Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 1 Attention, astronomical year style is used: The year -5900 in astronomical counting style is the year 5901 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ie year -5900 i	in astronomical co	unting style is the year	5901 BCE in historical c	ounting style.	0-
evening set	-5900 Feb 16 j 17:16	23° <b>පි</b> 20'51		minimum elong	-5895 Aug 15 j 11:31	8°905'41	1°26'29
				morning rise	-5895 Aug 28 j 00:09	10°953'04	
conjunction	-5900 Mar 01 j 08:36	26° <b>る</b> 30'48	-1°27'13	retrograde	-5895 Dec 27 j 17:19	28° <b>©</b> 17'20	
minimum elong	-5900 Mar 01 j 08:37	26° <b>る</b> 30'48	1°27'33	opposition	-5894 Feb 26 j 14:14	23° <b>©</b> 25'48	2°09'49
max. Earth dist.	-5900 Mar 03 j 03:25	26° <b>る</b> 55'42	6.08262 AU	min. Earth dist.	-5894 Feb 27 j 18:19	23° <b>©</b> 16'52	4.32340 AU
morning rise	-5900 Mar 15 j 01:50	29° <b>る</b> 41'35		direct	-5894 Apr 29 j 22:53	18° <b>5</b> 26'56	
	-5900 Mar 16 j 09:50	0° <b>≈</b>			-5894 Aug 03 j 19:45	$0^{\circ}\Omega$	
	-5900 May 30 j 15:14	15° <b>≈</b>		evening set	-5894 Sep 03 j 00:54	6° <b>£</b> 33'42	
retrograde	-5900 Jul 22 j 06:33	19° <b>≈</b> 11'30		max. Earth dist.	-5894 Sep 14 j 01:31	9° <b>Ω</b> 03'30	6.28304 AU
	-5900 Sep 13 j 04:13	15° <b>R</b> ≈					
opposition	-5900 Sep 19 j 16:05	14° <b>≈</b> 07′00	-2°00'31	conjunction	-5894 Sep 15 j 12:19	9° <b>Ω</b> 23'17	1°24'33
min. Earth dist.	-5900 Sep 18 j 16:59	14° <b>≈</b> 14'54	4.12585 AU	minimum elong	-5894 Sep 15 j 12:21	9° <b>Ω</b> 23′18	1°24'52
direct	-5900 Nov 17 j 10:06	9° <b>≈</b> 06'38		morning rise	-5894 Sep 27 j 22:40	12° <b>Ω</b> 12'32	
	-5899 Jan 19 j 13:40	15° <b>≈</b>			-5894 Oct 10 j 10:18	15° <b>Ω</b>	
evening set	-5899 Mar 24 j 06:24	28° <b>≈</b> 01'17			-5893 Jan 17 j 11:04	0° <b>™</b>	
	-5899 Apr 01 j 23:55	0° <b>∀</b>		retrograde	-5893 Jan 30 j 06:08	0° <b>m</b> 15'11	
					-5893 Feb 12 j 00:34	$30^{\circ}$ R $\Omega$	
conjunction	-5899 Apr 07 j 00:34	1° <b>)</b> €08'32		opposition	-5893 Apr 01 j 09:37	25° <b>Ω</b> 22'12	
minimum elong	-5899 Apr 07 j 00:38	1° <b>)</b> €08'34		min. Earth dist.	-5893 Apr 02 j 07:26		4.23766 AU
max. Earth dist.	-5899 Apr 08 j 06:24		6.17352 AU	direct	-5893 Jun 01 j 22:12	20° <b>Ω</b> 26′17	
morning rise	-5899 Apr 20 j 18:37	4° <b>¥</b> 15'32			-5893 Aug 25 j 07:56	0° <b>™</b>	
retrograde	-5899 Aug 24 j 12:05	22° <b>)</b> 50′21		evening set	-5893 Oct 04 j 18:32	8°M)47'56	
opposition	-5899 Oct 22 j 19:49	17° <b>)</b> 48′48	-1°12'40	max. Earth dist.	-5893 Oct 16 j 10:19	11° <b>M</b> )29'47	6.18784 AU
min. Earth dist.	-5899 Oct 22 j 07:31		4.22369 AU				
direct	-5899 Dec 21 j 16:58	12° <b>)</b> 45′51		conjunction	-5893 Oct 17 j 07:47	11°Mp42'15	0°57'08
	-5898 Apr 22 j 13:52	$0^{\circ}$ Y		minimum elong	-5893 Oct 17 j 07:51	11°Mp42'17	0°57'17
evening set	-5898 Apr 28 j 12:21	1° <b>Y</b> 18'27		morning rise	-5893 Oct 29 j 22:05	14°M)37'15	
					-5892 Jan 16 j 12:32	0∘ <b>⊽</b>	
conjunction	-5898 May 12 j 04:17	4° <b>Y</b> 20'45	-0°26'37	retrograde	-5892 Mar 05 j 09:55	3° <b>ჲ</b> 30'29	
minimum elong	-5898 May 12 j 04:19	4° <b>Y</b> 20'46			-5892 Apr 24 j 08:09	30°₽, <b>TD</b> )	
max. Earth dist.	-5898 May 12 j 10:27	4° <b>Υ</b> 24'11	6.27153 AU	opposition	-5892 May 05 j 14:08	28° <b>m</b> 34'19	0°52'01
morning rise	-5898 May 25 j 18:15	7° <b>Y</b> °21′53		min. Earth dist.	-5892 May 05 j 20:56	$28^{\circ}$ My $32'08$	4.13895 AU
retrograde	-5898 Sep 25 j 09:16	25° <b>Y</b> ′06′04		direct	-5892 Jul 04 j 19:45	23° <b>m</b> 40'42	
opposition	-5898 Nov 23 j 20:28	20° <b>Y</b> ′08′25			-5892 Sep 08 j 12:30	0∘ <b>⊽</b>	
min. Earth dist.	-5898 Nov 24 j 00:02		4.31284 AU	evening set	-5892 Nov 05 j 19:05	12° <b>≏</b> 21'41	
asc. node	-5898 Dec 15 j 23:00	17° <b>Y</b> ′22'14					
direct	-5897 Jan 24 j 01:16	15° <b>Y</b> ′04′26		conjunction	-5892 Nov 18 j 14:41	15° <b>≏</b> 22'44	
	-5897 May 16 j 22:38	0°8		minimum elong	-5892 Nov 18 j 14:42		
evening set	-5897 Jun 01 j 04:08	3° <b>8</b> 17'12		behind sun begin	-		
				behind sun end	-5892 Nov 18 j 21:13	15° <b>≏</b> 26'34	
conjunction	-5897 Jun 14 j 13:02	6° <b>8</b> 13'35		max. Earth dist.	-5892 Nov 18 j 17:07	15° <b>≏</b> 24'09	6.09543 AU
minimum elong	-5897 Jun 14 j 13:00	6° <b>8</b> 13'34	0°22'01	morning rise	-5892 Dec 01 j 12:35	18° <b>≏</b> 25'11	
max. Earth dist.	-5897 Jun 13 j 21:01	6° <b>8</b> 04'46	6.34545 AU		-5891 Jan 24 j 01:22	0°M₊	
morning rise	-5897 Jun 27 j 18:35	9° <b>8</b> 08'16		desc. node	-5891 Feb 03 j 09:15	1°M51'18	
	-5897 Jul 25 j 08:15	15° <b>8</b>		retrograde	-5891 Apr 10 j 23:27	8° <b>M</b> ₀07'11	
retrograde	-5897 Oct 26 j 10:42	26° <b>8</b> 21'02		opposition	-5891 Jun 10 j 19:23	3° <b>M</b> ₀07'04	
opposition	-5897 Dec 25 j 08:32	21° <b>8</b> 26'53	1°03'40	min. Earth dist.	-5891 Jun 10 j 09:39	3°M10'16	4.06050 AU
min. Earth dist.	-5897 Dec 26 j 01:07	21° <b>8</b> 21'29	4.36688 AU		-5891 Jul 06 j 14:35	30° <b>₹</b> Ω	
direct	-5896 Feb 25 j 11:51	16° <b>8</b> 23'27		direct	-5891 Aug 08 j 19:19	28° <b>≏</b> 14'11	
	-5896 Jun 11 j 21:02	0°Щ			-5891 Sep 10 j 15:31	0° <b>M</b> ₊	
evening set	-5896 Jul 02 j 11:00	4° <b>Ⅱ</b> 24'33			-5891 Dec 01 j 01:20	15° <b>™</b>	
max. Earth dist.	-5896 Jul 14 j 01:16	6° <b>Ⅱ</b> 57'30	6.37472 AU	evening set	-5891 Dec 10 j 13:57	17° <b>™</b> 14'00	
	#00 C Y	<b></b>	1000101		5001 F 55 : -	200m	0044440
conjunction	-5896 Jul 15 j 10:13	7° <b>Ⅱ</b> 15'41	1°03'01	conjunction	-5891 Dec 23 j 17:08	20°M20'54	
minimum elong	-5896 Jul 15 j 10:10	7° <b>Ⅱ</b> 15'39	1°03'21	minimum elong	-5891 Dec 23 j 17:05	20°M20'52	0°41'55
morning rise	-5896 Jul 28 j 06:07	10° <b>Ⅱ</b> 05'12		max. Earth dist.	-5891 Dec 24 j 17:58	20°M35'39	6.03795 AU
retrograde	-5896 Nov 25 j 16:19	27° <b>Ⅱ</b> 11′24	1050/20	morning rise	-5890 Jan 05 j 23:51	23°M29'40	
opposition	-5895 Jan 25 j 01:23	22° <b>Ⅱ</b> 19'31	1°52'30		-5890 Feb 03 j 10:06	0° <b>∡</b> ¹	
min. Earth dist.	-5895 Jan 26 j 04:09	22° <b>Ⅱ</b> 10'56	4.37086 AU	retrograde	-5890 May 17 j 22:11	13° <b>х</b> 39'40	4.02.002 : **
direct	-5895 Mar 28 j 16:24	17° <b>Ⅱ</b> 17'57		min. Earth dist.	-5890 Jul 16 j 05:46		4.03093 AU
	-5895 Jul 09 j 06:53	0°©		opposition	-5890 Jul 17 j 05:45	8° <b>∡</b> 736′02	-1~35'20
evening set	-5895 Aug 02 j 20:33	5°5017'14	(25150 ***	direct	-5890 Sep 13 j 09:22	3° 🗷 41'41	
max. Earth dist.	-5895 Aug 13 j 19:10	7° <b>©</b> 43'11	6.35170 AU	evening set	-5889 Jan 15 j 22:03	22° <b>∡</b> 52'39	
conjunction	-5895 Aug 15 j 11:33	8° <b>©</b> 05'42	1°26'07	conjunction	-5889 Jan 29 j 08:31	26° <b>∡</b> ¹02'35	-1°18'40
conjunction	-2022 Aug 13 J 11.33	0 200342	1 400/	conjunction	-2007 Jan 27 J UO.31	40 X:0233	-1 1040

-	_				5890 BCE in historical co	_	50 2
minimum elong	-5889 Jan 29 j 08:28	26° <b>≮</b> ¹02'33		retrograde	-5884 Nov 30 j 03:38	1° <b>©</b> 41'58	
max. Earth dist.	-5889 Jan 31 j 01:47	26° <b>∡</b> ¹26'57	6.03763 AU		-5883 Jan 02 j 14:39	30°R <b>Ⅱ</b>	
morning rise	-5889 Feb 11 j 21:59	29° <b>х</b> 14′03		opposition	-5883 Jan 29 j 14:49	26° <b>Ⅱ</b> 50′16	1°57'06
	-5889 Feb 15 j 04:45	5°0		min. Earth dist.	-5883 Jan 30 j 17:17	26° <b>∏</b> 41'47	4.36559 AU
retrograde	-5889 Jun 23 j 05:54	19° <b>る</b> 16'59		direct	-5883 Apr 02 j 04:18	21° <b>Ⅱ</b> 49′06	
opposition	-5889 Aug 21 j 23:36	14° <b>ප</b> 11'46	-2°09'29		-5883 Jun 20 j 15:37	$0$ $\circ$ $\odot$	
min. Earth dist.	-5889 Aug 20 j 20:23		4.06125 AU	evening set	-5883 Aug 07 j 07:12	9° <b>5</b> 49'28	
direct	-5889 Oct 19 j 03:19	9° <b>ට</b> 14'21		max. Earth dist.	-5883 Aug 18 j 06:14	12° <b>©</b> 16′00	6.34385 AU
evening set	-5888 Feb 21 j 20:55	28° <b>る</b> 22'19					
	-5888 Feb 28 j 22:02	0° <b>≈</b>		conjunction	-5883 Aug 19 j 21:23	12° <b>©</b> 37'54	1°27'29
				minimum elong	-5883 Aug 19 j 21:21	12° <b>©</b> 37'53	1°27'50
conjunction	-5888 Mar 06 j 12:51	1° <b>≈</b> 31'59	-1°26'18	morning rise	-5883 Sep 01 j 09:16	15° <b>©</b> 25'18	
minimum elong	-5888 Mar 06 j 12:52	1° <b>≈</b> 32'00	1°26'38		-5883 Nov 18 j 06:22	$0^{\circ}\Omega$	
max. Earth dist.	-5888 Mar 08 j 06:49	1° <b>≈</b> 56′18	6.09472 AU	retrograde	-5882 Jan 01 j 10:40	2° <b>Ω</b> 54'01	
morning rise	-5888 Mar 20 j 06:28	4° <b>≈</b> 42'22			-5882 Feb 15 j 10:09	30° <b>₹</b> 5	
	-5888 May 07 j 00:09	15° <b>≈</b>		opposition	-5882 Mar 03 j 07:53	28° <b>©</b> 02'28	2°09'12
retrograde	-5888 Jul 26 j 23:51	24° <b>≈</b> 04'54		min. Earth dist.	-5882 Mar 04 j 11:51	27° <b>©</b> 53'34	4.31357 AU
min. Earth dist.	-5888 Sep 23 j 10:45		4.13930 AU	direct	-5882 May 04 j 15:08	23°904'05	
opposition	-5888 Sep 24 j 09:17	19° <b>≈</b> 00'45	-1°55'53	_	-5882 Jul 15 j 04:09	$0^{\circ}\Omega$	
	-5888 Oct 28 j 18:24	15°R≈		evening set	-5882 Sep 07 j 12:09	11° <b>Ω</b> 12'18	
direct	-5888 Nov 22 j 05:48	13°≈59'59					
	-5888 Dec 17 j 00:35	15° <b>≈</b>		conjunction	-5882 Sep 19 j 23:25	14° <b>Ω</b> 02'17	
_	-5887 Mar 16 j 10:39	0° <b>)</b> {		minimum elong	-5882 Sep 19 j 23:28	14° <b>Ω</b> 02'18	1°22'27
evening set	-5887 Mar 29 j 06:35	2° <b>∺</b> 51'41		max. Earth dist.	-5882 Sep 18 j 13:31	13° <b>Ω</b> 42'58	6.27208 AU
		==\\			-5882 Sep 24 j 04:46	15° <b>Ω</b>	
conjunction	-5887 Apr 12 j 00:40	5° <b>¥</b> 58′21		morning rise	-5882 Oct 02 j 10:06	16° <b>£</b> 52′06	
minimum elong	-5887 Apr 12 j 00:45		1°03'20		-5882 Dec 06 j 21:24	0° <b>m</b>	
max. Earth dist.	-5887 Apr 13 j 02:11	6° <b>)</b> 12'48	6.18733 AU	retrograde	-5881 Feb 04 j 02:33	5° Mp 00'46	104044
morning rise	-5887 Apr 25 j 18:34	9° <b>)</b> €04'40		opposition	-5881 Apr 06 j 07:33	~	1°42'47
retrograde	-5887 Aug 29 j 01:42	27° <b>)</b> € 32'03	1002147	min. Earth dist.	-5881 Apr 07 j 02:37	~	4.22626 AU
opposition	-5887 Oct 27 j 08:40	22°\(\frac{1}{3}\)31'01		t' .	-5881 Apr 07 j 06:40	30°R€	
min. Earth dist.	-5887 Oct 26 j 23:28		4.23644 AU	direct	-5881 Jun 06 j 15:41	25° <b>Ω</b> 11'52	
direct	-5887 Dec 26 j 11:11	17° <b>¥</b> 27'50 0° <b>Ƴ</b>			-5881 Aug 03 j 05:50	0°Щ 12°т25102	
ovening set	-5886 Apr 05 j 13:05	5° <b>Υ</b> 57'49		evening set	-5881 Oct 09 j 08:24	13° <b>m</b> 35'02	
evening set	-5886 May 03 j 07:33	3   3/49		conjunction	-5881 Oct 21 j 22:23	16° <b>m</b> 30'05	0°51'25
conjunction	-5886 May 16 j 22:58	8° <b>Y</b> 59'26	0°10'54	minimum elong	-5881 Oct 21 j 22:26	16° mp 30'07	0°51'32
minimum elong	-5886 May 16 j 22:38	8° <b>Υ</b> 59'27		max. Earth dist.	-5881 Oct 21 j 22:20		6.17718 AU
max. Earth dist.	-5886 May 17 j 02:39	9° <b>Υ</b> 01'29	6.28241 AU	morning rise	-5881 Oct 21 j 03:23	10 m/2013 19° m/25'53	0.17718 AU
morning rise	-5886 May 30 j 11:55	11° <b>Υ</b> 59'44	0.26241 AU	morning risc	-5881 Dec 22 j 17:04	0° <b>ʊ</b>	
retrograde	-5886 Sep 29 j 18:09	29° <b>Υ</b> 38'49		retrograde	-5880 Mar 10 j 11:40	8° <b>£</b> 25'06	
asc. node	-5886 Oct 26 j 02:04	28° <b>Υ</b> 31'35		opposition	-5880 May 10 j 15:10	3° <b>⊆</b> 28'27	0°41'49
opposition	-5886 Nov 28 i 06:58	24° <b>Υ</b> 41'44	0°06'01	min. Earth dist.	-5880 May 10 j 20:21	3° <b>£</b> 26'46	4.12969 AU
min. Earth dist.	-5886 Nov 28 j 11:45	24° <b>Υ</b> 40'09	4.32109 AU	mm. Lattii dist.	-5880 Jun 09 j 15:33	30°R <b>™</b>	4.12707 AC
direct	-5885 Jan 28 j 13:56	19° <b>Ƴ</b> 37'47	4.5210) 110	direct	-5880 Jul 09 j 17:52	28° m 35'02	
direct	-5885 Apr 29 j 08:17	0°8		direct	-5880 Aug 08 j 12:36	0° <b>ಹ</b>	
evening set	-5885 Jun 05 j 18:55	7° <b>8</b> 49'08		evening set	-5880 Nov 10 j 13:25	0 <b>—</b> 17° <b>≏</b> 17'25	
max. Earth dist.	-5885 Jun 18 j 06:40	10° <b>8</b> 33'52	6.35042 AU	evening set	3000 1107 10 1 13.23	17 -1723	
	10,00.70	00002		conjunction	-5880 Nov 23 j 09:49	20° <b>₽</b> 19'09	0°02'48
conjunction	-5885 Jun 19 j 02:28	10° <b>8</b> 44'47	0°28'22	minimum elong	-5880 Nov 23 j 09:49	20° <b>₽</b> 19'09	0°02'42
minimum elong	-5885 Jun 19 j 02:26	10° <b>8</b> 44'46	0°28'34	behind sun begin	-5880 Nov 23 j 01:44	20° <b>⊆</b> 14'24	0 02 12
morning rise	-5885 Jul 02 j 06:50	13° <b>8</b> 38'46	0 200.	behind sun end	-5880 Nov 23 j 17:54	20° <b>£</b> 23'54	
morning rise	-5885 Jul 08 j 11:54	15° <b>8</b>		max. Earth dist.	-5880 Nov 23 j 14:15	20° <b>Ω</b> 21'44	6.08834 AU
	-5885 Oct 07 j 23:58	0°II		morning rise	-5880 Dec 06 j 09:01	23° <b>£</b> 22′28	
retrograde	-5885 Oct 30 j 21:49	0° <b>Ⅱ</b> 49'57		desc. node	-5880 Dec 14 j 04:57	25° <b>£</b> 12'00	
	-5885 Nov 22 j 17:06	30°R₩			-5879 Jan 04 j 12:41	0°M	
opposition	-5885 Dec 29 j 19:35	25° <b>8</b> 56'15	1°12'04	retrograde	-5879 Apr 16 j 01:10	13°M08'29	
min. Earth dist.	-5885 Dec 30 j 14:43	25° <b>8</b> 50'02	4.36840 AU	opposition	-5879 Jun 15 j 20:56	8°M07'47	-0°36'16
direct	-5884 Mar 01 j 01:51	20° <b>8</b> 53'03		min. Earth dist.	-5879 Jun 15 j 08:14	8°M11'59	4.05631 AU
	-5884 May 24 j 18:58	0°II		direct	-5879 Aug 13 j 16:56	3°M14'47	
evening set	-5884 Jul 06 j 22:41	8° <b>Ⅱ</b> 54'07			-5879 Nov 13 j 16:10	15° <b>M</b> ₊	
max. Earth dist.	-5884 Jul 18 j 10:28	11° <b>Ⅲ</b> 25'53	6.37255 AU	evening set	-5879 Dec 15 j 12:44	22°M15'36	
	<b>,</b>		-	J	<b>,</b>		
conjunction	-5884 Jul 19 j 20:44	11° <b>Ⅱ</b> 44'49	1°07'35	conjunction	-5879 Dec 28 j 17:01	25°M22'59	-0°48'06
minimum elong	-5884 Jul 19 j 20:40	11° <b>Ⅱ</b> 44'47	1°07'55	minimum elong	-5879 Dec 28 j 16:57	25°M22'57	0°48'22
morning rise	-5884 Aug 01 j 15:23	14° <b>Ⅲ</b> 33'55		max. Earth dist.	-5879 Dec 29 j 21:07	25°M39'40	6.03689 AU
	-5884 Oct 27 j 22:38	0ಂತ		morning rise	-5878 Jan 11 j 00:36	28°M32'11	

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 3 Attention, astronomical year style is used: The year -5878 in astronomical counting style is the year 5879 BCE in historical counting style.

Attention, astronomi	ical year style is used: Th	e year -5878 i	n astronomical cou	nting style is the year	5879 BCE in historical c	ounting style.	<b>6</b>
	-5878 Jan 17 j 06:28	0° <b>∡</b> 7		opposition	-5872 Jan 03 j 06:44	0° <b>Ⅲ</b> 25'53	1°20'02
retrograde	-5878 May 23 j 00:20	18° <b>∡</b> ¹42'37		min. Earth dist.	-5872 Jan 04 j 02:09	0° <b>Ⅱ</b> 19'35	4.37058 AU
min. Earth dist.	-5878 Jul 21 j 05:46	13° <b>∡</b> ¹46'38	4.03316 AU		-5872 Jan 06 j 14:36	30° <b>₹</b> 8	
opposition	-5878 Jul 22 j 05:36	13° <b>∡</b> ³38'36	-1°42'39	direct	-5872 Mar 05 j 13:43	25° <b>8</b> 22'54	
direct	-5878 Sep 18 j 09:08	8° <b>∡</b> ¹43'52			-5872 May 02 j 15:46	$\Pi$ °0	
evening set	-5877 Jan 20 j 23:53	27° <b>₹</b> 54'52		evening set	-5872 Jul 11 j 10:17	13° <b>Ⅱ</b> 23'18	
	-5877 Jan 29 j 20:54	0° <b>ප</b>		max. Earth dist.	-5872 Jul 22 j 19:01	15° <b>Ⅱ</b> 53'36	6.37186 AU
conjunction	-5877 Feb 03 j 11:09	1° <b>る</b> 04'54	_1°21'38	conjunction	-5872 Jul 24 j 06:54	16° <b>Ⅱ</b> 13'27	1°11'45
minimum elong	-5877 Feb 03 j 11:06	1°る04'53		minimum elong	-5872 Jul 24 j 06:50	16° <b>I</b> I13'25	
max. Earth dist.	-5877 Feb 05 j 05:02		6.04274 AU	morning rise	-5872 Aug 06 j 00:27	19° <b>Ⅱ</b> 02'05	1 12 03
morning rise	-5877 Feb 17 j 01:24	4° <b>ට</b> 16'24	0.0.27.110		-5872 Sep 29 j 14:01	0.0	
retrograde	-5877 Jun 28 j 02:57	24° <b>ට</b> 15'30		retrograde	-5872 Dec 04 j 16:29	6°9511'20	
opposition	-5877 Aug 26 j 19:23	19° <b>る</b> 10'19	-2°10'25	opposition	-5871 Feb 03 j 04:20	1° <b>©</b> 19'43	2°00'59
min. Earth dist.	-5877 Aug 25 j 15:58	19° <b>る</b> 19'40	4.06898 AU	min. Earth dist.	-5871 Feb 04 j 08:13	1°510'48	4.36203 AU
direct	-5877 Oct 23 j 23:32	14° <b>ප</b> 12'26			-5871 Feb 13 j 16:38	30°RⅡ	
	-5876 Feb 12 j 08:11	0° <b>≈</b>		direct	-5871 Apr 06 j 19:13	26° <b>Ⅱ</b> 18'51	
evening set	-5876 Feb 26 j 22:53	3° <b>≈</b> 19'18			-5871 May 28 j 02:26	$0$ $\circ$ $\odot$	
				evening set	-5871 Aug 11 j 16:44	14° <b>©</b> 19'20	
conjunction	-5876 Mar 11 j 15:17	6° <b>≈</b> 28'47		max. Earth dist.	-5871 Aug 22 j 15:16	16°9545'53	6.33733 AU
minimum elong	-5876 Mar 11 j 15:20	6° <b>≈</b> 28'48					
max. Earth dist.	-5876 Mar 13 j 06:09		6.10433 AU	conjunction	-5871 Aug 24 j 06:14	17°507'42	
morning rise	-5876 Mar 25 j 09:18	9° <b>≈</b> 38'51		minimum elong	-5871 Aug 24 j 06:13	17°507'42	1°28'41
ratra ara da	-5876 Apr 18 j 06:49	15°≈ 28°≈55'02		morning rise	-5871 Sep 05 j 17:33	19° <b>©</b> 55'07 0° <b>Ω</b>	
retrograde min. Earth dist.	-5876 Jul 31 j 16:52 -5876 Sep 28 j 04:37		4.14973 AU	retrograde	-5871 Oct 24 j 10:57 -5870 Jan 06 j 00:37	7° <b>Ω</b> 27'50	
opposition	-5876 Sep 29 j 00:52	23°≈51'12		opposition	-5870 Mar 08 j 00:35	2° <b>Ω</b> 36'04	2°07'48
direct	-5876 Nov 27 j 01:35	18°≈49'58	-1 30 34	min. Earth dist.	-5870 Mar 09 j 03:01	$2^{\circ}\Omega_{27'40}$	4.30441 AU
uncet	-5875 Feb 26 j 18:59	0° <b>∀</b>		mm. Bartii dist.	-5870 Mar 29 j 14:36	30°R.55	1.50111110
evening set	-5875 Apr 03 j 05:37	7° <b>)</b> 39'51		direct	-5870 May 09 j 04:41	27°538'04	
		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			-5870 Jun 18 j 10:24	0° <b>N</b>	
conjunction	-5875 Apr 16 j 23:54	10° <b>)</b> 46′07	-0°58'00		-5870 Sep 08 j 10:11	15° <b>Ω</b>	
minimum elong	-5875 Apr 16 j 23:58	10° <b>)</b> 46′09	0°58'10	evening set	-5870 Sep 11 j 22:21	15° <b>Ω</b> 47'31	
max. Earth dist.	-5875 Apr 17 j 23:46	10° <b>¥</b> 59'36	6.19808 AU	max. Earth dist.	-5870 Sep 23 j 02:01	18° <b>Ω</b> 19'53	6.26096 AU
morning rise	-5875 Apr 30 j 17:21	13° <b>¥</b> 51′50					
	-5875 Jul 27 j 02:34	$0$ ° $\mathbf{\gamma}$		conjunction	-5870 Sep 24 j 09:39	18° <b>Ω</b> 37'57	
retrograde	-5875 Sep 02 j 13:55	2° <b>Y</b> 12'48		minimum elong	-5870 Sep 24 j 09:42	18° <b>Ω</b> 37'59	1°19'32
	-5875 Oct 09 j 20:17	30° <b>₹</b>		morning rise	-5870 Oct 06 j 20:31	21° <b>Ω</b> 28'21	
opposition	-5875 Oct 31 j 21:04	27° <b>∺</b> 12'19			-5870 Nov 15 j 09:46	0° <b>m</b> )	
min. Earth dist.	-5875 Oct 31 j 13:06		4.24655 AU	retrograde	-5869 Feb 08 j 23:51	9° m 43'10	102 (102
direct	-5875 Dec 31 j 02:13	22° <b>光</b> 08'57 0° <b>Ƴ</b>		opposition	-5869 Apr 11 j 04:25	4° Mp 49'25	1°36'02
evening set	-5874 Mar 17 j 07:35 -5874 May 08 j 02:36	10° <b>Y</b> 37'03		min. Earth dist.	-5869 Apr 11 j 23:00 -5869 Jun 03 j 14:19	4° Mp43'30 30° RΩ	4.21358 AU
evening set	-36/4 May 06 J 02.30	10 13/03		direct	-5869 Jun 11 j 10:15	29° <b>Ω</b> 54'15	
conjunction	-5874 May 21 j 17:04	13° <b>Ƴ</b> 37'58	-0°13'05	ancet	-5869 Jun 19 j 05:14	0° <b>m</b>	
minimum elong	-5874 May 21 j 17:06	13° <b>Y</b> 37′59		evening set	-5869 Oct 13 j 21:50	18° <b>m</b> ) 19'42	
behind sun begin	-5874 May 21 j 12:15	13° <b>Y</b> 35'18		<i>3</i>			
behind sun end	-5874 May 21 j 21:56	13° <b>Y</b> 40'39		conjunction	-5869 Oct 26 j 12:29	21° Mp 15'37	0°45'23
max. Earth dist.	-5874 May 21 j 16:13	13° <b>Y</b> 37'30	6.29121 AU	minimum elong	-5869 Oct 26 j 12:32	21°M 15'39	0°45'29
morning rise	-5874 Jun 04 j 05:13	16° <b>Ƴ</b> 37'32		max. Earth dist.	-5869 Oct 25 j 20:56	21°M/06'34	6.16411 AU
	-5874 Aug 12 j 06:29	$0^{\circ}$ 8		morning rise	-5869 Nov 08 j 04:33	24° Mp 12'27	
asc. node	-5874 Sep 05 j 00:48	2° <b>8</b> 50'57			-5869 Dec 03 j 21:03	0∘ <b>ত</b>	
retrograde	-5874 Oct 04 j 05:09	4° <b>8</b> 12'13		retrograde	-5868 Mar 15 j 11:57	13° <b>≙</b> 18'41	
	-5874 Nov 27 j 03:19	30°R <b>Y</b>		opposition	-5868 May 15 j 15:42	8° <b>£</b> 21'28	0°31'20
opposition	-5874 Dec 02 j 18:01	29° <b>Y</b> 15'36	0°16'01	min. Earth dist.	-5868 May 15 j 17:49	8° <b>£</b> 20'48	4.11719 AU
min. Earth dist.	-5874 Dec 03 j 01:25	29° <b>Y</b> 13′09	4.32804 AU	direct	-5868 Jul 14 j 13:00	3° <b>£</b> 28'14	
direct	-5873 Feb 02 j 05:18 -5873 Apr 08 j 12:32	24° <b>Ƴ</b> 11'38 0° <b>႘</b>		desc. node evening set	-5868 Oct 23 j 15:23 -5868 Nov 15 j 08:18	17° <b>♀</b> 00'40 22° <b>♀</b> 13'35	
evening set	-5873 Jun 10 j 09:45	12° <b>8</b> 21'38		evening set	2000 INOV 12 J UO.18	44 <del>==</del> 1333	
J. J	-5873 Jun 22 j 10:06	15° <b>8</b>		conjunction	-5868 Nov 28 j 05:52	25° <b>≙</b> 16'17	-0°04'46
	50,5 tun 22 j 10.00	0		minimum elong	-5868 Nov 28 j 05:51	25° <b>⊆</b> 16'16	
conjunction	-5873 Jun 23 j 16:12	15° <b>8</b> 16'35	0°34'44	behind sun begin	-5868 Nov 27 j 21:57	25° <b>£</b> 11'37	
minimum elong	-5873 Jun 23 j 16:09	15° <b>8</b> 16'33	0°34'57	behind sun end	-5868 Nov 28 j 13:45	25° <b>≏</b> 20'55	
max. Earth dist.	-5873 Jun 22 j 19:29	15° <b>8</b> 05'10	6.35502 AU	max. Earth dist.	-5868 Nov 28 j 14:05	25° <b>≙</b> 21'07	6.07757 AU
morning rise	-5873 Jul 06 j 19:02	18° <b>8</b> 09'47		morning rise	-5868 Dec 11 j 06:10	28° <b>≏</b> 20'35	
	-5873 Sep 04 j 18:53	$\Pi^{\circ}0$			-5868 Dec 18 j 08:26	0° <b>M</b>	
retrograde	-5873 Nov 04 j 06:15	5° <b>Ⅱ</b> 19'15			-5867 Mar 05 j 22:34	15°M	

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5867 in astronomical counting style is the year 5868 BCE in historical counting style. opposition -5867 Apr 21 j 07:05 18°ML12'15 -5862 Dec 07 j 05:17 3°**8**50'13 0°25'49 retrograde -5867 Jun 06 j 22:02 min. Earth dist. -5862 Dec 07 j 13:44 3°847'26 4.34185 AU 15°RM. -5867 Jun 20 j 23:39 13°ML11'03 -0°47'00 -5861 Jan 09 j 11:42 30°RY opposition -5861 Feb 06 j 20:02 -5867 Jun 20 j 10:03 direct 28°**Y**46'22 min. Earth dist. 13°M15'33 4.04822 AU -5861 Mar 07 j 13:25 0°8 direct -5867 Aug 18 j 17:01 8°M17'54 -5867 Oct 24 j 06:54 15°M -5861 Jun 06 j 07:51 15°8 evening set -5867 Dec 20 j 13:57 27°M21'30 evening set -5861 Jun 14 j 23:23 16°**8**52'27 -5867 Dec 31 j 17:29 0°**∡**¹ max. Earth dist. -5861 Jun 27 j 03:58 19°**8**32'58 6.36640 AU 0°**∡**129'34 -0°54'16 conjunction -5866 Jan 02 j 19:18 conjunction -5861 Jun 28 j 04:12 19°**8**46'18 0°40'46 minimum elong -5866 Jan 02 j 19:14 0°**∡**129'31 0°54'34 minimum elong -5861 Jun 28 j 04:09 19°**8**46'17 0°41'02 -5861 Jul 11 j 05:45 22°838'28 max. Earth dist. -5866 Jan 04 j 01:45 0°**∡**¹47'38 6.03208 AU morning rise -5861 Aug 15 j 08:44 morning rise -5866 Jan 16 j 04:03 3°**∡**³39′27  $0^{\circ}\Pi$ retrograde -5866 May 28 j 04:03 23°**х** 51′23 retrograde -5861 Nov 08 j 14:22 9°**Ⅱ**44'23 min. Earth dist. -5866 Jul 26 j 06:04 18°**₹**'55'41 4.03248 AU opposition -5860 Jan 07 j 16:36 4°**I**I51'19 1°27'17 opposition -5866 Jul 27 j 07:23 18°**₰**¹47'09 -1°49'21 min. Earth dist. -5860 Jan 08 j 14:11 4°**Д**44'20 4.37885 AU direct -5866 Sep 23 j 08:32 13°**х** 52′05 -5860 Feb 27 j 21:59 30°R₩ -5865 Jan 12 j 22:41 0°る direct -5860 Mar 10 j 03:17 29°848'32 evening set -5865 Jan 26 j 05:21 3°る04'29 -5860 Mar 21 j 09:31  $0^{\circ}\Pi$ evening set -5860 Jul 15 j 18:28 17°**Ⅱ**46′07 conjunction -5865 Feb 08 j 17:28 6° 14'45 -1°24'03 max. Earth dist. -5860 Jul 27 j 01:50 20°**Ⅱ**15'36 6.37618 AU minimum elong -5865 Feb 08 i 17:26 6°る14'43 1°24'24 max. Earth dist. -5865 Feb 10 j 11:03 6°る39'12 6.04599 AU conjunction -5860 Jul 28 i 13:55 20°**Ⅲ**35'33 1°15'21 -5865 Feb 22 j 08:32 9°る26'25 -5860 Jul 28 i 13:52 20°**Ⅲ**35'31 1°15'41 morning rise minimum elong -5865 Jul 03 j 03:53 29°る22'10 morning rise -5860 Aug 10 j 06:06 23°II23'29 retrograde -5865 Aug 31 j 18:15 24°る17'03 -2°10'25 -5860 Sep 10 j 10:07 0ಂತಾ opposition -5865 Aug 30 j 15:31 -5860 Dec 08 j 22:47 10°932'39 min. Earth dist. 24°る26'11 4.07584 AU retrograde -5865 Oct 29 j 00:51 -5859 Feb 07 j 14:18 direct 19°**る**18'42 5°9641'07 2°03'57 opposition -5859 Feb 08 j 18:07 -5864 Jan 24 j 21:38 min. Earth dist. 5°932'15 4 36220 AU 0°≈≈ -5864 Mar 03 j 04:19 8°≈24'45 -5859 Apr 11 j 04:49 direct 0°9540'35 evening set -5859 Aug 15 j 22:18 18°9540'06 evening set 11°**≈**34'05 -1°22'35 -5859 Aug 26 j 19:03 6.33315 AU conjunction -5864 Mar 16 j 21:27 max. Earth dist. 21°**©**05'54 -5864 Mar 16 j 21:30 11°≈34'07 1°22'52 minimum elong -5864 Mar 18 j 12:44 -5859 Aug 28 j 10:58 21°528'18 1°28'35 max. Earth dist. 11°≈56'44 6.11454 AU conjunction -5864 Mar 30 j 15:36 -5859 Aug 28 j 10:58 morning rise 14°**≈**43'48 minimum elong 21°9528'18 1°28'56 -5859 Sep 09 j 21:53 -5864 Mar 31 j 19:59 15°≈ morning rise 24°9515'42 -5859 Oct 06 j 08:52 -5864 Jun 16 j 01:03 0°**∀**  $0^{\circ}\Omega$ retrograde -5864 Aug 05 j 12:47 3°¥53'05 retrograde -5858 Jan 10 j 12:50 11°Ω51'58 -5864 Sep 25 j 03:28 30°R≈ -5858 Mar 12 j 13:17 7°**Ω**00'03 2°05'40 opposition -5864 Oct 03 j 19:36 28°≈49'43 -1°44'19 min. Earth dist. -5858 Mar 13 j 16:46 6°**Ω**51'19 4.29590 AU opposition min. Earth dist. -5864 Oct 03 j 00:12 28°≈56'20 4.16239 AU direct -5858 May 13 j 16:48 2°₽02'20 -5864 Dec 01 j 23:05 23°≈48'14 -5858 Aug 23 j 14:27 15°**Ω** direct -5863 Feb 05 j 11:35 0°**)**€ -5858 Sep 16 j 04:09 20°Ω13'01 evening set -5863 Apr 08 j 07:45 12°**)** ₹35′18 max. Earth dist. -5858 Sep 27 j 08:22 22°**Ω**46′06 6.24881 AU evening set 23°Ω04'02 1°16'02 conjunction -5863 Apr 22 j 01:40 15°**)** 40′53 -0°52′21 conjunction -5858 Sep 28 i 15:41 -5863 Apr 22 j 01:44 minimum elong 15°**)** 40′55 0°52′28 minimum elong -5858 Sep 28 i 15:45 23°**Ω**04'03 1°16'16 max. Earth dist. -5863 Apr 22 j 21:53 15°**)** €52'17 6.21253 AU morning rise -5858 Oct 11 i 02:58 25°**Ω**55'06 morning rise -5863 May 05 j 18:49 18°**)**(45'49 -5858 Oct 29 i 08:30 0° m -5863 Jun 29 j 08:08  $0^{\circ}\Upsilon$ -5857 Feb 13 j 15:24 14° No 16'44 retrograde -5863 Sep 07 j 03:34 6°**Y**58'59 -5857 Apr 15 j 21:19 9° m 22'35 1°28'57 retrograde opposition -5863 Nov 05 j 11:36 1°Y59'02 -0°44'53 min. Earth dist. -5857 Apr 16 j 13:55 9° mb 17'17 4.19854 AU opposition min. Earth dist. -5863 Nov 05 j 05:25 2°Υ01'07 4.26166 AU -5857 Jun 15 j 22:01 4° m 27'40 direct -5863 Nov 20 j 16:02 30°**₹** evening set -5857 Oct 18 j 08:00 22° m 56'34 26°**¥**55'31 direct -5862 Jan 04 j 21:33  $0^{\circ}\Upsilon$ -5862 Feb 19 j 13:10 conjunction -5857 Oct 30 j 23:27 25° m 53'33 0°39'17 -5862 May 12 j 22:40 15°**Y**19'44 minimum elong -5857 Oct 30 j 23:31 25° m 53'35 0°39'20 evening set -5857 Oct 30 j 10:11 6.14759 AU max. Earth dist. 25° Mp 45'47 -5862 May 26 j 12:18 18°**Y**19'40 -0°06'10 28° m 51'33 conjunction morning rise -5857 Nov 12 j 16:31 -5862 May 26 j 12:19 18°**Y**19'40 0°06'05 -5857 Nov 17 j 14:50 0∘**⊽** minimum elong 18°**Y**15′21 behind sun begin -5862 May 26 j 04:30 retrograde -5856 Mar 20 j 12:38 18°**2**06'21 behind sun end -5862 May 26 j 20:08 18°**Y**23′59 opposition -5856 May 20 j 13:38 13°**♀**08'37 0°20'56 max. Earth dist. -5862 May 26 j 10:23 18°**Y**18'37 6.30625 AU min. Earth dist. -5856 May 20 j 14:50 13°**≏**08'14 4.10036 AU morning rise -5862 Jun 08 j 23:05 21°Υ18'05 direct -5856 Jul 19 j 07:07 8°**£**15'27 asc. node -5862 Jul 15 j 12:28 28°**Y**59'37 desc. node -5856 Sep 03 j 19:56 11°**£**38'23 -5862 Jul 20 j 17:39 0°8 -5856 Nov 20 j 01:49 27°**2**05'41 evening set -5862 Oct 08 j 13:58 8°**8**46'18 -5856 Dec 02 j 08:24 0°M retrograde

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5856 in astronomical counting style is the year 5857 BCE in historical counting style. -5856 Dec 03 i 00:34 0°ML09'34 -0°11'57 -5850 May 31 j 06:07 22°Y58'26 0°01'01 conjunction minimum elong -5856 Dec 03 j 00:33 -5850 May 30 j 21:52 22°Y53'54 0°12'06 behind sun begin minimum elong -5856 Dec 02 j 18:58 behind sun begin -5850 May 31 j 14:22 23°**Y**′02'58  $0^{\circ}$ M.06'16behind sun end max. Earth dist. 22°Y55'06 behind sun end -5856 Dec 03 j 06:07 0°M12'51 -5850 May 31 j 00:01 6.31902 AU max. Earth dist. -5850 Jun 13 j 15:47 25°Y55'52 -5856 Dec 03 j 11:29  $0^{\circ}$ M 16'026.06213 AU morning rise morning rise -5856 Dec 16 j 02:15 3°M15'09 -5850 Jul 02 j 12:18 0°8 -5855 Feb 08 j 03:05 15°M retrograde -5850 Oct 12 j 23:17 13°**8**18'53 8°**8**23'15 retrograde -5855 Apr 26 j 10:22 23°M14'01 opposition -5850 Dec 11 j 16:35 0°35'32 min. Earth dist. -5855 Jun 25 j 08:55 18°**M**₊17'41 4.03600 AU min. Earth dist. -5850 Dec 12 j 03:13 8°**8**19'45 4.35163 AU opposition -5855 Jun 26 j 01:02 18°M12'20 -0°57'13 direct -5849 Feb 11 j 11:11 3°**8**19'26 -5855 Jul 22 j 11:19 15°RM -5849 May 20 j 05:47 15°8 21°**8**23'12 direct -5855 Aug 23 j 13:31 13°M19'05 evening set -5849 Jun 19 j 12:59 -5855 Sep 24 j 11:12 15°M₁ -5855 Dec 15 j 04:21 0°**√** conjunction -5849 Jul 02 j 16:31 24°**8**16'15 0°46'40 evening set -5855 Dec 25 j 15:28 2°×27'10 minimum elong -5849 Jul 02 j 16:27 24°**8**16'14 0°46'56 max. Earth dist. -5849 Jul 01 j 15:02 24°**8**02'15 6.37236 AU conjunction -5854 Jan 07 j 21:54 5°**∡**36'04 -0°59'55 morning rise -5849 Jul 15 j 16:29 27°807'34 minimum elong -5854 Jan 07 j 21:50 5°**х** 36′01 1°00'15 -5849 Jul 28 j 23:30  $0^{\circ}\Pi$ max. Earth dist. -5854 Jan 09 j 06:20 5°**х** 55′20 6.02402 AU retrograde -5849 Nov 12 j 23:05 14°**Ⅲ**12'03 morning rise -5854 Jan 21 j 07:50 8°**х** 46'47 opposition -5848 Jan 12 j 03:45 9°**Ⅱ**19'21 1°34'15 retrograde -5854 Jun 02 j 08:33 29°×701'15 min. Earth dist. -5848 Jan 13 j 02:30 9°**Ⅱ**12'02 4.38074 AU min. Earth dist. -5854 Jul 31 i 07:04 24°**₹**05'37 4.02959 AU direct -5848 Mar 14 j 16:03 4°**Ⅱ**16'53 opposition -5854 Aug 01 j 09:31 23°**х** 56′39 -1°55'08 evening set -5848 Jul 20 i 04:48 22°II13'57 direct -5854 Sep 28 j 10:19 19°**∡**'01'09 max. Earth dist. -5848 Jul 31 j 08:04 24°**Ⅱ**41'27 6.37359 AU -5854 Dec 25 j 16:20 0°정 -5853 Jan 31 j 11:37 8°る15'27 -5848 Aug 01 j 22:55 25°**Ⅲ**02'58 conjunction 1°18'39 evening set -5848 Aug 01 j 22:52 25°**Ⅱ**02'56 1°19'01 minimum elong -5848 Aug 14 j 14:14 -5853 Feb 14 j 00:49 11°る26'01 -1°25'45 morning rise 27°II50'36 conjunction -5848 Aug 24 j 11:05 -5853 Feb 14 j 00:48 11°る26'01 1°26'07 0ಂತಾ minimum elong -5853 Feb 15 j 21:22 -5848 Dec 13 j 11:56 max. Earth dist. 11°**る**52'10 6.04851 AU retrograde 15°902'15 -5853 Feb 27 j 16:29 14°**る**37'49 -5847 Feb 12 j 04:18 10°9510'47 morning rise opposition 2°06'28 -5853 May 14 j 11:50 min. Earth dist. -5847 Feb 13 j 09:20 4.35542 AU 0°≈ 10°9501'32 -5853 Jul 08 j 05:36 4°≈29'46 -5847 Apr 15 j 18:55 retrograde direct 5°9510'37 -5853 Sep 01 j 09:55 30°R₹ evening set -5847 Aug 20 j 07:38 23°9511'24 29°る24'40 -2°09'20 -5853 Sep 05 j 17:33 opposition max. Earth dist. -5847 Aug 31 j 05:10 25°938'00 6.32267 AU -5853 Sep 04 j 14:54 min. Earth dist. 29°る33'46 4.08348 AU -5847 Sep 01 j 19:58 direct -5853 Nov 03 j 01:42 24°る25'50 conjunction 25°959'49 1°28'24 -5852 Jan 02 j 18:31 0°**≈** minimum elong -5847 Sep 01 j 19:58 25°959'50 1°28'44 -5852 Mar 08 j 10:30 13°≈30'20 -5847 Sep 14 j 06:27 28°9547'31 evening set morning rise -5852 Mar 14 j 23:02 15°≈ -5847 Sep 19 j 16:34  $0^{\circ}\Omega$ -5847 Dec 14 j 21:45 15°€ -5852 Mar 22 j 03:53 16°≈39'18 -1°19'44 -5846 Jan 15 j 05:17 16°**£**29'36 conjunction retrograde -5852 Mar 22 j 03:57 -5846 Feb 15 j 19:23 15°RΩ minimum elong 16°≈39'20 1°20'00 -5852 Mar 23 j 17:03 17°≈00'38 6.12630 AU -5846 Mar 17 j 07:44 11°**Ω**37'31 2°02'45 max. Earth dist. opposition -5852 Apr 04 j 22:21 19°≈48'33 -5846 Mar 18 j 09:40 11°**Ω**29'17 4.28244 AU morning rise min. Earth dist. -5852 May 22 j 14:23 0°**∀** direct -5846 May 18 j 07:24 6°Ω40'18 retrograde -5852 Aug 10 j 06:17 8° **)** 49'52 -5846 Aug 05 i 01:12 15°Ω opposition -5852 Oct 08 i 13:54 3°\(\)46'46 -1°37'17 evening set -5846 Sep 20 j 16:03 24°Ω53'43 min. Earth dist. -5852 Oct 07 i 19:25 3°**)** 53'04 4.17666 AU max. Earth dist. -5846 Oct 01 j 21:52 27°**Ω**28'17 6.23359 AU -5852 Nov 09 j 05:28 30°R≈ direct -5852 Dec 06 j 21:11 28°≈44'49 -5846 Oct 03 i 03:45 27°Ω45'28 1°12'08 conjunction -5851 Jan 03 j 22:24 0°**)**€ minimum elong -5846 Oct 03 j 03:48 27°**Ω**45'30 1°12'22 -5846 Oct 12 j 22:07 17°**)** 28'14 evening set -5851 Apr 13 j 08:59 O° m morning rise -5846 Oct 15 j 15:38 0° m 37'27 conjunction -5851 Apr 27 j 02:42 20°\(\frac{1}{3}3'02\) -0°46'19 retrograde -5845 Feb 18 j 16:50 19° Mp 07'00 -5851 Apr 27 j 02:46 20°**X**33'05 0°46'24 opposition -5845 Apr 20 j 21:11 14° Mp 12'29 1°20'50 minimum elong -5851 Apr 27 j 21:08 20°**)** 43′24 6.22806 AU min. Earth dist. -5845 Apr 21 j 12:29 14° Mp 07'35 4.18249 AU max. Earth dist. -5851 May 10 j 19:05 23°**)** 37'01 -5845 Jun 20 j 18:09 morning rise direct 9° m 17'55 -5851 Jun 09 j 08:25  $0^{\circ}\Upsilon$  $27^{\circ}$  My 50'26evening set -5845 Oct 23 j 00:48 11°**Υ**42'08 -5845 Nov 01 j 06:33 0∘**⊽** retrograde -5851 Sep 11 j 16:53 opposition -5851 Nov 10 j 01:30 6°**Y**42'43 -0°34'55 min. Earth dist. -5851 Nov 09 j 21:29 6°**Y**44'03 4.27654 AU conjunction -5845 Nov 04 j 17:17 0°**ჲ**48'30 0°32'32 direct -5850 Jan 09 j 16:19 1°**Y**39′03 minimum elong -5845 Nov 04 j 17:20 0°**ჲ**48'31 0°32'33 evening set -5850 May 17 j 17:39 19°**Y**59'30 max. Earth dist. -5845 Nov 04 j 07:35 0°**£**42'49 6.13252 AU asc. node -5850 May 24 j 02:00 21°\bar{Y}23'20 morning rise -5845 Nov 17 j 11:29 3°**£**47'41 23°**♀**10'10 retrograde -5844 Mar 25 j 17:46

opposition

18°**≙**11'57 0°09'45

-5844 May 25 j 17:47

-5850 May 31 j 06:08 22°**Υ**'58'27 0°00'54

conjunction

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5844 in astronomical counting style is the year 5845 BCE in historical counting style. -5844 May 25 j 15:43 18°**2**12'37 4.08785 AU conjunction -5838 Jun 04 i 20:23 27°**Y**29′16 0°07'40 min. Earth dist. -5844 Jul 13 j 18:12 minimum elong -5838 Jun 04 j 20:23 27°**Y**′29′16 0°07'49 desc node 13°**Ω**29'54 -5844 Jul 24 j 05:19 13°**₽**19'01 -5838 Jun 04 j 13:02 27°**Y**25'14 direct behind sun begin -5838 Jun 05 j 03:44 27° Y 33'19 -5844 Nov 15 j 15:04  $0^{\circ}M$ behind sun end 27°**Y**′24'02 -5838 Jun 04 j 10:53 evening set -5844 Nov 25 j 01:14 2°M12'23 max. Earth dist. 6.32828 AU -5838 Jun 16 j 05:45  $0^{\circ}$ 8 conjunction -5844 Dec 08 j 00:59 5°M17'08 -0°19'27 morning rise -5838 Jun 18 j 04:49 0°**8**25'49 minimum elong -5844 Dec 08 j 00:57 5°M17'07 0°19'38 -5838 Sep 04 j 23:13 15°8 max. Earth dist. -5844 Dec 08 j 15:09 5°M25'33 6.05343 AU retrograde -5838 Oct 17 j 07:34 17°**8**45'11 morning rise -5844 Dec 21 j 03:58 8°M23'39 -5838 Nov 28 j 22:30 15°₽₩ -5843 Jan 19 j 01:27 15°M opposition -5838 Dec 16 j 01:29 12°**8**50'04 0°44'46 retrograde -5843 May 01 j 16:57  $28^{\circ}$ M $_{2}6'44$ min. Earth dist. -5838 Dec 16 j 14:46 12°**8**45'43 4.35688 AU min. Earth dist. -5843 Jun 30 j 11:52  $23^{\circ}$ M $_{3}0'40$ 4.03227 AU direct -5837 Feb 15 j 23:50 7°**8**46'21 opposition -5843 Jul 01 j 06:20 23°M24'31 -1°07'23 -5837 May 01 j 02:39 15°8 direct -5843 Aug 28 j 16:41 18°M31'04 evening set -5837 Jun 24 j 00:16 25°849'19 -5843 Nov 27 j 02:32 0°**√** max. Earth dist. -5837 Jul 05 j 21:22 28°**8**25'46 6.37296 AU evening set -5843 Dec 30 j 20:03 7°**х¹**40′20 conjunction -5837 Jul 07 j 02:29 28°**8**41'48 0°52'10 conjunction -5842 Jan 13 j 03:36 10°**х** 49'36 -1°05'18 minimum elong -5837 Jul 07 j 02:26 28°**8**41'45 0°52'27 10°**∡**¹49'33 minimum elong -5842 Jan 13 j 03:32 1°05'36 -5837 Jul 13 j 00:35  $0^{\circ}\Pi$ max. Earth dist. -5842 Jan 14 j 16:18 11°**∡**11′22 6.02560 AU morning rise -5837 Jul 20 j 01:18 1°**I**I32'35 morning rise -5842 Jan 26 j 14:21 14°**∡**00'35 retrograde -5837 Nov 17 j 08:24 18°**Ⅲ**37'36 -5842 Apr 15 j 10:04 0°정 opposition -5836 Jan 16 j 14:29 13°**Ⅱ**45′08 1°40'36 -5842 Jun 07 i 13:36 4°る13'06 min. Earth dist. -5836 Jan 17 i 14:34 13°**Ⅲ**37′23 4.37706 AU retrograde -5842 Jul 31 j 02:27 30°R.✓ direct -5836 Mar 19 j 03:27 8°**Ⅱ**42'52 -5842 Aug 05 j 08:48 29° ₹17'25 4.03660 AU 26°**Ⅱ**41'06 min. Earth dist. evening set -5836 Jul 24 j 14:24 -5842 Aug 06 j 11:44 29° **2**08'17 -2°00'01 max. Earth dist. -5836 Aug 04 j 17:13 29°**Ⅱ**08'39 6.36583 AU opposition -5842 Oct 03 j 12:48 24°**∡**12′22 direct 0°궁 -5836 Aug 06 j 07:37 -5842 Dec 03 j 21:48 conjunction 29°**Ⅱ**29'58 1°21'28 -5841 Feb 05 j 17:34 13°る24'58 -5836 Aug 06 j 07:34 minimum elong 29°**Ⅲ**29'57 1°21'50 evening set -5836 Aug 08 j 13:41 000 -5841 Feb 19 j 07:18 -5836 Aug 18 j 21:52 conjunction 16°**ප**35'17 -1°26'50 2°9517'30 morning rise 16°る35'17 1°27'11 -5841 Feb 19 j 07:17 -5836 Dec 18 j 01:11 minimum elong retrograde 19°**©**33'17 -5841 Feb 21 j 02:50 -5835 Feb 16 j 19:07 max. Earth dist. 17°る00'46 6.05991 AU opposition 14°9541'53 2°08'13 -5841 Mar 04 j 23:40 -5835 Feb 17 j 23:57 morning rise 19°**る**46'46 min. Earth dist. 14°932'43 4.34432 AU -5841 Apr 20 j 19:27 0°≈ direct -5835 Apr 20 j 08:01 9°9542'09 retrograde -5841 Jul 13 j 01:17 9°**≈**31'28 evening set -5835 Aug 24 j 18:11 27°9545'22 min. Earth dist. -5841 Sep 09 j 11:24 4°≈35'31 4.09805 AU -5835 Sep 03 j 17:31  $0^{\circ}\Omega$ -5841 Sep 10 j 13:53 4°≈26'27 -2°07'18 max. Earth dist. -5835 Sep 04 j 14:58 0°**Ω**12'06 6.30905 AU opposition -5841 Oct 21 j 02:26 30°Rる direct -5841 Nov 08 j 00:25 29°る27'05 conjunction -5835 Sep 06 j 06:00 0°**Ω**34'08 1°27'38 -5841 Nov 26 j 02:48 -5835 Sep 06 j 06:01 0°**£**34′09 0°≈ minimum elong 1°27'56 -5840 Feb 27 j 03:20 -5835 Sep 18 j 16:32 3°**£**22′22 15°≈ morning rise -5840 Mar 13 j 12:51 -5835 Nov 14 j 17:04 evening set 18°≈27'49 15°€ -5834 Jan 20 j 01:59 21°Ω11'11 retrograde conjunction -5840 Mar 27 i 06:38 21°≈36'11 -1°16'25 opposition -5834 Mar 22 j 04:10 16°Ω18'51 1°58'58 minimum elong -5840 Mar 27 i 06:42 21°≈36'14 1°16'40 min. Earth dist. -5834 Mar 23 i 04:58 16°Ω10'58 4.26724 AU max. Earth dist. -5840 Mar 28 j 18:02 21°≈56'27 6.14282 AU -5834 Apr 01 i 15:09 15°RΩ morning rise -5840 Apr 10 j 00:56 24°≈44'39 direct -5834 May 23 j 00:35 11°Ω22'00 -5840 May 03 j 17:28 0°**₩** -5834 Jul 12 j 00:31 15°Ω -5840 Aug 14 j 21:31 13°\ 36'58 -5834 Sep 25 j 05:23 29°**£**38'24 retrograde evening set -5840 Oct 13 j 04:24 8°\ 34'18 -1°29'51 -5834 Sep 26 j 19:07 0° m opposition min. Earth dist. 8°**升**39'39 4.19319 AU -5840 Oct 12 j 12:38 3°**)** 32′00 direct -5840 Dec 11 j 17:00 conjunction -5834 Oct 07 j 17:41 2° m 31'00 1°07'41 -5839 Apr 18 j 05:46 22°**)** 11'17 minimum elong -5834 Oct 07 j 17:44 2° m/31'02 1°07'53 evening set max. Earth dist. -5834 Oct 06 j 15:41 2° Mp 16'01 6.21831 AU conjunction -5839 May 01 j 23:02 25°**H**15'16 -0°40'12 -5834 Oct 20 j 06:07 5° m 23'55 morning rise -5839 May 01 j 23:05 -5833 Feb 23 j 18:18 minimum elong 25°\dagger 15'18 0°40'16 retrograde 24° m 01'05 -5839 May 02 j 13:28 -5833 Apr 25 j 22:51 max. Earth dist. 25°**米**23'21 6.24328 AU opposition 19°**m**06'06 1°12'00 -5833 Apr 26 j 11:16 morning rise -5839 May 15 j 14:48 28°**)** 18'19 min. Earth dist. 19° Mp 02'07 4.16827 AU  $0^{\circ}\Upsilon$ -5833 Jun 25 j 14:27 -5839 May 23 j 06:48 direct 14° mp 11'55 -5839 Sep 16 j 01:05 16°**Y**16′10 -5833 Oct 15 j 17:39 0∘**⊽** retrograde opposition -5839 Nov 14 j 11:36 11°**Υ**17'15 -0°25'07 evening set -5833 Oct 27 j 19:08 2°**£**47'03 min. Earth dist. -5839 Nov 14 j 09:30 11°Υ17'57 4.28920 AU direct -5838 Jan 14 j 06:19 6°**Y**13′24 conjunction -5833 Nov 09 j 12:23 5°**£**46′00 0°25'27 -5838 Apr 03 j 00:51 14°Y25'37 -5833 Nov 09 j 12:25 5°**£**46'02 asc. node minimum elong 0°25'27 -5838 May 22 j 08:58 24° Y 31'09 max. Earth dist. -5833 Nov 09 j 05:42 5°**2**42'05 6.12060 AU evening set

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5833 in astronomical counting style is the year 5834 BCE in historical counting style. -5833 Nov 22 i 07:50 8°**2**46'14 direct -5826 Jan 18 j 22:12 10°**Y**48'41 morning rise -5832 Mar 30 j 22:45 28°**£**14'59 -5826 Feb 10 j 17:17 11°Y36'41 asc node retrograde -5832 May 22 j 20:04 24°**₽**19'04 -5826 May 27 j 00:32 29°Y04'25 evening set desc. node -5826 May 31 j 05:50 -5832 May 30 j 22:19 23°**♀**16'06 -0°01'37 0°8 opposition -5832 May 30 j 17:20 min. Earth dist. 23°**♀**17'44 4.07913 AU -5826 Jun 09 j 10:56 direct -5832 Jul 29 j 06:17 18°**£**23'12 conjunction 2°**8**01'50 0°14'25 -5826 Jun 09 j 10:54 -5832 Oct 28 j 22:28 0°M minimum elong 2°**8**01'49 0°14'35 -5826 Jun 09 j 07:34 1°859'59 evening set -5832 Nov 30 j 00:57 7°M18'21 behind sun begin behind sun end -5826 Jun 09 j 14:15 2°**8**03'39 conjunction -5832 Dec 13 j 01:55 10°M23'48 -0°26'49 max. Earth dist. -5826 Jun 08 j 22:29 1°**8**54'58 6.33545 AU minimum elong -5832 Dec 13 j 01:53  $10^{\circ}$  ML 23'47  $0^{\circ}27'02$ morning rise -5826 Jun 22 j 18:05 4°**8**57'35 -5826 Aug 11 j 00:40 max. Earth dist. -5832 Dec 13 j 21:03 10°M35'09 6.04864 AU 15°8 morning rise -5832 Dec 26 j 05:55 13°MJ31'00 retrograde -5826 Oct 21 j 15:36 22°**8**14'10 -5831 Jan 01 j 13:41 15°M₀ opposition -5826 Dec 20 j 11:31 17°**8**19'31 0°53'52 -5831 Mar 18 j 19:12 0°**√** min. Earth dist. -5826 Dec 21 j 01:56 17°**8**14'48 4.36068 AU retrograde -5831 May 06 j 23:29 3°**х** 36′23 -5825 Jan 07 j 23:46 15°R₩ -5831 Jun 25 j 12:00 30°RM direct -5825 Feb 20 j 11:28 12°815'56 opposition -5831 Jul 06 j 10:20 28°M233'44 -1°16'59 -5825 Apr 05 j 06:14 15°8 min. Earth dist. -5831 Jul 05 j 14:32  $28^{\circ}$ MJ40'204.03206 AU -5825 Jun 27 j 02:34  $0^{\circ}\Pi$ direct -5831 Sep 02 j 18:51 23°M-40'04 evening set -5825 Jun 28 j 12:27 0°II18'30 -5831 Nov 06 j 03:11 0°×7 max. Earth dist. -5825 Jul 10 j 06:34 2°II53'27 6.37306 AU evening set -5830 Jan 04 i 23:56 12°**х** 49'36 conjunction -5825 Jul 11 j 13:18 3°**Ⅱ**10′24 0°57'27 conjunction -5830 Jan 18 j 08:13 15°**₹**59'01 -1°10'07 minimum elong -5825 Jul 11 j 13:14 3°**Ⅱ**10′22 0°57'44 -5830 Jan 18 j 08:09 15°**∡** 58'59 1°10'28 morning rise -5825 Jul 24 j 10:47 6°**Ⅱ**00'38 minimum elong -5830 Jan 19 j 21:25 16°**₹**21'03 6.02953 AU -5825 Nov 21 j 19:38 23°**Ⅱ**06'23 max. Earth dist. retrograde -5830 Jan 31 j 20:01 19°**∡**10′12 -5824 Jan 21 j 02:27 18°**Ⅱ**14'16 1°46'29 opposition morning rise -5830 Mar 22 j 02:21 -5824 Jan 22 j 04:01 18°**耳**06′03 0°중 min. Earth dist. 4.37370 AU 9°る19'57 -5830 Jun 12 j 13:58 direct -5824 Mar 23 j 16:36 13°**Ⅲ**12'21 retrograde -5830 Aug 10 j 07:50 -5824 Jul 23 j 14:46 min. Earth dist. 4°る24'30 4.04455 AU 0.00 -5830 Aug 11 j 11:54 -5824 Jul 29 j 00:49 4°る14'57 -2°03'58 evening set 1°9511'25 opposition -5830 Sep 18 j 12:01 -5824 Aug 09 j 01:11 30°₽**⋌** max. Earth dist. 3°937'58 6.35916 AU 29°**х¹**18'36 -5830 Oct 08 j 12:47 direct 0°궁 -5824 Aug 10 j 16:59 -5830 Oct 28 j 16:43 conjunction 4°9500'07 1°23'51 -5824 Aug 10 j 16:57 evening set -5829 Feb 10 j 21:51 18°**る**29'37 minimum elong 4°900'06 1°24'13 -5824 Aug 23 j 06:32 morning rise 6°9547'36 -5829 Feb 24 j 12:22 21°る39'44 -1°27'17 -5824 Dec 22 j 15:52 conjunction retrograde 24°907'12 minimum elong -5829 Feb 24 j 12:22 21°る39'45 1°27'37 -5823 Feb 21 j 10:59 19°9515'47 2°09'15 opposition max. Earth dist. -5829 Feb 26 j 07:57 22°る05'10 6.07111 AU min. Earth dist. -5823 Feb 22 j 15:11 19°506'48 4.33508 AU -5829 Mar 10 j 05:02 24°る50'51 direct -5823 Apr 24 j 21:36 14°9516'27 morning rise -5829 Apr 01 j 23:17 -5823 Aug 18 j 14:40  $0^{\circ}\Omega$ 0°≈ -5829 Jul 17 j 22:04 14°≈28'45 -5823 Aug 29 j 04:40 retrograde evening set 2°**Ω**21'13 -5829 Sep 14 j 08:23 max. Earth dist. -5823 Sep 09 j 04:19 min. Earth dist. 9°≈32'21 4.11128 AU 4°**Ω**49'55 6.29819 AU -5829 Sep 15 j 08:48 9°≈24'00 -2°04'27 opposition -5829 Nov 12 j 22:59 4°≈24'13 -5823 Sep 10 j 16:20 5°**Ω**10'19 1°26'22 direct conjunction -5828 Feb 09 i 02:18 15°≈ minimum elong -5823 Sep 10 j 16:21 5°**Ω**10′20 1°26'40 -5828 Mar 18 j 14:20 23°≈22'00 morning rise -5823 Sep 23 i 02:37 7°**Ω**58'55 evening set -5823 Oct 25 i 12:01 15°Ω conjunction -5828 Apr 01 i 08:19 26°≈29'52 -1°12'37 retrograde -5822 Jan 24 j 21:42 25°**Ω**53'31 -5828 Apr 01 i 08:23 26°≈29'55 1°12'50 opposition -5822 Mar 27 j 00:38 21°Ω00'55 1°54'27 minimum elong -5828 Apr 02 j 17:15 26°≈48'39 6.15706 AU min. Earth dist. -5822 Mar 27 j 23:57 20°**Ω**53'30 4.25545 AU max. Earth dist. -5828 Apr 15 j 02:35 29°**≈**37'42 direct -5822 May 27 j 17:45 16°**Ω**04'33 morning rise 0°**)**€ -5822 Sep 10 j 07:01 0° m -5828 Apr 16 j 18:05 retrograde -5828 Aug 19 j 10:18 18°**)**22'01 evening set -5822 Sep 29 j 18:21 4° Mp 22'36 -5828 Oct 17 j 18:01 13°**¥**19'53 -1°21'56 max. Earth dist. -5822 Oct 11 j 06:31 7° Mp 01'44 6.20669 AU opposition min. Earth dist. -5828 Oct 17 j 03:25 13°**)** 24′50 4.20712 AU 8°**)** 17'18 conjunction -5822 Oct 12 j 06:55 7° **m** 15'50 1°02'52 direct -5828 Dec 16 j 09:56 -5822 Oct 12 j 06:59 evening set -5827 Apr 23 j 02:23 26°**米**53'39 minimum elong 7° m 15'52 1°03'01 10° Mp 09'34 morning rise -5822 Oct 24 j 20:12 conjunction -5827 May 06 j 19:07 29°**\**56'55 -0°33'51 retrograde -5821 Feb 28 j 18:00 28° m 53'01 minimum elong -5827 May 06 j 19:10 29°**\**56'57 0°33'54 opposition -5821 Apr 30 j 22:57 23° Mp 57'27 1°02'46 max. Earth dist. -5827 May 07 j 05:19 0°**Y**02'37 6.25599 AU min. Earth dist. -5821 May 01 j 08:35  $23^{\circ}$  My 54'224.15749 AU -5827 May 07 j 00:38 0° $\gamma$ direct -5821 Jun 30 j 10:26 19° m 03'30 morning rise -5827 May 20 j 10:10 2°Y59'10 -5821 Sep 28 j 05:52 0∘**⊽** retrograde -5827 Sep 20 j 12:24 20°**Y**50′53 evening set -5821 Nov 01 j 11:58 7°**£**40'14 15°Υ52'35 -0°15'09 opposition -5827 Nov 18 j 22:23 min. Earth dist. -5827 Nov 18 j 23:26 -5821 Nov 14 j 06:18 10°**2**40'00 0°18'21 15°**Y**52'14 4.29957 AU conjunction

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5821 in astronomical counting style is the year 5822 BCE in historical counting style. morning rise -5821 Nov 14 i 06:19 10°**△**40'01 0°18'19 -5815 May 25 j 04:38 7°**Y**38′10 minimum elong -5821 Nov 14 i 04:26 -5815 Sep 24 j 21:37 25°**Y**24'47 max. Earth dist. 10°**£**38'55 6.11182 AU retrograde -5821 Nov 27 j 02:41 13°**£**41'04 -5815 Nov 23 j 09:04 20°Y27'02 -0°05'08 morning rise opposition -5820 Feb 18 j 07:16 -5815 Nov 23 j 11:04 20°**Υ**26'22 4.30767 AU o°m. min. Earth dist. 17°**Y**02'00 -5820 Apr 02 j 05:23 -5815 Dec 21 j 17:18 desc. node 3°M13'52 asc. node 15°**Y**23'07 3°M14'39 retrograde -5820 Apr 05 j 02:13 direct -5814 Jan 23 j 11:13 -5820 May 22 j 08:48 30°R<u>Ω</u> -5814 May 14 j 20:54  $0^{\circ}$ 8 opposition -5820 Jun 05 j 00:14 28°**₽**15'14 -0°12'43 evening set -5814 May 31 j 16:21 3°**8**37'26 -5814 Jun 13 j 09:26 min. Earth dist. -5820 Jun 04 j 17:33 28°**♀**17'25 4.07308 AU max. Earth dist. 6°**8**25'16 6.34140 AU direct -5820 Aug 03 j 05:12 23°**£**22'20 -5820 Oct 08 j 17:21 0°M conjunction -5814 Jun 14 j 01:26 6°**8**34'06 0°21'04 -5814 Jun 14 j 01:24 6°**8**34'05 evening set -5820 Dec 04 j 22:36 12°M18'34 minimum elong 0°21'15 -5814 Jun 27 j 07:26 9°829'06 -5820 Dec 16 j 07:05 15°M⋅ morning rise -5814 Jul 23 j 03:50 15°8 conjunction -5820 Dec 18 j 00:23 15°M24'32 -0°33'49 retrograde -5814 Oct 26 j 02:24 26°843'16 minimum elong -5820 Dec 18 j 00:20 15°M24'30 0°34'03 opposition -5814 Dec 24 j 22:19 21°**8**49'04 1°02'38 max. Earth dist. -5820 Dec 18 j 21:01 15°M36'46 6.04563 AU min. Earth dist. -5814 Dec 25 j 15:07 21°**8**43'35 4.36420 AU 16°**8**45'38 morning rise -5820 Dec 31 j 05:38 18°MJ32'20 direct -5813 Feb 25 j 01:44 -5819 Feb 21 j 15:58 0°×7 -5813 Jun 10 j 14:29  $0^{\circ}\Pi$ retrograde -5819 May 12 j 00:39 8°×39'15 evening set -5813 Jul 03 j 00:28 4°**Ⅱ**47'26 opposition -5819 Jul 11 j 10:56 3°**∡**36′07 -1°25′44 max. Earth dist. -5813 Jul 14 j 16:14 7°**Ⅲ**21'11 6.37367 AU min. Earth dist. -5819 Jul 10 j 12:57 3°**х** 43′28 4.03255 AU -5819 Aug 10 j 20:03 30°RM conjunction -5813 Jul 16 i 00:06 7°**Ⅱ**38'46 1°02'23 direct -5819 Sep 07 i 16:56 28°M42'08 minimum elong -5813 Jul 16 j 00:02 7°**Ⅱ**38'44 1°02'43 -5819 Oct 05 j 13:12 0°×7 morning rise -5813 Jul 28 j 20:15 10°**Ⅲ**28′26 -5818 Jan 10 j 01:07 17°**∡**751'53 -5813 Nov 26 j 05:31 27°**Ⅲ**34'44 retrograde evening set opposition -5812 Jan 25 j 14:53 22°II42'46 1°51'44 -5818 Jan 23 j 10:25 21°**∡**01'32 -1°14'18 -5812 Jan 26 j 16:15 4.37158 AU conjunction min. Earth dist. 22°**Ⅱ**34'38 -5818 Jan 23 j 10:22 -5812 Mar 28 j 04:17 21°**₹**'01'29 1°14'40 direct 17°**Ⅱ**41'10 minimum elong -5818 Jan 25 j 01:37 -5812 Jul 06 j 23:57 max. Earth dist. 21°**尽**24'42 6.03333 AU 000 -5812 Aug 02 j 10:38 -5818 Feb 05 j 22:51 24°**₹**12'47 evening set 5°9540'16 morning rise -5818 Mar 03 j 05:58 -5812 Aug 13 j 10:44 6.35422 AU 0°ಕ max. Earth dist. 8°906'56 -5818 Jun 17 j 13:25 14°**る**19'45 retrograde 9°る23'48 4.05129 AU -5818 Aug 15 j 06:03 -5812 Aug 15 j 01:49 8°528'43 1°25'45 min. Earth dist. conjunction -5818 Aug 16 j 08:58 9°る14'38 -2°06'55 -5812 Aug 15 j 01:47 opposition minimum elong 8°**©**28'42 1°26'06 4°る17'47 -5812 Aug 27 j 14:30 direct -5818 Oct 13 j 11:27 morning rise 11°9516'02 23°る27'49 -5812 Dec 27 j 06:45 evening set -5817 Feb 15 j 23:53 retrograde 28°938'56 -5811 Feb 26 j 02:34 23°5647'28 2°09'29 opposition conjunction -5817 Mar 01 j 15:04 26°る37'49 -1°27'05 min. Earth dist. -5811 Feb 27 j 07:12 23°**©**38'22 4.32743 AU -5817 Mar 01 j 15:05 26°る37'50 1°27'25 direct -5811 Apr 29 j 12:34 18°9548'33 minimum elong max. Earth dist. -5817 Mar 03 j 09:39 27°る02'35 6.08013 AU -5811 Aug 01 j 16:09  $0^{\circ}\Omega$ -5817 Mar 15 j 08:16 29°る48'43 -5811 Sep 02 j 14:19 6°**Ω**54'14 morning rise evening set -5817 Mar 16 j 03:51 max. Earth dist. -5811 Sep 13 j 13:40 9°**Ω**23'11 6.28818 AU 0°≈ -5817 May 30 j 00:10 15°≈ -5817 Jul 22 j 14:59 conjunction -5811 Sep 15 j 01:40 9°**Ω**43'37 1°24'35 retrograde 19°≈20'29 9°**Ω**43'38 -5817 Sep 14 i 16:07 15°R≈ minimum elong -5811 Sep 15 i 01:42 1°24'53 12°**Ω**32'40 min. Earth dist. -5817 Sep 19 i 01:16 14°≈24'12 4.12176 AU morning rise -5811 Sep 27 i 12:07 -5811 Oct 08 j 11:32 opposition -5817 Sep 20 i 01:16 14°≈16'01 -2°00'49 15°Ω direct -5817 Nov 17 j 17:23 9°≈15'47 -5810 Jan 10 j 19:50 0° m -5816 Jan 18 j 22:41 15°**≈** -5810 Jan 29 j 15:43 0° m 32'56 retrograde -5816 Mar 23 j 14:06 28°≈11'42 -5810 Feb 17 j 12:59 30°RΩ evening set -5816 Mar 31 j 13:03 0°₩ -5810 Mar 31 j 20:02 25°Ω39'57 1°49'15 opposition min. Earth dist. -5810 Apr 01 j 17:24 25°**Ω**33'09 4.24355 AU conjunction -5816 Apr 06 j 08:12 1°\(\mathbf{1}\)10'10 -1°08'23 direct -5810 Jun 01 j 08:55 20°**Ω**43'57 minimum elong -5816 Apr 06 j 08:17 1°\mathbf{H}\ 19'13 \quad 1°08'34 -5810 Aug 23 j 09:37 0° m max. Earth dist. -5816 Apr 07 j 13:11 1°**₭**35'39 6.16827 AU evening set -5810 Oct 04 j 06:13 9° m 03'59 -5816 Apr 20 j 02:28 4°¥26'29 morning rise -5816 Aug 24 j 00:26 23°\(\)(04'10 -5810 Oct 16 j 19:27 0°57'40 retrograde conjunction 11°**m** 58'01 -5816 Oct 22 j 07:00 -5810 Oct 16 j 19:30 0°57'48 opposition 18°**米**02'30 -1°13'36 minimum elong 11° **m** 58'03 -5816 Oct 21 j 19:14 -5810 Oct 15 j 22:41 6.19398 AU min. Earth dist. 18°**¥**06'29 4.21787 AU max. Earth dist. 11° **m** 45'59 12°**)** 59′38 direct -5816 Dec 21 j 03:53 morning rise -5810 Oct 29 j 09:21 14° m 52'37  $0^{\circ}\Upsilon$ -5815 Apr 20 j 19:35 -5809 Jan 14 j 07:20 0∘**⊽** evening set -5815 Apr 27 j 22:08 1°**Y**33'59 retrograde -5809 Mar 05 j 18:30 3°**£**43′02 -5809 Apr 26 j 09:08 30°R, Mp conjunction -5815 May 11 j 14:28 4°**Υ**36'40 -0°27'21 opposition -5809 May 05 j 22:31 28°**m**47'01 0°53'09 minimum elong -5815 May 11 j 14:31 4°Υ36'42 0°27'20 -5809 May 06 j 06:58 28° Mp 44'18 4.14470 AU min. Earth dist. max. Earth dist. -5815 May 11 j 22:34 4°Υ41'11 6.26573 AU -5809 Jul 05 j 06:37 direct 23° m 53'20

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 9 Attention, astronomical year style is used: The year -5809 in astronomical counting style is the year 5810 BCE in historical counting style.

Attention, astronomic	cal year style is used: Th	e year -5809 i	n astronomical cou	nting style is the year	5810 BCE in historical co	ounting style.	6
	-5809 Sep 07 j 18:49	0∘ <b>⊽</b>		conjunction	-5803 May 16 j 11:38	9° <b>Ƴ</b> 22'19	-0°20'33
evening set	-5809 Nov 06 j 04:47	12° <b>≏</b> 32'46		minimum elong	-5803 May 16 j 11:40	9° <b>Ƴ</b> 22'20	0°20'31
				max. Earth dist.	-5803 May 16 j 15:50	9° <b>Ƴ</b> 24'39	6.28020 AU
conjunction	-5809 Nov 18 j 23:56	15° <b>≏</b> 33'27	0°11'07	morning rise	-5803 May 30 j 00:59	12° <b>Y</b> 22'50	
minimum elong	-5809 Nov 18 j 23:57	15° <b>≏</b> 33'28	0°11'03		-5803 Sep 24 j 05:24	$9^{\circ}$ 8	
behind sun begin	-5809 Nov 18 j 17:51	15° <b>≏</b> 29'53		retrograde	-5803 Sep 29 j 09:21	0° <b>8</b> 02'39	
behind sun end	-5809 Nov 19 j 06:03	15° <b>≏</b> 37'02			-5803 Oct 04 j 12:37	30° <b>Ŗ</b> ♈	
max. Earth dist.	-5809 Nov 18 j 23:42	15° <b>Ω</b> 33'19	6.10004 AU	asc. node	-5803 Oct 31 j 11:51	28° <b>Y</b> 23′52	
morning rise	-5809 Dec 01 j 21:40	18° <b>≏</b> 35'36		opposition	-5803 Nov 27 j 21:27	25° <b>Y</b> 05'23	0°04'57
	-5808 Jan 23 j 13:43	0°M		min. Earth dist.	-5803 Nov 28 j 01:47	25° <b>Y</b> 03'57	4.32152 AU
desc. node	-5808 Feb 11 j 08:53	3°M15'45		direct	-5802 Jan 28 j 04:43	20° <b>Y</b> 01′26	
retrograde	-5808 Apr 10 j 04:43	8°M15'27 3°M15'29	0022147	avaning sat	-5802 Apr 26 j 21:27	0° <b>と</b> 8° <b>と</b> 11'55	
opposition min. Earth dist.	-5808 Jun 10 j 02:10 -5808 Jun 09 j 16:31		-0 23 47 4.06344 AU	evening set	-5802 Jun 05 j 07:54	8 01133	
min. Earth dist.	-5808 Jul 07 j 07:56	30°R <b>Ω</b>	4.00344 AU	conjunction	-5802 Jun 18 j 15:47	11° <b>8</b> 07'32	0°27'35
direct	-5808 Aug 08 j 02:32	28° <b>£</b> 22'32		minimum elong	-5802 Jun 18 j 15:45	11° <b>8</b> 07'31	0°27'47
direct	-5808 Sep 08 j 15:04	0°M		max. Earth dist.	-5802 Jun 17 j 23:02	10° <b>8</b> 58'19	6.35369 AU
	-5808 Nov 29 j 19:47	15°M		morning rise	-5802 Jul 01 j 20:10	14° <b>8</b> 01'25	0.55505 110
evening set	-5808 Dec 09 j 21:36	17°M21'40		morning rise	-5802 Jul 06 j 07:39	15° <b>8</b>	
		- ,			-5802 Oct 02 j 23:27	0°II	
conjunction	-5808 Dec 23 j 00:36	20°M28'25	-0°40'38	retrograde	-5802 Oct 30 j 09:05	1° <b>Ⅱ</b> 11'10	
minimum elong	-5808 Dec 23 j 00:33	20°M28'23	0°40'52	Č	-5802 Nov 26 j 19:18	30°R <b>∀</b>	
max. Earth dist.	-5808 Dec 24 j 01:00	20°M42'55	6.03894 AU	opposition	-5802 Dec 29 j 08:33	26° <b>8</b> 17'19	1°10'52
morning rise	-5807 Jan 05 j 06:50	23°M36'59		min. Earth dist.	-5802 Dec 30 j 01:46	26° <b>8</b> 11'43	4.37420 AU
	-5807 Feb 02 j 03:42	0°⊀		direct	-5801 Mar 01 j 13:48	21° <b>8</b> 14'05	
retrograde	-5807 May 17 j 05:57	13° <b>∡</b> ¹46'53			-5801 May 23 j 12:31	$\Pi^{\circ}0$	
opposition	-5807 Jul 16 j 13:02	8° <b>∡</b> ¹43'21	-1°34'01	evening set	-5801 Jul 07 j 10:36	9° <b>Ⅱ</b> 12'42	
min. Earth dist.	-5807 Jul 15 j 14:49	8° <b>₹</b> 750'49	4.02957 AU	max. Earth dist.	-5801 Jul 18 j 22:31	11° <b>Ⅱ</b> 44'19	6.38043 AU
direct	-5807 Sep 12 j 17:52	3° <b>∡</b> ¹49'03					
evening set	-5806 Jan 15 j 05:08	23° <b>х</b> 00′38		conjunction	-5801 Jul 20 j 08:38	12° <b>Ⅱ</b> 03'07	1°06'50
				minimum elong	-5801 Jul 20 j 08:34	12° <b>Ⅱ</b> 03'05	1°07'09
conjunction	-5806 Jan 28 j 15:23	26° <b>≯</b> 10'38	-1°18'01	morning rise	-5801 Aug 02 j 03:32	14° <b>Ⅱ</b> 51'59	
minimum elong	-5806 Jan 28 j 15:20	26° <b>≯</b> 10′36			-5801 Oct 25 j 20:58	0ಂತಾ	
max. Earth dist.	-5806 Jan 30 j 07:53	26° <b>≯</b> 34'33	6.03409 AU	retrograde	-5801 Nov 30 j 14:15	1° <b>©</b> 56'59	
morning rise	-5806 Feb 11 j 04:47	29° <b>₹</b> 22'14			-5800 Jan 05 j 13:09	30°RⅡ	
	-5806 Feb 13 j 21:23	0°る		opposition	-5800 Jan 30 j 00:56	27° <b>I</b> 105'11	
retrograde	-5806 Jun 22 j 14:31	19° <b>る</b> 27'12	4.05500 411	min. Earth dist.	-5800 Jan 31 j 04:18	26°II56'25	4.37466 AU
min. Earth dist. opposition	-5806 Aug 20 j 04:47	14°る31'31 14°る22'04	4.05599 AU	direct	-5800 Apr 01 j 16:52 -5800 Jun 18 j 20:14	22° <b>I</b> 103'50	
direct	-5806 Aug 21 j 08:34 -5806 Oct 18 j 10:30	9° <b>る</b> 24'47	-2-09'00	evening set	-5800 Jun 18 j 20:14 -5800 Aug 06 j 16:50	10ം <b>ഉ</b> 01,10	
evening set	-5805 Feb 21 j 05:21	9 <b>3</b> 2447 28° <b>る</b> 34'37		max. Earth dist.	-5800 Aug 00 j 10:30	10 <b>3</b> 01 10	6.35316 AU
evening set	-5805 Feb 27 j 08:59	28 <b>⊙</b> 3437		max. Earth dist.	-3800 Aug 17 j 13.23	12 32/03	0.55510 AU
	-3003 1 co 27 j 00.37	0 ~		conjunction	-5800 Aug 19 j 07:12	12°549'17	1°27'03
conjunction	-5805 Mar 06 j 21:08	1° <b>≈</b> 44'33	-1°26'14	minimum elong	-5800 Aug 19 j 07:10	12°549'17	1°27'24
minimum elong	-5805 Mar 06 j 21:10	1° <b>≈</b> 44'34	1°26'33	morning rise	-5800 Aug 31 j 19:08	15°536'20	
max. Earth dist.	-5805 Mar 08 j 13:59	2°≈08'16	6.08825 AU	3	-5800 Nov 16 j 12:33	$0^{\circ}\Omega$	
morning rise	-5805 Mar 20 j 14:50	4°≈55'16		retrograde	-5800 Dec 31 j 15:25	3° <b>Ω</b> 01′27	
•	-5805 May 06 j 03:44	15° <b>≈</b>			-5799 Feb 15 j 18:03	30° <b>₹</b> 5	
retrograde	-5805 Jul 27 j 12:21	24° <b>≈</b> 21′07		opposition	-5799 Mar 02 j 14:17	28°509'51	2°08'53
opposition	-5805 Sep 24 j 21:00	19° <b>≈</b> 16'55	-1°56'14	min. Earth dist.	-5799 Mar 03 j 18:11	28° <b>©</b> 00'59	4.32227 AU
min. Earth dist.	-5805 Sep 23 j 22:39	19° <b>≈</b> 24'34	4.13244 AU	direct	-5799 May 03 j 21:58	23°511'15	
	-5805 Nov 01 j 20:36	15°R≈			-5799 Jul 13 j 21:34	$0^{\circ}\Omega$	
direct	-5805 Nov 22 j 17:12	14° <b>≈</b> 16′16		evening set	-5799 Sep 06 j 19:41	11° <b>Ω</b> 17'09	
	-5805 Dec 13 j 17:20	15° <b>≈</b>		max. Earth dist.	-5799 Sep 17 j 20:03	13° <b>Ω</b> 46′59	6.27933 AU
	-5804 Mar 14 j 12:27	0° <b>∀</b>					
evening set	-5804 Mar 28 j 17:09	3° <b>₩</b> 10'04		conjunction	-5799 Sep 19 j 06:55	14° <b>Ω</b> 06'49	1°22'21
				minimum elong	-5799 Sep 19 j 06:58	14° <b>Ω</b> 06'51	1°22'37
conjunction	-5804 Apr 11 j 11:30	6° <b>₩</b> 17'05			-5799 Sep 23 j 04:23	15° <b>Ω</b>	
minimum elong	-5804 Apr 11 j 11:34		1°03'44	morning rise	-5799 Oct 01 j 17:24	16° <b>Ω</b> 56'17	
max. Earth dist.	-5804 Apr 12 j 15:52		6.18114 AU		-5799 Dec 05 j 21:39	0° M) 5° M; 02104	
morning rise	-5804 Apr 25 j 05:23	9° <b>H</b> 23'43		retrograde	-5798 Feb 03 j 07:23	5° Mp 02'04	1042122
retrograde	-5804 Aug 28 j 15:35	27° <b>¥</b> 53'46	1004126	opposition	-5798 Apr 05 j 11:29	0° Mp 08'49	1°43'33
opposition min. Earth dist.	-5804 Oct 26 j 22:29 -5804 Oct 26 j 11:25	22°\f\ 52'40	4.23191 AU	min. Earth dist.	-5798 Apr 06 j 09:10 -5798 Apr 06 j 15:09	0° Mp 01'54 30° R <b>Ω</b>	4.23123 AU
direct	-5804 Dec 25 j 22:28	17° <b>H</b> 49'38	7.23171 AU	direct	-5798 Apr 06 j 13.09	25° <b>Ω</b> 13'06	
anoct	-5803 Apr 03 j 05:55	17 <b>Λ</b> 49 38		direct	-5798 Aug 02 j 09:00	0°m	
evening set	-5803 May 02 j 20:14	6° <b>Υ</b> 20'33		evening set	-5798 Oct 08 j 14:26	13° <b>m</b> 35'32	
		=000			300 00 j 11.20	·· <b>y</b>	

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 10 Attention, astronomical year style is used: The year -5798 in astronomical counting style is the year 5799 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ne year -5798 i	in astronomical co	ounting style is the year	5799 BCE in historical c	ounting style.	8
max. Earth dist.	-5798 Oct 20 j 07:44	16° m 18'32	6.17938 AU	morning rise	-5792 Apr 30 j 07:46	14° <b>)</b> 18′56	
					-5792 Jul 22 j 19:19	$0^{\circ}$ Y	
conjunction	-5798 Oct 21 j 04:14	16°M 30'26	0°52'18	retrograde	-5792 Sep 02 j 05:40	2° <b>Y</b> 40'48	
minimum elong	-5798 Oct 21 j 04:17	16°M 30'28	0°52'25		-5792 Oct 13 j 13:15	30° <b>₹</b> ₩	
morning rise	-5798 Nov 02 j 19:09	19° <b>m</b> 26'05		opposition	-5792 Oct 31 j 13:22	27° <b>)</b> 40′06	
	-5798 Dec 21 j 22:53	0∘ <b>⊽</b>		min. Earth dist.	-5792 Oct 31 j 04:20		4.24686 AU
retrograde	-5797 Mar 10 j 13:59	8° <b>£</b> 24'17		direct	-5792 Dec 30 j 18:10	22° <b>)</b> 36′47	
opposition	-5797 May 10 j 18:13	3° <b>≏</b> 27'48			-5791 Mar 14 j 08:39	0° <b>Υ</b>	
min. Earth dist.	-5797 May 11 j 00:09		4.12885 AU	evening set	-5791 May 07 j 16:50	11° <b>Y</b> 03'56	
	-5797 Jun 09 j 15:45	30°₽, Mp				••	
direct	-5797 Jul 09 j 20:44	28° m 34'16		conjunction	-5791 May 21 j 07:33	14° <b>Y</b> °04'47	
	-5797 Aug 08 j 19:59	0∘ <b>⊽</b>		minimum elong	-5791 May 21 j 07:34	14° <b>Y</b> ′04'48	0°13'35
evening set	-5797 Nov 10 j 19:14	17° <b>≏</b> 18'01		behind sun begin	-5791 May 21 j 03:12	14° <b>Y</b> ′02′23	
				behind sun end	-5791 May 21 j 11:55	14° <b>Y</b> ′07'12	
conjunction	-5797 Nov 23 j 15:35	20° <b>Ω</b> 19'52		max. Earth dist.	-5791 May 21 j 09:57		6.29430 AU
minimum elong	-5797 Nov 23 j 15:35	20° <b>Ω</b> 19'52	0°03'57	morning rise	-5791 Jun 03 j 19:37	17° <b>Y</b> ′04'14	
behind sun begin	-5797 Nov 23 j 07:36	20° <b>£</b> 15'10			-5791 Aug 08 j 23:45	0°8	
behind sun end	-5797 Nov 23 j 23:34	20° <b>£</b> 24'34	C 0045C ATT	asc. node	-5791 Sep 09 j 18:50	3° <b>8</b> 42'13	
max. Earth dist.	-5797 Nov 23 j 18:40		6.08456 AU	retrograde	-5791 Oct 03 j 18:55	4° <b>8</b> 37'47	
morning rise desc. node	-5797 Dec 06 j 14:27	23° <b>Ω</b> 23'14			-5791 Nov 29 j 23:38	30° <b>₹Υ</b> 29° <b>Υ</b> 41'04	0915100
desc. node	-5797 Dec 24 j 00:19	27° <b>Ω</b> 24'43		opposition	-5791 Dec 02 j 08:56		
	-5796 Jan 04 j 15:47	0°M		min. Earth dist.	-5791 Dec 02 j 14:52		4.33341 AU
retrograde	-5796 Apr 15 j 08:21	13°M10'53	0924125	direct	-5790 Feb 01 j 19:36	24° <b>Y</b> 37'10 0° <b>と</b>	
opposition	-5796 Jun 15 j 02:03	8°M10'25		avanina aat	-5790 Apr 05 j 11:49		
min. Earth dist.	-5796 Jun 14 j 15:32		4.04973 AU	evening set	-5790 Jun 09 j 22:54	12° <b>8</b> 44'47 15° <b>8</b>	
direct	-5796 Aug 12 j 23:00	3°M17′24		may Earth dist	-5790 Jun 20 j 05:32		6 26219 AII
	-5796 Nov 12 j 14:39	15°M		max. Earth dist.	-5790 Jun 22 j 08:11	13-02/32	6.36218 AU
evening set	-5796 Dec 14 j 19:52	22°M21'14		agniumation	5700 Jun 22:05:17	15° <b>8</b> 39'28	0022157
aamiumatiam	-5796 Dec 28 j 00:01	25°M28'59	0946150	conjunction minimum elong	-5790 Jun 23 j 05:17 -5790 Jun 23 j 05:14	15° <b>8</b> 39'27	
conjunction minimum elong	-5796 Dec 27 j 23:57	25°M28'57		morning rise	-5790 Jul 25 j 05.14 -5790 Jul 06 j 08:26	13 <b>8</b> 3927	0 3411
max. Earth dist.	-5796 Dec 27 j 23.57 -5796 Dec 29 j 02:53	25°M44'58	6.02827 AU	morning rise	-5790 Sep 02 j 03:38	0°Ⅱ	
morning rise	-5795 Jan 10 j 07:36	28°M38'34	0.02827 AU	retrograde	-5790 Nov 03 j 18:50	5° <b>Ⅱ</b> 39'32	
morning risc	-5795 Jan 16 j 02:08	20 11 <b>0</b> 3034 0° <b>√</b> 1		opposition	-5789 Jan 02 j 19:17	0° <b>П</b> 46'04	1°18'50
retrograde	-5795 May 22 j 09:29	18° <b>∡</b> 52'43		min. Earth dist.	-5789 Jan 03 j 15:05		4.37887 AU
opposition	-5795 Jul 21 j 14:25	13° <b>₹</b> ′48'52	-1°41'25	mm. Larm dist.	-5789 Jan 08 j 17:43	30°R₩	4.57007710
min. Earth dist.	-5795 Jul 20 j 14:03		4.02346 AU	direct	-5789 Mar 06 j 03:49	25° <b>8</b> 43'00	
direct	-5795 Sep 17 j 15:49	8° <b>√</b> 54'17	1.023 10 110	ancer	-5789 Apr 30 j 22:12	0°II	
evening set	-5794 Jan 20 j 09:45			evening set	-5789 Jul 11 j 21:12	13° <b>Ⅱ</b> 40′28	
evening sec	-5794 Jan 28 j 06:29	0°궁		max. Earth dist.	-5789 Jul 23 j 07:28	16° <b>I</b> I11'15	6.38071 AU
	27777444	• •					
conjunction	-5794 Feb 02 j 20:57	1° <b>る</b> 19'24	-1°21'02	conjunction	-5789 Jul 24 j 18:08	16° <b>Ⅲ</b> 30′22	1°11'01
minimum elong	-5794 Feb 02 j 20:54	1° <b>る</b> 19'22	1°21'22	minimum elong	-5789 Jul 24 j 18:05	16° <b>Ⅲ</b> 30′20	1°11'21
max. Earth dist.	-5794 Feb 04 j 14:25	1° <b>る</b> 43'53	6.03291 AU	morning rise	-5789 Aug 06 j 11:41	19° <b>Ⅱ</b> 18'41	
morning rise	-5794 Feb 16 j 11:16	4° <b>る</b> 31'24		Č	-5789 Sep 28 j 13:40	$0$ $\circ$ $\odot$	
retrograde	-5794 Jun 27 j 16:26	24° <b>る</b> 34'45		retrograde	-5789 Dec 04 j 23:49	6° <b>©</b> 24'55	
min. Earth dist.	-5794 Aug 25 j 04:29	19° <b>る</b> 39'00	4.05986 AU	opposition	-5788 Feb 03 j 13:23	1° <b>5</b> 33'16	2°00'03
opposition	-5794 Aug 26 j 08:13	19° <b>る</b> 29'31	-2°10'00	min. Earth dist.	-5788 Feb 04 j 16:44	1° <b>5</b> 24'32	4.37073 AU
direct	-5794 Oct 23 j 12:12	14° <b>る</b> 31'45			-5788 Feb 15 j 22:20	30°R <b>Ⅱ</b>	
	-5793 Feb 10 j 06:01	0° <b>≈</b>		direct	-5788 Apr 06 j 04:27	26° <b>Ⅲ</b> 32′19	
evening set	-5793 Feb 26 j 11:26	3° <b>≈</b> 41′26			-5788 May 25 j 21:16	0ಂತಾ	
				evening set	-5788 Aug 11 j 01:55	14° <b>©</b> 30'17	
conjunction	-5793 Mar 12 j 04:02	6° <b>≈</b> 51'19	-1°24'40	max. Earth dist.	-5788 Aug 21 j 22:46	16° <b>©</b> 55'39	6.34516 AU
minimum elong	-5793 Mar 12 j 04:04	6°≈51'20	1°24'58				
max. Earth dist.	-5793 Mar 13 j 22:12	7°≈15'43	6.09691 AU	conjunction	-5788 Aug 23 j 15:23	17° <b>©</b> 18'22	1°27'58
morning rise	-5793 Mar 25 j 21:59	10° <b>≈</b> 01'45		minimum elong	-5788 Aug 23 j 15:22	17° <b>©</b> 18'21	1°28'19
	-5793 Apr 17 j 00:33	15° <b>≈</b>		morning rise	-5788 Sep 05 j 02:51	20° <b>©</b> 05'32	
retrograde	-5793 Aug 01 j 09:02	29° <b>≈</b> 20′50			-5788 Oct 22 j 23:40	$0^{\circ}\Omega$	
opposition	-5793 Sep 29 j 16:29	24° <b>≈</b> 16′55	-1°50'44	retrograde	-5787 Jan 05 j 07:46	7° <b>Ω</b> 35'25	
min. Earth dist.	-5793 Sep 28 j 18:39	24° <b>≈</b> 24'22	4.14468 AU	opposition	-5787 Mar 07 j 06:51	2° <b>Ω</b> 43'43	2°07'39
direct	-5793 Nov 27 j 15:26	19° <b>≈</b> 15'52		min. Earth dist.	-5787 Mar 08 j 11:28	2° <b>£</b> 34'38	4.31066 AU
	-5792 Feb 25 j 04:56	0° <b>∀</b>			-5787 Mar 30 j 01:29	30° <b>₹</b> 5	
evening set	-5792 Apr 02 j 19:54	8° <b>₩</b> 06'41		direct	-5787 May 08 j 13:36	27° <b>5</b> 45'31	
					-5787 Jun 16 j 15:47	$0$ $^{\circ}$ $\Omega$	
conjunction	-5792 Apr 16 j 14:02	11° <b>) (</b> 13′02			-5787 Sep 07 j 06:47	15° <b>Ω</b>	
minimum elong	-5792 Apr 16 j 14:07	11° <b>) 1</b> 3′04	0°58'25	evening set	-5787 Sep 11 j 05:59	15° <b>Ω</b> 53'42	
max. Earth dist.	-5792 Apr 17 j 14:44	11° <b>∺</b> 27′00	6.19566 AU	max. Earth dist.	-5787 Sep 22 j 07:30	18° <b>Ω</b> 24'40	6.26509 AU

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5787 in astronomical counting style is the year 5788 BCE in historical counting style. -5787 Sep 23 i 17:22 18°Ω43'59 1°19'33 morning rise -5781 Mar 31 j 02:23 15°≈01'41 conjunction minimum elong -5787 Sep 23 j 17:25 18°**Ω**44'01 -5781 Jun 14 j 09:39 0°**₩** 1°19'48 -5787 Oct 06 j 04:10 21°Ω34'11 -5781 Aug 06 j 00:05 4°¥11'45 morning rise retrograde -5787 Nov 14 j 06:28 -5781 Sep 27 j 23:43 0° m 30°R≈ -5786 Feb 08 j 03:29 9° m 47'19 -5781 Oct 04 j 08:30 retrograde opposition 29°≈08'07 -1°44'38 -5781 Oct 03 j 12:06 opposition -5786 Apr 10 j 09:03 4° m 53'42 1°36'55 min. Earth dist. 29°≈15'04 4.16158 AU -5781 Dec 02 j 11:23 min. Earth dist. -5786 Apr 11 j 04:08 4° Mp 47'37 4.21542 AU direct 24°≈06'36 -5786 Jun 06 j 11:17 0°**)**€ 30°R€ -5780 Feb 04 j 03:38 29° **Q** 58'23 -5780 Apr 07 j 18:19 direct -5786 Jun 10 j 14:44 evening set 12°**米**53'03 -5786 Jun 14 j 18:08 0° M evening set -5786 Oct 13 j 05:01 18° Mp 24'15 conjunction -5780 Apr 21 j 12:22 15°**)** 58'37 -0°52'47 -5780 Apr 21 j 12:26 minimum elong 15°**X**58'40 0°52'54 -5780 Apr 22 j 10:36 conjunction -5786 Oct 25 j 19:35  $21^{\circ}$  Mp 20'090°46'16 max. Earth dist. 16°**₩**11′09 6.21248 AU minimum elong -5786 Oct 25 j 19:38 21°Mp20'11 0°46'22 morning rise -5780 May 05 j 05:25 19°**)**€03'32 max. Earth dist. -5786 Oct 25 j 02:28 21°Mp10'11 6.16354 AU -5780 Jun 27 j 03:11  $0^{\circ}\Upsilon$ morning rise -5786 Nov 07 j 11:27 24° Mp 16'56 retrograde -5780 Sep 06 j 16:18 7°Υ17'04 -5786 Dec 02 j 19:25 0∘**⊽** opposition -5780 Nov 05 j 00:16 2°Y16'56 -0°45'48 retrograde -5785 Mar 15 j 19:11 13°**≏**23'20 min. Earth dist. -5780 Nov 04 j 17:53 2°Υ19'05 4.26186 AU opposition -5785 May 15 j 21:00 8°**₽**26'19 0°32'58 -5780 Nov 22 j 15:32 30°R **₩** min. Earth dist. -5785 May 16 j 01:17 8°**£**24'56 4.11424 AU direct -5779 Jan 04 j 09:53 27°¥13'26 direct -5785 Jul 14 j 19:45 3°**₽**33'00 -5779 Feb 16 j 15:09  $0^{\circ}\Upsilon$ desc. node -5785 Nov 01 i 16:38 19°**2**05'18 evening set -5779 May 12 j 09:22 15°**Ƴ**37'05 evening set -5785 Nov 15 j 16:07 22°**₽**20'16 conjunction -5779 May 25 i 23:04 18° Y 37'03 -0°06'55 -5779 May 25 j 23:05 -5785 Nov 28 i 13:34 25°**2**3'08 -0°03'36 18°**Ƴ**37′03 0°06'51 conjunction minimum elong -5785 Nov 28 j 13:34 25°**₽**23'08 0°03'44 -5779 May 25 j 15:26 18°Y32'50 minimum elong behind sun begin -5785 Nov 28 j 05:32 25°**♀**18'24 -5779 May 26 j 06:45 18°**Y**41'16 behind sun begin behind sun end -5785 Nov 28 j 21:36 -5779 May 25 j 20:35 18°**Ƴ**35'41 6.30626 AU behind sun end 25°**£**27'52 max. Earth dist. -5779 Jun 08 j 10:13 21°Y35'36 max. Earth dist. -5785 Nov 28 j 20:18 25°**♀**27'05 6.07280 AU morning rise -5785 Dec 11 j 13:47 28°**₽**27'36 -5779 Jul 18 j 16:11 morning rise  $0^{\circ}$ 8 -5785 Dec 18 j 03:40 0°**8**30'02 -5779 Jul 21 j 07:24 0°M asc. node -5784 Mar 04 j 04:39 -5779 Oct 08 j 01:55 15°M⋅ 9°**8**04'10 retrograde -5784 Apr 20 j 14:21 18°M21'00 -5779 Dec 06 j 17:28 4°**8**07'55 0°24'38 retrograde opposition -5784 Jun 07 j 10:30 -5779 Dec 07 j 01:56 4°805'08 4.34159 AU 15°RM min. Earth dist. -5784 Jun 20 j 07:07 -5778 Jan 12 j 16:34 30°RY opposition 13°M19'59 -0°45'21 29°**Y**'04'00 -5784 Jun 19 j 17:17 -5778 Feb 06 j 07:46 min. Earth dist. 13°M24'33 4.04249 AU direct 0°B direct -5784 Aug 17 j 23:19 8°M26'57 -5778 Mar 03 j 06:24 -5784 Oct 22 j 17:37 15°M₀ -5778 Jun 04 j 10:05 15°8 -5784 Dec 19 j 23:07 27°M32'51 evening set -5778 Jun 14 j 10:32 17°**8**10'07 evening set -5784 Dec 30 j 07:09 0°**√** conjunction -5778 Jun 27 j 15:46 20°**8**04'08 0°39'58 -5783 Jan 02 j 04:16 0°**∡**1'07 -0°53'16 -5778 Jun 27 j 15:42 20°**8**04'06 0°40'13 conjunction minimum elong -5783 Jan 02 j 04:12 0°**∡**1'05 0°53'34 max. Earth dist. -5778 Jun 26 j 16:54 19°**8**51'33 6.36594 AU minimum elong -5783 Jan 03 j 10:01 0°**х** 58'49 6.02613 AU -5778 Jul 10 j 17:26 22°**8**56'24 max. Earth dist. morning rise -5783 Jan 15 j 12:54 3°**х**⁴51'13 -5778 Aug 13 j 08:00  $0^{\circ}\Pi$ morning rise -5778 Nov 08 j 02:08 10°**Ⅱ**02'40 retrograde -5783 May 27 j 14:23 24°×05'34 retrograde -5783 Jul 26 i 17:49 -5777 Jan 07 i 04:28 5°**Ⅱ**09'35 opposition 19°**∡**01'17 -1°48'13 opposition 1°26'12 5°**П**02'44 4.37818 AU min. Earth dist. -5783 Jul 25 i 16:14 19°**₹**09'56 4.02693 AU min. Earth dist. -5777 Jan 08 i 01:38 14°**∡**06'17 0°**I**106'48 direct -5783 Sep 22 i 19:28 direct -5777 Mar 10 j 14:29 evening set -5782 Jan 11 j 05:59 0°궁 -5777 Jul 16 j 06:36 18°**Ⅲ**04'49 -5782 Jan 25 j 15:36 3°る20'10 max. Earth dist. -5777 Jul 27 j 12:31 20°**Д**33'33 6.37539 AU evening set -5782 Feb 08 j 03:46 6°る30'38 -1°23'30 -5777 Jul 29 j 02:13 20°II54'24 1°14'43 conjunction conjunction 20°**Ⅱ**54'22 minimum elong -5782 Feb 08 j 03:44 6°る30'37 1°23'51 minimum elong -5777 Jul 29 j 02:09 1°15'03 max. Earth dist. -5782 Feb 10 j 00:01 6°る56'40 6.04153 AU morning rise -5777 Aug 10 j 18:52 23°**Ⅱ**42'31 -5782 Feb 21 j 18:38 9°る42'27 -5777 Sep 09 j 09:00 0°9 morning rise retrograde -5782 Jul 02 j 16:44 29°る39'52 retrograde -5777 Dec 09 j 12:00 10°951'54 24°る44'00 4.07279 AU -5782 Aug 30 j 03:13 -5776 Feb 08 j 02:04 2°03'17 min. Earth dist. opposition 6°9500′23 -5782 Aug 31 j 06:38 24°る34'38 -2°10'00 min. Earth dist. -5776 Feb 09 j 06:40 opposition 5°951'14 4.36140 AU -5782 Oct 28 j 12:27 19°る36'22 direct direct -5776 Apr 10 j 17:08 0°959'45 -5781 Jan 22 j 22:04 0°≈ evening set -5776 Aug 15 j 11:13 19°500'02 evening set -5781 Mar 03 j 15:16 8°≈42'35 max. Earth dist. -5776 Aug 26 j 08:57 21°926'19 6.33255 AU conjunction -5781 Mar 17 j 08:06 11°≈51'54 -1°22'33 conjunction -5776 Aug 28 j 00:18 21°**©**48'23 1°28'19 minimum elong -5781 Mar 17 j 08:09 11°≈51'56 1°22'49 minimum elong -5776 Aug 28 j 00:18 21°9548'23 1°28'39 max. Earth dist. -5781 Mar 18 j 23:27 12°≈14'35 6.11270 AU -5776 Sep 09 j 11:15 24°935'53 morning rise

-5776 Oct 04 j 07:32

 $0^{\circ}\Omega$ 

-5781 Mar 30 j 23:25

15°≈

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5775 in astronomical counting style is the year 5776 BCE in historical counting style. -5775 Jan 09 j 23:58 12°**Ω**12′00 direct -5770 Nov 02 i 10:47 24°る37'17 retrograde opposition -5775 Mar 12 j 00:50 7°**Ω**20'11 2°05'34 -5769 Jan 01 j 00:08 0°≈ -5775 Mar 13 j 03:41 7°**Ω**11'40 4.29574 AU -5769 Mar 08 j 17:53 min. Earth dist. 13°≈40'46 evening set 2°**£**22'29 -5769 Mar 14 j 12:21 -5775 May 13 j 03:43 15°≈ direct -5775 Aug 21 j 13:04 15°€ 16°≈49'38 -1°19'54 20°**Ω**33'48 -5769 Mar 22 j 11:14 evening set -5775 Sep 15 j 17:53 conjunction max. Earth dist. 6.24920 AU -5769 Mar 22 j 11:17 -5775 Sep 26 j 21:19 23°**Ω**06′29 minimum elong 16°≈49'40 1°20'10 max. Earth dist. -5769 Mar 24 j 01:09 17°≈11'25 6.12706 AU conjunction -5775 Sep 28 j 05:20 23°**Ω**24'49 1°16'10 morning rise -5769 Apr 05 j 05:27 19°≈58'47 minimum elong -5775 Sep 28 j 05:23 23°**Ω**24'50 1°16'24 -5769 May 22 j 00:18 0°**)**€ morning rise -5775 Oct 10 j 16:40 26°**Ω**15'54 retrograde -5769 Aug 10 j 16:19 9°**₭**00'39 -5775 Oct 27 j 08:15 -5769 Oct 08 j 23:31 0° m opposition 3°**¥**57'29 -1°37'57 retrograde -5774 Feb 13 j 04:40 14° m 36'57 min. Earth dist. -5769 Oct 08 j 05:41 4°**₭**03'33 4.17637 AU opposition -5774 Apr 15 j 09:01 9° m 42'57 1°29'28 -5769 Nov 11 j 17:34 30°R≈ min. Earth dist. -5774 Apr 16 j 02:28 9°m/37'22 4.19950 AU direct -5769 Dec 07 j 07:04 28°≈55'38 direct -5774 Jun 15 j 11:11 4° m 48'00 -5768 Jan 02 j 03:23 0°**)**€ evening set -5774 Oct 17 j 21:29 23° m 17'03 evening set -5768 Apr 12 j 16:13 17° **)** 38'44 conjunction -5774 Oct 30 j 12:57 26° Mp 13'57 0°39'49 conjunction -5768 Apr 26 j 09:57 20°\(\pm\)43'37 -0°47'01 minimum elong -5774 Oct 30 j 13:00 26° m 13'59 0°39'52 minimum elong -5768 Apr 26 j 10:01 20°**)** 43′39 0°47'05 max. Earth dist. -5774 Oct 29 j 23:43 26° Mp 06'14 6.14925 AU max. Earth dist. -5768 Apr 27 j 04:21 20°**¥**53'57 6.22657 AU morning rise -5774 Nov 12 i 05:50 29° m 11'50 morning rise -5768 May 10 j 02:34 23°**)**(47'44 -5774 Nov 15 i 16:59 0∘**⊽** -5768 Jun 07 j 18:56  $0^{\circ}\Upsilon$ retrograde -5773 Mar 20 j 23:18 18°**♀**25'23 retrograde -5768 Sep 11 i 01:39 11°Y54'08 -5773 May 21 j 00:48 13°**♀**27'51 0°21'59 opposition -5768 Nov 09 j 11:17 6°Y54'33 -0°36'09 opposition -5773 May 21 j 01:34 -5768 Nov 09 j 06:37 6°Υ56'07 4.27413 AU min. Earth dist. 13°**Ω**27'36 4 10281 AU min. Earth dist. -5773 Jul 19 j 17:49 -5767 Jan 09 j 00:43 1°Y50'53 direct 8°**£**34'46 direct -5773 Sep 10 j 02:56 -5767 May 17 j 02:04 20°**Y**12′00 desc. node 12°**£**47'29 evening set -5773 Nov 20 j 14:27 27°**Ω**24'25 evening set -5767 May 30 j 14:49 23°Y11'10 -0°00'03 -5773 Dec 01 j 13:34 0°M conjunction -5767 May 30 j 14:49 0°00'04 23°**Y**11′10 minimum elong -5773 Dec 03 j 12:51 0°M28'03 -0°11'09 -5767 May 30 j 07:13 conjunction behind sun begin 23°**℃**07'00 -5767 May 30 j 22:25 -5773 Dec 03 j 12:50 0°M28'02 0°11'18 23°**Y**15′21 minimum elong behind sun end 6.31592 AU -5773 Dec 03 j 06:50 -5767 May 30 j 09:09 23°**Y**′08′04 behind sun begin 0°M24'30 max. Earth dist. -5773 Dec 03 j 18:50 -5767 May 31 j 01:41 23°**Y**17′10 behind sun end 0°M31'35 asc. node -5773 Dec 03 j 22:55 -5767 Jun 13 j 00:45 26°**Y**08'51 max. Earth dist. 0°**M**⋅34'00 6.06510 AU morning rise morning rise -5773 Dec 16 j 14:17 3°M33'23 -5767 Jun 30 j 20:24  $0^{\circ}$ 8 -5772 Feb 07 j 01:32 15°M₀ retrograde -5767 Oct 12 j 10:53 13°833'20 retrograde -5772 Apr 25 j 20:00 23°M30'44 -5767 Dec 11 j 03:01 8°**8**37'38 0°34'11 opposition -5772 Jun 25 j 11:44 18°M29'09 -0°55'56 min. Earth dist. -5767 Dec 11 j 13:59 8°**8**34'02 4.34799 AU opposition min. Earth dist. -5772 Jun 24 j 19:44 18°M34'27 4.03918 AU direct -5766 Feb 10 j 21:26 3°**8**33'48 -5772 Jul 24 j 21:01 -5766 May 18 j 09:20 15°8 15°RM -5772 Aug 23 j 01:43 -5766 Jun 18 j 23:12 21°838'49 direct 13°M35'57 evening set -5772 Sep 21 j 02:30 max. Earth dist. -5766 Jul 01 j 00:41 24°**8**17'39 6.36842 AU 15°M -5772 Dec 13 j 12:01 0°**∡**¹ evening set -5766 Jul 02 i 03:04 -5772 Dec 25 j 02:01 2°×742'44 conjunction 24°**8**32'10 0°45'49 minimum elong -5766 Jul 02 i 03:01 24°832'08 0°46'04 conjunction -5771 Jan 07 i 08:16 5°**₹**51'23 -0°59'08 morning rise -5766 Jul 15 i 03:31 27°**8**23'49 minimum elong -5771 Jan 07 i 08:12 5°**₹**51'21 0°59'27 -5766 Jul 27 j 03:50  $0^{\circ}II$ max. Earth dist. -5771 Jan 08 j 17:58 6°**≯**11'24 6.02731 AU retrograde -5766 Nov 12 j 11:10 14°**Ⅲ**29'40 -5771 Jan 20 j 17:46 9°**х** 01′48 -5765 Jan 11 j 15:05 9°**II**36'53 1°33'11 morning rise opposition -5771 Jun 01 j 18:59 29°**х** 14′56 min. Earth dist. -5765 Jan 12 j 13:36 9°**Ⅱ**29'36 4.37698 AU retrograde opposition -5771 Jul 31 j 19:40 24°**₹**10'26 -1°54'08 direct -5765 Mar 15 j 02:21 4°**Ⅲ**34'17 24°**≯**19'16 4.03272 AU 22°II32'49 min. Earth dist. -5771 Jul 30 j 17:33 evening set -5765 Jul 20 j 16:49 19°**∡** 15′05 direct -5771 Sep 27 j 21:05 max. Earth dist. -5765 Jul 31 j 22:06 25°**Ⅲ**01′26 6.37055 AU -5771 Dec 24 j 00:56 0°정 -5770 Jan 30 j 20:25 8°る27'49 conjunction -5765 Aug 02 j 11:24 25°**Ⅲ**22'06 1°18'04 evening set -5765 Aug 02 j 11:21 25°**Ⅱ**22'04 1°18'25 minimum elong -5770 Feb 13 j 09:09 11°る38'08 -1°25'20 -5765 Aug 15 j 02:53 28°**Ⅲ**09'58 conjunction morning rise -5770 Feb 13 j 09:07 11°る38'07 1°25'41 minimum elong -5765 Aug 23 j 12:02 0ಂತಾ 12°**る**03'25 max. Earth dist. -5770 Feb 15 j 04:14 6.05103 AU retrograde -5765 Dec 14 j 00:16 15°522'18 morning rise -5770 Feb 27 j 00:45 14°**る**49'45 opposition -5764 Feb 12 j 16:09 10°**©**30'53 2°05'52 -5770 May 12 j 13:56 0°≈ min. Earth dist. -5764 Feb 13 j 20:39 10°9521'48 4.35353 AU retrograde -5770 Jul 07 j 12:55 4°≈41'10 direct -5764 Apr 15 j 06:11 5°930'42 -5770 Sep 02 j 04:53 30°Ŗる evening set -5764 Aug 19 j 21:12 23°932'24 min. Earth dist. -5770 Sep 03 j 23:47 29°る45'21 4.08516 AU max. Earth dist. -5764 Aug 30 j 17:54 25°558'35 6.32225 AU

-5770 Sep 05 j 03:02

opposition

29°る36'02 -2°09'07

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5764 in astronomical counting style is the year 5765 BCE in historical counting style. -5764 Sep 01 j 09:34 26°9520'54 1°28'11 retrograde -5758 Jul 12 i 09:03 9°≈34'52 conjunction minimum elong -5764 Sep 01 j 09:35 26°920'54 -5758 Sep 09 j 20:51 4°≈29'55 -2°07'21 1°28'30 opposition -5764 Sep 13 j 20:23 29°908'42 min. Earth dist. -5758 Sep 08 j 19:32 4°≈38'34 4.09529 AU morning rise -5764 Sep 17 j 16:21 30°Ŗ⋜  $0^{\circ}\Omega$ -5758 Oct 21 j 09:02 -5764 Dec 10 j 21:34 15°€ direct -5758 Nov 07 j 07:22 29°る30'44 -5763 Jan 14 j 18:27 retrograde 16°**Ω**50′17 -5758 Nov 24 j 07:50 0°≈ -5763 Feb 18 j 23:06 15°RΩ -5757 Feb 26 j 00:47 15°≈ 2°02'44 opposition -5763 Mar 16 j 19:37 11°**Ω**58'14 evening set -5757 Mar 13 j 18:03 18°≈32'19 11°**Ω**49'59 min. Earth dist. -5763 Mar 17 j 21:33 4.28379 AU direct -5763 May 17 j 20:00 7°**Ω**00'55 conjunction -5757 Mar 27 j 11:45 21°≈40'53 -1°16'45 -5763 Aug 02 j 18:16 15°€ minimum elong -5757 Mar 27 j 11:49 21°**≈**40′55 1°17'00 -5763 Sep 20 j 05:36 25°**Ω**14'06 evening set max. Earth dist. -5757 Mar 28 j 23:19 22°**≈**01'15 6.13831 AU -5757 Apr 10 j 06:09 morning rise 24°≈49'36 conjunction -5763 Oct 02 j 17:27 28° **Q**05'45 1°12'22 -5757 May 03 j 12:51 0°**)**€ minimum elong -5763 Oct 02 j 17:30 28°**Ω**05'47 1°12'35 retrograde -5757 Aug 15 j 05:14 13° ¥44'37 max. Earth dist. -5763 Oct 01 j 13:02 27°**Ω**49'26 6.23686 AU opposition -5757 Oct 13 j 12:57 8°\(\pm\)41'55 -1°30'46 -5763 Oct 11 j 00:30 min. Earth dist. -5757 Oct 12 j 20:02 8°**)**47'41 4.18768 AU morning rise -5763 Oct 15 j 05:07 0° m 57'32 direct -5757 Dec 11 j 23:16 3°**)**(39'47 retrograde -5762 Feb 18 j 02:53 19° m 24'59 evening set -5756 Apr 17 j 12:52 22°\ 20'48 opposition -5762 Apr 20 j 07:58 14° Mp 30'32 1°21'30 min. Earth dist. -5762 Apr 20 j 22:49 14° M 25'48 4.18765 AU conjunction -5756 May 01 j 06:15 25°\ 25'07 -0°40'59 direct -5762 Jun 20 i 05:22 9° m 35'58 minimum elong -5756 May 01 i 06:19 25°**¥**25′09 0°41'03 evening set -5762 Oct 22 i 12:57 28° M 06'46 max. Earth dist. -5756 May 01 j 20:52 25°**)**€33'18 6.23736 AU -5762 Oct 30 j 15:02 0∘**⊽** morning rise -5756 May 14 j 22:18 28°¥28'33 -5756 May 21 j 19:31 -5762 Nov 04 j 05:03 1°**2**04'26 0°33'13 -5756 Sep 15 j 13:18 16°**Y**29'14 conjunction retrograde -5762 Nov 04 j 05:06 1°**£**04'27 -5756 Nov 13 j 22:06 11°Υ30'15 -0°26'23 0°33'14 opposition minimum elong -5762 Nov 03 j 18:28 min. Earth dist. -5756 Nov 13 j 20:19 11°Υ30'51 4.28342 AU max. Earth dist. 0°**£**58'14 6.13893 AU -5762 Nov 16 j 23:04 -5755 Jan 13 j 16:28 6°Y26'30 4°<u>₽</u>03'13 direct morning rise -5761 Mar 26 j 01:24 23°**₽**22'30 -5755 Apr 09 j 18:39 16°**Y**01′56 asc. node retrograde -5755 May 21 j 18:25 -5761 May 26 j 02:28 24° Y 45' 59 18°**2**24'19 0°11'05 evening set opposition -5761 May 26 j 00:40 min. Earth dist. 18°**≏**24'54 4.09472 AU -5761 Jul 21 j 04:07 -5755 Jun 04 j 06:16 27°**Y**′44'30 13°**△**32'30 conjunction 0°06'47 desc. node -5755 Jun 04 j 06:15 -5761 Jul 24 j 16:05 27°**Y**44′29 0°06'56 direct 13°**₽**31'16 minimum elong -5761 Nov 15 j 07:00 -5755 Jun 03 j 22:39 27°**Y**40′18 0°M behind sun begin -5761 Nov 25 j 10:24 -5755 Jun 04 j 13:51 27°**Y**48'40 evening set 2°M22'15 behind sun end -5755 Jun 03 j 22:02 27°**Ƴ**39'58 max. Earth dist. 6.32313 AU conjunction -5761 Dec 08 j 09:56 5°M26'35 -0°18'27 -5755 Jun 14 j 11:43 0°8 minimum elong -5761 Dec 08 j 09:55 5°M26'34 0°18'37 morning rise -5755 Jun 17 j 15:02 0°841'24 max. Earth dist. -5761 Dec 09 j 00:37 5°M35'17 6.06000 AU -5755 Sep 02 j 04:31 15°8 morning rise -5761 Dec 21 j 12:22 8°M32'35 retrograde -5755 Oct 16 j 19:00 18°**8**02'43 -5760 Jan 18 j 18:27 -5755 Nov 30 j 21:04 15°R₩ 15°M -5760 Apr 30 j 23:32  $28^{\circ}$ MJ32'42-5755 Dec 15 j 13:06 13°**8**07'30 0°43'32 retrograde opposition -5760 Jun 30 j 13:08 23°MJ30'39 -1°05'49 min. Earth dist. -5755 Dec 16 j 00:55 13°**8**03'38 4.35288 AU opposition min. Earth dist. -5760 Jun 29 j 19:46 23°ML36'25 4.03774 AU direct -5754 Feb 15 j 09:19 8°**8**03'48 direct -5760 Aug 28 i 00:54 18°MJ37'16 -5754 Apr 28 i 19:41 15°8 -5760 Nov 26 i 00:22 0°×7 evening set -5754 Jun 23 j 11:45 26°807'58 -5760 Dec 30 j 02:23 evening set 7°**∡**¹44'31 max. Earth dist. -5754 Jul 05 j 10:29 28°**8**45'22 6.37061 AU -5759 Jan 12 j 09:22 10° **₹** 53'25 -1°04'23 -5754 Jul 06 j 14:15 29°**8**00'40 0°51'24 conjunction conjunction -5759 Jan 12 i 09:18 10°**∡** 53′22 1°04′42 -5754 Jul 06 i 14:12 29°**8**00'38 0°51'40 minimum elong minimum elong -5759 Jan 13 j 19:27 11°**҂**13'37 6.02926 AU -5754 Jul 11 j 01:57  $0^{\circ}II$ max. Earth dist. -5759 Jan 25 j 19:56 14°**₹**04'07 -5754 Jul 19 j 13:21 1°**I**I51'40 morning rise morning rise 0°궁 -5759 Apr 14 j 07:48 retrograde -5754 Nov 16 j 21:39 18°**耳**57'18 retrograde -5759 Jun 06 j 17:34 4°**る**15'39 opposition -5753 Jan 16 j 02:34 14°**Ⅱ**04'50 1°39'39 -5759 Jul 30 j 16:21 30°R.**✓** min. Earth dist. -5753 Jan 17 j 02:26 13°**Ⅱ**57′09 4.37643 AU opposition -5759 Aug 05 j 17:44 29°**∡**10'54 -1°59'01 direct -5753 Mar 19 j 15:38 9°**Ⅲ**02'35 -5759 Aug 04 j 14:33 29°**尽**20'07 4.03807 AU -5753 Jul 25 j 02:46 27° II 00'56 min. Earth dist. evening set 24°**₹**15′05 -5759 Oct 02 j 18:34 -5753 Aug 05 j 05:25 29°**Ⅲ**28′22 direct max. Earth dist. 6.36700 AU 0°ჳ -5759 Dec 02 j 21:38 -5758 Feb 04 j 22:13 13°る27'07 -5753 Aug 06 j 20:12 29°**I**49'53 1°20'57 evening set conjunction minimum elong -5753 Aug 06 j 20:09 29°**Ⅱ**49'51 1°21'18 conjunction -5758 Feb 18 j 11:51 16°る37'24 -1°26'30 -5753 Aug 07 j 14:27 0ಂತಾ minimum elong -5758 Feb 18 j 11:51 16°る37'24 1°26'50 morning rise -5753 Aug 19 j 10:49 2°537'29 max. Earth dist. -5758 Feb 20 j 07:20 17°**る**02'52 6.05924 AU retrograde -5753 Dec 18 j 12:43 19°952'24 -5758 Mar 04 j 03:53 19°る48'50 -5752 Feb 17 j 06:17 15°900'58 morning rise opposition 2°07'42

min. Earth dist.

-5752 Feb 18 j 10:28

14°**©**51'59

4.34723 AU

-5758 Apr 19 j 18:57

0°**≈** 

Planetary Pheno	•				5553 D.OE		
	nical year style is used: Th	-	in astronomical co				1027102
direct	-5752 Apr 19 j 18:48	10°501'08		conjunction	-5746 Feb 23 j 17:29	21°る44'05	
evening set	-5752 Aug 24 j 06:18	28°503'34		minimum elong	-5746 Feb 23 j 17:29	21°る44'05	
and the second	-5752 Sep 01 j 21:44	0° <b>N</b>	6 21250 AYY	max. Earth dist.	-5746 Feb 25 j 12:47	22°る09'22	6.06521 AU
max. Earth dist.	-5752 Sep 04 j 04:57	0° <b>Ω</b> 31′08	6.31358 AU	morning rise	-5746 Mar 09 j 10:12	24°る55'30	
	5550 0 05:1000	00 0 50110	1005101		-5746 Mar 31 j 19:12	0°≈	
conjunction	-5752 Sep 05 j 18:20	0° <b>Ω</b> 52'13	1°27'31	retrograde	-5746 Jul 17 j 05:54	14°≈36'28	
minimum elong	-5752 Sep 05 j 18:21	0° <b>Ω</b> 52'13	1°27'50	opposition	-5746 Sep 14 j 17:10	9°≈31'42	
morning rise	-5752 Sep 18 j 04:44	3° <b>Ω</b> 40'14		min. Earth dist.	-5746 Sep 13 j 15:38	9°≈40'26	4.10424 AU
	-5752 Nov 12 j 13:25	15° <b>Ω</b>		direct	-5746 Nov 12 j 05:13	4°≈32'04	
retrograde	-5751 Jan 19 j 11:29	21°Ω26'48			-5745 Feb 07 j 15:31	15° <b>≈</b>	
opposition	-5751 Mar 21 j 13:35	16° <b>Ω</b> 34'32		evening set	-5745 Mar 18 j 21:49	23° <b>≈</b> 32′09	
min. Earth dist.	-5751 Mar 22 j 14:39		4.27302 AU		5745 4 01:15 46	260 - 40121	1010150
1.	-5751 Apr 03 j 04:29	15°R€		conjunction	-5745 Apr 01 j 15:46	26°≈40'21	
direct	-5751 May 22 j 11:03	11° <b>Ω</b> 37'39		minimum elong	-5745 Apr 01 j 15:50	26°≈40'24	
	-5751 Jul 09 j 13:52	15° <b>Ω</b>		max. Earth dist.	-5745 Apr 03 j 00:29	26°≈59'03	6.14967 AU
evening set	-5751 Sep 24 j 16:14	29° <b>Ω</b> 52'24		morning rise	-5745 Apr 15 j 10:13	29° <b>≈</b> 48'35	
and the second	-5751 Sep 25 j 05:32	0° m)	6 00 17 6 1 XX		-5745 Apr 16 j 06:24	0° <b>)</b> {	
max. Earth dist.	-5751 Oct 06 j 00:33	2°11) 28'42	6.22476 AU	retrograde	-5745 Aug 19 j 22:50	18° <b>)</b> ₹36′23	1000145
	55510 . 05:04.14	207 4420	1000105	opposition	-5745 Oct 18 j 05:20	13° <b>)</b> ₹34'09	
conjunction	-5751 Oct 07 j 04:14	2° m/44'38	1°08'07	min. Earth dist.	-5745 Oct 17 j 14:43	13° <b>)</b> ₹39'06	4.20035 AU
minimum elong	-5751 Oct 07 j 04:18	2° m/44'40	1°08'18	direct	-5745 Dec 16 j 20:47	8° <b>)</b> € 31'42	
morning rise	-5751 Oct 19 j 16:40	5° m 37'14		evening set	-5744 Apr 22 j 12:12	27° <b>)</b> €09'51	
retrograde	-5750 Feb 23 j 00:54	24° m) 11'25			-5744 May 05 j 05:12	$0$ ° $\Upsilon$	
opposition	-5750 Apr 25 j 06:05	19° Mp 16'27	1°13'01				
min. Earth dist.	-5750 Apr 25 j 18:47	19° Mp 12'23	4.17478 AU	conjunction	-5744 May 06 j 05:17	0°Υ13'28	
direct	-5750 Jun 24 j 23:05	14° m/22'08		minimum elong	-5744 May 06 j 05:20	0°Υ13'30	
	-5750 Oct 14 j 11:14	0∘ <b>⊽</b>		max. Earth dist.	-5744 May 06 j 18:32	0°Υ20'52	6.25083 AU
evening set	-5750 Oct 27 j 03:40	2° <b>≏</b> 55'24		morning rise	-5744 May 19 j 20:29	3°Υ16'01	
				retrograde	-5744 Sep 20 j 00:24	21° <b>Υ</b> 09'44	
conjunction	-5750 Nov 08 j 20:49	5° <b>Ω</b> 54'00	0°26'24	opposition	-5744 Nov 18 j 11:03	16° <b>℃</b> 11'18	
minimum elong	-5750 Nov 08 j 20:51	5° <b>Ω</b> 54'01	0°26'24	min. Earth dist.	-5744 Nov 18 j 09:47	16° <b>℃</b> 11'43	4.29681 AU
max. Earth dist.	-5750 Nov 08 j 14:24	5° <b>2</b> 50'14	6.12661 AU	direct	-5743 Jan 18 j 08:27	11° <b>Y</b> 07'30	
morning rise	-5750 Nov 21 j 15:46	8° <b>≏</b> 53'47		asc. node	-5743 Feb 16 j 21:32	12° <b>Y</b> 26'44	
retrograde	-5749 Mar 31 j 04:06	28° <b>≏</b> 19'39		evening set	-5743 May 26 j 12:08	29° <b>Y</b> 23'32	
	•	222 2 20155	0000105	Č	, ,	001	
opposition	-5749 May 31 j 03:38	23° <b>£</b> 20'57	0°00'05	Č	-5743 May 29 j 06:40	$0^{\circ}$ 8	
min. Earth dist.	-5749 May 31 j 03:38 -5749 May 31 j 00:15	23° <b>ჲ</b> 22'03	0°00'05 4.08396 AU	-	-5743 May 29 j 06:40		0010104
min. Earth dist. desc. node	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44	23° <b>£</b> 22'03 23° <b>£</b> 17'39		conjunction	-5743 May 29 j 06:40 -5743 Jun 08 j 22:37	2° <b>8</b> 21'00	0°13'34
min. Earth dist.	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33	23° <b>£</b> 22'03 23° <b>£</b> 17'39 18° <b>£</b> 27'59		conjunction minimum elong	-5743 May 29 j 06:40 -5743 Jun 08 j 22:37 -5743 Jun 08 j 22:35	2° <b>8</b> 21'00 2° <b>8</b> 20'59	0°13'34 0°13'44
min. Earth dist. desc. node direct	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33 -5749 Oct 28 j 21:56	23° <b>Ω</b> 22'03 23° <b>Ω</b> 17'39 18° <b>Ω</b> 27'59 0° <b>M</b>		conjunction minimum elong behind sun begin	-5743 May 29 j 06:40 -5743 Jun 08 j 22:37 -5743 Jun 08 j 22:35 -5743 Jun 08 j 18:21	2° <b>8</b> 21'00 2° <b>8</b> 20'59 2° <b>8</b> 18'40	
min. Earth dist. desc. node	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33	23° <b>£</b> 22'03 23° <b>£</b> 17'39 18° <b>£</b> 27'59		conjunction minimum elong behind sun begin behind sun end	-5743 May 29 j 06:40 -5743 Jun 08 j 22:37 -5743 Jun 08 j 22:35 -5743 Jun 08 j 18:21 -5743 Jun 09 j 02:50	2°821'00 2°820'59 2°818'40 2°823'19	0°13'44
min. Earth dist. desc. node direct evening set	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33 -5749 Oct 28 j 21:56 -5749 Nov 30 j 07:18	23° <b>Ω</b> 22'03 23° <b>Ω</b> 17'39 18° <b>Ω</b> 27'59 0° <b>M</b> 7° <b>M</b> 21'45	4.08396 AU	conjunction minimum elong behind sun begin behind sun end max. Earth dist.	-5743 May 29 j 06:40 -5743 Jun 08 j 22:37 -5743 Jun 08 j 22:35 -5743 Jun 08 j 18:21 -5743 Jun 09 j 02:50 -5743 Jun 08 j 11:12	2°821'00 2°820'59 2°818'40 2°823'19 2°814'43	
min. Earth dist. desc. node direct evening set conjunction	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33 -5749 Oct 28 j 21:56 -5749 Nov 30 j 07:18	23° <b>Ω</b> 22'03 23° <b>Ω</b> 17'39 18° <b>Ω</b> 27'59 0° <b>M</b> . 7° <b>M</b> 21'45	4.08396 AU -0°25'38	conjunction minimum elong behind sun begin behind sun end	-5743 May 29 j 06:40 -5743 Jun 08 j 22:37 -5743 Jun 08 j 22:35 -5743 Jun 08 j 18:21 -5743 Jun 09 j 02:50 -5743 Jun 08 j 11:12 -5743 Jun 22 j 06:08	2°821'00 2°820'59 2°818'40 2°823'19 2°814'43 5°816'51	0°13'44
min. Earth dist. desc. node direct evening set conjunction minimum elong	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33 -5749 Oct 28 j 21:56 -5749 Nov 30 j 07:18 -5749 Dec 13 j 07:44 -5749 Dec 13 j 07:42	23°	4.08396 AU -0°25'38 0°25'51	conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise	-5743 May 29 j 06:40 -5743 Jun 08 j 22:37 -5743 Jun 08 j 22:35 -5743 Jun 08 j 18:21 -5743 Jun 09 j 02:50 -5743 Jun 08 j 11:12 -5743 Jun 22 j 06:08 -5743 Aug 08 j 18:12	2°\dagger 20'59 2°\dagger 20'59 2°\dagger 23'19 2°\dagger 214'43 5°\dagger 216'51 15°\dagger 2	0°13'44
min. Earth dist. desc. node direct evening set conjunction minimum elong max. Earth dist.	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33 -5749 Oct 28 j 21:56 -5749 Nov 30 j 07:18 -5749 Dec 13 j 07:44 -5749 Dec 13 j 07:42 -5749 Dec 13 j 23:53	23° \( \Omega \) 22'03 23° \( \Omega \) 17'39 18° \( \Omega \) 27'59 0° \( \mu \) 7° \( \Umu \) 21'45 10° \( \Umu \) 26'52 10° \( \Umu \) 36'26	4.08396 AU -0°25'38	conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde	-5743 May 29 j 06:40 -5743 Jun 08 j 22:37 -5743 Jun 08 j 22:35 -5743 Jun 08 j 18:21 -5743 Jun 09 j 02:50 -5743 Jun 08 j 11:12 -5743 Jun 22 j 06:08 -5743 Aug 08 j 18:12 -5743 Oct 21 j 05:10	2°821'00 2°820'59 2°818'40 2°823'19 2°814'43 5°816'51 15°8 22°833'11	0°13'44 6.33564 AU
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min. Earth dist. desc. node direct evening set conjunction minimum elong max. Earth dist.	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33 -5749 Oct 28 j 21:56 -5749 Nov 30 j 07:18 -5749 Dec 13 j 07:42 -5749 Dec 13 j 23:53 -5749 Dec 26 j 11:32 -5748 Jan 01 j 14:33	23° \( \Omega \) 22'03 23° \( \Omega \) 17'39 18° \( \Omega \) 27'59 0° \( \Dm \) 7° \( \Dm \) 21'45 10° \( \Dm \) 26'52 10° \( \Dm \) 36'26 13° \( \Dm \) 33'47 15° \( \Dm \)	4.08396 AU -0°25'38 0°25'51	conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde	-5743 May 29 j 06:40 -5743 Jun 08 j 22:37 -5743 Jun 08 j 22:35 -5743 Jun 08 j 18:21 -5743 Jun 09 j 02:50 -5743 Jun 08 j 11:12 -5743 Jun 22 j 06:08 -5743 Aug 08 j 18:12 -5743 Oct 21 j 05:10 -5743 Dec 20 j 00:01 -5743 Dec 20 j 14:10	2°\dagger \dagger 21'00 2°\dagger \dagger 20'59 2°\dagger \dagger 323'19 2°\dagger \dagger 314'43 5°\dagger \dagger 316'51 15°\dagger \dagger 22°\dagger \dagger 33'11 17°\dagger \dagger 33'47	0°13'44 6.33564 AU
min. Earth dist. desc. node direct evening set conjunction minimum elong max. Earth dist. morning rise	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33 -5749 Oct 28 j 21:56 -5749 Nov 30 j 07:18 -5749 Dec 13 j 07:42 -5749 Dec 13 j 23:53 -5749 Dec 26 j 11:32 -5748 Jan 01 j 14:33 -5748 Mar 17 j 18:37	23° № 22'03 23° № 17'39 18° № 27'59 0° M. 7° M.21'45 10° M.26'52 10° M.36'26 13° M.33'47 15° M.	4.08396 AU -0°25'38 0°25'51	conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist.	-5743 May 29 j 06:40 -5743 Jun 08 j 22:37 -5743 Jun 08 j 22:35 -5743 Jun 08 j 18:21 -5743 Jun 09 j 02:50 -5743 Jun 08 j 11:12 -5743 Jun 22 j 06:08 -5743 Aug 08 j 18:12 -5743 Oct 21 j 05:10 -5743 Dec 20 j 00:01 -5743 Dec 20 j 14:10 -5742 Jan 10 j 06:46	2°821'00 2°820'59 2°818'40 2°823'19 2°814'43 5°816'51 15°8 22°833'11 17°838'24 17°833'47 15°88	0°13'44 6.33564 AU 0°52'35
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min. Earth dist. desc. node direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33 -5749 Oct 28 j 21:56 -5749 Nov 30 j 07:18 -5749 Dec 13 j 07:44 -5749 Dec 13 j 07:42 -5749 Dec 13 j 23:53 -5749 Dec 26 j 11:32 -5748 Jan 01 j 14:33 -5748 May 17 j 18:37 -5748 May 06 j 02:37 -5748 Jul 24 j 21:52 -5748 Jul 05 j 15:00	23° № 22'03 23° № 17'39 18° № 27'59 0° M. 7° M.21'45 10° M.26'52 10° M.36'26 13° M.33'47 15° M. 0° ※ 3° № 37'56 30° RM. 28° M.35'22	4.08396 AU -0°25'38 0°25'51 6.05163 AU	conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-5743 May 29 j 06:40  -5743 Jun 08 j 22:37  -5743 Jun 08 j 22:35  -5743 Jun 08 j 18:21  -5743 Jun 08 j 11:12  -5743 Jun 08 j 11:12  -5743 Jun 22 j 06:08  -5743 Aug 08 j 18:12  -5743 Dec 20 j 00:01  -5743 Dec 20 j 14:10  -5742 Jan 10 j 06:46  -5742 Feb 20 j 00:51  -5742 Apr 02 j 01:13  -5742 Jun 25 j 06:00	2°821'00 2°820'59 2°818'40 2°823'19 2°814'43 5°816'51 15°8 22°833'11 17°838'24 17°833'47 15°88 12°834'49 15°8 0°II	0°13'44 6.33564 AU 0°52'35
min. Earth dist. desc. node direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33 -5749 Oct 28 j 21:56 -5749 Nov 30 j 07:18 -5749 Dec 13 j 07:44 -5749 Dec 13 j 07:42 -5749 Dec 26 j 11:32 -5748 Jun 01 j 14:33 -5748 May 06 j 02:37 -5748 Jun 24 j 21:52 -5748 Jul 05 j 15:00 -5748 Jul 04 j 19:15	23° \( \Omega \) 22'03 23° \( \Omega \) 17'39 18° \( \Omega \) 27'59 0° \( \mu \) 7° \( \mu \) 21'45 10° \( \mu \) 26'52 10° \( \mu \) 26'50 10° \( \mu \) 36'26 13° \( \mu \) 33'47 15° \( \mu \) 0° \( \delta \) 3° \( \delta \) 37'56 30° \( \mu \) 28° \( \mu \) 35'22 28° \( \mu \) 41'57	4.08396 AU -0°25'38 0°25'51 6.05163 AU	conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-5743 May 29 j 06:40  -5743 Jun 08 j 22:35 -5743 Jun 08 j 22:35 -5743 Jun 08 j 18:21 -5743 Jun 09 j 02:50 -5743 Jun 08 j 11:12 -5743 Jun 22 j 06:08 -5743 Aug 08 j 18:12 -5743 Oct 21 j 05:10 -5743 Dec 20 j 00:01 -5742 Jan 10 j 06:46 -5742 Feb 20 j 00:51 -5742 Apr 02 j 01:13 -5742 Jun 25 j 06:00 -5742 Jun 27 j 23:40	2°821'00 2°820'59 2°818'40 2°823'19 2°814'43 5°816'51 15°8 22°833'11 17°838'24 17°833'47 15°88 12°834'49 15°8 0°11 0°135'45	0°13'44 6.33564 AU 0°52'35 4.36373 AU
min. Earth dist. desc. node direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33 -5749 Oct 28 j 21:56 -5749 Nov 30 j 07:18 -5749 Dec 13 j 07:44 -5749 Dec 13 j 07:42 -5749 Dec 26 j 11:32 -5748 Jan 01 j 14:33 -5748 May 06 j 02:37 -5748 Jun 24 j 21:52 -5748 Jul 05 j 15:00 -5748 Jul 04 j 19:15 -5748 Sep 01 j 23:31	23° \$\Omega 22'03 23° \$\Omega 17'39 18° \$\Omega 27'59 0° \$\mathred{m}\$. 7° \$\mathred{m} 22'45 10° \$\mathred{m} 26'52 10° \$\mathred{m} 26'50 10° \$\mathred{m} 36'26 13° \$\mathred{m} 33'47 15° \$\mathred{m}\$. 0° \$\nall 3' 37'56 30° \$\mathred{m}\$. 28° \$\mathred{m} 35'22 28° \$\mathred{m} 41'57 23° \$\mathred{m} 41'42	4.08396 AU -0°25'38 0°25'51 6.05163 AU	conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-5743 May 29 j 06:40  -5743 Jun 08 j 22:37  -5743 Jun 08 j 22:35  -5743 Jun 08 j 18:21  -5743 Jun 08 j 11:12  -5743 Jun 08 j 11:12  -5743 Jun 22 j 06:08  -5743 Aug 08 j 18:12  -5743 Dec 20 j 00:01  -5743 Dec 20 j 14:10  -5742 Jan 10 j 06:46  -5742 Feb 20 j 00:51  -5742 Apr 02 j 01:13  -5742 Jun 25 j 06:00	2°821'00 2°820'59 2°818'40 2°823'19 2°814'43 5°816'51 15°8 22°833'11 17°838'24 17°833'47 15°88 12°834'49 15°8 0°II	0°13'44 6.33564 AU 0°52'35
min. Earth dist. desc. node direct evening set  conjunction minimum elong max. Earth dist. morning rise  retrograde opposition min. Earth dist. direct	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33 -5749 Oct 28 j 21:56 -5749 Nov 30 j 07:18 -5749 Dec 13 j 07:44 -5749 Dec 13 j 07:42 -5749 Dec 26 j 11:32 -5748 Jan 01 j 14:33 -5748 Mar 17 j 18:37 -5748 May 06 j 02:37 -5748 Jul 05 j 15:00 -5748 Jul 04 j 19:15 -5748 Sep 01 j 23:31 -5748 Nov 05 j 05:00	23° \$\textit{\Omega} 22'03 23° \$\textit{\Omega} 17'39 18° \$\textit{\Omega} 27'59 0° \$\textit{\mathre{m}}. 7° \$\textit{\mathre{m}} 26'52 10° \$\textit{\mathre{m}} 26'50 10° \$\textit{\mathre{m}} 36'26 13° \$\textit{\mathre{m}} 33'47 15° \$\textit{\mathre{m}}. 0° \$\textit{\sigma}" 30° \$\textit{\mathre{m}} 35'22 28° \$\textit{\mathre{m}} 41'57 23° \$\textit{\mathre{m}} 41'42 0° \$\textit{\sigma}"	4.08396 AU -0°25'38 0°25'51 6.05163 AU	conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist.	-5743 May 29 j 06:40  -5743 Jun 08 j 22:35 -5743 Jun 08 j 22:35 -5743 Jun 08 j 18:21 -5743 Jun 09 j 02:50 -5743 Jun 08 j 11:12 -5743 Jun 22 j 06:08 -5743 Aug 08 j 18:12 -5743 Oct 21 j 05:10 -5743 Dec 20 j 00:01 -5743 Dec 20 j 14:10 -5742 Jan 10 j 06:46 -5742 Feb 20 j 00:51 -5742 Apr 02 j 01:13 -5742 Jun 25 j 06:00 -5742 Jun 27 j 23:40 -5742 Jul 09 j 19:44	2°\d21'00 2°\d20'59 2°\d20'59 2°\d23'19 2°\d23'19 2°\d33'11 17°\d33'47 15°\d33'47 15°\d34'49 15°\d30'\II 0°\II35'45 3°\II11'32	0°13'44 6.33564 AU 0°52'35 4.36373 AU 6.37884 AU
min. Earth dist. desc. node direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33 -5749 Oct 28 j 21:56 -5749 Nov 30 j 07:18 -5749 Dec 13 j 07:44 -5749 Dec 13 j 07:42 -5749 Dec 26 j 11:32 -5748 Jan 01 j 14:33 -5748 May 06 j 02:37 -5748 Jun 24 j 21:52 -5748 Jul 05 j 15:00 -5748 Jul 04 j 19:15 -5748 Sep 01 j 23:31	23° \$\Omega 22'03 23° \$\Omega 17'39 18° \$\Omega 27'59 0° \$\mathred{m}\$. 7° \$\mathred{m} 22'45 10° \$\mathred{m} 26'52 10° \$\mathred{m} 26'50 10° \$\mathred{m} 36'26 13° \$\mathred{m} 33'47 15° \$\mathred{m}\$. 0° \$\nall 3' 37'56 30° \$\mathred{m}\$. 28° \$\mathred{m} 35'22 28° \$\mathred{m} 41'57 23° \$\mathred{m} 41'42	4.08396 AU -0°25'38 0°25'51 6.05163 AU	conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise  retrograde opposition min. Earth dist.  direct  evening set max. Earth dist.  conjunction	-5743 May 29 j 06:40  -5743 Jun 08 j 22:35 -5743 Jun 08 j 22:35 -5743 Jun 08 j 18:21 -5743 Jun 08 j 11:12 -5743 Jun 08 j 11:12 -5743 Jun 22 j 06:08 -5743 Aug 08 j 18:12 -5743 Oct 21 j 05:10 -5743 Dec 20 j 00:01 -5743 Dec 20 j 14:10 -5742 Jan 10 j 06:46 -5742 Feb 20 j 00:51 -5742 Apr 02 j 01:13 -5742 Jun 25 j 06:00 -5742 Jun 27 j 23:40 -5742 Jul 09 j 19:44	2°821'00 2°820'59 2°818'40 2°823'19 2°814'43 5°816'51 15°8 22°833'11 17°838'24 17°833'47 15°88 12°834'49 15°8 0°11 0°1135'45 3°111'32	0°13'44 6.33564 AU 0°52'35 4.36373 AU 6.37884 AU 0°56'36
min. Earth dist. desc. node direct evening set  conjunction minimum elong max. Earth dist. morning rise  retrograde  opposition min. Earth dist. direct evening set	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33 -5749 Oct 28 j 21:56 -5749 Nov 30 j 07:18 -5749 Dec 13 j 07:42 -5749 Dec 13 j 23:53 -5749 Dec 26 j 11:32 -5748 Jun 01 j 14:33 -5748 Mar 17 j 18:37 -5748 Jun 24 j 21:52 -5748 Jul 05 j 15:00 -5748 Jul 04 j 19:15 -5748 Sep 01 j 23:31 -5748 Nov 05 j 05:00 -5747 Jan 04 j 04:35	23° \$\textit{\Omega} 22'03 23° \$\textit{\Omega} 17'39 18° \$\textit{\Omega} 27'59 0° \$\textit{\mathre{m}}. 7° \$\textit{\mathre{m}} 26'52 10° \$\textit{\mathre{m}} 26'50 10° \$\textit{\mathre{m}} 36'26 13° \$\textit{\mathre{m}} 33'47 15° \$\textit{\mathre{m}}. 0° \$\textit{\sigma}' 3° \$\textit{\sigma} 37'56 30° R \$\textit{\mathre{m}}. 28° \$\textit{\mathre{m}} 35'22 28° \$\textit{\mathre{m}} 41'57 23° \$\textit{\mathre{m}} 41'42 0° \$\textit{\sigma}' 12° \$\textit{\sigma} 51'04	-0°25'38 0°25'51 6.05163 AU -1°15'19 4.03273 AU	conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise  retrograde opposition min. Earth dist.  direct  evening set max. Earth dist.  conjunction minimum elong	-5743 May 29 j 06:40  -5743 Jun 08 j 22:37 -5743 Jun 08 j 22:35 -5743 Jun 08 j 18:21 -5743 Jun 09 j 02:50 -5743 Jun 08 j 11:12 -5743 Jun 22 j 06:08 -5743 Aug 08 j 18:12 -5743 Oct 21 j 05:10 -5743 Dec 20 j 00:01 -5743 Dec 20 j 14:10 -5742 Jun 10 j 06:46 -5742 Feb 20 j 00:51 -5742 Apr 02 j 01:13 -5742 Jun 25 j 06:00 -5742 Jun 27 j 23:40 -5742 Jul 09 j 19:44  -5742 Jul 11 j 00:49 -5742 Jul 11 j 00:45	2°\d21'00 2°\d22'59 2°\d21'90 2°\d23'19 2°\d23'19 2°\d33'11 17°\d33'47 15°\d33'47 15°\d34'49 15°\d3'\d35'45 3°\II1'32 3°\II27'31 3°\II27'29	0°13'44 6.33564 AU 0°52'35 4.36373 AU 6.37884 AU
min. Earth dist. desc. node direct evening set conjunction minimum elong max. Earth dist. morning rise  retrograde opposition min. Earth dist. direct evening set conjunction	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33 -5749 Oct 28 j 21:56 -5749 Nov 30 j 07:18 -5749 Dec 13 j 07:42 -5749 Dec 13 j 23:53 -5749 Dec 26 j 11:32 -5748 Jun 01 j 14:33 -5748 Mar 17 j 18:37 -5748 May 06 j 02:37 -5748 Jul 05 j 15:00 -5748 Jul 04 j 19:15 -5748 Nov 05 j 05:00 -5747 Jan 04 j 04:35	23° \$\textit{\Omega} 22'03 23° \$\textit{\Omega} 17'39 18° \$\textit{\Omega} 27'59 0° \$\textit{\mu}\$. 7° \$\textit{\Umathbb{L}} 21'45 10° \$\textit{\Umathbb{L}} 26'52 10° \$\textit{\Umathbb{L}} 26'50 10° \$\textit{\Umathbb{L}} 30' \$\textit{\Umathbb{L}} 33'47 15° \$\textit{\Umathbb{L}}\$. 0° \$\textit{\Umathbb{Z}}\$ 30° \$\textit{\Umathbb{R}}\$\textit{\Umathbb{L}} 28° \$\textit{\Umathbb{L}} 35'22 28° \$\textit{\Umathbb{L}} 41'57 23° \$\textit{\Umathbb{L}} 41'42 0° \$\textit{\Umathbb{Z}}\$ 12° \$\textit{\Umathbb{Z}} 51'04 16° \$\textit{\Umathbb{Z}} 00'28	4.08396 AU  -0°25'38 0°25'51 6.05163 AU  -1°15'19 4.03273 AU	conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise  retrograde opposition min. Earth dist.  direct  evening set max. Earth dist.  conjunction minimum elong morning rise	-5743 May 29 j 06:40  -5743 Jun 08 j 22:37  -5743 Jun 08 j 22:35  -5743 Jun 08 j 18:21  -5743 Jun 08 j 18:21  -5743 Jun 08 j 11:12  -5743 Jun 22 j 06:08  -5743 Aug 08 j 18:12  -5743 Oct 21 j 05:10  -5743 Dec 20 j 00:01  -5742 Jun 10 j 06:46  -5742 Feb 20 j 00:51  -5742 Apr 02 j 01:13  -5742 Jun 25 j 06:00  -5742 Jun 27 j 23:40  -5742 Jul 11 j 00:49  -5742 Jul 11 j 00:49  -5742 Jul 23 j 22:25	2° 821'00 2° 820'59 2° 818'40 2° 823'19 2° 814'43 5° 816'51 15° 8 22° 833'11 17° 838'24 17° 833'47 15° 88 12° 834'49 15° 8 0° Π 0° Π35'45 3° Π11'32 3° Π27'31 3° Π27'29 6° Π17'36	0°13'44 6.33564 AU 0°52'35 4.36373 AU 6.37884 AU 0°56'36
min. Earth dist. desc. node direct evening set conjunction minimum elong max. Earth dist. morning rise  retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33 -5749 Oct 28 j 21:56 -5749 Nov 30 j 07:18 -5749 Dec 13 j 07:42 -5749 Dec 13 j 23:53 -5749 Dec 26 j 11:32 -5748 Jun 01 j 14:33 -5748 Mar 17 j 18:37 -5748 Jul 05 j 15:00 -5748 Jul 04 j 19:15 -5748 Sep 01 j 23:31 -5748 Nov 05 j 05:00 -5747 Jan 04 j 04:35 -5747 Jan 17 j 12:45 -5747 Jan 17 j 12:41	23° \$\textit{\Omega}\$ 22'03 23° \$\textit{\Omega}\$ 17'39 18° \$\textit{\Omega}\$ 27'59 0° \$\textit{\mathbb{m}}\$ 7° \$\textit{\mathbb{m}}\$ 26'52 10° \$\textit{\mathbb{m}}\$ 26'50 10° \$\textit{\mathbb{m}}\$ 36'26 13° \$\textit{\mathbb{m}}\$ 33'47 15° \$\textit{\mathbb{m}}\$ 0° \$\textit{\sigma}\$ 33'7'56 30° \$\textit{\mathbb{m}}\$ 28° \$\textit{\mathbb{m}}\$ 35'22 28° \$\textit{\mathbb{m}}\$ 41'57 23° \$\textit{\mathbb{m}}\$ 41'42 0° \$\textit{\sigma}\$ 12° \$\textit{\sigma}\$ 51'04 16° \$\textit{\sigma}\$ 00'28 16° \$\textit{\sigma}\$ 00'26	-0°25'38 0°25'51 6.05163 AU -1°15'19 4.03273 AU -1°09'14 1°09'33	conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise  retrograde opposition min. Earth dist.  direct  evening set max. Earth dist.  conjunction minimum elong morning rise retrograde	-5743 May 29 j 06:40  -5743 Jun 08 j 22:37  -5743 Jun 08 j 22:35  -5743 Jun 08 j 18:21  -5743 Jun 08 j 11:12  -5743 Jun 08 j 11:12  -5743 Jun 22 j 06:08  -5743 Aug 08 j 18:12  -5743 Oct 21 j 05:10  -5743 Dec 20 j 00:01  -5742 Jun 10 j 06:46  -5742 Feb 20 j 00:51  -5742 Apr 02 j 01:13  -5742 Jun 25 j 06:00  -5742 Jun 27 j 23:40  -5742 Jul 11 j 00:49  -5742 Jul 11 j 00:49  -5742 Jul 23 j 22:25  -5742 Nov 21 j 04:25	2° 821'00 2° 820'59 2° 818'40 2° 823'19 2° 816'51 15° 8 22° 833'11 17° 838'24 17° 833'47 15° 88 12° 834'49 15° 8 0° Π 0° Π35'45 3° Π27'31 3° Π27'31 3° Π27'29 6° Π17'36 23° Π21'02	0°13'44 6.33564 AU 0°52'35 4.36373 AU 6.37884 AU 0°56'36 0°56'54
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min. Earth dist. desc. node direct evening set conjunction minimum elong max. Earth dist. morning rise  retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33 -5749 Oct 28 j 21:56 -5749 Nov 30 j 07:18  -5749 Dec 13 j 07:44 -5749 Dec 13 j 07:42 -5749 Dec 13 j 23:53 -5749 Dec 26 j 11:32 -5748 Jan 01 j 14:33 -5748 Mar 17 j 18:37 -5748 May 06 j 02:37 -5748 Jul 05 j 15:00 -5748 Jul 04 j 19:15 -5748 Sep 01 j 23:31 -5748 Nov 05 j 05:00 -5747 Jan 17 j 12:45 -5747 Jan 17 j 12:41 -5747 Jan 19 j 01:46 -5747 Jan 31 j 00:07	23° \$\tilde{\Omega} 22'03 23° \$\tilde{\Omega} 17'39 18° \$\tilde{\Omega} 27'59 0° \$\tilde{\Omega} \tilde{\Omega} 26'52 10° \$\tilde{\Omega} 26'50 10° \$\tilde{\Omega} 36'26 13° \$\tilde{\Omega} 33'47 15° \$\tilde{\Omega} 3° \$\tilde{\omega} 37'56 30° \$\tilde{\Omega} \tilde{\Omega} 35'22 28° \$\tilde{\Omega} 41'57 23° \$\tilde{\Omega} 41'42 0° \$\tilde{\omega} 12° \$\tilde{\omega} 51'04 16° \$\tilde{\Omega} 200'28 16° \$\tilde{\omega} 22'25 19° \$\tilde{\omega} 11'35	-0°25'38 0°25'51 6.05163 AU -1°15'19 4.03273 AU -1°09'14 1°09'33	conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise  retrograde opposition min. Earth dist.  direct  evening set max. Earth dist.  conjunction minimum elong morning rise retrograde opposition min. Earth dist.	-5743 May 29 j 06:40  -5743 Jun 08 j 22:37  -5743 Jun 08 j 22:35  -5743 Jun 08 j 18:21  -5743 Jun 08 j 11:12  -5743 Jun 08 j 11:12  -5743 Jun 08 j 11:12  -5743 Jun 22 j 06:08  -5743 Aug 08 j 18:12  -5743 Dec 20 j 00:01  -5743 Dec 20 j 14:10  -5742 Jun 10 j 06:46  -5742 Feb 20 j 00:51  -5742 Apr 02 j 01:13  -5742 Jun 25 j 06:00  -5742 Jun 27 j 23:40  -5742 Jul 11 j 00:49  -5742 Jul 11 j 00:45  -5742 Jul 23 j 22:25  -5742 Nov 21 j 04:25  -5741 Jan 20 j 12:36  -5741 Jan 21 j 12:41	2°821'00 2°820'59 2°818'40 2°823'19 2°814'43 5°816'51 15°8 22°833'11 17°838'24 17°833'47 15°88 12°834'49 15°8 0°11 0°135'45 3°111'32 3°1127'29 6°117'36 23°1121'02 18°1128'46 18°1121'01	0°13'44 6.33564 AU 0°52'35 4.36373 AU 6.37884 AU 0°56'36 0°56'54
min. Earth dist. desc. node direct evening set conjunction minimum elong max. Earth dist. morning rise  retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33 -5749 Oct 28 j 21:56 -5749 Nov 30 j 07:18  -5749 Dec 13 j 07:44 -5749 Dec 13 j 07:42 -5749 Dec 13 j 23:53 -5749 Dec 26 j 11:32 -5748 Jan 01 j 14:33 -5748 Mar 17 j 18:37 -5748 May 06 j 02:37 -5748 Jul 05 j 15:00 -5748 Jul 04 j 19:15 -5748 Sep 01 j 23:31 -5748 Nov 05 j 05:00 -5747 Jan 17 j 12:45 -5747 Jan 17 j 12:45 -5747 Jan 19 j 01:46 -5747 Jan 31 j 00:07 -5747 Mar 21 j 02:45	23° \$\times 22'03 23° \$\times 17'39 18° \$\times 27'59 0° \$\times 1'45  10° \$\times 26'52 10° \$\times 26'50 10° \$\times 36'26 13° \$\times 33'47 15° \$\times 0° \$\times 35'22 28° \$\times 41'57 23° \$\times 41'42 0° \$\times 12° \$\times 51'04  16° \$\times 00'28 16° \$\times 20'25 19° \$\times 11'35 0° \$\times 13'50	-0°25'38 0°25'51 6.05163 AU -1°15'19 4.03273 AU -1°09'14 1°09'33	conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise  retrograde opposition min. Earth dist.  direct  evening set max. Earth dist.  conjunction minimum elong morning rise retrograde opposition	-5743 May 29 j 06:40  -5743 Jun 08 j 22:35 -5743 Jun 08 j 22:35 -5743 Jun 08 j 18:21 -5743 Jun 09 j 02:50 -5743 Jun 08 j 11:12 -5743 Jun 22 j 06:08 -5743 Aug 08 j 18:12 -5743 Oct 21 j 05:10 -5743 Dec 20 j 00:01 -5743 Dec 20 j 14:10 -5742 Jun 10 j 06:46 -5742 Feb 20 j 00:51 -5742 Apr 02 j 01:13 -5742 Jun 25 j 06:00 -5742 Jun 27 j 23:40 -5742 Jul 09 j 19:44  -5742 Jul 11 j 00:45 -5742 Jul 23 j 22:25 -5742 Nov 21 j 04:25 -5741 Jan 20 j 12:36 -5741 Jan 21 j 12:41 -5741 Mar 24 j 02:10	2°821'00 2°820'59 2°818'40 2°823'19 2°814'43 5°816'51 15°8 22°833'11 17°838'24 17°833'47 15°88 12°834'49 15°8 0°11 0°135'45 3°111'32 3°127'29 6°117'36 23°1121'02 18°128'46 18°1121'01 13°1126'45	0°13'44 6.33564 AU 0°52'35 4.36373 AU 6.37884 AU 0°56'36 0°56'54
min. Earth dist. desc. node direct evening set conjunction minimum elong max. Earth dist. morning rise  retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33 -5749 Oct 28 j 21:56 -5749 Nov 30 j 07:18 -5749 Dec 13 j 07:44 -5749 Dec 13 j 07:42 -5749 Dec 13 j 23:53 -5749 Dec 26 j 11:32 -5748 Jul 13 j 13:37 -5748 Mar 17 j 18:37 -5748 Mar 17 j 18:37 -5748 Jul 05 j 15:00 -5748 Jul 04 j 19:15 -5748 Sep 01 j 23:31 -5748 Nov 05 j 05:00 -5747 Jan 04 j 04:35 -5747 Jan 17 j 12:41 -5747 Jan 19 j 01:46 -5747 Jan 31 j 00:07 -5747 Mar 21 j 02:45 -5747 Jun 11 j 20:40	23° \$\tilde{\Omega} 22'03 23° \$\tilde{\Omega} 17'39 18° \$\tilde{\Omega} 27'59 0° \$\tilde{\Omega} \tilde{\Omega} 26'52 10° \$\tilde{\Omega} 26'50 10° \$\tilde{\Omega} 36'26 13° \$\tilde{\Omega} 33'47 15° \$\tilde{\Omega} 30' \$\tilde{\Omega} 37'56 30° \$\tilde{\Omega} 35'22 28° \$\tilde{\Omega} 41'57 23° \$\tilde{\Omega} 41'42 0° \$\tilde{\Omega} 12' \$\tilde{\Omega} 51'04 16° \$\tilde{\Omega} 20'28 16° \$\tilde{\Omega} 20'26 16° \$\tilde{\Omega} 22'25 19° \$\tilde{\Omega} 11'35 0° \$\tilde{\Omega} 9° \$\tilde{\Omega} 22'38	-1°15'19 -0°25'38 0°25'51 6.05163 AU -1°15'19 4.03273 AU -1°09'14 1°09'33 6.02793 AU	conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise  retrograde opposition min. Earth dist. direct  evening set max. Earth dist.  conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct	-5743 May 29 j 06:40  -5743 Jun 08 j 22:35 -5743 Jun 08 j 22:35 -5743 Jun 08 j 18:21 -5743 Jun 09 j 02:50 -5743 Jun 08 j 11:12 -5743 Jun 22 j 06:08 -5743 Aug 08 j 18:12 -5743 Oct 21 j 05:10 -5743 Dec 20 j 10:01 -5743 Dec 20 j 14:10 -5742 Jan 10 j 06:46 -5742 Feb 20 j 00:51 -5742 Apr 02 j 01:13 -5742 Jun 25 j 06:00 -5742 Jul 25 j 06:00 -5742 Jul 09 j 19:44  -5742 Jul 11 j 00:45 -5742 Jul 11 j 00:45 -5742 Jul 23 j 22:25 -5742 Nov 21 j 04:25 -5741 Jan 20 j 12:36 -5741 Jan 21 j 12:41 -5741 Mar 24 j 02:10 -5741 Jul 23 j 02:41	2° 821'00 2° 820'59 2° 818'40 2° 823'19 2° 814'43 5° 816'51 15° 8 22° 833'11 17° 838'24 17° 833'47 15° 88 12° 834'49 15° 8 0° Π 0° Π35'45 3° Π11'32 3° Π27'31 3° Π27'29 6° Π17'36 23° Π21'02 18° Π28'46 18° Π21'01 13° Π26'45 0° 9	0°13'44 6.33564 AU 0°52'35 4.36373 AU 6.37884 AU 0°56'36 0°56'54
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min. Earth dist. desc. node direct evening set conjunction minimum elong max. Earth dist. morning rise  retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33 -5749 Oct 28 j 21:56 -5749 Nov 30 j 07:18  -5749 Dec 13 j 07:44 -5749 Dec 13 j 07:42 -5749 Dec 13 j 23:53 -5749 Dec 26 j 11:32 -5748 Jan 01 j 14:33 -5748 May 06 j 02:37 -5748 Jul 05 j 15:00 -5748 Jul 04 j 19:15 -5748 Jul 04 j 19:15 -5748 Sep 01 j 23:31 -5748 Nov 05 j 05:00 -5747 Jan 17 j 12:41 -5747 Jan 17 j 12:41 -5747 Jan 17 j 12:41 -5747 Jan 19 j 01:46 -5747 Jan 31 j 00:07 -5747 Mar 21 j 02:45 -5747 Aug 10 j 18:00 -5747 Aug 09 j 15:22	23° \$\times 22'03 23° \$\times 17'39 18° \$\times 27'59 0° \$\times 1'45  10° \$\times 26'52 10° \$\times 26'50 10° \$\times 36'26 13° \$\times 33'47 15° \$\times 00° \$\times 135'22 28° \$\times 41'57 23° \$\times 41'42 0° \$\times 12° \$\times 51'04  16° \$\times 200'26 16° \$\times 22'25 19° \$\times 11'35 0° \$\times 9° \$\times 22'38 4° \$\times 17'40 4° \$\times 26'43	-1°15'19 -0°25'38 0°25'51 6.05163 AU -1°15'19 4.03273 AU -1°09'14 1°09'33 6.02793 AU	conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise  retrograde opposition min. Earth dist. direct  evening set max. Earth dist.  conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct	-5743 May 29 j 06:40  -5743 Jun 08 j 22:35 -5743 Jun 08 j 22:35 -5743 Jun 08 j 18:21 -5743 Jun 09 j 02:50 -5743 Jun 08 j 11:12 -5743 Jun 22 j 06:08 -5743 Aug 08 j 18:12 -5743 Oct 21 j 05:10 -5743 Dec 20 j 10:01 -5743 Dec 20 j 14:10 -5742 Jan 10 j 06:46 -5742 Feb 20 j 00:51 -5742 Apr 02 j 01:13 -5742 Jun 25 j 06:00 -5742 Jul 25 j 06:00 -5742 Jul 09 j 19:44  -5742 Jul 11 j 00:45 -5742 Jul 11 j 00:45 -5742 Jul 23 j 22:25 -5742 Nov 21 j 04:25 -5741 Jan 20 j 12:36 -5741 Jan 21 j 12:41 -5741 Mar 24 j 02:10 -5741 Jul 23 j 02:41	2° 821'00 2° 820'59 2° 818'40 2° 823'19 2° 814'43 5° 816'51 15° 8 22° 833'11 17° 838'24 17° 833'47 15° 88 12° 834'49 15° 8 0° Π 0° Π35'45 3° Π11'32 3° Π27'31 3° Π27'29 6° Π17'36 23° Π21'02 18° Π28'46 18° Π21'01 13° Π26'45 0° 9	0°13'44 6.33564 AU 0°52'35 4.36373 AU 6.37884 AU 0°56'36 0°56'54
min. Earth dist. desc. node direct evening set  conjunction minimum elong max. Earth dist. morning rise  retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise  retrograde opposition minimum elong max. Earth dist. morning rise	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33 -5749 Oct 28 j 21:56 -5749 Nov 30 j 07:18  -5749 Dec 13 j 07:44 -5749 Dec 13 j 07:42 -5749 Dec 13 j 23:53 -5749 Dec 26 j 11:32 -5748 Jan 01 j 14:33 -5748 May 06 j 02:37 -5748 Jul 05 j 15:00 -5748 Jul 04 j 19:15 -5748 Jul 04 j 19:15 -5748 Sep 01 j 23:31 -5748 Nov 05 j 05:00 -5747 Jan 17 j 12:45 -5747 Jan 17 j 12:41 -5747 Jan 19 j 01:46 -5747 Jan 31 j 00:07 -5747 Mar 21 j 02:45 -5747 Jul 11 j 20:40 -5747 Aug 10 j 18:00 -5747 Aug 09 j 15:22 -5747 Sep 18 j 10:14	23° \$\times 22'03 23° \$\times 17'39 18° \$\times 27'59 0° \$\times 1'45  10° \$\times 26'52 10° \$\times 26'50 10° \$\times 36'26 13° \$\times 33'47 15° \$\times 0° \$\times 36'36'56 30° \$\times 1.5'756 30° \$\times 1.5'756 30° \$\times 1.5'756 28° \$\times 35'22 28° \$\times 41'57 23° \$\times 41'42 0° \$\times 12° \$\times 51'04  16° \$\times 20'26 16° \$\times 22'25 19° \$\times 11'35 0° \$\times 9° \$\times 22'38 4° \$\times 17'40 4° \$\times 26'43 30° \$\times \times 1	-1°15'19 -0°25'38 0°25'51 6.05163 AU -1°15'19 4.03273 AU -1°09'14 1°09'33 6.02793 AU	conjunction minimum elong behind sun begin behind sun end max. Earth dist. 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 retrograde opposition min. Earth dist. direct	-5743 May 29 j 06:40  -5743 Jun 08 j 22:35 -5743 Jun 08 j 22:35 -5743 Jun 08 j 18:21 -5743 Jun 09 j 02:50 -5743 Jun 08 j 11:12 -5743 Jun 22 j 06:08 -5743 Aug 08 j 18:12 -5743 Oct 21 j 05:10 -5743 Dec 20 j 00:01 -5743 Dec 20 j 00:51 -5742 Jun 10 j 06:46 -5742 Feb 20 j 00:51 -5742 Apr 02 j 01:13 -5742 Jun 25 j 06:00 -5742 Jun 27 j 23:40 -5742 Jul 11 j 00:49 -5742 Jul 11 j 00:49 -5742 Jul 23 j 22:25 -5742 Nov 21 j 04:25 -5741 Jan 20 j 12:36 -5741 Jun 23 j 02:41 -5741 Jul 29 j 10:17 -5741 Aug 09 j 11:42	2°821'00 2°820'59 2°818'40 2°823'19 2°814'43 5°816'51 15°8 22°833'11 17°838'24 17°833'47 15°88 12°834'49 15°8 0°11 0°1135'45 3°111'32 3°1127'29 6°117'36 23°1121'02 18°128'46 18°121'01 13°126'45 0°9 1°922'57 3°949'45	0°13'44 6.33564 AU 0°52'35 4.36373 AU 6.37884 AU 0°56'36 0°56'54 1°45'19 4.38171 AU 6.36875 AU
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min. Earth dist. desc. node direct evening set  conjunction minimum elong max. Earth dist. morning rise  retrograde opposition min. Earth dist. direct evening set  conjunction minimum elong max. Earth dist. morning rise  retrograde opposition minimum elong max. Earth dist. morning rise	-5749 May 31 j 03:38 -5749 May 31 j 00:15 -5749 May 31 j 13:44 -5749 Jul 29 j 13:33 -5749 Oct 28 j 21:56 -5749 Nov 30 j 07:18  -5749 Dec 13 j 07:44 -5749 Dec 13 j 07:42 -5749 Dec 13 j 23:53 -5749 Dec 26 j 11:32 -5748 Jan 01 j 14:33 -5748 May 06 j 02:37 -5748 Jul 05 j 15:00 -5748 Jul 04 j 19:15 -5748 Jul 04 j 19:15 -5748 Sep 01 j 23:31 -5748 Nov 05 j 05:00 -5747 Jan 17 j 12:45 -5747 Jan 17 j 12:41 -5747 Jan 19 j 01:46 -5747 Jan 31 j 00:07 -5747 Mar 21 j 02:45 -5747 Jul 11 j 20:40 -5747 Aug 10 j 18:00 -5747 Aug 09 j 15:22 -5747 Sep 18 j 10:14	23° \$\times 22'03 23° \$\times 17'39 18° \$\times 27'59 0° \$\times 1'45  10° \$\times 26'52 10° \$\times 26'50 10° \$\times 36'26 13° \$\times 33'47 15° \$\times 0° \$\times 36'36'56 30° \$\times 1.5'756 30° \$\times 1.5'756 30° \$\times 1.5'756 28° \$\times 35'22 28° \$\times 41'57 23° \$\times 41'42 0° \$\times 12° \$\times 51'04  16° \$\times 20'26 16° \$\times 22'25 19° \$\times 11'35 0° \$\times 9° \$\times 22'38 4° \$\times 17'40 4° \$\times 26'43 30° \$\times \times 1	-1°15'19 -0°25'38 0°25'51 6.05163 AU -1°15'19 4.03273 AU -1°09'14 1°09'33 6.02793 AU	conjunction minimum elong behind sun begin behind sun end max. Earth dist. 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 retrograde opposition min. Earth dist. direct	-5743 May 29 j 06:40  -5743 Jun 08 j 22:35 -5743 Jun 08 j 22:35 -5743 Jun 08 j 18:21 -5743 Jun 09 j 02:50 -5743 Jun 08 j 11:12 -5743 Jun 22 j 06:08 -5743 Aug 08 j 18:12 -5743 Oct 21 j 05:10 -5743 Dec 20 j 00:01 -5743 Dec 20 j 00:51 -5742 Jun 10 j 06:46 -5742 Feb 20 j 00:51 -5742 Apr 02 j 01:13 -5742 Jun 25 j 06:00 -5742 Jun 27 j 23:40 -5742 Jul 11 j 00:49 -5742 Jul 11 j 00:49 -5742 Jul 23 j 22:25 -5742 Nov 21 j 04:25 -5741 Jan 20 j 12:36 -5741 Jun 23 j 02:41 -5741 Jul 29 j 10:17 -5741 Aug 09 j 11:42	2°821'00 2°820'59 2°818'40 2°823'19 2°814'43 5°816'51 15°8 22°833'11 17°838'24 17°833'47 15°88 12°834'49 15°8 0°11 0°1135'45 3°111'32 3°1127'29 6°117'36 23°1121'02 18°128'46 18°121'01 13°126'45 0°9 1°922'57 3°949'45	0°13'44 6.33564 AU 0°52'35 4.36373 AU 6.37884 AU 0°56'36 0°56'54 1°45'19 4.38171 AU 6.36875 AU 1°23'16

•	nical year style is used: Th		•				ige 13
retrograde	-5741 Dec 22 j 22:45	24°©14'23	in astronomicai co	evening set	-5734 Feb 15 j 08:32		
•	-5740 Feb 21 j 17:37	19°\$22'59	2°08'38	evening set	-5/54 100 15 100.52	23 04034	
opposition					5724 E-L 20 : 22.41	26° <b>ප</b> 51'01	1926150
min. Earth dist.	-5740 Feb 22 j 22:55	19°513'40	4.34520 AU	conjunction	-5734 Feb 28 j 23:41		
direct	-5740 Apr 24 j 06:32	14° <b>©</b> 23'29 0° <b>Ω</b>		minimum elong	-5734 Feb 28 j 23:42	26°る51'02 27°る15'58	6.07053 AU
. ,	-5740 Aug 17 j 13:45			max. Earth dist.	-5734 Mar 02 j 18:28		6.07053 AU
evening set	-5740 Aug 28 j 11:44	2° <b>Ω</b> 25'17	( 20774 ATT	morning rise	-5734 Mar 14 j 17:02	0°≈02'25	
max. Earth dist.	-5740 Sep 08 j 08:56	4° <b>Ω</b> 52'18	6.30774 AU		-5734 Mar 14 j 12:50	0°≈	
· · · · · · · · · · · ·	5740 C 00 : 22.10	50 0 1 2150	1927/21		-5734 May 27 j 14:33	15°≈	
conjunction	-5740 Sep 09 j 23:19		1°26'21	retrograde	-5734 Jul 22 j 04:11	19°≈38'17	
minimum elong	-5740 Sep 09 j 23:20	5° <b>Ω</b> 13'59	1°26'39	•.•	-5734 Sep 16 j 08:31	15°R≈	2000155
morning rise	-5740 Sep 22 j 09:41	8° <b>Ω</b> 02'12		opposition	-5734 Sep 19 j 13:32	14°≈33'41	
	-5740 Oct 24 j 14:24	15° <b>Ω</b>		min. Earth dist.	-5734 Sep 18 j 13:09	14°≈42'01	4.11356 AU
retrograde	-5739 Jan 23 j 23:54	25° <b>Ω</b> 53'05	105.455	direct	-5734 Nov 17 j 05:24	9°≈33'34	
opposition	-5739 Mar 26 j 03:36	21°Ω00'31			-5733 Jan 16 j 12:49	15° <b>≈</b>	
min. Earth dist.	-5739 Mar 27 j 03:38	20° <b>Ω</b> 52'53	4.26359 AU	evening set	-5733 Mar 24 j 01:15	28°≈31'38	
direct	-5739 May 26 j 21:37	16° <b>Ω</b> 03'56			-5733 Mar 30 j 12:56	0° <b>)</b>	
	-5739 Sep 09 j 15:34	0° m/y				401/0000	
evening set	-5739 Sep 28 j 23:03	4° m/20'10		conjunction	-5733 Apr 06 j 19:35	1° <b>)</b> 39′26	
max. Earth dist.	-5739 Oct 10 j 10:23	6° Mp 58'33	6.21268 AU	minimum elong	-5733 Apr 06 j 19:40	1° <b>)</b> (39′29	
				max. Earth dist.	-5733 Apr 08 j 04:11	1° <b>)</b> 58′00	6.16231 AU
conjunction	-5739 Oct 11 j 11:35	7° <b>m</b> 13'06	1°03'36	morning rise	-5733 Apr 20 j 13:50	4° <b>)</b> 47′03	
minimum elong	-5739 Oct 11 j 11:39	7° <b>m</b> 13'08	1°03'46	retrograde	-5733 Aug 24 j 14:22	23° <b>∺</b> 26′56	
morning rise	-5739 Oct 24 j 00:29	10°M)06'28		opposition	-5733 Oct 22 j 21:09	18° <b>∺</b> 25'07	
retrograde	-5738 Feb 27 j 19:53	28° <b>m</b> 47'30		min. Earth dist.	-5733 Oct 22 j 07:13		4.21462 AU
opposition	-5738 Apr 30 j 00:02	23° <b>m</b> 52'11	1°04'23	direct	-5733 Dec 21 j 15:50	13° <b>¥</b> 22′22	
min. Earth dist.	-5738 Apr 30 j 12:18	23° Mp 48'15	4.16070 AU		-5732 Apr 18 j 14:08	0° <b>Υ</b>	
direct	-5738 Jun 29 j 13:40	18° <b>m</b> 58'07		evening set	-5732 Apr 27 j 10:39	1° <b>Y</b> 56'55	
	-5738 Sep 27 j 19:36	0∘ <b>⊽</b>					
evening set	-5738 Oct 31 j 15:25	7° <b>≏</b> 34'50		conjunction	-5732 May 11 j 02:55	4° <b>Y</b> 59'37	
				minimum elong	-5732 May 11 j 02:57	4° <b>Υ</b> 59'39	0°27'55
conjunction	-5738 Nov 13 j 09:24	10° <b>≏</b> 34'29	0°19'40	max. Earth dist.	-5732 May 11 j 11:45	5° <b>Y</b> 04'33	6.26534 AU
minimum elong	-5738 Nov 13 j 09:26	10° <b>≏</b> 34'30	0°19'39	morning rise	-5732 May 24 j 17:25	8° <b>Y</b> 01′13	
max. Earth dist.	-5738 Nov 13 j 03:38	10° <b>≏</b> 31'05	6.11185 AU	retrograde	-5732 Sep 24 j 12:09	25° <b>Y</b> 47'53	
morning rise	-5738 Nov 26 j 05:43	13° <b>≏</b> 35'28		opposition	-5732 Nov 22 j 23:07	20° <b>Ƴ</b> 49'55	
	-5737 Feb 18 j 02:41	0°M₊		min. Earth dist.	-5732 Nov 23 j 00:40	20° <b>Ƴ</b> 49'24	4.30996 AU
retrograde	-5737 Apr 05 j 02:56	3°M09'06		asc. node	-5732 Dec 27 j 02:06	16° <b>Ƴ</b> 53'50	
desc. node	-5737 Apr 12 j 23:04	3°M03'16		direct	-5731 Jan 23 j 01:41	15° <b>Ƴ</b> 46′00	
	-5737 May 21 j 16:41	30°Ŗ <b>죠</b>			-5731 May 12 j 16:02	$9^{\circ}$ 8	
opposition	-5737 Jun 05 j 01:31	28° <b>≙</b> 09'54	-0°10'34	evening set	-5731 May 31 j 04:22	3° <b>8</b> 58'45	
min. Earth dist.	-5737 Jun 04 j 19:33	28° <b>≏</b> 11'51	4.06983 AU				
direct	-5737 Aug 03 j 06:17	23° <b>≏</b> 16'57		conjunction	-5731 Jun 13 j 13:47	6° <b>8</b> 55'18	0°20'16
	-5737 Oct 09 j 06:36	$0^{\circ}$ M		minimum elong	-5731 Jun 13 j 13:45	6° <b>8</b> 55'17	0°20'27
evening set	-5737 Dec 05 j 02:09	12°M15'17		max. Earth dist.	-5731 Jun 13 j 00:42	6° <b>8</b> 48'06	6.34624 AU
	-5737 Dec 16 j 15:48	15° <b>™</b>		morning rise	-5731 Jun 26 j 19:47	9° <b>8</b> 50'09	
					-5731 Jul 21 j 00:10	15° <b>8</b>	
conjunction	-5737 Dec 18 j 03:55	15°M21'29	-0°32'27	retrograde	-5731 Oct 25 j 12:41	27° <b>8</b> 02'30	
minimum elong	-5737 Dec 18 j 03:52	15°M21'27	0°32'40	opposition	-5731 Dec 24 j 10:19	22° <b>8</b> 08'09	1°01'23
max. Earth dist.	-5737 Dec 18 j 23:55	15°M33'22	6.03955 AU	min. Earth dist.	-5731 Dec 25 j 01:25	22° <b>8</b> 03'13	4.37103 AU
morning rise	-5737 Dec 31 j 08:49	18°M29'28		direct	-5730 Feb 24 j 12:44	17° <b>8</b> 04'43	
	-5736 Feb 21 j 22:23	0° <b>∡</b>			-5730 Jun 08 j 16:13	$\Pi$ $\circ$ 0	
retrograde	-5736 May 11 j 07:02	8° <b>∡</b> ³39'16		evening set	-5730 Jul 02 j 11:06	5° <b>Ⅱ</b> 03'48	
opposition	-5736 Jul 10 j 15:20	3° <b>∡</b> ³36′18	-1°24'03	max. Earth dist.	-5730 Jul 14 j 02:40	7° <b>Ⅲ</b> 37'11	6.38202 AU
min. Earth dist.	-5736 Jul 09 j 19:05	3° <b>∡</b> ′43′05	4.02408 AU				
	-5736 Aug 10 j 01:19	30°RM		conjunction	-5730 Jul 15 j 10:43	7° <b>Ⅱ</b> 54'50	1°01'34
direct	-5736 Sep 06 j 21:39	28°M42'25		minimum elong	-5730 Jul 15 j 10:39	7° <b>Ⅱ</b> 54'48	1°01'53
	-5736 Oct 04 j 15:12	0°⊀		morning rise	-5730 Jul 28 j 07:08	10° <b>Ⅱ</b> 44'16	
evening set	-5735 Jan 09 j 06:39	17° <b>∡</b> ¹55'34		retrograde	-5730 Nov 25 j 15:12	27° <b>Ⅱ</b> 47'35	
				opposition	-5729 Jan 25 j 00:01	22° <b>II</b> 55'33	1°50'36
conjunction	-5735 Jan 22 j 15:51	21° <b>尽</b> °05'39	-1°13'25	min. Earth dist.	-5729 Jan 26 j 02:20	22° <b>Ⅱ</b> 47'06	4.38065 AU
minimum elong	-5735 Jan 22 j 15:47	21° <b>₹</b> 05'37	1°13'46	direct	-5729 Mar 28 j 15:38	17° <b>Ⅱ</b> 53'49	
max. Earth dist.	-5735 Jan 24 j 06:39	21° <b>₹</b> ′28'39	6.02342 AU		-5729 Jul 06 j 11:53	$0$ $\circ$ $\odot$	
morning rise	-5735 Feb 05 j 04:23	24° <b>∡</b> 17′25		evening set	-5729 Aug 02 j 19:03	5° <b>©</b> 49'56	
	-5735 Mar 02 j 01:33	ರ∘ರ		max. Earth dist.	-5729 Aug 13 j 18:47	8° <b>©</b> 16'03	6.36331 AU
retrograde	-5735 Jun 16 j 21:59	14° <b>る</b> 28'47					
opposition	-5735 Aug 15 j 17:27	9° <b>る</b> 23'44	-2°06'12	conjunction	-5729 Aug 15 j 10:28	8°538'08	1°25'14
min. Earth dist.	-5735 Aug 14 j 13:19	9° <b>ට</b> 33'18	4.04106 AU	minimum elong	-5729 Aug 15 j 10:26	8° <b>5</b> 38'07	1°25'33
direct	-5735 Oct 12 j 17:18	4° <b>る</b> 27'03		morning rise	-5729 Aug 27 j 23:15	11° <b>©</b> 25'08	

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5729 in astronomical counting style is the year 5730 BCE in historical counting style. -5729 Dec 27 i 10:45 28°5544'39 retrograde -5723 Jun 21 j 23:27 19°る36'32 retrograde -5728 Feb 26 j 08:03 23°953'09 2°09'01 -5723 Aug 20 j 17:36 14°る31'18 -2°08'19 opposition opposition min. Earth dist. -5728 Feb 27 j 12:33 23°9544'06 4.33589 AU min. Earth dist. -5723 Aug 19 j 13:35 14°る40'52 4.05120 AU -5728 Apr 28 j 18:20 -5723 Oct 17 j 20:07 9°**ප**34'07 direct 18°954'02 direct -5728 Jul 31 j 14:41 evening set -5722 Feb 20 j 13:15 0° $\Omega$ 28°る44'56 -5728 Sep 01 j 20:55 -5722 Feb 25 j 22:57 evening set 6°**£**57'32 0°≈ -5728 Sep 12 j 19:24 max. Earth dist. 6.29533 AU 9°**Ω**25'43 -5722 Mar 06 j 05:06 conjunction 1°≈55'02 -1°26'03 1°24'40 conjunction -5728 Sep 14 j 08:18 9°**Ω**46'38 minimum elong -5722 Mar 06 j 05:07 1°≈55'03 1°26'22 -5728 Sep 14 j 08:20 minimum elong 9°**Ω**46'39 1°24'57 max. Earth dist. -5722 Mar 08 j 00:50 2°**≈**20′26 6.08469 AU -5728 Sep 26 j 18:38 morning rise 12°**Ω**35′22 morning rise -5722 Mar 19 j 22:37 5°≈05'51 -5728 Oct 07 j 13:41 -5722 May 04 j 13:05 15°€ 15°≈ -5727 Jan 09 j 23:22 -5722 Jul 26 j 22:37 0° M retrograde 24°≈33'10 retrograde -5727 Jan 28 j 19:41 0° m 32'47 min. Earth dist. -5722 Sep 23 j 07:50 19°**≈**36'51 4.13020 AU -5727 Feb 16 j 15:08 30°R€ opposition -5722 Sep 24 j 07:19 19°≈28'50 -1°56'25 opposition -5727 Mar 30 j 23:07 25°**Ω**39'58 1°49'53 -5722 Nov 04 j 09:20 15°R≈ min. Earth dist. -5727 Mar 31 j 22:56 25°**Ω**32'24 4.24872 AU direct -5722 Nov 22 j 02:17 14°≈28'17 direct -5727 May 31 j 14:43 20°**Ω**43'46 -5722 Dec 09 j 23:13 -5727 Aug 22 j 15:53 -5721 Mar 13 j 23:10 0°**)**€ evening set -5727 Oct 03 j 11:26 9° m 03'01 evening set -5721 Mar 29 j 01:31 3°**)**€21'58 max. Earth dist. -5727 Oct 15 j 00:23 11° Mp 42'54 6.19673 AU conjunction -5721 Apr 11 j 19:39 6°\ 28'58 -1°03'58 conjunction -5727 Oct 16 i 00:29 11° m 56'52 0°58'28 -5721 Apr 11 j 19:43 6°**)**€29'01 1°04'08 minimum elong minimum elong -5727 Oct 16 i 00:33 11° m 56'54 0°58'36 max. Earth dist. -5721 Apr 12 j 23:45 6°**)**(44'55 6.17986 AU morning rise -5727 Oct 28 j 14:21 14° m 51'18 morning rise -5721 Apr 25 j 13:45 9°**)** 35'43 -5726 Jan 13 j 17:41 0∘**⊽** -5721 Aug 29 j 01:33 28° ¥ 06'33 retrograde -5726 Mar 04 j 19:51 3°**£**40′28 -5721 Oct 27 j 09:03 23°**)**€05'12 -1°05'31 opposition retrograde -5726 Apr 25 j 03:49 30°R M -5721 Oct 26 j 21:43 23°¥09'02 4.23128 AU min. Earth dist. opposition -5726 May 05 j 00:42 -5721 Dec 26 j 08:42 18°**)**€02'08 28° mp 44'38 0°54'47 direct 4.14492 AU -5726 May 05 j 09:40 28° Mp 41'45 -5720 Apr 01 j 14:25  $0^{\circ}$ min. Earth dist. -5726 Jul 04 j 08:42 23° m 50'50 -5720 May 02 j 04:26 6°Y32'38 evening set direct -5726 Sep 07 j 04:04 0∘**⊽** -5726 Nov 05 j 09:44 -5720 May 15 j 20:09 9°Y34'29 -0°21'22 12°**£**31'15 conjunction evening set -5720 May 15 j 20:11 9°Y34'30 0°21'19 minimum elong 9°**Υ**37'58 6.27994 AU -5726 Nov 18 j 04:51 15°**△**31'58 0°12'23 -5720 May 16 j 02:26 conjunction max. Earth dist. -5726 Nov 18 j 04:51 -5720 May 29 j 09:31 12°**Y**35'03 minimum elong 15°**≏**31'59 0°12'19 morning rise -5726 Nov 17 j 23:26 -5720 Sep 16 j 06:41 behind sun begin 15°**≏**28'48  $0^{\circ}$ 8 behind sun end -5726 Nov 18 j 10:17 15°**2**35'10 retrograde -5720 Sep 28 j 19:04 0°815'22 max. Earth dist. -5726 Nov 18 j 03:39 15°**≏**31'16 6.09794 AU -5720 Oct 11 j 06:04 30°RY morning rise -5726 Dec 01 j 02:13 18°**≗**34'06 asc. node -5720 Nov 07 j 02:46 27°Υ50'55 -5725 Jan 22 j 20:13 0°M opposition -5720 Nov 27 j 07:33 25°**Y**17′59 0°03'38 desc. node -5725 Feb 20 j 10:17 4°M41'56 min. Earth dist. -5720 Nov 27 j 11:10 25°**Y**16'47 4.32130 AU -5725 Apr 10 j 10:14 8°M14'45 direct -5719 Jan 27 j 13:26 20°**Y**14'04 retrograde -5725 Jun 10 j 05:49 3°M15'01 -0°21'49 -5719 Apr 25 j 04:01  $0^{\circ}$ 8 opposition min. Earth dist. -5725 Jun 09 j 22:10 3°M17'31 4.05927 AU evening set -5719 Jun 04 j 16:48 8°**8**24'27 -5725 Jul 07 i 09:56 -5719 Jun 17 i 06:44 30°R<u>Ω</u> max. Earth dist. 11°**8**10'13 6.35325 AU direct -5725 Aug 08 i 07:26 28°**£**22'06 -5719 Jun 18 i 00:49 11°**8**20'10 0°26'38 -5725 Sep 08 i 20:42 0°M conjunction -5725 Nov 29 j 23:02 15°M minimum elong -5719 Jun 18 i 00:47 11°**8**20'09 0°26'50 -5725 Dec 10 j 03:21 17°M23'20 -5719 Jul 01 i 05:41 14°**8**14'14 evening set morning rise -5719 Jul 04 j 17:35 15°8 -5725 Dec 23 j 06:08 20°M230'16 -0°39'24 -5719 Sep 29 j 21:37  $0^{\circ}II$ conjunction -5725 Dec 23 j 06:04 20°M30'14 0°39'38 -5719 Oct 29 j 20:10 1°**Ⅲ**24'24 minimum elong retrograde max. Earth dist. -5725 Dec 24 j 05:20 20°M.44'04 6.03347 AU -5719 Nov 28 j 18:12 30°R8 morning rise -5724 Jan 05 j 12:18 23°M39'02 opposition -5719 Dec 28 j 18:23 26°830'28 1°09'34 4.37352 AU -5724 Feb 02 j 04:20 0°**∡**¹ min. Earth dist. -5719 Dec 29 j 12:25 26°**8**24'36 retrograde -5724 May 16 j 11:56 13°**х** 51′07 direct -5718 Feb 28 j 23:52 21°**8**27'11 -5724 Jul 15 j 19:22 8°**∡**747'44 -1°32'29 -5718 May 21 j 16:54  $0^{\circ}\Pi$ opposition -5724 Jul 14 j 20:21 8°**≯**55'27 4.02371 AU evening set -5718 Jul 06 j 20:12 9°**Ⅱ**26'12 min. Earth dist. -5724 Sep 11 j 22:43 3°**∡**¹53'35 -5718 Jul 18 j 09:45 11°**Д**58'38 6.37963 AU direct max. Earth dist. -5723 Jan 14 j 12:04 23°×07'09 evening set -5718 Jul 19 j 18:45 conjunction 12°**Ⅱ**16'50 1°06'03 conjunction -5723 Jan 27 j 22:08 26° ₹17'21 -1°17'13 minimum elong -5718 Jul 19 j 18:41 12°**Ⅱ**16'48 1°06'22 minimum elong -5723 Jan 27 j 22:04 26°**х** 17′19 1°17'34 morning rise -5718 Aug 01 j 13:48 15°**Ⅲ**05'50 max. Earth dist. -5723 Jan 29 j 14:35 26°**∡**¹41'17 6.02855 AU -5718 Oct 23 j 03:15 0 $\circ$  $\odot$ -5723 Feb 10 j 11:26 29°**∡**29'10 -5718 Nov 29 j 23:23 2°9511'06 morning rise retrograde -5723 Feb 12 j 16:07 0°る -5717 Jan 07 j 05:22 30°R∏

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5717 in astronomical counting style is the year 5718 BCE in historical counting style. opposition -5717 Jan 29 j 10:25 27°**Ⅱ**19'17 1°55'11 -5712 Jul 20 j 22:30 13°**∡** 58'16 -1°40'10 opposition -5717 Jan 30 j 12:58 27°**I**10'47 4.37389 AU -5712 Jul 19 j 22:26 14°**✗**06'22 4.02666 AU min. Earth dist. min. Earth dist. -5712 Sep 17 j 01:41 -5717 Apr 02 j 01:02 22°II17'56 9°**х** 03′46 direct direct -5717 Jun 17 j 22:03 -5711 Jan 19 j 16:38 28°**х** 16'45 0ಂತಾ evening set -5711 Jan 27 j 00:11 evening set -5717 Aug 07 j 03:33 10°9515'58 0°ಕ max. Earth dist. -5717 Aug 18 j 01:22 12°9541'32 6.35254 AU -5711 Feb 02 j 03:39 conjunction 1°る26'59 -1°20'25 conjunction -5717 Aug 19 j 18:03 13°**©**04'13 1°26'39 minimum elong -5711 Feb 02 j 03:36 1°る26'58 1°20'45 minimum elong -5717 Aug 19 j 18:01 13°9504'12 1°26'59 max. Earth dist. -5711 Feb 03 j 22:38 1°る52'20 6.03585 AU morning rise -5717 Sep 01 j 06:19 15°951'25 morning rise -5711 Feb 15 j 17:34 4°る38'42 -5717 Nov 15 j 00:46  $0^{\circ}\Omega$ retrograde -5711 Jun 26 j 23:59 24°**ප්**41'10 retrograde -5716 Jan 01 j 02:40 3°**Ω**16′28 opposition -5711 Aug 25 j 15:51 19°る35'58 -2°09'30 -5716 Feb 18 j 06:23 30°Rூ min. Earth dist. -5711 Aug 24 j 12:05 19°**る**45'26 4.06227 AU opposition -5716 Mar 01 j 23:44 28°9524'58 2°08'37 direct -5711 Oct 22 j 19:38 14°る38'19 min. Earth dist. -5716 Mar 03 j 04:53 28°9515'42 4.32187 AU -5710 Feb 09 j 02:08 0°≈ direct -5716 May 03 j 08:47 23°9526'17 evening set -5710 Feb 25 j 16:55 3°≈46'34 -5716 Jul 11 j 20:26  $0^{\circ}\Omega$ evening set -5716 Sep 06 j 07:05 11°**Ω**32'57 conjunction -5710 Mar 11 j 09:06 6°≈56'13 -1°24'41 max. Earth dist. -5716 Sep 17 j 07:00 14°**Ω**02'31 6.27926 AU minimum elong -5710 Mar 11 j 09:09 6°≈56'15 1°24'58 max. Earth dist. -5710 Mar 13 j 02:00 7°≈19'53 6.09839 AU conjunction -5716 Sep 18 j 18:31 14°Ω22'42 1°22'25 morning rise -5710 Mar 25 j 03:05 10°≈06'34 minimum elong -5716 Sep 18 j 18:33 14°**Ω**22'44 1°22'41 -5710 Apr 15 i 20:57 15°**≈** -5716 Sep 21 i 12:06 15°Ω retrograde -5710 Jul 31 i 14:41 29°≈25'49 -5716 Oct 01 i 05:03 17°**Ω**12'12 opposition -5710 Sep 28 j 23:50 24°≈21'46 -1°51'14 morning rise -5716 Dec 03 j 17:06 0° m min. Earth dist. -5710 Sep 28 j 01:43 24°≈29'19 4.14512 AU -5715 Feb 02 j 15:45 -5710 Nov 26 j 22:16 19°**≈**20'46 retrograde 5° m 17'27 direct -5715 Apr 04 j 20:40 -5709 Feb 24 j 01:23 0°**₩** 0° m 24'19 1°44'00 opposition -5715 Apr 05 j 17:32 0° Mp 17'40 4.23182 AU -5709 Apr 03 j 00:37 8° **)** 10'54 min. Earth dist. evening set -5715 Apr 08 j 01:08 30°R€ direct -5715 Jun 05 j 07:06 25°**Ω**28'35 -5709 Apr 16 j 18:52 conjunction 11°**光**17′16 -0°58′56 -5709 Apr 16 j 18:56 -5715 Jul 31 j 02:52  $0^{\circ}$  mb minimum elong 11°**X**17'19 0°59'04 -5715 Oct 08 j 02:02 -5709 Apr 17 j 20:54 13° m 51'25 max. Earth dist. 11°**∺**32'00 6.19511 AU evening set -5709 Apr 30 j 12:28 14°**)** 23'10 morning rise -5715 Oct 20 j 15:45 16° Mp 46'14 0°52'50 -5709 Jul 22 j 09:00  $0^{\circ}\Upsilon$ conjunction -5715 Oct 20 j 15:48 -5709 Sep 02 j 13:29 2°\partial 46'05 minimum elong 16° m 46'16 0°52'57 retrograde -5715 Oct 19 j 19:34 -5709 Oct 14 j 14:27 max. Earth dist. 16° Tp 34'31 6.18064 AU 30°R **X** -5709 Oct 31 j 20:57 morning rise -5715 Nov 02 j 06:27 19° m 41'45 opposition 27°**)** 45'18 -0°56'28 -5715 Dec 20 j 01:32 0∘**⊽** min. Earth dist. -5709 Oct 31 j 12:00 27°**)**48'19 4.24533 AU retrograde -5714 Mar 10 j 00:37 8°**£**38'56 direct -5709 Dec 31 j 01:05 22°\ 42'03 -5714 May 10 j 03:25 3°**2**42'35 0°44'36 -5708 Mar 13 j 02:29  $0^{\circ}\Upsilon$ opposition min. Earth dist. -5714 May 10 j 10:27 3°**△**40'19 4.13077 AU evening set -5708 May 06 j 22:20 11°Y09'21 -5714 Jun 11 j 21:23 30°R, My -5714 Jul 09 j 07:57 28° m/49'02 -5708 May 20 j 13:10 14°Υ10'22 -0°14'40 direct conjunction -5714 Aug 05 j 12:05 -5708 May 20 j 13:12 14°Υ10'23 0°14'36 0∘**⊽** minimum elong -5714 Nov 10 j 06:03 17°**≏**32'26 -5708 May 20 j 09:57 14° **Y** 08'35 evening set behind sun begin -5708 May 20 j 16:26 14°\bar{\gamma}12'10 behind sun end -5708 May 20 j 14:46 14°**Ƴ**11'15 conjunction -5714 Nov 23 i 02:11 20°**2**34'06 0°04'56 max. Earth dist. 6.29175 AU 17°**Y**10′04 minimum elong -5714 Nov 23 i 02:11 20°**₽**34'06 0°04'50 morning rise -5708 Jun 03 j 01:42 behind sun begin -5714 Nov 22 j 18:17 20°**₽**29'27 -5708 Aug 07 j 13:11 0°8 behind sun end -5714 Nov 23 i 10:04 20°**£**38'44 -5708 Sep 17 j 15:58 4°821'38 asc node -5714 Nov 23 j 04:43 20°**₽**35'33 6.08706 AU -5708 Oct 03 j 02:53 4°845'06 max. Earth dist. retrograde -5714 Dec 06 j 00:51 23°**₽**37'15 -5708 Nov 30 j 05:15 30°RY morning rise 29°**₽**08'35 opposition -5708 Dec 01 j 16:53 29°Y48'12 0°13'27 desc. node -5714 Dec 30 j 03:16 29°**Y**'46'13 -5713 Jan 03 j 00:45 0°M min. Earth dist. -5708 Dec 01 j 22:50 4.33013 AU 24° **Y**44' 13 retrograde -5713 Apr 15 j 15:39 13°M23'17 direct -5707 Feb 01 j 02:39 -5713 Jun 15 j 10:37 8°M22'58 -0°32'59 -5707 Apr 03 j 23:28 0°8 opposition min. Earth dist. -5713 Jun 14 j 23:27 8°M26'38 4.05280 AU -5707 Jun 09 j 05:59 12°852'54 evening set -5707 Jun 18 j 21:51 15°8 direct -5713 Aug 13 j 07:18 3°M30'03 15°M₀ -5713 Nov 12 j 01:58 -5713 Dec 15 j 05:03 22°M32'44 -5707 Jun 22 j 12:53 15°**8**47'54 0°32'55 evening set conjunction -5707 Jun 22 j 12:50 minimum elong 15°**8**47'53 0°33'09 conjunction -5713 Dec 28 j 08:49 25°M40'10 -0°46'03 max. Earth dist. -5707 Jun 21 j 17:09 15°**8**37'03 6.35851 AU minimum elong -5713 Dec 28 j 08:45  $25^{\circ}$ M $_{\circ}40'08$ 0°46'19 morning rise -5707 Jul 05 j 16:16 18°**8**41'11 max. Earth dist. -5713 Dec 29 j 11:04 25°M55'47 6.03161 AU -5707 Aug 31 j 13:03  $0^{\circ}\Pi$ morning rise -5712 Jan 10 j 16:01 28°M49'26 retrograde -5707 Nov 03 j 03:45 5°**Ⅱ**49'39 -5712 Jan 15 j 16:06 0°×7 -5706 Jan 02 j 03:54 0°**I**56'08 opposition 1°17'30 -5712 May 21 j 16:28 min. Earth dist. -5706 Jan 02 j 23:12 0°**Ц**49'53 4.37505 AU retrograde 19°**х** 02'06

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 18 Attention, astronomical year style is used: The year -5706 in astronomical counting style is the year 5707 BCE in historical counting style.

1-100   1-20	Attention, astronom	nical year style is used: Th	ne year -5706 i	n astronomical co	ounting style is the year	5707 BCE in historical c	ounting style.	
ceneing of the control of 10 mm         -700 Apr 29 pt 0.05         PTI         cenimated max.         -700 Fabr 1 (2) pt 32         FTI         control of 10 mm		•	30°₽ <b>႘</b>		direct	-5701 Aug 18 j 06:51	8° <b>™</b> 30′20	
evening set max. Earth dist         -5706 Jul 2 J 1532         Ferrar 1970 Jul 2 J 1532         Ferrar 1970 Jul 2 J 1532         Gerar 1970 J	direct	-5706 Mar 05 j 11:22	25° <b>8</b> 53'05			-5701 Oct 22 j 18:12	15° <b>™</b>	
max. Earth dist.         9706 Jal 2 2 j 1532         0710 Cart 10 companion         5700 Jan 0 2 j 1051         0724 Jal 0 2 j 1051		-5706 Apr 29 j 00:43			evening set	-5701 Dec 20 j 04:11		
Compinetion	evening set	-5706 Jul 11 j 06:21	13° <b>Ⅱ</b> 51'56			-5701 Dec 30 j 10:43	0° <b>∡</b> ¹	
Sociation   \$0.500   12   40.31   10   10   10   10   10   10   10	max. Earth dist.	-5706 Jul 22 j 15:32	16° <b>Ⅲ</b> 22'15	6.37709 AU				
minimal moming moming in moming in the moments of the					conjunction	-5700 Jan 02 j 09:01	0° <b>∡</b> ¹41'46	-0°52'11
	conjunction	-5706 Jul 24 j 03:31	16° <b>Ⅱ</b> 42'07	1°10'15	minimum elong	-5700 Jan 02 j 08:57	0° <b>∡</b> 1'44	0°52'29
crotograde         5706 Nos Do jol 333 0°S         crotograde opposition         5700 Nos Do jol 351 16 20°S         crotograde opposition         5700 Nos Do jol 351 16 16 16 20°S         crotograde opposition         5700 Nos Do jol 351 16 16 16 20°S         1984 10 18 10 1	minimum elong	-5706 Jul 24 j 03:27	16° <b>Ⅱ</b> 42'05	1°10'34	max. Earth dist.	-5700 Jan 03 j 14:54	0° <b>∡</b> 759'31	6.03140 AU
corposation         -570 (be. 0g 1).057         6°983 (92)         19942 (1994)         strone Fact Mod 12.29         1°283731         4.36774 AU         direct         -5700 (1942)         1°4940 (1942)         1°493731         4.36774 AU         direct         -5700 (1942)         1°4940 (1942)         1°493731         4.36774 AU         direct         -5700 (1942)         1°4940 (1942)         1°4940 (1942)         1°4940 (1942)         cening set         -5700 (1942)         1°4712 (1942)         4°4712 (1942)         1°4940 (1942)         cening set         -5609 (1942)         1°4712 (1942)         4°4712 (1942)         1°4712 (1942)         4°4712 (1942)         1°4712 (1942)         4°4712 (1942)         1°4712 (1942)         4°4712 (1942)	morning rise	-5706 Aug 05 j 21:36	19° <b>Ⅲ</b> 30'46		morning rise	-5700 Jan 15 j 17:08	3° <b>₰</b> 751'26	
opposition         -570 Feb Og 1,2553         1°28/62         1°29/14         min. Earth dist         -570 Feb Og 1,020         0°29/15         4 (0.00)         0.000 Feb (17),030         0°27         1         4 (0.000 Feb (17),030         0°27         1         200 Feb (17),030         0°27         1         200 Feb (17),030         0°37         1         200 Feb (17),030         0°37         2         200 Feb (17),030         0°37         1°2318         0°37         1°2318         0°37         0°37         1°2318         0°37         0°37         1°2318         0°37         0°37         1°2318         0°37         0°37         1°2318         0°37         0°37         1°2319         1°2319         1°2319         1°2319         1°2319         1°2319         1°2319         1°2319         1°2319         1°2318         0°37         1°2318         0°37         1°2318         0°37         1°2318         0°37         1°2319         1°2319         1°2319         1°2319         1°2319		-5706 Sep 26 j 18:33	$0 \circ \mathfrak{S}$		retrograde	-5700 May 26 j 18:21	24° <b>х</b> °03′50	
nin Earth dist         5.75 Keb 10 j (2030)         1°23731   4 36774 AU         direct         4.75 Cept 10,100   18°20	retrograde	-5706 Dec 04 j 10:57	6° <b>5</b> 38'04		opposition	-5700 Jul 25 j 21:54	18° <b>∡</b> ′59'45	-1°46'52
1908   1908	opposition	-5705 Feb 02 j 22:53	1° <b>5</b> 346'24	1°59'14	min. Earth dist.	-5700 Jul 24 j 21:10	19° <b>₰</b> 08'05	4.03038 AU
direct         -500 May 24 j.14210         0.97 May 24 j.12210         0.97 May 12 j.12220	min. Earth dist.	-5705 Feb 04 j 02:39	1° <b>©</b> 37'31	4.36774 AU	direct	-5700 Sep 22 j 00:15	14° <b>₮</b> 04'54	
centing set         5705 May 11;12.10         0°92         conjunction         5699 Feb 07;05.57         6°527.97         1-227.58           max. Farth dist         5705 Aug 21;01:20         17°251957         6.4331 AU         main memoral         5699 Feb 07;05.54         6°527.37         1°2316           conjunction         5705 Aug 21;02:36         17°25258         12°737         recorded         5699 Feb 08;234.53         6°85271         6°87214         60°87214           conjunction         5705 Aug 21;02:36         17°43238         12°737         recorded         5699 Peb 08;2345         96°7122         24°8173         40°8742           recording         5705 Sep 05;120;120         0°82         10°820         10°820         10°820         10°820         20°820 </td <td></td> <td>-5705 Feb 17 j 03:00</td> <td>30°Ŗ<b>Ⅱ</b></td> <td></td> <td></td> <td>-5699 Jan 10 j 13:22</td> <td>8°0</td> <td></td>		-5705 Feb 17 j 03:00	30°Ŗ <b>Ⅱ</b>			-5699 Jan 10 j 13:22	8°0	
evening set         -5705 Aug 1 j 1 j 1 2-60         14°924 440         compunction         -5609 Feb	direct	-5705 Apr 06 j 14:04	26° <b>Ⅱ</b> 45′22		evening set	-5699 Jan 24 j 18:18	3° <b>る</b> 17'25	
max. Earth dist.         9705 Aug 22 j 1112         1799/05         6.4331 AU         minimum dong         5.699 Feb 0 j 1054         672737         22737 C           conjunction         5705 Aug 24 j 0236         17.932258         12.737         morning rise         5.699 Feb 2 j 2,043         97-5370         6.04272 AU           minimum clong         5705 Aug 24 j 0236         17.932258         12.737         retrograde         5.699 Feb 2 j 2,043         97-53717         47-61724         4.07167 AU         6.909 Feb 2 j 2,043         97-53717         47-61724         4.07167 AU         6.909 Feb 2 j 2,043         97-53717         47-61724         4.07167 AU         6.909 Feb 2 j 2,043         97-53717         47-61724         4.07167 AU         6.909 Feb 2 j 2,043         97-63717         47-61724         4.07167 AU         6.909 Feb 2 j 2,043         97-63717         47-61724         4.07167 AU         6.909 Feb 2 j 2,043         97-63717         47-61724         4.07167 AU         6.909 Feb 2 j 2,043         4.07167 AU         47-61724         4.07167 AU         6.909 Feb 2 j 2,040         4.07167 AU         6.07167 AU         6.0716 AU         4.0716 AU </td <td></td> <td>-5705 May 24 j 13:21</td> <td><math>0</math><math>\circ</math><math>\mathfrak{s}</math></td> <td></td> <td></td> <td></td> <td></td> <td></td>		-5705 May 24 j 13:21	$0$ $\circ$ $\mathfrak{s}$					
Conjunction   S705 Aug 24 j 02:36   17833759   12737   morning   S705 Aug 24 j 02:36   17833759   12737   morning   S705 Aug 24 j 02:35   17833258   12757   morning   S705 Aug 24 j 02:35   17833258   12757   morning   S705 Aug 24 j 02:35   17833258   12757   morning   S705 Aug 24 j 02:35   17832258   12757   morning   S705 Aug 24 j 02:35   17832258   12757   morning   S705 Aug 24 j 02:35   17832258   12757   morning   S709 Aug 29 j 07:12   24763173   4.07167 AU 0position   S709 Aug 09 j 10:18   24763256   2-20944   morning   S709 Aug 09 j 12:25   28826078   morning   S709 Aug 09 j 12:25   28826078   max. Earth dist.   S698 Mar 16 j 10:26   178-84958   12301   max. Earth dist.   S698 Mar 18 j 02:20   127-84598   12301   max. Earth dist.   S698 Mar 18 j 02:20   127-84598   12301   max. Earth dist.   S698 Mar 18 j 02:20   127-84598   12301   max. Earth dist.   S698 Mar 18 j 02:20   127-84598   12301   max. Earth dist.   S698 Mar 18 j 02:20   127-84598   12301   max. Earth dist.   S698 Mar 18 j 02:20   127-84598   12301   max. Earth dist.   S698 Mar 18 j 02:20   127-84598   12301   max. Earth dist.   S698 Mar 18 j 02:20   127-84598   12301   max. Earth dist.   S698 Mar 18 j 02:20   127-84598   12301   max. Earth dist.   S698 Mar 18 j 02:20   127-84598   12301   max. Earth dist.   S698 Mar 18 j 02:20   127-84598   12301   max. Earth dist.   S698 Mar 18 j 02:20   127-84598   12301   max. Earth dist.   S698 Mar 18 j 02:20   127-84598   12301   max. Earth dist.   S698 Mar 18 j 02:20   127-84598   12301   max. Earth dist.   S698 Mar 18 j 02:20   127-84598   127-94598   max. Earth dist.   S698 Mar 18 j 02:20   127-84598   127-94598   127-94598   max. Ea	evening set	-5705 Aug 11 j 12:40	14° <b>5</b> 344'40		conjunction	-5699 Feb 07 j 05:57	6° <b>る</b> 27'39	-1°22'55
conjunction         5705 Aug 24 j 02-26         1°893789         127375         moming neaminame         5699 Feb 20 j 2043         9°83910         9°83910         9°83910         9°83917         40 j 1909         9°83717         40 morning rise         5705 Sep 05 j 1410         2°922917         retrogade         5699 Aug 30 j 1048         24°63123         40716 TAU           opposition         5704 Mar 05 j 1022         9°26         100 morning rise         5699 Aug 29 j 07:12         24°63123         40°13736         22°10324           opposition         5704 Mar 03 j 10:45         9°89         3104 AU         evening set         5698 Mar 22 j 1522         9°80312         36°031           direct         5704 Mar 13 j 10:45         9°80         3104 AU         evening set         5709 Mar 16 j 10:21         1°84978         1°2301         minimum clong         5698 Mar 16 j 10:22         1°84978         1°2301         1°248178         6°102 Mar 18 j 10:20         1°248178         6°102 Mar 18	max. Earth dist.	-5705 Aug 22 j 11:12	17° <b>©</b> 10'57	6.34331 AU	minimum elong	-5699 Feb 07 j 05:54	6° <b>る</b> 27'37	1°23'16
morning range   5.705 Aug 34   52.35   17*82258   12*157   morning range   5.705 Sep 0.5   14.10   20*22671   17*20   17*2057   18*10   18*					max. Earth dist.	-5699 Feb 08 j 23:45	6° <b>る</b> 52'14	6.04272 AU
moming fine         Problem Spill Sep (05) [14] (1)         20°2017   19" (20°2018)         min. Tarth dist.         -5699 Aug 20 j07;12         4°764 112         4°7014 ar0 (6) [62 d)         20°2017   19" (20°2018)         4°7014 ar0 (6) [62 d)         20°2018   20°2018         4°7014 ar0 (6) [62 d)         2°704 Mar (6) [62 d)         2°704 Mar (1) [03 d)         2°704 Mar (1) [03 d)         2°704 Mar (1) [03 d)         3°704 Mar (1) [03	conjunction	-5705 Aug 24 j 02:36	17° <b>5</b> 32'59	1°27'37	morning rise	-5699 Feb 20 j 20:43	9° <b>る</b> 39'20	
moming rise   6.700 Sep 05   14.10   20°2011   7 min Earth dist   5.600 Aug 20 j07:12   24°54173   40°167 AU opposition   5.704 Aur 06   16.24   27°45879   20°728   5.600 Aug 20 j07:12   10°82379   20°924   10°167 AU opposition   5.704 Aur 06   16.24   27°45879   20°728   5.600 Aug 20 j07:23   10°824071   10°	minimum elong	-5705 Aug 24 j 02:35	17° <b>©</b> 32'58	1°27'57	retrograde	-5699 Jul 01 j 19:09	29° <b>る</b> 37'17	
Protognate   5.00	=		20° <b>©</b> 20'17		min. Earth dist.	-5699 Aug 29 j 07:12	24° <b>る</b> 41'32	4.07167 AU
proposition   5,704 kan 0 5 j 1 7 0	S							
opposition         -5704 Mar 06 j 16.24         2°Q-85839         2°0728         -5698 Mar 02 j 10.52         0°%-84         -5704 Mar 07 j 19.51         2°Q-84956         4.3104 AU         evening set         -5698 Mar 16 j 10.23         1°%-84956         -1°224 Mar 18 j 10.24         3°%-84073         -1°224 Mar 18 j 10.24         1°%-84956         1°224 Mar 18 j 10.24         1°%-84956         1°224 Mar 18 j 10.24         1°224 Mar	retrograde				* *			
min. Earth dist.         5704 Mar of j j p.51         2-β.49% for Journal j 20-45         3/04 Mar of j 20-4	•			2°07'28		-		
direct         5704 Mar 3 l j 20-43         30°R92         conjunction         5698 Mar 16 j 10-22         11°≈49°5 s 1°22'45           evening set         5704 Vap 07 j 12-22         8°20'028         minimum clong         5698 Mar 16 j 10-22         11°≈49°5 s 1°22'01           evening set         5704 Sep 05 j 14-59         16°20'096         max. Earth dist.         5698 Mar 16 j 10-22         12°≈31'00         0.1095 AU           econjunction         5704 Sep 2 j 15:00         18°20'200'         2.5698 Mar 30 j 0.425         14°≈59'50         18°20'         12°≈31'00         0.1095 AU           conjunction         5704 Sep 2 j 0.505         18°20'521         1°1941         retrograde         5698 Mar 30 j 0.423         0°74					evening set	·	8°≈40'31	
direct         5704 Aun 13 18:09 or 15.00 or 13 18:00 or 15.00 or 10.00 or 10		,			8			
Part	direct				conjunction	-5698 Mar 16 i 10:23	11° <b>≈</b> 49'56	-1°22'45
cevening set   .5704 Sep   0.5   1.459   1.5°     max. Earth dist.   .5698 Mar   1.9   0.220   1.2°sa   3.00   6.10959 AU   1.0°sa   1.2°sa					-			
evening set					_			
max. Earth dist.         -5704 Sep 21 j 19:08         18°Q4000         2.6267 AU         -5698 Mun 13 j 13:48         18°PA           conjunction         -5704 Sep 23 j 30:50         18°Q5921         1°1941         retrograde         -5698 Sup 13 j 03:50         30°RAS           morning rise         -5704 Oct 05 j 15:52         12°Q4929         -0 popsition         -5698 Sep 27 j 06:55         30°RAS           retrograde         -5703 Feb 07 j 13:53         10°R0118         18°3292         18°3292         18°200         29°808 Sep 27 j 06:55         30°RAS           retrograde         -5704 Oct 05 j 15:54         12°Q4928         18°2092         min. Earth dist.         -5698 Dec 0 j 16:21         29°86872         41520         14520           min. Earth dist.         -5703 Apr 0 j 13:55         18°80718         18°3718         18°3718         5697 Reb 0 3j 04:51         0°RY         14520         18°80718         18°807	evening set	1 3						0.10/3/110
conjunction         -5704 Sep 23 j 0.50.2         18°AS9'21   19'941         retrograde         -5698 Aug 03 j 0.5645         4°H21'17         -7604 Sep 23 j 0.50.5         18°AS9'22   19'956         -5698 Aug 03 j 0.655         30°% ≈           moming rise         -5704 Sep 23 j 0.50.5         18°AS9'22   19'956         -5698 Oct 03 j 14:11         29°∞808'40   -1°45'27           moming rise         -5704 Nov 12 j 11:52         0°W         min. Earth dist.         -5698 Oct 03 j 14:11         29°∞808'40   -1°45'27           opposition         -5703 Apr 09 j 18:18         0°W         19'3729         -5697 Feb 03 j 04:51         0°H           opposition         -5703 Apr 10 j 13:50         5°W01'13   421891 AU         evening set         -5697 Apr 07 j 22:06         0°H           evening set         -5703 Apr 10 j 13:50         0°W1'25         0°W1'25         0°W1'25         0°W1'25           conjunction         -5703 Oct 22 j 15:61         8°W3'718         0°W1'25         0°M2'25         0°W1'25	•			6 26672 AU	morning rise			
conjunction         -5704 Sep 23 j 05:02         18° Δ592 l 1°19′41         retrograde         -5698 Sep 27 j 06:55         20° Key         -1°45′20 s 0° Key           momining rise         -5704 Nov 12 j 11:52         0° №         mini. Earth dist.         -5698 Sep 27 j 06:55         30° Key         -1°45′27           retrograde         -5703 Nov 12 j 11:52         0° №         min. Earth dist.         -5698 Oct 02 j 18:25         29° ≈81°25         4.15690 AU           opposition         -5703 Apr 10 j 13:58         1° № 10° 11         0° №         direct         -5698 Dec 01 j 16:21         29° ≈81°25         4.15690 AU           min. Earth dist.         -5703 Apr 10 j 13:58         5° № 10°13         42.1891 AU         evening set         -5697 Feb 03 j 04:51         0° ★           evening set         -5703 Oct 12 j 10:11         10 j 01:51         10 j 01:51         0° 10:225         evening set         -5697 Apr 2 j 16:11         16° № 10'0         0° 53'32           conjunction         -5703 Oct 12 j 06:18         21° № 32'5         0° 46'55         max. Earth dist.         -5697 Apr 2 j 16:11         16° № 10'0         0° 53'32           evening set         -5703 Oct 25 j 06:18         21° № 32'5         0° 46'55         max. Earth dist.         -5697 Apr 2 j 16:11         16° № 10'0         0° 9° 3'34	man. Darut dist.	270.5 <b>c</b> p 21 j 15.00	10 00.000	0.20072110				
minimum elong norming rise	conjunction	-5704 Sep. 23 i 05:02	18°Ω59'21	1°19'41	retrograde			
moming rise         5.704 Oct 0.5 j 15:54         21°Q4929         opposition         5.698 Oct 0.3 j 14:11         29°≈0840         1°4527         4.15690 AU           retrograde         5.703 Abr 0.9 j 18:18         10°B00118         direct         -5698 Dec 0.1 j 16:21         24°≈0721         4.15690 AU           opposition         5.703 Abr 0.9 j 18:18         5°B00748         1°3729         -5697 Feb 0.3 j 0.4:51         0°H					retrograde	e J		
cretograde   -5.704 Nov 12 j 11.52   0°m   min. Earth dist.   -5.698 Not 02 j 18.25   29°≈1525   4.15690 AU     retrograde   -5.703 Feb 07 j 13.518   5°m 07'48   1°37'29   cretograde   -5.697 Feb 03 j 04.51   0°H     min. Earth dist.   -5.703 Apr 10 j 13.51   5°m 07'48   1°37'29   creting set   -5.697 Apr 07 j 22.06   12°H 55'14     direct   -5.703 Jun 10 j 01.51   0°m 12'25   crening set   -5.697 Apr 07 j 22.06   12°H 55'14     conjunction   -5.703 Oct 12 j 15.41   18°m 37'18   conjunction   -5.697 Apr 21 j 16:11   16°H 01'09   0°53'36     conjunction   -5.703 Oct 25 j 06:14   21°m 32'57   0°46'55   max. Earth dist.   -5.697 Apr 21 j 16:16   16°H 01'09   0°53'42     conjunction   -5.703 Oct 25 j 06:14   21°m 32'57   0°46'55   max. Earth dist.   -5.697 Apr 21 j 16:16   16°H 01'09   0°53'42     conjunction   -5.703 Oct 25 j 06:14   21°m 32'57   0°46'55   max. Earth dist.   -5.697 Apr 21 j 16:16   16°H 01'09   0°53'42     max. Earth dist.   -5.703 Oct 24 j 13:33   21°m 32'15   0°46'55   max. Earth dist.   -5.697 Apr 21 j 16:16   16°H 01'09   0°53'42     max. Earth dist.   -5.703 Nov 06 j 01:15   24°m 22°92'4   retrograde   -5.697 Apr 21 j 16:16   16°H 01'09   0°53'42     morning rise   -5.703 Nov 06 j 01:15   24°m 22°92'4   retrograde   -5.697 Apr 20 j 00:23   7°°√22'56     min. Earth dist.   -5.703 Nov 06 j 01:15   24°m 22°92'4   retrograde   -5.697 Nov 05 j 00:17   2°°√22'11   0°47'13     retrograde   -5.702 Mar 15 j 01:17   13°±32'57   min. Earth dist.   -5.697 Nov 05 j 00:17   2°°√22'11   0°47'13     direct   -5.702 Mar 15 j 01:18   3°±42'45   retrograde   -5.696 Amy 11 j 15:31   30°*H   10°*M 14'14     direct   -5.702 Mar 15 j 00:38   8°±34'53   4.12079 AU   direct   -5.696 Amy 11 j 15:31   3°°+41'14     direct   -5.702 Mar 15 j 00:38   8°±34'53   4.12079 AU   direct   -5.696 Amy 11 j 15:31   2°°+41'15     direct   -5.702 Mar 15 j 00:38   2°±02'54   2°±02'34   2°±02'34   2°±02'34   2°±02'34   2°±02'34   2°±02'34   2°±02'34   2°±02'34   2°±02'34   2°±02'34   2°±02'34   2°±02'34   2°±02'34   2°±02'34   2°±				1 17 30	onnosition		•	-1°45'27
retrograde         -5703 Feb 07 j 13:58         10°m0118         direct         -5698 Dec 01 j 16:12         24°≈0721         -6907 Feb 03 j 04:51         0°%         -703 Apr 10 j 13:16         5°m01734         4.21891 AU         evening set         -5697 Feb 03 j 04:51         0°%         -703 Jun 10 j 01:31         5°m01734         4.21891 AU         evening set         -5697 Apr 07 j 22:06         12°% 5514	morning rise				* *			
opposition         -5703 Apr   09   18:18         5° №748         1°37'29         evening set         -5697 Feb   03   04:55         0° ★         Feb   05   05   05   05   05   05   05   0	ratrograda	·				·		4.13070 AC
min. Earth dist.         -5703 Apr 10 j 13:50         5° № 134         2.1891 AU         evening set         -5697 Apr 0° j 22:06         12° €75:14	-	_		1037'20	direct			
direct         -5703 Jun 10 j 01:51         0°N 1225         cevening set         -5703 Oct 12 j 15:46         18°N 3718         conjunction         -5697 Apr 21 j 16:11         16° ★010°         -0°5334           conjunction         -5703 Oct 25 j 06:14         21°N 32'57         0°46'55         max. Earth dist.         -5697 Apr 22 j 14:33         16°★13'43         62063 AU           max. Earth dist.         -5703 Oct 25 j 06:18         21°N 32'59         0°47'00         morning rise         -5697 Apr 22 j 14:33         16°★13'43         62063 AU           max. Earth dist.         -5703 Oct 24 j 13:33         21°N 32'59         0°47'00         morning rise         -5697 Apr 21 j 16:10         0°9€         0°96           morning rise         -5703 Nov 06 j 21:51         24°N 29'21         616871 AU         -5697 Nov 05 j 07:32         0°9°         0°9°         0°9°         0°90 sitton         -5697 Nov 05 j 07:32         2°°Y2'21         -42570 AU         0°9°         0°9°         0°90 Nov 05 j 07:42         2°°Y2'21         -42570 AU         0°9°					avaning sat			
evening set         -5703 Oct 12 j 15:46         18° m3718         conjunction         -5697 Apr 21 j 16:11         16° M01'06         -0°53'36           conjunction         -5703 Oct 25 j 06:14         21° m3257         0°46'55         max. Earth dist.         -5697 Apr 21 j 16:16         16° M1'09         0°53'42           max. Earth dist.         -5703 Oct 25 j 06:18         21° m325'5         0°4700         morning rise         -5697 Jun 26 j 23:02         19° M6'24         -6063 AU           morning rise         -5703 Nov 06 j 21:51         24° m29'24         retrograde         -5697 Jun 26 j 23:02         7° V22'56         0° V1'13           retrograde         -5702 Mar 15 j 01.740         0° 4         0° 4         0° 9         0° 90 Nov 05 j 07:42         2° V2'21         0° 4'113           opposition         -5702 Mar 15 j 01.740         0° 4         0° 34'16         5697 Nov 05 j 00:17         2° V2'25'1         4.25570 AU           retrograde         -5702 Mar 15 j 08:08         8° 23'45'3         4.12079 AU         direct         -5696 Nov 23 j 18:19         3° %         4.25570 AU           direct         -5702 Nov 15 j 00:38         8° 23'45'3         4.12079 AU         direct         -5696 Mar 11 j 15:41         2° V2'211         0° V1'13           direct         -5702 Nov 15 j 00:38				4.21691 AU	evening set	-3097 Apr 07 j 22.00	12 /(3314	
conjunction   -5703 Oct 25 j Oct 1   21°m 32'57   0°46'55   max. Earth dist.   -5697 Apr 2 j 1 ic.16   16° \ 11'3 d   6.206'3 AU     minimum elong   -5703 Oct 25 j Oct 1   21°m 32'57   0°46'55   max. Earth dist.   -5697 Apr 2 j 1 ic.3   16° \ 11'3 d   6.206'3 AU     max. Earth dist.   -5703 Oct 25 j Oct 1   21°m 32'57   0°46'05   morning rise   -5697 Am 0 5 j 09:32   19°\ 10'\ 10'\ 10'\ 10'\ 10'\ 10'\ 10'\ 10'		·			agniunation	5607 Apr 21 ; 16:11	160 <b>¥</b> 01'06	0052126
conjunction         -5703 Oct 25 j 06:14         21° № 32'57         0°46'55         max. Earth dist.         -5697 Apr 22 j 14:33         16° № 13'43         6.20663 AU           max. Earth dist.         -5703 Oct 25 j 06:18         21° № 32'59         0°47'00         morning rise         -5697 May 05 j 09:32         19° № 66'24         -700 Nov 05 j 00:42         0° №         -5697 May 05 j 09:32         0° №         0° №         -5697 May 05 j 09:32         0° № <td>evening set</td> <td>-5/05 Oct 12 j 15.40</td> <td>10 11/5/110</td> <td></td> <td>v</td> <td></td> <td></td> <td></td>	evening set	-5/05 Oct 12 j 15.40	10 11/5/110		v			
minimum elong	agniumation	5702 Oct. 25 i 06:14	21º m, 22!57	0016155	_			
max. Earth dist.   -5703 Oct 24j 13:33   21°m 23'14   6.16871 AU   -5697 Jun 26j 22:50   0°°°			-					0.20003 AU
Properties   Pr	Č				morning rise			
-5703 Dec 0   j 07:40   0°Δ   opposition   -5697 Nov 0   j 07:42   2°Υ22'4   -0'47'13     retrograde   -5702 Mar 1   5 j 01:17   3°Δ32'57   min. Earth dist.   -5697 Nov 0   j 00:17   2°Υ25'11   4.25570 AU     opposition   -5702 May 1   5 j 04:28   8°Δ36'04   0°34'16   -5697 Nov 23 j 18:19   30°R		•		0.108/1 AU	ratragrada			
retrograde	morning rise	·	-		C	1 2		0047!12
opposition         -5702 May 15 j 04:28         8° Ω 36'04         0°34'16         -5697 Nov 23 j 18:19         30° R H           min. Earth dist.         -5702 May 15 j 08:08         8° Ω 34'53         4.12079 AU         direct         -5696 Jan 04 j 15:15         27° H 19'16           direct         -5702 Jul 14 j 03:29         3° Ω 42'45         evening set         -5696 Feb 16 j 00:22         0° Υ           evening set         -5702 Nov 08 j 22:46         21° Ω 02'34         evening set         -5696 May 11 j 15:31         15° Υ 44'47           evening set         -5702 Nov 15 j 00:36         22° Ω 27'48         evening set         -5696 May 25 j 05:35         18° Υ 45'08         -0°07'57           conjunction         -5702 Nov 27 j 21:34         25° Ω 30'10         -0°02'33         minimum elong         -5696 May 25 j 05:35         18° Υ 45'08         0°07'53           minimum elong         -5702 Nov 27 j 21:35         25° Ω 30'10         0°02'40         behind sun begin         -5696 May 25 j 05:35         18° Υ 41'04         18° Υ 41'04           behind sun end         -5702 Nov 28 j 05:41         25° Ω 33'33         6.07983 AU         morning rise         -5696 May 25 j 04:23         18° Υ 44'04         18°	retrograde				* *			
min. Earth dist.		·		0024116	mm. Earth dist.			4.23370 AO
direct					direct			
desc. node				4.12079 AU	direct			
evening set  -5702 Nov 15 j 00:36  22°\(\Omega\)2748  conjunction  -5702 Nov 27 j 21:34  25°\(\Omega\)30'10 -0°02'33  minimum elong  -5702 Nov 27 j 21:35  25°\(\Omega\)30'10 0°02'40  behind sun begin  behind sun begin  behind sun end  -5702 Nov 27 j 13:30  25°\(\Omega\)31'35  behind sun end  -5702 Nov 28 j 05:41  25°\(\Omega\)34'56  max. Earth dist.  -5702 Nov 28 j 03:21  25°\(\Omega\)33'33 6.07983 AU  morning rise  -5702 Dec 10 j 21:24  28°\(\Omega\)34'09  retrograde  -5701 Mar 03 j 22:20  15°\(\Omega\)18  15°\(\Omega\)13:36  15°\(\Omega\)18  15°\(\Omega\)18  15°\(\Omega\)18  15°\(\Omega\)18  15°\(\Omega\)13:36  15°\(\Omega\)13:36  15°\(\Omega\)13:36  15°\(\Omega\)13:36  15°\(\Omega\)13:36  15°\(\Omega\)18  15°\(\Omega\)18  15°\(\Omega\)18  15°\(\Omega\)13:36  15°\(\Omega\)13:36  15°\(\Omega\)13:36  15°\(\Omega\)13:36  15°\(\Omega\)18  15°\(\Omega\)18  15°\(\Omega\)18  15°\(\Omega\)18  15°\(\Omega\)13:36  15°\(\Omega\)18  15°\(\Omega\)18  15°\(\Omega\)18  15°\(\Omega\)13:36  15°\(\Omega\					ovening set			
conjunction -5702 Nov 27 j 21:34 25° □ 30'10   -0°02'33   minimum elong   -5696 May 25 j 05:35   18° ♀ 45'08   0°07'57   minimum elong   -5702 Nov 27 j 21:35   25° □ 30'10   0°02'40   behind sun begin   -5696 May 25 j 05:35   18° ♀ 41'04   behind sun begin   -5702 Nov 27 j 13:30   25° □ 25'25   behind sun end   -5696 May 25 j 12:57   18° ♀ 41'04   max. Earth dist.   -5702 Nov 28 j 05:41   25° □ 34'56   max. Earth dist.   -5696 May 25 j 04:23   18° ♀ 44'29   6.30044 AU   max. Earth dist.   -5702 Nov 28 j 03:21   25° □ 33'33   6.07983 AU   morning rise   -5696 Jul 17 j 04:10   0° ௧   morning rise   -5702 Dec 10 j 21:24   28° □ 34'09   asc. node   -5696 Jul 29 j 03:04   2° ₺ 12'56   -5701 Mar 03 j 22:20   15° □ asc. node   -5696 Dec 06 j 02:30   4° ₺ 18'43   0° 23'09   retrograde   -5701 Jun 08 j 02:19   15° ⋒   min. Earth dist.   -5696 Dec 06 j 10:40   4° ₺ 16'01   4.33656 AU   opposition   -5701 Jun 20 j 12:25   13° □ 23'23   -0° 43'36   -5695 Jan 14 j 13:44   30° ♀ ♀					evening set	-3090 Way 11 J 13.31	13   44 47	
conjunction         -5702 Nov 27 j 21:34         25° □ 30'10         -0°02'33         minimum elong         -5696 May 25 j 05:35         18° ♀ 45'08         0°07'53           minimum elong         -5702 Nov 27 j 21:35         25° □ 30'10         0°02'40         behind sun begin         -5696 May 25 j 05:35         18° ♀ 41'04         18° ♀ 41'04           behind sun begin         -5702 Nov 27 j 13:30         25° □ 25'25         behind sun end         -5696 May 25 j 05:35         18° ♀ 41'04         18° ♀ 41'04           behind sun end         -5702 Nov 28 j 05:41         25° □ 34'56         max. Earth dist.         -5696 May 25 j 04:23         18° ♀ 44'29         6.30044 AU           max. Earth dist.         -5702 Nov 28 j 03:21         25° □ 33'33         6.07983 AU         morning rise         -5696 Jul 07 j 17:01         21° ♀ 44'04         18° ♀ 44'29         6.30044 AU           morning rise         -5702 Dec 10 j 21:24         28° □ 34'09         morning rise         -5696 Jul 07 j 17:01         21° ♀ 44'04         0° ௧           -5702 Dec 17 j 00:18         0° □         asc. node         -5696 Jul 29 j 03:04         2° ₭12'56         2° ₭12'56           -5701 Mar 03 j 22:20         15° □         retrograde         -5696 Dec 06 j 02:30         4° ₭18'43         0° 23'09           retrograde         -5701 Jun 08 j 02:19	evening set	-5/02 NOV 15 J 00.30	22 = 27 48		agniunation	5606 May 25 i 05:25	1001/15100	0007157
minimum elong behind sun begin behind sun end control behind sun end behind sun end she in the sun end behind sun end control contro	conjunction	5702 Nov. 27: 21:24	250.0.20110	0.003133	v			
behind sun begin behind sun end control behind sun end behind sun end behind sun end control con		·			-			0 0/33
behind sun end max. Earth dist5702 Nov 28 j 05:41 25° □ 33'33 6.07983 AU morning rise -5696 May 25 j 04:23 18° № 44'29 6.30044 AU morning rise -5696 Jun 07 j 17:01 21° № 44'04 rows asc. node -5696 Jul 17 j 04:10 0° ₺ 15702 Dec 10 j 21:24 28° □ 34'09 retrograde -5696 Jul 17 j 04:10 0° ₺ 15702 Dec 17 j 00:18 0° № retrograde -5696 Jul 29 j 03:04 2° ₺ 12'56 retrograde -5696 Oct 07 j 12:12 9° ₺ 15'02 retrograde -5701 Apr 20 j 18:20 18° № 18°	•			0 02 40	=			
max. Earth dist. morning rise  -5702 Nov 28 j 03:21  25°♀33'33 6.07983 AU morning rise  -5696 Jun 07 j 17:01  0°∀  -5702 Dec 10 j 21:24  28°♀34'09  asc. node  -5696 Jul 17 j 04:10  0°∀  asc. node  -5696 Jul 29 j 03:04  2°♥12'56  -5701 Mar 03 j 22:20  15°NL  retrograde  -5696 Oct 07 j 12:12  9°♥15'02  retrograde  -5701 Jun 08 j 02:19  15°RNL  min. Earth dist.  -5696 Dec 06 j 10:40  4°♥16'01  4.33656 AU  opposition  -5701 Jun 20 j 12:25  13°NL23'23  -0°43'36	_							6 30044 411
morning rise				6 07002 ATT				0.30044 AU
2°812'56   2°812'56				0.07983 AU	morning rise			
Fetrograde   -5701 Mar   03 j 22:20   15°M   retrograde   -5696 Oct   07 j 12:12   9°\815'02   retrograde   -5701 Apr   20 j 18:20   18°M24'18   opposition   -5696 Dec   06 j 02:30   4°\818'43   0°23'09   retrograde   -5701 Jun   08 j 02:19   15°RM   min. Earth dist.   -5696 Dec   06 j 10:40   4°\816'01   4.33656 AU   0000   00	morning rise				1	•		
retrograde -5701 Apr 20 j 18:20 18°M24'18 opposition -5696 Dec 06 j 02:30 4°818'43 0°23'09 -5701 Jun 08 j 02:19 15°RM min. Earth dist5696 Dec 06 j 10:40 4°816'01 4.33656 AU opposition -5701 Jun 20 j 12:25 13°M23'23 -0°43'36 -5695 Jan 14 j 13:44 30°RY								
-5701 Jun 08 j 02:19 15°RM min. Earth dist5696 Dec 06 j 10:40 4°8√16'01 4.33656 AU opposition -5701 Jun 20 j 12:25 13°M23'23 -0°43'36 -5695 Jan 14 j 13:44 30°R√1	ratra a J-				-			0022100
opposition -5701 Jun 20 j 12:25 13°M23'23 -0°43'36 -5695 Jan 14 j 13:44 30°R <b>Y</b>	retrograde							
	*.*			0042126	min. Earth dist.	-		4.33636 AU
min. Earth dist5/01 Jun 19 j 25:20 15*IIb2/42 4.0489/ AU direct -5695 Feb 05 j 16:17 29*Y14'51					J:			
	min. Earth dist.	-5/01 Jun 19 J 23:20	13~11627'42	4.0489 / AU	airect	-5695 Feb U5 J 16:17	29°'Y'14'51	

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 19 Attention, astronomical year style is used: The year -5695 in astronomical counting style is the year 5696 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ie year -5695 i	in astronomical co	unting style is the year	5696 BCE in historical c	ounting style.	
	-5695 Feb 27 j 23:14	$0^{\circ}$ 8		morning rise	-5690 Dec 15 j 18:08	3°M30'55	
	-5695 Jun 02 j 19:53	15° <b>8</b>			-5689 Feb 06 j 12:04	15° <b>™</b>	
evening set	-5695 Jun 13 j 19:07	17° <b>8</b> 22'24		retrograde	-5689 Apr 25 j 22:13	23°M25'58	
max. Earth dist.	-5695 Jun 26 j 01:52	20° <b>8</b> 04'12	6.36209 AU	opposition	-5689 Jun 25 j 13:55	18°M24'33	
				min. Earth dist.	-5689 Jun 24 j 23:18		4.04219 AU
conjunction	-5695 Jun 27 j 00:41	20° <b>8</b> 16'44			-5689 Jul 24 j 04:06	15°RM	
minimum elong	-5695 Jun 27 j 00:38	20° <b>8</b> 16'43	0°39'15	direct	-5689 Aug 23 j 05:04	13°M31'22	
morning rise	-5695 Jul 10 j 02:51	23° <b>8</b> 09'21			-5689 Sep 22 j 01:34	15° <b>™</b>	
	-5695 Aug 11 j 14:39	0°П			-5689 Dec 13 j 23:57	0° <b>∡</b> 7	
retrograde	-5695 Nov 07 j 12:16	10° <b>Ⅱ</b> 16'47	100.4150	evening set	-5689 Dec 25 j 04:29	2° <b>∡</b> ³37'12	
opposition	-5694 Jan 06 j 14:14	5° <b>Ⅱ</b> 23'35		. ,.	5600 I 07:10.12	50 7 45127	0057150
min. Earth dist.	-5694 Jan 07 j 10:38	5°Ⅱ16'58	4.37590 AU	conjunction	-5688 Jan 07 j 10:13	5° <b>×</b> 45'37	
direct	-5694 Mar 09 j 23:25	0° <b>Ⅱ</b> 20'43		minimum elong max. Earth dist.	-5688 Jan 07 j 10:09 -5688 Jan 08 j 16:55	5° <b>x</b> 45'35	6.02792 AU
evening set	-5694 Jul 15 j 16:37	18° <b>Ⅱ</b> 19'23	6 27507 AII		-	8° <b>x</b> ' 03'32	6.02792 AU
max. Earth dist.	-5694 Jul 27 j 01:10	20 Д4930	6.37507 AU	morning rise retrograde	-5688 Jan 20 j 19:33 -5688 May 31 j 19:55	8 <b>x</b> · 33 34 29° <b>x</b> 109′12	
conjunction	-5694 Jul 28 j 12:39	21° <b>∏</b> 09'08	1°14'03	opposition	-5688 Jul 30 j 22:13	24° <b>x</b> *0912	-1°52'51
minimum elong	-5694 Jul 28 j 12:36	21° <b>Д</b> 09'06	1°14'22	min. Earth dist.	-5688 Jul 29 j 20:04		4.03069 AU
morning rise	-5694 Aug 10 j 05:27	23° <b>I</b> 57'21	1 1422	direct	-5688 Sep 26 j 23:13	19° <b>×</b> 1930	4.03007 AC
morning rise	-5694 Sep 07 j 14:25	0°95		direct	-5688 Dec 23 j 13:16	0°る	
retrograde	-5694 Dec 08 j 21:22	11°506'21		evening set	-5687 Jan 29 j 22:11	8° <b>る</b> 22'52	
opposition	-5693 Feb 07 j 11:28	6°9514'49	2°02'33	ovening sec	2007 van 25 j 22.11	0 02202	
min. Earth dist.	-5693 Feb 08 j 15:17	6°905'56	4.36305 AU	conjunction	-5687 Feb 12 j 10:54	11° <b>る</b> 33'20	-1°24'50
direct	-5693 Apr 11 j 02:28	1° <b>©</b> 14'09	50506110	minimum elong	-5687 Feb 12 j 10:52	11° <b>る</b> 33'19	
evening set	-5693 Aug 15 j 21:39	19° <b>©</b> 13'55		max. Earth dist.	-5687 Feb 14 j 06:10		6.04673 AU
max. Earth dist.	-5693 Aug 26 j 18:32		6.33601 AU	morning rise	-5687 Feb 26 j 02:13	14° <b>る</b> 45'05	
	<i>5</i> 3			C	-5687 May 12 j 00:08	0° <b>≈</b>	
conjunction	-5693 Aug 28 j 10:44	22° <b>©</b> 02'11	1°28'04	retrograde	-5687 Jul 06 j 18:54	4° <b>≈</b> 39'11	
minimum elong	-5693 Aug 28 j 10:44	22° <b>©</b> 02'11	1°28'24	C	-5687 Sep 01 j 03:53	30°Ŗ₹	
morning rise	-5693 Sep 09 j 21:59	24° <b>©</b> 49'37		min. Earth dist.	-5687 Sep 03 j 05:37	29° <b>る</b> 43'02	4.07888 AU
	-5693 Oct 03 j 16:37	$0^{\circ}\Omega$		opposition	-5687 Sep 04 j 07:52	29° <b>る</b> 34'04	-2°09'02
retrograde	-5692 Jan 10 j 08:48	12° <b>Ω</b> 23'51		direct	-5687 Nov 01 j 15:10	24° <b>る</b> 35'28	
opposition	-5692 Mar 11 j 08:49	7° <b>Ω</b> 32′02	2°05'33		-5687 Dec 31 j 06:52	0° <b>≈</b>	
min. Earth dist.	-5692 Mar 12 j 11:59	7° <b>Ω</b> 23′24	4.30075 AU	evening set	-5686 Mar 07 j 21:26	13° <b>≈</b> 41′01	
direct	-5692 May 12 j 13:00	2° <b>Ω</b> 34′09			-5686 Mar 13 j 15:09	15° <b>≈</b>	
	-5692 Aug 20 j 02:03	15° <b>Ω</b>					
evening set	-5692 Sep 15 j 03:11	20° <b>Ω</b> 44′03		conjunction	-5686 Mar 21 j 14:46	16° <b>≈</b> 50′15	-1°20'10
max. Earth dist.	-5692 Sep 26 j 07:39	23° <b>Ω</b> 17′02	6.25540 AU	minimum elong	-5686 Mar 21 j 14:49	16° <b>≈</b> 50'17	
				max. Earth dist.	-5686 Mar 23 j 04:56	17° <b>≈</b> 12'12	6.11939 AU
conjunction	-5692 Sep 27 j 14:46	23° <b>Ω</b> 34'49	1°16'29	morning rise	-5686 Apr 04 j 09:11	19° <b>≈</b> 59'50	
minimum elong	-5692 Sep 27 j 14:49	23° <b>Ω</b> 34'51	1°16'43		-5686 May 20 j 23:28	0° <b>∀</b>	
morning rise	-5692 Oct 10 j 01:50	26° <b>Ω</b> 25'34		retrograde	-5686 Aug 09 j 23:16	9° <b>∺</b> 05'29	
	-5692 Oct 26 j 00:31	0° m/y		min. Earth dist.	-5686 Oct 07 j 11:45	4° <b>)</b> €08'51	4.16837 AU
retrograde	-5691 Feb 12 j 09:29	14° m 43'31	1000100	opposition	-5686 Oct 08 j 07:06	4° <b>)</b> €02'16	-1°38'48
opposition	-5691 Apr 14 j 14:43	9° Mp 49'36	1°30'22	T' .	-5686 Nov 12 j 00:46	30°R≈	
min. Earth dist.	-5691 Apr 15 j 08:14	9° Mp 44'01	4.20651 AU	direct	-5686 Dec 06 j 12:02	29° <b>≈</b> 00'35 0° <b>米</b>	
direct	-5691 Jun 14 j 17:41	4° m 54'34 23° m 21'34		avanina aat	-5686 Dec 31 j 07:39	17° <b>∺</b> 46'10	
evening set	-5691 Oct 17 j 04:51	23 IIJ 21 34		evening set	-5685 Apr 12 j 22:33	17 大40 10	
conjunction	-5691 Oct 29 j 19:55	26° Mp 18'01	0°40'45	conjunction	-5685 Apr 26 j 16:27	20° <b>)</b> 51′27	-0°47'46
minimum elong	-5691 Oct 29 j 19:58	26° My 18'03	0°40'48	minimum elong	-5685 Apr 26 j 16:30	20° <b>H</b> 51'27	0°47'50
max. Earth dist.	-5691 Oct 29 j 05:06	26° m 09'22	6.15629 AU	max. Earth dist.	-5685 Apr 27 j 11:52	21° <b>H</b> 02'23	6.21926 AU
morning rise	-5691 Nov 11 j 12:35	29° m 15'27	0.1302) 110	morning rise	-5685 May 10 j 09:19	23° <b>)</b> 56'00	0.21720710
morning rise	-5691 Nov 14 j 17:37	0∘ <b>⊽</b>		morning rise	-5685 Jun 07 j 08:34	0° <b>Υ</b>	
retrograde	-5690 Mar 20 j 02:12	ა <b>—</b> 18° <b>Ω</b> 25'42		retrograde	-5685 Sep 11 j 13:25	12° <b>Υ</b> '05'37	
opposition	-5690 May 20 j 04:19	13° <b>Ω</b> 28'13	0°23'44	opposition	-5685 Nov 09 j 21:26	7° <b>Υ</b> '05'57	-0°37'26
min. Earth dist.	-5690 May 20 j 06:01	13° <b>⊆</b> 27'40	4.10910 AU	min. Earth dist.	-5685 Nov 09 j 16:23	7° <b>Υ</b> '07'39	4.26840 AU
direct	-5690 Jul 18 j 23:36	8° <b>£</b> 34'58		direct	-5684 Jan 09 j 10:17	2° <b>Υ</b> '02'27	
desc. node	-5690 Sep 18 j 22:26	14° <b>Ω</b> 19'38		evening set	-5684 May 16 j 10:49	20° <b>Υ</b> 24'57	
evening set	-5690 Nov 19 j 19:00	27° <b>≏</b> 22'43		J	y 19 119	- 7	
Č	-5690 Nov 30 j 21:16	0°M		conjunction	-5684 May 29 j 23:56	23° <b>Y</b> ′24'25	-0°01'02
	Ÿ			minimum elong	-5684 May 29 j 23:57	23° <b>Y</b> ′24'25	0°00'55
conjunction	-5690 Dec 02 j 17:12	0°M26'01	-0°09'51	behind sun begin	-5684 May 29 j 15:41	23° <b>Y</b> 19'53	
minimum elong	-5690 Dec 02 j 17:11	0°M26'00	0°09'59	behind sun end	-5684 May 30 j 08:12	23° <b>Y</b> ′28'58	
behind sun begin	-5690 Dec 02 j 10:36	0°M22'07		max. Earth dist.	-5684 May 29 j 20:43	23° <b>Y</b> ′22'41	6.31258 AU
behind sun end	-5690 Dec 02 j 23:46	0°M29'53		asc. node	-5684 Jun 07 j 06:00	25° <b>Y</b> 13'58	
max. Earth dist.	-5690 Dec 03 j 03:03	0° <b>ጤ</b> 31'50	6.07007 AU	morning rise	-5684 Jun 12 j 10:11	26° <b>Ƴ</b> 22'22	

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 20 Attention, astronomical year style is used: The year -5684 in astronomical counting style is the year 5685 BCE in historical counting style.

Attention, astronomic	cal year style is used: Th	e year -5684 i	n astronomical cou	nting style is the year	5685 BCE in historical co	ounting style.	·
	-5684 Jun 29 j 04:10	0°8		conjunction	-5678 Dec 07 j 10:01	5°M15'00	-0°16'51
retrograde	-5684 Oct 11 j 20:53	13° <b>8</b> 48'00		minimum elong	-5678 Dec 07 j 10:00	5°M14'59	0°17'02
opposition	-5684 Dec 10 j 13:45	8° <b>8</b> 52'10	0°32'47	max. Earth dist.	-5678 Dec 07 j 20:52	5°M21'25	6.05749 AU
min. Earth dist.	-5684 Dec 10 j 22:32	8° <b>8</b> 49'16	4.34757 AU	morning rise	-5678 Dec 20 j 12:20	8°M21'02	
direct	-5683 Feb 10 j 06:21	3° <b>8</b> 48'24			-5677 Jan 18 j 14:50	15° <b>M</b> ₊	
	-5683 May 16 j 13:57	15° <b>8</b>		retrograde	-5677 Apr 30 j 22:43	$28^{\circ}$ ML $22^{\circ}$ $23$	
evening set	-5683 Jun 18 j 08:59	21° <b>8</b> 53'01		opposition	-5677 Jun 30 j 12:45	23°M20'32	-1°03'39
				min. Earth dist.	-5677 Jun 29 j 19:52	23°M26'08	4.03197 AU
conjunction	-5683 Jul 01 j 13:04	24° <b>8</b> 46'22	0°44'52	direct	-5677 Aug 28 j 00:08	18°M27'10	
minimum elong	-5683 Jul 01 j 13:01	24° <b>8</b> 46'20	0°45'08		-5677 Nov 26 j 17:11	0°⊀	
max. Earth dist.	-5683 Jun 30 j 12:49	24° <b>8</b> 33'02	6.37126 AU	evening set	-5677 Dec 30 j 03:32	7° <b>∡</b> ³37'04	
morning rise	-5683 Jul 14 j 13:46	27° <b>8</b> 38'01					
	-5683 Jul 25 j 11:54	$\Pi$ $^{\circ}0$		conjunction	-5676 Jan 12 j 10:33	10° <b>∡</b> ¹46′19	-1°03'11
retrograde	-5683 Nov 11 j 21:09	14° <b>∏</b> 42'34		minimum elong	-5676 Jan 12 j 10:28	10° <b>∡</b> ¹46′17	1°03'29
opposition	-5682 Jan 11 j 00:41	9° <b>∏</b> 49'44	1°31'52	max. Earth dist.	-5676 Jan 13 j 20:44	11° <b>∡</b> ¹06'38	6.02105 AU
min. Earth dist.	-5682 Jan 11 j 22:36	9° <b>∏</b> 42'39	4.38270 AU	morning rise	-5676 Jan 25 j 20:47	13° <b>х</b> 57′20	
direct	-5682 Mar 14 j 12:50	4° <b>∏</b> 47'10			-5676 Apr 13 j 20:31	0°ප	
evening set	-5682 Jul 20 j 01:30	22° <b>∏</b> 43′24		retrograde	-5676 Jun 05 j 22:42	4° <b>る</b> 12'48	
max. Earth dist.	-5682 Jul 31 j 06:51	25° <b>Ⅱ</b> 11'47	6.37869 AU		-5676 Jul 29 j 11:36	30°₽ <b>⋌</b> 7	
				opposition	-5676 Aug 04 j 21:23	29° <b>₰</b> 08'08	-1°57'51
conjunction	-5682 Aug 01 j 20:14	25° <b>Ⅱ</b> 32'27	1°17'20	min. Earth dist.	-5676 Aug 03 j 19:19	29° <b>х</b> 16′58	4.02813 AU
minimum elong	-5682 Aug 01 j 20:11	25° <b>Ⅱ</b> 32'25	1°17'40	direct	-5676 Oct 01 j 21:49	24° <b>∡</b> 12'27	
morning rise	-5682 Aug 14 j 11:59	28° <b>Ⅲ</b> 20′05			-5676 Dec 02 j 04:38	ರ°0	
	-5682 Aug 22 j 02:48	0∘ <b>ௐ</b>		evening set	-5675 Feb 04 j 02:01	13° <b>る</b> 27'59	
retrograde	-5682 Dec 13 j 06:11	15° <b>©</b> 29'15		_	-		
opposition	-5681 Feb 11 j 22:38	10° <b>©</b> 37'45	2°05'00	conjunction	-5675 Feb 17 j 15:35	16° <b>ප</b> 38'45	-1°26'02
min. Earth dist.	-5681 Feb 13 j 02:39	10°528'49	4.36335 AU	minimum elong	-5675 Feb 17 j 15:34	16° <b>ප</b> 38'45	1°26'22
direct	-5681 Apr 15 j 13:14	5° <b>©</b> 37'24		max. Earth dist.	-5675 Feb 19 j 11:24	17° <b>る</b> 04'28	6.04859 AU
evening set	-5681 Aug 20 j 03:37	23°536'00		morning rise	-5675 Mar 03 j 07:47	19° <b>る</b> 50'44	
max. Earth dist.	-5681 Aug 31 j 01:27	26°502'24	6.33290 AU	Č	-5675 Apr 18 j 15:43	0° <b>≈</b>	
	<i>C</i> ,			retrograde	-5675 Jul 11 j 16:19	9° <b>≈</b> 41'25	
conjunction	-5681 Sep 01 j 16:10	26°524'08	1°27'57	min. Earth dist.	-5675 Sep 08 j 01:27	4° <b>≈</b> 45'39	4.08511 AU
minimum elong	-5681 Sep 01 j 16:11	26°524'08	1°28'16	opposition	-5675 Sep 09 j 04:33	4°≈36'23	
morning rise	-5681 Sep 14 j 02:48	29° <b>©</b> 11'29		11	-5675 Oct 22 j 16:59	30°Rる	
C	-5681 Sep 17 j 18:01	$0^{\circ}\Omega$		direct	-5675 Nov 06 j 12:36	29° <b>る</b> 37'20	
	-5681 Dec 11 j 04:28	15° <b>Ω</b>			-5675 Nov 21 j 12:02	0° <b>≈</b>	
retrograde	-5680 Jan 14 j 20:25	16° <b>Ω</b> 48'52			-5674 Feb 24 i 15:19	15° <b>≈</b>	
S	-5680 Feb 18 i 19:50	15°R <b>Ω</b>		evening set	-5674 Mar 13 j 01:13	18° <b>≈</b> 42'00	
opposition	-5680 Mar 15 j 22:01	11° <b>Ω</b> 56'55	2°02'51	Ü	J		
min. Earth dist.	-5680 Mar 17 j 00:59		4.29424 AU	conjunction	-5674 Mar 26 j 18:56	21° <b>≈</b> 50'59	-1°16'57
direct	-5680 May 17 j 00:11	6° <b>Ω</b> 59'27		minimum elong	-5674 Mar 26 j 19:00		1°17'11
	-5680 Aug 02 j 04:10	15° <b>Ω</b>		max. Earth dist.	-5674 Mar 28 j 07:23	22°≈11'55	6.12947 AU
evening set	-5680 Sep 19 j 09:24	25° <b>Ω</b> 09'52		morning rise	-5674 Apr 09 j 13:30	25°≈00'10	
Ü	1 3			Z .	-5674 May 01 j 23:29	0° <b>)</b>	
conjunction	-5680 Oct 01 j 20:57	28° <b>Ω</b> 01'03	1°12'55	retrograde	-5674 Aug 14 j 17:18	13° <b>)</b> € 58'44	
minimum elong	-5680 Oct 01 j 21:00	28° <b>Ω</b> 01'04	1°13'08	opposition	-5674 Oct 12 j 23:52	8° <b>升</b> 55'50	-1°31'26
max. Earth dist.	-5680 Sep 30 j 13:26	27° <b>Ω</b> 42'59	6.24598 AU	min. Earth dist.	-5674 Oct 12 j 06:31	9° <b>)</b> €01'44	4.18087 AU
	-5680 Oct 10 j 12:43	0° mp		direct	-5674 Dec 11 j 10:01	3° <b>)</b> €53'45	
morning rise	-5680 Oct 14 j 08:35	0° m 52'24		evening set	-5673 Apr 17 j 22:14	22° <b>)</b> ₹36'11	
retrograde	-5679 Feb 17 j 02:03	19° <b>m</b> ) 16'14		<i>3</i>	r		
opposition	-5679 Apr 19 j 07:15	14° m) 21'55	1°22'54	conjunction	-5673 May 01 j 15:53	25° <b>)</b> (40'46	-0°41'36
min. Earth dist.	-5679 Apr 19 j 23:35	14° Mp 16'41	4.19454 AU	minimum elong	-5673 May 01 j 15:56	25° <b>)</b> (40'48	0°41'40
direct	-5679 Jun 19 j 06:10	9° m/27'08		max. Earth dist.	-5673 May 02 j 09:55	25° <b>)</b> € 50'53	6.23315 AU
evening set	-5679 Oct 21 j 14:14	27° m 56'36		morning rise	-5673 May 15 j 08:01	28° <b>)</b> 44′26	
e venning see	-5679 Oct 30 j 09:57	0∘ <b>⊽</b>		morning rise	-5673 May 21 j 00:18	0°Υ	
	2017 000 201 07.01	<b>~</b>		retrograde	-5673 Sep 16 j 00:11	16° <b>Ƴ</b> 46'29	
conjunction	-5679 Nov 03 j 06:17	0° <b>£</b> 54'01	0°34'31	opposition	-5673 Nov 14 j 09:58	11° <b>Υ</b> 47'16	-0°27'29
minimum elong	-5679 Nov 03 j 06:19	0° <b>⊆</b> 54'02	0°34'32	min. Earth dist.	-5673 Nov 14 j 05:45	11° <b>Υ</b> 48'41	4.28210 AU
max. Earth dist.	-5679 Nov 02 j 18:31	0° <b>⊆</b> 47'08	6.14304 AU	direct	-5672 Jan 14 j 02:11	6° <b>Υ</b> 43'34	0210710
morning rise	-5679 Nov 15 j 23:49	3° <b>£</b> 52'28		asc. node	-5672 Apr 16 j 02:13	17° <b>Y</b> 39'06	
retrograde	-5678 Mar 25 j 00:03	23° <b>⊆</b> 10'03		evening set	-5672 May 21 j 04:41	25° <b>Υ</b> 02'35	
opposition	-5678 May 25 j 00:41	18° <b>⊆</b> 12'08	0°13'23	- , J 500	50,2 may 21 J 07.71	_0 10233	
min. Earth dist.	-5678 May 25 j 01:13	18° <b>⊆</b> 12'08	4.09560 AU	conjunction	-5672 Jun 03 j 16:34	28° <b>Ƴ</b> 01'03	0°05'56
direct	-5678 Jul 23 j 15:40	13° <b>⊆</b> 11'37	07500710	minimum elong	-5672 Jun 03 j 16:33	28° <b>Υ</b> 01'03	0°06'04
desc. node	-5678 Aug 01 j 01:32	13° <b>⊆</b> 1903		behind sun begin	-5672 Jun 03 j 08:46	27° <b>Υ</b> 56'46	3 00 OT
	-5678 Nov 15 j 03:31	0°M		behind sun end	-5672 Jun 04 j 00:21	28° <b>Υ</b> 05'20	
evening set	-5678 Nov 24 j 10:54	2°M10'43		max. Earth dist.	-5672 Jun 03 j 09:20	27° <b>Υ</b> 57'05	6.32476 AU
- /	20,01101 21j 10.54	- 11010 TJ			50,2 tan 05 j 07.20	_, 10/00	5.52170110

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 21 Attention, astronomical year style is used: The year -5672 in astronomical counting style is the year 5673 BCE in historical counting style.

Attention, astronomi	ical year style is used: Th	e year -5672 i	n astronomical cou	inting style is the year	5673 BCE in historical co	ounting style.	
	-5672 Jun 12 j 16:07	0°8		direct	-5666 Jul 28 j 13:17	18° <b>≙</b> 18'49	
morning rise	-5672 Jun 17 j 01:40	0° <b>8</b> 57'59			-5666 Oct 28 j 15:12	0°M₊	
_	-5672 Aug 30 j 14:17	15° <b>႘</b>		evening set	-5666 Nov 29 j 09:28	7° <b>II</b> L14'04	
retrograde	-5672 Oct 16 j 06:58	18° <b>8</b> 18'32		Č	,		
C	-5672 Dec 02 j 11:06	15° <b>R</b> ℃		conjunction	-5666 Dec 12 j 09:52	10°ML19'18	-0°24'10
opposition	-5672 Dec 15 j 00:10	13° <b>8</b> 23'08	0°42'12	minimum elong	-5666 Dec 12 j 09:50	10°ML19'16	
min. Earth dist.	-5672 Dec 15 j 11:52	13° <b>8</b> 19'18	4.35706 AU	max. Earth dist.	-5666 Dec 13 j 01:49	10°ML28'46	6.04808 AU
direct	-5671 Feb 14 j 21:22	8° <b>8</b> 19'22		morning rise	-5666 Dec 25 j 13:14	13°M26'16	
	-5671 Apr 26 j 18:39	15° <b>8</b>			-5665 Jan 01 j 05:01	15° <b>M</b> ₊	
evening set	-5671 Jun 22 j 21:14	26° <b>8</b> 21'31			-5665 Mar 18 j 14:35	0° <b>∡</b> 7	
max. Earth dist.	-5671 Jul 04 j 21:44		6.37699 AU	retrograde	-5665 May 06 j 06:29	3° <b>∡</b> ³32'01	
max. Earth dist.	-30/1 Jul 04 j 21.44	28 03930	0.37099 AU	retrograde	-5665 Jun 24 j 05:39	30°RM	
conjunction	-5671 Jul 06 j 00:02	29° <b>8</b> 14'03	0°50'20	opposition	-5665 Jul 05 j 17:01	28°M29'42	1012122
				**			
minimum elong	-5671 Jul 05 j 23:58	29° <b>8</b> 14'02	0°50'45	min. Earth dist.	-5665 Jul 04 j 22:48		4.02761 AU
	-5671 Jul 09 j 11:35	0°II		direct	-5665 Sep 02 j 02:20	23°M36'11	
morning rise	-5671 Jul 18 j 23:16	2° <b>Ⅱ</b> 04'52			-5665 Nov 05 j 18:39	0° <b>∡</b> ¹	
retrograde	-5671 Nov 16 j 04:42	19° <b>Ⅲ</b> 08'02		evening set	-5664 Jan 04 j 07:39	12° <b>∡</b> ¹47'38	
opposition	-5670 Jan 15 j 11:00	14° <b>Ⅱ</b> 15′26	1°38'21			_	
min. Earth dist.	-5670 Jan 16 j 09:37	14° <b>Ⅲ</b> 08′08	4.38449 AU	conjunction	-5664 Jan 17 j 15:33	15° <b>∡</b> 757'15	
direct	-5670 Mar 18 j 23:31	9° <b>Ⅱ</b> 13'03		minimum elong	-5664 Jan 17 j 15:29	15° <b>₹</b> 757'12	
evening set	-5670 Jul 24 j 10:34	27° <b>Ⅱ</b> 08'37		max. Earth dist.	-5664 Jan 19 j 04:06		6.02209 AU
max. Earth dist.	-5670 Aug 04 j 14:05	29° <b>Ⅲ</b> 36′11	6.37622 AU	morning rise	-5664 Jan 31 j 02:54	19° <b>∡</b> ¹08'37	
					-5664 Mar 20 j 09:23	0°ප	
conjunction	-5670 Aug 06 j 04:07	29° <b>Ⅱ</b> 57'15	1°20'16	retrograde	-5664 Jun 11 j 00:46	9° <b>る</b> 22'13	
minimum elong	-5670 Aug 06 j 04:04	29° <b>Ⅱ</b> 57'14	1°20'36	opposition	-5664 Aug 09 j 22:47	4° <b>る</b> 17'21	-2°02'05
	-5670 Aug 06 j 09:05	0°€		min. Earth dist.	-5664 Aug 08 j 18:48	4° <b>る</b> 26'51	4.03490 AU
morning rise	-5670 Aug 18 j 18:49	2° <b>5</b> 044'32			-5664 Sep 17 j 14:05	30°₽ <b>ᡘ</b>	
retrograde	-5670 Dec 17 j 18:10	19° <b>©</b> 55'59		direct	-5664 Oct 06 j 22:11	29° <b>∡</b> ¹21'16	
opposition	-5669 Feb 16 j 11:24	15° <b>©</b> 04'34	2°06'57		-5664 Oct 26 j 10:09	8°0	
min. Earth dist.	-5669 Feb 17 j 16:42	14° <b>©</b> 55'15	4.35678 AU	evening set	-5663 Feb 09 j 07:23	18° <b>ට</b> 35'14	
direct	-5669 Apr 20 j 02:07	10°904'34		8			
evening set	-5669 Aug 24 j 11:57	28°504'14		conjunction	-5663 Feb 22 j 21:36	21° <b>ප්</b> 45'45	-1°26'39
evening sec	-5669 Sep 02 j 02:33	0°Ω		minimum elong	-5663 Feb 22 j 21:36	21°る45'45	
max. Earth dist.	-5669 Sep 04 j 08:17		6.32259 AU	max. Earth dist.	-5663 Feb 24 j 17:16		6.06027 AU
max. Lattii dist.	-3007 Sep 04 J 00.17	0 863013	0.32237 AU	morning rise	-5663 Mar 08 j 14:16	24°る57'22	0.00027 AC
conjunction	-5669 Sep 05 j 23:59	0° <b>Ω</b> 52'33	1°27'24	morning 1130	-5663 Mar 30 j 19:07	24 <b>⊙</b> 37 22	
minimum elong	-5669 Sep 05 j 24:00	0° <b>Ω</b> 52'34		retrograde	-5663 Jul 16 j 13:12	0 <b>≈</b> 14° <b>≈</b> 40'39	
=			1 2/42	•	·		4 10020 ATT
morning rise	-5669 Sep 18 j 10:31	3° <b>Ω</b> 40'14		min. Earth dist.	-5663 Sep 12 j 22:33		4.10028 AU
	-5669 Nov 12 j 22:43	15° <b>Ω</b>		opposition	-5663 Sep 14 j 00:12	9° <b>≈</b> 35'45	-2*04*38
retrograde	-5668 Jan 19 j 12:33	21° <b>Ω</b> 23'16	1050105	direct	-5663 Nov 11 j 12:41	4°≈36'12	
opposition	-5668 Mar 20 j 15:15	16° <b>Ω</b> 31'03	1°59'27		-5662 Feb 06 j 12:10	15° <b>≈</b>	
min. Earth dist.	-5668 Mar 21 j 16:59	16° <b>Ω</b> 22'52	4.28083 AU	evening set	-5662 Mar 18 j 02:53	23° <b>≈</b> 36′50	
	-5668 Apr 01 j 18:42	15°RΩ					
direct	-5668 May 21 j 13:39	11° <b>Ω</b> 33'55		conjunction	-5662 Mar 31 j 20:56	26° <b>≈</b> 45′10	
	-5668 Jul 09 j 05:33	15° <b>Ω</b>		minimum elong	-5662 Mar 31 j 21:00	26° <b>≈</b> 45′13	1°13'30
evening set	-5668 Sep 23 j 19:50	29° <b>Ω</b> 46′59		max. Earth dist.	-5662 Apr 02 j 08:29	27° <b>≈</b> 05′29	6.14689 AU
	-5668 Sep 24 j 18:39	0° <b>m</b>		morning rise	-5662 Apr 14 j 15:18	29° <b>≈</b> 53'30	
max. Earth dist.	-5668 Oct 05 j 03:31	2°₩22'39	6.23076 AU		-5662 Apr 15 j 02:45	0° <b>ℋ</b>	
				retrograde	-5662 Aug 19 j 06:06	18° <b>)</b> 42′38	
conjunction	-5668 Oct 06 j 07:52	2°M/38'57	1°08'47	opposition	-5662 Oct 17 j 13:09	13° <b>)</b> 40′14	-1°23'41
minimum elong	-5668 Oct 06 j 07:55	2°M/38'59	1°08'58	min. Earth dist.	-5662 Oct 16 j 20:59	13° <b>)</b> 45′43	4.19866 AU
morning rise	-5668 Oct 18 j 19:55	5° <b>m</b> 31'11		direct	-5662 Dec 16 j 02:49	8° <b>)</b> 37′51	
retrograde	-5667 Feb 22 j 01:23	24° Mp 02'49		evening set	-5661 Apr 22 j 17:43	27° <b>₩</b> 15'47	
opposition	-5667 Apr 24 j 05:49	19° <b>m</b> 08'06	1°14'33		-5661 May 04 j 24:00	$0^{\circ}$ $\Upsilon$	
min. Earth dist.	-5667 Apr 24 j 20:55	19° <b>m</b> 03'16	4.17848 AU		, ,		
direct	-5667 Jun 24 j 00:59	14° mp 13'41		conjunction	-5661 May 06 j 10:41	0° <b>Υ</b> 19'25	-0°35'24
	-5667 Oct 14 j 04:39	0∘ <b>ರ</b>		minimum elong	-5661 May 06 j 10:45	0° <b>Υ</b> 19'26	
evening set	-5667 Oct 26 j 06:05	° <b>–</b> 2° <b>–</b> 46'47		max. Earth dist.	-5661 May 06 j 23:29	0° <b>Υ</b> 26'34	6.24983 AU
o ronning sor	5007 50t 20 j 00.05	2 <b>—</b> -07/		morning rise	-5661 May 20 j 02:14	3° <b>Υ</b> 22'06	3.2 1703 AU
conjunction	-5667 Nov 07 : 22:52	50 <b>Ω</b> 15111	0°27'43	•		3 1 22 06 21° <b>Υ</b> 16'37	
conjunction	-5667 Nov 07 j 22:53	5° <b>Ω</b> 45'14	0°27'43	retrograde	-5661 Sep 20 j 09:04		0017!45
minimum elong	-5667 Nov 07 j 22:56	5° <b>Ω</b> 45'15	0°27'43	opposition	-5661 Nov 18 j 18:55	16° <b>Y</b> 17'57	
max. Earth dist.	-5667 Nov 07 j 12:49	5° <b>£</b> 39'20	6.12771 AU	min. Earth dist.	-5661 Nov 18 j 18:01		4.29614 AU
morning rise	-5667 Nov 20 j 17:45	8° <b>£</b> 44'54		direct	-5660 Jan 18 j 16:19	11° <b>Υ</b> 14'07	
retrograde	-5666 Mar 30 j 03:10	28° <b>£</b> 10'14	0000110	asc. node	-5660 Feb 25 j 17:04	13° <b>Y</b> 23'13	
opposition	-5666 May 30 j 03:20	23° <b>£</b> 11'47	0°02'18	evening set	-5660 May 25 j 17:56	29° <b>Y</b> 29'56	
min. Earth dist.	-5666 May 30 j 00:31	23° <b>£</b> 12'42	4.08247 AU		-5660 May 28 j 00:50	$0^{\circ}$ 8	
desc node	-5666 Jun 10 i 17:28	21° <b>Q</b> 12'38					

desc. node

-5666 Jun 10 j 17:28 21°**♀**42'38

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 22 Attention, astronomical year style is used: The year -5660 in astronomical counting style is the year 5661 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -5660 i	n astronomical cou	inting style is the year	5661 BCE in historical c	ounting style.	-8
conjunction	-5660 Jun 08 j 04:53	2° <b>8</b> 27'34	0°12'30	desc. node	-5654 Apr 19 j 22:51	2°M53'04	
minimum elong	-5660 Jun 08 j 04:52	2° <b>8</b> 27'33	0°12'40		-5654 May 21 j 21:38	30° <b>ŖΩ</b>	
behind sun begin	-5660 Jun 07 j 23:46	2° <b>8</b> 24'45		opposition	-5654 Jun 04 j 08:01	28° <b>≏</b> 16'54	-0°09'00
behind sun end	-5660 Jun 08 j 09:58	2° <b>8</b> 30'21		min. Earth dist.	-5654 Jun 04 j 03:10	28° <b>≏</b> 18′30	4.07242 AU
max. Earth dist.	-5660 Jun 07 j 19:12		6.33507 AU	direct	-5654 Aug 02 j 14:51	23° <b>≏</b> 23'58	
morning rise	-5660 Jun 21 j 12:34	5° <b>8</b> 23'33			-5654 Oct 07 j 23:33	$0^{\circ}$ M	
	-5660 Aug 07 j 10:05	15° <b>8</b>		evening set	-5654 Dec 04 j 09:34	12°M21'23	
retrograde	-5660 Oct 20 j 11:45	22° <b>8</b> 40'20			-5654 Dec 15 j 13:00	15°M	
opposition	-5660 Dec 19 j 07:14	17° <b>8</b> 45'26					
min. Earth dist.	-5660 Dec 19 j 20:21	17° <b>8</b> 41'08	4.36310 AU	conjunction	-5654 Dec 17 j 10:55	15°M27'18	
	-5659 Jan 10 j 15:20	15°R <b>8</b>		minimum elong	-5654 Dec 17 j 10:53	15° <b>™</b> 27'16	
direct	-5659 Feb 19 j 05:58	12° <b>8</b> 41'49		max. Earth dist.	-5654 Dec 18 j 06:04	15° <b>™</b> 38'40	6.04251 AU
	-5659 Mar 31 j 06:22	15° <b>8</b>		morning rise	-5654 Dec 30 j 15:35	18° <b>M</b> 35'01	
	-5659 Jun 23 j 23:30	0°II			-5653 Feb 20 j 18:33	0° <b>⊼</b>	
evening set	-5659 Jun 27 j 06:31	0°II43'00	6 <b>2 5</b> 0 1 <b>2</b> 1 <b>3</b> 1	retrograde	-5653 May 11 j 10:52	8° <b>∡</b> 743'07	1000100
max. Earth dist.	-5659 Jul 09 j 01:52	3°Щ18′24	6.37813 AU	opposition	-5653 Jul 10 j 21:08	3° <b>х</b> 40'16	
	5650 X 1 10:07.52	201724155	0055120	min. Earth dist.	-5653 Jul 10 j 00:01		4.02732 AU
conjunction	-5659 Jul 10 j 07:53	3° <b>Ⅱ</b> 34'55		r.	-5653 Aug 11 j 02:02	30°RM 200 <b>m</b> 4€120	
minimum elong	-5659 Jul 10 j 07:49	3° <b>Ⅱ</b> 34'53	0~55′56	direct	-5653 Sep 07 j 03:14	28°M46'29	
morning rise	-5659 Jul 23 j 05:58	6° <b>Ⅱ</b> 25'12			-5653 Oct 04 j 04:15	0° 🔏	
retrograde	-5659 Nov 20 j 13:30	23° <b>II</b> 28'53	1044100	evening set	-5652 Jan 09 j 11:54	17° <b>∡</b> 58′04	
opposition	-5658 Jan 19 j 19:46	18° <b>Ⅱ</b> 36'36	1°44'09	. ,.	5 ( 5 2 T 22 : 20 41	210 70750	1012127
min. Earth dist.	-5658 Jan 20 j 20:57	18° <b>Ⅱ</b> 28'30	4.38087 AU	conjunction minimum elong	-5652 Jan 22 j 20:41	21°×707'50	
direct	-5658 Mar 23 j 09:58	13° <b>Ⅱ</b> 34'30 0° <b>⑤</b>		2	-5652 Jan 22 j 20:37	21° <b>х</b> 07'47 21° <b>х</b> 30'36	
	-5658 Jul 21 j 19:09			max. Earth dist.	-5652 Jan 24 j 11:07		0.02002 AU
evening set	-5658 Jul 28 j 17:57	1°931'16	6 26707 AII	morning rise	-5652 Feb 05 j 08:48	24°⊀19'16 0°る	
max. Earth dist.	-5658 Aug 08 j 19:32	3-903807	6.36787 AU	ratra arada	-5652 Mar 01 j 02:56	14°る29'34	
conjunction	-5658 Aug 10 j 10:40	4°919'50	1922141	retrograde opposition	-5652 Jun 16 j 02:26 -5652 Aug 14 j 22:55	9° <b>る</b> 24'29	2005122
minimum elong	• •	4°919'49	1°23'01	min. Earth dist.	-5652 Aug 13 j 19:15	9° <b>る</b> 33'54	
morning rise	-5658 Aug 10 j 10:38 -5658 Aug 23 j 00:32	7°907'07	1 23 01	direct	-5652 Oct 12 j 00:31	9 033 34 4° <b>る</b> 27'54	4.04381 AU
retrograde	-5658 Dec 22 j 05:25	24°923'06		evening set	-5651 Feb 14 j 11:39	4 02734 23° <b>る</b> 39'43	
opposition	-5657 Feb 21 j 00:24	19°931'40	2°08'09	evening set	-3031100 14 111.39	23 03943	
min. Earth dist.	-5657 Feb 22 j 04:58	19°922'35	4.34452 AU	conjunction	-5651 Feb 28 j 02:39	26° <b>る</b> 49'59	-1°26'39
direct	-5657 Apr 24 j 12:08	14°932'04	4.54452 AU	minimum elong	-5651 Feb 28 j 02:39	26°る49'59	
ancet	-5657 Aug 17 j 05:20	0° <b>Ω</b>		max. Earth dist.	-5651 Mar 01 j 23:10	20° <b>ろ</b> 15'55	
evening set	-5657 Aug 28 j 20:30	2° <b>Ω</b> 34'39		morning rise	-5651 Mar 13 j 19:39	0°≈01'09	0.07207110
max. Earth dist.	-5657 Sep 08 j 18:10		6.30742 AU	morning rise	-5651 Mar 13 j 17:39	0° <b>≈</b>	
mar. Barur dist.	2027 Sep 00 j 10.10	000100	0.507.2110		-5651 May 26 j 21:32	15° <b>≈</b>	
conjunction	-5657 Sep 10 j 08:15	5° <b>Ω</b> 23'27	1°26'17	retrograde	-5651 Jul 21 j 08:37	19° <b>≈</b> 36'51	
minimum elong	-5657 Sep 10 j 08:17	5° <b>Ω</b> 23'27	1°26'35		-5651 Sep 15 j 09:06	15°R≈	
morning rise	-5657 Sep 22 j 18:40	8° <b>Ω</b> 11'43		opposition	-5651 Sep 18 j 18:34	14° <b>≈</b> 32'12	-2°01'12
Č	-5657 Oct 24 j 04:48	15° <b>Ω</b>		min. Earth dist.	-5651 Sep 17 j 17:42	14° <b>≈</b> 40'42	4.11497 AU
retrograde	-5656 Jan 24 j 08:03	26° <b>Ω</b> 02'08		direct	-5651 Nov 16 j 09:29	9° <b>≈</b> 32'13	
opposition	-5656 Mar 25 j 10:20	21° <b>Ω</b> 09'43	1°55'15		-5650 Jan 15 j 20:35	15° <b>≈</b>	
min. Earth dist.	-5656 Mar 26 j 11:35	21° <b>Ω</b> 01'42	4.26372 AU	evening set	-5650 Mar 23 j 03:35	28° <b>≈</b> 29'12	
direct	-5656 May 26 j 06:00	16° <b>Ω</b> 13'04			-5650 Mar 29 j 19:30	0° <b>)</b> €	
	-5656 Sep 08 j 06:54	0° <b>m</b> )					
evening set	-5656 Sep 28 j 08:14	4° <b>m</b> 29'50		conjunction	-5650 Apr 05 j 21:36	1° <b>¥</b> 36′53	-1°09'12
				minimum elong	-5650 Apr 05 j 21:40	1° <b>)</b> 36′55	1°09'22
conjunction	-5656 Oct 10 j 20:41	7° <b>m</b> 22'44	1°04'06	max. Earth dist.	-5650 Apr 07 j 04:55	1° <b>¥</b> 54'43	6.16261 AU
minimum elong	-5656 Oct 10 j 20:45	7° Mp 22'47	1°04'15	morning rise	-5650 Apr 19 j 15:59	4° <b>){</b> 44′30	
max. Earth dist.	-5656 Oct 09 j 17:53	7° <b>m</b> 07'16	6.21328 AU	retrograde	-5650 Aug 23 j 18:44	23° <b>¥</b> 25′13	
morning rise	-5656 Oct 23 j 09:38	10° <b>m</b> ) 16'04		opposition	-5650 Oct 22 j 02:09	18° <b>¥</b> 23'15	-1°15'30
retrograde	-5655 Feb 27 j 01:18	$28^{\circ}$ Mp $56$ ' $10$		min. Earth dist.	-5650 Oct 21 j 12:27	18° <b>)</b> €27'54	4.21387 AU
opposition	-5655 Apr 29 j 06:37	24° Mp 00'57	1°05'28	direct	-5650 Dec 20 j 20:30	13° <b>)</b> €20′32	
min. Earth dist.	-5655 Apr 29 j 18:04	23° <b>m</b> 57'16	4.16201 AU		-5649 Apr 18 j 20:15	$0^{\circ}$ Y	
direct	-5655 Jun 28 j 20:13	19° <b>m</b> 06'50		evening set	-5649 Apr 27 j 12:57	1° <b>Y</b> 54'54	
	-5655 Sep 26 j 11:26	0∘ <b>⊽</b>					
evening set	-5655 Oct 31 j 00:06	7° <b>≙</b> 43'29		conjunction	-5649 May 11 j 05:32	4° <b>Ƴ</b> 57'47	
				minimum elong	-5649 May 11 j 05:35	4° <b>Y</b> 57'48	0°29'00
conjunction	-5655 Nov 12 j 17:59	10° <b>≏</b> 42'59	0°20'35	max. Earth dist.	-5649 May 11 j 16:06	5° <b>Y</b> ′03'40	6.26365 AU
minimum elong	-5655 Nov 12 j 18:01	10° <b>≙</b> 43'00	0°20'34	morning rise	-5649 May 24 j 20:04	7° <b>Y</b> ′59'30	
max. Earth dist.	-5655 Nov 12 j 13:07	10° <b>≏</b> 40'07	6.11386 AU	retrograde	-5649 Sep 24 j 17:12	25° <b>Y</b> 47'33	
morning rise	-5655 Nov 25 j 13:53	13° <b>≏</b> 43'45		opposition	-5649 Nov 23 j 04:19	20° <b>Y</b> ′49′28	
	-5654 Feb 16 j 11:24	0° <b>M</b> ₊		min. Earth dist.	-5649 Nov 23 j 05:17	20° <b>Y</b> 49′09	4.30747 AU
retrograde	-5654 Apr 04 j 10:23	3°M₁5′58		asc. node	-5648 Jan 06 j 02:31	16° <b>Ƴ</b> 13'18	

-	ical year style is used: Th		•	· · ·		· •	.50 23
direct	-5648 Jan 23 j 05:06	15° <b>Y</b> 45'36		behind sun begin	-5643 Nov 17 j 07:04	15° <b>≏</b> 33'41	
	-5648 May 11 j 19:23	$9^{\circ}$ 8		behind sun end	-5643 Nov 17 j 16:29	15° <b>≏</b> 39'12	
evening set	-5648 May 30 j 08:09	3° <b>8</b> 59'03		max. Earth dist.	-5643 Nov 17 j 09:59	15° <b>≏</b> 35'23	6.10438 AU
				morning rise	-5643 Nov 30 j 08:52	18° <b>≏</b> 38′08	
conjunction	-5648 Jun 12 j 17:47	6° <b>8</b> 55'51	0°19'04		-5642 Jan 21 j 20:34	$0^{\circ}$ M	
minimum elong	-5648 Jun 12 j 17:45	6° <b>8</b> 55'50	0°19'14	desc. node	-5642 Feb 28 j 10:25	5° <b>M</b> 50′10	
max. Earth dist.	-5648 Jun 12 j 03:19	6° <b>8</b> 47'53	6.34300 AU	retrograde	-5642 Apr 09 j 12:16	8°M15'27	
morning rise	-5648 Jun 26 j 00:23	9° <b>8</b> 51'03		opposition	-5642 Jun 09 j 09:36	3°M15′50	
	-5648 Jul 20 j 02:42	15° <b>8</b>		min. Earth dist.	-5642 Jun 09 j 01:23	3°M₁8′32	4.06624 AU
retrograde	-5648 Oct 24 j 19:57	27° <b>8</b> 04'55			-5642 Jul 06 j 17:52	30° <b>₹</b> Ω	
opposition	-5648 Dec 23 j 16:06	22° <b>8</b> 10'27		direct	-5642 Aug 07 j 11:30	28° <b>≏</b> 22'57	
min. Earth dist.	-5648 Dec 24 j 07:58	22° <b>8</b> 05'16	4.36731 AU		-5642 Sep 07 j 23:29	0° <b>M</b> ,	
direct	-5647 Feb 23 j 18:12	17° <b>8</b> 06'57		_	-5642 Nov 29 j 05:38	15° <b>M</b> ₊	
	-5647 Jun 07 j 15:10	0°II		evening set	-5642 Dec 09 j 07:28	17° <b>M</b> 21'40	
evening set	-5647 Jul 01 j 16:44	5° <b>Ⅱ</b> 07'27	( 27010 ATT	. ,.	5642 D 22:00 40	200 <b>M</b> 20107	0020100
max. Earth dist.	-5647 Jul 13 j 10:13	/°Щ41′33	6.37819 AU	conjunction minimum elong	-5642 Dec 22 j 09:49	20°M28'07	
:	5647 I1 14:16:50	7° <b>Ⅱ</b> 58'51	1900125	max. Earth dist.	-5642 Dec 22 j 09:45	20°M28'05	0°38'23
conjunction minimum elong	-5647 Jul 14 j 16:59 -5647 Jul 14 j 16:55	7° <b>П</b> 58'31	1°00'35 1°00'53	max. Earth dist.	-5642 Dec 23 j 07:56	20°M41'16 23°M36'22	6.03999 AU
U	•	7° <b>П</b> 38'49 10° <b>П</b> 48'35	1-00-55	morning rise	-5641 Jan 04 j 15:28	23°11636°22 0° <b>√</b>	
morning rise retrograde	-5647 Jul 27 j 13:39 -5647 Nov 24 j 21:34	10 <b>П</b> 4833 27° <b>П</b> 53'11		retrograde	-5641 Feb 01 j 13:12 -5641 May 16 j 12:47	0 <b>x</b> . 13° <b>x</b> 45'45	
opposition	-5646 Jan 24 j 06:22	23° <b>I</b> I01'08	1°49'29	opposition	-5641 Jul 15 j 21:29	8° <b>×</b> 42'28	1930/46
min. Earth dist.	-5646 Jan 25 j 07:39	22° <b>I</b> I53'01	4.37711 AU	min. Earth dist.	-5641 Jul 14 j 23:31	8° <b>х</b> 42 28	4.02875 AU
direct	-5646 Mar 27 j 20:10	17° <b>Ⅲ</b> 59'24	4.57711 AO	direct	-5641 Sep 12 j 02:55	3°×7'48'23	4.02073 AC
uncet	-5646 Jul 05 j 06:01	0°99		evening set	-5640 Jan 14 j 12:54	22° <b>x</b> 59'55	
evening set	-5646 Aug 02 j 02:51	5° <b>©</b> 57'07		evening sec	50 10 Juli 11 j 12.5 1	22 7 37 33	
max. Earth dist.	-5646 Aug 13 j 02:18	8° <b>©</b> 23'12	6.36051 AU	conjunction	-5640 Jan 27 j 22:40	26° <b>₹</b> '09'49	-1°16'22
man zarur uiov.	20.01148 12 ) 02.10	0 02312	0.50001110	minimum elong	-5640 Jan 27 j 22:37	26° <b>х</b> 09'47	
conjunction	-5646 Aug 14 j 18:28	8°9545'33	1°24'42	max. Earth dist.	-5640 Jan 29 j 15:22	26° <b>х</b> <sup>7</sup> 33'52	6.03168 AU
minimum elong	-5646 Aug 14 j 18:26		1°25'01	morning rise	-5640 Feb 10 j 11:32	29° <b>х</b> 21′20	
morning rise	-5646 Aug 27 j 07:40	11° <b>©</b> 32'49		. <i>&amp;</i>	-5640 Feb 13 j 05:37	0°ප	
retrograde	-5646 Dec 26 j 19:53	28°952'57		retrograde	-5640 Jun 21 j 01:13	19° <b>පි</b> 28'08	
opposition	-5645 Feb 25 j 15:06	24° <b>©</b> 01'34	2°08'39	opposition	-5640 Aug 19 j 19:16	14° <b>පි</b> 23'02	-2°07'38
min. Earth dist.	-5645 Feb 26 j 20:24	23° <b>©</b> 52'14	4.33418 AU	min. Earth dist.	-5640 Aug 18 j 15:38	14° <b>る</b> 32'26	4.05215 AU
direct	-5645 Apr 29 j 02:16	19° <b>©</b> 02'25		direct	-5640 Oct 16 j 21:25	9° <b>ට</b> 26'02	
	-5645 Jul 31 j 05:09	$0^{\circ}\Omega$		evening set	-5639 Feb 19 j 12:55	28° <b>පි</b> 36'16	
evening set	-5645 Sep 02 j 05:57	7° <b>Ω</b> 07'00			-5639 Feb 25 j 13:26	0° <b>≈</b>	
max. Earth dist.	-5645 Sep 13 j 04:44	9° <b>Ω</b> 35'21	6.29509 AU				
				conjunction	-5639 Mar 05 j 04:22	1° <b>≈</b> 46′18	-1°26'02
conjunction	-5645 Sep 14 j 17:35	9° <b>Ω</b> 56'14		minimum elong	-5639 Mar 05 j 04:23	1° <b>≈</b> 46′18	1°26'20
minimum elong	-5645 Sep 14 j 17:37	9° <b>Ω</b> 56'15	1°24'58	max. Earth dist.	-5639 Mar 06 j 22:03	2° <b>≈</b> 10'31	6.08329 AU
morning rise	-5645 Sep 27 j 04:01	12° <b>Ω</b> 45′02		morning rise	-5639 Mar 18 j 21:56	4° <b>≈</b> 57'11	
	-5645 Oct 07 j 05:34	15° <b>Ω</b>		_	-5639 May 04 j 05:11	15° <b>≈</b>	
	-5644 Jan 07 j 20:08	0° m/y		retrograde	-5639 Jul 26 j 00:05	24°≈26′15	
retrograde	-5644 Jan 29 j 01:45	0° mp 41'49		min. Earth dist.	-5639 Sep 22 j 10:22	19° <b>≈</b> 29'53	4.12675 AU
•,•	-5644 Feb 19 j 10:12	30°R€	1050120	opposition	-5639 Sep 23 j 09:50	19° <b>≈</b> 21'51	-1°57′03
opposition	-5644 Mar 30 j 05:55	25° <b>Ω</b> 49'07	1°50'20	T' A	-5639 Nov 01 j 15:23	15°R≈	
min. Earth dist.	-5644 Mar 31 j 04:24	25° <b>Ω</b> 41'58	4.25039 AU	direct	-5639 Nov 21 j 03:51	14°≈21'25	
direct	-5644 May 30 j 21:04	20° <b>Ω</b> 52'56			-5639 Dec 10 j 20:51	15° <b>≈</b> 0° <b>)</b> €	
evening set	-5644 Aug 21 j 05:49 -5644 Oct 02 j 20:32	0° Mp 9° Mp 12'02		evening set	-5638 Mar 13 j 10:41 -5638 Mar 28 j 01:52	3° <b>∺</b> 16′07	
max. Earth dist.	-5644 Oct 14 j 10:21	11° <b>m</b> 52'20	6.20033 AU	evening set	-3036 Widi 26 J 01.32	3 <b>/</b> (1007	
max. Earth dist.	-3044 Oct 14 j 10.21	11 111/3220	0.20033 AU	conjunction	-5638 Apr 10 j 20:12	6° <b>¥</b> 23'24	-1°04'44
conjunction	-5644 Oct 15 j 09:29	12° <b>m</b> 05'43	0°59'04	minimum elong	-5638 Apr 10 j 20:17	6° <del>X</del> 23'26	1°04'53
minimum elong	-5644 Oct 15 j 09:33	12° my 05'45	0°59'11	max. Earth dist.	-5638 Apr 12 j 01:43	6°\(\frac{7}{40}\)'10	6.17490 AU
morning rise	-5644 Oct 27 j 23:06	14° <b>m</b> 59'55	J J J I I	morning rise	-5638 Apr 24 j 14:16	9°\(\frac{40}{30}\)'23	5.1770 AU
	-5643 Jan 12 j 04:23	0° <b>ʊ</b>		retrograde	-5638 Aug 28 j 06:42	28° <b>\</b> 04'06	
retrograde	-5643 Mar 04 j 02:45	° <b>–</b> 3° <b>≏</b> 46'55		opposition	-5638 Oct 26 j 13:26	23° <b>₭</b> 02'41	-1°07'01
5	-5643 Apr 25 j 06:34	30°RM)		min. Earth dist.	-5638 Oct 26 j 01:55	23° <b>)</b> (06'34	4.22542 AU
opposition	-5643 May 04 j 06:40	28° m 51'14	0°56'03	direct	-5638 Dec 25 j 11:33	17° <b>¥</b> 59'46	
min. Earth dist.	-5643 May 04 j 16:28	28° m/48'05	4.15020 AU		-5637 Apr 01 j 19:26	0°Υ	
direct	-5643 Jul 03 j 17:15	23° m 57'25		evening set	-5637 May 02 j 07:03	6° <b>Ƴ</b> 31'57	
	-5643 Sep 05 j 21:38	0∘ <b>⊽</b>		ū			
evening set	-5643 Nov 04 j 16:59	12° <b>≙</b> 36′07		conjunction	-5637 May 15 j 22:56	9° <b>Ƴ</b> 34'09	-0°22'31
				minimum elong	-5637 May 15 j 22:58	9° <b>Ƴ</b> 34'10	0°22'29
conjunction	-5643 Nov 17 j 11:46	15° <b>≏</b> 36′26	0°13'28	max. Earth dist.	-5637 May 16 j 04:59	9° <b>Ƴ</b> 37'31	6.27365 AU
minimum elong	-5643 Nov 17 j 11:47	15° <b>≏</b> 36′26	0°13'24	morning rise	-5637 May 29 j 12:49	12° <b>Ƴ</b> 35'11	

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 24 Attention, astronomical year style is used: The year -5637 in astronomical counting style is the year 5638 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	e year -5637 i	n astronomical co	unting style is the year	5638 BCE in historical c	ounting style.	
	-5637 Sep 15 j 10:53	$9^{\circ}$ 8		morning rise	-5632 Nov 01 j 11:55	19° <b>m</b> 41'28	
retrograde	-5637 Sep 29 j 01:19	0° <b>8</b> 18'17			-5632 Dec 19 j 09:56	0∘ <b>ত</b>	
	-5637 Oct 12 j 15:08	30° <b>ŖƳ</b>		retrograde	-5631 Mar 09 j 00:49	8° <b>亞</b> 35'03	
asc. node	-5637 Nov 17 j 01:07	26° <b>Y</b> 43'30		opposition	-5631 May 09 j 05:11	ვ° <b>ჲ</b> 38'50	0°46'18
opposition	-5637 Nov 27 j 13:38	25° <b>Y</b> ′20'42	0°01'54	min. Earth dist.	-5631 May 09 j 12:08	3° <b>≏</b> 36'35	4.13819 AU
min. Earth dist.	-5637 Nov 27 j 16:44	25° <b>Y</b> ′19'40	4.31531 AU		-5631 Jun 10 j 06:05	30°R, Mp	
direct	-5636 Jan 27 j 18:08	20° <b>Y</b> 16'46		direct	-5631 Jul 08 j 10:16	28° m/45'12	
_	-5636 Apr 24 j 01:03	0° <b>8</b>		_	-5631 Aug 05 j 10:17	0∘ <b>ত</b>	
evening set	-5636 Jun 03 j 21:58	8° <b>8</b> 28'53		evening set	-5631 Nov 09 j 09:14	17° <b>≏</b> 26′23	
· · · · · · · · · · · · ·	5626 Inn. 17:06:22	11° <b>8</b> 25'01	0925120		5621 Nov. 22 : 04.57	200 0 27124	0907110
conjunction minimum elong	-5636 Jun 17 j 06:33	11° <b>8</b> 23'01	0°25'29	conjunction minimum elong	-5631 Nov 22 j 04:57 -5631 Nov 22 j 04:56	20° <b>£</b> 27'34 20° <b>£</b> 27'34	0°06'18 0°06'12
max. Earth dist.	-5636 Jun 17 j 06:31 -5636 Jun 16 j 14:46	11° <b>8</b> 16'19	6.34825 AU	behind sun begin	-5631 Nov 21 j 21:17	20° <b>£</b> 27'34 20° <b>£</b> 23'04	0 00 12
morning rise	-5636 Jun 30 j 11:43	14° <b>8</b> 19'26	0.34623 AU	behind sun end	-5631 Nov 21 j 21:17	20° <b>⊆</b> 23'04 20° <b>⊆</b> 32'04	
morning risc	-5636 Jul 03 j 14:02	15° <b>8</b>		max. Earth dist.	-5631 Nov 22 j 05:58	20° <b>⊆</b> 32'04 20° <b>⊆</b> 28'10	6.09374 AU
	-5636 Sep 28 j 00:18	0°II		morning rise	-5631 Dec 05 j 03:11	23° <b>⊆</b> 30'14	0.07374 AC
retrograde	-5636 Oct 29 j 03:25	1° <b>Ⅱ</b> 31'15		morning rise	-5630 Jan 02 j 16:55	0°M	
retrograde	-5636 Nov 29 j 07:25	30°R <b>8</b>		desc. node	-5630 Jan 08 j 22:00	1°M 19'57	
opposition	-5636 Dec 28 j 01:25	26° <b>8</b> 37'13	1°08'04	retrograde	-5630 Apr 14 j 14:48	13°M13'18	
min. Earth dist.	-5636 Dec 28 j 18:19	26° <b>8</b> 31'43	4.36986 AU	opposition	-5630 Jun 14 j 10:31	8°M13'04	-0°30'46
direct	-5635 Feb 28 j 05:50	21° <b>8</b> 33'56		min. Earth dist.	-5630 Jun 14 j 00:43	8°M16'18	4.05783 AU
	-5635 May 20 j 07:30	0°II		direct	-5630 Aug 12 j 09:34	3°M20'04	
evening set	-5635 Jul 06 j 03:32	9° <b>Ⅱ</b> 33'59			-5630 Nov 11 j 23:16	15° <b>™</b>	
max. Earth dist.	-5635 Jul 17 j 16:46		6.37765 AU	evening set	-5630 Dec 14 j 05:23	22°M21'13	
	,			Ü	J		
conjunction	-5635 Jul 19 j 02:20	12° <b>Ⅲ</b> 24'50	1°05'11	conjunction	-5630 Dec 27 j 08:52	25°M28'21	-0°44'39
minimum elong	-5635 Jul 19 j 02:16	12° <b>Ⅱ</b> 24'48	1°05'29	minimum elong	-5630 Dec 27 j 08:48	25°M28'19	0°44'55
morning rise	-5635 Jul 31 j 21:57	15° <b>Ⅱ</b> 14'06		max. Earth dist.	-5630 Dec 28 j 10:31	25°M43'36	6.03454 AU
	-5635 Oct 21 j 05:23	0ಂತಾ		morning rise	-5629 Jan 09 j 15:36	28°M37'19	
retrograde	-5635 Nov 29 j 07:57	2°519'38			-5629 Jan 15 j 12:25	0° <b>∡</b>	
	-5634 Jan 07 j 20:25	30° <b>Ŗ</b> Ⅱ		retrograde	-5629 May 21 j 15:52	18° <b>∡</b> ¹48'55	
opposition	-5634 Jan 28 j 17:51	27° <b>Ⅱ</b> 27'43	1°54'12	opposition	-5629 Jul 20 j 21:58	13° <b>∡</b> °45′18	-1°38'25
min. Earth dist.	-5634 Jan 29 j 20:22	27° <b>Ⅱ</b> 19′13	4.37377 AU	min. Earth dist.	-5629 Jul 19 j 22:53	13° <b>∡</b> °53′03	4.02709 AU
direct	-5634 Apr 01 j 08:59	22° <b>II</b> 26'14		direct	-5629 Sep 17 j 01:27	8° <b>∡</b> 750′53	
	-5634 Jun 16 j 10:42	$0$ $\circ$ $\odot$		evening set	-5628 Jan 19 j 15:33	28° <b>₹</b> 03'44	
evening set	-5634 Aug 06 j 11:33	10° <b>©</b> 24'17			-5628 Jan 27 j 20:56	8°0	
max. Earth dist.	-5634 Aug 17 j 11:29	12°950'51	6.35445 AU				
				conjunction	-5628 Feb 02 j 02:05	1° <b>る</b> 13'55	
conjunction	-5634 Aug 19 j 02:30			minimum elong	-	1° <b>る</b> 13'53	
minimum elong	-5634 Aug 19 j 02:28	13° <b>©</b> 12'35	1°26'33	max. Earth dist.	-5628 Feb 03 j 18:17		6.03358 AU
morning rise	-5634 Aug 31 j 14:50	15°959'47		morning rise	-5628 Feb 15 j 15:55	4°る25'41	
	-5634 Nov 13 j 10:21	0°N		retrograde	-5628 Jun 25 j 23:34	24°る30'00	2000101
retrograde	-5634 Dec 31 j 07:56	3° <b>£</b> 23′28		opposition	-5628 Aug 24 j 16:45	19°る24'48	
	-5633 Feb 18 j 12:06	30°R©	2000122	min. Earth dist.	-5628 Aug 23 j 12:56	19°る34'18 14°る27'17	4.05746 AU
opposition min. Earth dist.	-5633 Mar 02 j 05:56	28°531'56 28°523'04	2°08'22 4.32577 AU	direct	-5628 Oct 21 j 19:48 -5627 Feb 08 j 19:12	0° <b>≈</b>	
direct	-5633 Mar 03 j 09:51 -5633 May 03 j 14:48	28 923 04 23°933'10	4.32377 AU	evening set	-5627 Feb 08 j 19:12 -5627 Feb 24 j 16:23	0 ≈ 3°≈37'10	
direct	-5633 Jul 11 j 12:34	0°Ω		evening set	-3027 FC0 24 j 10.23	3 <b>~</b> 37 10	
evening set	-5633 Sep 06 j 14:52	11° <b>Ω</b> 38'45		conjunction	-5627 Mar 10 j 08:41	6° <b>≈</b> 47'09	-1°24'46
max. Earth dist.	-5633 Sep 17 j 14:20	14° <b>Ω</b> 07'54	6.28481 AU	minimum elong	-5627 Mar 10 j 08:43		1°25'03
max. Lartii dist.	3033 Бер 17 ј 14.20	14 0007 54	0.20401 710	max. Earth dist.	-5627 Mar 12 j 02:29	7°≈11'23	6.09162 AU
conjunction	-5633 Sep 19 j 02:12	14° <b>Ω</b> 28'16	1°22'35	morning rise	-5627 Mar 24 j 02:30	9° <b>≈</b> 57'47	0.09102110
minimum elong	-5633 Sep 19 j 02:14	14° <b>Ω</b> 28'18		morning rise	-5627 Apr 15 j 11:27	15° <b>≈</b>	
g	-5633 Sep 21 j 10:03	15° <b>Ω</b>	1 2200	retrograde	-5627 Jul 30 j 19:52	29° <b>≈</b> 20'50	
morning rise	-5633 Oct 01 j 12:47	17° <b>Ω</b> 17'32		min. Earth dist.	-5627 Sep 27 j 05:52		4.13706 AU
	-5633 Dec 03 j 14:32	0° m)		opposition	-5627 Sep 28 j 03:35	24°≈16'47	
retrograde	-5632 Feb 02 j 20:56	5° <b>m</b> ) 19'59		direct	-5627 Nov 26 j 00:39	19° <b>≈</b> 16'00	
opposition	-5632 Apr 04 j 00:56	0° m/26'55	1°44'43		-5626 Feb 23 j 10:00	0° <b>)</b> €	
min. Earth dist.	-5632 Apr 04 j 22:49	0° m/ 19'56	4.23853 AU	evening set	-5626 Apr 02 j 02:55	8° <b>)</b> €08'46	
	-5632 Apr 07 j 13:32	30°R <b>Ω</b>	-	J	1 3:		
direct	-5632 Jun 04 j 13:50	25° <b>Ω</b> 31'00		conjunction	-5626 Apr 15 j 21:13	11° <b>)</b> 15′35	-0°59'42
	-5632 Jul 30 j 03:35	0° <b>m</b> )		minimum elong	-5626 Apr 15 j 21:17	11° <b>¥</b> 15'37	
evening set	-5632 Oct 07 j 07:55	13° <b>m</b> ) 51'56		max. Earth dist.	-5626 Apr 16 j 23:42	11° <b>)</b> 30′35	6.18647 AU
	-			morning rise	-5626 Apr 29 j 15:10	14° <b>)</b> €22'00	
conjunction	-5632 Oct 19 j 21:30	$16^{\circ}$ Mp $46^{\circ}$ 22	0°53'40		-5626 Jul 21 j 07:56	$0^{\circ}$ Y	
minimum elong	-5632 Oct 19 j 21:34	16° Mp 46'24	0°53'47	retrograde	-5626 Sep 01 j 19:27	2° <b>Y</b> '48'54	
max. Earth dist.	-5632 Oct 19 j 00:51	$16^\circ$ My $34'24$	6.18796 AU		-5626 Oct 14 j 06:19	30°₽ <b>)</b>	

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5626 in astronomical counting style is the year 5627 BCE in historical counting style. -5626 Oct 31 i 03:27 27°\(\)\(48'00\)\(-0^57'54\) -5621 Nov 13 j 05:39 0° m opposition -5626 Oct 30 j 17:02 27°**)** €51'31 4.23730 AU -5620 Feb 07 j 11:03 9° m 50'35 min. Earth dist. retrograde -5626 Dec 30 j 05:10 22°\ 44'55 -5620 Apr 08 j 16:27 4° m 57'13 direct opposition 1°38'34  $0^{\circ}\Upsilon$ -5620 Apr 09 j 12:56 4° Mp 50′42 -5625 Mar 12 j 22:25 min. Earth dist. 4.22885 AU 11°**Y**14'37 -5625 May 07 j 03:40 -5620 Jun 09 j 01:21 evening set direct 0° Mp 01'40 evening set -5620 Oct 11 j 16:03 18° m 24'03 14°**Y**16'03 -0°15'44 conjunction -5625 May 20 j 18:50 max. Earth dist. -5620 Oct 23 j 10:28  $21^\circ$  **M** 07'476.17660 AU -5625 May 20 j 18:51 minimum elong 14°**Υ**16'04 0°15'40 -5625 May 20 j 17:53 behind sun begin 14°Υ15'32 conjunction -5620 Oct 24 j 06:06 21° m 19'12 0°48'07 14°**Y**16'36  $21^{\circ}$  My 19'14behind sun end -5625 May 20 j 19:50 minimum elong -5620 Oct 24 j 06:10 0°48'12 max. Earth dist. -5625 May 20 j 22:46 14°**Y**18'14 6.28542 AU morning rise -5620 Nov 05 j 21:26 24° Mp 15'11 -5625 Jun 03 j 07:38 17°**Y**16′11 -5620 Dec 01 j 10:22 morning rise 0∘**⊽** -5625 Aug 07 j 00:32 0°8 retrograde -5619 Mar 13 j 21:16 13°**2**15′26 asc. node -5625 Sep 26 j 19:43 4°849'15 opposition -5619 May 14 j 00:14 8°**£**18'43 0°36'33 retrograde -5625 Oct 03 j 12:22 4°853'40 min. Earth dist. -5619 May 14 j 06:01 8°**£**16'51 4.12570 AU -5625 Dec 01 j 15:19 30°R℃ direct -5619 Jul 13 j 01:32 3°**£**25'13 opposition -5625 Dec 02 j 01:16 29°**Y**56'42 0°11'52 evening set -5619 Nov 13 j 22:30 22°**₽**09'30 min. Earth dist. -5625 Dec 02 j 06:12 29°**Y**55'04 4.32621 AU desc. node -5619 Nov 20 j 22:28 23°**-**48′26 direct -5624 Feb 01 j 10:21 24° Y 52' 54 -5624 Apr 02 j 07:11 0°8 conjunction -5619 Nov 26 j 19:19 25°**2**11'41 -0°00'48 evening set -5624 Jun 08 j 13:25 13°**8**02'21 minimum elong -5619 Nov 26 j 19:19 25°**♀**11'42 0°00'55 -5624 Jun 17 j 11:59 15°8 behind sun begin -5619 Nov 26 j 11:13 25°**2**06'56 behind sun end -5619 Nov 27 i 03:25 25°**2**16'28 conjunction -5624 Jun 21 j 20:36 15°**8**57'33 0°31'51 max. Earth dist. -5619 Nov 26 i 23:30 25°**♀**14'07 6.08149 AU -5624 Jun 21 j 20:33 15°**8**57'32 0°32'05 morning rise -5619 Dec 09 j 18:41 28° **2**15′25 minimum elong -5624 Jun 21 j 02:02 15°**8**47'21 -5619 Dec 17 j 05:49 max. Earth dist. 6.35755 AU o°m. -5624 Jul 05 j 00:27 -5618 Mar 05 j 05:07 15°M morning rise 18°**8**51'03 -5624 Aug 29 j 21:43 -5618 Apr 19 j 14:36 0°Π 18°MJ04'51 retrograde -5624 Nov 02 j 11:45 -5618 Jun 04 j 07:22 retrograde 5°**I**59'35 15°RM -5623 Jan 01 j 12:07 1°**Ⅱ**05'56 -5618 Jun 19 j 08:08 1°16'01 opposition 13°M04'12 -0°41'02 opposition -5623 Jan 02 j 06:04 1°**Д**00'06 4.37724 AU -5618 Jun 18 j 20:54 min. Earth dist. min. Earth dist. 13°M07'55 4.04712 AU -5623 Jan 10 j 00:43 30°**₹**8 direct -5618 Aug 17 j 03:06 8°ML11'10 direct -5623 Mar 04 j 19:14 26°**8**02'51 -5618 Oct 23 j 09:04 15°M -5623 Apr 27 j 04:47  $0^{\circ}\Pi$ -5618 Dec 19 j 01:44 27°M16'06 evening set -5623 Jul 10 j 13:55 14°**Ⅱ**00'35 -5618 Dec 30 j 13:45 evening set 0°×7 -5623 Jul 22 j 02:14 max. Earth dist. 16°**Ⅲ**32'22 6.38254 AU -5617 Jan 01 j 06:10 0°**х** 24'03 -0°50'39 conjunction conjunction -5623 Jul 23 j 11:26 16°**Ⅱ**50'41 1°09'22 minimum elong -5617 Jan 01 j 06:06 0°**≯**24'01 0°50'56 -5623 Jul 23 j 11:23 16°**Ⅲ**50′39 1°09'41 max. Earth dist. -5617 Jan 02 j 08:37 0°**∡**³39'48 6.02623 AU minimum elong -5623 Aug 05 j 05:35 19°**Ⅲ**39'11 morning rise -5617 Jan 14 j 14:11 3°**х¹**33'54 morning rise -5623 Sep 25 j 09:30 0ಂತಾ retrograde -5617 May 26 j 16:18 23°**х** 48′52 -5623 Dec 03 j 16:02 -5617 Jul 25 j 20:20 18°**∡**¹44'53 -1°45'09 retrograde 6°9544'06 opposition -5622 Feb 02 j 04:52 1°552'24 1°58'08 min. Earth dist. -5617 Jul 24 j 19:42 18°**₹**53'12 4.02229 AU opposition -5622 Feb 03 j 07:39 -5617 Sep 21 j 21:51 13°**∡**′50′06 min. Earth dist. 1°543'51 4.37587 AU direct -5622 Feb 17 j 05:21 -5616 Jan 11 j 09:43 0°정 30°**Ŗ**Ⅱ direct -5622 Apr 05 j 20:51 26°**Ⅲ**51'19 evening set -5616 Jan 24 j 17:13 3°**ප**05'41 -5622 May 23 j 02:40 0ಂತಾ -5616 Feb 07 i 04:57 evening set -5622 Aug 10 j 18:43 14°9547'49 conjunction 6° 16'22 -1°22'09 max. Earth dist. -5622 Aug 21 j 16:11 17°9513'13 6.35340 AU minimum elong -5616 Feb 07 i 04:55 6°る16'21 1°22'29 max. Earth dist. -5616 Feb 08 i 23:36 6°る41'32 6.03281 AU -5622 Aug 23 j 08:35 17°935'45 1°27'11 -5616 Feb 20 j 19:29 9°₹28'29 conjunction morning rise -5622 Aug 23 j 08:34 17°935'44 1°27'31 -5616 Jun 30 j 23:34 29°る31'08 minimum elong retrograde -5622 Sep 04 j 20:23 20°522'43 24°る35'11 4.06086 AU morning rise min. Earth dist. -5616 Aug 28 j 10:31 -5622 Oct 21 j 06:32  $0^{\circ}\Omega$ opposition -5616 Aug 29 j 13:41 24°る25'55 -2°09'22 retrograde -5621 Jan 04 j 19:28 7°**Ω**48'36 direct -5616 Oct 26 j 17:49 19°る27'57 2°**Ω**56'59 2°07'15 -5621 Mar 06 j 18:41 -5615 Jan 21 j 15:21 0°≈ opposition min. Earth dist. -5621 Mar 07 j 22:58 2°**Ω**48'00 4.32147 AU -5615 Mar 01 j 19:50 8°**≈**37'56 evening set -5621 Mar 31 j 16:41 30°Rூ 27°**©**58'33 -5615 Mar 15 j 12:40 direct -5621 May 08 j 02:55 conjunction 11°≈47′52 -1°22′50  $0^{\circ}\Omega$ -5615 Mar 15 j 12:42 -5621 Jun 14 j 06:27 minimum elong 11°≈47'53 1°23'05 15°€ -5621 Sep 06 j 03:02 max. Earth dist. -5615 Mar 17 j 05:27 12°≈11'27 6.09887 AU evening set -5621 Sep 10 j 20:51 16°**Ω**03'57 morning rise -5615 Mar 29 j 06:59 14°≈58'20 max. Earth dist. -5621 Sep 21 j 22:13 18°**Ω**34'24 6.27768 AU -5615 Mar 29 j 09:53 15°≈ -5615 Jun 12 j 13:42 0°**)**€ conjunction -5621 Sep 23 j 08:14 18°Ω53'45 1°20'01 retrograde -5615 Aug 04 j 12:36 4°**)** 15'17 -5621 Sep 23 j 08:17 18°**Ω**53'47 1°20'15 -5615 Sep 26 j 22:07 minimum elong

-5615 Oct 02 j 20:45

opposition

29°≈11'29 -1°46'07

-5621 Oct 05 j 18:49

morning rise

21°**Ω**43'22

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5615 in astronomical counting style is the year 5616 BCE in historical counting style. min. Earth dist. -5615 Oct 01 j 22:58 29°≈18'55 4.14737 AU evening set -5609 Sep 15 i 05:48 20°Ω36'13 -5615 Nov 30 j 20:30 24°≈10'16 -5609 Sep 26 j 07:05 23°**Ω**07′08 direct max. Earth dist. 6.26387 AU -5614 Feb 02 j 00:47 0°₩ -5614 Apr 07 j 03:40 13°**)**€00'45 -5609 Sep 27 j 17:07 conjunction 23°**Ω**26'34 1°16'57 evening set -5609 Sep 27 j 17:10 minimum elong 23°**Ω**26'36 1°17'10 -5614 Apr 20 j 21:53 16°¥07'00 -0°54'15 -5609 Oct 10 j 04:12 conjunction morning rise 26°**Ω**16'57 -5614 Apr 20 j 21:58 -5609 Oct 26 j 19:11 minimum elong 16°**)** € 07'02 0°54'21 0° m -5614 Apr 21 j 22:02 6.19913 AU max. Earth dist. 16°**∺**20'39 retrograde -5608 Feb 12 j 07:43 14° m 31'29 -5614 May 04 j 15:26  $1^{\circ}31'38$ morning rise 19°**)** 12'41 opposition -5608 Apr 13 j 12:47 9°**m** 37'43  $0^{\circ}\Upsilon$ -5614 Jun 25 j 12:29 min. Earth dist. -5608 Apr 14 j 07:46 9°**m** 31'40 4.21319 AU retrograde -5614 Sep 06 j 09:29 7°**Y**32′04 direct -5608 Jun 13 j 17:19 4° m/42'30 -5614 Nov 04 j 16:51 -5608 Oct 16 j 05:13 opposition 2°**Y**31'36 -0°48'25 evening set 23° Mp 08'20 min. Earth dist. -5614 Nov 04 j 08:47 2°**Y**34'19 4.25068 AU -5614 Nov 24 j 09:27 30°**₹**₩ conjunction -5608 Oct 28 j 20:13 26° Mp 04'32 0°42'00 direct -5613 Jan 04 j 00:05 27°**)** 28'15 minimum elong -5608 Oct 28 j 20:17 26° Mp 04'34 0°42'03 -5613 Feb 14 j 01:00  $0^{\circ}\Upsilon$ max. Earth dist. -5608 Oct 28 j 04:24 25° m 55'18 6.16072 AU evening set -5613 May 11 j 22:52 15°**Y**54'30 morning rise -5608 Nov 10 j 12:25 29° Mp 01'37 -5608 Nov 14 j 17:30 0∘**ত** conjunction -5613 May 25 j 13:13 18°Y55'03 -0°08'53 retrograde -5607 Mar 18 j 23:31 18°**♀**10'00 minimum elong -5613 May 25 j 13:14 18°**Y**55'03 0°08'48 opposition -5607 May 19 j 01:17 13°**♀**12'50 0°26'01 behind sun begin -5613 May 25 j 06:09 18°Y51'09 min. Earth dist. -5607 May 19 j 04:58 13°**£**11'38 4.11097 AU behind sun end -5613 May 25 j 20:18 18°Y58'58 direct -5607 Jul 17 j 21:44 8°**£**19'37 max. Earth dist. -5613 May 25 j 14:38 18°Y55'50 6.29823 AU desc. node -5607 Sep 30 i 06:11 16°**♀**18'40 morning rise -5613 Jun 08 i 00:56 21°Y54'11 evening set -5607 Nov 18 j 18:21 27°**2**07'45 -5613 Jul 16 j 15:01 0°8 -5607 Nov 30 j 21:40 0°M -5613 Aug 06 j 08:28 3°844'07 asc. node -5613 Oct 07 j 20:21 9°**8**25'45 -5607 Dec 01 j 16:07 0°ML10'55 -0°08'13 conjunction retrograde -5613 Dec 06 j 11:45 4°**8**29'11 0°21'42 -5607 Dec 01 j 16:06 0°08'21 minimum elong 0°M,10'55 opposition -5613 Dec 06 j 17:47 -5607 Dec 01 j 08:56 min. Earth dist. 4°**8**27'12 4.33724 AU behind sun begin 0°M,06'42 -5612 Jan 17 j 17:03 -5607 Dec 01 j 23:16 30°R**Y** behind sun end 0°ML15'08 29°**Y**25'18 0°M14'44 6.06930 AU -5612 Feb 05 j 23:57 -5607 Dec 01 j 22:34 direct max. Earth dist. -5612 Feb 25 j 12:41 -5607 Dec 14 j 16:53 0°8 3°M 15'47 morning rise -5606 Feb 06 j 17:53 -5612 Jun 01 j 09:37 15°**8** 15°M -5612 Jun 13 j 02:59 -5606 Apr 24 j 19:30 evening set 17°**8**31'56 retrograde 23°M11'19 -5612 Jun 25 j 11:51 -5606 Jun 24 j 11:50 max. Earth dist. 20°**8**14'42 6.36569 AU opposition 18°M10'10 -0°51'36 -5606 Jun 23 j 21:32 min. Earth dist. 18°M14'54 4.03901 AU -5612 Jun 26 j 08:46 20°**8**26'12 0°37'59 conjunction -5606 Jul 20 j 15:07 15°RM minimum elong -5612 Jun 26 j 08:43 20°**8**26'11 0°38'15 direct -5606 Aug 22 j 03:06 13°M17'04 -5612 Jul 09 j 11:10 23°**8**18'46 -5606 Sep 23 j 09:01 15°M morning rise -5612 Aug 10 j 05:02  $0^{\circ}II$ -5606 Dec 13 j 21:22 0°**⊼** retrograde -5612 Nov 06 j 20:18 10°**Ⅲ**24'40 evening set -5606 Dec 24 j 03:48 2°×724'38 -5611 Jan 05 j 21:54 5°**Ⅲ**31'22 1°23'33 opposition min. Earth dist. -5611 Jan 06 j 17:57 5°**Ц**24'53 4.38185 AU -5605 Jan 06 j 09:28 5°**₹**33'14 -0°56'36 conjunction -5611 Mar 09 j 08:01 0°**I**I28'29 -5605 Jan 06 j 09:24 5°**х** 33′12 0°56′54 direct minimum elong -5611 Jul 14 j 23:25 18°**Ⅲ**24′52 -5605 Jan 07 j 16:51 5° ₹ 51'54 6.02315 AU evening set max. Earth dist. 20°**Ц**54'36 6.38287 AU max. Earth dist. -5611 Jul 26 i 07:46 morning rise -5605 Jan 19 j 18:22 8°×43'37 retrograde -5605 May 31 j 21:54 28°**х** 59'17 conjunction -5611 Jul 27 i 19:37 21°**Ⅱ**14'23 1°13'13 opposition -5605 Jul 30 i 22:58 23°**₹**55'00 -1°51'22 minimum elong -5611 Jul 27 i 19:34 21°**Ⅱ**14'21 1°13'32 min. Earth dist. -5605 Jul 29 i 21:42 24° ₹ 03'33 4.02502 AU -5611 Aug 09 j 12:42 24°**Ⅲ**02'24 direct -5605 Sep 27 j 00:07 18°**₹**'59'55 morning rise -5611 Sep 06 j 13:11 0ಂತಾ -5605 Dec 24 j 05:56 0°궁 -5611 Dec 08 j 01:41 -5604 Jan 29 j 22:34 8°**궁**15'09 retrograde 11°908'26 evening set -5610 Feb 06 j 16:15 opposition 6°516'49 2°01'33 min. Earth dist. -5610 Feb 07 j 19:43 6°908'02 4.37211 AU conjunction -5604 Feb 12 j 11:00 11°る25'47 -1°24'12 direct -5610 Apr 10 j 07:43 1°9515'59 minimum elong -5604 Feb 12 j 10:58 11°**る**25'46 1°24'32 -5604 Feb 14 j 06:34 evening set -5610 Aug 15 j 02:21 19°9512'59 max. Earth dist. 11°る51'25 6.04091 AU max. Earth dist. -5610 Aug 26 j 00:27 21°539'00 6.34571 AU morning rise -5604 Feb 26 j 02:21 14°る37'48 -5604 May 11 j 15:23 0°≈ -5610 Aug 27 j 15:40 -5604 Jul 05 j 20:51 conjunction 22°900'56 1°27'44 retrograde 4°≈34'38 -5610 Aug 27 j 15:40 -5604 Aug 30 j 17:38 minimum elong 22°900'56 1°28'03 30°Ŗる min. Earth dist. 29°る39'02 4.07369 AU morning rise -5610 Sep 09 j 02:49 24°5947'59 -5604 Sep 02 j 07:04 -5610 Oct 03 j 01:57 0° $\Omega$ opposition -5604 Sep 03 j 11:08 29°る29'27 -2°08'46 retrograde -5609 Jan 09 j 09:26 12°**Ω**18′28 direct -5604 Oct 31 j 16:24 24°る31'02 opposition -5609 Mar 11 j 09:56 7°**Ω**26'45 2°05'31 -5604 Dec 30 j 18:48 0°≈ min. Earth dist. -5609 Mar 12 j 13:56 7°**Ω**17'52 4.31030 AU evening set -5603 Mar 06 j 22:58 13°≈37'39 -5609 May 12 j 15:41 2°**Ω**28'44 -5603 Mar 12 j 22:27 direct 15°≈

-5609 Aug 20 j 18:13

15°**Ω** 

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5603 in astronomical counting style is the year 5604 BCE in historical counting style. -5603 Mar 20 j 16:12 16°≈47'01 -1°20'21 retrograde -5597 Jan 14 i 00:55 16°Ω50'56 conjunction -5603 Mar 20 j 16:15 16°≈47'03 1°20'36 -5597 Feb 18 j 08:22 15°RΩ minimum elong -5603 Mar 22 j 07:14 17°≈09'30 -5597 Mar 16 j 01:57 11°**Ω**59'00 2°03'01 max. Earth dist. 6.11523 AU opposition -5603 Apr 03 j 10:36 -5597 Mar 17 j 04:47 19°≈56'47 4.29376 AU min. Earth dist. 11°**Ω**50′28 morning rise -5603 May 20 j 05:56 0°**)**€ -5597 May 17 j 03:48 direct 7°**Ω**01'21 -5603 Aug 09 j 04:46 9°\ 04'31 -5597 Aug 02 j 04:55 retrograde 15°€ -5603 Oct 07 j 12:03 -5597 Sep 19 j 15:57 opposition 4°**₭**01'04 -1°39'38 evening set 25°**Ω**12'36 min. Earth dist. -5603 Oct 06 j 16:41 4°**₭**07'40 4.16526 AU max. Earth dist. -5597 Sep 30 j 21:02 27°**Ω**46′16 6.24595 AU -5603 Nov 10 j 23:11 30°R≈ direct -5603 Dec 05 j 17:20 28°≈59'27 conjunction -5597 Oct 02 j 03:42 28°**Ω**03'50 1°13'20 -5603 Dec 30 j 16:55 0°**)**€ minimum elong -5597 Oct 02 j 03:46 28°**Ω**03′52 1°13'32 -5597 Oct 10 j 14:30 evening set -5602 Apr 12 j 00:49 17°**)** 45'06 0°m -5597 Oct 14 j 15:09 morning rise 0° m 55'09 conjunction -5602 Apr 25 j 18:51 20°\\$50'30 -0°48'37 retrograde -5596 Feb 17 j 06:54 19° m 18'12 minimum elong -5602 Apr 25 j 18:55 20°\\$50'32 0°48'41 opposition -5596 Apr 18 j 11:16 14° **m** 24'04 1°23'57 max. Earth dist. -5602 Apr 26 j 16:42 21°**)**€02'48 6.21713 AU min. Earth dist. -5596 Apr 19 j 04:32 14° **m**) 18'33 4.19512 AU morning rise -5602 May 09 j 11:46 23°**¥**55′10 direct -5596 Jun 18 j 11:40 9°m/29'15 -5602 Jun 06 j 12:27  $0^{\circ}\Upsilon$ evening set -5596 Oct 20 j 20:53 27° m 59'03 retrograde -5602 Sep 10 j 17:23 12°Y05'53 -5596 Oct 29 j 12:22 0∘**⊽** opposition -5602 Nov 09 j 02:34 7°Y05'58 -0°39'00 min. Earth dist. -5602 Nov 08 j 19:50 7°**Υ**08'14 4.26708 AU conjunction -5596 Nov 02 j 12:36 0°**£**56'19 0°35'28 direct -5601 Jan 08 j 13:24 2°Y02'27 minimum elong -5596 Nov 02 i 12:39 0°**£**56′20 0°35'29 evening set -5601 May 16 j 13:41 20°Y24'40 max. Earth dist. -5596 Nov 01 j 23:03 0°**-**48′23 6.14418 AU morning rise -5596 Nov 15 i 06:06 3°**£**54'38 -5601 May 30 i 02:57 23°Y'24'14 -0°02'15 retrograde -5595 Mar 24 j 02:51 23°**₽**11'03 conjunction -5601 May 30 j 02:55 23°**Y**24'13 0°02'09 opposition -5595 May 24 j 04:37 18°**♀**13'15 0°15'03 minimum elong -5601 May 29 j 18:40 23°Y19'41 -5595 May 24 j 04:31 18°**♀**13'17 behind sun begin min. Earth dist. 4 09736 AU -5601 May 30 j 11:10 23°Y28'46 -5595 Jul 22 j 20:07 behind sun end direct 13°**£**20'09 -5601 May 29 j 23:28 23°**Y**22'21 -5595 Aug 09 j 01:26 13°**£**49'19 max. Earth dist. 6.31176 AU desc. node -5601 Jun 12 j 13:34 26°**Y**22′20 -5595 Nov 14 j 07:54 0°M morning rise 27°**Y**23'49 -5601 Jun 17 j 05:51 -5595 Nov 23 j 16:28 evening set 2°M11'23 asc. node -5601 Jun 29 j 07:35  $0^{\circ}$ 8 -5601 Oct 12 j 03:19 -5595 Dec 06 j 15:28 13°**8**48'33 conjunction 5°M15'29 -0°15'40 retrograde  $5^{\circ}\text{ML}15'28 \quad 0^{\circ}15'50$ -5601 Dec 10 j 18:39 8°**8**52'31 0°31'00 -5595 Dec 06 j 15:26 opposition minimum elong 4.34685 AU -5601 Dec 11 j 04:07 -5595 Dec 06 j 13:45 min. Earth dist. 8°**8**49'24 behind sun begin 5°M14'28 -5600 Feb 10 j 11:28 3°**8**48'39 -5595 Dec 06 j 17:08 direct behind sun end 5°M16'28 6.05991 AU -5595 Dec 07 j 03:31 -5600 May 15 j 17:02 15°**8** max. Earth dist. 5°M22'37 evening set -5600 Jun 17 j 12:32 21°**8**53'14 morning rise -5595 Dec 19 j 17:16 8°M21'14 -5594 Jan 17 j 19:41 15°M conjunction -5600 Jun 30 j 17:08 24°846'48 0°43'43 retrograde -5594 Apr 30 j 03:12 28°M21'05 -5600 Jun 30 j 17:05 24°**8**46'46 0°43'57 opposition -5594 Jun 29 j 16:32 23°M19'22 -1°01'53 minimum elong -5600 Jun 29 j 17:19 24°**8**33'42 6.37046 AU min. Earth dist. -5594 Jun 29 j 00:40 23°M24'38 4.03480 AU max. Earth dist. -5600 Jul 13 j 18:11 27°**8**38'37 direct -5594 Aug 27 j 05:43 18°M26'05 morning rise -5600 Jul 24 j 15:14  $0^{\circ}\Pi$ -5594 Nov 26 j 00:58 0°**∡**7 -5600 Nov 11 j 01:16 14°**Ⅱ**43′28 -5594 Dec 29 j 07:20 7°**х**³34'43 retrograde evening set 9°II50'30 1°30'24 opposition -5599 Jan 10 i 05:01 -5593 Jan 11 i 13:51 10°**х** 43'39 -1°02'09 min. Earth dist. -5599 Jan 11 i 02:13 9°**Ц**43'38 4.38179 AU conjunction 4°**∐**47'47 direct -5599 Mar 13 j 15:22 minimum elong -5593 Jan 11 i 13:47 10°**∡**¹43'37 1°02'27 evening set -5599 Jul 19 j 06:16 22°**Ⅱ**44'30 max. Earth dist. -5593 Jan 12 i 23:17 11°**х** 03′30 6.02403 AU max. Earth dist. -5599 Jul 30 j 12:15 25°**Ⅱ**13'13 6.37782 AU morning rise -5593 Jan 24 j 23:52 13°**₹**′54′24 -5593 Apr 14 j 09:35 0°궁 -5599 Aug 01 j 01:20 25°II33'44 1°16'32 -5593 Jun 05 j 23:57 4°**⋜**08'31 conjunction retrograde -5599 Aug 01 j 01:17 25°**II**33'42 1°16'52 -5593 Jul 29 j 02:10 30°R*x*7 minimum elong morning rise -5599 Aug 13 j 17:23 28°**Ⅲ**21'31 min. Earth dist. -5593 Aug 03 j 21:27 29°**✗**13'08 4.03111 AU -5599 Aug 21 j 05:39 000 opposition -5593 Aug 05 j 00:38 29° x 03'56 -1°56'41 retrograde -5599 Dec 12 j 11:56 15°930'43 direct -5593 Oct 02 j 00:29 24°**₹**08'24 -5598 Feb 11 j 02:50 10°**©**39'14 2°04'15 -5593 Dec 02 j 18:14 0°궁 opposition -5598 Feb 12 j 07:46 10°930'01 4.36249 AU -5592 Feb 04 j 03:31 13°**る**22'16 min. Earth dist. evening set direct -5598 Apr 14 j 18:03 5°938'46 -5592 Feb 17 j 16:43 16°る32'45 -1°25'37 evening set -5598 Aug 19 j 09:27 23°938'05 conjunction -5598 Aug 30 j 05:50 26°503'42 6.33213 AU -5592 Feb 17 j 16:42 max. Earth dist. minimum elong 16°**る**32'45 1°25'56 max. Earth dist. -5592 Feb 19 j 12:24 16°**る**58'23 6.05129 AU conjunction -5598 Aug 31 j 22:13 26°9526'21 1°27'45 morning rise -5592 Mar 02 j 08:35 19°る44'29 minimum elong -5598 Aug 31 j 22:13 26°9526'21 1°28'02 -5592 Apr 18 j 05:40 0°≈ morning rise -5598 Sep 13 j 09:11 29°9513'50 retrograde -5592 Jul 10 j 18:48 9°≈34'47 -5598 Sep 16 j 20:07  $0^{\circ}\Omega$ -5592 Sep 07 j 05:02 4°≈38'46 4.08714 AU min. Earth dist.

-5592 Sep 08 j 07:33

opposition

4°≈29'42 -2°07'16

-5598 Dec 10 j 01:43

15°**Ω** 

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 28 Attention, astronomical year style is used: The year -5592 in astronomical counting style is the year 5593 BCE in historical counting style.

Attention, astronomi	ical year style is used: Th	e year -5592 i	n astronomical cou	nting style is the year	5593 BCE in historical co	ounting style.	
	-5592 Oct 19 j 19:02	30°Rる		max. Earth dist.	-5586 Sep 03 j 15:33	0° <b>£</b> 34′01	6.32088 AU
direct	-5592 Nov 05 j 16:48	29° <b>る</b> 30'46					
	-5592 Nov 22 j 15:58	0° <b>≈</b>		conjunction	-5586 Sep 05 j 06:26	0° <b>Ω</b> 55'55	1°27'17
	-5591 Feb 24 j 05:37	15° <b>≈</b>		minimum elong	-5586 Sep 05 j 06:26	0° <b>Ω</b> 55'55	1°27'34
evening set	-5591 Mar 12 j 01:12	18° <b>≈</b> 34'03		morning rise	-5586 Sep 17 j 17:06	3° <b>Ω</b> 43'45	
					-5586 Nov 11 j 20:36	15° <b>Ω</b>	
conjunction	-5591 Mar 25 j 18:52	21° <b>≈</b> 42'55	-1°17'22	retrograde	-5585 Jan 18 j 18:42	21° <b>Ω</b> 26'47	
minimum elong	-5591 Mar 25 j 18:55	21°≈42'57		opposition	-5585 Mar 20 j 19:44	16° <b>Ω</b> 34'43	1°59'45
max. Earth dist.	-5591 Mar 27 j 08:57	21 ≈42 37 22°≈04'46	6.13069 AU	min. Earth dist.	-5585 Mar 21 j 22:10	16° <b>Ω</b> 26'20	4.28062 AU
			0.13009 AU	iiiii. Eartii uist.	·		4.20002 AU
morning rise	-5591 Apr 08 j 13:14	24°≈51'59			-5585 Apr 02 j 11:11	15°R <b>Ω</b>	
	-5591 May 01 j 14:30	0° <b>∀</b>		direct	-5585 May 21 j 19:16	11° <b>Ω</b> 37'36	
retrograde	-5591 Aug 13 j 18:59	13° <b>¥</b> 51′01			-5585 Jul 08 j 23:33	15° <b>Ω</b>	
min. Earth dist.	-5591 Oct 11 j 08:08	8° <b>¥</b> 54'16	4.18125 AU	evening set	-5585 Sep 24 j 02:51	29° <b>Ω</b> 51'16	
opposition	-5591 Oct 12 j 02:25	8° <b>)</b> 48′03	-1°32'36		-5585 Sep 24 j 18:09	0° <b>m</b> ∕	
direct	-5591 Dec 10 j 10:54	3° <b>)</b> 46′06		max. Earth dist.	-5585 Oct 05 j 09:28	2° Mp 26'20	6.23223 AU
evening set	-5590 Apr 16 j 22:04	22° <b>)</b> €28′00					
				conjunction	-5585 Oct 06 j 14:49	2° Mp 43'12	1°09'17
conjunction	-5590 Apr 30 j 15:36	25° <b>)</b> 32'34	-0°42'42	minimum elong	-5585 Oct 06 j 14:52	2° mp 43'14	1°09'28
minimum elong	-5590 Apr 30 j 15:40	25°₩32'36		morning rise	-5585 Oct 19 j 02:57	5° m/35'22	1 0 20
max. Earth dist.	-5590 May 01 j 08:25	25° <b>X</b> 42'01	6.23249 AU	retrograde	-5584 Feb 22 j 04:02	24° <b>m</b> 05'34	
		28°\(\frac{42}{36}\)'22	0.23249 AU	-			1015144
morning rise	-5590 May 14 j 08:03			opposition	-5584 Apr 23 j 09:43	19° <b>m</b> 10'57	1°15'44
	-5590 May 20 j 14:56	0° <b>Υ</b>		min. Earth dist.	-5584 Apr 23 j 23:39	19° <b>m</b> 06'30	4.18187 AU
retrograde	-5590 Sep 15 j 03:54	16° <b>Ƴ</b> 39'39		direct	-5584 Jun 23 j 05:12	14° <b>m</b> 16'30	
opposition	-5590 Nov 13 j 12:44	11° <b>Y</b> 40'19	-0°29'21		-5584 Oct 13 j 07:02	0∘ <b>⊽</b>	
min. Earth dist.	-5590 Nov 13 j 09:15	11° <b>Ƴ</b> 41'29	4.28049 AU	evening set	-5584 Oct 25 j 12:04	2° <b>≏</b> 48'43	
direct	-5589 Jan 13 j 04:45	6° <b>Ƴ</b> 36'37					
asc. node	-5589 Apr 27 j 08:01	19° <b>Ƴ</b> 48'57		conjunction	-5584 Nov 07 j 04:44	5° <b>£</b> 46'51	0°28'47
evening set	-5589 May 21 j 05:06	24° <b>Ƴ</b> 55'57		minimum elong	-5584 Nov 07 j 04:46	5° <b>≏</b> 46'53	0°28'47
				max. Earth dist.	-5584 Nov 06 j 20:01	5° <b>Ω</b> 41'45	6.13281 AU
conjunction	-5589 Jun 03 j 17:30	27° <b>Ƴ</b> 54'42	0°04'34	morning rise	-5584 Nov 19 j 23:06	8° <b>≏</b> 46'07	0.13201710
-	-	27 <b>γ</b> 54 42 27° <b>γ</b> 54'42		-	•		
minimum elong	-5589 Jun 03 j 17:30		0°04'43	retrograde	-5583 Mar 29 j 06:20	28° <b>2</b> 08'35	000 411 1
behind sun begin	-5589 Jun 03 j 09:28	27° <b>Y</b> 50′17		opposition	-5583 May 29 j 06:02	23° <b>⊆</b> 10'16	0°04'11
behind sun end	-5589 Jun 04 j 01:32	27° <b>Ƴ</b> 59'07		min. Earth dist.	-5583 May 29 j 04:15	23° <b>≏</b> 10'50	4.08877 AU
max. Earth dist.	-5589 Jun 03 j 11:47	27° <b>Ƴ</b> 51'35	6.32229 AU	desc. node	-5583 Jun 19 j 11:21	20° <b>≏</b> 33'19	
	-5589 Jun 13 j 04:27	$9^{\circ}$ 8		direct	-5583 Jul 27 j 18:44	18° <b>≏</b> 17'15	
morning rise	-5589 Jun 17 j 02:51	0° <b>8</b> 51'54			-5583 Oct 28 j 00:39	0° <b>M</b> .	
	-5589 Aug 31 j 08:13	15° <b>8</b>		evening set	-5583 Nov 28 j 12:48	7° <b>IIL</b> 10'09	
retrograde	-5589 Oct 16 j 09:30	18° <b>8</b> 13'53		•	· ·		
	-5589 Dec 01 j 23:08	15°R₩		conjunction	-5583 Dec 11 j 12:41	10°M14'53	-0°22'49
opposition	-5589 Dec 15 j 02:59	13° <b>8</b> 18'24	0°40'16	minimum elong	-5583 Dec 11 j 12:39	10°ML14'52	
min. Earth dist.	-5589 Dec 15 j 13:43	13° <b>8</b> 14'52		max. Earth dist.	-5583 Dec 12 j 03:14	10°M23'31	6.05475 AU
	·		4.33397 AU		•		0.03473 AU
direct	-5588 Feb 14 j 21:39	8° <b>8</b> 14'38		morning rise	-5583 Dec 24 j 15:46	13°M21'23	
_	-5588 Apr 26 j 06:36	15° <b>8</b>			-5583 Dec 31 j 16:03	15° <b>M</b> ₊	
evening set	-5588 Jun 21 j 23:39	26° <b>8</b> 17'57			-5582 Mar 18 j 13:04	0° <b>∡</b> ¹	
max. Earth dist.	-5588 Jul 03 j 23:28	28° <b>8</b> 55'48	6.37349 AU	retrograde	-5582 May 05 j 04:32	3° <b>҂</b> 23′52	
					-5582 Jun 22 j 04:35	30°₽ <b>M</b>	
conjunction	-5588 Jul 05 j 02:47	29° <b>8</b> 10'49	0°49'17	opposition	-5582 Jul 04 j 17:35	28°M21'38	-1°11'22
minimum elong	-5588 Jul 05 j 02:43	29° <b>8</b> 10'47	0°49'33	min. Earth dist.	-5582 Jul 03 j 22:54	28°M27'51	4.03383 AU
	-5588 Jul 08 j 20:11	$\Pi$ $^{\circ}0$		direct	-5582 Sep 01 j 03:11	23°M28'09	
morning rise	-5588 Jul 18 j 02:37	2° <b>I</b> I02'00			-5582 Nov 05 j 15:52	0° <b>∡</b> ¹	
retrograde	-5588 Nov 15 j 10:32	19° <b>Ⅱ</b> 06'29		evening set	-5581 Jan 03 j 07:32	12° <b>∡</b> ³37′06	
opposition	-5587 Jan 14 j 14:28	14° <b>I</b> I13'53	1°36'54	evening sec	5501 Sun 65 j 67.52	12 7 37 00	
min. Earth dist.	-5587 Jan 15 j 14:09	14° <b>Ⅱ</b> 06'15	4.38079 AU	conjunction	5591 Ion 16;15:00	15° <b>∡</b> ¹46'16	1007'02
			4.36079 AU		-5581 Jan 16 j 15:00		
direct	-5587 Mar 18 j 03:01	9° <b>Ⅱ</b> 11'27		minimum elong	-5581 Jan 16 j 14:55	15° <b>∡</b> 46′14	
evening set	-5587 Jul 23 j 14:57	27° <b>I</b> 108'38		max. Earth dist.	-5581 Jan 18 j 02:31		6.02701 AU
max. Earth dist.	-5587 Aug 03 j 18:56	29° <b>∏</b> 36′32	6.37268 AU	morning rise	-5581 Jan 30 j 01:48	18° <b>∡</b> 757'11	
					-5581 Mar 21 j 08:46	0°ಕ	
conjunction	-5587 Aug 05 j 09:02	29° <b>Ⅱ</b> 57'38	1°19'32	retrograde	-5581 Jun 10 j 23:29	9° <b>ට</b> 09'14	
minimum elong	-5587 Aug 05 j 08:59	29° <b>Ⅱ</b> 57'36	1°19'52	opposition	-5581 Aug 09 j 22:25	4° <b>る</b> 04'23	-2°00'58
-	-5587 Aug 05 j 13:19	0ಂತ		min. Earth dist.	-5581 Aug 08 j 19:40	4° <b>ට</b> 13'28	4.03774 AU
morning rise	-5587 Aug 18 j 00:05	2°545'14			-5581 Sep 14 j 12:39	30°Ŗ <b>⋌</b> ¹	
retrograde	-5587 Dec 16 j 22:40	19°957'38		direct	-5581 Oct 06 j 23:44	29° <b>×</b> 708'24	
opposition	-5586 Feb 15 j 15:26	15°906'13	2°06'19		-5581 Oct 29 j 11:38	0°る	
	-			evening set		0 8 18° <b>8</b> 20'56	
min. Earth dist.	-5586 Feb 16 j 19:43	14°957'12	4.35392 AU	evening set	-5580 Feb 09 j 04:48	10 02030	
direct	-5586 Apr 19 j 04:22	10°906'11			5500 F 1 - 55 : : :	210-22	1000
evening set	-5586 Aug 23 j 18:07	28°9507'24		conjunction	-5580 Feb 22 j 18:49	21°る31'18	
	-5586 Sep 01 j 03:05	$0$ $\circ$ $\Omega$		minimum elong	-5580 Feb 22 j 18:48	21° <b>る</b> 31'18	1°26'40

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5580 in astronomical counting style is the year 5581 BCE in historical counting style. -5580 Feb 24 j 15:10 21°る57'15 6.06087 AU min. Earth dist. -5574 Feb 21 i 10:11 19°9524'45 4.34668 AU max. Earth dist. 24°る42'47 14°**©**34'19 -5580 Mar 07 j 11:09 -5574 Apr 23 j 18:15 direct morning rise  $0^{\circ}\Omega$ -5580 Mar 30 j 18:28 -5574 Aug 16 j 07:59 0°≈≈ 2°**Ω**36′23 -5580 Jul 15 j 12:51 14°≈26'53 evening set -5574 Aug 28 j 02:30 retrograde 9°**≈**30'49 -5574 Sep 08 j 00:30 5°**Ω**03'40 min. Earth dist. -5580 Sep 11 j 22:16 4.09874 AU max. Earth dist. 6.31147 AU opposition -5580 Sep 13 j 00:08 9°≈21'59 -2°04'56 -5574 Sep 09 j 14:29 5°**Ω**25'06 direct -5580 Nov 10 j 11:12 4°≈22'37 conjunction 1°26'17 -5574 Sep 09 j 14:30 -5579 Feb 06 j 12:49 15°≈ minimum elong 5°**Ω**25′07 1°26'35 -5574 Sep 22 j 00:58 evening set -5579 Mar 17 j 00:25 23°**≈**23′28 morning rise 8°**Ω**13'14 -5574 Oct 23 j 08:56 15°Ω 26°**Ω**01′23 conjunction -5579 Mar 30 j 18:14 26°≈31'53 -1°13'56 retrograde -5573 Jan 23 j 09:44 -5579 Mar 30 j 18:18 -5573 Mar 25 j 13:05 minimum elong 26°**≈**31'56 1°14'08 opposition 21°**Ω**09'01 1°55'43 -5579 Apr 01 j 04:11 -5573 Mar 26 j 13:15 max. Earth dist. 26°≈51'19 6.14330 AU min. Earth dist. 21°**Ω**01'20 4.26951 AU morning rise -5579 Apr 13 j 12:48 29°≈40'27 direct -5573 May 26 j 08:54 16°**Ω**12'16 -5579 Apr 14 j 23:19 0°**)**€ -5573 Sep 08 j 15:15 0° m retrograde -5579 Aug 18 j 07:26 18°**¥**32'10 evening set -5573 Sep 28 j 13:06 4° m 27'33 opposition -5579 Oct 16 j 14:33 13°¥29'36 -1°25'10 max. Earth dist. -5573 Oct 09 j 23:00 7° m 04'53 6.22033 AU min. Earth dist. -5579 Oct 15 j 22:43 13°**¥**34'59 4.19352 AU direct -5579 Dec 15 j 03:19 8°**¥**27'18 conjunction -5573 Oct 11 j 01:25 7° m/20'07 1°04'49 evening set -5578 Apr 21 j 16:52 27°**)** (06'40 minimum elong -5573 Oct 11 j 01:28 7° m 20'09 1°04'58 -5578 May 04 j 15:09  $0^{\circ}\Upsilon$ morning rise -5573 Oct 23 j 14:03 10° m 13'02 retrograde -5572 Feb 27 i 02:38 28° m 49'42 -5578 May 05 i 10:14 0°Υ10'41 -0°36'38 opposition -5572 Apr 28 i 07:13 23° m 54'38 1°07'02 conjunction minimum elong -5578 May 05 i 10:17 0°Υ10'43 0°36'40 min. Earth dist. -5572 Apr 28 i 20:08 23° m 50'30 4.16964 AU max. Earth dist. -5578 May 06 i 01:06 0°Υ19'00 6.24381 AU direct -5572 Jun 27 j 23:51 19° m 00'26 -5578 May 19 j 01:53 3°Y13'43 -5572 Sep 26 j 04:40 0∘**⊽** morning rise -5578 Sep 19 j 12:20 21°Y11'10 -5572 Oct 30 j 02:18 7°**-**234'53 retrograde evening set -5578 Nov 17 j 22:02 16°**Y**′12′23 -0°19′42 opposition -5578 Nov 17 j 20:08 16°**Y**13'01 4.28991 AU -5572 Nov 11 j 19:47 10°**△**33'54 0°21'57 min. Earth dist. conjunction -5577 Jan 17 j 17:03 11°Y08'38 -5572 Nov 11 j 19:49 direct minimum elong 10°**2**33'55 0°21'55 -5577 Mar 07 j 21:10 14° **Y**38'19 -5572 Nov 11 j 13:17 max. Earth dist. 10°**2**30'05 6.12137 AU asc. node 29°Y26'13 -5572 Nov 24 j 15:22 -5577 May 25 j 19:52 13°**£**34'11 evening set morning rise -5577 May 28 j 09:27 -5571 Feb 17 j 00:35 0°8 0°M -5571 Apr 03 j 06:41 retrograde 3°M02'50 -5577 Jun 08 j 07:05 2°**8**24'15 0°11'10 -5571 Apr 30 j 10:25 conjunction desc. node 1°M54'27 -5577 Jun 08 j 07:03 -5571 May 19 j 00:49 minimum elong 2°**8**24'14 0°11'19 -5577 Jun 08 j 01:07 -5571 Jun 03 j 06:09 behind sun begin 2°**8**20'58 opposition 28°**£**03'57 -0°06'40 behind sun end -5577 Jun 08 j 13:00 2°**8**27'30 min. Earth dist. -5571 Jun 03 j 01:12 28°**£**05'34 4.07915 AU max. Earth dist. -5577 Jun 07 j 20:50 2°**8**18'36 6.32918 AU direct -5571 Aug 01 j 13:28 23°**£**11'01 morning rise -5577 Jun 21 j 15:25 5°**8**20'42 -5571 Oct 08 j 05:49 0°M -5577 Aug 07 j 17:40 15°8 evening set -5571 Dec 03 j 08:42 12°M06'22 -5577 Oct 20 j 17:46 22°**8**39'43 -5571 Dec 15 j 13:41 retrograde 15°M -5577 Dec 19 j 11:48 17°**8**44'40 0°49'15 opposition -5577 Dec 20 j 01:03 17°**8**40'19 4.35809 AU -5571 Dec 16 j 09:39 15°ML11'51 -0°29'48 min. Earth dist. conjunction -5576 Jan 10 j 16:30 15°₹**8** -5571 Dec 16 j 09:36 15°M11'50 0°30'01 minimum elong -5576 Feb 19 i 10:01 12°**8**40'59 -5571 Dec 17 i 03:19 direct max. Earth dist. 15°**M**22'21 6.04771 AU -5571 Dec 29 i 13:45 -5576 Mar 30 i 11:39 15°8 morning rise 18°**M**₁9'07 -5576 Jun 23 i 02:36  $0^{\circ}II$ -5570 Feb 21 i 03:16 0°×7 evening set -5576 Jun 26 i 10:47 0°**Ⅱ**43'39 retrograde -5570 May 10 j 07:12 8°**х** 25′10 max. Earth dist. -5576 Jul 08 j 09:00 3°**II**20'39 6.37454 AU -5570 Jul 09 i 18:06 3°x722'28 -1°20'22 opposition min. Earth dist. -5570 Jul 08 j 22:36 3°**₹**'28'59 4.03012 AU -5576 Jul 09 j 12:47 3°II35'57 0°54'33 -5570 Aug 06 j 17:54 30°RML conjunction minimum elong -5576 Jul 09 j 12:43 3°**II**35'55 0°54'50 -5570 Sep 06 j 02:14 28°M28'43 direct morning rise -5576 Jul 22 j 11:10 6°**Ⅲ**26'32 -5570 Oct 06 j 06:56 0°×7 retrograde -5576 Nov 19 j 18:10 23°**Ⅲ**31'08 evening set -5569 Jan 08 j 08:31 17°**х** 39′23 opposition -5575 Jan 19 j 00:45 18°**耳**38'45 1°42'52 min. Earth dist. -5575 Jan 20 j 00:18 18°**Ⅲ**31′10 4.37901 AU conjunction -5569 Jan 21 j 17:01 20° **₹** 48'59 -1°11'29 -5575 Mar 22 j 13:23 13°**Ⅱ**36'38 -5569 Jan 21 j 16:57 20° **₹**48'57 1°11'49 direct minimum elong -5575 Jul 20 j 19:56 000 -5569 Jan 23 j 06:54 21°**₹**11′26 6.02683 AU max. Earth dist. -5575 Jul 27 j 23:55 -5569 Feb 04 j 04:44 24°**₹**00'17 evening set 1°934'01 morning rise -5575 Aug 08 j 01:46 -5569 Mar 02 j 08:59 0°궁 max. Earth dist. 4°901'02 6.36805 AU retrograde -5569 Jun 16 j 00:14 14°る11'10 conjunction -5575 Aug 09 j 16:48 4°522'42 1°22'04 opposition -5569 Aug 14 j 20:34 9°**ට**06'14 -2°04'24 minimum elong -5575 Aug 09 j 16:46 4°9522'40 1°22'23 min. Earth dist. -5569 Aug 13 j 17:17 9°る15'30 4.04135 AU morning rise -5575 Aug 22 j 07:03 7°9510'06 direct -5569 Oct 11 j 21:27 4°る09'50

-5575 Dec 21 j 11:34

-5574 Feb 20 j 05:06

retrograde

opposition

24°9525'26

19°534'00 2°07'39

-5568 Feb 14 j 07:55

evening set

23°る22'25

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5568 in astronomical counting style is the year 5569 BCE in historical counting style. -5568 Feb 27 i 22:33 26°る32'48 -1°26'29 min. Earth dist. -5562 Feb 25 j 21:32 23°950'41 4.34426 AU conjunction -5568 Feb 27 j 22:33 26°**ප**32'48 1°26'47 direct -5562 Apr 28 j 05:17 19°900'20 minimum elong -5568 Feb 29 j 16:54 26°る57'30 6.06761 AU -5562 Jul 30 j 16:26 max. Earth dist.  $0^{\circ}\Omega$ -5562 Sep 01 j 09:04 29°る44'13 7°Ω01'42 -5568 Mar 12 j 15:36 morning rise evening set -5568 Mar 13 j 18:55 -5562 Sep 12 j 06:54 9°**Ω**29'09 0°≈ max. Earth dist. 6.30640 AU -5568 May 27 j 09:59 15°≈ -5568 Jul 20 j 07:59 19°≈23'10 -5562 Sep 13 j 20:32 9°**Ω**50′26 1°24'47 retrograde conjunction -5562 Sep 13 j 20:34 -5568 Sep 12 j 16:43 15°R≈ minimum elong 9°**£**50′27 1°25'04 14°**≈**18′27 -2°01′43 -5562 Sep 26 j 06:58 opposition -5568 Sep 17 j 18:30 morning rise 12°**Ω**38'45 -5562 Oct 06 j 20:32 min. Earth dist. -5568 Sep 16 j 17:39 14°≈26'57 4.10780 AU 15°€ direct -5568 Nov 15 j 08:20 9°≈18'36 -5561 Jan 09 j 18:33 0° m -5567 Jan 16 j 02:15 -5561 Jan 28 j 00:29 0° m 30'47 15°≈ retrograde -5561 Feb 15 j 05:48 evening set -5567 Mar 22 j 01:47 28°**≈**17'58  $30^{\circ}$ R $\Omega$ -5567 Mar 29 j 13:10 0°**)**€ opposition -5561 Mar 30 j 04:14 25°**Ω**38′08 1°51'02 min. Earth dist. -5561 Mar 31 j 04:30 25°**Ω**30′25 4.26177 AU conjunction -5567 Apr 04 j 20:03 1°\;\;26'06 -1°09'54 direct -5561 May 30 j 22:42 20°**Ω**41'40 minimum elong -5567 Apr 04 j 20:07 1°**¥**26'08 1°10'04 -5561 Aug 22 j 08:30 0° M max. Earth dist. -5567 Apr 06 j 05:10 1°**¥**45′00 6.15413 AU evening set -5561 Oct 02 j 20:21 8° m 57'33 morning rise -5567 Apr 18 j 14:25 4°)(34'09 max. Earth dist. -5561 Oct 14 j 08:14 11° Mp 36'19 6.21068 AU retrograde -5567 Aug 22 j 22:50 23°¥19'05 opposition -5567 Oct 21 j 05:02 18°**升**17'03 -1°17'00 conjunction -5561 Oct 15 j 09:08 11° Mp 50'42 1°00'03 min. Earth dist. -5567 Oct 20 j 14:52 18°**)** €21'52 4.20498 AU minimum elong -5561 Oct 15 i 09:11 11° m 50'44 1°00'11 direct -5567 Dec 19 j 21:11 13°¥14'33 morning rise -5561 Oct 27 j 22:24 14° m 44'19 -5566 Apr 18 j 04:07  $0^{\circ}\Upsilon$ -5560 Jan 14 j 08:30 0∘**⊽** -5566 Apr 26 j 14:35 1°Y51'42 retrograde -5560 Mar 02 j 19:45 3°**£**26'47 evening set -5560 Apr 21 j 08:26 30°R ₩ -5566 May 10 j 07:18 4°Υ55'02 -0°30'10 -5560 May 03 j 01:14 28° m 31'16 0°58'08 conjunction opposition -5566 May 10 j 07:21 4°Υ55'03 0°30'10 -5560 May 03 j 11:52 28°**m**27'51 4.15867 AU minimum elong min. Earth dist. -5566 May 10 j 18:11 5°**Υ**01'06 6.25516 AU -5560 Jul 02 j 12:47 max. Earth dist. direct 23° m 37'17 -5566 May 23 j 22:22 7°**Y**57′19 -5560 Sep 06 j 18:48 0∘Ω morning rise -5566 Sep 23 j 22:52 25°Y48'54 -5560 Nov 03 j 13:45 12°**♀**13'55 evening set retrograde -5566 Nov 22 j 09:48 20°Υ50'39 -0°09'42 opposition -5566 Nov 22 j 09:43 20°Υ50'41 4.30047 AU -5560 Nov 16 j 08:06 min. Earth dist. conjunction 15°**2**13'48 0°15'10 -5565 Jan 15 j 08:41 15°**Y**51'34 -5560 Nov 16 j 08:07 asc. node minimum elong 15°**2**13'48 0°15'07 15°**Y**46'52 -5565 Jan 22 j 08:52 -5560 Nov 16 j 05:04 direct behind sun begin 15°**£**12'01 -5565 May 11 j 18:18 -5560 Nov 16 j 11:10  $0^{\circ}$ 8 behind sun end 15°**£**15'36 -5565 May 30 j 12:34 4°**8**02'13 -5560 Nov 16 j 03:49 evening set max. Earth dist. 15°**≏**11'17 6.11012 AU morning rise -5560 Nov 29 j 04:44 18°**≙**15′02 conjunction -5565 Jun 12 j 22:43 6°859'24 0°17'51 -5559 Jan 22 j 19:22 0°M -5565 Jun 12 j 22:42 6°859'24 0°18'01 desc. node -5559 Mar 12 j 23:52 6°ML46'11 minimum elong max. Earth dist. -5565 Jun 12 j 11:38 6°853'18 6.33852 AU retrograde -5559 Apr 08 j 05:38 7°M50'00 -5565 Jun 26 j 05:35 9°**8**54'55 -5559 Jun 08 j 02:51 2°M50'34 -0°17'10 morning rise opposition -5565 Jul 19 j 23:57 15°8 min. Earth dist. -5559 Jun 07 j 20:59 2°M52'29 4.06845 AU -5565 Oct 25 j 02:18 27°**8**10'12 -5559 Jul 01 j 07:56 30°R<u>Ω</u> retrograde -5565 Dec 23 j 22:30 22°**8**15'38 0°58'04 -5559 Aug 06 j 07:07 27°**£**57'34 opposition direct min. Earth dist. -5565 Dec 24 i 12:30 22°811'04 4.36582 AU -5559 Sep 10 j 18:54 0°M -5564 Feb 23 i 23:35 direct 17°**8**12'13 -5559 Nov 29 i 20:19 15°M -5564 Jun 06 i 10:38  $\mathbb{I}^{\circ 0}$ evening set -5559 Dec 08 j 02:13 16°M56'13 evening set -5564 Jun 30 j 22:47 5°**Ⅱ**12'42 conjunction -5559 Dec 21 j 04:19 20°ML02'36 -0°36'22 -5564 Jul 13 j 23:12 8°II04'10 0°59'33 -5559 Dec 21 i 04:16 20°ML02'34 0°36'35 conjunction minimum elong -5564 Jul 13 j 23:09 8°**II**04'08 0°59'52 -5559 Dec 22 j 00:48 20°ML14'46 6.03867 AU minimum elong max. Earth dist. -5564 Jul 12 j 16:48 7°**П**47'26 6.37999 AU -5558 Jan 03 j 09:37 23°ML10'46 max. Earth dist. morning rise 10°**I**53′59 0°×7 morning rise -5564 Jul 26 j 20:23 -5558 Feb 02 j 05:32 retrograde -5564 Nov 24 j 03:30 27°**I**57′25 retrograde -5558 May 15 j 07:45 13°**∡** 20′59 -5563 Jan 23 j 11:49 23°**II**05'15 1°48'12 opposition -5558 Jul 14 j 16:00 8°**х** 17′56 -1°28′33 opposition -5558 Jul 13 j 19:09 min. Earth dist. -5563 Jan 24 j 12:42 22°**Ⅲ**57'15 4.38206 AU min. Earth dist. 8°**х** 24'55 4.02398 AU -5563 Mar 27 j 02:51 18°**Ⅱ**03'24 -5558 Sep 10 j 20:56 3°**х** 23′57 direct direct -5563 Jul 04 j 05:54 000 -5557 Jan 13 j 08:04 22°×37'31 evening set evening set -5563 Aug 01 j 08:08 5°959'10 -5557 Jan 26 j 17:29 25°**х** 47′40 -1°15′16 max. Earth dist. -5563 Aug 12 j 09:58 8°926'14 6.36835 AU conjunction minimum elong -5557 Jan 26 j 17:25 25°**х**⁴47'38 1°15'35 conjunction -5563 Aug 14 j 00:06 8°547'24 1°24'06 max. Earth dist. -5557 Jan 28 j 07:26 26°**х** 10′09 6.02396 AU minimum elong -5563 Aug 14 j 00:04 8°9547'23 1°24'25 morning rise -5557 Feb 09 j 06:18 28°**х** 59'30 morning rise -5563 Aug 26 j 13:17 11°534'24 -5557 Feb 13 j 13:36 0°궁 -5563 Dec 25 j 20:27 28°951'05 -5557 Jun 20 j 22:40 19°る10'17 retrograde retrograde

-5562 Feb 24 j 17:25

opposition

23°959'37 2°08'07

opposition

-5557 Aug 19 j 17:22

14°る05'11 -2°06'50

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5557 in astronomical counting style is the year 5558 BCE in historical counting style. -5557 Aug 18 j 13:35 14°る14'39 4.04223 AU direct -5551 Mar 31 j 13:48 22°**Ⅲ**27'16 min. Earth dist. -5557 Oct 16 j 18:25 9°**⋜**08'18 -5551 Jun 15 j 15:06 0ಂತಾ direct -5556 Feb 19 j 10:21 28°る21'55 -5551 Aug 05 j 15:47 10°522'51 evening set evening set -5556 Feb 26 j 11:13 0°≈≈ max. Earth dist. -5551 Aug 16 j 14:32 12°9548'31 6.36338 AU -5556 Mar 04 j 01:59 conjunction 1°≈32'29 -1°25'54 conjunction -5551 Aug 18 j 06:42 13°9510'52 1°25'42 -5556 Mar 04 j 02:00 minimum elong 1°≈32'30 1°26'12 minimum elong -5551 Aug 18 j 06:41 13°9510'51 1°26'01 6.07239 AU max. Earth dist. -5556 Mar 05 j 21:32 1°≈57'52 morning rise -5551 Aug 30 j 19:19 15°957'47 morning rise -5556 Mar 17 j 19:26 4°≈43'52 -5551 Nov 13 j 02:57  $0^{\circ}\Omega$ -5556 May 04 j 02:29 15°≈ retrograde -5551 Dec 30 j 09:26 3°£18′01 retrograde -5556 Jul 25 j 04:06 24°≈18'03 -5550 Feb 16 j 18:52 30°R55 -5550 Mar 01 j 07:02 opposition -5556 Sep 22 j 12:18 19°≈13'34 -1°57'35 opposition 28°**5**26'30 2°08'00 min. Earth dist. -5556 Sep 21 j 12:33 19°≈21'41 4.11587 AU min. Earth dist. -5550 Mar 02 j 11:49 28°917'22 4.33540 AU -5556 Oct 29 j 16:30 15°R≈ direct -5550 May 02 j 17:58 23°927'34 direct -5556 Nov 20 j 04:30 14°≈13'18 -5550 Jul 11 j 06:03  $0^{\circ}\Omega$ -5556 Dec 11 j 21:15 15°≈ evening set -5550 Sep 05 j 16:46 11°**Ω**30'28 -5555 Mar 12 j 21:29 0°**)**€ max. Earth dist. -5550 Sep 16 j 16:22 13°**Ω**59'19 6.29440 AU evening set -5555 Mar 27 j 03:06 3°**)** 11′14 conjunction -5550 Sep 18 j 04:16 14°**Ω**19'39 1°22'49 conjunction -5555 Apr 09 j 21:28 6°**升**19'00 -1°05'21 minimum elong -5550 Sep 18 j 04:18 14°**Ω**19'40 minimum elong -5555 Apr 09 j 21:33 6°**)** 19'03 1°05'31 -5550 Sep 21 j 03:27 15°Ω max. Earth dist. -5555 Apr 11 j 04:04 6°**)** ₹36'25 6.16489 AU -5550 Sep 30 j 14:37 17°Ω08'29 morning rise morning rise -5555 Apr 23 i 15:55 9°\ 26'34 -5550 Dec 03 i 19:44 0° m retrograde -5555 Aug 27 j 11:35 28° **)** (04'24 retrograde -5549 Feb 01 i 17:17 5° m 06'58 -5555 Oct 25 j 19:05 23°\circ 02'45 -1°08'19 -5549 Apr 03 j 22:16 0° m 14'04 1°45'38 opposition opposition -5555 Oct 25 j 05:44 23°**)** €07'17 4.21720 AU min. Earth dist. -5549 Apr 04 j 20:51 0° Mp 06'54 4.24739 AU min. Earth dist. -5549 Apr 05 j 18:33 direct -5555 Dec 24 j 15:00 17°**¥**59'56 30°R €  $0^{\circ}\Upsilon$ -5549 Jun 04 j 12:15 25°**Ω**18'02 -5554 Mar 31 j 20:17 direct 6°Y34'07 -5549 Jul 31 j 14:38 -5554 May 01 j 11:09 0° m evening set -5549 Oct 07 j 07:34 evening set 13° m 36'57 -5554 May 15 j 03:20 9°Y36'40 -0°23'32 conjunction -5554 May 15 j 03:22 -5549 Oct 19 j 20:48 16° m 30'58 0°54'47 9°\bar{\gamma}36'41 0°23'29 conjunction minimum elong -5554 May 15 j 12:13 9°**Υ**41'37 6.26799 AU -5549 Oct 19 j 20:51 16° Mp 31'00 0° 54' 53 max. Earth dist. minimum elong 6.19520 AU -5554 May 28 j 17:25 12°**Y**38'02 -5549 Oct 18 j 21:32 morning rise max. Earth dist. 16° **m** 17'30 -5554 Sep 13 j 00:00 -5549 Nov 01 j 10:58  $0^{\circ}$ 8 morning rise 19° m 25'38 -5554 Sep 28 j 09:17 0°**8**23'11 -5549 Dec 20 j 20:13 retrograde 0∘**⊽** -5554 Oct 13 j 16:12 30°**Ŗ**♈ retrograde -5548 Mar 07 j 20:43 8°**£**16'12 asc. node -5554 Nov 25 j 03:35 25°Y39'09 -5548 May 08 j 00:22 3°**2**20'12 0°48'29 opposition -5554 Nov 26 j 20:51 25°**Y**25′26 0°00'19 min. Earth dist. -5548 May 08 j 09:24 3°**2**17'18 4.14307 AU opposition min. Earth dist. -5554 Nov 26 j 22:46 25°**Y**24'48 4.31241 AU -5548 Jun 05 j 14:19 30°R, M) -5553 Jan 27 j 00:40 20°Y21'36 direct -5548 Jul 07 j 07:36 28° M 26'28 direct -5553 Apr 23 j 20:09 0°8 -5548 Aug 07 j 17:12 0∘**ত** -5553 Jun 04 j 03:36 8°**8**33'52 -5548 Nov 08 j 06:40 17°**≏**06'57 evening set evening set -5553 Jun 17 j 12:26 11°830'07 0°24'22 -5548 Nov 21 j 02:11 20°**♀**07'57 0°07'59 conjunction conjunction -5553 Jun 17 j 12:24 minimum elong 11°**8**30'06 0°24'34 minimum elong -5548 Nov 21 i 02:11 20°**♀**07'57 0°07'53 -5553 Jun 16 j 21:47 max. Earth dist. 11°**8**22'03 6.34826 AU behind sun begin -5548 Nov 20 i 18:55 20°**2**03'41 14°**8**24'42 morning rise -5553 Jun 30 j 18:03 behind sun end -5548 Nov 21 i 09:27 20°**♀**12'12 -5553 Jul 03 j 10:42 15°8 max. Earth dist. -5548 Nov 21 i 01:51 20°**♀**07'45 6.09604 AU -5553 Sep 27 j 09:44  $0^{\circ}\Pi$ -5548 Dec 03 j 23:59 23°**₽**10'21 morning rise -5553 Oct 29 j 09:38 1°**I**I36′19 -5547 Jan 03 j 02:30 0°M retrograde -5553 Nov 30 j 11:09 30°R8 -5547 Jan 20 j 22:34 desc. node 3°M40'56 26°842'06 1°06'29 -5547 Apr 13 j 09:54 opposition -5553 Dec 28 j 08:00 retrograde 12°M.52'26 min. Earth dist. -5553 Dec 28 j 23:42 26°**8**36'59 4.37262 AU opposition -5547 Jun 13 j 05:34 7°ML52'33 -0°28'08 direct -5552 Feb 28 j 12:05 21°**8**38'45 min. Earth dist. -5547 Jun 12 j 21:08 7°**ጤ**55'19 4.05749 AU -5552 May 19 j 03:51  $\mathbb{I}^{\circ 0}$ direct -5547 Aug 11 j 04:57 2°M59'39 evening set -5552 Jul 05 j 09:05 9°**Ⅲ**37'28 -5547 Nov 12 j 08:56 15°M -5552 Jul 17 j 01:11 12°**Ц**11'08 6.38309 AU -5547 Dec 13 j 02:14 22°M01'39 max. Earth dist. evening set -5552 Jul 18 j 08:15 12°**I**28'15 1°04'13 -5547 Dec 26 j 05:16

conjunction

minimum elong

max. Earth dist.

morning rise

retrograde

opposition

min. Earth dist.

-5547 Dec 26 j 05:13

-5547 Dec 27 j 04:08

-5546 Jan 08 j 11:49

-5546 Jan 15 j 17:57

-5546 May 20 j 12:12

-5546 Jul 19 j 18:52

-5546 Jul 18 j 19:45

25°M08'46 -0°43'02

13°**≯**27'24 -1°36'28

13°**∡**35'10 4.02245 AU

0°43'17

6.03181 AU

25°**™**08'44

 $25^{\circ}$ ML22'22

28°M17'46

18°**х** 30′50

0°**∡** 

conjunction

morning rise

retrograde

opposition

min. Earth dist.

minimum elong

-5552 Jul 18 j 08:12

-5552 Jul 31 j 03:58

-5552 Oct 20 j 05:09

-5552 Nov 28 j 11:25

-5551 Jan 07 j 04:50

-5551 Jan 27 j 22:09

-5551 Jan 28 j 23:49

12°**Ⅲ**28′13

15°**Ⅲ**17'22

2°9520'42

27°**Ⅱ**28'47 1°52'59

27°**П**20'33 4.38125 AU

0 $\circ$  $\odot$ 

30°R∏

1°04'31

•	nical year style is used: Th		_	` //		, .	150 32
direct	-5546 Sep 15 j 22:19	8° <b>₹</b> 33'08	ustronomicur co	max. Earth dist.	-5540 Jul 21 j 03:15		6.38170 AU
evening set	-5545 Jan 18 j 12:42	27° <b>×</b> <sup>7</sup> 47'43		mar. Bartii dibt.	21,05.10	10 220 00	0.50170110
e venning see	-5545 Jan 27 j 20:56	0°る		conjunction	-5540 Jul 22 j 13:44	16° <b>Ⅱ</b> 45'05	1°08'22
	22 12 3un 27 j 20.30	° <b>O</b>		minimum elong	-5540 Jul 22 j 13:41	16° <b>Ⅱ</b> 45'03	1°08'40
conjunction	-5545 Jan 31 j 23:12	0° <b>る</b> 58'07	-1°18'//1	morning rise	-5540 Aug 04 j 08:25	19° <b>Ⅱ</b> 33'48	1 00 40
minimum elong	-5545 Jan 31 j 23:09	0° <b>ろ</b> 58'05		morning risc	-5540 Sep 25 j 00:49	0°95	
max. Earth dist.	-5545 Feb 02 j 16:52		6.02805 AU	retrograde	-5540 Dec 02 j 18:32	6° <b>©</b> 38'48	
morning rise	-5545 Feb 14 j 12:39	4°る10'02	0.02803 AC	opposition	-5539 Feb 01 j 06:29	1°9647'00	1°57'04
retrograde	-5545 Jun 26 j 00:22	24°පි17'08		min. Earth dist.	-5539 Feb 02 j 09:25	1°938'23	4.37487 AU
opposition	-5545 Aug 24 j 16:42	19° <b>ට</b> 11'57	-2°08'23	mm. Larm dist.	-5539 Feb 15 j 12:30	30°R <b>I</b>	4.57407 710
min. Earth dist.	-5545 Aug 23 j 13:03		4.05178 AU	direct	-5539 Apr 04 j 21:45	26° <b>II</b> 45'43	
direct	-5545 Oct 21 j 19:08	19 <b>3</b> 21 29	4.03170710	direct	-5539 May 22 j 21:32	0°95	
ancet	-5544 Feb 09 j 14:09	0° <b>≈</b>		evening set	-5539 Aug 09 j 21:43	14°5543'00	
evening set	-5544 Feb 24 j 14:46	3°≈25'51		max. Earth dist.	-5539 Aug 20 j 20:33		6.35241 AU
e venning see	20111 <b>0</b> 0 <b>2</b> 1, 11.10	5 . 7 20 0 1		mar. Bartii dibt.	2029 1148 20 1 20.22	1, 20,00	0.502 11 110
conjunction	-5544 Mar 09 j 06:49	6° <b>≈</b> 36'00	-1°24'46	conjunction	-5539 Aug 22 j 12:02	17° <b>©</b> 31'08	1°26'47
minimum elong	-5544 Mar 09 j 06:51	6° <b>≈</b> 36'01	1°25'02	minimum elong	-5539 Aug 22 j 12:01	17° <b>©</b> 31'08	1°27'06
max. Earth dist.	-5544 Mar 11 j 01:17	7° <b>≈</b> 00'39	6.08634 AU	morning rise	-5539 Sep 03 j 23:57	20°©18'14	
morning rise	-5544 Mar 23 j 00:45	9° <b>≈</b> 46'54		, and the second	-5539 Oct 20 j 19:54	$0^{\circ}\Omega$	
Č	-5544 Apr 15 j 04:57	15° <b>≈</b>		retrograde	-5538 Jan 03 j 21:34	7° <b>Ω</b> 43'58	
retrograde	-5544 Jul 29 j 20:04	29° <b>≈</b> 12'28		opposition	-5538 Mar 05 j 20:08	2° <b>Ω</b> 52'25	2°07'10
min. Earth dist.	-5544 Sep 26 j 05:52	24°≈16'16	4.13276 AU	min. Earth dist.	-5538 Mar 07 j 00:48		4.32063 AU
opposition	-5544 Sep 27 j 05:29	24°≈08'12			-5538 Mar 29 j 23:47	30° <b>₹</b> 5	
direct	-5544 Nov 25 j 00:54	19° <b>≈</b> 07'30		direct	-5538 May 07 j 04:23	27°©53'52	
	-5543 Feb 23 j 01:59	0° <b>∀</b>			-5538 Jun 14 j 02:05	$0^{\circ}\Omega$	
evening set	-5543 Apr 01 j 02:29	8° <b>)</b> €00'47			-5538 Sep 05 j 13:46	15° <b>Ω</b>	
Č	1 ,			evening set	-5538 Sep 10 j 01:00	16° <b>Ω</b> 00'16	
conjunction	-5543 Apr 14 j 20:48	11° <b>)(</b> 07'43	-1°00'29	max. Earth dist.	-5538 Sep 21 j 00:24	18° <b>Ω</b> 29'39	6.27698 AU
minimum elong	-5543 Apr 14 j 20:52	11° <b>)(</b> 07'46	1°00'37		1 3		
max. Earth dist.	-5543 Apr 16 j 00:44	11° <b>)</b> 23'34	6.18335 AU	conjunction	-5538 Sep 22 j 12:23	18° <b>Ω</b> 50'07	1°20'19
morning rise	-5543 Apr 28 j 14:48	14° <b>)(</b> 14'17		minimum elong	-5538 Sep 22 j 12:25	18° <b>Ω</b> 50'09	1°20'33
•	-5543 Jul 21 j 06:07	$0^{\circ}$ Y		morning rise	-5538 Oct 04 j 23:12	21° <b>Ω</b> 39'49	
retrograde	-5543 Aug 31 j 23:07	2° <b>Y</b> '42'43		-	-5538 Nov 12 j 16:59	o° mp	
	-5543 Oct 12 j 11:56	30° <b>₹</b>		retrograde	-5537 Feb 06 j 13:46	9° <b>m</b> 46'39	
opposition	-5543 Oct 30 j 06:20	27° <b>)</b> (41'34	-0°59'28	opposition	-5537 Apr 08 j 18:00	4° m 53'22	1°39'30
min. Earth dist.	-5543 Oct 29 j 19:49	27° <b>)</b> 45′07	4.23521 AU	min. Earth dist.	-5537 Apr 09 j 15:02	4° Mp 46'40	4.22843 AU
direct	-5543 Dec 29 j 08:08	22° <b>)</b> 38′28			-5537 Jun 04 j 05:06	$30^{\circ}$ R $\Omega$	
	-5542 Mar 12 j 13:59	$0^{\circ}\Upsilon$		direct	-5537 Jun 09 j 03:32	29° <b>Ω</b> 57'41	
evening set	-5542 May 06 j 03:51	11° <b>Y</b> 07'54			-5537 Jun 14 j 02:03	0° <b>m</b>	
				evening set	-5537 Oct 11 j 20:31	18° <b>™</b> 20'58	
conjunction	-5542 May 19 j 19:15	14° <b>Y</b> ′09'28	-0°16'59				
minimum elong	-5542 May 19 j 19:17	14° <b>Y</b> ′09'29	0°16'57	conjunction	-5537 Oct 24 j 10:39	21°M/16'07	0°49'02
max. Earth dist.	-5542 May 20 j 00:31	14° <b>Y</b> 12'23	6.28405 AU	minimum elong	-5537 Oct 24 j 10:43	21°M/16'09	0°49'07
morning rise	-5542 Jun 02 j 08:20	17° <b>Y</b> ′09'44		max. Earth dist.	-5537 Oct 23 j 15:37	21°Mp05'03	6.17663 AU
	-5542 Aug 06 j 17:37	$9^{\circ}$ 8		morning rise	-5537 Nov 06 j 01:41	24° Mp 12'00	
retrograde	-5542 Oct 02 j 13:56	4° <b>8</b> 47'57			-5537 Dec 01 j 20:27	0∘ <b>ত</b>	
asc. node	-5542 Oct 06 j 16:59	4° <b>8</b> 46'16		retrograde	-5536 Mar 12 j 23:20	13° <b>≏</b> 11'27	
	-5542 Nov 29 j 23:46	30° <b>ŖƳ</b>		opposition	-5536 May 13 j 02:01	8° <b>£</b> 14'57	0°38'16
opposition	-5542 Dec 01 j 03:49	29° <b>Y</b> 50'41	0°09'54	min. Earth dist.	-5536 May 13 j 08:17	8° <b>≏</b> 12'55	4.12643 AU
min. Earth dist.	-5542 Dec 01 j 07:32	29° <b>Y</b> 49'28	4.32535 AU	direct	-5536 Jul 12 j 04:04	3° <b>₽</b> 21'30	
direct	-5541 Jan 31 j 11:12	24° <b>Y</b> 46'45		evening set	-5536 Nov 13 j 02:39	22° <b>≏</b> 05'58	
	-5541 Apr 03 j 00:13	$9^{\circ}$ 8					
evening set	-5541 Jun 08 j 14:16	12° <b>8</b> 56'00		conjunction	-5536 Nov 25 j 23:02	25° <b>≙</b> 07'57	0°00'31
	-5541 Jun 18 j 00:29	15° <b>8</b>		minimum elong	-5536 Nov 25 j 23:03	25° <b>≏</b> 07'58	0°00'24
				behind sun begin	-5536 Nov 25 j 14:59	25° <b>≙</b> 03'13	
conjunction	-5541 Jun 21 j 21:49	15° <b>8</b> 51'22		behind sun end	-5536 Nov 26 j 07:08	25° <b>≏</b> 12'43	
minimum elong	-5541 Jun 21 j 21:46	15° <b>8</b> 51'20	0°30'44	max. Earth dist.	-5536 Nov 26 j 01:44	25° <b>≏</b> 09'29	6.08280 AU
max. Earth dist.	-5541 Jun 21 j 03:50	15° <b>8</b> 41'28	6.35698 AU	desc. node	-5536 Nov 29 j 18:38	26° <b>ჲ</b> 02'07	
morning rise	-5541 Jul 05 j 02:03	18° <b>8</b> 45'01		morning rise	-5536 Dec 08 j 22:15	28° <b>≏</b> 11'31	
	-5541 Aug 30 j 13:58	0°Щ			-5536 Dec 16 j 16:06	0°M₊	
retrograde	-5541 Nov 02 j 15:00	5° <b>Ⅱ</b> 53'50			-5535 Mar 04 j 22:17	15°M	
opposition	-5540 Jan 01 j 14:11	1° <b>Ⅱ</b> 00′03	1°14'14	retrograde	-5535 Apr 18 j 15:16	17° <b>M</b> 59'52	
min. Earth dist.	-5540 Jan 02 j 08:34	0° <b>Ⅱ</b> 54'05	4.37662 AU		-5535 Jun 02 j 17:00	15°RM	
	-5540 Jan 09 j 08:08	30° <b>₹</b> 8		opposition	-5535 Jun 18 j 10:02	12°M59'21	-0°39'05
direct	-5540 Mar 03 j 21:16	25° <b>8</b> 56'50		min. Earth dist.	-5535 Jun 17 j 22:19	13°M03'13	4.04897 AU
	-5540 Apr 26 j 23:18	0°II		direct	-5535 Aug 16 j 05:52	8°M06'22	
evening set	-5540 Jul 09 j 15:49	13° <b>∏</b> 54'48			-5535 Oct 22 j 23:00	15°M	

•	omena of Jupiter fro					, .	ge 33
	ical year style is used: Th	-	in astronomical co				
evening set	-5535 Dec 18 j 04:17	27°M10'36		evening set	-5529 Jun 13 j 02:22	1/°022'23	
	-5535 Dec 30 j 01:41	0° <b>∡</b> ¹			5500 I 26:00 44	200 1 2150	0026125
	5525 D 21:00.22	00 71000	0040107	conjunction	-5529 Jun 26 j 08:44	20° <b>8</b> 16'59	0°36'35
conjunction	-5535 Dec 31 j 08:33	0° ₹ 18'22		minimum elong	-5529 Jun 26 j 08:41	20° <b>8</b> 16'58	0°36'50
minimum elong	-5535 Dec 31 j 08:29	0° ₹ 18'19	0°49'44	max. Earth dist.	-5529 Jun 25 j 12:03	20° <b>8</b> 05'37	6.36285 AU
max. Earth dist.	-5534 Jan 01 j 12:37	0° <b>₹</b> 35'03	6.02862 AU	morning rise	-5529 Jul 09 j 11:35	23° <b>8</b> 09'52	
morning rise	-5534 Jan 13 j 16:02	3° <b>₹</b> 27'54		. 1	-5529 Aug 10 j 23:01	0°II	
retrograde	-5534 May 25 j 18:33	23° <b>х</b> 41'43	1042140	retrograde	-5529 Nov 06 j 21:22	10° <b>Ⅱ</b> 17'00	1001146
opposition	-5534 Jul 24 j 22:13	18° <b>∡</b> 37'52		opposition	-5528 Jan 05 j 22:45	5° <b>Ⅱ</b> 23'36	1°21'46
min. Earth dist.	-5534 Jul 23 j 22:18		4.02496 AU	min. Earth dist.	-5528 Jan 06 j 18:10	5° <b>Ⅱ</b> 17'18	4.37851 AU
direct	-5534 Sep 21 j 00:58	13° <b>∡</b> ¹43'16		direct	-5528 Mar 08 j 06:40	0° <b>Ⅱ</b> 20'36	
. ,	-5533 Jan 11 j 00:38	0°る		evening set	-5528 Jul 14 j 00:56	18° <b>Ⅱ</b> 18'27	6 27040 ATT
evening set	-5533 Jan 23 j 17:49	2° <b>る</b> 57'21		max. Earth dist.	-5528 Jul 25 j 09:58	20°Щ48′37	6.37940 AU
conjunction	-5533 Feb 06 j 05:01	6° <b>る</b> 07'44	-1°21'30	conjunction	-5528 Jul 26 j 21:35	21° <b>Ⅱ</b> 08'18	1°12'15
minimum elong	-5533 Feb 06 j 04:59	6° <b>る</b> 07'42		minimum elong	-5528 Jul 26 j 21:32	21° <b>Ⅱ</b> 08'16	1°12'34
max. Earth dist.	-5533 Feb 07 j 23:15	6° <b>る</b> 32'38	6.03545 AU	morning rise	-5528 Aug 08 j 15:05	23° <b>II</b> 56'38	
morning rise	-5533 Feb 19 j 19:23	9° <b>る</b> 19'37		C	-5528 Sep 06 j 02:33	0° <b>©</b>	
retrograde	-5533 Jun 30 j 22:40	29° <b>පි</b> 21'35		retrograde	-5528 Dec 07 i 05:09	11° <b>©</b> 03'38	
min. Earth dist.	-5533 Aug 28 j 10:37	24° <b>る</b> 26'05	4.06334 AU	opposition	-5527 Feb 05 j 17:45	6°9512'05	2°00'36
opposition	-5533 Aug 29 j 15:04	24° <b>ප</b> 16'22		min. Earth dist.	-5527 Feb 06 j 22:01	6°903'03	4.36870 AU
direct	-5533 Oct 26 j 18:10	19° <b>る</b> 18'36		direct	-5527 Apr 09 j 09:14	1°911'11	
	-5532 Jan 22 j 10:56	0° <b>≈</b>		evening set	-5527 Aug 14 j 05:47	19° <b>5</b> 09'49	
evening set	-5532 Feb 29 j 18:29	8° <b>≈</b> 27'00		max. Earth dist.	-5527 Aug 25 j 02:47	21° <b>©</b> 35'20	6.34272 AU
							***************************************
conjunction	-5532 Mar 14 j 11:04	11° <b>≈</b> 36'43	-1°23'02	conjunction	-5527 Aug 26 j 19:23	21°958'03	1°27'26
minimum elong	-5532 Mar 14 j 11:07	11° <b>≈</b> 36'45	1°23'17	minimum elong	-5527 Aug 26 j 19:23	21° <b>9</b> 58'03	1°27'44
max. Earth dist.	-5532 Mar 16 j 04:03	12° <b>≈</b> 00′25	6.10097 AU	morning rise	-5527 Sep 08 j 06:57	24° <b>©</b> 45'21	
morning rise	-5532 Mar 28 j 05:09	14° <b>≈</b> 47′01			-5527 Oct 02 j 10:50	$0^{\circ}\Omega$	
	-5532 Mar 29 j 03:50	15° <b>≈</b>		retrograde	-5526 Jan 08 j 12:38	12° <b>Ω</b> 16′20	
	-5532 Jun 12 j 19:24	0° <b>)</b> €		opposition	-5526 Mar 10 j 12:00	7° <b>Ω</b> 24'39	2°05'35
retrograde	-5532 Aug 03 j 13:49	4° <b>)</b> €04'10		min. Earth dist.	-5526 Mar 11 j 15:34	7° <b>Ω</b> 15'53	4.30824 AU
	-5532 Sep 24 j 13:44	30° <b>R</b> ≈		direct	-5526 May 11 j 17:02	2° <b>£</b> 26′32	
opposition	-5532 Oct 01 j 21:53	29° <b>≈</b> 00'17	-1°47'02		-5526 Aug 20 j 00:50	15° <b>Ω</b>	
min. Earth dist.	-5532 Oct 01 j 00:45	29° <b>≈</b> 07'30	4.14876 AU	evening set	-5526 Sep 14 j 10:39	20° <b>£</b> 35′21	
direct	-5532 Nov 29 j 22:21	23° <b>≈</b> 59'11					
	-5531 Feb 02 j 03:27	0° <b>∀</b>		conjunction	-5526 Sep 26 j 22:14	23° <b>Ω</b> 25'49	1°17'20
evening set	-5531 Apr 06 j 01:28	12° <b>)</b> 48′35		minimum elong	-5526 Sep 26 j 22:17	23° <b>Ω</b> 25'51	1°17'33
				max. Earth dist.	-5526 Sep 25 j 13:34	23° <b>Ω</b> 07′10	6.26320 AU
conjunction	-5531 Apr 19 j 19:45	15° <b>¥</b> 54'48	-0°55'15	morning rise	-5526 Oct 09 j 09:10	26° <b>Ω</b> 16′12	
minimum elong	-5531 Apr 19 j 19:49	15° <b>¥</b> 54'51	0°55'21		-5526 Oct 26 j 01:35	o° <b>m</b> y	
max. Earth dist.	-5531 Apr 20 j 21:11	16° <b>∺</b> 09'10	6.19962 AU	retrograde	-5525 Feb 11 j 10:43	14° <b>m</b> 30'02	
morning rise	-5531 May 03 j 13:19	19° <b>)</b> €00'31		opposition	-5525 Apr 13 j 14:58	9° <b>™</b> 36′27	1°32'41
	-5531 Jun 25 j 13:26	$0^{\circ}$ Y		min. Earth dist.	-5525 Apr 14 j 10:19	9° <b>m</b> 30'16	4.21430 AU
retrograde	-5531 Sep 05 j 09:02	7° <b>Y</b> ′20'42		direct	-5525 Jun 13 j 20:44	4° <b>m</b> 41'13	
opposition	-5531 Nov 03 j 17:36	2° <b>Y</b> 20'08	-0°50'18	evening set	-5525 Oct 16 j 10:13	23° My 07'05	
min. Earth dist.	-5531 Nov 03 j 08:21	2° <b>Y</b> 23'15	4.25032 AU	max. Earth dist.	-5525 Oct 28 j 07:47	25° <b>m</b> 53'06	6.16353 AU
	-5531 Nov 21 j 19:04	30° <b>₹</b>					
direct	-5530 Jan 02 j 22:51	27° <b>¥</b> 16′52		conjunction	-5525 Oct 29 j 00:53	26° Mp 03'04	0°43'00
	-5530 Feb 14 j 14:42	0° <b>Υ</b>		minimum elong	-5525 Oct 29 j 00:56	26° Mp 03'06	0°43'02
evening set	-5530 May 10 j 21:02	15° <b>Ƴ</b> 42'54		morning rise	-5525 Nov 10 j 17:01	28° <b>m</b> 59'57	
					-5525 Nov 15 j 01:02	0∘ <b>⊽</b>	
conjunction	-5530 May 24 j 11:30	18° <b>Ƴ</b> 43'34		retrograde	-5524 Mar 17 j 23:30	18° <b>≏</b> 06'12	
minimum elong	-5530 May 24 j 11:31	18° <b>Ƴ</b> 43'35	0°10'15	opposition	-5524 May 18 j 02:44	13° <b>ഫ</b> 09'06	0°27'51
behind sun begin	-5530 May 24 j 05:02	18° <b>Y</b> ′40′00		min. Earth dist.	-5524 May 18 j 05:38	13° <b>ഫ</b> 08'10	4.11543 AU
behind sun end	-5530 May 24 j 18:01	18° <b>Y</b> 47'10		direct	-5524 Jul 17 j 00:23	8° <b>≏</b> 15'48	
max. Earth dist.	-5530 May 24 j 12:11	18° <b>Ƴ</b> 43'56	6.29700 AU	desc. node	-5524 Oct 09 j 16:15	18° <b>≏</b> 16'42	
morning rise	-5530 Jun 06 j 23:38	21° <b>Y</b> '42'54		evening set	-5524 Nov 17 j 21:16	27° <b>≏</b> 02'21	
	-5530 Jul 16 j 12:51	0°8					
asc. node	-5530 Aug 17 j 09:30	5° <b>8</b> 24'31		conjunction	-5524 Nov 30 j 18:49	0° <b>M</b> ∙05'08	
retrograde	-5530 Oct 06 j 23:01	9° <b>8</b> 15'42		minimum elong	-5524 Nov 30 j 18:49	0° <b>M</b> ₀05'08	0°06'59
opposition	-5530 Dec 05 j 12:37	4° <b>8</b> 19'02	0°19'32	behind sun begin	-5524 Nov 30 j 11:18	0° <b>M</b> ₀00'42	
min. Earth dist.	-5530 Dec 05 j 19:34	4° <b>8</b> 16'44	4.33516 AU	behind sun end	-5524 Dec 01 j 02:20	0° <b>M</b> ₀09'34	
	-5529 Jan 14 j 00:19	30° <b>₹</b> Υ			-5524 Nov 30 j 10:06	0° <b>M</b>	
direct	-5529 Feb 05 j 00:42	29° <b>Y</b> 15′07		max. Earth dist.	-5524 Dec 01 j 02:40	0° <b>™</b> 09'46	6.07500 AU
	-5529 Feb 27 j 05:15	0°8		morning rise	-5524 Dec 13 j 18:59	3°M09'31	
	-5529 Jun 02 j 03:03	15° <b>8</b>			-5523 Feb 06 j 11:24	15° <b>™</b>	

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5523 in astronomical counting style is the year 5524 BCE in historical counting style. opposition -5523 Apr 23 j 19:42 23°ML01'56 -5518 Dec 09 i 20:50 8°**8**45'31 0°28'57 retrograde 18°ML00'53 -0°49'27 -5523 Jun 23 j 11:56 min. Earth dist. -5518 Dec 10 j 04:50 8°**8**42'53 4.34115 AU opposition -5523 Jun 22 j 22:46 18°M05'14 4.04519 AU -5517 Feb 09 j 10:49 3°841'41 min. Earth dist. direct -5523 Jul 18 j 03:17 15°8 15°RM -5517 May 16 j 05:58 -5523 Aug 21 j 05:36 -5517 Jun 17 j 14:20 21°**8**48'04 direct 13°ML07'46 evening set -5523 Sep 23 j 23:04 15°M -5523 Dec 13 j 17:24 24°**8**42'00 0°42'25 0°**∡** conjunction -5517 Jun 30 j 19:17 -5517 Jun 30 j 19:13 0°42'40 evening set -5523 Dec 23 j 03:43 2°**∡**12'45 minimum elong 24°**8**41'58 -5517 Jun 29 j 19:26 max. Earth dist. 24°**8**28'53 6.36575 AU -5517 Jul 13 j 20:57 conjunction -5522 Jan 05 j 08:46 5°**∡**120'50 -0°55'19 morning rise 27°**8**34'15 minimum elong -5522 Jan 05 j 08:42 5°×20'48 0°55'36 -5517 Jul 25 j 01:55  $0^{\circ}\Pi$ -5517 Nov 11 j 06:38  $14^{\circ} \Pi 40'38$ max. Earth dist. -5522 Jan 06 j 14:24 5°**∡**³38′27 6.02885 AU retrograde -5516 Jan 10 j 08:15 morning rise -5522 Jan 18 j 17:22 8°**х**³30'46 opposition 9°**Ⅱ**47'37 1°28'50 retrograde -5522 May 30 j 17:46 28°**х¹**43'56 min. Earth dist. -5516 Jan 11 j 05:51 9°**Ⅱ**40'37 4.37839 AU opposition -5522 Jul 29 j 21:22 23°**₹**39'42 -1°49'50 direct -5516 Mar 12 j 18:36 4°**Ⅱ**44'51 min. Earth dist. -5522 Jul 28 j 19:34 23°**∡**¹48'25 4.02947 AU evening set -5516 Jul 18 j 10:02 22°II42'46 direct -5522 Sep 25 j 22:31 18°**∡**¹44'41 max. Earth dist. -5516 Jul 29 j 17:22 25°**Ⅱ**12'14 6.37610 AU -5522 Dec 24 j 10:53 0°る evening set -5521 Jan 28 j 19:21 7°る57'53 conjunction -5516 Jul 31 j 05:38 25°**Ⅲ**32'17 1°15'43 minimum elong -5516 Jul 31 j 05:35 25°**Ⅲ**32'15 1°16'02 conjunction -5521 Feb 11 j 07:24 11°る08'13 -1°23'36 morning rise -5516 Aug 12 j 22:02 28°**Ⅲ**20′18 minimum elong -5521 Feb 11 i 07:22 11°る08'12 1°23'56 -5516 Aug 20 j 12:29 0ಂತಾ max. Earth dist. -5521 Feb 13 i 02:11 11°**る**33'24 6.04356 AU retrograde -5516 Dec 11 i 15:07 15°929'35 morning rise -5521 Feb 24 j 22:17 14°る19'56 opposition -5515 Feb 10 i 05:57 10°938'05 2°03'27 -5521 May 13 j 11:42 0°≈ min. Earth dist. -5515 Feb 11 j 09:26 10°9529'18 4.36272 AU -5521 Jul 05 j 18:55 4°≈16'37 -5515 Apr 13 j 19:51 retrograde direct 5°937'33 -5521 Aug 28 j 10:41 30°RZ -5515 Aug 18 j 14:11 23°937'06 evening set -5521 Sep 02 j 06:39 29°る20'35 4.07411 AU -5515 Aug 29 j 12:00 26°903'25 min. Earth dist. max. Earth dist. 6.33447 AU -5521 Sep 03 j 09:29 29°る11'25 -2°08'38 opposition -5521 Oct 31 j 15:58 -5515 Aug 31 j 03:08 direct 24°る13'07 conjunction 26°9525'22 1°27'33 -5520 Jan 01 j 11:23 -5515 Aug 31 j 03:08 0°≈ 26°925'22 minimum elong 1°27'50 -5515 Sep 12 j 14:11 29°9512'48 -5520 Mar 05 j 18:31 13°≈19'08 evening set morning rise -5520 Mar 13 j 02:02 15°**≈** -5515 Sep 16 j 03:04 0 $^{\circ}\Omega$ -5515 Dec 09 j 14:24 15°€ -5520 Mar 19 j 11:38 16°≈28'31 -1°20'46 -5514 Jan 13 j 04:10 conjunction retrograde 16°**Ω**48'22 -5520 Mar 19 j 11:41 -5514 Feb 17 j 00:29 minimum elong 16°≈28'33 1°21'01 15°Ŗ**Ω** -5520 Mar 21 j 03:34 max. Earth dist. 16°≈51'32 6.11346 AU opposition -5514 Mar 15 j 04:07 11°**Ω**56'32 2°03'12 morning rise -5520 Apr 02 j 05:54 19°**≈**38′20 min. Earth dist. -5514 Mar 16 j 07:31 11°**Ω**47'50 4.29804 AU -5520 May 20 j 14:51 0°**)**€ direct -5514 May 16 j 07:30 6°£058'51 retrograde -5520 Aug 08 j 03:18 8°**)**47'58 -5514 Aug 01 j 14:50 15°€ -5520 Oct 06 j 11:11 3°\(\)44'28 -1°40'54 evening set -5514 Sep 18 j 20:04 25°**Ω**09'06 opposition 3°**¥**51′21 4.16173 AU min. Earth dist. -5520 Oct 05 j 15:00 max. Earth dist. -5514 Sep 29 j 23:44 27°**Ω**41'48 6.25178 AU -5520 Nov 06 j 15:55 30°R≈ -5520 Dec 04 j 14:12 28°≈43'00 -5514 Oct 01 j 07:42 28°**Ω**00'05 1°13'53 direct conjunction -5519 Jan 01 j 21:29 0°**)**€ -5514 Oct 01 j 07:45 28°**Ω**00′07 minimum elong 1°14'05 evening set -5519 Apr 10 j 21:39 17°**¥**29'37 -5514 Oct 10 i 01:25 0° m morning rise -5514 Oct 13 i 19:10 0° m 51'09 conjunction -5519 Apr 24 i 15:38 20°\(\)35'14 -0°49'48 retrograde -5513 Feb 16 i 05:36 19° m 11'13 minimum elong -5519 Apr 24 i 15:42 20°**)** 35'17 0°49'52 opposition -5513 Apr 18 j 11:10 14° m 17'10 1°25'16 max. Earth dist. -5519 Apr 25 i 12:21 20°¥46'55 6.21211 AU min. Earth dist. -5513 Apr 19 j 03:48 14° mb 11'51 4.20217 AU -5519 May 08 j 08:54 23°**)** € 40′15 direct -5513 Jun 18 j 12:26 9° m 22'16 morning rise -5519 Jun 06 j 13:31  $0^{\circ}\Upsilon$ -5513 Oct 20 j 22:50 27° m 50'10 evening set -5519 Sep 09 j 19:32 11°Y53'52 -5513 Oct 30 j 05:54 0∘**⊽** retrograde opposition -5519 Nov 08 j 03:23 6°Υ53'49 -0°41'01 min. Earth dist. -5519 Nov 07 j 21:17 6°**Υ**55'52 4.26119 AU conjunction -5513 Nov 02 j 14:22 0°**ჲ**47'01 0°36'43 -5518 Jan 07 j 13:33 1°Y50'21 minimum elong -5513 Nov 02 j 14:25 0°**₽**47'02 0°36'44 direct -5518 May 15 j 12:41 20°**Y**14'19 max. Earth dist. -5513 Nov 02 j 01:25 0°**£**39'27 6.15184 AU evening set -5513 Nov 15 j 07:18 3°**£**44'48 morning rise -5518 May 29 j 02:30 23°Y14'20 -0°03'43 -5512 Mar 23 j 00:52 conjunction retrograde 22°**£**57'32 -5518 May 29 j 02:28 23°**Y**14′19 0°03'37 0°17'19 minimum elong opposition -5512 May 23 j 02:19 17°**£**59'57 23°**Y**09'49 behind sun begin -5518 May 28 j 18:18 min. Earth dist. -5512 May 23 j 03:54 17°**£**59'26 4.10490 AU behind sun end -5518 May 29 j 10:39 23°Y18'50 direct -5512 Jul 21 j 20:50 13°**2**06'49 max. Earth dist. -5518 May 29 j 01:06 23°**Y**13'36 6.30562 AU desc. node -5512 Aug 20 j 03:22 14°**2**29′50 morning rise -5518 Jun 11 j 13:24 26°**Y**12'51 -5512 Nov 14 j 09:26 0°M asc. node -5518 Jun 28 j 06:48 29°**Y**50′22 evening set -5512 Nov 22 j 15:18 1°M55'43 -5518 Jun 29 j 00:56 0°8 -5518 Oct 11 j 05:23 13°**8**41'40 -5512 Dec 05 j 13:44 4°M59'18 -0°14'01 retrograde conjunction

Attention actronomi	ical year etyle is used. Th	a waar 5512 i	n actronomical cou	intina etula je tha vaar	5513 BCE in historical c	ounting ctyle	
minimum elong	-5512 Dec 05 j 13:43	4°M59'17		max. Earth dist.	-5506 Jun 02 j 13:51		6.31508 AU
behind sun begin	-5512 Dec 05 j 09:41	4°M56'54	0 14 11	max. Earth tist.	-5506 Jun 12 j 11:53	0° <b>8</b>	0.31308 AU
behind sun begin	•	5°ML01'40		mamina risa	,	0° <b>8</b> 49'12	
	-5512 Dec 05 j 17:45		( 0((52 AII	morning rise	-5506 Jun 16 j 05:17	15° <b>8</b>	
max. Earth dist.	-5512 Dec 05 j 23:24 -5512 Dec 18 j 15:13	5°M05'01 8°M04'35	6.06653 AU	. 1	-5506 Aug 30 j 14:25	_	
morning rise	,			retrograde	-5506 Oct 15 j 15:31	18° <b>႘</b> 13'49 15°ℝ <b>႘</b>	
. 1	-5511 Jan 18 j 01:09	15°M		•,•	-5506 Dec 01 j 03:09		0020124
retrograde	-5511 Apr 28 j 20:52	28°M01'27	0050127	opposition	-5506 Dec 14 j 07:43	13° <b>8</b> 18'09	0°38'24
opposition	-5511 Jun 28 j 12:16	22°M59'54		min. Earth dist.	-5506 Dec 14 j 17:56	13° <b>8</b> 14'47	4.34898 AU
min. Earth dist.	-5511 Jun 27 j 20:20	23°M05'11	4.03979 AU	direct	-5505 Feb 14 j 01:41	8° <b>8</b> 14'24	
direct	-5511 Aug 26 j 01:42	18°M06'39			-5505 Apr 26 j 09:12	15° <b>8</b>	
. ,	-5511 Nov 26 j 11:23	0° <b>∡</b> 7		evening set	-5505 Jun 22 j 03:36	26° <b>8</b> 18'51	6 27152 ATT
evening set	-5511 Dec 28 j 03:03	7° <b>∡</b> 13'35		max. Earth dist.	-5505 Jul 04 j 07:17	28° <b>8</b> 58'47	6.37152 AU
	-5510 Jan 10 j 09:12	100.700110	1900146		5505 I-J 05:07:21	29° <b>8</b> 12'01	0°48'07
conjunction	•	10° <b>₹</b> '22'12 10° <b>₹'</b> 22'10		conjunction minimum elong	-5505 Jul 05 j 07:21 -5505 Jul 05 j 07:17	29° <b>8</b> 11'59	
minimum elong max. Earth dist.	-5510 Jan 10 j 09:07 -5510 Jan 11 j 17:23	10 <b>x</b> · 22 10 10° <b>x</b> 41'20	6.02685 AU	minimum elong	3	0° <b>Ⅱ</b>	0 48 22
	-		0.02083 AU	mamina risa	-5505 Jul 08 j 22:34	0 П 2°П03'25	
morning rise	-5510 Jan 23 j 18:40	13° <b>∡</b> ³32'37		morning rise	-5505 Jul 18 j 07:27		
. 1	-5510 Apr 15 j 18:10	0°る		retrograde	-5505 Nov 15 j 14:19	19° <b>Ⅱ</b> 08'06	1025126
retrograde	-5510 Jun 04 j 19:11	3°る46'08		opposition	-5504 Jan 14 j 19:03	14° <b>I</b> I15'20	1°35'26
•,.•	-5510 Jul 25 j 02:00	30°₹ <b>⋌</b> 7	1055112	min. Earth dist.	-5504 Jan 15 j 16:27	14° <b>Ⅱ</b> 08'26	4.38208 AU
opposition	-5510 Aug 03 j 20:17	28° 🖈 41'38		direct	-5504 Mar 17 j 06:21	9° <b>Ⅱ</b> 12'54	
min. Earth dist.	-5510 Aug 02 j 18:42		4.03113 AU	evening set	-5504 Jul 22 j 19:45	27° <b>I</b> 109'16	6 0 mm 2 2 4 X X
direct	-5510 Sep 30 j 21:36	23° <b>∡</b> ¹46′13		max. Earth dist.	-5504 Aug 03 j 00:36	29° <b>Ⅱ</b> 37'30	6.37733 AU
	-5510 Dec 03 j 17:01	0°る					
evening set	-5509 Feb 02 j 21:35	12° <b>る</b> 59'51		conjunction	-5504 Aug 04 j 13:58	29° <b>Ⅱ</b> 58'10	1°18'45
		_		minimum elong	-5504 Aug 04 j 13:55	29° <b>∏</b> 58′09	1°19'05
conjunction	-5509 Feb 16 j 10:33	16° <b>ට</b> 10'20			-5504 Aug 04 j 17:16	0ಂತಾ	
minimum elong	-5509 Feb 16 j 10:32	16° <b>පි</b> 10'20		morning rise	-5504 Aug 17 j 05:22	2°545'42	
max. Earth dist.	-5509 Feb 18 j 06:21	16° <b>පි</b> 36'03	6.04857 AU	retrograde	-5504 Dec 16 j 02:12	19° <b>©</b> 55'46	
morning rise	-5509 Mar 02 j 02:09	19° <b>පි</b> 22'06		opposition	-5503 Feb 14 j 18:21	15° <b>©</b> 04'17	2°05'32
	-5509 Apr 19 j 19:36	0° <b>≈</b>		min. Earth dist.	-5503 Feb 15 j 22:51	14° <b>©</b> 55'12	4.36143 AU
retrograde	-5509 Jul 10 j 15:56	9° <b>≈</b> 14'34		direct	-5503 Apr 18 j 09:28	10° <b>©</b> 04'06	
min. Earth dist.	-5509 Sep 07 j 01:53	4° <b>≈</b> 18'39	4.08202 AU	evening set	-5503 Aug 22 j 21:18	28° <b>©</b> 02'41	
opposition	-5509 Sep 08 j 04:41	4° <b>≈</b> 09'30	-2°07'23		-5503 Aug 31 j 15:09	$0^{\circ}\Omega$	
	-5509 Oct 14 j 13:01	30°Ŗる		max. Earth dist.	-5503 Sep 02 j 19:03	0° <b>Ω</b> 29'08	6.33062 AU
direct	-5509 Nov 05 j 12:10	29° <b>る</b> 10'45					
	-3309 NOV 03 J 12.10						
	-5509 Nov 27 j 16:03	0° <b>≈</b>		conjunction	-5503 Sep 04 j 09:46	0° <b>Ω</b> 50'52	1°27'08
				conjunction minimum elong	-5503 Sep 04 j 09:46 -5503 Sep 04 j 09:46	0° <b>Ω</b> 50'52 0° <b>Ω</b> 50'52	
evening set	-5509 Nov 27 j 16:03	0° <b>≈</b>					
evening set	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33	0° <b>≈</b> 15° <b>≈</b>		minimum elong	-5503 Sep 04 j 09:46	0°Ω50'52 3°Ω38'19 15°Ω	
evening set	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33	0° <b>≈</b> 15° <b>≈</b>	-1°17'54	minimum elong	-5503 Sep 04 j 09:46 -5503 Sep 16 j 20:26	0° <b>Ω</b> 50'52 3° <b>Ω</b> 38'19	
-	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23	0°≈ 15°≈ 18°≈15'34	-1°17'54 1°18'07	minimum elong morning rise	-5503 Sep 04 j 09:46 -5503 Sep 16 j 20:26 -5503 Nov 11 j 16:51	0°Ω50'52 3°Ω38'19 15°Ω	
conjunction	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23 -5508 Mar 24 j 13:50	0°≈ 15°≈ 18°≈15'34 21°≈24'42		minimum elong morning rise retrograde	-5503 Sep 04 j 09:46 -5503 Sep 16 j 20:26 -5503 Nov 11 j 16:51 -5502 Jan 17 j 15:59	0° Ω50'52 3° Ω38'19 15° Ω 21° Ω17'04	1°27'26
conjunction minimum elong	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23 -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54	0°≈ 15°≈ 18°≈15'34 21°≈24'42 21°≈24'44	1°18'07	minimum elong morning rise retrograde opposition	-5503 Sep 04 j 09:46 -5503 Sep 16 j 20:26 -5503 Nov 11 j 16:51 -5502 Jan 17 j 15:59 -5502 Mar 19 j 18:48	0° Ω50'52 3° Ω38'19 15° Ω 21° Ω17'04 16° Ω24'58	1°27'26 2°00'03
conjunction minimum elong max. Earth dist.	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23 -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28	0°≈ 15°≈ 18°≈15'34 21°≈24'42 21°≈24'44 21°≈45'45	1°18'07	minimum elong morning rise retrograde opposition	-5503 Sep 04 j 09:46 -5503 Sep 16 j 20:26 -5503 Nov 11 j 16:51 -5502 Jan 17 j 15:59 -5502 Mar 19 j 18:48 -5502 Mar 20 j 20:24	0° \$\Omega 50'52 3° \$\Omega 38'19 15° \$\Omega 21^\circ \$\Omega 17'04 16° \$\Omega 24'58 16° \$\Omega 16'50	1°27'26 2°00'03
conjunction minimum elong max. Earth dist.	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23 -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28 -5508 Apr 07 j 08:26	0°≈ 15°≈ 18°≈15'34 21°≈24'42 21°≈24'44 21°≈45'45 24°≈34'10 0° ₩ 13° ₩37'13	1°18'07 6.12347 AU	minimum elong morning rise retrograde opposition min. Earth dist.	-5503 Sep 04 j 09:46 -5503 Sep 16 j 20:26 -5503 Nov 11 j 16:51 -5502 Jan 17 j 15:59 -5502 Mar 19 j 18:48 -5502 Mar 20 j 20:24 -5502 Mar 31 j 02:22	0° Ω50'52 3° Ω38'19 15° Ω 21° Ω17'04 16° Ω24'58 16° Ω16'50 15° RΩ	1°27'26 2°00'03
conjunction minimum elong max. Earth dist. morning rise	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23 -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28 -5508 Apr 07 j 08:26 -5508 May 01 j 17:38	0°≈ 15°≈ 18°≈15'34 21°≈24'42 21°≈24'44 21°≈45'45 24°≈34'10 0° ₩ 13° ₩37'13	1°18'07	minimum elong morning rise retrograde opposition min. Earth dist.	-5503 Sep 04 j 09:46 -5503 Sep 16 j 20:26 -5503 Nov 11 j 16:51 -5502 Jan 17 j 15:59 -5502 Mar 19 j 18:48 -5502 Mar 20 j 20:24 -5502 May 31 j 02:22 -5502 May 20 j 19:19	0° \$\Omega 50'52 \\ 3° \$\Omega 38'19 \\ 15° \$\Omega \\ 21° \$\Omega 17'04 \\ 16° \$\Omega 24'58 \\ 16° \$\Omega 16'50 \\ 15° \$\RA \\ 11° \$\Omega 27'38 \end{align*}	1°27'26 2°00'03
conjunction minimum elong max. Earth dist. morning rise retrograde	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23 -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28 -5508 Apr 07 j 08:26 -5508 May 01 j 17:38 -5508 Aug 12 j 19:16	0°≈ 15°≈ 18°≈15'34 21°≈24'42 21°≈24'44 21°≈45'45 24°≈34'10 0° ₩ 13° ₩37'13	1°18'07 6.12347 AU 4.17264 AU	minimum elong morning rise retrograde opposition min. Earth dist. direct	-5503 Sep 04 j 09:46 -5503 Sep 16 j 20:26 -5503 Nov 11 j 16:51 -5502 Jan 17 j 15:59 -5502 Mar 19 j 18:48 -5502 Mar 20 j 20:24 -5502 Mar 31 j 02:22 -5502 May 20 j 19:19 -5502 Jul 09 j 08:15	0° Ω50'52 3° Ω38'19 15° Ω 21° Ω17'04 16° Ω24'58 16° Ω16'50 15° RΩ 11° Ω27'38 15° Ω	1°27'26 2°00'03
conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist.	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23 -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28 -5508 Apr 07 j 08:26 -5508 May 01 j 17:38 -5508 Aug 12 j 19:16 -5508 Oct 10 j 08:14	0°≈ 15°≈ 18°≈15'34  21°≈24'42 21°≈24'44 21°≈45'45 24°≈34'10 0° ₩ 13° ₩ 37'13 8° ₩ 40'14	1°18'07 6.12347 AU 4.17264 AU	minimum elong morning rise retrograde opposition min. Earth dist. direct	-5503 Sep 04 j 09:46 -5503 Sep 16 j 20:26 -5503 Nov 11 j 16:51 -5502 Jan 17 j 15:59 -5502 Mar 19 j 18:48 -5502 Mar 20 j 20:24 -5502 May 20 j 19:19 -5502 Jul 09 j 08:15 -5502 Sep 23 j 03:17	0° Ω50'52 3° Ω38'19 15° Ω 21° Ω17'04 16° Ω24'58 16° Ω16'50 15° RΩ 11° Ω27'38 15° Ω 29° Ω37'57	1°27'26 2°00'03
conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23 -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28 -5508 Apr 07 j 08:26 -5508 May 01 j 17:38 -5508 Aug 12 j 19:16 -5508 Oct 10 j 08:14 -5508 Oct 11 j 02:17	0°≈ 15°≈ 18°≈15'34  21°≈24'42 21°≈24'44 21°≈45'45 24°≈34'10 0° € 13° € 37'13 8° € 40'14 8° € 34'05	1°18'07 6.12347 AU 4.17264 AU	minimum elong morning rise retrograde opposition min. Earth dist. direct evening set	-5503 Sep 04 j 09:46 -5503 Sep 16 j 20:26 -5503 Nov 11 j 16:51 -5502 Jan 17 j 15:59 -5502 Mar 19 j 18:48 -5502 Mar 20 j 20:24 -5502 Mar 31 j 02:22 -5502 May 20 j 19:19 -5502 Jul 09 j 08:15 -5502 Sep 23 j 03:17 -5502 Sep 24 j 18:02	0° \$\Omega 50'52 \\ 3° \$\Omega 38'19 \\ 15° \$\Omega 21' \Omega 17'04 \\ 16° \$\Omega 24'58 \\ 16° \$\Omega 16'50 \\ 15° \$\Omega \alpha \\ 11° \$\Omega 27'38 \\ 15° \$\Omega \\ 29° \$\Omega 37'57 \\ 0° \$\Omega \\ 0° \$\Omega \\	1°27'26 2°00'03 4.29180 AU
conjunction minimum elong max. Earth dist. morning rise  retrograde min. Earth dist. opposition direct	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23 -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28 -5508 Apr 07 j 08:26 -5508 May 01 j 17:38 -5508 Oct 10 j 08:14 -5508 Oct 11 j 02:17 -5508 Dec 09 j 09:35	0°≈ 15°≈ 18°≈15'34  21°≈24'42 21°≈24'44 21°≈45'45 24°≈34'10 0° ₩ 13° ₩ 37'13 8° ₩ 40'14 8° ₩ 34'05 3° ₩ 32'14	1°18'07 6.12347 AU 4.17264 AU	minimum elong morning rise retrograde opposition min. Earth dist. direct evening set	-5503 Sep 04 j 09:46 -5503 Sep 16 j 20:26 -5503 Nov 11 j 16:51 -5502 Jan 17 j 15:59 -5502 Mar 19 j 18:48 -5502 Mar 20 j 20:24 -5502 Mar 31 j 02:22 -5502 May 20 j 19:19 -5502 Jul 09 j 08:15 -5502 Sep 23 j 03:17 -5502 Sep 24 j 18:02	0° \$\Omega 50'52 \\ 3° \$\Omega 38'19 \\ 15° \$\Omega 21' \Omega 17'04 \\ 16° \$\Omega 24'58 \\ 16° \$\Omega 16'50 \\ 15° \$\Omega \alpha \\ 11° \$\Omega 27'38 \\ 15° \$\Omega \\ 29° \$\Omega 37'57 \\ 0° \$\Omega \\ 0° \$\Omega \\	1°27'26 2°00'03 4.29180 AU
conjunction minimum elong max. Earth dist. morning rise  retrograde min. Earth dist. opposition direct	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23 -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28 -5508 Apr 07 j 08:26 -5508 May 01 j 17:38 -5508 Oct 10 j 08:14 -5508 Oct 11 j 02:17 -5508 Dec 09 j 09:35	0°≈ 15°≈ 18°≈15'34  21°≈24'42 21°≈24'44 21°≈45'45 24°≈34'10 0° ₩ 13° ₩ 37'13 8° ₩ 40'14 8° ₩ 34'05 3° ₩ 32'14	1°18'07 6.12347 AU 4.17264 AU -1°34'00	minimum elong morning rise  retrograde opposition min. Earth dist.  direct evening set max. Earth dist.	-5503 Sep 04 j 09:46 -5503 Sep 16 j 20:26 -5503 Nov 11 j 16:51 -5502 Jan 17 j 15:59 -5502 Mar 19 j 18:48 -5502 Mar 20 j 20:24 -5502 Mar 31 j 02:22 -5502 May 20 j 19:19 -5502 Jul 09 j 08:15 -5502 Sep 23 j 03:17 -5502 Sep 24 j 18:02 -5502 Oct 04 j 09:29	0° \$\Omega 50'52 \\ 3° \$\Omega 38'19 \\ 15° \$\Omega 21' \Omega 17'04 \\ 16° \$\Omega 24'58 \\ 16° \$\Omega 16'50 \\ 15° \$\Omega \\ 11° \$\Omega 27'38 \\ 15° \$\Omega \\ 29° \$\Omega 37'57 \\ 0° \$\Omega \\ 2° \$\Omega 12'22 \\	1°27'26 2°00'03 4.29180 AU 6.24372 AU
conjunction minimum elong max. Earth dist. morning rise  retrograde min. Earth dist. opposition direct evening set	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23 -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28 -5508 Apr 07 j 08:26 -5508 May 01 j 17:38 -5508 Oct 10 j 08:14 -5508 Oct 11 j 02:17 -5508 Dec 09 j 09:35 -5507 Apr 15 j 20:04	0°≈ 15°≈ 18°≈15'34  21°≈24'42 21°≈24'44 21°≈45'45 24°≈34'10 0° ₩ 13° ₩37'13 8° ₩40'14 8° ₩34'05 3° ₩32'14 22° ₩16'47	1°18'07 6.12347 AU 4.17264 AU -1°34'00	minimum elong morning rise  retrograde opposition min. Earth dist.  direct evening set max. Earth dist.  conjunction	-5503 Sep 04 j 09:46 -5503 Sep 16 j 20:26 -5503 Nov 11 j 16:51 -5502 Jan 17 j 15:59 -5502 Mar 19 j 18:48 -5502 Mar 20 j 20:24 -5502 Mar 31 j 02:22 -5502 May 20 j 19:19 -5502 Jul 09 j 08:15 -5502 Sep 23 j 03:17 -5502 Sep 24 j 18:02 -5502 Oct 04 j 09:29	0° Ω 50'52 3° Ω 38'19 15° Ω 21° Ω 17'04 16° Ω 24'58 16° Ω 16'50 15° R Ω 11° Ω 27'38 15° Ω 29° Ω 37'57 0° TΩ 2° TΩ 12'22	1°27'26 2°00'03 4.29180 AU 6.24372 AU 1°10'01
conjunction minimum elong max. Earth dist. morning rise  retrograde min. Earth dist. opposition direct evening set  conjunction	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23 -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28 -5508 Apr 07 j 08:26 -5508 Aug 12 j 19:16 -5508 Oct 10 j 08:14 -5508 Oct 11 j 02:17 -5508 Dec 09 j 09:35 -5507 Apr 29 j 14:02	0°≈ 15°≈ 18°≈15'34  21°≈24'42 21°≈24'44 21°≈45'45 24°≈34'10 0° ₩ 13° ₩37'13 8° ₩40'14 8° ₩34'05 3° ₩32'14 22° ₩16'47	1°18'07 6.12347 AU 4.17264 AU -1°34'00 -0°43'53	minimum elong morning rise  retrograde opposition min. Earth dist.  direct evening set max. Earth dist.  conjunction minimum elong	-5503 Sep 04 j 09:46 -5503 Sep 16 j 20:26 -5503 Nov 11 j 16:51 -5502 Jan 17 j 15:59 -5502 Mar 19 j 18:48 -5502 Mar 20 j 20:24 -5502 Mar 31 j 02:22 -5502 May 20 j 19:19 -5502 Jul 09 j 08:15 -5502 Sep 23 j 03:17 -5502 Sep 24 j 18:02 -5502 Oct 04 j 09:29 -5502 Oct 05 j 15:04 -5502 Oct 05 j 15:08	0° \$\Omega 50'52 \\ 3° \$\Omega 38'19 \\ 15° \$\Omega 21' \Omega 17'04 \\ 16° \$\Omega 24'58 \\ 16° \$\Omega 16'50 \\ 15° \$\Omega \\ 11° \$\Omega 27'38 \\ 15° \$\Omega \\ 29° \$\Omega 37'57 \\ 0° \$\Omega \\ 2° \$\Omega 12'22 \\ 2° \$\Omega 29'20 \\ 2° \$\Omega 29'20 \\ 2° \$\Omega 29'22 \\ 2° \$\Omega 29'23 \\ 2° \$\O	1°27'26 2°00'03 4.29180 AU 6.24372 AU 1°10'01
conjunction minimum elong max. Earth dist. morning rise  retrograde min. Earth dist. opposition direct evening set  conjunction minimum elong	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23 -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28 -5508 Apr 07 j 08:26 -5508 May 01 j 17:38 -5508 Oct 10 j 08:14 -5508 Oct 11 j 02:17 -5508 Dec 09 j 09:35 -5507 Apr 29 j 14:02 -5507 Apr 29 j 14:05	0°≈ 15°≈ 18°≈15'34  21°≈24'42 21°≈24'44 21°≈45'45 24°≈34'10 0° ₩ 13° ₩37'13 8° ₩40'14 8° ₩34'05 3° ₩32'14 22° ₩16'47  25° ₩21'54 25° ₩21'56	1°18'07 6.12347 AU 4.17264 AU -1°34'00 -0°43'53 0°43'56	minimum elong morning rise  retrograde opposition min. Earth dist.  direct evening set max. Earth dist.  conjunction minimum elong morning rise	-5503 Sep 04 j 09:46 -5503 Sep 16 j 20:26 -5503 Nov 11 j 16:51 -5502 Jan 17 j 15:59 -5502 Mar 19 j 18:48 -5502 Mar 20 j 20:24 -5502 Mar 31 j 02:22 -5502 May 20 j 19:19 -5502 Jul 09 j 08:15 -5502 Sep 23 j 03:17 -5502 Sep 24 j 18:02 -5502 Oct 04 j 09:29 -5502 Oct 05 j 15:04 -5502 Oct 05 j 15:08 -5502 Oct 18 j 02:50	0° \$\Omega 50'52 \\ 3° \$\Omega 38'19 \\ 15° \$\Omega 21' \Omega 17'04 \\ 16° \$\Omega 24'58 \\ 16° \$\Omega 16'50 \\ 15° \$\Omega \\ 11° \$\Omega 27'38 \\ 15° \$\Omega \\ 29° \$\Omega 37'57 \\ 0° \$\Omega \\ 2° \$\Omega 12'22 \\ 2° \$\Omega 29'20 \\ 2° \$\Omega 29'22 \\ 5° \$\Omega 20'53	1°27'26 2°00'03 4.29180 AU 6.24372 AU 1°10'01
conjunction minimum elong max. Earth dist. morning rise  retrograde min. Earth dist. opposition direct evening set  conjunction minimum elong max. Earth dist.	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23 -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28 -5508 Apr 07 j 08:26 -5508 May 01 j 17:38 -5508 Oct 10 j 08:14 -5508 Oct 10 j 08:14 -5508 Oct 11 j 02:17 -5508 Dec 09 j 09:35 -5507 Apr 15 j 20:04 -5507 Apr 29 j 14:02 -5507 Apr 29 j 14:05 -5507 Apr 30 j 09:19	0°≈ 15°≈ 18°≈15'34  21°≈24'42 21°≈24'44 21°≈45'45 24°≈34'10 0° ₩ 13° ₩37'13 8° ₩40'14 8° ₩34'05 3° ₩32'14 22° ₩16'47  25° ₩21'54 25° ₩21'54 25° ₩32'45	1°18'07 6.12347 AU 4.17264 AU -1°34'00 -0°43'53 0°43'56	minimum elong morning rise  retrograde opposition min. Earth dist.  direct evening set max. Earth dist.  conjunction minimum elong morning rise retrograde	-5503 Sep 04 j 09:46 -5503 Sep 16 j 20:26 -5503 Nov 11 j 16:51 -5502 Jan 17 j 15:59 -5502 Mar 19 j 18:48 -5502 Mar 20 j 20:24 -5502 Mar 31 j 02:22 -5502 May 20 j 19:19 -5502 Jul 09 j 08:15 -5502 Sep 23 j 03:17 -5502 Sep 24 j 18:02 -5502 Oct 04 j 09:29 -5502 Oct 05 j 15:04 -5502 Oct 05 j 15:08 -5502 Oct 18 j 02:50 -5501 Feb 20 j 23:34	0° \$\Omega 50'52 \\ 3° \$\Omega 38'19 \\ 15° \$\Omega 21' \Omega 17'04 \\ 16° \$\Omega 24'58 \\ 16° \$\Omega 16'50 \\ 15° \$\Omega \\ 11° \$\Omega 27'38 \\ 15° \$\Omega \\ 29° \$\Omega 37'57 \\ 0° \$\Omega \\ 2° \$\Omega 12'22 \\ 2° \$\Omega 29'20 \\ 2° \$\Omega 29'22 \\ 5° \$\Omega 20'53 \\ 23° \$\Omega 46'06	1°27'26  2°00'03  4.29180 AU  6.24372 AU  1°10'01  1°10'11
conjunction minimum elong max. Earth dist. morning rise  retrograde min. Earth dist. opposition direct evening set  conjunction minimum elong max. Earth dist.	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23 -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28 -5508 Apr 07 j 08:26 -5508 May 01 j 17:38 -5508 Aug 12 j 19:16 -5508 Oct 10 j 08:14 -5508 Oct 11 j 02:17 -5508 Dec 09 j 09:35 -5507 Apr 29 j 14:02 -5507 Apr 29 j 14:05 -5507 Apr 30 j 09:19 -5507 May 13 j 06:37	0°≈ 15°≈ 18°≈15'34  21°≈24'42 21°≈24'44 21°≈45'45 24°≈34'10 0° ₩ 13° ₩37'13 8° ₩40'14 8° ₩34'05 3° ₩32'14 22° ₩16'47  25° ₩21'54 25° ₩21'54 25° ₩32'45 28° ₩26'12	1°18'07 6.12347 AU 4.17264 AU -1°34'00 -0°43'53 0°43'56	minimum elong morning rise  retrograde opposition min. Earth dist.  direct  evening set  max. Earth dist.  conjunction minimum elong morning rise retrograde opposition	-5503 Sep 04j09:46 -5503 Sep 16j20:26 -5503 Nov 11j16:51 -5502 Jan 17j15:59 -5502 Mar 19j18:48 -5502 Mar 20j20:24 -5502 Mar 31j02:22 -5502 May 20j19:19 -5502 Jul 09j08:15 -5502 Sep 23j03:17 -5502 Sep 24j18:02 -5502 Oct 04j09:29 -5502 Oct 05j15:04 -5502 Oct 05j15:08 -5502 Oct 18j02:50 -5501 Feb 20j23:34 -5501 Apr 23j04:49	0° \$\Omega 50'52 \\ 3° \$\Omega 38'19 \\ 15° \$\Omega 21' \Omega 17'04 \\ 16° \$\Omega 24'58 \\ 16° \$\Omega 16'50 \\ 15° \$\Omega \\ 11° \$\Omega 27'38 \\ 15° \$\Omega \\ 29° \$\Omega 37'57 \\ 0° \$\Omega \\ 2° \$\Omega 12'22 \\ 2° \$\Omega 29'20 \\ 2° \$\Omega 29'22 \\ 5° \$\Omega 20'53 \\ 23° \$\Omega 46'06 \\ 18° \$\Omega 51'39 \\ align*	1°27'26  2°00'03  4.29180 AU  6.24372 AU  1°10'01  1°10'11
conjunction minimum elong max. Earth dist. morning rise  retrograde min. Earth dist. opposition direct evening set  conjunction minimum elong max. Earth dist. morning rise	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23 -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28 -5508 Apr 07 j 08:26 -5508 May 01 j 17:38 -5508 Aug 12 j 19:16 -5508 Oct 10 j 08:14 -5508 Oct 11 j 02:17 -5508 Dec 09 j 09:35 -5507 Apr 29 j 14:02 -5507 Apr 29 j 14:05 -5507 Apr 30 j 09:19 -5507 May 13 j 06:37 -5507 May 20 j 07:41	0°≈ 15°≈ 18°≈15'34  21°≈24'42 21°≈24'44 21°≈45'45 24°≈34'10 0° ₩ 13° ₩37'13 8° ₩40'14 8° ₩34'05 3° ₩32'14 22° ₩16'47  25° ₩21'56 25° ₩21'56 25° ₩32'45 28° ₩26'12 0° ♥	1°18'07 6.12347 AU 4.17264 AU -1°34'00 -0°43'53 0°43'56 6.22341 AU	minimum elong morning rise  retrograde opposition min. Earth dist.  direct  evening set  max. Earth dist.  conjunction minimum elong morning rise retrograde opposition min. Earth dist.	-5503 Sep 04j09:46 -5503 Sep 16j20:26 -5503 Nov 11j16:51 -5502 Jan 17j15:59 -5502 Mar 19j18:48 -5502 Mar 20j20:24 -5502 Mar 31j02:22 -5502 May 20j19:19 -5502 Jul 09j08:15 -5502 Sep 23j03:17 -5502 Sep 24j18:02 -5502 Oct 04j09:29 -5502 Oct 05j15:04 -5502 Oct 05j15:08 -5502 Oct 18j02:50 -5501 Feb 20j23:34 -5501 Apr 23j04:49 -5501 Apr 23j1:03	0° \$\Omega 50'52 \\ 3° \$\Omega 38'19 \\ 15° \$\Omega 21' \Omega 17'04 \\ 16° \$\Omega 24'58 \\ 16° \$\Omega 16'50 \\ 15° \$\Omega \\ 11° \$\Omega 27'38 \\ 15° \$\Omega \\ 29° \$\Omega 37'57 \\ 0° \$\Omega \\ 2° \$\Omega 29'20 \\ 2° \$\Omega 29'22 \\ 5° \$\Omega 20'53 \\ 23° \$\Omega 46'06 \\ 18° \$\Omega 46'28 \\ 0° \$	1°27'26  2°00'03  4.29180 AU  6.24372 AU  1°10'01  1°10'11
conjunction minimum elong max. Earth dist. morning rise  retrograde min. Earth dist. opposition direct evening set  conjunction minimum elong max. Earth dist. morning rise	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23 -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28 -5508 Apr 07 j 08:26 -5508 May 01 j 17:38 -5508 Oct 10 j 08:14 -5508 Oct 10 j 08:14 -5508 Oct 11 j 02:17 -5508 Dec 09 j 09:35 -5507 Apr 29 j 14:02 -5507 Apr 29 j 14:05 -5507 Apr 30 j 09:19 -5507 May 13 j 06:37 -5507 May 20 j 07:41 -5507 Sep 14 j 06:59	0°≈ 15°≈ 18°≈15'34  21°≈24'42 21°≈24'44 21°≈45'45 24°≈34'10 0° ₩ 13° ₩37'13 8° ₩40'14 8° ₩34'05 3° ₩32'14 22° ₩16'47  25° ₩21'54 25° ₩21'54 25° ₩21'54 25° ₩32'45 28° ₩26'12 0° № 16° №	1°18'07 6.12347 AU 4.17264 AU -1°34'00 -0°43'53 0°43'56 6.22341 AU	minimum elong morning rise  retrograde opposition min. Earth dist.  direct  evening set  max. Earth dist.  conjunction minimum elong morning rise retrograde opposition min. Earth dist.	-5503 Sep 04j09:46 -5503 Sep 16j20:26 -5503 Nov 11j16:51 -5502 Jan 17j15:59 -5502 Mar 19j18:48 -5502 Mar 20j20:24 -5502 Mar 31j02:22 -5502 May 20j19:19 -5502 Jul 09j08:15 -5502 Sep 23j03:17 -5502 Sep 24j18:02 -5502 Oct 04j09:29 -5502 Oct 05j15:08 -5502 Oct 05j15:08 -5502 Oct 18j02:50 -5501 Feb 20j23:34 -5501 Apr 23j04:49 -5501 Jun 23j03:51	0° \$\Omega 50'52 \\ 3° \$\Omega 38'19 \\ 15° \$\Omega 21' \Omega 17'04 \\ 16° \$\Omega 24'58 \\ 16° \$\Omega 16'50 \\ 15° \$\Omega \\ 11° \$\Omega 27'38 \\ 15° \$\Omega \\ 29° \$\Omega 37'57 \\ 0° \$\Omega \\ 2° \$\Omega 29'20 \\ 2° \$\Omega 29'22 \\ 5° \$\Omega 20'53 \\ 23° \$\Omega 46'06 \\ 18° \$\Omega 56'59 \\ 13° \$\Omega 56'59 \\ \$\Omega 50'55 \\ 3° \$\Omega 56'59 \\ 3° \$	1°27'26  2°00'03  4.29180 AU  6.24372 AU  1°10'01  1°10'11
conjunction minimum elong max. Earth dist. morning rise  retrograde min. Earth dist. opposition direct evening set  conjunction minimum elong max. Earth dist. morning rise  retrograde opposition	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23 -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28 -5508 Apr 07 j 08:26 -5508 Aug 12 j 19:16 -5508 Oct 10 j 08:14 -5508 Oct 11 j 02:17 -5508 Dec 09 j 09:35 -5507 Apr 15 j 20:04 -5507 Apr 29 j 14:02 -5507 Apr 29 j 14:05 -5507 May 13 j 06:37 -5507 May 13 j 06:37 -5507 Sep 14 j 06:59 -5507 Nov 12 j 15:25	0°≈ 15°≈ 18°≈15'34  21°≈24'42 21°≈24'44 21°≈45'45 24°≈34'10 0° ₩ 13° ₩37'13 8° ₩40'14 8° ₩34'05 3° ₩32'14 22° ₩16'47  25° ₩21'54 25° ₩21'56 25° ₩32'45 28° ₩26'12 0° Ψ 16° Ψ33'30 11° Ψ34'01	1°18'07 6.12347 AU 4.17264 AU -1°34'00 -0°43'53 0°43'56 6.22341 AU	minimum elong morning rise  retrograde opposition min. Earth dist.  direct  evening set  max. Earth dist.  conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct	-5503 Sep 04 j 09:46 -5503 Sep 16 j 20:26 -5503 Nov 11 j 16:51 -5502 Jan 17 j 15:59 -5502 Mar 19 j 18:48 -5502 Mar 20 j 20:24 -5502 Mar 20 j 20:24 -5502 May 20 j 19:19 -5502 Jul 09 j 08:15 -5502 Sep 23 j 03:17 -5502 Sep 24 j 18:02 -5502 Oct 04 j 09:29 -5502 Oct 05 j 15:04 -5502 Oct 05 j 15:08 -5502 Oct 18 j 02:50 -5501 Apr 23 j 04:49 -5501 Apr 23 j 21:03 -5501 Jun 23 j 03:51 -5501 Oct 14 j 18:48	0° \$\Omega_50'52 3° \$\Omega_38'19 15° \$\Omega_21'\text{\$\Omega_16'50}\$ 15° \$\Omega_27'38 15° \$\Omega_27'38 15° \$\Omega_27'38 15° \$\Omega_29'20 2° \$\Omega_29'22 2° \$\Omega_29'22 2° \$\Omega_29'22 5° \$\Omega_29'22 5° \$\Omega_29'53 23° \$\Omega_46'06 18° \$\Omega_51'39 18° \$\Omega_46'28 13° \$\Omega_56'59 0° \$\Omega_40'38'	1°27'26  2°00'03  4.29180 AU  6.24372 AU  1°10'01  1°10'11
conjunction minimum elong max. Earth dist. morning rise  retrograde min. Earth dist. opposition direct evening set  conjunction minimum elong max. Earth dist. morning rise  retrograde opposition min. Earth dist.	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23 -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28 -5508 Apr 07 j 08:26 -5508 Aug 12 j 19:16 -5508 Oct 10 j 08:14 -5508 Oct 11 j 02:17 -5508 Dec 09 j 09:35 -5507 Apr 15 j 20:04 -5507 Apr 29 j 14:02 -5507 Apr 29 j 14:05 -5507 Apr 30 j 09:19 -5507 May 13 j 06:37 -5507 Nov 12 j 15:25 -5507 Nov 12 j 15:25	0°≈ 15°≈ 18°≈15'34  21°≈24'42 21°≈24'44 21°≈45'45 24°≈34'10 0° ₩ 13° ₩37'13 8° ₩40'14 8° ₩34'05 3° ₩32'14 22° ₩16'47  25° ₩21'54 25° ₩21'54 25° ₩22'45 28° ₩26'12 0° Ψ 16° Ψ33'30 11° Ψ34'01 11° Ψ35'41	1°18'07 6.12347 AU 4.17264 AU -1°34'00 -0°43'53 0°43'56 6.22341 AU	minimum elong morning rise  retrograde opposition min. Earth dist.  direct  evening set  max. Earth dist.  conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct	-5503 Sep 04 j 09:46 -5503 Sep 16 j 20:26 -5503 Nov 11 j 16:51 -5502 Jan 17 j 15:59 -5502 Mar 19 j 18:48 -5502 Mar 20 j 20:24 -5502 Mar 20 j 20:24 -5502 May 20 j 19:19 -5502 Jul 09 j 08:15 -5502 Sep 23 j 03:17 -5502 Sep 24 j 18:02 -5502 Oct 04 j 09:29 -5502 Oct 05 j 15:04 -5502 Oct 05 j 15:08 -5502 Oct 18 j 02:50 -5501 Apr 23 j 04:49 -5501 Apr 23 j 21:03 -5501 Jun 23 j 03:51 -5501 Oct 14 j 18:48	0° \$\Omega_50'52 3° \$\Omega_38'19 15° \$\Omega_21'\text{\$\Omega_16'50}\$ 15° \$\Omega_27'38 15° \$\Omega_27'38 15° \$\Omega_27'38 15° \$\Omega_29'20 2° \$\Omega_29'22 2° \$\Omega_29'22 2° \$\Omega_29'22 5° \$\Omega_29'22 5° \$\Omega_29'53 23° \$\Omega_46'06 18° \$\Omega_51'39 18° \$\Omega_46'28 13° \$\Omega_56'59 0° \$\Omega_40'38'	1°27'26  2°00'03  4.29180 AU  6.24372 AU  1°10'01  1°10'11
conjunction minimum elong max. Earth dist. morning rise  retrograde min. Earth dist. opposition direct evening set  conjunction minimum elong max. Earth dist. morning rise  retrograde opposition min. Earth dist. direct	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23  -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28 -5508 Mar 26 j 02:28 -5508 Mar 07 j 08:26 -5508 May 01 j 17:38 -5508 Aug 12 j 19:16 -5508 Oct 10 j 08:14 -5508 Oct 11 j 02:17 -5508 Dec 09 j 09:35 -5507 Apr 15 j 20:04  -5507 Apr 29 j 14:02 -5507 Apr 29 j 14:05 -5507 Apr 30 j 09:19 -5507 May 13 j 06:37 -5507 May 20 j 07:41 -5507 Sep 14 j 06:59 -5507 Nov 12 j 15:25 -5507 Nov 12 j 15:25 -5506 Jan 12 j 04:31	0°≈ 15°≈ 18°≈15'34  21°≈24'42 21°≈24'44 21°≈45'45 24°≈34'10 0° ₩ 13° ₩37'13 8° ₩40'14 8° ₩34'05 3° ₩32'14 22° ₩16'47  25° ₩21'54 25° ₩21'56 25° ₩32'45 28° ₩26'12 0° Ψ 16° Ψ33'30 11° Ψ34'01 11° Ψ35'41 6° Ψ30'29	1°18'07 6.12347 AU 4.17264 AU -1°34'00 -0°43'53 0°43'56 6.22341 AU	minimum elong 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	-5503 Sep 04j09:46 -5503 Sep 16j20:26 -5503 Nov 11j16:51 -5502 Jan 17j15:59 -5502 Mar 19j18:48 -5502 Mar 20j20:24 -5502 Mar 20j20:24 -5502 May 20j19:19 -5502 Jul 09j08:15 -5502 Sep 23j03:17 -5502 Sep 24j18:02 -5502 Oct 04j09:29  -5502 Oct 05j15:04 -5502 Oct 05j15:08 -5502 Oct 18j02:50 -5501 Feb 20j23:34 -5501 Apr 23j04:49 -5501 Apr 23j03:51 -5501 Oct 14j18:48 -5501 Oct 25j08:59	0° \$\Omega_50'52 3° \$\Omega_38'19 15° \$\Omega_21'\circ \Omega_17'04 16° \$\Omega_24'58 16° \$\Omega_16'50 15° \$\Omega_27'38 15° \$\Omega_27'38 15° \$\Omega_29'20 2° \$\Omega_29'22 2° \$\Omega_29'22 2° \$\Omega_29'22 2° \$\Omega_29'22 5° \$\Omega_20'53 23° \$\Omega_46'06 18° \$\Omega_56'59 0° \$\Omega_2^26'18	1°27'26  2°00'03  4.29180 AU  6.24372 AU  1°10'01  1°10'11  1°17'26  4.19250 AU
conjunction minimum elong max. Earth dist. morning rise  retrograde min. Earth dist. opposition direct evening set  conjunction minimum elong max. Earth dist. morning rise  retrograde opposition min. Earth dist. direct asc. node	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23  -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28 -5508 Mar 26 j 02:28 -5508 Mar 07 j 08:26 -5508 May 01 j 17:38 -5508 Oct 10 j 08:14 -5508 Oct 10 j 08:14 -5508 Dec 09 j 09:35 -5507 Apr 15 j 20:04  -5507 Apr 29 j 14:02 -5507 Apr 29 j 14:05 -5507 May 13 j 06:37 -5507 May 20 j 07:41 -5507 Sep 14 j 06:59 -5507 Nov 12 j 15:25 -5507 Nov 12 j 10:29 -5506 May 07 j 13:19	0°≈ 15°≈ 18°≈15'34  21°≈24'42 21°≈24'44 21°≈45'45 24°≈34'10 0° ₩ 13° ₩37'13 8° ₩40'14 8° ₩34'05 3° ₩32'14 22° ₩16'47  25° ₩21'54 25° ₩21'56 25° ₩32'45 28° ₩26'12 0° Ψ 16° Ψ33'30 11° Ψ34'01 11° Ψ35'41 6° Ψ30'29 22° Ψ06'22	1°18'07 6.12347 AU 4.17264 AU -1°34'00 -0°43'53 0°43'56 6.22341 AU	minimum elong 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  evening set  conjunction	-5503 Sep 04j09:46 -5503 Sep 16j20:26 -5503 Nov 11j16:51 -5502 Jan 17j15:59 -5502 Mar 19j18:48 -5502 Mar 20j20:24 -5502 Mar 31j02:22 -5502 May 20j19:19 -5502 Jul 09j08:15 -5502 Sep 23j03:17 -5502 Sep 24j18:02 -5502 Oct 04j09:29  -5502 Oct 05j15:04 -5502 Oct 05j15:08 -5502 Oct 18j02:50 -5501 Feb 20j23:34 -5501 Apr 23j04:49 -5501 Apr 23j04:49 -5501 Jun 23j03:51 -5501 Oct 14j18:48 -5501 Oct 25j08:59	0° \$\Omega_50'52\\ 3° \$\Omega_38'19\\ 15° \$\Omega_21'\0pera17'04\\ 16° \$\Omega_24'58\\ 16° \$\Omega_16'50\\ 15° \$\Omega_27'38\\ 15° \$\Omega_27'38\\ 15° \$\Omega_29'20\\ 2° \$\Omega_29'20\\ 2° \$\Omega_29'22\\ 5° \$\Omega_20'53\\ 23° \$\Omega_46'06\\ 18° \$\Omega_56'59\\ 0° \$\Omega_2\$\\ 2° \$\Omega_26'18\\ 5° \$\Omega_23'54\\	1°27'26  2°00'03  4.29180 AU  6.24372 AU  1°10'01  1°10'11  1°17'26  4.19250 AU
conjunction minimum elong max. Earth dist. morning rise  retrograde min. Earth dist. opposition direct evening set  conjunction minimum elong max. Earth dist. morning rise  retrograde opposition min. Earth dist. direct asc. node	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23  -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28 -5508 Mar 26 j 02:28 -5508 Mar 07 j 08:26 -5508 May 01 j 17:38 -5508 Oct 10 j 08:14 -5508 Oct 10 j 08:14 -5508 Dec 09 j 09:35 -5507 Apr 15 j 20:04  -5507 Apr 29 j 14:02 -5507 Apr 29 j 14:05 -5507 May 13 j 06:37 -5507 May 20 j 07:41 -5507 Sep 14 j 06:59 -5507 Nov 12 j 15:25 -5507 Nov 12 j 10:29 -5506 May 07 j 13:19	0°≈ 15°≈ 18°≈15'34  21°≈24'42 21°≈24'44 21°≈45'45 24°≈34'10 0° ₩ 13° ₩37'13 8° ₩40'14 8° ₩34'05 3° ₩32'14 22° ₩16'47  25° ₩21'54 25° ₩21'56 25° ₩32'45 28° ₩26'12 0° Ψ 16° Ψ33'30 11° Ψ34'01 11° Ψ35'41 6° Ψ30'29 22° Ψ06'22	1°18'07 6.12347 AU 4.17264 AU -1°34'00 -0°43'53 0°43'56 6.22341 AU	minimum elong 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  conjunction min Earth dist. direct	-5503 Sep 04 j 09:46 -5503 Sep 16 j 20:26 -5503 Nov 11 j 16:51 -5502 Jan 17 j 15:59 -5502 Mar 19 j 18:48 -5502 Mar 20 j 20:24 -5502 Mar 31 j 02:22 -5502 May 20 j 19:19 -5502 Jul 09 j 08:15 -5502 Sep 23 j 03:17 -5502 Sep 24 j 18:02 -5502 Oct 04 j 09:29 -5502 Oct 05 j 15:04 -5502 Oct 18 j 02:50 -5501 Feb 20 j 23:34 -5501 Apr 23 j 04:49 -5501 Apr 23 j 04:49 -5501 Oct 14 j 18:48 -5501 Oct 25 j 08:59 -5501 Nov 07 j 01:13 -5501 Nov 07 j 01:13	0° \$\Omega_50'52\\ 3° \$\Omega_38'19\\ 15° \$\Omega_21'\000000150\\ 16° \$\Omega_24'58\\ 16° \$\Omega_16'50\\ 15° \$\Omega_27'38\\ 15° \$\Omega_27'38\\ 15° \$\Omega_29'20\\ 2° \$\Omega_29'20\\ 2° \$\Omega_29'22\\ 5° \$\Omega_20'53\\ 23° \$\Omega_46'06\\ 18° \$\Omega_51'39\\ 18° \$\Omega_46'28\\ 13° \$\Omega_26'18\\ 5° \$\Omega_23'54\\ 5° \$\Omega_23'55\\	1°27'26  2°00'03  4.29180 AU  6.24372 AU  1°10'01  1°10'11  1°17'26  4.19250 AU  0°30'21 0°30'21
conjunction minimum elong max. Earth dist. morning rise  retrograde min. Earth dist. opposition direct evening set  conjunction minimum elong max. Earth dist. morning rise  retrograde opposition min. Earth dist. direct asc. node evening set	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28 -5508 Apr 07 j 08:26 -5508 Aug 12 j 19:16 -5508 Oct 10 j 08:14 -5508 Oct 10 j 08:14 -5508 Dec 09 j 09:35 -5507 Apr 15 j 20:04 -5507 Apr 29 j 14:02 -5507 Apr 29 j 14:05 -5507 May 13 j 06:37 -5507 May 20 j 07:41 -5507 Sep 14 j 06:59 -5507 Nov 12 j 15:25 -5507 Nov 12 j 10:29 -5506 May 07 j 13:19 -5506 May 20 j 06:40	0°≈ 15°≈ 18°≈15'34  21°≈24'42 21°≈24'44 21°≈45'45 24°≈34'10 0° ₩ 13° ₩37'13 8° ₩40'14 8° ₩34'05 3° ₩32'14 22° ₩16'47  25° ₩21'54 25° ₩21'56 25° ₩32'45 28° ₩26'12 0° Ψ 16° Ψ33'30 11° Ψ34'01 11° Ψ35'41 6° Ψ30'29 22° Ψ06'22 24° Ψ52'17	1°18'07 6.12347 AU 4.17264 AU -1°34'00 -0°43'53 0°43'56 6.22341 AU -0°31'17 4.27188 AU	minimum elong 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  conjunction min. Earth dist. direct	-5503 Sep 04 j 09:46 -5503 Sep 16 j 20:26 -5503 Nov 11 j 16:51 -5502 Jan 17 j 15:59 -5502 Mar 19 j 18:48 -5502 Mar 20 j 20:24 -5502 Mar 31 j 02:22 -5502 May 20 j 19:19 -5502 Jul 09 j 08:15 -5502 Sep 23 j 03:17 -5502 Sep 24 j 18:02 -5502 Oct 04 j 09:29 -5502 Oct 05 j 15:04 -5502 Oct 05 j 15:08 -5502 Oct 18 j 02:50 -5501 Feb 20 j 23:34 -5501 Apr 23 j 04:49 -5501 Apr 23 j 04:49 -5501 Oct 14 j 18:48 -5501 Oct 25 j 08:59 -5501 Nov 07 j 01:13 -5501 Nov 07 j 01:13 -5501 Nov 06 j 13:28	0° \$\Omega_50'52\\ 3° \$\Omega_38'19\\ 15° \$\Omega_21'\000000150\\ 16° \$\Omega_24'58\\ 16° \$\Omega_16'50\\ 15° \$\Omega_27'38\\ 15° \$\Omega_27'38\\ 15° \$\Omega_29'20\\ 2° \$\Omega_29'20\\ 2° \$\Omega_29'22\\ 5° \$\Omega_20'53\\ 23° \$\Omega_46'06\\ 18° \$\Omega_51'39\\ 18° \$\Omega_46'28\\ 13° \$\Omega_26'18\\ 5° \$\Omega_23'54\\ 5° \$\Omega_23'55\\ 5° \$\Omega_17'02\\	1°27'26  2°00'03  4.29180 AU  6.24372 AU  1°10'01  1°10'11  1°17'26  4.19250 AU  0°30'21 0°30'21
conjunction minimum elong max. Earth dist. morning rise  retrograde min. Earth dist. opposition direct evening set  conjunction minimum elong max. Earth dist. morning rise  retrograde opposition min. Earth dist. direct asc. node evening set  conjunction	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 10 j 20:23  -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28 -5508 Mar 26 j 02:28 -5508 Mar 07 j 08:26 -5508 May 01 j 17:38 -5508 Oct 10 j 08:14 -5508 Oct 10 j 08:14 -5508 Oct 11 j 02:17 -5508 Dec 09 j 09:35 -5507 Apr 15 j 20:04  -5507 Apr 29 j 14:02 -5507 Apr 29 j 14:05 -5507 May 13 j 06:37 -5507 May 20 j 07:41 -5507 Sep 14 j 06:59 -5507 Nov 12 j 10:29 -5506 Jan 12 j 04:31 -5506 May 07 j 13:19 -5506 May 20 j 06:40	0°≈ 15°≈ 18°≈15'34  21°≈24'42 21°≈24'44 21°≈45'45 24°≈34'10 0° ₩ 13° ₩37'13 8° ₩40'14 8° ₩34'05 3° ₩32'14 22° ₩16'47  25° ₩21'54 25° ₩21'54 25° ₩32'45 28° ₩26'12 0° Ψ 16° Ψ33'30 11° Ψ34'01 11° Ψ35'41 6° Ψ30'29 22° Ψ06'22 24° Ψ52'17	1°18'07 6.12347 AU 4.17264 AU -1°34'00 -0°43'53 0°43'56 6.22341 AU -0°31'17 4.27188 AU	minimum elong 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  conjunction minimum elong max. Earth dist. direct	-5503 Sep 04 j 09:46 -5503 Sep 16 j 20:26 -5503 Nov 11 j 16:51 -5502 Jan 17 j 15:59 -5502 Mar 19 j 18:48 -5502 Mar 20 j 20:24 -5502 Mar 31 j 02:22 -5502 May 20 j 19:19 -5502 Jul 09 j 08:15 -5502 Sep 23 j 03:17 -5502 Sep 24 j 18:02 -5502 Oct 04 j 09:29 -5502 Oct 05 j 15:04 -5502 Oct 05 j 15:08 -5502 Oct 18 j 02:50 -5501 Feb 20 j 23:34 -5501 Apr 23 j 04:49 -5501 Apr 23 j 04:49 -5501 Apr 23 j 04:49 -5501 Oct 14 j 18:48 -5501 Oct 25 j 08:59 -5501 Nov 07 j 01:13 -5501 Nov 07 j 01:13 -5501 Nov 07 j 01:15 -5501 Nov 06 j 13:28 -5501 Nov 19 j 19:15	0° \$\Omega 50'52 3° \$\Omega 38'19 15° \$\Omega 21' \Omega 17'04 16° \$\Omega 24'58 16° \$\Omega 16'50 15° \$\Omega \Omega 37'57 0° \$\Omega 20' \Omega 29'20 2° \$\Omega 29'20 2° \$\Omega 29'20 2° \$\Omega 29'22 5° \$\Omega 20'53 23° \$\Omega 46'06 18° \$\Omega 51'39 18° \$\Omega 46'28 13° \$\Omega 56'59 0° \$\Omega 20'54 5° \$\Omega 23'54 5° \$\Omega 23'55 5° \$\Omega 17'02 8° \$\Omega 22'37	1°27'26  2°00'03  4.29180 AU  6.24372 AU  1°10'01  1°10'11  1°17'26  4.19250 AU  0°30'21 0°30'21
conjunction minimum elong max. Earth dist. morning rise  retrograde min. Earth dist. opposition direct evening set  conjunction minimum elong max. Earth dist. morning rise  retrograde opposition min. Earth dist. direct asc. node evening set  conjunction minimum elong	-5509 Nov 27 j 16:03 -5508 Feb 25 j 10:33 -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:50 -5508 Mar 24 j 13:54 -5508 Mar 26 j 02:28 -5508 Apr 07 j 08:26 -5508 May 01 j 17:38 -5508 Aug 12 j 19:16 -5508 Oct 10 j 08:14 -5508 Oct 10 j 08:14 -5508 Dec 09 j 09:35 -5507 Apr 15 j 20:04 -5507 Apr 29 j 14:02 -5507 Apr 29 j 14:05 -5507 Apr 30 j 09:19 -5507 May 13 j 06:37 -5507 May 20 j 07:41 -5507 Sep 14 j 06:59 -5507 Nov 12 j 15:25 -5507 Nov 12 j 15:25 -5507 May 07 j 13:19 -5506 May 07 j 13:19 -5506 May 00 j 06:40 -5506 Jun 02 j 19:17 -5506 Jun 02 j 19:18	0°≈ 15°≈ 18°≈15'34  21°≈24'42 21°≈24'44 21°≈45'45 24°≈34'10 0° ₩ 13° ₩37'13 8° ₩40'14 8° ₩34'05 3° ₩32'14 22° ₩16'47  25° ₩21'54 25° ₩21'54 25° ₩32'45 28° ₩26'12 0° Ψ 16° Ψ'33'30 11° Ψ'34'01 11° Ψ'35'41 6° Ψ'30'29 22° Ψ'06'22 24° Ψ'52'17	1°18'07 6.12347 AU 4.17264 AU -1°34'00 -0°43'53 0°43'56 6.22341 AU -0°31'17 4.27188 AU	minimum elong 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  conjunction minimum elong max. Earth dist. direct	-5503 Sep 04j09:46 -5503 Sep 16j20:26 -5503 Nov 11j16:51 -5502 Jan 17j15:59 -5502 Mar 19j18:48 -5502 Mar 20j20:24 -5502 Mar 31j02:22 -5502 May 20j19:19 -5502 Jul 09j08:15 -5502 Sep 23j03:17 -5502 Sep 24j18:02 -5502 Oct 04j09:29 -5502 Oct 05j15:04 -5502 Oct 05j15:08 -5502 Oct 18j02:50 -5501 Feb 20j23:34 -5501 Apr 23j04:49 -5501 Apr 23j04:49 -5501 Apr 23j04:49 -5501 Oct 14j18:48 -5501 Oct 25j08:59 -5501 Nov 07j01:13 -5501 Nov 07j01:15 -5501 Nov 07j01:15 -5501 Nov 07j01:15	0° \$\Omega_50'52\\ 3° \$\Omega_38'19\\ 15° \$\Omega_21'\000000000000000000000000000000000000	1°27'26  2°00'03  4.29180 AU  6.24372 AU  1°10'01  1°10'11  1°17'26  4.19250 AU  0°30'21  0°30'21  6.14151 AU

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5500 in astronomical counting style is the year 5501 BCE in historical counting style. desc. node -5500 Jul 02 j 08:38 18°**≏**46'36 conjunction -5494 Jun 07 j 11:01 2°**8**25'22 0°09'58 -5500 Jul 26 j 11:38 17°**♀**50'05 minimum elong -5494 Jun 07 j 11:00 2°**8**25'21 0°10'07 direct -5500 Oct 28 j 22:48 0°M -5494 Jun 07 j 04:28 2°**8**21'46 behind sun begin -5494 Jun 07 j 17:31 2°**8**28'57 -5500 Nov 27 j 06:42 6°M41'38 behind sun end evening set -5494 Jun 07 j 04:21 2°**8**21'42 max. Earth dist. 6.32580 AU -5500 Dec 10 j 06:14 9°M46'05 -0°20'55 -5494 Jun 20 j 19:33 5°**8**22'05 conjunction morning rise 15°8 minimum elong -5500 Dec 10 j 06:12 9°M46'03 0°21'07 -5494 Aug 06 j 18:16 22°842'08 max. Earth dist. -5500 Dec 10 j 18:46 9°M53'31 6.05751 AU retrograde -5494 Oct 19 j 23:00 morning rise -5500 Dec 23 j 08:45 12°M52'14 opposition -5494 Dec 18 j 17:14 17°**8**46'55 0°47'33 -5499 Jan 01 j 11:17 15°M min. Earth dist. -5494 Dec 19 j 04:39 17°**8**43'10 4.35758 AU -5499 Mar 21 j 00:58 0°**∡**¹ -5493 Jan 10 j 05:47 15°R₩ -5493 Feb 18 j 14:15 12°843'18 retrograde -5499 May 03 j 21:02 2°**х¹**53'56 direct -5499 Jun 16 j 19:28  $30^{\circ}$ RML -5493 Mar 30 j 07:52 15°8 opposition -5499 Jul 03 j 09:50 27°M51'55 -1°08'45 -5493 Jun 23 j 03:32  $0^{\circ}\Pi$ min. Earth dist. -5499 Jul 02 j 17:24 27°M57'23 4.03280 AU evening set -5493 Jun 26 j 15:17 0°**I**I45'33 direct -5499 Aug 30 j 21:14 22°M58'27 conjunction -5499 Nov 07 j 01:49 0°**√** -5493 Jul 09 j 17:29 3°**Ⅲ**37'53 0°53'29 evening set -5498 Jan 02 j 00:23 12°**∡**08'15 minimum elong -5493 Jul 09 j 17:25 3°**Ⅲ**37'51 0°53'45 max. Earth dist. -5493 Jul 08 j 13:48 3°**Ⅱ**22'40 6.37687 AU conjunction -5498 Jan 15 j 07:36 15°**≯**17'31 -1°05'38 morning rise -5493 Jul 22 j 16:23 6°**Ⅲ**28'32 minimum elong -5498 Jan 15 j 07:31 15°**₹**17'29 1°05'56 retrograde -5493 Nov 19 j 22:56 23°II31'59 max. Earth dist. -5498 Jan 16 j 17:50 15°**∡**37'51 6.02251 AU opposition -5492 Jan 19 i 04:53 18°**Ⅱ**39'29 1°41'29 morning rise -5498 Jan 28 i 18:08 18°**∡** 28'33 min. Earth dist. -5492 Jan 20 i 04:21 18°**Ⅲ**31'56 4.38382 AU -5498 Mar 22 j 10:02 0°궁 direct -5492 Mar 21 i 18:37 13°**Ⅲ**37'15 retrograde -5498 Jun 09 j 18:29 8°る43'10 -5492 Jul 20 j 01:33 0ಂತಾ -5498 Aug 08 j 17:05 3°る38'31 -1°59'38 -5492 Jul 27 j 03:43 1°932'53 evening set opposition -5498 Aug 07 j 14:32 3°る47'31 4.03031 AU -5492 Aug 07 j 07:41 4°900'46 6.37503 AU min. Earth dist. max Earth dist -5498 Sep 08 j 02:36 30°R x<sup>7</sup> -5498 Oct 05 j 16:53 28°**∡**¹42'44 -5492 Aug 08 j 21:00 direct conjunction 4°9521'26 1°21'23 -5498 Nov 02 j 09:19 0°궁 -5492 Aug 08 j 20:58 minimum elong 4°921'25 1°21'41 -5497 Feb 07 j 23:06 -5492 Aug 21 j 11:18 17°る58'00 7°9508'38 evening set morning rise -5492 Dec 20 j 11:19 24°9521'02 retrograde -5491 Feb 19 j 06:22 21°る08'45 -1°25'57 conjunction -5497 Feb 21 j 12:50 19°529'35 2°06'59 opposition 21°**る**08'44 1°26'15 4.35528 AU -5497 Feb 21 j 12:50 -5491 Feb 20 j 10:24 minimum elong min. Earth dist. 19°**©**20'40 -5497 Feb 23 j 07:23 21°る33'41 6.05121 AU -5491 Apr 22 j 19:49 max. Earth dist. direct 14°9529'48 -5497 Mar 07 j 05:15 24°**පි**20'41 -5491 Aug 15 j 22:23 morning rise 0 $^{\circ}\Omega$ -5491 Aug 27 j 04:43 -5497 Apr 01 j 03:11 0°≈ evening set 2°**Ω**29'19 retrograde -5497 Jul 15 j 11:32 14°**≈**09'45 max. Earth dist. -5491 Sep 07 j 01:48 4°**Ω**55'49 6.32098 AU -5497 Sep 12 j 22:52 9°≈04'47 -2°05'12 opposition min. Earth dist. -5497 Sep 11 j 20:46 9°≈13'43 4.08786 AU conjunction -5491 Sep 08 j 16:37 5°**Ω**17'40 1°26'17 -5497 Nov 10 j 08:42 4°≈05'33 -5491 Sep 08 j 16:38 5°**Ω**17'40 1°26'34 direct minimum elong -5496 Feb 07 j 15:28 -5491 Sep 21 j 03:09  $8^{\circ}\Omega05'26$ 15°≈ morning rise -5496 Mar 15 j 21:46 23°≈09'54 -5491 Oct 23 j 04:19 15°**Ω** evening set -5490 Jan 22 j 08:21 25°**Ω**49'39 retrograde -5496 Mar 29 j 15:52 26°≈18'54 -1°14'27 -5490 Mar 24 j 11:02 20°**Ω**57'22 1°56'16 conjunction opposition minimum elong -5496 Mar 29 i 15:57 26°≈18'56 1°14'39 min. Earth dist. -5490 Mar 25 i 12:57 20°**Ω**49'08 4.27907 AU max. Earth dist. -5496 Mar 31 i 04:36 26°≈39'58 6.13233 AU direct -5490 May 25 i 09:55 16°Ω00'23 morning rise -5496 Apr 12 j 10:28 29°≈28'01 -5490 Sep 08 i 16:13 0° m -5496 Apr 14 j 18:48 0°**∀** evening set -5490 Sep 27 i 12:45 4° m 13'12 -5496 Aug 17 j 11:17 18° ¥ 24'39 max. Earth dist. -5490 Oct 08 j 20:52 6° m 49'11 6.22908 AU retrograde -5496 Oct 15 j 17:08 13°¥21'58 -1°26'26 opposition min. Earth dist. -5496 Oct 15 j 00:12 13°**)** €27'43 4.18347 AU -5490 Oct 10 i 00:59 7° m 05'21 1°05'41 conjunction 8° **X** 19'50 -5490 Oct 10 j 01:03 7° m 05'23 1°05'50 direct -5496 Dec 14 j 03:21 minimum elong evening set -5495 Apr 20 j 18:03 27°\ 02'03 morning rise -5490 Oct 22 j 13:24 9° m 57'48  $0^{\circ}\Upsilon$ -5495 May 03 j 23:54 retrograde -5489 Feb 25 j 20:01 28° m 30'35 opposition -5489 Apr 28 j 01:54 23° m 35'43 1°08'55 conjunction -5495 May 04 j 11:30 0°Υ06'30 -0°37'40 min. Earth dist. -5489 Apr 28 j 15:26 23°M 31'23 4.17696 AU -5495 May 04 j 11:33 0°**Υ**06'32 0°37'42 -5489 Jun 27 j 19:20 18° Mp 41'23 minimum elong direct -5495 May 05 j 03:13 0°**Υ**15'19 6.23532 AU -5489 Sep 27 j 16:05 0∘**⊽** max. Earth dist. 3°Y10'05 -5489 Oct 29 j 23:33 morning rise -5495 May 18 j 03:39 evening set 7°**£**14'16 21°Υ10'49 retrograde -5495 Sep 18 j 17:17 -5495 Nov 17 j 03:01 16°**Y**11'47 -0°21'23 conjunction -5489 Nov 11 j 16:41 10°**♀**12'54 0°23'33 opposition min. Earth dist. -5495 Nov 16 j 23:53 16°**Y**12'50 4.28369 AU minimum elong -5489 Nov 11 j 16:43 10°**£**12'55 0°23'32 direct -5494 Jan 16 j 20:32 11°**Υ**08'05 max. Earth dist. -5489 Nov 11 j 08:11 10°**♀**07'55 6.12655 AU asc. node -5494 Mar 16 j 19:50 16°**Y**01′56 morning rise -5489 Nov 24 j 11:48 13°**2**12'46 -5494 May 24 j 23:20 29°**Y**27'02 -5488 Feb 19 j 22:03 evening set 0°M -5494 May 27 j 11:25 0°8 -5488 Apr 02 j 01:02 retrograde 2°M39'11

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 37 Attention, astronomical year style is used: The year -5488 in astronomical counting style is the year 5489 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	ie year -5488 i	in astronomical co	unting style is the year	5489 BCE in historical c	counting style.	<i>6</i>
desc. node	-5488 May 12 j 16:32	0° <b>™</b> 11'41		asc. node	-5482 Jan 26 j 00:26	15° <b>Y</b> ′38'29	
	-5488 May 14 j 09:50	30° <b>ŖΩ</b>			-5482 May 11 j 13:40	$0^{\circ}$ 8	
opposition	-5488 Jun 01 j 23:45	27° <b>≏</b> 40'32	-0°03'59	evening set	-5482 May 29 j 11:35	3° <b>8</b> 51'24	
min. Earth dist.	-5488 Jun 01 j 21:06	27° <b>≏</b> 41'24	4.08158 AU				
direct	-5488 Jul 31 j 09:23	22° <b>≏</b> 47'32		conjunction	-5482 Jun 11 j 22:01	6° <b>8</b> 48'43	
	-5488 Oct 09 j 04:39	$0^{\circ}$ M		minimum elong	-5482 Jun 11 j 22:00	6° <b>8</b> 48'42	
evening set	-5488 Dec 02 j 04:09	11°M42'47		max. Earth dist.	-5482 Jun 11 j 10:38	6° <b>8</b> 42'27	6.33802 AU
				morning rise	-5482 Jun 25 j 05:24	9° <b>8</b> 44'26	
conjunction	-5488 Dec 15 j 04:49	14°M48'10			-5482 Jul 19 j 20:19	15° <b>8</b>	
minimum elong	-5488 Dec 15 j 04:47	14°M48'08		retrograde	-5482 Oct 24 j 02:59	27° <b>8</b> 00'04	
max. Earth dist.	-5488 Dec 15 j 21:02		6.04749 AU	opposition	-5482 Dec 22 j 23:10	22° <b>8</b> 05'15	
	-5488 Dec 16 j 00:45	15° <b>™</b>		min. Earth dist.	-5482 Dec 23 j 13:00	22° <b>8</b> 00'43	4.36547 AU
morning rise	-5488 Dec 28 j 08:36	17° <b>M</b> 55'18		direct	-5481 Feb 22 j 23:34	17° <b>8</b> 01'39	
	-5487 Feb 21 j 23:57	0° <b>∡</b>			-5481 Jun 07 j 06:51	$\Pi$ °0	
retrograde	-5487 May 09 j 01:45	8° <b>∡</b> ′01'31		evening set	-5481 Jun 30 j 22:36	5° <b>Ⅱ</b> 02'09	
opposition	-5487 Jul 08 j 12:39	2° <b>∡</b> ′59'07					
min. Earth dist.	-5487 Jul 07 j 17:43		4.02751 AU	conjunction	-5481 Jul 13 j 23:36	7° <b>Ⅱ</b> 53'50	
	-5487 Aug 01 j 15:50	30°RM		minimum elong	-5481 Jul 13 j 23:32	7° <b>Ⅱ</b> 53'47	
direct	-5487 Sep 04 j 20:17	28°M05'31		max. Earth dist.	-5481 Jul 12 j 18:17		6.37967 AU
	-5487 Oct 08 j 19:46	0° <b>∡</b> 7		morning rise	-5481 Jul 26 j 21:03	10° <b>Ⅱ</b> 43'48	
evening set	-5486 Jan 07 j 03:53	17° <b>∡</b> 17′26		retrograde	-5481 Nov 24 j 03:35	27° <b>Ⅱ</b> 47'15	
		_		opposition	-5480 Jan 23 j 11:38	22° <b>I</b> 55'02	
conjunction	-5486 Jan 20 j 12:00	20° <b>∡</b> ¹27'07		min. Earth dist.	-5480 Jan 24 j 12:28	22° <b>I</b> I47'03	4.38152 AU
minimum elong	-5486 Jan 20 j 11:56	20° <b>∡</b> ¹27'04		direct	-5480 Mar 26 j 02:02	17° <b>Ⅲ</b> 53'04	
max. Earth dist.	-5486 Jan 21 j 23:52		6.02242 AU		-5480 Jul 04 j 01:59	0ა <b>ௐ</b>	
morning rise	-5486 Feb 02 j 23:35	23° <b>∡</b> 38'33		evening set	-5480 Jul 31 j 09:09	5°5649'26	
	-5486 Mar 02 j 18:19	0° <b>ろ</b>		max. Earth dist.	-5480 Aug 11 j 09:12	8° <b>©</b> 15'33	6.36750 AU
retrograde	-5486 Jun 14 j 20:35	13° <b>ප්</b> 51'47					
opposition	-5486 Aug 13 j 17:44	8° <b>ප්</b> 46'53		conjunction	-5480 Aug 13 j 01:22	8° <b>©</b> 37'51	
min. Earth dist.	-5486 Aug 12 j 14:07		4.03581 AU	minimum elong	-5480 Aug 13 j 01:19	8°937'50	1°23'47
direct	-5486 Oct 10 j 18:19	3°る50'39		morning rise	-5480 Aug 25 j 15:03	11°525'03	
evening set	-5485 Feb 13 j 03:59	23° <b>る</b> 04'46		retrograde	-5480 Dec 24 j 22:03	28°5541'42	2005145
	5405 7 1 26:40.20	260715122	100 (110	opposition	-5479 Feb 23 j 17:08	23°550'15	
conjunction	-5485 Feb 26 j 18:38	26°る15'23		min. Earth dist.	-5479 Feb 24 j 22:24	23°5540'57	4.34312 AU
minimum elong	-5485 Feb 26 j 18:38	26°る15'23		direct	-5479 Apr 27 j 05:44	18°\$50'46	
max. Earth dist.	-5485 Feb 28 j 15:19		6.06197 AU		-5479 Jul 30 j 11:10	0°N	
morning rise	-5485 Mar 12 j 11:24	29° <b>る</b> 26'59		evening set	-5479 Aug 31 j 10:59	6° <b>Ω</b> 53'16	6 20512 ATT
	-5485 Mar 14 j 20:29	0° <b>≈</b>		max. Earth dist.	-5479 Sep 11 j 09:25	9° <b>8 (</b> 21'02	6.30513 AU
. 1	-5485 May 29 j 00:20			. ,.	5470 C 12:22.52	00 0 42111	1024155
retrograde	-5485 Jul 20 j 08:23	19° <b>≈</b> 08'46		conjunction	-5479 Sep 12 j 22:52	9° <b>Ω</b> 42'11 9° <b>Ω</b> 42'12	
***	-5485 Sep 10 j 21:24	15°R≈	2002105	minimum elong	-5479 Sep 12 j 22:54		1°25'11
opposition	-5485 Sep 17 j 18:19	14°≈03'57		morning rise	-5479 Sep 25 j 09:18	12° <b>Ω</b> 30'35	
min. Earth dist.	-5485 Sep 16 j 16:56	14°≈12'38	4.10274 AU		-5479 Oct 06 j 13:40	15° <b>Ω</b>	
direct	-5485 Nov 15 j 06:56	9° <b>≈</b> 04'17		retrograde	-5478 Jan 11 j 11:30	0°Mp 0°Mp22'28	
arraning got	-5484 Jan 17 j 10:00	15° <b>≈</b> 28° <b>≈</b> 04'29		renograde	-5478 Jan 27 j 00:08 -5478 Feb 11 j 14:27	0 11/2228 30°RΩ	
evening set	-5484 Mar 20 j 23:20	28 <b>≈</b> 04 29 0° <b>∺</b>		ampagition		30 κδι 25° <b>Ω</b> 29'58	1°51'47
	-5484 Mar 29 j 10:05	υ χ		opposition min. Earth dist.	-5478 Mar 29 j 03:51	$25^{\circ}\Omega 22'17$	4.26065 AU
conjunction	-5484 Apr 03 j 17:26	1° <b>){</b> 12'45	-1010122	direct	-5478 Mar 30 j 04:03 -5478 May 29 j 21:52	23° <b>Ω</b> 33'26	4.20003 AU
minimum elong	-5484 Apr 03 j 17:30	1° <b>)</b> 12'48		direct	-5478 Aug 22 j 01:51	0°m)	
max. Earth dist.	-5484 Apr 05 j 03:12	1° <del>X</del> 32'03		evening set	-5478 Oct 01 j 23:20	8° Mp 50'37	
	-5484 Apr 03 j 03.12 -5484 Apr 17 j 12:02	4° <b>∺</b> 21'02	0.14994 AU	max. Earth dist.	-5478 Oct 01 j 23.20 -5478 Oct 13 j 09:52	11°Mp28'42	6.20970 AU
morning rise retrograde	-5484 Aug 21 j 22:17	23° <b>¥</b> 07'59		max. Earth dist.	-3478 Oct 13 J 09.32	11 111/2042	0.20970 AU
opposition	-5484 Oct 20 j 06:05	18° <b>X</b> 05'40	1010120	conjunction	-5478 Oct 14 j 11:59	11° <b>m</b> )43'47	1°00'53
min. Earth dist.	-5484 Oct 19 j 14:26		4.20195 AU	minimum elong	-5478 Oct 14 j 11:39	11° my 43'49	1°01'00
direct	-5484 Dec 18 j 20:59	13° <b>★</b> 03'10	4.20193 AU	morning rise	-5478 Oct 27 j 01:14	14° Mp 37'25	1 01 00
direct	-5483 Apr 17 j 23:14	0° <b>Υ</b>		morning risc	-5477 Jan 14 j 07:22	14 m/3/23 0°Ω	
evening set	-5483 Apr 25 j 13:02	1° <b>Υ</b> '40'23		retrograde	-5477 Mar 02 j 21:25	0 <b>=</b> 3° <b>ჲ</b> 19'35	
evening set	этоэ гэрт 23 J 13.02	1 17043		ronograde	-5477 Apr 20 j 09:09	30°RM)	
conjunction	-5483 May 09 j 06:00	4° <b>Υ</b> '43'51	-0°31'25	opposition	-5477 May 03 j 01:19	28° Mg 24'15	0°59'47
minimum elong	-5483 May 09 j 06:03	4 1 43 31 4° <b>Υ</b> 43'52		min. Earth dist.	-5477 May 03 j 01.19	28° Mp 20'29	4.15796 AU
max. Earth dist.	-5483 May 09 j 18:56	4° <b>Υ</b> 51'04	6.25336 AU	direct	-5477 Jul 02 j 14:15	23° m/30'12	1.15/70 AU
morning rise	-5483 May 22 j 21:10	7° <b>Υ</b> 46'15	0.23330 AU	uncet	-5477 Sep 07 j 12:12	0° <b>ت</b> 12 الأعرا	
retrograde	-5483 Sep 23 j 00:36	25° <b>Υ</b> 38'47		evening set	-5477 Nov 03 j 16:42	0 <b>=</b> 12° <b>⊆</b> 07'47	
opposition	-5483 Nov 21 j 11:07	23 <b>γ</b> 38 4 / 20° <b>γ</b> 40'17	-0°11'44	evening set	57// 110V 05 J 10.42	12 -0/4/	
min. Earth dist.	-5483 Nov 21 j 10:33	20° <b>Υ</b> 40'29	4.29954 AU	conjunction	-5477 Nov 16 j 10:58	15° <b>≏</b> 07'37	0°16'27
direct	-5482 Jan 21 j 09:40	15° <b>Υ</b> 36'29	1.27737 AU	minimum elong	-5477 Nov 16 j 10:59		0°16'23
311001	5 102 Juli 21 j 07.40	15 1 30 49		mmmum clong	5177 1107 10 J 10.39	0/30	3 10 23

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 38 Attention, astronomical year style is used: The year -5477 in astronomical counting style is the year 5478 BCE in historical counting style.

max. Earth didd         5477 Nov. 19 [66.2]         [1980]         1990 Nov. 19 [66.2]         1990 Nov. 19 [67.2]         2977 [17.2]         2977 [17.2]         1977 [17.2] <th< th=""><th>Attention, astronomi</th><th>cal year style is used: Th</th><th>e year -5477 i</th><th>n astronomical cou</th><th>nting style is the year</th><th>5478 BCE in historical co</th><th>ounting style.</th><th>6</th></th<>	Attention, astronomi	cal year style is used: Th	e year -5477 i	n astronomical cou	nting style is the year	5478 BCE in historical co	ounting style.	6
	max. Earth dist.	-5477 Nov 16 j 06:52	15° <b>≏</b> 05'13	6.10986 AU		-5471 Oct 07 j 09:47	30° <b>₹</b> Υ	
does noted         5470 May 27 (65 52)         77H,910 (6)         see node         5470 Lang 27 (51 24)         2270 (71 15)         2270	morning rise	-5477 Nov 29 j 07:17	18° <b>≏</b> 08'45		opposition	-5471 Nov 25 j 20:29	25° <b>Ƴ</b> 12′08	-0°01'56
companied         5476 μρ 07 j6 s.9         PH 1410s         offices         5470 μρ 23 j2 j.24 d         070 km         07 j0 mm         08 mm         5470 μρ 06 j2 j.22 d         2784 kg         075 kg         07 j0 mm         08 kg         070 μρ         07 j0 mm         08 kg         07 j0 mm         07 j0 m		-5476 Jan 23 j 11:14	$0^{\circ}$ M		min. Earth dist.	-5471 Nov 25 j 21:36	25° <b>Ƴ</b> 11'45	4.31174 AU
opposition         5476 Am 07 (3) 8.3         PERIASE - 071508         central set         5470 Am 08 (3) 127         2784 570         2018 50         4690 Am         5470 Am 08 (3) 167         8820 31         2782 31           direct         5476 Am 08 (3) 167         2794 510         compunetion         5430 Jm 10 (10) 00         1128 167         0.23 21           centing set         5476 Dec 07 (3) 62         178 168 10         minimum close         5470 Jm 10 (3) 688         1128 167         0.23 21           compunction         5476 Dec 07 (3) 62         178 168 50         0.930 10         178 168 50         0.930 10         178 168 50         0.930 10         178 168 50         0.930 10         178 168 50         0.930 10         178 168 50         0.930 10         178 168 50         0.930 10         178 168 50         0.930 10         178 168 50         0.930 10         178 168 50         0.930 10         178 168 50         0.930 10         178 178 10         0.930 10         178 178 10         0.930 10         178 178 10         0.930 10         178 178 10         0.930 10         178 178 10         0.930 10         178 178 10         0.930 10         178 178 10         0.930 10         178 178 10         0.930 10         178 178 10         0.930 10         0.930 10         0.930 10         0.930 10         0.930	desc. node	-5476 Mar 22 j 05:52	7°M19'01		asc. node	-5471 Dec 06 j 15:10	23° <b>Y</b> 47'16	
March   1976	retrograde	-5476 Apr 07 j 05:59	7°M43'06		direct	-5470 Jan 25 j 22:41	20° <b>Y</b> 08′15	
1976   1976	opposition	-5476 Jun 07 j 03:34	2°M43'54	-0°15'08		-5470 Apr 23 j 21:49	0°8	
direct         4576 No. 90 jol 752         276 Syst 10 jol 2016         O'REA         comination closes         4570 No. 10 jol 2016         O'REA         comination closes         4570 No. 10 jol 2016         O'REA         comination closes         4570 No. 10 jol 2016         1780 No. 20 jol 2019         Inches Value         comming rise         4570 No. 10 jol 30 in 15 jol 2018         1280 No. 20 jol 2018         Comming rise         5470 Jol 10 jol 30 in 15 jol 2018         1280 No. 20 jol 2018         Comming rise         5470 No. 20 jol 30 in 15 jol 30 in 172 No. 2018         1270 No. 2018	min. Earth dist.	-5476 Jun 06 j 21:37	2°M45'50	4.06893 AU	evening set	-5470 Jun 03 j 01:17	8° <b>8</b> 20'31	
1947   1948		-5476 Jun 29 j 08:02	30° <b>₹</b> Ω					
1948   1948	direct	-5476 Aug 05 j 07:52	27° <b>£</b> 51′01		conjunction	-5470 Jun 16 j 10:30	11° <b>8</b> 16'59	0°22'51
ceaming set         -5476 Dec 20 jol 0020         1678 Use 10 jol 003         1678 Use 11 jol 003		-5476 Sep 10 j 20:16	$0^{\circ}$ M		minimum elong	-5470 Jun 16 j 10:28	11° <b>8</b> 16'57	0°23'02
Conjunction		-5476 Nov 29 j 09:45	15°M		max. Earth dist.	-5470 Jun 15 j 20:08	11° <b>8</b> 09'04	6.34685 AU
conjunction         -547 Dec 20 j0 6004         99°MLSSS         09°MLSSS         09°MLSSSS         09°MLSSS         09°MLSSSS         09°MLSSSS         09°MLSSSS         09	evening set	-5476 Dec 07 j 04:29	16°M49'40		morning rise	-5470 Jun 29 j 16:31	14° <b>8</b> 11'46	
minimack means         545 Dec 20 j0 604 by 59 MS 548 by 516 by 60 min. Earth dist.         5476 Dec 21 j013 by 50 MS 20 jul 10 by 50 min. Earth dist.         5476 Dec 21 jul 10 by 50 min. Earth dist.         5470 Dec 21 jul 10 by 50 min. Earth dist.         5480 Dec 21 jul 10 by 50 min. Earth dist.         5470 Dec						-5470 Jul 03 j 08:55	15° <b>8</b>	
max Earth disk         5-476 Dec 21 jol.105         07100725         6.0976 AU	conjunction	-5476 Dec 20 j 06:07	19°M55'50	-0°35'03		-5470 Sep 28 j 13:09	$\Pi^{\circ}0$	
1978   1978	minimum elong	-5476 Dec 20 j 06:04	19°M55'48	0°35'16	retrograde	-5470 Oct 28 j 10:30	1° <b>Ⅲ</b> 24'17	
1968   1978	max. Earth dist.	-5476 Dec 21 j 01:36	20°ML07'25	6.03976 AU		-5470 Nov 27 j 07:08	30° <b>₹</b> 8	
ratograde opposition         -5475 May 14 j 07-26         13°P1718         direct         -5469 Fac 7 j 11-12         21°B2633         composition min Farth dist.         -5475 Jul 13 j 17-10         8°×21021         1°256 AU         evening set         -5469 May 20 j 0423         0°21066         -5470 Jul 12 j 18-41         8°×21021         1°258 AU         evening set         -5469 Jul 16 j 23-30         1°11 M5919         6.38011 AU         1°11 M5919         6.38021 AU         1°10 M5919         6.38021 AU	morning rise	-5475 Jan 02 j 11:10	23°ML03'50		opposition	-5470 Dec 27 j 07:30	26° <b>8</b> 29'59	1°04'27
opposition min. Earth dist.         5.475 Jul 1 2 j j 1941         8°-29 (221 + 12°-2940)         5°-29 (221 + 12°-		-5475 Feb 01 j 19:48	0° <b>∡</b> ¹		min. Earth dist.	-5470 Dec 27 j 23:46	26° <b>8</b> 24'41	4.37045 AU
min Earth dist	retrograde	-5475 May 14 j 07:26	13° <b>∡</b> 13′18		direct	-5469 Feb 27 j 11:12	21° <b>8</b> 26'33	
min. Earl dist         5475 Jul 12 j 1941         8° Pl729 k 0.2556 AU         evening set         5469 Jul 15 j08.20         9° D300 b 0.8021 AU           cerning set         5473 Jun 12 j08.35         22° P2905         recenting set         conjunction         5469 Jul 18 j07.55         12° H1712         10° 30° 2           conjunction         5473 Jun 25 j 1774         25° P3901         1° 1424         minimum clong         5469 Jul 18 j07.55         12° H1710         10° 30° 2           max. Earlh dist         5474 Jun 25 j 17744         25° P3890         1° 1424         morning rise         5469 Jul 18 j04.18         15° 10° 40         26° 10° 20° 10° 20° 10° 20° 10° 20° 10° 20° 10° 20° 10° 20° 10° 20° 10° 20° 10° 20° 10° 20° 10° 20° 10° 20° 10° 20° 10° 20° 10° 20° 10° 20° 10° 20° 10° 20° 20° 20° 20° 20° 20° 20° 20° 20° 2	-		8° <b>∡</b> 10′21	-1°26'49		-5469 May 20 j 04:23	$\Pi^{\circ}0$	
direct         -5478 kpr         09 j 2300         3°81027         max. Earth dist.         -5409 kgl         16 j 2330         1°1 II 5919         6.38021 AU           conjunction         -5474 km         12 j 1747         25°8°3901         1°11424         minimum clong         -5469 kgl         18 j 07:55         12°1 II 712         1°0301           max. Earth dist         -5474 km         25′1 744         25°8°3859         1°1443         moming c         -5469 kgl         18 j 07:55         12°1 II 710         10°319           morning rise         -5474 km         17 j 0943         26°80240         0.62604 AU         -5469 kgl         25 j 1747         2°21073         0°2           retorgade         -5474 km         19 j 2342         19°60079         opposition         -5468 km         0.51158         3°8°L         25°1433           retorgade         -5474 km         17 j 1459         18°50509         404460 AU         direct         -5468 km         30j 1222         2°111703         43792 AU           retorgade         -5473 km         18 j 19050         18°50500         404460 AU         direct         -5468 km         30j 1222         2°11170         37972 AU           direct         -5473 km         18 j 19050         18°26070         mi		-5475 Jul 12 j 19:41	8° <b>∡</b> 17′29	4.02556 AU	evening set	-5469 Jul 05 j 08:20	9° <b>Ⅱ</b> 26′06	
evening set         5474 Jan 12 j 08.35         22°8/2905         conjunction         5469 Jul 18 j 07.59         12°II 1712         1°002           conjunction         -5474 Jan 25 j 17.44         25° 37.390 l -1°1424         minimum elong         -5469 Jul 18 j 07.55         12°II 1710         1°030 j           minimum elong         -5474 Jan 25 j 17.44         25° 37.3859         1°1424         morning rise         -5469 Jul 31 j 04.18         15° 10.04         1°002           morning rise         -5474 Feb 18 j 06.43         25° 37.3951         1°1424         morning rise         -5469 Nov 28 j 12.17         0°26 J 050           retrograde         -5474 Feb 18 j 04.43         19° 25039         0°700 s         cretograde         -5468 Jan 27 j 21.44         27° II 1852         1°5143           minimardi dist         -5474 Aug 18 j 1827         13° 55536         -20005         minimardi dist         -5468 Jan 2 j 21.24         2°III 103         43771 1822         1°51143         43773 18 J 21.22         2°III 170         43718 18 J 21.22         1°51143         43718 18 J 21.22         2°III 170         43718 18 J 21.22         2°III 17	direct	-5475 Sep 09 i 23:09	3° <b>∡</b> 16'27		max. Earth dist.			6.38021 AU
conjunction         -5474 Jan 2 5 j 17.47         25°g 3901   -1°1424         conjunction         -5469 Jul 18 j 07.55         12°H 1712   1°03′012         10°30′19           minimum clong         -5474 Jan 2 5 j 17.44         25°g 390′1   -1°1424         minimum clong         -5469 Jul 18 j 07.55         10°H 10°H 10°H 10°H 10°H 10°H 10°H 10°H						,		
conjunction         5.474 Jan 2.5 j 1.74         25 y 3.939   1-14 2.4         minimum clong         5.469 Jul 3 j 0.418   5° 100-64         1.5° 100-64         1.0° 100-10         1.0° 10         1.0	Ü	J			conjunction	-5469 Jul 18 j 07:59	12° <b>Ⅱ</b> 17'12	1°03'02
minimum clong         4.547 Jan 2.5 j 17.44         25°, 37.85° 1°, 14.43         moming rise         4.540 Jul 31 j 04.18         15° Π0640           max. Earth dist         5.474 Feb 08 j 06.043         28°, 25°034         retrograde         4.540 Nov 28 j 12.77         2°90103         -           retrograde         5.474 Feb 13 j 04.43         10°B0039         opposition         5.468 Jan 05 j 15.58         30°R II         2°7 II 18°2         18°11 J 18°1         2°90103         30°R II         2°7 II 18°2         18°11 J 18°1         30°R II         2°7 II 18°2         18°11 J 18°1         30°R II         2°7 II 18°2         18°11 J 18°1         30°R II 18°I         3	conjunction	-5474 Jan 25 i 17:47	25° <b>₹</b> 39'01	-1°14'24		-	12° <b>Ⅱ</b> 17'10	1°03'19
max. Earth dist.         5.474 Jan 2 7 jo 9.3         6.970240         6.02604 AU         - etrograde - 5.469 Nov 28 j 12.17         2.673 Feb 13 jo4.43         0°C         - etrograde - 5.468 Nov 28 j 12.17         2.673 Feb 13 jo4.43         0°C         - 6.468 Jan 05 j 15.58         30°R II           retrograde         5.474 Jun 19 j 23.42         19°50039         opposition         5.468 Jan 05 j 15.58         30°R II           min. Earth dist.         5.474 Aug 17 j 1450         14°5050         4.04460 AU         direct         -5.468 Jan 15 j 12.22         2°E II 1710         2°E II 1710         2°E II 1710         4.072 AU         3.4779 AU<	·				•	-		
moming rise         -5474 Feb 13 jok-44         28°,8004         28°,87074         retrograde         -5474 Feb 13 jok-44         0°B         -5485 Jan 05 j 15:17         2°281053         15'11452 <td>Č</td> <td></td> <td></td> <td></td> <td></td> <td>•</td> <td></td> <td></td>	Č					•		
retrograde				0.02001110	retrograde	-		
retrograde   -5474 Jun   19 j 23 42   19 "50039   opposition   -5468 Jun   27 j 21 47   27 "I 1852   78 143 opposition   -5474 Aug   17 j 14:50   14 "50500   4.04460 AU   direct   -5468 Mar   30 j 12:22   27 "II 033   3.7792 AU   direct   -5474 Aug   17 j 14:50   14 "50500   4.04460 AU   direct   -5468 Mar   30 j 12:22   0°©   -2473 Feb   26 j 04:48   0°∞   -2473 Feb   26 j 04:48   0°∞   -2473 Feb   26 j 04:48   0°∞   -2275   -22551   ocnjunction   -5468 Aug   17 j 16:20   10 "26 j 12"   10 "26 j 12"   -2250   -	morning rise	-			renograde			
opposition min. Earth dist.         -5474 Aug 18 j 18:27         13°5536 σ²0005         min. Earth dist.         -5486 Jan 28 j 23:44         2°I 10'33         4.37792 AU min. Earth dist.           min. Earth dist.         -5474 Aug 17 j 14:50         14°5000         4.04460 AU direct         -5468 Mar 30 j 12:22         2°I 17'10         10°E31421         10°E3142	retrograde	·			onnosition	·		1°51'43
min. Earth dist.	-			-2°06'05	* *	-		
direct         -5474 Oct 15 j 19:58         8°E58856         cvening set         -5468 Jun 15 j 12:22         0°E9         cvening set         -54673 Feb 18 j 09:05         28°E10956         evening set         -5468 Aug 04 j 17:01         10°E91421         -63002 AU           conjunction         -5473 Feb 26 j 04:48         0°8         conjunction         -5468 Aug 17 j 08:28         13°E00242         12°S10           minimum elong         -5473 Mar 04 j 00:11         1°8≈21'12 1°2609         minimum elong         -5468 Aug 17 j 08:28         13°E002'41         12°S29           max. Earth dist         -5473 Mar 17 j 17:33         4°8×22'5         retrograde         -5468 Nov 13 j 03:22         0°£         0°£           retrograde         -5473 Mar 17 j 17:33         4°8×22'5         retrograde         -5468 Nov 13 j 03:22         0°£         0°£           retrograde         -5473 Mar 25 j 02:09         24°8×06'22         retrograde         -5467 Feb 14 j 19:18         3°£         0°£           retrograde         -5473 Mar 30 j 00:38         15°8×02         19°8×101         11:178 AU         opposition         -5467 Feb 14 j 19:18         3°£         9°£         0°£         0°£         0°£         0°£         0°£         0°£         0°£         0°£         0°£         0°£         0°£						-		1.57772110
evening set		• .		1.01100710	ancer			
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conjunction	evening set	-			-			6.36002 ATT
minimum elong		-34731C0 20 j 04.40	0 ~		max. Lartii dist.	-5400 Aug 15 j 17.14	12 340 31	0.30002 AC
minimum elong	conjunction	-5473 Mar 04 i 00:11	1° <b>≈</b> 21'12	-1°25'51	conjunction	-5468 Aug 17 i 08:28	13° <b>©</b> 02'42	1°25'10
max. Earth dist.         -5473 Mar 105 j 19:28         1°≈46′24         6.07466 AU         moming rise         -5468 Aug 20 j 21:16         1°∞49′85′1         -473 Mar 17 j 17:33         4°≈83225         retrograde         -5468 Nov 13 j 03:22         0°Ω         -473 Mar 17 j 17:33         4°≈83225         retrograde         -5468 Nov 13 j 03:22         0°Ω         -473 Mar 17 j 17:33         4°≈83275         retrograde         -5468 Nov 29 j 01:29         3°Ω10′45         -473 Mar 17 j 17:33         4°≈83672         -473 Mar 17 j 17:33         4°≈80672         -473 Mar 17 j 17:33         4°≈80672         41.1798 AU         opposition         -5467 Feb 14 j 19:18         30°€20         70°48         43.2336 AU         42.23°£20/17         4°°£10/18         43.2336 AU         43.2336 AU         42.23°£20/17         40°£21         4°°£10/18         43.2336 AU         40°£21         4°°£10/18         43.2336 AU         40°£21         4°°£10/18         40°£21         4°°£21         4°°£21         4°°£21         4°°£21         4°°£21         4°°£21         4°°£21         4°°£21         4°°£21         4°°£21         4°°£21         4°°£21         4°°£21 </td <td>-</td> <td></td> <td></td> <td></td> <td>·</td> <td></td> <td></td> <td></td>	-				·			
moming rise	U	3			_			. 20 25
retrograde		-		0.07 100 110		• •		
retrograde	morning rise				retrograde	•		
min. Earth dist.	retrograde				renograde	-		
opposition         -5473 Sep 22 j 12:52         19°≈01'47 -1°58'10         min. Earth dist.         -5467 Mar 01 j 12:10         28°91'08         4.33236 AU           direct         -5473 Oct 27 j 03:14         15°≈≈         direct         -5467 May 01 j 17:44         23°920'17         -7473 May 12 j 18:24         0°£         -5473 May 12 j 18:24         0°£         -5472 May 12 j 18:20         11°Ω24'53         10°£         -5472 May 12 j 18:27         0°£         max. Earth dist.         -5467 Sep 15 j 18:02         13°Ω52'59         6.29203 AU         6.292	•	3		4 11798 AU	onnosition	3		2°07'48
conjunction					* *	•		
direct	оррозион			1 30 10		-		4.55250710
evening set	direct				ancer	, ,		
evening set	direct	-			evening set	-		
evening set					-			6 29203 ATT
conjunction         -5472 Apr 08 j 18:38         6° θ 05:43 -1°06'11         minimum elong         -5467 Sep 17 j 07:28         14° Ω14'13         1°23'02           minimum elong         -5472 Apr 08 j 18:38         6° θ 05:43 -1°06'11         minimum elong         -5467 Sep 17 j 07:30         14° Ω14'14         1°23'16           max. Earth dist.         -5472 Apr 08 j 18:42         6° θ 05:45 1°06'21         -5467 Sep 20 j 16:13         15° Ω           morning rise         -5472 Apr 10 j 01:58         6° θ 23'33         6.16660 AU         morning rise         -5467 Sep 20 j 18:08         17° Ω03'13           retrograde         -5472 Apr 22 j 12:57         9° Ӈ 13'10         -5467 Dec 03 j 11:43         0° Ӈ           opposition         -5472 Aug 26 j 12:13         27° Ӈ 51'23         retrograde         -5466 Dec 03 j 11:43         0° Ӈ           opposition         -5472 Aug 26 j 12:13         27° Ӈ 51'23         retrograde         -5466 Dec 03 j 11:43         0° Ӈ         1′46'30           min. Earth dist.         -5472 Oct 24 j 19:16         22° Ӈ 49'36         -1°10'02         opposition         -5466 Apr 02 j 23:10         0° Ӈ 01'42         4.24612 AU           direct         -5472 Dec 23 j 15:24         17° Ӈ 46'52         revening set         -5466 Jul 31 j 30:557         0° Ӈ           evening set         -54	evening set				max. Lartii dist.	-5407 Sep 15 j 16.02	15 063237	0.27203 AC
conjunction         -5472 Apr 08 j 18:38         6° ±05'43         -1°06'11         minimum elong         -5467 Sep 17 j 07:30         14°Ω 14'14         1°23'16           minimum elong         -5472 Apr 08 j 18:42         6° ±05'45         1°06'21         -5467 Sep 20 j 16:13         15° Ω	evening set	5472 With 20 J 00.21	2 /(3000		conjunction	-5467 Sep. 17 i 07:28	14°Ω14'13	1°23'02
minimum elong	conjunction	-5472 Apr 08 i 18:38	6°¥05'43	-1°06'11	3			
max. Earth dist.         -5472 Apr 10 j 01:58         6° ★23'33         6.1660 AU         morning rise         -5467 Sep 29 j 18:08         17° Ω03'13         retrograde           retrograde         -5472 Aug 26 j 12:13         27° ★51'23         retrograde         -5466 Jan 31 j 19:42         5° №01'48         5° №01'48           opposition         -5472 Oct 24 j 19:16         22° ★49'36         -1° 10'02         opposition         -5466 Apr 02 j 23:10         0° №08'59         1° 46'30           min. Earth dist.         -5472 Dec 23 j 15:24         17° ★46'52         min. Earth dist.         -5466 Apr 04 j 03:22         30° №0           evening set         -5471 Mar 31 j 20:29         0° №         direct         -5466 Jun 03 j 13:42         25° Ω12'49           evening set         -5471 Apr 30 j 08:08         6° №20'06         evening set         -5466 Jun 03 j 13:42         25° Ω12'49           conjunction         -5471 May 14 j 00:28         9° №22'42         -0°24'57         max. Earth dist.         -5466 Oct 18 j 02:40         16° № 13'57         6.19541 AU           minimum elong         -5471 May 14 j 00:30         9° №2'243         0°24'55         max. Earth dist.         -5466 Oct 19 j 00:51         16° №26'48         0°55'40           morning rise         -5471 May 27 j 14:48         12° №2'4'09         morning r	•				minimum ciong			1 23 10
morning rise   -5472 Apr   22 j   12:57   9°	Č				morning rise			
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opposition         -5472 Oct 24 j 19:16         22° χ 49'36         -1°10'02         opposition         -5466 Apr 02 j 23:10         0° mol's59         1°46'30           min. Earth dist.         -5472 Oct 24 j 06:23         22° χ 53'58         4.21826 AU         min. Earth dist.         -5466 Apr 03 j 22:00         0° mol'42         4.24612 AU           direct         -5472 Dec 23 j 15:24         17° χ 46'52         -5466 Apr 04 j 03:22         30° κ Ω         30° κ Ω         25° Ω 12'49         25°	-				ratra ara da	•		
min. Earth dist.	•			1910/02	-			1946!20
direct $-5472  \text{Dec} \ 23  j  15:24 \ 17^{\circ} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	**							
-5471 Mar 31 j 20:29 0°Υ direct -5466 Jun 03 j 13:42 25° & 12'49 evening set -5471 Apr 30 j 08:08 6°Υ 20'06 evening set -5466 Jul 31 j 05:57 0° M evening set -5466 Oct 06 j 11:30 13° M 32'46 conjunction -5471 May 14 j 00:28 9°Υ 22'42 -0°24'57 max. Earth dist5466 Oct 18 j 02:40 16° M 13'57 6.19541 AU minimum elong -5471 May 14 j 00:30 9° Υ 22'43 0°24'55 max. Earth dist5471 May 14 j 09:46 9° Υ 27'53 6.26812 AU conjunction -5466 Oct 19 j 00:55 16° M 26'48 0°55'40 morning rise -5471 Sep 17 j 06:25 0° 8 morning rise -5466 Oct 31 j 14:46 19° M 21'22 ε		-		7.21020 AU	mm. Darm uist.			7.27012 AU
evening set	uncet				diract			
evening set -5466 Oct 06 j 11:30 13° m/32'46  conjunction	ovening set				ullect	•		
conjunction       -5471 May 14 j 00:28       9°Y22'42       -0°24'57       max. Earth dist.       -5466 Oct       18 j 02:40       16° m 13'57       6.19541 AU         minimum elong       -5471 May 14 j 00:30       9°Y22'43       0°24'55         max. Earth dist.       -5471 May 14 j 09:46       9°Y27'53       6.26812 AU       conjunction       -5466 Oct       19 j 00:51       16° m 26'48       0°55'40         morning rise       -5471 May 27 j 14:48       12°Y24'09       morning rise       -5466 Oct       19 j 00:55       16° m 26'50       0°55'46         -5471 Sep 17 j 06:25       0°8       morning rise       -5466 Oct       31 j 14:46       19° m 21'22	evening set	-34/1 Apr 30 J 08:08	0 12006		ovening set	-		
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max. Earth dist5471 May 14 j 09:46 9°Y27'53 6.26812 AU conjunction -5466 Oct 19 j 00:51 16° m/26'48 0°55'40 morning rise -5471 May 27 j 14:48 12°Y24'09 minimum elong -5466 Oct 19 j 00:55 16° m/26'50 0°55'46 -5471 Sep 17 j 06:25 0°8 morning rise -5466 Oct 31 j 14:46 19° m/21'22					max. Earth dist.	-3400 Oct 18 J 02:40	10°11 <b>7</b> 13'5/	0.19341 AU
morning rise -5471 May 27 j 14:48 12° Y 24'09 minimum elong -5466 Oct 19 j 00:55 16° Mp 26'50 0° 55'46 -5471 Sep 17 j 06:25 0° 8 morning rise -5466 Oct 31 j 14:46 19° Mp 21'22	Č					EACC 0 + 10:00 51	1 (0 m- 0 (140	0055140
-5471 Sep 17 j 06:25 0°8 morning rise -5466 Oct 31 j 14:46 19° mp 21'22				0.20812 AU		-		
	morning rise				_			U-33'46
-5471 Sep 2/10/:55 0°O1004 -5466 Dec 20109:19 0°44	notno e 1.				morning rise	•		
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Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5465 in astronomical counting style is the year 5466 BCE in historical counting style. -5465 Mar 07 j 21:34 8°**₽**10'46 direct -5460 Dec 28 j 04:57 22°\(\frac{1}{2}2'09\) retrograde opposition -5465 May 08 j 01:20 3°**£**14'56 0°50'12 -5459 Mar 12 j 20:30  $0^{\circ}\Upsilon$ 3°**2**12'04 4.14510 AU -5465 May 08 j 10:15 -5459 May 05 j 01:17 10°**Y**54'02 min. Earth dist. evening set -5465 Jun 04 j 17:24 30°R M -5465 Jul 07 j 09:25 13°**Y**55'56 -0°18'28 direct 28° m 21'13 conjunction -5459 May 18 j 16:53 -5459 May 18 j 16:54 -5465 Aug 08 j 17:23 0∘**⊽** minimum elong 13°**Y**55'57 0°18'25 -5459 May 18 j 21:47 evening set -5465 Nov 08 j 09:58 17°**♀**01'11 max. Earth dist. 13°**Y**58'40 6.27859 AU 16°**Y**56'37 morning rise -5459 Jun 01 j 06:24 conjunction -5465 Nov 21 j 05:01 20°**₽**01'51 0°09'18 -5459 Aug 06 j 22:58 0°8 minimum elong -5465 Nov 21 j 05:01 20°**₽**01'51 0°09'13 retrograde -5459 Oct 01 j 17:05 4°**8**37'35 behind sun begin -5465 Nov 20 j 22:11 19°**♀**57'50 asc. node -5459 Oct 18 j 00:39 4°811'10 behind sun end -5465 Nov 21 j 11:52 20°**♀**05'52 -5459 Nov 27 j 17:20 30°**Ŗ**Υ max. Earth dist. -5465 Nov 21 j 03:39 20°**₽**01'03 6.09962 AU opposition -5459 Nov 30 j 04:55 29°**Y**40′14 0°07'43 morning rise -5465 Dec 04 j 02:35 23°**♀**03'56 min. Earth dist. -5459 Nov 30 j 09:09 29°**Y**38'50 4.31965 AU -5464 Jan 03 j 17:32 0°M direct -5458 Jan 30 j 11:38 24° Y 36'21 desc. node -5464 Jan 31 j 12:52 5°M32'16 -5458 Apr 03 j 00:52 0°8 retrograde -5464 Apr 12 j 08:34 12°M43'40 evening set -5458 Jun 07 j 14:04 12°847'21 opposition -5464 Jun 12 j 05:45  $7^{\circ}$ ML43'50  $-0^{\circ}25'59$ -5458 Jun 17 j 15:48 15°8 min. Earth dist. -5464 Jun 11 j 20:55 7°M46'44 4.06222 AU direct -5464 Aug 10 j 06:47 2°M50'54 conjunction -5458 Jun 20 j 22:12 15°**8**43'10 0°29'05 -5464 Nov 12 j 04:28 15°M₀ minimum elong -5458 Jun 20 j 22:10 15°**8**43'09 0°29'19 evening set -5464 Dec 12 i 02:50 21°M50'54 max. Earth dist. -5458 Jun 20 i 05:17 15°**8**33'52 6.35159 AU morning rise -5458 Jul 04 i 02:56 18°**8**37'16 conjunction -5464 Dec 25 j 05:38 24°M57'37 -0°41'39 -5458 Aug 30 i 07:39  $\Pi^{\circ}0$ -5464 Dec 25 j 05:34 24°M57'35 0°41'53 retrograde -5458 Nov 01 j 17:13 5°**Ⅱ**48'09 minimum elong -5464 Dec 26 j 05:49 -5458 Dec 31 j 16:13 0°II54'14 1°12'26 max. Earth dist. 25°M12'00 6.03718 AU opposition -5463 Jan 07 j 11:33 min. Earth dist. -5457 Jan 01 j 09:19 0°**П**48'40 4.37211 AU 28°M,06'08 morning rise -5457 Jan 07 j 15:46 -5463 Jan 15 j 13:53 0°×7 30°R₩ -5463 May 19 j 11:02 18°**х** 16'33 direct -5457 Mar 03 j 20:57 25°**8**51'00 retrograde -5457 Apr 27 j 15:57 -5463 Jul 18 j 17:46 13°**∡**13'11 -1°34'39  $0^{\circ}\Pi$ opposition min. Earth dist. -5463 Jul 17 j 19:39 13°**尽**20'36 4.02756 AU evening set -5457 Jul 09 j 18:12 13° II 50′33 -5463 Sep 14 j 22:53 8°**х** 19′00 max. Earth dist. -5457 Jul 21 j 07:18 16°**Ⅲ**22'49 6.37862 AU direct -5462 Jan 17 j 10:16 27°**х**³31'13 evening set -5462 Jan 27 j 22:28 -5457 Jul 22 j 16:34 16°**耳**41'10 1°07'21 0°궁 conjunction -5457 Jul 22 j 16:30 minimum elong 16°**Ⅱ**41′08 1°07'38 0°る41'11 -1°17'49 -5462 Jan 30 j 20:09 -5457 Aug 04 j 11:39 conjunction morning rise 19°**Ⅲ**30′12 minimum elong -5462 Jan 30 j 20:06 0°る41'09 1°18'08 -5457 Sep 25 j 11:37 0ಂತಾ max. Earth dist. -5462 Feb 01 j 12:11 1°る04'50 6.03200 AU retrograde -5457 Dec 02 j 22:32 6°935'54 morning rise -5462 Feb 13 j 09:22 3°る52'47 -5456 Feb 01 j 08:57 1°**5**44'09 1°56'00 opposition retrograde -5462 Jun 24 j 19:57 23°る58'45 min. Earth dist. -5456 Feb 02 j 11:57 1°535'30 4.37341 AU -5462 Aug 22 j 10:19 19°る03'15 4.05405 AU -5456 Feb 15 j 05:04 30°RⅡ min. Earth dist. -5462 Aug 23 j 14:38 18°る53'35 -2°07'47 -5456 Apr 04 j 00:17 26°**Ⅱ**42'49 opposition direct -5462 Oct 20 j 16:25 13°**る**56'25 -5456 May 22 j 08:28 0ಂತಾ direct -5461 Feb 09 j 20:09 14°9540'51 0°≈ evening set -5456 Aug 09 j 01:35 -5461 Feb 23 j 10:05 max. Earth dist. evening set 3°≈06'20 -5456 Aug 19 j 23:57 17°**5**06'42 6.35274 AU conjunction -5461 Mar 09 i 01:53 6°≈16'20 -1°24'53 conjunction -5456 Aug 21 j 16:09 17°9529'07 1°26'23 minimum elong -5461 Mar 09 i 01:55 6°≈16'21 1°25'08 minimum elong -5456 Aug 21 i 16:08 17°9529'06 1°26'42 max. Earth dist. -5461 Mar 10 j 20:07 6°≈40'52 6.08669 AU morning rise -5456 Sep 03 i 04:26 20°9516'19 -5461 Mar 22 j 19:30 9°≈27'07 -5456 Oct 20 j 04:54  $0^{\circ}\Omega$ morning rise -5461 Apr 16 j 11:52 15°**≈** -5455 Jan 03 j 00:21 7°Ω41'18 retrograde -5461 Jul 29 j 18:55 -5455 Mar 04 j 22:09 2°Ω49'45 2°07'04 retrograde 28°≈53'53 opposition min. Earth dist. 2°**Ω**40'52 4.32289 AU min. Earth dist. -5461 Sep 26 j 05:19 23°≈57'18 4.13112 AU -5455 Mar 06 j 02:06 opposition -5461 Sep 27 j 03:55 23°≈49'35 -1°53'34 -5455 Mar 28 j 15:35 30°R55 27°951'06 direct -5461 Nov 24 j 23:34 18°≈49'03 direct -5455 May 06 j 06:13 -5460 Feb 24 j 10:04 0°**)**€ -5455 Jun 13 j 14:57  $0^{\circ}\Omega$ -5460 Mar 30 j 21:54 7°**)** 42′32 -5455 Sep 04 j 23:03 15°€ evening set 15°**Ω**57'10 evening set -5455 Sep 09 j 04:50 -5460 Apr 13 j 16:17 10°**¥**49'38 -1°01'31 conjunction max. Earth dist. -5455 Sep 20 j 06:01 18°**Ω**27'21 6.28112 AU minimum elong -5460 Apr 13 j 16:21 10°**)** 49'41 1°01'39 max. Earth dist. -5460 Apr 14 j 20:58 11°**米**05′54 6.17988 AU conjunction -5455 Sep 21 j 16:25 18°**Ω**46′54 1°20′39 -5460 Apr 27 j 10:23 13°**¥** 56′25 minimum elong -5455 Sep 21 j 16:28 18°**Ω**46'56 1°20'52 morning rise -5460 Jul 22 j 08:45  $0^{\circ}\Upsilon$ morning rise -5455 Oct 04 j 03:03 21°**Ω**36'24 retrograde -5460 Aug 30 j 21:43 2°**Y**27′22 -5455 Nov 12 j 04:57 0° m -5460 Oct 09 j 07:10 30°**₹** retrograde -5454 Feb 05 j 14:25 9° m 40'52 -5460 Oct 29 j 05:42 27°\ 26'07 -1°01'24 -5454 Apr 07 j 18:25 opposition opposition 4° m 47'44 1°40'30 -5460 Oct 28 j 18:05 min. Earth dist. 27°**₭**30'03 4.23051 AU min. Earth dist. -5454 Apr 08 j 15:50 4° Mp 40'55 4.23426 AU Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 40 Attention, astronomical year style is used: The year -5454 in astronomical counting style is the year 5455 BCE in historical counting style.

Attention, astronom	ical year style is used: Th		n astronomical co	unting style is the year			
	-5454 May 29 j 23:19	30°R€			-5448 Feb 03 j 18:44	0° <b>\</b>	
direct	-5454 Jun 08 j 05:21	29° <b>Ω</b> 52'00		evening set	-5448 Apr 04 j 21:22	12° <b>∺</b> 31'38	
	-5454 Jun 17 j 11:33	0° <b>m</b> )					
evening set	-5454 Oct 10 j 23:07	18° <b>m</b> 13'46		conjunction	-5448 Apr 18 j 15:40	15° <b>)</b> 38′16	
				minimum elong	-5448 Apr 18 j 15:45	15° <b>)</b> 38′18	0°56'27
conjunction	-5454 Oct 23 j 12:52	21°Mp08'31	0°50'06	max. Earth dist.	-5448 Apr 19 j 16:20	15° <b>)</b> 52′13	6.19121 AU
minimum elong	-5454 Oct 23 j 12:56	21° <b>m</b> 08'33	0°50'10	morning rise	-5448 May 02 j 09:37	18° <b>) (</b> 44′28	
max. Earth dist.	-5454 Oct 22 j 16:02	20° <b>m</b> 56'25	6.18348 AU		-5448 Jun 25 j 18:25	$0^{\circ}$ Y	
morning rise	-5454 Nov 05 j 03:47	24° Mp 04'00		retrograde	-5448 Sep 04 j 11:24	7° <b>Y</b> 08'46	
	-5454 Dec 01 j 14:19	0∘ <b>ত</b>		opposition	-5448 Nov 02 j 18:22	2° <b>Y</b> 08'00	-0°52'14
retrograde	-5453 Mar 12 j 19:50	12° <b>≏</b> 59'58		min. Earth dist.	-5448 Nov 02 j 09:35	2° <b>Y</b> 10'58	4.24137 AU
opposition	-5453 May 13 j 00:05	8° <b>ഫ</b> 03'35	0°40'18		-5448 Nov 19 j 02:46	30° <b>Ŗ</b> ₩	
min. Earth dist.	-5453 May 13 j 06:17	8° <b>ഫ</b> 01'34	4.13379 AU	direct	-5447 Jan 01 j 22:36	27° <b>₩</b> 04'47	
direct	-5453 Jul 12 j 03:53	3° <b>₽</b> 10'02			-5447 Feb 15 j 03:19	$0^{\circ}\mathbf{\Upsilon}$	
evening set	-5453 Nov 13 j 02:15	21° <b>≙</b> 52'16		evening set	-5447 May 09 j 20:12	15° <b>Ƴ</b> 33'29	
conjunction	-5453 Nov 25 j 22:23	24° <b>£</b> 53'46	0°02'08	conjunction	-5447 May 23 j 11:14	18° <b>Y</b> 34'43	-0°11'44
minimum elong	-5453 Nov 25 j 22:25	24° <b>₽</b> 53'47	0°02'02	minimum elong	-5447 May 23 j 11:15	18° <b>Ƴ</b> 34'44	0°11'39
behind sun begin	-5453 Nov 25 j 14:19	24° <b>₽</b> 49'02		behind sun begin	-5447 May 23 j 05:29	18° <b>Y</b> 31'33	
behind sun end	-5453 Nov 26 j 06:30	24° <b>₽</b> 58'32		behind sun end	-5447 May 23 j 17:01	18° <b>Ƴ</b> 37'55	
max. Earth dist.	-5453 Nov 26 j 01:33	24° <b>₽</b> 55'35	6.09005 AU	max. Earth dist.	-5447 May 23 j 14:29	18° <b>Y</b> 36'31	6.28839 AU
morning rise	-5453 Dec 08 j 20:57	27° <b>£</b> 56'46		morning rise	-5447 Jun 05 i 23:40	21° <b>Y</b> ′34'35	
desc. node	-5453 Dec 11 j 23:23	28° <b>Ω</b> 40'19		. 8	-5447 Jul 16 j 04:23	0°8	
	-5453 Dec 17 j 16:37	0°M₊		asc. node	-5447 Aug 27 j 23:33	6° <b>8</b> 47'51	
	-5452 Mar 06 j 03:01	15° <b>™</b>		retrograde	-5447 Oct 06 j 01:54	9° <b>8</b> 10'45	
retrograde	-5452 Apr 17 j 11:33	17° <b>M</b> 41'40		opposition	-5447 Dec 04 j 15:39	4° <b>8</b> 13'55	0°17'32
	-5452 May 29 j 23:28	15°RM		min. Earth dist.	-5447 Dec 04 j 20:37	4° <b>8</b> 12'16	
opposition	-5452 Jun 17 j 06:14	12°M41'20	-0°36'35	mm. Bartir dist.	-5446 Jan 11 j 21:11	30°RY	52,0,110
min. Earth dist.	-5452 Jun 16 j 20:08	12°M44'40	4.05534 AU	direct	-5446 Feb 04 j 00:37	29° <b>Υ</b> 10'06	
direct	-5452 Aug 15 j 04:36	7°M48'21		4.1.001	-5446 Feb 27 j 11:52	0°8	
direct	-5452 Oct 23 j 13:32	15°M			-5446 Jun 01 j 11:16	15° <b>8</b>	
evening set	-5452 Dec 17 j 00:40	26°M50'18		evening set	-5446 Jun 12 j 04:51	17° <b>8</b> 19'23	
evening set	5452 Dec 17 j 00.40	20 11030 10		evening set	5440 Juli 12 j 04.51	17 01723	
conjunction	-5452 Dec 30 j 04:20	29°M57'36	-0°47'54	conjunction	-5446 Jun 25 j 11:33	20° <b>8</b> 14'22	0°35'18
minimum elong	-5452 Dec 30 j 04:16	29°M57'34		minimum elong	-5446 Jun 25 j 11:30	20° <b>8</b> 14'21	0°35'32
minimum clong	-5452 Dec 30 j 04:10	0° <b>√</b> 1	0 40 10	max. Earth dist.	-5446 Jun 24 j 15:47	20° <b>8</b> 03'30	6.35781 AU
max. Earth dist.	-5452 Dec 31 j 05:43	0° <b>⊼</b> 12'41	6.03335 AU	morning rise	-5446 Jul 08 j 15:01	23° <b>8</b> 07'41	0.33781 AO
morning rise	-5451 Jan 12 j 11:31	3°×1241	0.03333 AU	morning risc	-5446 Aug 10 j 06:14	0°Ⅱ	
Č	-5451 May 24 j 11:10	23°×18'44		ratra ara da	-5446 Nov 06 j 03:24	0 H 10°H16'18	
retrograde opposition	-5451 Jul 23 j 17:16	18° <b>x</b> 14'58	1041147	retrograde opposition	-5445 Jan 05 j 02:58	5° <b>П</b> 22'48	1020/00
min. Earth dist.	-		4.02744 AU		-	5° <b>П</b> 16'35	4.37622 AU
	-5451 Jul 22 j 17:11 -5451 Sep 19 j 19:56	13° <b>x</b> 23'04	4.02744 AU	min. Earth dist. direct	-5445 Jan 05 j 22:05 -5445 Mar 08 j 10:55	0° <b>П</b> 19'47	4.37022 AU
direct	-5450 Jan 11 j 12:16	13 x·2024 0°る			-5445 Jul 14 j 05:02	0 <u>П</u> 1947 18° <b>П</b> 18'01	
evening set	-5450 Jan 22 j 11:44	0 0 2° <b>る</b> 33'24		evening set max. Earth dist.	-	20° <b>∏</b> 49'21	6.38027 AU
evening set	-3430 Jan 22 J 11.44	2 033 24		max. Earm dist.	-5445 Jul 25 j 16:20	20 Д4921	0.38027 AU
agniumation	5450 Eab 04 : 22:20	50-212127	1920/41	aaniumatian	-5445 Jul 27 j 02:12	21° <b>II</b> 08'02	1911120
conjunction	-5450 Feb 04 j 22:39	5°る43'37 5°る43'35		conjunction minimum elong	-5445 Jul 27 j 02:12	21° <b>I</b> I08'02	
minimum elong max. Earth dist.	-5450 Feb 04 j 22:36		6.03544 AU	morning rise	,	23° <b>I</b> I56'29	1 11 36
	-5450 Feb 06 j 16:06	8° <b>ろ</b> 55'20	0.05544 AU	morning rise	-5445 Aug 08 j 20:01	23 <b>п</b> 3629	
morning rise	-5450 Feb 18 j 12:31				-5445 Sep 06 j 08:13		
retrograde min. Earth dist.	-5450 Jun 29 j 18:43 -5450 Aug 27 j 07:59	28°る58'14	4.06060 AU	retrograde	-5445 Dec 07 j 07:52 -5444 Feb 05 j 21:01	11°502'31 6°510'50	1°59'36
				opposition	,		
opposition	-5450 Aug 28 j 11:00	23° <b>ろ</b> 53'01	-2 08 30	min. Earth dist.	-5444 Feb 06 j 23:21	6°502'25	4.37278 AU
direct	-5450 Oct 25 j 15:06	18° <b>る</b> 55'21		direct	-5444 Apr 08 j 11:43	1°509'52	
. ,	-5449 Jan 23 j 01:42	0° <b>≈</b>		evening set	-5444 Aug 13 j 09:46	19°507'03	C 24004 ATT
evening set	-5449 Feb 28 j 12:08	8° <b>≈</b> 04'19		max. Earth dist.	-5444 Aug 24 j 08:33	21° <b>©</b> 33'17	6.34984 AU
conjunction	5440 Mar 14:04:26	1100014112	1023117	conjunction	5444 Aug 25 : 22:21	21° <b>©</b> 55'03	1027105
conjunction	-5449 Mar 14 j 04:36	11°≈14'12		conjunction	-5444 Aug 25 j 23:31 -5444 Aug 25 j 23:30		
minimum elong	-5449 Mar 14 j 04:39	11°≈14'14		minimum elong		21°555'03	1°27'23
max. Earth dist.	-5449 Mar 15 j 22:10	11°≈38'16	6.09574 AU	morning rise	-5444 Sep 07 j 11:06	24°5942'06	
morning rise	-5449 Mar 27 j 22:37	14°≈24'43		ratra a J.	-5444 Oct 01 j 22:18	0°Ω	
	-5449 Mar 30 j 12:11	15° <b>≈</b>		retrograde	-5443 Jan 07 j 13:33	12° <b>Ω</b> 09'46	2005122
, 1	-5449 Jun 14 j 22:51	0° <b>)</b> {		opposition	-5443 Mar 09 j 12:42	7° <b>Ω</b> 18'06	
retrograde	-5449 Aug 03 j 11:26	3° <b>)</b> (45′05		min. Earth dist.	-5443 Mar 10 j 16:43	7°Ω09'13	4.31770 AU
*.*	-5449 Sep 22 j 02:07	30°R≈	104040	direct	-5443 May 10 j 19:57	2° <b>Ω</b> 19'52	
opposition	-5449 Oct 01 j 19:50	28°≈41'06			-5443 Aug 19 j 19:13	15° <b>Ω</b>	
min. Earth dist.	-5449 Sep 30 j 21:48		4.14170 AU	evening set	-5443 Sep 13 j 12:27	20° <b>Ω</b> 25'44	
direct	-5449 Nov 29 j 17:41	23° <b>≈</b> 40′08					

Attention actronomi	and moor etails is used. Th	a woor 5/1/2 i	n actronomical cou	nting style is the year	5444 BCE in historical c	ounting style	
	-5443 Sep 25 j 23:52	e year -5443 1 $23^{\circ}\Omega$ 15'44		max. Earth dist.			6.10293 AU
conjunction					-5437 Mar 20 j 21:46		0.10293 AU
minimum elong	-5443 Sep 25 j 23:55	23° <b>Ω</b> 15'45	1°18'00	morning rise	-5437 Apr 02 j 01:05	19° <b>≈</b> 20'11	
max. Earth dist.	-5443 Sep 24 j 13:35	22° <b>Ω</b> 56'13	6.27403 AU		-5437 May 21 j 20:20	0° <b>\</b>	
morning rise	-5443 Oct 08 j 10:48	26° <b>Ω</b> 05'37		retrograde	-5437 Aug 08 j 04:20	8° <b>)</b> 34′57	1040100
	-5443 Oct 25 j 23:31	0° <b>m</b> )		opposition	-5437 Oct 06 j 11:25	3° <b>∺</b> 31'18	
retrograde	-5442 Feb 10 j 06:00	14° m 14'43		min. Earth dist.	-5437 Oct 05 j 15:06		4.15097 AU
opposition	-5442 Apr 12 j 11:35	9° m, 21'11	1°33'57		-5437 Nov 04 j 06:25	30°R≈	
min. Earth dist.	-5442 Apr 13 j 06:53	9° <b>m</b> ,15′02	4.22552 AU	direct	-5437 Dec 04 j 13:21	28° <b>≈</b> 29'57	
direct	-5442 Jun 12 j 18:54	4° <b>™</b> 25'45			-5436 Jan 04 j 03:50	0° <b>∀</b>	
evening set	-5442 Oct 15 j 08:38	22° Mp 48'29		evening set	-5436 Apr 09 j 20:17	17° <b>∺</b> 19'47	
conjunction	-5442 Oct 27 j 23:06	25° <b>m</b> 43'55	0°44'19	conjunction	-5436 Apr 23 j 14:41	20° <b>¥</b> 25'59	
minimum elong	-5442 Oct 27 j 23:10	25° Mp 43'57	0°44'21	minimum elong	-5436 Apr 23 j 14:45	20° <b>)</b> € 26′02	0°50'51
max. Earth dist.	-5442 Oct 27 j 05:43	25° Mg 33'48	6.17405 AU	max. Earth dist.	-5436 Apr 24 j 14:37	20° <b>∺</b> 39'31	6.20213 AU
morning rise	-5442 Nov 09 j 14:39	28° Mp 40'08		morning rise	-5436 May 07 j 08:05	23° <b>)</b> €31'32	
	-5442 Nov 15 j 09:29	0∘ <b>⊽</b>			-5436 Jun 06 j 03:56	$0^{\circ}$ Y	
retrograde	-5441 Mar 17 j 17:02	17° <b>≏</b> 41'48		retrograde	-5436 Sep 08 j 23:09	11° <b>Y</b> 49'14	
opposition	-5441 May 17 j 20:02	12° <b>≏</b> 44'58	0°30'20	opposition	-5436 Nov 07 j 06:33	6° <b>Ƴ</b> 49'00	-0°42'44
min. Earth dist.	-5441 May 18 j 01:21	12° <b>≏</b> 43'15	4.12415 AU	min. Earth dist.	-5436 Nov 06 j 22:36	6° <b>Y</b> 51'40	4.25281 AU
direct	-5441 Jul 16 j 20:46	7° <b>£</b> 51'36		direct	-5435 Jan 06 j 13:49	1° <b>Y</b> 45'38	
desc. node	-5441 Oct 23 j 13:42	20° <b>ჲ</b> 51'18		evening set	-5435 May 14 j 14:44	20° <b>Ƴ</b> 11'47	
evening set	-5441 Nov 17 j 16:12	26° <b>Ω</b> 35'51		-			
S	,			conjunction	-5435 May 28 j 04:41	23° <b>Y</b> 12'10	-0°04'57
conjunction	-5441 Nov 30 j 13:11	29° <b>£</b> 38'10	-0°05'00	minimum elong	-5435 May 28 j 04:41	23° <b>Y</b> 12'09	0°04'51
minimum elong	-5441 Nov 30 j 13:10	29° <b>≏</b> 38'09	0°05'07	behind sun begin	-5435 May 27 j 20:38	23° <b>Y</b> 07'43	
behind sun begin	-5441 Nov 30 j 05:18	29° <b>₽</b> 33'32		behind sun end	-5435 May 28 j 12:43	23° <b>Y</b> 16'36	
behind sun end	-5441 Nov 30 j 21:02	29° <b>Ω</b> 42'47		max. Earth dist.	-5435 May 28 j 03:52	23° <b>Y</b> 11'43	6.29941 AU
max. Earth dist.	-5441 Nov 30 j 17:20	29° <b>Ω</b> 40'35	6.08106 AU	morning rise	-5435 Jun 10 j 16:11	26° <b>Υ</b> 11'08	0.27741710
max. Earth dist.	-5441 Dec 02 j 02:07	0°M	0.00100710	morning rise	-5435 Jun 28 j 06:23	0°8	
morning rise	-5441 Dec 13 j 13:01	2°M42'05		asc. node	-5435 Jul 07 j 14:20	1° <b>8</b> 57'02	
morning risc	-5440 Feb 08 j 18:25	15°M		retrograde	-5435 Oct 10 j 11:16	13° <b>8</b> 42'06	
retrograde	-5440 Apr 22 j 09:45	22°M32'04		opposition	-5435 Dec 09 j 01:42	8° <b>8</b> 45'43	0°27'11
opposition	-5440 Jun 22 j 03:37	17°M31'16	0.046,40	min. Earth dist.	-5435 Dec 09 j 09:09	8° <b>8</b> 43'15	4.33745 AU
11	-5440 Jun 21 j 14:59		4.04793 AU	direct	-5434 Feb 08 j 15:06	3° <b>8</b> 41'51	4.55745 AU
min. Earth dist.	,	17 11633 20 15°RM	4.04/93 AU	direct	-5434 May 15 j 08:12	15° <b>8</b>	
1:4	-5440 Jul 12 j 05:58	13 KIIL 12°MJ38'11				21° <b>8</b> 48'46	
direct	-5440 Aug 19 j 21:31			evening set	-5434 Jun 16 j 17:57	21 04840	
	-5440 Sep 27 j 01:02	15°M₁			5424 I 20 : 22 20	240 42156	0041116
	-5440 Dec 14 j 13:25	0° <b>∡</b> 7		conjunction	-5434 Jun 29 j 23:28	24° <b>8</b> 42'56	
evening set	-5440 Dec 21 j 20:18	1° <b>∡</b> 142'47		minimum elong	-5434 Jun 29 j 23:25	24° <b>8</b> 42'54	0°41'30
				T 4 1 4	5.40.4 X 20 : 00 45		
conjunction	5420 I 04:01.05	40.750147	0053140	max. Earth dist.	-5434 Jun 29 j 02:45	24° <b>8</b> 31'32	6.36489 AU
minimum elong	-5439 Jan 04 j 01:05	4° <b>∡</b> 750'47		max. Earth dist. morning rise	-5434 Jul 13 j 01:22	24° <b>8</b> 31'32 27° <b>8</b> 35'21	
	-5439 Jan 04 j 01:01	4° <b>₰</b> 50'44	0°53'57	morning rise	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27	24°₩31'32 27°₩35'21 0°Щ	
max. Earth dist.	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08	4° <b>х</b> 50'44 5° <b>х</b> 07'27		morning rise retrograde	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04	24°₩31'32 27°₩35'21 0°Ⅲ 14°Ⅲ41'38	6.36489 AU
morning rise	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10	4° ₹ 50'44 5° ₹ 07'27 8° ₹ 00'35	0°53'57	morning rise retrograde opposition	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31	24° <b>8</b> 31'32 27° <b>8</b> 35'21 0°П 14°П41'38 9°П48'26	6.36489 AU 1°27'19
morning rise retrograde	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20	4° ₹ 50'44 5° ₹ 07'27 8° ₹ 00'35 28° ₹ 14'45	0°53'57 6.02820 AU	morning rise retrograde opposition min. Earth dist.	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02	24° <b>8</b> 31'32 27° <b>8</b> 35'21 0°П 14°П41'38 9°П48'26 9°П42'06	6.36489 AU
morning rise retrograde opposition	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20 -5439 Jul 28 j 14:21	4° ₹ 50'44 5° ₹ 07'27 8° ₹ 00'35 28° ₹ 14'45 23° ₹ 10'43	0°53'57 6.02820 AU -1°48'01	retrograde opposition min. Earth dist. direct	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02 -5433 Mar 12 j 21:31	24° <b>8</b> 31'32 27° <b>8</b> 35'21 0°П 14°П41'38 9°П48'26 9°П42'06 4°П45'38	6.36489 AU 1°27'19
morning rise retrograde opposition min. Earth dist.	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20 -5439 Jul 28 j 14:21 -5439 Jul 27 j 14:31	4° ₹ 50'44 5° ₹ 07'27 8° ₹ 00'35 28° ₹ 14'45 23° ₹ 10'43 23° ₹ 18'46	0°53'57 6.02820 AU	retrograde opposition min. Earth dist. direct evening set	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02 -5433 Mar 12 j 21:31 -5433 Jul 18 j 14:12	24° 831'32 27° 835'21 0° Π 14° Π41'38 9° Π48'26 9° Π42'06 4° Π45'38 22° Π42'35	6.36489 AU 1°27'19 4.38028 AU
morning rise retrograde opposition	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20 -5439 Jul 28 j 14:21 -5439 Jul 27 j 14:31 -5439 Sep 24 j 16:21	4° ₹ 50'44 5° ₹ 07'27 8° ₹ 00'35 28° ₹ 14'45 23° ₹ 10'43 23° ₹ 18'46 18° ₹ 15'50	0°53'57 6.02820 AU -1°48'01	retrograde opposition min. Earth dist. direct	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02 -5433 Mar 12 j 21:31	24° <b>8</b> 31'32 27° <b>8</b> 35'21 0°П 14°П41'38 9°П48'26 9°П42'06 4°П45'38	6.36489 AU 1°27'19
morning rise retrograde opposition min. Earth dist.	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20 -5439 Jul 28 j 14:21 -5439 Jul 27 j 14:31	4° ₹ 50'44 5° ₹ 07'27 8° ₹ 00'35 28° ₹ 14'45 23° ₹ 10'43 23° ₹ 18'46	0°53'57 6.02820 AU -1°48'01	retrograde opposition min. Earth dist. direct evening set	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02 -5433 Mar 12 j 21:31 -5433 Jul 18 j 14:12	24° \(\delta\) 31'32 27° \(\delta\) 35'21 0° \(\mathbb{\pi}\) 14° \(\mathbb{\pi}\) 41'38 9° \(\mathbb{\pi}\) 42'06 4° \(\mathbb{\pi}\) 42'35 22° \(\mathbb{\pi}\) 42'35 25° \(\mathbb{\pi}\) 12'08	6.36489 AU 1°27'19 4.38028 AU
morning rise retrograde opposition min. Earth dist.	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20 -5439 Jul 28 j 14:21 -5439 Jul 27 j 14:31 -5439 Sep 24 j 16:21	4° ₹ 50'44 5° ₹ 07'27 8° ₹ 00'35 28° ₹ 14'45 23° ₹ 10'43 23° ₹ 18'46 18° ₹ 15'50	0°53'57 6.02820 AU -1°48'01	retrograde opposition min. Earth dist. direct evening set	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02 -5433 Mar 12 j 21:31 -5433 Jul 18 j 14:12	24° 831'32 27° 835'21 0° Π 14° Π41'38 9° Π48'26 9° Π42'06 4° Π45'38 22° Π42'35	6.36489 AU 1°27'19 4.38028 AU
morning rise retrograde opposition min. Earth dist. direct	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20 -5439 Jul 28 j 14:21 -5439 Jul 27 j 14:31 -5439 Sep 24 j 16:21 -5439 Dec 25 j 08:05	4°₹50'44 5°₹07'27 8°₹00'35 28°₹14'45 23°₹10'43 23°₹18'46 18°₹15'50 0°₹	0°53'57 6.02820 AU -1°48'01	retrograde opposition min. Earth dist. direct evening set max. Earth dist.	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02 -5433 Mar 12 j 21:31 -5433 Jul 18 j 14:12 -5433 Jul 29 j 21:58	24° \(\delta\) 31'32 27° \(\delta\) 35'21 0° \(\mathbb{\pi}\) 14° \(\mathbb{\pi}\) 41'38 9° \(\mathbb{\pi}\) 42'06 4° \(\mathbb{\pi}\) 42'35 22° \(\mathbb{\pi}\) 42'35 25° \(\mathbb{\pi}\) 12'08	6.36489 AU 1°27'19 4.38028 AU 6.38058 AU
morning rise retrograde opposition min. Earth dist. direct	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20 -5439 Jul 28 j 14:21 -5439 Jul 27 j 14:31 -5439 Sep 24 j 16:21 -5439 Dec 25 j 08:05	4°₹50'44 5°₹07'27 8°₹00'35 28°₹14'45 23°₹10'43 23°₹18'46 18°₹15'50 0°₹	0°53'57 6.02820 AU -1°48'01 4.02523 AU	retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02 -5433 Mar 12 j 21:31 -5433 Jul 18 j 14:12 -5433 Jul 29 j 21:58	24° 831'32 27° 835'21 0° Π 14° Π41'38 9° Π48'26 9° Π42'06 4° Π45'38 22° Π42'35 25° Π12'08 25° Π32'00	6.36489 AU 1°27'19 4.38028 AU 6.38058 AU 1°14'53
morning rise retrograde opposition min. Earth dist. direct evening set	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20 -5439 Jul 28 j 14:21 -5439 Jul 27 j 14:31 -5439 Dec 25 j 08:05 -5438 Jan 27 j 12:01	4° ₹50'44 5° ₹07'27 8° ₹00'35 28° ₹14'45 23° ₹10'43 23° ₹18'46 18° ₹15'50 0° ₹ 7° ₹30'47 10° ₹41'23	0°53'57 6.02820 AU -1°48'01 4.02523 AU	retrograde opposition min. Earth dist. direct evening set max. Earth dist.  conjunction minimum elong	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02 -5433 Mar 12 j 21:31 -5433 Jul 18 j 14:12 -5433 Jul 29 j 21:58 -5433 Jul 31 j 09:57 -5433 Jul 31 j 09:53	24° 831'32 27° 835'21 0° Π 14° Π41'38 9° Π42'06 4° Π45'38 22° Π42'35 25° Π12'08 25° Π32'00 25° Π31'58	6.36489 AU 1°27'19 4.38028 AU 6.38058 AU 1°14'53
morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20 -5439 Jul 28 j 14:21 -5439 Jul 27 j 14:31 -5439 Sep 24 j 16:21 -5439 Dec 25 j 08:05 -5438 Jan 27 j 12:01 -5438 Feb 09 j 23:52	4° ₹50'44 5° ₹07'27 8° ₹00'35 28° ₹14'45 23° ₹10'43 23° ₹18'46 18° ₹15'50 0° ₹ 7° ₹30'47 10° ₹41'23	0°53'57 6.02820 AU -1°48'01 4.02523 AU -1°22'53	retrograde opposition min. Earth dist. direct evening set max. Earth dist.  conjunction minimum elong	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02 -5433 Mar 12 j 21:31 -5433 Jul 18 j 14:12 -5433 Jul 29 j 21:58 -5433 Jul 31 j 09:57 -5433 Jul 31 j 09:53 -5433 Aug 13 j 02:43	24°\delta31'32 27°\delta35'21 0°\Pi 14°\Pi41'38 9°\Pi42'06 4°\Pi45'38 22°\Pi42'35 25°\Pi12'08  25°\Pi32'00 25°\Pi31'58 28°\Pi19'58	6.36489 AU 1°27'19 4.38028 AU 6.38058 AU 1°14'53
morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20 -5439 Jul 28 j 14:21 -5439 Jul 27 j 14:31 -5439 Sep 24 j 16:21 -5439 Dec 25 j 08:05 -5438 Jan 27 j 12:01 -5438 Feb 09 j 23:52 -5438 Feb 09 j 23:51	4° ₹50'44 5° ₹07'27 8° ₹00'35 28° ₹14'45 23° ₹10'43 23° ₹18'46 18° ₹15'50 0° ₹ 7° ₹30'47 10° ₹41'23 10° ₹41'21	0°53'57 6.02820 AU -1°48'01 4.02523 AU -1°22'53 1°23'12	retrograde opposition min. Earth dist. direct evening set max. Earth dist.  conjunction minimum elong morning rise	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02 -5433 Mar 12 j 21:31 -5433 Jul 18 j 14:12 -5433 Jul 29 j 21:58 -5433 Jul 31 j 09:57 -5433 Jul 31 j 09:53 -5433 Aug 13 j 02:43 -5433 Aug 20 j 18:02	24°♥31'32 27°♥35'21 0°Ⅲ 14°Ⅲ41'38 9°Ⅲ48'26 9°Ⅲ42'06 4°Ⅲ45'38 22°Ⅲ42'35 25°Ⅲ12'08 25°Ⅲ32'00 25°Ⅲ31'58 28°Ⅲ19'58 0°☞	6.36489 AU 1°27'19 4.38028 AU 6.38058 AU 1°14'53
morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20 -5439 Jul 28 j 14:21 -5439 Jul 27 j 14:31 -5439 Sep 24 j 16:21 -5439 Dec 25 j 08:05 -5438 Feb 09 j 23:52 -5438 Feb 09 j 23:51 -5438 Feb 11 j 18:13	4° ₹50'44 5° ₹07'27 8° ₹00'35 28° ₹14'45 23° ₹10'43 23° ₹18'46 18° ₹15'50 0° ₹ 7° ₹30'47 10° ₹41'23 10° ₹41'21 11° ₹06'20	0°53'57 6.02820 AU -1°48'01 4.02523 AU -1°22'53 1°23'12	retrograde opposition min. Earth dist. direct evening set max. Earth dist.  conjunction minimum elong morning rise retrograde	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02 -5433 Mar 12 j 21:31 -5433 Jul 18 j 14:12 -5433 Jul 29 j 21:58 -5433 Jul 31 j 09:53 -5433 Jul 31 j 09:53 -5433 Aug 13 j 02:43 -5433 Aug 20 j 18:02 -5433 Dec 11 j 18:21	24°\delta31'32 27°\delta35'21 0°\Pi 14°\Pi41'38 9°\Pi42'06 4°\Pi45'38 22°\Pi42'35 25°\Pi12'08 25°\Pi31'58 28°\Pi19'58 0°\delta 15°\delta27'08	6.36489 AU 1°27'19 4.38028 AU 6.38058 AU 1°14'53 1°15'13
morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20 -5439 Jul 28 j 14:21 -5439 Jul 27 j 14:31 -5439 Sep 24 j 16:21 -5439 Dec 25 j 08:05 -5438 Feb 09 j 23:52 -5438 Feb 09 j 23:51 -5438 Feb 11 j 18:13 -5438 Feb 23 j 14:38	4° \$\sigma 50'44 5° \$\sigma 07'27 8° \$\sigma 00'35 28° \$\sigma 14'45 23° \$\sigma 10'43 23° \$\sigma 18'46 18° \$\sigma 15'50 0° \$\sigma 70' \$\sigma 30'47 10° \$\sigma 41'23 10° \$\sigma 41'21 11° \$\sigma 66'20 13° \$\sigma 53'24	0°53'57 6.02820 AU -1°48'01 4.02523 AU -1°22'53 1°23'12	retrograde opposition min. Earth dist. direct evening set max. Earth dist.  conjunction minimum elong morning rise  retrograde opposition	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02 -5433 Mar 12 j 21:31 -5433 Jul 18 j 14:12 -5433 Jul 29 j 21:58 -5433 Jul 31 j 09:57 -5433 Jul 31 j 09:53 -5433 Aug 13 j 02:43 -5433 Aug 20 j 18:02 -5433 Dec 11 j 18:21 -5432 Feb 10 j 08:20	24°\text{831'32} 27°\text{835'21} 0°\T 14°\T41'38 9°\T42'06 4°\T45'38 22°\T42'35 25°\T12'08 25°\T31'58 28°\T19'58 0°\T 15°\T27'08 10°\T35'33	6.36489 AU  1°27'19 4.38028 AU  6.38058 AU  1°14'53 1°15'13
morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20 -5439 Jul 28 j 14:21 -5439 Jul 27 j 14:31 -5439 Sep 24 j 16:21 -5439 Dec 25 j 08:05 -5438 Feb 09 j 23:52 -5438 Feb 09 j 23:51 -5438 Feb 11 j 18:13 -5438 Feb 23 j 14:38 -5438 May 14 j 22:48	4° ₹50'44 5° ₹07'27 8° ₹00'35 28° ₹14'45 23° ₹18'46 18° ₹15'50 0° ₹ 7° ₹30'47 10° ₹41'23 10° ₹41'21 11° ₹06'20 13° ₹53'24 0° ≈	0°53'57 6.02820 AU -1°48'01 4.02523 AU -1°22'53 1°23'12	retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist.	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02 -5433 Mar 12 j 21:31 -5433 Jul 18 j 14:12 -5433 Jul 29 j 21:58 -5433 Jul 31 j 09:57 -5433 Jul 31 j 09:53 -5433 Aug 13 j 02:43 -5433 Aug 20 j 18:02 -5433 Dec 11 j 18:21 -5432 Feb 10 j 08:20 -5432 Feb 11 j 12:22	24°\text{831'32} 27°\text{835'21} 0°\T 14°\T41'38 9°\T42'06 4°\T45'38 22°\T42'35 25°\T12'08 25°\T31'58 28°\T19'58 0°\T 15°\T27'08 10°\T35'33 10°\T26'36	6.36489 AU  1°27'19 4.38028 AU  6.38058 AU  1°14'53 1°15'13
morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20 -5439 Jul 28 j 14:21 -5439 Jul 27 j 14:31 -5439 Sep 24 j 16:21 -5439 Dec 25 j 08:05 -5438 Jan 27 j 12:01 -5438 Feb 09 j 23:52 -5438 Feb 09 j 23:51 -5438 Feb 11 j 18:13 -5438 Feb 23 j 14:38 -5438 May 14 j 22:48 -5438 Jul 04 j 15:26	4° \$\sigma 50'44 5° \$\sigma 07'27 8° \$\sigma 00'35 28° \$\sigma 10'43 23° \$\sigma 18'46 18° \$\sigma 15'50 0° \$\sigma 7° \$\sigma 30'47 10° \$\sigma 41'21 11° \$\sigma 66'20 13° \$\sigma 53'24 0° \$\sigma 3° \$\sigma 54'01 30° \$\sigma 5	0°53'57 6.02820 AU -1°48'01 4.02523 AU -1°22'53 1°23'12	retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02 -5433 Mar 12 j 21:31 -5433 Jul 18 j 14:12 -5433 Jul 29 j 21:58 -5433 Jul 31 j 09:57 -5433 Jul 31 j 09:53 -5433 Aug 13 j 02:43 -5433 Aug 20 j 18:02 -5432 Feb 10 j 08:20 -5432 Feb 11 j 12:22 -5432 Apr 13 j 00:14	24° \(\begin{align*} 24° \(\beta\) 31'32 27° \(\beta\) 35'21 0° \(\mathbb{II}\) 14° \(\mathbb{II}\) 41'38 9° \(\mathbb{II}\) 42'06 4° \(\mathbb{II}\) 42'35 22° \(\mathbb{II}\) 42'35 25° \(\mathbb{II}\) 12'08 25° \(\mathbb{II}\) 31'58 28° \(\mathbb{II}\) 19'58 0° \(\omega\) 15° \(\omega\) 27'08 10° \(\omega\) 33'33 10° \(\omega\) 26'36 5° \(\omega\) 34'52	6.36489 AU  1°27'19 4.38028 AU  6.38058 AU  1°14'53 1°15'13
morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20 -5439 Jul 28 j 14:21 -5439 Jul 27 j 14:31 -5439 Sep 24 j 16:21 -5439 Dec 25 j 08:05 -5438 Feb 09 j 23:52 -5438 Feb 09 j 23:51 -5438 Feb 11 j 18:13 -5438 Feb 23 j 14:38 -5438 May 14 j 22:48 -5438 Jul 04 j 15:26 -5438 Aug 24 j 11:38	4° \$\sigma 50'44 5° \$\sigma 07'27 8° \$\sigma 00'35 28° \$\sigma 10'43 23° \$\sigma 18'46 18° \$\sigma 15'50 0° \$\sigma 7° \$\sigma 30'47 10° \$\sigma 41'21 11° \$\sigma 66'20 13° \$\sigma 53'24 0° \$\sigma 3° \$\sigma 54'01 30° \$\sigma 5	0°53'57 6.02820 AU -1°48'01 4.02523 AU -1°22'53 1°23'12 6.03635 AU	retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct evening set	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02 -5433 Mar 12 j 21:31 -5433 Jul 18 j 14:12 -5433 Jul 29 j 21:58 -5433 Jul 31 j 09:57 -5433 Jul 31 j 09:53 -5433 Aug 13 j 02:43 -5433 Aug 20 j 18:02 -5433 Dec 11 j 18:21 -5432 Feb 10 j 08:20 -5432 Feb 11 j 12:22 -5432 Aug 17 j 17:07	24° \(\begin{align*} 24° \(\beta\) 31'32 27° \(\beta\) 35'21 0° \(\mathbb{II}\) 14° \(\mathbb{II}\) 41'38 9° \(\mathbb{II}\) 42'06 4° \(\mathbb{II}\) 42'35 22° \(\mathbb{II}\) 42'35 25° \(\mathbb{II}\) 12'08 25° \(\mathbb{II}\) 31'58 28° \(\mathbb{II}\) 19'58 0° \(\odoldrightarrow\) 15° \(\odoldrightarrow\) 27'08 10° \(\odoldrightarrow\) 35'33 10° \(\odoldrightarrow\) 26'36 5° \(\odoldrightarrow\) 33'52 23° \(\odoldrightarrow\) 32'19	6.36489 AU  1°27'19 4.38028 AU  6.38058 AU  1°14'53 1°15'13  2°02'34 4.36925 AU
morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist.	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20 -5439 Jul 28 j 14:21 -5439 Jul 27 j 14:31 -5439 Sep 24 j 16:21 -5439 Dec 25 j 08:05 -5438 Jan 27 j 12:01 -5438 Feb 09 j 23:52 -5438 Feb 09 j 23:51 -5438 Feb 23 j 14:38 -5438 May 14 j 22:48 -5438 Aug 24 j 11:38 -5438 Sep 01 j 02:15	4° \$\sigma 50'44 5° \$\sigma 07'27 8° \$\sigma 00'35 28° \$\sigma 10'43 23° \$\sigma 18'46 18° \$\sigma 15'50 0° \$\sigma 70' \$\sigma 30'47 10° \$\sigma 41'21 11° \$\sigma 66'20 13° \$\sigma 53'24 0° \$\sigma 3' \$\sigma 54'01 30° \$\sigma 528' \$\sigma 58'17	0°53'57 6.02820 AU -1°48'01 4.02523 AU -1°22'53 1°23'12 6.03635 AU	retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct evening set	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02 -5433 Mar 12 j 21:31 -5433 Jul 18 j 14:12 -5433 Jul 29 j 21:58 -5433 Jul 31 j 09:57 -5433 Jul 31 j 09:53 -5433 Aug 13 j 02:43 -5433 Aug 20 j 18:02 -5433 Dec 11 j 18:21 -5432 Feb 10 j 08:20 -5432 Feb 11 j 12:22 -5432 Aug 17 j 17:07	24° \(\begin{align*} 24° \(\beta\) 31'32 27° \(\beta\) 35'21 0° \(\mathbb{II}\) 14° \(\mathbb{II}\) 41'38 9° \(\mathbb{II}\) 42'06 4° \(\mathbb{II}\) 42'35 22° \(\mathbb{II}\) 42'35 25° \(\mathbb{II}\) 12'08 25° \(\mathbb{II}\) 31'58 28° \(\mathbb{II}\) 19'58 0° \(\odoldrightarrow\) 15° \(\odoldrightarrow\) 27'08 10° \(\odoldrightarrow\) 35'33 10° \(\odoldrightarrow\) 26'36 5° \(\odoldrightarrow\) 33'52 23° \(\odoldrightarrow\) 32'19	6.36489 AU  1°27'19 4.38028 AU  6.38058 AU  1°14'53 1°15'13  2°02'34 4.36925 AU
morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20 -5439 Jul 28 j 14:21 -5439 Jul 27 j 14:31 -5439 Sep 24 j 16:21 -5439 Dec 25 j 08:05 -5438 Jan 27 j 12:01 -5438 Feb 09 j 23:52 -5438 Feb 09 j 23:51 -5438 Feb 23 j 14:38 -5438 Feb 23 j 14:38 -5438 May 14 j 22:48 -5438 Aug 24 j 11:38 -5438 Sep 01 j 02:15 -5438 Sep 02 j 05:43 -5438 Oct 30 j 09:52	4° \$\sigma 50'44 5° \$\sigma 07'27 8° \$\sigma 00'35 28° \$\sigma 10'43 23° \$\sigma 10'43 23° \$\sigma 15'50 0° \$\sigma 70' \$\sigma 30'47 10° \$\sigma 41'21 11° \$\sigma 66'20 13° \$\sigma 53'24 0° \$\sigma 30'8 \$\sigma 54'01 30° \$\sigma 58'54'17 28° \$\sigma 848'54	0°53'57 6.02820 AU -1°48'01 4.02523 AU -1°22'53 1°23'12 6.03635 AU	retrograde opposition min. Earth dist. direct evening set max. Earth dist.  conjunction minimum elong morning rise  retrograde opposition min. Earth dist. direct evening set max. Earth dist.	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02 -5433 Mar 12 j 21:31 -5433 Jul 18 j 14:12 -5433 Jul 29 j 21:58 -5433 Jul 31 j 09:57 -5433 Jul 31 j 09:53 -5433 Aug 13 j 02:43 -5433 Feb 10 j 08:20 -5432 Feb 10 j 08:20 -5432 Aug 17 j 17:07 -5432 Aug 28 j 14:57 -5432 Aug 30 j 06:16	24° \(\begin{align*} 331'32 \) 27° \(\begin{align*} 335'21 \) 0° \(\mathbb{I} \) 14° \(\mathbb{I} \) 41'38 \\ 9° \(\mathbb{I} \) 42'06 \\ 4° \(\mathbb{I} \) 45'38 \\ 22° \(\mathbb{I} \) 42'08 \\ 25° \(\mathbb{I} \) 32'00 \\ 25° \(\mathbb{I} \) 31'58 \\ 28° \(\mathbb{I} \) 19'58 \\ 0° \(\mathbb{G} \) 15° \(\mathbb{G} \) 27'08 \\ 10° \(\mathbb{G} \) 35'33 \\ 10° \(\mathbb{G} \) 26'36 \\ 5° \(\mathbb{G} \) 34'52 \\ 23° \(\mathbb{G} \) 32'19 \\ 25° \(\mathbb{G} \) 58'58'20	6.36489 AU  1°27'19 4.38028 AU  6.38058 AU  1°14'53 1°15'13  2°02'34 4.36925 AU  6.34252 AU  1°27'19
morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20 -5439 Jul 28 j 14:21 -5439 Jul 27 j 14:31 -5439 Sep 24 j 16:21 -5439 Dec 25 j 08:05 -5438 Jan 27 j 12:01 -5438 Feb 09 j 23:52 -5438 Feb 09 j 23:51 -5438 Feb 11 j 18:13 -5438 Feb 23 j 14:38 -5438 May 14 j 22:48 -5438 Aug 24 j 11:38 -5438 Sep 01 j 02:15 -5438 Sep 02 j 05:43 -5438 Oct 30 j 09:52 -5437 Jan 02 j 08:15	4° \$\times 50'44 5° \$\times 07'27 8° \$\times 07'27 8° \$\times 07'27 8° \$\times 07'35 23° \$\times 18'46 18° \$\times 15'50 0° \$\times 70' \$\times 30'47 10° \$\times 41'21 11° \$\times 06'20 13° \$\times 53'24 0° \$\times 3' \$\times 54'01 30° \$\times 58'17 28° \$\times 58'17 28° \$\times 58'55'50'50	0°53'57 6.02820 AU -1°48'01 4.02523 AU -1°22'53 1°23'12 6.03635 AU	retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist.	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02 -5433 Mar 12 j 21:31 -5433 Jul 18 j 14:12 -5433 Jul 29 j 21:58 -5433 Jul 31 j 09:57 -5433 Jul 31 j 09:53 -5433 Aug 13 j 02:43 -5433 Feb 10 j 08:20 -5432 Feb 10 j 08:20 -5432 Aug 17 j 17:07 -5432 Aug 28 j 14:57 -5432 Aug 30 j 06:16 -5432 Aug 30 j 06:16	24° \(\begin{align*} 331'32 \) 27° \(\begin{align*} 335'21 \) 0° \(\mathbb{I} \) 14° \(\mathbb{I} \) 41'38 \\ 9° \(\mathbb{I} \) 42'06 \\ 4° \(\mathbb{I} \) 42'35 \\ 25° \(\mathbb{I} \) 12'08 \\ 25° \(\mathbb{I} \) 31'58 \\ 28° \(\mathbb{I} \) 19'58 \\ 0° \(\mathbb{G} \) 15° \(\mathbb{G} \) 27'08 \\ 10° \(\mathbb{G} \) 35'33 \\ 10° \(\mathbb{G} \) 26'36 \\ 5° \(\mathbb{G} \) 32'19 \\ 25° \(\mathbb{G} \) 58'20 \\ 26° \(\mathbb{G} \) 20'20	6.36489 AU  1°27'19 4.38028 AU  6.38058 AU  1°14'53 1°15'13  2°02'34 4.36925 AU  6.34252 AU
morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20 -5439 Jul 28 j 14:21 -5439 Jul 27 j 14:31 -5439 Sep 24 j 16:21 -5439 Dec 25 j 08:05 -5438 Feb 09 j 23:52 -5438 Feb 09 j 23:51 -5438 Feb 09 j 23:51 -5438 Feb 11 j 18:13 -5438 Feb 23 j 14:38 -5438 May 14 j 22:48 -5438 Jul 04 j 15:26 -5438 Sep 02 j 05:43 -5438 Sep 02 j 05:43 -5438 Oct 30 j 09:52 -5437 Jan 02 j 08:15 -5437 Mar 05 j 13:37	4° \$\times 50'44 5° \$\times 00'35 28° \$\times 10'43 23° \$\times 10'43 23° \$\times 15'50 0° \$\times 70' \$\times 30'47 10° \$\times 41'23 10° \$\times 41'21 11° \$\times 06'20 13° \$\times 53'24 0° \$\times 3' \$\times 53'24 0° \$\times 3' \$\times 54'01 30° \$\times 54'01 30° \$\times 54'54 28° \$\times 548'54 23° \$\times 50'50 0° \$\times 10' \$\ti	0°53'57 6.02820 AU -1°48'01 4.02523 AU -1°22'53 1°23'12 6.03635 AU	retrograde opposition min. Earth dist. direct evening set max. Earth dist.  conjunction minimum elong morning rise  retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction min. Earth dist. direct evening set max. Earth dist.	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02 -5433 Mar 12 j 21:31 -5433 Jul 18 j 14:12 -5433 Jul 29 j 21:58 -5433 Jul 31 j 09:57 -5433 Jul 31 j 09:53 -5433 Aug 13 j 02:43 -5433 Aug 20 j 18:02 -5432 Feb 10 j 08:20 -5432 Feb 11 j 12:22 -5432 Aug 17 j 17:07 -5432 Aug 28 j 14:57 -5432 Aug 30 j 06:16 -5432 Sep 11 j 17:23	24° \(\begin{align*} 331'32 \) 27° \(\begin{align*} 835'21 \) 0° \(\begin{align*} 14\) \(\begin{align*} 14\) \(\begin{align*} 14\) \(\begin{align*} 14\) \(\begin{align*} 24\) \(\begin{align*} 25\) \(\begin{align*} 13\) \(\begin{align*} 25\) \(\begin{align*} 27\) \(\begin{align*} 28\) \(\begin{align*} 19\) \(\begin{align*} 25\) \(\begin{align*} 27\) \(\begin{align*} 23\) \	6.36489 AU  1°27'19 4.38028 AU  6.38058 AU  1°14'53 1°15'13  2°02'34 4.36925 AU  6.34252 AU  1°27'19
morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20 -5439 Jul 28 j 14:21 -5439 Jul 27 j 14:31 -5439 Sep 24 j 16:21 -5439 Dec 25 j 08:05 -5438 Jan 27 j 12:01 -5438 Feb 09 j 23:52 -5438 Feb 09 j 23:51 -5438 Feb 11 j 18:13 -5438 Feb 23 j 14:38 -5438 May 14 j 22:48 -5438 Aug 24 j 11:38 -5438 Sep 01 j 02:15 -5438 Sep 02 j 05:43 -5438 Oct 30 j 09:52 -5437 Jan 02 j 08:15	4° ₹50'44 5° ₹07'27 8° ₹00'35 28° ₹14'45 23° ₹10'43 23° ₹18'46 18° ₹15'50 0° ₹ 7° ₹30'47 10° ₹41'23 10° ₹41'21 11° ₹06'20 13° ₹53'24 0° ≈ 3° ≈54'01 30° ₹₹ 28° ₹58'17 28° ₹58'17 28° ₹48'54 23° ₹50'50 0° ≈ 12° ≈59'58	0°53'57 6.02820 AU -1°48'01 4.02523 AU -1°22'53 1°23'12 6.03635 AU	retrograde opposition min. Earth dist. direct evening set max. Earth dist.  conjunction minimum elong morning rise  retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction min. Earth dist. direct evening set max. Earth dist.	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02 -5433 Mar 12 j 21:31 -5433 Jul 18 j 14:12 -5433 Jul 29 j 21:58 -5433 Jul 31 j 09:57 -5433 Jul 31 j 09:53 -5433 Aug 13 j 02:43 -5433 Aug 20 j 18:02 -5432 Feb 10 j 08:20 -5432 Feb 11 j 12:22 -5432 Aug 17 j 17:07 -5432 Aug 28 j 14:57 -5432 Aug 30 j 06:16 -5432 Sep 11 j 17:23 -5432 Sep 15 j 16:01	24°\S31'32 27°\S35'21 0°\II 14°\II41'38 9°\II48'26 9°\II42'06 4°\II45'38 22°\II42'35 25°\II31'58 25°\II31'58 28°\II19'58 0°\S 15°\S27'08 10°\S35'33 10°\S26'36 5°\S34'52 23°\S32'19 25°\S58'20 26°\S20'20 26°\S20'20 29°\S07'29 0°\Lambda	6.36489 AU  1°27'19 4.38028 AU  6.38058 AU  1°14'53 1°15'13  2°02'34 4.36925 AU  6.34252 AU  1°27'19
morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20 -5439 Jul 28 j 14:21 -5439 Jul 27 j 14:31 -5439 Sep 24 j 16:21 -5439 Dec 25 j 08:05 -5438 Feb 09 j 23:52 -5438 Feb 09 j 23:51 -5438 Feb 11 j 18:13 -5438 Feb 23 j 14:38 -5438 May 14 j 22:48 -5438 May 14 j 22:48 -5438 Aug 24 j 11:38 -5438 Sep 02 j 05:43 -5438 Oct 30 j 09:52 -5437 Jan 02 j 08:15 -5437 Mar 05 j 13:37 -5437 Mar 14 j 05:50	4° \$50'44 5° \$707'27 8° \$700'35 28° \$714'45 23° \$710'43 23° \$718'46 18° \$715'50 0° \$7 7° \$30'47 10° \$41'23 10° \$41'21 11° \$606'20 13° \$53'24 0° \$8 3° \$54'01 30° \$8 28° \$558'17 28° \$58'17 28° \$58'50'50 0° \$8 12° \$59'58 15° \$8	0°53'57 6.02820 AU -1°48'01 4.02523 AU -1°22'53 1°23'12 6.03635 AU 4.06483 AU -2°08'28	retrograde opposition min. Earth dist. direct evening set max. Earth dist.  conjunction minimum elong morning rise  retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02 -5433 Mar 12 j 21:31 -5433 Jul 18 j 14:12 -5433 Jul 29 j 21:58 -5433 Jul 31 j 09:57 -5433 Jul 31 j 09:53 -5433 Aug 13 j 02:43 -5433 Aug 20 j 18:02 -5432 Feb 10 j 08:20 -5432 Feb 11 j 12:22 -5432 Aug 17 j 17:07 -5432 Aug 28 j 14:57 -5432 Aug 30 j 06:16 -5432 Sep 11 j 17:23 -5432 Sep 15 j 16:01 -5432 Dec 10 j 00:44	24°\S31'32 27°\S35'21 0°\II 14°\II41'38 9°\II48'26 9°\II42'06 4°\II45'38 22°\II42'35 25°\II31'58 28°\II19'58 0°\Gamma 15°\S27'08 10°\S35'33 10°\S26'36 5°\S32'19 25°\S58'20 26°\S20'20 26°\S20'20 29°\S07'29 0°\R 15°\R	6.36489 AU  1°27'19 4.38028 AU  6.38058 AU  1°14'53 1°15'13  2°02'34 4.36925 AU  6.34252 AU  1°27'19
morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct	-5439 Jan 04 j 01:01 -5439 Jan 05 j 05:08 -5439 Jan 17 j 09:10 -5439 May 29 j 11:20 -5439 Jul 28 j 14:21 -5439 Jul 27 j 14:31 -5439 Sep 24 j 16:21 -5439 Dec 25 j 08:05 -5438 Feb 09 j 23:52 -5438 Feb 09 j 23:51 -5438 Feb 09 j 23:51 -5438 Feb 11 j 18:13 -5438 Feb 23 j 14:38 -5438 May 14 j 22:48 -5438 Jul 04 j 15:26 -5438 Sep 02 j 05:43 -5438 Sep 02 j 05:43 -5438 Oct 30 j 09:52 -5437 Jan 02 j 08:15 -5437 Mar 05 j 13:37	4° ₹50'44 5° ₹07'27 8° ₹00'35 28° ₹14'45 23° ₹10'43 23° ₹18'46 18° ₹15'50 0° ₹ 7° ₹30'47 10° ₹41'23 10° ₹41'21 11° ₹06'20 13° ₹53'24 0° ≈ 3° ≈54'01 30° ₹₹ 28° ₹58'17 28° ₹58'17 28° ₹48'54 23° ₹50'50 0° ≈ 12° ≈59'58	0°53'57 6.02820 AU -1°48'01 4.02523 AU -1°22'53 1°23'12 6.03635 AU 4.06483 AU -2°08'28	retrograde opposition min. Earth dist. direct evening set max. Earth dist.  conjunction minimum elong morning rise  retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction min. Earth dist. direct evening set max. Earth dist.	-5434 Jul 13 j 01:22 -5434 Jul 24 j 04:27 -5434 Nov 10 j 10:04 -5433 Jan 09 j 12:31 -5433 Jan 10 j 08:02 -5433 Mar 12 j 21:31 -5433 Jul 18 j 14:12 -5433 Jul 29 j 21:58 -5433 Jul 31 j 09:57 -5433 Jul 31 j 09:53 -5433 Aug 13 j 02:43 -5433 Aug 20 j 18:02 -5432 Feb 10 j 08:20 -5432 Feb 11 j 12:22 -5432 Aug 17 j 17:07 -5432 Aug 28 j 14:57 -5432 Aug 30 j 06:16 -5432 Sep 11 j 17:23 -5432 Sep 15 j 16:01	24°\S31'32 27°\S35'21 0°\II 14°\II41'38 9°\II48'26 9°\II42'06 4°\II45'38 22°\II42'35 25°\II31'58 25°\II31'58 28°\II19'58 0°\S 15°\S27'08 10°\S35'33 10°\S26'36 5°\S34'52 23°\S32'19 25°\S58'20 26°\S20'20 26°\S20'20 29°\S07'29 0°\Lambda	6.36489 AU  1°27'19 4.38028 AU  6.38058 AU  1°14'53 1°15'13  2°02'34 4.36925 AU  6.34252 AU  1°27'19

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5431 in astronomical counting style is the year 5432 BCE in historical counting style. -5431 Mar 14 i 03:20 11°Ω47'39 2°03'22 -5426 Nov 30 i 06:07 0°≈ opposition -5431 Mar 15 j 06:03 11°**Ω**39'10 4.30707 AU -5425 Feb 25 j 12:31 15°≈ min. Earth dist. -5431 May 15 j 07:22 6°Ω49'47 -5425 Mar 10 j 16:51 direct 17°≈59'23 evening set -5431 Aug 01 j 13:48 15°€ evening set -5431 Sep 17 j 20:52 24°**Ω**57'30 conjunction -5425 Mar 24 j 10:24 21°≈08'44 -1°18'20 max. Earth dist. -5425 Mar 24 j 10:28 21°**≈**08'46 1°18'33 -5431 Sep 29 j 00:20 27°**Ω**29'44 6.26098 AU minimum elong 21°**≈**31'37 max. Earth dist. -5425 Mar 26 j 02:09 6.11861 AU -5431 Sep 30 j 08:26 conjunction 27°**Ω**48′04 1°14'28 morning rise -5425 Apr 07 j 04:49 24°≈18'24 minimum elong -5431 Sep 30 j 08:29 27°**Ω**48′06 1°14'40 -5425 May 02 j 18:40 0°**)**€ -5431 Oct 09 j 23:37 0° m retrograde -5425 Aug 12 j 19:58 13°**¥**23'55 morning rise -5431 Oct 12 j 19:38 0°m/38'39 min. Earth dist. -5425 Oct 10 j 07:27 8°**升**27'12 4.16894 AU retrograde -5430 Feb 15 j 02:12 18° m 54'39 opposition -5425 Oct 11 j 02:44 8°¥20'38 -1°35'14 opposition -5430 Apr 17 j 07:12  $14^{\circ}$  Mp 00'451°26'45 direct -5425 Dec 09 j 08:15 3°**¥**18'56 min. Earth dist. -5430 Apr 18 j 02:02 13° Mp 54'44 4.21069 AU evening set -5424 Apr 14 j 17:54 22°\ 03'49 direct -5430 Jun 17 j 11:42 9°m/05'38 evening set -5430 Oct 19 j 21:04 27° m 31'26 conjunction -5424 Apr 28 j 11:47 25°\(\mathbf{H}\)09'03 -0°45'01 -5430 Oct 30 j 12:31 0∘**⊽** minimum elong -5424 Apr 28 j 11:51 25°**₩**09'05 0°45'05 max. Earth dist. -5424 Apr 29 j 07:29 25°**¥**20′07 6.22088 AU conjunction -5430 Nov 01 j 12:14 0°**≏**27'50 0°38'07 morning rise -5424 May 12 j 04:45 28° ¥ 13'33 minimum elong -5430 Nov 01 j 12:17 0°**£**27'51 0°38'08 -5424 May 20 j 04:37  $0^{\circ}\Upsilon$ max. Earth dist. -5430 Oct 31 j 20:23 0°**≏**18'35 6.15881 AU retrograde -5424 Sep 13 j 07:14 16°**Y**22'12 morning rise -5430 Nov 14 i 04:56 3°**₽**25'11 opposition -5424 Nov 11 j 16:22 11°Y22'26 -0°33'16 retrograde -5429 Mar 22 j 17:02 22°**₽**34'40 min. Earth dist. -5424 Nov 11 j 10:46 11°**Υ**24'19 4.27051 AU opposition -5429 May 22 j 19:58 17°**♀**37'16 0°19'50 direct -5423 Jan 11 i 04:49 6°**Y**18'51 min. Earth dist. -5429 May 22 j 22:03 17°**♀**36'36 4.10976 AU asc. node -5423 May 18 j 13:55 24° Y 32' 03 -5429 Jul 21 j 15:04 12°**£**44'02 evening set -5423 May 19 j 05:00 24°Y40'19 direct -5429 Sep 02 j 09:57 15°**£**36'06 desc node -5423 Jun 01 j 18:03 27°**Y**39'39 0°01'45 -5429 Nov 15 j 21:55 oom. conjunction -5423 Jun 01 j 18:03 27°Y39'39 0°01'53 -5429 Nov 22 j 11:09 1°M32'02 evening set minimum elong -5423 Jun 01 j 09:48 27°Y35'06 behind sun begin -5429 Dec 05 j 09:17 -5423 Jun 02 j 02:18 27°**Y**44'11 conjunction 4°M35'21 -0°12'14 behind sun end -5429 Dec 05 j 09:16 -5423 Jun 01 j 15:06 27°Υ38'04 6.31473 AU 4°MJ35'21 0°12'23 max. Earth dist. minimum elong -5429 Dec 05 j 03:52 -5423 Jun 12 j 08:03  $0^{\circ}$ 8 behind sun begin 4°M32'10 -5429 Dec 05 j 14:39 -5423 Jun 15 j 04:11 0°**8**37'28 behind sun end 4°M38'31 morning rise -5429 Dec 05 j 17:38 -5423 Aug 31 j 01:31 max. Earth dist. 4°**M**₊40'18 6.06893 AU 15°**8** -5429 Dec 18 j 10:12 morning rise 7°**IL**40'19 retrograde -5423 Oct 14 j 15:29 18°**8**02'27 -5428 Jan 19 j 17:15 15°M -5423 Nov 28 j 14:07 15°₹**8** retrograde -5428 Apr 27 j 15:12 27°M36'17 opposition -5423 Dec 13 j 08:03 13°**8**06'35 0°36'16 -5428 Jun 27 j 06:08 22°M34'57 -0°56'53 min. Earth dist. -5423 Dec 13 j 17:16 13°**8**03'32 4.34919 AU opposition min. Earth dist. -5428 Jun 26 j 16:14 22°M39'34 4.03940 AU direct -5422 Feb 13 j 00:41 8°802'48 -5428 Aug 24 j 21:27 17°M41'45 -5422 Apr 26 j 11:54 15°8 direct -5428 Nov 27 j 03:33 -5422 Jun 21 j 02:33 26°806'50 0°×7 evening set -5428 Dec 26 j 21:50 max. Earth dist. -5422 Jul 03 j 05:06 28°**8**46'08 6.37187 AU evening set 6°**∡**¹49'16 -5427 Jan 09 j 03:41 9°**∡**757'54 -0°59'19 -5422 Jul 04 j 06:33 29°800'07 0°46'45 conjunction conjunction -5422 Jul 04 i 06:29 minimum elong -5427 Jan 09 i 03:37 9°**₹**57'52 0°59'36 minimum elong 29°800'05 0°47'00 max. Earth dist. -5427 Jan 10 j 10:49 10°**∡**16′25 6.02410 AU -5422 Jul 08 i 19:28  $0^{\circ}II$ morning rise -5427 Jan 22 j 12:56 13°**х** 08′21 morning rise -5422 Jul 17 i 07:16 1°**I**I51'43 -5427 Apr 17 i 07:49 0°궁 retrograde -5422 Nov 14 j 15:10 18°**Ⅱ**56'21 -5427 Jun 03 j 14:45 3°₹23'24 -5421 Jan 13 j 18:29 14°**I**103'28 1°33'45 retrograde opposition -5427 Jul 20 j 23:49 30°R*x*7 min. Earth dist. -5421 Jan 14 j 16:49 13°**Ⅱ**56'15 4.38220 AU -5427 Aug 02 j 16:04 28°**х** 19'07 -1°53'43 direct -5421 Mar 17 j 06:12 9°**Ⅱ**00'50 opposition -5427 Aug 01 j 14:09 28°**₹**27'52 4.02668 AU -5421 Jul 22 j 19:20 26° II 57'28 min. Earth dist. evening set 29°**Ⅱ**26'10 6.37707 AU direct -5427 Sep 29 j 16:09 23°×23'56 max. Earth dist. -5421 Aug 03 j 01:14 -5427 Dec 04 j 13:47 0°정 -5426 Feb 01 j 17:00 12°る39'04 conjunction -5421 Aug 04 j 14:10 29°II46'35 1°17'55 evening set minimum elong -5421 Aug 04 j 14:07 29°**Ⅱ**46'34 1°18'14 -5426 Feb 15 j 05:37 15°る49'42 -1°24'35 -5421 Aug 05 j 14:25 0ംഉ conjunction 15°**る**49'41 -5421 Aug 17 j 05:48 minimum elong -5426 Feb 15 j 05:36 1°24'53 morning rise 2°934'16 -5426 Feb 17 j 00:19 16°**る**14'48 max. Earth dist. 6.04318 AU retrograde -5421 Dec 16 j 00:34 19°9544'10 19°**る**01'40 morning rise -5426 Feb 28 j 21:08 opposition -5420 Feb 14 j 16:55 14°**©**52'42 2°04'49 -5426 Apr 20 j 06:24 0°≈ min. Earth dist. -5420 Feb 15 j 21:04 14°9543'44 4.36072 AU retrograde -5426 Jul 09 j 13:49 8°≈57'03 direct -5420 Apr 17 j 06:52 9°952'23 min. Earth dist. -5426 Sep 06 j 00:00 4°≈01'14 4.07648 AU evening set -5420 Aug 21 j 22:08 27°951'58 opposition -5426 Sep 07 j 03:15 3°≈51'55 -2°07'23 -5420 Aug 31 j 11:01 0° $\Omega$ -5426 Oct 09 j 18:31 30°Ŗる max. Earth dist. -5420 Sep 01 j 18:42 0°**Ω**17'48 6.32946 AU

-5426 Nov 04 j 10:25

direct

28°る53'21

Planetary Phenomena of Jupiter from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5420 in astronomical counting style is the year 5421 BCE in historical counting style. -5420 Sep 03 j 10:43 0°Ω40'16 1°27'03 -5414 Mar 31 j 19:01 0°≈ conjunction -5420 Sep 03 j 10:44 0°**Ω**40'17 1°27'20 -5414 Jul 14 j 12:37 14°≈00'20 minimum elong retrograde -5420 Sep 15 j 21:40 3°**Ω**27'52 -5414 Sep 10 j 21:51 9°≈04'23 4.09018 AU min. Earth dist. morning rise -5414 Sep 12 j 00:22 -5420 Nov 11 j 18:23 15°€ 8°≈55'19 -2°05'22 opposition 21°**Ω**06'35 -5414 Nov 09 j 09:48 retrograde -5419 Jan 16 j 16:53 direct 3°≈56'17 15°≈ opposition -5419 Mar 18 j 17:34 16°**Ω**14'37 2°00'31 -5413 Feb 07 j 10:50 min. Earth dist. -5419 Mar 19 j 20:55 16°**Ω**05'55 4.29020 AU evening set -5413 Mar 15 j 20:04 22°≈58'48 -5419 Mar 28 j 14:52 15°RΩ direct -5419 May 19 j 19:40 11°**Ω**17'07 conjunction -5413 Mar 29 j 13:45 26°≈07'33 -1°15'01 -5419 Jul 09 j 14:01 15°€ minimum elong -5413 Mar 29 j 13:49 26°**≈**07'36 1°15'13 evening set -5419 Sep 22 j 05:04 29°**Ω**28'54 max. Earth dist. -5413 Mar 31 j 02:11 26°**≈**28′27 6.13462 AU -5413 Apr 12 j 08:23 -5419 Sep 24 j 11:41 0° M morning rise 29°≈16'32 -5419 Oct 03 j 10:12 max. Earth dist.  $2^{\circ}$  M 02'456.24181 AU -5413 Apr 15 j 13:00 0°**)**€ retrograde -5413 Aug 17 j 09:41 18°¥13'05 conjunction -5419 Oct 04 j 17:01 2°m/20'25 1°10'42 opposition -5413 Oct 15 j 17:52 13°¥10'11 -1°27'50 minimum elong -5419 Oct 04 j 17:04 2°m/20'27 1°10'52 min. Earth dist. -5413 Oct 15 j 00:02 13°**¥**16'15 4.18560 AU morning rise -5419 Oct 17 j 04:48 5° m 12'03 direct -5413 Dec 14 j 03:35 8° **)** 08'07 23°m/37'14 retrograde -5418 Feb 19 j 22:21 evening set -5412 Apr 19 j 15:23 26°**)** 48′50 opposition -5418 Apr 22 j 03:50 18° m 42'58 1°18'56 min. Earth dist. -5418 Apr 22 j 19:45 18° Mp 37'52 4.19064 AU conjunction -5412 May 03 j 08:58 29°\\$53'13 -0°38'57 direct -5418 Jun 22 j 02:19 13° m 48'15 minimum elong -5412 May 03 j 09:01 29°**¥**53'15 0°38'59 -5418 Oct 14 i 10:08 0∘**⊽** -5412 May 03 j 21:04 evening set -5418 Oct 24 j 11:33 2°**2**19'04 max. Earth dist. -5412 May 04 i 02:02 0°Υ02'47 6.23710 AU -5412 May 17 j 01:05 2°Y56'43 morning rise conjunction -5418 Nov 06 i 03:39 5°**£**16'41 0°31'34 retrograde -5412 Sep 17 j 17:24 20°Y57'38 -5418 Nov 06 j 03:41 5°**£**16'42 0°31'34 -5412 Nov 16 j 02:59 15°**Y**′58′27 -0°23′32 minimum elong opposition -5418 Nov 05 j 15:40 5°**Ω**09'40 -5412 Nov 15 j 23:49 15°**Y**59'30 4.28485 AU max. Earth dist. 6.13981 AU min Earth dist -5418 Nov 18 j 21:25 -5411 Jan 15 j 20:05 10°**Y**54'46 8° **△** 15'22 direct morning rise -5417 Mar 27 j 22:44 -5411 Mar 28 j 11:38 17°Y52'17 27°**△**34'02 retrograde asc. node opposition -5417 May 27 j 22:32 -5411 May 23 j 20:45 29°Y12'53 22°**2**36'06 0°08'58 evening set -5417 May 27 j 22:35 -5411 May 27 j 10:35 min. Earth dist. 22°**₽**36'05 4.09336 AU 0°8 -5417 Jul 12 j 19:59 18°**♀**01'35 desc. node -5411 Jun 06 j 08:39 -5417 Jul 26 j 13:27 17°**£**43′02 conjunction 2°811'18 0°08'26 direct -5411 Jun 06 j 08:37 -5417 Oct 29 j 13:00 2°**8**11'17 0°M minimum elong 0°08'34 -5417 Nov 27 j 09:04 -5411 Jun 06 j 01:29 2°**8**07'22 evening set 6°**™**35'24 behind sun begin -5411 Jun 06 j 15:45 2°**8**15'12 behind sun end 9°M39'46 -0°19'33 -5417 Dec 10 j 08:21 -5411 Jun 06 j 00:59 2°**8**07'05 conjunction max. Earth dist. 6.32606 AU minimum elong -5417 Dec 10 j 08:19 9°M39'45 0°19'45 morning rise -5411 Jun 19 j 17:40 5°808'10 max. Earth dist. -5417 Dec 10 j 20:58 9°M47'15 6.05665 AU -5411 Aug 06 j 23:23 15°8 -5417 Dec 23 j 10:37 12°M45'51 retrograde -5411 Oct 18 j 22:23 22°**8**28'40 morning rise -5416 Jan 01 j 23:59 15°M₀ opposition -5411 Dec 17 j 16:35 17°**8**33'15 0°45'22 -5416 Mar 20 j 22:48 min. Earth dist. -5411 Dec 18 j 04:10 17°**8**29'27 4.35699 AU 0°×7 -5416 May 02 j 21:24 2°**х¹**47'17 -5410 Jan 07 j 03:18 15°R₩ retrograde -5416 Jun 14 j 22:42 -5410 Feb 17 j 12:58 12°**8**29'29 30°RM direct -5416 Jul 02 j 11:00 27°M45'25 -1°06'52 -5410 Mar 31 j 07:06 15°8 opposition min. Earth dist. -5416 Jul 01 i 17:51 27°ML51'07 4.03277 AU -5410 Jun 23 i 02:50  $0^{\circ}II$ evening set direct -5416 Aug 29 j 21:51 22°M52'07 -5410 Jun 25 j 13:30 0°**Ⅲ**31'55 -5416 Nov 06 i 17:46 0°×7 -5410 Jul 08 i 16:17 evening set -5415 Jan 01 j 01:58 12°**∡**01'38 conjunction 3°II24'31 0°52'08 minimum elong -5410 Jul 08 i 16:14 3°**Ⅲ**24'29 0°52'25 -5415 Jan 14 i 08:44 15° **₹**10'42 -1°04'36 max. Earth dist. -5410 Jul 07 j 13:31 3°**Ⅱ**09'47 6.37551 AU conjunction -5415 Jan 14 j 08:40 15°**∡**10'40 1°04'54 -5410 Jul 21 j 15:31 6° II 15′24 minimum elong morning rise -5415 Jan 15 j 18:24 15°**✗**30'43 6.02324 AU -5410 Nov 18 j 22:14 23°**Ⅱ**19'25 max. Earth dist. retrograde -5409 Jan 18 j 03:51 morning rise -5415 Jan 27 j 19:00 18°**∡**¹21'35 opposition 18°**Ⅱ**26'51 1°39'54 -5415 Mar 22 j 01:27 0°궁 min. Earth dist. -5409 Jan 19 j 03:18 18°**Ⅱ**19'18 4.38169 AU retrograde -5415 Jun 08 j 18:46 8°**る**35'46 direct -5409 Mar 21 j 16:35 13°**Ⅲ**24'29 -5415 Aug 07 j 18:37 3°**ප**31'06 -1°58'35 -5409 Jul 20 j 23:03 0ಂತಾ opposition -5415 Aug 06 j 15:37 3°る40'16 4.03161 AU -5409 Jul 27 j 03:47 min. Earth dist. evening set 1°9521'15 -5415 Sep 05 j 20:25 30°R.✓ -5409 Aug 07 j 05:57 max. Earth dist. 3°**©**48'15 6.37221 AU -5415 Oct 04 j 19:33 28°**∡**³35'26 direct 0°궁 -5409 Aug 08 j 21:22 -5415 Nov 02 j 19:05 conjunction 4°9510'05 1°20'38 evening set -5414 Feb 06 j 22:57 17°**る**49'27 minimum elong -5409 Aug 08 j 21:20 4°9510'03 1°20'56 morning rise -5409 Aug 21 j 12:15 6°957'35 conjunction -5414 Feb 20 j 12:30 20°**ට**59'59 -1°25'38 retrograde -5409 Dec 20 j 12:51 24°9510'39 minimum elong -5414 Feb 20 j 12:30 20°**る**59'59 1°25'56 opposition -5408 Feb 19 j 05:43 19°**©**19'13 2°06'28

-5414 Feb 22 j 09:24

-5414 Mar 06 j 04:27

max. Earth dist.

morning rise

21°**ප්**26'18

24°る11'41

6.05311 AU

min. Earth dist.

direct

-5408 Feb 20 j 10:59

-5408 Apr 21 j 19:42

19°909'53

14°9519'13

4.35201 AU

•	omena of Jupiter fro		_				ge 44
Attention, astronom	nical year style is used: Th	-	in astronomical co				6 0 6200 AXX
	-5408 Aug 15 j 16:25	$0^{\circ}\Omega$		max. Earth dist.	-5402 Feb 27 j 10:17	26° <b>⋜</b> 24'23	6.06398 AU
evening set	-5408 Aug 26 j 06:31	2° <b>Ω</b> 20'35		morning rise	-5402 Mar 11 j 07:44	29° <b>る</b> 10'34	
max. Earth dist.	-5408 Sep 06 j 04:23	4° <b>Ω</b> 47'33	6.31765 AU		-5402 Mar 14 j 21:15	0° <b>≈</b>	
					-5402 May 29 j 18:36	15° <b>≈</b>	
conjunction	-5408 Sep 07 j 18:52	5° <b>Ω</b> 09'13	1°26'18	retrograde	-5402 Jul 19 j 05:14	18° <b>≈</b> 52'34	
minimum elong	-5408 Sep 07 j 18:53	5° <b>Ω</b> 09'13	1°26'35		-5402 Sep 07 j 19:54	15° <b>R</b> ≈	
morning rise	-5408 Sep 20 j 05:29	7° <b>Ω</b> 57'11		opposition	-5402 Sep 16 j 17:18	13° <b>≈</b> 47'42	-2°02'32
	-5408 Oct 22 j 22:21	15° <b>Ω</b>		min. Earth dist.	-5402 Sep 15 j 15:15	13° <b>≈</b> 56'37	4.10305 AU
retrograde	-5407 Jan 21 j 08:33	25° <b>Ω</b> 41'57		direct	-5402 Nov 14 j 04:47	8° <b>≈</b> 48'12	
opposition	-5407 Mar 23 j 11:05	20° <b>Ω</b> 49'47	1°56'52		-5401 Jan 17 j 21:31	15° <b>≈</b>	
min. Earth dist.	-5407 Mar 24 j 12:36	20° <b>Ω</b> 41'41	4.27627 AU	evening set	-5401 Mar 20 j 19:14	27° <b>≈</b> 47'51	
direct	-5407 May 24 j 09:05	15° <b>Ω</b> 52'45			-5401 Mar 30 j 11:07	0° <b>∀</b>	
	-5407 Sep 08 j 06:38	O°Mp					
evening set	-5407 Sep 26 j 16:12	4° <b>™</b> 07'19		conjunction	-5401 Apr 03 j 13:19	0° <b>¥</b> 56′09	-1°11'19
max. Earth dist.	-5407 Oct 07 j 23:38	6° Mp 43′01	6.22712 AU	minimum elong	-5401 Apr 03 j 13:23	0° <b>¥</b> 56'11	1°11'28
				max. Earth dist.	-5401 Apr 04 j 23:33	1° <b>)</b> 15′43	6.14857 AU
conjunction	-5407 Oct 09 j 04:22	6° ₩ 59'33	1°06'25	morning rise	-5401 Apr 17 j 07:47	4° <b>)</b> €04'28	
minimum elong	-5407 Oct 09 j 04:26	6° Mp 59'35	1°06'33	retrograde	-5401 Aug 21 j 22:54	22° <b>升</b> 53'19	
morning rise	-5407 Oct 21 j 16:49	9° m 52'06		opposition	-5401 Oct 20 j 05:49	17° <b>¥</b> 50'56	-1°20'07
retrograde	-5406 Feb 24 j 22:36	28° m/24'49		min. Earth dist.	-5401 Oct 19 j 14:45	17° <b>¥</b> 56′02	4.19906 AU
opposition	-5406 Apr 27 j 02:50	23° m 30'06	1°10'27	direct	-5401 Dec 18 j 20:04	12° <b>)</b> 48'35	
min. Earth dist.	-5406 Apr 27 j 17:06	23° m) 25'32	4.17622 AU		-5400 Apr 17 j 21:40	$0^{\circ}$ Y	
direct	-5406 Jun 26 j 21:42	18° <b>m</b> ) 35'42		evening set	-5400 Apr 24 j 10:04	1° <b>Y</b> 26'31	
	-5406 Sep 27 j 05:11	0∘ <u>v</u>		<i>8</i>	r J		
evening set	-5406 Oct 29 j 03:13	7° <b>ჲ</b> 09'20		conjunction	-5400 May 08 j 03:13	4° <b>Y</b> 30'15	-0°32'48
<b>3</b>				minimum elong	-5400 May 08 j 03:16	4° <b>Υ</b> 30'16	
conjunction	-5406 Nov 10 j 20:16	10° <b>Ω</b> 07'54	0°24'47	max. Earth dist.	-5400 May 08 j 16:21	4° <b>Υ</b> '37'35	6.24913 AU
minimum elong	-5406 Nov 10 j 20:18	10° <b>⊆</b> 07'55	0°24'45	morning rise	-5400 May 21 j 18:45	7° <b>Υ</b> 33'00	0.2 1713 710
max. Earth dist.	-5406 Nov 10 j 12:18	10° <b>⊆</b> 07'33	6.12727 AU	retrograde	-5400 Sep 22 j 00:50	25° <b>Υ</b> 28'01	
morning rise	-5406 Nov 23 j 15:06	13° <b>⊆</b> 07'36	0.12727 710	opposition	-5400 Nov 20 j 11:52	20° <b>Υ</b> 29'24	-0°13'54
morning risc	-5405 Feb 19 j 20:07	0° <b>™</b>		min. Earth dist.	-5400 Nov 20 j 11:32	20° <b>Υ</b> 29'53	4.29459 AU
retrograde	-5405 Apr 02 j 01:10	2°M32'44		direct	-5399 Jan 20 j 08:18	15° <b>Υ</b> 25'39	4.29439 AU
retrograde	-5405 May 13 j 12:32	2 11€32 44 30°R <b>Ω</b>		asc. node	-5399 Feb 06 j 08:14	15° <b>Υ</b> 52'33	
daga mada	-5405 May 23 j 02:34	30 k== 28° <b>£</b> 50'57		asc. Houe	-	0° <b>8</b>	
desc. node	, ,		0001157		-5399 May 11 j 07:00	3° <b>8</b> 42'05	
opposition min. Earth dist.	-5405 Jun 02 j 00:42	27° <b>Ω</b> 34'15	4.08399 AU	evening set	-5399 May 28 j 10:48	3 642 03	
	-5405 Jun 01 j 21:31		4.08399 AU		5200 I 10 : 21 40	6° <b>႘</b> 39'48	001.415.6
direct	-5405 Jul 31 j 10:38	22° <b>Ω</b> 41'19		conjunction	-5399 Jun 10 j 21:40	. •	0°14'56
	-5405 Oct 09 j 21:23	0°M		minimum elong	-5399 Jun 10 j 21:38	6° <b>8</b> 39'47	0°15'05
evening set	-5405 Dec 02 j 06:30	11°M35'39		behind sun begin	-5399 Jun 10 j 19:02	6° <b>8</b> 38'21	
				behind sun end	-5399 Jun 11 j 00:15	6° <b>8</b> 41'13	
conjunction	-5405 Dec 15 j 06:41	14°M40'40		max. Earth dist.	-5399 Jun 10 j 11:14	6° <b>8</b> 34'03	6.33296 AU
minimum elong	-5405 Dec 15 j 06:38	14° <b>™</b> 40′39		morning rise	-5399 Jun 24 j 05:27	9° <b>8</b> 35'54	
max. Earth dist.	-5405 Dec 15 j 22:18	14° <b>™</b> 49'57	6.05117 AU	_	-5399 Jul 19 j 12:20	15° <b>8</b>	
	-5405 Dec 16 j 15:13	15° <b>™</b>		retrograde	-5399 Oct 23 j 06:23	26° <b>8</b> 53'42	
morning rise	-5405 Dec 28 j 10:06	17° <b>M</b> 47'28		opposition	-5399 Dec 22 j 01:06	21° <b>8</b> 58'50	0°54'05
	-5404 Feb 22 j 19:33	0° <b>∡</b>		min. Earth dist.	-5399 Dec 22 j 14:53	21° <b>8</b> 54'20	4.36070 AU
retrograde	-5404 May 08 j 00:23	7° <b>∡</b> 751'38	404.5%				
opposition	-5404 Jul 07 j 12:55	2° <b>₹</b> 49'14					
min. Earth dist.	-5404 Jul 06 j 17:50		4.03181 AU				
	-5404 Jul 30 j 03:46	30°RM					
direct	-5404 Sep 03 j 22:23	27°M55'40					
	-5404 Oct 09 j 09:23	0°⊀					
evening set	-5403 Jan 06 j 03:18	17° <b>∡</b> 05'30					
conjunction	-5403 Jan 19 j 11:10	20° <b>҂</b> 14′50	-1°09'13				
minimum elong	-5403 Jan 19 j 11:06	20° <b>∡</b> 14'48	1°09'32				
max. Earth dist.	-5403 Jan 21 j 00:29	20° <b>∡</b> ³36′58	6.02673 AU				
morning rise	-5403 Feb 01 j 22:11	23° <b>∡</b> *25'52					
	-5403 Mar 02 j 16:36	8°0					
retrograde	-5403 Jun 13 j 19:44	13° <b>る</b> 37'28					
opposition	-5403 Aug 12 j 17:05	8° <b>ろ</b> 32'38	-2°02'19				
min. Earth dist.	-5403 Aug 11 j 14:04	8° <b>පි</b> 41'48	4.03933 AU				
direct	-5403 Oct 09 j 18:20	3° <b>る</b> 36'33					
evening set	-5402 Feb 12 j 00:59	22° <b>る</b> 48'50					
	-						
conjunction	-5402 Feb 25 j 15:04	25° <b>る</b> 59'08	-1°26'01				
· · · · · ·	5402 F-L 25 : 15.04						

-5402 Feb 25 j 15:04 25° 중59'08 1°26'19

minimum elong