec 20 j 07:06 8°**♀**00'14 0°23'33 direct -11686 Aug 15 j 17:33 14° m 10'52 max. Earth dist. -11681 Dec 20 j 19:04 8° **2**01'55 20.91954 AU evening set -11686 Nov 13 j 02:18 17° Mp 07'48 morning rise -11680 Jan 05 i 23:00 8°**♀**56'35 retrograde -11680 Apr 09 i 13:27 12° **2**04'25 conjunction -11686 Nov 29 j 09:43 18° m 02'42 0°01'39 opposition -11680 Jun 25 j 07:19 10° **2**04'18 -0°28'42 -11686 Nov 29 j 09:43 18° m 02'42 0°01'50 min. Earth dist. -11680 Jun 24 j 22:19 10°**2**05'14 18.89867 AU minimum elong behind sun begin -11686 Nov 29 j 03:02 18° m 01'47 -11680 Sep 07 j 19:42 8°**2**06'35 direct -11686 Nov 29 j 16:24 18° m 03'37 -11680 Dec 07 j 04:53 11° **2**06'59 behind sun end evening set -11686 Nov 30 j 07:38 18° Mp 05'47 21.07688 AU max. Earth dist. -11686 Dec 15 j 21:15 18° m 58'10 -11680 Dec 23 j 18:18 12° **2**03'05 -0°28'19 morning rise conjunction -11685 Mar 20 j 18:08 22° m 04'50 -11680 Dec 23 j 18:18 12°**2**03'05 0°28'26 retrograde minimum elong -11680 Dec 24 j 03:55 12°**£**04'26 20.87674 AU -11685 Mar 28 j 20:45 22° m 03'14 desc. node max. Earth dist. -11685 Jun 05 j 11:01 20° Mp 06'50 19.06533 AU -11679 Jan 09 j 10:53 12°**2**59'38 min. Earth dist. morning rise -11685 Jun 06 j 06:03 20° m 04'54 -0°01'05 -11679 Apr 14 j 00:47 16° **2**07'51 opposition retrograde -11685 Aug 19 j 22:35 18° m 08'11 -11679 Jun 29 j 12:58 14°**2**07'41 -0°34'00 direct opposition -11685 Nov 17 j 09:16 21° m 05'29 -11679 Jun 29 j 05:22 14°**2**08'28 18.85369 AU evening set min. Earth dist. -11679 Sep 12 j 02:06 12°**♀**09'43 direct conjunction -11685 Dec 03 j 17:39 22° m 00'32 -0°03'32 evening set -11679 Dec 11 j 16:02 15° **△**10'58 minimum elong -11685 Dec 03 j 17:39 22° m 00'32 0°03'25 -11679 Dec 28 j 06:18 16° **2**07'19 -0°33'02 behind sun begin -11685 Dec 03 j 11:00 21° m 59'38 conjunction behind sun end -11685 Dec 04 j 00:18 22° Mp 01'27 minimum elong -11679 Dec 28 j 06:17 16°**2**07'19 0°33'11 max. Earth dist. -11685 Dec 04 j 13:31 22° m 03'21 21.05251 AU max. Earth dist. -11679 Dec 28 j 13:05 16° **2**08'17 20.82946 AU morning rise -11685 Dec 20 j 06:11 22° m 56'11 morning rise -11678 Jan 13 j 23:30 17°**♀**04'06 -11684 Mar 24 j 01:04 26° m 02'58 retrograde -11678 Apr 18 j 10:47 20° **2**12'41 retrograde -11684 Jun 09 j 10:56 24° m 02'57 -0°06'40 -11678 Jul 03 j 19:14 18°**≙**12'28 -0°39'09 opposition opposition -11684 Jun 08 j 18:23 24° m 04'39 19.03919 AU -11678 Jul 03 j 14:54 18° **2**12'55 18.80416 AU min. Earth dist. min. Earth dist. -11684 Aug 23 j 01:18 22° m 06'04 direct direct -11678 Sep 16 i 07:39 16° \(\Omega\) 14'12 -11684 Nov 20 j 16:26 25° **m** 03'47 evening set evening set -11678 Dec 16 j 03:58 19° **△**16'23 -11684 Dec 07 i 02:00 25° m 59'02 -0°08'34 conjunction -11677 Jan 01 i 19:05 20° \(\Omega\) 12'58 -0°37'36 conjunction -11684 Dec 07 i 02:00 25° m 59'02 0°08'28 minimum elong -11677 Jan 01 i 19:05 20° \(\Omega\) 12'58 0°37'48 minimum elong behind sun begin -11684 Dec 06 j 20:09 25° m 58'13 max. Earth dist. -11677 Jan 01 j 23:01 20° **2**13'32 20.77772 AU behind sun end -11684 Dec 07 j 07:51 25° m 59'50 -11677 Jan 18 j 12:51 21° **2**09'58 morning rise max. Earth dist. -11684 Dec 07 j 20:28 26° m 01'38 21.02472 AU retrograde -11677 Apr 22 j 22:42 24° **△**18'58 -11677 Jul 08 j 01:41 22°**2**18'40 -0°44'07 morning rise -11684 Dec 23 j 15:25 26° m 54'49 opposition -11683 Mar 19 j 21:19 0°**♀** min. Earth dist. -11677 Jul 07 j 22:54 22°**2**18'57 18.75015 AU retrograde -11683 Mar 28 j 10:42 0°**ჲ**01'48 direct -11677 Sep 20 j 15:10 20°**2**20'04 -11683 Apr 06 j 01:27 30°R Mp -11677 Dec 20 j 16:43 23°**△**23'13 evening set -11683 Jun 13 j 15:43 28° Mp 01'44 -0°12'15 opposition min. Earth dist. -11683 Jun 12 j 23:51 28° m 03'22 19.00957 AU -11676 Jan 06 j 08:33 24°**2**20'04 -0°42'00 conjunction -11683 Aug 27 j 06:38 26° Mp 04'39 direct minimum elong -11676 Jan 06 j 08:33 24°**£**20'03 0°42'14 evening set -11683 Nov 25 j 00:32 29° m 02'55 max. Earth dist. -11676 Jan 06 j 09:41 24° **2**20'13 20.72148 AU morning rise -11676 Jan 23 j 02:46 25°**⊆**17'17 conjunction -11683 Dec 11 j 11:03 29° m 58'21 -0°13'35 retrograde -11676 Apr 26 j 09:35 28°**♀**26'41 minimum elong -11683 Dec 11 j 11:03 29° m 58'21 0°13'33 opposition -11676 Jul 11 j 08:44 26°**2**26'17 -0°48'54 behind sun begin -11683 Dec 11 j 07:27 29° m 57'51 min. Earth dist. -11676 Jul 11 j 09:07 26°**2**26'15 18.69192 AU

direct

-11676 Sep 23 j 21:57 24° **2**27'19

behind sun end

-11683 Dec 11 j 14:39 29° m 58'51

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Attention, astronomical year style is used: The year -11676 in astronomical counting style is the year 11677 BCE in historical counting style. evening set -11676 Dec 24 j 06:02 27°**2**31'27 max. Earth dist. -11669 Feb 05 j 10:42 23°M 49'56 20.25690 AU -11675 Jan 09 j 22:38 28° **2**28'34 -0°46'12 -11669 Feb 06 j 03:36 23°ML52'25 -1°05'58 conjunction conjunction -11675 Jan 09 j 22:38 28° **2**28'34 0°46'29 -11669 Feb 06 j 03:36 23°ML52'25 1°06'28 minimum elong minimum elong -11669 Feb 22 j 23:08 24°M51'15 -11675 Jan 09 j 20:51 28° **2**28'19 20.66146 AU max. Earth dist. morning rise -11675 Jan 26 j 17:22 29° **2**26'01 -11669 May 27 j 08:02 28° ML04'13 morning rise retrograde -11675 Feb 06 j 00:43 0°M₊ opposition -11669 Aug 09 j 23:42 26°ML02'56 -1°14'31 -11675 Apr 30 j 22:22 retrograde 2°M35'52 min. Earth dist. -11669 Aug 10 j 13:49 26°M 01'25 18.22252 AU -11675 Jul 15 j 16:03 opposition 0°M35'19 -0°53'26 direct -11669 Oct 23 j 23:15 24°ML00'59 -11668 Jan 25 j 03:43 27°ML13'42 min. Earth dist. -11675 Jul 15 j 17:58 0°M 35'07 18.63013 AU evening set -11675 Jul 29 j 21:27 30°R € -11675 Sep 28 j 06:54 28°**♀**35'55 -11668 Feb 10 j 23:21 28°ML12'46 -1°08'09 direct conjunction -11675 Nov 25 j 22:03 -11668 Feb 10 j 23:20 28°ML12'45 1°08'41 0° M minimum elong evening set -11675 Dec 28 j 20:24 1°M41'08 max. Earth dist. -11668 Feb 10 j 05:05 28°ML10'04 20.18749 AU morning rise -11668 Feb 27 j 18:33 29° ML11'49 conjunction -11674 Jan 14 j 13:39 2°MJ38'31 -0°50'11 -11668 Mar 13 j 03:29 0°**∡**7 minimum elong -11674 Jan 14 j 13:39 2°M38'31 0°50'30 retrograde -11668 May 30 j 22:42 2°**∡**¹25'24 0°**∡**124′04 -1°16′46 max. Earth dist. -11674 Jan 14 j 09:21 2°M37'54 20.59802 AU opposition -11668 Aug 13 j 11:27 morning rise -11674 Jan 31 j 08:39 3°M36'12 min. Earth dist. -11668 Aug 14 j 03:50 0° ₹22'18 18.15326 AU retrograde -11674 May 05 j 09:46 6°M46'29 -11668 Aug 22 j 21:10 30°RM opposition -11674 Jul 19 j 23:51 4°M45'48 -0°57'44 direct -11668 Oct 27 j 11:47 28°M21'45 min. Earth dist. -11674 Jul 20 i 04:46 4°ML45'17 18.56537 AU -11668 Dec 30 i 00:58 0°**∡**7 direct -11674 Oct 02 j 14:52 2°M45'58 evening set -11667 Jan 29 i 00:10 1°**∡**35'52 evening set -11673 Jan 02 j 11:32 5°ML52'18 conjunction -11667 Feb 14 j 19:48 2°**₹**35'12 -1°09'57 -11673 Jan 19 j 05:20 6°M 49'58 -0°53'55 minimum elong -11667 Feb 14 i 19:47 2°**₹**35'12 1°10'32 conjunction -11673 Jan 19 j 05:20 6°ML49'58 0°54'16 max. Earth dist. -11667 Feb 13 j 22:22 2° ₹32'01 20.11839 AU minimum elong max. Earth dist. -11673 Jan 18 j 22:06 6°M 48'55 20.53217 AU -11667 Mar 03 j 14:58 3° ₹34'29 morning rise -11673 Feb 05 j 00:40 7°ML47'52 -11667 Jun 04 j 16:06 6° **₹** 48'42 morning rise retrograde -11667 Aug 18 j 00:02 4° ₹ 47'19 -1°18'35 -11673 May 09 j 23:30 10°M 58'39 retrograde opposition -11673 Jul 24 j 08:09 8°ML57'48 -1°01'45 min. Earth dist. -11667 Aug 18 j 18:02 4°**₹** 45'23 18.08429 AU opposition -11673 Jul 24 j 14:27 8°ML57'08 18.49859 AU -11667 Nov 01 j 03:19 2°**х** 44′38 min. Earth dist. direct -11673 Oct 07 j 01:20 6°M57'31 -11666 Feb 02 j 21:36 6° ₹ 00'11 evening set direct -11672 Jan 07 j 03:18 10°ML05'02 evening set -11666 Feb 19 j 17:23 6° ₹ 59'48 -1°11'22 conjunction -11672 Jan 23 j 21:37 11°ML02'58 -0°57'22 -11666 Feb 19 j 17:23 6° ₹ 59'48 1°11'57 conjunction minimum elong -11672 Jan 23 j 21:37 11°ML02'58 0°57'47 -11666 Feb 18 j 18:43 6° ₹ 56'25 20.04931 AU minimum elong max. Earth dist. max. Earth dist. -11672 Jan 23 j 12:23 11°M 01'38 20.46444 AU morning rise -11666 Mar 08 j 12:02 7°**尽** 59'18 morning rise -11672 Feb 09 j 17:01 12°ML01'06 retrograde -11666 Jun 09 j 08:55 11°**х** 14'08 -11672 Apr 21 j 12:56 15° M₄ opposition -11666 Aug 22 j 13:29 9°**尽** 12'45 -1°19'57 retrograde -11672 May 13 j 11:46 15° ML12'23 min. Earth dist. -11666 Aug 23 j 09:40 9°**尽** 10'34 18.01529 AU -11672 Jun 04 j 11:45 15°RML -11666 Nov 05 j 18:29 7°**尽** 09'42 direct -11672 Jul 27 j 17:07 13°ML11'24 -1°05'27 -11665 Feb 07 j 20:05 10° ₹ 26'41 opposition evening set min. Earth dist. -11672 Jul 28 j 02:03 13°ML10'27 18.43031 AU -11672 Oct 10 j 10:20 11°ML10'42 conjunction -11665 Feb 24 j 15:37 11°**₹** 26'33 -1°12'21 direct -11671 Jan 10 j 20:03 14° ML19'25 -11665 Feb 24 i 15:37 11° ₹26'33 1°12'58 evening set minimum elong -11671 Jan 22 j 13:48 15°M -11665 Feb 23 j 13:35 11° ₹22'39 19.98035 AU max. Earth dist. morning rise -11665 Mar 13 j 10:01 12° ₹ 26'17 -11671 Jan 27 j 14:45 15° ML 17'38 -1°00'33 conjunction retrograde -11665 Jun 14 i 03:21 15° ₹ 41'45 minimum elong -11671 Jan 27 i 14:45 15°ML17'38 1°00'59 opposition -11665 Aug 27 j 03:58 13° ₹ 40'18 -1°20'50 max. Earth dist. -11671 Jan 27 j 02:35 15°M 15'52 20.39573 AU min. Earth dist. -11665 Aug 28 j 01:52 13° ₹37'57 17.94650 AU morning rise -11671 Feb 13 j 10:22 16° ML16'00 direct -11665 Nov 10 j 11:32 11° ₹36'53 retrograde -11671 May 18 j 02:35 19° ML 27'50 -11664 Feb 12 j 19:06 14° ₹ 55'16 evening set opposition -11671 Aug 01 j 02:29 17°M26'42 -1°08'50 max. Earth dist. -11664 Feb 28 j 11:40 15° ₹ 51'20 19.91148 AU min. Earth dist. -11671 Aug 01 j 12:47 17° M 25'37 18.36133 AU direct -11671 Oct 14 j 22:38 15°M25'34 conjunction -11664 Feb 29 j 14:40 15° ₹ 55'24 -1°12'54 evening set -11670 Jan 15 j 13:44 18° ML35'35 minimum elong -11664 Feb 29 j 14:40 15° ₹ 55'24 1°13'32 morning rise -11664 Mar 17 j 08:25 16° **₹** 55'19 -11664 Jun 17 j 22:08 20° ₹ 11'24 conjunction retrograde -11670 Feb 01 j 08:52 19° M 34'05 1°03'54 -11664 Aug 30 j 19:20 18° ₹09'55 -1°21'15 minimum elong opposition -11670 Jan 31 j 18:59 19°M 32'03 20.32637 AU -11664 Aug 31 j 19:00 18° ₹ 07'21 17.87776 AU max. Earth dist. min. Earth dist. morning rise -11670 Feb 18 j 04:22 20° ML32'41 direct -11664 Nov 14 j 05:13 16° ₹ 06'06 retrograde -11670 May 22 j 15:52 23°M 45'04 evening set -11663 Feb 16 j 19:16 19° ₹25'53 opposition -11670 Aug 05 j 12:48 21°ML43'51 -1°11'52 max. Earth dist. -11663 Mar 04 j 08:10 20° ₹21'41 19.84295 AU min. Earth dist. -11670 Aug 06 j 01:32 21°ML42'29 18.29188 AU -11670 Oct 19 j 09:05 19°M42'18 -11663 Mar 05 j 14:27 20°**⊀** 26'15 -1°13'01 direct conjunction -11669 Jan 20 j 08:18 22°M 53'39 -11663 Mar 05 j 14:27 20°**⊀** 26'15 1°13'39 evening set minimum elong

Planetary Pheno	omena of Uranus fro	om -11900	through -1139	8 (UT). Astrodiei	nst AG 18-Feb-2025	14:23.	page 20
-	nical year style is used: Th		_	. //			
morning rise	-11663 Mar 22 j 07:47	•	in uon onomour o	direct	-11657 Dec 17 j 09:38		
retrograde	-11663 Jun 22 j 17:24			evening set	-11656 Mar 22 j 11:50		
opposition	-11663 Sep 04 j 11:26		-1°21'09	max. Earth dist.	-11656 Apr 06 j 15:18		19.42981 AU
min. Earth dist.	-11663 Sep 05 j 12:58					,	
direct	-11663 Nov 19 j 00:02		-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	conjunction	-11656 Apr 08 j 03:06	22° ~ 49'54	-1°00'57
evening set	-11662 Feb 21 j 20:04			minimum elong	-11656 Apr 08 j 03:07		
max. Earth dist.	-11662 Mar 09 j 08:08		19 77526 AU	morning rise	-11656 Apr 24 j 14:30		1 0133
man. Darut dist.	1100 2 1.1 a 1 09 j 00.00	2.7.0.17	19.77020110	retrograde	-11656 Jul 25 j 01:21		
conjunction	-11662 Mar 10 j 15:06	24° × 759'00	-1°12'40	opposition	-11656 Oct 06 j 04:44		-1°06'09
minimum elong	-11662 Mar 10 j 15:06		1°13'19	min. Earth dist.	-11656 Oct 07 j 10:46		
morning rise	-11662 Mar 27 j 07:38		1 13 17	direct	-11656 Dec 21 j 11:02		17.10707110
retrograde	-11662 Jun 27 j 13:45			evening set	-11655 Mar 27 j 15:53		
opposition	-11662 Sep 09 j 04:34		-1°20'32	max. Earth dist.	-11655 Apr 11 j 18:36		19.38877 AU
min. Earth dist.	-11662 Sep 10 j 07:18					_,,	
direct	-11662 Nov 23 j 19:58		-,,,,,======	conjunction	-11655 Apr 13 j 06:17	27°₹33'27	-0°57'27
evening set	-11661 Feb 26 j 21:31			minimum elong	-11655 Apr 13 j 06:18		
max. Earth dist.	-11661 Mar 14 j 06:24		19.70909 AU	morning rise	-11655 Apr 29 j 16:31		0 20 03
		-, , -, -, -,			-11655 May 24 j 12:31		
conjunction	-11661 Mar 15 j 15:58	29° х 33'32	-1°11'51	retrograde	-11655 Jul 29 j 23:50		
minimum elong	-11661 Mar 15 j 15:58			1011 ogrude	-11655 Oct 08 j 12:58		
	-11661 Mar 22 j 21:47			opposition	-11655 Oct 11 j 03:42		-1°02'03
morning rise	-11661 Apr 01 j 07:53			min. Earth dist.	-11655 Oct 12 j 10:38		
retrograde	-11661 Jul 02 j 10:02	3° る 51'48		direct	-11655 Dec 26 j 11:44		17.57121110
opposition	-11661 Sep 13 j 22:31	1°る50'03	-1°19'25	4.1.001	-11654 Mar 10 j 20:37		
min. Earth dist.	-11661 Sep 15 j 02:52		17.67765 AU	evening set	-11654 Apr 01 j 20:14		
min. Burtir dist.	-11661 Nov 04 j 16:01		17.07700110	max. Earth dist.	-11654 Apr 16 j 22:11		19.35360 AU
direct	-11661 Nov 28 j 16:21			max. Burtil dist.	1103 (71p) 10 j 22.11	2 /4/12 / /	17.55500710
direct	-11661 Dec 22 j 12:30			conjunction	-11654 Apr 18 j 09:36	2° ≈ 18'17	-0°53'32
evening set	-11660 Mar 02 j 23:25	3° そ 08'45		minimum elong	-11654 Apr 18 j 09:36		
max. Earth dist.	-11660 Mar 18 j 07:49		19.64538 AU	morning rise	-11654 May 04 j 18:50		0 2107
max. Earth dist.	11000 14141 10 j 07.19	1 00150	17.01330710	retrograde	-11654 Aug 04 j 00:09	6°≈40'28	
conjunction	-11660 Mar 19 j 17:32	4° る 09'45	-1°10'34	opposition	-11654 Oct 16 j 03:28		-0°57'29
minimum elong	-11660 Mar 19 j 17:32			min. Earth dist.	-11654 Oct 17 j 09:07		17.33880 AU
morning rise	-11660 Apr 05 j 08:36		1 11 15	direct	-11654 Dec 31 j 15:05		17.55000 110
retrograde	-11660 Jul 06 j 07:37			evening set	-11653 Apr 07 j 00:32		
opposition	-11660 Sep 17 j 17:09	6° පි 26'51	-1°17'46	max. Earth dist.	-11653 Apr 22 j 02:37		19.32393 AU
min. Earth dist.	-11660 Sep 18 j 21:59		17.61542 AU	max. Dartii dist.	11000 11p1 22 j 02.57	0.0001	17.52575710
direct	-11660 Dec 02 j 13:44	4° る 21'25	17.010.2110	conjunction	-11653 Apr 23 j 12:58	7° ≈ 04'17	-0°49'15
evening set	-11659 Mar 08 j 02:00			minimum elong	-11653 Apr 23 j 12:58		0°49'48
max. Earth dist.	-11659 Mar 23 j 07:52		19.58482 AU	morning rise	-11653 May 09 j 20:55		0 17 10
man. Darut dist.	11009 Mai 20 j 07.02	0 0 .2 07	17.00.02110	retrograde	-11653 Aug 08 j 23:28		
conjunction	-11659 Mar 24 j 19:26	8° ප 47'35	-1°08'51	opposition	-11653 Oct 21 j 04:09		-0°52'30
minimum elong	-11659 Mar 24 j 19:27			min. Earth dist.	-11653 Oct 22 j 10:27		17.31187 AU
morning rise	-11659 Apr 10 j 09:44		, -,	direct	-11652 Jan 05 j 17:21	7° ≈ 18'09	-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
retrograde	-11659 Jul 11 j 05:09			evening set	-11652 Apr 11 j 05:11		
opposition	-11659 Sep 22 j 12:49		-1°15'37	max. Earth dist.	-11652 Apr 26 j 06:04		19 29975 AU
min. Earth dist.	-11659 Sep 23 j 19:03			man. Darm dist.	1100211p1 20 j 00.0 i	11 10 10 0 1	19.299,0110
direct	-11659 Dec 07 j 11:30		-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	conjunction	-11652 Apr 27 j 16:25	11° ≈ 51'19	-0°44'36
evening set	-11658 Mar 13 j 04:54			minimum elong	-11652 Apr 27 j 16:25		
max. Earth dist.	-11658 Mar 28 j 10:23		19.52827 AU	morning rise	-11652 May 13 j 23:21		
					-11652 Jun 21 j 20:31		
conjunction	-11658 Mar 29 j 21:45	13°₹26'55	-1°06'39	retrograde	-11652 Aug 13 j 00:45		
minimum elong	-11658 Mar 29 j 21:46			1011 ogrude	-11652 Oct 06 j 10:41		
morning rise	-11658 Apr 15 j 11:05		,	opposition	-11652 Oct 25 j 05:13		-0°47'08
retrograde	-11658 Jul 16 j 03:43			min. Earth dist.	-11652 Oct 26 j 10:10		
opposition	-11658 Sep 27 j 09:15		-1°12'57	direct	-11651 Jan 09 j 22:08		17.27017110
min. Earth dist.	-11658 Sep 28 j 15:10				-11651 Apr 06 j 02:19		
direct	-11658 Dec 12 j 10:44			evening set	-11651 Apr 16 j 09:47		
evening set	-11657 Mar 18 j 08:18			max. Earth dist.	-11651 May 01 j 11:17		19.28054 AU
max. Earth dist.	-11657 Apr 02 j 12:11		19 47633 ATT	Durtii uist.	11001 may 01 J 11.1/	10.40000	17.2005 AU
Zurur dist.	1.00, 11pt 02 j 12.11	10 002 00	->055710	conjunction	-11651 May 02 j 20:01	16°≈39'09	-0°39'37
conjunction	-11657 Apr 04 j 00:21	18°₹07'43	-1°04'01	minimum elong	-11651 May 02 j 20:01		
minimum elong	-11657 Apr 04 j 00:21			morning rise	-11651 May 19 j 01:35		3 .5 05
morning rise	-11657 Apr 04 j 00:21 -11657 Apr 20 j 12:41			retrograde	-11651 Aug 18 j 00:48		
retrograde	-11657 Jul 21 j 01:51			opposition	-11651 Oct 30 j 07:19		-0°41'25
opposition	-11657 Oct 02 j 06:39		-1°09'48	min. Earth dist.	-11651 Oct 31 j 12:32		
min. Earth dist.	-11657 Oct 02 j 00:35			direct	-11650 Jan 15 j 01:20		-,.2,3 12 110
	511 55 j 15.50						

Planetary Phenomena of Uranus from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11650 in astronomical counting style is the year 11651 BCE in historical counting style. -11650 Apr 21 j 14:21 20°≈25'48 asc. node -11644 Apr 15 j 15:30 17°**米** 17'13 evening set -11644 May 20 j 08:54 19°**米** 14'19 evening set -11650 May 07 j 23:12 21°≈27'32 -0°34'21 conjunction -11650 May 07 j 23:12 21°≈27'32 0°34'48 -11644 Jun 05 j 10:13 20° **★** 15'10 0°00'50 minimum elong conjunction -11650 May 06 j 14:30 21°≈22'21 19.26632 AU -11644 Jun 05 j 10:12 20° **)** 15'10 0°00'42 max. Earth dist. minimum elong -11650 May 24 j 03:43 22°≈28'37 -11644 Jun 05 j 03:36 20° ¥ 14'08 morning rise behind sun begin retrograde -11650 Aug 23 j 02:48 25°≈50'42 behind sun end -11644 Jun 05 j 16:49 20° **∺** 16'11 opposition -11650 Nov 04 j 09:51 23°≈48'54 -0°35'24 max. Earth dist. -11644 Jun 04 j 12:52 20° **X** 11'46 19.29211 AU min. Earth dist. -11650 Nov 05 j 13:28 23°≈45'54 17.26160 AU morning rise -11644 Jun 21 j 07:35 21° **★** 15'26 direct -11649 Jan 20 j 06:33 21°≈42'07 retrograde -11644 Sep 20 j 05:53 24° **∺** 37'25 evening set -11649 Apr 26 j 18:34 25°≈14'31 opposition -11644 Dec 03 j 07:26 22° ★ 35'35 0°04'11 -11649 May 11 j 19:58 26°≈11'22 19.25698 AU -11644 Dec 04 j 01:47 22° **€** 33'37 17.30422 AU max. Earth dist. min. Earth dist. direct -11643 Feb 18 j 12:15 20° **★** 29'25 conjunction -11649 May 13 j 02:22 26°≈16'11 -0°28'51 evening set -11643 May 25 j 09:53 24°**米**00'11 minimum elong -11649 May 13 j 02:22 26°≈16'11 0°29'15 morning rise -11649 May 29 j 05:30 27°≈17'12 conjunction -11643 Jun 10 j 09:58 25° **★** 00'48 0°06'54 -11649 Jul 21 j 15:56 0°**)**€ minimum elong -11643 Jun 10 j 09:58 25° **)** €00'48 0°06'48 retrograde -11649 Aug 28 j 03:28 0°**)**39'23 behind sun begin -11643 Jun 10 j 03:48 24° **€** 59'51 -11649 Oct 05 j 17:20 30°R≈ behind sun end -11643 Jun 10 j 16:08 25° **₭** 01'45 opposition -11649 Nov 09 j 12:52 28°≈37'36 -0°29'08 max. Earth dist. -11643 Jun 09 j 15:54 24° ¥ 57'56 19.31760 AU min. Earth dist. -11649 Nov 10 j 16:06 28°≈34'39 17.25471 AU morning rise -11643 Jun 26 j 06:11 26° ₩ 00'51 direct -11648 Jan 25 j 10:30 26°≈30'51 retrograde -11643 Sep 25 i 06:21 29° ** 22'41 evening set -11648 Apr 30 j 22:32 0° **★** 03'18 opposition -11643 Dec 08 j 11:23 27° \(\frac{1}{20}\)'53 -11648 Apr 30 j 01:10 0°**∀** min. Earth dist. -11643 Dec 09 j 02:41 27° ¥ 19'15 17.33283 AU max. Earth dist. -11648 May 15 j 22:51 1°**¥**00'04 19.25276 AU direct -11642 Feb 23 j 18:24 25° **₭** 15'01 -11642 May 30 j 10:04 28° \(\mathbf{H}\)45'05 evening set -11648 May 17 j 04:57 1°\d'51 -0°23'08 conjunction -11648 May 17 j 04:57 1°**)** €04'51 0°23'29 -11642 Jun 15 j 08:52 29° **€** 45'28 0°12'51 minimum elong conjunction -11648 Jun 02 j 07:03 2° **米** 05'46 -11642 Jun 15 j 08:51 29°) (45'27 0°12'47 morning rise minimum elong -11648 Sep 01 j 05:02 5°**)** €28'01 -11642 Jun 15 j 04:40 29° **X** 44'49 retrograde behind sun begin -11648 Nov 13 j 16:10 3°**)** €26'13 -0°22'40 -11642 Jun 15 j 13:03 29° **∺**46'06 opposition behind sun end -11648 Nov 14 j 17:42 3°**米**23'27 17.25304 AU max. Earth dist. -11642 Jun 14 j 17:13 29° **★** 42'59 19.34950 AU min. Earth dist. -11647 Jan 29 j 15:40 1°**米** 19'30 -11642 Jun 19 j 04:21 0°**Υ** direct -11647 May 06 j 01:58 4° **★** 51'53 -11642 Jul 01 j 04:03 0°**Υ**45'18 evening set morning rise -11647 May 21 j 03:59 5° ★ 48'58 19.25380 AU -11642 Sep 30 j 04:33 4°**Υ**06'57 max. Earth dist. retrograde -11642 Dec 13 j 15:19 2° Υ 05'14 0° 17'30 opposition -11647 May 22 j 07:16 5° **★** 53'18 -0°17'17 -11642 Dec 14 j 04:43 2°**Υ**03'48 17.36795 AU conjunction min. Earth dist. minimum elong -11647 May 22 j 07:16 5° **H** 53'18 0°17'35 -11641 Feb 25 j 09:46 30°R ₩ morning rise -11647 Jun 07 j 08:00 6° **€** 54'04 direct -11641 Feb 28 j 21:44 29°**米** 59'41 retrograde -11647 Sep 06 j 05:42 10° **∺** 16'20 -11641 Mar 04 j 09:14 0°**Υ** opposition -11647 Nov 18 j 19:49 8°**米** 14'31 -0°16'03 evening set -11641 Jun 04 j 09:33 3°**Y**29′00 min. Earth dist. -11647 Nov 19 j 20:07 8°**光** 11'54 17.25671 AU -11646 Feb 03 j 20:57 6°**米**07'53 conjunction -11641 Jun 20 j 07:10 4°**Υ**'29'06 0°18'42 direct minimum elong -11641 Jun 20 j 07:09 4°**Υ**'29'06 0°18'43 evening set max. Earth dist. -11646 May 26 j 06:35 10° **€** 37'06 19.26047 AU max. Earth dist. -11641 Jun 19 j 18:31 4°**Υ**27'06 19.38776 AU -11641 Jul 06 j 01:23 5°**Υ**28'43 morning rise -11646 May 27 j 08:53 10° \(\frac{1}{41}'17 \) -0°11'19 -11641 Oct 05 i 04:37 8° Υ 50'07 conjunction retrograde -11646 May 27 j 08:53 10° \(\frac{1}{4}1'17 \) 0°11'34 -11641 Dec 18 j 18:47 6° Υ 48'32 0° 23'59 minimum elong opposition -11646 May 27 j 04:06 10° **\(\)** 40'33 -11641 Dec 19 j 04:46 6° \(\gamma 47'29 \) 17.40899 AU behind sun begin min. Earth dist. behind sun end -11646 May 27 i 13:40 10° \(\frac{1}{2} \) 42'02 direct -11640 Mar 05 i 02:51 4° Υ 43'22 morning rise -11646 Jun 12 j 08:34 11° **\(\)**41'55 -11640 Jun 08 j 08:17 8°**Y**11'50 evening set retrograde -11646 Sep 11 j 06:12 15° ¥ 04'08 -11646 Nov 23 j 23:41 13°**米**02'17 -0°09'20 conjunction -11640 Jun 24 j 04:44 9°Υ11'41 0°24'25 opposition -11646 Nov 24 j 22:06 12° **€** 59'53 17.26637 AU 9°Υ11'41 0°24'29 min. Earth dist. minimum elong -11640 Jun 24 j 04:44 -11640 Jun 23 j 18:54 9°**Υ**10'08 19.43155 AU direct -11645 Feb 09 j 01:49 10° **★** 55'46 max. Earth dist. evening set -11645 May 16 j 07:09 14° ¥27'34 morning rise -11640 Jul 09 j 22:00 10°**Υ**11'03 max. Earth dist. -11645 May 31 j 10:50 15°**米**24'58 19.27320 AU retrograde -11640 Oct 09 j 02:12 13°**Υ**32'12 -11640 Dec 22 j 22:19 11° Υ 30'45 0°30'16 opposition -11645 Jun 01 j 09:52 15°**¥**28'38 -0°05'19 min. Earth dist. -11640 Dec 23 j 06:41 11°**Υ**29'52 17.45537 AU conjunction -11645 Jun 01 j 09:52 15° **★**28'38 0°05'31 -11639 Mar 10 j 04:55 9°**Υ**26'00 minimum elong direct -11645 Jun 01 j 03:28 15°**米**27'38 -11639 Jun 13 j 06:11 12°**Υ**53'32 behind sun begin evening set behind sun end -11645 Jun 01 j 16:15 15°**∺**29'37 morning rise -11645 Jun 17 j 08:19 16°**★**29'05 conjunction -11639 Jun 29 j 01:27 13°**Υ**53'04 0°29'57 retrograde -11645 Sep 16 j 06:51 19°**米**51'12 minimum elong -11639 Jun 29 j 01:27 13°**Υ**53'04 0°30'05 opposition -11645 Nov 29 j 03:36 17° **★**49'21 -0°02'34 max. Earth dist. -11639 Jun 28 j 18:09 13°**Υ**51'55 19.48034 AU

morning rise

retrograde

-11639 Jul 14 j 17:54 14°**Υ**52'12

-11639 Oct 14 j 01:54 18° Υ 13'02

min. Earth dist.

direct

-11645 Nov 29 j 23:49 17° **€**47'11 17.28205 AU

-11644 Feb 14 j 07:55 15°**)** 42'59

•	omena of Uranus fro		-				page 22
Attention, astronomi	ical year style is used: The						le.
opposition	-11639 Dec 28 j 01:29	16° Ƴ 11'45	0°36'20	direct	-11632 Apr 12 j 11:37	11° 8 41'42	
min. Earth dist.	-11639 Dec 28 j 06:16	16° Ƴ 11'15	17.50624 AU	evening set	-11632 Jul 14 j 15:04	15° 8 00'36	
direct	-11638 Mar 15 j 08:22	14° Y '07'26			-11632 Jul 14 j 11:06	15° 8	
evening set	-11638 Jun 18 j 03:19	17° Y 33'56					
				conjunction	-11632 Jul 30 j 04:34	15° 8 57'58	1°00'44
conjunction	-11638 Jul 03 j 21:34	18° Ƴ 33'11	0°35'16	minimum elong	-11632 Jul 30 j 04:34	15° 8 57'58	1°01'10
minimum elong	-11638 Jul 03 j 21:34	18° Ƴ 33'10	0°35'27	max. Earth dist.	-11632 Jul 30 j 15:32	15° 8 59'40	19.90322 AU
max. Earth dist.	-11638 Jul 03 j 17:24		19.53317 AU	morning rise	-11632 Aug 14 j 17:10		
morning rise	-11638 Jul 19 j 13:09			retrograde	-11632 Nov 14 j 23:25		
retrograde	-11638 Oct 18 j 23:17			opposition	-11631 Jan 30 j 09:20		1°09'14
opposition	-11637 Jan 02 j 04:27		0°42'07	min. Earth dist.	-11631 Jan 29 j 21:54		,
min. Earth dist.	-11637 Jan 02 j 07:48			direct	-11631 Apr 17 j 10:09		17.55700110
direct	-11637 Mar 20 j 09:25		17.50077710	evening set	-11631 Jul 19 j 05:35		
	-11637 Jun 22 j 23:36			evening set	-11031 Jul 17 J 03.33	17 02/34	
evening set	-1103/Juli 22 J 23.30	22 1233		aamiumatiam	-11631 Aug 03 j 18:24	20082450	1°03'41
	11/27 I-1 00:1/.4/	2200011140	0940120	conjunction	• .		1°04'11
conjunction	-11637 Jul 08 j 16:46		0°40'20	minimum elong	-11631 Aug 03 j 18:24		
minimum elong	-11637 Jul 08 j 16:46		0°40'33	max. Earth dist.	-11631 Aug 04 j 06:54		19.97097 AU
max. Earth dist.	-11637 Jul 08 j 14:35		19.58951 AU	morning rise	-11631 Aug 19 j 07:00		
morning rise	-11637 Jul 24 j 07:45			retrograde	-11631 Nov 19 j 17:27		
retrograde	-11637 Oct 23 j 22:10			opposition	-11630 Feb 04 j 07:34		1°12'18
opposition	-11636 Jan 07 j 06:46		0°47'35	min. Earth dist.	-11630 Feb 03 j 17:08		18.00577 AU
min. Earth dist.	-11636 Jan 07 j 06:37		17.61870 AU	direct	-11630 Apr 22 j 06:56		
direct	-11636 Mar 24 j 11:15	23° Y 26'02		evening set	-11630 Jul 23 j 19:08	23° 8 53'01	
evening set	-11636 Jun 26 j 19:00	26° Y ′50′14					
				conjunction	-11630 Aug 08 j 07:43	24° 8 49'48	1°06'16
conjunction	-11636 Jul 12 j 11:19	27° Ƴ 48'52	0°45'06	minimum elong	-11630 Aug 08 j 07:42	24° 8 49'48	1°06'46
minimum elong	-11636 Jul 12 j 11:19	27° Y ′48'52	0°45'22	max. Earth dist.	-11630 Aug 08 j 23:50	24° 8 52'16	20.04041 AU
max. Earth dist.	-11636 Jul 12 j 12:20	27° Y ′49'01	19.64841 AU	morning rise	-11630 Aug 23 j 20:04	25° 8 46'34	
morning rise	-11636 Jul 28 j 01:31	28° Ƴ 47'12		retrograde	-11630 Nov 24 j 08:48	29° 8 02'51	
	-11636 Aug 17 j 21:20	0°B		opposition	-11629 Feb 09 j 04:50		1°14'54
retrograde	-11636 Oct 27 j 18:25	2° 8 06'51		min. Earth dist.	-11629 Feb 08 j 12:17		18.07607 AU
opposition	-11635 Jan 11 j 08:41	0° 8 05'55	0°52'43	direct	-11629 Apr 27 j 03:04		
min. Earth dist.	-11635 Jan 11 j 07:09	_	17.67878 AU	evening set	-11629 Jul 28 j 07:54		
	-11635 Jan 13 j 17:26						
direct	-11635 Mar 29 j 11:53			conjunction	-11629 Aug 12 j 20:02	29° ∺ 12'33	1°08'25
uncet	-11635 Jun 06 j 13:46	0°8		minimum elong	-11629 Aug 12 j 20:01		
ovening set	-11635 Jul 00 j 13:40	1° 8 25'49		max. Earth dist.	-11629 Aug 13 j 13:28		
evening set	-11033 Jul 01 J 13.37	1 02349		max. Earth dist.	• .		20.11143 AU
	11/25 1 17:04 57	20 4100	0040122		-11629 Aug 25 j 19:57	0°II	
conjunction	-11635 Jul 17 j 04:57	2° 8 24'08	0°49'32	morning rise	-11629 Aug 28 j 08:35	0° Ⅱ 09'05	
minimum elong	-11635 Jul 17 j 04:57	2° 8 24'08	0°49'51	retrograde	-11629 Nov 29 j 01:34		10 14500 444
max. Earth dist.	-11635 Jul 17 j 07:33		19.70958 AU	min. Earth dist.	-11628 Feb 13 j 06:11		18.14788 AU
morning rise	-11635 Aug 01 j 18:44	3° 8 22'13		opposition	-11628 Feb 14 j 01:16		1°17'03
retrograde	-11635 Nov 01 j 16:09	6° 8 41'23			-11628 Mar 23 j 01:19		
opposition	-11634 Jan 16 j 09:58	4° 8 40'30	0°57'28	direct	-11628 Apr 30 j 21:03		
min. Earth dist.	-11634 Jan 16 j 05:02	_	17.74093 AU		-11628 Jun 07 j 08:39		
direct	-11634 Apr 03 j 12:25	2° 8 37'51		evening set	-11628 Jul 31 j 19:37	2° Ⅱ 37'07	
evening set	-11634 Jul 06 j 06:59	5° 8 59'29					
				conjunction	-11628 Aug 16 j 07:42	3° Ⅱ 33'20	1°10'11
conjunction	-11634 Jul 21 j 21:43	6° 8 57'29	0°53'38	minimum elong	-11628 Aug 16 j 07:42	3° Ⅲ 33′20	1°10'45
minimum elong	-11634 Jul 21 j 21:42	6° 8 57'29	0°54'00	max. Earth dist.	-11628 Aug 17 j 04:33	3° Ⅱ 36'30	20.18369 AU
max. Earth dist.	-11634 Jul 22 j 03:44		19.77251 AU	morning rise	-11628 Aug 31 j 20:10		
morning rise	-11634 Aug 06 j 10:55	7° 8 55'18		retrograde	-11628 Dec 02 j 16:01	7° ∐ 44'44	
retrograde	-11634 Nov 06 j 10:50			opposition	-11627 Feb 17 j 20:53		1°18'45
opposition	-11633 Jan 21 j 10:39		1°01'49	min. Earth dist.	-11627 Feb 16 j 23:37		18.22051 AU
min. Earth dist.	-11633 Jan 21 j 04:10		17.80470 AU	direct	-11627 May 05 j 15:08		10.22031710
direct	-11633 Apr 08 j 12:35	7° 8 10'51	17.00470710	evening set	-11627 Aug 05 j 06:47	6° П 56'19	
evening set	-11633 Jul 10 j 23:37			evening set	-1102/ Aug 03 j 00.4/	0 113017	
evening set	11055 Jul 10 J 25.5/	10 0310/		conjunction	11627 Aug 20: 10:25	7° Ⅱ 52'16	1°11'32
aomium -+:	11622 I-1 26: 12:22	110930140	0057122	conjunction	-11627 Aug 20 j 18:35		
conjunction	-11633 Jul 26 j 13:32			minimum elong	-11627 Aug 20 j 18:35		1°12'08
minimum elong	-11633 Jul 26 j 13:32		0°57'47	max. Earth dist.	-11627 Aug 21 j 16:34		20.25660 AU
max. Earth dist.	-11633 Jul 26 j 20:59		19.83711 AU	morning rise	-11627 Sep 05 j 07:26		
morning rise	-11633 Aug 11 j 02:34			retrograde	-11627 Dec 07 j 07:28		
	-11633 Oct 01 j 01:23			opposition	-11626 Feb 22 j 15:45		1°20'00
retrograde	-11633 Nov 11 j 06:29			min. Earth dist.	-11626 Feb 21 j 16:34		18.29363 AU
	-11633 Dec 24 j 01:33	15° ₹ 8		direct	-11626 May 10 j 06:37	8° Ⅱ 03'02	
opposition	-11632 Jan 26 j 10:16	13° 8 43'37	1°05'44	evening set	-11626 Aug 09 j 16:58	11° Ⅱ 13'45	
min Farth dist	11632 Ian 26 i 00:40	1301/1/36	17 97013 ATT				

min. Earth dist.

-11632 Jan 26 j 00:40 13°**8**44'36 17.87013 AU

Planetary Phenomena of Uranus from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11626 in astronomical counting style is the year 11627 BCE in historical counting style. -11626 Aug 25 j 04:57 12°**I**109'28 1°12'28 retrograde -11619 Jan 06 i 00:42 11°524'20 conjunction minimum elong -11626 Aug 25 j 04:57 12°**I**109'28 1°13'06 min. Earth dist. -11619 Mar 23 j 20:59 9°527'48 18.75092 AU max. Earth dist. -11626 Aug 26 j 05:57 12°**Д**13'14 20.32950 AU -11619 Mar 25 j 04:07 9°524'41 1°16'19 opposition -11626 Sep 09 j 17:58 13°**Д**05'21 direct -11619 Jun 09 j 02:27 7°9627'33 morning rise -11626 Dec 11 j 21:33 16°**Д**19'19 -11619 Sep 07 j 00:27 10°530'16 retrograde evening set -11625 Feb 26 j 08:36 14°**Д**21'39 18.36615 AU min. Earth dist. -11625 Feb 27 j 09:43 14°**Ц**19'07 1°20'47 1°08'00 -11619 Sep 22 j 14:42 11°524'42 opposition conjunction -11625 May 14 j 23:09 12°**Ц**20'03 -11619 Sep 22 j 14:42 11°524'42 1°08'40 direct minimum elong -11625 Aug 14 j 02:46 15°**Ⅱ**29'30 -11619 Sep 23 j 22:26 11°\$29'21 20.77651 AU evening set max. Earth dist. morning rise -11619 Oct 08 j 08:10 12°519'35 conjunction -11625 Aug 29 j 14:40 16°**I**I24'59 1°13'00 retrograde -11618 Jan 10 j 11:09 15°529'45 -11625 Aug 29 j 14:40 16°**Ⅲ**24'59 1°13'38 -11618 Mar 28 j 09:29 13°533'10 18.80286 AU minimum elong min. Earth dist. -11625 Aug 30 j 16:21 16°**Д**28'50 20.40142 AU max. Earth dist. opposition -11618 Mar 29 j 16:19 13°530'04 1°14'10 morning rise -11625 Sep 14 j 04:12 17°**Ⅲ**20'41 direct -11618 Jun 13 j 11:31 11°533'07 retrograde -11625 Dec 16 j 11:26 20° **II** 34'05 evening set -11618 Sep 11 j 06:06 14°534'53 min. Earth dist. -11624 Mar 02 j 00:35 18°**Д**36'41 18.43747 AU opposition -11624 Mar 03 j 02:47 18°**Д**34'02 1°21'07 conjunction -11618 Sep 26 j 21:13 15°\$29'13 1°05'56 direct -11624 May 18 j 12:20 16°**Д**35'22 minimum elong -11618 Sep 26 j 21:13 15°529'13 1°06'34 evening set -11624 Aug 17 j 11:46 19°**Д**43'37 max. Earth dist. -11618 Sep 28 j 06:23 15°534'04 20.82673 AU morning rise -11618 Oct 12 j 15:27 16°524'00 conjunction -11624 Sep 01 j 23:59 20° **II** 38'53 1°13'08 retrograde -11617 Jan 14 j 21:29 19°533'39 minimum elong -11624 Sep 01 j 23:58 20° **II** 38'53 1°13'47 min. Earth dist. -11617 Apr 01 j 19:22 17°537'12 18.85136 AU max. Earth dist. -11624 Sep 03 j 04:07 20°**Ц**43'06 20.47173 AU opposition -11617 Apr 03 j 03:32 17°533'59 1°11'40 morning rise -11624 Sep 17 j 13:48 21°**Д**34'24 direct -11617 Jun 17 j 21:30 15°537'12 -11624 Dec 20 j 00:47 24°**Д**47'16 retrograde evening set -11617 Sep 15 j 11:32 18°538'05 opposition -11623 Mar 07 j 19:06 22° **1**47'20 1°21'00 min. Earth dist. -11623 Mar 06 j 15:13 22°**Д**50'09 18.50663 AU conjunction -11617 Oct 01 j 03:11 19°532'19 1°03'32 -11623 May 23 j 03:23 20°**Д**49'05 minimum elong -11617 Oct 01 j 03:11 19°532'19 1°04'10 direct -11623 Aug 21 j 20:14 23°**Д**56'08 max. Earth dist. -11617 Oct 02 j 12:10 19°\$37'06 20.87360 AU evening set -11617 Oct 16 j 22:27 20°\$27'02 morning rise -11623 Sep 06 j 08:33 24°**Д**51'12 1°12'52 -11616 Jan 19 j 06:18 23°536'13 conjunction retrograde -11623 Sep 06 j 08:33 24°**Д**51'12 1°13'30 min. Earth dist. -11616 Apr 05 j 06:24 21°539'43 18.89681 AU minimum elong -11623 Sep 07 j 13:02 24° $\mathbf{\Pi}$ 55'26 20.53955 AU max. Earth dist. opposition -11616 Apr 06 j 14:03 21°536'32 1°08'50 -11623 Sep 21 j 23:05 25°**Ц**46'33 -11616 Jun 21 j 05:19 19°539'55 morning rise direct -11623 Dec 24 j 13:32 28°**II**58'53 -11616 Sep 18 j 16:26 22°540'00 retrograde evening set -11622 Mar 11 j 06:23 27°**Д**01'55 18.57312 AU min. Earth dist. -11622 Mar 12 j 10:46 26° **I** 59'04 1°20'27 -11616 Oct 04 j 09:02 23°534'09 1°00'51 opposition conjunction direct -11622 May 27 j 15:03 25°**Ⅲ**01'08 minimum elong -11616 Oct 04 j 09:03 23°534'09 1°01'27 evening set -11622 Aug 26 j 04:07 28°**II**07'03 max. Earth dist. -11616 Oct 05 j 19:17 23°539'07 20.91759 AU morning rise -11616 Oct 20 j 05:08 24°528'48 conjunction -11622 Sep 10 j 16:57 29° **I** 01'56 1°12'12 retrograde -11615 Jan 22 j 16:34 27°537'35 minimum elong -11622 Sep 10 j 16:57 29°**Д**01'56 1°12'51 opposition -11615 Apr 10 j 23:50 25°537'55 1°05'41 max. Earth dist. -11622 Sep 11 j 23:20 29°**Д**06'27 20.60435 AU min. Earth dist. -11615 Apr 09 j 14:55 25°5541'13 18.93925 AU morning rise -11622 Sep 26 j 07:57 29°**Д**57'09 direct -11615 Jun 25 j 13:40 23°5541'28 -11622 Sep 27 j 03:40 0°ഇ -11615 Sep 22 j 21:09 26°5540'49 evening set -11622 Dec 29 i 01:54 3°508'55 retrograde -11615 Oct 08 j 14:29 27°534'54 0°57'52 min. Earth dist. -11621 Mar 15 j 19:29 1°5512'11 18.63614 AU conjunction -11615 Oct 08 j 14:29 27°534'54 0°58'28 opposition -11621 Mar 17 i 01:15 1°509'11 1°19'28 minimum elong -11615 Oct 10 j 00:24 27°539'48 20.95852 AU -11621 Apr 16 j 16:29 30°RII max. Earth dist. direct -11621 Jun 01 i 04:19 29° II 11'34 morning rise -11615 Oct 24 j 11:46 28°529'32 -11621 Jul 14 j 20:10 0°5 -11615 Nov 22 j 11:16 $0^{\circ}\Omega$ -11621 Aug 30 j 11:33 2°516'23 retrograde -11614 Jan 27 j 00:13 $1^{\circ}\Omega$ 37'55 evening set -11614 Apr 06 j 07:13 30°RS min. Earth dist. -11614 Apr 14 j 01:05 29°5541'30 18.97865 AU conjunction -11621 Sep 15 j 00:41 3°511'06 1°11'09 -11621 Sep 15 j 00:41 minimum elong 3°511'06 1°11'49 opposition -11614 Apr 15 j 09:09 29°538'17 1°02'13 -11621 Sep 16 j 06:57 max. Earth dist. 3°515'34 20.66549 AU direct -11614 Jun 29 j 20:03 27°542'00 morning rise -11621 Sep 30 j 16:33 4°906'11 -11614 Sep 14 j 15:56 $0^{\circ}\Omega$ retrograde -11620 Jan 02 j 13:32 7°9517'25 -11614 Sep 27 j 01:39 0°**Ω**40'42 evening set min. Earth dist. -11620 Mar 19 j 09:26 5°520'43 18.69548 AU -11620 Mar 20 j 15:11 1°18'05 -11614 Oct 12 j 20:03 1°**Ω**34'45 0°54'37 opposition 5°917'44 conjunction -11620 Jun 04 j 14:44 -11614 Oct 12 j 20:04 direct 3°520'22 minimum elong 1°**Ω**34'45 0°55'12 evening set -11620 Sep 02 j 18:08 6°9524'07 max. Earth dist. -11614 Oct 14 j 06:52 1°**Ω**39'46 20.99631 AU morning rise -11614 Oct 28 j 18:16 2°**Ω**29'21 conjunction -11620 Sep 18 j 07:57 7°**©**18'41 1°09'45 retrograde -11613 Jan 31 j 10:16 5°**Ω**37'23 minimum elong -11620 Sep 18 j 07:57 7°**©**18'41 1°10'25 min. Earth dist. -11613 Apr 18 j 08:38 3°**Ω**41'07 19.01459 AU max. Earth dist. -11620 Sep 19 j 15:49 7°523'22 20.72289 AU -11613 Apr 19 j 17:32 3°**£**37′49 0°58'28 opposition

morning rise

-11620 Oct 04 j 00:25

8°9513'39

direct

-11613 Jul 04 j 03:23

1°**Ω**41'40

Planetary Phenomena of Uranus from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 24 Attention, astronomical year style is used: The year -11613 in astronomical counting style is the year 11614 BCE in historical counting style.

Attention, astronom	ical year style is used: The	e year -11613	in astronomical co	unting style is the yea	r 11614 BCE in historical	counting sty	le.
evening set	-11613 Oct 01 j 06:10	4° Ω 39'49		max. Earth dist.	-11607 Nov 10 j 16:23	29° Ω 23'46	21.13355 AU
					-11607 Nov 21 j 09:00	0° m	
conjunction	-11613 Oct 17 j 01:22	5° Ω 33'52	0°51'07	morning rise	-11607 Nov 25 j 17:47	0° Mp 14'35	
minimum elong	-11613 Oct 17 j 01:22	5° Ω 33'52	0°51'41	retrograde	-11606 Feb 28 j 16:43	3°m/21'15	
max. Earth dist.	-11613 Oct 18 j 11:27	5° Ω 38'45	21.03041 AU	opposition	-11606 May 17 j 17:33	1° Mp 21'44	0°25'44
morning rise	-11613 Nov 02 j 00:48	6° Ω 28'28		min. Earth dist.	-11606 May 16 j 16:10	1° m) 24'17	19.13340 AU
retrograde	-11612 Feb 04 j 17:12	9° Ω 36'12			-11606 Jun 24 j 02:49	30°RΩ	
min. Earth dist.	-11612 Apr 21 j 18:07		19.04676 AU	direct	-11606 Jul 31 j 13:44		
opposition	-11612 Apr 23 j 01:43	7° Ω 36'41	0°54'27		-11606 Sep 06 j 04:21	0° m)	
direct	-11612 Jul 07 j 08:02	5° Ω 40'41		evening set	-11606 Oct 28 j 15:06	2°m)22'09	
evening set	-11612 Oct 04 j 10:21	8° Ω 38'21		<i>3</i>		4	
<i>8</i> - 11	, ,			conjunction	-11606 Nov 13 j 17:59	3° m 16'31	0°20'57
conjunction	-11612 Oct 20 j 06:41	9° Ω 32'22	0°47'22	minimum elong	-11606 Nov 13 j 17:59	3° m) 16'31	0°21'17
minimum elong	-11612 Oct 20 j 06:41	9° Ω 32'22	0°47'54	max. Earth dist.	-11606 Nov 14 j 22:00		21.13105 AU
max. Earth dist.	-11612 Oct 21 j 17:15		21.06057 AU	morning rise	-11606 Nov 30 j 01:10	4° m 11'30	21.15105110
morning rise	-11612 Nov 05 j 07:05		21.00037710	retrograde	-11605 Mar 05 j 00:39	7° m) 18'04	
retrograde	-11611 Feb 08 j 02:40			opposition	-11605 May 21 j 22:47	5° m) 18'28	0°20'25
min. Earth dist.	-11611 Apr 26 j 01:14		19 07/61 ATT	min. Earth dist.	-11605 May 20 j 21:48	~	19.12813 AU
opposition	-11611 Apr 27 j 09:18		0°50'10	direct	-11605 May 20 j 21:48 -11605 Aug 04 j 18:54	3° m) 22'27	19.12813 AU
direct		9° Ω 39'08	0 30 10	evening set	-11605 Nov 01 j 20:32	6° m) 18'48	
	-11611 Jul 11 j 13:02 -11611 Oct 08 j 14:55			evening set	-11003 NOV 01 J 20.32	0 III 10 40	
evening set	-11011 Oct 08 j 14.55	12 8630 23			11(05 N 10:00-22	70 m. 1211 (0017107
	11(11 0 + 24 : 12 00	120 020126	0042124	conjunction	-11605 Nov 18 j 00:23	7° Mp 13'16	
conjunction	-11611 Oct 24 j 12:08		0°43'24	minimum elong	-11605 Nov 18 j 00:23	7° Mp 13'16	
minimum elong	-11611 Oct 24 j 12:08			max. Earth dist.	-11605 Nov 19 j 02:27	-	21.12331 AU
max. Earth dist.	-11611 Oct 25 j 21:30		21.08609 AU	morning rise	-11605 Dec 04 j 08:47	8° Mp 08'21	
morning rise	-11611 Nov 09 j 13:47			retrograde	-11604 Mar 08 j 07:04	-•	
_	-11611 Nov 20 j 06:14			min. Earth dist.	-11604 May 24 j 05:25	-•	19.11804 AU
retrograde	-11610 Feb 12 j 09:35			opposition	-11604 May 25 j 04:01	9° m 15'11	0°15'00
min. Earth dist.	-11610 Apr 30 j 10:16			direct	-11604 Aug 07 j 22:06	7° m 19'01	
opposition	-11610 May 01 j 16:30		0°45'39	evening set	-11604 Nov 05 j 01:56	10° Mp 15'28	
	-11610 May 15 j 12:42						
direct	-11610 Jul 15 j 18:39			conjunction	-11604 Nov 21 j 07:04		0°11'11
	-11610 Sep 11 j 23:12			minimum elong	-11604 Nov 21 j 07:04	11° m 10'04	0°11'26
evening set	-11610 Oct 12 j 19:27	16° Ω 34'03		behind sun begin	-11604 Nov 21 j 02:15		
				behind sun end	-11604 Nov 21 j 11:52	-	
conjunction	-11610 Oct 28 j 17:53			max. Earth dist.	-11604 Nov 22 j 08:24		21.11110 AU
minimum elong	-11610 Oct 28 j 17:53			morning rise	-11604 Dec 07 j 16:26	12°M/05'16	
max. Earth dist.	-11610 Oct 30 j 03:02	17° Ω 32'52	21.10661 AU	retrograde	-11603 Mar 12 j 15:19	15°Mp11'49	
morning rise	-11610 Nov 13 j 20:33	18° Ω 22'49		min. Earth dist.	-11603 May 28 j 10:42		
retrograde	-11609 Feb 16 j 18:31	21° Ω 29'53		opposition	-11603 May 29 j 08:55	13°M 12'01	0°09'32
opposition	-11609 May 05 j 23:12	19° Ω 30′29	0°40'56	direct	-11603 Aug 12 j 03:09	11°Mp15'41	
min. Earth dist.	-11609 May 04 j 16:59	19° Ω 33'31	19.11535 AU	evening set	-11603 Nov 09 j 08:03	14° Mp 12'20	
direct	-11609 Jul 20 j 01:04	17° Ω 34'44					
evening set	-11609 Oct 17 j 00:12	20° Ω 31′25		conjunction	-11603 Nov 25 j 14:09	15°№07'04	0°06'14
				minimum elong	-11603 Nov 25 j 14:09	15°№07'04	0°06'26
conjunction	-11609 Nov 01 j 23:32	21° Ω 25'32	0°34'53	behind sun begin	-11603 Nov 25 j 07:52	15°Mp06'13	
minimum elong	-11609 Nov 01 j 23:32	21° Ω 25'33	0°35'18	behind sun end	-11603 Nov 25 j 20:26	15°Mp07'56	
max. Earth dist.	-11609 Nov 03 j 06:57	21° Ω 30′01	21.12140 AU	max. Earth dist.	-11603 Nov 26 j 13:26	15° Mp 10'22	21.09466 AU
morning rise	-11609 Nov 18 j 03:25	22° Ω 20′16		morning rise	-11603 Dec 12 j 00:41	16° Mp 02′25	
retrograde	-11608 Feb 21 j 01:28	25° Ω 27'11		retrograde	-11602 Mar 16 j 21:35	19° m 09'01	
min. Earth dist.	-11608 May 08 j 01:39	23° Ω 30′36	19.12725 AU	opposition	-11602 Jun 02 j 13:43	17° m 09'08	0°04'00
opposition	-11608 May 09 j 05:42	23° Ω 27'47	0°36'01	min. Earth dist.	-11602 Jun 01 j 18:00	17° Mp 11'09	19.08528 AU
direct	-11608 Jul 23 j 04:31			direct	-11602 Aug 16 j 05:55		
evening set	-11608 Oct 20 j 04:57			evening set	-11602 Nov 13 j 14:24		
Ü	3			8	,	•	
conjunction	-11608 Nov 05 j 05:33	25° Ω 22'43	0°30'22	conjunction	-11602 Nov 29 j 21:43	19° m 04'28	0°01'12
minimum elong	-11608 Nov 05 j 05:33			minimum elong	-11602 Nov 29 j 21:44	-	0°01'21
max. Earth dist.	-11608 Nov 06 j 12:21			behind sun begin	-11602 Nov 29 j 15:03		
morning rise	-11608 Nov 21 j 10:27			behind sun end	-11602 Nov 30 j 04:26	-•	
retrograde	-11607 Feb 24 j 09:53			max. Earth dist.	-11602 Nov 30 j 19:59		21.07452 AU
min. Earth dist.	-11607 May 12 j 07:54		19 13323 ATT	morning rise	-11602 Nov 30 j 19:39 -11602 Dec 16 j 09:11	-	21.0/702 AU
opposition	-11607 May 12 j 07:34 -11607 May 13 j 11:42			desc. node	-11601 Feb 24 j 21:45	-	
direct	-11607 May 13 j 11.42 -11607 Jul 27 j 10:13		0 3031	retrograde	-11601 Feb 24 j 21.45 -11601 Mar 21 j 06:36		
evening set	-11607 Oct 24 j 09:58			opposition	-11601 Mar 21 J 06:36 -11601 Jun 06 j 18:25		-0°01'34
evening set	-1100/ Oct 24 J 09.38	20 0 (23 23		min. Earth dist.	-11601 Jun 06 j 18:25 -11601 Jun 05 j 23:11		
conjunction	11607 Nov. 00 : 11.25	200 0 10141	0°25'43		·	-	19.00320 AU
conjunction	-11607 Nov 09 j 11:35 -11607 Nov 09 j 11:35			direct	-11601 Aug 20 j 10:52		
minimum elong	-1100/ NOV 09 J 11.33	47 66 1741	0 2004	evening set	-11601 Nov 17 j 21:14	22 الالال 22	

Planetary Phenomena of Uranus from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11601 in astronomical counting style is the year 11602 BCE in historical counting style. -11601 Dec 04 i 05:31 23° m 02'27 -0°03'58 evening set -11595 Dec 12 j 04:34 16° **△**14'42 conjunction -11601 Dec 04 j 05:30 23° Mp 02'27 0°03'50 minimum elong behind sun begin -11601 Dec 03 j 22:53 23° m 01'32 -11595 Dec 28 j 18:45 17° **2**11'03 -0°33'18 conjunction -11601 Dec 04 j 12:08 23° m 03'21 -11595 Dec 28 j 18:45 17° **2**11'03 0°33'28 behind sun end minimum elong -11601 Dec 05 j 01:34 23° m 05'16 21.05059 AU -11595 Dec 29 j 01:01 17° **2**11'57 20.82376 AU max. Earth dist. max. Earth dist. -11594 Jan 14 j 11:56 18°**2**07'51 -11601 Dec 20 j 17:59 23° m 58'05 morning rise morning rise -11594 Apr 18 j 22:57 21°**♀**16'31 -11600 Mar 24 j 13:11 27° m 04'58 retrograde retrograde -11600 Jun 09 j 23:20 25° Mp 04'59 -0°07'08 -11594 Jul 04 j 08:03 19°**£**16'15 -0°39'25 opposition opposition -11594 Jul 04 j 03:57 19°**2**16'41 18.79752 AU min. Earth dist. -11600 Jun 09 j 06:40 25° M 06'41 19.03747 AU min. Earth dist. direct -11600 Aug 23 j 13:45 23° m 08'08 direct -11594 Sep 16 j 20:06 17°**△**17'57 evening set -11600 Nov 21 j 04:34 26° m 05'55 evening set -11594 Dec 16 j 16:27 20°**2**20'08 -11600 Dec 07 j 14:02 27° my 01'11 -0°08'58 -11593 Jan 02 j 07:32 21°**2**16'45 -0°37'50 conjunction conjunction -11600 Dec 07 j 14:02 27° m 01'11 0°08'54 minimum elong minimum elong -11593 Jan 02 j 07:32 21°**2**16'44 0°38'01 behind sun begin -11600 Dec 07 j 08:19 27° m 00'23 max. Earth dist. -11593 Jan 02 j 11:14 21°**2**17'16 20.77020 AU behind sun end -11600 Dec 07 j 19:46 27° m 01'58 morning rise -11593 Jan 19 j 01:16 22°**♀**13'45 max. Earth dist. -11600 Dec 08 j 08:47 27° m 03'50 21.02317 AU retrograde -11593 Apr 23 j 11:39 25° **2**22'48 morning rise -11600 Dec 24 j 03:23 27° m 56'59 opposition -11593 Jul 08 j 14:34 23°**2**22'24 -0°44'21 -11599 Feb 04 j 13:15 min. Earth dist. -11593 Jul 08 j 11:53 23°**2**22'41 18.74177 AU retrograde -11599 Mar 28 j 22:59 direct -11593 Sep 21 j 04:31 21° **2**23'43 -11599 May 21 j 12:14 30°R MD evening set -11593 Dec 21 i 04:59 24° \(\Omega\) 26'51 opposition -11599 Jun 14 i 04:05 29° m 04'04 -0°12'42 min. Earth dist. -11599 Jun 13 j 12:10 29° m 05'42 19.00811 AU conjunction -11592 Jan 06 j 20:47 25° \alpha 23'42 -0°42'11 direct -11599 Aug 27 j 18:48 27° m 07'03 minimum elong -11592 Jan 06 j 20:46 25° **2**23'42 0°42'26 -11599 Nov 23 i 21:36 0°**♀** max. Earth dist. -11592 Jan 06 j 21:39 25° 223'50 20.71239 AU -11599 Nov 25 j 12:44 0°**£**05′23 morning rise -11592 Jan 23 j 15:00 26° \$\oldsymbol{\Omega}\$20'56 evening set retrograde -11592 Apr 26 j 21:25 29° **2**30'23 -11599 Dec 11 j 23:09 1°200'51 -0°13'58 -11592 Jul 11 j 21:36 27°**2**29'50 -0°49'04 conjunction opposition -11599 Dec 11 j 23:09 1°**2**00'51 0°13'56 min. Earth dist. -11592 Jul 11 j 22:05 27°**2**29'47 18.68218 AU minimum elong -11599 Dec 11 j 19:51 1°**♀**00'23 -11592 Sep 24 j 10:53 25°**2**30'44 behind sun begin direct -11592 Dec 24 j 18:21 28° **2**34'52 -11599 Dec 12 j 02:26 1°**2**01'18 behind sun end evening set -11599 Dec 12 j 15:22 1°**2**03'08 20.99188 AU max. Earth dist. -11599 Dec 28 j 13:27 -11591 Jan 10 j 10:56 29° **2**31'59 -0°46'20 morning rise 1°**£**56'50 conjunction -11598 Apr 02 j 06:43 5°**♀**04'10 -11591 Jan 10 j 10:55 29°**2**31'59 0°46'37 retrograde minimum elong -11591 Jan 10 j 09:15 29°**2**31'44 20.65127 AU -11598 Jun 18 j 09:14 3°**♀**04'08 -0°18'13 max. Earth dist. opposition -11598 Jun 17 j 20:13 3°**⊆**05'29 18.97483 AU -11591 Jan 18 j 13:56 0°M min. Earth dist. -11598 Aug 31 j 22:15 1°**♀**06'56 -11591 Jan 27 j 05:37 0°M29'26 direct morning rise evening set -11598 Nov 29 j 21:29 4°**£**05'55 retrograde -11591 May 01 j 10:27 3°M 39'19 opposition -11591 Jul 16 j 04:45 1°M 38'36 -0°53'34 -11598 Dec 16 j 09:00 5°**£**01'35 -0°18'56 conjunction min. Earth dist. -11591 Jul 16 j 06:37 1°ML38'24 18.61961 AU minimum elong -11598 Dec 16 j 08:59 5°**2**01'35 0°18'57 -11591 Aug 31 j 05:02 30°R € max. Earth dist. -11598 Dec 16 j 23:25 5°**2**03'37 20.95662 AU -11591 Sep 28 j 20:16 29° **2**39'04 direct morning rise -11597 Jan 02 j 00:01 5°**♀**57'45 -11591 Oct 27 j 05:57 retrograde -11597 Apr 06 j 17:17 9°**£**05'23 -11591 Dec 29 j 08:39 2°M44'15 evening set -11597 Jun 22 j 14:21 7°**೨**05'20 -0°23'41 opposition -11597 Jun 22 i 02:26 -11590 Jan 15 j 01:51 3°ML41'39 -0°50'16 min. Earth dist. 7°**2**06'34 18.93738 AU conjunction -11590 Jan 15 j 01:51 3°ML41'39 0°50'36 direct -11597 Sep 05 i 04:03 5°**₽**07'54 minimum elong -11597 Dec 04 i 07:07 8° **2**07'36 -11590 Jan 14 j 21:36 3°M 41'02 20.58733 AU evening set max. Earth dist. -11590 Jan 31 i 20:51 4°M 39'20 morning rise conjunction -11597 Dec 20 i 19:27 9° **2**03'29 -0°23'50 retrograde -11590 May 05 i 21:31 7°**I**ቤ49'39 minimum elong -11597 Dec 20 i 19:27 9° \(\Omega\)03'29 0°23'54 opposition -11590 Jul 20 i 12:38 5°ML48'48 -0°57'49 max. Earth dist. -11597 Dec 21 j 07:04 9° **2**05'08 20.91694 AU min. Earth dist. -11590 Jul 20 j 17:29 5°ML48'17 18.55467 AU -11596 Jan 06 j 11:17 9°**♀**59'52 direct -11590 Oct 03 j 04:08 3°ML48'50 morning rise -11596 Apr 10 j 01:58 13°**♀**07'49 -11589 Jan 02 j 23:36 evening set retrograde 6°M55'09 -11596 Jun 25 j 19:59 11°**2**07'43 -0°29'03 opposition min. Earth dist. -11596 Jun 25 j 11:12 11° **2**08'38 18.89549 AU conjunction -11589 Jan 19 j 17:21 7°M52'48 -0°53'58 -11596 Sep 08 j 08:00 9°**♀**10'03 direct minimum elong -11589 Jan 19 j 17:21 7°M52'48 0°54'20 -11596 Dec 07 j 17:18 12° **2**10'31 max. Earth dist. -11589 Jan 19 j 10:33 7°M51'49 20.52152 AU evening set -11589 Feb 05 j 12:39 8°M50'43 morning rise -11596 Dec 24 j 06:41 13°**2**06'38 -0°28'38 -11589 May 10 j 11:10 12° ML01'33 conjunction retrograde -11596 Dec 24 j 06:41 13°**2**06'38 0°28'44 -11589 Jul 24 j 20:52 10°ML00'32 -1°01'47 minimum elong opposition max. Earth dist. -11596 Dec 24 j 16:03 13°**2**07'58 20.87281 AU min. Earth dist. -11589 Jul 25 j 02:53 9°**ጤ**59'54 18.48817 AU morning rise -11595 Jan 09 j 23:13 14°**£**03'13 direct -11589 Oct 07 j 14:24 8°M00'09 retrograde -11595 Apr 14 j 13:49 17°**£**11'32 evening set -11588 Jan 07 j 15:26 11°M 07'39 opposition -11595 Jun 30 j 01:49 15°**-**211'22 -0°34'19 min. Earth dist. -11595 Jun 29 j 18:24 15°**2**12'08 18.84890 AU conjunction -11588 Jan 24 j 09:43 12°ML05'36 -0°57'23

-11588 Jan 24 j 09:43 12°ML05'35 0°57'47

minimum elong

-11595 Sep 12 j 15:10 13° **2** 13'24

direct

•			-		nst AG 18-Feb-2025		page 26
		-			ar 11589 BCE in historical		le.
max. Earth dist.	-11588 Jan 24 j 00:47		20.45432 AU	morning rise	-11582 Mar 09 j 00:50		
morning rise	-11588 Feb 10 j 05:07			retrograde	-11582 Jun 09 j 22:51		
	-11588 Mar 19 j 11:04			opposition	-11582 Aug 23 j 02:55		
retrograde	-11588 May 13 j 23:45			min. Earth dist.	-11582 Aug 23 j 23:05		18.00907 AU
	-11588 Jul 09 j 16:38			direct	-11582 Nov 06 j 06:40		
opposition	-11588 Jul 28 j 05:49			evening set	-11581 Feb 08 j 08:52		
min. Earth dist.	-11588 Jul 28 j 14:33		18.42063 AU	max. Earth dist.	-11581 Feb 24 j 02:23	12° ₹ 27'05	19.97386 AU
direct	-11588 Oct 10 j 23:40					_	
	-11587 Jan 04 j 19:48			conjunction	-11581 Feb 25 j 04:25		
evening set	-11587 Jan 11 j 08:07	15°M21'55		minimum elong	-11581 Feb 25 j 04:25		1°12'41
				morning rise	-11581 Mar 13 j 22:51		
conjunction	-11587 Jan 28 j 02:51			retrograde	-11581 Jun 14 j 17:04		
minimum elong	-11587 Jan 28 j 02:50			opposition	-11581 Aug 27 j 17:27		
max. Earth dist.	-11587 Jan 27 j 15:12		20.38650 AU	min. Earth dist.	-11581 Aug 28 j 15:13		17.93969 AU
morning rise	-11587 Feb 13 j 22:28			direct	-11581 Nov 11 j 00:34		
retrograde	-11587 May 18 j 14:37			evening set	-11580 Feb 13 j 08:08		
opposition	-11587 Aug 01 j 15:19			max. Earth dist.	-11580 Feb 29 j 00:36	16° ≯ ′56′08	19.90435 AU
min. Earth dist.	-11587 Aug 02 j 01:13		18.35258 AU				
direct	-11587 Oct 15 j 11:01			conjunction	-11580 Mar 01 j 03:44		
evening set	-11586 Jan 16 j 01:50	19°11L38'06		minimum elong	-11580 Mar 01 j 03:44		1°13'14
				morning rise	-11580 Mar 17 j 21:31		
conjunction	-11586 Feb 01 j 20:58			retrograde	-11580 Jun 18 j 11:30		
minimum elong	-11586 Feb 01 j 20:58			opposition	-11580 Aug 31 j 08:46		
max. Earth dist.	-11586 Feb 01 j 07:26		20.31812 AU	min. Earth dist.	-11580 Sep 01 j 08:31		17.87032 AU
morning rise	-11586 Feb 18 j 16:28			direct	-11580 Nov 14 j 18:05		
retrograde	-11586 May 23 j 04:54			evening set	-11579 Feb 17 j 08:23		
opposition	-11586 Aug 06 j 01:38			max. Earth dist.	-11579 Mar 04 j 21:15	21° ∡ ¹26'47	19.83528 AU
min. Earth dist.	-11586 Aug 06 j 14:06		18.28415 AU			_	
direct	-11586 Oct 19 j 22:09			conjunction	-11579 Mar 06 j 03:37		
evening set	-11585 Jan 20 j 20:32	23°M56'20		minimum elong	-11579 Mar 06 j 03:36		1°13'19
				morning rise	-11579 Mar 22 j 21:01		
conjunction	-11585 Feb 06 j 15:51			retrograde	-11579 Jun 23 j 06:51		
minimum elong	-11585 Feb 06 j 15:51			opposition	-11579 Sep 05 j 01:00		
max. Earth dist.	-11585 Feb 05 j 23:27		20.24970 AU	min. Earth dist.	-11579 Sep 06 j 02:23		17.80177 AU
morning rise	-11585 Feb 23 j 11:25			direct	-11579 Nov 19 j 13:34		
retrograde	-11585 May 27 j 20:45			evening set	-11578 Feb 22 j 09:07		
opposition	-11585 Aug 10 j 12:39			max. Earth dist.	-11578 Mar 09 j 21:18	25° х¹ 59'38	19.76726 AU
min. Earth dist.	-11585 Aug 11 j 02:22		18.21574 AU			_	
direct	-11585 Oct 24 j 11:02			conjunction	-11578 Mar 11 j 04:12		
evening set	-11584 Jan 25 j 15:58	28°M16'43		minimum elong	-11578 Mar 11 j 04:12		1°12'55
				morning rise	-11578 Mar 27 j 20:48		
conjunction	-11584 Feb 11 j 11:36				-11578 May 30 j 17:36		
minimum elong	-11584 Feb 11 j 11:36			retrograde	-11578 Jun 28 j 03:05	0°る21'59	
max. Earth dist.	-11584 Feb 10 j 17:38		20.18110 AU		-11578 Jul 26 j 19:47		
	-11584 Feb 23 j 24:00	0° ∡ ¹		opposition	-11578 Sep 09 j 18:05		
morning rise	-11584 Feb 28 j 06:53	0° ∡ 14'55 −		min. Earth dist.	-11578 Sep 10 j 20:45		17.73458 AU
retrograde	-11584 May 31 j 12:43	3° ≯ 28'40		direct	-11578 Nov 24 j 09:22		
opposition	-11584 Aug 14 j 00:35	1° ₹ 27'21		evening set	-11577 Feb 27 j 10:38		
min. Earth dist.	-11584 Aug 14 j 16:48		18.14711 AU		-11577 Mar 05 j 12:43		
	-11584 Sep 20 j 21:06			max. Earth dist.	-11577 Mar 14 j 19:40	0° ර 33'52	19.70115 AU
direct	-11584 Oct 28 j 00:07	29°M25'05					
	-11584 Dec 03 j 20:30	0° ∡ 7		conjunction	-11577 Mar 16 j 05:09	0° る 38'58	
evening set	-11583 Jan 29 j 12:42	2° ∡ 39'19 −		minimum elong	-11577 Mar 16 j 05:09	0° る 38'58	1°12'06
max. Earth dist.	-11583 Feb 14 j 11:08	3° ∡ ³35'33	20.11239 AU	morning rise	-11577 Apr 01 j 21:11	1° る 39'29	
				retrograde	-11577 Jul 02 j 23:19	4° る 57'21	
conjunction	-11583 Feb 15 j 08:20	3° ∡ 38'42		opposition	-11577 Sep 14 j 11:59	2°る55'31	
minimum elong	-11583 Feb 15 j 08:20	3° ₹ 38'42	1°10'20	min. Earth dist.	-11577 Sep 15 j 16:05		17.66989 AU
morning rise	-11583 Mar 04 j 03:33	4° ∡ ³38'01		direct	-11577 Nov 29 j 05:29	0° る 50'25	
retrograde	-11583 Jun 05 j 05:37	7° ₹ 52'25	40404	evening set	-11576 Mar 03 j 12:25	4°ਰ14'12	
opposition	-11583 Aug 18 j 13:11	5° ₹ 51'04		max. Earth dist.	-11576 Mar 18 j 21:11	5° ට 10'08	19.63785 AU
min. Earth dist.	-11583 Aug 19 j 06:59		18.07832 AU			_	
direct	-11583 Nov 01 j 15:27	3° ∡ 48′26		conjunction	-11576 Mar 20 j 06:38	5° る 15'15	
evening set	-11582 Feb 03 j 10:21	7° ∡ °04'08		minimum elong	-11576 Mar 20 j 06:38	5° る 15'15	1°10'47
max. Earth dist.	-11582 Feb 19 j 07:27	8° ₰ 00'24	20.04326 AU	morning rise	-11576 Apr 05 j 21:48	6° ප 15'55	
				retrograde	-11576 Jul 06 j 21:31	9° ට 34'17	
conjunction	-11582 Feb 20 j 06:09	8° ∡ 03'46		opposition	-11576 Sep 18 j 06:45	7° る 32'22	
minimum elong	-11582 Feb 20 j 06:08	8° ₰ 03'46	1°11'44	min. Earth dist.	-11576 Sep 19 j 11:23	7° 七 29'15	17.60819 AU

Planetary Pheno	omena of Uranus fro	m -11900	through -1139	8 (UT), Astrodier	nst AG 18-Feb-2025	14:23,	page 27
Attention, astronom	ical year style is used: The	e year -11576	in astronomical co	ounting style is the year	ar 11577 BCE in historical	counting sty	le.
direct	-11576 Dec 03 j 03:20	5° る 26'53		conjunction	-11569 Apr 24 j 03:00	8°≈10'59	-0°48'38
evening set	-11575 Mar 08 j 15:03	8° る 51'53		minimum elong	-11569 Apr 24 j 03:00	8° ≈ 10'59	0°49'11
max. Earth dist.	-11575 Mar 23 j 21:15		19.57798 AU	morning rise	-11569 May 10 j 11:03	9° ≈ 12'12	
	•			retrograde	-11569 Aug 09 j 14:06	12° ≈ 33'39	
conjunction	-11575 Mar 25 j 08:33	9° ප 53'06	-1°08'23	opposition	-11569 Oct 21 j 18:17	10° ≈ 31'46	-0°51'49
minimum elong	-11575 Mar 25 j 08:33			min. Earth dist.	-11569 Oct 23 j 00:46		
morning rise	-11575 Apr 10 j 22:57			direct	-11568 Jan 06 j 06:35		
retrograde	-11575 Jul 11 j 18:08			evening set	-11568 Apr 11 j 19:18		
opposition	-11575 Sep 23 j 02:21		-1°15'05	max. Earth dist.	-11568 Apr 26 j 20:15		19.29704 AU
min. Earth dist.	-11575 Sep 24 j 08:14				1 3		
direct	-11575 Dec 08 j 00:28			conjunction	-11568 Apr 28 j 06:38	12°≈58'20	-0°43'58
evening set	-11574 Mar 13 j 18:01			minimum elong	-11568 Apr 28 j 06:39		
max. Earth dist.	-11574 Mar 29 j 00:03		19.52244 AU	morning rise	-11568 May 14 j 13:40		
	,			. 8	-11568 May 31 j 13:21		
conjunction	-11574 Mar 30 j 10:58	14°る32'29	-1°06'10	retrograde	-11568 Aug 13 j 15:56		
minimum elong	-11574 Mar 30 j 10:58			opposition	-11568 Oct 25 j 19:40		-0°46'25
morning rise	-11574 Apr 16 j 00:22		1 00 10	min. Earth dist.	-11568 Oct 27 j 00:46		
retrograde	-11574 Jul 16 j 17:47			mm. zarur aist.	-11568 Nov 02 j 07:07		17.20707110
opposition	-11574 Sep 27 j 22:54		-1°12'24	direct	-11567 Jan 10 j 11:52	•	
min. Earth dist.	-11574 Sep 29 j 04:32			direct	-11567 Mar 17 j 07:11		
direct	-11574 Dec 13 j 00:19		17.47724 AO	evening set	-11567 Apr 17 j 00:04		
evening set	-11574 Dec 13 j 00:19			max. Earth dist.	-11567 May 02 j 01:26		10 27602 AH
max. Earth dist.			10 47170 ATT	max. Earth dist.	-11307 May 02 J 01.20	1/ 24113	19.27092 AU
max. Earth dist.	-11573 Apr 03 j 01:41	19 00/48	19.4/1/0 AU	agnismation	11567 May 02 : 10:22	1790046127	0020150
agniumation	11572 Amr 04: 12:20	100=712121	1902121	conjunction minimum elong	-11567 May 03 j 10:22		
conjunction	-11573 Apr 04 j 13:29			_	-11567 May 03 j 10:22		0 3927
minimum elong	-11573 Apr 04 j 13:30		1°04'08	morning rise	-11567 May 19 j 16:01		
morning rise	-11573 Apr 21 j 01:57			retrograde	-11567 Aug 18 j 15:34		0040142
retrograde	-11573 Jul 21 j 15:03		1000112	opposition	-11567 Oct 30 j 21:52		
opposition	-11573 Oct 02 j 20:21			min. Earth dist.	-11567 Nov 01 j 03:18		17.26932 AU
min. Earth dist.	-11573 Oct 04 j 02:58		17.44918 AU	direct	-11566 Jan 15 j 15:29		
direct	-11573 Dec 17 j 23:02			evening set	-11566 Apr 22 j 04:50		10.00171.177
evening set	-11572 Mar 23 j 01:09			max. Earth dist.	-11566 May 07 j 04:56	22° ≈ 29'52	19.26174 AU
max. Earth dist.	-11572 Apr 07 j 05:10	23° 6 50'12	19.42633 AU				
				conjunction	-11566 May 08 j 13:47		
conjunction	-11572 Apr 08 j 16:31			minimum elong	-11566 May 08 j 13:47		0°34'08
minimum elong	-11572 Apr 08 j 16:31		1°01'02	morning rise	-11566 May 24 j 18:23		
morning rise	-11572 Apr 25 j 04:00			retrograde	-11566 Aug 23 j 17:31		
retrograde	-11572 Jul 25 j 15:28			opposition	-11566 Nov 05 j 00:27		
opposition	-11572 Oct 06 j 18:23			min. Earth dist.	-11566 Nov 06 j 04:09		17.25659 AU
min. Earth dist.	-11572 Oct 08 j 00:17		17.40638 AU	direct	-11565 Jan 20 j 21:17		
direct	-11572 Dec 22 j 00:41			evening set	-11565 Apr 27 j 09:01		
evening set	-11571 Mar 28 j 05:25			max. Earth dist.	-11565 May 12 j 10:24	27° ≈ 19′07	19.25159 AU
max. Earth dist.	-11571 Apr 12 j 08:24	28°₹33'58	19.38622 AU				
				conjunction	-11565 May 13 j 16:56		
conjunction	-11571 Apr 13 j 19:53	28° る 39'30	-0°56'53	minimum elong	-11565 May 13 j 16:56	27° ≈ 23'57	0°28'35
minimum elong	-11571 Apr 13 j 19:54		0°57'29	morning rise	-11565 May 29 j 20:10	28° ≈ 25′00	
morning rise	-11571 Apr 30 j 06:15	29° る 40'40			-11565 Jun 26 j 07:13	0° ∀	
	-11571 May 05 j 14:19	0° ≈		retrograde	-11565 Aug 28 j 17:44	1° \ 47'17	
retrograde	-11571 Jul 30 j 13:45	3°≈01'22			-11565 Nov 04 j 13:05	30°R≈	
opposition	-11571 Oct 11 j 17:37	0° ≈ 59'21	-1°01'24	opposition	-11565 Nov 10 j 03:34	29° ≈ 45′28	-0°28'25
min. Earth dist.	-11571 Oct 13 j 00:27	0° ≈ 55'59	17.36898 AU	min. Earth dist.	-11565 Nov 11 j 06:56	29° ≈ 42'30	17.24898 AU
	-11571 Nov 04 j 07:48	30°Ŗる		direct	-11564 Jan 26 j 01:14	27° ≈ 38'42	
direct	-11571 Dec 27 j 00:59	28° る 52'45			-11564 Apr 11 j 11:21	0°)	
	-11570 Feb 16 j 12:08	0° ≈		evening set	-11564 May 01 j 13:09	1° ₩ 11'15	
evening set	-11570 Apr 02 j 09:50	2° ≈ 22'51					
							0000120
				conjunction	-11564 May 17 j 19:39	2° 升 12'50	-0°22'30
conjunction	-11570 Apr 18 j 23:18	3° ≈ 24'38	-0°52'57	minimum elong	-11564 May 17 j 19:39 -11564 May 17 j 19:39	2° 	
conjunction minimum elong	-11570 Apr 18 j 23:18 -11570 Apr 18 j 23:18	3°≈24'38 3°≈24'38		•		2° 升 12′50	
		3° ≈ 24'38		minimum elong	-11564 May 17 j 19:39	2° 升 12′50	0°22'51
minimum elong	-11570 Apr 18 j 23:18	3° ≈ 24'38	0°53'32	minimum elong max. Earth dist.	-11564 May 17 j 19:39 -11564 May 16 j 13:29	2° 	0°22'51
minimum elong max. Earth dist.	-11570 Apr 18 j 23:18 -11570 Apr 17 j 12:10	3°≈24'38 3°≈19'08	0°53'32	minimum elong max. Earth dist. morning rise	-11564 May 17 j 19:39 -11564 May 16 j 13:29 -11564 Jun 02 j 21:50	2°¥12'50 2°¥08'02 3°¥13'46	0°22'51 19.24684 AU
minimum elong max. Earth dist. morning rise	-11570 Apr 18 j 23:18 -11570 Apr 17 j 12:10 -11570 May 05 j 08:37	3°≈24'38 3°≈19'08 4°≈25'50	0°53'32 19.35150 AU	minimum elong max. Earth dist. morning rise retrograde	-11564 May 17 j 19:39 -11564 May 16 j 13:29 -11564 Jun 02 j 21:50 -11564 Sep 01 j 19:40	2°\dagger 12'50 2°\dagger 08'02 3°\dagger 13'46 6°\dagger 36'06 4°\dagger 34'17	0°22'51 19.24684 AU
minimum elong max. Earth dist. morning rise retrograde	-11570 Apr 18 j 23:18 -11570 Apr 17 j 12:10 -11570 May 05 j 08:37 -11570 Aug 04 j 15:08	3°≈24'38 3°≈19'08 4°≈25'50 7°≈46'56 5°≈44'59	0°53'32 19.35150 AU	minimum elong max. Earth dist. morning rise retrograde opposition	-11564 May 17 j 19:39 -11564 May 16 j 13:29 -11564 Jun 02 j 21:50 -11564 Sep 01 j 19:40 -11564 Nov 14 j 06:46	2°\dagger 12'50 2°\dagger 08'02 3°\dagger 13'46 6°\dagger 36'06 4°\dagger 34'17	0°22'51 19.24684 AU -0°21'58
minimum elong max. Earth dist. morning rise retrograde opposition	-11570 Apr 18 j 23:18 -11570 Apr 17 j 12:10 -11570 May 05 j 08:37 -11570 Aug 04 j 15:08 -11570 Oct 16 j 17:31	3°≈24'38 3°≈19'08 4°≈25'50 7°≈46'56 5°≈44'59	0°53'32 19.35150 AU -0°56'49	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-11564 May 17 j 19:39 -11564 May 16 j 13:29 -11564 Jun 02 j 21:50 -11564 Sep 01 j 19:40 -11564 Nov 14 j 06:46 -11564 Nov 15 j 08:15	2°\(\)12'50 2°\(\)\(\)08'02 3°\(\)\(\)13'46 6°\(\)\(\)36'06 4°\(\)\(\)34'17 4°\(\)\(\)31'31	0°22'51 19.24684 AU -0°21'58
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-11570 Apr 18 j 23:18 -11570 Apr 17 j 12:10 -11570 May 05 j 08:37 -11570 Aug 04 j 15:08 -11570 Oct 16 j 17:31 -11570 Oct 17 j 23:13	3°≈24'38 3°≈19'08 4°≈25'50 7°≈46'56 5°≈44'59 5°≈41'45	0°53'32 19.35150 AU -0°56'49	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-11564 May 17 j 19:39 -11564 May 16 j 13:29 -11564 Jun 02 j 21:50 -11564 Sep 01 j 19:40 -11564 Nov 14 j 06:46 -11564 Nov 15 j 08:15 -11563 Jan 30 j 06:44	2°\tau2'50 2°\tau8'02 3°\tau8'13'46 6°\tau8'06 4°\tau8'17 4°\tau8'131 2°\tau27'32	0°22'51 19.24684 AU -0°21'58
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-11570 Apr 18 j 23:18 -11570 Apr 17 j 12:10 -11570 May 05 j 08:37 -11570 Aug 04 j 15:08 -11570 Oct 16 j 17:31 -11570 Oct 17 j 23:13 -11569 Jan 01 j 04:42	3°≈24'38 3°≈19'08 4°≈25'50 7°≈46'56 5°≈44'59 5°≈41'45 3°≈38'19 7°≈09'09	0°53'32 19.35150 AU -0°56'49	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-11564 May 17 j 19:39 -11564 May 16 j 13:29 -11564 Jun 02 j 21:50 -11564 Sep 01 j 19:40 -11564 Nov 14 j 06:46 -11564 Nov 15 j 08:15 -11563 Jan 30 j 06:44	2°\tau2'50 2°\tau8'02 3°\tau8'13'46 6°\tau8'06 4°\tau8'17 4°\tau8'131 2°\tau27'32	0°22'51 19.24684 AU -0°21'58 17.24700 AU
minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-11570 Apr 18 j 23:18 -11570 Apr 17 j 12:10 -11570 May 05 j 08:37 -11570 Aug 04 j 15:08 -11570 Oct 16 j 17:31 -11570 Oct 17 j 23:13 -11569 Jan 01 j 04:42 -11569 Apr 07 j 14:30	3°≈24'38 3°≈19'08 4°≈25'50 7°≈46'56 5°≈44'59 5°≈41'45 3°≈38'19 7°≈09'09	0°53'32 19.35150 AU -0°56'49 17.33674 AU	minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-11564 May 17 j 19:39 -11564 May 16 j 13:29 -11564 Jun 02 j 21:50 -11564 Sep 01 j 19:40 -11564 Nov 14 j 06:46 -11564 Nov 15 j 08:15 -11563 Jan 30 j 06:44 -11563 May 06 j 16:40	2°\tau2'50 2°\tau8'02 3°\tau8'13'46 6°\tau8'06 4°\tau8'17 4°\tau8'131 2°\tau2'732 6°\tau0'01	0°22'51 19.24684 AU -0°21'58 17.24700 AU -0°16'40

Planetary Pheno	omena of Uranus fro	om -11900	through -1139	8 (UT). Astrodier	nst AG 18-Feb-2025	14:23.	page 28
•	ical year style is used: The		•				
max. Earth dist.	-11563 May 21 j 18:52			opposition	-11558 Dec 14 j 06:03	3° Υ 14'45	
morning rise	-11563 Jun 07 j 22:52			min. Earth dist.	-11558 Dec 14 j 19:09	3° Ƴ 13'21	17.36832 AU
retrograde	-11563 Sep 06 j 20:14	11°) 24'36		direct	-11557 Mar 01 j 12:23	1° Y 09'16	
opposition	-11563 Nov 19 j 10:31	9°) 22'46	-0°15'22	evening set	-11557 Jun 05 j 00:35	4° Ƴ 38'40	
min. Earth dist.	-11563 Nov 20 j 10:48		17.25087 AU				
direct	-11562 Feb 04 j 11:02	7° ₩ 16'07		conjunction	-11557 Jun 20 j 22:16	5° Ƴ 38'47	0°19'11
evening set	-11562 May 11 j 19:38	10°) 48′20		minimum elong	-11557 Jun 20 j 22:16	5° Ƴ 38'47	0°19'12
				max. Earth dist.	-11557 Jun 20 j 09:49		19.38866 AU
conjunction	-11562 May 27 j 23:33			morning rise	-11557 Jul 06 j 16:33	6° Y 38′25	
minimum elong	-11562 May 27 j 23:33		0°10'58	retrograde	-11557 Oct 05 j 19:44	9°Υ59'52	000 410 0
behind sun begin	-11562 May 27 j 18:31			opposition	-11557 Dec 19 j 09:43	7°Υ58'21	
behind sun end max. Earth dist.	-11562 May 28 j 04:35		10.25401 AII	min. Earth dist.	-11557 Dec 19 j 19:36	5° Υ 53'15	17.41026 AU
morning rise	-11562 May 26 j 21:27 -11562 Jun 12 j 23:19		19.23491 AU	direct evening set	-11556 Mar 05 j 17:26 -11556 Jun 08 j 23:28	9° Υ 21'46	
retrograde	-11562 Sep 11 j 21:34			evening set	-11330 Juli 00 j 23.20	9 1 21 40	
opposition	-11562 Nov 24 j 14:22		-0°08'40	conjunction	-11556 Jun 24 j 19:55	10° ℃ 21'37	0°24'52
min. Earth dist.	-11562 Nov 25 j 12:30			minimum elong	-11556 Jun 24 j 19:55		
direct	-11561 Feb 09 j 16:35		17.20120110	max. Earth dist.	-11556 Jun 24 j 10:01		
evening set	-11561 May 16 j 21:56			morning rise	-11556 Jul 10 j 13:14		19.10009110
max. Earth dist.	-11561 Jun 01 j 01:59		19.26854 AU	retrograde	-11556 Oct 09 j 17:46		
	J			opposition	-11556 Dec 23 j 13:16		0°30'45
conjunction	-11561 Jun 02 j 00:43	16°) 37′10	-0°04'44	min. Earth dist.	-11556 Dec 23 j 21:37		17.45706 AU
minimum elong	-11561 Jun 02 j 00:42			direct	-11555 Mar 10 j 19:32		
behind sun begin	-11561 Jun 01 j 18:14	16°) 36′09		evening set	-11555 Jun 13 j 21:32	14° Ƴ 03'38	
behind sun end	-11561 Jun 02 j 07:10	16°) 38′10					
morning rise	-11561 Jun 17 j 23:11	17°) 37′39		conjunction	-11555 Jun 29 j 16:50	15° Ƴ 03'10	0°30'22
retrograde	-11561 Sep 16 j 21:30			minimum elong	-11555 Jun 29 j 16:50	15° Ƴ 03′10	0°30'30
opposition	-11561 Nov 29 j 18:11			max. Earth dist.	-11555 Jun 29 j 09:29		19.48207 AU
min. Earth dist.	-11561 Nov 30 j 14:13		17.27803 AU	morning rise	-11555 Jul 15 j 09:18	16° Y 02′18	
direct	-11560 Feb 14 j 21:40			retrograde	-11555 Oct 14 j 17:27		
asc. node	-11560 Mar 12 j 13:10			opposition	-11555 Dec 28 j 16:32		0°36'46
evening set	-11560 May 20 j 23:46			min. Earth dist.	-11555 Dec 28 j 21:26		17.50793 AU
max. Earth dist.	-11560 Jun 05 j 03:58	21° ∺ 20'34	19.28880 AU	direct	-11554 Mar 15 j 23:44		
	11500 1 00:01:00	210\/22156	0001105	evening set	-11554 Jun 18 j 18:39	18° 'Y' 44'03	
conjunction	-11560 Jun 06 j 01:09		0°01'25		11554 I.J. 04: 12.55	1000042117	0925120
minimum elong	-11560 Jun 06 j 01:07 -11560 Jun 05 j 18:30		0°01'16	conjunction minimum elong	-11554 Jul 04 j 12:55 -11554 Jul 04 j 12:55		
behind sun begin behind sun end	-11560 Jun 06 j 07:45			max. Earth dist.	-11554 Jul 04 j 08:27		
morning rise	-11560 Jun 21 j 22:33			morning rise	-11554 Jul 20 j 04:31		19.33409 AU
retrograde	-11560 Sep 20 j 21:40			retrograde	-11554 Oct 19 j 14:25		
opposition	-11560 Dec 03 j 22:10		0°04'48	opposition	-11553 Jan 02 j 19:33		0°42'30
min. Earth dist.	-11560 Dec 04 j 16:04			min. Earth dist.	-11553 Jan 02 j 23:03		
direct	-11559 Feb 19 j 02:49		-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	direct	-11553 Mar 21 j 00:29		
evening set	-11559 May 26 j 00:43			evening set	-11553 Jun 23 j 15:04		
max. Earth dist.	-11559 Jun 10 j 07:09		19.31584 AU	C	,		
	v			conjunction	-11553 Jul 09 j 08:16	24° Y 21'49	0°40'39
conjunction	-11559 Jun 11 j 00:53	26°) €09'51	0°07'26	minimum elong	-11553 Jul 09 j 08:15	24° Y 21'49	
minimum elong	-11559 Jun 11 j 00:52	26° ₩ 09'51	0°07'21	max. Earth dist.	-11553 Jul 09 j 05:47	24° Y 21'26	19.59049 AU
behind sun begin	-11559 Jun 10 j 18:49	26°) €08'54		morning rise	-11553 Jul 24 j 23:14	25° Y 20′25	
behind sun end	-11559 Jun 11 j 06:56	26°) 1 0′47		retrograde	-11553 Oct 24 j 13:15	28° Y 40′26	
morning rise	-11559 Jun 26 j 21:08			opposition	-11552 Jan 07 j 21:42		0°47'54
	-11559 Aug 23 j 01:44			min. Earth dist.	-11552 Jan 07 j 21:47		17.61937 AU
retrograde	-11559 Sep 25 j 21:09			direct	-11552 Mar 25 j 03:25		
	-11559 Oct 30 j 15:53			evening set	-11552 Jun 27 j 10:29	27° Y 59′59	
opposition	-11559 Dec 09 j 02:09		0°11'29			• •	
min. Earth dist.	-11559 Dec 09 j 17:10		17.33182 AU	conjunction	-11552 Jul 13 j 02:49		0°45'21
direct	-11558 Feb 24 j 08:38			minimum elong	-11552 Jul 13 j 02:49		
evening set	-11558 May 31 j 01:07			max. Earth dist.	-11552 Jul 13 j 03:26		19.64879 AU
	-11558 Jun 01 j 12:57	0° Υ		morning rise	-11552 Jul 28 j 17:02		
a a minus - 4:	11550 I 15:32 55	000054150	0012121	notno a J-	-11552 Jul 29 j 13:03	0° 8	
conjunction	-11558 Jun 15 j 23:57	0° Y 54'50	0°13'21	retrograde	-11552 Oct 28 j 08:59	3° 8 16'29	0050150
minimum elong	-11558 Jun 15 j 23:57	0° Υ 54'49 0° Υ 54'13	0°13'20	opposition	-11551 Jan 11 j 23:40	1° 8 15'28	
behind sun begin behind sun end	-11558 Jun 15 j 20:04 -11558 Jun 16 j 03:50	0°Υ55'26		min. Earth dist.	-11551 Jan 11 j 22:22 -11551 Feb 13 j 11:19		17.67888 AU
max. Earth dist.	-11558 Jun 16 j 03:50 -11558 Jun 15 j 08:25		19.34923 AU	direct	-11551 Feb 13 j 11:19 -11551 Mar 30 j 03:06		
morning rise	-11558 Jul 13 j 08.23	1° Υ 54'41	17.37723 AU	direct	-11551 May 12 j 05:51	0° 8	
retrograde	-11558 Sep 30 j 20:09	5°Υ16'23		evening set	-11551 Jul 02 j 04:52	2° 8 35'13	
- Carogrado	11000 00p 00 j 20.09	. 1023			11001 041 02 J 07.02	_ 🔾 55 15	

Planetary Phenomena of Uranus from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 29								
•	nical year style is used: The		•					
conjunction	-11551 Jul 17 j 20:16	-		minimum elong	-11545 Aug 13 j 10:34	0° Ⅱ 19'44		
minimum elong	-11551 Jul 17 j 20:15	3° 8 33'30		max. Earth dist.	-11545 Aug 14 j 04:18		20.11704 AU	
max. Earth dist.	-11551 Jul 17 j 22:41		19.70946 AU	morning rise	-11545 Aug 28 j 23:05	1° Ⅱ 16'15		
morning rise	-11551 Aug 02 j 10:04	4° 8 31'34		retrograde	-11545 Nov 29 j 15:37	4° ∏ 31'52		
retrograde	-11551 Nov 02 j 06:22	7° 8 50'37		opposition	-11544 Feb 14 j 15:20	2° ∏ 31'19	1°16'54	
opposition	-11550 Jan 17 j 00:51	5° 8 49'39	0°57'39	min. Earth dist.	-11544 Feb 13 j 19:55		18.15427 AU	
min. Earth dist.	-11550 Jan 16 j 20:04	_	17.74063 AU	direct	-11544 May 01 j 11:28	0° П 31'00	10.13427 110	
direct	-11550 Apr 04 j 04:44	3° 8 46'54	17.74003 AU	evening set	-11544 Aug 01 j 10:09	3° Ⅱ 44'19		
evening set	-11550 Apr 04 j 04:44 -11550 Jul 06 j 22:14	7° 8 08'26		evening set	-11344 Aug 01 j 10.09	J 1144 19		
evening set	-11330 Jul 00 J 22.14	7 008 20			11544 A 16: 22-14	40T 4012 1	1010101	
	11550 1 1 22:12:50	000000	0052147	conjunction	-11544 Aug 16 j 22:14	4° Ⅱ 40'31		
conjunction	-11550 Jul 22 j 12:59	_		minimum elong	-11544 Aug 16 j 22:14	4° Ⅱ 40'31	1°10'36	
minimum elong	-11550 Jul 22 j 12:59	8° 8 06'25	0°54'08	max. Earth dist.	-11544 Aug 17 j 19:21		20.19087 AU	
max. Earth dist.	-11550 Jul 22 j 18:51		19.77219 AU	morning rise	-11544 Sep 01 j 10:41	5° Ⅱ 36'48		
morning rise	-11550 Aug 07 j 02:13	9° 8 04'12		retrograde	-11544 Dec 03 j 06:53	8° Ⅱ 51'50		
retrograde	-11550 Nov 07 j 00:55			opposition	-11543 Feb 18 j 10:57	6° Ⅱ 51'27		
opposition	-11549 Jan 22 j 01:18			min. Earth dist.	-11543 Feb 17 j 13:36		18.22834 AU	
min. Earth dist.	-11549 Jan 21 j 19:00		17.80445 AU	direct	-11543 May 06 j 05:18	4° Ⅱ 51'36		
direct	-11549 Apr 09 j 03:12	8° 8 19'24		evening set	-11543 Aug 05 j 21:10	8° Ⅱ 03'35		
evening set	-11549 Jul 11 j 14:39	11° 8 39'34						
				conjunction	-11543 Aug 21 j 08:58	8° Ⅱ 59'32	1°11'20	
conjunction	-11549 Jul 27 j 04:36	12° 8 37'14	0°57'27	minimum elong	-11543 Aug 21 j 08:58	8° ∏ 59'32	1°11'55	
minimum elong	-11549 Jul 27 j 04:36	12° 8 37'14	0°57'52	max. Earth dist.	-11543 Aug 22 j 07:07	9° Ⅱ 02'53	20.26500 AU	
max. Earth dist.	-11549 Jul 27 j 12:07	12° 8 38'24	19.83707 AU	morning rise	-11543 Sep 05 j 21:49	9° Ⅱ 55'36		
morning rise	-11549 Aug 11 j 17:39			retrograde	-11543 Dec 07 j 21:41	13° Ⅱ 10′05		
Č	-11549 Sep 05 j 17:52			min. Earth dist.	-11542 Feb 22 j 06:27		18.30242 AU	
retrograde	-11549 Nov 11 j 20:32			opposition	-11542 Feb 23 j 05:46			
retrograde	-11548 Jan 23 j 17:27			direct	-11542 May 10 j 21:13	9° Ⅱ 10'25	1 17 11	
opposition	-11548 Jan 27 j 00:53		1°05'48	evening set	-11542 Aug 10 j 07:27			
min. Earth dist.	-11548 Jan 26 j 15:14			evening set	11342 Aug 10 j 07.27	12 1121 00		
direct	-11548 Apr 13 j 02:49		17.87042 AO	conjunction	-11542 Aug 25 j 19:24	120∏16!40	1012114	
direct	-11548 Jun 25 j 09:11			minimum elong	-11542 Aug 25 j 19:24 -11542 Aug 25 j 19:24			
				_	-11542 Aug 26 j 20:26			
evening set	-11548 Jul 15 j 05:53	10 008 34		max. Earth dist.			20.33839 AU	
	11540 1 1 20:10 22	170 405156	1000145	morning rise	-11542 Sep 10 j 08:22			
conjunction	-11548 Jul 30 j 19:22	_	1°00'45	retrograde	-11542 Dec 12 j 11:38		1000100	
minimum elong	-11548 Jul 30 j 19:22		1°01'13	opposition	-11541 Feb 27 j 23:31		1°20'28	
max. Earth dist.	-11548 Jul 31 j 06:34		19.90397 AU	min. Earth dist.	-11541 Feb 26 j 22:36		18.37544 AU	
morning rise	-11548 Aug 15 j 07:58			direct	-11541 May 15 j 12:51			
retrograde	-11548 Nov 15 j 13:45			evening set	-11541 Aug 14 j 17:13	16° Ⅱ 36'57		
opposition	-11547 Jan 30 j 23:50							
min. Earth dist.	-11547 Jan 30 j 12:18		17.93845 AU	conjunction	-11541 Aug 30 j 05:05			
direct	-11547 Apr 18 j 00:23			minimum elong	-11541 Aug 30 j 05:05			
evening set	-11547 Jul 19 j 20:23	20° 8 35'29		max. Earth dist.	-11541 Aug 31 j 06:36		20.41079 AU	
				morning rise	-11541 Sep 14 j 18:34	18° Ⅱ 28′04		
conjunction	-11547 Aug 04 j 09:12	21° 8 32'32	1°03'40	retrograde	-11541 Dec 17 j 01:31	21° Ⅱ 41′24		
minimum elong	-11547 Aug 04 j 09:12	21° 8 32'32	1°04'09	opposition	-11540 Mar 03 j 16:38	19° Ⅱ 41'26	1°20'46	
max. Earth dist.	-11547 Aug 04 j 22:01	21° 8 34'30	19.97310 AU	min. Earth dist.	-11540 Mar 02 j 14:30	19° ∐ 44′04	18.44681 AU	
morning rise	-11547 Aug 19 j 21:47	22° 8 29'32		direct	-11540 May 19 j 02:58	17° Ⅱ 42'50		
retrograde	-11547 Nov 20 j 07:33	25° 8 46'19		evening set	-11540 Aug 18 j 02:03	20° Ⅲ 51′02		
opposition	-11546 Feb 04 j 21:52		1°12'14	-	- *			
min. Earth dist.	-11546 Feb 04 j 07:06			conjunction	-11540 Sep 02 j 14:14	21° II 46'17	1°12'48	
direct	-11546 Apr 22 j 21:25			minimum elong	-11540 Sep 02 j 14:14			
evening set	-11546 Jul 24 j 09:44			max. Earth dist.	-11540 Sep 03 j 18:11			
8.11	,			morning rise	-11540 Sep 18 j 04:00			
conjunction	-11546 Aug 08 j 22:20	25° 8 57'06	1°06'11	retrograde	-11540 Dec 20 j 14:33			
minimum elong	-11546 Aug 08 j 22:19			min. Earth dist.	-11539 Mar 07 j 05:16		18 51563 AII	
max. Earth dist.	-11546 Aug 09 j 14:47			opposition	-11539 Mar 08 j 08:56			
			20.04420 AO	direct			1 20 30	
morning rise	-11546 Aug 24 j 10:40 -11546 Nov 05 j 08:19				-11539 May 23 j 17:09			
notno a J -				evening set	-11539 Aug 22 j 10:35	25 д 05 25		
retrograde	-11546 Nov 24 j 23:49			t	11520 9 06:30 53	250 ™ 50!25	1012120	
.	-11546 Dec 14 j 22:10		1014140	conjunction	-11539 Sep 06 j 22:52			
opposition	-11545 Feb 09 j 19:06			minimum elong	-11539 Sep 06 j 22:52			
min. Earth dist.	-11545 Feb 09 j 02:20		18.08079 AU	max. Earth dist.	-11539 Sep 08 j 02:57		20.54830 AU	
direct	-11545 Apr 27 j 17:15			morning rise	-11539 Sep 22 j 13:21			
evening set	-11545 Jul 28 j 22:27				-11539 Dec 09 j 17:36			
	-11545 Aug 08 j 01:34	Π $^{\circ}0$		retrograde	-11539 Dec 25 j 03:11			
					-11538 Jan 09 j 18:27			
conjunction	-11545 Aug 13 j 10:34	0° Ⅱ 19'44	1°08'19	min. Earth dist.	-11538 Mar 11 j 20:07	28° Ⅱ 09'01	18.58160 AU	

Dlanatary Dhan	omana af Hranua fra	m 11000	through 1120	Q (IIT) A atradia	nat A.C. 18 Eab 2025	14.22	maga 20
•	omena of Uranus fro ical year style is used: The		•				page 30
opposition	-11538 Mar 13 j 00:23	-		max. Earth dist.	-11532 Oct 06 j 08:41		
direct	-11538 May 28 j 05:26		1 20 01	morning rise	-11532 Oct 20 j 17:59		20.90101110
evening set	-11538 Aug 26 j 18:16			retrograde	-11531 Jan 23 j 03:50		
	-11538 Sep 08 j 19:02	0 \circ \odot		min. Earth dist.	-11531 Apr 10 j 03:22	26°5544'33	18.95390 AU
				opposition	-11531 Apr 11 j 12:32		1°05'07
conjunction	-11538 Sep 11 j 07:06	0° © 08'54	1°11'47	direct	-11531 Jun 26 j 03:01		
minimum elong	-11538 Sep 11 j 07:06		1°12'26	evening set	-11531 Sep 23 j 10:05	27°5944'01	
max. Earth dist.	-11538 Sep 12 j 13:10		20.61255 AU				
morning rise	-11538 Sep 26 j 22:04	1°504'05		conjunction	-11531 Oct 09 j 03:21		0°57'21
retrograde	-11538 Dec 29 j 15:25	4°915'40	10 C4400 ATT	minimum elong	-11531 Oct 09 j 03:21		0°57'57
min. Earth dist. opposition	-11537 Mar 16 j 09:17 -11537 Mar 17 j 14:53	2°918'55	18.64409 AU 1°19'00	max. Earth dist. morning rise	-11531 Oct 10 j 13:32 -11531 Oct 25 j 00:34		20.97407 AU
direct	-11537 Jun 01 j 18:37	0°9518'18	1 1900	morning risc	-11531 Oct 23 j 00:34 -11531 Nov 02 j 06:22		
evening set	-11537 Aug 31 j 01:30	3°922'57		retrograde	-11530 Jan 27 j 12:49		
e vennig see	1105 / 11 ug 51 j 01.50	3 02237		opposition	-11530 Apr 15 j 21:39		1°01'39
conjunction	-11537 Sep 15 j 14:36	4° © 17'38	1°10'43	min. Earth dist.	-11530 Apr 14 j 13:19		18.99499 AU
minimum elong	-11537 Sep 15 j 14:36	4°9517'38	1°11'23		-11530 May 03 j 10:38	30°R∽	
max. Earth dist.	-11537 Sep 16 j 20:37	4° 5 22'04	20.67331 AU	direct	-11530 Jun 30 j 08:21	28°9545'03	
morning rise	-11537 Oct 01 j 06:24	5° 5 12'41			-11530 Aug 24 j 10:27	$0^{\circ}\Omega$	
retrograde	-11536 Jan 03 j 02:20	8°923'42		evening set	-11530 Sep 27 j 14:27	1° Ω 43'37	
min. Earth dist.	-11536 Mar 19 j 22:48		18.70324 AU				
opposition	-11536 Mar 21 j 04:35	6°523'58	1°17'36	conjunction	-11530 Oct 13 j 08:47	2° Ω 37'38	0°54'06
direct	-11536 Jun 05 j 05:01	4°926'34		minimum elong	-11530 Oct 13 j 08:48		
evening set	-11536 Sep 03 j 07:58	7° © 30'08		max. Earth dist.	-11530 Oct 14 j 19:52		21.01334 AU
conjunction	-11536 Sep 18 j 21:45	8° 5 24'39	1°09'18	morning rise retrograde	-11530 Oct 29 j 06:55 -11529 Jan 31 j 21:46		
minimum elong	-11536 Sep 18 j 21:45	8°9524'39	1°09'18 1°09'57	min. Earth dist.	-11529 Apr 18 j 21:04		19.03215 AU
max. Earth dist.	-11536 Sep 16 j 21:45 -11536 Sep 20 j 05:38		20.73082 AU	opposition	-11529 Apr 10 j 21:04 -11529 Apr 20 j 06:07	4°Ω40'36	
morning rise	-11536 Oct 04 j 14:10	9°9519'34	20.73002110	direct	-11529 Jul 04 j 15:37		0 27 23
retrograde	-11535 Jan 06 j 13:36			evening set	-11529 Oct 01 j 18:49		
min. Earth dist.	-11535 Mar 24 j 10:13	10° © 33'26	18.75912 AU		,		
opposition	-11535 Mar 25 j 17:20	10° © 30'18	1°15'48	conjunction	-11529 Oct 17 j 13:55	6° Ω 36'34	0°50'35
direct	-11535 Jun 09 j 16:55	8°533'06		minimum elong	-11529 Oct 17 j 13:55	6° Ω 36'34	0°51'08
evening set	-11535 Sep 07 j 13:59	11° © 35'38		max. Earth dist.	-11529 Oct 19 j 00:01		21.04837 AU
				morning rise	-11529 Nov 02 j 13:15		
conjunction	-11535 Sep 23 j 04:13			retrograde	-11528 Feb 05 j 06:10		
minimum elong	-11535 Sep 23 j 04:13			min. Earth dist.	-11528 Apr 22 j 06:31		
max. Earth dist.	-11535 Sep 24 j 12:06		20.78517 AU	opposition	-11528 Apr 23 j 14:15		0°53'51
morning rise retrograde	-11535 Oct 08 j 21:39 -11534 Jan 10 j 23:13			direct evening set	-11528 Jul 07 j 20:29 -11528 Oct 04 j 23:05		
min. Earth dist.	-11534 Mar 28 j 22:21		18 81209 AII	evening set	-11328 Oct 04 j 23.03	9 0 (41 02	
opposition	-11534 Mar 30 j 05:24			conjunction	-11528 Oct 20 j 19:20	10°Ω35'01	0°46'50
direct	-11534 Jun 14 j 01:21		1 10 50	minimum elong	-11528 Oct 20 j 19:20		
evening set	-11534 Sep 11 j 19:31			max. Earth dist.	-11528 Oct 22 j 05:51		
				morning rise	-11528 Nov 05 j 19:36		
conjunction	-11534 Sep 27 j 10:34	16°533'52	1°05'27	retrograde	-11527 Feb 08 j 15:07	14° Ω 36′56	
minimum elong	-11534 Sep 27 j 10:35	16° © 33'52	1°06'04	opposition	-11527 Apr 27 j 21:43		
max. Earth dist.	-11534 Sep 28 j 20:07		20.83668 AU	min. Earth dist.	-11527 Apr 26 j 13:44		19.09284 AU
morning rise	-11534 Oct 13 j 04:42			direct	-11527 Jul 12 j 02:35		
retrograde	-11533 Jan 15 j 09:21		10.00017.444	evening set	-11527 Oct 09 j 03:35	13° 61 39'03	
min. Earth dist.	-11533 Apr 02 j 07:59			conjunction	11527 Oct 25:00 42	140 (0 22102	0042152
opposition direct	-11533 Apr 03 j 16:19 -11533 Jun 18 j 11:38		1°11'08	minimum elong	-11527 Oct 25 j 00:42 -11527 Oct 25 j 00:42		
evening set	-11533 Sun 18 j 11:38 -11533 Sep 16 j 00:46			max. Earth dist.	-11527 Oct 26 j 09:44		
evening set	11333 Бер То ј 00.40	1) 34211		max. Earth dist.	-11527 Nov 01 j 21:47		21.10407 110
conjunction	-11533 Oct 01 j 16:22	20°536'21	1°03'03	morning rise	-11527 Nov 10 j 02:16		
minimum elong	-11533 Oct 01 j 16:23		1°03'39	retrograde	-11526 Feb 12 j 22:33		
max. Earth dist.	-11533 Oct 03 j 01:41			min. Earth dist.	-11526 Apr 30 j 22:52		19.11526 AU
morning rise	-11533 Oct 17 j 11:35	21° © 31'01		opposition	-11526 May 02 j 04:57	16° Ω 35'31	0°45'03
retrograde	-11532 Jan 19 j 18:22	24° © 39'59			-11526 Jun 17 j 19:36		
min. Earth dist.	-11532 Apr 05 j 18:48		18.90955 AU	direct	-11526 Jul 16 j 07:16		
opposition	-11532 Apr 07 j 02:49		1°08'17		-11526 Aug 13 j 06:56		
direct	-11532 Jun 21 j 18:13			evening set	-11526 Oct 13 j 08:04	17° {\ 36'42	
evening set	-11532 Sep 19 j 05:23	23°©43'35		aamine -ti	11506 0-4 20 : 06 22	100 0 20144	0020142
agniumation	11522 Oct 04: 21:57	2406227141	1°00'21	conjunction minimum elong	-11526 Oct 29 j 06:23 -11526 Oct 29 j 06:23		
conjunction minimum elong	-11532 Oct 04 j 21:57 -11532 Oct 04 j 21:57		1°00'21 1°00'57	minimum elong max. Earth dist.	-11526 Oct 29 j 06:23 -11526 Oct 30 j 15:15		
mmmum ciong	11332 Oct 07 j 21.37	∠. ~ 5/ 7 1	1 00 0 1	man. Darui dist.	11525 Oct 50 j 15.15	10 0633 23	21.12301 AU

Planetary Phenomena of Uranus from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11526 in astronomical counting style is the year 11527 BCE in historical counting style. -11526 Nov 14 j 08:53 19° Ω 25'21 morning rise -11520 Dec 08 i 03:48 13° m 06'23 morning rise -11525 Feb 17 j 07:32 22° Ω 32'18 -11519 Mar 13 j 02:19 16° m 12'47 retrograde retrograde -11525 May 05 j 05:32 $20^{\circ}\Omega$ 36'03 19.13171 AU -11519 May 29 j 20:27 14° m 13'02 0°09'04 min. Earth dist. opposition -11525 May 06 j 11:29 $20^{\circ}\Omega$ 33'02 $0^{\circ}40'20$ min. Earth dist. -11519 May 28 j 22:09 14° Mp 15'18 19.11562 AU opposition -11525 Jul 20 j 12:57 18° Ω 37'25 direct direct -11519 Aug 12 j 15:02 12° Mp 16'44 -11525 Oct 17 j 12:43 21° **Ω**33'59 -11519 Nov 09 j 19:30 15° m 13'14 evening set evening set -11525 Nov 02 j 11:57 22°**Q**28'04 0°34'21 -11519 Nov 26 j 01:30 16° M 07'56 conjunction conjunction 0°05'50 -11519 Nov 26 j 01:29 16° **m** 07'55 -11525 Nov 02 j 11:57 22°Ω28'04 0°34'47 minimum elong minimum elong 0°06'01 max. Earth dist. -11525 Nov 03 j 18:55 22° **Ω**32'28 21.13710 AU behind sun begin -11519 Nov 25 j 19:08 16° M 07'03 morning rise -11525 Nov 18 j 15:45 23° **Ω**22'46 behind sun end -11519 Nov 26 j 07:50 16° m 08'48 -11524 Feb 21 j 13:49 26° **Ω**29'33 -11519 Nov 27 j 00:42 16° Mp11'12 21.10679 AU retrograde max. Earth dist. opposition -11524 May 09 j 17:57 24° Ω 30'15 0°35'26 morning rise -11519 Dec 12 j 11:55 17° m 03'13 min. Earth dist. -11524 May 08 j 14:09 $24^{\circ}\Omega 33'02$ 19.14218 AU retrograde -11518 Mar 17 j 08:56 20° m 09'41 direct -11524 Jul 23 j 16:50 22°**Q**34'36 min. Earth dist. -11518 Jun 02 j 05:25 18° Mp 11'53 19.09756 AU opposition evening set -11524 Oct 20 j 17:12 25°**Ω**30'57 -11518 Jun 03 j 01:19 18° **m** 09'51 0°03'34 direct -11518 Aug 16 j 17:36 16° Mp 13'24 conjunction -11524 Nov 05 j 17:43 $26^{\circ}\Omega$ 25'06 0° 29'51 evening set -11518 Nov 14 j 01:41 19° mp 10'11 minimum elong -11524 Nov 05 j 17:43 $26^{\circ}\Omega$ 25'06 $0^{\circ}30'14$ max. Earth dist. -11524 Nov 07 j 00:20 $26^{\circ}\Omega$ 29'27 21.14470 AU conjunction -11518 Nov 30 j 08:55 20° m 05'03 morning rise -11524 Nov 21 j 22:32 $27^{\circ}\Omega$ 19'51 minimum elong -11518 Nov 30 j 08:54 20° mp 05'03 0°00'58 -11523 Jan 22 j 11:05 0° m behind sun begin -11518 Nov 30 j 02:14 20° m 04'08 retrograde -11523 Feb 24 i 22:32 0° m 26'29 behind sun end -11518 Nov 30 j 15:35 20° m 05'58 -11523 Mar 30 i 18:54 30° R Ω max. Earth dist. -11518 Dec 01 j 07:17 20° m 08'12 21.08689 AU opposition -11523 May 13 j 23:51 $28^{\circ}\Omega$ 27'07 $0^{\circ}30'23$ morning rise -11518 Dec 16 j 20:12 21° Mp 00'29 min. Earth dist. -11523 May 12 j 20:22 $28^{\circ}\Omega$ 29'53 19.14674 AU desc. node -11517 Jan 27 j 18:14 23° m 02'03 -11523 Jul 27 j 22:44 $26^{\circ}\Omega$ 31'24 retrograde -11517 Mar 21 j 17:28 24° mp 07'04 direct evening set -11523 Oct 24 j 22:07 29° Ω 27'37 min. Earth dist. -11517 Jun 06 j 10:30 22° m 09'10 19.07565 AU -11523 Nov 03 j 13:26 0° Mp -11517 Jun 07 j 05:54 22° m 07'11 -0°01'59 opposition -11517 Aug 20 j 22:23 20° Mp 10'35 direct -11523 Nov 09 j 23:36 0° m 21'51 0°25'13 -11517 Nov 18 j 08:31 23° m 07'45 conjunction evening set -11523 Nov 09 j 23:37 0° m 21'51 0°25'35 minimum elong -11523 Nov 11 j 04:10 0° M 25'53 21.14651 AU -11517 Dec 04 j 16:41 24° m 02'47 -0°04'19 max. Earth dist. conjunction -11517 Dec 04 j 16:41 24° m 02'47 0°04'13 -11523 Nov 26 j 05:43 1° Mp 16'41 morning rise minimum elong -11517 Dec 04 j 10:05 24° m 01'52 -11522 Mar 01 j 04:07 4° m 23'12 retrograde behind sun begin -11522 May 17 j 04:16 2° m 26'16 19.14587 AU -11517 Dec 04 j 23:16 24° Mp 03'41 min. Earth dist. behind sun end -11522 May 18 j 05:24 2° m 23'44 0°25'12 -11517 Dec 05 j 12:40 24° m 05'36 21.06310 AU opposition max. Earth dist. direct -11522 Aug 01 j 01:43 0° **m** 27'53 morning rise -11517 Dec 21 j 05:04 24° m 58'23 evening set -11522 Oct 29 j 03:02 3° Mp 24'03 retrograde -11516 Mar 25 j 00:50 28° m 05'08 opposition -11516 Jun 10 j 10:46 26° m 05'13 -0°07'31 conjunction -11522 Nov 14 j 05:49 4° m 18'22 0°20'29 min. Earth dist. -11516 Jun 09 j 18:01 26° M 06'56 19.04993 AU -11522 Nov 14 j 05:49 4° m 18'22 0°20'48 -11516 Aug 24 j 01:02 24° Mp 08'27 minimum elong direct max. Earth dist. -11522 Nov 15 j 09:52 4° M 22'20 21.14319 AU -11516 Nov 21 j 15:45 27° m 06'06 evening set -11522 Nov 30 j 12:54 5° m 13'18 morning rise -11521 Mar 05 j 12:20 8° m 19'43 conjunction -11516 Dec 08 j 01:09 28° m 01'19 -0°09'19 retrograde -11521 May 21 j 09:44 6° m 22'40 19.14004 AU -11516 Dec 08 j 01:09 28° m 01'19 0°09'15 min. Earth dist. minimum elong 6° m 20'09 0°19'54 -11516 Dec 07 j 19:31 28° m 00'33 opposition -11521 May 22 j 10:36 behind sun begin direct -11521 Aug 05 i 07:22 4° m 24'10 behind sun end -11516 Dec 08 i 06:46 28° m 02'06 evening set -11521 Nov 02 j 08:10 7° m 20'21 max. Earth dist. -11516 Dec 08 i 19:58 28° m 03'59 21.03548 AU morning rise -11516 Dec 24 j 14:23 28° m 57'05 conjunction -11521 Nov 18 i 11:53 8° m 14'46 0°15'39 -11515 Jan 13 j 12:03 0∘ಹ -11521 Nov 18 j 11:53 8° Mb 14'46 retrograde -11515 Mar 29 j 10:21 minimum elong 0°15'56 2°**£**04'04 -11521 Nov 18 j 11:36 -11515 Jun 14 j 15:35 0°**2**04'08 -0°13'04 behind sun begin 8° m 14'44 opposition 8° m 14'49 behind sun end -11521 Nov 18 j 12:10 min. Earth dist. -11515 Jun 13 j 23:41 0°**2**05'46 19.02010 AU -11521 Nov 19 j 13:56 max. Earth dist. 8° mg 18'27 21.13510 AU -11515 Jun 16 j 07:53 30°R M 9°**m**09'49 -11515 Aug 28 j 06:17 28° **m** 07'12 morning rise -11521 Dec 04 j 20:11 direct 0∘**⊽** retrograde -11520 Mar 08 j 18:05 12° Mp 16'12 -11515 Nov 05 j 05:25 -11520 May 25 j 15:44 10° Mp 16'32 0°14'31 -11515 Nov 25 j 23:59 opposition evening set 1°**£**05'25 -11520 May 24 j 17:07 10° Mp 18'49 19.12984 AU min. Earth dist. -11520 Aug 08 j 10:01 8° Mp 20'24 -11515 Dec 12 j 10:16 2°**2**00'49 -0°14'17 direct conjunction -11520 Nov 05 j 13:33 11° Mp 16'41 evening set minimum elong -11515 Dec 12 j 10:16 2°**♀**00'49 0°14'17 behind sun begin -11515 Dec 12 j 07:16 2°**£**00′25 conjunction -11520 Nov 21 j 18:33 12° Mp 11'14 0°10'46 behind sun end -11515 Dec 12 j 13:16 2°**₽**01'14 minimum elong -11520 Nov 21 j 18:34 12° mp 11'14 0°11'00 max. Earth dist. -11515 Dec 13 j 02:17 2°**2**03'05 21.00346 AU behind sun begin -11520 Nov 21 j 13:34 12° m 10'33 morning rise -11515 Dec 29 j 00:29 2°**£**56'47 behind sun end -11520 Nov 21 j 23:33 12° m 11'55 -11514 Apr 02 j 18:16 6°**£**04'02 retrograde

-11514 Jun 18 j 20:38

opposition

4°**£**04'04 -0°18'33

max. Earth dist.

-11520 Nov 22 j 20:01 12° Mp 14'50 21.12294 AU

Planetary Pheno	omena of Uranus fro	om -11900	through -1139	8 (UT), Astrodier	nst AG 18-Feb-2025	14:23,	page 32
Attention, astronom	ical year style is used: The	e year -11514	in astronomical co	unting style is the yea	r 11515 BCE in historica	l counting sty	le.
min. Earth dist.	-11514 Jun 18 j 07:49	4° ₽ 05'23	18.98585 AU	conjunction	-11507 Jan 10 j 21:23	0°M30'35	-0°46'24
direct	-11514 Sep 01 j 09:35	2° ഫ 06'55		minimum elong	-11507 Jan 10 j 21:22	0°M30'35	0°46'42
evening set	-11514 Nov 30 j 08:45	5° ≙ 05'48		max. Earth dist.	-11507 Jan 10 j 19:44	0°M30'21	20.65038 AU
	·			morning rise	-11507 Jan 27 j 16:02	1°M28'02	
conjunction	-11514 Dec 16 j 20:09	6° ≏ 01'25	-0°19'14	retrograde	-11507 May 01 j 20:40	4° M 37'54	
minimum elong	-11514 Dec 16 j 20:09	6° ₽ 01'25	0°19'15	opposition	-11507 Jul 16 j 15:53		-0°53'37
max. Earth dist.	-11514 Dec 17 j 10:28	6° ჲ 03′27	20.96696 AU	min. Earth dist.	-11507 Jul 16 j 17:41		18.61832 AU
morning rise	-11513 Jan 02 j 11:05	6° ₽ 57'34		direct	-11507 Sep 29 j 07:49		
retrograde	-11513 Apr 07 j 04:44	10° ≏ 05'07		evening set	-11507 Dec 29 j 19:02		
opposition	-11513 Jun 23 j 01:52	8° ჲ 05'06	-0°23'59	Č	,		
min. Earth dist.	-11513 Jun 22 j 14:13		18.94688 AU	conjunction	-11506 Jan 15 j 12:08	4° ነቤ 40'07	-0°50'17
direct	-11513 Sep 05 j 15:34	6° ₽ 07'45		minimum elong	-11506 Jan 15 j 12:07		
evening set	-11513 Dec 04 j 18:13	9° ₽ 07'20		max. Earth dist.	-11506 Jan 15 j 07:48		20.58572 AU
		·		morning rise	-11506 Feb 01 j 07:05		
conjunction	-11513 Dec 21 j 06:27	10° ₽ 03'11	-0°24'05	retrograde	-11506 May 06 j 07:36		
minimum elong	-11513 Dec 21 j 06:27			opposition	-11506 Jul 20 j 23:37		-0°57'49
max. Earth dist.	-11513 Dec 21 j 17:41			min. Earth dist.	-11506 Jul 21 j 04:22		18.55288 AU
morning rise	-11512 Jan 06 j 22:14		20.72540 110	direct	-11506 Oct 03 j 14:55		10.33200710
retrograde	-11512 Jan 00 j 22:14 -11512 Apr 10 j 13:16			evening set	-11505 Jan 03 j 09:53		
opposition	-11512 Jun 26 j 07:34		0°20'20	evening set	-11303 Jan 03 J 09.33	/ 1163333	
min. Earth dist.				agniumation	11505 Ion 20:02:27	00 m 51!14	0052157
	-11512 Jun 25 j 23:10		18.90293 AU	conjunction	-11505 Jan 20 j 03:37		
direct	-11512 Sep 08 j 19:58			minimum elong	-11505 Jan 20 j 03:36		
evening set	-11512 Dec 08 j 04:27	13°4410'04		max. Earth dist.	-11505 Jan 19 j 21:01		20.51960 AU
	11512 D 24:17.46	1.40.0.0(100	0000151	morning rise	-11505 Feb 05 j 22:52		
conjunction	-11512 Dec 24 j 17:46			retrograde	-11505 May 10 j 22:09		
minimum elong	-11512 Dec 24 j 17:46			opposition	-11505 Jul 25 j 07:51		
max. Earth dist.	-11512 Dec 25 j 02:50		20.87910 AU	min. Earth dist.	-11505 Jul 25 j 13:34		18.48618 AU
morning rise	-11511 Jan 10 j 10:12			direct	-11505 Oct 08 j 01:24		
retrograde	-11511 Apr 15 j 00:25			evening set	-11504 Jan 08 j 01:34	12° 11 L06'07	
opposition	-11511 Jun 30 j 13:17						
min. Earth dist.	-11511 Jun 30 j 06:15		18.85401 AU	conjunction	-11504 Jan 24 j 19:48		
direct	-11511 Sep 13 j 02:50			minimum elong	-11504 Jan 24 j 19:48		
evening set	-11511 Dec 12 j 15:35	17° ≏ 14'01		max. Earth dist.	-11504 Jan 24 j 10:54	13°ML02'47	20.45228 AU
				morning rise	-11504 Feb 10 j 15:14	14°Ml02'15	
conjunction	-11511 Dec 29 j 05:42	18° ≏ 10′21	-0°33'29		-11504 Feb 28 j 07:01	15° M ₊	
minimum elong	-11511 Dec 29 j 05:41			retrograde	-11504 May 14 j 10:16	17° M ₊13'40	
max. Earth dist.	-11511 Dec 29 j 11:27	18° ≏ 11'10	20.82774 AU	opposition	-11504 Jul 28 j 16:51	15°M12'33	-1°05'23
morning rise	-11510 Jan 14 j 22:50	19° ₽ 07'07		min. Earth dist.	-11504 Jul 29 j 01:22	15°M11'38	18.41852 AU
retrograde	-11510 Apr 19 j 09:48	22° ₽ 15'44			-11504 Aug 02 j 15:05	15°RM₊	
opposition	-11510 Jul 04 j 19:32	20° ₽ 15′26	-0°39'36	direct	-11504 Oct 11 j 09:43	13°M11'46	
min. Earth dist.	-11510 Jul 04 j 15:49	20° ≙ 15'49	18.80038 AU		-11504 Dec 17 j 14:17	15° M ₊	
direct	-11510 Sep 17 j 08:26	18° ≏ 17′07		evening set	-11503 Jan 11 j 18:19	16°M20'32	
evening set	-11510 Dec 17 j 03:12	21° ≏ 19'12					
				conjunction	-11503 Jan 28 j 13:02	17°M18'46	-1°00'27
conjunction	-11509 Jan 02 j 18:12	22° ≏ 15'47	-0°37'58	minimum elong	-11503 Jan 28 j 13:01	17° M 18'46	1°00'53
minimum elong	-11509 Jan 02 j 18:12	22° ≙ 15'47	0°38'12	max. Earth dist.	-11503 Jan 28 j 01:37	17°M17'06	20.38433 AU
max. Earth dist.	-11509 Jan 02 j 21:45	22° ♀ 16'17	20.77206 AU	morning rise	-11503 Feb 14 j 08:38	18° ጤ 17'11	
morning rise	-11509 Jan 19 j 11:52			retrograde	-11503 May 19 j 02:04		
retrograde	-11509 Apr 23 j 21:28			opposition	-11503 Aug 02 j 02:16	19°M27'59	-1°08'41
opposition	-11509 Jul 09 j 01:54		-0°44'29	min. Earth dist.	-11503 Aug 02 j 11:56		
min. Earth dist.	-11509 Jul 08 j 23:26			direct	-11503 Oct 15 j 21:54		
direct	-11509 Sep 21 j 16:18			evening set	-11502 Jan 16 j 12:07		
evening set	-11509 Dec 21 j 15:41						
				conjunction	-11502 Feb 02 j 07:13	21°M.35'27	-1°03'15
conjunction	-11508 Jan 07 j 07:24	26° ₽ 22'30	-0°42'17	minimum elong	-11502 Feb 02 j 07:12		
minimum elong	-11508 Jan 07 j 07:23			max. Earth dist.	-11502 Feb 01 j 17:41		
max. Earth dist.	-11508 Jan 07 j 07:59			morning rise	-11502 Feb 19 j 02:45		20.31370110
morning rise	-11508 Jan 24 j 01:35		20.71202710	retrograde	-11502 May 23 j 15:32		
morning Hac	-11508 Mar 24 j 01:09			opposition	-11502 May 25 j 13.32 -11502 Aug 06 j 12:42		-1°11'38
retrograde	-11508 Mar 24 j 01:09 -11508 Apr 27 j 07:40			min. Earth dist.	-11502 Aug 00 j 12.42 -11502 Aug 07 j 01:09		
renograde							10.2014/ AU
onnosition	-11508 May 31 j 21:58		0040110	direct	-11502 Oct 20 j 08:03		
opposition	-11508 Jul 12 j 08:43			evening set	-11501 Jan 21 j 06:44		20.24669 417
min. Earth dist.	-11508 Jul 12 j 09:23		18.0818U AU	max. Earth dist.	-11501 Feb 06 j 09:50	23°11631'49	20.24008 AU
direct	-11508 Sep 24 j 22:38			aamin	11501 E-L 07:00 00	250m 5412	1005142
evening set	-11508 Dec 25 j 04:51			conjunction	-11501 Feb 07 j 02:03		
	-11507 Jan 02 j 00:20	いずル		minimum elong	-11501 Feb 07 j 02:02		1~06.14
				morning rise	-11501 Feb 23 j 21:37	20°11633'06	

Planetary Phenomena of Uranus from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11501 in astronomical counting style is the year 11502 BCE in historical counting style. -11501 May 12 j 19:14 0° ₹ evening set -11494 Feb 22 j 19:51 26° × 02'56 -11501 May 28 j 08:28 0° ₹ 06'20 max. Earth dist. -11494 Mar 10 j 08:14 26° ₹758'56 19.75390 AU retrograde -11501 Jun 12 j 19:45 30°RM opposition -11501 Aug 10 j 23:45 28°M 05'03 -1°14'12 -11494 Mar 11 j 15:02 27° ₹ 03'36 -1°11'54 conjunction -11501 Aug 11 j 13:29 28°M 03'35 18.21222 AU -11494 Mar 11 j 15:02 27° ₹ 03'36 1°12'33 min. Earth dist. minimum elong -11501 Oct 24 j 22:08 26°M03'09 -11494 Mar 28 j 07:44 28°**尽** 03'59 direct morning rise -11500 Jan 26 j 02:27 29°M 16'01 evening set -11494 May 03 j 12:50 0°る -11500 Feb 07 j 15:38 0° **尽** retrograde -11494 Jun 28 j 13:57 1°る21'25 -11494 Aug 25 j 10:10 30°R ⊀ conjunction -11500 Feb 11 j 22:03 0° ₹ 15'08 -1°07'50 opposition -11494 Sep 10 j 05:31 29° ₹ 19'33 -1°19'41 minimum elong -11500 Feb 11 j 22:03 0°**∡**15′08 1°08′22 min. Earth dist. -11494 Sep 11 j 08:08 29° ₹ 16'39 17.72115 AU -11500 Feb 11 j 03:55 0°**∡**12'27 20.17698 AU -11494 Nov 24 j 20:25 27° **₹** 14'45 max. Earth dist. direct -11500 Feb 28 j 17:22 -11493 Feb 17 j 04:31 morning rise 1°**∡**°14'15 0°궁 retrograde -11500 May 31 j 23:16 4°**҂**28'07 evening set -11493 Feb 27 j 21:13 0°る37'19 opposition -11500 Aug 14 j 11:41 2°**∡**126'47 -1°16'22 max. Earth dist. -11493 Mar 15 j 06:38 1°る33'09 19.68780 AU min. Earth dist. -11500 Aug 15 j 04:14 2°**尽**25'01 18.14228 AU direct -11500 Oct 28 j 10:40 0°**х** 24'31 conjunction -11493 Mar 16 j 15:49 1°る38'12 -1°11'03 evening set -11499 Jan 29 j 23:18 3° **₹** 38'49 minimum elong -11493 Mar 16 j 15:49 1°る38'12 1°11'41 morning rise -11493 Apr 02 j 07:59 2°る38'45 conjunction -11499 Feb 15 j 18:57 4° ₹38'12 -1°09'33 retrograde -11493 Jul 03 j 10:28 5°₹56'45 minimum elong -11499 Feb 15 j 18:57 4°**∡**³38'12 1°10'08 opposition -11493 Sep 14 j 23:26 3° 중54'47 -1°18'30 max. Earth dist. -11499 Feb 14 j 21:37 4° ₹35'02 20.10670 AU min. Earth dist. -11493 Sep 16 j 03:11 3° **궁**51'46 17.65673 AU morning rise -11499 Mar 04 j 14:11 5°**х** 37'33 direct -11493 Nov 29 j 17:07 1°る49'34 retrograde -11499 Jun 05 i 17:16 8°**х** 52′03 evening set -11492 Mar 03 i 23:09 5°る13'27 opposition -11499 Aug 19 j 00:30 6° ₹ 50'40 -1°18'06 max. Earth dist. -11492 Mar 19 j 08:26 6° 중09'28 19.62504 AU min. Earth dist. -11499 Aug 19 j 18:31 6° ₹ 48'43 18.07169 AU -11499 Nov 02 j 02:35 -11492 Mar 20 j 17:28 6°る14'32 -1°09'43 direct 4° 2747'59 conjunction evening set -11498 Feb 03 j 20:58 8° ₹03'42 -11492 Mar 20 j 17:28 6°る14'32 1°10'22 minimum elong -11492 Apr 06 j 08:44 7°る15'15 morning rise -11498 Feb 20 j 16:46 9° ₹03'22 -1°10'53 -11492 Jul 07 j 07:51 10°♂33'45 conjunction retrograde -11498 Feb 20 j 16:45 9° ₹03'22 1°11'28 -11492 Sep 18 j 18:11 8° 중31'44 -1°16'48 minimum elong opposition -11498 Feb 19 j 17:45 8°**尽** 59'57 20.03560 AU -11492 Sep 19 j 22:33 8°중28'39 17.59587 AU max. Earth dist. min. Earth dist. -11498 Mar 09 j 11:29 10° **₹**02'57 -11492 Dec 03 j 14:29 6°**궁**26'11 direct morning rise -11498 Jun 10 j 09:50 13° ₹ 18'04 -11491 Mar 09 j 01:55 9°**궁**51'17 retrograde evening set -11498 Aug 23 j 14:17 11°**尽** 16'36 -1°19'23 -11491 Mar 24 j 08:34 10°♂47'11 19.56626 AU opposition max. Earth dist. -11498 Aug 24 j 10:48 11°**尽** 14'23 18.00040 AU min. Earth dist. -11491 Mar 25 j 19:30 10°₹52'34 -1°07'57 direct -11498 Nov 06 j 18:01 9° ₹ 13'31 conjunction evening set -11497 Feb 08 j 19:36 12° ₹30'39 minimum elong -11491 Mar 25 j 19:30 10°**궁**52'34 1°08'35 morning rise -11491 Apr 11 j 10:01 11°₹53'25 conjunction -11497 Feb 25 j 15:13 13° ₹30'35 -1°11'48 retrograde -11491 Jul 12 j 05:55 15°**⋜**12'28 minimum elong -11497 Feb 25 j 15:13 13°**х** 30'35 1°12'25 opposition -11491 Sep 23 j 13:58 13°쥥10'23 -1°14'36 max. Earth dist. -11497 Feb 24 j 12:57 13°**₹**26'39 19.96421 AU min. Earth dist. -11491 Sep 24 j 19:17 13°♂07'12 17.53942 AU morning rise -11497 Mar 14 j 09:43 14° ₹30'22 -11491 Dec 08 j 12:20 11°**⋜**04'32 direct -11497 Jun 15 j 04:25 17° **₹** 46'06 -11490 Mar 14 j 04:53 14°₹30'50 retrograde evening set -11497 Aug 28 j 04:46 15°**х** 44'32 -1°20'12 max. Earth dist. -11490 Mar 29 j 11:34 15° ₹ 26'57 19.51209 AU opposition -11497 Aug 29 j 02:43 15° ₹ 42'10 17.92910 AU min. Earth dist. -11490 Mar 30 j 21:56 15° ₹32'16 -1°05'43 direct -11497 Nov 11 j 11:28 13° ₹ 41'01 conjunction -11490 Mar 30 j 21:56 15° ₹32'16 1°06'21 evening set -11496 Feb 13 j 18:49 16° ₹ 59'32 minimum elong max. Earth dist. -11496 Feb 29 j 11:08 17° ₹ 55'37 19.89295 AU morning rise -11490 Apr 16 j 11:27 16°る33'15 retrograde -11490 Jul 17 i 04:51 19° ₹52'48 conjunction -11496 Mar 01 i 14:30 17° ₹759'44 -1°12'17 opposition -11490 Sep 28 j 10:37 17° ₹50'44 -1°11'54 -11496 Mar 01 i 14:30 17° ₹759'44 1°12'54 min. Earth dist. -11490 Sep 29 j 15:48 17° ₹47'32 17.48760 AU minimum elong -11496 Mar 18 j 08:24 18° ₹ 59'44 direct -11490 Dec 13 j 11:21 15°る44'38 morning rise retrograde -11496 Jun 18 j 22:45 22° ₹ 16'02 evening set -11489 Mar 19 j 08:33 19°**궁**12'03 opposition -11496 Aug 31 j 20:13 20° ₹ 14'23 -1°20'31 max. Earth dist. -11489 Apr 03 j 13:15 20° **전**08'07 19.46280 AU -11496 Sep 01 j 20:11 20° \nearrow 11'47 17.85817 AU min. Earth dist. direct -11496 Nov 15 j 05:20 18°**尽** 10'26 conjunction -11489 Apr 05 j 00:46 20°♂13'38 -1°03'03 -11495 Feb 17 j 19:05 21° ₹30'20 -11489 Apr 05 j 00:46 20°♂13'38 1°03'40 evening set minimum elong -11495 Mar 05 j 08:00 22° ₹26'10 19.82258 AU -11489 Apr 21 j 13:23 21°중14'43 max. Earth dist. morning rise -11489 Jul 22 j 03:49 24°₹34'46 retrograde -11495 Mar 06 j 14:23 22° ₹30'46 -1°12'19 -11489 Oct 03 j 08:04 22°♂32'43 -1°08'41 conjunction opposition minimum elong -11495 Mar 06 j 14:23 22° ₹30'46 1°12'57 min. Earth dist. -11489 Oct 04 j 14:14 22°중29'25 17.44091 AU morning rise -11495 Mar 23 j 07:53 23° ₹ 30'58 direct -11489 Dec 18 j 10:04 20°중26'25 retrograde -11495 Jun 23 j 18:05 26° ₹ 47'50 evening set -11488 Mar 23 j 12:32 23°♂54'54 opposition -11495 Sep 05 j 12:20 24° ₹ 46'04 -1°20'21 max. Earth dist. -11488 Apr 07 j 17:03 24°궁51'09 19.41862 AU min. Earth dist. -11495 Sep 06 j 13:40 24° ₹ 43'19 17.78863 AU -11495 Nov 20 j 00:37 22°**х** 41'40 -11488 Apr 09 j 04:02 24° ₹56'37 -0°59'56 direct conjunction

Planetary Phenomena of Uranus from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11488 in astronomical counting style is the year 11489 BCE in historical counting style. -11488 Apr 09 j 04:03 24°る56'37 1°00'31 morning rise -11482 May 25 j 07:12 24°≈40'27 minimum elong -11488 Apr 25 j 15:39 25°る57'46 -11482 Aug 24 j 06:36 28°≈02'46 morning rise retrograde -11488 Jul 26 j 04:03 29°る18'17 -11482 Nov 05 j 13:16 26°≈00'52 -0°34'04 retrograde opposition -11482 Nov 06 j 17:05 25°≈57'51 17.24566 AU -11488 Oct 07 j 06:26 27°₹16'17 -1°05'00 min. Earth dist. opposition -11488 Oct 08 j 12:05 27°중13'02 17.39905 AU -11481 Jan 21 j 09:49 23°≈54'00 min. Earth dist. direct -11488 Dec 22 j 11:28 25° ₹ 09'51 direct evening set -11481 Apr 27 j 21:51 27°≈26'37 evening set -11487 Mar 28 j 17:02 28°중39'18 max. Earth dist. -11481 May 12 j 23:07 28°≈23'28 19.24041 AU max. Earth dist. -11487 Apr 12 j 20:09 29°중35'33 19.37916 AU conjunction -11481 May 14 j 05:52 28°≈28'21 -0°27'40 conjunction -11487 Apr 14 j 07:36 29°₹41'06 -0°56'23 minimum elong -11481 May 14 j 05:52 28°≈28'21 0°28'02 minimum elong -11487 Apr 14 j 07:36 29°₹41'06 0°56'58 morning rise -11481 May 30 j 09:12 29°≈29'26 -11487 Apr 19 j 08:35 -11481 Jun 07 j 17:36 0°≈ 0°**)** -11487 Apr 30 j 18:04 morning rise 0°≈42'19 retrograde -11481 Aug 29 j 06:54 2°**)** 51'49 retrograde -11487 Jul 31 j 03:10 4°≈03'16 opposition -11481 Nov 10 j 16:18 0°¥49'55 -0°27'49 opposition -11487 Oct 12 j 05:47 2°≈01'19 -1°00'50 min. Earth dist. -11481 Nov 11 j 19:53 0°**)** 46'56 17.23764 AU min. Earth dist. -11487 Oct 13 j 12:28 1°≈57'58 17.36202 AU -11481 Nov 30 j 09:30 30°R≈ -11487 Dec 13 j 11:38 30°R궁 direct -11480 Jan 26 j 13:59 28°≈43'03 direct -11487 Dec 27 j 12:01 29°**궁**54'47 -11480 Mar 21 j 15:55 0°**₩** -11486 Jan 10 j 13:43 0°**≈** evening set -11480 May 02 j 02:04 2°**)** 15'42 evening set -11486 Apr 02 j 21:47 3°≈25'05 max. Earth dist. -11480 May 17 j 02:30 3°**¥**12'32 19.23547 AU max. Earth dist. -11486 Apr 18 j 00:17 4°≈21'26 19.34449 AU conjunction -11480 May 18 i 08:41 3°\(\)\(\)\(17'20\)\(\)\(-0^\cent{21'59}\) conjunction -11486 Apr 19 j 11:22 4°≈26'56 -0°52'26 minimum elong -11480 May 18 j 08:41 3°**¥**17'20 0°22'18 minimum elong -11486 Apr 19 j 11:22 4°≈26'57 0°52'59 morning rise -11480 Jun 03 j 10:59 4°**)**(18'19 morning rise -11486 May 05 j 20:47 5°≈28'12 retrograde -11480 Sep 02 j 08:36 7°**){** 40'44 -11486 Aug 05 j 04:06 8°≈49'32 -11480 Nov 14 j 19:42 5° **H** 38'48 -0°21'23 retrograde opposition -11486 Oct 17 j 05:54 6°≈47'37 -0°56'13 min. Earth dist. -11480 Nov 15 j 21:09 5° ¥ 36'03 17.23572 AU opposition -11486 Oct 18 j 11:36 6°≈44'23 17.32955 AU -11479 Jan 30 j 19:33 3°**)** €31'57 min. Earth dist. direct -11485 Jan 01 j 15:49 evening set -11479 May 07 j 05:35 direct 4°≈41'00 7°**₩**04'31 evening set -11485 Apr 08 j 02:35 max. Earth dist. -11479 May 22 j 08:00 8° **H** 01'42 19.23673 AU 8°≈12'02 -11485 Apr 23 j 04:28 9°≈08'28 19.31424 AU max. Earth dist. -11479 May 23 j 11:04 8° \(\mathcal{H}\) 06'01 -0°16'09 conjunction -11485 Apr 24 j 15:11 9°≈13'56 -0°48'06 -11479 May 23 j 11:04 8°**米**06'01 0°16'26 conjunction minimum elong -11479 Jun 08 j 11:58 9° **€** 06'51 -11485 Apr 24 j 15:12 9°≈13'56 0°48'37 minimum elong morning rise -11479 Sep 07 j 09:17 12°**米**29'16 -11485 May 10 j 23:23 10°≈15'12 morning rise retrograde -11485 Aug 10 j 03:30 13°≈36'52 -11479 Nov 19 j 23:32 10° **★** 27'20 -0°14'48 retrograde opposition -11485 Oct 22 j 06:53 11°≈35'00 -0°51'12 -11479 Nov 20 j 23:47 10° **★**24'43 17.24017 AU opposition min. Earth dist. min. Earth dist. -11485 Oct 23 j 13:27 11°≈31'40 17.30155 AU direct -11478 Feb 05 j 00:33 8° **★**20'34 direct -11484 Jan 06 j 18:22 9°≈28'18 evening set -11478 May 12 j 08:46 11° ¥ 52'55 evening set -11484 Apr 12 j 07:40 12°≈59'56 max. Earth dist. -11478 May 27 j 10:50 12° **€** 50'06 19.24468 AU max. Earth dist. -11484 Apr 27 j 08:28 13°≈56'22 19.28854 AU -11478 May 28 j 12:46 12° **€** 54'14 -0°10'13 conjunction -11484 Apr 28 j 19:06 14°≈01'49 -0°43'25 -11478 May 28 j 12:47 12° **€** 54'14 0°10'27 conjunction minimum elong -11484 Apr 28 j 19:06 14°≈01'49 0°43'55 behind sun begin -11478 May 28 j 07:33 12°**升**53'25 minimum elong -11484 May 14 j 06:14 15°≈ behind sun end -11478 May 28 j 18:00 12° **∺** 55'03 -11478 Jun 13 j 12:38 13°\cdot\(54'56\) morning rise -11484 May 15 j 02:13 15°≈03'05 morning rise -11478 Sep 12 j 10:15 17°\mathbf{H} 17'19 retrograde -11484 Aug 14 i 04:52 18°≈25'01 retrograde -11478 Nov 25 j 03:22 15° \(\) 15'22 -0°08'07 opposition -11484 Oct 26 j 08:18 16°≈23'09 -0°45'48 opposition min. Earth dist. -11484 Oct 27 j 13:32 16°≈19'58 17.27801 AU min. Earth dist. -11478 Nov 26 j 01:14 15° ** 13'01 17.25158 AU -11484 Nov 30 i 02:47 15°R≈ direct -11477 Feb 10 j 05:20 13° **★** 08'45 direct -11483 Jan 11 i 00:08 14°≈16'23 -11477 May 17 j 11:09 16° **X** 40'45 evening set -11483 Feb 20 j 23:34 15°≈ -11483 Apr 17 j 12:40 17°≈48'30 conjunction -11477 Jun 02 j 14:02 17° **X** 41'54 -0°04'15 evening set -11477 Jun 02 j 14:02 17°**米**41'54 0°04'26 minimum elong conjunction -11483 May 03 j 23:03 18°≈50'22 -0°38'25 behind sun begin -11477 Jun 02 j 07:31 17°**)** 40'53 -11477 Jun 02 j 20:33 17°**¥**42'54 minimum elong -11483 May 03 j 23:04 18°≈50'22 0°38'52 behind sun end max. Earth dist. -11483 May 02 j 13:42 18°≈45'06 19.26735 AU max. Earth dist. -11477 Jun 01 j 15:34 17° **X** 38'19 19.25958 AU -11483 May 20 j 04:49 19°≈51'35 -11477 Jun 18 j 12:36 18° ¥ 42'25 morning rise morning rise -11483 Aug 19 j 04:39 23°≈13'44 -11477 Sep 17 j 11:09 22° **★** 04'42 retrograde retrograde -11483 Oct 31 j 10:38 21°≈11'52 -0°40'05 -11477 Nov 30 j 07:26 20°**₭**02'49 -0°01'24 opposition opposition -11477 Dec 01 j 03:17 20° ₭ 00'41 17.26980 AU min. Earth dist. -11483 Nov 01 j 16:16 21°≈08'39 17.25923 AU min. Earth dist. direct -11482 Jan 16 j 03:44 19°≈05'03 asc. node -11476 Feb 13 j 05:52 17° ★ 56'33 evening set -11482 Apr 22 j 17:25 22°≈37'28 direct -11476 Feb 15 j 10:59 17° **★** 56'25 max. Earth dist. -11482 May 07 j 17:27 23°≈34'03 19.25122 AU evening set -11476 May 21 j 13:08 21°**米**27'59 -11482 May 09 j 02:29 23°≈39'17 -0°33'09 -11476 Jun 06 j 14:33 22° **€** 28'54 0°01'54 conjunction conjunction -11482 May 09 j 02:29 23°≈39'17 0°33'35 -11476 Jun 06 j 14:33 22° **€** 28'54 0°01'46 minimum elong minimum elong

Planetary Pheno	omena of Uranus fro	om -11900	through -1139	8 (UT). Astrodier	nst AG 18-Feb-202	5 14:23.	page 35
•	ical year style is used: The		_	· //		,	
behind sun begin	-11476 Jun 06 j 07:56	•		conjunction	-11470 Jul 05 j 03:4		
behind sun end	-11476 Jun 06 j 21:11			minimum elong	-11470 Jul 05 j 03:4		0°36'09
max. Earth dist.	-11476 Jun 05 j 17:38		19.28132 AU	max. Earth dist.	-11470 Jul 04 j 23:0		19.53007 AU
morning rise	-11476 Jun 22 j 12:04	23°) 29′14		morning rise	-11470 Jul 20 j 19:2:	5 21° Υ 50'11	
retrograde	-11476 Sep 21 j 11:00	26° ¥ 51′25		retrograde	-11470 Oct 20 j 05:10		
opposition	-11476 Dec 04 j 11:30	24°) 49′36	0°05'19	opposition	-11469 Jan 03 j 09:53	3 23° Y 09'37	0°42'50
min. Earth dist.	-11476 Dec 05 j 05:04	24°) (47'43	17.29493 AU	min. Earth dist.	-11469 Jan 03 j 13:3	23° Υ 09'14	17.55738 AU
direct	-11475 Feb 19 j 15:15	22°) 43′28		direct	-11469 Mar 21 j 15:1:	3 21° Υ 05'44	
evening set	-11475 May 26 j 14:20	26°) 14'30		evening set	-11469 Jun 24 j 05:50	5 24° Υ 31'15	
conjunction	-11475 Jun 11 j 14:36	27°) 15′11	0°07'53	conjunction	-11469 Jul 09 j 23:13	3 25° Υ 30'12	0°40'55
minimum elong	-11475 Jun 11 j 14:36	27° ₩ 15'11	0°07'49	minimum elong	-11469 Jul 09 j 23:12		
behind sun begin	-11475 Jun 11 j 08:38	27°) 1 4′16		max. Earth dist.	-11469 Jul 09 j 20:3	7 25° Υ 29'48	19.58533 AU
behind sun end	-11475 Jun 11 j 20:34	27° ∺ 16′07		morning rise	-11469 Jul 25 j 14:12	2 26° Y 28'50	
max. Earth dist.	-11475 Jun 10 j 21:13		19.30982 AU	retrograde	-11469 Oct 25 j 03:49		
morning rise	-11475 Jun 27 j 10:56	28° ∺ 15'18		opposition	-11468 Jan 08 j 12:1:		0°48'11
	-11475 Jul 28 j 00:49	0° Y		min. Earth dist.	-11468 Jan 08 j 12:32	2 27° Y 47′52	17.61394 AU
retrograde	-11475 Sep 26 j 11:57	1° Y 37'20		direct	-11468 Mar 25 j 17:4	25° ℃ 44'22	
	-11475 Nov 30 j 02:06			evening set	-11468 Jun 28 j 01:20	29° Υ 08'38	
opposition	-11475 Dec 09 j 15:43				-11468 Jul 11 j 19:2:	8 0° 8	
min. Earth dist.	-11475 Dec 10 j 06:38		17.32642 AU				
direct	-11474 Feb 24 j 21:18	27° ∺ 29'52		conjunction	-11468 Jul 13 j 17:4:	2 0° 8 07'17	0°45'35
	-11474 May 14 j 19:41	0 ° $\mathbf{\Upsilon}$		minimum elong	-11468 Jul 13 j 17:4:	2 0° 8 07'17	0°45'53
evening set	-11474 May 31 j 14:51	1° Y 00'13		max. Earth dist.	-11468 Jul 13 j 18:09	0° 8 07'21	19.64315 AU
				morning rise	-11468 Jul 29 j 07:5	1° 8 05'38	
conjunction	-11474 Jun 16 j 13:46	2° Y 00′39	0°13'48	retrograde	-11468 Oct 28 j 23:3:	4° 8 25'15	
minimum elong	-11474 Jun 16 j 13:46	2° Y 00′39	0°13'46	opposition	-11467 Jan 12 j 14:1:	2° 8 24'14	0°53'12
behind sun begin	-11474 Jun 16 j 10:11	2° Y 00′05		min. Earth dist.	-11467 Jan 12 j 13:04	2° 8 24'22	17.67312 AU
behind sun end	-11474 Jun 16 j 17:21	2° Y 01′12		direct	-11467 Mar 30 j 18:0	0° 8 21'04	
max. Earth dist.	-11474 Jun 15 j 22:24	1° Y 58'13	19.34439 AU	evening set	-11467 Jul 02 j 19:4	3° 8 44'02	
morning rise	-11474 Jul 02 j 09:08	3° Y 00′33					
retrograde	-11474 Oct 01 j 10:45	6° Y 22'24		conjunction	-11467 Jul 18 j 11:14	4° 8 42'21	0°49'55
opposition	-11474 Dec 14 j 19:50	4° Y 20'49	0°18'33	minimum elong	-11467 Jul 18 j 11:14	4° 8 42'21	0°50'15
min. Earth dist.	-11474 Dec 15 j 08:51	4° Ƴ 19'26	17.36385 AU	max. Earth dist.	-11467 Jul 18 j 13:4	4° 8 42'44	19.70369 AU
direct	-11473 Mar 02 j 00:59	2° Y 15′24		morning rise	-11467 Aug 03 j 01:04	5° 8 40'26	
evening set	-11473 Jun 05 j 14:41	5° Ƴ 45'00		retrograde	-11467 Nov 02 j 21:1:		
				opposition	-11466 Jan 17 j 15:2	6° 8 58'31	0°57'49
conjunction	-11473 Jun 21 j 12:26	6° Ƴ 45'10		min. Earth dist.	-11466 Jan 17 j 10:3:	6° 8 59'01	17.73495 AU
minimum elong	-11473 Jun 21 j 12:26	6° Ƴ 45'10		direct	-11466 Apr 04 j 18:5	4° 8 55'42	
max. Earth dist.	-11473 Jun 21 j 00:09	6° Ƴ 43'13	19.38447 AU	evening set	-11466 Jul 07 j 13:0	8° 8 17'17	
morning rise	-11473 Jul 07 j 06:45	7° Ƴ 44'50					
retrograde	-11473 Oct 06 j 10:54			conjunction	-11466 Jul 23 j 03:50		
opposition	-11473 Dec 19 j 23:36	9° Ƴ 05'00		minimum elong	-11466 Jul 23 j 03:49		
min. Earth dist.	-11473 Dec 20 j 09:41		17.40623 AU	max. Earth dist.	-11466 Jul 23 j 09:4		19.76673 AU
direct	-11472 Mar 06 j 06:49	6° Ƴ 59'58		morning rise	-11466 Aug 07 j 17:0		
evening set	-11472 Jun 09 j 13:52	10° Y 28'41		retrograde	-11466 Nov 07 j 15:1:		
				opposition	-11465 Jan 22 j 15:5		
conjunction	-11472 Jun 25 j 10:22			min. Earth dist.	-11465 Jan 22 j 09:20		17.79935 AU
minimum elong	-11472 Jun 25 j 10:22			direct	-11465 Apr 09 j 18:10		
max. Earth dist.	-11472 Jun 25 j 00:20		19.42912 AU	evening set	-11465 Jul 12 j 05:20	12° 8 48'23	
morning rise	-11472 Jul 11 j 03:43						
retrograde	-11472 Oct 10 j 08:40			conjunction	-11465 Jul 27 j 19:24		
opposition	-11472 Dec 24 j 03:28			minimum elong	-11465 Jul 27 j 19:24		
min. Earth dist.	-11472 Dec 24 j 11:56		17.45307 AU	max. Earth dist.	-11465 Jul 28 j 03:0		19.83243 AU
direct	-11471 Mar 11 j 09:31			morning rise	-11465 Aug 12 j 08:2:		
evening set	-11471 Jun 14 j 12:03	15° Υ' 11'05			-11465 Aug 16 j 21:3		
				retrograde	-11465 Nov 12 j 11:14		
conjunction	-11471 Jun 30 j 07:25			opposition	-11464 Jan 27 j 15:13		
minimum elong	-11471 Jun 30 j 07:24			min. Earth dist.	-11464 Jan 27 j 05:1		17.86642 AU
max. Earth dist.	-11471 Jun 30 j 00:03		19.47793 AU		-11464 Feb 22 j 04:4:		
morning rise	-11471 Jul 15 j 23:54			direct	-11464 Apr 13 j 17:20		
retrograde	-11471 Oct 15 j 08:14				-11464 Jun 01 j 21:4		
opposition	-11471 Dec 29 j 06:54			evening set	-11464 Jul 15 j 20:4:	5 17° 8 17'18	
min. Earth dist.	-11471 Dec 29 j 12:02		17.50359 AU		111217	10011	100011
direct	-11470 Mar 16 j 13:51			conjunction	-11464 Jul 31 j 10:1:		1°00'46
evening set	-11470 Jun 19 j 09:29	19°'Y'52'00		minimum elong	-11464 Jul 31 j 10:1:		1°01'13
				max. Earth dist.	-11464 Jul 31 j 21:3:	18° 6 16'25	19.900/3 AU

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Earth dist. -11457 Sep 15 ј 09:18 19°**Д**36'00 morning rise -11463 Aug 04 j 23:57 22°841'09 1°03'38 -11457 Dec 17 j 16:07 22° **II**49'14 conjunction retrograde -11463 Aug 04 j 23:57 22°**8**41'09 1°04'07 -11456 Mar 03 j 04:59 20°**Д**51'53 18.45066 AU minimum elong min. Earth dist. -11463 Aug 05 j 13:01 22°**8**43'10 19.97163 AU max. Earth dist. opposition -11456 Mar 04 j 07:00 20°**I**I49'16 1°20'22 morning rise -11463 Aug 20 j 12:31 23°**8**38'09 direct -11456 May 19 j 17:45 18°**Д**50'38 -11463 Nov 20 j 22:20 26°**8**54'54 -11456 Aug 18 j 16:56 21°**Д**58'47 retrograde evening set -11462 Feb 05 j 12:14 24°**8**54'06 1°12'10 opposition min. Earth dist. -11462 Feb 04 j 21:02 24°**8**55'40 18.00816 AU conjunction -11456 Sep 03 j 05:06 22°**Д**54'00 1°12'25 direct -11462 Apr 23 j 12:04 22°852'52 minimum elong -11456 Sep 03 j 05:06 22°**Д**54'00 1°13'03 evening set -11462 Jul 25 j 00:34 26°**8**08'53 max. Earth dist. -11456 Sep 04 j 08:51 22°**Ц**58'09 20.48454 AU morning rise -11456 Sep 18 j 18:50 23°**Д**49'28 conjunction -11462 Aug 09 j 13:10 27°**8**05'38 1°06'06 retrograde -11456 Dec 21 j 04:52 27°**Д**02'06 minimum elong -11462 Aug 09 j 13:09 27°**8**05'38 1°06'36 opposition -11455 Mar 08 j 23:14 25°**耳**02'14 1°20'09 max. Earth dist. -11462 Aug 10 j 05:46 27°**8**08'11 20.04457 AU min. Earth dist. -11455 Mar 07 j 19:54 25°**Д**04'59 18.51898 AU morning rise -11462 Aug 25 j 01:30 28°802'23 direct -11455 May 24 j 08:34 23°**Д**03'58 -11462 Sep 30 i 16:51 0°**Ц** evening set -11455 Aug 23 j 01:16 26° **II** 10'52 retrograde -11462 Nov 25 і 13:26 1°**Д**18'31 -11461 Jan 23 i 20:41 30°R conjunction -11455 Sep 07 j 13:33 27° **I**I 05'53 1°12'04 opposition -11461 Feb 10 j 09:17 29°**8**17'51 1°14'40 minimum elong -11455 Sep 07 j 13:33 27°**I**05'53 1°12'41 min. Earth dist. -11461 Feb 09 j 16:21 29°**8**19'35 18.08193 AU max. Earth dist. -11455 Sep 08 j 17:25 27°**Д**10'02 20.55140 AU -11461 Apr 28 j 07:32 27°**8**17'05 -11455 Sep 23 j 04:02 28°**Д**01'12 direct morning rise -11461 Jul 20 j 12:27 0°**Ⅱ** -11455 Oct 31 j 15:14 0°95 -11461 Jul 29 j 13:14 0°**Д**31'44 -11455 Dec 25 j 17:15 1°513'15 retrograde evening set -11454 Feb 21 j 19:08 30°RII -11461 Aug 14 j 01:23 1°**Д**28'11 1°08'10 min. Earth dist. -11454 Mar 12 j 10:31 29°**Ⅱ**16'16 18.58443 AU conjunction -11461 Aug 14 j 01:22 1°II28'11 1°08'44 minimum elong opposition -11454 Mar 13 j 14:38 29°**Ⅱ**13'26 1°19'31 -11461 Aug 14 j 19:17 1°**Д**30'55 20.11899 AU -11454 May 28 j 20:36 27°**Д**15'28 max. Earth dist. direct -11461 Aug 29 j 13:53 2°**Ⅲ**24'42 -11454 Aug 21 j 04:38 0°ഇ morning rise -11461 Nov 30 j 06:41 5°**Ⅱ**40'15 -11454 Aug 27 j 08:51 retrograde evening set 0°9521'11 -11460 Feb 14 j 09:59 3°**Д**41'43 18.15685 AU min. Earth dist. -11460 Feb 15 j 05:37 3°**I**39'43 1°16'43 -11454 Sep 11 j 21:40 1°516'01 1°11'20 opposition conjunction direct -11460 May 02 j 01:52 1°**Д**39'24 minimum elong -11454 Sep 11 j 21:40 1°516'01 1°11'59 evening set -11460 Aug 02 j 00:52 4°**Д**52'42 max. Earth dist. -11454 Sep 13 j 03:38 1°520'27 20.61523 AU morning rise -11454 Sep 27 j 12:36 2°511'10 conjunction -11460 Aug 17 j 12:57 5°**Ⅱ**48'54 1°09'50 retrograde -11454 Dec 30 j 04:39 5°522'37 -11460 Aug 17 j 12:57 5°**Ⅱ**48'54 1°10'24 min. Earth dist. -11453 Mar 16 j 23:30 3°525'48 18.64669 AU minimum elong max. Earth dist. -11460 Aug 18 j 10:11 5°**Д**52'07 20.19402 AU opposition -11453 Mar 18 j 04:51 3°522'51 1°18'29 -11460 Sep 02 j 01:24 6°**Д**45'10 direct -11453 Jun 02 j 09:22 1°525'09 morning rise -11460 Dec 03 j 20:57 10°**Д**00'08 4°9529'44 retrograde evening set -11453 Aug 31 j 15:54 -11459 Feb 18 j 04:01 8°Д01'56 18.23191 AU min. Earth dist. -11459 Feb 19 i 01:17 7° **II**59'46 1°18'19 opposition conjunction -11453 Sep 16 j 04:59 5°524'23 1°10'14 direct -11459 May 06 j 19:39 5°**Ц**59'55 minimum elong -11453 Sep 16 j 04:59 5°524'23 1°10'52 evening set -11459 Aug 06 j 12:02 9°**I**I11'53 max. Earth dist. -11453 Sep 17 j 10:58 5°\$28'48 20.67604 AU morning rise -11453 Oct 01 i 20:47 6°519'24 conjunction -11459 Aug 21 i 23:49 10° II 07'48 1°11'06 retrograde -11452 Jan 03 j 15:46 9°930'17 -11459 Aug 21 i 23:49 10° \$\mathbb{\Pi}\$07'48 1°11'41 opposition -11452 Mar 21 j 18:27 7°\$30'32 1°17'02 minimum elong -11452 Mar 20 j 12:36 max. Earth dist. -11459 Aug 22 j 21:57 10°**П**11'09 20.26890 AU min. Earth dist. 7°533'32 18.70619 AU -11459 Sep 06 j 12:38 11°**Д**03'51 morning rise direct -11452 Jun 05 j 19:54 5°933'04 -11459 Dec 08 j 12:40 14°**II**18'15 retrograde evening set -11452 Sep 03 j 22:04 8°**9**36'33 opposition -11458 Feb 23 j 20:00 12° II 18'02 1° 19'27 min. Earth dist. -11458 Feb 22 j 20:44 12°**Ц**20'23 18.30654 AU conjunction -11452 Sep 19 j 11:50 9°\$31'03 1°08'47 -11458 May 11 j 11:37 10°**Ⅲ**18'37 minimum elong -11452 Sep 19 j 11:50 9°531'03 1°09'26 direct -11458 Aug 10 j 22:17 13°**Ⅲ**29'16 -11452 Sep 20 j 19:55 9°535'46 20.73414 AU evening set max. Earth dist. -11452 Oct 05 j 04:13 10°525'57 morning rise -11458 Aug 26 j 10:14 14°**I**I24'57 1°11'56 conjunction retrograde -11451 Jan 07 j 02:18 13°€36'17 minimum elong -11458 Aug 26 j 10:14 14°**I**I24'57 1°12'33 min. Earth dist. -11451 Mar 24 j 23:51 11°539'41 18.76296 AU max. Earth dist. -11458 Aug 27 j 11:10 14°**Д**28'43 20.34278 AU opposition -11451 Mar 26 j 07:06 11°536'33 1°15'13 morning rise -11458 Sep 10 j 23:11 15°**Ⅲ**20'48 direct -11451 Jun 10 j 06:40 9°539'19 retrograde -11458 Dec 13 j 02:17 18°**Д**34'36 evening set -11451 Sep 08 j 04:02 12°541'46 -11457 Feb 28 j 13:54 16°**Д**34'31 1°20'08 opposition min. Earth dist. -11457 Feb 27 j 13:15 16°**Д**37'01 18.37961 AU -11451 Sep 23 j 18:13 13°536'08 1°07'00 conjunction

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Earth dist. -11450 Mar 30 j 18:52 15°5541'01 1°13'02 -11444 Oct 21 j 08:41 11° Ω 40'30 0°46'13 opposition conjunction -11444 Oct 21 j 08:41 11° Ω 40'30 0°46'43 direct -11450 Jun 14 j 15:28 13°544'00 minimum elong -11450 Sep 12 j 09:23 16°9545'31 -11444 Oct 22 j 19:19 11° Ω 45'27 21.09250 AU evening set max. Earth dist. morning rise -11444 Nov 06 j 08:52 12°**Ω**35'01 conjunction -11450 Sep 28 j 00:24 17°539'47 1°04'54 -11444 Dec 28 j 17:57 15°**Ω** -11450 Sep 28 j 00:24 17°539'47 minimum elong 1°05'31 retrograde -11443 Feb 09 j 03:53 15° **Ω**42'13 -11450 Sep 29 j 10:13 17°5544'42 20.84280 AU max. Earth dist. -11443 Mar 24 j 12:44 15°RΩ -11450 Oct 13 j 18:29 18°534'28 min. Earth dist. -11443 Apr 27 j 03:02 13° **Ω**46'10 19.10652 AU morning rise retrograde -11449 Jan 15 j 22:29 21°5643'47 opposition -11443 Apr 28 j 10:52 13°**Ω**42'59 min. Earth dist. -11449 Apr 02 j 21:08 19°5047'25 18.86918 AU direct -11443 Jul 12 j 16:39 11°**Ω**47'18 opposition -11449 Apr 04 j 05:50 19°5044'08 1°10'31 evening set -11443 Oct 09 j 17:02 14° **Ω**44'19 direct -11449 Jun 19 j 00:37 17°547'21 -11443 Oct 14 j 09:01 15°**Ω** evening set -11449 Sep 16 j 14:23 20°5548'00 conjunction -11443 Oct 25 j 14:03 15° Ω 38'15 0°42'15 conjunction -11449 Oct 02 j 05:56 21°542'09 1°02'29 minimum elong -11443 Oct 25 j 14:04 15° Ω 38'15 0°42'43 minimum elong -11449 Oct 02 j 05:57 21°542'09 1°03'06 max. Earth dist. -11443 Oct 26 j 22:56 15° Ω 42'57 21.11772 AU max. Earth dist. -11449 Oct 03 j 15:30 21°5047'01 20.89328 AU morning rise -11443 Nov 10 j 15:31 $16^{\circ}\Omega$ 32'48 morning rise -11449 Oct 18 j 01:06 22°536'47 retrograde -11442 Feb 13 j 11:14 19° Ω 39'45 retrograde -11448 Jan 20 j 07:32 25°545'40 min. Earth dist. -11442 May 01 j 11:55 $17^{\circ}\Omega$ 43'31 19.12881 AU min. Earth dist. -11448 Apr 06 j 07:45 23°549'19 18.91835 AU opposition -11442 May 02 j 17:54 $17^{\circ}\Omega$ 40'31 0°44'22 -11448 Apr 07 j 16:16 23°546'04 1°07'39 direct -11442 Jul 16 j 20:21 15° Ω 44'53 opposition -11448 Jun 22 j 07:54 21°549'31 -11442 Oct 13 j 21:21 18° **Ω**41'32 direct evening set evening set -11448 Sep 19 j 19:02 24°5549'21 conjunction -11442 Oct 29 j 19:36 19° Ω 35'31 0°38'05 -11442 Oct 29 j 19:37 19° Ω 35'31 0°38'33 -11448 Oct 05 j 11:33 25°5643'26 0°59'46 minimum elong conjunction -11448 Oct 05 j 11:33 25°543'26 1°00'22 max. Earth dist. -11442 Oct 31 j 04:23 19° Ω 40'11 21.13706 AU minimum elong -11448 Oct 06 j 22:37 25°548'31 20.94098 AU -11442 Nov 14 j 22:02 20°**Ω**30'05 max. Earth dist. morning rise -11448 Oct 21 j 07:31 26°538'00 -11441 Feb 17 j 19:12 23°**Ω**36'49 morning rise retrograde -11441 May 05 j 18:38 21° Ω 40'34 19.14502 AU -11447 Jan 23 j 17:43 29°546'29 min. Earth dist. retrograde -11441 May 07 j 00:27 21° Ω 37'34 0°39'40 -11447 Apr 10 j 16:24 27°550'19 18.96437 AU min. Earth dist. opposition -11447 Apr 12 j 01:52 27°546'58 1°04'28 -11441 Jul 21 j 02:42 19° **Ω**41'57 opposition direct -11447 Jun 26 j 15:57 25°550'39 -11441 Oct 18 j 01:42 22° Ω38'18 direct evening set evening set -11447 Sep 23 j 23:36 28°549'46 conjunction -11441 Nov 03 j 00:51 23° Ω32'19 0°33'45 conjunction -11447 Oct 09 j 16:49 29°543'47 0°56'46 minimum elong -11441 Nov 03 j 00:52 23°**Q**32'19 0°34'10 minimum elong -11447 Oct 09 j 16:49 29°543'47 0°57'22 max. Earth dist. -11441 Nov 04 j 07:41 23° Ω 36'41 21.15036 AU max. Earth dist. -11447 Oct 11 j 03:14 29°5548'45 20.98530 AU morning rise -11441 Nov 19 j 04:35 24°**\O**26'56 -11447 Oct 14 j 09:14 0°**Ω** retrograde -11440 Feb 22 j 02:21 27°**Ω**33'29 -11447 Oct 25 j 13:59 0° **Ω**38'19 min. Earth dist. -11440 May 09 j 02:58 25° Ω 36'58 19.15541 AU morning rise -11446 Jan 28 j 01:47 3°**Ω**46'26 -11440 May 10 j 06:48 25°**Ω**34'10 0°34'47 retrograde opposition -11446 Apr 15 j 02:22 1°Ω50'16 19.00684 AU -11440 Jul 24 j 06:12 23° Ω 38'30 min. Earth dist. direct -11440 Oct 21 j 06:05 26°**Ω**34'38 -11446 Apr 16 j 11:00 $1^{\circ}\Omega$ 47'00 $1^{\circ}00'59$ opposition evening set -11446 Jun 11 j 22:19 30° R 55 -11446 Jun 30 j 21:44 29°\$50'53 -11440 Nov 06 j 06:31 $27^{\circ}\Omega 28'43$ 0°29'16 direct conjunction -11446 Jul 19 i 17:29 $0^{\circ}\Omega$ minimum elong -11440 Nov 06 i 06:32 $27^{\circ}\Omega$ 28'43 $0^{\circ}29'40$ -11446 Sep 28 j 03:56 $2^{\circ}\Omega 49'22$ max. Earth dist. -11440 Nov 07 j 13:11 $27^{\circ}\Omega$ 33'04 21.15803 AU evening set morning rise -11440 Nov 22 j 11:15 $28^{\circ}\Omega 23'24$ conjunction -11446 Oct 13 j 22:11 $3^{\circ}\Omega 43'20$ $0^{\circ}53'30$ -11440 Dec 24 j 07:18 0° Mg -11446 Oct 13 j 22:12 3°Ω43'20 0°54'03 minimum elong retrograde -11439 Feb 25 j 09:49 1° m 29'47 max. Earth dist. -11446 Oct 15 j 09:34 3°**Ω**48'26 21.02572 AU -11439 May 02 j 03:06 30°R**Ω** -11439 May 13 j 08:52 $29^{\circ}\Omega$ 33'10 19.16028 AU morning rise -11446 Oct 29 j 20:12 $4^{\circ}\Omega$ 37'51 min. Earth dist. retrograde -11445 Feb 01 j 11:31 7°**Ω**45'37 opposition -11439 May 14 j 12:26 29° € 30'24 0°29'45 min. Earth dist. -11445 Apr 19 j 10:13 5°**Ω**49'35 19.04499 AU direct -11439 Jul 28 j 11:30 27°**Ω**34'39 -11445 Apr 20 j 19:19 5°**Ω**46'16 0°57'12 opposition -11439 Oct 16 j 00:24 0° m -11445 Jul 05 j 05:07 3°**Ω**50′21 -11439 Oct 25 j 10:46 0°m/30'38 direct evening set -11445 Oct 02 j 08:22 evening set 6°**Ω**48'17 conjunction -11439 Nov 10 j 12:10 1° m 24'47 0°24'40 -11445 Oct 18 j 03:22 conjunction 7°**Ω**42'13 0°49'59 minimum elong -11439 Nov 10 j 12:10 1° m/24'47 0°25'00 minimum elong -11445 Oct 18 j 03:22 7°**Ω**42'13 0°50'31 max. Earth dist. -11439 Nov 11 j 16:46 1°My28'50 21.16038 AU max. Earth dist. -11445 Oct 19 j 13:34 7°**Ω**47'07 21.06160 AU morning rise -11439 Nov 26 j 18:11 2° m 19'34 -11445 Nov 03 j 02:37 8°**Ω**36'44 -11438 Mar 01 j 16:29 5° m 25'50 morning rise retrograde retrograde -11444 Feb 05 j 18:57 11°**Ω**44'12 -11438 May 18 j 17:56 3° m/26'21 0°24'36 opposition

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Earth dist. 5° Mp 24'42 21.15797 AU evening set morning rise -11438 Dec 01 j 01:00 6° m 15'33 retrograde -11437 Mar 06 j 00:07 9° m 21'45 conjunction -11432 Dec 08 j 12:45 29° m 02'30 -0°09'43 -11437 May 22 j 22:55 opposition 7° m/22'12 0°19'20 minimum elong -11432 Dec 08 j 12:44 29° m 02'30 0°09'40 min. Earth dist. -11437 May 21 j 21:42 7° m/24'45 19.15547 AU behind sun begin -11432 Dec 08 j 07:15 29° m 01'45 direct -11437 Aug 05 j 19:25 5° m 26'15 behind sun end -11432 Dec 08 j 18:14 29° m 03'16 -11437 Nov 02 j 20:27 -11432 Dec 09 j 07:42 29° m 05'11 21.05591 AU evening set 8° Mp 22'13max. Earth dist. morning rise -11432 Dec 25 j 01:52 29° m 58'13 conjunction -11437 Nov 19 j 00:02 9° m 16'35 0°15'09 -11432 Dec 25 j 14:47 0∘**⊽** minimum elong -11437 Nov 19 j 00:03 9° m 16'35 0°15'25 retrograde -11431 Mar 29 j 22:23 3°**£**05′07 behind sun begin -11437 Nov 18 j 22:16 9° m 16'20 min. Earth dist. -11431 Jun 14 j 11:40 1°**2**06'59 19.04034 AU behind sun end -11437 Nov 19 j 01:49 9° m 16'49 opposition -11431 Jun 15 j 03:26 1°**೨**05'22 -0°13'29 max. Earth dist. -11437 Nov 20 j 02:22 9° Mp 20'18 21.15119 AU -11431 Jul 13 j 08:44 30°R Mp morning rise -11437 Dec 05 j 08:14 10° mp 11'34 direct -11431 Aug 28 j 18:08 29° m 08'38 retrograde -11436 Mar 09 j 06:24 13° m 17'45 -11431 Oct 12 j 22:43 0∘**⊽** min. Earth dist. -11436 May 25 j 04:52 11° m 20'28 19.14666 AU evening set -11431 Nov 26 j 11:39 2°**£**06'44 opposition -11436 May 26 j 03:54 11° mp 18'08 0°13'59 direct -11436 Aug 08 j 22:16 9° m 22'04 conjunction -11431 Dec 12 j 21:48 3°**2**02'05 -0°14'40 evening set -11436 Nov 06 j 01:36 12° mp 18'10 minimum elong -11431 Dec 12 j 21:48 3°**ഫ**02'05 0°14'39 behind sun begin -11431 Dec 12 j 19:10 3°**₽**01'43 -11436 Nov 22 j 06:31 13° m 12'40 0°10'17 behind sun end -11431 Dec 13 j 00:26 3°**₽**02'27 conjunction -11436 Nov 22 j 06:31 13° m 12'40 0°10'30 max. Earth dist. -11431 Dec 13 j 13:35 3°**△**04'19 21.02334 AU minimum elong -11436 Nov 22 j 01:20 13° Mp 11'57 -11431 Dec 29 j 11:55 3°**♀**58'00 behind sun begin morning rise -11436 Nov 22 j 11:42 13° m 13'22 -11430 Apr 03 j 06:02 7°**♀**05'09 behind sun end retrograde -11436 Nov 23 j 08:26 13° Mp 16'19 21.14042 AU -11430 Jun 19 j 08:35 5°**2**05'21 -0°18'57 max. Earth dist. opposition min. Earth dist. -11436 Dec 08 j 15:39 14° mp 07'46 -11430 Jun 18 j 19:55 5°**⊆**06'39 19.00524 AU morning rise -11430 Sep 01 j 21:30 retrograde -11435 Mar 13 j 14:50 17° Mp 13'59 direct 3°**£**08'24 -11435 May 29 j 09:58 15° Mp 16'37 19.13376 AU -11430 Nov 30 j 20:13 6°**♀**07'07 min. Earth dist. evening set -11435 May 30 j 08:36 15° mg 14'19 0°08'33 opposition -11430 Dec 17 j 07:30 7°**2**02'42 -0°19'34 -11435 Aug 13 j 02:53 13° Mp 18'09 direct conjunction -11435 Nov 10 j 07:26 16° Mp 14'29 -11430 Dec 17 j 07:29 7°**2**02'42 0°19'36 evening set minimum elong max. Earth dist. -11430 Dec 17 j 21:38 7°**2**04'41 20.98566 AU conjunction -11435 Nov 26 j 13:18 17° m 09'07 0°05'22 morning rise -11429 Jan 02 j 22:17 7°**♀**58'47 minimum elong -11435 Nov 26 j 13:18 17° m 09'07 0°05'34 retrograde -11429 Apr 07 j 16:09 11°**೨**06'15 behind sun begin -11435 Nov 26 j 06:53 17° Mp 08'14 opposition -11429 Jun 23 j 13:45 9°**೨**06'22 -0°24'20 behind sun end -11435 Nov 26 j 19:43 17° m 10'00 min. Earth dist. -11429 Jun 23 j 02:16 9°**2**07'33 18.96484 AU max. Earth dist. -11435 Nov 27 j 12:49 17° mg 12'26 21.12554 AU direct -11429 Sep 06 j 03:36 7°**♀**09'09 -11435 Dec 12 j 23:38 18° Mp 04'22 -11429 Dec 05 j 05:41 10° **2**08'34 morning rise evening set -11434 Mar 17 j 21:01 21° m 10'41 retrograde -11434 Jun 03 j 13:16 19° m 10'59 0°03'04 -11429 Dec 21 j 17:48 11°**2**04'21 -0°24'23 opposition conjunction -11434 Jun 02 j 17:06 19° m 13'02 19.11685 AU -11429 Dec 21 j 17:47 11°**2**04'21 0°24'28 min. Earth dist. minimum elong -11429 Dec 22 j 04:33 11°**2**05'52 20.94263 AU direct -11434 Aug 17 j 05:13 17° mp 14'42 max. Earth dist. evening set -11434 Nov 14 j 13:31 20° m 11'21 morning rise -11428 Jan 07 i 09:29 12° **2**00'39 retrograde -11428 Apr 11 i 00:32 15° \(\Omega\) 08'25 conjunction -11434 Nov 30 i 20:38 21° m 06'08 0°00'21 opposition -11428 Jun 26 j 19:16 13° \(\Omega\) 08'25 -0°29'38 -11434 Nov 30 i 20:39 21° m 06'09 0°00'29 min. Earth dist. -11428 Jun 26 j 11:03 13° **2**09'16 18.91925 AU minimum elong -11428 Sep 09 j 07:45 11°**△**10'53 -11434 Nov 30 j 13:59 21° m 05'14 direct behind sun begin -11434 Dec 01 j 03:19 21° m 07'03 behind sun end evening set -11428 Dec 08 j 15:43 14°**£**11'02 max. Earth dist. -11434 Dec 01 j 19:25 21° m 09'21 21.10668 AU -11434 Dec 17 j 07:50 22° Mp 01'32 morning rise conjunction -11428 Dec 25 j 04:57 15° **2**07'04 -0°29'06 desc. node -11434 Dec 25 j 16:31 22° m 28'42 minimum elong -11428 Dec 25 j 04:57 15°**2**07'04 0°29'14 retrograde -11433 Mar 22 j 06:03 25° m 08'00 max. Earth dist. -11428 Dec 25 j 13:46 15° **2**08'19 20.89461 AU -11433 Jun 07 j 17:54 23° Mp 08'17 -0°02'27 -11427 Jan 10 j 21:17 16°**♀**03'34 opposition morning rise -11433 Jun 06 j 22:20 23° Mp 10'17 19.09580 AU -11427 Apr 15 j 11:30 19° **△**11'39 min. Earth dist. retrograde -11433 Aug 21 j 10:11 21° Mp 11'52 direct opposition -11427 Jul 01 j 00:55 17°**2**11'31 -0°34'48 -11433 Nov 18 j 20:10 24° m 08'55 evening set min. Earth dist. -11427 Jun 30 j 17:59 17°**2**12'14 18.86872 AU direct -11427 Sep 13 j 14:58 15°**△**13'37 conjunction -11433 Dec 05 j 04:14 25° m 03'53 -0°04'45 evening set -11427 Dec 13 j 02:38 18°**△**14'35 minimum elong -11433 Dec 05 j 04:13 25° m 03'53 0°04'38 behind sun begin -11433 Dec 04 j 21:40 25° m 02'59 -11427 Dec 29 j 16:36 19°**2**10'51 -0°33'42 conjunction behind sun end -11433 Dec 05 j 10:46 25° m 04'47 -11427 Dec 29 j 16:36 19°**2**10'51 0°33'53 minimum elong

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Attention, astronom	nical year style is used: The	•		ounting style is the year	r 11427 BCE in historical	l counting sty	le.	
max. Earth dist.	-11427 Dec 29 j 22:07	19° ≏ 11'38	20.84180 AU	opposition	-11420 Jul 29 j 03:22	16°M09'39	-1°05'18	
morning rise	-11426 Jan 15 j 09:39	20° ≙ 07'34		min. Earth dist.	-11420 Jul 29 j 11:49	16°ML08'45	18.43206 AU	
retrograde	-11426 Apr 19 j 20:15	23° ≏ 16′00			-11420 Aug 27 j 07:28	15°RM₀		
opposition	-11426 Jul 05 j 06:53	21° ≏ 15'42	-0°39'48	direct	-11420 Oct 11 j 21:04	14°ML08'57		
min. Earth dist.	-11426 Jul 05 j 03:12				-11420 Nov 25 j 19:33			
direct	-11426 Sep 17 j 19:55			evening set	-11419 Jan 12 j 04:09			
evening set	-11426 Dec 17 j 14:04			evening sec	11119 Jun 12 j 0 1.09	17 1101731		
evening set	-11420 Dec 17 j 14.04	22 -1713		conjunction	-11419 Jan 28 j 22:50	100M 151/13	1°00'22	
agniumation	11425 Ion 02:05:00	229 0 15146	0020100	•	-11419 Jan 28 j 22:49			
conjunction	-11425 Jan 03 j 05:00			minimum elong	•			
minimum elong	-11425 Jan 03 j 04:59			max. Earth dist.	-11419 Jan 28 j 11:44		20.39786 AU	
max. Earth dist.	-11425 Jan 03 j 08:39		20.78518 AU	morning rise	-11419 Feb 14 j 18:25			
morning rise	-11425 Jan 19 j 22:33			retrograde	-11419 May 19 j 11:27			
retrograde	-11425 Apr 24 j 08:08			opposition	-11419 Aug 02 j 12:49			
opposition	-11425 Jul 09 j 13:04	25° ≏ 21'02	-0°44'38	min. Earth dist.	-11419 Aug 02 j 22:24	20°M23'49	18.36365 AU	
min. Earth dist.	-11425 Jul 09 j 10:31	25° ≏ 21'18	18.75555 AU	direct	-11419 Oct 16 j 08:27	18°M23'46		
direct	-11425 Sep 22 j 03:57	23° ≏ 22'20		evening set	-11418 Jan 16 j 21:50	21°M33'42		
evening set	-11425 Dec 22 j 02:15	26° £ 25′07						
				conjunction	-11418 Feb 02 j 16:51	22°MJ32'11	-1°03'08	
conjunction	-11424 Jan 07 j 17:52	27° ≏ 21'54	-0°42'24	minimum elong	-11418 Feb 02 j 16:50	22°M32'11	1°03'36	
minimum elong	-11424 Jan 07 j 17:52	27° £ 21'54	0°42'40	max. Earth dist.	-11418 Feb 02 j 03:17	22°M30'12	20.32880 AU	
max. Earth dist.	-11424 Jan 07 j 18:32			morning rise	-11418 Feb 19 j 12:22			
morning rise	-11424 Jan 24 j 12:02		20.72020110	retrograde	-11418 May 24 j 01:46			
morning rise	-11424 Feb 26 j 11:02			opposition	-11418 Aug 06 j 23:09		1011128	
ratra ara da	•			min. Earth dist.				
retrograde	-11424 Apr 27 j 17:49				-11418 Aug 07 j 11:42		18.29413 AU	
	-11424 Jun 29 j 18:47		0040116	direct	-11418 Oct 20 j 18:52			
opposition	-11424 Jul 12 j 19:49			evening set	-11417 Jan 21 j 16:30	25°11L52'03		
min. Earth dist.	-11424 Jul 12 j 20:21		18.69437 AU					
direct	-11424 Sep 25 j 10:08			conjunction	-11417 Feb 07 j 11:48			
	-11424 Dec 15 j 19:52	0°M₊		minimum elong	-11417 Feb 07 j 11:47	26°M50'50	1°06'04	
evening set	-11424 Dec 25 j 15:17	0°M32'19		max. Earth dist.	-11417 Feb 06 j 19:33	26°M48'26	20.25879 AU	
				morning rise	-11417 Feb 24 j 07:21	27° M 49'41		
conjunction	-11423 Jan 11 j 07:44	1°M29'22	-0°46'28		-11417 Apr 08 j 16:01	0° ∡ ¹		
minimum elong	-11423 Jan 11 j 07:44	1°ML29'21	0°46'46	retrograde	-11417 May 28 j 18:21	1° ∡ ¹02'51		
max. Earth dist.	-11423 Jan 11 j 06:27	1°ML29'10	20.66294 AU	•	-11417 Jul 18 j 15:58			
morning rise	-11423 Jan 28 j 02:18	2°M26'45		opposition	-11417 Aug 11 j 10:07		-1°14'00	
retrograde	-11423 May 02 j 06:27	5°M36'25		min. Earth dist.	-11417 Aug 11 j 23:57			
opposition	-11423 Jul 17 j 02:43	3°M35'38	-0°53'40	direct	-11417 Oct 25 j 08:10		10.22501110	
min. Earth dist.	-11423 Jul 17 j 04:20		18.63097 AU	uncet	-11416 Jan 22 j 20:06	0° ∡ 7		
		1°M36'06	18.03097 AU	avanina aat		0° х ¹ 12'34		
direct	-11423 Sep 29 j 18:56			evening set	-11416 Jan 26 j 12:08	0°×'12'34		
evening set	-11423 Dec 30 j 05:16	4° M 40'59			11416 E. L. 10:07.40	10 711120	1005125	
				conjunction	-11416 Feb 12 j 07:43	1° ∡ 11'39		
conjunction	-11422 Jan 15 j 22:17			minimum elong	-11416 Feb 12 j 07:43	1° ∡ 11'39		
minimum elong	-11422 Jan 15 j 22:16	5° M 38′19		max. Earth dist.	-11416 Feb 11 j 13:08		20.18748 AU	
max. Earth dist.	-11422 Jan 15 j 18:09		20.59853 AU	morning rise	-11416 Feb 29 j 03:04	2° ∡ 10'45		
morning rise	-11422 Feb 01 j 17:12	6°M35'56		retrograde	-11416 Jun 01 j 10:02	5° ∡ ¹24'34		
retrograde	-11422 May 06 j 17:40	9°M46'06		opposition	-11416 Aug 14 j 22:08	3° ∡ ¹23'17	-1°16'07	
opposition	-11422 Jul 21 j 10:27	7°ML45'12	-0°57'50	min. Earth dist.	-11416 Aug 15 j 14:56		18.15176 AU	
min. Earth dist.	-11422 Jul 21 j 14:59	7° M 44'43	18.56587 AU	direct	-11416 Oct 28 j 20:36	1° ∡ ′21′06		
direct	-11422 Oct 04 j 02:26	5°ML45'15		evening set	-11415 Jan 30 j 08:54	4° ∡ ³35'15		
evening set	-11421 Jan 03 j 19:48	8°M51'18		max. Earth dist.	-11415 Feb 15 j 06:52		20.11505 AU	
5	j ->o				J	•		
conjunction	-11421 Jan 20 j 13:28	9° M 48'54	-0°53'56	conjunction	-11415 Feb 16 j 04:33	5° ∡ ¹34'37	-1°09'19	
minimum elong	-11421 Jan 20 j 13:28			minimum elong	-11415 Feb 16 j 04:33	5° × ³ 34'37		
max. Earth dist.	-11421 Jan 20 j 07:21		20.53277 AU	morning rise			1 07 32	
			20.33277 AU	-	-11415 Mar 04 j 23:47			
morning rise	-11421 Feb 06 j 08:41			retrograde	-11415 Jun 06 j 03:31	9° 🗷 48'24	1017140	
retrograde	-11421 May 11 j 07:21		1001142	opposition	-11415 Aug 19 j 10:47	7° 🗷 47'02		
opposition	-11421 Jul 25 j 18:34			min. Earth dist.	-11415 Aug 20 j 04:57		18.07887 AU	
min. Earth dist.	-11421 Jul 26 j 00:03		18.49950 AU	direct	-11415 Nov 02 j 12:33	5° ∡ ¹44'24		
direct	-11421 Oct 08 j 12:14			evening set	-11414 Feb 04 j 06:28	9° ₰ 00'00		
evening set	-11420 Jan 08 j 11:29	13°ML03'26		max. Earth dist.	-11414 Feb 20 j 02:42	9° ∡ ¹56'08	20.04165 AU	
conjunction	-11420 Jan 25 j 05:39	14° ML 01'19	-0°57'18	conjunction	-11414 Feb 21 j 02:16	9° ∡ ¹59'39	-1°10'36	
minimum elong	-11420 Jan 25 j 05:39			minimum elong	-11414 Feb 21 j 02:15		1°11'12	
max. Earth dist.	-11420 Jan 24 j 20:55			morning rise	-11414 Mar 09 j 21:02			
morning rise	-11420 Feb 11 j 01:04			retrograde	-11414 Jun 10 j 20:02			
<i>5</i> 2-	-11420 Feb 11 j 05:02			opposition	-11414 Aug 24 j 00:29		-1°19'03	
retrograde	-11420 May 14 j 20:12			min. Earth dist.	-11414 Aug 24 j 21:15			
		-5 110-10 15		Januar dibt.	21, 21.13			

Planetary Phenomena of Uranus from -11900 through -11398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -11414 in astronomical counting style is the year 11415 BCE in historical counting style. direct -11414 Nov 07 j 03:00 10°**✗** 09'44 conjunction -11407 Mar 26 j 04:01 11°₹47'16 -1°07'31 -11413 Feb 09 j 04:44 13° ₹26'44 minimum elong -11407 Mar 26 j 04:01 11°**ठ**47'16 1°08'10 evening set max. Earth dist. -11413 Feb 24 j 21:54 14° ₹22'41 19.96808 AU -11407 Apr 11 j 18:39 12°る48'08 morning rise -11407 Jul 12 j 14:38 16°중07'12 retrograde -11413 Feb 26 j 00:24 14° ₹26'39 -1°11'29 -11407 Sep 23 j 23:13 14°**⋜**05'06 -1°14'07 conjunction opposition -11413 Feb 26 j 00:24 14° ₹26'39 1°12'04 -11407 Sep 25 j 04:16 14°정01'55 17.53865 AU minimum elong min. Earth dist. -11413 Mar 14 j 18:59 15° ₹ 26'26 -11407 Dec 08 j 21:17 11°**⋜**59'13 morning rise direct -11413 Jun 15 j 14:34 18°**⊀** 42'07 retrograde evening set -11406 Mar 14 j 13:27 15°**♂**25'29 -11406 Mar 29 j 20:32 16°**정**21'40 19.51143 AU opposition -11413 Aug 28 j 14:49 16°**尽** 40'31 -1°19'49 max. Earth dist. min. Earth dist. -11413 Aug 29 j 12:50 16° ₹38'08 17.93193 AU -11406 Mar 31 j 06:37 16°**⋜**26'56 -1°05'17 direct -11413 Nov 11 j 21:33 14° ₹36'59 conjunction -11412 Feb 14 j 03:53 17° ₹ 55'23 -11406 Mar 31 j 06:37 16°**⋜**26'56 1°05'55 evening set minimum elong -11406 Apr 16 j 20:14 17°**♂**27'56 morning rise conjunction -11412 Mar 01 j 23:36 18° ₹ 55'34 -1°11'56 retrograde -11406 Jul 17 j 14:18 20°₹47'31 minimum elong -11412 Mar 01 j 23:36 18° ₹ 55'34 1°12'33 opposition -11406 Sep 28 j 19:51 18°₹45'26 -1°11'24 max. Earth dist. -11412 Feb 29 j 19:57 18°**尽** 51'24 19.89493 AU min. Earth dist. -11406 Sep 30 j 01:02 18°₹42'14 17.48695 AU morning rise -11412 Mar 18 j 17:34 19° ₹ 55'33 direct -11406 Dec 13 j 20:13 16°**⋜**39'21 retrograde -11412 Jun 19 j 07:54 23° **₹**11'49 evening set -11405 Mar 19 j 17:06 20° ₹306'45 opposition -11412 Sep 01 j 05:58 21° ₹ 10'06 -1°20'07 max. Earth dist. -11405 Apr 03 j 22:01 21°る02'51 19.46213 AU min. Earth dist. -11412 Sep 02 j 06:09 21° ₹ 07'29 17.85937 AU direct -11412 Nov 15 j 14:19 19° ₹06'07 conjunction -11405 Apr 05 j 09:26 21°る08'21 -1°02'36 -11411 Feb 18 j 03:57 22° ₹25'54 evening set minimum elong -11405 Apr 05 j 09:26 21°る08'21 1°03'12 morning rise -11405 Apr 21 j 22:13 22°る09'27 conjunction -11411 Mar 06 j 23:19 23° ₹26'19 -1°11'57 retrograde -11405 Jul 22 j 12:43 25°る29'33 minimum elong -11411 Mar 06 j 23:18 23° ₹726'19 1°12'34 opposition -11405 Oct 03 j 17:23 23°₹27'30 -1°08'11 max. Earth dist. -11411 Mar 05 j 16:55 23° ₹21'44 19.82317 AU min. Earth dist. -11405 Oct 04 j 23:30 23°る24'12 17.44004 AU -11411 Mar 23 j 16:54 24° ₹26'31 -11405 Dec 18 j 19:25 21°る21'13 morning rise direct -11411 Jun 24 j 03:31 27° ₹ 43'22 -11404 Mar 23 j 21:16 24° ₹ 49'43 retrograde evening set -11411 Sep 05 j 22:02 25° ₹ 41'31 -1°19'55 max. Earth dist. -11404 Apr 08 j 02:03 25°**ठ**46'00 19.41749 AU opposition -11411 Sep 06 j 23:16 25° ₹38'47 17.78868 AU min. Earth dist. -11411 Nov 20 j 10:29 23°**尽** 37'05 -11404 Apr 09 j 12:54 25° ₹51'26 -0°59'28 direct conjunction evening set -11410 Feb 23 j 04:26 26° ₹ 58'14 -11404 Apr 09 j 12:54 25° ₹51'26 1°00'04 minimum elong -11404 Apr 26 j 00:36 26°**궁**52'37 morning rise -11404 Jul 04 j 21:31 0°≈ -11410 Mar 11 j 23:39 27° ₹ 58'54 -1°11'31 conjunction -11410 Mar 11 j 23:39 27° ₹ 58'54 1°12'09 -11404 Jul 26 j 13:25 0°≈13'10 minimum elong retrograde -11410 Mar 10 j 16:57 27° ₹ 54'14 19.75354 AU -11404 Aug 17 j 07:58 30°R♂ max. Earth dist. -11410 Mar 28 j 16:26 28° ₹ 59'16 -11404 Oct 07 j 15:45 28°♂11'11 -1°04'29 morning rise opposition -11410 Apr 15 j 10:48 0°ਰ min. Earth dist. -11404 Oct 08 j 21:39 28°**궁**07'55 17.39754 AU retrograde -11410 Jun 28 j 22:45 2°쥥16'41 direct -11404 Dec 22 j 20:31 26°**⋜**04'46 opposition -11410 Sep 10 j 15:02 0°쥥14'45 -1°19'14 evening set -11403 Mar 29 j 01:59 29°₹34'14 min. Earth dist. -11410 Sep 11 j 17:41 0° 중11'51 17.72049 AU -11403 Apr 05 j 01:29 0°**≈** -11410 Sep 16 j 06:50 30°R ✓ max. Earth dist. -11403 Apr 13 j 05:00 0°≈30'29 19.37719 AU direct -11410 Nov 25 j 05:37 28° ₹ 09'53 -11409 Jan 31 j 10:00 0° ₹ conjunction -11403 Apr 14 j 16:38 0°≈36'03 -0°55'55 -11409 Feb 28 j 05:48 1°♂32'22 -11403 Apr 14 j 16:38 0°≈36'03 0°56'28 evening set minimum elong -11403 May 01 i 03:16 1°≈37'18 max. Earth dist. -11409 Mar 15 j 15:27 2°る28'13 19.68697 AU morning rise retrograde -11403 Jul 31 j 12:36 4°≈58'18 -11409 Mar 17 j 00:28 2°る33'14 -1°10'38 conjunction opposition -11403 Oct 12 j 15:15 2°≈56'20 -1°00'18 -11409 Mar 17 j 00:28 2°る33'14 1°11'17 minimum elong min. Earth dist. -11403 Oct 13 j 22:04 2°≈52'58 17.35951 AU -11409 Apr 02 i 16:43 3°₹33'48 morning rise direct -11403 Dec 27 j 21:34 0°≈49'47 evening set retrograde -11409 Jul 03 i 19:20 6° 중51'47 -11402 Apr 03 j 06:43 4°≈20'07 -11409 Sep 15 j 08:45 4°정49'45 -1°18'02 max. Earth dist. -11402 Apr 18 j 09:19 5°≈16'29 19.34134 AU opposition min. Earth dist. -11409 Sep 16 j 12:15 4°る46'45 17.65581 AU -11409 Nov 30 j 02:26 2°る44'29 direct conjunction -11402 Apr 19 j 20:26 5°≈22'00 -0°51'57 evening set -11408 Mar 04 j 07:41 6°**る**08'17 minimum elong -11402 Apr 19 j 20:27 5°≈22'00 0°52'30 max. Earth dist. -11408 Mar 19 j 17:15 7°る04'21 19.62410 AU morning rise -11402 May 06 j 05:59 6°≈23'17 retrograde -11402 Aug 05 j 13:59 9°≈44'40 -11408 Mar 21 j 02:04 7°る09'22 -1°09'19 -11402 Oct 17 j 15:26 conjunction opposition 7°≈42'44 -0°55'41 -11408 Mar 21 j 02:04 7°る09'22 1°09'56 min. Earth dist. -11402 Oct 18 j 21:24 7°≈39'28 17.32573 AU minimum elong -11408 Apr 06 j 17:25 8°**る**10'05 morning rise direct -11401 Jan 02 j 00:58 5°≈36'05 -11408 Jul 07 j 17:00 11°**⋜**28'36 retrograde evening set -11401 Apr 08 j 11:48 9°≈07'08 opposition -11408 Sep 19 j 03:33 9°**ප්**26'32 -1°16'20 max. Earth dist. -11401 Apr 23 j 13:25 10°≈03'32 19.30974 AU min. Earth dist. -11408 Sep 20 j 07:49 9°る23'27 17.59496 AU direct -11408 Dec 03 j 23:32 7°**る**20'57 conjunction -11401 Apr 25 j 00:31 10°≈09'04 -0°47'37 evening set -11407 Mar 09 j 10:22 10°♂46'00 minimum elong -11401 Apr 25 j 00:31 10°≈09'04 0°48'08 max. Earth dist. -11407 Mar 24 j 17:18 11° ₹ 41'56 19.56543 AU -11401 May 11 j 08:51 11°≈10'21 morning rise retrograde -11401 Aug 10 j 13:16 14°≈32'04

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Attention, astronomical year style is used: The year -11401 in astronomical counting style is the year 11402 BCE in historical counting style.

opposition -11401 Oct 22 j 16:18 12°≈30'09 -0°50'40

min. Earth dist. -11401 Oct 23 j 23:07 12°≈26'47 17.29640 AU

direct -11400 Jan 07 j 03:30 10°≈23'23 evening set -11400 Apr 12 j 16:59 13°≈55'04

max. Earth dist. -11400 Apr 27 j 17:50 14°≈51'30 19.28278 AU

conjunction -11400 Apr 29 j 04:35 14°≈56′59 -0°42′57 minimum elong -11400 Apr 29 j 04:35 14°≈56′59 0°43′25

-11400 Apr 29 j 23:41 15°≈

morning rise -11400 May 15 j 11:50 15°≈58'17 retrograde -11400 Aug 14 j 14:59 19°≈20'15

direct -11399 Jan 11 j 08:53 15°≈11'29

evening set -11399 Apr 17 j 21:56 18°≈43'38

max. Earth dist. -11399 May 02 j 22:54 19°≈40'14 19.26058 AU

conjunction -11399 May 04 j 08:28 19°≈45'32 -0°37'58 minimum elong -11399 May 04 j 08:28 19°≈45'32 0°38'25

morning rise -11399 May 20 j 14:22 20° \approx 46'47 retrograde -11399 Aug 19 j 14:28 24° \approx 08'59

opposition -11399 Oct 31 j 20:08 22°≈07'02 -0°39'34 min. Earth dist. -11399 Nov 02 j 01:53 22°≈03'48 17.25211 AU