Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -9900 in astronomical counting style is the year 9901 BCE in historical counting style. -9900 Mar 22 i 01:45 22° m 01'48 min. Earth dist. -9895 Nov 07 j 03:29 7°**)** €25'10 4.29701 AU retrograde 21° mp 41'55 -9900 Apr 05 j 11:57 -9894 Jan 07 j 06:56 2°\ 25'02 desc. node direct -9900 May 21 j 22:18 16° Mp 59'31 -0°10'25 asc. node -9894 Jan 13 j 20:01 2°\ 28'59 opposition -9894 May 16 j 01:53 20°**)** 47'59 min. Earth dist. -9900 May 21 j 06:57 17° mp 04'36 4.08911 AU evening set -9900 Jul 19 j 15:26 12° m 05'53 -9894 May 28 j 05:10 direct max. Earth dist. 23°**)** €29'42 6.32076 AU 0∘**⊽** -9900 Nov 16 j 04:10 evening set -9900 Nov 19 j 23:10 0°**£**52'57 conjunction -9894 May 29 j 05:41 23°**)** 43'21 0°18'38 -9894 May 29 j 05:39 minimum elong 23°**)** 43'20 0°18'30 -9894 Jun 11 j 06:00 conjunction -9900 Dec 03 j 06:46 4°£00'15 -0°35'34 morning rise 26°**H**36'55 minimum elong -9900 Dec 03 j 06:42 4°**Ω**00'12 0°35'33 -9894 Jun 26 j 18:02 $0^{\circ}\Upsilon$ 13°**Y**55'41 max. Earth dist. -9900 Dec 04 j 10:54 4°**£**16'45 6.07191 AU retrograde -9894 Oct 09 j 20:43 9°**Y**03'11 morning rise -9900 Dec 16 j 18:04 7°**£**09'27 opposition -9894 Dec 08 j 22:04 1°04'03 retrograde -9899 Apr 27 j 06:31 27°**♀**05'40 min. Earth dist. -9894 Dec 09 j 17:57 8°**Y**56'46 4.33566 AU opposition -9899 Jun 26 j 10:29 22°**2**00'55 -1°32'51 direct -9893 Feb 09 j 07:21 4°Υ01'12 min. Earth dist. -9899 Jun 25 j 12:36 22°**₽**08'20 4.06702 AU evening set -9893 Jun 17 j 03:14 22°Y10'26 direct -9899 Aug 23 j 14:38 17°**♀**04'43 conjunction -9899 Nov 29 j 06:42 0°M -9893 Jun 29 j 21:15 25°**Y**00'49 1°06'50 evening set -9899 Dec 26 j 08:53 $6^{\circ}\text{ML}07^{\prime}26$ minimum elong -9893 Jun 29 j 21:10 25°**Y**′00′46 1°07'00 max. Earth dist. -9893 Jun 28 j 14:42 24°**Y**43'46 6.33925 AU conjunction -9898 Jan 08 j 23:01 9°M17'18 -1°22'03 morning rise -9893 Jul 12 j 12:18 27° **Y**49'45 0°8 minimum elong -9898 Jan 08 j 22:56 9°ML17'15 1°22'21 -9893 Jul 22 j 08:47 max. Earth dist. -9898 Jan 10 j 08:53 9°**™**37'03 6.07252 AU -9893 Oct 30 i 23:16 15°8 morning rise -9898 Jan 22 i 15:28 12°M28'20 -9893 Nov 10 j 17:21 15°811'00 retrograde -9898 Feb 02 i 15:56 15°M -9893 Nov 21 i 12:28 15°R₩ -9898 Apr 25 j 09:14 0°×7 opposition -9892 Jan 10 j 12:08 10°819'19 2°02'57 -9898 Jun 01 j 21:59 2°**х** 12'47 -9892 Jan 11 j 09:21 10°**8**12'34 min. Earth dist. 4.33395 AU retrograde -9898 Jul 09 j 00:17 -9892 Mar 12 j 23:04 5°**8**20'09 30°RM. direct -9898 Jul 31 j 07:53 27°M07'59 -2°21'18 -9892 Jun 07 j 19:28 15°8 opposition min. Earth dist. -9898 Jul 30 j 12:56 -9892 Jul 17 j 10:22 23°**8**23'33 27°M14'28 4.09148 AU evening set -9898 Sep 27 j 17:59 direct 22°M₂08'22 -9892 Jul 29 j 21:01 1°35'33 -9898 Dec 10 j 10:31 0°×7 conjunction 26°**8**11'29 -9892 Jul 29 j 20:58 -9897 Feb 01 j 09:09 11°**∡**16'15 minimum elong 26°**8**11'28 1°36'00 evening set -9892 Jul 28 j 17:40 max. Earth dist. 25°**8**56'04 6.31612 AU 14°**₹**25′12 -1°38′30 -9897 Feb 15 j 02:04 -9892 Aug 11 j 06:03 28°**8**58'44 conjunction morning rise -9897 Feb 15 j 02:04 -9892 Aug 15 j 19:45 minimum elong 14°**∡**°25′12 1°39′02 $0^{\circ}\Pi$ -9897 Feb 16 j 03:14 -9892 Dec 12 j 12:37 max. Earth dist. 14°**✗**39'40 6.11743 AU retrograde 16°**Ⅱ**43′26 -9897 Feb 28 j 19:35 -9891 Feb 11 j 19:59 morning rise 17°**∡**³34'19 opposition 11°**I**I50'48 2°26'26 -9897 Apr 29 j 10:05 0°궁 min. Earth dist. -9891 Feb 12 j 13:38 11°**Д**45'13 4.29163 AU retrograde -9897 Jul 06 j 05:01 6°る41'23 direct -9891 Apr 14 j 18:55 6°**I**I54'41 -9897 Sep 03 j 06:32 1°る38'54 -2°18'42 evening set -9891 Aug 17 j 15:18 25°**Ⅲ**00′12 opposition min. Earth dist. -9897 Sep 02 j 19:07 1°る42'47 4.15278 AU max. Earth dist. -9891 Aug 29 j 06:05 27°**I**39'14 6.25733 AU -9897 Sep 15 j 14:09 30°R.**✓** -9897 Nov 01 j 12:40 26°**х** 36′16 -9891 Aug 30 j 00:21 27°II49'41 1°36'20 direct conjunction -9897 Dec 18 j 18:09 0°る -9891 Aug 30 j 00:23 27°**Ⅱ**49'42 1°36'54 minimum elong -9896 Mar 08 j 18:10 15°**る**35'31 -9891 Sep 08 j 12:27 0ಂತಾ evening set morning rise -9891 Sep 11 i 09:54 0°939'31 18°る41'16 -1°20'11 conjunction -9896 Mar 22 j 10:38 retrograde -9890 Jan 15 i 13:16 19°502'44 minimum elong -9896 Mar 22 j 10:43 18°る41'19 1°20'45 opposition -9890 Mar 18 i 02:33 14°907'22 2°05'50 max. Earth dist. -9896 Mar 22 j 18:31 18°る45'44 6.19023 AU min. Earth dist. -9890 Mar 18 i 09:28 14°9505'09 4.22022 AU -9896 Apr 05 i 01:43 21°る46'08 direct -9890 May 17 i 23:27 9°9513'36 morning rise -9896 May 13 i 08:48 0°≈ -9890 Sep 18 j 12:11 27°928'34 evening set -9896 Aug 07 j 06:07 10°≈05'37 -9890 Sep 29 j 09:59 $0^{\circ}\Omega$ retrograde -9896 Oct 05 j 06:58 5°≈06'49 -1°29'39 opposition min. Earth dist. -9896 Oct 05 j 08:06 5°≈06'26 4.22946 AU conjunction -9890 Oct 01 j 02:36 0°Ω23'34 1°07'15 1°07'47 direct -9896 Dec 04 j 19:16 0°≈02'39 minimum elong -9890 Oct 01 j 02:41 $0^{\circ}\Omega_{23'37}$ -9890 Oct 01 j 01:46 0°**£**23′05 6.18002 AU -9895 Mar 26 j 15:22 15°≈ max. Earth dist. 3°**£**19′49 -9895 Apr 12 j 16:58 18°≈44'10 morning rise -9890 Oct 13 j 19:02 evening set -9890 Dec 08 j 00:29 15°€ -9895 Apr 26 j 05:12 -9889 Feb 19 j 21:59 22°**Ω**26'48 conjunction 21°≈45′12 -0°35′51 retrograde -9889 Apr 22 j 05:37 17°**Ω**27'44 1°03'36 minimum elong -9895 Apr 26 j 05:16 21°≈45'14 0°36'16 opposition max. Earth dist. -9895 Apr 25 j 19:09 21°**≈**39'34 6.26577 AU min. Earth dist. -9889 Apr 22 j 00:34 17°**Ω**29'22 4.14188 AU morning rise -9895 May 09 j 14:20 24°≈44'35 -9889 May 12 j 03:00 15°R€ -9895 Jun 02 j 19:32 0°**)**€ direct -9889 Jun 20 j 21:13 12°**Ω**34'52 retrograde -9895 Sep 08 j 04:57 12°**)** 24'02 -9889 Jul 29 j 23:20 15°€ opposition -9895 Nov 06 j 16:07 7°**∺**28'55 -0°14'01 -9889 Oct 17 j 01:55 0° m

evening set	-9889 Oct 21 j 19:11	1° Mp 05'41	n usu onomour o	conjunction	9890 BCE in historical c -9883 May 01 j 00:06	26°≈28'00	-0°28'19
				minimum elong	-9883 May 01 j 00:09	26° ≈ 28′02	0°28'42
conjunction	-9889 Nov 03 j 18:46	4° m 07'54	0°15'16	morning rise	-9883 May 14 j 08:15	29° ≈ 26'35	
minimum elong	-9889 Nov 03 j 18:48	4° الله 07'55	0°15'35		-9883 May 16 j 20:33	0°)	
behind sun begin	-9889 Nov 03 j 16:39	4° Mp 06′40		retrograde	-9883 Sep 12 j 17:48	17° 米 01'39	
behind sun end	-9889 Nov 03 j 20:57	4° m 09'10		opposition	-9883 Nov 11 j 05:54	12°) €06'58	-0°02'31
max. Earth dist.	-9889 Nov 04 j 10:05	4° Mp 16′52	6.10842 AU	min. Earth dist.	-9883 Nov 11 j 19:21	12° 米 02'32	4.30517 AU
morning rise	-9889 Nov 16 j 21:56	7° Mp 12'02		asc. node	-9883 Nov 23 j 12:39	10°) 31′46	
desc. node	-9888 Feb 15 j 10:53	24° TQ 26'06		direct	-9882 Jan 12 j 01:21	7° ∺ 03'12	
retrograde	-9888 Mar 27 j 00:08	26° m 54'57	000010	evening set	-9882 May 20 j 16:24	25° ∺ 23′27	
opposition	-9888 May 26 j 19:31	21° m 52'15			0000 1 00:10.55	2001/10100	000 (11.1
min. Earth dist.	-9888 May 26 j 02:41	21° Mp 57'50	4.08293 AU	conjunction	-9882 Jun 02 j 18:55	28°\(\frac{1}{1}\)18'00 28°\(\frac{1}{1}\)7'58	0°26'11
direct	-9888 Jul 24 j 09:30	16° Mp 58′20 0° <u>₽</u>		minimum elong	-9882 Jun 02 j 18:53	28° X 1/38 28° X 04'02	0°26'06 6.32684 AU
evening set	-9888 Oct 30 j 09:23 -9888 Nov 24 j 21:24	0° ± 2 5° £ 48'24		max. Earth dist.	-9882 Jun 01 j 17:51 -9882 Jun 10 j 10:13	28°π0402 0°Υ	0.32084 AU
evening set	-9000 NOV 24 J 21.24	3 == 46 24		morning rise	-9882 Jun 15 j 17:47	0 1 1° Υ 10'44	
conjunction	-9888 Dec 08 j 06:17	8° ≏ 56'23	0.043100	retrograde	-9882 Oct 14 j 06:42	18° Υ 27'59	
minimum elong	-9888 Dec 08 j 06:17	8° ⊆ 56'21		opposition	-9882 Dec 13 j 11:38	13° Υ 35'39	1°13'58
max. Earth dist.	-9888 Dec 09 j 12:23	9° Ω 14'04	6.06753 AU	min. Earth dist.	-9882 Dec 14 j 07:17	13° Υ 29'19	4.33925 AU
morning rise	-9888 Dec 21 j 18:25	12° Ω 06'10	0.00733710	direct	-9881 Feb 13 j 21:26	8° Υ 33'58	1.55725710
morning rise	-9887 Mar 26 j 21:06	0°M		evening set	-9881 Jun 21 j 14:05	26° Y 41'29	
retrograde	-9887 May 02 j 07:38	2°M03'32		max. Earth dist.	-9881 Jul 02 j 23:57	29° Y 14'03	6.33978 AU
	-9887 Jun 07 j 08:45	30°R Ω			, , , , , , , , , , , , , , , , , , ,	-,	
min. Earth dist.	-9887 Jun 30 j 10:24	27° Ω 05'46	4.06503 AU	conjunction	-9881 Jul 04 j 06:43	29° Ƴ 31'14	1°12'18
opposition	-9887 Jul 01 j 07:13	26° ≏ 58'42	-1°42'06	minimum elong	-9881 Jul 04 j 06:37	29° Ƴ 31'12	1°12'32
direct	-9887 Aug 28 j 11:29	22° ჲ 02'05		_	-9881 Jul 06 j 10:08	0°8	
	-9887 Nov 09 j 23:45	0° M		morning rise	-9881 Jul 16 j 20:37	2° 8 19'39	
evening set	-9887 Dec 31 j 11:46	11°ML07'32			-9881 Sep 19 j 06:44	15° 8	
				retrograde	-9881 Nov 15 j 07:13	19° 8 42'32	
conjunction	-9886 Jan 14 j 02:29	14°ML17'38	-1°26'19		-9880 Jan 13 j 22:30	15° ₹ 8	
minimum elong	-9886 Jan 14 j 02:24	14°M17'35	1°26'41	opposition	-9880 Jan 15 j 03:17	14° 8 50'52	2°08'40
max. Earth dist.	-9886 Jan 15 j 11:08	14° M 36'40	6.07294 AU	min. Earth dist.	-9880 Jan 16 j 01:23	14° 8 43'50	4.33133 AU
	-9886 Jan 17 j 03:12	15° M		direct	-9880 Mar 17 j 14:28	9° 8 52'05	
morning rise	-9886 Jan 27 j 19:31	17°M28'50			-9880 May 17 j 13:50	15° 8	
	-9886 Mar 27 j 23:06	0° ∡ ¹		evening set	-9880 Jul 21 j 19:23	27° 8 55'02	
retrograde	-9886 Jun 06 j 18:31	7° ∡ 10'54			-9880 Jul 31 j 01:25	0°II	
min. Earth dist.	-9886 Aug 04 j 07:53	2° ∡ 12'52	4.09458 AU	max. Earth dist.	-9880 Aug 02 j 01:59	0°Щ27′25	6.31026 AU
opposition	-9886 Aug 05 j 02:57	2° ∡ 706′20	-2°24'04		0000 4 02:05.24	00 T 10 155	1027120
J:4	-9886 Aug 21 j 00:38	30°RM 27°M 0€119		conjunction	-9880 Aug 03 j 05:24		1°37'28
direct	-9886 Oct 02 j 13:22 -9886 Nov 14 j 06:52	27°ML06′18 0°⊀		minimum elong morning rise	-9880 Aug 03 j 05:22 -9880 Aug 15 j 14:10	0° П 42'53 3° П 30'15	1°37'56
evening set	-9885 Feb 06 j 12:59	16° ₹ 15'16		retrograde	-9880 Dec 17 j 04:45	21° II 19'26	
evening set	-9865 Feb 00 j 12.59	10 8 13 10		opposition	-9879 Feb 16 j 13:55	16° Ⅱ 26'27	2°26'17
conjunction	-9885 Feb 20 j 06:05	19° ∡ ¹24'04	-1°37'53	min. Earth dist.	-9879 Feb 17 j 05:55	16° II 20'27'	4.28300 AU
minimum elong	-9885 Feb 20 j 06:06	19° × 24'05		direct	-9879 Apr 19 j 08:52	11° II 30'40	4.20300 110
max. Earth dist.	-9885 Feb 21 j 05:02	19° х 21°05	6.12302 AU	evening set	-9879 Aug 22 j 01:18	29° I 37'10	
morning rise	-9885 Mar 05 j 23:32	22° ⋌ 32'53	0.12302110	evening sec	-9879 Aug 23 j 17:24	0ಂಣ	
	-9885 Apr 08 j 21:11	0°る				. =	
retrograde	-9885 Jul 10 j 23:37	11° පි 34'51		conjunction	-9879 Sep 03 j 10:48	2° © 27'15	1°33'59
opposition	-9885 Sep 07 j 23:34	6° る 32'50	-2°14'11	minimum elong	-9879 Sep 03 j 10:51	2° © 27'17	1°34'34
min. Earth dist.	-9885 Sep 07 j 14:20		4.16021 AU	max. Earth dist.	-9879 Sep 02 j 19:24	2°518'25	6.24666 AU
direct	-9885 Nov 06 j 10:06	1° る 29'55		morning rise	-9879 Sep 15 j 20:49	5°917'46	
				retrograde		23°9547'15	
evening set	-9884 Mar 13 j 19:07	20° る 28'04		retrograde	-9878 Jan 20 j 11:50		
evening set	-9884 Mar 13 j 19:07	20° る 28'04		opposition	-9878 Mar 22 j 23:55	18° © 51'26	1°59'21
evening set	-9884 Mar 13 j 19:07 -9884 Mar 27 j 11:26	20°ිට 28'04 23°ට 33'22	-1°15'06	-			1°59'21 4.20807 AU
-	-			opposition	-9878 Mar 22 j 23:55	18°©51'26 18°©49'24 13°©57'52	
conjunction	-9884 Mar 27 j 11:26 -9884 Mar 27 j 11:31 -9884 Mar 27 j 18:04	23° ප 33'22 23° ප 33'25 23° ප 37'08		opposition min. Earth dist.	-9878 Mar 22 j 23:55 -9878 Mar 23 j 06:15 -9878 May 22 j 17:30 -9878 Sep 13 j 06:20	18°©51'26 18°©49'24 13°©57'52 0°Ω	
conjunction minimum elong	-9884 Mar 27 j 11:26 -9884 Mar 27 j 11:31 -9884 Mar 27 j 18:04 -9884 Apr 10 j 01:51	23° ි 33'22 23° ි 33'25 23° ි 37'08 26° ි 37'38	1°15'39	opposition min. Earth dist.	-9878 Mar 22 j 23:55 -9878 Mar 23 j 06:15 -9878 May 22 j 17:30	18°©51'26 18°©49'24 13°©57'52	
conjunction minimum elong max. Earth dist. morning rise	-9884 Mar 27 j 11:26 -9884 Mar 27 j 11:31 -9884 Mar 27 j 18:04 -9884 Apr 10 j 01:51 -9884 Apr 25 j 06:48	23°♂33'22 23°♂33'25 23°♂37'08 26°♂37'38 0°≈	1°15'39	opposition min. Earth dist. direct evening set	-9878 Mar 22 j 23:55 -9878 Mar 23 j 06:15 -9878 May 22 j 17:30 -9878 Sep 13 j 06:20 -9878 Sep 23 j 02:26	18°\$51'26 18°\$49'24 13°\$57'52 0°\$\Omega\$ 2°\$\Omega\$15'09	4.20807 AU
conjunction minimum elong max. Earth dist. morning rise retrograde	-9884 Mar 27 j 11:26 -9884 Mar 27 j 11:31 -9884 Mar 27 j 18:04 -9884 Apr 10 j 01:51 -9884 Apr 25 j 06:48 -9884 Aug 11 j 19:10	23°♂33'22 23°♂33'25 23°♂37'08 26°♂37'38 0°≈ 14°≈51'13	1°15'39 6.19912 AU	opposition min. Earth dist. direct evening set conjunction	-9878 Mar 22 j 23:55 -9878 Mar 23 j 06:15 -9878 May 22 j 17:30 -9878 Sep 13 j 06:20 -9878 Sep 23 j 02:26 -9878 Oct 05 j 17:52	18°\$51'26 18°\$49'24 13°\$57'52 0°\$\Omega\$2"\$\Omega\$15'09 5°\$\Omega\$11'10	4.20807 AU 1°01'01
conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-9884 Mar 27 j 11:26 -9884 Mar 27 j 11:31 -9884 Mar 27 j 18:04 -9884 Apr 10 j 01:51 -9884 Apr 25 j 06:48 -9884 Aug 11 j 19:10 -9884 Oct 09 j 21:46	23°♂33'22 23°♂33'25 23°♂37'08 26°♂37'38 0°≈ 14°≈51'13 9°≈52'57	1°15'39 6.19912 AU -1°19'56	opposition min. Earth dist. direct evening set conjunction minimum elong	-9878 Mar 22 j 23:55 -9878 Mar 23 j 06:15 -9878 May 22 j 17:30 -9878 Sep 13 j 06:20 -9878 Sep 23 j 02:26 -9878 Oct 05 j 17:52 -9878 Oct 05 j 17:57	18°951'26 18°9549'24 13°957'52 0°A 2°A15'09 5°A11'10 5°A11'13	4.20807 AU 1°01'01 1°01'32
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-9884 Mar 27 j 11:26 -9884 Mar 27 j 11:31 -9884 Mar 27 j 18:04 -9884 Apr 10 j 01:51 -9884 Apr 25 j 06:48 -9884 Aug 11 j 19:10 -9884 Oct 09 j 21:46 -9884 Oct 09 j 23:16	23° る33'22 23° る33'25 23° る37'08 26° る37'38 0° ≈ 14° ≈ 51'13 9° ≈ 52'57 9° ≈ 52'27	1°15'39 6.19912 AU	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-9878 Mar 22 j 23:55 -9878 Mar 23 j 06:15 -9878 May 22 j 17:30 -9878 Sep 13 j 06:20 -9878 Sep 23 j 02:26 -9878 Oct 05 j 17:52 -9878 Oct 05 j 17:57 -9878 Oct 05 j 17:53	18°951'26 18°951'24 13°957'52 0°A 2°A15'09 5°A11'10 5°A11'11 5°A11'11	4.20807 AU 1°01'01
conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-9884 Mar 27 j 11:26 -9884 Mar 27 j 11:31 -9884 Mar 27 j 18:04 -9884 Apr 10 j 01:51 -9884 Apr 25 j 06:48 -9884 Aug 11 j 19:10 -9884 Oct 09 j 21:46 -9884 Oct 09 j 23:16 -9884 Dec 09 j 13:07	23°♂33'22 23°♂33'25 23°♂37'08 26°♂37'38 0°≈ 14°≈51'13 9°≈52'57 9°≈52'27 4°≈48'44	1°15'39 6.19912 AU -1°19'56	opposition min. Earth dist. direct evening set conjunction minimum elong	-9878 Mar 22 j 23:55 -9878 Mar 23 j 06:15 -9878 May 22 j 17:30 -9878 Sep 13 j 06:20 -9878 Sep 23 j 02:26 -9878 Oct 05 j 17:52 -9878 Oct 05 j 17:57 -9878 Oct 05 j 17:53 -9878 Oct 18 j 11:51	18°\$51'26 18°\$49'24 13°\$57'52 0°\$\Omega\$ 2°\$\Omega\$15'09 5°\$\Omega\$11'13 5°\$\Omega\$11'11 8°\$\Omega\$08'36	4.20807 AU 1°01'01 1°01'32
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-9884 Mar 27 j 11:26 -9884 Mar 27 j 11:31 -9884 Mar 27 j 18:04 -9884 Apr 10 j 01:51 -9884 Apr 25 j 06:48 -9884 Aug 11 j 19:10 -9884 Oct 09 j 21:46 -9884 Oct 09 j 23:16 -9884 Dec 09 j 13:07 -9883 Mar 08 j 11:26	23°♂33'22 23°♂33'25 23°♂37'08 26°♂37'38 0°≈ 14°≈51'13 9°≈52'57 9°≈52'27 4°≈48'44 15°≈	1°15'39 6.19912 AU -1°19'56	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-9878 Mar 22 j 23:55 -9878 Mar 23 j 06:15 -9878 May 22 j 17:30 -9878 Sep 13 j 06:20 -9878 Sep 23 j 02:26 -9878 Oct 05 j 17:52 -9878 Oct 05 j 17:53 -9878 Oct 18 j 11:51 -9878 Nov 18 j 05:40	18°\$51'26 18°\$49'24 13°\$57'52 0°\$\Omega\$ 2°\$\Omega\$15'09 5°\$\Omega\$11'13 5°\$\Omega\$11'11 8°\$\Omega\$08'36 15°\$\Omega\$	4.20807 AU 1°01'01 1°01'32
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-9884 Mar 27 j 11:26 -9884 Mar 27 j 11:31 -9884 Mar 27 j 18:04 -9884 Apr 10 j 01:51 -9884 Apr 25 j 06:48 -9884 Aug 11 j 19:10 -9884 Oct 09 j 21:46 -9884 Oct 09 j 23:16 -9884 Dec 09 j 13:07 -9883 Mar 08 j 11:26 -9883 Apr 17 j 12:57	23°♂33'22 23°♂33'25 23°♂37'08 26°♂37'38 0°≈ 14°≈51'13 9°≈52'57 9°≈52'27 4°≈48'44 15°≈ 23°≈27'46	1°15'39 6.19912 AU -1°19'56 4.23891 AU	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-9878 Mar 22 j 23:55 -9878 Mar 23 j 06:15 -9878 May 22 j 17:30 -9878 Sep 13 j 06:20 -9878 Sep 23 j 02:26 -9878 Oct 05 j 17:52 -9878 Oct 05 j 17:53 -9878 Oct 18 j 11:51 -9878 Nov 18 j 05:40 -9877 Feb 24 j 22:08	18°\$51'26 18°\$49'24 13°\$57'52 0°\$\Omega\$ 2°\$\Omega\$15'09 5°\$\Omega\$11'10 5°\$\Omega\$11'11 8°\$\Omega\$08'36 15°\$\Omega\$21'58	4.20807 AU 1°01'01 1°01'32 6.16752 AU
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-9884 Mar 27 j 11:26 -9884 Mar 27 j 11:31 -9884 Mar 27 j 18:04 -9884 Apr 10 j 01:51 -9884 Apr 25 j 06:48 -9884 Aug 11 j 19:10 -9884 Oct 09 j 21:46 -9884 Oct 09 j 23:16 -9884 Dec 09 j 13:07 -9883 Mar 08 j 11:26	23°♂33'22 23°♂33'25 23°♂37'08 26°♂37'38 0°≈ 14°≈51'13 9°≈52'57 9°≈52'27 4°≈48'44 15°≈	1°15'39 6.19912 AU -1°19'56	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-9878 Mar 22 j 23:55 -9878 Mar 23 j 06:15 -9878 May 22 j 17:30 -9878 Sep 13 j 06:20 -9878 Sep 23 j 02:26 -9878 Oct 05 j 17:52 -9878 Oct 05 j 17:53 -9878 Oct 18 j 11:51 -9878 Nov 18 j 05:40	18°\$51'26 18°\$49'24 13°\$57'52 0°\$\Omega\$ 2°\$\Omega\$15'09 5°\$\Omega\$11'13 5°\$\Omega\$11'11 8°\$\Omega\$08'36 15°\$\Omega\$	4.20807 AU 1°01'01 1°01'32

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 3 Attention, astronomical year style is used: The year -9877 in astronomical counting style is the year 9878 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -9877	in astronomical co	ounting style is the year	r 9878 BCE in historical c	ounting style.	
direct	-9877 Jun 25 j 16:08	17° Ω 29'25			-9871 Feb 15 j 12:42	15° ≈	
	-9877 Sep 29 j 22:04	0° ™		evening set	-9871 Apr 22 j 04:03	27° ≈ 59'59	
evening set	-9877 Oct 26 j 15:41	6° Mp 03′38			-9871 May 01 j 04:06	0° ∀	
conjunction	-9877 Nov 08 j 16:51	9°№06'56		conjunction	-9871 May 05 j 14:16	0° 米 59′12	
minimum elong	-9877 Nov 08 j 16:52	9° ™ 06'57	0°07'13	minimum elong	-9871 May 05 j 14:18	0°) 59'14	0°21'15
behind sun begin	-9877 Nov 08 j 09:22	9° ™ 02'34		max. Earth dist.	-9871 May 04 j 23:59	0° ∺ 51'15	6.28936 AU
behind sun end	-9877 Nov 09 j 00:23	9° ™ 11'20		morning rise	-9871 May 18 j 21:01	3° ¥ 56'41	
max. Earth dist.	-9877 Nov 09 j 11:42	9° ™ 17'59	6.09840 AU	retrograde	-9871 Sep 16 j 23:35	21° ∺ 26′17	
morning rise	-9877 Nov 21 j 21:22	12°M/12'09		asc. node	-9871 Oct 05 j 03:00	20° ¥ 54'14	
desc. node	-9877 Dec 25 j 08:12	19° m 42'03		opposition	-9871 Nov 15 j 14:55	16°) 32′02	0°08'28
	-9876 Feb 25 j 02:14	0∘ ⊽		min. Earth dist.	-9871 Nov 16 j 05:15	16°) €27'20	4.31630 AU
retrograde	-9876 Apr 01 j 05:40	1° ≏ 59'29		direct	-9870 Jan 16 j 12:47	11° ¥ 28′28	
	-9876 May 07 j 03:17	30°R Mp		evening set	-9870 May 25 j 01:37	29°) 45′18	
opposition	-9876 May 31 j 21:03	26° M 56'24	-0°35'06		-9870 May 26 j 04:15	0 ° Υ	
min. Earth dist.	-9876 May 31 j 03:58	27° Mp 02'06	4.07582 AU	max. Earth dist.	-9870 Jun 05 j 22:14	2° Y 23'10	6.33382 AU
direct	-9876 Jul 29 j 09:28	22° m 02'13			v		
	-9876 Oct 10 j 18:53	0∘ ⊽		conjunction	-9870 Jun 07 j 02:35	2° Y 38'56	0°33'14
evening set	-9876 Nov 30 j 00:38	10° Ω 55'31		minimum elong	-9870 Jun 07 j 02:32	2° Y '38'54	
S	J			morning rise	-9870 Jun 20 j 00:15	5° Ƴ 30'52	
conjunction	-9876 Dec 13 j 10:29	14° Ω 04'06	-0°50'42	retrograde	-9870 Oct 18 j 14:34	22° Y '46'54	
minimum elong	-9876 Dec 13 j 10:24	14° Ω 04'03		opposition	-9870 Dec 17 j 20:37	17° Y ′54'50	1°23'00
max. Earth dist.	-9876 Dec 14 j 17:36	14° £ 22'22	6.06405 AU	min. Earth dist.	-9870 Dec 18 j 18:36	17° Y 47'46	4.34164 AU
morning rise	-9876 Dec 26 j 23:46	17° Ω 14'28	0.00.00110	direct	-9869 Feb 18 j 08:31	12° Y ′53'26	
morning rise	-9875 Feb 25 j 01:05	0°M		ancer	-9869 Jun 21 j 07:20	0°8	
retrograde	-9875 May 07 j 09:52	7°M11'55		evening set	-9869 Jun 25 j 19:37	0° 8 59'52	
min. Earth dist.	-9875 Jul 05 j 09:26	2°M14'33	4.06619 AU	max. Earth dist.	-9869 Jul 07 j 03:57		6.33712 AU
opposition	-9875 Jul 06 j 07:42	2°M06'59		max. Earth dist.	-9809 Jul 07 J 05.57	3 03144	0.33712 AU
opposition	-9875 Jul 22 j 10:35	2 11000 39 30°R Ω	-1 30 33	conjunction	-9869 Jul 08 j 11:16	3° 8 49'15	101707
direct		27° £ 09'59		-	-9869 Jul 08 j 11:11	3° 8 49'12	
direct	-9875 Sep 02 j 10:37	27 == 0939		minimum elong	·	6° 8 37'21	1 1/23
	-9875 Oct 14 j 07:29			morning rise	-9869 Jul 21 j 00:08		
	-9875 Dec 31 j 05:32	15°M			-9869 Aug 29 j 17:16	15° 8	
evening set	-9874 Jan 05 j 18:42	16°M16'43		retrograde	-9869 Nov 19 j 16:03	24° 8 03'24	2012126
. ,.	00741 10:00.55	100 m 26145	1020106	opposition	-9868 Jan 19 j 14:34	19° 8 11'41	
conjunction	-9874 Jan 19 j 09:55	19°M26'45		min. Earth dist.	-9868 Jan 20 j 12:03		4.32405 AU
minimum elong	-9874 Jan 19 j 09:51	19°M26'42			-9868 Feb 28 j 04:22	15°R 8	
max. Earth dist.	-9874 Jan 20 j 18:35	19°M45'45	6.07878 AU	direct	-9868 Mar 21 j 22:54	14° 8 13'19	
morning rise	-9874 Feb 02 j 03:10	22°M37'43			-9868 Apr 13 j 19:22	15° 8	
	-9874 Mar 07 j 05:25				-9868 Jul 15 j 17:42	0°Щ	
retrograde	-9874 Jun 11 j 17:21	12° √ 14'39		evening set	-9868 Jul 26 j 01:01	2° Ⅱ 17'41	
min. Earth dist.	-9874 Aug 09 j 06:22		4.10475 AU	max. Earth dist.	-9868 Aug 06 j 07:38	4° Ⅱ 50'32	6.29881 AU
opposition	-9874 Aug 10 j 00:11	7° ∡ 10'17 −	-2°25'47			_	
direct	-9874 Oct 07 j 14:26	2° , 709'48		conjunction	-9868 Aug 07 j 10:35	5° Ⅱ 05'48	1°38'43
evening set	-9873 Feb 11 j 17:57	21° ∡ 16'41		minimum elong	-9868 Aug 07 j 10:33	5° Ⅱ 05'47	1°39'12
				morning rise	-9868 Aug 19 j 19:09	7° Ⅱ 53'30	
conjunction	-9873 Feb 25 j 11:11	24° ₹ 24'55		retrograde	-9868 Dec 21 j 21:31	25° Ⅱ 49'23	
minimum elong	-9873 Feb 25 j 11:13	24° ₹ 24'56		opposition	-9867 Feb 21 j 05:47	20° Ⅱ 56′12	
max. Earth dist.	-9873 Feb 26 j 10:00		6.13682 AU	min. Earth dist.	-9867 Feb 21 j 22:04	20° Ⅱ 51′02	4.26811 AU
morning rise	-9873 Mar 11 j 04:14	27° ∡ ³32'57		direct	-9867 Apr 23 j 21:53	16° Ⅱ 00'48	
	-9873 Mar 22 j 01:07	8°0			-9867 Aug 07 j 18:53	0	
retrograde	-9873 Jul 15 j 15:17	16° る 26'19		evening set	-9867 Aug 26 j 10:11	4° © 10'39	
opposition	-9873 Sep 12 j 16:01	11° る 24'46					
min. Earth dist.	-9873 Sep 12 j 07:14	11° る 27'46	4.17629 AU	conjunction	-9867 Sep 07 j 20:16	7° 5 01'40	1°31'02
direct	-9873 Nov 11 j 06:07	6° る 21'36		minimum elong	-9867 Sep 07 j 20:20	7° 5 01'42	1°31'37
evening set	-9872 Mar 18 j 17:49	25° る 15'08		max. Earth dist.	-9867 Sep 07 j 05:42	6° © 53'18	6.22965 AU
				morning rise	-9867 Sep 20 j 07:15	9° 9 53'18	
conjunction	-9872 Apr 01 j 09:23	28° る 19'28	-1°09'39	retrograde	-9866 Jan 25 j 08:40	28° © 31'21	
minimum elong	-9872 Apr 01 j 09:29	28° る 19'31	1°10'10	opposition	-9866 Mar 27 j 20:56	23° © 35'03	1°52'05
max. Earth dist.	-9872 Apr 01 j 12:09	28° る 21'02	6.21616 AU	min. Earth dist.	-9866 Mar 28 j 00:26	23° © 33'56	4.19025 AU
	-9872 Apr 08 j 19:46	0° ≈		direct	-9866 May 27 j 08:24	18° 5 341'45	
morning rise	-9872 Apr 14 j 23:11	1° ≈ 22'43			-9866 Aug 27 j 02:03	$0^{\circ}\Omega$	
	-9872 Jun 22 j 22:44	15° ≈		evening set	-9866 Sep 27 j 17:24	7° Ω 03′28	
retrograde	-9872 Aug 16 j 06:14	19° ≈ 27'58			-		
	-9872 Oct 10 j 16:39	15°R ≈		conjunction	-9866 Oct 10 j 10:16	10° Ω 00'49	0°54'19
opposition	-9872 Oct 14 j 09:52	14° ≈ 30'12	-1°09'59	minimum elong	-9866 Oct 10 j 10:20	10° Ω 00'52	0°54'47
min. Earth dist.	-9872 Oct 14 j 13:57	14° ≈ 28'50	4.25516 AU	max. Earth dist.	-9866 Oct 10 j 14:05	10° Ω 03'03	6.15064 AU
direct	-9872 Dec 14 j 07:20	9° ≈ 25'53		morning rise	-9866 Oct 23 j 05:40	12° Ω 59'39	
	J			Č	,		

•	nical year style is used: Th		•				ige 4
Attention, astronom	-9866 Oct 31 j 23:02	15° Ω	in astronomical co	opposition	-9860 Oct 18 j 23:16	19° ≈ 11'34	-0°59'33
	-9865 Jan 21 j 10:43	0° m/y		min. Earth dist.	-9860 Oct 19 j 04:45		4.26655 AU
retrograde	-9865 Mar 02 j 02:56	2° m/20'58		min. Darm dige.	-9860 Nov 25 j 08:06	15°R≈	20000 110
	-9865 Apr 10 j 20:21	30°R Ω		direct	-9860 Dec 19 j 00:11	14° ≈ 07'16	
opposition	-9865 May 02 j 07:03	27° Ω 20'49	0°40'24		-9859 Jan 11 j 23:21	15° ≈	
min. Earth dist.	-9865 May 01 j 22:14	27° Ω 23'42	4.11536 AU		-9859 Apr 14 j 20:02	0° ∀	
direct	-9865 Jun 30 j 14:26	22° Ω 27'53		evening set	-9859 Apr 26 j 21:20	2°) 38′19	
	-9865 Sep 10 j 05:09	0° m					
evening set	-9865 Oct 31 j 14:28	11°Mp06'23		conjunction	-9859 May 10 j 06:18	5°) (36′42	-0°13'15
desc. node	-9865 Nov 02 j 11:31	11° m 32'42		minimum elong	-9859 May 10 j 06:19	5°) (36′42	0°13'32
				behind sun begin	-9859 May 10 j 01:52	5°) (34′14	
conjunction	-9865 Nov 13 j 16:59	14° m 10'48	-0°01'42	behind sun end	-9859 May 10 j 10:46	5°) 39′10	
minimum elong	-9865 Nov 13 j 17:00	14° m 10'48	0°01'30	max. Earth dist.	-9859 May 09 j 12:01	5° ¥ 26'31	6.29833 AU
behind sun begin	-9865 Nov 13 j 08:47	14°Mp06'01		morning rise	-9859 May 23 j 12:02	8°) 33′22	
behind sun end	-9865 Nov 14 j 01:12	14° Mp 15'36		asc. node	-9859 Aug 14 j 17:53	23°) (46′23	
max. Earth dist.	-9865 Nov 14 j 14:21	14° Mp 23'21	6.08736 AU	retrograde	-9859 Sep 21 j 11:00	25° ¥ 59'32	
morning rise	-9865 Nov 26 j 23:08	17° m)17'11		opposition	-9859 Nov 20 j 03:37	21° ∺ 05'39	0°19'42
	-9864 Jan 25 j 20:49	0∘ ⊽		min. Earth dist.	-9859 Nov 20 j 20:07	21° ∺ 00′16	4.32231 AU
retrograde	-9864 Apr 06 j 10:30	7° ≏ 08'40		direct	-9858 Jan 21 j 04:40	16° 米 02'15	
opposition	-9864 Jun 05 j 23:45	2° ≏ 05'10			-9858 May 09 j 18:54	0° Υ	
min. Earth dist.	-9864 Jun 05 j 04:08	2° ≏ 11'44	4.06965 AU	evening set	-9858 May 29 j 14:11	4° Υ 17'14	
	-9864 Jun 22 j 02:47	30°R, Mp		max. Earth dist.	-9858 Jun 10 j 09:38	6° Ƴ 54'27	6.33639 AU
direct	-9864 Aug 03 j 08:37	27° m 10'41					
	-9864 Sep 14 j 02:50	0∘ ⊽		conjunction	-9858 Jun 11 j 13:57	7° Y 10′12	
evening set	-9864 Dec 05 j 05:55	16° ≏ 06'46		minimum elong	-9858 Jun 11 j 13:53	7° Y 10′10	0°40'21
		_		morning rise	-9858 Jun 24 j 10:07	10° Y ′01′26	
conjunction	-9864 Dec 18 j 16:45	19° Ω 15'48		retrograde	-9858 Oct 23 j 01:23	27° Y 17'44	
minimum elong	-9864 Dec 18 j 16:39	19° Ω 15'45		opposition	-9858 Dec 22 j 10:21	22° Y 25'49	1°31'58
max. Earth dist.	-9864 Dec 20 j 01:32	19° Ω 35'02	6.06286 AU	min. Earth dist.	-9858 Dec 23 j 08:07	22° Y 18'51	4.34087 AU
morning rise	-9863 Jan 01 j 06:48	22° Ω 26'29		direct	-9857 Feb 22 j 21:48	17° Y ′24'51	
	-9863 Feb 03 j 23:48	0°M			-9857 Jun 04 j 17:27	0°8	
retrograde	-9863 May 12 j 13:02	12°M22'37	4.06001 411	evening set	-9857 Jun 30 j 06:05	5° 8 30'54	
min. Earth dist.	-9863 Jul 10 j 10:37		4.06991 AU		0057 1 1 12:20 27	00 10155	1021144
opposition	-9863 Jul 11 j 08:33	7°M17'30	-1~58.55	conjunction	-9857 Jul 12 j 20:27	8° 8 19'55	1°21'44
direct	-9863 Sep 07 j 12:45 -9863 Dec 13 j 08:39	2°M19'57 15°M		minimum elong max. Earth dist.	-9857 Jul 12 j 20:22 -9857 Jul 11 j 12:08	8° と 19'52 8° と 01'48	1°22'02 6.33291 AU
ovening set	-9862 Jan 11 j 01:59	21°M26'55		morning rise	-9857 Jul 25 j 08:32	11° 8 07'47	0.33291 AU
evening set	-9002 Jan 11 J 01.39	21 1162033		morning rise	-9857 Aug 12 j 00:05	11 8 0747	
conjunction	-9862 Jan 24 j 17:43	24°M36'46	1033113	retrograde	-9857 Nov 24 j 08:19	28° 8 37'24	
minimum elong	-9862 Jan 24 j 17:40	24°M36'44	1°33'39	opposition	-9856 Jan 24 j 07:24	23° 8 45'35	2°17'42
max. Earth dist.	-9862 Jan 26 j 03:08	24°M56'09	6.08657 AU	min. Earth dist.	-9856 Jan 25 j 05:22	23° 8 38'37	4.31688 AU
morning rise	-9862 Feb 07 j 11:02	27°M47'22	0.00007110	direct	-9856 Mar 26 j 14:52	18° 8 47'39	51000110
morning rise	-9862 Feb 17 j 03:10	0° √		direct	-9856 Jun 28 j 16:48	0°П	
retrograde	-9862 Jun 16 j 15:18	17° √ 18'13		evening set	-9856 Jul 30 j 11:16	6°П52'52	
opposition	-9862 Aug 14 j 21:00	12° ≯ 14'08	-2°26'27	evening sec	>000 tun	0 20202	
min. Earth dist.	-9862 Aug 14 j 03:43	12° ≯ 20'03	4.11569 AU	conjunction	-9856 Aug 11 j 20:38	9° ∏ 41'14	1°39'29
direct	-9862 Oct 12 j 13:38	7° ∡ 13'12		minimum elong	-9856 Aug 11 j 20:37	9° ∏ 41'14	1°40'00
evening set	-9861 Feb 16 j 22:37	26° ₹ 17'55		max. Earth dist.	-9856 Aug 10 j 19:29	9° Ⅱ 26'57	6.28929 AU
S	3			morning rise	-9856 Aug 24 j 05:07	12° Ⅱ 29'18	
conjunction	-9861 Mar 02 j 15:37	29° х 25′31	-1°34'37	-	-9856 Dec 08 j 08:48	0°ಅ	
minimum elong	-9861 Mar 02 j 15:40	29° х 25′33		retrograde	-9856 Dec 26 j 16:15	0° © 30'58	
max. Earth dist.	-9861 Mar 03 j 10:34	29° х 36′21	6.14962 AU	C	-9855 Jan 14 j 01:22	30°RⅡ	
	-9861 Mar 05 j 03:59	ರ°0		opposition	-9855 Feb 26 j 02:26	25° Ⅱ 37'26	2°23'16
morning rise	-9861 Mar 16 j 08:29	2° る 32'52		min. Earth dist.	-9855 Feb 26 j 16:08	25° Ⅲ 33′05	4.25720 AU
retrograde	-9861 Jul 20 j 07:42	21° る 18'28		direct	-9855 Apr 28 j 14:01	20° ∏ 42′28	
opposition	-9861 Sep 17 j 08:34	16° る 17'24	-2°02'29		-9855 Jul 20 j 18:05	0 \circ \odot	
min. Earth dist.	-9861 Sep 17 j 01:59	16° る 19'38	4.18957 AU	evening set	-9855 Aug 30 j 22:50	8° 9 53'50	
direct	-9861 Nov 16 j 04:14	11° る 13'54					
evening set	-9860 Mar 23 j 16:51	0° ≈ 04'09		conjunction	-9855 Sep 12 j 09:30	11° © 45'35	1°27'27
	-9860 Mar 23 j 09:24	0° ≈		minimum elong	-9855 Sep 12 j 09:34	11° © 45'38	1°28'02
				max. Earth dist.	-9855 Sep 11 j 21:51	11° © 38'52	6.21849 AU
conjunction	-9860 Apr 06 j 08:03	3° ≈ 07'47	-1°03'43	morning rise	-9855 Sep 24 j 21:21	14° © 38'05	
minimum elong	-9860 Apr 06 j 08:08	3° ≈ 07'50	1°04'15		-9855 Dec 13 j 06:25	$0^{\circ}\Omega$	
max. Earth dist.	-9860 Apr 06 j 09:14	3° ≈ 08'27	6.22909 AU	retrograde	-9854 Jan 30 j 09:57	3° Ω 22′25	
morning rise	-9860 Apr 19 j 20:52	6° ≈ 10′08			-9854 Mar 20 j 09:36	30° ℝ ∽	
	-9860 May 31 j 13:25	15° ≈		opposition	-9854 Apr 01 j 21:04	28° © 25'36	1°43'53
retrograde	-9860 Aug 20 j 18:29	24° ≈ 08'46		min. Earth dist.	-9854 Apr 01 j 23:11	28° © 24'55	4.17962 AU

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 5 Attention, astronomical year style is used: The year -9854 in astronomical counting style is the year 9855 BCE in historical counting style.

Attention, astronomi	cal year style is used: Th	e year -9854 i	n astronomical cou	nting style is the year	9855 BCE in historical co	ounting style.	
direct	-9854 Jun 01 j 05:33	23°532'28		evening set	-9848 Mar 28 j 13:05	4° ≈ 46'33	
	-9854 Aug 06 j 20:25	$0^{\circ}\Omega$					
evening set	-9854 Oct 02 j 10:27	11° Ω 55'52		conjunction	-9848 Apr 11 j 03:39	7° ≈ 49'39	-0°57'30
•	v			minimum elong	-9848 Apr 11 j 03:44	7° ≈ 49'42	0°58'00
conjunction	-9854 Oct 15 j 04:35	14° Ω 54'11	0°47'11	max. Earth dist.	-9848 Apr 11 j 00:43	7°≈48'00	6.23742 AU
minimum elong	-9854 Oct 15 j 04:39	14° Ω 54'13	0°47'39	morning rise	-9848 Apr 24 j 15:54	10° ≈ 51'25	
max. Earth dist.	-9854 Oct 15 j 11:20	14° Ω 58'07	6.14177 AU	C	-9848 May 13 j 13:01	15° ≈	
	-9854 Oct 15 j 14:34	15° Ω		retrograde	-9848 Aug 25 j 05:40	28° ≈ 45'32	
morning rise	-9854 Oct 28 j 01:31	17° Ω 54'05		opposition	-9848 Oct 23 j 11:38	23° ≈ 48'52	-0°48'56
C	-9854 Dec 24 j 04:08	0° m		min. Earth dist.	-9848 Oct 23 j 18:55	23° ≈ 46′26	4.27299 AU
retrograde	-9853 Mar 07 j 04:46	7° m 19'52		direct	-9848 Dec 23 j 15:49	18° ≈ 44'35	
opposition	-9853 May 07 j 08:11	2° m 19'10	0°28'16		-9847 Mar 28 j 11:50	0° ∀	
min. Earth dist.	-9853 May 06 j 20:38	2° m 22'58	4.10912 AU	evening set	-9847 May 01 j 13:19	7°) 14'19	
	-9853 May 25 j 19:00	30°R Ω		<i>3</i> · · ·			
direct	-9853 Jul 05 j 11:11	27° Ω 26'09		conjunction	-9847 May 14 j 21:17	10°) 12′06	-0°05'35
	-9853 Aug 14 j 12:09	0° mp		minimum elong	-9847 May 14 j 21:18	10°) 12'07	
desc. node	-9853 Sep 11 j 18:24	4° mp 22'01		behind sun begin	-9847 May 14 j 13:30	10°) €07'48	0 00 00
evening set	-9853 Nov 05 j 12:46	16° Mp 06'10		behind sun end	-9847 May 15 j 05:05	10° ¥ 16'26	
evening set	7033 110V 03 J 12.40	10 11/00 10		max. Earth dist.	-9847 May 14 j 02:11	10° H 01'28	6.30266 AU
conjunction	-9853 Nov 18 j 16:33	19° m 11'17	-0°10'07	morning rise	-9847 May 28 j 01:43	13°) (01'20	0.30200710
minimum elong	-9853 Nov 18 j 16:32	19° m)11'16		asc. node	-9847 Jun 24 j 05:12	18°) 58'32	
behind sun begin	-9853 Nov 18 j 09:53	19° Mp 07'23	0 07 50	ase. node	-9847 Sep 07 j 13:06	0°Υ	
behind sun end	-9853 Nov 18 j 23:11	19° m 15'09		retrograde	-9847 Sep 25 j 22:14	0° Υ 32'39	
max. Earth dist.	-9853 Nov 19 j 16:03	19° m 25'05	6.08421 AU	renograde	-9847 Oct 14 j 06:22	30°R) €	
morning rise	-9853 Dec 01 j 23:57	22° m 18'20	0.06421 AU	opposition	-9847 Nov 24 j 16:25	25° H 39'12	0°30'47
morning risc	· ·	0° ⊡		min. Earth dist.		25° H 33'35	4.32432 AU
ratra ara da	-9852 Jan 05 j 07:56				-9847 Nov 25 j 09:39 -9846 Jan 25 j 18:59	20° H 36'10	4.32432 AU
retrograde	-9852 Apr 11 j 12:36	12° £ 11'01	0050115	direct	3	20 χ 36 10	
opposition	-9852 Jun 10 j 23:48	7° Ω 07'05			-9846 Apr 21 j 17:30	8° Υ 50'30	
min. Earth dist.	-9852 Jun 10 j 03:43		4.06981 AU	evening set	-9846 Jun 03 j 03:09		C 22504 ATT
direct	-9852 Aug 08 j 07:56	2° £ 12'13		max. Earth dist.	-9846 Jun 14 j 19:09	11- 1 20 02	6.33584 AU
evening set	-9852 Dec 10 j 08:05	21° ≏ 09'09			0046 1 16:01.27	1100040155	0047114
	0052 D 22:10.50	240 0 10122	100.4122	conjunction	-9846 Jun 16 j 01:27	11° Y 42'55	0°47'14
conjunction	-9852 Dec 23 j 19:50	24° £ 18'22		minimum elong	-9846 Jun 16 j 01:23	11° Y 42'53	0°47'17
minimum elong	-9852 Dec 23 j 19:44		1°04'43	morning rise	-9846 Jun 28 j 20:33	14° Ƴ 33'41	
max. Earth dist.	-9852 Dec 25 j 06:13	24° £ 38'30	6.06617 AU		-9846 Sep 22 j 22:00	0°8	
morning rise	-9851 Jan 06 j 10:30	27° £ 29'08		retrograde	-9846 Oct 27 j 15:12	1° 8 51'21	
	-9851 Jan 17 j 08:32	0°M			-9846 Dec 01 j 15:17	30°RƳ	
	-9851 Apr 08 j 10:08	15° ™		opposition	-9846 Dec 27 j 01:31	26° Y 59'33	
retrograde	-9851 May 17 j 11:52	17°M22'22		min. Earth dist.	-9846 Dec 27 j 23:42		4.33812 AU
	-9851 Jun 25 j 04:50	15°RM		direct	-9845 Feb 27 j 13:17	21°Υ58'59	
min. Earth dist.	-9851 Jul 15 j 07:39		4.07621 AU		-9845 May 16 j 21:43	0°8	
opposition	-9851 Jul 16 j 05:18	12°M17'17	-2°05'44	evening set	-9845 Jul 04 j 17:03	10° 8 05'00	
direct	-9851 Sep 12 j 09:56	7° M 19′17		max. Earth dist.	-9845 Jul 16 j 00:27	12° 8 36'52	6.32811 AU
	-9851 Nov 23 j 18:13	15° ™					
evening set	-9850 Jan 16 j 05:17	26°M25'56		conjunction	-9845 Jul 17 j 06:33	12° 8 53'46	
				minimum elong	-9845 Jul 17 j 06:29	12° 8 53'44	1°26'13
conjunction	-9850 Jan 29 j 21:11	29°M35'30			-9845 Jul 26 j 15:30	15° 8	
minimum elong	-9850 Jan 29 j 21:08	29°M35'28		morning rise	-9845 Jul 29 j 17:39	15° 8 41'27	
max. Earth dist.	-9850 Jan 31 j 03:24	29°M53'00	6.09491 AU		-9845 Oct 13 j 03:11	$\Pi^{\circ}0$	
	-9850 Jan 31 j 15:31	0° ∡ ¹		retrograde	-9845 Nov 28 j 23:42	3° Ⅱ 14'45	
morning rise	-9850 Feb 12 j 14:44	2° ∡ ¹45'44			-9844 Jan 16 j 00:42	30°R ∀	
retrograde	-9850 Jun 21 j 08:40	22° ҂ 10′50		opposition	-9844 Jan 29 j 01:34	28° 8 22'47	2°21'08
opposition	-9850 Aug 19 j 13:41	17° ∡ 07'04	-2°26'04	min. Earth dist.	-9844 Jan 29 j 21:47	28° 8 16'23	4.31052 AU
min. Earth dist.	-9850 Aug 18 j 21:58	17° ∡ 12'27	4.12523 AU	direct	-9844 Mar 31 j 06:38	23° 8 25'22	
direct	-9850 Oct 17 j 09:59	12° х 05′40			-9844 Jun 08 j 18:27	Π $^{\circ}0$	
	-9849 Feb 16 j 20:54	0°₹		evening set	-9844 Aug 03 j 22:16	11° Ⅲ 30'47	
evening set	-9849 Feb 21 j 23:13	1° る 09'02		max. Earth dist.	-9844 Aug 15 j 07:10	14° Ⅱ 05'36	6.28171 AU
conjunction	-9849 Mar 07 j 16:21	4° ප 16'15	-1°32'03	conjunction	-9844 Aug 16 j 07:14	14° ∏ 19'18	1°39'37
minimum elong	-9849 Mar 07 j 16:25	4° ප 16'17	1°32'37	minimum elong	-9844 Aug 16 j 07:14	14° Ⅱ 19'18	1°40'09
max. Earth dist.	-9849 Mar 08 j 09:40	4° පි 26'07	6.15972 AU	morning rise	-9844 Aug 28 j 15:50	17° Ⅱ 07'42	
morning rise	-9849 Mar 21 j 08:45	7° る 23'00			-9844 Oct 31 j 16:16	0ಂ ತಾ	
retrograde	-9849 Jul 24 j 22:36	26° පි 02'17		retrograde	-9844 Dec 31 j 12:56	5° © 14'23	
opposition	-9849 Sep 21 j 22:14	21° පි 01'48	-1°55'38	opposition	-9843 Mar 02 j 23:36	0°520'25	2°20'20
min. Earth dist.	-9849 Sep 21 j 17:42	21° පි 03'21	4.19913 AU	min. Earth dist.	-9843 Mar 03 j 12:09	0°516'25	4.24871 AU
direct	-9849 Nov 20 j 21:27	15°₹58'08			-9843 Mar 05 j 15:52	30°RⅡ	
	-9848 Mar 06 j 17:00	0° ≈		direct	-9843 May 03 j 08:54	25° Ⅱ 25'44	

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 6 Attention, astronomical year style is used: The year -9843 in astronomical counting style is the year 9844 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -9843 i	n astronomical cou	inting style is the year	9844 BCE in historical c	ounting style.	.6
	-9843 Jun 28 j 11:26	0ංම		minimum elong	-9837 Mar 12 j 18:02	9° ප 09'33	1°29'23
evening set	-9843 Sep 04 j 11:29	13°537'40		max. Earth dist.	-9837 Mar 13 j 07:45	9° る 17'21	6.16796 AU
				morning rise	-9837 Mar 26 j 10:09	12° る 15'47	
conjunction	-9843 Sep 16 j 22:57	16°930'07	1°23'19		-9837 Jul 07 j 05:08	0° ≈	
minimum elong	-9843 Sep 16 j 23:01	16° © 30'09	1°23'52	retrograde	-9837 Jul 29 j 12:25	0° ≈ 49'13	
max. Earth dist.	-9843 Sep 16 j 14:21	16°525'09	6.20984 AU		-9837 Aug 20 j 16:48	30°೩ರ	
morning rise	-9843 Sep 29 j 11:42	19°523'24		opposition	-9837 Sep 26 j 13:13	25° る 49'13	-1°47'56
-	-9843 Nov 18 j 07:24	$0^{\circ}\Omega$		min. Earth dist.	-9837 Sep 26 j 09:55	25° る 50'20	4.20733 AU
retrograde	-9842 Feb 04 j 08:37	8° Ω 12'50		direct	-9837 Nov 25 j 15:49	20° පි 45'18	
opposition	-9842 Apr 06 j 20:09	3° Ω 15'30	1°34'59		-9836 Feb 17 j 02:14	0° ≈	
min. Earth dist.	-9842 Apr 06 j 19:51	3° Ω 15'35	4.17131 AU	evening set	-9836 Apr 02 j 10:49	9° ≈ 32'12	
	-9842 May 04 j 14:40	30° ₹ 5		C	1 3		
direct	-9842 Jun 06 j 00:10	28°522'29		conjunction	-9836 Apr 16 j 00:47	12° ≈ 34'44	-0°50'49
	-9842 Jul 08 j 01:51	$0^{\circ}\Omega$		minimum elong	-9836 Apr 16 j 00:52	12° ≈ 34'47	
	-9842 Sep 29 j 09:20	15° Ω		max. Earth dist.	-9836 Apr 15 j 19:42		6.24519 AU
evening set	-9842 Oct 07 j 02:59	16° Ω 47'03			-9836 Apr 26 j 19:54	15° ≈	
5 · 4 · · · · · · · · · · · · · · · · ·	, , , , , , , , , , , , , , , , , , ,			morning rise	-9836 Apr 29 j 12:08	15° ≈ 35'50	
conjunction	-9842 Oct 19 j 22:18	19° Ω 46'13	0°39'47	morning 1150	-9836 Jul 13 j 15:05	0° ∀	
minimum elong	-9842 Oct 19 j 22:22	19° Ω 46'15		retrograde	-9836 Aug 29 j 19:12	3° ¥ 25′29	
max. Earth dist.	-9842 Oct 20 j 06:57		6.13448 AU	retrograde	-9836 Oct 16 j 11:29	30°R≈	
morning rise	-9842 Nov 01 j 20:41	22° Ω 47'05	0.15440710	opposition	-9836 Oct 28 j 01:33	28° ≈ 29'21	-0°37'51
morning risc	-9842 Dec 04 j 03:12	0° m)		min. Earth dist.	-9836 Oct 28 j 10:42		4.27960 AU
retrograde	-9841 Mar 12 j 06:41	12° Mp 16'56		direct	-9836 Dec 28 j 09:24	23°≈25'11	4.27900 AU
opposition	-9841 May 12 j 08:03	7° m) 15'40	0°16'00	unect	-9835 Mar 08 j 03:34	25 ≈ 25 11 0° ∺	
				aca mada	,	0 X 11° X 06'05	
min. Earth dist.	-9841 May 11 j 19:20		4.10326 AU	asc. node	-9835 May 02 j 17:05		
direct	-9841 Jul 10 j 08:22	2° My 22'26		evening set	-9835 May 06 j 06:38	11° ¥ 53'15	
desc. node	-9841 Jul 22 j 23:01	2° m/38'31			002534 10:12.24	1.40 1/ 50122	0000100
evening set	-9841 Nov 10 j 10:24	21°Mp04'14		conjunction	-9835 May 19 j 13:24	14° ¥ 50′22	
				minimum elong	-9835 May 19 j 13:24	14°) € 50′22	0~02.09
conjunction	-9841 Nov 23 j 15:31	24° m 10'03		behind sun begin	-9835 May 19 j 05:15	14°) 45′51	
minimum elong	-9841 Nov 23 j 15:29	24° m 10'02		behind sun end	-9835 May 19 j 21:33	14°) €54'53	
max. Earth dist.	-9841 Nov 24 j 17:37		6.08042 AU	max. Earth dist.	-9835 May 18 j 16:06	14°) 38′30	6.30766 AU
morning rise	-9841 Dec 07 j 00:04	27° m) 17'47		morning rise	-9835 Jun 01 j 16:41	17°) 45'41	
	-9841 Dec 18 j 17:15	0∘ ⊽			-9835 Aug 02 j 08:28	0° Υ	
retrograde	-9840 Apr 16 j 13:56	17° £ 11'44		retrograde	-9835 Sep 30 j 10:10	5° Y ′08′21	
opposition	-9840 Jun 15 j 22:31	12° ≏ 07'32		opposition	-9835 Nov 29 j 06:53	0° Υ 15'12	0°41'49
min. Earth dist.	-9840 Jun 15 j 02:03	12° ≏ 14'25	4.06871 AU	min. Earth dist.	-9835 Nov 30 j 00:32	0° Y ′09'28	4.32769 AU
direct	-9840 Aug 13 j 04:44	7° ≏ 12'17			-9835 Dec 01 j 05:39	30° Ŗ ₩	
evening set	-9840 Dec 15 j 10:32	26° ≙ 10'57		direct	-9834 Jan 30 j 11:13	25°) 1 2′27	
					-9834 Mar 30 j 12:47	0° Y	
conjunction	-9840 Dec 28 j 22:54	29° ₽ 20'22	-1°10'38	evening set	-9834 Jun 07 j 16:40	13° Y 25′24	
minimum elong	-9840 Dec 28 j 22:48	29° ₽ 20'19	1°10'52	max. Earth dist.	-9834 Jun 19 j 08:22	16° Y ′00'49	6.33743 AU
max. Earth dist.	-9840 Dec 30 j 07:44	29° ₽ 39'35	6.06755 AU				
	-9840 Dec 31 j 18:40	0° M.		conjunction	-9834 Jun 20 j 13:39	16° Ƴ 17'09	0°53'53
morning rise	-9839 Jan 11 j 14:20	2°M31'18		minimum elong	-9834 Jun 20 j 13:34	16° Ƴ 17'07	0°54'00
	-9839 Mar 11 j 07:21	15° M ₊		morning rise	-9834 Jul 03 j 07:19	19° Ƴ 07'17	
retrograde	-9839 May 22 j 09:32	22°M22'15			-9834 Aug 25 j 20:40	9° 8	
min. Earth dist.	-9839 Jul 20 j 04:11	17°ML24'27	4.08010 AU	retrograde	-9834 Nov 01 j 04:24	6° 8 25'37	
opposition	-9839 Jul 21 j 01:29	17°ML17'10	-2°11'40	opposition	-9834 Dec 31 j 17:27	1° 8 33'56	1°48'19
	-9839 Aug 07 j 12:00	15°RM		min. Earth dist.	-9833 Jan 01 j 15:23	1° 8 26'56	4.33801 AU
direct	-9839 Sep 17 j 07:34	12°ML18'37			-9833 Jan 13 j 04:45	30° ŖƳ	
	-9839 Oct 28 j 04:08	15° M ₊		direct	-9833 Mar 04 j 05:39	26° Y 33'53	
	-9838 Jan 15 j 02:47	0° ∡ ¹			-9833 Apr 22 j 14:07	0°8	
evening set	-9838 Jan 21 j 09:02	1° ∡ ¹25'58		evening set	-9833 Jul 09 j 04:11	14° 8 38'43	
Č	, and the second			C	-9833 Jul 10 j 18:20	15° 8	
conjunction	-9838 Feb 04 j 01:28	4° ∡ ³35'26	-1°37'10	max. Earth dist.	-9833 Jul 20 j 10:06	17° 8 09'58	6.32608 AU
minimum elong	-9838 Feb 04 j 01:26	4° ∡ ³35'24					
max. Earth dist.	-9838 Feb 05 j 07:13	4° ₹ 152'37	6.10094 AU	conjunction	-9833 Jul 21 j 16:32	17° 8 27'05	1°29'30
morning rise	-9838 Feb 17 j 18:56	7° ∡ 145'21		minimum elong	-9833 Jul 21 j 16:28	17° 8 27'02	
retrograde	-9838 Jun 26 j 04:41	27° × 105'20		morning rise	-9833 Aug 03 j 03:00	20° 8 14'32	-
opposition	-9838 Aug 24 j 07:11	22° × 101'57	-2°24'41		-9833 Sep 18 j 22:31	0°Ⅱ	
min. Earth dist.	-9838 Aug 23 j 17:25	22° х 01'37	4.13273 AU	retrograde	-9833 Dec 03 j 15:48	7° П 50'36	
direct	-9838 Oct 22 j 06:44	17° × 700'08	1.152/5/10	opposition	-9832 Feb 02 j 19:28	7 П 50 30 2° П 58'26	2°23'37
direct	-9837 Jan 30 j 14:32	0°る		min. Earth dist.	-9832 Feb 02 j 19:28 -9832 Feb 03 j 14:50	2° П 52'18	
evening set	-9837 Feb 27 j 00:59	6° る 02'40		mm. Darui uist.	-9832 Feb 03 j 14.30 -9832 Feb 28 j 00:58	30°R 8	7.300/3 AU
evening set	703/100 2/J 00.39	0 00240		direct	-9832 Apr 04 j 23:11	28° 8 01'23	
conjunction	-9837 Mar 12 j 17:58	9° ろ 09'30	1028140	uncet	-9832 Apr 04 j 23:11 -9832 May 11 j 14:08	0°Ⅱ	
Conjunction	-2021 IVIAI 12 J 11.38	9 00930	-1 2047		-7052 iviay 11 J 14.08	υщ	

•	omena of Jupiter fron nical year style is used: Th	e year -9832 i	n astronomical co	ounting style is the year	9833 BCE in historical c	ounting style.	
evening set	-9832 Aug 08 j 08:19	16° Ⅱ 06'09			-9826 Aug 05 j 04:15	30°R ✓	
				min. Earth dist.	-9826 Aug 28 j 11:20	27° ∡ ¹02'41	4.13901 AU
conjunction	-9832 Aug 20 j 17:19	18° Ⅱ 54'50	1°39'07	opposition	-9826 Aug 29 j 00:43	26° ₹ ¹58'07	-2°22'14
minimum elong	-9832 Aug 20 j 17:20	18° Ⅱ 54'50	1°39'40	direct	-9826 Oct 27 j 02:12	21° ₹ 55'56	
max. Earth dist.	-9832 Aug 19 j 20:24	18° Ⅱ 42'55	6.27655 AU		-9825 Jan 10 j 23:58	0°ಕ	
morning rise	-9832 Sep 02 j 01:53	21° Ⅱ 43′28		evening set	-9825 Mar 04 j 03:09	10° පි 58'03	
	-9832 Oct 10 j 12:08	0 \circ \odot				_	
retrograde	-9831 Jan 05 j 07:17	9° 9 54'19		conjunction	-9825 Mar 17 j 20:02	14° ට 04'32	
opposition	-9831 Mar 07 j 19:31	5°900'00	2°16'28	minimum elong	-9825 Mar 17 j 20:06	14° ට 04'35	
min. Earth dist.	-9831 Mar 08 j 06:27	4° 9 56'31	4.24233 AU	max. Earth dist.	-9825 Mar 18 j 07:31		6.17604 AU
direct	-9831 May 08 j 01:30	0°905'40		morning rise	-9825 Mar 31 j 11:48	17° る 10'18	
evening set	-9831 Sep 08 j 22:55	18° © 17'38			-9825 Jun 02 j 14:42	0° ≈	
				retrograde	-9825 Aug 03 j 04:50	5°≈37'56	
conjunction	-9831 Sep 21 j 11:00	21°5510'41	1°18'39	opposition	-9825 Oct 01 j 04:56	0°≈38'28	
minimum elong	-9831 Sep 21 j 11:04	21°9510'44	1°19'12	min. Earth dist.	-9825 Oct 01 j 03:46	0° ≈ 38'51	4.21621 AU
max. Earth dist.	-9831 Sep 21 j 03:31	21° © 06'22	6.20273 AU		-9825 Oct 05 j 23:10	30°Rる	
morning rise	-9831 Oct 04 j 00:53	24°9504'46		direct	-9825 Nov 30 j 12:05	25° පි 34'26	
	-9831 Oct 30 j 13:27	0 $^{\circ}\Omega$			-9824 Jan 24 j 19:36	0° ≈	
retrograde	-9830 Feb 09 j 06:49	12° Ω 59'01		evening set	-9824 Apr 07 j 08:20	14° ≈ 19′07	
opposition	-9830 Apr 11 j 17:32	8° Ω 01'07	1°25'32		-9824 Apr 10 j 09:43	15° ≈	
min. Earth dist.	-9830 Apr 11 j 15:44	8° Ω 01'42	4.16367 AU				
direct	-9830 Jun 10 j 17:54	3° Ω 08′09		conjunction	-9824 Apr 20 j 21:39	17° ≈ 21'01	
	-9830 Sep 12 j 13:08	15° Ω		minimum elong	-9824 Apr 20 j 21:43	17° ≈ 21′03	
evening set	-9830 Oct 11 j 18:12	21° Ω 34'01		max. Earth dist.	-9824 Apr 20 j 14:55		6.25430 AU
				morning rise	-9824 May 04 j 08:03	20° ≈ 21′23	
conjunction	-9830 Oct 24 j 14:56	24° Ω 34'06			-9824 Jun 19 j 12:07	0° ∀	
minimum elong	-9830 Oct 24 j 14:59	24° Ω 34'08	0°32'35	retrograde	-9824 Sep 03 j 06:29	8° ∺ 06'09	
max. Earth dist.	-9830 Oct 25 j 02:39	24° Ω 40'57	6.12722 AU	opposition	-9824 Nov 01 j 15:46	3° ¥ 10′25	
morning rise	-9830 Nov 06 j 14:39	27° Ω 35'55		min. Earth dist.	-9824 Nov 02 j 01:15	3° ∺ 07'17	4.28808 AU
	-9830 Nov 17 j 01:04	0° ™			-9824 Nov 27 j 16:46	30°R ≈	
retrograde	-9829 Mar 17 j 06:47	17° m 09'45		direct	-9823 Jan 02 j 02:35	28° ≈ 06′19	
opposition	-9829 May 17 j 05:52	12°M)08'05	0°03'47		-9823 Feb 06 j 22:44	0° ∀	
min. Earth dist.	-9829 May 16 j 16:28	12° m 12'30	4.09697 AU	asc. node	-9823 Mar 11 j 10:15	4° ∺ 25'19	
desc. node	-9829 Jun 03 j 03:55	9° m 58'50		evening set	-9823 May 10 j 23:05	16°) 31′41	
direct	-9829 Jul 15 j 02:44	7° m 14'43		max. Earth dist.	-9823 May 23 j 05:47	19° ¥ 15′19	6.31483 AU
evening set	-9829 Nov 15 j 07:21	25° m 58'59					
				conjunction	-9823 May 24 j 04:29	19° ∺ 27'57	0°10'10
conjunction	-9829 Nov 28 j 13:30	29° m 05'30	-0°26'24	minimum elong	-9823 May 24 j 04:27	19°) 27′56	0°09'59
minimum elong	-9829 Nov 28 j 13:27	29° m 05'29	0°26'19	behind sun begin	-9823 May 23 j 21:55	19°) 24′19	
max. Earth dist.	-9829 Nov 29 j 15:13	29° m 20'36	6.07556 AU	behind sun end	-9823 May 24 j 11:00	19°) 31′34	
	-9829 Dec 02 j 10:18	0∘ ⊽		morning rise	-9823 Jun 06 j 06:24	22°) 22′25	
morning rise	-9829 Dec 11 j 23:24	2° ₾ 13'59			-9823 Jul 12 j 07:13	0° Υ	
retrograde	-9828 Apr 21 j 12:50	22° ჲ 09'46		retrograde	-9823 Oct 04 j 22:07	9° Ƴ 42'37	
opposition	-9828 Jun 20 j 19:45	17° ≙ 05'20	-1°21'06	opposition	-9823 Dec 03 j 20:48	4° Ƴ 49'45	0°52'32
min. Earth dist.	-9828 Jun 19 j 22:34	17° ♀ 12'29	4.06586 AU	i. Danda dina			
direct	, , , , , , , , , , , , , , , , , , , ,	-,	1.00500710	min. Earth dist.	-9823 Dec 04 j 15:53	4° Ƴ 43'34	4.33278 AU
	-9828 Aug 18 j 00:39	12° ≏ 09'42	1.00500710	min. Earth dist.	-9823 Dec 04 j 15:53 -9822 Jan 23 j 08:22	4° Y ′43'34 30° ₹ ₩	4.33278 AU
	•		1.00300710	direct	-		4.33278 AU
evening set	-9828 Aug 18 j 00:39	12° ≏ 09'42	1.00000 110		-9822 Jan 23 j 08:22	30° ₹ ₩	4.33278 AU
	-9828 Aug 18 j 00:39 -9828 Dec 15 j 09:32	12° ₽ 09'42 0° M			-9822 Jan 23 j 08:22 -9822 Feb 04 j 04:21	30° ₹¥ 29° ¥ 47'17	4.33278 AU
	-9828 Aug 18 j 00:39 -9828 Dec 15 j 09:32	12° ₽ 09'42 0° M		direct	-9822 Jan 23 j 08:22 -9822 Feb 04 j 04:21 -9822 Feb 16 j 00:29	30°R) (29°) (47'17 0° ° 17° ° ° 58'02	4.33278 AU 6.33964 AU
evening set	-9828 Aug 18 j 00:39 -9828 Dec 15 j 09:32 -9828 Dec 20 j 12:16	12° Ω 09'42 0° M 1° M 11'05		direct evening set	-9822 Jan 23 j 08:22 -9822 Feb 04 j 04:21 -9822 Feb 16 j 00:29 -9822 Jun 12 j 04:45	30°R) (29°) (47'17 0° ° 17° ° ° 58'02	
evening set	-9828 Aug 18 j 00:39 -9828 Dec 15 j 09:32 -9828 Dec 20 j 12:16 -9827 Jan 03 j 01:36	12° £ 09'42 0° M 1° M 11'05 4° M 20'54	-1°16′09	direct evening set	-9822 Jan 23 j 08:22 -9822 Feb 04 j 04:21 -9822 Feb 16 j 00:29 -9822 Jun 12 j 04:45	30°R) (29°) (47'17 0° ° 17° ° ° 58'02	
evening set conjunction minimum elong	-9828 Aug 18 j 00:39 -9828 Dec 15 j 09:32 -9828 Dec 20 j 12:16 -9827 Jan 03 j 01:36 -9827 Jan 03 j 01:30	12° 2 09'42 0° M 1° M 11'05 4° M 20'54 4° M 20'50	-1°16′09 1°16′25	direct evening set max. Earth dist.	-9822 Jan 23 j 08:22 -9822 Feb 04 j 04:21 -9822 Feb 16 j 00:29 -9822 Jun 12 j 04:45 -9822 Jun 23 j 17:54	30°R₩ 29°₩47'17 0°Ψ 17°Ψ'58'02 20°Ψ'32'06	6.33964 AU
evening set conjunction minimum elong max. Earth dist.	-9828 Aug 18 j 00:39 -9828 Dec 15 j 09:32 -9828 Dec 20 j 12:16 -9827 Jan 03 j 01:36 -9827 Jan 03 j 01:30 -9827 Jan 04 j 11:32 -9827 Jan 16 j 17:29	12° 2 09'42 0° M 1° M 11'05 4° M 20'54 4° M 20'50 4° M 40'44	-1°16′09 1°16′25	direct evening set max. Earth dist. conjunction minimum elong	-9822 Jan 23 j 08:22 -9822 Feb 04 j 04:21 -9822 Feb 16 j 00:29 -9822 Jun 12 j 04:45 -9822 Jun 23 j 17:54 -9822 Jun 25 j 00:21	30°RH 29°H47'17 0°Y 17°Y'58'02 20°Y'32'06 20°Y'49'05	6.33964 AU 1°00'11
evening set conjunction minimum elong max. Earth dist.	-9828 Aug 18 j 00:39 -9828 Dec 15 j 09:32 -9828 Dec 20 j 12:16 -9827 Jan 03 j 01:36 -9827 Jan 03 j 01:30 -9827 Jan 04 j 11:32 -9827 Jan 16 j 17:29 -9827 Feb 19 j 02:38	12° № 09'42 0° M. 1° M.11'05 4° M.20'54 4° M.20'50 4° M.40'44 7° M.32'02	-1°16′09 1°16′25	direct evening set max. Earth dist. conjunction	-9822 Jan 23 j 08:22 -9822 Feb 04 j 04:21 -9822 Feb 16 j 00:29 -9822 Jun 12 j 04:45 -9822 Jun 23 j 17:54 -9822 Jun 25 j 00:21 -9822 Jun 25 j 00:16 -9822 Jul 07 j 16:48	30°R\ 29°\47'17 0°\ 17°\7'58'02 20°\7'32'06 20°\7'49'05 20°\7'49'02	6.33964 AU 1°00'11
evening set conjunction minimum elong max. Earth dist. morning rise	-9828 Aug 18 j 00:39 -9828 Dec 15 j 09:32 -9828 Dec 20 j 12:16 -9827 Jan 03 j 01:36 -9827 Jan 03 j 01:30 -9827 Jan 04 j 11:32 -9827 Jan 16 j 17:29	12° \$\infty\$09'42 0° \$\mathbb{M}\$. 1° \$\mathbb{M}\$.11'05 4° \$\mathbb{M}\$.20'54 4° \$\mathbb{M}\$.20'50 4° \$\mathbb{M}\$.40'44 7° \$\mathbb{M}\$.32'02 15° \$\mathbb{M}\$.	-1°16'09 1°16'25 6.06701 AU	direct evening set max. Earth dist. conjunction minimum elong	-9822 Jan 23 j 08:22 -9822 Feb 04 j 04:21 -9822 Feb 16 j 00:29 -9822 Jun 12 j 04:45 -9822 Jun 23 j 17:54 -9822 Jun 25 j 00:21 -9822 Jun 25 j 00:16	30°RH 29°H47'17 0°Y 17°Y58'02 20°Y32'06 20°Y49'05 20°Y49'02 23°Y38'35	6.33964 AU 1°00'11
evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-9828 Aug 18 j 00:39 -9828 Dec 15 j 09:32 -9828 Dec 20 j 12:16 -9827 Jan 03 j 01:36 -9827 Jan 03 j 01:30 -9827 Jan 04 j 11:32 -9827 Jan 16 j 17:29 -9827 Feb 19 j 02:38 -9827 May 27 j 09:20	12° \$\textit{\Omega}\$09'42 0° \$\textit{\mathbb{m}}\$. 1° \$\textit{\mathbb{m}}\$11'05 4° \$\textit{\mathbb{m}}\$20'54 4° \$\textit{\mathbb{m}}\$20'50 4° \$\textit{\mathbb{m}}\$40'44 7° \$\textit{\mathbb{m}}\$32'02 15° \$\textit{\mathbb{m}}\$ 27° \$\textit{\mathbb{m}}\$21'33	-1°16'09 1°16'25 6.06701 AU	direct evening set max. Earth dist. conjunction minimum elong morning rise	-9822 Jan 23 j 08:22 -9822 Feb 04 j 04:21 -9822 Feb 16 j 00:29 -9822 Jun 12 j 04:45 -9822 Jun 23 j 17:54 -9822 Jun 25 j 00:21 -9822 Jun 25 j 00:16 -9822 Jul 07 j 16:48 -9822 Aug 06 j 08:28	30°RH 29°H47'17 0°Y 17°Y58'02 20°Y32'06 20°Y49'05 20°Y49'02 23°Y38'35 0°B	6.33964 AU 1°00'11
evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-9828 Aug 18 j 00:39 -9828 Dec 15 j 09:32 -9828 Dec 20 j 12:16 -9827 Jan 03 j 01:36 -9827 Jan 03 j 01:30 -9827 Jan 04 j 11:32 -9827 Jan 16 j 17:29 -9827 Feb 19 j 02:38 -9827 May 27 j 09:20 -9827 Jul 25 j 21:23 -9827 Jul 25 j 01:30	12° \(\Omega\) 0° \(\mathbb{M}\). 1° \(\mathbb{M}\).11'05 4° \(\mathbb{M}\).20'54 4° \(\mathbb{M}\).20'50 4° \(\mathbb{M}\).40'44 7° \(\mathbb{M}\).32'02 15° \(\mathbb{M}\). 27° \(\mathbb{M}\).21'33 22° \(\mathbb{M}\).16'38	-1°16'09 1°16'25 6.06701 AU -2°16'35	direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde	-9822 Jan 23 j 08:22 -9822 Feb 04 j 04:21 -9822 Feb 16 j 00:29 -9822 Jun 12 j 04:45 -9822 Jun 23 j 17:54 -9822 Jun 25 j 00:21 -9822 Jun 25 j 00:16 -9822 Jul 07 j 16:48 -9822 Aug 06 j 08:28 -9822 Nov 05 j 16:23 -9821 Jan 05 j 08:25	30°RH 29°H47'17 0°Y 17°Y58'02 20°Y32'06 20°Y49'05 20°Y49'02 23°Y38'35 0°B 10°B57'37	6.33964 AU 1°00'11 1°00'20
evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-9828 Aug 18 j 00:39 -9828 Dec 15 j 09:32 -9828 Dec 20 j 12:16 -9827 Jan 03 j 01:36 -9827 Jan 03 j 01:30 -9827 Jan 04 j 11:32 -9827 Jan 16 j 17:29 -9827 Feb 19 j 02:38 -9827 May 27 j 09:20 -9827 Jul 25 j 21:23 -9827 Jul 25 j 01:30 -9827 Sep 22 j 04:58	12° № 09'42 0° M. 1° M.11'05 4° M.20'54 4° M.20'50 4° M.40'44 7° M.32'02 15° M. 27° M.21'33 22° M.16'38 22° M.23'26	-1°16'09 1°16'25 6.06701 AU -2°16'35	direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition	-9822 Jan 23 j 08:22 -9822 Feb 04 j 04:21 -9822 Feb 16 j 00:29 -9822 Jun 12 j 04:45 -9822 Jun 23 j 17:54 -9822 Jun 25 j 00:21 -9822 Jun 25 j 00:16 -9822 Jul 07 j 16:48 -9822 Aug 06 j 08:28 -9822 Nov 05 j 16:23 -9821 Jan 05 j 08:25 -9821 Jan 06 j 06:01	30°RH 29°H47'17 0°Y 17°Y58'02 20°Y32'06 20°Y49'05 20°Y49'02 23°Y38'35 0°B 10°B57'37 6°B05'54	6.33964 AU 1°00'11 1°00'20
evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-9828 Aug 18 j 00:39 -9828 Dec 15 j 09:32 -9828 Dec 20 j 12:16 -9827 Jan 03 j 01:36 -9827 Jan 03 j 01:30 -9827 Jan 04 j 11:32 -9827 Jan 16 j 17:29 -9827 Feb 19 j 02:38 -9827 May 27 j 09:20 -9827 Jul 25 j 21:23 -9827 Jul 25 j 01:30 -9827 Sep 22 j 04:58 -9827 Dec 28 j 16:36	12° \$\to\$09'42 0° \$\mathbb{M}\$. 1° \$\mathbb{M}\$.11'05 4° \$\mathbb{M}\$.20'54 4° \$\mathbb{M}\$.20'50 4° \$\mathbb{M}\$.40'44 7° \$\mathbb{M}\$.32'02 15° \$\mathbb{M}\$. 27° \$\mathbb{M}\$.21'33 22° \$\mathbb{M}\$.16'38 22° \$\mathbb{M}\$.23'26 17° \$\mathbb{M}\$.17'39	-1°16'09 1°16'25 6.06701 AU -2°16'35	evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist.	-9822 Jan 23 j 08:22 -9822 Feb 04 j 04:21 -9822 Feb 16 j 00:29 -9822 Jun 12 j 04:45 -9822 Jun 23 j 17:54 -9822 Jun 25 j 00:21 -9822 Jun 25 j 00:16 -9822 Jul 07 j 16:48 -9822 Aug 06 j 08:28 -9822 Nov 05 j 16:23 -9821 Jan 05 j 08:25 -9821 Jan 06 j 06:01 -9821 Mar 08 j 20:07	30°RH 29°H47'17 0°Y 17°Y'58'02 20°Y32'06 20°Y49'05 20°Y49'02 23°Y38'35 0°8 10°857'37 6°805'54 5°859'01 1°806'10	6.33964 AU 1°00'11 1°00'20
evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-9828 Aug 18 j 00:39 -9828 Dec 15 j 09:32 -9828 Dec 20 j 12:16 -9827 Jan 03 j 01:36 -9827 Jan 03 j 01:30 -9827 Jan 04 j 11:32 -9827 Jan 16 j 17:29 -9827 Feb 19 j 02:38 -9827 May 27 j 09:20 -9827 Jul 25 j 21:23 -9827 Jul 25 j 01:30 -9827 Sep 22 j 04:58	12° \$\to\$09'42 0° \$\text{\text{\$\mathbb{L}\$}} \text{10'} \$\text{\$\mathbb{L}\$} \text{11'05}\$ 4° \$\text{\$\mathbb{L}\$} \text{20'54} 4° \$\text{\$\mathbb{L}\$} \text{20'50} 4° \$\text{\$\mathbb{L}\$} \text{40'44} 7° \$\text{\$\mathbb{L}\$} \text{21'33} 22° \$\text{\$\mathbb{L}\$} \text{21'33} 22° \$\text{\$\mathbb{L}\$} \text{23'26} 17° \$\text{\$\mathbb{L}\$} \text{17'39} 0° \$\text{\$\neq\$}\$	-1°16'09 1°16'25 6.06701 AU -2°16'35	direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct	-9822 Jan 23 j 08:22 -9822 Feb 04 j 04:21 -9822 Feb 16 j 00:29 -9822 Jun 12 j 04:45 -9822 Jun 23 j 17:54 -9822 Jun 25 j 00:21 -9822 Jun 25 j 00:16 -9822 Jul 07 j 16:48 -9822 Aug 06 j 08:28 -9822 Nov 05 j 16:23 -9821 Jan 05 j 08:25 -9821 Jan 06 j 06:01 -9821 Mar 08 j 20:07 -9821 Jun 24 j 13:01	30°RH 29°H47'17 0°Y 17°Y'58'02 20°Y32'06 20°Y49'05 20°Y49'02 23°Y38'35 0°8 10°857'37 6°805'54 5°859'01 1°806'10 15°8	6.33964 AU 1°00'11 1°00'20
evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-9828 Aug 18 j 00:39 -9828 Dec 15 j 09:32 -9828 Dec 20 j 12:16 -9827 Jan 03 j 01:36 -9827 Jan 03 j 01:30 -9827 Jan 04 j 11:32 -9827 Jan 16 j 17:29 -9827 Feb 19 j 02:38 -9827 May 27 j 09:20 -9827 Jul 25 j 21:23 -9827 Jul 25 j 01:30 -9827 Sep 22 j 04:58 -9827 Dec 28 j 16:36 -9826 Jan 26 j 13:01	12° \$\to\$09'42 0° \$\mathbb{M}\$. 1° \$\mathbb{M}\$.11'05 4° \$\mathbb{M}\$.20'54 4° \$\mathbb{M}\$.20'50 4° \$\mathbb{M}\$.40'44 7° \$\mathbb{M}\$.32'02 15° \$\mathbb{M}\$. 27° \$\mathbb{M}\$.21'33 22° \$\mathbb{M}\$.16'38 22° \$\mathbb{M}\$.23'26 17° \$\mathbb{M}\$.17'39 0° \$\neq\$1 6° \$\neq\$26'29	-1°16'09 1°16'25 6.06701 AU -2°16'35 4.08207 AU	direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct evening set	-9822 Jan 23 j 08:22 -9822 Feb 04 j 04:21 -9822 Feb 16 j 00:29 -9822 Jun 12 j 04:45 -9822 Jun 23 j 17:54 -9822 Jun 25 j 00:21 -9822 Jun 25 j 00:16 -9822 Jul 07 j 16:48 -9822 Aug 06 j 08:28 -9822 Nov 05 j 16:23 -9821 Jan 05 j 08:25 -9821 Jan 06 j 06:01 -9821 Mar 08 j 20:07 -9821 Jun 24 j 13:01 -9821 Jul 13 j 13:44	30°RH 29°H47'17 0°Y 17°Y'58'02 20°Y32'06 20°Y49'05 20°Y49'02 23°Y38'35 0°B 10°B57'37 6°B05'54 5°B59'01 1°B06'10 15°B 19°B10'04	6.33964 AU 1°00'11 1°00'20 1°55'31 4.33727 AU
evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-9828 Aug 18 j 00:39 -9828 Dec 15 j 09:32 -9828 Dec 20 j 12:16 -9827 Jan 03 j 01:36 -9827 Jan 03 j 01:30 -9827 Jan 04 j 11:32 -9827 Jan 16 j 17:29 -9827 Feb 19 j 02:38 -9827 May 27 j 09:20 -9827 Jul 25 j 21:23 -9827 Jul 25 j 01:30 -9827 Sep 22 j 04:58 -9827 Dec 28 j 16:36 -9826 Jan 26 j 13:01 -9826 Feb 09 j 05:43	12° \$\to\$09'42 0° \$\mathbb{M}\$. 1° \$\mathbb{M}\$.11'05 4° \$\mathbb{M}\$.20'54 4° \$\mathbb{M}\$.20'50 4° \$\mathbb{M}\$.40'44 7° \$\mathbb{M}\$.32'02 15° \$\mathbb{M}\$. 27° \$\mathbb{M}\$.21'33 22° \$\mathbb{M}\$.22' \$\mathbb{M}\$.17'39 0° \$\mathscr{A}\$ 6° \$\mathscr{A}\$ 26'29 9° \$\mathscr{A}\$ 35'54	-1°16'09 1°16'25 6.06701 AU -2°16'35 4.08207 AU	direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct	-9822 Jan 23 j 08:22 -9822 Feb 04 j 04:21 -9822 Feb 16 j 00:29 -9822 Jun 12 j 04:45 -9822 Jun 23 j 17:54 -9822 Jun 25 j 00:21 -9822 Jun 25 j 00:16 -9822 Jul 07 j 16:48 -9822 Aug 06 j 08:28 -9822 Nov 05 j 16:23 -9821 Jan 05 j 08:25 -9821 Jan 06 j 06:01 -9821 Mar 08 j 20:07 -9821 Jun 24 j 13:01	30°RH 29°H47'17 0°Y 17°Y'58'02 20°Y32'06 20°Y49'05 20°Y49'02 23°Y38'35 0°8 10°857'37 6°805'54 5°859'01 1°806'10 15°8	6.33964 AU 1°00'11 1°00'20
evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-9828 Aug 18 j 00:39 -9828 Dec 15 j 09:32 -9828 Dec 20 j 12:16 -9827 Jan 03 j 01:36 -9827 Jan 03 j 01:30 -9827 Jan 04 j 11:32 -9827 Jan 16 j 17:29 -9827 Feb 19 j 02:38 -9827 May 27 j 09:20 -9827 Jul 25 j 21:23 -9827 Jul 25 j 01:30 -9827 Sep 22 j 04:58 -9827 Dec 28 j 16:36 -9826 Jan 26 j 13:01 -9826 Feb 09 j 05:43 -9826 Feb 09 j 05:43	12° \$\to\$09'42 0° \$\mathbb{M}\$. 1° \$\mathbb{M}\$.11'05 4° \$\mathbb{M}\$.20'54 4° \$\mathbb{M}\$.20'50 4° \$\mathbb{M}\$.40'44 7° \$\mathbb{M}\$.32'02 15° \$\mathbb{M}\$. 27° \$\mathbb{M}\$.21'33 22° \$\mathbb{M}\$.16'38 22° \$\mathbb{M}\$.23'26 17° \$\mathbb{M}\$.17'39 0° \$A\$ 6° \$A\$.26'29 9° \$A\$.35'54 9° \$A\$.35'53	-1°16'09 1°16'25 6.06701 AU -2°16'35 4.08207 AU -1°38'03 1°38'34	direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist.	-9822 Jan 23 j 08:22 -9822 Feb 04 j 04:21 -9822 Feb 16 j 00:29 -9822 Jun 12 j 04:45 -9822 Jun 23 j 17:54 -9822 Jun 25 j 00:21 -9822 Jun 25 j 00:16 -9822 Jul 07 j 16:48 -9822 Aug 06 j 08:28 -9822 Nov 05 j 16:23 -9821 Jan 05 j 08:25 -9821 Jan 06 j 06:01 -9821 Mar 08 j 20:07 -9821 Jun 24 j 13:01 -9821 Jul 13 j 13:44 -9821 Jul 24 j 20:32	30°RH 29°H47'17 0°Y 17°Y'58'02 20°Y'49'05 20°Y'49'02 23°Y'38'35 0°B 10°B57'37 6°B05'54 5°B59'01 1°B06'10 15°B 19°B10'04 21°B41'59	6.33964 AU 1°00'11 1°00'20 1°55'31 4.33727 AU 6.32222 AU
evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-9828 Aug 18 j 00:39 -9828 Dec 15 j 09:32 -9828 Dec 20 j 12:16 -9827 Jan 03 j 01:36 -9827 Jan 03 j 01:30 -9827 Jan 04 j 11:32 -9827 Jan 16 j 17:29 -9827 Feb 19 j 02:38 -9827 May 27 j 09:20 -9827 Jul 25 j 21:23 -9827 Jul 25 j 01:30 -9827 Sep 22 j 04:58 -9826 Jan 26 j 13:01 -9826 Feb 09 j 05:43 -9826 Feb 09 j 05:42 -9826 Feb 10 j 09:10	12° \$\to\$09'42 0° \$\mathbb{M}\$. 1° \$\mathbb{M}\$.11'05 4° \$\mathbb{M}\$.20'54 4° \$\mathbb{M}\$.20'50 4° \$\mathbb{M}\$.40'44 7° \$\mathbb{M}\$.32'02 15° \$\mathbb{M}\$. 27° \$\mathbb{M}\$.21'33 22° \$\mathbb{M}\$.16'38 22° \$\mathbb{M}\$.23'26 17° \$\mathbb{M}\$.17'39 0° \$\mathbb{A}\$ 6° \$\mathbb{A}\$.26'29 9° \$\mathbb{A}\$.35'54 9° \$\mathbb{A}\$.35'53 9° \$\mathbb{A}\$.51'45	-1°16'09 1°16'25 6.06701 AU -2°16'35 4.08207 AU	direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction	-9822 Jan 23 j 08:22 -9822 Feb 04 j 04:21 -9822 Feb 16 j 00:29 -9822 Jun 12 j 04:45 -9822 Jun 23 j 17:54 -9822 Jun 25 j 00:21 -9822 Jun 25 j 00:16 -9822 Jul 07 j 16:48 -9822 Aug 06 j 08:28 -9822 Nov 05 j 16:23 -9821 Jan 05 j 08:25 -9821 Jan 06 j 06:01 -9821 Mar 08 j 20:07 -9821 Jun 24 j 13:01 -9821 Jul 13 j 13:44 -9821 Jul 24 j 20:32 -9821 Jul 26 j 01:17	30°RH 29°H47'17 0°Y 17°Y'58'02 20°Y'32'06 20°Y'49'05 20°Y'49'02 23°Y'38'35 0°B 10°B57'37 6°B05'54 5°B59'01 1°B06'10 15°B 19°B10'04 21°B41'59	6.33964 AU 1°00'11 1°00'20 1°55'31 4.33727 AU 6.32222 AU 1°32'35
evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-9828 Aug 18 j 00:39 -9828 Dec 15 j 09:32 -9828 Dec 20 j 12:16 -9827 Jan 03 j 01:36 -9827 Jan 03 j 01:30 -9827 Jan 04 j 11:32 -9827 Jan 16 j 17:29 -9827 Feb 19 j 02:38 -9827 May 27 j 09:20 -9827 Jul 25 j 21:23 -9827 Jul 25 j 01:30 -9827 Sep 22 j 04:58 -9826 Jan 26 j 13:01 -9826 Feb 09 j 05:43 -9826 Feb 09 j 05:42 -9826 Feb 10 j 09:10 -9826 Feb 22 j 23:24	12° \$\to\$09'42 0° \$\mathbb{M}\$. 1° \$\mathbb{M}\$.11'05 4° \$\mathbb{M}\$.20'54 4° \$\mathbb{M}\$.20'50 4° \$\mathbb{M}\$.40'44 7° \$\mathbb{M}\$.32'02 15° \$\mathbb{M}\$. 27° \$\mathbb{M}\$.21'33 22° \$\mathbb{M}\$.16'38 22° \$\mathbb{M}\$.23'26 17° \$\mathbb{M}\$.17'39 0° \$\nall\$ 6° \$\nall\$ 26'29 9° \$\nall\$ 35'54 9° \$\nall\$ 35'53 9° \$\nall\$ 51'45 12° \$\nall\$ 45'41	-1°16'09 1°16'25 6.06701 AU -2°16'35 4.08207 AU -1°38'03 1°38'34	direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong	-9822 Jan 23 j 08:22 -9822 Feb 04 j 04:21 -9822 Feb 16 j 00:29 -9822 Jun 12 j 04:45 -9822 Jun 23 j 17:54 -9822 Jun 25 j 00:21 -9822 Jun 25 j 00:16 -9822 Jul 07 j 16:48 -9822 Aug 06 j 08:28 -9822 Nov 05 j 16:23 -9821 Jan 05 j 08:25 -9821 Jan 06 j 06:01 -9821 Mar 08 j 20:07 -9821 Jun 24 j 13:01 -9821 Jul 24 j 13:44 -9821 Jul 24 j 20:32 -9821 Jul 26 j 01:17 -9821 Jul 26 j 01:14	30°RH 29°H47'17 0°Y 17°Y'58'02 20°Y'32'06 20°Y'49'05 20°Y'49'02 23°Y'38'35 0°8 10°857'37 6°805'54 5°859'01 1°806'10 15°8 19°810'04 21°841'59	6.33964 AU 1°00'11 1°00'20 1°55'31 4.33727 AU 6.32222 AU
evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-9828 Aug 18 j 00:39 -9828 Dec 15 j 09:32 -9828 Dec 20 j 12:16 -9827 Jan 03 j 01:36 -9827 Jan 03 j 01:30 -9827 Jan 04 j 11:32 -9827 Jan 16 j 17:29 -9827 Feb 19 j 02:38 -9827 May 27 j 09:20 -9827 Jul 25 j 21:23 -9827 Jul 25 j 01:30 -9827 Sep 22 j 04:58 -9826 Jan 26 j 13:01 -9826 Feb 09 j 05:43 -9826 Feb 09 j 05:42 -9826 Feb 10 j 09:10	12° \$\to\$09'42 0° \$\mathbb{M}\$. 1° \$\mathbb{M}\$.11'05 4° \$\mathbb{M}\$.20'54 4° \$\mathbb{M}\$.20'50 4° \$\mathbb{M}\$.40'44 7° \$\mathbb{M}\$.32'02 15° \$\mathbb{M}\$. 27° \$\mathbb{M}\$.21'33 22° \$\mathbb{M}\$.16'38 22° \$\mathbb{M}\$.23'26 17° \$\mathbb{M}\$.17'39 0° \$\mathbb{A}\$ 6° \$\mathbb{A}\$.26'29 9° \$\mathbb{A}\$.35'54 9° \$\mathbb{A}\$.35'53 9° \$\mathbb{A}\$.51'45	-1°16'09 1°16'25 6.06701 AU -2°16'35 4.08207 AU -1°38'03 1°38'34	direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction	-9822 Jan 23 j 08:22 -9822 Feb 04 j 04:21 -9822 Feb 16 j 00:29 -9822 Jun 12 j 04:45 -9822 Jun 23 j 17:54 -9822 Jun 25 j 00:21 -9822 Jun 25 j 00:16 -9822 Jul 07 j 16:48 -9822 Aug 06 j 08:28 -9822 Nov 05 j 16:23 -9821 Jan 05 j 08:25 -9821 Jan 06 j 06:01 -9821 Mar 08 j 20:07 -9821 Jun 24 j 13:01 -9821 Jul 13 j 13:44 -9821 Jul 24 j 20:32 -9821 Jul 26 j 01:17	30°RH 29°H47'17 0°Y 17°Y'58'02 20°Y'32'06 20°Y'49'05 20°Y'49'02 23°Y'38'35 0°B 10°B57'37 6°B05'54 5°B59'01 1°B06'10 15°B 19°B10'04 21°B41'59	6.33964 AU 1°00'11 1°00'20 1°55'31 4.33727 AU 6.32222 AU 1°32'35

•	ical year style is used: Th		•	* *			ge o
		-	n astronomicai cou				
retrograde	-9821 Dec 08 j 07:37	12° Ⅱ 25'11	2025110	evening set	-9814 Jan 31 j 19:46	11° ∡ ³32'31	
opposition	-9820 Feb 07 j 13:01	7° Ⅱ 32'49				_	
min. Earth dist.	-9820 Feb 08 j 08:07	7° Ⅱ 26'47	4.29998 AU	conjunction	-9814 Feb 14 j 12:38	14° ∡ ¹41'30	
direct	-9820 Apr 09 j 15:00	2° Ⅱ 36′10		minimum elong	-9814 Feb 14 j 12:38	14° ⊀ °41'30	1°38'47
evening set	-9820 Aug 12 j 18:07	20° Ⅱ 41'19		max. Earth dist.	-9814 Feb 15 j 15:02	14° ₹ 56'42	6.11637 AU
max. Earth dist.	-9820 Aug 24 j 06:08	23° Ⅱ 18′26	6.26719 AU	morning rise	-9814 Feb 28 j 06:09	17° ∡ 750'41	
					-9814 Apr 27 j 07:15	8°0	
conjunction	-9820 Aug 25 j 03:00	23° II 30'20	1°38'03	retrograde	-9814 Jul 05 j 18:10	6° る 58'35	
minimum elong	-9820 Aug 25 j 03:01	23° Ⅲ 30′21	1°38'36	opposition	-9814 Sep 02 j 19:31	1° ප 56'00	-2°18'43
morning rise	-9820 Sep 06 j 12:02	26° Ⅱ 19'32	1 30 30	min. Earth dist.	-9814 Sep 02 j 07:59		4.15332 AU
morning risc	-9820 Sep 00 j 12:02	0°9		iiiii. Eartii tiist.	-9814 Sep 17 j 08:44	1 ℃3930 30°R ⁄ 7	4.13332 AU
	1 3			11	1 2		
retrograde	-9819 Jan 10 j 03:26	14°536'13	******	direct	-9814 Nov 01 j 02:04	26° ₹ 53'31	
opposition	-9819 Mar 12 j 16:09		2°11'48		-9814 Dec 16 j 01:53	0°ප	
min. Earth dist.	-9819 Mar 13 j 01:21	9° © 38'28	4.23095 AU	evening set	-9813 Mar 09 j 04:42	15° る 51'47	
direct	-9819 May 12 j 17:46	4° © 47'16					
evening set	-9819 Sep 13 j 11:44	23° © 01'07		conjunction	-9813 Mar 22 j 21:18	18° る 57'27	-1°20'28
				minimum elong	-9813 Mar 22 j 21:24	18° る 57'30	1°21'03
conjunction	-9819 Sep 26 j 00:57	25° © 55'07	1°13'27	max. Earth dist.	-9813 Mar 23 j 07:37	19° る 03'17	6.19240 AU
minimum elong	-9819 Sep 26 j 01:01	25°955'10	1°14'00	morning rise	-9813 Apr 05 j 12:22	22° ප 02'15	
max. Earth dist.	-9819 Sep 25 j 20:55	25°952'48	6.19051 AU		-9813 May 12 j 11:56	0° ≈	
morning rise	-9819 Oct 08 j 15:52	28°950'14	0.17031710	retrograde	-9813 Aug 07 j 16:16	10° ≈ 21'09	
morning risc				•	-9813 Oct 05 j 18:50		1020126
	-9819 Oct 13 j 17:38	0°N		opposition	,	5°≈22'13	
_	-9818 Jan 01 j 07:17	15° Ω		min. Earth dist.	-9813 Oct 05 j 18:14		4.23307 AU
retrograde	-9818 Feb 14 j 08:26	17° Ω 50'59		direct	-9813 Dec 05 j 05:52	0° ≈ 18′06	
	-9818 Mar 30 j 17:41	15° ₹ Ω			-9812 Mar 24 j 23:10	15° ≈	
opposition	-9818 Apr 16 j 17:12	12° Ω 52'35	1°15'21	evening set	-9812 Apr 12 j 02:43	18° ≈ 57'47	
min. Earth dist.	-9818 Apr 16 j 14:20	12° Ω 53'30	4.15142 AU				
direct	-9818 Jun 15 j 13:30	7° Ω 59'40		conjunction	-9812 Apr 25 j 14:54	21° ≈ 58'36	-0°36'39
	-9818 Aug 23 j 19:21	15° Ω		minimum elong	-9812 Apr 25 j 14:57	21°≈58'38	0°37'04
evening set	-9818 Oct 16 j 12:53	26° £ 28'33		max. Earth dist.	-9812 Apr 25 j 04:33	21° ≈ 52'49	6.27038 AU
evening sec	7010 OCC 10 J 12.55	20 002033		morning rise	-9812 May 09 j 00:16	24°≈57'51	0.27030710
agnismation	-9818 Oct 29 j 10:52	29° Ω 29'43	0°24'13	morning risc		0° \	
conjunction	•			. 1	-9812 Jun 01 j 04:52		
minimum elong	-9818 Oct 29 j 10:54	29° Ω 29'45	0°24'33	retrograde	-9812 Sep 07 j 15:36	12°) ₹35′56	
max. Earth dist.	-9818 Oct 29 j 23:27	29° Ω 37'05	6.11603 AU	opposition	-9812 Nov 06 j 02:11	7°) 40′42	
	-9818 Oct 31 j 14:34	0° m		min. Earth dist.	-9812 Nov 06 j 14:24	7°) 36′40	4.30191 AU
morning rise	-9818 Nov 11 j 12:18	2° Mg 32′45		direct	-9811 Jan 06 j 18:26	2°) €36'43	
retrograde	-9817 Mar 22 j 09:33	22° Mp 11'53		asc. node	-9811 Jan 20 j 12:19	2° 升 54′10	
desc. node	-9817 Apr 12 j 19:57	21°Mp28'31		evening set	-9811 May 15 j 10:20	20° 升 57'51	
opposition	-9817 May 22 j 07:19	17° m 09'43	-0°08'51	•			
min. Earth dist.	-9817 May 21 j 15:48	17° mp 14'51	4.08788 AU	conjunction	-9811 May 28 j 14:29	23°) €53'08	0°17'33
direct	-9817 Jul 20 j 00:18	12° Mp 16'08		minimum elong	-9811 May 28 j 14:28	23° ¥ 53′07	0°17'26
direct	-9817 Nov 15 j 19:00	0° ⊡		max. Earth dist.	-9811 May 27 j 14:09	23° H 39'36	6.32519 AU
. ,	3				, ,		0.32319 AU
evening set	-9817 Nov 20 j 08:46	1° ≏ 03'54		morning rise	-9811 Jun 10 j 14:58	26°) 46′36	
					-9811 Jun 25 j 09:28	0° Υ	
conjunction	-9817 Dec 03 j 16:18	4° ≙ 11'15	-0°34'32	retrograde	-9811 Oct 09 j 03:30	14° Ƴ 03'59	
minimum elong	-9817 Dec 03 j 16:15	4° ≏ 11'13	0°34'31	opposition	-9811 Dec 08 j 05:47	9° Ƴ 11'23	1°02'26
max. Earth dist.	-9817 Dec 04 j 21:19	4° £ 28'17	6.06954 AU	min. Earth dist.	-9811 Dec 09 j 01:26	9° Ƴ 05'02	4.33907 AU
morning rise	-9817 Dec 17 j 03:12	7° ഫ 20'26		direct	-9810 Feb 08 j 14:21	4° Ƴ 09'13	
retrograde	-9816 Apr 26 j 18:31	27° ≏ 18'01		evening set	-9810 Jun 16 j 11:24	22° Ƴ 17'48	
opposition	-9816 Jun 25 j 21:09	22° ₽ 13′26	-1°31'30	max. Earth dist.	-9810 Jun 27 j 21:47	24° Y 50'26	6.34118 AU
min. Earth dist.	-9816 Jun 25 j 00:10		4.06388 AU				
direct	-9816 Aug 23 j 01:46	17° £ 17′27		conjunction	-9810 Jun 29 j 05:36	25° Y 08'12	1°05'50
uncet	-9816 Nov 27 j 16:18	0°M		minimum elong	-9810 Jun 29 j 05:31	25°Υ08'09	1°06'00
					-		1 00 00
evening set	-9816 Dec 25 j 18:59	6°M21′08		morning rise	-9810 Jul 11 j 20:55	27° Y 57'09	
					-9810 Jul 21 j 04:00	0°8	
conjunction	-9815 Jan 08 j 08:53	9°M31'06			-9810 Oct 27 j 08:39	15° 8	
minimum elong	-9815 Jan 08 j 08:48	9°M31'02	1°21'37	retrograde	-9810 Nov 10 j 01:38	15° 8 17'41	
max. Earth dist.	00157 00:10.40	9°M50'53	6.06928 AU		-9810 Nov 23 j 18:08	15° ₹ 8	
	-9815 Jan 09 j 18:49			opposition	-9809 Jan 09 j 18:49	10° 8 26'05	2°01'45
morning rise	-9815 Jan 09 j 18:49 -9815 Jan 22 j 01:24	12°M42'19		opposition			
	-9815 Jan 22 j 01:24	12°M42'19 15°M		min. Earth dist.	-	10° 8 18'40	4.33400 AU
	-9815 Jan 22 j 01:24 -9815 Feb 01 j 00:56	15° M ₊		min. Earth dist.	-9809 Jan 10 j 18:05	10° 8 18'40	4.33400 AU
morning rise	-9815 Jan 22 j 01:24 -9815 Feb 01 j 00:56 -9815 Apr 22 j 14:36	15° ™ 0° ⊀			-9809 Jan 10 j 18:05 -9809 Mar 13 j 07:00	10° 8 18'40 5° 8 26'43	4.33400 AU
	-9815 Jan 22 j 01:24 -9815 Feb 01 j 00:56 -9815 Apr 22 j 14:36 -9815 Jun 01 j 09:07	15° M 0° ♂ 2° ♂ 28'30		min. Earth dist. direct	-9809 Jan 10 j 18:05 -9809 Mar 13 j 07:00 -9809 Jun 07 j 13:02	10° と 18'40 5° と 26'43 15° と	4.33400 AU
morning rise	-9815 Jan 22 j 01:24 -9815 Feb 01 j 00:56 -9815 Apr 22 j 14:36 -9815 Jun 01 j 09:07 -9815 Jul 10 j 19:38	15°M 0°⊀ 2°⊀28'30 30°RM	2°20'24	min. Earth dist. direct	-9809 Jan 10 j 18:05 -9809 Mar 13 j 07:00 -9809 Jun 07 j 13:02 -9809 Jul 17 j 18:55	10°818'40 5°826'43 15°8 23°830'55	
morning rise retrograde opposition	-9815 Jan 22 j 01:24 -9815 Feb 01 j 00:56 -9815 Apr 22 j 14:36 -9815 Jun 01 j 09:07 -9815 Jul 10 j 19:38 -9815 Jul 30 j 20:08	15°M. 0°⊀ 2°⊀28'30 30°RM. 27°M.23'43		min. Earth dist. direct	-9809 Jan 10 j 18:05 -9809 Mar 13 j 07:00 -9809 Jun 07 j 13:02	10°818'40 5°826'43 15°8 23°830'55	4.33400 AU 6.31414 AU
retrograde opposition min. Earth dist.	-9815 Jan 22 j 01:24 -9815 Feb 01 j 00:56 -9815 Apr 22 j 14:36 -9815 Jun 01 j 09:07 -9815 Jul 10 j 19:38 -9815 Jul 30 j 20:08 -9815 Jul 29 j 23:25	15° M. 0° ♂ 2° ♂ 28'30 30° R.M. 27° M.23'43 27° M.30'49	-2°20'36 4.08902 AU	min. Earth dist. direct evening set max. Earth dist.	-9809 Jan 10 j 18:05 -9809 Mar 13 j 07:00 -9809 Jun 07 j 13:02 -9809 Jul 17 j 18:55 -9809 Jul 29 j 00:00	10°&18'40 5°&26'43 15°& 23°&30'55 26°&02'14	6.31414 AU
morning rise retrograde opposition	-9815 Jan 22 j 01:24 -9815 Feb 01 j 00:56 -9815 Apr 22 j 14:36 -9815 Jun 01 j 09:07 -9815 Jul 10 j 19:38 -9815 Jul 30 j 20:08 -9815 Jul 29 j 23:25 -9815 Sep 27 j 04:22	15° M 0° 2° 2° 28'30 30° 27° M23'43 27° M30'49 22° M24'20		min. Earth dist. direct evening set max. Earth dist. conjunction	-9809 Jan 10 j 18:05 -9809 Mar 13 j 07:00 -9809 Jun 07 j 13:02 -9809 Jul 17 j 18:55 -9809 Jul 29 j 00:00 -9809 Jul 30 j 05:48	10°&18'40 5°&26'43 15°& 23°&30'55 26°&02'14 26°&19'02	6.31414 AU 1°35'00
retrograde opposition min. Earth dist.	-9815 Jan 22 j 01:24 -9815 Feb 01 j 00:56 -9815 Apr 22 j 14:36 -9815 Jun 01 j 09:07 -9815 Jul 10 j 19:38 -9815 Jul 30 j 20:08 -9815 Jul 29 j 23:25	15° M. 0° ♂ 2° ♂ 28'30 30° R.M. 27° M.23'43 27° M.30'49		min. Earth dist. direct evening set max. Earth dist.	-9809 Jan 10 j 18:05 -9809 Mar 13 j 07:00 -9809 Jun 07 j 13:02 -9809 Jul 17 j 18:55 -9809 Jul 29 j 00:00	10°&18'40 5°&26'43 15°& 23°&30'55 26°&02'14	6.31414 AU

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 9 Attention, astronomical year style is used: The year -9809 in astronomical counting style is the year 9810 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -9809 i	n astronomical cou	inting style is the year	9810 BCE in historical c	ounting style.	0-1
morning rise	-9809 Aug 11 j 15:07	29° 8 06'28		min. Earth dist.	-9803 Aug 03 j 23:33	2° ∡ ³37'49	4.09786 AU
	-9809 Aug 15 j 14:50	Π °0			-9803 Aug 24 j 03:12	30°RML	
retrograde	-9809 Dec 12 j 20:09	16° Ⅱ 51'35		direct	-9803 Oct 02 j 06:30	27°M31'15	
opposition	-9808 Feb 12 j 02:49	11° Ⅱ 59'00	2°26'07		-9803 Nov 10 j 14:21	0° ∡ ¹	
min. Earth dist.	-9808 Feb 12 j 20:55		4.28781 AU	evening set	-9802 Feb 06 j 02:05	16° ∡ ³37'53	
direct	-9808 Apr 14 j 00:44	7° Ⅱ 02'42					
evening set	-9808 Aug 17 j 01:16	25° Ⅱ 10'30		conjunction	-9802 Feb 19 j 19:09	19° ∡ ¹46′25	
		_		minimum elong	-9802 Feb 19 j 19:10	19° ∡ ¹46′26	
conjunction	-9808 Aug 29 j 10:33	28° Ⅱ 00'15		max. Earth dist.	-9802 Feb 20 j 20:50		6.12805 AU
minimum elong	-9808 Aug 29 j 10:35	28° I I00'16		morning rise	-9802 Mar 05 j 12:25	22° ∡ 54'57	
max. Earth dist.	-9808 Aug 28 j 15:59		6.25198 AU		-9802 Apr 06 j 16:49	0°る	
	-9808 Sep 07 j 03:45	0°95		retrograde	-9802 Jul 10 j 12:00	11° ろ 55'06	2014117
morning rise	-9808 Sep 10 j 20:00	0°950'17		opposition	-9802 Sep 07 j 13:35	6° る 52'58	
retrograde	-9807 Jan 15 j 00:21	19°515'02	2°06'22	min. Earth dist.	-9802 Sep 07 j 02:51	1°る50'37	4.16652 AU
opposition min. Earth dist.	-9807 Mar 17 j 11:17 -9807 Mar 17 j 19:59	14°©19'51 14°©17'05	4.21368 AU	direct evening set	-9802 Nov 05 j 23:21 -9801 Mar 14 j 06:11	1 33007 20° る 45'12	
direct	-9807 May 17 j 08:49	9°926'01	4.21308 AU	evening set	-9001 Wai 14 J 00.11	20 043 12	
evening set	-9807 Sep 18 j 00:12	27°9543'59		conjunction	-9801 Mar 27 j 22:15	23°る50'07	-1°15'30
evening set	-9807 Sep 18 j 00:12 -9807 Sep 27 j 18:56	0°Ω		minimum elong	-9801 Mar 27 j 22:19	23° る 50'11	
	7007 Sep 27 j 10.30	0 00		max. Earth dist.	-9801 Mar 28 j 04:11	23° る 53'29	
conjunction	-9807 Sep 30 j 14:27	0° Ω 39'14	1°07'46	morning rise	-9801 Apr 10 j 12:50	26° පි 54'06	0.20099 110
minimum elong	-9807 Sep 30 j 14:32	0°Ω39'17		morning rise	-9801 Apr 24 j 12:07	0° ≈	
max. Earth dist.	-9807 Sep 30 j 11:31		6.17279 AU		-9801 Aug 04 j 18:10	15° ≈	
morning rise	-9807 Oct 13 j 06:58	3° Ω 35'46		retrograde	-9801 Aug 12 j 06:40	15° ≈ 05'42	
Č	-9807 Dec 05 j 22:35	15° Ω		Č	-9801 Aug 19 j 18:45	15°R ≈	
retrograde	-9806 Feb 19 j 08:55	22° Ω 45′03		opposition	-9801 Oct 10 j 09:30	10° ≈ 07'17	-1°20'52
opposition	-9806 Apr 21 j 17:05	17° Ω 46′04	1°04'36	min. Earth dist.	-9801 Oct 10 j 11:41	10° ≈ 06'34	4.24565 AU
min. Earth dist.	-9806 Apr 21 j 11:16	17° Ω 47'58	4.13468 AU	direct	-9801 Dec 10 j 02:20	5° ≈ 03'01	
	-9806 May 14 j 09:53	15°R Ω			-9800 Mar 06 j 18:58	15° ≈	
direct	-9806 Jun 20 j 07:35	12° Ω 53'13		evening set	-9800 Apr 16 j 21:49	23° ≈ 39'19	
	-9806 Jul 26 j 18:25	15° Ω					
	-9806 Oct 15 j 03:23	0° m		conjunction	-9800 Apr 30 j 09:15	26° ≈ 39'22	-0°29'13
evening set	-9806 Oct 21 j 08:58	1° Mp 26'48		minimum elong	-9800 Apr 30 j 09:18	26° ≈ 39′23	0°29'36
				max. Earth dist.	-9800 Apr 29 j 21:30	26° ≈ 32'48	6.28114 AU
conjunction	-9806 Nov 03 j 08:37	4° m 29'17		morning rise	-9800 May 13 j 17:23	29° ≈ 37'43	
minimum elong	-9806 Nov 03 j 08:38	4° m 29'18			-9800 May 15 j 09:38	0° ∀	
max. Earth dist.	-9806 Nov 04 j 01:36		6.10199 AU	retrograde	-9800 Sep 12 j 01:52	17° ∺ 11'12	
morning rise	-9806 Nov 16 j 11:29	7° m 33'37		opposition	-9800 Nov 10 j 15:05	12° 米 16′25	
desc. node	-9805 Feb 19 j 17:51	25° m 20'48		min. Earth dist.	-9800 Nov 11 j 04:03		4.31006 AU
retrograde	-9805 Mar 27 j 16:10	27° m 18'39	0001105	asc. node	-9800 Nov 30 j 11:16	9°) 47′06	
opposition	-9805 May 27 j 09:59	22° m 16'01		direct	-9799 Jan 11 j 09:31	7°) 12'36	
min. Earth dist.	-9805 May 26 j 17:34	22° Th 21'28	4.07786 AU	evening set	-9799 May 20 j 00:33	25°) (31'23	(22000 ATT
direct	-9805 Jul 25 j 00:57	17° ™ 22'11 0° ≏		max. Earth dist.	-9799 May 31 j 23:54	28°) 10′42	6.33008 AU
evening set	-9805 Oct 29 j 02:59 -9805 Nov 25 j 12:31	0 <u>₽</u> 6° ₽ 13'40		conjunction	-9799 Jun 02 j 03:11	28° ∺ 25'52	0°25'04
evening set	-9803 NOV 23 J 12.31	0 = 1340		minimum elong	-9799 Jun 02 j 03:11	28°\(\frac{7}{25}\)51	
conjunction	-9805 Dec 08 j 21:08	9° ₽ 21'44	-0°42'30	minimum clong	-9799 Jun 09 j 04:30	26 γ (25 51	0 24 39
minimum elong	-9805 Dec 08 j 21:04	9° £ 21'41	0°42'32	morning rise	-9799 Jun 15 j 02:28	1° Υ 18'37	
max. Earth dist.	-9805 Dec 10 j 03:48	9° ₽ 39'44	6.06423 AU	retrograde	-9799 Oct 13 j 16:03	18° Y 35'04	
morning rise	-9805 Dec 22 j 09:19	12° £ 31'38		opposition	-9799 Dec 12 j 19:19	13° Y '42'45	1°12'23
<i>5</i>	-9804 Mar 22 j 15:13	0°M		min. Earth dist.	-9799 Dec 13 j 16:56	13° Y 35'47	4.34054 AU
retrograde	-9804 May 01 j 22:10	2°M29'51		direct	-9798 Feb 13 j 06:10	8° Y 40'53	
	-9804 Jun 10 j 22:33	30° ₹ Ω		evening set	-9798 Jun 20 j 22:24	26° Ƴ 48'39	
opposition	-9804 Jun 30 j 23:07	27° £ 24'58	-1°41'15	max. Earth dist.	-9798 Jul 02 j 07:47	29° Y ′20'53	6.33896 AU
min. Earth dist.	-9804 Jun 30 j 00:18	27° ≏ 32'42	4.06397 AU				
direct	-9804 Aug 28 j 02:09	22° ≏ 28'29		conjunction	-9798 Jul 03 j 15:31	29° Y 38'37	1°11'22
	-9804 Nov 07 j 07:28	0° M		minimum elong	-9798 Jul 03 j 15:26	29° Y 38'34	1°11'36
evening set	-9804 Dec 31 j 02:33	11°M33'25			-9798 Jul 05 j 05:47	9° 8	
				morning rise	-9798 Jul 16 j 05:39	2° 8 27'10	
conjunction	-9803 Jan 13 j 17:05	14°M43'22			-9798 Sep 17 j 19:43	15° 8	
minimum elong	-9803 Jan 13 j 16:59	14°ML43'19	1°26'12	retrograde	-9798 Nov 14 j 14:47	19° 8 50'21	
	-9803 Jan 14 j 21:36	15°M	C 0.511.0 1.55	opposition	-9797 Jan 14 j 10:41	14° 8 58'43	2°07'37
max. Earth dist.	-9803 Jan 15 j 03:18	15°M03'20	6.07418 AU		-9797 Jan 14 j 06:39	15°R 8	4.220001 : ***
morning rise	-9803 Jan 27 j 09:54	17°M54'26		min. Earth dist.	-9797 Jan 15 j 08:51	14° 8 51'40	4.32861 AU
	-9803 Mar 25 j 05:50	0° ⊀ 7 7° ⋅ 7 25155		direct	-9797 Mar 17 j 20:25	9° 8 59'49	
retrograde	-9803 Jun 06 j 09:37	7° ∡ 35'55	2022122	ovening s-4	-9797 May 17 j 00:44	15° 8	
opposition	-9803 Aug 04 j 18:51	2° ҂ 31'12	-2 23 33	evening set	-9797 Jul 22 j 05:12	28° 8 04'37	

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 10 Attention, astronomical year style is used: The year -9797 in astronomical counting style is the year 9798 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -9797 i	n astronomical co	unting style is the year	r 9798 BCE in historical c	ounting style.	
	-9797 Jul 30 j 18:07	0° I I		minimum elong	-9791 Jan 18 j 21:22	19°M45'24	1°30'00
max. Earth dist.	-9797 Aug 02 j 10:49	0° Ⅱ 36'35	6.30594 AU	max. Earth dist.	-9791 Jan 20 j 07:46	20°ML05'23	6.08163 AU
				morning rise	-9791 Feb 01 j 14:26	22°M56'11	
conjunction	-9797 Aug 03 j 15:26	0° Ⅱ 52'46	1°37'01		-9791 Mar 05 j 06:18	0° ∡ ¹	
minimum elong	-9797 Aug 03 j 15:24	0° Ⅱ 52'45	1°37'29	retrograde	-9791 Jun 11 j 05:09	12° ∡ ³32′18	
morning rise	-9797 Aug 16 j 00:22	3° Ⅱ 40′22		opposition	-9791 Aug 09 j 13:00	7° ∡ ¹27'53	-2°25'21
retrograde	-9797 Dec 17 j 16:10	21° Ⅲ 30′52		min. Earth dist.	-9791 Aug 08 j 18:32	7° ∡ ³34'13	4.10731 AU
opposition	-9796 Feb 16 j 22:45	16° Ⅲ 38′05	2°26'05	direct	-9791 Oct 07 j 02:26	2° ∡ ¹27'30	
min. Earth dist.	-9796 Feb 17 j 16:35	16° Ⅱ 32'26	4.27745 AU	evening set	-9790 Feb 11 j 04:14	21° ∡ ³32'54	
direct	-9796 Apr 18 j 18:19	11° Ⅱ 42'15					
evening set	-9796 Aug 21 j 13:12	29° Ⅱ 51'32		conjunction	-9790 Feb 24 j 21:13	24° ∡ ¹40'58	-1°36'34
•	-9796 Aug 22 j 04:04	0ಂತ		minimum elong	-9790 Feb 24 j 21:15	24° ∡ ¹40'59	1°37'09
				max. Earth dist.	-9790 Feb 25 j 18:39	24° ∡ ′53′15	6.13846 AU
conjunction	-9796 Sep 02 j 22:48	2° © 41'55	1°34'04	morning rise	-9790 Mar 10 j 14:27	27° ∡ ¹48'58	
minimum elong	-9796 Sep 02 j 22:50	2°541'56	1°34'39	C	-9790 Mar 20 j 06:40	0°ರ	
max. Earth dist.	-9796 Sep 02 j 05:46	2° © 32'08	6.24049 AU	retrograde	-9790 Jul 15 j 03:10	16° ප් 42'33	
morning rise	-9796 Sep 15 j 08:58	5°532'44		opposition	-9790 Sep 12 j 04:17	11° ප් 40'54	-2°09'07
retrograde	-9795 Jan 19 j 22:37	24°904'00		min. Earth dist.	-9790 Sep 11 j 19:59		4.17677 AU
opposition	-9795 Mar 22 j 10:42	19°508'20	1°59'53	direct	-9790 Nov 10 j 19:01	6° ට 37'43	
min. Earth dist.	-9795 Mar 22 j 16:13	19° © 06'35	4.20215 AU	evening set	-9789 Mar 19 j 03:53	25° පි 30'53	
direct	-9795 May 22 j 02:56	14°5514'49	20210 110	evening sec	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	20 00000	
ancer	-9795 Sep 11 j 09:57	0°Ω		conjunction	-9789 Apr 01 j 19:45	28° る 35'20	-1°10'10
evening set	-9795 Sep 22 j 16:10	2° Ω 34'42		minimum elong	-9789 Apr 01 j 19:50	28° ප 35'23	
evening set	-7773 Sep 22 j 10.10	2 6634 42		max. Earth dist.	-9789 Apr 01 j 23:56		6.21551 AU
conjunction	-9795 Oct 05 j 07:37	5° Ω 30'55	1°01'31	max. Lartii dist.	-9789 Apr 08 j 01:54	20°≈	0.21331 AO
minimum elong	-9795 Oct 05 j 07:42	5° Ω 30'58	1°02'01	morning rise	-9789 Apr 08 j 01:34	0 ∞ 1°≈38'38	
max. Earth dist.	-9795 Oct 05 j 08:44	5° Ω 31'34	6.16253 AU	morning rise		1 ≈36 36 15°≈	
		8° Ω 28'29	0.10233 AU	ratra ara da	-9789 Jun 21 j 15:02	13 ≈ 19°≈44'50	
morning rise	-9795 Oct 18 j 01:21			retrograde	-9789 Aug 16 j 18:46		
, 1	-9795 Nov 16 j 04:48	15° Ω		***	-9789 Oct 13 j 07:12	15°R≈	1011102
retrograde	-9794 Feb 24 j 12:47	27° Ω 43'15	0052112	opposition	-9789 Oct 14 j 22:01	14°≈47'01	
opposition	-9794 Apr 26 j 18:45	22° Ω 43'44		min. Earth dist.	-9789 Oct 15 j 01:40		4.25353 AU
min. Earth dist.	-9794 Apr 26 j 11:43		4.12648 AU	direct	-9789 Dec 14 j 17:53	9° ≈ 42'45	
direct	-9794 Jun 25 j 06:40	17° Ω 50′53			-9788 Feb 14 j 04:35	15° ≈	
	-9794 Sep 27 j 19:19	0° m/y		evening set	-9788 Apr 21 j 15:18	28°≈17'27	
evening set	-9794 Oct 26 j 06:10	6° Mp 26'13			-9788 Apr 29 j 07:51	0° ∀	
				max. Earth dist.	-9788 May 04 j 09:51	1° X 08'04	6.28686 AU
conjunction	-9794 Nov 08 j 07:04	9° m 29'31				.,	
minimum elong	-9794 Nov 08 j 07:04	9° m 29'31	0°07'54	conjunction	-9788 May 05 j 01:37	1° 米 16′51	
behind sun begin	-9794 Nov 07 j 23:45	9° m/25'15		minimum elong	-9788 May 05 j 01:39	1° ¥ 16′52	0°22'05
behind sun end	-9794 Nov 08 j 14:24	9° m 33'48		morning rise	-9788 May 18 j 08:52	4° ¥ 14'36	
max. Earth dist.	-9794 Nov 09 j 02:06	9° m 40'41	6.09664 AU	retrograde	-9788 Sep 16 j 13:42	21°) 45′27	
morning rise	-9794 Nov 21 j 11:29	12° m 34'44		asc. node	-9788 Oct 10 j 19:55	20°) 48′27	
desc. node	-9794 Dec 29 j 18:27	21° Mp 05'40		opposition	-9788 Nov 15 j 03:36	16° ¥ 51′06	0°07'12
	-9793 Feb 21 j 05:15	0∘ ⊽		min. Earth dist.	-9788 Nov 15 j 18:39	16° ¥ 46′10	4.31333 AU
retrograde	-9793 Apr 01 j 18:36	2° £ 22'09		direct	-9787 Jan 16 j 01:05	11°)(47'27	
	-9793 May 11 j 04:51	30°R, M⊅		evening set	-9787 May 24 j 14:20	0° Υ 05'29	
opposition	-9793 Jun 01 j 11:07	27° Mp 19'04	-0°33'59		-9787 May 24 j 04:24	0° Υ	
min. Earth dist.	-9793 May 31 j 16:27	27° m 25'18	4.07603 AU				
direct	-9793 Jul 29 j 22:51	22° m 24'59		conjunction	-9787 Jun 06 j 15:50	2° Y 59′26	0°32'24
	-9793 Oct 09 j 09:46	0∘ ⊽		minimum elong	-9787 Jun 06 j 15:47	2° Y 59'24	0°32'21
evening set	-9793 Nov 30 j 14:21	11° ≙ 17'35		max. Earth dist.	-9787 Jun 05 j 12:50	2° Ƴ 44'24	6.33074 AU
				morning rise	-9787 Jun 19 j 13:40	5° Y 51'35	
conjunction	-9793 Dec 13 j 23:56	14° ≙ 25'58	-0°49'58	retrograde	-9787 Oct 18 j 03:48	23° Y 08'33	
minimum elong	-9793 Dec 13 j 23:52	14° £ 25'56	0°50'02	opposition	-9787 Dec 17 j 09:37	18° Ƴ 16′27	1°21'54
max. Earth dist.	-9793 Dec 15 j 07:51	14° ≏ 44'42	6.06580 AU	min. Earth dist.	-9787 Dec 18 j 06:47	18° Ƴ 09'39	4.33882 AU
morning rise	-9793 Dec 27 j 12:53	17° ≏ 36′06		direct	-9786 Feb 17 j 19:58	13° Ƴ 15′01	
	-9792 Feb 23 j 15:09	0° M ₊			-9786 Jun 19 j 04:21	0°8	
retrograde	-9792 May 06 j 22:51	7°M32'40		evening set	-9786 Jun 25 j 10:08	1° 8 22'42	
opposition	-9792 Jul 05 j 21:29	2°M27'38	-1°49'55	max. Earth dist.	-9786 Jul 06 j 17:33	3° 8 54'09	6.33486 AU
min. Earth dist.	-9792 Jul 04 j 23:26	2°M35'08	4.06880 AU		-		
	-9792 Jul 24 j 21:35	30° ₹ Ω		conjunction	-9786 Jul 08 j 01:54	4° 8 12'15	1°16'29
direct	-9792 Sep 02 j 01:38	27° ≙ 30'40		minimum elong	-9786 Jul 08 j 01:49	4° 8 12'13	1°16'46
	-9792 Oct 11 j 03:24	0° M .		morning rise	-9786 Jul 20 j 15:09	7° 8 00'34	
	-9792 Dec 29 j 08:13	15° M ₊		Ç	-9786 Aug 27 j 08:03	15° 8	
evening set	-9791 Jan 05 j 06:22	16°MJ35'37		retrograde	-9786 Nov 19 j 07:35	24° 8 26'57	
-	Ÿ			opposition	-9785 Jan 19 j 04:16	19° 8 35'15	2°12'45
conjunction	-9791 Jan 18 j 21:27	19°M45'26	-1°29'36	min. Earth dist.	-9785 Jan 20 j 02:36	19° 8 28'09	4.32257 AU

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 11 Attention, astronomical year style is used: The year -9785 in astronomical counting style is the year 9786 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	ne year -9785 i	n astronomical co	ounting style is the year	9786 BCE in historical c	ounting style.	
	-9785 Mar 06 j 13:03	15° ₹ 8			-9780 Dec 11 j 22:36	15° M	
direct	-9785 Mar 22 j 13:29	14° 8 36'46		evening set	-9779 Jan 10 j 10:17	21°M36'45	
	-9785 Apr 07 j 13:39	15° 8					
	-9785 Jul 14 j 13:07	0°II		conjunction	-9779 Jan 24 j 01:40	24°M46'28	
evening set	-9785 Jul 26 j 16:22	2° Ⅱ 41'54		minimum elong	-9779 Jan 24 j 01:37		1°33'06
max. Earth dist.	-9785 Aug 06 j 23:45	5° Ⅱ 15'08	6.29839 AU	max. Earth dist.	-9779 Jan 25 j 09:11	25°M04'45	6.08699 AU
. ,.	0705 4 00:02.12	50 T 20107	1020125	morning rise	-9779 Feb 06 j 19:02	27°M57'02	
conjunction	-9785 Aug 08 j 02:12	5° П 30'07 5° П 30'06	1°38'25 1°38'54		-9779 Feb 15 j 18:02	0° ҂ 17° ҂ 28'37	
minimum elong morning rise	-9785 Aug 08 j 02:11 -9785 Aug 20 j 10:50	3 Д3006 8°Д17'53	1 36 34	retrograde opposition	-9779 Jun 16 j 00:36 -9779 Aug 14 j 07:21	17 x 28 37 12° x 24'26	2026100
retrograde	-9785 Dec 22 j 10:16	6 П 1733 26° П 13'11		min. Earth dist.	-9779 Aug 14 j 07.21		4.11439 AU
opposition	-9784 Feb 21 j 19:19	21° II 20'02	2°25'05	direct	-9779 Oct 11 j 23:58	7°×723'33	4.11437 AU
min. Earth dist.	-9784 Feb 22 j 10:31		4.26898 AU	evening set	-9778 Feb 16 j 06:47	26° ₹ 28'26	
direct	-9784 Apr 23 j 11:00	16° Ⅱ 24'35			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
	-9784 Aug 05 j 14:37	0.ಪ		conjunction	-9778 Mar 02 j 00:00	29° ∡ ³36'14	-1°34'42
evening set	-9784 Aug 26 j 01:44	4° © 34'25		minimum elong	-9778 Mar 02 j 00:03	29° ∡ ³36′16	
C	C 3			max. Earth dist.	-9778 Mar 02 j 20:14	29° ∡ ′47'48	6.14680 AU
conjunction	-9784 Sep 07 j 11:43	7° © 25'20	1°31'08		-9778 Mar 03 j 17:35	ರ°0	
minimum elong	-9784 Sep 07 j 11:46	7° 5 25'22	1°31'43	morning rise	-9778 Mar 15 j 16:50	2° る 43'44	
max. Earth dist.	-9784 Sep 06 j 21:21	7° 9 17'04	6.23174 AU	retrograde	-9778 Jul 19 j 20:07	21° る 31'20	
morning rise	-9784 Sep 19 j 22:34	10° © 16'49		opposition	-9778 Sep 16 j 19:47	16° る 30'13	-2°03'03
retrograde	-9783 Jan 24 j 22:32	28° © 53'23		min. Earth dist.	-9778 Sep 16 j 13:19		4.18541 AU
opposition	-9783 Mar 27 j 10:03	23° © 57'10	1°52'34	direct	-9778 Nov 15 j 14:03	11° る 26'49	
min. Earth dist.	-9783 Mar 27 j 14:28	23° © 55'45	4.19335 AU		-9777 Mar 22 j 17:46	0° ≈	
direct	-9783 May 26 j 23:45	19° © 03'47		evening set	-9777 Mar 24 j 02:52	0° ≈ 18′29	
	-9783 Aug 24 j 23:32	$0^{\circ}\Omega$					
evening set	-9783 Sep 27 j 07:47	7° Ω 24'34		conjunction	-9777 Apr 06 j 18:10	3°≈22'25	
	0.000	100 001100	0054151	minimum elong	-9777 Apr 06 j 18:16	3°≈22'28	
conjunction	-9783 Oct 10 j 00:24		0°54'51	max. Earth dist.	-9777 Apr 06 j 18:21		6.22380 AU
minimum elong	-9783 Oct 10 j 00:28	10° Ω 21'42	0°55'20	morning rise	-9777 Apr 20 j 07:26	6°≈25'10	
max. Earth dist.	-9783 Oct 10 j 03:55 -9783 Oct 22 j 19:34	10° Ω 23'42 13° Ω 20'12	6.15454 AU	retrograde	-9777 May 30 j 15:44 -9777 Aug 21 j 07:40	15° ≈ 24° ≈ 26'21	
morning rise	-9783 Oct 22 j 19.34 -9783 Oct 30 j 01:02	15° Ω		opposition	-9777 Oct 19 j 12:01	24 ≈20 21 19°≈29'03	1000137
	-9782 Jan 18 j 06:18	0° m)		min. Earth dist.	-9777 Oct 19 j 17:22		4.26074 AU
retrograde	-9782 Mar 01 j 13:21	2° mp 39'22		iiiii. Lattii dist.	-9777 Nov 30 j 04:55	15°R≈	4.20074 AU
retrograde	-9782 Apr 13 j 02:00	30°RΩ		direct	-9777 Dec 19 j 11:30	14°≈24'45	
opposition	-9782 May 01 j 19:04	27° Ω 39'19	0°41'31	4.1.000	-9776 Jan 07 j 23:06	15° ≈	
min. Earth dist.	-9782 May 01 j 09:31		4.11988 AU		-9776 Apr 12 j 20:31	0°) €	
direct	-9782 Jun 30 j 02:35			evening set	-9776 Apr 26 j 09:39	2° ¥ 57'53	
	-9782 Sep 08 j 03:53	0° m					
evening set	-9782 Oct 31 j 02:49	11° m 23'13		conjunction	-9776 May 09 j 19:03	5°) € 56'41	-0°14'01
desc. node	-9782 Nov 08 j 00:10	13° m 14'00		minimum elong	-9776 May 09 j 19:05	5° ¥ 56'42	0°14'18
				behind sun begin	-9776 May 09 j 15:23	5°) 54′38	
conjunction	-9782 Nov 13 j 05:00	14°Mp27'17		behind sun end	-9776 May 09 j 22:47	5° ¥ 58'45	
minimum elong	-9782 Nov 13 j 04:59	14°Mp27'16	0°00'34	max. Earth dist.	-9776 May 09 j 02:31	5°) 47′28	6.29270 AU
behind sun begin	-9782 Nov 12 j 20:49	14° m 22'30		morning rise	-9776 May 23 j 01:01	8° ¥ 53'43	
behind sun end	-9782 Nov 13 j 13:09	14° Tp 32'03		asc. node	-9776 Aug 19 j 23:43	24°) (44'18	
max. Earth dist.	-9782 Nov 14 j 01:56	14° Mp 39'34	6.09201 AU	retrograde	-9776 Sep 21 j 02:13	26°) € 22'02	0010125
morning rise	-9782 Nov 26 j 10:42	17° Tp 33'16		opposition	-9776 Nov 19 j 17:44	21°) (28'09	0°18'35
retrograde	-9781 Jan 23 j 22:23 -9781 Apr 06 j 20:35	0° ჲ 7° ჲ 22'49		min. Earth dist. direct	-9776 Nov 20 j 09:28 -9775 Jan 20 j 17:07	21°) 23'01 16°) 24'50	4.31743 AU
opposition	-9781 Apr 06 j 20.33	2° £ 19'18	0°46'04	direct	-9775 May 07 j 11:43	10 π 24 30	
min. Earth dist.	-9781 Jun 05 j 15:47		4.07376 AU	evening set	-9775 May 07 j 11:43	4° Υ 41'33	
mm. Latti dist.	-9781 Jun 24 j 13:44	30°RM)	4.07370 AC	max. Earth dist.	-9775 Jun 09 j 24:00	7° Υ 18'41	6.33279 AU
direct	-9781 Aug 03 j 21:21	27° m/24'50		max. Earth dist.	7773 Jun 07 J 24:00	7 1 10 41	0.55277110
ancer	-9781 Sep 12 j 18:05	0∘ ರ		conjunction	-9775 Jun 11 j 04:57	7° Ƴ 34'48	0°39'37
evening set	-9781 Dec 05 j 15:50	16° ≏ 19'09		minimum elong	-9775 Jun 11 j 04:53	7° Υ '34'46	0°39'38
<i>5</i>				morning rise	-9775 Jun 24 j 01:37	10° Υ 26'22	
conjunction	-9781 Dec 19 j 02:27	19° ≏ 27'54	-0°57'01	retrograde	-9775 Oct 22 j 17:46	27° Y '43'35	
minimum elong	-9781 Dec 19 j 02:21	19° ≏ 27'51	0°57'08	opposition	-9775 Dec 22 j 01:16	22° Y ′51'38	1°31'01
max. Earth dist.	-9781 Dec 20 j 11:43	19° ≏ 47'25	6.06610 AU	min. Earth dist.	-9775 Dec 22 j 22:53	22° Y ′44'42	4.33904 AU
morning rise	-9780 Jan 01 j 16:10	22° △ 38'19		direct	-9774 Feb 22 j 12:36	17° Y ′50'37	
	-9780 Feb 03 j 11:21	0° M			-9774 Jun 02 j 06:05	0° 8	
retrograde	-9780 May 11 j 22:34	12°M33'26		evening set	-9774 Jun 29 j 22:00	5° 8 57'22	
opposition	-9780 Jul 10 j 18:49	7°M28'23		max. Earth dist.	-9774 Jul 11 j 06:30	8° 8 29'32	6.33322 AU
min. Earth dist.	-9780 Jul 09 j 20:52		4.07193 AU				
direct	-9780 Sep 06 j 22:36	2° ™ 30′57		conjunction	-9774 Jul 12 j 12:45	8° 8 46'29	1°21'10

Attention, astronom	ical year style is used: Th		n astronomical co	ounting style is the year	9775 BCE in historical c	ounting style.	
minimum elong	-9774 Jul 12 j 12:40	8° 8 46'27		morning rise	-9768 Jan 06 j 18:32		
morning rise	-9774 Jul 25 j 00:50	11° 8 34'24		-	-9768 Jan 16 j 23:31	0° M	
	-9774 Aug 09 j 15:07	15° 8			-9768 Apr 06 j 06:53	15° M ₊	
retrograde	-9774 Nov 23 j 22:09	29° 8 03'14		retrograde	-9768 May 16 j 20:45	17°MJ33'13	
opposition	-9773 Jan 23 j 21:53	24° 8 11'27	2°17'02		-9768 Jun 26 j 03:59	15°RM	
min. Earth dist.	-9773 Jan 24 j 18:41	24° 8 04'51	4.31936 AU	opposition	-9768 Jul 15 j 15:13	12°M28'08	-2°04'40
direct	-9773 Mar 27 j 05:13	19° 8 13'30		min. Earth dist.	-9768 Jul 14 j 17:28	12°M35'33	4.07285 AU
	-9773 Jun 27 j 06:16	Π °0		direct	-9768 Sep 11 j 19:47	7°M30'12	
evening set	-9773 Jul 31 j 03:01	7° Ⅱ 17'57			-9768 Nov 22 j 02:59	15°M₊	
max. Earth dist.	-9773 Aug 11 j 10:32	9° Ⅱ 51'32	6.29364 AU	evening set	-9767 Jan 15 j 13:55	26°M37'48	
conjunction	-9773 Aug 12 j 12:15	10° Ⅱ 06'08	1°39'12	conjunction	-9767 Jan 29 j 05:57	29°M47'35	-1°35'03
minimum elong	-9773 Aug 12 j 12:14	10° Ⅱ 06′07	1°39'43	minimum elong	-9767 Jan 29 j 05:54	29°M47'34	1°35'30
morning rise	-9773 Aug 24 j 20:49	12° Ⅲ 54′02			-9767 Jan 30 j 03:21	0° ∡ ¹	
	-9773 Dec 03 j 01:14	0 \circ \mathfrak{s}		max. Earth dist.	-9767 Jan 30 j 13:32	0° ∡ ¹05'54	6.09027 AU
retrograde	-9773 Dec 27 j 05:37	0° © 53'26		morning rise	-9767 Feb 11 j 23:21	2° ₹ ′58′02	
	-9772 Jan 20 j 10:53	30°Ŗ Ⅱ		retrograde	-9767 Jun 20 j 21:51	22° ∡ 25'41	
opposition	-9772 Feb 26 j 15:24	25° Ⅱ 59'55		min. Earth dist.	-9767 Aug 18 j 10:06		4.11980 AU
min. Earth dist.	-9772 Feb 27 j 05:44		4.26284 AU	opposition	-9767 Aug 19 j 01:36	17° ∡ ¹21'52	-2°25'51
direct	-9772 Apr 28 j 05:11	21° Ⅱ 04'48		direct	-9767 Oct 16 j 20:57	12° ∡ ¹20'35	
	-9772 Jul 18 j 12:12	ი _ა ფ			-9766 Feb 15 j 02:24	0°ಕ	
evening set	-9772 Aug 30 j 12:51	9° © 14'28		evening set	-9766 Feb 21 j 09:44	1° る 25'28	
conjunction	-9772 Sep 11 j 23:27	12° © 05'55	1°27'38	conjunction	-9766 Mar 07 j 02:55	4° ට 32'59	-1°32'08
minimum elong	-9772 Sep 11 j 23:31	12° © 05'57	1°28'12	minimum elong	-9766 Mar 07 j 02:58	4° ප 33'01	1°32'42
max. Earth dist.	-9772 Sep 11 j 11:54	11° 9 59'16	6.22477 AU	max. Earth dist.	-9766 Mar 07 j 20:05	4° る 42'47	6.15390 AU
morning rise	-9772 Sep 24 j 11:01	14° © 58'03		morning rise	-9766 Mar 20 j 19:40	7°る40'07	
	-9772 Dec 10 j 13:45	0 $^{\circ}$ Ω		retrograde	-9766 Jul 24 j 11:22	26° る 22'03	
retrograde	-9771 Jan 29 j 19:10	3° £ 39′21		opposition	-9766 Sep 21 j 11:54	21° る 21'23	
	-9771 Mar 22 j 03:43	30° ₹ 5		min. Earth dist.	-9766 Sep 21 j 06:18		4.19357 AU
opposition	-9771 Apr 01 j 07:40	28° 5 42'39	1°44'32	direct	-9766 Nov 20 j 09:23	16° る 17'43	
min. Earth dist.	-9771 Apr 01 j 09:49	28°5541'58	4.18596 AU	_	-9765 Mar 05 j 14:34	0° ≈	
direct	-9771 May 31 j 17:05	23°5549'28		evening set	-9765 Mar 29 j 01:51	5° ≈ 07'43	
	-9771 Aug 04 j 19:12	0°N		. ,.	0765 4 11:16 40	0011105	0057157
evening set	-9771 Oct 01 j 22:14	12° Ω 11′03		conjunction	-9765 Apr 11 j 16:40	8°≈11'05	
agnismation	0771 Oct. 14: 15:56	15° Ω 08'57	0047154	minimum elong	-9765 Apr 11 j 16:45	8°≈11'08	
conjunction minimum elong	-9771 Oct 14 j 15:56 -9771 Oct 14 j 16:00	$15^{\circ} \Omega 08'57$ $15^{\circ} \Omega 08'59$		max. Earth dist.	-9765 Apr 11 j 15:14 -9765 Apr 25 j 05:06	8°≈10'17 11°≈13'09	6.23269 AU
minimum eiong	-9771 Oct 14 j 10.00	15 δ l 08 39	0 46 22	morning rise	-9765 May 12 j 09:26	11 ≈13 09 15°≈	
max. Earth dist.	-9771 Oct 14 j 00:30	15° Ω 11'58	6.14736 AU	retrograde	-9765 Aug 25 j 21:43	13 ≈ 29° ≈ 09'04	
morning rise	-9771 Oct 14 j 21:07	18° Ω 08'26	0.14750 AC	opposition	-9765 Oct 24 j 02:39	24°≈12'16	-0°49'45
morning rise	-9771 Dec 22 j 09:13	0° mp		min. Earth dist.	-9765 Oct 24 j 09:38	24°≈09'56	4.26936 AU
retrograde	-9770 Mar 06 j 13:53	7° mp 31'55		direct	-9765 Dec 24 j 06:09	19° ≈ 08'00	4.20/30/10
opposition	-9770 May 06 j 17:23	2° m/31'19	0°29'40		-9764 Mar 26 j 02:00	0° ∀	
min. Earth dist.	-9770 May 06 j 06:56	2° m) 34'45	4.11325 AU	evening set	-9764 May 01 j 03:45	7°) € 38'34	
	-9770 May 26 j 23:36	30°R Ω		Č	, ,		
direct	-9770 Jul 04 j 22:06	27° Ω 38'14		conjunction	-9764 May 14 j 11:58	10° ¥ 36'34	-0°06'12
	-9770 Aug 12 j 06:46	0° m/y		minimum elong	-9764 May 14 j 11:58	10°) 36′34	0°06'28
desc. node	-9770 Sep 18 j 04:41	5° m 52'37		behind sun begin	-9764 May 14 j 04:18	10°) 32′19	
evening set	-9770 Nov 04 j 22:10	16° Mp 17'01		behind sun end	-9764 May 14 j 19:39	10°) 40′49	
				max. Earth dist.	-9764 May 13 j 17:13	10° ¥ 26′07	6.30032 AU
conjunction	-9770 Nov 18 j 01:43	19° m 21'54	-0°09'02	max. Earth dist. morning rise		13°) 32′47	6.30032 AU
minimum elong	-9770 Nov 18 j 01:41	19° m 21'53	-0°09'02 0°08'52		-9764 May 13 j 17:13 -9764 May 27 j 16:45 -9764 Jun 28 j 11:31	13°) 32'47 20°) 20'02	6.30032 AU
	-9770 Nov 18 j 01:41 -9770 Nov 17 j 18:38	19° Mp 21'53 19° Mp 17'46		morning rise	-9764 May 13 j 17:13 -9764 May 27 j 16:45 -9764 Jun 28 j 11:31 -9764 Sep 01 j 00:08	13°¥32'47 20°¥20'02 0° Υ	6.30032 AU
minimum elong behind sun begin behind sun end	-9770 Nov 18 j 01:41 -9770 Nov 17 j 18:38 -9770 Nov 18 j 08:44	19° Mp 21'53 19° Mp 17'46 19° Mp 26'00	0°08'52	morning rise	-9764 May 13 j 17:13 -9764 May 27 j 16:45 -9764 Jun 28 j 11:31 -9764 Sep 01 j 00:08 -9764 Sep 25 j 13:14	13°¥32'47 20°¥20'02 0°° 0°°Y'57'55	6.30032 AU
minimum elong behind sun begin behind sun end max. Earth dist.	-9770 Nov 18 j 01:41 -9770 Nov 17 j 18:38 -9770 Nov 18 j 08:44 -9770 Nov 19 j 00:58	19° m/21'53 19° m/17'46 19° m/26'00 19° m/35'32		morning rise asc. node retrograde	-9764 May 13 j 17:13 -9764 May 27 j 16:45 -9764 Jun 28 j 11:31 -9764 Sep 01 j 00:08 -9764 Sep 25 j 13:14 -9764 Oct 20 j 02:57	13°¥32'47 20°¥20'02 0°Y 0°Y57'55 30°R¥	
minimum elong behind sun begin behind sun end	-9770 Nov 18 j 01:41 -9770 Nov 17 j 18:38 -9770 Nov 18 j 08:44 -9770 Nov 19 j 00:58 -9770 Dec 01 j 08:42	19° m 21'53 19° m 17'46 19° m 26'00 19° m 35'32 22° m 28'41	0°08'52	morning rise asc. node retrograde opposition	-9764 May 13 j 17:13 -9764 May 27 j 16:45 -9764 Jun 28 j 11:31 -9764 Sep 01 j 00:08 -9764 Sep 25 j 13:14 -9764 Oct 20 j 02:57 -9764 Nov 24 j 07:38	13° ₭32'47 20° ₭20'02 0° Ŷ 0° Ŷ57'55 30° ℞ ₭ 26° ₭04'17	0°29'50
minimum elong behind sun begin behind sun end max. Earth dist. morning rise	-9770 Nov 18 j 01:41 -9770 Nov 17 j 18:38 -9770 Nov 18 j 08:44 -9770 Nov 19 j 00:58 -9770 Dec 01 j 08:42 -9769 Jan 03 j 21:19	19° m 21'53 19° m 17'46 19° m 26'00 19° m 35'32 22° m 28'41 0° Ω	0°08'52	morning rise asc. node retrograde opposition min. Earth dist.	-9764 May 13 j 17:13 -9764 May 27 j 16:45 -9764 Jun 28 j 11:31 -9764 Sep 01 j 00:08 -9764 Sep 25 j 13:14 -9764 Oct 20 j 02:57 -9764 Nov 24 j 07:38 -9764 Nov 25 j 00:02	13° X 32'47 20° X 20'02 0° Y 0° Y 57'55 30° R X 26° X 04'17 25° X 58'56	
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde	-9770 Nov 18 j 01:41 -9770 Nov 17 j 18:38 -9770 Nov 18 j 08:44 -9770 Nov 19 j 00:58 -9770 Dec 01 j 08:42 -9769 Jan 03 j 21:19 -9769 Apr 11 j 21:13	19° m 21'53 19° m 17'46 19° m 26'00 19° m 35'32 22° m 28'41 0° Ω 12° Ω 20'36	0°08'52 6.08663 AU	morning rise asc. node retrograde opposition	-9764 May 13 j 17:13 -9764 May 27 j 16:45 -9764 Jun 28 j 11:31 -9764 Sep 01 j 00:08 -9764 Sep 25 j 13:14 -9764 Oct 20 j 02:57 -9764 Nov 24 j 07:38 -9764 Nov 25 j 00:02 -9763 Jan 25 j 09:34	13° ★32'47 20° ★20'02 0° ♀ 0° ♀57'55 30° ℞ ★ 26° ★04'17 25° ★58'56 21° ★01'08	0°29'50
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition	-9770 Nov 18 j 01:41 -9770 Nov 17 j 18:38 -9770 Nov 18 j 08:44 -9770 Nov 19 j 00:58 -9770 Dec 01 j 08:42 -9769 Jan 03 j 21:19 -9769 Apr 11 j 21:13 -9769 Jun 11 j 08:42	19° m 21'53 19° m 17'46 19° m 26'00 19° m 35'32 22° m 28'41 0° Ω 12° Ω 20'36 7° Ω 16'49	0°08'52 6.08663 AU -0°57'38	morning rise asc. node retrograde opposition min. Earth dist. direct	-9764 May 13 j 17:13 -9764 May 27 j 16:45 -9764 Jun 28 j 11:31 -9764 Sep 01 j 00:08 -9764 Sep 25 j 13:14 -9764 Oct 20 j 02:57 -9764 Nov 24 j 07:38 -9764 Nov 25 j 00:02 -9763 Jan 25 j 09:34 -9763 Apr 19 j 03:18	13°\\$32'47 20°\\$20'02 0°\\$' 0°\\$57'55 30°\R\\$ 26°\\$04'17 25°\\$58'56 21°\\$01'08 0°\\$'	0°29'50
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist.	-9770 Nov 18 j 01:41 -9770 Nov 17 j 18:38 -9770 Nov 18 j 08:44 -9770 Nov 19 j 00:58 -9770 Dec 01 j 08:42 -9769 Jan 03 j 21:19 -9769 Apr 11 j 21:13 -9769 Jun 11 j 08:42 -9769 Jun 10 j 13:18	19° m 21'53 19° m 17'46 19° m 26'00 19° m 35'32 22° m 28'41 0° Ω 12° Ω 20'36 7° Ω 16'49 7° Ω 23'19	0°08'52 6.08663 AU	morning rise asc. node retrograde opposition min. Earth dist.	-9764 May 13 j 17:13 -9764 May 27 j 16:45 -9764 Jun 28 j 11:31 -9764 Sep 01 j 00:08 -9764 Sep 25 j 13:14 -9764 Oct 20 j 02:57 -9764 Nov 24 j 07:38 -9764 Nov 25 j 00:02 -9763 Jan 25 j 09:34	13° ★32'47 20° ★20'02 0° ♀ 0° ♀57'55 30° ℞ ★ 26° ★04'17 25° ★58'56 21° ★01'08	0°29'50
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-9770 Nov 18 j 01:41 -9770 Nov 17 j 18:38 -9770 Nov 18 j 08:44 -9770 Nov 19 j 00:58 -9770 Dec 01 j 08:42 -9769 Jan 03 j 21:19 -9769 Apr 11 j 21:13 -9769 Jun 10 j 13:18 -9769 Aug 08 j 16:32	19° m 21'53 19° m 17'46 19° m 26'00 19° m 35'32 22° m 28'41 0° Ω 12° Ω 20'36 7° Ω 16'49 7° Ω 23'19 2° Ω 22'03	0°08'52 6.08663 AU -0°57'38	morning rise asc. node retrograde opposition min. Earth dist. direct evening set	-9764 May 13 j 17:13 -9764 May 27 j 16:45 -9764 Jun 28 j 11:31 -9764 Sep 01 j 00:08 -9764 Sep 25 j 13:14 -9764 Oct 20 j 02:57 -9764 Nov 24 j 07:38 -9764 Nov 25 j 00:02 -9763 Jan 25 j 09:34 -9763 Apr 19 j 03:18 -9763 Jun 02 j 18:25	13° \cdot 32'47 20° \cdot 20'02 0° \cdot 0° \cdot 57'55 30° \cdot \cdot 26° \cdot 404'17 25° \cdot 58'56 21° \cdot 401'08 0° \cdot 9° \cdot 15'35	0°29'50 4.32345 AU
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist.	-9770 Nov 18 j 01:41 -9770 Nov 17 j 18:38 -9770 Nov 18 j 08:44 -9770 Nov 19 j 00:58 -9770 Dec 01 j 08:42 -9769 Jan 03 j 21:19 -9769 Apr 11 j 21:13 -9769 Jun 11 j 08:42 -9769 Jun 10 j 13:18	19° m 21'53 19° m 17'46 19° m 26'00 19° m 35'32 22° m 28'41 0° Ω 12° Ω 20'36 7° Ω 16'49 7° Ω 23'19	0°08'52 6.08663 AU -0°57'38	morning rise asc. node retrograde opposition min. Earth dist. direct evening set conjunction	-9764 May 13 j 17:13 -9764 May 27 j 16:45 -9764 Jun 28 j 11:31 -9764 Sep 01 j 00:08 -9764 Sep 25 j 13:14 -9764 Oct 20 j 02:57 -9764 Nov 24 j 07:38 -9764 Nov 25 j 00:02 -9763 Jan 25 j 09:34 -9763 Apr 19 j 03:18 -9763 Jun 02 j 18:25	13°\cdot\32'47 20°\cdot\20'02 0°\cdot\30'\cdot\\$57'55 30°\cdot\cdot\32'\cdot\36'\cdo	0°29'50 4.32345 AU 0°46'34
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-9770 Nov 18 j 01:41 -9770 Nov 17 j 18:38 -9770 Nov 18 j 08:44 -9770 Nov 19 j 00:58 -9770 Dec 01 j 08:42 -9769 Jan 03 j 21:19 -9769 Apr 11 j 21:13 -9769 Jun 11 j 08:42 -9769 Aug 08 j 16:32 -9769 Dec 10 j 16:33	19° m 21'53 19° m 17'46 19° m 26'00 19° m 35'32 22° m 28'41 0° • 12° • 20'36 7° • 16'49 7° • 22'03 21° • 218'48	0°08'52 6.08663 AU -0°57'38 4.07033 AU	morning rise asc. node retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-9764 May 13 j 17:13 -9764 May 27 j 16:45 -9764 Jun 28 j 11:31 -9764 Sep 01 j 00:08 -9764 Sep 25 j 13:14 -9764 Oct 20 j 02:57 -9764 Nov 24 j 07:38 -9764 Nov 25 j 00:02 -9763 Jun 25 j 09:34 -9763 Jun 02 j 18:25 -9763 Jun 15 j 17:03 -9763 Jun 15 j 17:03	13°\cdot\32'47 20°\cdot\20'02 0°\cdot\30'\cdot\\$57'55 30°\cdot\cdot\32'\cdot\36'\cdo	0°29'50 4.32345 AU 0°46'34 0°46'38
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-9770 Nov 18 j 01:41 -9770 Nov 17 j 18:38 -9770 Nov 18 j 08:44 -9770 Nov 19 j 00:58 -9770 Dec 01 j 08:42 -9769 Jan 03 j 21:19 -9769 Apr 11 j 21:13 -9769 Jun 10 j 13:18 -9769 Aug 08 j 16:32 -9769 Dec 10 j 16:33	19° m 21'53 19° m 17'46 19° m 26'00 19° m 35'32 22° m 28'41 0° \(\Omega\) 12° \(\Omega\) 20'36 7° \(\Omega\) 16'49 7° \(\Omega\) 22'03 21° \(\Omega\) 18'48 24° \(\Omega\) 27'57	0°08'52 6.08663 AU -0°57'38 4.07033 AU -1°03'34	morning rise asc. node retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-9764 May 13 j 17:13 -9764 May 27 j 16:45 -9764 Jun 28 j 11:31 -9764 Sep 01 j 00:08 -9764 Sep 25 j 13:14 -9764 Oct 20 j 02:57 -9764 Nov 24 j 07:38 -9764 Nov 25 j 00:02 -9763 Jun 25 j 09:34 -9763 Jun 02 j 18:25 -9763 Jun 15 j 17:03 -9763 Jun 15 j 16:58 -9763 Jun 14 j 12:22	13°\cdot\delta247 20°\cdot\delta20'02 0°\cdot\delta20'05 30°\cdot\delta\delta417 25°\cdot\delta58'56 21°\cdot\delta01'08 0°\cdot\delta 9°\cdot\delta15'35 12°\cdot\delta804 12°\cdot\delta802 11°\cdot\delta52'06	0°29'50 4.32345 AU 0°46'34
minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-9770 Nov 18 j 01:41 -9770 Nov 17 j 18:38 -9770 Nov 18 j 08:44 -9770 Nov 19 j 00:58 -9770 Dec 01 j 08:42 -9769 Jan 03 j 21:19 -9769 Apr 11 j 21:13 -9769 Jun 11 j 08:42 -9769 Aug 08 j 16:32 -9769 Dec 10 j 16:33	19° m 21'53 19° m 17'46 19° m 26'00 19° m 35'32 22° m 28'41 0° Ω 12° Ω 20'36 7° Ω 16'49 7° Ω 23'19 2° Ω 22'03 21° Ω 18'48 24° Ω 27'57 24° Ω 27'54	0°08'52 6.08663 AU -0°57'38 4.07033 AU -1°03'34	morning rise asc. node retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-9764 May 13 j 17:13 -9764 May 27 j 16:45 -9764 Jun 28 j 11:31 -9764 Sep 01 j 00:08 -9764 Sep 25 j 13:14 -9764 Oct 20 j 02:57 -9764 Nov 24 j 07:38 -9764 Nov 25 j 00:02 -9763 Jun 25 j 09:34 -9763 Jun 02 j 18:25 -9763 Jun 15 j 17:03 -9763 Jun 15 j 17:03	13°\cdot\32'47 20°\cdot\20'02 0°\cdot\30'\cdot\\$57'55 30°\cdot\cdot\32'\cdot\36'\cdo	0°29'50 4.32345 AU 0°46'34 0°46'38

	nical year style is used: Th						ge 13
retrograde	-9763 Oct 27 j 05:39	2° 8 15'49	n astronomicai co	opposition	-9757 Jun 16 j 10:15	12° £ 23'49	1900112
retrograde	-9763 Dec 05 j 04:26	2 O13 49 30°RΥ		min. Earth dist.	-9757 Jun 15 j 13:27		4.06567 AU
:4:	3	30 K I 27° Υ 23'59	1°39'31			7° £ 28'42	4.00307 AU
opposition	-9763 Dec 26 j 15:59	27° Y 16'58		direct	-9757 Aug 13 j 16:12		
min. Earth dist.	-9763 Dec 27 j 13:56	27 1 10 38 22°\bar{Y}23'22	4.34015 AU	evening set	-9757 Dec 15 j 22:07	26° ≏ 28'32	
direct	-9762 Feb 27 j 04:14	0° 8			0757 D 20 : 10-22	200 0 20100	1900/52
	-9762 May 14 j 07:09			conjunction	-9757 Dec 29 j 10:33	29° ₽ 38'09	
evening set	-9762 Jul 04 j 08:20	10° 8 28'43		minimum elong	-9757 Dec 29 j 10:27	29° ₽ 38'05	1-100/
	07/2 1 1 1/ : 21 51	13° 8 17'24	1025121	E d Ed	-9757 Dec 30 j 23:52	0° ጤ 29° ჲ 58'18	C 0 C 2 O 2 A 1 1
conjunction	-9762 Jul 16 j 21:51	_		max. Earth dist.	-9757 Dec 30 j 20:58		6.06393 AU
minimum elong	-9762 Jul 16 j 21:47	13° 8 17'22		morning rise	-9756 Jan 12 j 01:43	2°M49'12	
max. Earth dist.	-9762 Jul 15 j 14:25		6.33116 AU	. 1	-9756 Mar 09 j 01:38	15°M	
	-9762 Jul 24 j 12:50	15° 8		retrograde	-9756 May 22 j 00:41	22°M42'11	201.0152
morning rise	-9762 Jul 29 j 09:13	16° 8 05'02		opposition	-9756 Jul 20 j 15:19	17°M37'12	
. 1	-9762 Oct 09 j 22:56	0°II		min. Earth dist.	-9756 Jul 19 j 18:10		4.07657 AU
retrograde	-9762 Nov 28 j 13:18	3° Ⅱ 36'44		1.	-9756 Aug 09 j 21:46	15°RM	
.	-9761 Jan 18 j 14:35	30° ₹8	2020120	direct	-9756 Sep 16 j 21:08	12°M38'55	
opposition	-9761 Jan 28 j 14:48				-9756 Oct 24 j 21:48	15° ™	
min. Earth dist.	-9761 Jan 29 j 11:19	28° 8 38'14	4.31426 AU		-9755 Jan 13 j 02:17	0° ∡ ¹	
direct	-9761 Mar 31 j 20:56	23° 8 47'09		evening set	-9755 Jan 20 j 21:33	1° ∡ ¹47'07	
	-9761 Jun 07 j 06:03	0°II				=	
evening set	-9761 Aug 04 j 12:36	11° Ⅱ 51'36		conjunction	-9755 Feb 03 j 13:50	4° ∡ ¹56'41	
		_		minimum elong	-9755 Feb 03 j 13:48	4° ⋌ ¹56'40	
conjunction	-9761 Aug 16 j 21:45		1°39'24	max. Earth dist.	-9755 Feb 04 j 20:13	5° ∡ 14'15 −	6.09822 AU
minimum elong	-9761 Aug 16 j 21:45	14° Ⅱ 39'59	1°39'57	morning rise	-9755 Feb 17 j 07:29	8° ₰ 06'49	
max. Earth dist.	-9761 Aug 15 j 22:32	14° Ⅱ 26'48	6.28586 AU	retrograde	-9755 Jun 25 j 18:15	27° ∡ ¹28'16	
morning rise	-9761 Aug 29 j 06:10	17° Ⅱ 28'11		opposition	-9755 Aug 23 j 22:05	22° ∡ ¹24'48	
	-9761 Oct 30 j 05:44	0ංම		min. Earth dist.	-9755 Aug 23 j 06:22	22° ∡ ³30′11	4.13158 AU
retrograde	-9761 Dec 31 j 23:56	5° © 32'47		direct	-9755 Oct 21 j 19:51	17° ∡ ²23′10	
opposition	-9760 Mar 02 j 11:10		2°20'19		-9754 Jan 28 j 08:25	0°ಕ	
min. Earth dist.	-9760 Mar 03 j 00:11	0° © 34'47	4.25282 AU	evening set	-9754 Feb 26 j 13:57	6° る 25'24	
	-9760 Mar 07 j 14:08	30°RⅡ				_	
direct	-9760 May 02 j 21:23	25° Ⅱ 44'10		conjunction	-9754 Mar 12 j 06:57	9° ට 32'14	
	-9760 Jun 25 j 23:49	0 \circ		minimum elong	-9754 Mar 12 j 07:02	9° ප 32'16	
evening set	-9760 Sep 04 j 00:47	13° © 55'13		max. Earth dist.	-9754 Mar 12 j 22:27	9° ප 41'03	6.16878 AU
				morning rise	-9754 Mar 25 j 23:11	12° る 38'29	
conjunction	-9760 Sep 16 j 11:57	16° © 47'25	1°23'35		-9754 Jul 02 j 00:02	0° ≈	
minimum elong	-9760 Sep 16 j 12:01	16° 9 547'28	1°24'08	retrograde	-9754 Jul 29 j 03:26	1° ≈ 11'52	
max. Earth dist.	-9760 Sep 16 j 01:16		6.21334 AU		-9754 Aug 25 j 00:48	30°Ŗる	
morning rise	-9760 Sep 29 j 00:37	19° 5 540'30		opposition	-9754 Sep 26 j 03:56	26° る 11'45	
	-9760 Nov 16 j 08:48	0 $^{\circ}\Omega$		min. Earth dist.	-9754 Sep 26 j 00:25	26° ප 12'56	4.20998 AU
retrograde	-9759 Feb 03 j 19:18	8° Ω 28'16		direct	-9754 Nov 25 j 06:51	21° る 07'56	
opposition	-9759 Apr 06 j 06:38		1°35'46		-9753 Feb 14 j 17:06	0° ≈	
min. Earth dist.	-9759 Apr 06 j 07:14	3° Ω 30′51	4.17369 AU	evening set	-9753 Apr 02 j 23:12	9° ≈ 53'08	
	-9759 May 06 j 21:06	30°R∽					
direct	-9759 Jun 05 j 11:50	28° © 37'56		conjunction	-9753 Apr 16 j 13:17	12° ≈ 55'32	
	-9759 Jul 04 j 20:34	0 $^{\circ}\Omega$		minimum elong	-9753 Apr 16 j 13:22	12° ≈ 55'34	
	-9759 Sep 27 j 18:48	15° Ω		max. Earth dist.	-9753 Apr 16 j 09:45		6.24939 AU
evening set	-9759 Oct 06 j 14:52	17° Ω 02'11			-9753 Apr 25 j 19:28	15° ≈	
		_		morning rise	-9753 Apr 30 j 00:43	15°≈56′29	
conjunction	-9759 Oct 19 j 10:04	20° Ω 01'14			-9753 Jul 11 j 19:13	0° ∀	
minimum elong	-9759 Oct 19 j 10:08	20°Ω01'16	0°40'57	retrograde	-9753 Aug 30 j 06:13	3°) 44'47	
max. Earth dist.	-9759 Oct 19 j 18:42	20° Ω 06′17	6.13557 AU		-9753 Oct 19 j 12:43	30° R ≈	
morning rise	-9759 Nov 01 j 08:03	23° Ω 01'54		opposition	-9753 Oct 28 j 14:29	28° ≈ 48'27	
	-9759 Dec 02 j 10:34	0° m)		min. Earth dist.	-9753 Oct 28 j 22:17	28° ≈ 45'51	4.28492 AU
retrograde	-9758 Mar 11 j 17:35	12° m /31'16		direct	-9753 Dec 28 j 21:46	23° ≈ 44'14	
opposition	-9758 May 11 j 18:40	7° m 30'13	0°17'20		-9752 Mar 05 j 19:39	0° ∺	
min. Earth dist.	-9758 May 11 j 06:55	7° m 34'04	4.10293 AU	evening set	-9752 May 05 j 17:40	12° ¥ 10′02	
direct	-9758 Jul 09 j 19:08	2° m 37'04		asc. node	-9752 May 08 j 13:30	12°) 47′30	
desc. node	-9758 Jul 28 j 12:49	3° m 12'08		max. Earth dist.	-9752 May 18 j 03:22	14° ∺ 55'11	6.31353 AU
evening set	-9758 Nov 09 j 21:50	21° m 19'19					
				conjunction	-9752 May 19 j 00:32	15° 米 06'56	0°01'28
conjunction	-9758 Nov 23 j 02:33	24° m 25'06		minimum elong	-9752 May 19 j 00:31	15° ¥ 06'56	0°01'15
minimum elong	-9758 Nov 23 j 02:31	24° m 25'04	0°17'18	behind sun begin	-9752 May 18 j 16:22	15° 米 02'25	
max. Earth dist.	-9758 Nov 24 j 02:27	24° m 39'08	6.07865 AU	behind sun end	-9752 May 19 j 08:40	15° 米 11′27	
morning rise	-9758 Dec 06 j 11:01	27° m/32'51		morning rise	-9752 Jun 01 j 03:58	18°) €02'04	
	-9758 Dec 17 j 01:34	0∘ ⊽			-9752 Jul 31 j 05:53	0° Υ	
retrograde	-9757 Apr 17 j 00:35	17° ≏ 27'53		retrograde	-9752 Sep 29 j 20:56	5° Y ′22'49	

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 14 Attention, astronomical year style is used: The year -9752 in astronomical counting style is the year 9753 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	-		unting style is the year	9753 BCE in historical c	ounting style.	8
opposition	-9752 Nov 28 j 17:26	0° Y 29'35		evening set	-9746 Nov 14 j 23:03	26° Mp 25'14	
min. Earth dist.	-9752 Nov 29 j 12:00		4.33324 AU				
	-9752 Dec 02 j 12:38	30° ₹		conjunction	-9746 Nov 28 j 05:18	29° m/32'01	
direct	-9751 Jan 29 j 23:12 -9751 Mar 28 j 09:54	25° ¥ 26'42 0° Ƴ		minimum elong max. Earth dist.	-9746 Nov 28 j 05:15	29° m 32'00	0°25'42 6.06962 AU
evening set	-9751 Mar 28 j 09:34 -9751 Jun 07 j 02:30	13° Y 37'51		max. Earth dist.	-9746 Nov 29 j 09:28 -9746 Nov 30 j 04:52	29° 1 ழ 48'35 0° <u>ட</u>	6.06962 AU
evening set	-9/31 Juli 0/ J 02.30	13 3/31		morning rise	-9746 Nov 30 j 04.32	0 = 2° £ 40'42	
conjunction	-9751 Jun 19 j 23:44	16° Ƴ 29'31	0°52'56	retrograde	-9745 Apr 22 j 07:25	22° £ 38'33	
minimum elong	-9751 Jun 19 j 23:40	16° Y 29'29	0°53'03	opposition	-9745 Jun 21 j 12:53	17° Ω 34'06	-1°20'19
max. Earth dist.	-9751 Jun 18 j 16:48	16° Ƴ 12'19	6.34186 AU	min. Earth dist.	-9745 Jun 20 j 15:42		4.06179 AU
morning rise	-9751 Jul 02 j 17:41	19° Ƴ 19'35		direct	-9745 Aug 18 j 18:11	12° ≏ 38'34	
	-9751 Aug 24 j 04:28	$0^{\circ}S$			-9745 Dec 13 j 22:58	0° M	
retrograde	-9751 Oct 31 j 12:32	6° 8 36'22		evening set	-9745 Dec 21 j 05:06	1°M40'46	
opposition	-9751 Dec 31 j 01:48	1° 8 44'37					
min. Earth dist.	-9750 Jan 01 j 00:18		4.34084 AU	conjunction	-9744 Jan 03 j 18:11	4°M50'35	
	-9750 Jan 14 j 00:32	30° ₹ Υ		minimum elong	-9744 Jan 03 j 18:05	4° ™ 50'32	
direct	-9750 Mar 03 j 14:04	26° Y 44'18		max. Earth dist.	-9744 Jan 05 j 05:05		6.06506 AU
. ,	-9750 Apr 20 j 15:13	0°8		morning rise	-9744 Jan 17 j 10:06	8°M01'48	
evening set	-9750 Jul 08 j 13:42	14° 8 48'50		ratra arada	-9744 Feb 17 j 10:58	15°M	
max. Earth dist.	-9750 Jul 09 j 09:44 -9750 Jul 19 j 19:25	15° 8	6.32703 AU	retrograde opposition	-9744 May 27 j 01:32 -9744 Jul 25 j 15:17	27°M51'46 22°M46'44	2016/02
max. Earth dist.	-9/30 Jul 19 j 19.23	17 01933	0.32703 AU	min. Earth dist.	-9744 Jul 24 j 17:16		4.08258 AU
conjunction	-9750 Jul 21 j 02:22	17° 8 37'16	1°28'51	direct	-9744 Sep 21 j 21:42	17°M47'52	4.00230 AC
minimum elong	-9750 Jul 21 j 02:17	17° 8 37'14		uncet	-9744 Dec 26 j 01:47	0° ₹	
morning rise	-9750 Aug 02 j 12:52	20° 8 24'43	,	evening set	-9743 Jan 26 j 05:08	6° ₹ ¹55'33	
5 5	-9750 Sep 17 j 10:38	0°II		8	,		
retrograde	-9750 Dec 03 j 00:23	8° Ⅱ 00′16		conjunction	-9743 Feb 08 j 21:41	10° ∡ °04'46	-1°37'49
opposition	-9749 Feb 02 j 03:14	3° Ⅱ 08'11	2°23'02	minimum elong	-9743 Feb 08 j 21:40	10° х 04'45	1°38'20
min. Earth dist.	-9749 Feb 03 j 00:19	3° Ⅲ 01'31	4.30563 AU	max. Earth dist.	-9743 Feb 10 j 02:51	10° ∡ "21′36	6.10808 AU
	-9749 Feb 28 j 23:46	30° ₹ 8		morning rise	-9743 Feb 22 j 15:14	13° ≯ 14'21	
direct	-9749 Apr 05 j 07:44	28° 8 10'58			-9743 May 22 j 00:04	ರ∘ರ	
	-9749 May 10 j 09:01	Π °0		retrograde	-9743 Jun 30 j 15:15	2° る 28'43	
evening set	-9749 Aug 08 j 18:33	16° Ⅱ 16'58			-9743 Aug 08 j 22:44	30°Ŗ ⋌ 7	
max. Earth dist.	-9749 Aug 20 j 03:31	18° Ⅱ 52'07	6.27324 AU	opposition	-9743 Aug 28 j 17:54	27° ₹ 25'34	
				min. Earth dist.	-9743 Aug 28 j 04:25		4.14383 AU
conjunction	-9749 Aug 21 j 03:33			direct	-9743 Oct 26 j 20:32	22° ₹ 23'29	
minimum elong	-9749 Aug 21 j 03:33	19°Щ05'49 21° Ц 54'39	1°39'33		-9742 Jan 08 j 05:48	0°る	
morning rise	-9749 Sep 02 j 12:22 -9749 Oct 09 j 23:17	21° ய 34'39		evening set	-9742 Mar 03 j 17:21	11° る 22'54	
retrograde	-9748 Jan 05 j 17:07	10°9506'24		conjunction	-9742 Mar 17 j 10:15	14° る 29'06	-1°25'04
opposition	-9748 Mar 07 j 04:13	5°912'08	2°16'46	minimum elong	-9742 Mar 17 j 10:13	14° 3 29'08	1°25'39
min. Earth dist.	-9748 Mar 07 j 15:59	5°908'23	4.23709 AU	max. Earth dist.	-9742 Mar 17 j 23:51	14° る 36'48	6.18229 AU
direct	-9748 May 07 j 09:44	0°917'36	25 / 05 110	morning rise	-9742 Mar 31 j 01:56	17° る 34'34	0.1022) 110
evening set	-9748 Sep 08 j 10:42	18° © 32'13		Č	-9742 May 30 j 21:46	0° ≈	
•	7 0			retrograde	-9742 Aug 02 j 17:27	6° ≈ 00'08	
conjunction	-9748 Sep 20 j 22:57	21° © 25'35	1°19'03	opposition	-9742 Sep 30 j 19:39	1° ≈ 00'33	-1°39'57
minimum elong	-9748 Sep 20 j 23:02	21° 5 25'37	1°19'36	min. Earth dist.	-9742 Sep 30 j 17:03	1° ≈ 01'26	4.22333 AU
max. Earth dist.	-9748 Sep 20 j 15:34	21° 5 21'18	6.19606 AU		-9742 Oct 08 j 08:30	30°Rる	
morning rise	-9748 Oct 03 j 12:39	24°519'53		direct	-9742 Nov 30 j 01:59	25° る 56'34	
	-9748 Oct 28 j 20:02	0 ° Ω			-9741 Jan 21 j 22:04	0° ≈	
retrograde	-9747 Feb 08 j 19:51	13° Ω 16'13	100 (10 (evening set	-9741 Apr 07 j 20:32	14° ≈ 38'17	
opposition	-9747 Apr 11 j 04:46	8° Ω 18'29	1°26'26		-9741 Apr 09 j 11:37	15° ≈	
min. Earth dist.	-9747 Apr 11 j 04:06	8° Ω 18'42	4.15617 AU	:	0741 A 21:00:42	17020150	0944124
direct	-9747 Jun 10 j 05:08 -9747 Sep 10 j 14:16	3° Ω 25'31 15° Ω		conjunction minimum elong	-9741 Apr 21 j 09:42 -9741 Apr 21 j 09:46	17°≈39'50 17°≈39'52	0°44'24 0°44'50
evening set	-9747 Oct 11 j 08:11	21° Ω 54'27		max. Earth dist.	-9741 Apr 21 j 02:12	17°≈35'38	6.26162 AU
J. J	,,,, occ 11, 00.11	06574/		morning rise	-9741 May 04 j 20:15	20°≈39'55	0.20102 /10
conjunction	-9747 Oct 24 j 04:41	24° Ω 54'49	0°32'51		-9741 Jun 18 j 10:53	0° ∺	
minimum elong	-9747 Oct 24 j 04:44	24° Ω 54'50	0°33'14	retrograde	-9741 Sep 03 j 19:04	8°) €22'37	
max. Earth dist.	-9747 Oct 24 j 14:45	25° Ω 00'42	6.11946 AU	opposition	-9741 Nov 02 j 04:00	3°) €26'49	-0°27'41
morning rise	-9747 Nov 06 j 04:27	27° Ω 56'57		min. Earth dist.	-9741 Nov 02 j 14:35	3° ¥ 23'19	
-	-9747 Nov 15 j 01:34	0° m y			-9741 Nov 30 j 23:37	30° ₹ ≈	
retrograde	-9746 Mar 16 j 20:46	17° m 33'29		direct	-9740 Jan 02 j 16:24	28° ≈ 22'41	
opposition	-9746 May 16 j 20:16	12° m 31'50	0°04'46		-9740 Feb 04 j 16:54	0°) €	
min. Earth dist.	-9746 May 16 j 05:53	12° m 36'35	4.08973 AU	asc. node	-9740 Mar 17 j 13:15	5°) 49′12	
desc. node	-9746 Jun 07 j 02:56	9° m 52'46		evening set	-9740 May 10 j 09:19	16°) 45′42	
direct	-9746 Jul 14 j 16:13	7° m 38'30					

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -9740 in astronomical counting style is the year 9741 BCE in historical counting style. morning rise -9740 May 23 j 15:02 19°**)** 41'49 0°09'12 -9735 Nov 11 i 03:06 2° m 57'22 conjunction -9740 May 23 j 15:01 19°**¥**41'49 0°09'02 -9734 Mar 22 j 01:42 minimum elong retrograde 22° m 37'32 behind sun begin -9740 May 23 j 08:06 19°\ 37'59 -9734 Apr 16 j 20:29 desc. node 21° m 34'56 -9740 May 23 j 21:56 -9734 May 21 j 22:25 behind sun end 19°**)** 45′38 17° **m** $35'26 - 0^{\circ}07'51$ opposition -9740 May 22 j 16:21 19°**¥**29′13 max. Earth dist. -9734 May 21 j 07:15 6.32053 AU min. Earth dist. 17° Mp 40'274.08560 AU -9740 Jun 05 j 17:04 -9734 Jul 19 j 16:49 morning rise 22°**)** 36'07 direct 12° mp 41'55 $0^{\circ}\Upsilon$ -9740 Jul 10 j 15:23 -9734 Nov 13 j 13:25 0∘ಹ 9°**Υ**54'46 retrograde -9740 Oct 04 j 06:44 evening set -9734 Nov 20 j 00:14 1°**2**30′01 5°**Y**01'52 opposition -9740 Dec 03 j 06:26 0°51'03 min. Earth dist. -9740 Dec 04 j 01:22 4°**Υ**55'43 4.33697 AU conjunction -9734 Dec 03 j 07:27 4°**2**37'17 -0°33'51 -9739 Jan 31 j 17:59 30°**₹** minimum elong -9734 Dec 03 j 07:24 4°**£**37'15 0°33'51 29°**米**59'17 direct -9739 Feb 03 j 13:11 max. Earth dist. -9734 Dec 04 j 12:34 4°**£**54'23 6.06899 AU $0^{\circ}\Upsilon$ -9739 Feb 06 j 08:24 morning rise -9734 Dec 16 j 18:18 7°**£**46'26 evening set -9739 Jun 11 j 14:29 18°**Y**09'13 retrograde -9733 Apr 27 j 08:15 27°**-**43'41 max. Earth dist. -9739 Jun 23 j 02:22 20°**Y**42′29 6.34200 AU opposition -9733 Jun 26 j 12:30 22°**△**39'01 -1°30'33 min. Earth dist. -9733 Jun 25 j 13:56 22°**₽**46'39 4.06495 AU conjunction -9739 Jun 24 j 10:17 21°**Y**′00'16 0°59'15 direct -9733 Aug 23 j 16:28 17°**△**43'03 minimum elong -9739 Jun 24 j 10:12 21°**Y**'00'14 0°59'23 -9733 Nov 26 j 08:59 morning rise -9739 Jul 07 j 03:01 23°Y49'48 evening set -9733 Dec 26 j 09:12 6°M45'34 -9739 Aug 04 j 21:06 0°8 retrograde -9739 Nov 05 j 02:30 11°**8**08'11 conjunction -9732 Jan 08 j 22:54 9°M55'19 -1°20'46 opposition -9738 Jan 04 i 16:57 6°**8**16'35 1°54'21 minimum elong -9732 Jan 08 i 22:49 9°ML55'15 1°21'04 min. Earth dist. -9738 Jan 05 i 16:38 6°**8**09'03 4.33750 AU max. Earth dist. -9732 Jan 10 j 09:33 10°M15′32 6.07142 AU direct -9738 Mar 08 i 05:50 1°816'43 morning rise -9732 Jan 22 j 15:08 13°ML06'19 -9738 Jun 23 j 01:54 15°8 -9732 Jan 30 j 20:48 15°M 19°**8**21'27 -9732 Apr 18 j 23:58 0°×7 -9738 Jul 12 j 23:56 evening set -9738 Jul 24 j 04:36 21°**8**52'14 6.32029 AU -9732 May 31 j 23:26 max. Earth dist. 2° 2 51'41 retrograde -9732 Jul 13 j 15:17 30°RM. -9738 Jul 25 j 11:45 22°809'46 1°32'01 -9732 Jul 30 j 11:04 conjunction opposition 27°M46'45 -2°20'00 -9738 Jul 25 j 11:42 22°**8**09'44 -9732 Jul 29 j 14:53 27°ML53'40 4.09143 AU minimum elong 1°32'26 min. Earth dist. -9738 Aug 06 j 21:43 24°857'14 direct -9732 Sep 26 j 20:28 22°M-47'22 morning rise -9738 Aug 29 j 23:32 $0^{\circ}\Pi$ -9732 Dec 05 j 23:39 0°×7 -9738 Dec 07 j 17:07 12°**Ⅲ**37'33 -9731 Jan 31 j 08:12 11°**х** 53′52 retrograde evening set -9737 Feb 06 j 21:49 7°**II**45'19 2°24'53 opposition 7°**Д**39'08 4.29621 AU -9737 Feb 07 j 17:17 -9731 Feb 14 j 01:02 15°**₹**02'43 -1°38'05 min. Earth dist. conjunction -9731 Feb 14 j 01:02 direct -9737 Apr 09 j 22:41 2°**∏**48'33 minimum elong 15°**✓**02'43 1°38'37 -9731 Feb 15 j 04:51 evening set -9737 Aug 13 j 05:53 20°**I**I56′01 max. Earth dist. 15°**≯**18'43 6.11850 AU morning rise -9731 Feb 27 j 18:26 18°**∡**11'45 conjunction -9737 Aug 25 j 15:00 23°II45'20 1°38'00 -9731 Apr 24 j 21:26 0°궁 -9737 Aug 25 j 15:02 23°**Ⅱ**45'20 1°38'33 retrograde -9731 Jul 05 j 07:04 7°る19'18 minimum elong max. Earth dist. -9737 Aug 24 j 18:02 23°**Ⅲ**33′20 6.26209 AU -9731 Sep 02 j 09:32 2°る16'37 -2°18'48 opposition -9737 Sep 06 j 24:00 26°**Ⅲ**34'45 min. Earth dist. -9731 Sep 01 j 21:08 2°る20'51 4.15482 AU morning rise 30°₽**✓** -9737 Sep 22 j 06:24 0ಂಣ -9731 Sep 19 j 17:52 -9736 Jan 10 j 16:28 14°953'00 -9731 Oct 31 j 14:48 27°**х** 14′11 retrograde direct -9736 Mar 12 j 02:49 -9731 Dec 12 j 22:14 0°정 opposition 9°958'25 2°12'09 min. Earth dist. -9736 Mar 12 j 13:31 9°**©**55'01 4.22507 AU evening set -9730 Mar 08 j 16:40 16°る11'31 direct -9736 May 12 j 04:50 5°9504'18 -9730 Mar 22 i 09:10 evening set -9736 Sep 13 i 01:36 23°9520'57 conjunction 19°る17'08 -1°20'48 minimum elong -9730 Mar 22 i 09:15 19°る17'11 1°21'22 -9736 Sep 25 j 14:40 26°915'13 1°13'50 max. Earth dist. -9730 Mar 22 i 18:02 19°る22'10 6.19292 AU conjunction -9736 Sep 25 i 14:45 26°915'15 1°14'23 -9730 Apr 05 j 00:29 22°る21'59 minimum elong morning rise -9736 Sep 25 j 08:52 26°©11'51 6.18450 AU -9730 May 10 j 09:04 0°≈ max. Earth dist. -9736 Oct 08 j 05:43 29°910'35 -9730 Aug 07 j 06:42 10°≈41'22 morning rise retrograde -9730 Oct 05 j 08:36 -9736 Oct 11 j 19:43 $0^{\circ}\Omega$ opposition 5°≈42'20 -1°31'12 -9736 Dec 29 j 00:13 15°€ min. Earth dist. -9730 Oct 05 j 08:57 5°≈42'12 4.23253 AU retrograde -9735 Feb 13 j 20:54 18°**Ω**13′08 direct -9730 Dec 04 j 20:24 0°≈38'09 -9735 Apr 02 j 09:57 15°R€ -9729 Mar 23 j 21:51 15°≈ -9735 Apr 16 j 06:12 13°**Ω**14'51 1°16'11 -9729 Apr 12 j 15:03 19°**≈**17'57 opposition evening set -9735 Apr 16 j 02:20 13°**Ω**16'06 4.14609 AU min. Earth dist. -9735 Jun 15 j 01:27 8°**Ω**22'00 -9729 Apr 26 j 03:38 direct conjunction 22°≈18'57 -0°37'20 15°€ -9735 Aug 21 j 06:18 minimum elong -9729 Apr 26 j 03:41 22°≈18'59 0°37'44 evening set -9735 Oct 16 j 04:00 26°**Ω**52'57 max. Earth dist. -9729 Apr 25 j 18:31 22°≈13'51 6.26891 AU morning rise -9729 May 09 j 13:05 25°≈18'20 conjunction -9735 Oct 29 j 02:00 29°**Ω**54'16 0°24'50 -9729 May 31 j 02:49 0°**)**€ retrograde minimum elong -9735 Oct 29 j 02:03 29°**Ω**54'17 0°25'10 -9729 Sep 08 j 05:12 12°**¥**57′20 -9735 Oct 29 j 11:48 -9729 Nov 06 j 16:01 8°\cdot\02'02 -0°16'32 opposition max. Earth dist. -9735 Oct 29 j 16:30 0° Mp 02'45 6.11203 AU -9729 Nov 07 j 03:25 7°**¥**58'16 4.29980 AU min. Earth dist.

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -9728 in astronomical counting style is the year 9729 BCE in historical counting style. -9728 Jan 07 j 06:22 2°\ 58'01 -9723 Nov 02 j 22:43 4° m 50'52 0°17'00 direct minimum elong -9728 Jan 26 j 14:48 3°¥32'06 -9723 Nov 03 j 14:45 6.10625 AU asc node max. Earth dist. 5° m 00'15 -9728 May 15 j 00:04 21°¥19'59 -9723 Nov 16 j 01:21 evening set 7° m 54'52 morning rise -9722 Feb 24 j 14:39 max. Earth dist. -9728 May 27 j 02:48 24°**₭**01'15 6.32268 AU 26° Tp 11'52 desc. node -9722 Mar 27 j 03:12 retrograde 27° m 37'55 conjunction -9728 May 28 j 04:23 24°**)** 15'29 0°16'46 opposition -9722 May 26 j 22:45 22° m 35'22 -0°20'20 0°16'39 minimum elong -9728 May 28 j 04:21 24° **€** 15′28 min. Earth dist. -9722 May 26 j 05:30 22° Mp 41'06 4.08223 AU -9728 Jun 10 j 05:19 27°\ 09'13 -9722 Jul 24 j 13:36 morning rise direct 17° mp 41'37 $0^{\circ}\Upsilon$ -9728 Jun 23 j 05:36 -9722 Oct 27 j 06:06 0∘ಹ retrograde -9728 Oct 08 j 19:53 14°**Y**27'30 evening set -9722 Nov 25 j 00:42 6°**£**31'21 opposition -9728 Dec 07 j 20:10 9°**Y**34'53 1°01'22 -9722 Dec 08 j 09:01 9°**2**39'05 -0°41'38 min. Earth dist. -9728 Dec 08 j 16:53 9°**Y**28′11 4.33643 AU conjunction direct -9727 Feb 08 j 05:09 4°**Y**32'36 minimum elong -9722 Dec 08 j 08:57 9°**₽**39'03 0°41'40 evening set -9727 Jun 16 j 02:32 22°Y42'21 max. Earth dist. -9722 Dec 09 j 15:25 9°**£**56'57 6.06821 AU morning rise -9722 Dec 21 j 20:47 12°**△**48'40 conjunction -9727 Jun 28 j 21:12 25°**Y**33'00 1°05'11 -9721 Mar 20 j 21:27 0°M minimum elong -9727 Jun 28 j 21:07 25°**Y**32'57 1°05'22 retrograde -9721 May 02 j 09:37 2°M45'36 max. Earth dist. -9727 Jun 27 j 13:55 25°**Y**15'32 6.33870 AU -9721 Jun 13 j 15:27 morning rise -9727 Jul 11 j 12:42 28°Y22'09 opposition -9721 Jul 01 j 11:05 27°**♀**40'45 -1°40'03 -9727 Jul 18 j 22:01 0°8 min. Earth dist. -9721 Jun 30 j 13:14 27°**≏**48′09 4.06694 AU -9727 Oct 19 j 05:49 15°8 direct -9721 Aug 28 j 15:32 22°**-**44′20 -9727 Nov 09 i 16:09 15°**8**43'11 -9721 Nov 06 i 09:51 0°M retrograde -9727 Dec 01 i 05:19 15°R₩ -9721 Dec 31 j 12:42 11°M47'50 evening set -9726 Jan 09 j 09:26 10°**8**51'34 2°01'00 opposition min. Earth dist. -9726 Jan 10 j 07:42 10°**8**44'28 4.33209 AU -9720 Jan 14 i 03:04 14°ML57'38 -1°25'13 conjunction -9720 Jan 14 j 02:59 direct -9726 Mar 12 j 20:09 5°**8**52'09 minimum elong 14°M.57'35 1°25'35 -9720 Jan 14 j 07:08 -9726 Jun 04 j 22:40 15°8 15°M. -9726 Jul 17 j 11:24 23°**8**57'21 -9720 Jan 15 j 13:59 max. Earth dist. 15°M17'59 6 07589 AU evening set -9720 Jan 27 j 19:39 18°M08'32 morning rise -9726 Jul 29 j 22:23 26°845'34 1°34'38 -9720 Mar 23 j 09:15 conjunction 0°×7 -9720 Jun 05 j 20:25 -9726 Jul 29 j 22:20 26°**8**45'32 1°35'05 retrograde 7°**х** 50′00 minimum elong -9720 Aug 03 j 10:47 max. Earth dist. -9726 Jul 28 j 16:45 26°**8**28'50 6.31309 AU min. Earth dist. 2°**≯**52'02 4.09818 AU -9720 Aug 04 j 06:27 -9726 Aug 11 j 07:49 29°**8**33'05 2°\$\square\$45'19 -2°22'59 morning rise opposition -9726 Aug 13 j 07:54 -9720 Aug 25 j 15:55 $0^{\circ}\Pi$ 30°RM -9726 Dec 12 j 12:53 -9720 Oct 01 j 16:56 retrograde 17°**Ⅱ**18′02 direct 27°M45'31 -9725 Feb 11 j 17:56 opposition 12°**I**25'32 2°25'48 -9720 Nov 08 j 00:45 0°×7 -9719 Feb 05 j 11:35 min. Earth dist. -9725 Feb 12 j 12:56 12°**Ⅱ**19'31 4.28774 AU evening set 16°**∡**°51'43 direct -9725 Apr 14 j 17:03 7°**Ⅱ**29'11 -9725 Aug 17 j 18:01 25°**Ⅲ**37'17 conjunction -9719 Feb 19 j 04:26 20°**∡**100'15 -1°37'40 evening set 6.25294 AU max. Earth dist. -9725 Aug 29 j 08:02 28°**Ⅱ**16'00 minimum elong -9719 Feb 19 j 04:27 20°**₹**00'15 1°38'12 max. Earth dist. -9719 Feb 20 j 04:30 20°**≯**14'04 6.12677 AU -9725 Aug 30 j 03:18 28°**II**27'02 1°36'21 -9719 Mar 04 j 21:54 23°**х** 08'54 conjunction morning rise -9725 Aug 30 j 03:19 28°**Ⅲ**27′03 -9719 Apr 04 j 23:22 0°궁 minimum elong 1°36'55 -9725 Sep 05 j 21:46 -9719 Jul 10 j 00:03 12°る10'33 0ಂತಾ retrograde -9725 Sep 11 j 12:49 -9719 Sep 07 j 01:43 7°る08'18 -2°14'35 morning rise 1°9517'02 opposition retrograde -9724 Jan 15 i 13:51 19°9540'45 min. Earth dist. -9719 Sep 06 i 15:32 7°る11'47 4.16370 AU opposition -9724 Mar 17 i 01:53 14°9545'38 2°06'35 direct -9719 Nov 05 i 11:40 2°る05'30 min. Earth dist. -9724 Mar 17 i 09:28 14°5643'12 4.21583 AU evening set -9718 Mar 13 j 16:31 21°る01'28 direct -9724 May 16 j 23:05 9°951'46 evening set -9724 Sep 17 j 16:23 28°909'17 -9718 Mar 27 j 08:57 24° **ප්**06'41 -1°15'56 conjunction -9724 Sep 25 j 15:46 $0^{\circ}\Omega$ -9718 Mar 27 j 09:02 24°₹06'44 1°16'28 minimum elong -9718 Mar 27 j 16:23 24°**る**10'53 6.20195 AU max. Earth dist. -9724 Sep 30 j 06:31 1°Ω04'20 1°08'07 -9718 Apr 09 j 23:34 27°る10'54 conjunction morning rise minimum elong -9724 Sep 30 j 06:36 1°Ω04'23 1°08'39 -9718 Apr 22 j 16:02 0°22 -9718 Jul 27 j 01:40 max. Earth dist. -9724 Sep 30 j 04:30 1°**Ω**03'10 6.17594 AU 15°≈ -9724 Oct 12 j 22:39 4°Ω00'36 -9718 Aug 11 j 20:38 15°≈24'43 morning rise retrograde -9724 Dec 03 j 09:34 15°€ -9718 Aug 27 j 13:04 15°R≈ -9723 Feb 18 j 23:26 23°**Ω**08′08 -9718 Oct 09 j 22:41 retrograde opposition 10°≈26'17 -1°21'46 18°**Ω**09'17 1°05'24 -9718 Oct 10 j 00:20 opposition -9723 Apr 21 j 07:02 min. Earth dist. 10°≈25'44 4.24073 AU min. Earth dist. -9723 Apr 21 j 02:14 18°**Ω**10'51 4.13857 AU direct -9718 Dec 09 j 13:34 5°≈22'05 -9723 May 17 j 18:58 15°Ŗ**Ω** -9717 Mar 05 j 13:37 15°≈ direct -9723 Jun 19 j 23:47 13°**Ω**16′27 evening set -9717 Apr 17 j 10:28 24°≈00'09 -9723 Jul 22 j 19:13 15°€ -9723 Oct 13 j 03:47 0° m conjunction -9717 Apr 30 j 22:02 27°≈00'31 -0°29'55 evening set -9723 Oct 20 j 23:28 1° Mp 48'42 minimum elong -9717 Apr 30 j 22:05 27°**≈**00'33 0°30'18 -9717 Apr 30 j 09:06 26°≈53'17 6.27572 AU max. Earth dist. -9723 Nov 02 j 22:41 4° m 50'51 0°16'41 -9717 May 14 j 06:40 29°≈59'17 conjunction morning rise

-	omena of Jupiter fro		_			_	ige I7
Attention, astronom	nical year style is used: Th	-	n astronomical co				
	-9717 May 14 j 07:58	0°) {		conjunction	-9711 Nov 07 j 18:02	9° m 43'53	0°08'33
retrograde	-9717 Sep 12 j 18:11	17° ¥ 35′01		minimum elong	-9711 Nov 07 j 18:04	9° m 43'54	0°08'49
opposition	-9717 Nov 11 j 05:50	12° ¥ 40′11		behind sun begin	-9711 Nov 07 j 11:02	9° m 39'47	
min. Earth dist.	-9717 Nov 11 j 19:09		4.30474 AU	behind sun end	-9711 Nov 08 j 01:05	9° m ,48'00	
asc. node	-9717 Dec 06 j 06:15	9°) 36′58		max. Earth dist.	-9711 Nov 08 j 11:57	9° m 54'23	6.10058 AU
direct	-9716 Jan 11 j 23:34	7° ¥ 36′21		morning rise	-9711 Nov 20 j 22:02	12° m 48'44	
evening set	-9716 May 19 j 15:24	25° ¥ 57′02		desc. node	-9710 Jan 04 j 17:04	22°m/38'32	
					-9710 Feb 18 j 19:05	0∘ ⊽	
conjunction	-9716 Jun 01 j 18:33	28° 米 51'54		retrograde	-9710 Apr 01 j 04:20	2° ≏ 34'46	
minimum elong	-9716 Jun 01 j 18:31	28° ¥ 51′52	0°24'17		-9710 May 12 j 11:00	30°R, MD	
max. Earth dist.	-9716 May 31 j 17:19	28° ∺ 37'51	6.32557 AU	opposition	-9710 May 31 j 21:16	27° Mp 31'45	-0°32'29
	-9716 Jun 06 j 20:54	0° Y		min. Earth dist.	-9710 May 31 j 03:50	27° m 37'34	4.07805 AU
morning rise	-9716 Jun 14 j 18:00	1° Y 44'56		direct	-9710 Jul 29 j 10:33	22° Mg 37'40	
retrograde	-9716 Oct 13 j 07:56	19° Ƴ 02'46			-9710 Oct 07 j 17:43	0∘ ত	
opposition	-9716 Dec 12 j 10:55	14° Ƴ 10′27	1°11'26	evening set	-9710 Nov 30 j 00:01	11° ≏ 29'33	
min. Earth dist.	-9716 Dec 13 j 07:09	14° Y 03'55	4.33738 AU				
direct	-9715 Feb 12 j 19:55	9° Ƴ 08'37		conjunction	-9710 Dec 13 j 09:25	14° ≏ 37'50	-0°48'59
evening set	-9715 Jun 20 j 15:10	27° Y °17'32		minimum elong	-9710 Dec 13 j 09:20	14° ≏ 37'47	0°49'04
max. Earth dist.	-9715 Jul 02 j 00:17	29° Y 49'41	6.33760 AU	max. Earth dist.	-9710 Dec 14 j 17:05	14° ≙ 56′24	6.06591 AU
	-9715 Jul 02 j 18:44	0° 8		morning rise	-9710 Dec 26 j 22:06	17° ≏ 47'52	
					-9709 Feb 21 j 22:19	0° M	
conjunction	-9715 Jul 03 j 08:22	0° 8 07'37	1°10'48	retrograde	-9709 May 07 j 09:05	7° M 44'50	
minimum elong	-9715 Jul 03 j 08:17	0° 8 07'35	1°11'01	min. Earth dist.	-9709 Jul 05 j 10:06		4.06706 AU
morning rise	-9715 Jul 15 j 22:52	2° 8 56'22		opposition	-9709 Jul 06 j 08:02	2°M39'53	-1°48'43
S	-9715 Sep 14 j 10:46	15° 8		11	-9709 Jul 27 j 02:41	30° ₽ Ω	
retrograde	-9715 Nov 14 j 08:21	20° 8 19'27		direct	-9709 Sep 02 j 11:16	27° ₽ 43'02	
opposition	-9714 Jan 14 j 02:38	_	2°06'55		-9709 Oct 09 j 20:04	0°M	
min. Earth dist.	-9714 Jan 15 j 01:09	_	4.32919 AU		-9709 Dec 28 j 19:27	15°M	
min. Burtir dist.	-9714 Jan 17 j 18:08	15°R と		evening set	-9708 Jan 05 j 15:58	16°M48'28	
direct	-9714 Mar 17 j 13:19	10° 8 28'50		evening sec	7700 Juli 05 j 15.50	10 110 10 20	
direct	-9714 May 13 j 12:16	15° 8		conjunction	-9708 Jan 19 j 06:46	19°M58'21	-1°28'59
evening set	-9714 Jul 21 j 22:09	28° 8 33'26		minimum elong	-9708 Jan 19 j 06:42		1°29'23
evening set	-9714 Jul 28 j 08:10	0°Ⅱ		max. Earth dist.	-9708 Jan 20 j 15:13		6.07820 AU
max. Earth dist.	-9714 Aug 02 j 05:01	1° Ⅱ 05'58	6.30854 AU	morning rise	-9708 Feb 01 j 23:51	23°M09'16	0.07620 AC
max. Earm dist.	-9/14 Aug 02 J 03.01	1 щ05 38	0.30834 AU	morning rise	-	23 IIC09 10 0° √	
agniumation	0714 Aug 02 : 00:25	1° Ⅱ 21'33	1°36'39	rotro ara do	-9708 Mar 03 j 14:23	0 x . 12° ∡ '47'32	
conjunction	-9714 Aug 03 j 08:35	1° П 21'33		retrograde	-9708 Jun 10 j 16:47		4 10250 ATT
minimum elong	-9714 Aug 03 j 08:33		1°37'07	min. Earth dist.	-9708 Aug 08 j 06:39	7° 🗷 49'23	4.10259 AU
morning rise	-9714 Aug 15 j 17:30	4° Ⅱ 09'02		opposition	-9708 Aug 09 j 01:10	7° 🖈 43'02	-2°24'54
retrograde	-9714 Dec 17 j 05:38	21° II 57'50	2025145	direct	-9708 Oct 06 j 14:17	2° × ⁷ 42'43	
opposition	-9713 Feb 16 j 13:31	17° Ⅱ 05'01	2°25'45	evening set	-9707 Feb 10 j 14:49	21° х 49'27	
min. Earth dist.	-9713 Feb 17 j 06:04	16° Ⅱ 59'47	4.28190 AU			=	
direct	-9713 Apr 19 j 09:04	12° Ⅱ 09'07		conjunction	-9707 Feb 24 j 08:04	24° ₹ '57'51	
_	-9713 Aug 20 j 23:22	0°50		minimum elong	-9707 Feb 24 j 08:06	24° ₹ '57'52	1°37'04
evening set	-9713 Aug 22 j 05:11	0° © 16'56		max. Earth dist.	-9707 Feb 25 j 07:29		6.13310 AU
				morning rise	-9707 Mar 10 j 01:16	28° ∡ ¹06'08	
conjunction	-9713 Sep 03 j 14:38	3° © 07'02	1°34'04		-9707 Mar 18 j 10:43	0°ಕ	
minimum elong	-9713 Sep 03 j 14:40	3° 5 07'04	1°34'39	retrograde	-9707 Jul 14 j 18:22	17° る 02'23	
max. Earth dist.	-9713 Sep 02 j 21:40	2° 9 57'18	6.24625 AU	opposition	-9707 Sep 11 j 18:18	12° る 00'39	
morning rise	-9713 Sep 16 j 00:37	5° 9 57'32		min. Earth dist.	-9707 Sep 11 j 09:34		4.17132 AU
retrograde	-9712 Jan 20 j 11:42	24° © 25'58		direct	-9707 Nov 10 j 07:29	6° る 57'35	
opposition	-9712 Mar 21 j 23:34	19° © 30'21	2°00'12	evening set	-9706 Mar 18 j 16:50	25° る 52'19	
min. Earth dist.	-9712 Mar 22 j 06:18	19° © 28'11	4.20842 AU				
direct	-9712 May 21 j 18:34	14° © 36'41		conjunction	-9706 Apr 01 j 08:47	28° る 57'03	-1°10'30
	-9712 Sep 09 j 12:07	$0^{\circ}\Omega$		minimum elong	-9706 Apr 01 j 08:52	28° る 57'06	1°11'02
evening set	-9712 Sep 22 j 05:57	2° Ω 54'37		max. Earth dist.	0506 4 01:10 44	200750116	6.21033 AU
evening sec	7/12 Sep 22 j 03.57	2 003437		max. Earth dist.	-9706 Apr 01 j 12:44	28°03916	0.21033710
evening sec	7/12 Sep 22 j 05.57	2 063437		max. Earth dist.	-9706 Apr 06 j 00:20	28°€539'16	0.21033710
conjunction	-9712 Oct 04 j 21:07	5° Ω 50'27	1°02'01	morning rise			0.21033 110
			1°02'01 1°02'30		-9706 Apr 06 j 00:20	0° ≈	0.21033 110
conjunction	-9712 Oct 04 j 21:07	5° Ω 50'27			-9706 Apr 06 j 00:20 -9706 Apr 14 j 22:59	0° ≈ 2° ≈ 00'43	0.21033 110
conjunction minimum elong	-9712 Oct 04 j 21:07 -9712 Oct 04 j 21:12	5° Ω 50'27 5° Ω 50'30	1°02'30	morning rise	-9706 Apr 06 j 00:20 -9706 Apr 14 j 22:59 -9706 Jun 18 j 17:48	0°≈ 2°≈00'43 15°≈	
conjunction minimum elong max. Earth dist.	-9712 Oct 04 j 21:07 -9712 Oct 04 j 21:12 -9712 Oct 04 j 21:08	5° N 50'27 5° N 50'30 5° N 50'27	1°02'30	morning rise	-9706 Apr 06 j 00:20 -9706 Apr 14 j 22:59 -9706 Jun 18 j 17:48 -9706 Aug 16 j 10:13	0°≈ 2°≈00'43 15°≈ 20°≈09'04	
conjunction minimum elong max. Earth dist.	-9712 Oct 04 j 21:07 -9712 Oct 04 j 21:12 -9712 Oct 04 j 21:08 -9712 Oct 17 j 14:35	5°N50'27 5°N50'30 5°N50'27 8°N47'37	1°02'30	morning rise retrograde opposition	-9706 Apr 06 j 00:20 -9706 Apr 14 j 22:59 -9706 Jun 18 j 17:48 -9706 Aug 16 j 10:13 -9706 Oct 14 j 13:27	0°≈ 2°≈00'43 15°≈ 20°≈09'04 15°≈11'05	-1°11'43
conjunction minimum elong max. Earth dist. morning rise	-9712 Oct 04 j 21:07 -9712 Oct 04 j 21:12 -9712 Oct 04 j 21:08 -9712 Oct 17 j 14:35 -9712 Nov 14 j 07:12	5°\$\Omega\)50'27 5°\$\Omega\)50'30 5°\$\Omega\)50'27 8°\$\Omega\)47'37 15°\$\Omega\)	1°02'30	morning rise retrograde opposition	-9706 Apr 06 j 00:20 -9706 Apr 14 j 22:59 -9706 Jun 18 j 17:48 -9706 Aug 16 j 10:13 -9706 Oct 14 j 13:27 -9706 Oct 14 j 16:31	0°≈ 2°≈00'43 15°≈ 20°≈09'04 15°≈11'05 15°≈10'04	-1°11'43
conjunction minimum elong max. Earth dist. morning rise retrograde	-9712 Oct 04 j 21:07 -9712 Oct 04 j 21:12 -9712 Oct 04 j 21:08 -9712 Oct 17 j 14:35 -9712 Nov 14 j 07:12 -9711 Feb 23 j 21:54	5° \$\Omega 50'27 5° \$\Omega 50'30 5° \$\Omega 50'27 8° \$\Omega 47'37 15° \$\Omega 27° \$\Omega 59'33	1°02'30 6.16859 AU	morning rise retrograde opposition min. Earth dist.	-9706 Apr 06 j 00:20 -9706 Apr 14 j 22:59 -9706 Jun 18 j 17:48 -9706 Aug 16 j 10:13 -9706 Oct 14 j 13:27 -9706 Oct 14 j 16:31 -9706 Oct 15 j 22:32	0°≈ 2°≈00'43 15°≈ 20°≈09'04 15°≈11'05 15°≈10'04 15°R≈	-1°11'43
conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-9712 Oct 04 j 21:07 -9712 Oct 04 j 21:12 -9712 Oct 04 j 21:08 -9712 Oct 17 j 14:35 -9712 Nov 14 j 07:12 -9711 Feb 23 j 21:54 -9711 Apr 26 j 05:37 -9711 Apr 25 j 22:24	5° \$\Omega 50'27 5° \$\Omega 50'30 5° \$\Omega 50'27 8° \$\Omega 47'37 15° \$\Omega 27^* \$\Omega 59'33 23° \$\Omega 000'09	1°02'30 6.16859 AU 0°54'18	morning rise retrograde opposition min. Earth dist.	-9706 Apr 06 j 00:20 -9706 Apr 14 j 22:59 -9706 Jun 18 j 17:48 -9706 Aug 16 j 10:13 -9706 Oct 14 j 13:27 -9706 Oct 14 j 16:31 -9706 Oct 15 j 22:32 -9706 Dec 14 j 08:18	0°≈ 2°≈00'43 15°≈ 20°≈09'04 15°≈11'05 15°≈10'04 15°R≈ 10°≈06'47	-1°11'43
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-9712 Oct 04 j 21:07 -9712 Oct 04 j 21:12 -9712 Oct 04 j 21:08 -9712 Oct 17 j 14:35 -9712 Nov 14 j 07:12 -9711 Feb 23 j 21:54 -9711 Apr 26 j 05:37 -9711 Apr 25 j 22:24 -9711 Jun 24 j 17:57	5° \$\alpha 50'27 5° \$\alpha 50'30 5° \$\alpha 50'27 8° \$\alpha 47'37 15° \$\alpha 27° \$\alpha 59'33 23° \$\alpha 00'09 23° \$\alpha 02'29 18° \$\alpha 07'17	1°02'30 6.16859 AU 0°54'18	morning rise retrograde opposition min. Earth dist. direct	-9706 Apr 06 j 00:20 -9706 Apr 14 j 22:59 -9706 Jun 18 j 17:48 -9706 Aug 16 j 10:13 -9706 Oct 14 j 13:27 -9706 Oct 14 j 16:31 -9706 Oct 15 j 22:32 -9706 Dec 14 j 08:18 -9705 Feb 11 j 03:33 -9705 Apr 22 j 06:05	0°≈ 2°≈00'43 15°≈ 20°≈09'04 15°≈11'05 15°≈10'04 15°R≈ 10°≈06'47 15°≈	-1°11'43
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-9712 Oct 04 j 21:07 -9712 Oct 04 j 21:12 -9712 Oct 04 j 21:08 -9712 Oct 17 j 14:35 -9712 Nov 14 j 07:12 -9711 Feb 23 j 21:54 -9711 Apr 26 j 05:37 -9711 Apr 25 j 22:24	5° \$\lambda 50' 27 5° \$\lambda 50' 30 5° \$\lambda 50' 27 8° \$\lambda 47' 37 15° \$\lambda 27° \$\lambda 59' 33 23° \$\lambda 000' 09 23° \$\lambda 02' 29	1°02'30 6.16859 AU 0°54'18	morning rise retrograde opposition min. Earth dist. direct	-9706 Apr 06 j 00:20 -9706 Apr 14 j 22:59 -9706 Jun 18 j 17:48 -9706 Aug 16 j 10:13 -9706 Oct 14 j 13:27 -9706 Oct 14 j 16:31 -9706 Oct 15 j 22:32 -9706 Dec 14 j 08:18 -9705 Feb 11 j 03:33	0°≈ 2°≈00'43 15°≈ 20°≈09'04 15°≈11'05 15°≈10'04 15°R≈ 10°≈06'47 15°≈ 28°≈42'43	-1°11'43

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -9705 in astronomical counting style is the year 9706 BCE in historical counting style. -9705 May 05 i 16:46 1°**)**(42'23 -0°22'17 direct -9699 Jun 29 i 15:06 23°**Ω**03′18 conjunction -9705 May 05 j 16:49 1°\ 42'24 0°22'37 -9699 Sep 06 j 03:04 0° m minimum elong max. Earth dist. -9705 May 05 j 03:13 1°**H** 34'49 -9699 Oct 30 j 14:52 11° mp 40'17 6.28375 AU evening set -9705 May 19 j 00:08 4° **)** 40'20 morning rise -9705 Sep 17 j 06:15 -9699 Nov 12 j 16:52 retrograde 22°**)** 12'13 conjunction 14° **m**) 44'18 0°00'07 20°**)** 54′50 -9705 Oct 15 j 15:46 -9699 Nov 12 j 16:53 asc. node minimum elong 14° Mp 44'18 0°00'20 -9699 Nov 12 j 08:43 opposition -9705 Nov 15 j 19:41 17°**)(** 17'47 0°06'21 behind sun begin 14° m 39'32 min. Earth dist. -9705 Nov 16 j 09:48 17°**X** 13'10 4.31162 AU behind sun end -9699 Nov 13 j 01:03 14° m 49'04 direct -9704 Jan 16 j 16:01 12°**)** 14′10 desc. node -9699 Nov 13 j 09:47 14° m 54'13 $0^{\circ}\Upsilon$ -9704 May 21 j 19:12 max. Earth dist. -9699 Nov 13 j 13:41 14° Mp 56'30 6.09111 AU $0^{\circ} \Upsilon 32'32$ evening set -9704 May 24 j 06:16 morning rise -9699 Nov 25 j 22:18 17° m 50'13 -9704 Jun 05 j 04:20 -9698 Jan 21 j 19:51 max. Earth dist. 3°**Υ**11'14 6.33046 AU 0°Ω -9698 Apr 06 j 08:50 retrograde 7°**△**40'20 conjunction -9704 Jun 06 j 07:55 3° Y26'350°31'47 opposition -9698 Jun 05 j 22:48 2°**2**37'00 -0°44'46 minimum elong -9704 Jun 06 j 07:52 3° Y26'330°31'45 min. Earth dist. -9698 Jun 05 j 04:15 2°**2**43'11 4.07146 AU morning rise -9704 Jun 19 j 06:10 6°Y18'53 -9698 Jun 26 j 15:32 30°R, Mg retrograde -9704 Oct 17 j 20:29 23°Y35'41 direct -9698 Aug 03 j 08:28 27° Mp 42'41 opposition -9704 Dec 17 j 01:24 18°**Ƴ**43'29 1°21'02 -9698 Sep 09 j 18:52 0∘**ত** min. Earth dist. -9704 Dec 17 j 22:34 18°**Ƴ**36'40 4.33992 AU evening set -9698 Dec 05 j 04:04 16°**£**37'57 direct -9703 Feb 17 j 12:02 13°Y41'56 -9703 Jun 16 j 19:51 0°8 conjunction -9698 Dec 18 j 14:23 19° **△**46'47 -0°56'14 evening set -9703 Jun 25 i 02:14 1°**8**49'17 minimum elong -9698 Dec 18 i 14:18 19°**2**46'44 0°56'21 max. Earth dist. -9703 Jul 06 j 11:35 4°**8**21'39 6.33727 AU max. Earth dist. -9698 Dec 19 i 21:57 20°**♀**05'19 6.06262 AU morning rise -9697 Jan 01 i 04:08 22°**♀**57'22 conjunction -9703 Jul 07 i 18:21 4°**8**38'51 1°15'57 -9697 Feb 01 i 10:49 0°M minimum elong -9703 Jul 07 j 18:16 4°**8**38'48 1°16'14 -9697 May 12 j 11:39 12°M54'26 retrograde -9703 Jul 20 j 07:34 7°**8**27'06 -9697 Jul 10 j 10:15 morning rise min. Earth dist. 7°M.57'03 4 06774 AU -9703 Aug 24 j 19:17 opposition -9697 Jul 11 j 08:40 15°8 7°M,49'26 -1°56'51 -9703 Nov 18 j 21:19 -9697 Sep 07 j 12:12 2°M52'10 24°**8**52'09 direct retrograde -9702 Jan 18 j 18:42 20°800'28 2°12'03 -9697 Dec 10 j 18:28 15°M opposition -9702 Jan 19 j 16:22 -9696 Jan 10 j 23:20 min. Earth dist. 19°**8**53'35 4.32601 AU evening set 21°M59'17 -9702 Mar 22 j 03:49 15°**8**01'58 direct -9696 Jan 24 j 14:52 25°ML09'13 -1°32'14 -9702 Jul 12 j 07:54 $0^{\circ}\Pi$ conjunction -9702 Jul 26 j 08:00 3°**耳**06'11 -9696 Jan 24 j 14:49 evening set minimum elong 25°M09'11 1°32'39 -9696 Jan 26 j 00:42 max. Earth dist. 25°M28'52 6.08304 AU -9702 Aug 07 j 17:43 5°II54'15 1°38'07 -9696 Feb 07 j 08:04 conjunction morning rise 28°M19'58 -9702 Aug 07 j 17:42 -9696 Feb 14 j 14:37 minimum elong 5°**I**I54'14 1°38'36 0° **₹** max. Earth dist. -9702 Aug 06 j 13:58 5°**Ц**38'32 6.30246 AU retrograde -9696 Jun 15 j 17:30 17°**∡** 53'34 morning rise -9702 Aug 20 j 02:28 8°**Ⅱ**41'53 opposition -9696 Aug 13 j 23:08 12°**∡** 49'25 -2°25'48 retrograde -9702 Dec 22 j 00:12 26°**Ⅲ**35'17 min. Earth dist. -9696 Aug 13 j 05:30 12°**✗**55′27 4.11149 AU -9701 Feb 21 j 08:25 21°II42'10 2°24'52 direct -9696 Oct 11 j 15:06 7°**∡**¹48'46 opposition -9701 Feb 22 j 00:42 21°**Д**37'00 4.27320 AU -9695 Feb 15 j 20:57 26°**₹**54'02 min. Earth dist. evening set -9701 Apr 24 j 02:00 16°**Ⅱ**46'35 direct -9701 Aug 04 j 13:35 0ಂತಾ -9695 Mar 01 j 14:05 0°る01'53 -1°34'39 conjunction -9701 Aug 26 j 16:01 -9695 Mar 01 j 14:08 0°る01'55 1°35'14 evening set 4°955'25 minimum elong -9701 Sep 07 i 11:25 -9695 Mar 01 i 10:47 max. Earth dist. 7°537'46 6.23570 AU 0°궁 max. Earth dist. -9695 Mar 02 j 11:11 0°る13'57 6.14550 AU -9701 Sep 08 i 02:02 conjunction 7°546'10 1°31'15 morning rise -9695 Mar 15 i 07:09 3°**⋜**09'31 -9701 Sep 08 i 02:05 7°546'12 1°31'50 retrograde -9695 Jul 19 i 10:42 21°る57'48 minimum elong -9701 Sep 20 i 12:41 10°937'26 -9695 Sep 16 j 11:56 16° ප් 56'31 -2°03'15 morning rise opposition -9700 Jan 25 j 09:05 29°9512'03 min. Earth dist. -9695 Sep 16 j 03:46 16°る59'18 4.18615 AU retrograde -9700 Mar 26 j 21:36 24°915'59 1°53'04 direct -9695 Nov 15 j 05:09 11°る53'11 opposition -9700 Mar 27 j 02:13 24°9514'30 4.19670 AU -9694 Mar 20 j 10:24 0°**≈** min. Earth dist. direct -9700 May 26 j 11:43 19°9522'34 evening set -9694 Mar 23 j 17:02 0°≈43'50 -9700 Aug 23 j 01:10 $0^{\circ}\Omega$ -9700 Sep 26 j 20:56 7°**Ω**42'45 conjunction -9694 Apr 06 j 08:27 3°≈47'39 -1°04'39 evening set minimum elong -9694 Apr 06 j 08:32 3°≈47'42 1°05'10 -9700 Oct 09 j 13:13 10°**Ω**39'37 0°55'26 -9694 Apr 06 j 10:47 conjunction max. Earth dist. 3°≈48'58 6.22674 AU -9700 Oct 09 j 13:18 10°**Ω**39'40 -9694 Apr 19 j 21:44 minimum elong 0°55'55 morning rise 6°≈50'17 -9700 Oct 09 j 15:06 10°**Ω**40'43 6.15675 AU max. Earth dist. -9694 May 28 j 04:00 15°≈ 13°**Ω**37'57 morning rise -9700 Oct 22 j 08:07 retrograde -9694 Aug 20 j 22:45 24°≈50'27 -9700 Oct 28 j 06:40 15°€ opposition -9694 Oct 19 j 03:06 19°≈53'01 -1°01'22 -9699 Jan 15 j 10:27 0° m min. Earth dist. -9694 Oct 19 j 07:59 19°≈51'23 4.26544 AU retrograde -9699 Mar 01 j 01:12 2° m 56'11 -9694 Dec 08 j 05:16 15°R≈ -9699 Apr 14 j 22:52 30°R€ direct -9694 Dec 19 j 02:50 14°≈48'43 -9699 May 01 j 06:15 27°**Ω**56'15 0°42'40 -9694 Dec 30 j 02:03 15°**≈** opposition

-9699 Apr 30 j 21:53

min. Earth dist.

27°**Ω**58'59 4.12052 AU

-9693 Apr 11 j 16:42

0°)

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 19 Attention, astronomical year style is used: The year -9693 in astronomical counting style is the year 9694 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ie year -9693 i	n astronomical co	ounting style is the year	9694 BCE in historical c	counting style.	C
evening set	-9693 Apr 26 j 22:40	3° ¥ 19′33		minimum elong	-9688 Oct 14 j 04:59	15° Ω 26'31	0°49'01
				max. Earth dist.	-9688 Oct 14 j 10:19	15° Ω 29'38	6.13965 AU
conjunction	-9693 May 10 j 08:09	6°) 18′07	-0°14'44	morning rise	-9688 Oct 27 j 01:17	18° Ω 26'14	
minimum elong	-9693 May 10 j 08:10	6°) 18′08	0°15'01		-9688 Dec 20 j 04:00	0° ™	
behind sun begin	-9693 May 10 j 05:23	6° ¥ 16'35		retrograde	-9687 Mar 06 j 04:14	7° m 52'25	
behind sun end	-9693 May 10 j 10:58	6° 米 19'41		opposition	-9687 May 06 j 06:31	2° m 51'59	0°30'44
max. Earth dist.	-9693 May 09 j 15:44	6° ∺ 08'59	6.29861 AU	min. Earth dist.	-9687 May 05 j 20:25	2°M 55'17	4.10520 AU
morning rise	-9693 May 23 j 14:18	9° ∺ 14'57			-9687 May 29 j 16:39	30°R Ω	
asc. node	-9693 Aug 26 j 05:27	25°) 34'38		direct	-9687 Jul 04 j 10:24	27° Ω 59'00	
retrograde	-9693 Sep 21 j 13:37	26°) 41′13			-9687 Aug 08 j 18:21	0° ™	
opposition	-9693 Nov 20 j 06:24	21°) 47′07		desc. node	-9687 Sep 22 j 11:13	7° Mp 10'01	
min. Earth dist.	-9693 Nov 20 j 21:43	21°) 42′07	4.32392 AU	evening set	-9687 Nov 04 j 13:19	16° m 40'51	
direct	-9692 Jan 21 j 06:07	16°) 43′38					
	-9692 May 05 j 14:47	0° Υ		conjunction	-9687 Nov 17 j 16:38	19° m 46'00	
evening set	-9692 May 28 j 16:22	4° Ƴ 57'58		minimum elong	-9687 Nov 17 j 16:37	19° m 46'00	0°08'12
				behind sun begin	-9687 Nov 17 j 09:22	19° m 41'45	
conjunction	-9692 Jun 10 j 16:36		0°38'43	behind sun end	-9687 Nov 17 j 23:53	19° m 50'15	
minimum elong	-9692 Jun 10 j 16:32	7° Y ′51′00	0°38'44	max. Earth dist.	-9687 Nov 18 j 14:58	19° m 59'08	6.07891 AU
max. Earth dist.	-9692 Jun 09 j 12:11	7° Y 35'14	6.33922 AU	morning rise	-9687 Nov 30 j 23:41	22° m 53'08	
morning rise	-9692 Jun 23 j 13:19	10° Y ′42′22			-9686 Jan 01 j 12:49	0∘ ত	
retrograde	-9692 Oct 22 j 03:17	27° ℃ 57'18		retrograde	-9686 Apr 11 j 13:00	12° △ 47'59	
opposition	-9692 Dec 21 j 11:11	23° Y ′05'19	1°29'42	min. Earth dist.	-9686 Jun 10 j 04:28		4.06367 AU
min. Earth dist.	-9692 Dec 22 j 09:31	22° Y ′58'09	4.34453 AU	opposition	-9686 Jun 11 j 01:02	7° Ω 44'12	-0°56'46
direct	-9691 Feb 21 j 23:28	18° Y ′04'07		direct	-9686 Aug 08 j 08:15	2° Ω 49'32	
	-9691 May 31 j 16:04	0° 8		evening set	-9686 Dec 10 j 09:24	21° ≏ 48'20	
evening set	-9691 Jun 29 j 08:22	6° 8 09'25			0.000 00 00 00 00	240 0 55145	1002104
	0.601.7.11100.11	001.450105	100010	conjunction	-9686 Dec 23 j 20:53	24° £ 57'45	
conjunction	-9691 Jul 11 j 23:11	8° 8 58'27	1°20'26	minimum elong	-9686 Dec 23 j 20:47	24° £ 57'41	1°03'15
minimum elong	-9691 Jul 11 j 23:07	8° 8 58'25	1°20'44	max. Earth dist.	-9686 Dec 25 j 07:49		6.05984 AU
max. Earth dist.	-9691 Jul 10 j 14:00	8° 8 39'53	6.33705 AU	morning rise	-9685 Jan 06 j 11:16	28° Ω 08'42	
morning rise	-9691 Jul 24 j 11:37	11° 8 46'19			-9685 Jan 14 j 11:47	0°M⊾	
	-9691 Aug 08 j 04:06	15° 8			-9685 Apr 02 j 19:20	15°M	
retrograde	-9691 Nov 23 j 07:13	29° 8 13'40	2017/12	retrograde	-9685 May 17 j 16:19	18°M04'52	
opposition	-9690 Jan 23 j 06:09	24° 8 21'52		: E 4 E 4	-9685 Jul 01 j 06:41	15°RM	4.07020 ATT
min. Earth dist.	-9690 Jan 24 j 04:26		4.32110 AU	min. Earth dist.	-9685 Jul 15 j 11:31		4.07030 AU
direct	-9690 Mar 26 j 14:28	19° 8 23'39		opposition	-9685 Jul 16 j 09:41	12°M59'46	-2*04*06
	-9690 Jun 25 j 19:33	0° П 7° П 28'19		direct	-9685 Sep 12 j 14:17	8°M02'00	
evening set	-9690 Jul 30 j 13:03	/-щ28/19			-9685 Nov 19 j 23:10 -9684 Jan 16 j 07:25	15°M	
agnismation	0600 Ana 11 : 22:26	100Π16127	1020156	evening set	•		
conjunction	-9690 Aug 11 j 22:36	10° Ⅱ 16'37 10° Ⅱ 16'36	1°38'36 1°39'27		-9684 Jan 28 j 13:38	0° ⊼	
minimum elong max. Earth dist.	-9690 Aug 11 j 22:35 -9690 Aug 10 j 20:20		6.29317 AU	conjunction	0694 Ion 20:22:12	0° ∡ 19'28	1924146
		10 Щ01 42 13°Щ04'32	0.2931 / AU	minimum elong	-9684 Jan 29 j 23:13 -9684 Jan 29 j 23:10	0° x 1928 0° x 19'27	1°35'13
morning rise	-9690 Aug 24 j 07:06 -9690 Nov 30 j 03:45	13 щ0432 0°©		max. Earth dist.	-9684 Jan 31 j 07:50	0° x 1927 0° x 38'23	6.09009 AU
retrograde	-9690 Dec 26 j 14:07	1°903'50		morning rise	-9684 Feb 12 j 16:42	3° x ⁷ 29'56	0.09009 AU
remograde	-9689 Jan 22 j 03:28	1 3 03 30		retrograde	-9684 Jun 20 j 14:37	22° x ⁷ 57'30	
opposition	-	26° Ⅱ 10'27	2°23'10	-	•	17° x 53'33	2025135
opposition min. Earth dist.	-9689 Feb 25 j 23:36 -9689 Feb 26 j 15:09	26°Щ10'27 26°Щ05'31	4.26016 AU	opposition min. Earth dist.	-9684 Aug 18 j 20:10 -9684 Aug 18 j 02:36	17° x '53'33	4.12209 AU
direct	-9689 Apr 28 j 13:28	20 H 05 31 21° H 15'12	4.20010 AU	direct	-9684 Oct 16 j 14:30	17 × 3933	4.12209 AO
direct	-9689 Jul 17 j 23:05	0°95		direct	-9683 Feb 12 j 12:52	12 メ ・32 23	
evening set	-9689 Aug 31 j 00:05	9° 5 26'44		evening set	-9683 Feb 21 j 02:03	1°る55'33	
evening set	-2002 Aug 21 J 00.03	ə ≥υ ∠044		evening set	-9005 FEU 21 J U2.U3	1 03333	
conjunction	-9689 Sep 12 j 10:34	12° © 18'21	1°27'56	conjunction	-9683 Mar 06 j 19:09	5° る 02'49	-1°32'08
minimum elong	-9689 Sep 12 j 10:38	12 \$31821 12°\$518'23	1°28'29	minimum elong	-9683 Mar 06 j 19:13		1°32'42
max. Earth dist.	-9689 Sep 11 j 20:14	12°9510'05	6.22001 AU	max. Earth dist.	-9683 Mar 07 j 14:05	5°る13'37	6.15845 AU
morning rise	-9689 Sep 24 j 22:14	12 3 10 03	J.22001 AU	morning rise	-9683 Mar 20 j 11:48	8° る 09'42	0.13073 AU
morning risc	-9689 Dec 09 j 09:05	0°Ω		retrograde	-9683 Jul 24 j 04:21	8 30942 26° る 50'07	
retrograde	-9688 Jan 30 j 06:38	3° Ω 53'30		opposition	-9683 Sep 21 j 05:01	20 3 3007 21° る 49'22	-1°56'20
ronograde	-9688 Mar 23 j 11:34	30°RS		min. Earth dist.	-9683 Sep 20 j 23:22		4.19976 AU
opposition	-9688 Mar 31 j 17:34	28°956'55	1°45'21	direct	-9683 Nov 20 j 03:20	21 ප 31 10	1.17710 AU
min. Earth dist.	-9688 Mar 31 j 20:51	28°955'52	4.17937 AU	direct	-9682 Mar 03 j 04:07	0°≈	
direct	-9688 May 31 j 03:06	26 3 33 32 24° 9 03'37	1.1//3/ AU	evening set	-9682 Mar 28 j 16:14	0 ∞ 5°≈32'55	
direct	-9688 Aug 02 j 19:23	24 3 03 37 0° Ω		evening set	7002 IVIAI 20 J 10.14	J ~ J4 J3	
evening set	-9688 Oct 01 j 11:07	12° Ω 28'15		conjunction	-9682 Apr 11 j 07:04	8° ≈ 35'59	-0°58'23
Svennig set	-9688 Oct 12 j 07:35	12 δί 28 13		minimum elong	-9682 Apr 11 j 07:09	8°≈36'02	0°58'53
	7000 Oct 12 J 07.33	1000		max. Earth dist.	-9682 Apr 11 j 07:09	8°≈35'48	6.23986 AU
conjunction	-9688 Oct 14 j 04:55	15° Ω 26'29	0°48'33	morning rise	-9682 Apr 24 j 19:30	11° ≈ 37'44	5.23760 AU
Jongan Chon	7000 Oct 1-1 JUT.33	10 062029	5 10 33	111011111115 1130	7002 rspr 2-t j 17.30	11 / 3/ / 11	

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 20 Attention, astronomical year style is used: The year -9682 in astronomical counting style is the year 9683 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ie year -9682 i	in astronomical co	ounting style is the year	r 9683 BCE in historical c	ounting style.	C
	-9682 May 10 j 03:06	15° ≈		morning rise	-9677 Sep 29 j 13:23	19° 9 58'26	
retrograde	-9682 Aug 25 j 10:00	29° ≈ 31'25			-9677 Nov 15 j 06:03	$0^{\circ}\Omega$	
opposition	-9682 Oct 23 j 16:57	24° ≈ 34'30	-0°50'39	retrograde	-9676 Feb 04 j 09:04	8° Ω 47'55	
min. Earth dist.	-9682 Oct 23 j 22:55	24° ≈ 32'31	4.27694 AU	opposition	-9676 Apr 05 j 18:34	3° Ω 50′53	1°36'33
direct	-9682 Dec 23 j 20:03	19° ≈ 30′15		min. Earth dist.	-9676 Apr 05 j 20:03	3° Ω 50′24	4.16790 AU
	-9681 Mar 24 j 21:03	0° ∀			-9676 May 10 j 08:13	30° ℝ ∽	
evening set	-9681 May 01 j 16:06	7° ¥ 58′02		direct	-9676 Jun 04 j 23:45	28° © 57'49	
max. Earth dist.	-9681 May 14 j 05:18	10°) 45′09	6.30772 AU		-9676 Jun 30 j 11:06	0 $^{\circ}$ Ω	
					-9676 Sep 25 j 18:29	15° Ω	
conjunction	-9681 May 15 j 00:20	10° ¥ 55'44		evening set	-9676 Oct 06 j 05:29	17° Ω 24'34	
minimum elong	-9681 May 15 j 00:21	10° ¥ 55'45	0°07'16				
behind sun begin	-9681 May 14 j 16:52	10° 米 51'36		conjunction	-9676 Oct 19 j 00:25	20° Ω 23'45	
behind sun end	-9681 May 15 j 07:49	10° ¥ 59'53		minimum elong	-9676 Oct 19 j 00:29	20° Ω 23'48	0°41'33
morning rise	-9681 May 28 j 05:14	13° ¥ 51'42		max. Earth dist.	-9676 Oct 19 j 07:42	20° Ω 28′01	6.13018 AU
asc. node	-9681 Jul 05 j 03:44	21° 米 51′26		morning rise	-9676 Oct 31 j 22:25	23° Ω 24'38	
	-9681 Aug 29 j 01:11	0° Y			-9676 Nov 30 j 05:22	0° ™	
retrograde	-9681 Sep 26 j 01:11	1° Y 14'40		retrograde	-9675 Mar 11 j 07:00	12° m 55'36	
	-9681 Oct 24 j 01:04	30° Ŗ ₩		opposition	-9675 May 11 j 08:53	7° m 54'34	0°18'21
opposition	-9681 Nov 24 j 19:21	26° ∺ 21′02	0°28'29	min. Earth dist.	-9675 May 10 j 20:05	7° m 58'46	4.09863 AU
min. Earth dist.	-9681 Nov 25 j 12:51	26° ¥ 15′20	4.32998 AU	direct	-9675 Jul 09 j 08:51	3° m 01'27	
direct	-9680 Jan 25 j 22:38	21° ¥ 17′50		desc. node	-9675 Aug 01 j 18:06	3° m 55'40	
	-9680 Apr 17 j 04:32	0° Υ		evening set	-9675 Nov 09 j 13:10	21° Mp 45'01	
evening set	-9680 Jun 02 j 05:10	9° Y '30'21		C	v	•	
max. Earth dist.	-9680 Jun 13 j 21:43	12° Υ '05'53	6.34156 AU	conjunction	-9675 Nov 22 j 17:53	24° m 50'52	-0°16'45
	J			minimum elong	-9675 Nov 22 j 17:51	24° m) 50'51	0°16'37
conjunction	-9680 Jun 15 j 04:02	12° Y ′22'45	0°45'38	max. Earth dist.	-9675 Nov 23 j 20:14	25° m) 06'22	
minimum elong	-9680 Jun 15 j 03:58	12° Υ 22'42	0°45'42	morning rise	-9675 Dec 06 j 02:00	27° m 58'37	0.0707.110
morning rise	-9680 Jun 27 j 23:30	15° Υ 13'28	0 13 12	morning rise	-9675 Dec 14 j 19:34	0∘ ⊽	
morning rise	-9680 Sep 16 j 06:36	0°8		retrograde	-9674 Apr 16 j 17:20	ა — 17° ჲ 54'14	
retrograde	-9680 Oct 26 j 14:51	2° 8 28'56		min. Earth dist.	-9674 Jun 15 j 05:24		4.06469 AU
retrograde	-9680 Dec 06 j 13:51	30°RY		opposition	-9674 Jun 16 j 02:03	12° ⊆ 50'07	
opposition	-9680 Dec 26 j 01:26	27° Υ '37'05	1°38'14	direct	-9674 Aug 13 j 09:04	7° £ 55'03	-1 0012
min. Earth dist.	-9680 Dec 26 j 23:58	27° Υ 29'52	4.34333 AU	evening set	-9674 Dec 15 j 13:16	26° ≏ 54'26	
	-9679 Feb 26 j 13:38	22° Υ 36'17	4.54555 AO	evening set	-9674 Dec 28 j 18:42	0°M₁	
direct	•	0° 8			-90/4 Dec 28 j 18.42	U IIG	
	-9679 May 12 j 12:25 -9679 Jul 03 j 18:48	10° 8 41'23			0(74 D 20 : 01-21	0°M03'53	1900117
evening set max. Earth dist.	-9679 Jul 15 j 00:38		6.33232 AU	conjunction	-9674 Dec 29 j 01:21	0°ML03'50	
max. Earth dist.	-90/9 Jul 15 J 00:38	13 612 12	0.33232 AU	minimum elong	-9674 Dec 29 j 01:15		
	0.70 1 1 16:00 27	120 - 20100	1024140	max. Earth dist.	-9674 Dec 30 j 11:55		6.06439 AU
conjunction	-9679 Jul 16 j 08:37			morning rise	-9673 Jan 11 j 16:31	3°M14'52	
minimum elong	-9679 Jul 16 j 08:32	13° 8 30'06	1°25′00	. 1	-9673 Mar 07 j 09:31	15°M	
	-9679 Jul 23 j 00:50	15° 8		retrograde	-9673 May 22 j 14:17	23°M.07'19	
morning rise	-9679 Jul 28 j 20:02	16° 8 17'47		min. Earth dist.	-9673 Jul 20 j 08:18	18°M09'54	4.07810 AU
	-9679 Oct 07 j 21:35	0°Щ		opposition	-9673 Jul 21 j 06:55	18°M02'11	-2°10'09
retrograde	-9679 Nov 27 j 22:52	3° Ⅱ 49'01			-9673 Aug 14 j 07:36	15°RM₁	
	-9678 Jan 19 j 15:45	30° ₹ 8		direct	-9673 Sep 17 j 12:03	13°ML03'53	
opposition	-9678 Jan 27 j 23:32	28° 8 57'13	2°19'50		-9673 Oct 21 j 21:07	15° ™	
min. Earth dist.	-9678 Jan 28 j 21:46	28° 8 50'10	4.31329 AU		-9672 Jan 11 j 22:25	0° ∡ 7	
direct	-9678 Mar 31 j 06:27	23° 8 59'30		evening set	-9672 Jan 21 j 11:14	2° ∡ 10′38	
	-9678 Jun 05 j 09:41	0°II				_	
evening set	-9678 Aug 03 j 23:51	12° Ⅱ 05'16		conjunction	-9672 Feb 04 j 03:23	5° ∡ ′20′01	
max. Earth dist.	-9678 Aug 15 j 06:49	14° Ⅱ 38'55	6.28284 AU	minimum elong	-9672 Feb 04 j 03:20	5° ∡ ¹20'00	
		_		max. Earth dist.	-9672 Feb 05 j 10:22	5° ∡ ³37'57	6.10024 AU
conjunction	-9678 Aug 16 j 09:01	14° Ⅱ 53'50		morning rise	-9672 Feb 17 j 20:50	8° ∡ ¹29'58	
minimum elong	-9678 Aug 16 j 09:01	14° Ⅱ 53'50	1°39'46	retrograde	-9672 Jun 25 j 09:08	27° ∡ 50′57	
morning rise	-9678 Aug 28 j 17:42	17° Ⅱ 42'13		opposition	-9672 Aug 23 j 13:13	22° ∡ °47′20	-2°24'21
	-9678 Oct 28 j 05:24	0ಂತಾ		min. Earth dist.	-9672 Aug 22 j 22:12	22° ₹ 52'28	4.13337 AU
retrograde	-9678 Dec 31 j 10:52	5° © 47'43		direct	-9672 Oct 21 j 11:56	17° ∡ ¹45'42	
opposition	-9677 Mar 02 j 20:52	0° © 53'59	2°20'29		-9671 Jan 26 j 04:16	5°0	
min. Earth dist.	-9677 Mar 03 j 10:37	0° 5 49'37	4.24818 AU	evening set	-9671 Feb 26 j 02:31	6° ප 46'38	
	-9677 Mar 09 j 23:42	30°RⅡ					
direct	-9677 May 03 j 06:36	25° Ⅱ 59'07		conjunction	-9671 Mar 11 j 19:36	9° る 53'24	-1°29'04
direct	7011 May 05 J 00.50			minimum elong	-9671 Mar 11 j 19:41	9° 云 53'26	1°29'38
uncer	-9677 Jun 24 j 16:15	0 \circ \odot		minimum ciong) 03320	
evening set	• •	0°ତ 14°©12'41		max. Earth dist.	-9671 Mar 12 j 12:03	10°る02'45	6.16993 AU
	-9677 Jun 24 j 16:15			=			
	-9677 Jun 24 j 16:15		1°23'54	max. Earth dist.	-9671 Mar 12 j 12:03	10° る 02'45	
evening set	-9677 Jun 24 j 16:15 -9677 Sep 04 j 13:31	14°512'41 17°505'10	1°23'54 1°24'27	max. Earth dist.	-9671 Mar 12 j 12:03 -9671 Mar 25 j 11:50	10°පි02'45 12°පි59'38	
evening set	-9677 Jun 24 j 16:15 -9677 Sep 04 j 13:31 -9677 Sep 17 j 00:54	14°512'41 17°505'10 17°505'13		max. Earth dist. morning rise	-9671 Mar 12 j 12:03 -9671 Mar 25 j 11:50 -9671 Jun 27 j 16:40	10° ට 02'45 12°ට59'38 0°≈	

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -9671 in astronomical counting style is the year 9672 BCE in historical counting style. -9671 Sep 25 i 18:17 26°**ට**32'54 -1°48'54 -9666 Oct 07 i 09:09 0ಂತಾ opposition 26°る34'25 4.21036 AU -9671 Sep 25 j 13:49 -9665 Jan 05 j 09:35 10°933'36 min. Earth dist. retrograde direct -9671 Nov 24 j 19:36 21°る29'06 -9665 Mar 07 j 19:36 5°939'30 opposition 2°16'48 -9670 Feb 12 j 09:18 0°≈≈ min. Earth dist. -9665 Mar 08 j 08:04 5°935'32 4 23841 AU -9670 Apr 02 j 12:01 evening set 10°≈14'00 direct -9665 May 08 j 02:15 0°9545'00 evening set -9665 Sep 09 j 03:40 18°959'29 conjunction -9670 Apr 16 j 02:08 13°≈16'26 -0°51'55 minimum elong -9670 Apr 16 j 02:13 13°≈16′29 0°52'23 conjunction -9665 Sep 21 j 15:40 21°952'41 1°19'16 -9665 Sep 21 j 15:45 6.24890 AU 1°19'49 max. Earth dist. -9670 Apr 15 j 21:27 13°**≈**13'48 minimum elong 21°952'43 -9670 Apr 23 j 18:57 15°≈ max. Earth dist. -9665 Sep 21 j 06:57 21°9547'38 6.19836 AU morning rise -9670 Apr 29 j 13:52 16°≈17'31 morning rise -9665 Oct 04 j 05:22 24°9546'51 -9670 Jul 08 j 21:14 -9665 Oct 27 j 11:09 0°**)**€ 0° Ω -9664 Feb 09 j 08:57 retrograde -9670 Aug 29 j 21:57 4°**)**€06'32 retrograde 13°**Ω**41'46 -9670 Oct 21 j 21:57 30°R≈ opposition -9664 Apr 10 j 19:19 $8^{\circ}\Omega44'08$ 1°27'02 opposition -9670 Oct 28 j 04:56 29°≈10'08 -0°39'54 min. Earth dist. -9664 Apr 10 j 17:46 8°**Ω**44'38 4.15940 AU min. Earth dist. -9670 Oct 28 j 13:48 29°≈07'12 4.28357 AU direct -9664 Jun 09 j 19:43 3°**£**51′11 direct -9670 Dec 28 j 12:48 24°≈05'54 -9664 Sep 08 j 06:32 15°€ -9669 Mar 04 j 03:55 0°**)**€ evening set -9664 Oct 10 j 23:44 22°Ω19'11 evening set -9669 May 06 j 07:16 12°**)**€32'12 asc. node -9669 May 14 j 14:54 14°**)**€22'48 conjunction -9664 Oct 23 j 20:05 25°**Ω**19'16 0°33'27 minimum elong -9664 Oct 23 j 20:09 25°**Ω**19'18 0°33'49 conjunction -9669 May 19 j 14:32 15°**¥**29'19 0°00'42 max. Earth dist. -9664 Oct 24 i 07:24 25°**Ω**25'54 6.12340 AU -9669 May 19 j 14:32 15°**¥**29'19 0°00'29 morning rise -9664 Nov 05 i 19:21 28° **Ω**21'04 minimum elong behind sun begin -9669 May 19 j 06:23 15°**)** 24'49 -9664 Nov 12 j 22:37 0° m behind sun end -9669 May 19 j 22:41 15°**)** 33'50 retrograde -9663 Mar 16 i 10:48 17° m 55'45 -9669 May 18 j 17:57 -9663 May 16 j 10:05 12° m 54'14 0°05'53 max. Earth dist. 15°**)** 17′53 6.31151 AU opposition -9669 Jun 01 j 18:11 -9663 May 15 j 20:43 12° m 58'39 4.09403 AU morning rise 18°**)** 24'39 min Earth dist -9669 Jul 29 j 12:12 $0^{\circ}\Upsilon$ -9663 Jun 11 j 18:00 desc. node 9° m 43'30 -9669 Sep 30 j 11:06 5°Y46'20 direct -9663 Jul 14 j 08:12 8° Mp 01'00 retrograde -9669 Nov 29 j 08:00 0°Υ53'02 0°39'19 -9663 Nov 14 j 12:30 26° Mp 46'02opposition evening set -9669 Nov 30 j 01:44 0°**Υ**47'16 min. Earth dist. 4.33091 AU -9669 Dec 06 j 04:01 -9663 Nov 27 j 18:15 30°**₹** conjunction 29° m 52'28 -0°24'57 -9668 Jan 30 j 12:01 29° My 52'26direct 25°**¥**50′06 minimum elong -9663 Nov 27 j 18:13 0°24'53 -9668 Mar 25 j 06:18 $0^{\circ}\Upsilon$ -9663 Nov 28 j 07:05 0∘ 🗗 14°**Υ**02'20 -9663 Nov 28 j 21:13 evening set -9668 Jun 06 j 17:40 max. Earth dist. 0°**ჲ**08'18 6.07381 AU -9668 Jun 18 j 07:59 16°**Y**36′52 -9663 Dec 11 j 03:43 max. Earth dist. 6.33958 AU morning rise 3°**♀**00'50 retrograde -9662 Apr 21 j 18:12 22°**£**57'03 conjunction -9668 Jun 19 j 15:07 16°Υ54'12 0°52'15 min. Earth dist. -9662 Jun 20 j 03:29 18°**♀**00'07 4.06552 AU -9668 Jun 19 j 15:02 16°**Υ**54'10 0°52'21 opposition -9662 Jun 21 j 01:31 17° 252'41 -1°19'04 minimum elong -9668 Jul 02 j 09:23 19°**Y**44'29 direct -9662 Aug 18 j 06:33 12°**⊆**57'15 morning rise -9668 Aug 21 j 10:48 0° 8 -9662 Dec 12 j 04:29 0°M -9668 Oct 31 j 05:12 7°**8**01'54 -9662 Dec 20 j 16:21 1°M57'46 retrograde evening set -9668 Dec 30 j 16:49 2°810'13 1°46'11 opposition -9668 Dec 31 j 16:15 2°802'44 4.33879 AU -9661 Jan 03 j 05:11 5°M07'21 -1°14'58 min. Earth dist. conjunction -9667 Jan 17 j 06:31 -9661 Jan 03 j 05:06 5°M07'18 1°15'14 30°**₹**Υ minimum elong -9667 Mar 03 i 05:46 27°**Y**′09'51 direct max. Earth dist. -9661 Jan 04 i 15:54 5°M27'39 6.06793 AU 0°8 -9667 Apr 16 j 19:38 morning rise -9661 Jan 16 j 20:47 8°M18'19 -9667 Jul 07 i 02:18 15°8 -9661 Feb 15 i 15:14 15°M evening set -9667 Jul 08 j 06:05 15°**8**15'28 retrograde -9661 May 27 j 13:30 28°M07'45 max. Earth dist. -9667 Jul 19 j 11:18 17°**8**46'17 6.32543 AU -9661 Jul 25 j 06:27 23°ML09'52 4.08411 AU min. Earth dist. -9661 Jul 26 j 03:23 23°ML02'43 -2°15'15 opposition -9667 Jul 20 j 18:58 18°804'04 1°28'23 direct -9661 Sep 22 j 10:44 18°M03'56 conjunction -9667 Jul 20 j 18:54 18°804'02 1°28'46 -9661 Dec 25 j 07:08 0°×7 minimum elong 20°**8**51'41 morning rise -9667 Aug 02 j 05:44 evening set -9660 Jan 26 j 14:58 7°**х** 10′39 -9667 Sep 14 j 17:33 $0^{\circ}II$ retrograde -9667 Dec 02 j 15:44 8°**Ⅲ**27'22 conjunction -9660 Feb 09 j 07:29 10°**∡**19'50 -1°37'33 -9666 Feb 01 j 18:31 3°**Ⅲ**35′21 2°22'35 minimum elong -9660 Feb 09 j 07:28 10°×719'50 1°38'05 opposition -9666 Feb 02 j 14:47 3°**I**28'55 4.30481 AU -9660 Feb 10 j 13:25 10°**х** 37′06 6.10812 AU min. Earth dist. max. Earth dist. 30°₽₩ -9660 Feb 23 j 00:55 13°**₹**29'24 -9666 Mar 05 j 13:08 morning rise 28°**8**38'05 -9660 May 19 j 07:04 0°궁 direct -9666 Apr 04 j 22:08 $0^{\circ}\Pi$ 2°る44'34 -9666 May 05 j 05:13 retrograde -9660 Jun 30 j 02:29 evening set -9666 Aug 08 j 11:36 16°**Ⅱ**44'46 -9660 Aug 10 j 16:19 30°R.**✓** opposition -9660 Aug 28 j 05:59 27°**х** 41'23 -2°22'08 conjunction -9666 Aug 20 j 20:43 19°**Ⅲ**33'38 1°38'51 min. Earth dist. -9660 Aug 27 j 15:50 27°**х** 46'13 4.14249 AU minimum elong -9666 Aug 20 j 20:44 19°**Ⅲ**33'39 1°39'24 direct -9660 Oct 26 j 06:50 22°**х** 39'24

-9666 Aug 19 j 21:55

-9666 Sep 02 j 05:24

max. Earth dist.

morning rise

19°**Ⅲ**20'38

22°**II**22'27

6.27347 AU

evening set

-9659 Jan 06 j 05:09

-9659 Mar 03 j 03:33

0°る

11°る39'03

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 22 Attention, astronomical year style is used: The year -9659 in astronomical counting style is the year 9660 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -9659 i	n astronomical co	unting style is the year	9660 BCE in historical c	ounting style.	<i>O</i> -
conjunction	-9659 Mar 16 j 20:22	14° පි 45'22	-1°25'22	morning rise	-9654 Sep 06 j 16:38	27° Ⅱ 01'22	
minimum elong	-9659 Mar 16 j 20:27	14° පි 45'24	1°25'57		-9654 Sep 19 j 23:07	0 \circ \odot	
max. Earth dist.	-9659 Mar 17 j 08:33	14° ප 52'17	6.17952 AU	retrograde	-9653 Jan 10 j 04:40	15°9517'07	
morning rise	-9659 Mar 30 j 12:21	17°る51'03		opposition	-9653 Mar 12 j 16:37	10°9522'30	2°12'14
	-9659 May 28 j 16:10	0° ≈		min. Earth dist.	-9653 Mar 13 j 02:18	10°919'25	4.23096 AU
retrograde	-9659 Aug 02 j 07:23	6°≈18'31		direct	-9653 May 12 j 18:56	5° © 28'16	
opposition	-9659 Sep 30 j 08:39	1°≈18'50	-1°40'43	evening set	-9653 Sep 13 j 16:26	23°5643'02	
min. Earth dist.	-9659 Sep 30 j 06:57	1° ≈ 19'24	4.21936 AU	C	1 3		
	-9659 Oct 10 j 04:49	30°Rる		conjunction	-9653 Sep 26 j 05:22	26°936'56	1°14'10
direct	-9659 Nov 29 j 15:20	26° ප 14'50		minimum elong	-9653 Sep 26 j 05:27	26°936'59	
	-9658 Jan 19 j 04:35	0° ≈		max. Earth dist.	-9653 Sep 26 j 00:02	26°933'50	6.19092 AU
evening set	-9658 Apr 07 j 08:20	14° ≈ 57'53		morning rise	-9653 Oct 08 j 20:01	29° © 31'53	
	-9658 Apr 07 j 12:09	15° ≈			-9653 Oct 10 j 20:59	0°N	
	r,				-9653 Dec 27 j 03:15	15° Ω	
conjunction	-9658 Apr 20 j 21:57	17° ≈ 59'47	-0°45'03	retrograde	-9652 Feb 14 j 09:03	18° Ω 31'27	
minimum elong	-9658 Apr 20 j 22:01	17° ≈ 59'49	0°45'29		-9652 Apr 04 j 09:33	15°RΩ	
max. Earth dist.	-9658 Apr 20 j 15:56	17°≈56'25		opposition	-9652 Apr 15 j 18:03	13° Ω 33'15	1°17'02
morning rise	-9658 May 04 j 08:38	21°≈00'10	0.23001710	min. Earth dist.	-9652 Apr 15 j 15:48	13° Ω 33'59	
morning rise	-9658 Jun 16 j 03:29	0° \		direct	-9652 Jun 14 j 16:00	8° Ω 40'19	4.13217710
retrograde	-9658 Sep 03 j 09:15	8°) 44′59		direct	-9652 Aug 19 j 03:39	15° Ω	
opposition	-9658 Nov 01 j 18:04	3°) 49′07	-0°28'45	evening set	-9652 Oct 15 j 16:25	27° Ω 09'20	
min. Earth dist.	-9658 Nov 02 j 03:39		4.28977 AU	evening set	-9652 Oct 27 j 20:27	0° m)	
iiiii. Eartii tist.	-9658 Dec 04 j 15:55	3 /(43 3 / 30°R≈	4.209// AU		-9032 Oct 27 j 20.27	V III	
direct	3	30 k≈ 28°≈45'00		aamiumatiam	0652 Oat 20 : 12:50	0° mp 10'15	0025120
direct	-9657 Jan 02 j 04:14	28 ≈ 43 00		conjunction	-9652 Oct 28 j 13:58	0° my 10'17	
1	-9657 Jan 31 j 01:15			minimum elong	-9652 Oct 28 j 14:00		
asc. node	-9657 Mar 23 j 12:04	7° ¥ 10′25		max. Earth dist.	-9652 Oct 29 j 02:31	0° Mp 17'36	6.11714 AU
evening set	-9657 May 10 j 23:37	17° ¥ 09'52	6 21560 ATT	morning rise	-9652 Nov 10 j 14:48	3° Mp 12'59	
max. Earth dist.	-9657 May 23 j 06:03	19° 大 53'15	6.31560 AU	retrograde	-9651 Mar 21 j 10:18	22° m 51'01	
				desc. node	-9651 Apr 22 j 14:23	21° m 15'20	
conjunction	-9657 May 24 j 05:30	20° ₩ 06'18	0°08'28	opposition	-9651 May 21 j 08:47	17° m 49'01	
minimum elong	-9657 May 24 j 05:29	20° ₩ 06'17	0°08'18	min. Earth dist.	-9651 May 20 j 17:22		4.08926 AU
behind sun begin	-9657 May 23 j 22:19	20° ₩ 02'20		direct	-9651 Jul 19 j 03:05	12° m 55'33	
behind sun end	-9657 May 24 j 12:38	20° ¥ 10′15			-9651 Nov 12 j 02:02	0∘ ত	
morning rise	-9657 Jun 06 j 08:02	23°) €00'59		evening set	-9651 Nov 19 j 10:25	1° ≏ 42'27	
	-9657 Jul 09 j 03:34	$0^{\circ}\mathbf{\Upsilon}$					
retrograde	-9657 Oct 05 j 00:24	10° Y 21'19		conjunction	-9651 Dec 02 j 17:23	4° ≏ 49'30	
opposition	-9657 Dec 03 j 21:59	5° Y 28′22		minimum elong	-9651 Dec 02 j 17:19	4° ≏ 49'28	0°32'51
min. Earth dist.	-9657 Dec 04 j 17:30		4.33280 AU	max. Earth dist.	-9651 Dec 03 j 21:40		6.07090 AU
direct	-9656 Feb 04 j 04:48	0° Υ 25'44		morning rise	-9651 Dec 16 j 03:50	7° ≙ 58'25	
evening set	-9656 Jun 11 j 06:37	18° Ƴ 37′07		retrograde	-9650 Apr 26 j 18:43	27° ≏ 55'28	
max. Earth dist.	-9656 Jun 22 j 20:24	21° Ƴ 11′28	6.33914 AU	opposition	-9650 Jun 25 j 22:57	22° ჲ 50'51	-1°29'11
				min. Earth dist.	-9650 Jun 25 j 01:41	22° ჲ 58'03	4.06477 AU
conjunction	-9656 Jun 24 j 02:53	21° Y 28'28	0°58'37	direct	-9650 Aug 23 j 04:03	17° ≙ 54'58	
minimum elong	-9656 Jun 24 j 02:49	21° Y 28'25	0°58'45		-9650 Nov 24 j 20:40	0° M	
morning rise	-9656 Jul 06 j 19:49	24° Ƴ 18'13		evening set	-9650 Dec 25 j 18:33	6° M 57′27	
	-9656 Aug 02 j 06:18	0° 8					
retrograde	-9656 Nov 04 j 18:12	11° 8 37'06		conjunction	-9649 Jan 08 j 08:11	10°ML07'16	-1°20'01
opposition	-9655 Jan 04 j 08:51	6° 8 45'28	1°53'34	minimum elong	-9649 Jan 08 j 08:05	10°ML07'13	1°20'20
min. Earth dist.	-9655 Jan 05 j 06:58	6° 8 38'24	4.33645 AU	max. Earth dist.	-9649 Jan 09 j 19:02	10° ML27'37	6.06936 AU
direct	-9655 Mar 07 j 20:12	1° 8 45'33		morning rise	-9649 Jan 22 j 00:19	13°ML18'21	
	-9655 Jun 20 j 11:57	15° 8			-9649 Jan 29 j 08:46	15°M₊	
evening set	-9655 Jul 12 j 17:15	19° 8 50'41			-9649 Apr 17 j 16:37	0° ∡ ¹	
max. Earth dist.	-9655 Jul 23 j 22:43	22° 8 21'53	6.32130 AU	retrograde	-9649 Jun 01 j 10:39	3° ∡ ¹05′16	
					-9649 Jul 15 j 22:59	30°RML	
conjunction	-9655 Jul 25 j 05:08	22° 8 39'00	1°31'35	opposition	-9649 Jul 30 j 22:37	28°ML00'23	-2°19'20
minimum elong	-9655 Jul 25 j 05:04	22° 8 38'58	1°32'00	min. Earth dist.	-9649 Jul 30 j 01:59	28°M07'27	4.08786 AU
morning rise	-9655 Aug 06 j 15:12	25° 8 26'28		direct	-9649 Sep 27 j 06:20	23°ML01'11	
-	-9655 Aug 27 j 10:06	0°II			-9649 Dec 05 j 02:46	0° ∡ ¹	
retrograde	-9655 Dec 07 j 09:54	13° Ⅱ 05'41		evening set	-9648 Jan 31 j 18:23	12° ∡ '08'45	
opposition	-9654 Feb 06 j 13:25	8° Ⅱ 13'27	2°24'25	Ç	,		
min. Earth dist.	-9654 Feb 07 j 09:27	8° I 07'07	4.29918 AU	conjunction	-9648 Feb 14 j 11:04	15° ∡ 17'48	-1°37'53
direct	-9654 Apr 09 j 15:54	3° Ⅱ 16'36	-	minimum elong	-9648 Feb 14 j 11:04	15° ∡ 17'48	1°38'24
evening set	-9654 Aug 12 j 22:33	21° I I23'03		max. Earth dist.	-9648 Feb 15 j 13:41	15° ∡ ³33′08	6.11376 AU
max. Earth dist.	-9654 Aug 24 j 10:16	23° I I59'58	6.26671 AU	morning rise	-9648 Feb 28 j 04:43	18° ∡ 27'08	
				<i>3</i>	-9648 Apr 22 j 19:57	0°ਰ	
conjunction	-9654 Aug 25 j 07:38	24° Ⅱ 12'09	1°37'53	retrograde	-9648 Jul 04 j 20:39	7° る 37'23	
	· J 0 / . J 0	/					
minimum elong	-9654 Aug 25 j 07:40	24° Ⅱ 12'10	1°38'26	opposition	-9648 Sep 01 j 22:56	2° る 34'36	-2°18'55

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 23 Attention, astronomical year style is used: The year -9648 in astronomical counting style is the year 9649 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	ne year -9648 i	in astronomical co	ounting style is the year	r 9649 BCE in historical c	ounting style.	.8
min. Earth dist.	-9648 Sep 01 j 10:41	2° る 38'47	4.14944 AU	minimum elong	-9642 Aug 29 j 17:53	28° Ⅱ 49'10	1°36'54
	-9648 Sep 21 j 19:43	30°R. ✓		max. Earth dist.	-9642 Aug 28 j 22:02	28° Ⅲ 37'48	6.25748 AU
direct	-9648 Oct 31 j 03:57	27° ₹ 32'14			-9642 Sep 03 j 21:43	0 \circ \odot	
	-9648 Dec 09 j 21:11	5°0		morning rise	-9642 Sep 11 j 03:15	1° 9 38'55	
evening set	-9647 Mar 08 j 04:35	16° පි 31'11		retrograde	-9641 Jan 15 j 02:27	20° © 00'33	
				opposition	-9641 Mar 17 j 13:49	15° 5 05'30	2°06'53
conjunction	-9647 Mar 21 j 21:28	19° る 37'11	-1°21'03	min. Earth dist.	-9641 Mar 17 j 23:00	15° © 02'35	4.21991 AU
minimum elong	-9647 Mar 21 j 21:33	19° る 37'14	1°21'36	direct	-9641 May 17 j 13:25	10° © 11'31	
max. Earth dist.	-9647 Mar 22 j 08:41	19° る 43'32	6.18758 AU	evening set	-9641 Sep 18 j 05:40	28°9528'05	
morning rise	-9647 Apr 04 j 12:51	22° る 42'20			-9641 Sep 24 j 20:41	$0^{\circ}\Omega$	
	-9647 May 08 j 04:28	0° ≈					
retrograde	-9647 Aug 06 j 22:16	11° ≈ 04'11		conjunction	-9641 Sep 30 j 19:37	1° Ω 22'56	1°08'35
opposition	-9647 Oct 04 j 23:29	6°≈05'04	-1°31'49	minimum elong	-9641 Sep 30 j 19:42	1° Ω 22'59	1°09'06
min. Earth dist.	-9647 Oct 04 j 22:46	6°≈05'19	4.22771 AU	max. Earth dist.	-9641 Sep 30 j 16:08		6.17913 AU
direct	-9647 Dec 04 j 09:20	1° ≈ 01'00		morning rise	-9641 Oct 13 j 11:34	4°Ω18'58	
	-9646 Mar 21 j 14:42	15° ≈		Ü	-9641 Dec 02 j 08:17	15° Ω	
evening set	-9646 Apr 12 j 05:17	19° ≈ 42'14		retrograde	-9640 Feb 19 j 08:53	23° Ω 24'53	
	, , , , , , , , , , , , , , , , , , ,			opposition	-9640 Apr 20 j 17:47	18° Ω 26'10	1°06'26
conjunction	-9646 Apr 25 j 17:58	22° ≈ 43'28	-0°37'51	min. Earth dist.	-9640 Apr 20 j 12:59		4.14056 AU
minimum elong	-9646 Apr 25 j 18:02	22°≈43'30		Time Darm Gibt.	-9640 May 20 j 05:16	15°RΩ	
max. Earth dist.	-9646 Apr 25 j 08:24	22°≈38'07	6.26495 AU	direct	-9640 Jun 19 j 10:40	13° Ω 33'17	
morning rise	-9646 May 09 j 03:53	25° ≈ 43'11	0.20193710	ancer	-9640 Jul 19 j 10:35	15° Ω	
morning risc	-9646 May 28 j 18:23	0°) €			-9640 Oct 11 j 10:58	0° mp	
retrograde	-9646 Sep 07 j 22:13	13°) 23′43		evening set	-9640 Oct 20 j 11:34	ارات 2° الم	
opposition	-9646 Nov 06 j 08:00	8° H 28'18	0°17'22	evening set	-9040 Oct 20 j 11.54	2 IIJ () 3 1 /	
min. Earth dist.	-9646 Nov 06 j 19:21		4.29700 AU	conjunction	0640 Nov. 02 i 10:20	5° Mp 07'16	0017122
		8 X 2433 3° X 24'16	4.29/00 AU	,	-9640 Nov 02 j 10:30		
direct	-9645 Jan 06 j 22:06	3° π 24 16 4° ℋ 14'55		minimum elong	-9640 Nov 02 j 10:32	5° Mp 07'17	
asc. node	-9645 Jan 30 j 13:01			max. Earth dist.	-9640 Nov 03 j 01:25	5° Mp 16'01	6.10672 AU
evening set	-9645 May 15 j 15:31	21°) 46'59		morning rise	-9640 Nov 15 j 12:47	8° Mp 11'06	
	064534 20:20.16	2401/42140	0017110	desc. node	-9639 Mar 02 j 03:46	26° m 58'19	
conjunction	-9645 May 28 j 20:16	24°) (42'40		retrograde	-9639 Mar 26 j 14:56	27° m 54'07	0010150
minimum elong	-9645 May 28 j 20:14	24°) (42'39		opposition	-9639 May 26 j 10:03	22° m 51'38	
max. Earth dist.	-9645 May 27 j 21:04		6.32138 AU	min. Earth dist.	-9639 May 25 j 18:03		4.08089 AU
morning rise	-9645 Jun 10 j 21:18	27°) (36'32		direct	-9639 Jul 24 j 02:04	17° m 57'54	
	-9645 Jun 21 j 19:11	0° Υ			-9639 Oct 25 j 10:59	0∘ ত	
retrograde	-9645 Oct 09 j 11:26	14° Y 55'05		evening set	-9639 Nov 24 j 12:13	6° ≏ 48'14	
opposition	-9645 Dec 08 j 11:59	10° Y ′02'24	1°00'29				
min. Earth dist.	-9645 Dec 09 j 07:17		4.33666 AU	conjunction	-9639 Dec 07 j 20:24	9° ≏ 56'03	
direct	-9644 Feb 08 j 19:31	5° Y ′00′08		minimum elong	-9639 Dec 07 j 20:20	9° ჲ 56'00	0°40'47
evening set	-9644 Jun 15 j 18:44	23° Y ′09'45		max. Earth dist.	-9639 Dec 09 j 02:44	10° ≏ 13'52	6.06533 AU
max. Earth dist.	-9644 Jun 27 j 05:26	25° Y 42'33	6.34038 AU	morning rise	-9639 Dec 21 j 08:00	13° ≏ 05'41	
					-9638 Mar 17 j 23:10	0° M	
conjunction	-9644 Jun 28 j 13:27	26° Y 00′25	1°04'37	retrograde	-9638 May 01 j 22:23	3°M04'09	
minimum elong	-9644 Jun 28 j 13:22	26° Y 00′22	1°04'48		-9638 Jun 15 j 17:30	30° Ŗ亞	
morning rise	-9644 Jul 11 j 05:17	28° Ƴ 49'36		opposition	-9638 Jun 30 j 23:55	27° ≏ 59'23	-1°38'58
	-9644 Jul 16 j 12:42	9° 8		min. Earth dist.	-9638 Jun 30 j 01:50	28° ≏ 06'52	4.06294 AU
	-9644 Oct 12 j 23:00	15° 8		direct	-9638 Aug 28 j 02:53	23° ჲ 03'08	
retrograde	-9644 Nov 09 j 08:33	16° 8 09'39			-9638 Nov 04 j 04:19	0° M	
	-9644 Dec 06 j 19:55	15° ₹ 8		evening set	-9638 Dec 31 j 01:14	12°M08'00	
opposition	-9643 Jan 09 j 00:21	11° 8 18'01	2°00'13		-9637 Jan 12 j 08:36	15° M	
min. Earth dist.	-9643 Jan 09 j 23:20	11° 8 10'42	4.33493 AU				
direct	-9643 Mar 12 j 12:14	6° 8 18'29		conjunction	-9637 Jan 13 j 15:24	15°M17'58	-1°24'39
	-9643 Jun 02 j 07:12	15° 8		minimum elong	-9637 Jan 13 j 15:19	15° ™ 17'55	1°25'01
evening set	-9643 Jul 17 j 03:03	24° 8 22'55		max. Earth dist.	-9637 Jan 15 j 01:07	15°M37'38	6.07125 AU
max. Earth dist.	-9643 Jul 28 j 09:04	26° 8 54'36	6.31684 AU	morning rise	-9637 Jan 27 j 08:05	18° M 29'07	
	·			-	-9637 Mar 21 j 23:37	0° ∡ ″	
conjunction	-9643 Jul 29 j 14:17	27° 8 11'04	1°34'14	retrograde	-9637 Jun 06 j 10:58	8° ∡ 12'57	
minimum elong	-9643 Jul 29 j 14:14	27° 8 11'03	1°34'41	opposition	-9637 Aug 04 j 21:21	3° ∡ ′08'14	-2°22'30
morning rise	-9643 Aug 10 j 23:41	29° 8 58'27		min. Earth dist.	-9637 Aug 04 j 01:10	3° ∡ 15′09	
Č	-9643 Aug 11 j 02:27	0°Ⅱ			-9637 Aug 29 j 19:00	30°RM	
retrograde	-9643 Dec 12 j 01:09	17° Ⅱ 41'32		direct	-9637 Oct 02 j 07:38	28°M08'34	
opposition	-9642 Feb 11 j 07:14	12° ∏ 49'04	2°25'25		-9637 Nov 05 j 02:16	0° ∡ 7	
min. Earth dist.	-9642 Feb 12 j 01:28	12° ∏ 43'18	4.29211 AU	evening set	-9636 Feb 06 j 01:20	17° ∡ 15'57	
direct	-9642 Apr 14 j 06:07	7° П 52'39		<i>3</i>	,	,	
evening set	-9642 Aug 17 j 08:42	25° ∏ 59'38		conjunction	-9636 Feb 19 j 18:23	20° ∡ *24'42	-1°37'31
<i>3</i>				minimum elong	-9636 Feb 19 j 18:24	20° ₹ 24'42	
conjunction	-9642 Aug 29 j 17:52	28° ∏ 49'09	1°36'19	max. Earth dist.	-9636 Feb 20 j 21:28		6.12340 AU
<i>y</i>		, .,	-				

-	nical year style is used: Th		_			_	150 2 1
morning rise	-9636 Mar 04 j 11:44	-	in astronomical co	direct	-9630 Apr 18 j 18:05	12° ∏ 17'24	
morning rise	-9636 Apr 02 j 13:59	0°궁			-9630 Aug 19 j 17:04	0ಂತ	
retrograde	-9636 Jul 09 j 17:07	12° る 36'42		evening set	-9630 Aug 21 j 15:04	0°926'08	
opposition	-9636 Sep 06 j 18:03	7°る34'24	-2°14'39	max. Earth dist.	-9630 Sep 02 j 06:20	3°905'50	6.24421 AU
min. Earth dist.	-9636 Sep 06 j 06:44		4.16218 AU	max. Earth dist.	7030 Sep 02 j 00.20	J 3 0330	0.24421710
direct	-9636 Nov 05 j 02:56	2°る31'46	4.10210 AC	conjunction	-9630 Sep 03 j 00:41	3°516'21	1°34'15
evening set	-9635 Mar 13 j 07:11	21°る27'28		minimum elong	-9630 Sep 03 j 00:41	3°916'23	1°34'49
evening set	-7033 Wai 13 j 07.11	21 02/20		morning rise	-9630 Sep 15 j 10:35	6°906'55	1 3447
conjunction	-9635 Mar 26 j 23:32	24° පි 32'40	1016'10	retrograde	-9629 Jan 19 j 19:48	24° © 35'51	
minimum elong	-9635 Mar 26 j 23:37	24°る32'43		opposition	-9629 Mar 22 j 07:32	19° © 40'25	2°00'55
max. Earth dist.	-9635 Mar 27 j 07:43	24° る 37'18	6.20254 AU	min. Earth dist.	-9629 Mar 22 j 15:01	19°938'02	4.20419 AU
morning rise	-9635 Apr 09 j 14:26	24 3 37 16 27° る 36'56	0.20234 AU	direct	-9629 May 22 j 01:57	14°536'02	4.20419 AU
morning risc	-9635 Apr 20 j 07:31	0° ≈		direct	-9629 Sep 09 j 01:31	0°Ω	
	-9635 Jul 19 j 19:32	0 ∞ 15° ≈		evening set	-9629 Sep 22 j 17:09	3° Ω 07'06	
retrograde	-9635 Aug 11 j 11:34	15°≈50'34		evening set	-7027 Sep 22 j 17.07	3 660700	
retrograde	-9635 Sep 03 j 00:46	15°R≈		conjunction	-9629 Oct 05 j 08:11	6° Ω 03'09	1°02'41
opposition	-9635 Oct 09 j 14:40	10°≈51'55	-1°22'20	minimum elong	-9629 Oct 05 j 08:11	6° Ω 03'12	1°03'10
min. Earth dist.	-9635 Oct 09 j 15:15		4.24354 AU	max. Earth dist.	-9629 Oct 05 j 06:19	6°Ω02'04	6.16245 AU
direct	-9635 Dec 09 j 05:26	5°≈47'42	4.24334 AU	morning rise	-9629 Oct 18 j 01:34	9° Ω 00'33	0.10243 AU
direct	-9634 Mar 03 j 00:17	5 ≈47 42 15°≈		morning rise	-9629 Nov 13 j 17:01	15° Ω	
evening set	-9634 Apr 17 j 00:35	13 ≈ 24° ≈ 24'05		retrograde	-9628 Feb 24 j 10:22	28° Ω 14'44	
evening set	-9034 Apr 17 J 00.33	24 24 03		opposition	-9628 Apr 25 j 16:10	23°Ω15'31	0°55'32
conjunction	0624 Apr. 20: 12:20	27° ≈ 24'17	0920121	min. Earth dist.		$23^{\circ}\Omega 17'28$	4.12410 AU
3	-9634 Apr 30 j 12:20	27 ≈24 17 27°≈24'19	0°30'53		-9628 Apr 25 j 10:09	$18^{\circ}\Omega 22'37$	4.12410 AU
minimum elong max. Earth dist.	-9634 Apr 30 j 12:23	27 ≈24 19 27°≈18'28	6.28063 AU	direct	-9628 Jun 24 j 04:56		
max. Earm dist.	-9634 Apr 30 j 01:55	27 ≈ 1626	0.28003 AU	avanina aat	-9628 Sep 24 j 06:36 -9628 Oct 25 j 06:32	0° т р 6° т р 59'34	
morning rise	-9634 May 12 j 03:44 -9634 May 13 j 20:55	0° ∺ 22'50		evening set	-9028 Oct 23 J 00.32	0 IIJ3934	
retrograde	-9634 Sep 12 j 07:34	17°) 56'44		conjunction	-9628 Nov 07 j 07:04	10° m 02'53	0°09'22
opposition	-9634 Nov 10 j 19:50	17 X 30 44 13° X 01'47	0.0611.2	minimum elong	-9628 Nov 07 j 07:05	10° my 02'53	0°09'22
min. Earth dist.	-9634 Nov 10 j 19.30	13 X 01 47 12° X 57'40	4.31113 AU	behind sun begin	-9628 Nov 07 j 07:03	9° Mp 58'57	0 09 38
	-9634 Nov 11 j 08.21 -9634 Dec 11 j 06:40	9° ¥ 26'44	4.31113 AU	behind sun begin	-9628 Nov 07 j 00.20	9 11/2837 10°10/06'50	
asc. node direct	-9633 Jan 11 j 13:35	7° H 57'54		max. Earth dist.	-9628 Nov 08 j 01:20	10° my 13'36	6.09224 AU
evening set	-9633 May 20 j 04:01	26° ∺ 16'00		morning rise	-9628 Nov 20 j 10:55	13°M)08'04	0.09224 AU
max. Earth dist.	-9633 Jun 01 j 04:48	28° H 55'57	6.33269 AU	desc. node	-9627 Jan 09 j 18:26	24° Mp 04'04	
max. Earm dist.	-9033 Juli 01 J 04.46	20 1(3331	0.33209 AU	desc. Hode	-9627 Feb 15 j 08:51	ე∘ ი	
conjunction	-9633 Jun 02 j 07:10	29° ∺ 10'35	0023131	retrograde	-9627 Mar 31 j 19:21	0 == 2° £ 57'16	
minimum elong	-9633 Jun 02 j 07:10	29° X 10'34	0°23'25	retrograde	-9627 May 15 j 05:59	2 <u>=</u> 37 10 30°R, Mp	
minimum clong	-9633 Jun 06 j 00:08	25 γ (1034	0 23 23	opposition	-9627 May 31 j 11:21	27° m 54'24	0°31'22
morning rise	-9633 Jun 15 j 06:55	2°Υ03'25		min. Earth dist.	-9627 May 30 j 17:34	28° Mp 00'19	4.06997 AU
retrograde	-9633 Oct 13 j 19:18	19° Υ 18'43		direct	-9627 Jul 28 j 22:59	23°M 00'28	4.00/// AC
opposition	-9633 Dec 12 j 22:10	14° Υ 26'15	1°10'07	direct	-9627 Oct 05 j 04:35	ე° ი	
min. Earth dist.	-9633 Dec 13 j 19:08	14° Υ 19'29	4.34445 AU	evening set	-9627 Nov 29 j 15:20	° – 11° ≏ 55'14	
direct	-9632 Feb 13 j 08:22	9° Υ 24'12	4.54445710	evening set	7027 140V 27 J 13.20	11 =33 14	
evening set	-9632 Jun 20 j 01:58	27° Y '30'55		conjunction	-9627 Dec 13 j 00:34	15° ≏ 03'48	-0°48'20
max. Earth dist.	-9632 Jul 01 j 11:43	0° 8 03'07	6.34389 AU	minimum elong	-9627 Dec 13 j 00:29	15° ⊆ 03'45	
max. Darur dist.	-9632 Jul 01 j 06:08	0°8	0.5 1507 110	max. Earth dist.	-9627 Dec 14 j 07:53	15° ⊆ 22'13	6.05877 AU
	7032 Jul 01 J 00.00	ů O		morning rise	-9627 Dec 26 j 13:20	18° ⊆ 14'11	0.03077710
conjunction	-9632 Jul 02 j 19:31	0° 8 20'52	1°09'58		-9626 Feb 19 j 02:10	0°M	
minimum elong	-9632 Jul 02 j 19:26	0° 8 20'49	1°10'12	retrograde	-9626 May 07 j 01:25	8°M13'57	
morning rise	-9632 Jul 15 j 10:00	3° 8 09'23		min. Earth dist.	-9626 Jul 05 j 01:57	3°M16'49	4.06152 AU
morning rise	-9632 Sep 12 j 16:32	15° 8		opposition	-9626 Jul 06 j 01:04	3°M08'58	
retrograde	-9632 Nov 13 j 16:06	20° 8 30'08		opp same.	-9626 Jul 31 j 06:58	30° ₽ Ω	, -,
opposition	-9631 Jan 13 j 11:06	15° 8 38'32	2°05'52	direct	-9626 Sep 02 j 03:59	28° ≏ 12'14	
min. Earth dist.	-9631 Jan 14 j 10:06	15° 8 31'13	4.33401 AU		-9626 Oct 05 j 02:31	0° M	
	-9631 Jan 18 j 12:36	15° ₹ 8			-9626 Dec 26 j 06:49	15° ™	
direct	-9631 Mar 16 j 21:58	10° 8 39'24		evening set	-9625 Jan 05 j 08:41	17° M 19'07	
	-9631 May 11 j 17:39	15° 8		8			
evening set	-9631 Jul 21 j 08:09	28° 8 43'07		conjunction	-9625 Jan 18 j 23:38	20°M29'11	-1°28'36
8	-9631 Jul 27 j 01:02	0°II		minimum elong	-9625 Jan 18 j 23:34	20°M29'09	
	· · · · · · · · · · · · · · · · · · ·			max. Earth dist.	-9625 Jan 20 j 11:19	20°M49'59	6.07490 AU
conjunction	-9631 Aug 02 j 18:32	1° Ⅱ 31'09	1°36'14	morning rise	-9625 Feb 01 j 16:31	23°M40'14	
minimum elong	-9631 Aug 02 j 18:30	1° Ⅱ 31'07		Č	-9625 Mar 01 j 20:47	0° ∡ 7	
max. Earth dist.	-9631 Aug 01 j 12:01	1° Ⅱ 13'55	6.31131 AU	retrograde	-9625 Jun 11 j 12:06	13° √ 19'39	
morning rise	-9631 Aug 15 j 03:39	4° Ⅱ 18'35	-	opposition	-9625 Aug 09 j 19:45	8° ≯ 15'07	-2°24'33
retrograde	-9631 Dec 16 j 14:41	22° Ⅱ 06'14		min. Earth dist.	-9625 Aug 09 j 00:21		4.10179 AU
opposition	-9630 Feb 15 j 20:56	17° Ⅱ 13'32	2°25'32	direct	-9625 Oct 07 j 08:40	3° ∡ 14'58	
min. Earth dist.	-9630 Feb 16 j 15:43		4.28226 AU	evening set	-9624 Feb 11 j 07:39	22° ₹ '21'03	
	•			-	ž.		

•	nical year style is used: Th			. //		, .	ge 23
conjunction	-9624 Feb 25 j 00:41	e year -9624 i 25° ⊼ 29'19		min. Earth dist.	-9618 Feb 21 j 10:08		4.27111 AU
minimum elong	-9624 Feb 25 j 00:41	25° x 29'19			-9618 Apr 23 j 10:26	21 ∏ 48 07 16° ∏ 57'57	4.2/111 AU
2	,			direct		0° ©	
max. Earth dist.	-9624 Feb 26 j 01:05	25° 🖈 43'17	6.13474 AU		-9618 Aug 03 j 01:05		
morning rise	-9624 Mar 09 j 18:01	28°♂37'32 0°♂		evening set	-9618 Aug 26 j 03:15	5° © 08'26	
	-9624 Mar 15 j 19:37				0(10 0 07:12.00	79650110	1021120
retrograde	-9624 Jul 14 j 10:22	17°る33'10	2000120	conjunction	-9618 Sep 07 j 13:09		1°31'28
opposition	-9624 Sep 11 j 12:12	12° る 31'16	-2°09′28 4.17524 AU	minimum elong	-9618 Sep 07 j 13:12	7°959'21	1°32'03
min. Earth dist.	-9624 Sep 11 j 01:47	12° る 34'49	4.17524 AU	max. Earth dist.	-9618 Sep 06 j 20:03	7°549'29	6.23188 AU
direct	-9624 Nov 10 j 00:51	7° る 28'16		morning rise	-9618 Sep 19 j 23:55	10°550'45	
evening set	-9623 Mar 18 j 08:16	26° る 20'47		retrograde	-9617 Jan 24 j 20:33	29°526'36	1°53'49
. ,.	0(22 4 01:00 14	200=25114	1010140	opposition	-9617 Mar 27 j 07:33	24°530'40	
conjunction	-9623 Apr 01 j 00:14	29° る 25'14		min. Earth dist.	-9617 Mar 27 j 13:04	24°528'54	4.19161 AU
minimum elong	-9623 Apr 01 j 00:20	29° る 25'17		direct	-9617 May 26 j 21:54	19° © 37'10 0° Ω	
max. Earth dist.	-9623 Apr 01 j 06:07		6.21624 AU		-9617 Aug 22 j 06:08	0° δ ε 7° Ω 59'49	
	-9623 Apr 03 j 13:53	0°≈ 2°2 • 2012 °		evening set	-9617 Sep 27 j 09:37	/ 8 (3949	
morning rise	-9623 Apr 14 j 14:21	2°≈28'38			0(17.0-4, 10:01.50	100 05055	0056105
	-9623 Jun 15 j 15:28	15° ≈		conjunction	-9617 Oct 10 j 01:59	10° Ω 56'55	0°56'05
retrograde	-9623 Aug 16 j 01:49	20°≈35'01	1012122	minimum elong	-9617 Oct 10 j 02:03	10° Ω 56'57	0°56'34
opposition	-9623 Oct 14 j 05:16	15°≈36'57		max. Earth dist.	-9617 Oct 10 j 04:24	10° Ω 58'19	6.15119 AU
min. Earth dist.	-9623 Oct 14 j 08:06		4.25632 AU	morning rise	-9617 Oct 22 j 20:40	13° Ω 55'25	
t' .	-9623 Oct 18 j 19:54	15°R≈			-9617 Oct 27 j 12:35	15° Ω	
direct	-9623 Dec 14 j 00:31	10°≈32'43		. 1	-9616 Jan 13 j 11:53	0° Mp	
	-9622 Feb 07 j 22:56	15° ≈		retrograde	-9616 Feb 29 j 14:19	3° m 15'20	
evening set	-9622 Apr 21 j 19:33	29°≈05'40		*,*	-9616 Apr 17 j 03:22	30°RΩ	0042140
	-9622 Apr 25 j 21:38	0° ℋ		opposition	-9616 Apr 30 j 18:32	28° Ω 15'34	0°43'49
	0.000	201/05/01	0000150	min. Earth dist.	-9616 Apr 30 j 10:18	28° Ω 18'15	4.11534 AU
conjunction	-9622 May 05 j 06:16	2° H 05'01		direct	-9616 Jun 29 j 02:56	23° Ω 22'42	
minimum elong	-9622 May 05 j 06:18	2°) €05'02			-9616 Sep 03 j 20:04	0° m)	
max. Earth dist.	-9622 May 04 j 16:29		6.29145 AU	evening set	-9616 Oct 30 j 04:59	12°Mp01'36	
morning rise	-9622 May 18 j 13:46	5° ∺ 02'41			061637 10:06 11	1.50% 0.5140	000015
retrograde	-9622 Sep 16 j 17:55	22°) € 32'10		conjunction	-9616 Nov 12 j 06:41	15° m 05'42	0°00'56
asc. node	-9622 Oct 21 j 03:06	20°) € 40′56	0005107	minimum elong	-9616 Nov 12 j 06:40	15° m 05'42	0°01'09
opposition	-9622 Nov 15 j 08:41	17° ¥ 37'37		behind sun begin	-9616 Nov 11 j 22:29	15° m, 00'55	
min. Earth dist.	-9622 Nov 15 j 22:32	17°) € 33'04	4.31927 AU	behind sun end	-9616 Nov 12 j 14:51	15° m) 10'29	6 00 6 TO 1 TY
direct	-9621 Jan 16 j 05:18	12°) ₹33'54		max. Earth dist.	-9616 Nov 13 j 02:44	15° m 17'30	6.08678 AU
	-9621 May 20 j 23:16	0° Υ		desc. node	-9616 Nov 18 j 10:14	16° Mp 32'25	
evening set	-9621 May 24 j 17:43	0° Ƴ 49'40		morning rise	-9616 Nov 25 j 12:02	18° m 11'45	
	0.01 1 0.01	2000 42120	0020152		-9615 Jan 19 j 09:15	0∘ ʊ	
conjunction	-9621 Jun 06 j 19:34	3° Υ 43'29	0°30'52	retrograde	-9615 Apr 05 j 22:07	8° ₾ 03'12	0042126
minimum elong	-9621 Jun 06 j 19:31	3° Y 43′28	0°30'49	opposition	-9615 Jun 05 j 13:09	2° 2 59'49	
max. Earth dist.	-9621 Jun 05 j 16:20	3° Y 28′21	6.33754 AU	min. Earth dist.	-9615 Jun 04 j 17:30	3° ≏ 06′23	4.06845 AU
morning rise	-9621 Jun 19 j 17:52	6° Y 35'33			-9615 Jun 29 j 18:12	30°R, Mp	
retrograde	-9621 Oct 18 j 06:21	23° Y 50'08	1010120	direct	-9615 Aug 02 j 22:53	28° m 05'32	
opposition	-9621 Dec 17 j 11:39	18° Y 57'56 18° Y 50'53	1°19'39	. ,	-9615 Sep 05 j 23:46	0° ™	
min. Earth dist.	-9621 Dec 18 j 09:34		4.34579 AU	evening set	-9615 Dec 04 j 18:16	17° ≏ 01'17	
direct	-9620 Feb 17 j 23:07	13° Y 56'18		. ,.	0(15 D 10:04.25	200 0 10100	0055120
	-9620 Jun 15 j 06:25	0°8		conjunction	-9615 Dec 18 j 04:35	20° £ 10′09 20° £ 10′06	
evening set	-9620 Jun 24 j 12:37	2° 8 02'08 4° 8 32'49	6.34134 AU	minimum elong max. Earth dist.	-9615 Dec 18 j 04:29 -9615 Dec 19 j 14:51	20° £ 30'16	0°55'38 6.06121 AU
max. Earth dist.	-9620 Jul 05 j 19:11	4 03249	0.34134 AU		·		0.00121 AU
agniumation	0620 Iul 07:04:50	4° 8 51'37	1915100	morning rise	-9615 Dec 31 j 17:59	23° £ 20'40 0° I L	
conjunction	-9620 Jul 07 j 04:50	4° 8 51'34		ratra ara da	-9614 Jan 30 j 05:07		
minimum elong	-9620 Jul 07 j 04:45	_	1°15'25	retrograde	-9614 May 12 j 03:25	13°M18'00	1055157
morning rise	-9620 Jul 19 j 18:25	7° と 39'49 15° と		opposition	-9614 Jul 10 j 23:56	8°M12'54	
rotro aro do	-9620 Aug 23 j 05:17 -9620 Nov 18 j 06:34			min. Earth dist.	-9614 Jul 10 j 01:27		4.06780 AU
retrograde		25° 8 03'28	2011100	direct	-9614 Sep 07 j 03:57	3°M15'42	
opposition	-9619 Jan 18 j 03:09	20° 8 11'48	2°11'08	avanina aat	-9614 Dec 08 j 13:29	15°M	
min. Earth dist.	-9619 Jan 19 j 02:17	20° 8 04'27	4.32802 AU	evening set	-9613 Jan 10 j 12:57	22°M21'51	
direct	-9619 Mar 21 j 13:16	15° 8 13'04 0° Ⅱ		aaniumatiam	0612 Ion 24:04:00	250M 21127	1021140
	0610 1.1 10:21.21	υц		conjunction	-9613 Jan 24 j 04:09	25°M31'37	
overing	-9619 Jul 10 j 21:21			199 to 199 to 199 to 1			
evening set	-9619 Jul 25 j 18:11	3° Ⅱ 17'30	6 20226 ATT	minimum elong	-9613 Jan 24 j 04:06	25°M31'35	
evening set max. Earth dist.			6.30236 AU	max. Earth dist.	-9613 Jan 25 j 13:55	25°M51'13	6.08401 AU
max. Earth dist.	-9619 Jul 25 j 18:11 -9619 Aug 06 j 00:01	3° Ⅱ 17'30 5° Ⅱ 49'42			-9613 Jan 25 j 13:55 -9613 Feb 06 j 21:23	25°M51'13 28°M42'17	
max. Earth dist.	-9619 Jul 25 j 18:11 -9619 Aug 06 j 00:01 -9619 Aug 07 j 04:14	3°П17'30 5°П49'42 6°П05'40	1°37'46	max. Earth dist. morning rise	-9613 Jan 25 j 13:55 -9613 Feb 06 j 21:23 -9613 Feb 12 j 12:47	25°M51'13 28°M42'17 0°⊀	
max. Earth dist. conjunction minimum elong	-9619 Aug 06 j 00:01 -9619 Aug 07 j 04:14 -9619 Aug 07 j 04:12	3°П17'30 5°П49'42 6°П05'40 6°П05'39		max. Earth dist. morning rise retrograde	-9613 Jan 25 j 13:55 -9613 Feb 06 j 21:23 -9613 Feb 12 j 12:47 -9613 Jun 16 j 06:17	25°M51'13 28°M42'17 0°×7 18°×7'15'34	6.08401 AU
max. Earth dist. conjunction minimum elong morning rise	-9619 Jul 25 j 18:11 -9619 Aug 06 j 00:01 -9619 Aug 07 j 04:14 -9619 Aug 07 j 04:12 -9619 Aug 19 j 12:55	3°П17'30 5°П49'42 6°П05'40 6°П05'39 8°П53'19	1°37'46	max. Earth dist. morning rise retrograde opposition	-9613 Jan 25 j 13:55 -9613 Feb 06 j 21:23 -9613 Feb 12 j 12:47 -9613 Jun 16 j 06:17 -9613 Aug 14 j 13:53	25°M51'13 28°M42'17 0°×' 18°×'15'34 13°×'11'14	6.08401 AU -2°25'27
max. Earth dist. conjunction minimum elong	-9619 Aug 06 j 00:01 -9619 Aug 07 j 04:14 -9619 Aug 07 j 04:12	3°П17'30 5°П49'42 6°П05'40 6°П05'39	1°37'46 1°38'15	max. Earth dist. morning rise retrograde	-9613 Jan 25 j 13:55 -9613 Feb 06 j 21:23 -9613 Feb 12 j 12:47 -9613 Jun 16 j 06:17	25°M51'13 28°M42'17 0°×' 18°×'15'34 13°×'11'14	6.08401 AU

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 26 Attention, astronomical year style is used: The year -9612 in astronomical counting style is the year 9613 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	ne year -9612 i	in astronomical co	ounting style is the year	9613 BCE in historical c	ounting style.	
evening set	-9612 Feb 16 j 09:20	27° х 14′36			-9607 Nov 24 j 15:53	0ංම	
	-9612 Feb 28 j 11:21	5°0		retrograde	-9607 Dec 26 j 05:11	1° 5 30'18	
					-9606 Jan 27 j 00:09	30°RⅡ	
conjunction	-9612 Mar 01 j 02:25	0° る 22'20	-1°34'40	opposition	-9606 Feb 25 j 14:17	26° Ⅲ 36′59	2°23'03
minimum elong	-9612 Mar 01 j 02:28	0° る 22'22	1°35'15	min. Earth dist.	-9606 Feb 26 j 05:32	26° Ⅲ 32′09	4.26070 AU
max. Earth dist.	-9612 Mar 02 j 00:11	0° る 34'47	6.14688 AU	direct	-9606 Apr 28 j 04:15	21° Ⅱ 41'42	
morning rise	-9612 Mar 14 j 19:24	3° る 29'53			-9606 Jul 15 j 07:17	0 \circ \odot	
retrograde	-9612 Jul 19 j 01:27	22° る 18'15		evening set	-9606 Aug 30 j 16:29	9° 9 53'26	
opposition	-9612 Sep 16 j 02:15	17° る 16'51	-2°03'38				
min. Earth dist.	-9612 Sep 15 j 18:45	17° る 19'24	4.18702 AU	conjunction	-9606 Sep 12 j 03:04	12° 5 45'00	1°28'03
direct	-9612 Nov 14 j 19:41	12° る 13'33		minimum elong	-9606 Sep 12 j 03:08	12° 5 45'02	1°28'37
	-9611 Mar 18 j 11:03	0° ≈		max. Earth dist.	-9606 Sep 11 j 14:11	12° 5 37'34	6.22164 AU
evening set	-9611 Mar 23 j 05:04	1° ≈ 03'31		morning rise	-9606 Sep 24 j 14:28	15° © 37'12	
					-9606 Dec 06 j 00:56	0 $^{\circ}$ Ω	
conjunction	-9611 Apr 05 j 20:39	4° ≈ 07'24	-1°05'08	retrograde	-9605 Jan 29 j 21:37	4° Ω 18'49	
minimum elong	-9611 Apr 05 j 20:44	4° ≈ 07'26	1°05'39		-9605 Mar 27 j 10:19	30° ₹🥯	
max. Earth dist.	-9611 Apr 05 j 23:18	4° ≈ 08'53	6.22677 AU	opposition	-9605 Apr 01 j 07:53	29° © 22'25	1°45'50
morning rise	-9611 Apr 19 j 10:06	7° ≈ 10′06		min. Earth dist.	-9605 Apr 01 j 11:37	29° 5 21'13	4.18211 AU
	-9611 May 26 j 00:32	15° ≈		direct	-9605 May 31 j 18:18	24° 5 29'09	
retrograde	-9611 Aug 20 j 11:32	25°≈10'52			-9605 Jul 31 j 22:48	$0^{\circ}\Omega$	
opposition	-9611 Oct 18 j 16:55	20°≈13′20	-1°02'19	evening set	-9605 Oct 02 j 02:47	12° Q 53′04	
min. Earth dist.	-9611 Oct 18 j 21:04	20°≈11'56	4.26472 AU	_	-9605 Oct 11 j 04:48	15° Ω	
direct	-9611 Dec 18 j 15:03	15° ≈ 09'03			, and the second		
	-9610 Apr 09 j 15:05	0°) €		conjunction	-9605 Oct 14 j 20:11	15° Ω 51′02	0°49'05
evening set	-9610 Apr 26 j 11:35	3°) 40′12		minimum elong	-9605 Oct 14 j 20:15	15° Ω 51'04	0°49'33
Č	1 3			max. Earth dist.	-9605 Oct 15 j 00:08	15° Ω 53'20	6.14317 AU
conjunction	-9610 May 09 j 21:13	6°) 38′54	-0°15'30	morning rise	-9605 Oct 27 j 16:25	18° Ω 50'32	
minimum elong	-9610 May 09 j 21:15	6°) €38'55		. <i>8</i>	-9605 Dec 18 j 16:00	0° m)	
behind sun begin	-9610 May 09 j 20:14	6°) (38′21		retrograde	-9604 Mar 05 j 15:55	8° m) 14'54	
behind sun end	-9610 May 09 j 22:17	6° ¥ 39'29		opposition	-9604 May 05 j 19:52	3° m) 14'32	0°31'48
max. Earth dist.	-9610 May 09 j 04:34	6° ¥ 29'38	6.29726 AU	min. Earth dist.	-9604 May 05 j 09:12	3° m/ 18'02	4.10926 AU
morning rise	-9610 May 23 j 03:39	9°) €35'55	0.27720110	mm. Darun dibu	-9604 Jun 01 j 23:43	30°R Ω	0,20110
asc. node	-9610 Aug 31 j 13:05	26°) €21'48		direct	-9604 Jul 04 j 00:16	28° Ω 21'36	
retrograde	-9610 Sep 21 j 04:56	27° \ 03'03		anov	-9604 Aug 04 j 19:17	0° m)	
opposition	-9610 Nov 19 j 20:28	22° H 08'58	0°16'12	desc. node	-9604 Sep 27 j 11:26	8° mp 38'04	
min. Earth dist.	-9610 Nov 20 j 12:34	22°) (08'36' 22°) (08'42'	4.32206 AU	evening set	-9604 Nov 04 j 02:49	17° m) 01'57	
direct	-9609 Jan 20 j 20:22	17°) (05'30	4.32200710	evening set	7004 110V 04 J 02.47	17 1100137	
direct	-9609 May 04 j 09:16	0° Υ		conjunction	-9604 Nov 17 j 05:58	20° m/06'48	0°07'32
evening set	-9609 May 29 j 06:26	5° Υ 20'40		minimum elong	-9604 Nov 17 j 05:57		
max. Earth dist.	-9609 Jun 10 j 02:01		6.33702 AU	behind sun begin	-9604 Nov 16 j 22:28	20° m/02'24	0 0722
max. Earm dist.	-9009 Juli 10 J 02.01	1 13132	0.33702 AU	behind sun end	-9604 Nov 17 j 13:26	20° my 11'10	
conjunction	0600 Jun 11; 07:00	8° Ƴ 13'59	0°37'57	max. Earth dist.	-	20° m) 20'44	6.08326 AU
minimum elong	-9609 Jun 11 j 07:00 -9609 Jun 11 j 06:57	8° Υ 13'57	0°37'57		-9604 Nov 18 j 05:41 -9604 Nov 30 j 12:28		0.08320 AU
2		8 1 13 3 7 11° Υ 05'33	0 3/3/	morning rise	-	23° m 13'32 0° ⊆	
morning rise	-9609 Jun 24 j 04:05	28° Υ 21'17		rotro ara do	-9604 Dec 30 j 12:16		
retrograde	-9609 Oct 22 j 17:48		1920141	retrograde	-9603 Apr 11 j 01:45	13° ♀ 06'32 8° ♀ 02'51	0055126
opposition	-9609 Dec 22 j 01:27	23° Y 29'16 23° Y 22'13	1°28'41 4.34239 AU	opposition	-9603 Jun 10 j 13:33		
min. Earth dist.	-9609 Dec 22 j 23:25		4.34239 AU	min. Earth dist.	-9603 Jun 09 j 17:55	8° ♀ 09'26	4.06787 AU
direct	-9608 Feb 22 j 12:45	18° Y 28'01		direct	-9603 Aug 07 j 22:32	3° Ω 08'16 22° Ω 05'11	
	-9608 May 29 j 06:29	0° 8		evening set	-9603 Dec 09 j 20:44	22 ==03 11	
evening set	-9608 Jun 28 j 23:48	6° と 34'28 9° と 05'41	6.33533 AU	agniumation	0602 Dec 22: 07:45	25° £ 14'16	1002112
max. Earth dist.	-9608 Jul 10 j 06:47	9 005 41	0.33333 AU	conjunction	-9603 Dec 23 j 07:45		
	0.000 1 1 11:14.57	00000140	1010151	minimum elong	-9603 Dec 23 j 07:40	25° £ 14'12	
conjunction	-9608 Jul 11 j 14:57	9° 8 23'42	1°19'51	max. Earth dist.	-9603 Dec 24 j 17:26	25° £ 34'00	6.06341 AU
minimum elong	-9608 Jul 11 j 14:52	9° 8 23'40	1°20'09	morning rise	-9602 Jan 05 j 22:04	28° £ 24'59	
morning rise	-9608 Jul 24 j 03:29	12° 8 11'43			-9602 Jan 12 j 18:17	0°M₀	
	-9608 Aug 05 j 21:06	15° 8			-9602 Mar 31 j 07:10	15°M	
retrograde	-9608 Nov 22 j 22:28	29° 8 39'21	2015125	retrograde	-9602 May 17 j 01:52	18°M20'01	
opposition	-9607 Jan 22 j 20:43	24° 8 47'41	2°15'35	**	-9602 Jul 02 j 18:12	15°RM	2002104
min. Earth dist.	-9607 Jan 23 j 19:27	24° 8 40'28	4.31997 AU	opposition	-9602 Jul 15 j 21:10	13°M14'54	
direct	-9607 Mar 26 j 05:35	19° 8 49'29		min. Earth dist.	-9602 Jul 14 j 22:12	13°M22'43	4.07289 AU
	-9607 Jun 23 j 06:39	0°П		direct	-9602 Sep 12 j 01:15	8°M17'12	
evening set	-9607 Jul 30 j 05:29	7° ∏ 54'58			-9602 Nov 18 j 01:10	15° ™	
max. Earth dist.	-9607 Aug 10 j 11:23	10° Ⅱ 27'39	6.29278 AU	evening set	-9601 Jan 15 j 16:57	27°M23'34	
	0.005		1000115		-9601 Jan 26 j 23:26	0° ∡ ¹	
conjunction	-9607 Aug 11 j 15:01	10° Ⅱ 43'19	1°38'41			- -	
minimum elong	-9607 Aug 11 j 14:59	10° Ⅱ 43'18	1°39'12	conjunction	-9601 Jan 29 j 08:38	0° ∡ 33'10	
morning rise	-9607 Aug 23 j 23:44	13° Ⅱ 31′20		minimum elong	-9601 Jan 29 j 08:35	0° ∡ ³33′09	1°34'47

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -9601 in astronomical counting style is the year 9602 BCE in historical counting style. -9601 Jan 30 j 17:11 0° ₹ 52'03 6.09148 AU retrograde -9596 Nov 27 j 13:33 4°**I**15'28 max. Earth dist. -9601 Feb 12 j 01:55 3°×43'30 -9595 Jan 22 j 19:26 30°R8 morning rise -9601 Jun 21 j 02:12 23°×11'21 -9595 Jan 27 j 14:25 29°**8**23'37 2°19'14 retrograde opposition -9595 Jan 28 j 11:24 -9601 Aug 19 j 07:39 4.31459 AU 18°**₹**07'19 -2°25'22 min. Earth dist. 29°**8**16'57 opposition -9601 Aug 18 j 15:08 -9595 Mar 30 j 20:43 24°**8**25'49 min. Earth dist. 18°**≯**12'59 4.12196 AU direct -9601 Oct 17 j 02:31 direct 13°**х** 06′13 -9595 Jun 02 j 09:13 $0^{\circ}\Pi$ -9600 Feb 11 j 22:01 0°궁 evening set -9595 Aug 03 j 16:13 12°**Ⅲ**31'16 evening set -9600 Feb 21 j 11:06 2°る08'59 max. Earth dist. -9595 Aug 15 j 00:52 15°**Ⅱ**05'43 6.28620 AU 15°**Ⅲ**19'43 conjunction -9600 Mar 06 j 04:17 5°**ට**16'21 -1°32'17 conjunction -9595 Aug 16 j 01:29 1°38'59 minimum elong -9600 Mar 06 j 04:21 5°る16'23 1°32'51 minimum elong -9595 Aug 16 j 01:29 15°**Ⅱ**19'43 1°39'32 -9600 Mar 06 j 23:48 -9595 Aug 28 j 10:00 18°**Ⅱ**07'56 max. Earth dist. 5°**る**27'29 6.15679 AU morning rise -9595 Oct 25 j 10:01 morning rise -9600 Mar 19 j 21:00 8°**る**23'21 0ಂತಾ retrograde -9600 Jul 23 j 15:09 27°る05'12 retrograde -9595 Dec 31 j 01:13 6°9511'25 opposition -9600 Sep 20 j 16:47 22°る04'19 -1°56'58 opposition -9594 Mar 02 j 10:47 1°9517'46 2°20'24 min. Earth dist. -9600 Sep 20 j 10:15 22°る06'32 4.19684 AU min. Earth dist. -9594 Mar 03 j 01:05 1°513'14 4.25326 AU direct -9600 Nov 19 j 12:59 17°る00'46 -9594 Mar 12 j 18:31 30°RⅡ -9599 Mar 01 j 08:46 direct -9594 May 02 j 22:16 26°**Ⅲ**22'49 evening set -9599 Mar 28 j 02:38 5°≈48'47 -9594 Jun 21 j 12:54 0ಂತಾ evening set -9594 Sep 04 i 04:29 14°934'45 conjunction -9599 Apr 10 j 17:35 8°≈52'05 -0°59'01 minimum elong -9599 Apr 10 j 17:40 8°≈52'07 0°59'30 conjunction -9594 Sep 16 i 15:33 17°526'53 1°24'06 max. Earth dist. -9599 Apr 10 j 16:11 8°**≈**51'17 6.23587 AU minimum elong -9594 Sep 16 i 15:38 17°9526'56 1°24'40 morning rise -9599 Apr 24 i 06:23 11°≈54'08 max. Earth dist. -9594 Sep 16 i 03:48 17°9520'06 6.21390 AU -9599 May 08 j 07:25 15°≈ morning rise -9594 Sep 29 j 04:00 20°9519'50 -9599 Aug 25 j 00:30 29°≈49'49 -9594 Nov 13 i 01:56 retrograde $0^{\circ}\Omega$ -9599 Oct 23 j 05:50 24°≈52'48 -0°51'46 -9593 Feb 03 j 19:00 9°**Ω**06'22 retrograde opposition -9599 Oct 23 j 12:45 -9593 Apr 06 j 06:17 4°Ω09'21 1°37'13 min. Earth dist. 24°≈50'30 4 27220 AU opposition -9599 Dec 23 j 09:06 min. Earth dist. -9593 Apr 06 j 07:16 4°Ω09'02 4.17445 AU direct 19°≈48'29 -9598 Mar 22 j 17:51 0°**)**€ -9593 May 15 j 02:33 30°R55 -9598 May 01 j 04:33 -9593 Jun 05 j 12:10 29°9516'12 8°**)** 17'56 direct evening set -9593 Jun 26 j 21:14 0 $^{\circ}\Omega$ conjunction 11°**¥**16′01 -0°07′49 -9598 May 14 j 13:16 -9593 Sep 25 j 01:59 15°€ -9598 May 14 j 13:17 11°**升**16′02 0°08′05 -9593 Oct 06 j 18:00 17°**Ω**40'56 minimum elong evening set -9598 May 14 j 06:01 behind sun begin 11°**)** 12′00 -9598 May 14 j 20:32 -9593 Oct 19 j 12:44 20° **Ω**39'44 0°41'52 behind sun end 11°**)** € 20′03 conjunction -9598 May 13 j 19:08 -9593 Oct 19 j 12:48 max. Earth dist. 11°**)** 05'56 6.30264 AU minimum elong 20°**Ω**39'46 0°42'17 morning rise -9598 May 27 j 18:26 14°**¥**12'19 max. Earth dist. -9593 Oct 19 j 20:28 20°**Ω**44'15 6.13640 AU -9598 Jul 10 j 16:19 23°¥21'06 morning rise -9593 Nov 01 j 10:10 23°**Ω**40′08 asc. node -9598 Aug 24 j 15:03 $0^{\circ}\Upsilon$ -9593 Nov 29 j 13:10 0° m -9598 Sep 25 j 15:06 1°Y37'10 retrograde -9592 Mar 10 j 17:14 13°M)08'26 retrograde -9598 Oct 27 j 18:33 30°**₹**₩ -9592 May 10 j 18:54 8° m 07'35 0°19'45 opposition -9598 Nov 24 j 09:24 26°\dagger43'27 0°27'19 min. Earth dist. -9592 May 10 j 07:46 8° Mp 11'14 4.10376 AU opposition min. Earth dist. -9598 Nov 25 j 01:44 26°**)** 38'07 4.32520 AU -9592 Jul 08 j 21:12 3° m 14'30 direct -9597 Jan 25 j 10:34 21°**)** 40′13 -9592 Aug 07 j 20:50 4° m 42'52 direct desc. node $0^{\circ}\Upsilon$ -9597 Apr 15 i 15:55 evening set -9592 Nov 08 i 23:12 21° m 56'25 evening set -9597 Jun 02 i 19:54 9°Y54'27 -9592 Nov 22 i 03:24 25° m 01'56 -0°15'42 conjunction conjunction -9597 Jun 15 j 19:02 12°**Υ**'47'08 0°44'54 minimum elong -9592 Nov 22 i 03:22 25° m 01'55 0°15'34 -9597 Jun 15 i 18:58 12°**Y**47′06 0°44'58 behind sun begin -9592 Nov 22 j 01:19 25° m 00'43 minimum elong -9597 Jun 14 j 13:04 12°**Υ**30'27 6.33773 AU behind sun end -9592 Nov 22 j 05:25 25° m 03'07 max. Earth dist. -9597 Jun 28 j 14:52 15°**Y**38′09 -9592 Nov 23 j 03:25 25° m 16'03 6.07943 AU morning rise max. Earth dist. -9597 Sep 13 j 10:27 0°8 -9592 Dec 05 j 11:19 28° m 09'24 morning rise retrograde -9597 Oct 27 j 07:37 2°854'37 -9592 Dec 13 j 10:08 0∘**⊽** -9597 Dec 10 j 23:19 30°R℃ retrograde -9591 Apr 16 j 00:56 18°**♀**03'57 opposition -9597 Dec 26 j 16:30 28°Υ02'48 1°37'17 opposition -9591 Jun 15 j 11:17 12° 259'58 -1°06'39 min. Earth dist. -9597 Dec 27 j 15:25 27°**Y**55′28 4.34086 AU min. Earth dist. -9591 Jun 14 j 14:18 13°**♀**07'00 4.06627 AU -9596 Feb 27 j 05:13 23°**Y**01'57 -9591 Aug 12 j 17:50 8°**£**05'00 direct direct -9596 May 09 j 16:01 0°8 27°**2**03'51 evening set -9591 Dec 14 j 21:37 -9596 Jul 03 j 10:59 11°**8**07'58 -9591 Dec 27 j 10:57 0°M evening set -9596 Jul 14 j 17:12 13°**8**38'59 max. Earth dist. 6.33158 AU conjunction -9591 Dec 28 j 09:33 0°M13'15 -1°08'23 conjunction -9596 Jul 16 j 01:04 13°**8**56'52 1°24'08 minimum elong -9591 Dec 28 j 09:28 0°M13'11 1°08'36 minimum elong -9596 Jul 16 j 01:00 13°**8**56'49 1°24'28 max. Earth dist. -9591 Dec 29 j 19:38 0°M33'13 6.06404 AU -9596 Jul 20 j 17:39 15°8 morning rise -9590 Jan 11 j 00:26 3°M24'10 -9596 Jul 28 j 12:45 16°**8**44'38 -9590 Mar 05 j 20:58 15°M morning rise -9596 Oct 04 j 11:44 $\mathbb{I}^{\circ 0}$ -9590 May 22 j 01:01 23°M17'40 retrograde

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -9590 in astronomical counting style is the year 9591 BCE in historical counting style. -9590 Jul 20 i 17:01 18°M12'35 -2°09'11 retrograde -9585 Oct 31 i 18:50 7°**8**27'03 opposition 18°ML19'53 4.07575 AU opposition min. Earth dist. -9590 Jul 19 j 19:39 -9585 Dec 31 j 07:02 2°**8**35'18 1°45'17 -9590 Aug 15 j 09:38 min. Earth dist. -9584 Jan 01 j 05:07 2°**8**28'15 4.34089 AU 15°RM 30°**₹**Υ -9590 Sep 16 j 22:35 -9584 Jan 21 j 14:31 direct 13°M14'25 -9584 Mar 02 j 18:51 27° Y 34'51 -9590 Oct 19 j 14:34 15°M direct -9584 Apr 12 j 21:00 0°8 -9589 Jan 10 j 11:25 0°**∡**¹ -9589 Jan 20 j 19:48 evening set 2°**∡**¹21'54 -9584 Jul 04 j 21:28 15°8 evening set -9584 Jul 07 j 21:15 15°**8**39'52 -9584 Jul 19 j 02:37 6.32886 AU conjunction -9589 Feb 03 j 11:57 5°**х** 31'29 -1°36'07 max. Earth dist. 18°**8**10'38 minimum elong -9589 Feb 03 j 11:55 5°**х** 31'27 1°36'37 max. Earth dist. -9589 Feb 04 j 19:39 5°**∡**¹49'49 6.09628 AU conjunction -9584 Jul 20 j 10:12 18°**8**28'22 1°27'53 -9589 Feb 17 j 05:24 -9584 Jul 20 j 10:08 18°**8**28'20 morning rise 8°**∡**11'38 minimum elong 1°28'16 -9584 Aug 01 j 21:04 21°**8**15'53 retrograde -9589 Jun 25 j 20:16 28°**₹**'05'01 morning rise min. Earth dist. -9589 Aug 23 j 08:49 23°**✗**06'51 4.12843 AU -9584 Sep 12 j 07:04 $0^{\circ}\Pi$ opposition -9589 Aug 24 j 00:46 23°**₹**01'24 -2°24'16 retrograde -9584 Dec 02 j 05:54 8°**Ⅱ**49'46 direct -9589 Oct 21 j 21:08 17°**∡** 59'57 opposition -9583 Feb 01 j 07:26 3°**Ⅱ**57'47 2°22'02 -9588 Jan 25 j 09:13 0°ರ min. Earth dist. -9583 Feb 02 j 04:48 3°**Ⅲ**51′01 4.30912 AU evening set -9588 Feb 26 j 12:46 7°る02'27 -9583 Mar 09 j 17:06 30°R₩ direct -9583 Apr 04 j 12:50 29°800'23 conjunction -9588 Mar 11 j 05:49 10°る09'29 -1°29'14 -9583 Apr 30 j 06:29 $0^{\circ}\Pi$ minimum elong -9588 Mar 11 j 05:53 10°る09'31 1°29'48 evening set -9583 Aug 08 j 01:44 17°**Ⅲ**05'52 max. Earth dist. -9588 Mar 11 j 21:38 10°る18'29 6.16449 AU max. Earth dist. -9583 Aug 19 j 10:55 19°**Ⅱ**40′56 6.27822 AU morning rise -9588 Mar 24 j 22:23 13°る16'04 -9588 Jun 24 i 02:49 0°≈ conjunction -9583 Aug 20 j 10:51 19°**Ⅲ**54'33 1°38'43 -9583 Aug 20 j 10:51 -9588 Jul 28 j 06:57 1°≈52'20 19°**I**54'34 1°39'16 retrograde minimum elong -9588 Aug 31 j 05:42 30°RZ -9583 Sep 01 j 19:32 22°II43'09 morning rise opposition -9588 Sep 25 j 07:45 26°る52'00 -1°49'30 -9583 Oct 05 j 07:27 0ംഉ -9588 Sep 25 j 03:39 26°る53'23 4.20495 AU -9582 Jan 04 j 19:27 10°951'57 min. Earth dist. retrograde -9588 Nov 24 j 09:06 21°る48'15 -9582 Mar 07 j 06:39 direct opposition 5°957'50 2°16'55 -9587 Feb 10 j 02:08 -9582 Mar 07 j 18:37 5°554'02 4.24325 AU 0°≈ min. Earth dist. -9587 Apr 02 j 00:18 -9582 May 07 j 13:31 10°≈34'47 1°903'13 evening set direct -9582 Sep 08 j 16:19 19°9516'27 evening set -9587 Apr 15 j 14:52 conjunction 13°≈37'35 -0°52'27 -9587 Apr 15 j 14:57 -9582 Sep 21 j 04:13 22°509'24 1°19'39 minimum elong 13°≈37'37 0°52'55 conjunction -9587 Apr 15 j 12:34 -9582 Sep 21 j 04:18 22°509'26 1°20'12 max. Earth dist. 13°≈36'17 6.24409 AU minimum elong 6.20279 AU -9587 Apr 21 j 17:43 -9582 Sep 20 j 19:25 15°**≈** max. Earth dist. 22°**©**04'18 -9587 Apr 29 j 02:44 -9582 Oct 03 j 17:32 25°9503'14 morning rise 16°≈38'58 morning rise -9587 Jul 05 j 22:07 0°**)**€ -9582 Oct 25 j 17:43 0° Ω retrograde -9587 Aug 29 j 12:23 4° #29'54 retrograde -9581 Feb 08 j 19:22 13°**Ω**56'00 -9587 Oct 24 j 11:23 30°R≈ opposition -9581 Apr 11 j 05:05 8°**Ω**58'29 1°27'59 opposition -9587 Oct 27 j 19:28 29°≈33'26 -0°40'49 min. Earth dist. -9581 Apr 11 j 05:26 8°**Ω**58'22 4.16280 AU min. Earth dist. -9587 Oct 28 j 02:50 29°≈30'59 4.27979 AU -9581 Jun 10 j 07:57 4°**Ω**05'25 direct direct -9587 Dec 28 j 01:18 24°≈29'14 -9581 Sep 07 j 15:40 15°Ω -9586 Mar 01 j 06:21 0°**)**€ -9581 Oct 11 j 10:54 22°**Ω**32'40 evening set -9586 May 05 j 21:38 12°**¥**56'39 evening set -9581 Oct 24 i 06:53 25°**Ω**32'31 0°34'18 max. Earth dist. -9586 May 18 j 08:10 15°**)** 42'23 6.30908 AU conjunction minimum elong -9581 Oct 24 i 06:56 25°Ω32'33 0°34'40 conjunction -9586 May 19 j 05:00 15°**)** 53′58 -0°00′00 max. Earth dist. -9581 Oct 24 i 15:52 25°**Ω**37'47 6.12534 AU -9586 May 19 i 04:59 15°**¥**53'58 0°00'13 morning rise -9581 Nov 06 i 05:58 28°**Ω**34'06 minimum elong behind sun begin -9586 May 18 i 20:54 15°**)** 49'29 -9581 Nov 12 i 10:31 0° m behind sun end -9586 May 19 i 13:05 15°\ 58'26 -9580 Mar 15 j 18:49 18° m 07'47 retrograde -9586 May 19 j 04:25 15°**)** 53'40 -9580 May 15 j 19:26 13° m 06'24 0°07'22 asc node opposition 13°M 10'52 -9586 Jun 01 j 09:04 18°**)**49'31 min. Earth dist. -9580 May 15 j 05:55 4.09425 AU morning rise $0^{\circ}\Upsilon$ -9580 Jun 17 j 21:02 -9586 Jul 26 j 15:21 desc. node 9° m 19'01 -9580 Jul 13 j 17:14 retrograde -9586 Sep 30 j 03:48 6°Y11'54 direct 8° m 13'09 -9586 Nov 28 j 23:08 1°Υ18'32 0°38'19 evening set -9580 Nov 13 j 22:33 26° m 58'19 opposition min. Earth dist. -9586 Nov 29 j 17:14 1°Υ12'39 4.32993 AU -9580 Nov 26 j 20:05 0∘**⊽** -9586 Dec 09 j 03:17 30°**₹** -9585 Jan 30 j 03:47 26°**¥**15'33 -9580 Nov 27 j 04:07 0°**2**04'43 -0°23'56 direct conjunction $0^{\circ}\Upsilon$ -9585 Mar 22 j 19:05 -9580 Nov 27 j 04:05 0°**2**04'42 0°23'52 minimum elong 14°**Y**27'57 6.07228 AU evening set -9585 Jun 07 j 08:45 max. Earth dist. -9580 Nov 28 j 06:23 0°**ჲ**20'10 max. Earth dist. -9585 Jun 19 j 01:02 17°**Y**03′29 6.34017 AU morning rise -9580 Dec 10 j 13:12 3°**₽**13'01 retrograde -9579 Apr 21 j 05:20 23°**₽**10'14 conjunction -9585 Jun 20 j 06:36 17°**Υ**19'57 0°51'35 opposition -9579 Jun 20 j 12:13 18° 205'55 -1°17'42 minimum elong -9585 Jun 20 j 06:32 17°**Y**19'55 0°51'41 min. Earth dist. -9579 Jun 19 j 15:24 18°**≙**12'56 4.06218 AU -9585 Jul 03 j 01:00 20°**Y**10′17 -9579 Aug 17 j 18:05 13°**♀**10'33 morning rise direct -9585 Aug 19 j 17:35 0°8 -9579 Dec 10 j 14:01 0°M

Attention, astronom	ical year style is used: Th	e year -9579 i	n astronomical co	ounting style is the year	9580 BCE in historical c	ounting style.	
evening set	-9579 Dec 20 j 02:43	2°M12'13		max. Earth dist.	-9573 Jun 23 j 05:47		6.34694 AU
conjunction	-9578 Jan 02 j 15:31	5° M 21'59	-1°14'13	conjunction	-9573 Jun 24 j 13:54	21° Y '42'29	0°57'43
minimum elong	-9578 Jan 02 j 15:25	5°M21'56	1°14'28	minimum elong	-9573 Jun 24 j 13:49	21° Y ′42'26	0°57'51
max. Earth dist.	-9578 Jan 04 j 02:36	5°ML42'31	6.06331 AU	morning rise	-9573 Jul 07 j 07:07	24° Y ′32'01	
morning rise	-9578 Jan 16 j 07:04	8°MJ33'10			-9573 Aug 01 j 16:11	9° 8	
	-9578 Feb 13 j 21:03	15°M₊		retrograde	-9573 Nov 05 j 04:08	11° 8 48'08	
retrograde	-9578 May 27 j 01:59	28°M24'56		opposition	-9572 Jan 04 j 17:45	6° 8 56'28	1°52'19
opposition	-9578 Jul 25 j 16:06	23°M19'57	-2°14'32	min. Earth dist.	-9572 Jan 05 j 17:28	6° 8 48'54	4.34355 AU
min. Earth dist.	-9578 Jul 24 j 18:19	23°M27'23	4.07892 AU	direct	-9572 Mar 07 j 06:56	1° 8 56'21	
direct	-9578 Sep 21 j 21:37	18°M21'22			-9572 Jun 19 j 03:19	15° 8	
	-9578 Dec 23 j 08:03	0° ∡ ¹		evening set	-9572 Jul 12 j 02:30	19° 8 59'40	
evening set	-9577 Jan 26 j 03:02	7° ∡ 729'44		max. Earth dist.	-9572 Jul 23 j 07:16	22° 8 30'12	6.32698 AU
conjunction	-9577 Feb 08 j 19:24	10° ∡ ³39′08		conjunction	-9572 Jul 24 j 14:40	22° 8 47'51	1°30'59
minimum elong	-9577 Feb 08 j 19:23		1°37'47	minimum elong	-9572 Jul 24 j 14:37	22° 8 47'49	1°31'24
max. Earth dist.	-9577 Feb 10 j 00:57	10° ∡ 56′12	6.10310 AU	morning rise	-9572 Aug 06 j 00:44	25° 8 35'07	
morning rise	-9577 Feb 22 j 13:03	13° ∡ ¹49'00			-9572 Aug 26 j 04:10	0°П	
	-9577 May 17 j 01:08	0°₹		retrograde	-9572 Dec 06 j 15:34	13° Ⅱ 12'09	
retrograde	-9577 Jun 30 j 17:28	3° ට 06'38		opposition	-9571 Feb 05 j 19:46	8° Ⅲ 20'01	2°23'54
	-9577 Aug 14 j 06:25	30°Ŗ ⋌ ¹		min. Earth dist.	-9571 Feb 06 j 16:10	8° Ⅱ 13'33	4.30295 AU
opposition	-9577 Aug 28 j 20:56	28° ∡ 03′22		direct	-9571 Apr 08 j 21:55	3° Ⅲ 23′02	
min. Earth dist.	-9577 Aug 28 j 06:17		4.13848 AU	evening set	-9571 Aug 12 j 07:08	21° Ⅱ 29'12	
direct	-9577 Oct 26 j 21:42	23° ∡ '01'32			0.551 1 04:16:10	2 40 T 1 011 6	1005150
	-9576 Jan 04 j 16:07	0°る		conjunction	-9571 Aug 24 j 16:10	24° Ⅱ 18'16	1°37'53
evening set	-9576 Mar 02 j 16:52	12° る 01'59		minimum elong	-9571 Aug 24 j 16:11	24° Ⅱ 18'16	1°38'26
	0576 Mar. 16 : 00.57	15070000	1925122	max. Earth dist.	-9571 Aug 23 j 16:43	24° Ⅱ 04'53	6.26818 AU
conjunction minimum elong	-9576 Mar 16 j 09:57 -9576 Mar 16 j 10:02	15°る08'28 15°る08'31	1°26'06	morning rise	-9571 Sep 06 j 01:06 -9571 Sep 18 j 20:48	27° Ⅱ 07'23 0° ©	
max. Earth dist.	-9576 Mar 17 j 01:38	15°る17'23	6.17743 AU	retrograde	-9570 Jan 09 j 12:32	15° © 22'30	
morning rise	-9576 Mar 30 j 01:54	13 3 1723	0.17743 AU	opposition	-9570 Mar 11 j 22:42		2°12'46
morning risc	-9576 May 25 j 23:36	18 ⊘ 1417		min. Earth dist.	-9570 Mar 12 j 10:53		4.22985 AU
retrograde	-9576 Aug 01 j 22:53	6°≈42'41		direct	-9570 May 12 j 02:44	5°933'43	4.22763 AC
opposition	-9576 Sep 30 j 00:13	1°≈42'53	-1°41'14	evening set	-9570 Sep 13 j 01:10	23° © 49'55	
min. Earth dist.	-9576 Sep 29 j 20:45		4.21962 AU	evening sec	узто в е р 13 ј от.10	25 🔾 1,755	
mm. Barm anst.	-9576 Oct 12 j 23:27	30°R₹	21702110	conjunction	-9570 Sep 25 j 14:02	26°5643'56	1°14'49
direct	-9576 Nov 29 j 05:33	26° පි 39'01		minimum elong	-9570 Sep 25 j 14:07	26°9643'59	1°15'22
	-9575 Jan 15 j 19:37	0° ≈		max. Earth dist.	-9570 Sep 25 j 06:25	26°939'31	6.18734 AU
	-9575 Apr 05 j 07:58	15° ≈		morning rise	-9570 Oct 08 j 04:37	29° © 39'00	
evening set	-9575 Apr 06 j 22:16	15° ≈ 21'16		_	-9570 Oct 09 j 17:07	$0^{\circ}\Omega$	
					-9570 Dec 25 j 12:00	15° Ω	
conjunction	-9575 Apr 20 j 11:49	18° ≈ 23′03	-0°45'36	retrograde	-9569 Feb 13 j 16:12	18° Ω 39'47	
minimum elong	-9575 Apr 20 j 11:53	18° ≈ 23'06	0°46'01		-9569 Apr 05 j 20:42	15°R Ω	
max. Earth dist.	-9575 Apr 20 j 06:09	18° ≈ 19'53	6.25947 AU	opposition	-9569 Apr 16 j 01:26	13° Ω 41'48	1°18'23
morning rise	-9575 May 03 j 22:50	21° ≈ 23′25		min. Earth dist.	-9569 Apr 15 j 23:22	13° Ω 42′28	4.14654 AU
	-9575 Jun 13 j 18:10	0°) €		direct	-9569 Jun 14 j 22:28	8° Ω 48'53	
retrograde	-9575 Sep 02 j 23:39	9° ₩ 07'15			-9569 Aug 18 j 14:56	15° Ω	
opposition	-9575 Nov 01 j 08:32	4°) 11′13		evening set	-9569 Oct 16 j 02:34	27° Ω 20'42	
min. Earth dist.	-9575 Nov 01 j 17:47	4°) €08'09	4.29456 AU		-9569 Oct 27 j 10:44	0° m)	
	-9575 Dec 08 j 21:59	30° R ≈					
direct	-9574 Jan 01 j 19:30	29° ≈ 07'03		conjunction	-9569 Oct 29 j 00:01	0°My21'53	0°26'38
	-9574 Jan 25 j 22:28	0° ∀		minimum elong	-9569 Oct 29 j 00:03	0°My21'54	0°26'58
asc. node	-9574 Mar 28 j 21:06	8° ¥ 36'43		max. Earth dist.	-9569 Oct 29 j 11:43	0° Mp 28'45	6.10987 AU
evening set	-9574 May 10 j 12:23	17° ∺ 29'46		morning rise	-9569 Nov 11 j 00:37	3° m 24'51	
				retrograde	-9568 Mar 20 j 22:43	23° m 05'49	
conjunction	-9574 May 23 j 18:33	20° ₩ 26'00	0°07'39	desc. node	-9568 Apr 28 j 17:51	20° m/48'57	
minimum elong	-9574 May 23 j 18:32	20° ∺ 26′00	0°07'29	opposition	-9568 May 20 j 19:24	18° Mp 03'57	
behind sun begin	-9574 May 23 j 11:09	20°) €21'55		min. Earth dist.	-9568 May 20 j 04:56	18° Mp 08'45	4.08094 AU
behind sun end	-9574 May 24 j 01:56	20°) € 30'06	(22217 · ***	direct	-9568 Jul 18 j 14:07	13° m 10'32	
max. Earth dist.	-9574 May 22 j 21:26	20°) 14'17	6.32217 AU		-9568 Nov 10 j 07:12	ე₀ ⊽	
morning rise	-9574 Jun 05 j 21:02	23° ¥ 20′25		evening set	-9568 Nov 18 j 22:32	2° ჲ 00'36	
ratro ar- J-	-9574 Jul 07 j 03:18	0° Υ		aamin	0560 D 02:05 27	50 0 00101	0021157
retrograde	-9574 Oct 04 j 10:58	10° Y 38'24	0040142	conjunction	-9568 Dec 02 j 05:27	5° Ω 08'01	
opposition	-9574 Dec 03 j 09:49	5° Y 45'21	0°48'42	minimum elong	-9568 Dec 02 j 05:24	5° £ 07'59	0°31'56
min. Earth dist. direct	-9574 Dec 04 j 04:15 -9573 Feb 03 j 16:14	5° Υ 39'23 0° Υ 42'40	4.34041 AU	max. Earth dist.	-9568 Dec 03 j 10:29 -9568 Dec 15 j 15:52	5° £ 25'06 8° £ 17'19	6.06245 AU
	- <i>73/3</i> 1 CU U3 10.14	U 14240		morning rise	-7000 DCC 10 10:02	0 == 1/19	
evening set	-9573 Jun 11 j 17:39	18° Ƴ 51'25		retrograde	-9567 Apr 26 j 09:12	28° ≏ 17'43	

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -9567 in astronomical counting style is the year 9568 BCE in historical counting style. -9567 Jun 25 i 13:06 23°**£**13'10 -1°28'08 direct -9561 Feb 08 i 07:16 5°**Y**14'21 opposition 23°**2**20'43 4.05718 AU -9567 Jun 24 j 14:45 evening set -9561 Jun 16 j 04:37 23°**Y**21'42 min. Earth dist. -9567 Aug 22 j 16:00 direct 18°**♀**17'27 -9561 Jun 28 j 23:42 26°**Y**12′13 -9567 Nov 22 j 13:51 $0^{\circ}M$ conjunction 1°03'41 -9567 Dec 25 j 08:51 -9561 Jun 28 j 23:37 26°**Y**12′10 1°03'52 evening set 7°M22'16 minimum elong -9561 Jun 27 j 16:02 25°**Y**54'34 max. Earth dist. 6.34682 AU 29°**Υ**01'12 -9561 Jul 11 j 15:32 conjunction -9566 Jan 07 j 22:19 10°M32'20 -1°19'27 morning rise -9566 Jan 07 j 22:13 minimum elong 10°M32'17 1°19'46 -9561 Jul 16 j 02:07 0°8 -9566 Jan 09 j 09:17 15°8 max. Earth dist. 10°M52'48 6.06322 AU -9561 Oct 11 j 11:19 morning rise -9566 Jan 21 j 14:34 13°M43'43 retrograde -9561 Nov 09 j 15:40 16°**8**18'59 -9566 Jan 27 j 02:36 15°M -9561 Dec 09 j 00:31 15°₹**8** -9560 Jan 09 j 08:14 -9566 Apr 13 j 22:22 0°**∡**¹ opposition 11°**8**27'23 1°59'01 retrograde -9566 Jun 01 j 02:41 3°**∡**³33′05 min. Earth dist. -9560 Jan 10 j 07:38 11°**8**19'56 4.33990 AU -9566 Jul 19 j 06:20 30°RM direct -9560 Mar 11 j 20:14 6°827'42 opposition -9566 Jul 30 j 15:15 28°M28'05 -2°18'49 -9560 May 31 j 21:25 15°8 min. Earth dist. -9566 Jul 29 j 17:34 28°M35'30 4.08370 AU evening set -9560 Jul 16 j 12:15 24°831'11 direct -9566 Sep 26 j 22:57 23°M28'58 -9566 Dec 02 j 03:09 0°**∡**7 conjunction -9560 Jul 28 j 23:29 27°**8**19'16 1°33'42 27°**8**19'14 evening set -9565 Jan 31 j 09:42 12°**∡**37'10 minimum elong -9560 Jul 28 j 23:26 1°34'08 max. Earth dist. -9560 Jul 27 j 15:24 27°801'12 6.31990 AU conjunction -9565 Feb 14 j 02:32 15°**∡** 46'18 -1°37'41 -9560 Aug 09 j 21:21 $0^{\circ}\Pi$ minimum elong -9565 Feb 14 i 02:32 15°**∡**¹46'18 1°38'12 morning rise -9560 Aug 10 j 09:09 0°Д06'36 max. Earth dist. -9565 Feb 15 i 08:45 16°**₹**03'43 6.11208 AU retrograde -9560 Dec 11 i 09:32 17°**Ⅱ**48'27 morning rise -9565 Feb 27 i 19:59 18°**х** 55'41 opposition -9559 Feb 10 i 14:00 12°**Ⅱ**56′06 2°25'03 -9565 Apr 20 j 21:15 0°궁 min. Earth dist. -9559 Feb 11 j 10:22 12°**Ⅱ**49'39 4.29297 AU -9565 Jul 05 j 14:13 8°**궁**06'28 -9559 Apr 13 j 14:32 7°**Ⅱ**59'29 retrograde direct -9565 Sep 02 j 16:14 3°る03'35 -2°18'54 26°**Ⅱ**07'10 -9559 Aug 16 j 17:50 opposition evening set -9565 Sep 02 j 02:40 -9559 Aug 28 j 06:10 28°**Ⅱ**44'47 min. Earth dist. 3°る08'13 4.15034 AU max. Earth dist. 6.25625 AU -9565 Sep 26 j 20:38 30°R.✓ -9565 Oct 31 j 20:43 28°**₹**'01'21 -9559 Aug 29 j 03:10 direct conjunction 28°**∏**56'47 1°36'25 -9559 Aug 29 j 03:11 -9565 Dec 06 j 06:25 0°궁 28°**Ⅲ**56'48 1°36'59 minimum elong -9559 Sep 02 j 17:40 0ಂತಾ -9564 Mar 07 j 19:39 16°**පි**58'56 evening set -9559 Sep 10 j 12:28 1°9546'35 morning rise 20°**ප්**04'44 -1°21'15 -9564 Mar 21 j 12:20 -9558 Jan 14 j 09:34 conjunction retrograde 20°9508'24 20°る04'47 1°21'48 -9558 Mar 16 j 21:00 minimum elong -9564 Mar 21 j 12:25 opposition 15°9513'34 2°07'31 -9564 Mar 22 j 00:18 -9558 Mar 17 j 06:40 max. Earth dist. 20°る11'31 6.19080 AU min. Earth dist. 15°**©**10'29 4.21696 AU morning rise -9564 Apr 04 j 03:55 23°**る**09'47 direct -9558 May 16 j 20:04 10°9519'34 -9564 May 05 j 14:54 evening set -9558 Sep 17 j 15:58 28°938'06 0°≈ retrograde -9564 Aug 06 j 12:52 11°≈30'29 -9558 Sep 23 j 13:34 $0^{\circ}\Omega$ -9564 Oct 04 j 15:29 6°≈31'10 -1°32'23 opposition min. Earth dist. -9564 Oct 04 j 13:47 6°≈31'44 4.23291 AU conjunction -9558 Sep 30 j 05:45 1°**Q**33'04 1°09'16 -9564 Dec 04 j 01:30 1°≈27'04 -9558 Sep 30 j 05:50 1°**Ω**33'07 1°09'46 direct minimum elong -9563 Mar 19 j 06:47 -9558 Sep 30 j 00:47 1°Ω30'11 6.17490 AU 15°≈ max. Earth dist. -9563 Apr 11 j 18:48 20°≈05'45 -9558 Oct 12 j 21:36 4°**Ω**29'14 evening set morning rise -9558 Nov 30 j 18:53 15°**Ω** conjunction -9563 Apr 25 i 07:37 23°≈06'43 -0°38'28 retrograde -9557 Feb 18 i 19:44 23°**Ω**36'34 18°**Ω**38'02 1°07'45 minimum elong -9563 Apr 25 i 07:41 23°≈06'45 0°38'52 opposition -9557 Apr 21 i 02:58 max. Earth dist. -9563 Apr 25 i 00:19 23°≈02'38 6.27177 AU min. Earth dist. -9557 Apr 20 i 23:09 18°**Ω**39'16 4.13555 AU morning rise -9563 May 08 j 17:28 26°≈06'08 -9557 May 22 j 20:04 15°RΩ -9563 May 26 i 13:49 0°**₩** direct -9557 Jun 19 j 20:37 13°Ω45'09 -9563 Sep 07 j 10:59 13°¥44'22 -9557 Jul 17 j 15:26 15°Ω retrograde -9557 Oct 10 j 22:13 -9563 Nov 05 j 21:27 8°\dagger48'52 -0°18'32 opposition 0° m min. Earth dist. -9563 Nov 06 j 08:13 8°**)** 45'19 4.30469 AU -9557 Oct 20 j 23:01 evening set 2° m 19'24 direct -9562 Jan 06 j 11:33 3° **)** 44'49 -9562 Feb 05 j 07:57 5°**¥**04'29 conjunction -9557 Nov 02 j 21:54 5° **m** 21'34 $0^{\circ}18'29$ asc. node -9562 May 15 j 03:13 22°\ 04'35 minimum elong -9557 Nov 02 j 21:56 5° m 21'35 0°18'48 evening set max. Earth dist. -9562 May 27 j 07:23 24°**)** 46'20 6.32922 AU -9557 Nov 03 j 13:23 5° m 30'39 6.10175 AU max. Earth dist. -9557 Nov 15 j 23:59 8°m 25'33 morning rise -9562 May 28 j 07:57 24°\ 59'58 0°15'14 conjunction desc. node -9556 Mar 08 j 06:28 27° m/40'12 -9562 May 28 j 07:55 0°15'07 minimum elong 24°**)** 59'57 retrograde -9556 Mar 26 j 02:45 28° m 10'09 behind sun begin -9562 May 28 j 05:12 24°**)** 58'27 opposition -9556 May 25 j 21:35 23° m 07'50 -0°17'31 behind sun end -9562 May 28 j 10:39 25°**₭**01'28 min. Earth dist. -9556 May 25 j 05:03 23° m 13'19 4.07671 AU morning rise -9562 Jun 10 j 09:15 27°**¥**53′35 direct -9556 Jul 23 j 12:36 18° m 14'14 -9562 Jun 20 j 00:04 0° γ -9556 Oct 23 j 15:17 0∘**⊽** retrograde -9562 Oct 08 j 22:05 15°**Y**09'35 evening set -9556 Nov 24 j 00:29 7°**£**05'49 -9562 Dec 07 j 22:37 10°**Y**16′48 0°59'01 opposition min. Earth dist. -9562 Dec 08 j 18:41 10°Υ10'19 4.34404 AU -9556 Dec 07 j 08:21 10°**2**13'40 -0°39'49 conjunction

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -9556 in astronomical counting style is the year 9557 BCE in historical counting style. morning rise -9556 Dec 07 i 08:17 10°**△**13'38 0°39'51 -9550 Jun 14 i 19:45 2°Y22'54 minimum elong -9556 Dec 08 j 14:24 10°**£**31'21 -9550 Oct 13 j 08:40 19°Y38'58 max. Earth dist. 6.06228 AU retrograde -9556 Dec 20 j 19:52 13°**£**23'24 opposition -9550 Dec 12 j 10:53 14°**Y**46'32 1°08'53 morning rise -9550 Dec 13 j 07:58 0°M 14°**Ƴ**39'44 4.34244 AU -9555 Mar 15 j 02:53 min. Earth dist. 9°**Y**44'30 -9555 May 01 j 10:08 -9549 Feb 12 j 20:34 retrograde 3°M22'55 direct 27°**Y**52'12 -9549 Jun 20 j 15:32 -9555 Jun 17 j 18:05 30°R Ω evening set opposition -9555 Jun 30 j 13:01 28° **1**8'05 -1°37'47 -9549 Jun 30 j 05:23 0°8 0°**8**23'47 6.34196 AU max. Earth dist. -9549 Jul 01 j 24:00 min. Earth dist. -9555 Jun 29 j 13:59 28°**£**25'53 4.06116 AU direct -9555 Aug 27 j 16:21 23°**£**21'53 -9555 Nov 01 j 23:18 0° M conjunction -9549 Jul 03 j 09:18 0°**8**42'22 1°09'14 -9549 Jul 03 j 09:13 evening set -9555 Dec 30 j 13:11 12°M26'37 minimum elong 0°**8**42'19 1°09'28 -9549 Jul 16 j 00:15 3°**8**31'08 -9554 Jan 10 j 12:42 15°M⋅ morning rise -9549 Sep 11 j 01:20 15°8 conjunction -9554 Jan 13 j 03:23 15°M36'35 -1°24'00 retrograde -9549 Nov 14 j 06:16 20°852'19 minimum elong -9554 Jan 13 j 03:18 15°M36'32 1°24'23 opposition -9548 Jan 14 j 00:06 16°**8**00'43 2°05'02 max. Earth dist. -9554 Jan 14 j 15:44 15°M57'47 6.07083 AU min. Earth dist. -9548 Jan 14 j 23:24 15°**8**53'18 4.33246 AU morning rise -9554 Jan 26 j 19:47 18°ML47'39 -9548 Jan 22 j 00:08 15°R₩ -9554 Mar 19 j 20:03 0°×7 direct -9548 Mar 16 j 11:14 11°801'29 retrograde -9554 Jun 06 j 00:38 8°**х** 31'38 -9548 May 08 j 16:29 15°8 opposition -9554 Aug 04 j 10:47 3°**₹**26'50 -2°21'54 evening set -9548 Jul 20 j 22:47 29°806'11 min. Earth dist. -9554 Aug 03 j 14:20 3°**х¹**33'49 4.09422 AU -9548 Jul 24 j 22:42 $0^{\circ}\Pi$ -9554 Sep 01 i 09:57 30°RM max. Earth dist. -9548 Aug 01 j 04:17 1°**Ⅱ**37'51 6.31046 AU direct -9554 Oct 01 i 21:05 28°M27'15 -9554 Nov 01 i 13:50 0°×7 conjunction -9548 Aug 02 i 09:32 1°**Ⅱ**54'23 1°35'50 evening set -9553 Feb 05 j 12:37 17°**∡**33'35 -9548 Aug 02 j 09:29 1°**I**54′21 1°36'17 minimum elong -9548 Aug 14 j 18:37 4°**Ⅱ**41'53 morning rise -9553 Feb 19 j 05:25 20°**₹**42'12 -1°37'22 -9548 Dec 16 j 03:23 22°**Ⅲ**29'16 conjunction retrograde -9553 Feb 19 j 05:26 -9547 Feb 15 j 09:58 17°**Ⅲ**36'42 2°25'15 minimum elong 20° ₹42'13 1°37'55 opposition -9553 Feb 20 j 08:02 20°**尽**57'29 6.12427 AU -9547 Feb 16 j 04:33 17°**Д**30'48 4.28235 AU max. Earth dist. min. Earth dist. 23°**х** 50′59 -9553 Mar 04 j 22:54 -9547 Apr 18 j 07:19 12°**Ⅲ**40'34 direct morning rise -9547 Aug 17 j 14:39 -9553 Apr 01 j 16:27 0°ಕ 0.00 -9553 Jul 10 j 04:32 -9547 Aug 21 j 06:16 0°9549'41 12°**る**54'17 evening set retrograde -9553 Sep 07 j 07:01 7°る51'49 -2°14'51 opposition -9553 Sep 06 j 18:51 7°る55'59 4.16296 AU -9547 Sep 02 j 15:41 3°539'50 1°34'17 min. Earth dist. conjunction -9553 Nov 05 j 15:06 2°**る**49'11 -9547 Sep 02 j 15:44 direct minimum elong 3°939'52 1°34'52 3°528'43 6.24527 AU -9552 Mar 12 j 17:44 21°**る**44'09 -9547 Sep 01 j 20:18 evening set max. Earth dist. -9547 Sep 15 j 01:40 morning rise 6°930'21 conjunction -9552 Mar 26 j 10:13 24°る49'21 -1°16'35 retrograde -9546 Jan 19 j 09:20 24°958'20 minimum elong -9552 Mar 26 j 10:18 24°る49'24 1°17'07 opposition -9546 Mar 21 j 20:32 20°502'59 2°01'18 max. Earth dist. -9552 Mar 26 j 19:16 24°る54'28 6.20295 AU min. Earth dist. -9546 Mar 22 j 04:12 20°500'32 4.20625 AU -9552 Apr 09 j 01:09 27°る53'38 direct -9546 May 21 j 16:06 15°909'11 morning rise -9552 Apr 18 j 12:06 -9546 Sep 07 j 00:35 $0^{\circ}\Omega$ 0°≈ -9552 Jul 15 j 15:35 -9546 Sep 22 j 07:35 3°**£**29′08 15°≈ evening set -9552 Aug 11 j 00:58 16°≈07'48 retrograde -9552 Sep 06 j 04:59 -9546 Oct 04 j 22:35 6°**Q**25'00 1°03'10 15°R≈ conjunction -9552 Oct 09 i 03:16 -9546 Oct 04 i 22:39 opposition 11°≈09'05 -1°23'16 minimum elong 6°**Ω**25'03 1°03'40 -9552 Oct 09 i 04:10 6°**Ω**24'32 min. Earth dist. 11°≈08'47 4.24331 AU max. Earth dist. -9546 Oct 04 i 21:45 6.16548 AU 9°Ω22'09 direct -9552 Dec 08 i 17:23 6°≈04'55 morning rise -9546 Oct 17 i 15:37 -9551 Feb 28 j 22:53 15°≈ -9546 Nov 11 i 15:34 15°Ω -9551 Apr 16 j 11:42 24°≈41'19 -9545 Feb 23 j 22:22 28°Ω34'33 evening set retrograde -9545 Apr 26 j 04:25 23°Ω35'27 0°56'35 opposition -9551 Apr 29 j 23:39 27°≈41'39 -0°31'19 min. Earth dist. -9545 Apr 25 j 22:29 23°Ω37'23 4.12805 AU conjunction -9551 Apr 29 j 23:42 direct -9545 Jun 24 j 17:45 18°**Ω**42'37 minimum elong 27° \$\approx 41'41 0° 31' 41 max. Earth dist. -9551 Apr 29 j 12:31 27°≈35'27 6.27959 AU -9545 Sep 23 j 07:52 0° m -9551 May 10 j 07:51 0°**)**€ evening set -9545 Oct 25 j 19:28 7° m 18'10 -9551 May 13 j 08:35 morning rise 0° > 40'23 -9551 Sep 11 j 19:59 18°**¥**15′08 conjunction -9545 Nov 07 j 19:30 10° Tp 21'06 0°10'14 retrograde -9551 Nov 10 j 08:16 13°**)** €20'04 -0°07'30 -9545 Nov 07 j 19:31 10° Mp 21'070°10'30 opposition minimum elong -9551 Nov 10 j 20:35 13°**光**16′01 4.30951 AU -9545 Nov 07 j 13:08 10° m 17'23 min. Earth dist. behind sun begin 9°**)** 12'44 10° m 24'51 asc. node -9551 Dec 17 j 06:06 behind sun end -9545 Nov 08 j 01:54 direct -9550 Jan 11 j 00:52 8°**)** 16'10 max. Earth dist. -9545 Nov 08 j 12:31 10° mg 31'05 6.09664 AU evening set -9550 May 19 j 16:16 26°**)** ₹35′03 morning rise -9545 Nov 20 j 23:05 13° m 25'57 desc. node -9544 Jan 16 j 12:10 25° m 31'34 conjunction -9550 Jun 01 j 19:48 29°**₩**29'52 0°22'36 -9544 Feb 13 j 17:08 0∘**⊽** minimum elong -9550 Jun 01 j 19:46 29°**米**29'51 0°22'31 retrograde -9544 Mar 31 j 04:37 3°**£**13′07 max. Earth dist. -9550 May 31 j 18:08 29°¥15'36 6.33078 AU -9544 May 16 j 20:52 30°R M

-9544 May 30 j 22:30

opposition

28° m 10'17 -0°29'54

-9550 Jun 04 j 02:01

 $0^{\circ}\Upsilon$

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 32 Attention, astronomical year style is used: The year -9544 in astronomical counting style is the year 9545 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	ne year -9544 i	in astronomical co	ounting style is the year	9545 BCE in historical c	ounting style.	
min. Earth dist.	-9544 May 30 j 04:23	28° Mp 16'19	4.07440 AU	max. Earth dist.	-9538 Jun 05 j 04:53	3° Y 46'43	6.33278 AU
direct	-9544 Jul 28 j 11:14	23° Mp 16'23					
	-9544 Oct 03 j 06:35	0∘ ⊽		conjunction	-9538 Jun 06 j 08:11	4° Υ 01'53	0°29'57
evening set	-9544 Nov 29 j 01:38	12° Ω 09'12		minimum elong	-9538 Jun 06 j 08:09	4° Υ ′01′52	0°29'55
	·			morning rise	-9538 Jun 19 j 06:53	6° Ƴ 54'19	
conjunction	-9544 Dec 12 j 10:41	15° ≏ 17'27	-0°47'21	retrograde	-9538 Oct 17 j 19:44	24° Ƴ 10′25	
minimum elong	-9544 Dec 12 j 10:36	15° Ω 17'24		opposition	-9538 Dec 17 j 00:39	19° Ƴ 18'10	1°18'28
max. Earth dist.	-9544 Dec 13 j 19:28	15° Ω 36'43	6.06298 AU	min. Earth dist.	-9538 Dec 17 j 21:45	19° Ƴ 11'23	4.34194 AU
morning rise	-9544 Dec 25 j 22:56	18° ≏ 27'28		direct	-9537 Feb 17 j 10:45	14° Ƴ 16'30	
8	-9543 Feb 17 j 08:58	0°M₊			-9537 Jun 14 j 04:45	0°B	
retrograde	-9543 May 06 j 11:58	8°M25'42		evening set	-9537 Jun 25 j 02:50	2° 8 23'51	
opposition	-9543 Jul 05 j 11:25	3°M20'45	-1°46'39	max. Earth dist.	-9537 Jul 06 j 11:25		6.33910 AU
min. Earth dist.	-9543 Jul 04 j 13:01		4.06506 AU	max. Earth dist.	7557 vai 00 j 11.25	1 033 12	0.55710710
mm. Earth dist.	-9543 Aug 01 j 16:27	30° Ŗ Ω	1.00300110	conjunction	-9537 Jul 07 j 19:24	5° 8 13'34	1°14'27
direct	-9543 Sep 01 j 15:15	28° £ 24'07		minimum elong	-9537 Jul 07 j 19:19	5° 8 13'32	
direct	-9543 Oct 02 j 15:11	0°M		morning rise	-9537 Jul 20 j 09:08	8° 8 01'57	1 1777
	-9543 Dec 24 j 21:18	15°M		morning risc	-9537 Aug 21 j 23:29	15° 8	
evening set	-9542 Jan 04 j 16:58	17°M29'09		retrograde	-9537 Nov 18 j 20:37	25° 8 25'51	
evening set	-9342 Jan 04 j 10.38	17 11629 09		opposition	-9536 Jan 18 j 16:32	20° 8 34'16	2°10'20
· · · · · · · · · · · ·	0542 I 10:07:22	200 m 20150	1927157		•	20° 8 26'58	4.32766 AU
conjunction	-9542 Jan 18 j 07:32	20°M38'59		min. Earth dist.	-9536 Jan 19 j 15:33		4.32/00 AU
minimum elong	-9542 Jan 18 j 07:28	20°M38'56		direct	-9536 Mar 21 j 03:13	15° 8 35'33	
max. Earth dist.	-9542 Jan 19 j 17:56	20°M59'00	6.07729 AU		-9536 Jul 08 j 18:07	0°II	
morning rise	-9542 Feb 01 j 00:27	23°M49'53		evening set	-9536 Jul 25 j 09:16	3° Ⅱ 40'18	
	-9542 Feb 28 j 11:10	0° ∡ 7					
retrograde	-9542 Jun 10 j 19:53	13° ∡ 28'59		conjunction	-9536 Aug 06 j 19:18	6° Ⅲ 28'27	
min. Earth dist.	-9542 Aug 08 j 09:20		4.10282 AU	minimum elong	-9536 Aug 06 j 19:16	6° Ⅱ 28'26	
opposition	-9542 Aug 09 j 05:25	8° ∡ °24′21	-2°24'01	max. Earth dist.	-9536 Aug 05 j 14:21	6° Ⅱ 12'05	6.30401 AU
direct	-9542 Oct 06 j 17:27	3° ∡ °24'16		morning rise	-9536 Aug 19 j 04:13	9° Ⅱ 16′06	
evening set	-9541 Feb 10 j 14:55	22° ∡ 29'31		retrograde	-9536 Dec 20 j 21:24	27° Ⅱ 07'59	
				opposition	-9535 Feb 20 j 05:28	22° Ⅱ 15′04	2°24'32
conjunction	-9541 Feb 24 j 07:57	25° ∡ ³37'46	-1°36'24	min. Earth dist.	-9535 Feb 20 j 22:14		4.27474 AU
minimum elong	-9541 Feb 24 j 07:59	25° ∡ ³37'47	1°36'58	direct	-9535 Apr 22 j 23:47	17° Ⅱ 19'19	
max. Earth dist.	-9541 Feb 25 j 08:32	25° ₹ 51'52	6.13436 AU		-9535 Aug 01 j 00:34	0ං ම	
morning rise	-9541 Mar 10 j 01:11	28° ₰ ¹46'00		evening set	-9535 Aug 25 j 17:20	5° 5 28'46	
	-9541 Mar 15 j 11:51	5°0		max. Earth dist.	-9535 Sep 06 j 11:43	8° © 10'29	6.23724 AU
retrograde	-9541 Jul 14 j 21:04	17° る 42'44					
opposition	-9541 Sep 11 j 22:15	12° る 40'43	-2°09'57	conjunction	-9535 Sep 07 j 03:16	8° © 19'25	1°31'35
min. Earth dist.	-9541 Sep 11 j 12:42	12° る 43'58	4.17339 AU	minimum elong	-9535 Sep 07 j 03:19	8° © 19'27	1°32'09
direct	-9541 Nov 10 j 10:45	7° る 37'47		morning rise	-9535 Sep 19 j 13:40	11° © 10'31	
evening set	-9540 Mar 17 j 16:09	26° る 30'38		retrograde	-9534 Jan 24 j 07:21	29° 5 43'35	
				opposition	-9534 Mar 26 j 18:31	24° © 47'48	1°54'20
conjunction	-9540 Mar 31 j 08:19	29° る 35'18	-1°11'24	min. Earth dist.	-9534 Mar 27 j 00:33	24°9545'52	4.19818 AU
minimum elong	-9540 Mar 31 j 08:24	29° පි 35'21	1°11'55	direct	-9534 May 26 j 10:26	19° 9 54'17	
max. Earth dist.	-9540 Mar 31 j 14:22	29° る 38'43	6.21299 AU		-9534 Aug 20 j 11:13	$0^{\circ}\Omega$	
	-9540 Apr 02 j 04:07	0° ≈		evening set	-9534 Sep 26 j 21:42	8° Ω 14'53	
morning rise	-9540 Apr 13 j 22:40	2° ≈ 38'57		Č	1 3		
S	-9540 Jun 13 j 21:19	15° ≈		conjunction	-9534 Oct 09 j 13:34	11° Ω 11'31	0°56'45
retrograde	-9540 Aug 15 j 11:46	20°≈47'14		minimum elong	-9534 Oct 09 j 13:39	11° Ω 11'34	0°57'14
opposition	-9540 Oct 13 j 15:53	15° ≈ 49'01	-1°13'35	max. Earth dist.	-9534 Oct 09 j 13:59	11° Ω 11'45	6.15806 AU
min. Earth dist.	-9540 Oct 13 j 17:56		4.25209 AU	morning rise	-9534 Oct 22 j 08:02	14° Ω 09'35	-
	-9540 Oct 19 j 18:50	15°R≈			-9534 Oct 25 j 23:27	15° Ω	
direct	-9540 Dec 13 j 09:03	10° ≈ 44'46			-9533 Jan 11 j 09:44	0° m/y	
ancet	-9539 Feb 05 j 22:08	15° ≈		retrograde	-9533 Feb 28 j 21:16	3° My 26'26	
evening set	-9539 Apr 21 j 05:29	29°≈19'12		retrograde	-9533 Apr 19 j 00:21	30°RΩ	
evening set	-9539 Apr 24 j 07:07	0° ∺		opposition	-9533 Apr 19 J 00:21 -9533 May 01 j 03:12	28° Ω 26'45	0°45'12
	7007 Apr 24 J 07.07	υ Λ		min. Earth dist.	-9533 May 01 J 03.12 -9533 Apr 30 j 19:04	28° Ω 29'25	4.12166 AU
conjunction	-9539 May 04 j 16:27	2° 升 18'53	_0°23'5 <i>1</i>	direct	-9533 Apr 30 j 19:04 -9533 Jun 29 j 12:39	$28^{\circ} \Omega 29^{\circ} 23^{\circ} \Omega 33^{\circ} 52^{\circ}$	т.12100 AU
·	• •	2° X 18'53		uncci			
minimum elong	-9539 May 04 j 16:30			ovening set	-9533 Sep 03 j 06:28	0°M) 12°M-10'48	
max. Earth dist.	-9539 May 04 j 02:33	2° 升 11'08	6.28665 AU	evening set	-9533 Oct 30 j 14:03	12° Mp 10'48	
morning rise	-9539 May 18 j 00:20	5°) 16'54			0522 N 12:15:20	1.50 m. 1.42 1	0002105
retrograde	-9539 Sep 16 j 07:30	22°) (48'23		conjunction	-9533 Nov 12 j 15:30	15° m 14'31	0°02'05
asc. node	-9539 Oct 27 j 11:25	20°) 12'35		minimum elong	-9533 Nov 12 j 15:30	15° m 14'32	0°02'17
opposition	-9539 Nov 14 j 20:37	17°) €53'48	0°03'44	behind sun begin	-9533 Nov 12 j 07:20	15° m 09'45	
min. Earth dist.	-9539 Nov 15 j 11:04	17°) (49'04	4.31425 AU	behind sun end	-9533 Nov 12 j 23:40	15° m 19'18	
direct	-9538 Jan 15 j 16:57	12°) € 50'06		max. Earth dist.	-9533 Nov 13 j 11:53	15° m 26'30	6.09197 AU
	-9538 May 19 j 02:40	0° Υ		morning rise	-9533 Nov 25 j 20:15	18° m) 20'08	
evening set	-9538 May 24 j 05:56	1° Ƴ 07'41		desc. node	-9533 Nov 26 j 10:01	18° m) 28'09	

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 33 Attention, astronomical year style is used: The year -9532 in astronomical counting style is the year 9533 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	ne year -9532 i	in astronomical co	unting style is the year	9533 BCE in historical c		
	-9532 Jan 19 j 00:58	0∘ ⊽		conjunction	-9526 Jun 10 j 20:29	8° Y 35'08	
retrograde	-9532 Apr 05 j 05:53	8° ₾ 09'38		minimum elong	-9526 Jun 10 j 20:26	8° Y 35'06	0°37'09
opposition	-9532 Jun 04 j 20:44	3° ჲ 06'27		max. Earth dist.	-9526 Jun 09 j 16:06	8° Y 19'21	6.33641 AU
min. Earth dist.	-9532 Jun 04 j 02:39	3° ≏ 12'29	4.07190 AU	morning rise	-9526 Jun 23 j 17:53	11° Υ 26'51	
	-9532 Jun 30 j 03:59	30°R Mp		retrograde	-9526 Oct 22 j 08:01	28° Y ′42′21	
direct	-9532 Aug 02 j 08:09	28° Mp 12'17		opposition	-9526 Dec 21 j 14:28	23° Y 50'18	1°27'35
. ,	-9532 Sep 04 j 07:22	0° Ω		min. Earth dist.	-9526 Dec 22 j 12:48	23° Y 43'08	4.34341 AU
evening set	-9532 Dec 04 j 01:07	17° ≏ 06'49		direct	-9525 Feb 22 j 02:50	18° Y 48'57 0° と	
conjunction	-9532 Dec 17 j 10:57	20° £ 15'28	0054122	evening set	-9525 May 28 j 02:47 -9525 Jun 29 j 13:17	6° 8 54'58	
minimum elong	-9532 Dec 17 j 10:57	20° ⊆ 15'25		max. Earth dist.	-9525 Jul 10 j 20:27	9° 8 26'11	6.33784 AU
max. Earth dist.	-9532 Dec 17 j 10:52		6.06258 AU	max. Latur dist.	-7525 Jul 10 J 20.27	7 02011	0.55764 AC
morning rise	-9532 Dec 31 j 00:15	23° Ω 25'51	0.00230710	conjunction	-9525 Jul 12 j 04:41	9° 8 44'13	1°19'13
	-9531 Jan 29 j 01:48	0°M		minimum elong	-9525 Jul 12 j 04:37	9° 8 44'10	1°19'31
retrograde	-9531 May 11 j 09:31	13°M23'19		morning rise	-9525 Jul 24 j 17:27	12° 8 32'12	
min. Earth dist.	-9531 Jul 09 j 08:34	8°M26'06	4.06705 AU	C	-9525 Aug 04 j 21:35	15° 8	
opposition	-9531 Jul 10 j 07:30	8°M18'18	-1°54'37	retrograde	-9525 Nov 23 j 09:35	29° 8 58'20	
direct	-9531 Sep 06 j 10:47	3°M21'13		opposition	-9524 Jan 23 j 08:19	25° 8 06'36	2°14'51
	-9531 Dec 07 j 09:28	15°M		min. Earth dist.	-9524 Jan 24 j 06:11	24° 8 59'39	4.32381 AU
evening set	-9530 Jan 09 j 19:11	22°M27'34		direct	-9524 Mar 25 j 16:55	20° 8 08'13	
					-9524 Jun 21 j 06:31	Π °0	
conjunction	-9530 Jan 23 j 10:21	25°M37'26		evening set	-9524 Jul 29 j 18:22	8° Ⅱ 12'38	
minimum elong	-9530 Jan 23 j 10:17	25°M37'23		max. Earth dist.	-9524 Aug 10 j 01:13	10° Ⅱ 45'37	6.29764 AU
max. Earth dist.	-9530 Jan 24 j 20:04		6.08142 AU				
morning rise	-9530 Feb 06 j 03:24	28°M48'12		conjunction	-9524 Aug 11 j 04:00		1°38'24
	-9530 Feb 11 j 08:26	0° ∡7		minimum elong	-9524 Aug 11 j 03:59	11° I I00'48	1°38'55
retrograde	-9530 Jun 15 j 16:11	18° ₹ 23'31	2925106	morning rise	-9524 Aug 23 j 12:34	13° ∏ 48'35 0° ©	
opposition min. Earth dist.	-9530 Aug 13 j 22:55 -9530 Aug 13 j 05:02	13°×719'10	4.10870 AU	retrograde	-9524 Nov 21 j 11:54 -9524 Dec 25 j 15:35	1°9545'05	
direct	-9530 Aug 13 j 03:02 -9530 Oct 11 j 13:56	8°×18'40	4.108/0 AU	renograde	-9524 Dec 23 j 13:33 -9523 Jan 29 j 01:30	1 3 43 03	
evening set	-9529 Feb 15 j 16:43	27° ₹ 23'58		opposition	-9523 Feb 25 j 00:10	26° Ⅱ 51'51	2°22'59
evening set	-9529 Feb 27 j 02:01	0°る		min. Earth dist.	-9523 Feb 25 j 16:32	26° I I46'40	4.26609 AU
	3023100 27 J 02.01	. .		direct	-9523 Apr 27 j 16:05	21° I I56'26	20009110
conjunction	-9529 Mar 01 j 09:55	0° る 32'00	-1°34'44		-9523 Jul 13 j 12:46	0ංම	
minimum elong	-9529 Mar 01 j 09:58	0° る 32'01	1°35'19	evening set	-9523 Aug 30 j 03:56	10° © 06'42	
max. Earth dist.	-9529 Mar 02 j 08:32	0° る 44'56	6.14155 AU	-			
morning rise	-9529 Mar 15 j 03:02	3° る 39'51		conjunction	-9523 Sep 11 j 14:14	12° © 57'57	1°28'20
retrograde	-9529 Jul 19 j 11:31	22° る 30'59		minimum elong	-9523 Sep 11 j 14:18	12° 9 57'59	
opposition	-9529 Sep 16 j 13:02	17° る 29'30	-2°04'11	max. Earth dist.	-9523 Sep 10 j 23:10	12° 5 49'17	6.22695 AU
min. Earth dist.	-9529 Sep 16 j 04:11		4.18134 AU	morning rise	-9523 Sep 24 j 01:35	15° © 49'51	
direct	-9529 Nov 15 j 03:49	12° る 26'19			-9523 Dec 04 j 05:01	0 $^{\circ}\Omega$	
	-9528 Mar 16 j 18:36	0° ≈		retrograde	-9522 Jan 29 j 04:19	4° Ω 28'55	
evening set	-9528 Mar 22 j 14:40	1°≈18′00		***	-9522 Mar 28 j 02:17	30°₹©	1046141
aaniumatian	0529 Amr 05: 06:22	490022111	1905142	opposition min. Earth dist.	-9522 Mar 31 j 15:58	29° © 32'33 29° © 31'22	1°46'41 4.18686 AU
conjunction minimum elong	-9528 Apr 05 j 06:22 -9528 Apr 05 j 06:27	4°≈22'11 4°≈22'14		direct	-9522 Mar 31 j 19:38 -9522 May 31 j 03:03	29 931 22 24°939'09	4.18080 AU
max. Earth dist.	-9528 Apr 05 j 08:55	4°≈23'38	6.22129 AU	unect	-9522 Jul 30 j 09:09	24 3 3909	
morning rise	-9528 Apr 18 j 20:11	7°≈25'16	0.22127710	evening set	-9522 Oct 01 j 12:16	13° Ω 01'51	
	-9528 May 24 j 03:20	15° ≈		evening sec	-9522 Oct 09 j 23:29	15° Ω	
retrograde	-9528 Aug 20 j 01:28	25° ≈ 28'26			,		
opposition	-9528 Oct 18 j 05:23	20° ≈ 30'47	-1°03'23	conjunction	-9522 Oct 14 j 05:32	15° Ω 59'33	0°49'57
min. Earth dist.	-9528 Oct 18 j 09:53	20° ≈ 29'16	4.25989 AU	minimum elong	-9522 Oct 14 j 05:36	15° Q 59'35	0°50'25
direct	-9528 Dec 18 j 03:42	15° ≈ 26′29		max. Earth dist.	-9522 Oct 14 j 09:33	16° Ω 01'53	6.14687 AU
	-9527 Apr 07 j 15:51	0° ∀		morning rise	-9522 Oct 27 j 01:15	18° Ω 58'42	
evening set	-9527 Apr 25 j 23:19	3° ¥ 59′01			-9522 Dec 17 j 08:30	0° m	
				retrograde	-9521 Mar 05 j 23:47	8° Mp 21'22	
conjunction	-9527 May 09 j 09:26	6°) ₹58'03		opposition	-9521 May 06 j 03:08	3° m/21'09	0°33'25
minimum elong	-9527 May 09 j 09:27	6°) 58′04		min. Earth dist.	-9521 May 05 j 18:22	3° m/24'01	4.11135 AU
max. Earth dist.	-9527 May 08 j 18:31		6.29349 AU	11.	-9521 Jun 03 j 11:05	30°R€	
morning rise	-9527 May 22 j 16:05	9°) (55'19		direct	-9521 Jul 04 j 09:34	28° Ω 28'11	
asc. node	-9527 Sep 05 j 23:56	27°) (02'22		4 1	-9521 Aug 04 j 01:22	0° M)	
retrograde	-9527 Sep 20 j 17:24	27°) 23'39 22°) 29'26	0°15'00	desc. node	-9521 Oct 05 j 18:16	10° M) 24'58	
opposition min. Earth dist.	-9527 Nov 19 j 09:31 -9527 Nov 20 j 00:03	22° H 29'26 22° H 24'41	4.31973 AU	evening set	-9521 Nov 04 j 10:53	17° Mp 08'05	
direct	-9526 Jan 20 j 07:44	17° H 25'55	1.517/3 AU	conjunction	-9521 Nov 17 j 13:33	20° m 12'44	-0°06'21
	-9526 May 02 j 05:49	0°Υ		minimum elong	-9521 Nov 17 j 13:33	20° m/12'44	
evening set	-9526 May 28 j 19:45	5° Υ 41'43		behind sun begin	-9521 Nov 17 j 05:46	20° m/08'12	
<i>5</i>	== 1 ->	5		2 0.2	j 000	*	

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -9521 in astronomical counting style is the year 9522 BCE in historical counting style. asc. node -9521 Nov 17 j 21:18 20° m 17'17 -9515 Jul 16 j 18:14 24° ¥ 50'58 behind sun end -9521 Nov 18 j 10:39 20° m 25'08 -9515 Aug 21 j 07:47 $0^{\circ}\Upsilon$ max Earth dist 6.08341 AU -9521 Nov 30 j 19:54 23° m/ 19'22 -9515 Sep 25 j 03:31 1°Y54'00 morning rise retrograde -9515 Oct 30 j 02:05 -9521 Dec 30 j 08:41 0∘ଫ 30°**₹** -9520 Apr 10 j 08:02 27°**₩**00'12 0°25'55 retrograde 13°**♀**12'29 opposition -9515 Nov 23 j 21:16 -9515 Nov 24 j 13:52 opposition -9520 Jun 09 j 21:10 8°**£**08'54 -0°53'42 min. Earth dist. 26°**)** 54'47 4.33174 AU -9514 Jan 25 j 00:03 min. Earth dist. -9520 Jun 09 j 01:13 8°**£**15'34 4.06603 AU direct 21°**)** 56'54 $0^{\circ}\Upsilon$ 3°**△**14'23 direct -9520 Aug 07 j 05:24 -9514 Apr 13 j 16:33 10°**Y**08'37 evening set -9520 Dec 09 j 04:10 22° **△**12'00 evening set -9514 Jun 02 j 06:20 max. Earth dist. -9514 Jun 14 j 01:06 12°**Υ**45'10 6.34553 AU conjunction -9520 Dec 22 j 15:06 25°**2**21'11 -1°01'12 -9520 Dec 22 j 15:00 -9514 Jun 15 j 05:46 13° Υ 01'05 minimum elong 25°**≏**21′08 1°01'23 conjunction 0°43'54 -9514 Jun 15 j 05:42 max. Earth dist. -9520 Dec 24 j 00:40 25°**♀**40'53 6.05982 AU minimum elong 13°**Y**01'03 0°43'58 morning rise -9519 Jan 05 j 05:08 28°**♀**32'00 morning rise -9514 Jun 28 j 01:38 15°**Y**51'49 -9519 Jan 11 j 13:04 0°M -9514 Sep 11 j 08:23 0°8 -9519 Mar 29 j 13:36 15°M retrograde -9514 Oct 26 j 14:52 3°805'28 retrograde -9519 May 16 j 12:32 18°M29'14 -9514 Dec 11 j 20:45 30°RY 28°**Y**13'34 -9519 Jul 03 j 08:27 15°RM opposition -9514 Dec 26 j 01:10 1°35'50 28°**Y**′06'31 min. Earth dist. -9519 Jul 14 j 08:56 13°M31'38 4.06780 AU min. Earth dist. -9514 Dec 26 j 23:12 4.34913 AU opposition -9519 Jul 15 j 06:52 13°M24'09 -2°01'59 direct -9513 Feb 26 j 13:31 23°Y12'36 direct -9519 Sep 11 j 11:07 8°M26'37 -9513 May 09 j 02:33 0°8 -9519 Nov 16 j 11:35 15°M evening set -9513 Jul 03 i 19:39 11°**8**16'06 -9518 Jan 15 i 01:35 27°M34'38 max. Earth dist. -9513 Jul 15 j 00:49 13°**8**46'16 6.33952 AU evening set -9518 Jan 25 j 12:34 0°×7 conjunction -9513 Jul 16 i 09:48 14°804'44 1°23'20 -9518 Jan 28 j 17:19 0°**х** 44'33 -1°33'51 -9513 Jul 16 j 09:43 14°804'42 1°23'40 minimum elong conjunction -9518 Jan 28 j 17:16 -9513 Jul 20 j 12:29 15°8 0° 2744'31 1°34'18 minimum elong -9518 Jan 30 j 02:57 -9513 Jul 28 j 21:36 max. Earth dist. 1°**尽**04'05 6.08560 AU 16°**8**52'15 morning rise -9518 Feb 11 j 10:41 -9513 Oct 04 j 04:19 3°**х** 55′13 0°П morning rise -9513 Nov 27 j 20:25 4°**Ⅲ**20′06 -9518 Jun 20 j 13:49 23°**х** 26′02 retrograde retrograde -9512 Jan 23 j 15:57 -9518 Aug 18 j 19:38 18°**₹**22'02 -2°25'10 30°R₩ opposition -9512 Jan 27 j 20:03 -9518 Aug 18 j 01:39 18°**₹**28'12 4.11627 AU opposition 29°**8**28'21 2°18'22 min. Earth dist. 13°**∡**′21′11 -9518 Oct 16 j 12:01 min. Earth dist. -9512 Jan 28 j 19:06 29°**8**21'02 4.32127 AU direct -9517 Feb 10 j 03:10 -9512 Mar 30 j 04:29 0°궁 direct 24°**8**30'21 -9512 Jun 01 j 06:06 evening set -9517 Feb 20 j 21:50 2°**る**25'37 $0^{\circ}\Pi$ evening set -9512 Aug 02 j 23:14 12°**Ⅲ**34′22 -9517 Mar 06 j 14:58 conjunction 5°る33'12 -1°32'23 max. Earth dist. -9512 Aug 14 j 05:20 15°**Ⅲ**07'12 6.29096 AU minimum elong -9517 Mar 06 j 15:01 5°る33'14 1°32'57 max. Earth dist. -9517 Mar 07 j 10:57 5°る44'37 6.15215 AU conjunction -9512 Aug 15 j 08:34 15°**Ⅲ**22'39 1°38'47 -9517 Mar 20 j 07:57 8°**る**40'31 minimum elong -9512 Aug 15 j 08:33 15°**Ⅲ**22'39 1°39'20 morning rise retrograde -9517 Jul 24 j 05:34 27°る24'37 morning rise -9512 Aug 27 j 17:08 18°**Ⅱ**10'41 -9517 Sep 21 j 06:38 22°る23'39 -1°57'28 -9512 Oct 24 j 12:23 opposition 0ಂತಾ -9517 Sep 20 j 23:43 22°る26'00 4.19402 AU -9512 Dec 30 j 04:33 min. Earth dist. retrograde 6°9512'14 -9517 Nov 20 j 03:00 17°る20'15 -9511 Mar 01 j 14:29 1°518'41 2°20'39 direct opposition -9516 Feb 28 j 06:53 min. Earth dist. -9511 Mar 02 j 05:19 1°513'58 4.25573 AU 0°≈ evening set -9516 Mar 27 i 14:35 6°≈08'34 -9511 Mar 12 j 01:29 30°RⅡ direct -9511 May 02 j 01:49 26°**Ⅲ**23'36 conjunction -9516 Apr 10 i 05:51 9°≈11'59 -0°59'33 -9511 Jun 20 j 16:15 0ಂತಾ minimum elong -9516 Apr 10 j 05:56 9°≈12'02 1°00'02 evening set -9511 Sep 03 j 10:48 14°935'45 max. Earth dist. -9516 Apr 10 i 07:59 9°**≈**13'11 6.23552 AU -9516 Apr 23 j 18:41 12°≈14'06 -9511 Sep 15 j 21:50 17°9527'51 morning rise conjunction 1°24'41 -9516 May 06 j 07:09 15°**≈** -9511 Sep 15 j 21:54 minimum elong 17°9627'53 1°25'14 -9516 Aug 14 j 12:40 0°**)**€ -9511 Sep 15 j 08:54 17°520'23 6.21388 AU max. Earth dist. -9511 Sep 28 j 09:58 retrograde -9516 Aug 24 j 13:06 0°¥10'00 morning rise 20°520'41 -9516 Sep 03 j 13:28 30°R≈ -9511 Nov 12 j 05:53 $0^{\circ}\Omega$ 9°**Ω**07'06 -9516 Oct 22 j 19:23 25°≈12'53 -0°52'47 retrograde -9510 Feb 03 j 00:44 opposition min. Earth dist. -9516 Oct 23 j 00:13 25°≈11'16 4.27443 AU opposition -9510 Apr 05 j 10:26 4°**Ω**10'19 1°38'36 -9516 Dec 22 j 21:16 20°≈08'40 -9510 Apr 05 j 13:52 4°**Ω**09'13 4.17181 AU direct min. Earth dist. 0°**)**€ -9510 May 14 j 11:59 -9515 Mar 20 j 13:47 30°Rூ -9510 Jun 04 j 17:54 29°9517'05 evening set -9515 Apr 30 j 16:37 8°**)** 36'45 direct 0° Ω max. Earth dist. -9515 May 13 j 07:27 11°**)** 24'45 6.30733 AU -9510 Jun 25 j 20:30 -9510 Sep 24 j 04:22 15°€ conjunction -9515 May 14 j 01:19 11°**)** 34'41 -0°08'41 evening set -9510 Oct 06 j 00:52 17°**Ω**43'39 minimum elong -9515 May 14 j 01:20 11°**)** 34'41 0°08'56 behind sun begin -9515 May 13 j 18:21 11°**)** 30'49 conjunction -9510 Oct 18 j 19:21 20°Ω42'35 0°43'00 -9515 May 14 j 08:18 11°**)** ₹38'33 -9510 Oct 18 j 19:25 $20^{\circ} \Omega 42'37$ behind sun end minimum elong 0°43'25

-9515 May 27 j 06:49

morning rise

14°**)** ₹30′53

max. Earth dist.

-9510 Oct 19 j 00:17

20°**Ω**45'28 6.13138 AU

-	cal year style is used: Th					_	50 33
morning rise	-9510 Oct 31 j 16:44	23° Ω 43'08		retrograde	-9504 Aug 29 j 01:11	4°) (48'57	
morning rise	-9510 Nov 28 j 13:08	0° mp		renograde	-9504 Oct 26 j 09:23	30°R≈	
retrograde	-9509 Mar 10 j 22:57	13° m) 13'18		opposition	-9504 Oct 27 j 08:37	29°≈52'16	-0°41'57
opposition	-9509 May 11 j 01:03	8° Mp 12'37	0°21'37	min. Earth dist.	-9504 Oct 27 j 15:49	29°≈49'53	4.28599 AU
min. Earth dist.	-9509 May 10 j 13:44	8° Mp 16'19	4.09687 AU	direct	-9504 Dec 27 j 15:23	24°≈48'00	4.20377 110
direct	-9509 Jul 09 j 02:17	3° m/ 19'34	4.07007 AC	direct	-9503 Feb 26 j 20:27	0° \	
desc. node	-9509 Aug 16 j 13:24	5° Mp 42'20		evening set	-9503 May 05 j 08:40	13° ∺ 12'47	
evening set	-9509 Nov 09 j 07:30	22° Mp 04'24		evening set	-7505 Way 05 J 00.40	13 /(12 4/	
evening set	-2302 140V 02 J 07.30	22 11/0424		conjunction	-9503 May 18 j 16:19	16° ₩ 09'52	0°00'50
conjunction	-9509 Nov 22 j 11:39	25° m) 10'14	0°14'20	minimum elong	-9503 May 18 j 16:20	16° ★ 09'52	
minimum elong	-9509 Nov 22 j 11:38	25° m) 10'13		behind sun begin	-9503 May 18 j 08:10	16° X 05'21	0 01 12
behind sun begin	-9509 Nov 22 j 17:50	25° m 08'00	0 1421	behind sun end	-9503 May 19 j 00:29	16° X 14'23	
behind sun end	-9509 Nov 22 j 07:30	25° M) 12'26		max. Earth dist.	-9503 May 17 j 21:35	15° X 59'28	6.31646 AU
max. Earth dist.	-9509 Nov 23 j 11:41	25° m) 24'23	6.07138 AU	asc. node	-9503 May 25 j 17:41	17° X 43'58	0.31040 AU
	-9509 Nov 23 j 11.41 -9509 Dec 05 j 19:18		0.0/138 AU			17 X 45 38	
morning rise	3	28° Mp 17'59 0° <u> </u>		morning rise	-9503 May 31 j 20:21	19 χ 03 08	
	-9509 Dec 13 j 02:56 -9508 Apr 15 j 12:12				-9503 Jul 24 j 17:15	6° Y 25′00	
retrograde	1 3	18° £ 15'55	1905107	retrograde	-9503 Sep 29 j 12:43		0926145
opposition	-9508 Jun 14 j 21:13	13° £ 11'57		opposition	-9503 Nov 28 j 09:18	1° Y 31'33 1° Y 25'57	0°36'45
min. Earth dist.	-9508 Jun 14 j 00:55		4.05773 AU	min. Earth dist.	-9503 Nov 29 j 02:30		4.33783 AU
direct	-9508 Aug 12 j 04:00	8° £ 17'05		T'	-9503 Dec 10 j 07:30	30° ₹ ₩	
evening set	-9508 Dec 14 j 08:00	27° £ 18'45		direct	-9502 Jan 29 j 13:32	26° ∺ 28'30	
	-9508 Dec 25 j 19:18	0° M ₊			-9502 Mar 20 j 16:09	0°Υ	
				evening set	-9502 Jun 06 j 18:07	14° Y 38'16	
conjunction	-9508 Dec 27 j 19:55	0°M28'31		max. Earth dist.	-9502 Jun 18 j 08:38	17° Ƴ 12'34	6.34792 AU
minimum elong	-9508 Dec 27 j 19:49	0°M28'28	1°07'45			0 0	
max. Earth dist.	-9508 Dec 29 j 07:16		6.05593 AU	conjunction	-9502 Jun 19 j 15:59	17° Ƴ 30′00	0°50'32
morning rise	-9507 Jan 10 j 10:50	3° M 39′50		minimum elong	-9502 Jun 19 j 15:55	17° Y 29'57	0°50'38
	-9507 Mar 03 j 19:28	15° ™		morning rise	-9502 Jul 02 j 10:42	20° Y 20′07	
retrograde	-9507 May 21 j 13:45	23°M36'35			-9502 Aug 18 j 08:04	0° 8	
min. Earth dist.	-9507 Jul 19 j 07:10		4.06901 AU	retrograde	-9502 Oct 31 j 03:20	7° 8 34'13	
opposition	-9507 Jul 20 j 06:10	18°M31'27	-2°08'21	opposition	-9502 Dec 30 j 14:29	2° 8 42'28	1°43'49
	-9507 Aug 18 j 03:03	15°RM		min. Earth dist.	-9502 Dec 31 j 14:07	2° 8 34'54	4.34787 AU
direct	-9507 Sep 16 j 09:40	13°M33'26			-9501 Jan 22 j 00:25	30° ₹Ƴ	
	-9507 Oct 15 j 21:32	15°M		direct	-9501 Mar 03 j 04:03	27° Y 41'49	
	-9506 Jan 08 j 11:35	0° ∡ ¹			-9501 Apr 12 j 04:42	0° 8	
evening set	-9506 Jan 20 j 08:21	2° ∡ ¹42'38			-9501 Jul 04 j 19:45	15° 8	
				evening set	-9501 Jul 08 j 04:58	15° 8 45'02	
conjunction	-9506 Feb 03 j 00:22	5° ₹ 52'24	-1°35'45	max. Earth dist.	-9501 Jul 19 j 09:53	18° 8 15'17	6.33451 AU
minimum elong	-9506 Feb 03 j 00:20	5° ₹ 52'23	1°36'15				
max. Earth dist.	-9506 Feb 04 j 08:37	6° ∡ 11'05	6.09141 AU	conjunction	-9501 Jul 20 j 18:16	18° 8 33'26	1°27'08
morning rise	-9506 Feb 16 j 17:59	9° ∡ 02'49		minimum elong	-9501 Jul 20 j 18:12	18° 8 33'24	1°27'31
retrograde	-9506 Jun 25 j 10:59	28° ≯ ¹28'05		morning rise	-9501 Aug 02 j 05:11	21° 8 20'48	
opposition	-9506 Aug 23 j 15:49	23° х¹ 24′16	-2°24'08		-9501 Sep 12 j 06:29	Π °0	
min. Earth dist.	-9506 Aug 22 j 23:04	23° х¹ 30′00	4.12580 AU	retrograde	-9501 Dec 02 j 10:10	8° Ⅱ 52'32	
direct	-9506 Oct 21 j 12:33	18° ≯ 22'53		opposition	-9500 Feb 01 j 12:22	4° Ⅱ 00'38	2°21'18
	-9505 Jan 23 j 02:27	0° ට		min. Earth dist.	-9500 Feb 02 j 10:01	3° Ⅱ 53'46	4.31310 AU
evening set	-9505 Feb 26 j 01:55	7° る 25'18			-9500 Mar 09 j 13:32	30° ₹ 8	
				direct	-9500 Apr 03 j 17:21	29° 8 03'06	
conjunction	-9505 Mar 11 j 19:10	10°る32'22	-1°29'22		-9500 Apr 28 j 22:22	Π °0	
minimum elong	-9505 Mar 11 j 19:14	10° る 32'24	1°29'56	evening set	-9500 Aug 07 j 08:57	17° Ⅱ 08'17	
max. Earth dist.	-9505 Mar 12 j 14:40	10° る 43'28	6.16442 AU				
morning rise	-9505 Mar 25 j 11:36	13° る 38'56		conjunction	-9500 Aug 19 j 18:02	19° Ⅱ 56'54	1°38'37
	-9505 Jun 21 j 05:14	0° ≈		minimum elong	-9500 Aug 19 j 18:03	19° Ⅱ 56'54	1°39'10
retrograde	-9505 Jul 28 j 21:22	2° ≈ 15′09		max. Earth dist.	-9500 Aug 18 j 16:11	19° Ⅱ 42'10	6.28022 AU
	-9505 Sep 04 j 08:28	30°Ŗる		morning rise	-9500 Sep 01 j 02:43	22° Ⅱ 45'25	
opposition	-9505 Sep 25 j 22:39	27° る 14'39	-1°50'00		-9500 Oct 04 j 10:31	0 \circ \odot	
min. Earth dist.	-9505 Sep 25 j 16:47	27° ප 16'38	4.20738 AU	retrograde	-9499 Jan 04 j 01:50	10° © 53'19	
direct	-9505 Nov 24 j 23:00	22° る 10'59		opposition	-9499 Mar 06 j 11:07	5° © 59'27	2°17'20
	-9504 Feb 08 j 15:16	0° ≈		min. Earth dist.	-9499 Mar 07 j 01:29	5° © 54'52	4.24310 AU
evening set	-9504 Apr 01 j 12:58	10° ≈ 55'44		direct	-9499 May 06 j 19:46	1° 5 04'42	
				evening set	-9499 Sep 07 j 23:39	19° © 19'09	
conjunction	-9504 Apr 15 j 03:24	13° ≈ 58'19	-0°53'03				
minimum elong	-9504 Apr 15 j 03:29	13° ≈ 58′21	0°53'30	conjunction	-9499 Sep 20 j 11:29	22° © 12'09	1°20'17
max. Earth dist.	-9504 Apr 15 j 01:18	13° ≈ 57′08	6.24864 AU	minimum elong	-9499 Sep 20 j 11:33	22°512'11	1°20'50
	-9504 Apr 19 j 17:28	15° ≈		max. Earth dist.	-9499 Sep 20 j 00:41	22° © 05'54	6.20073 AU
morning rise	-9504 Apr 28 j 15:32	16° ≈ 59'33		morning rise	-9499 Oct 03 j 00:44	25° © 06'02	
	-9504 Jul 03 j 08:01	0°)			-9499 Oct 24 j 19:25	$0^{\circ}\Omega$	

•	•		•	* * ·	9499 BCE in historical c		ge 30
retrograde	-9498 Feb 08 j 00:29	13° Ω 59'24	n astronomicai cot	inting style is the year	-9492 Apr 03 j 19:14	ounting style. 15°≈	
-	-9498 Apr 10 j 10:32	9° Ω 02'07	1°29'23	evening set	-9492 Apr 06 j 06:44	15 ≈ 15°≈33'00	
opposition		9° Ω 02'01		evening set	-9492 Apr 00 J 00.44	13 ≈33 00	
min. Earth dist.	-9498 Apr 10 j 10:50		4.15937 AU	:	0402 4 10:20.27	10024155	0946127
direct	-9498 Jun 09 j 12:33	4° Ω 09'07		conjunction	-9492 Apr 19 j 20:37	18°≈34'55	
. ,	-9498 Sep 06 j 13:55	15° Ω		minimum elong	-9492 Apr 19 j 20:41	18°≈34'57	0°46'52
evening set	-9498 Oct 10 j 19:09	22° Ω 38′25		max. Earth dist.	-9492 Apr 19 j 16:15	18°≈32'29	6.25873 AU
	0400 0 4 22 : 14 50	250 020124	0025125	morning rise	-9492 May 03 j 07:43	21°≈35′23	
conjunction	-9498 Oct 23 j 14:59	25° Ω 38'24	0°35'25		-9492 Jun 12 j 02:27	0° ∺ 9° ∺ 19'59	
minimum elong	-9498 Oct 23 j 15:02	25° Ω 38′26	0°35'48	retrograde	-9492 Sep 02 j 10:28		0021112
max. Earth dist.	-9498 Oct 23 j 23:37	25° Ω 43'28	6.12109 AU	opposition	-9492 Oct 31 j 18:46	4° ¥ 23'53	
morning rise	-9498 Nov 05 j 13:47	28° Ω 40'04		min. Earth dist.	-9492 Nov 01 j 03:48		4.29326 AU
. 1	-9498 Nov 11 j 07:52	0° Mp		1	-9492 Dec 11 j 09:56	30°R≈	
retrograde	-9497 Mar 16 j 04:07	18° Mp 15'21	0000111	direct	-9491 Jan 01 j 04:16	29°≈19'43	
opposition	-9497 May 16 j 03:12	13° Mp 14'09	0°09'11	1	-9491 Jan 22 j 04:21	0° ∀	
min. Earth dist.	-9497 May 15 j 14:32	13° m 18'19	4.08972 AU	asc. node	-9491 Apr 05 j 01:37	10° ¥ 20′39	
desc. node	-9497 Jun 26 j 08:39	8° m/52'20		evening set	-9491 May 09 j 22:04	17°) 42′57	(22020 A L
direct	-9497 Jul 14 j 01:59	8° m, 20'59		max. Earth dist.	-9491 May 22 j 05:47	20°) € 26'48	6.32029 AU
evening set	-9497 Nov 14 j 07:35	27° m 07'54					
	-9497 Nov 26 j 12:28	0∘ ⊽		conjunction	-9491 May 23 j 04:27	20°) 39′24	0°06'35
				minimum elong	-9491 May 23 j 04:26	20° ₩ 39'23	0°06'25
conjunction	-9497 Nov 27 j 12:58	0° ≙ 14'25		behind sun begin	-9491 May 22 j 20:47	20° ₭ 35'09	
minimum elong	-9497 Nov 27 j 12:56	0° ≙ 14'24		behind sun end	-9491 May 23 j 12:05	20°) (43′37	
max. Earth dist.	-9497 Nov 28 j 15:56		6.06817 AU	morning rise	-9491 Jun 05 j 07:26	23°) (34′03	
morning rise	-9497 Dec 10 j 21:54	3° £ 22'51			-9491 Jul 05 j 10:32	0° Υ	
retrograde	-9496 Apr 20 j 14:52	23° ≙ 21'31		retrograde	-9491 Oct 03 j 22:50	10° Y 52′50	
opposition	-9496 Jun 19 j 22:01	18° ≙ 17'17		opposition	-9491 Dec 02 j 20:18	5° Y 59'43	0°47'11
min. Earth dist.	-9496 Jun 19 j 00:06	18° ≏ 24'39	4.05910 AU	min. Earth dist.	-9491 Dec 03 j 15:16	5° Y 53'34	4.33820 AU
direct	-9496 Aug 17 j 02:20	13° ≙ 22'05		direct	-9490 Feb 03 j 02:24	0° Y 56'55	
	-9496 Dec 09 j 02:18	0° M ₊		evening set	-9490 Jun 11 j 04:34	19° Y 06'40	
evening set	-9496 Dec 19 j 12:02	2° M 24'18		max. Earth dist.	-9490 Jun 22 j 18:25	21° Y 40'47	6.34478 AU
conjunction	-9495 Jan 02 j 00:32	5°M34'04	-1°13'18	conjunction	-9490 Jun 24 j 01:20	21° Y 57'59	0°56'46
minimum elong	-9495 Jan 02 j 00:27		1°13'34	minimum elong	-9490 Jun 24 j 01:15	21° Y '57'57	0°56'54
max. Earth dist.	-9495 Jan 03 j 11:31	5°M54'34	6.06138 AU	morning rise	-9490 Jul 06 j 18:42	24° Ƴ 47'43	
morning rise	-9495 Jan 15 j 16:03	8°ML45'18	0.00120110		-9490 Jul 30 j 21:20	0°8	
morning rise	-9495 Feb 12 j 07:16	15° M .		retrograde	-9490 Nov 04 j 14:47	12° 8 04'20	
retrograde	-9495 May 26 j 11:37	28°M37'55		opposition	-9489 Jan 04 j 04:24	7° 8 12'41	1°51'10
min. Earth dist.	-9495 Jul 24 j 04:34		4.07802 AU	min. Earth dist.	-9489 Jan 05 j 03:34	7° 8 05'18	4.34171 AU
opposition	-9495 Jul 25 j 02:57	23°M32'48		direct	-9489 Mar 07 j 16:29	2° 8 12'32	
direct	-9495 Sep 21 j 08:57	18°MJ34'16			-9489 Jun 18 j 07:02	15° 8	
	-9495 Dec 21 j 17:24	0° ∡ ¹		evening set	-9489 Jul 12 j 14:56	20° 8 16'50	
evening set	-9494 Jan 25 j 11:47	7° ∡ ¹42'03		max. Earth dist.	-9489 Jul 23 j 18:29	22° 8 46'46	6.32566 AU
conjunction	-9494 Feb 08 j 04:14	10° ∡ 751'26	-1°36'56	conjunction	-9489 Jul 25 j 03:12	23° 8 05'10	1°30'23
minimum elong	-9494 Feb 08 j 04:13	10° ₹ '51'25		minimum elong	-9489 Jul 25 j 03:08	23° 8 05'08	1°30'49
max. Earth dist.	-9494 Feb 09 j 12:19	11° ×7 09'58	6.10308 AU	morning rise	-9489 Aug 06 j 13:37	25° 8 52'37	
morning rise	-9494 Feb 21 j 21:40	14° ₹ '01'15	0.10500110		-9489 Aug 25 j 08:10	0°II	
	-9494 May 14 j 20:45	0°ಕ		retrograde	-9489 Dec 07 j 04:10	13° Ⅱ 29'33	
retrograde	-9494 Jun 30 j 04:27	3° ට 19'10		opposition	-9488 Feb 06 j 06:38	8° Ⅲ 37′28	2°23'23
roundgrade	-9494 Aug 15 j 08:28	30°R. ₹		min. Earth dist.	-9488 Feb 07 i 03:56	8° П 30'42	4.30232 AU
opposition	-9494 Aug 28 j 07:49	28° ₹ 15'48	-2°22'05	direct	-9488 Apr 08 j 10:08	3° Ⅱ 40′20	50252110
min. Earth dist.	-9494 Aug 27 j 16:36	28° × ⁷ 21'00		evening set	-9488 Aug 11 j 20:06	21° II 47'11	
direct	-9494 Oct 26 j 08:02	23° × 14'02	1.13000 110	max. Earth dist.	-9488 Aug 23 j 06:26	24° I I23'13	6.26848 AU
unect	-9493 Jan 02 j 21:51	0°중		max. Earth dist.	7 100 Hug 25 J 00.20	2. 123.13	0.200 10 110
evening set	-9493 Mar 03 j 01:13	12°る13'35		conjunction	-9488 Aug 24 j 05:20	24° Ⅱ 36'17	1°37'47
evening set	7475 Will 05 J 01.15	12 01333		minimum elong	-9488 Aug 24 j 05:21	24° II 36'17	1°38'21
conjunction	-9493 Mar 16 j 18:09	15° පි 20'01	-1°25'51	morning rise	-9488 Sep 05 j 14:11	27° I I25'22	1 3021
minimum elong	-9493 Mar 16 j 18:13	15° る 20'04			-9488 Sep 17 j 01:28	0ಂತ	
max. Earth dist.	-9493 Mar 17 j 09:05	15°る20'04	6.17763 AU	retrograde	-9487 Jan 08 j 22:18	15°939'37	
morning rise	-9493 Mar 30 j 10:21	13 3 28 30	3.17,03710	opposition	-9487 Mar 11 j 09:24	10°945'18	2°13'01
	-9493 May 25 j 05:56	0°≈		min. Earth dist.	-9487 Mar 11 j 09.24	10°941'38	4.23131 AU
retrograde	-9493 May 23 j 03:30 -9493 Aug 02 j 08:44	0 ≈ 6°≈54'51		direct	-9487 May 11 j 13:24	5°950'56	T.22121 AU
opposition	-9493 Sep 30 j 10:44	0 ≈5451 1°≈54'52	-1°42'08	evening set	-9487 Nay 11 j 13.24 -9487 Sep 12 j 13:59	24°906'58	
min. Earth dist.	-9493 Sep 30 j 07:04		4.21938 AU	5,011112 20t	7107 Sep 12 J 13.39	20000	
mm. Darm dist.	-9493 Oct 15 j 00:00	1 ≈30 00 30°Rる	1.21/JU AU	conjunction	-9487 Sep 25 j 02:36	27°900'47	1°15'16
direct	-9493 Nov 29 j 15:33	30 KO 26°る50'58		minimum elong	-9487 Sep 25 j 02:30	27°900'50	1°15'49
uncet	-9493 Nov 29 J 15.55	20 3 30 38 0° ≈		max. Earth dist.	-9487 Sep 23 j 02.41 -9487 Sep 24 j 18:46	27 900 30 26°956'15	6.18989 AU
	7772 Jan 17 J 13.30	· ~		max. Latin dist.	7-107 Dep 2-1 J 10.40	20 -2013	0.10707 AU

•	cal year style is used: Th		•	/ *	9488 BCE in historical c	, .	5 • 5 ,
morning rise	-9487 Oct 07 j 16:58	29° © 55'39		retrograde	-9481 Aug 06 j 21:59	11° ≈ 35'17	
Č	-9487 Oct 08 j 00:33	$0^{\circ}\Omega$		opposition	-9481 Oct 04 j 23:29	6°≈35'53	-1°33'36
	-9487 Dec 23 j 02:27	15° Ω		min. Earth dist.	-9481 Oct 04 j 22:11	6° ≈ 36'19	4.22953 AU
retrograde	-9486 Feb 13 j 03:04	18° Ω 54'51		direct	-9481 Dec 04 j 08:24	1° ≈ 31'52	
	-9486 Apr 07 j 07:07	15°R Ω			-9480 Mar 18 j 02:29	15° ≈	
opposition	-9486 Apr 15 j 11:46	13° Ω 56'57	1°19'26	evening set	-9480 Apr 11 j 01:19	20°≈11'40	
min. Earth dist.	-9486 Apr 15 j 10:19	13° Ω 57′25	4.14998 AU				
direct	-9486 Jun 14 j 10:47	9° Ω 03'58		conjunction	-9480 Apr 24 j 14:25	23° ≈ 12'57	-0°39'30
	-9486 Aug 16 j 16:27	15° Ω		minimum elong	-9480 Apr 24 j 14:28	23° ≈ 12'59	0°39'54
evening set	-9486 Oct 15 j 13:57	27° Ω 34'42		max. Earth dist.	-9480 Apr 24 j 06:27	23° ≈ 08'30	6.26727 AU
	-9486 Oct 25 j 22:27	0° mp		morning rise	-9480 May 08 j 00:41	26° ≈ 12'44	
					-9480 May 25 j 08:22	0° ∀	
conjunction	-9486 Oct 28 j 11:08	0° m 35'34	0°27'33	retrograde	-9480 Sep 06 j 20:15	13°) 53′08	
minimum elong	-9486 Oct 28 j 11:11	0°M 35'36	0°27'53	opposition	-9480 Nov 05 j 06:22	8° ¥ 57'31	-0°20'11
max. Earth dist.	-9486 Oct 28 j 23:17	0° ™ 42'41	6.11403 AU	min. Earth dist.	-9480 Nov 05 j 16:49	8°) 54′03	4.29961 AU
morning rise	-9486 Nov 10 j 11:22	3° m 38'11		direct	-9479 Jan 05 j 18:43	3°) €53′26	
retrograde	-9485 Mar 21 j 06:51	23°Mp 16'56		asc. node	-9479 Feb 12 j 23:04	6°) €01'31	
desc. node	-9485 May 06 j 08:05	20° m 09'54		evening set	-9479 May 14 j 12:11	22° 升 15′10	
opposition	-9485 May 21 j 04:36	18° m 15'13	-0°03'19				
min. Earth dist.	-9485 May 20 j 13:55	18° m 20'04	4.08563 AU	conjunction	-9479 May 27 j 17:22	25°) 10′57	0°14'06
direct	-9485 Jul 18 j 23:36	13°M 21'53		minimum elong	-9479 May 27 j 17:20	25°) 10′56	0°14'00
	-9485 Nov 09 j 23:37	0∘ ⊽		behind sun begin	-9479 May 27 j 13:17	25°) €08'42	
evening set	-9485 Nov 19 j 07:39	2° ₽ 10'04		behind sun end	-9479 May 27 j 21:24	25° ∺ 13'11	
				max. Earth dist.	-9479 May 26 j 17:47	24°) 57′51	6.32412 AU
conjunction	-9485 Dec 02 j 14:02	5° ≏ 17'03	-0°30'48	morning rise	-9479 Jun 09 j 18:58	28°) €04'56	
minimum elong	-9485 Dec 02 j 13:59	5° £ 17'01	0°30'48		-9479 Jun 18 j 12:48	0 ° $\mathbf{\Upsilon}$	
max. Earth dist.	-9485 Dec 03 j 17:55	5° £ 33'28	6.06715 AU	retrograde	-9479 Oct 08 j 09:18	15° Y 22'45	
morning rise	-9485 Dec 16 j 00:06	8° £ 25'58		opposition	-9479 Dec 07 j 08:44	10° Ƴ 30′00	0°57'30
retrograde	-9484 Apr 25 j 15:25	28° £ 24'33		min. Earth dist.	-9479 Dec 08 j 04:38	10° Y 23'34	4.33937 AU
opposition	-9484 Jun 24 j 21:19	23° ≙ 19'59	-1°26'29	direct	-9478 Feb 07 j 16:24	5° Y 27'37	
min. Earth dist.	-9484 Jun 23 j 22:55	23° £ 27'33	4.06135 AU	evening set	-9478 Jun 15 j 15:55	23° Y 36'48	
direct	-9484 Aug 22 j 01:36	18° ≏ 24'20		max. Earth dist.	-9478 Jun 27 j 02:43	26° Ƴ 09'29	6.34310 AU
	-9484 Nov 21 j 10:33	0°M					
evening set	-9484 Dec 24 j 15:10	7°M27'06		conjunction	-9478 Jun 28 j 11:16	26° Ƴ 27'37	1°02'46
				minimum elong	-9478 Jun 28 j 11:11	26° Ƴ 27'35	1°02'57
conjunction	-9483 Jan 07 j 04:30	10°M36'55	-1°18'32	morning rise	-9478 Jul 11 j 03:36	29° Ƴ 16'57	
minimum elong	-9483 Jan 07 j 04:25	10°M36'52	1°18'52		-9478 Jul 14 j 09:29	9° 8	
max. Earth dist.	-9483 Jan 08 j 16:55	10°M58'12	6.06664 AU		-9478 Oct 07 j 23:28	15° 8	
morning rise	-9483 Jan 20 j 20:20	13°ML48'01		retrograde	-9478 Nov 09 j 04:02	16° 8 35'40	
	-9483 Jan 26 j 01:00	15° M ₊			-9478 Dec 11 j 14:19	15° ₹ 8	
	-9483 Apr 12 j 17:41	0° ∡ ¹		opposition	-9477 Jan 08 j 19:16	11° 8 44'05	1°57'57
retrograde	-9483 May 31 j 10:13	3° ∡ ¹36'35		min. Earth dist.	-9477 Jan 09 j 18:27	11° 8 36'41	4.33770 AU
_	-9483 Jul 19 j 00:17	30°RM₊		direct	-9477 Mar 12 j 07:10	6° 8 44'22	
opposition	-9483 Jul 29 j 22:48	28°M31'35	-2°17'54		-9477 May 30 j 20:05	15° 8	
min. Earth dist.	-9483 Jul 29 j 01:28	28°M38'53	4.08599 AU	evening set	-9477 Jul 17 j 00:52	24° 8 48'53	
direct	-9483 Sep 26 j 06:33	23°M32'37		max. Earth dist.	-9477 Jul 28 j 06:25	27° 8 20'11	6.31971 AU
	-9483 Dec 01 j 02:25	0° ∡ ¹			, and the second		
evening set	-9482 Jan 30 j 14:44	12° ∡ ³39′28		conjunction	-9477 Jul 29 j 12:29	27° 8 37'07	1°33'10
				minimum elong	-9477 Jul 29 j 12:26	27° 8 37'05	1°33'36
conjunction	-9482 Feb 13 j 07:15	15° ∡ ¹48'29	-1°37'27	_	-9477 Aug 09 j 02:24	$\Pi^{\circ}0$	
minimum elong	-9482 Feb 13 j 07:15	15° ∡ ¹48'28	1°37'59	morning rise	-9477 Aug 10 j 22:08	0° Ⅱ 24'30	
max. Earth dist.	-9482 Feb 14 j 12:00	16° ₹ 05'02	6.11284 AU	retrograde	-9477 Dec 11 j 19:46	18° Ⅱ 05'41	
morning rise	-9482 Feb 27 j 00:50	18° ∡ 757'51		opposition	-9476 Feb 11 j 00:45	13° Ⅱ 13′26	2°24'36
	-9482 Apr 19 j 21:35	0°రె		min. Earth dist.	-9476 Feb 11 j 20:27	13° Ⅱ 07'12	4.29499 AU
retrograde	-9482 Jul 04 j 20:09	8° ප 09'17		direct	-9476 Apr 13 j 01:40	8° Ⅱ 16'50	
opposition	-9482 Sep 01 j 23:33	3° ට 06'17	-2°19'09	evening set	-9476 Aug 16 j 06:32	26° Ⅲ 24'04	
min. Earth dist.	-9482 Sep 01 j 09:33	3° ප 11'04	4.14958 AU	•			
	-9482 Sep 26 j 14:13	30°Ŗ ⋌ ¹		conjunction	-9476 Aug 28 j 15:39	29° Ⅱ 13'30	1°36'23
direct	-9482 Oct 31 j 03:06	28° ₹ ¹04'06		minimum elong	-9476 Aug 28 j 15:40	29° Ⅱ 13'31	1°36'57
	-9482 Dec 05 j 02:05	ರ°0		max. Earth dist.	-9476 Aug 27 j 18:01	29° II 01'08	6.26031 AU
evening set	-9481 Mar 08 j 00:37	17° ට 01'42			-9476 Sep 01 j 01:00	0ಂತ	
<u> </u>	,			morning rise	-9476 Sep 10 j 00:58	2°503'07	
conjunction	-9481 Mar 21 j 17:28	20°る07'38	-1°21'47	retrograde	-9475 Jan 13 j 19:09	20°522'38	
minimum elong	-9481 Mar 21 j 17:33	20° ට 07'41	1°22'21	opposition	-9475 Mar 16 j 06:31	15° © 27'52	2°07'53
max. Earth dist.					•		
	-9481 Mar 22 i 06:02	20°る14'46	6.18863 AU	min. Earth dist.	-9475 Mar 16 i 16:21	15° © 24'43	4.22268 AU
morning rise	-9481 Mar 22 j 06:02 -9481 Apr 04 j 09:04		6.18863 AU	min. Earth dist. direct	-9475 Mar 16 j 16:21 -9475 May 16 j 07:32	15°924'43 10°933'45	4.22268 AU
morning rise	·	20°ප14'46 23°ප12'48 0°≈	6.18863 AU		·		4.22268 AU

Auchton, astronom	-9475 Sep 22 j 03:02	1e year -94/5 1 $0^{\circ}\Omega$	n asu onomicai co	minimum elong	9476 BCE in historical c -9469 Mar 26 j 16:19	ounting style. 24° 궁 55'24	1°17'41
	-9473 Sep 22 J 03.02	0 86		max. Earth dist.	-9469 Mar 27 j 02:07	24 033 24 25°る00'56	6.19691 AU
conjunction	-9475 Sep 29 j 16:20	1° Ω 45'06	1°09'51	morning rise	-9469 Apr 09 j 07:28	23°る00'30 28°る00'02	0.19091 AU
minimum elong	-9475 Sep 29 j 16:25	1°Ω45'09	1°10'22	morning risc	-9469 Apr 18 j 06:32	28 3 00 02 0° ≈	
max. Earth dist.	-9475 Sep 29 j 12:11	1°Ω42'42	6.18172 AU		-9469 Jul 14 j 06:55	15° ≈	
morning rise	-9475 Oct 12 j 07:45	4°Ω40'49	0.10172710	retrograde	-9469 Aug 11 j 09:37	16°≈17'01	
	-9475 Nov 29 j 06:55	15° Ω			-9469 Sep 08 j 09:15	15°R ≈	
retrograde	-9474 Feb 18 j 02:23	23° Ω 44'50		opposition	-9469 Oct 09 j 12:37	11° ≈ 18′07	-1°24'28
opposition	-9474 Apr 20 j 10:18	18° Ω 46′26	1°09'05	min. Earth dist.	-9469 Oct 09 j 12:10	11° ≈ 18′16	4.23754 AU
min. Earth dist.	-9474 Apr 20 j 06:53	18° Ω 47'33	4.14280 AU	direct	-9469 Dec 09 j 00:21	6° ≈ 13'58	
	-9474 May 23 j 20:38	15°R Ω			-9468 Feb 28 j 09:45	15° ≈	
direct	-9474 Jun 19 j 05:07	13° Ω 53'34		evening set	-9468 Apr 15 j 20:06	24° ≈ 52′02	
	-9474 Jul 15 j 09:43	15° Ω					
	-9474 Oct 09 j 19:13	0° ™		conjunction	-9468 Apr 29 j 08:19	27° ≈ 52'42	-0°32'16
evening set	-9474 Oct 20 j 07:00	2°M/25'26		minimum elong	-9468 Apr 29 j 08:22	27° ≈ 52'43	0°32'37
				max. Earth dist.	-9468 Apr 28 j 22:03	27° ≈ 46′58	6.27470 AU
conjunction	-9474 Nov 02 j 05:19	5° TD 27'05	0°19'39		-9468 May 08 j 20:26	0° ∀	
minimum elong	-9474 Nov 02 j 05:21	5° m 27'07		morning rise	-9468 May 12 j 17:37	0°) 51'46	
max. Earth dist.	-9474 Nov 02 j 18:44	5° m/34'58	6.10841 AU	retrograde	-9468 Sep 11 j 07:53	18° ∺ 28′20	
morning rise	-9474 Nov 15 j 07:01	8° m/30'35		opposition	-9468 Nov 09 j 18:51	13°) € 33'10	
desc. node	-9473 Mar 17 j 04:08	28° m 04'33		min. Earth dist.	-9468 Nov 10 j 07:11	13° ¥ 29'06	4.30581 AU
retrograde	-9473 Mar 26 j 06:27	28° m) 12'28	4.00102.411	asc. node	-9468 Dec 23 j 20:46	8° ¥ 57'55	
min. Earth dist.	-9473 May 25 j 10:57		4.08192 AU	direct	-9467 Jan 10 j 11:22	8°) € 29'14	
opposition direct	-9473 May 26 j 03:01	23° To 10'13	-0°15′31	evening set max. Earth dist.	-9467 May 19 j 02:37	26°) 49'06	6.32855 AU
direct	-9473 Jul 23 j 19:18 -9473 Oct 23 j 18:34	18° ™ 16'39 0° Ω		max. Earth dist.	-9467 May 31 j 05:30	29 X 30 13	0.32833 AU
evening set	-9473 Nov 24 j 05:17	0 = 7° ჲ 06'22		conjunction	-9467 Jun 01 j 06:33	29°) 44'10	0°21'37
evening set	-94/3 NOV 24 J 03.17	7 = 00 22		minimum elong	-9467 Jun 01 j 06:30	29° H 44'08	0°21'32
conjunction	-9473 Dec 07 j 12:56	10° ≏ 13'56	-0°38'29	minimum clong	-9467 Jun 02 j 11:03	25 γ (44 06	0 21 32
minimum elong	-9473 Dec 07 j 12:52	10° ⊆ 13'53		morning rise	-9467 Jun 14 j 06:52	2° Υ 37'25	
max. Earth dist.	-9473 Dec 08 j 19:26	10° ⊆ 31'51	6.06569 AU	retrograde	-9467 Oct 12 j 19:16	19° Y 53'57	
morning rise	-9473 Dec 20 j 23:54	13° Ω 23'18	0.00007110	opposition	-9467 Dec 11 j 21:42	15° Υ '01'22	1°07'31
Ü	-9472 Mar 14 j 08:56	0°M		min. Earth dist.	-9467 Dec 12 j 17:41	14° Ƴ 54'54	4.34190 AU
retrograde	-9472 Apr 30 j 15:36	3°M21'58		direct	-9466 Feb 12 j 06:31	9° Ƴ 59'13	
-	-9472 Jun 16 j 20:03	30° Ŗ Ω		evening set	-9466 Jun 20 j 02:46	28° Y 06'59	
opposition	-9472 Jun 29 j 18:04	28° ≏ 17'16	-1°36'01		-9466 Jun 28 j 14:16	9° 8	
min. Earth dist.	-9472 Jun 28 j 20:11	28° ≏ 24'40	4.06242 AU				
direct	-9472 Aug 26 j 22:03	23° ≏ 21'14		conjunction	-9466 Jul 02 j 20:51	0° 8 57'13	1°08'24
	-9472 Nov 01 j 06:02	0° M		minimum elong	-9466 Jul 02 j 20:46	0° 8 57'10	1°08'39
evening set	-9472 Dec 29 j 16:36	12°M25'15		max. Earth dist.	-9466 Jul 01 j 13:16	0° 8 39'35	6.34333 AU
	-9471 Jan 09 j 18:13	15° ™		morning rise	-9466 Jul 15 j 11:55	3° 8 46'00	
					-9466 Sep 09 j 02:32	15° 8	
conjunction	-9471 Jan 12 j 06:25	15°M35'08		retrograde	-9466 Nov 13 j 16:25	21° 8 06'07	•••
minimum elong	-9471 Jan 12 j 06:19	15°M35'05		opposition	-9465 Jan 13 j 10:04	16° 8 14'31	2°04'01
max. Earth dist.	-9471 Jan 13 j 16:50	15°M55'14	6.06985 AU	min. Earth dist.	-9465 Jan 14 j 09:22	16° 8 07'07	4.33549 AU
morning rise	-9471 Jan 25 j 22:53	18°M46'16		T' A	-9465 Jan 23 j 06:42	15°R 8	
ratra ara da	-9471 Mar 19 j 01:21	0° द्र ⁷ 8° द्र ⁷ 31'36		direct	-9465 Mar 16 j 22:14 -9465 May 07 j 11:50	11° 8 15'12	
retrograde opposition	-9471 Jun 05 j 05:07 -9471 Aug 03 j 16:31	3° ₹ 26'45	2°21'10	evening set	-9465 Jul 21 j 09:51	29° 8 19'00	
min. Earth dist.	-9471 Aug 03 j 10:31		4.09123 AU	evening set	-9465 Jul 24 j 11:00	0°Ⅱ	
min. Barui uist.	-9471 Aug 02 j 19.31 -9471 Aug 31 j 15:28	30°RM	4.07123 AU		7702 Jul 24 J 11.00	ν н	
direct	-9471 Oct 01 j 01:34	28°M27'17		conjunction	-9465 Aug 02 j 20:36	2° Ⅱ 07'03	1°35'23
direct	-9471 Oct 31 j 18:11	0° √		minimum elong	-9465 Aug 02 j 20:34	2° Ⅱ 07'02	1°35'51
evening set	-9470 Feb 04 j 16:26	17° ∡ ³34'26		max. Earth dist.	-9465 Aug 01 j 14:06	1° ∏ 49'51	6.31483 AU
	, .,	-, ,		morning rise	-9465 Aug 15 j 05:55	4° Ⅱ 54'27	
conjunction	-9470 Feb 18 j 09:21	20° ∡ ¹43'17	-1°37'15	retrograde	-9465 Dec 16 j 11:25	22° Ⅱ 39'34	
minimum elong	-9470 Feb 18 j 09:22	20° ∡ ¹43'17		opposition	-9464 Feb 15 j 18:04	17° Ⅱ 46'59	2°24'56
max. Earth dist.	-9470 Feb 19 j 12:33	20° ₹ '58'56		min. Earth dist.	-9464 Feb 16 j 12:38	17° Ⅱ 41'06	4.28769 AU
morning rise	-9470 Mar 04 j 02:49	23° ∡ ′52′17		direct	-9464 Apr 17 j 16:24	12° Ⅱ 50'41	
	-9470 Mar 31 j 17:07	ರ∘ರ			-9464 Aug 16 j 08:47	0 \circ \odot	
retrograde	-9470 Jul 09 j 13:17	12° る 58'21		evening set	-9464 Aug 20 j 15:55	0°958'24	
annagition	-9470 Sep 06 j 14:43	7° る 55'47		max. Earth dist.	-9464 Sep 01 j 06:46	3° © 37'37	6.25116 AU
opposition			4.15742 AU				
min. Earth dist.	-9470 Sep 06 j 03:06		4.13/42 AU				
min. Earth dist.	-9470 Nov 04 j 21:59	2° る 53'17	4.13/42 AU	conjunction	-9464 Sep 02 j 01:24	3° 5 48'17	1°34'25
min. Earth dist.			4.13742 AU	minimum elong	-9464 Sep 02 j 01:27	3°548'19	1°34'25 1°35'01
min. Earth dist. direct evening set	-9470 Nov 04 j 21:59 -9469 Mar 12 j 23:33	2°පි53'17 21°පි49'49		minimum elong morning rise	-9464 Sep 02 j 01:27 -9464 Sep 14 j 11:02	3°548'19 6°538'27	
min. Earth dist.	-9470 Nov 04 j 21:59	2° る 53'17		minimum elong	-9464 Sep 02 j 01:27	3°548'19	

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -9463 in astronomical counting style is the year 9464 BCE in historical counting style. -9463 Mar 21 j 02:44 20°508'22 2°02'00 direct -9458 Nov 09 j 18:29 7°る49'40 opposition -9463 Mar 21 j 11:21 evening set -9457 Mar 18 j 01:20 26°る44'00 min. Earth dist. 20°905'37 4.21217 AU direct -9463 May 20 j 23:55 15°9514'31 -9457 Mar 31 j 17:33 29° 8 48'53 -1°11'56 -9463 Sep 06 j 01:07 0 $^{\circ}\Omega$ conjunction -9463 Sep 21 j 15:21 -9457 Mar 31 j 17:38 evening set 3°**£**32′53 minimum elong 29°**る**48'56 1°12'28 6.20943 AU max. Earth dist. -9457 Apr 01 j 00:46 29°**る**52'57 -9463 Oct 04 j 05:52 conjunction 6°**£**28′22 1°04'01 -9457 Apr 01 j 13:15 0°≈ -9463 Oct 04 j 05:57 minimum elong 6°**Ω**28'25 1°04'31 morning rise -9457 Apr 14 j 08:12 2°≈52'47 6.17073 AU max. Earth dist. -9463 Oct 04 j 02:31 6°**Ω**26'25 -9457 Jun 12 j 20:35 15°≈ 9°**Ω**25'09 morning rise -9463 Oct 16 j 22:43 retrograde -9457 Aug 16 j 00:28 21°≈02'40 -9463 Nov 10 j 17:43 15°€ opposition -9457 Oct 14 j 03:39 16°≈04'21 -1°14'40 retrograde -9462 Feb 23 j 01:44 28°**Ω**35'13 min. Earth dist. -9457 Oct 14 j 05:21 16°≈03'46 4.25096 AU opposition -9462 Apr 25 j 09:01 23°**Ω**36′13 0°58'17 -9457 Oct 22 j 04:58 15°R≈ min. Earth dist. -9462 Apr 25 j 03:33 23°**Ω**38′00 4.13198 AU direct -9457 Dec 13 j 21:14 11°**≈**00'11 direct -9462 Jun 23 j 23:25 18°**Ω**43'18 -9456 Feb 04 j 13:00 15°**≈** -9462 Sep 22 j 13:40 0° m evening set -9456 Apr 20 j 15:31 29°≈34'21 evening set -9462 Oct 25 j 01:06 7° m 17'55 -9456 Apr 22 j 13:52 0°**)**€ conjunction -9462 Nov 07 j 00:56 10° m/20'37 0°11'35 conjunction -9456 May 04 j 02:51 2°**)** 34'04 -0°24'49 minimum elong -9462 Nov 07 j 00:57 10° Mp 20'37 0°11'50 minimum elong -9456 May 04 j 02:53 2°\dagger34'06 0°25'08 behind sun begin -9462 Nov 06 j 19:15 10° m 17'17 max. Earth dist. -9456 May 03 j 15:42 2°**)** 27'52 6.28823 AU behind sun end -9462 Nov 07 i 06:40 10° m 23'58 morning rise -9456 May 17 j 10:52 5°\ 32'06 max. Earth dist. -9462 Nov 07 i 17:54 10° m 30'34 6.09888 AU retrograde -9456 Sep 15 i 16:39 23°\(\)(02'54 morning rise -9462 Nov 20 i 03:57 13° m 25'09 asc. node -9456 Nov 03 i 08:08 19°**¥**33'18 desc. node -9461 Jan 25 j 02:58 27° m 09'48 -9456 Nov 14 i 07:13 18°**¥**08'10 0°02'13 opposition -9461 Feb 13 j 01:32 0∘**⊽** min. Earth dist. -9456 Nov 14 j 19:44 18°**¥**04′03 4.31842 AU -9461 Mar 31 j 09:34 3°**₽**11'30 -9455 Jan 15 j 02:36 13°**)**€04'26 direct retrograde 30°R M $0^{\circ}\Upsilon$ -9461 May 16 j 20:07 -9455 May 17 j 13:06 -9461 May 30 j 10:29 -9455 May 23 j 15:33 1°Y20'11 min. Earth dist. 28° Mp 14'19 4.07457 AU evening set -9461 May 31 j 02:56 28° m 08'51 -0°27'48 opposition -9461 Jul 28 j 16:57 -9455 Jun 05 j 17:53 4°Υ14'10 0°28'51 23° m 15'02 conjunction direct -9455 Jun 05 j 17:50 -9461 Oct 03 j 14:41 0∘**⊽** minimum elong 4°**Y**14′09 0°28'49 -9455 Jun 04 j 15:20 3°**Y**59′26 6.33927 AU -9461 Nov 29 j 06:08 12°**♀**07'57 max. Earth dist. evening set -9455 Jun 18 j 16:49 7°**Y**06′25 morning rise -9461 Dec 12 j 14:43 15°**2**16'09 -0°46'02 -9455 Oct 17 j 04:17 24°Y19'58 conjunction retrograde -9461 Dec 12 j 14:38 -9455 Dec 16 j 08:52 19°**Y**27'40 1°16'49 minimum elong 15°**£**16'06 0°46'06 opposition -9455 Dec 17 j 06:29 19°**Y**20'43 4.34993 AU max. Earth dist. -9461 Dec 13 j 21:02 15°**≏**33'59 6.06093 AU min. Earth dist. morning rise -9461 Dec 26 j 02:54 18°**♀**26'11 direct -9454 Feb 16 j 21:02 14°\bar{Y}25'52 -9460 Feb 17 j 14:24 0°M -9454 Jun 12 j 23:41 0°8 retrograde -9460 May 05 j 16:27 8° M25'52 evening set -9454 Jun 24 j 10:32 2°830'28 -9460 Jul 04 j 17:06 3°M21'00 -1°45'05 max. Earth dist. -9454 Jul 05 j 18:40 5°**8**01'44 6.34776 AU opposition min. Earth dist. -9460 Jul 03 j 18:12 3°M28'46 4.06098 AU -9460 Jul 31 j 23:24 -9454 Jul 07 j 03:19 5°819'56 1°13'28 30°R <u>Ω</u> conjunction -9460 Aug 31 j 19:53 28°**£**24'30 -9454 Jul 07 j 03:14 5°**8**19'53 direct minimum elong 1°13'44 -9460 Oct 01 j 18:23 -9454 Jul 19 j 17:14 8°808'02 0°M morning rise -9460 Dec 23 i 23:20 15°M -9454 Aug 20 j 21:14 15°8 evening set -9459 Jan 03 j 21:43 17°MJ30'56 retrograde -9454 Nov 18 i 00:24 25°**8**28'33 opposition -9453 Jan 17 j 21:14 20°**8**36'55 2°09'06 conjunction -9459 Jan 17 j 12:20 20°M41'02 -1°27'11 min. Earth dist. -9453 Jan 18 j 20:09 20°829'38 4.33621 AU minimum elong -9459 Jan 17 i 12:15 20°M40'59 1°27'35 direct -9453 Mar 21 j 08:19 15°**8**37'57 -9459 Jan 18 j 23:17 21°M01'25 6.07174 AU -9453 Jul 08 j 22:54 $0^{\circ}\Pi$ max. Earth dist. -9459 Jan 31 j 05:06 23°M52'11 -9453 Jul 25 j 14:58 3°**Ⅱ**40′25 morning rise evening set -9453 Aug 05 j 19:43 6°**Ⅱ**11'41 -9459 Feb 27 j 10:30 max. Earth dist. 0°×7 6.31165 AU retrograde -9459 Jun 10 j 05:34 13° x 34'29 opposition -9459 Aug 08 j 13:43 8°**х** 29'53 -2°23'31 conjunction -9453 Aug 07 j 01:09 6°**Ⅲ**28'18 1°36'57 6°**Ⅲ**28′17 min. Earth dist. -9459 Aug 07 j 18:19 8°**≯**36'31 4.09634 AU minimum elong -9453 Aug 07 j 01:07 1°37'26 9°Ⅱ15'37 -9459 Oct 06 j 01:15 3°**х** 30′00 -9453 Aug 19 j 09:56 direct morning rise -9458 Feb 09 j 21:49 22°**х¹**37′20 -9453 Dec 21 j 00:02 27° II 04'23 evening set retrograde opposition -9452 Feb 20 j 07:23 22°**Ⅱ**11'37 2°24'24 22°**Ⅲ**05'38 4.28068 AU conjunction -9458 Feb 23 j 14:58 25°**х** 45′57 -1°36′22 min. Earth dist. -9452 Feb 21 j 02:16 17°**Ⅲ**15'40 minimum elong -9458 Feb 23 j 14:59 25°**∡**¹45'57 1°36'56 direct -9452 Apr 22 j 03:45 max. Earth dist. -9458 Feb 24 j 17:02 26°**₹**00'55 6.12780 AU -9452 Jul 31 j 12:59 0ಂತಾ morning rise -9458 Mar 09 j 08:23 28°**х** 54'34 evening set -9452 Aug 24 j 21:35 5°924'04 -9458 Mar 14 j 03:37 0°궁 retrograde -9458 Jul 14 j 06:52 17°る54'26 conjunction -9452 Sep 06 j 07:17 8°9514'30 1°31'58 -9458 Sep 11 j 08:45 12°る52'24 -2°10'25 8°9514'32 opposition minimum elong -9452 Sep 06 j 07:20 1°32'33

max. Earth dist.

-9452 Sep 05 j 12:06

8°503'30 6.24087 AU

-9458 Sep 10 j 21:17

12°る56'18 4.16789 AU

min. Earth dist.

Planetary Phenomena of Jupiter from -9900 through -9398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -9452 in astronomical counting style is the year 9453 BCE in historical counting style. opposition -9452 Sep 18 j 17:41 11°9505'24 -9446 Sep 16 i 01:47 17°る45'46 -2°04'38 morning rise -9451 Jan 23 j 07:47 29°936'50 min. Earth dist. -9446 Sep 15 j 16:27 17°る48'57 4.18018 AU retrograde -9451 Mar 25 j 19:13 -9446 Nov 14 j 17:06 12°る42'39 24°9541'09 1°55'34 direct opposition 4.19919 AU -9445 Mar 16 j 00:34 min. Earth dist. -9451 Mar 26 j 02:08 24°938'56 0°≈≈ -9445 Mar 23 j 01:04 direct -9451 May 25 j 11:32 19°547'28 evening set 1°≈33'46 -9451 Aug 20 j 03:08 0° Ω evening set -9451 Sep 26 j 01:12 8°**Ω**08'45 conjunction -9445 Apr 05 j 17:00 4°≈37'57 -1°06'16 minimum elong -9445 Apr 05 j 17:06 4°**≈**38′00 1°06'47 conjunction -9451 Oct 08 j 17:02 11°**Ω**05'23 0°57'57 max. Earth dist. -9445 Apr 05 j 23:04 4°≈41'22 6.22263 AU minimum elong -9451 Oct 08 j 17:07 11°**Ω**05′26 0°58'26 morning rise -9445 Apr 19 j 06:48 7°≈40'59 max. Earth dist. -9451 Oct 08 j 16:40 11°**Ω**05′10 6.15647 AU -9445 May 23 j 07:19 15°≈ -9451 Oct 21 j 11:03 morning rise 14°**Ω**03′21 retrograde -9445 Aug 20 j 12:01 25°≈43'43 -9445 Oct 18 j 17:13 -9451 Oct 25 j 13:15 15°€ opposition 20°≈45′53 -1°04′31 -9450 Jan 11 j 05:39 min. Earth dist. -9445 Oct 18 j 19:43 20°≈45'03 4.26354 AU retrograde -9450 Feb 28 j 00:38 3°m/20'42 direct -9445 Dec 18 j 14:17 15°≈41'40 -9450 Apr 17 j 07:57 30°R€ -9444 Apr 06 j 00:05 0°**)**€ opposition -9450 Apr 30 j 05:07 28°**Ω**21'14 0°47'22 evening set -9444 Apr 25 j 09:14 4° ¥ 12'17 min. Earth dist. -9450 Apr 29 j 23:08 28°**Ω**23'11 4.11752 AU direct -9450 Jun 28 j 15:46 23°**Ω**28'19 conjunction -9444 May 08 j 19:18 7°**升**11'05 -0°17'17 -9450 Sep 02 j 20:58 0°m minimum elong -9444 May 08 j 19:20 7°**)**€11'06 0°17'33 evening set -9450 Oct 29 j 18:20 12° m 07'24 max. Earth dist. -9444 May 08 j 04:23 7°**)**€02'48 6.29909 AU morning rise -9444 May 22 i 02:17 10°**)**€08'13 conjunction -9450 Nov 11 j 19:25 15° m 11'17 0°03'36 asc. node -9444 Sep 13 i 08:10 27°**)** 30'04 -9450 Nov 11 j 19:26 15° m 11'17 0°03'48 retrograde -9444 Sep 20 i 03:37 27°**)** 34'38 minimum elong behind sun begin -9450 Nov 11 j 11:21 15° m 06'34 opposition -9444 Nov 18 i 19:12 22°**)** 40'19 0°13'21 -9450 Nov 12 j 03:31 15° To 16'01 -9444 Nov 19 j 10:13 behind sun end min. Earth dist. 22°**)** 35'25 4 32664 AU -9450 Nov 12 j 13:01 15° Mp 21'38-9443 Jan 19 j 19:03 max. Earth dist. 6.08565 AU direct 17° **X** 36'44 -9450 Nov 25 j 00:09 -9443 Apr 30 j 20:33 $0^{\circ}\Upsilon$ 18° m 17'07 morning rise -9443 May 28 j 03:59 5°Y50'01 -9450 Dec 05 j 23:03 20° m 49'17 evening set desc. node -9449 Jan 18 j 08:37 -9443 Jun 09 j 01:47 8°**Y**28'06 0∘ଫ max. Earth dist. 6.34410 AU retrograde -9449 Apr 05 j 10:07 8°**₽**09'11 min. Earth dist. -9449 Jun 04 j 06:48 -9443 Jun 10 j 05:06 8°**Υ**43'15 0°35'58 3°**£**12'20 4.06401 AU conjunction -9449 Jun 05 j 01:27 3°**£**06'07 -0°39'42 -9443 Jun 10 j 05:02 8°**Y**43'13 0°35'59 opposition minimum elong -9449 Jun 30 j 07:25 -9443 Jun 23 j 02:33 11°**Y**34'43 30°R, My morning rise -9449 Aug 02 j 11:34 -9443 Oct 21 j 13:19 direct 28° Mp 12'01 retrograde 28°**Y**47'33 -9443 Dec 20 j 21:06 23°Y55'28 1°25'52 -9449 Sep 04 j 12:07 0∘**⊽** opposition -9449 Dec 04 j 06:54 23°**Υ**48'34 4.35128 AU evening set 17°**♀**09'26 min. Earth dist. -9443 Dec 21 j 18:36 direct -9442 Feb 21 j 08:59 18°**Y**54'01 conjunction -9449 Dec 17 j 16:46 20°**2**18'27 -0°53'08 -9442 May 27 j 02:13 0°8 -9449 Dec 17 j 16:41 20°**2**18'24 0°53'16 evening set -9442 Jun 28 j 19:56 6°857'46 minimum elong max. Earth dist. -9449 Dec 19 j 01:37 20°**♀**37'47 6.05405 AU max. Earth dist. -9442 Jul 10 j 02:06 9°**8**28'10 6.34533 AU -9449 Dec 31 j 05:51 23°**₽**29'11 morning rise -9448 Jan 28 j 23:40 -9442 Jul 11 j 11:26 9°846'47 1°18'14 0°M conjunction -9448 May 10 j 19:28 -9442 Jul 11 j 11:21 9°**8**46'45 1°18'33 retrograde 13°M30'23 minimum elong -9448 Jul 09 j 16:08 8°M25'20 -1°53'18 -9442 Jul 24 j 00:23 12°**8**34'34 opposition morning rise min. Earth dist. -9448 Jul 08 i 17:37 8°M33'00 4.05860 AU -9442 Aug 04 i 00:41 15°8 direct -9448 Sep 05 i 19:18 3°M28'23 retrograde -9442 Nov 22 i 14:47 29°857'58 -9448 Dec 06 i 01:05 15°M opposition -9441 Jan 22 j 12:12 25°**8**06'21 2°13'44 evening set -9447 Jan 09 j 03:18 22°M37'12 min. Earth dist. -9441 Jan 23 j 12:01 24°858'48 4.33023 AU direct -9441 Mar 25 j 22:52 20°807'49 -9447 Jan 22 j 18:30 25°M47'26 -1°30'33 -9441 Jun 21 j 14:01 $0^{\circ}\Pi$ conjunction -9447 Jan 22 j 18:26 25°M47'24 1°30'58 -9441 Jul 29 j 23:39 8° II 10'57 minimum elong evening set 6.30245 AU -9447 Jan 24 j 06:01 26°ML08'07 6.07392 AU max. Earth dist. -9441 Aug 10 j 04:12 10°**Ⅱ**42′28 max. Earth dist. morning rise -9447 Feb 05 j 11:42 28°M58'36 -9447 Feb 09 j 22:19 0°**∡**¹ conjunction -9441 Aug 11 j 09:23 10°**Ⅱ**59'00 1°38'03 retrograde -9447 Jun 15 j 02:49 18°**∡**36′56 minimum elong -9441 Aug 11 j 09:22 10°**Ⅱ**58'59 1°38'34 -9447 Aug 13 j 10:16 13°**∡** 32'29 -2°24'44 morning rise -9441 Aug 23 j 18:03 13°**Ⅱ**46'37 opposition -9447 Aug 12 j 14:23 13°**✗**39'17 4.10296 AU -9441 Nov 22 j 06:20 0ಂತಾ min. Earth dist. -9447 Oct 10 j 23:04 8°**х** 32′07 -9441 Dec 25 j 17:09 1°9541'08 direct retrograde 27°**∡**38'38 -9440 Jan 28 j 11:06 evening set -9446 Feb 15 j 02:50 30°RⅡ 0°궁 -9446 Feb 25 j 10:16 opposition -9440 Feb 25 j 01:58 26°**I**I48'05 2°23'03 min. Earth dist. -9440 Feb 25 j 18:45 26°**Ⅱ**42'45 4.26905 AU conjunction -9446 Feb 28 j 19:58 0°る46'49 -1°34'45 direct -9440 Apr 26 j 17:37 21°**I**52'33 minimum elong -9446 Feb 28 j 20:00 0°る46'50 1°35'19 -9440 Jul 13 j 01:08 0ಂತಾ max. Earth dist. -9446 Mar 01 j 19:36 1°**る**00'21 6.13803 AU evening set -9440 Aug 29 j 08:37 10°903'01 -9446 Mar 14 j 13:17 3°る54'54 morning rise

-9446 Jul 19 j 00:27

retrograde

22°る47'28

conjunction

-9440 Sep 10 j 18:54 12°554'13 1°28'50

•	ical year style is used: Th		•				ige 41
minimum elong	-9440 Sep 10 j 18:58	12°©54'15		minimum elong	-9434 Mar 05 j 20:27	5° ♂ 37'49	1922107
max. Earth dist.	-9440 Sep 10 j 18:58	12 3 34 13	6.22794 AU	max. Earth dist.	-9434 Mar 06 j 18:48	5° ろ 50'35	
morning rise	-9440 Sep 10 j 02.34 -9440 Sep 23 j 05:56	12 944 39 15°945'58	0.22794 AU	morning rise	-9434 Mar 19 j 13:14	3 3 3033 8° る 45'04	0.1318/ AU
morning rise	-9440 Dec 03 j 19:52	13 3 43 38		retrograde	-9434 Jul 23 j 13:02	8 043 04 27°る29'44	
retrograde	-9439 Jan 28 j 08:02	4°Ω24'32		opposition	-9434 Sep 20 j 14:27	27 3 2944 22° る 28'35	1058115
remograde	-9439 Mar 26 j 15:21	30°RS		min. Earth dist.	-9434 Sep 20 j 14.27		4.19372 AU
opposition	-9439 Mar 30 j 17:59	29° © 28'27	1°48'02	direct	-9434 Nov 19 j 09:33	17°る25'13	4.19372 AO
min. Earth dist.	-9439 Mar 30 j 23:54	29°526'33	4.18588 AU	direct	-9433 Feb 27 j 03:47	0°≈	
direct	-9439 May 30 j 06:36	24°935'04	4.10300 AC	evening set	-9433 Mar 27 j 20:06	6°≈13'03	
direct	-9439 Jul 29 j 22:06	0°Ω		evening set	7455 With 27 J 20.00	0 7013 03	
evening set	-9439 Sep 30 j 17:06	12° Ω 59'09		conjunction	-9433 Apr 10 j 11:19	9° ≈ 16'30	-1°00'25
evening set	-9439 Oct 09 j 08:42	15° Ω		minimum elong	-9433 Apr 10 j 11:24	9° ≈ 16'33	1°00'54
)43) OCI 0) j 00.42	13 00		max. Earth dist.	-9433 Apr 10 j 12:24	9° ≈ 17'07	6.23474 AU
conjunction	-9439 Oct 13 j 10:02	15° Ω 56'51	0°51'10	morning rise	-9433 Apr 24 j 00:33	12°≈18'46	0.23474710
minimum elong	-9439 Oct 13 j 10:07	15°Ω56'53		morning rise	-9433 May 06 j 04:23	15° ≈	
max. Earth dist.	-9439 Oct 13 j 11:38	15° Ω 57'47	6.14427 AU		-9433 Aug 12 j 09:56	0° ∀	
morning rise	-9439 Oct 26 j 05:39	18° Ω 56'03	0.1442/ AO	retrograde	-9433 Aug 24 j 21:20	0°) 15'30	
morning risc	-9439 Dec 16 j 17:13	0° m)		renograde	-9433 Sep 06 j 07:22	30°R≈	
retrograde	-9438 Mar 05 j 02:21	8° Mp 19'36		opposition	-9433 Oct 23 j 03:05	25°≈18'11	-0°54'23
opposition	-9438 May 05 j 06:33	3°m/19'38	0°35'32	min. Earth dist.	-9433 Oct 23 j 08:23		4.27311 AU
min. Earth dist.	-9438 May 04 j 21:16	3° m) 22'40	4.10775 AU	direct	-9433 Oct 23 j 08:23 -9433 Dec 23 j 04:52	20°≈13'51	4.27311 AO
iiiii. Eartii dist.	-9438 Jun 02 j 08:27	30°RΩ	4.10773 AO	direct	-9432 Mar 19 j 08:56	20 ≈ 1331	
direct	-9438 Jul 02 j 08.27	28° Ω 26'46		evening set	-9432 Apr 29 j 22:55	8°) 42'15	
direct	-9438 Aug 03 j 10:46	0° m)		evening set	-9432 Apr 29 J 22.33	6 / (4213	
desc. node	-9438 Oct 14 j 23:59	12° Mp 37'05		conjunction	-9432 May 13 j 08:07	11° ¥ 40′25	0°00'54
evening set	-9438 Nov 03 j 16:17	17° Mp 08'26		minimum elong	-9432 May 13 j 08:08	11° X 40'25	
evening set	-9436 NOV 03 J 10.17	17 111/08/20		behind sun begin	-9432 May 13 j 08:08	11° X 4023	0 1009
conjunction	-9438 Nov 16 j 18:47	20° m 13'12	0°04!53	behind sun begin	-9432 May 13 j 14:38	11 X 3049	
minimum elong	-9438 Nov 16 j 18:47	20° mg 13'12		max. Earth dist.	-9432 May 13 j 14.38	11° X 4401	6.30553 AU
behind sun begin	-9438 Nov 16 j 10:48	20° mg 08'31	0 0443	morning rise	-9432 May 26 j 13:47	14°) 36'47	0.30333 AO
behind sun end	-9438 Nov 17 j 02:47	20° m) 17'53		asc. node	-9432 Jul 25 j 06:49	26° H 31'38	
max. Earth dist.	-9438 Nov 17 j 16:26	20° m) 25'56	6.07944 AU	asc. nouc	-9432 Aug 19 j 14:44	20 γ (31 38	
morning rise	-9438 Nov 30 j 00:44	23° m 19'53	0.07744 AO	retrograde	-9432 Sep 24 j 11:04	2°Υ'00'45	
morning risc	-9438 Dec 29 j 11:40	0° ت		retrograde	-9432 Oct 30 j 11:57	30° ₹	
retrograde	-9437 Apr 10 j 14:48	0 — 13° ≏ 14'34		opposition	-9432 Nov 23 j 04:47	27° ¥ 06′52	0°24'05
min. Earth dist.	-9437 Jun 09 j 07:37	8° ₽ 17'33	4.06217 AU	min. Earth dist.	-9432 Nov 23 j 20:38	27° H 01'41	4.32958 AU
opposition	-9437 Jun 10 j 02:56	8° ⊆ 11'05		direct	-9431 Jan 24 j 05:39	22°) (01'41	4.32/30 110
direct	-9437 Aug 07 j 12:12	3° ₽ 16'42	0 3137	direct	-9431 Apr 12 j 08:18	0° Υ	
evening set	-9437 Dec 09 j 09:55			evening set	-9431 Jun 01 j 14:19	10° Y 16′08	
evening sec	7137 Bee 07 J 07.33	22 -13 22		max. Earth dist.	-9431 Jun 13 j 07:44	12° Υ 52'01	6.34318 AU
conjunction	-9437 Dec 22 j 20:37	25° ≏ 24'37	-0°59'58	man. Darun dibu) 131 Van 13 J 07	12 10201	0.5 15 10 110
minimum elong	-9437 Dec 22 j 20:31	25° Ω 24'33		conjunction	-9431 Jun 14 j 13:58	13° Y '08'49	0°42'43
max. Earth dist.	-9437 Dec 24 j 07:06	25° Ω 44'52	6.05659 AU	minimum elong	-9431 Jun 14 j 13:54	13° Υ '08'47	0°42'47
morning rise	-9436 Jan 05 j 10:32	28° ♀ 35'31		morning rise	-9431 Jun 27 j 10:21	15° Y ′59'49	
3	-9436 Jan 11 j 12:08	0°M		3	-9431 Sep 09 j 15:14	0°8	
	-9436 Mar 28 j 06:17	15° ™		retrograde	-9431 Oct 26 j 01:02	3° 8 14'06	
retrograde	-9436 May 15 j 18:43	18° ™ 34'01			-9431 Dec 12 j 09:28	30°RƳ	
-	-9436 Jul 03 j 06:31	15°RM		opposition	-9431 Dec 25 j 09:10	28° Y ′22'11	1°34'19
opposition	-9436 Jul 14 j 14:13	13°M28'54	-2°00'35	min. Earth dist.	-9431 Dec 26 j 08:14	28° Ƴ 14'47	4.34681 AU
min. Earth dist.	-9436 Jul 13 j 14:46		4.06561 AU	direct	-9430 Feb 25 j 22:00	23° Y ′21′04	
direct	-9436 Sep 10 j 16:53	8°M31'30			-9430 May 07 j 13:54	0°8	
	-9436 Nov 15 j 07:05	15° ™		evening set	-9430 Jul 03 j 04:56	11° 8 25'41	
evening set	-9435 Jan 14 j 07:17	27°M39'25		max. Earth dist.	-9430 Jul 14 j 11:04	13° 8 56'23	6.33756 AU
C	-9435 Jan 24 j 09:56	0° ∡ ¹			,		
	•			conjunction	-9430 Jul 15 j 19:34	14° 8 14'34	1°22'30
conjunction	-9435 Jan 27 j 22:46	0° ∡ '49'17	-1°33'13	minimum elong	-9430 Jul 15 j 19:30	14° 8 14'32	
minimum elong	-9435 Jan 27 j 22:42	0° ∡ ′49′15	1°33'41	•	-9430 Jul 19 j 04:41	15° ႘	
max. Earth dist.	-9435 Jan 29 j 08:26	1° ≯ 08'51	6.08436 AU	morning rise	-9430 Jul 28 j 07:34	17° 8 02'16	
morning rise	-9435 Feb 10 j 16:08	3° ∡ ′59′59		-	-9430 Oct 02 j 10:50	0°II	
retrograde	-9435 Jun 19 j 21:01	23° ∡ ³31'35		retrograde	-9430 Nov 27 j 04:15	4° Ⅱ 30'14	
min. Earth dist.	-9435 Aug 17 j 09:33	18° ∡ ³33'34	4.11565 AU		-9429 Jan 24 j 08:16	30°₽ ႘	
opposition	-9435 Aug 18 j 03:40	18° ∡ ′27′22	-2°24'50	opposition	-9429 Jan 27 j 04:05	29° 8 38'30	2°17'32
direct	-9435 Oct 15 j 20:43	13° ∡ ¹26'30		min. Earth dist.	-9429 Jan 28 j 02:15	29° 8 31'28	4.32002 AU
	-9434 Feb 09 j 00:23	ರ∘ರ		direct	-9429 Mar 30 j 11:13	24° 8 40'26	
evening set	-9434 Feb 20 j 03:08	2° ප 30'11			-9429 May 31 j 13:12	$\Pi^{\circ}0$	
				evening set	-9429 Aug 03 j 09:44	12° Ⅱ 45′22	
conjunction	-9434 Mar 05 j 20:24	5° る 37'47	-1°32'33				

•	•		•	* ·	9430 BCE in historical c		ge 42
conjunction		e year -9429 r 15° ∏ 33'44				5° × ⁷ 48'20	1025!14
3	-9429 Aug 15 j 19:08			conjunction	-9423 Feb 02 j 02:31		
minimum elong	-9429 Aug 15 j 19:07	15° Ⅱ 33'43	1°39'03	minimum elong	-9423 Feb 02 j 02:29	5° ∡ 748'19	
max. Earth dist.	-9429 Aug 14 j 15:44	15° I I18'10	6.29060 AU	max. Earth dist.	-9423 Feb 03 j 12:12	6° ₹ 07'51	6.09347 AU
morning rise	-9429 Aug 28 j 03:46	18° Ⅱ 21'48		morning rise	-9423 Feb 15 j 19:51	8° ≯ 58'36	
_	-9429 Oct 23 j 20:59	0°€		retrograde	-9423 Jun 24 j 15:29	28° ₹ 24'01	
retrograde	-9429 Dec 30 j 14:28	6° ॐ 22'45		opposition	-9423 Aug 22 j 20:23	23° ∡ 20′13	
opposition	-9428 Feb 29 j 22:44	1° 5 29'20	2°20'42	min. Earth dist.	-9423 Aug 22 j 03:33	23° ≯ 25′58	4.12644 AU
min. Earth dist.	-9428 Mar 01 j 14:41	1°9524'16	4.25633 AU	direct	-9423 Oct 20 j 16:17	18° ∡ 18'59	
	-9428 Mar 12 j 20:30	30°Ŗ Ⅱ			-9422 Jan 22 j 13:09	0°ප	
direct	-9428 May 01 j 11:54	26° Ⅲ 34'10		evening set	-9422 Feb 25 j 03:45	7°る20'47	
	-9428 Jun 18 j 18:25	0 \circ ∞					
evening set	-9428 Sep 02 j 21:20	14° © 46'34		conjunction	-9422 Mar 10 j 20:49	10° る 27'52	-1°29'45
				minimum elong	-9422 Mar 10 j 20:53	10° る 27'55	1°30'20
conjunction	-9428 Sep 15 j 08:16	17° 5 38'33	1°25'02	max. Earth dist.	-9422 Mar 11 j 14:50	10°る38'08	6.16338 AU
minimum elong	-9428 Sep 15 j 08:20	17°538'36	1°25'36	morning rise	-9422 Mar 24 j 13:32	13° る 34'34	
max. Earth dist.	-9428 Sep 14 j 18:53	17°530'50	6.21553 AU	Ü	-9422 Jun 20 j 20:10	0° ≈	
morning rise	-9428 Sep 27 j 20:18	20°531'16		retrograde	-9422 Jul 28 j 01:56	2°≈12'21	
	-9428 Nov 10 j 18:51	0°Ω			-9422 Sep 03 j 02:54	30°R ට	
retrograde	-9427 Feb 02 j 07:11	9° Ω 16'17		opposition	-9422 Sep 25 j 03:34	27°る11'43	-1°51'10
opposition	-9427 Apr 04 j 18:15	4° Ω 19'37	1°39'35	min. Earth dist.	-9422 Sep 24 j 21:45		4.20486 AU
min. Earth dist.	1 3	4°Ω18'50	4.17467 AU			27°る1341 22°る08'05	4.20460 AU
IIIII. Eartii dist.	-9427 Apr 04 j 20:42		4.17407 AU	direct	-9422 Nov 24 j 03:04		
	-9427 May 16 j 08:40	30° ₹ 5			-9421 Feb 07 j 23:51	0° ≈	
direct	-9427 Jun 04 j 01:38	29°526'26		evening set	-9421 Apr 01 j 15:39	10° ≈ 53'35	
	-9427 Jun 22 j 18:50	$0^{\circ}\Omega$					
	-9427 Sep 22 j 22:32	15° Ω		conjunction	-9421 Apr 15 j 06:27	13° ≈ 56′26	
evening set	-9427 Oct 05 j 10:24	17° Ω 52'16		minimum elong	-9421 Apr 15 j 06:32	13° ≈ 56′29	
				max. Earth dist.	-9421 Apr 15 j 05:37	13° ≈ 55'58	6.24492 AU
conjunction	-9427 Oct 18 j 04:36	20° Ω 50'54	0°43'57		-9421 Apr 19 j 23:45	15° ≈	
minimum elong	-9427 Oct 18 j 04:40	20° Ω 50′56	0°44'22	morning rise	-9421 Apr 28 j 18:45	16° ≈ 57'57	
max. Earth dist.	-9427 Oct 18 j 10:06	20° Ω 54'06	6.13525 AU		-9421 Jul 03 j 13:26	0° ∀	
morning rise	-9427 Oct 31 j 01:32	23° N 51'06		retrograde	-9421 Aug 29 j 07:51	4°) 49′29	
	-9427 Nov 27 j 07:40	0° m y			-9421 Oct 26 j 16:31	30° Ŗ ≈	
retrograde	-9426 Mar 10 j 06:27	13° m 19'16		opposition	-9421 Oct 27 j 14:18	29° ≈ 52'46	-0°43'49
opposition	-9426 May 10 j 08:10	8° Mp 18'42	0°23'22	min. Earth dist.	-9421 Oct 27 j 21:13	29° ≈ 50'28	4.28138 AU
min. Earth dist.	-9426 May 09 j 21:41	8° m 22'08	4.10138 AU	direct	-9421 Dec 27 j 18:57	24° ≈ 48'32	
direct	-9426 Jul 08 j 11:41	3° m 25'41			-9420 Feb 26 j 22:06	0°) €	
desc. node	-9426 Aug 24 j 07:05	6° m 53'19		evening set	-9420 May 04 j 13:48	13°) 15′02	
evening set	-9426 Nov 08 j 14:49	22° m 08'51			,,,,,		
evening set	7420110V 00 J 14.47	22 11/0031		conjunction	-9420 May 17 j 21:44	16°) 12′29	-0°02'22
conjunction	-9426 Nov 21 j 18:33	25° m 14'17	0°13'11	minimum elong	-9420 May 17 j 21:45	16° X 12'30	0°02'34
3	-9426 Nov 21 j 18:32					16° X 1230	0 02 34
minimum elong	3	25° Mp 14'16	0 13 03	behind sun begin	-9420 May 17 j 13:36		
behind sun begin	-9426 Nov 21 j 13:36	25° m 17'123		behind sun end	-9420 May 18 j 05:55	16°) 17'01	(21121 ATT
behind sun end	-9426 Nov 21 j 23:28	25° m 17'10		max. Earth dist.	-9420 May 17 j 01:37	16° 米 01'19	6.31121 AU
max. Earth dist.	-9426 Nov 22 j 18:36	25° m 28'26	6.07621 AU	morning rise	-9420 May 31 j 02:24	19°) €08'12	
morning rise	-9426 Dec 05 j 01:50	28° Mp 21'40		asc. node	-9420 Jun 03 j 22:39	19° ¥ 59′02	
	-9426 Dec 12 j 03:09	0∘ ⊽			-9420 Jul 23 j 14:28	0 ° Υ	
retrograde	-9425 Apr 15 j 16:42	18° ≏ 17'25		retrograde	-9420 Sep 28 j 21:29	6° Ƴ 30′09	
min. Earth dist.	-9425 Jun 14 j 06:14	13° ≏ 20'37	4.06256 AU	opposition	-9420 Nov 27 j 16:09	1° Y 36'39	0°34'51
opposition	-9425 Jun 15 j 03:09	13° ≏ 13'36	-1°03'08	min. Earth dist.	-9420 Nov 28 j 09:43	1° Y 30'55	4.33249 AU
direct	-9425 Aug 12 j 09:37	8° ≏ 18'54			-9420 Dec 10 j 06:21	30°₽ 升	
evening set	-9425 Dec 14 j 12:29	27° ≏ 18′23		direct	-9419 Jan 28 j 19:25	26°) 33'31	
	-9425 Dec 26 j 00:36	0° M ₊			-9419 Mar 19 j 05:31	0° Y	
				evening set	-9419 Jun 06 j 01:43	14° Y 45'25	
conjunction	-9425 Dec 27 j 23:55	0° M 27'46	-1°06'20	max. Earth dist.	-9419 Jun 17 j 18:25	17° Y 21′00	6.34315 AU
minimum elong	-9425 Dec 27 j 23:49		1°06'34				
max. Earth dist.	-9425 Dec 29 j 10:11	0°M47'52	6.06025 AU	conjunction	-9419 Jun 19 j 00:12	17° Ƴ 37'34	0°49'20
morning rise	-9424 Jan 10 j 14:32	3°M38'44		minimum elong	-9419 Jun 19 j 00:08	17° Ƴ 37'31	0°49'27
morning rise	-9424 Mar 03 j 02:36	15°M		morning rise	-9419 Jul 01 j 19:09	20° Υ 28'01	0 47 27
retrograde	-9424 May 20 j 17:07	23°M34'20		morning 1150	-9419 Aug 16 j 22:07	0° 8	
=		18°M29'10	2006/50	ratrograda		7° 8 43'31	
opposition	-9424 Jul 19 j 11:13			retrograde	-9419 Oct 30 j 11:40		1042122
min. Earth dist.	-9424 Jul 18 j 12:27		4.07228 AU	opposition	-9419 Dec 29 j 22:24	2° 8 51'47	1°42'23
T'	-9424 Aug 16 j 23:10	15°RM		min. Earth dist.	-9419 Dec 30 j 21:04	2° 8 44'32	4.34419 AU
direct	-9424 Sep 15 j 15:46	13°M31'17			-9418 Jan 22 j 19:18	30°RΥ	
	-9424 Oct 15 j 11:58	15° ™		direct	-9418 Mar 02 j 10:16	27° Y 51'11	
	-9423 Jan 07 j 20:44	0° ∡ ¹			-9418 Apr 10 j 01:24	0° 8	
evening set	-9423 Jan 19 j 10:31	2° ∡ ³38'42			-9418 Jul 03 j 09:46	15° 8	
				evening set	-9418 Jul 07 j 14:41	15° 8 55'55	

Attention astronom	nical year style is used: Th	e vear - 9418 i	n astronomical co	unting style is the year	9419 RCF in historical c	ounting style	
max. Earth dist.	-9418 Jul 18 j 19:09			min. Earth dist.	-9412 Jul 23 j 07:42		4.07685 AU
max. Lartii dist.)410 Jul 10 j 17.07	10 02002	0.55247 710	opposition	-9412 Jul 24 j 05:32	23°M24'07	
conjunction	-9418 Jul 20 j 04:08	18° 8 44'32	1°26'22	direct	-9412 Sep 20 j 10:59	18°M25'46	-2 12 21
minimum elong	-9418 Jul 20 j 04:04	18° 8 44'30	1°26'45	direct	-9412 Dec 21 j 10:31	0° ∡ 7	
morning rise	-9418 Aug 01 j 15:29	21° 8 32'07	1 20 43	evening set	-9411 Jan 24 j 12:06	7° ∡ ¹33'35	
morning risc	-9418 Sep 10 j 16:48	0°Ⅱ		evening set	-9411 Jan 24 j 12.00	1 × 33 33	
retrograde	-9418 Dec 01 j 20:28	9° П 03'56		conjunction	-9411 Feb 07 j 04:19	10° ∡ ¹43'03	1026122
opposition	-9417 Jan 31 j 20:49	4° Ⅱ 12'05	2°20'34	minimum elong	-9411 Feb 07 j 04:17	10 × 43 03 10° × 43'03	
min. Earth dist.	-9417 Feb 01 j 18:50	4° 耳 05'06	4.31302 AU	max. Earth dist.	-9411 Feb 08 j 10:44	11° x 43 03	6.09978 AU
iiiii. Eartii dist.	-9417 Mar 12 j 14:59	30°R 8	4.51502 AU	morning rise	-9411 Feb 08 j 10:44 -9411 Feb 20 j 21:58	13° х 53'05	0.09978 AC
direct	-9417 Apr 04 j 03:02	29° 8 14'28		morning rise	-9411 May 14 j 18:03	0°る	
direct	-9417 Apr 04 j 03:02	0°Ⅱ		retrograde	-9411 Jun 29 j 07:30	3°る13'27	
evening set	-9417 Apr 20 j 14:11	17° Ⅱ 19'56		renograde	-9411 Aug 13 j 18:21	30°R. ₹	
max. Earth dist.	-9417 Aug 19 j 03:56	19° Ⅲ 54'32	6.28233 AU	opposition	-9411 Aug 27 j 11:44	28° × ⁷ 09'57	2°22'15
max. Latur dist.	-7417 Aug 17 J 05.50	1) 113432	0.20233 AU	min. Earth dist.	-9411 Aug 26 j 20:02	28° x 0537	4.13393 AU
conjunction	-9417 Aug 20 j 04:34	20° Ⅱ 08'33	1°38'25	direct	-9411 Oct 25 j 10:30	23° × ⁷ 08'16	4.13373 AO
minimum elong	-9417 Aug 20 j 04:35	20° I I 08'33	1°38'58	direct	-9410 Jan 02 j 11:48	23 x 08 10	
morning rise	-9417 Sep 01 j 13:10	20° II 56'58	1 36 36	evening set	-9410 Mar 02 j 03:05	12° ろ 09'17	
morning rise	-9417 Sep 01 j 13.10 -9417 Oct 03 j 22:50	0°95		evening set	-9410 Mai 02 J 03.03	12 00917	
ratragrada		11°©03'07		agniumation	0410 Mar 15 ; 20:16	15° る 16'04	1026121
retrograde opposition	-9416 Jan 04 j 07:51	6°909'19	2°17'30	conjunction minimum elong	-9410 Mar 15 j 20:16 -9410 Mar 15 j 20:20	15° る 16'06	
	-9416 Mar 05 j 18:32			Č			6.17173 AU
min. Earth dist.	-9416 Mar 06 j 07:53 -9416 May 06 j 03:33	6°905'05	4.24747 AU	max. Earth dist. morning rise	-9410 Mar 16 j 12:30		0.1/1/3 AU
direct	, ,	1°514'33		morning rise	-9410 Mar 29 j 12:32	18°る22'15	
evening set	-9416 Sep 07 j 09:00	19° © 27'41			-9410 May 24 j 13:57	0° ≈	
. ,.	0416 0 10:20 21	2206220110	1020146	retrograde	-9410 Aug 01 j 15:56	6°≈54'18	1042122
conjunction	-9416 Sep 19 j 20:31	22°520'19	1°20'46	opposition	-9410 Sep 29 j 16:41	1°≈54'13	
minimum elong	-9416 Sep 19 j 20:35	22°520'21	1°21'20	min. Earth dist.	-9410 Sep 29 j 12:54		4.21316 AU
max. Earth dist.	-9416 Sep 19 j 09:41	22°5514'03	6.20685 AU	T' 4	-9410 Oct 14 j 03:23	30°Rる	
morning rise	-9416 Oct 02 j 09:28	25°513'49		direct	-9410 Nov 28 j 19:55	26° る 50'25	
	-9416 Oct 23 j 14:34	0° N			-9409 Jan 13 j 20:50	0° ≈	
retrograde	-9415 Feb 07 j 06:16	14° Ω 04'01	1020127		-9409 Apr 03 j 21:29	15° ≈	
opposition	-9415 Apr 09 j 16:18	9° Ω 06'48	1°30'37	evening set	-9409 Apr 06 j 11:13	15° ≈ 34'17	
min. Earth dist.	-9415 Apr 09 j 17:27	9° Ω 06'26	4.16654 AU	. ,.	0400 4 20:01.22	10026125	0047120
direct	-9415 Jun 08 j 21:09	4°Ω13'41		conjunction	-9409 Apr 20 j 01:22	18°≈36'35	
. ,	-9415 Sep 05 j 14:57	15° Ω		minimum elong	-9409 Apr 20 j 01:26	18°≈36'37	
evening set	-9415 Oct 10 j 01:38	22° Ω 40′32		max. Earth dist.	-9409 Apr 19 j 21:15	18°≈34'17	6.25268 AU
	0415.0 + 22:21.06	250 0 40102	0026126	morning rise	-9409 May 03 j 12:57	21°≈37'29	
conjunction	-9415 Oct 22 j 21:06			. 1	-9409 Jun 12 j 02:04	0°) {	
minimum elong	-9415 Oct 22 j 21:10	25° Ω 40'04 25° Ω 44'57	0°36'58	retrograde	-9409 Sep 02 j 18:01	9°) € 24'35	0022157
max. Earth dist.	-9415 Oct 23 j 05:32		6.12850 AU	opposition	-9409 Nov 01 j 02:09	4° ¥ 28'18	
morning rise	-9415 Nov 04 j 19:27	28° Ω 41'10		min. Earth dist.	-9409 Nov 01 j 10:15	4° ¥ 25'37	4.28807 AU
, 1	-9415 Nov 10 j 11:47	0° Mp		T' 4	-9409 Dec 12 j 20:48	30°R≈	
retrograde	-9414 Mar 15 j 06:06	18° To 13'00	0°11'19	direct	-9408 Jan 01 j 09:53	29°≈24'06	
opposition	-9414 May 15 j 06:40	13° To 11'55		aga mada	-9408 Jan 21 j 04:58	0° \ 12° \ 13'53	
min. Earth dist.	-9414 May 14 j 18:13	13° M) 16'00	4.09660 AU	asc. node	-9408 Apr 13 j 04:46		
desc. node	-9414 Jul 05 j 06:27	8° TD 25'13		evening set	-9408 May 09 j 05:00	17°) 48′55	
direct	-9414 Jul 13 j 06:08	8° Mp 18'46			0400 M 22 : 11.51	200W 45141	0°05'23
evening set	-9414 Nov 13 j 10:54 -9414 Nov 25 j 23:57	27° ™ 03'14 0° ⊆		conjunction	-9408 May 22 j 11:51	20°) 45'41	
	-7+1+1NUV /.31/.3 3/			minimum alana		20014/2011	0°05'12
	y	0 ==		minimum elong	-9408 May 22 j 11:50	20°\(\frac{1}{45}\)41	0°05'13
agnismation	-		0921112	behind sun begin	-9408 May 22 j 11:50 -9408 May 22 j 03:57	20°) 41′19	0°05'13
conjunction	-9414 Nov 26 j 15:43	0° ჲ 09'16		behind sun begin behind sun end	-9408 May 22 j 11:50 -9408 May 22 j 03:57 -9408 May 22 j 19:43	20°) 41′19 20°) 50′02	
minimum elong	-9414 Nov 26 j 15:43 -9414 Nov 26 j 15:40	0° ഫ 09'16 0° ഫ 09'14	0°21'09	behind sun begin behind sun end max. Earth dist.	-9408 May 22 j 11:50 -9408 May 22 j 03:57 -9408 May 22 j 19:43 -9408 May 21 j 15:05	20°) 41'19 20°) 50'02 20°) 34'08	0°05'13 6.31656 AU
minimum elong max. Earth dist.	-9414 Nov 26 j 15:43 -9414 Nov 26 j 15:40 -9414 Nov 27 j 16:45	0° Ω 09'16 0° Ω 09'14 0° Ω 24'00		behind sun begin behind sun end	-9408 May 22 j 11:50 -9408 May 22 j 03:57 -9408 May 22 j 19:43 -9408 May 21 j 15:05 -9408 Jun 04 j 15:08	20°\dagger41'19 20°\dagger50'02 20°\dagger34'08 23°\dagger440'39	
minimum elong max. Earth dist. morning rise	-9414 Nov 26 j 15:43 -9414 Nov 26 j 15:40 -9414 Nov 27 j 16:45 -9414 Dec 10 j 00:11	0° ച 09'16 0° ച 09'14 0° ച 24'00 3° ച 17'14	0°21'09	behind sun begin behind sun end max. Earth dist. morning rise	-9408 May 22 j 11:50 -9408 May 22 j 03:57 -9408 May 22 j 19:43 -9408 May 21 j 15:05 -9408 Jun 04 j 15:08 -9408 Jul 04 j 04:52	20° X 41'19 20° X 50'02 20° X 34'08 23° X 40'39 0° Υ	
minimum elong max. Earth dist. morning rise retrograde	-9414 Nov 26 j 15:43 -9414 Nov 26 j 15:40 -9414 Nov 27 j 16:45 -9414 Dec 10 j 00:11 -9413 Apr 20 j 15:21	0° Ω 09'16 0° Ω 09'14 0° Ω 24'00 3° Ω 17'14 23° Ω 14'01	0°21'09 6.07361 AU	behind sun begin behind sun end max. Earth dist. morning rise retrograde	-9408 May 22 j 11:50 -9408 May 22 j 03:57 -9408 May 22 j 19:43 -9408 May 21 j 15:05 -9408 Jun 04 j 15:08 -9408 Jul 04 j 04:52 -9408 Oct 03 j 07:33	20°\;\;\\\41'19 20°\;\;\\\50'02 20°\;\\\34'08 23°\;\\\\40'39 0°\;\\\\11°\;\\\00'33	6.31656 AU
minimum elong max. Earth dist. morning rise retrograde min. Earth dist.	-9414 Nov 26 j 15:43 -9414 Nov 26 j 15:40 -9414 Nov 27 j 16:45 -9414 Dec 10 j 00:11 -9413 Apr 20 j 15:21 -9413 Jun 19 j 03:01	0° ഇ09'16 0° ഇ09'14 0° ഇ24'00 3° ഇ17'14 23° ഇ14'01 18° ഇ16'58	0°21'09 6.07361 AU 4.06239 AU	behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition	-9408 May 22 j 11:50 -9408 May 22 j 03:57 -9408 May 22 j 19:43 -9408 May 21 j 15:05 -9408 Jun 04 j 15:08 -9408 Jul 04 j 04:52 -9408 Oct 03 j 07:33 -9408 Dec 02 j 04:21	20°\dagger41'19 20°\dagger50'02 20°\dagger34'08 23°\dagger40'39 0°\dagger 11°\dagger00'33 6°\dagger07'22	6.31656 AU 0°45'29
minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition	-9414 Nov 26 j 15:43 -9414 Nov 26 j 15:40 -9414 Nov 27 j 16:45 -9414 Dec 10 j 00:11 -9413 Apr 20 j 15:21 -9413 Jun 19 j 03:01 -9413 Jun 20 j 00:13	0° ഇ09'16 0° ഇ09'14 0° ഇ24'00 3° ഇ17'14 23° ഇ14'01 18° ഇ16'58 18° ഇ09'50	0°21'09 6.07361 AU 4.06239 AU	behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist.	-9408 May 22 j 11:50 -9408 May 22 j 03:57 -9408 May 22 j 19:43 -9408 May 21 j 15:05 -9408 Jun 04 j 15:08 -9408 Jul 04 j 04:52 -9408 Oct 03 j 07:33 -9408 Dec 02 j 04:21 -9408 Dec 02 j 22:42	20°\(\dagger*\)41'19 20°\(\dagger*\)50'02 20°\(\dagger*\)34'08 23°\(\dagger*\)40'39 0°\(\Varphi*\) 11°\(\Varphi*\)00'33 6°\(\Varphi*\)07'22 6°\(\Varphi*\)01'25	6.31656 AU
minimum elong max. Earth dist. morning rise retrograde min. Earth dist.	-9414 Nov 26 j 15:43 -9414 Nov 26 j 15:40 -9414 Nov 27 j 16:45 -9414 Dec 10 j 00:11 -9413 Apr 20 j 15:21 -9413 Jun 19 j 03:01 -9413 Jun 20 j 00:13 -9413 Aug 17 j 06:02	0° ഇ09'16 0° ഇ09'14 0° ഇ24'00 3° ഇ17'14 23° ഇ14'01 18° ഇ16'58 18° ഇ09'50	0°21'09 6.07361 AU 4.06239 AU	behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-9408 May 22 j 11:50 -9408 May 22 j 03:57 -9408 May 22 j 19:43 -9408 May 21 j 15:05 -9408 Jun 04 j 15:08 -9408 Jul 04 j 04:52 -9408 Oct 03 j 07:33 -9408 Dec 02 j 04:21 -9408 Dec 02 j 22:42 -9407 Feb 02 j 09:46	20°\(\frac{\pmath{41'19}}{20°\(\frac{\pmath{50'02}}{20°\(\frac{\pmath{50'02}}{34'08}}\) 23°\(\frac{\pmath{40'39}}{0°\(\frac{\pmath{7}}{00'33}}\) 6°\(\frac{\pmath{7}07'22}{6°\(\frac{\pmath{7}01'25}}\) 1°\(\frac{\pmath{9}04'35}\)	6.31656 AU 0°45'29
minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct	-9414 Nov 26 j 15:40 -9414 Nov 26 j 15:40 -9414 Nov 27 j 16:45 -9414 Dec 10 j 00:11 -9413 Apr 20 j 15:21 -9413 Jun 19 j 03:01 -9413 Jun 20 j 00:13 -9413 Aug 17 j 06:02 -9413 Dec 09 j 18:26	0° ഇ09'16 0° ഇ09'14 0° ഇ24'00 3° ഇ17'14 23° ഇ14'01 18° ഇ16'58 18° ഇ09'50 13° ഇ14'42	0°21'09 6.07361 AU 4.06239 AU	behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-9408 May 22 j 11:50 -9408 May 22 j 03:57 -9408 May 22 j 19:43 -9408 May 21 j 15:05 -9408 Jun 04 j 15:08 -9408 Jul 04 j 04:52 -9408 Oct 03 j 07:33 -9408 Dec 02 j 04:21 -9408 Dec 02 j 02:42 -9407 Feb 02 j 09:46 -9407 Jun 10 j 13:07	20°\(\frac{\pmath{41'19}}{20°\(\frac{\pmath{50'02}}{20°\(\frac{\pmath{50'02}}{34'08}}\) 23°\(\frac{\pmath{40'39}}{40'39}\) 0°\(\frac{\pmath{7}}{11°\(\frac{\pmath{7}00'33}{00'22}}\) 6°\(\frac{\pmath{7}07'22}{6°\(\frac{\pmath{7}01'25}{10'\pmath{7}04'35}}\) 19°\(\frac{\pmath{7}14'56}{14'56}\)	6.31656 AU 0°45'29 4.33609 AU
minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition	-9414 Nov 26 j 15:43 -9414 Nov 26 j 15:40 -9414 Nov 27 j 16:45 -9414 Dec 10 j 00:11 -9413 Apr 20 j 15:21 -9413 Jun 19 j 03:01 -9413 Jun 20 j 00:13 -9413 Aug 17 j 06:02	0° ഇ09'16 0° ഇ09'14 0° ഇ24'00 3° ഇ17'14 23° ഇ14'01 18° ഇ16'58 18° ഇ09'50	0°21'09 6.07361 AU 4.06239 AU	behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-9408 May 22 j 11:50 -9408 May 22 j 03:57 -9408 May 22 j 19:43 -9408 May 21 j 15:05 -9408 Jun 04 j 15:08 -9408 Jul 04 j 04:52 -9408 Oct 03 j 07:33 -9408 Dec 02 j 04:21 -9408 Dec 02 j 22:42 -9407 Feb 02 j 09:46	20°\(\frac{\pmath{41'19}}{20°\(\frac{\pmath{50'02}}{20°\(\frac{\pmath{50'02}}{34'08}}\) 23°\(\frac{\pmath{40'39}}{0°\(\frac{\pmath{7}}{00'33}}\) 6°\(\frac{\pmath{7}07'22}{6°\(\frac{\pmath{7}01'25}}\) 1°\(\frac{\pmath{9}04'35}\)	6.31656 AU 0°45'29
minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set	-9414 Nov 26 j 15:43 -9414 Nov 26 j 15:40 -9414 Nov 27 j 16:45 -9414 Dec 10 j 00:11 -9413 Apr 20 j 15:21 -9413 Jun 19 j 03:01 -9413 Jun 20 j 00:13 -9413 Aug 17 j 06:02 -9413 Dec 09 j 18:26 -9413 Dec 19 j 12:37	0°	0°21'09 6.07361 AU 4.06239 AU -1°13'55	behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist.	-9408 May 22 j 11:50 -9408 May 22 j 03:57 -9408 May 22 j 19:43 -9408 May 21 j 15:05 -9408 Jun 04 j 15:08 -9408 Jul 04 j 04:52 -9408 Oct 03 j 07:33 -9408 Dec 02 j 04:21 -9408 Dec 02 j 02:42 -9407 Feb 02 j 09:46 -9407 Jun 10 j 13:07 -9407 Jun 22 j 02:43	20° \(\frac{\pmath{41'19}}{20° \(\frac{\pmath{50'02}}{20° \(\frac{\pmath{40'39}}{34'08}}\) 23° \(\frac{\pmath{40'39}}{40'39}\) 0° \(\frac{\pmath{7}}{00'33}\) 6° \(\frac{\pmath{70'7'22}}{6° \(\frac{\pmath{70'125}}{10' \pmath{704'35}}\) 19° \(\frac{\pmath{714'56}}{21° \(\frac{\pmath{48'57}}{48'57}\)	6.31656 AU 0°45'29 4.33609 AU 6.34447 AU
minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set conjunction	-9414 Nov 26 j 15:43 -9414 Nov 26 j 15:40 -9414 Nov 27 j 16:45 -9414 Dec 10 j 00:11 -9413 Apr 20 j 15:21 -9413 Jun 19 j 03:01 -9413 Jun 20 j 00:13 -9413 Aug 17 j 06:02 -9413 Dec 09 j 18:26 -9413 Dec 19 j 12:37 -9412 Jan 02 j 00:58	0° №09'16 0° №09'14 0° №24'00 3° №17'14 23° №14'01 18° №16'58 18° №09'50 13° №14'42 0° № 2° №15'27	0°21'09 6.07361 AU 4.06239 AU -1°13'55	behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction	-9408 May 22 j 11:50 -9408 May 22 j 03:57 -9408 May 22 j 19:43 -9408 May 21 j 15:05 -9408 Jun 04 j 15:08 -9408 Jul 04 j 04:52 -9408 Oct 03 j 07:33 -9408 Dec 02 j 04:21 -9408 Dec 02 j 02:42 -9407 Jun 10 j 13:07 -9407 Jun 22 j 02:43 -9407 Jun 23 j 10:07	20°\(\pm\)41'19 20°\(\pm\)50'02 20°\(\pm\)34'08 23°\(\pm\)40'39 0°\(\pm\) 11°\(\pm\)00'33 6°\(\pm\)07'22 6°\(\pm\)01'25 1°\(\pm\)04'35 19°\(\pm\)14'56 21°\(\pm\)48'57	6.31656 AU 0°45'29 4.33609 AU 6.34447 AU 0°55'42
minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set conjunction minimum elong	-9414 Nov 26 j 15:43 -9414 Nov 26 j 15:40 -9414 Nov 27 j 16:45 -9414 Dec 10 j 00:11 -9413 Apr 20 j 15:21 -9413 Jun 19 j 03:01 -9413 Jun 20 j 00:13 -9413 Dec 09 j 18:26 -9413 Dec 19 j 12:37 -9412 Jan 02 j 00:58 -9412 Jan 02 j 00:53	0° \$\infty\$09'14 0° \$\infty\$24'00 3° \$\infty\$17'14 23° \$\infty\$14'01 18° \$\infty\$16'58 18° \$\infty\$09'50 13° \$\infty\$14'42 0° \$\mathbb{L}\$ 2° \$\mathbb{L}\$15'27 5° \$\mathbb{L}\$25'04 5° \$\mathbb{L}\$25'01	0°21'09 6.07361 AU 4.06239 AU -1°13'55 -1°12'05 1°12'20	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	-9408 May 22 j 11:50 -9408 May 22 j 03:57 -9408 May 22 j 19:43 -9408 May 21 j 15:05 -9408 Jun 04 j 15:08 -9408 Jul 04 j 04:52 -9408 Oct 03 j 07:33 -9408 Dec 02 j 04:21 -9408 Dec 02 j 09:46 -9407 Jun 10 j 13:07 -9407 Jun 22 j 02:43 -9407 Jun 23 j 10:07 -9407 Jun 23 j 10:03	20°\(\pm\)41'19 20°\(\pm\)50'02 20°\(\pm\)34'08 23°\(\pm\)40'39 0°\(\pm\) 11°\(\pm\)00'33 6°\(\pm\)07'22 6°\(\pm\)01'25 1°\(\pm\)04'35 19°\(\pm\)14'56 21°\(\pm\)48'57 22°\(\pm\)06'25 22°\(\pm\)06'25 22°\(\pm\)06'23	6.31656 AU 0°45'29 4.33609 AU 6.34447 AU
minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set conjunction minimum elong max. Earth dist.	-9414 Nov 26 j 15:43 -9414 Nov 26 j 15:40 -9414 Nov 27 j 16:45 -9414 Dec 10 j 00:11 -9413 Apr 20 j 15:21 -9413 Jun 19 j 03:01 -9413 Jun 20 j 00:13 -9413 Dec 09 j 18:26 -9413 Dec 19 j 12:37 -9412 Jan 02 j 00:58 -9412 Jan 02 j 00:53 -9412 Jan 03 j 12:38	0° \$\infty\$09'14 0° \$\infty\$24'00 3° \$\infty\$17'14 23° \$\infty\$14'01 18° \$\infty\$16'58 18° \$\infty\$09'50 13° \$\infty\$14'42 0° \$\mathbb{M}\$ 2° \$\mathbb{M}\$15'27 5° \$\mathbb{M}\$25'04 5° \$\mathbb{M}\$25'01 5° \$\mathbb{M}\$45'58	0°21'09 6.07361 AU 4.06239 AU -1°13'55	behind sun begin behind sun end max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction	-9408 May 22 j 11:50 -9408 May 22 j 03:57 -9408 May 22 j 19:43 -9408 May 21 j 15:05 -9408 Jun 04 j 15:08 -9408 Jul 04 j 04:52 -9408 Oct 03 j 07:33 -9408 Dec 02 j 04:21 -9408 Dec 02 j 02:42 -9407 Feb 02 j 09:46 -9407 Jun 10 j 13:07 -9407 Jun 22 j 02:43 -9407 Jun 23 j 10:07 -9407 Jun 23 j 10:03 -9407 Jul 06 j 03:58	20°\(\pm\)41'19 20°\(\pm\)50'02 20°\(\pm\)34'08 23°\(\pm\)40'39 0°\(\pm\) 11°\(\pm\)00'33 6°\(\pm\)07'22 6°\(\pm\)01'25 1°\(\pm\)04'35 19°\(\pm\)14'56 21°\(\pm\)48'57 22°\(\pm\)06'25 22°\(\pm\)06'25 22°\(\pm\)06'23 24°\(\pm\)56'19	6.31656 AU 0°45'29 4.33609 AU 6.34447 AU 0°55'42
minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set conjunction minimum elong	-9414 Nov 26 j 15:43 -9414 Nov 26 j 15:40 -9414 Nov 27 j 16:45 -9414 Dec 10 j 00:11 -9413 Apr 20 j 15:21 -9413 Jun 19 j 03:01 -9413 Jun 20 j 00:13 -9413 Dec 09 j 18:26 -9413 Dec 19 j 12:37 -9412 Jan 02 j 00:58 -9412 Jan 02 j 00:53 -9412 Jan 03 j 12:38 -9412 Jan 15 j 16:05	0°	0°21'09 6.07361 AU 4.06239 AU -1°13'55 -1°12'05 1°12'20	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	-9408 May 22 j 11:50 -9408 May 22 j 03:57 -9408 May 22 j 19:43 -9408 May 21 j 15:05 -9408 Jun 04 j 15:08 -9408 Jul 04 j 04:52 -9408 Oct 03 j 07:33 -9408 Dec 02 j 04:21 -9408 Dec 02 j 02:42 -9407 Feb 02 j 09:46 -9407 Jun 10 j 13:07 -9407 Jun 22 j 02:43 -9407 Jun 23 j 10:07 -9407 Jun 23 j 10:03 -9407 Jul 06 j 03:58 -9407 Jul 29 j 14:14	20°\(\pm\)41'19 20°\(\pm\)50'02 20°\(\pm\)34'08 23°\(\pm\)40'39 0°\(\pm\) 11°\(\pm\)00'33 6°\(\pm\)07'22 6°\(\pm\)01'25 1°\(\pm\)04'35 19°\(\pm\)14'56 21°\(\pm\)48'57 22°\(\pm\)06'25 22°\(\pm\)06'25 22°\(\pm\)06'23 24°\(\pm\)56'19 0°\(\pm\)	6.31656 AU 0°45'29 4.33609 AU 6.34447 AU 0°55'42
minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set conjunction minimum elong max. Earth dist.	-9414 Nov 26 j 15:43 -9414 Nov 26 j 15:40 -9414 Nov 27 j 16:45 -9414 Dec 10 j 00:11 -9413 Apr 20 j 15:21 -9413 Jun 19 j 03:01 -9413 Jun 20 j 00:13 -9413 Dec 09 j 18:26 -9413 Dec 19 j 12:37 -9412 Jan 02 j 00:58 -9412 Jan 02 j 00:53 -9412 Jan 03 j 12:38	0° \$\infty\$09'14 0° \$\infty\$24'00 3° \$\infty\$17'14 23° \$\infty\$14'01 18° \$\infty\$16'58 18° \$\infty\$09'50 13° \$\infty\$14'42 0° \$\mathbb{M}\$ 2° \$\mathbb{M}\$15'27 5° \$\mathbb{M}\$25'04 5° \$\mathbb{M}\$25'01 5° \$\mathbb{M}\$45'58	0°21'09 6.07361 AU 4.06239 AU -1°13'55 -1°12'05 1°12'20	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	-9408 May 22 j 11:50 -9408 May 22 j 03:57 -9408 May 22 j 19:43 -9408 May 21 j 15:05 -9408 Jun 04 j 15:08 -9408 Jul 04 j 04:52 -9408 Oct 03 j 07:33 -9408 Dec 02 j 04:21 -9408 Dec 02 j 02:42 -9407 Feb 02 j 09:46 -9407 Jun 10 j 13:07 -9407 Jun 22 j 02:43 -9407 Jun 23 j 10:07 -9407 Jun 23 j 10:03 -9407 Jul 06 j 03:58	20°\(\pm\)41'19 20°\(\pm\)50'02 20°\(\pm\)34'08 23°\(\pm\)40'39 0°\(\pm\) 11°\(\pm\)00'33 6°\(\pm\)07'22 6°\(\pm\)01'25 1°\(\pm\)04'35 19°\(\pm\)14'56 21°\(\pm\)48'57 22°\(\pm\)06'25 22°\(\pm\)06'25 22°\(\pm\)06'23 24°\(\pm\)56'19	6.31656 AU 0°45'29 4.33609 AU 6.34447 AU 0°55'42 0°55'51

A 44 4 4		0406			0407 DCE: 1:4 : 1		
		-			9407 BCE in historical c		C 0/224 ATT
min. Earth dist.	-9406 Jan 04 j 11:05		4.34323 AU	max. Earth dist.	-9400 Jan 08 j 15:28	10°M49'19	6.06224 AU
direct	-9406 Mar 07 j 00:37	2° 8 20'34		morning rise	-9400 Jan 20 j 20:59	13°M40'31	
	-9406 Jun 17 j 00:35	15° 8			-9400 Jan 26 j 14:29	15° ™	
evening set	-9406 Jul 11 j 23:39	20° 8 24'29			-9400 Apr 12 j 11:48	0° ∡ ¹	
max. Earth dist.	-9406 Jul 23 j 05:22	22° 8 55'27	6.32905 AU	retrograde	-9400 May 30 j 13:10	3° ∡ ³31'47	
					-9400 Jul 17 j 13:37	30°₽M	
conjunction	-9406 Jul 24 j 12:17	23° 8 12'49	1°29'44	min. Earth dist.	-9400 Jul 28 j 04:39	28°M34'18	4.07981 AU
minimum elong	-9406 Jul 24 j 12:14	23° 8 12'47	1°30'09	opposition	-9400 Jul 29 j 02:37	28° M 26'47	-2°16'56
morning rise	-9406 Aug 05 j 22:42	26° 8 00'10		direct	-9400 Sep 25 j 09:02	23°M27'57	
	-9406 Aug 24 j 03:41	Π $\circ 0$			-9400 Nov 30 j 13:57	0° ∡ ™	
retrograde	-9406 Dec 06 j 09:33	13° Ⅱ 35′10		evening set	-9399 Jan 29 j 17:08	12° ∡ ³36'49	
opposition	-9405 Feb 05 j 12:44	8° Ⅱ 43'10	2°22'46				
min. Earth dist.	-9405 Feb 06 j 09:41	8° Ⅱ 36'32	4.30727 AU	conjunction	-9399 Feb 12 j 09:50	15° ∡ ¹46'13	-1°37'11
direct	-9405 Apr 08 j 16:58	3° Ⅱ 45'59		minimum elong	-9399 Feb 12 j 09:49	15° ∡ ¹46′12	1°37'43
evening set	-9405 Aug 12 j 04:05	21° Ⅱ 51'34		max. Earth dist.	-9399 Feb 13 j 15:51	16° ∡ °03'33	6.10573 AU
Č	Ç Ş			morning rise	-9399 Feb 26 j 03:24	18° ∡ 55'57	
conjunction	-9405 Aug 24 j 13:07	24° ∏ 40′24	1°37'45	Č	-9399 Apr 19 j 01:29	ರ°0	
minimum elong	-9405 Aug 24 j 13:08	24° II 40'24	1°38'18	retrograde	-9399 Jul 04 i 04:15	8° ਰ 11'06	
max. Earth dist.	-9405 Aug 23 j 12:48	24° II 26'32	6.27448 AU	opposition	-9399 Sep 01 i 06:13	3°₹08'03	-2°19'27
morning rise	-9405 Sep 05 j 22:01	27° Ⅱ 29'14	0.27440710	min. Earth dist.	-9399 Aug 31 j 16:22		4.14233 AU
morning risc	-9405 Sep 17 j 02:38	0°95		iiiii. Lartii dist.	-9399 Sep 26 j 03:19	30°R. ₹	4.14233 AU
ratra ara da	-9404 Jan 09 j 02:39	15° © 40'35		direct	-9399 Oct 30 j 08:34	28° ₹ 06'05	
retrograde	-9404 Mar 10 j 13:30		2012120	direct			
opposition	J	10°546'22	2°13'29		-9399 Dec 03 j 22:47	0°₹	
min. Earth dist.	-9404 Mar 11 j 01:51	10°5542'26	4.23777 AU				
direct	-9404 May 10 j 19:46	5°951'51					
evening set	-9404 Sep 11 j 19:47	24° © 06'14					
		🕳					
conjunction	-9404 Sep 24 j 08:16	26° © 59'42	1°16'02				
minimum elong	-9404 Sep 24 j 08:21	26° © 59'45	1°16'34				
max. Earth dist.	-9404 Sep 24 j 00:22	26° © 55'08	6.19628 AU				
morning rise	-9404 Oct 06 j 22:12	29° © 54'07					
	-9404 Oct 07 j 08:26	0 $^{\circ}$ Ω					
	-9404 Dec 22 j 16:19	15° Ω					
retrograde	-9403 Feb 12 j 04:30	18° Ω 50'19					
	-9403 Apr 05 j 19:11	15° Ŗ €					
opposition	-9403 Apr 14 j 13:53	13° Ω 52'38	1°21'06				
min. Earth dist.	-9403 Apr 14 j 13:10	13° Ω 52'52	4.15575 AU				
direct	-9403 Jun 13 j 14:03	8° Ω 59'39					
	-9403 Aug 16 j 07:43	15° Ω					
evening set	-9403 Oct 14 j 17:32	27° Ω 28'51					
-	-9403 Oct 25 j 12:08	0° m)					
	·						
conjunction	-9403 Oct 27 j 14:10	0°m/29'19	0°28'59				
minimum elong	-9403 Oct 27 j 14:13	0°m 29'21	0°29'20				
max. Earth dist.	-9403 Oct 27 j 23:50	0° m/34'59	6.11846 AU				
morning rise	-9403 Nov 09 j 14:02	3° m/31'33					
retrograde	-9402 Mar 20 j 06:55	23° m 08'31					
desc. node	-9402 May 16 j 03:39	18° m) 39'14					
opposition	-9402 May 20 j 05:39	18° My 06'55	-0°00'54				
min. Earth dist.	-9402 May 19 j 15:51	18° Mp 11'29	4.08802 AU				
direct	-9402 Jul 18 j 01:46	13° My 13'34	-1.00002 AU				
direct		0∘ ⊽					
	-9402 Nov 09 j 16:33						
evening set	-9402 Nov 18 j 09:01	2° ჲ 01'11					
	0402 D 01:15:13	50 0 00100	0920112				
conjunction	-9402 Dec 01 j 15:13	5° ₽ 08'02					
minimum elong	-9402 Dec 01 j 15:10	5° 2 08'01					
max. Earth dist.	-9402 Dec 02 j 19:07	5° £ 24'28	6.06734 AU				
morning rise	-9402 Dec 15 j 00:47	8° ≏ 16'47					
retrograde	-9401 Apr 25 j 17:49	28° ≙ 15'43					
opposition	-9401 Jun 24 j 23:07	23° ≙ 11'19					
min. Earth dist.	-9401 Jun 24 j 01:53		4.05918 AU				
direct	-9401 Aug 22 j 03:35	18° ≙ 15'50					
	-9401 Nov 22 j 03:07	0°M₊					
evening set	-9401 Nov 22 j 03:07 -9401 Dec 24 j 16:05	0° ጤ 7° ጤ 19'17					

-9400 Jan 07 j 04:59 10°ML29'08 1°17'44

minimum elong