Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12900 in astronomical counting style is the year 12901 BCE in historical counting style. -12900 Apr 05 j 01:56 16° mp 10'38 opposition -12895 Nov 17 j 13:02 28°≈52'33 0°40'53 retrograde min. Earth dist. -12900 Jun 03 j 07:18 11° Mp 11'53 4.07352 AU -12895 Nov 18 j 05:57 28°≈47'06 4.32443 AU min. Earth dist. opposition -12900 Jun 04 j 00:46 11° Mp 05'58 -1°12'59 -12894 Jan 18 j 21:47 23°≈51'21 direct -12900 Aug 01 j 05:34 6° Mp 08'46 direct -12894 Mar 27 j 12:31 0°**米** -12900 Dec 04 j 08:01 25° Mp 13'06 evening set evening set -12894 May 26 j 12:10 12°**米**00'41 -12894 Jun 07 j 04:52 14°**米** 37'23 max. Earth dist. 6.33222 AU -12900 Dec 18 j 00:10 28° m 23'53 -1°14'56 conjunction -12900 Dec 18 j 00:03 28° m 23'49 1°14'54 -12894 Jun 08 j 05:00 14° **★** 50'55 minimum elong conjunction 0°55'45 max. Earth dist. -12900 Dec 19 j 01:22 28° m 38'33 6.07370 AU minimum elong -12894 Jun 08 j 04:55 14° **★** 50'52 0°55'31 -12900 Dec 24 j 21:20 0°**♀** morning rise -12894 Jun 20 j 19:03 17°**米** 39'48 morning rise -12900 Dec 31 j 18:31 1°**♀**35'42 -12894 Aug 21 j 22:46 0°**℃** -12899 May 10 j 13:29 21°**2**17'05 -12894 Oct 20 j 09:12 5°**Υ**04'38 retrograde retrograde -12899 Jul 08 j 19:09 16°**♀**12'48 -2°20'49 opposition opposition -12894 Dec 20 j 08:41 0° \begin{pmatrix} \text{12'45} & 1^{\circ} \text{54'26} \end{pmatrix} min. Earth dist. -12899 Jul 08 j 04:38 16°**2**17'48 4.08701 AU min. Earth dist. -12894 Dec 21 j 01:21 0° Υ 07'28 4.33122 AU direct -12899 Sep 05 j 06:36 11°**2**12'10 -12894 Dec 22 j 00:54 30°R ★ -12898 Jan 08 j 13:36 0°M direct -12893 Feb 20 j 18:03 25°**米** 14'41 evening set -12898 Jan 10 j 14:07 0°M27'45 -12893 Apr 20 j 06:32 0°**Υ** evening set -12893 Jun 26 j 16:20 13°**Υ**13'55 conjunction -12898 Jan 24 j 07:17 3°M 37'09 -1°44'56 max. Earth dist. -12893 Jul 08 j 04:56 15°**Υ**49'31 6.31847 AU minimum elong -12898 Jan 24 j 07:14 3°M37'07 1°45'24 max. Earth dist. -12898 Jan 25 j 01:01 3°ML47'22 6.10813 AU conjunction -12893 Jul 09 j 01:48 16° Υ 01'17 1°35'37 morning rise -12898 Feb 07 i 00:12 6°M 46'21 minimum elong -12893 Jul 09 i 01:43 16°**Υ**01'15 -12898 Mar 16 j 12:21 15°M morning rise -12893 Jul 21 j 10:18 18° γ 48'11 retrograde -12898 Jun 14 j 01:11 25°M 54'02 -12893 Sep 14 j 02:43 0°8 opposition -12898 Aug 11 j 20:48 20°M 52'24 -2°37'21 retrograde -12893 Nov 22 j 04:59 6°\(\alpha \)35'29 min. Earth dist. -12898 Aug 11 j 14:33 20°ML54'32 4.13974 AU -12892 Jan 22 j 17:46 1°842'01 2°34'56 opposition -12898 Oct 10 j 06:13 15° ML49'08 min. Earth dist. -12892 Jan 23 j 05:12 1°838'24 4.29906 AU direct -12897 Jan 24 j 17:19 0° ₹ -12892 Feb 05 j 11:08 30°R**Y** -12897 Feb 16 j 05:10 4° ₹ 59'04 -12892 Mar 24 j 12:42 26°**Υ**'46'49 direct evening set -12892 May 10 j 11:50 0°8 -12897 Mar 01 j 19:44 8° ₹ 04'35 -1°37'24 -12892 Jul 26 j 18:19 14°**8**45'11 conjunction evening set minimum elong -12897 Mar 01 j 19:48 8° ₹04'37 1°38'11 -12892 Jul 27 j 20:28 15°**8** -12897 Mar 01 j 21:20 8° ₹ 05'29 6.17400 AU max. Earth dist. -12897 Mar 15 j 08:26 11°**尽** 08'59 -12892 Aug 08 j 02:26 17°**8**33'38 1°47'41 morning rise conjunction -12897 Jul 17 j 05:36 29° ₹31'41 -12892 Aug 08 j 02:27 17°**8**33'38 1°48'18 retrograde minimum elong -12897 Sep 14 j 04:24 24° ₹33'45 -1°59'58 -12892 Aug 07 j 17:04 17°**8**28'17 6.26939 AU opposition max. Earth dist. -12897 Sep 14 j 07:41 24° ₹32'39 4.21222 AU -12892 Aug 20 j 11:10 20°**8**22'33 min. Earth dist. morning rise direct -12897 Nov 13 j 19:16 19°**尽** 29'25 -12892 Oct 04 j 18:29 0°**Ⅱ** -12896 Feb 12 j 03:24 0°る retrograde -12892 Dec 25 j 01:53 8°**II**46'06 evening set -12896 Mar 22 j 06:17 8°₹20'17 opposition -12891 Feb 24 j 19:50 3°**Д**49'41 2°29'23 min. Earth dist. -12891 Feb 24 j 22:09 3°**II**48'57 4.23667 AU -12896 Apr 04 j 15:57 11°**⋜**20'53 -0°57'32 -12891 Mar 31 j 09:53 30°R8 conjunction -12896 Apr 04 j 16:02 11°₹20'56 0°58'23 -12891 Apr 26 j 13:26 28°**8**56'27 minimum elong direct -12896 Apr 04 j 03:36 11°**궁**13'56 6.24820 AU -12891 May 22 j 13:41 0°**П** max. Earth dist. -12896 Apr 17 j 22:24 14°**♂**19'48 -12891 Aug 27 j 12:24 17°**Д**02'46 morning rise evening set -12896 Jul 12 j 10:23 0°≈ -12891 Sep 09 i 02:09 19° II 56'34 1°26'53 retrograde -12896 Aug 17 j 12:23 2°≈03'24 conjunction -12896 Sep 22 j 17:53 30°Rる -12891 Sep 09 i 02:14 19° II 56'37 1°27'43 minimum elong opposition -12896 Oct 15 j 22:56 27°る08'58 -0°45'30 max. Earth dist. -12891 Sep 09 j 05:12 19°**Ц**58'19 6.19879 AU min. Earth dist. -12896 Oct 16 j 11:07 27°る04'59 4.28076 AU morning rise -12891 Sep 21 j 18:34 22°**Д**51'50 direct -12896 Dec 16 j 16:30 22°る05'31 -12891 Oct 24 j 02:10 0°5 -12895 Mar 04 j 05:37 0°≈ retrograde -12890 Jan 29 i 02:48 11°555'57 -12895 Apr 24 j 13:34 10°≈33'16 opposition -12890 Mar 31 j 13:42 6°555'51 1°35'48 evening set min. Earth dist. -12890 Mar 31 j 06:11 6°558'18 4.16225 AU -12890 May 30 j 03:12 2°502'49 conjunction -12895 May 07 j 15:31 13°≈28'29 -0°00'36 direct minimum elong -12895 May 07 j 15:32 13°≈28'29 0°01'12 evening set -12890 Sep 29 j 16:04 20°525'28 behind sun begin -12895 May 07 j 07:26 13°≈23'59 -12895 May 07 j 23:37 13°≈32'59 -12890 Oct 12 j 16:48 23°527'12 0°37'17 behind sun end conjunction -12895 May 06 j 16:47 13°≈15'46 6.30658 AU -12890 Oct 12 j 16:52 23°527'15 max. Earth dist. minimum elong 0°38'04 -12890 Oct 13 j 10:17 23°537'22 asc. node -12895 May 11 j 09:52 14°≈19'01 max. Earth dist. 6.12817 AU -12895 May 14 j 11:10 15°≈ morning rise -12890 Oct 25 j 21:05 26°930'55 morning rise -12895 May 20 j 14:09 16°≈21'57 -12890 Nov 10 j 03:45 $0^{\circ}\Omega$ -12895 Jul 30 j 08:44 0°**∀** -12889 Feb 06 j 21:59 15°**Ω** retrograde -12895 Sep 18 j 08:15 3°**米**44′50 retrograde -12889 Mar 05 j 23:28 $16^{\circ}\Omega$ 07'55 -12895 Nov 08 j 17:20 30°R≈ -12889 Apr 01 j 18:28 15°R**Ω**

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12889 in astronomical counting style is the year 12890 BCE in historical counting style. -12889 May 05 j 16:47 11° Ω 04'40 0°07'55 -12883 Feb 07 i 13:51 opposition min. Earth dist. -12889 May 05 j 02:00 $11^{\circ}\Omega$ 09'36 4.10057 AU -12883 Mar 20 j 19:46 6°≈49'13 asc. node -12889 Jun 07 j 06:06 $7^{\circ}\Omega$ 17'40 -12883 Apr 28 j 14:46 15°≈ desc node -12883 Apr 29 j 02:56 15°≈06'45 -12889 Jul 03 j 06:59 6°**Ω**10'02 direct evening set -12889 Sep 19 j 08:40 15°Ω -12883 May 11 j 05:18 17°≈48'44 max. Earth dist. 6.31134 AU -12889 Nov 03 j 17:00 24°**Ω**55'03 evening set -12883 May 12 j 03:41 18°≈01'16 0°07'50 conjunction -12883 May 12 j 03:39 18°**≈**01'15 -12889 Nov 17 j 04:04 28° Ω 03'27 -0°26'17 conjunction minimum elong 0°07'16 -12889 Nov 17 j 04:00 28° Ω 03'25 0°25'50 -12883 May 11 j 20:16 17°≈57'08 minimum elong behind sun begin -12889 Nov 18 j 04:37 28° **Ω**17'48 6.08141 AU max. Earth dist. behind sun end -12883 May 12 j 11:03 18°≈05'22 -12889 Nov 25 j 11:47 0° m morning rise -12883 May 25 j 01:02 20°≈54'02 -12889 Nov 30 j 18:39 -12883 Jul 07 j 13:18 morning rise 1° Mp 13'40 0°**∀** -12888 Apr 09 j 22:25 21° Mg 04'25 retrograde retrograde -12883 Sep 22 j 20:07 8°**₩**16'00 opposition -12888 Jun 08 j 19:26 15° **m** 59'36 -1°24'31 opposition -12883 Nov 22 j 03:07 3°**¥**23'55 0°52'31 min. Earth dist. -12888 Jun 08 j 02:10 16° Mp 05'29 4.07339 AU min. Earth dist. -12883 Nov 22 j 20:19 3° **∺** 18'24 4.32767 AU direct -12888 Aug 06 j 00:14 11° Mp 01'53 -12883 Dec 21 j 08:40 30°R≈ -12888 Dec 08 j 18:49 0∘**⊽** direct -12882 Jan 23 j 13:23 28°≈23'11 evening set -12888 Dec 09 j 09:22 0°**£**08'25 -12882 Feb 25 j 19:47 0°**)**€ evening set -12882 May 30 j 22:08 16° ¥ 30'26 conjunction -12888 Dec 23 j 02:05 3°**2**19'16 -1°21'00 minimum elong -12888 Dec 23 j 01:57 3°**♀**19'12 1°21'03 conjunction -12882 Jun 12 j 13:41 19° **★**20'03 1°02'39 max. Earth dist. -12888 Dec 24 i 03:35 3° **△**34'06 6.07560 AU minimum elong -12882 Jun 12 j 13:36 19°**)** € 20'00 morning rise -12887 Jan 05 j 20:21 6°**2**30'56 max. Earth dist. -12882 Jun 11 j 13:07 19°**)** € 06'18 6.33345 AU retrograde -12887 May 15 j 09:25 26° **2**09'21 morning rise -12882 Jun 25 j 02:49 22° ₩ 08'28 -12887 Jul 13 j 12:02 21°**2**05'22 -2°26'23 opposition -12882 Aug 01 j 03:26 0°**Υ** min. Earth dist. -12887 Jul 12 j 23:08 21° **2**09'48 4.09090 AU retrograde -12882 Oct 24 j 21:53 9°**Y**34'53 -12887 Sep 10 j 01:33 16°**♀**04'20 -12882 Dec 24 j 23:56 4° Υ 42'50 2° 02'27 direct opposition -12887 Dec 22 j 19:19 min. Earth dist. -12882 Dec 25 j 15:47 4° **Y** 37'48 4.33042 AU o°m. -12886 Jan 15 j 15:59 5°M20'49 -12881 Feb 12 j 13:59 30°R € evening set direct -12881 Feb 25 j 08:01 29° **★**45'10 -12886 Jan 29 j 08:53 8°M29'52 -1°46'07 -12881 Mar 10 j 03:18 0°**Υ** conjunction -12881 Jul 01 j 00:19 17°**Υ**43'09 -12886 Jan 29 j 08:50 8°ML29'51 1°46'38 minimum elong evening set -12886 Jan 29 j 23:21 8°MJ38'13 6.11344 AU max. Earth dist. -12881 Jul 13 j 09:17 20°**Υ**'30'21 1°39'10 -12886 Feb 12 j 01:32 11°M 38'40 morning rise conjunction -12881 Jul 13 j 09:12 20°**Y**'30'18 1°39'28 -12886 Feb 26 j 21:54 15°M minimum elong -12886 May 29 j 07:14 0° **尽** -12881 Jul 12 j 15:05 20°**γ**20'04 6.31545 AU max. Earth dist. -12886 Jun 18 j 16:01 0° **₹** 41'32 -12881 Jul 25 j 17:11 23°**Υ**17'08 retrograde morning rise -12886 Jul 08 j 22:16 30°RML -12881 Aug 25 j 18:02 0°8 opposition -12886 Aug 16 j 11:45 25°M-40'22 -2°35'09 retrograde -12881 Nov 26 j 19:53 11°**8**08'06 min. Earth dist. -12886 Aug 16 j 06:25 25°M-42'12 4.14612 AU opposition -12880 Jan 27 j 10:36 6°**8**14'20 2°37'05 direct -12886 Oct 15 j 00:25 20°M36'50 min. Earth dist. -12880 Jan 27 j 21:05 6°**8**11'01 4.29394 AU -12885 Jan 06 j 08:21 0° ⊀ direct -12880 Mar 29 j 03:16 1°**8**19'31 -12885 Feb 21 j 03:48 9° **₹**46'02 -12880 Jul 11 j 19:15 15°**8** evening set -12880 Jul 31 j 02:58 19°**8**17'47 evening set -12885 Mar 06 j 17:57 12°**∡** 51'06 -1°33'30 conjunction -12885 Mar 06 j 18:02 12° ₹ 51'09 1°34'19 -12880 Aug 12 j 11:15 22°**8**06'36 1°46'46 minimum elong conjunction -12885 Mar 06 j 17:45 12° ₹ 50'59 6.18118 AU max. Earth dist. minimum elong -12880 Aug 12 j 11:16 22°**8**06'37 morning rise -12885 Mar 20 j 05:56 15° ₹ 54'56 max. Earth dist. -12880 Aug 12 j 02:04 22°**8**01'22 6.26234 AU -12885 May 30 i 09:42 0°る morning rise -12880 Aug 24 j 20:42 24°856'05 retrograde -12885 Jul 21 i 19:55 4° 중12'46 -12880 Sep 16 i 16:58 0°Ⅱ -12885 Sep 13 i 04:39 30°R ✓ retrograde -12880 Dec 29 j 20:21 13°**Д**24'37 opposition -12885 Sep 18 j 18:24 29° ₹ 15'24 -1°51'17 -12879 Mar 01 j 14:16 8°**II**27'42 2°24'41 opposition min. Earth dist. -12885 Sep 18 j 23:28 29° ₹ 13'42 4.21938 AU min. Earth dist. -12879 Mar 01 j 15:19 8°**Д**27'21 4.22799 AU -12885 Nov 18 j 13:14 24° ₹ 11'08 direct direct -12879 May 01 j 04:29 3°**II**34'33 -12884 Jan 22 j 03:22 0°る evening set -12879 Sep 01 j 00:02 21°**Ц**42'18 evening set -12884 Mar 27 j 00:02 12°₹59'53 conjunction -12879 Sep 13 j 15:13 24°**Д**37'05 1°21'31 -12884 Apr 09 j 08:53 15° ₹59'55 -0°50'11 minimum elong -12879 Sep 13 j 15:18 24°**I**I37'08 1°22'22 conjunction -12884 Apr 09 j 08:58 15°**⋜**59'58 0°51'01 -12879 Sep 13 j 20:55 24°**II**40'23 6.18943 AU minimum elong max. Earth dist. -12884 Apr 08 j 18:59 15° ₹52'06 6.25496 AU -12879 Sep 26 j 08:59 27°**Ⅲ**33'24 max. Earth dist. morning rise -12884 Apr 22 j 14:27 18°**궁**58'14 -12879 Oct 07 j 02:47 0°95 morning rise -12884 Jun 15 j 06:28 0°**≈** retrograde -12878 Feb 03 j 01:08 16°542'26 retrograde -12884 Aug 21 j 23:21 6°≈38'36 opposition -12878 Apr 05 j 09:37 11°5541'55 1°25'11 opposition -12884 Oct 20 j 12:35 1°≈44'32 -0°33'30 min. Earth dist. -12878 Apr 05 j 01:25 11°5644'36 4.15279 AU min. Earth dist. -12884 Oct 21 j 00:54 1°≈40'29 4.28662 AU direct -12878 Jun 03 j 19:24 6°548'47 -12884 Nov 03 j 02:50 30°R ₹ -12878 Oct 04 j 09:21 25°5014'13 evening set

direct

-12884 Dec 21 j 07:51 26°₹41'20

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Earth dist. -12872 Oct 25 j 17:09 6°**≈**18'30 desc. node -12877 Apr 18 j 10:43 18°**Ω**45'53 direct -12872 Dec 26 j 03:10 1°≈19'59 2°≈59'25 opposition -12877 May 10 j 13:23 15°**Q**58'48 -0°05'22 asc. node -12871 Jan 28 j 16:59 min. Earth dist. -12877 May 09 j 21:46 $16^{\circ}\Omega$ 04'02 4.09324 AU -12871 Apr 12 j 01:38 15°≈ -12877 May 17 j 22:26 15°RΩ evening set -12871 May 03 j 16:24 19°≈41'25 -12877 Jul 08 j 01:01 11°**Ω**03'45 direct -12877 Aug 26 j 22:59 15°**Ω** conjunction -12871 May 16 j 15:53 22°≈35'02 0°16'06 evening set -12877 Nov 08 j 16:40 29°**Ω**52'31 minimum elong -12871 May 16 j 15:51 22°≈35'01 0°15'35 -12877 Nov 09 j 05:32 0° M behind sun begin -12871 May 16 j 13:45 22°≈33'51 behind sun end -12871 May 16 j 17:57 22°≈36'11 conjunction -12877 Nov 22 j 05:01 3° Mp 01'39 -0°34'55 max. Earth dist. -12871 May 15 j 17:32 22°≈22'33 6.31985 AU minimum elong -12877 Nov 22 j 04:57 3° m 01'37 0°34'32 morning rise -12871 May 29 j 11:58 25°≈26'57 max. Earth dist. -12877 Nov 23 j 07:13 3° m 16'58 6.07616 AU -12871 Jun 19 j 09:51 0°**米** morning rise -12877 Dec 05 j 20:24 6° m 12'27 retrograde -12871 Sep 27 j 05:58 12°\cdot\cdot 46'55 retrograde -12876 Apr 14 j 22:43 26° m 03'53 opposition -12871 Nov 26 j 17:23 7° **)** 54'51 opposition -12876 Jun 13 j 15:47 20° m 59'04 -1°35'38 min. Earth dist. -12871 Nov 27 j 09:46 7°**)** 49'36 4.33450 AU min. Earth dist. -12876 Jun 12 j 23:36 21° m 04'35 4.07082 AU direct -12870 Jan 28 i 04:04 2° **\(\)** 54'29 direct -12876 Aug 10 j 20:59 16° M 00'53 evening set -12870 Jun 04 j 07:04 20° **ਮ** 58'19 -12876 Nov 21 i 17:30 0°**♀** -12876 Dec 14 j 13:52 5°**£**10'37 -12870 Jun 16 j 21:22 23°¥47'12 1°09'06 conjunction evening set minimum elong -12870 Jun 16 j 21:16 23°) (47'08 1°09'01 -12876 Dec 28 j 06:48 8° **2**21'33 -1°26'36 max. Earth dist. -12870 Jun 15 j 21:59 23° **∺** 34'05 6.33793 AU conjunction -12876 Dec 28 j 06:41 8° **2**21'29 1°26'44 -12870 Jun 29 j 09:21 26° **∺**34'56 minimum elong morning rise -12876 Dec 29 j 06:08 8°**2**35'07 6.07560 AU max. Earth dist. -12870 Jul 14 j 22:58 0°**℃** -12870 Oct 29 j 09:47 14°**Y**°02'03 -12875 Jan 11 j 01:19 11°**△**33'13 morning rise retrograde -12875 Apr 23 j 17:30 0°M -12870 Dec 29 j 14:18 9° Υ 09'52 2°09'37 opposition -12875 May 20 j 05:45 1°ML08'57 -12870 Dec 30 j 06:21 9° Υ 04'48 4.33223 AU min. Earth dist. retrograde -12875 Jun 15 j 12:04 30°R € -12869 Mar 01 j 22:50 4°**Υ**12'36 direct -12875 Jul 18 j 07:10 26°**♀**05'14 -2°31'03 -12869 Jul 05 j 06:57 22°**Y**08'29 opposition evening set min. Earth dist. -12875 Jul 17 j 18:28 26°**2**09'36 4.09367 AU -12875 Sep 14 j 22:30 21°**♀**03'44 -12869 Jul 17 j 15:14 24°**Y** 55'26 1°42'04 direct conjunction -12875 Dec 03 j 16:54 0°M minimum elong -12869 Jul 17 j 15:10 24° Υ 55'24 1°42'25 evening set -12874 Jan 20 j 20:40 10° M21'24 max. Earth dist. -12869 Jul 16 j 20:37 24°**Y**44'55 6.31413 AU morning rise -12869 Jul 29 j 22:59 27°**Y**42'09 conjunction -12874 Feb 03 j 13:26 13°M 30'10 -1°46'35 -12869 Aug 09 j 06:35 0°**8** minimum elong -12874 Feb 03 j 13:25 13°M 30'09 1°47'10 -12869 Nov 11 j 11:16 15°8 max. Earth dist. -12874 Feb 04 j 02:22 13°M 37'37 6.11870 AU -12869 Dec 01 j 08:54 15°836'18 retrograde -12874 Feb 10 j 01:36 15°M -12869 Dec 21 j 08:30 15°R8 -12874 Feb 17 j 05:34 16°M38'29 opposition -12868 Feb 01 j 01:40 10°**8**42'08 2°38'13 morning rise -12874 Apr 23 i 07:19 0° ₹ -12868 Feb 01 j 10:54 10°\(\alpha \) 39'12 4.28963 AU min. Earth dist. retrograde -12874 Jun 23 j 11:35 5° ₹36'21 direct -12868 Apr 02 j 15:09 5°**8**47'33 opposition -12874 Aug 21 i 05:39 0° ₹35'41 -2°31'53 -12868 Jun 24 j 13:02 15°8 min. Earth dist. -12874 Aug 21 i 02:18 0° ₹36'49 4.15329 AU evening set -12868 Aug 04 j 09:47 23°**8**45'37 -12874 Aug 25 j 14:37 30°RM direct -12874 Oct 19 j 22:37 25° ML31'57 conjunction -12874 Dec 13 j 23:21 0° ₹ minimum elong max. Earth dist. -12873 Feb 26 j 04:43 14° ₹39'39 -12868 Aug 16 j 11:55 26°831'03 6.25538 AU evening set morning rise -12868 Aug 29 j 04:42 29°**8**25'00 conjunction -12873 Mar 11 j 18:24 17° ₹ 44'11 -1°28'55 -12868 Aug 31 j 18:27 0°**Ⅱ** minimum elong -12873 Mar 11 j 18:30 17° ₹ 44'14 1°29'44 retrograde -12867 Jan 03 j 14:11 17°**Д**58'30 -12867 Mar 06 j 07:08 13° Π 01'11 2°19'10 max. Earth dist. -12873 Mar 11 j 17:05 17° ₹ 43'26 6.18987 AU opposition -12873 Mar 25 j 05:37 20° ₹ 47'22 min. Earth dist. -12867 Mar 06 j 07:59 13°**Д**00'54 4.21872 AU morning rise -12873 May 07 j 09:42 0°る -12867 May 05 j 18:01 8°**Д**08'08 direct -12873 Jul 26 j 09:28 8°**る**59'36 -12867 Sep 05 j 10:33 26°**Ⅲ**17'44 retrograde evening set -12873 Sep 23 j 10:34 4°る02'42 -1°41'45 opposition min. Earth dist. -12873 Sep 23 j 15:36 4°**궁**01'01 4.22895 AU conjunction -12867 Sep 18 j 02:54 29°**Ⅱ**13'33 1°15'44 -12873 Oct 28 j 19:33 30°R ✓ minimum elong -12867 Sep 18 j 03:00 29° **I**I 13'36 1°16'34 direct -12873 Nov 23 j 08:08 28°**尽** 58'30 max. Earth dist. -12867 Sep 18 j 08:18 29°**Ⅱ**16'40 6.17869 AU -12873 Dec 19 j 05:45 0°₹ -12867 Sep 21 j 11:10 0 \circ ∞ -12872 Mar 31 j 19:28 17°₹43'59 -12867 Sep 30 j 22:23 2°511'04 evening set morning rise max. Earth dist. -12872 Apr 13 j 11:59 20°**궁**34'39 6.26507 AU -12866 Feb 07 j 21:16 21°525'44 retrograde

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Earth dist. 6.27577 AU -12866 Oct 09 j 02:18 $0^{\circ}\Omega$ 00'48 -12860 May 01 j 22:34 28°**정**18'46 evening set morning rise -12860 May 09 j 13:16 0°**≈** -12866 Oct 09 j 00:55 $0^{\circ}\Omega$ -12860 Aug 08 j 00:34 15°**≈** -12866 Oct 22 j 06:16 $3^{\circ}\Omega$ 04'50 0° 20'23 conjunction retrograde -12860 Aug 30 j 21:52 15°≈50'40 -12866 Oct 22 j 06:18 $3^{\circ}\Omega$ 04'51 $0^{\circ}21'06$ -12860 Sep 22 j 21:14 15°R≈ minimum elong -12866 Oct 23 j 01:51 $3^{\circ}\Omega$ 16'16 6.10858 AU max. Earth dist. opposition -12860 Oct 29 j 17:02 10°≈57'15 -0°09'02 min. Earth dist. -12860 Oct 30 j 06:26 10°≈52'53 4.30505 AU morning rise -12866 Nov 04 j 13:45 $6^{\circ}\Omega$ 10'52 -12866 Dec 14 j 13:10 15°**Ω** asc. node -12860 Dec 09 j 08:05 6°≈36'36 -12865 Feb 27 j 15:44 25° **Q**30'34 desc. node direct -12860 Dec 30 j 18:23 5°**≈**54'37 -12865 Mar 15 j 22:45 25°**Ω**55'47 retrograde -12859 Mar 24 j 23:22 15°≈ opposition -12865 May 15 j 09:36 $20^{\circ}\Omega$ 51'57 -0° 18'33 evening set -12859 May 08 j 04:04 24°≈12'39 min. Earth dist. -12865 May 14 j 18:29 $20^{\circ}\Omega$ 57'01 4.08396 AUmax. Earth dist. -12859 May 20 j 02:19 26°≈52'10 6.32589 AU direct -12865 Jul 12 j 19:13 15°**Ω**56'35 -12865 Oct 23 j 12:26 0° m conjunction -12859 May 21 j 02:06 27°≈05'27 0°24'13 evening set -12865 Nov 13 j 17:14 minimum elong -12859 May 21 j 02:03 27°≈05'25 morning rise -12859 Jun 02 j 21:03 29°≈56'37 conjunction -12865 Nov 27 j 06:31 8° m 00'02 -0°43'16 -12859 Jun 03 j 03:08 0°**光** minimum elong -12865 Nov 27 j 06:26 7° mp 59'59 0°42'55 retrograde -12859 Oct 01 j 17:36 17°\ 15'53 max. Earth dist. -12865 Nov 28 j 07:48 8° m 14'49 6.06934 AU opposition -12859 Dec 01 i 06:52 12°\ft 23'58 1°14'33 morning rise -12865 Dec 10 j 23:00 11° m 11'33 min. Earth dist. -12859 Dec 02 i 00:34 12° \(\) 18'19 4.33736 AU -12864 Mar 25 i 03:14 0°**♀** direct -12858 Feb 01 i 19:42 7° *\(\frac{1}{2}\)3'59 retrograde -12864 Apr 19 j 21:42 1°**△**04'09 evening set -12858 Jun 08 j 15:25 25° ¥25'58 -12864 May 15 j 10:16 30°R Mp max. Earth dist. -12858 Jun 20 j 05:17 28° **米** 01'16 6.33718 AU -12864 Jun 18 j 12:26 25° m 59'22 -1°46'03 opposition min. Earth dist. -12864 Jun 17 j 19:26 26° m 05'10 4.06746 AU conjunction -12864 Aug 15 j 16:48 21° Mp 00'45 -12858 Jun 21 j 04:36 28° **₭** 14'20 direct minimum elong 1°15'09 -12858 Jun 29 j 01:10 0°**Υ** -12864 Nov 02 j 19:08 0°**♀** -12864 Dec 19 j 19:03 10° **2**14'01 -12858 Jul 03 j 15:47 1°**Υ**01'46 evening set morning rise -12858 Nov 02 j 21:39 18°**Y**31'34 retrograde -12863 Jan 02 j 12:19 13°**2**25'03 -1°31'34 opposition -12857 Jan 03 j 05:15 13°**Y**'39'12 2°16'10 conjunction -12863 Jan 02 j 12:13 13°**2**24'59 1°31'45 min. Earth dist. -12857 Jan 03 j 19:59 13°**Y**34'32 4.32819 AU minimum elong -12863 Jan 03 j 11:34 13°**2**38'34 6.07596 AU -12857 Mar 06 j 10:55 8°**Y**42'19 max. Earth dist. direct -12863 Jan 16 j 06:46 16°**♀**36'37 -12857 Jul 09 j 14:42 26°**Y**38'09 morning rise evening set -12863 Mar 21 j 12:48 0°M retrograde -12863 May 25 j 04:38 6°ML09'28 conjunction -12857 Jul 21 j 22:40 29°**Y**25'11 1°44'26 opposition -12863 Jul 23 j 03:01 1°ML06'04 -2°34'35 minimum elong -12857 Jul 21 j 22:37 29°**Y**25'09 1°44'50 min. Earth dist. -12863 Jul 22 j 15:51 1°ML09'54 4.09779 AU max. Earth dist. -12857 Jul 21 j 05:45 29°**Y**15'36 6.30696 AU -12863 Jul 31 j 05:01 30°R € -12857 Jul 24 j 12:11 0°**8** direct -12863 Sep 19 j 21:45 26°**♀**04'12 -12857 Aug 03 j 06:13 2°**8**12'07 morning rise -12863 Nov 09 j 10:02 0°M -12857 Oct 06 j 07:44 15°**8** -12862 Jan 24 j 10:31 15°M retrograde -12857 Dec 06 j 03:09 20°811'33 -12862 Jan 26 j 01:25 15°M22'11 -12856 Feb 05 j 19:34 15°**8**17'03 2°38'32 evening set opposition -12856 Feb 06 i 04:42 15°**8**14'09 4.27979 AU min. Earth dist. -12862 Feb 08 j 18:01 18°M 30'32 -1°46'16 -12856 Feb 08 i 01:22 15°R& conjunction -12862 Feb 08 j 18:01 18° ML30'32 1°46'54 -12856 Apr 07 i 06:27 10°\(22'45 \) minimum elong direct -12862 Feb 09 i 06:28 18° ML37'41 6.12613 AU max. Earth dist. -12856 Jun 02 j 18:46 15°8 -12862 Feb 22 i 09:35 21°M 38'16 -12856 Aug 08 j 19:57 28°822'23 morning rise evening set -12862 Apr 01 j 17:23 0° ₹ -12856 Aug 15 j 22:57 0°**Ⅱ** retrograde -12862 Jun 28 j 03:46 10° ₹30'02 -12862 Aug 25 j 23:02 5° ₹29'51 -2°27'30 conjunction -12856 Aug 21 j 05:26 1°**Д**12'27 1°43'01 opposition min. Earth dist. -12862 Aug 25 j 19:41 5° ₹30'59 4.16324 AU minimum elong -12856 Aug 21 j 05:29 1°**П**12'29 1°43'44 direct -12862 Oct 24 j 18:48 0° ₹25'56 max. Earth dist. -12856 Aug 20 j 23:02 1°**І**08'47 6.24368 AU evening set -12861 Mar 03 j 04:32 19°**х** 30'55 morning rise -12856 Sep 02 j 16:34 4°**Д**03'27 -12855 Jan 08 j 11:14 22°**Д**43'26 retrograde -12861 Mar 16 j 17:26 22° ₹34'41 -1°23'45 -12855 Mar 11 j 03:48 17°**II**45'35 2°12'35 conjunction opposition -12861 Mar 16 j 17:32 22° ₹34'44 1°24'35 min. Earth dist. -12855 Mar 11 j 02:18 17°**II**46'04 4.20606 AU minimum elong -12861 Mar 16 j 13:26 22° ₹32'25 6.20144 AU -12855 May 10 j 09:14 12°**Д**52'38 max. Earth dist. direct morning rise -12861 Mar 30 j 03:57 25° ₹ 37'04 -12855 Sep 05 j 08:09 0ಂತಾ -12861 Apr 18 j 23:23 0°る evening set -12855 Sep 10 j 01:47 1°905'12 retrograde -12861 Jul 30 j 23:38 13°₹42'58 opposition -12861 Sep 28 j 01:44 8°**る**46'31 -1°31'39 conjunction -12855 Sep 22 j 19:49 4°902'15 1°09'12 min. Earth dist. -12861 Sep 28 j 08:48 8°る44'10 4.24058 AU minimum elong -12855 Sep 22 j 19:55 4°902'18 1°10'03 -12861 Nov 28 j 04:35 3°₹42'22 max. Earth dist. -12855 Sep 23 j 04:38 4°9507'22 6.16654 AU direct -12860 Apr 05 j 12:22 22°₹23'46 -12855 Oct 05 j 16:49 7°9501'02 evening set morning rise

Planetary Pheno	omena of Jupiter fro	m -12900	through -1239	8 (UT), Astrodiei	nst AG 18-Feb-2025	14:23,	page 5
Attention, astronom	nical year style is used: The	e year -12854	in astronomical co	ounting style is the ye	ar 12855 BCE in historica	l counting styl	le.
retrograde	-12854 Feb 12 j 23:51	26°521'22		min. Earth dist.	-12849 Oct 02 j 19:26	13° る 12'59	4.25223 AU
opposition	-12854 Apr 15 j 03:26	21° © 19'57	1°02'07	direct	-12849 Dec 02 j 17:29	8° る 11'35	
min. Earth dist.	-12854 Apr 14 j 17:17	21° 5 23'17	4.13074 AU	evening set	-12848 Apr 09 j 23:52	26° ප් 49'21	
direct	-12854 Jun 13 j 05:51	16°9526'32		max. Earth dist.	-12848 Apr 22 j 10:16		6.28425 AU
	-12854 Sep 22 j 01:49				1 3		
evening set	-12854 Oct 14 j 00:28	4° Ω 59'22		conjunction	-12848 Apr 23 j 05:33	29°₹46'58	-0°26'49
evening sec	1200 1 000 1 1 1 00.20	. 000522		minimum elong	-12848 Apr 23 j 05:35		
conjunction	-12854 Oct 27 j 05:52	8° Ω 04'26	0°11'25	minimum ciong	-12848 Apr 24 j 04:48		0 2733
minimum elong	-12854 Oct 27 j 05:53	8° Ω 04'26		morning rise	-12848 May 06 j 07:58		
behind sun begin	-12854 Oct 27 j 00:18	8°Ω01'12	0 12 04	morning 1130	-12848 Jul 06 j 20:24		
behind sun end	•	8°Ω07'41		ratra ara da	-12848 Sep 04 j 05:36		
max. Earth dist.	-12854 Oct 27 j 11:28		6.10093 AU	retrograde			
	-12854 Oct 28 j 02:21	8° Ω 16'23	6.10093 AU	asc. node	-12848 Oct 22 j 01:36		0002140
morning rise	-12854 Nov 09 j 15:06			opposition	-12848 Nov 03 j 02:00		0°02'40
	-12854 Nov 26 j 07:03			min. Earth dist.	-12848 Nov 03 j 17:43		4.30973 AU
desc. node	-12853 Jan 06 j 17:41				-12848 Nov 05 j 12:24		
	-12853 Feb 24 j 01:24	0° m		direct	-12847 Jan 04 j 06:34		
retrograde	-12853 Mar 20 j 23:50	0° m 58'48			-12847 Mar 03 j 18:22	15° ≈	
	-12853 Apr 14 j 18:04			evening set	-12847 May 12 j 11:16	28° ≈ 32'57	
opposition	-12853 May 20 j 09:07	25° Ω 54'42	-0°32'02		-12847 May 18 j 23:44	0° ∀	
min. Earth dist.	-12853 May 19 j 15:58	26° Ω 00′29	4.08040 AU	max. Earth dist.	-12847 May 24 j 08:21	1° ₩ 11'51	6.32632 AU
direct	-12853 Jul 17 j 16:26	20° Ω 58'59					
	-12853 Oct 04 j 14:53	0° m)		conjunction	-12847 May 25 j 08:18	1° ∺ 25'15	0°31'50
evening set	-12853 Nov 18 j 21:04	9° m 55'00		minimum elong	-12847 May 25 j 08:15	1° ¥ 25'13	0°31'26
Č	,	•		morning rise	-12847 Jun 07 j 02:03	4°) 15'57	
conjunction	-12853 Dec 02 j 11:17	13° m 05'11	-0°51'28	retrograde	-12847 Oct 06 j 01:11		
minimum elong	-12853 Dec 02 j 11:11		0°51'13	opposition	-12847 Dec 05 j 17:27		1°24'35
max. Earth dist.	-12853 Dec 02 j 14:07		6.07031 AU	min. Earth dist.	-12847 Dec 06 j 10:38		4.33382 AU
morning rise	-12853 Dec 05 j 14:07		0.07031710	direct	-12846 Feb 06 j 04:34		4.55502 110
morning risc	-12852 Feb 20 j 00:13	0° ⊽		evening set	-12846 Jun 12 j 21:35		
ratra ara da	-12852 Apr 24 j 22:01	6° £ 06'53		evening set	-12846 Jun 13 j 19:20		
retrograde			1055140	Eth- 4:-4	,		6.32975 AU
opposition	-12852 Jun 23 j 09:54	1° 2 02'06		max. Earth dist.	-12846 Jun 24 j 09:58	2 1 22 43	6.32973 AU
min. Earth dist.	-12852 Jun 22 j 17:43		4.07311 AU		10016 7 05:00 10	20002 (100	1000100
	-12852 Jul 01 j 00:43	-		conjunction	-12846 Jun 25 j 09:49	2° Y 36′08	1°20'38
direct	-12852 Aug 20 j 16:49			minimum elong	-12846 Jun 25 j 09:43	2° Y 36′04	1°20'40
	-12852 Oct 09 j 18:58	0∘ ⊽		morning rise	-12846 Jul 07 j 20:16	5° Y 23′29	
evening set	-12852 Dec 25 j 00:12	15° ≏ 16′07		retrograde	-12846 Nov 07 j 12:23		
				opposition	-12845 Jan 07 j 19:40		
conjunction	-12851 Jan 07 j 17:31	18° ≏ 26'40	-1°35'48	min. Earth dist.	-12845 Jan 08 j 10:50		4.31756 AU
minimum elong	-12851 Jan 07 j 17:25	18° ≏ 26'37	1°36'04	direct	-12845 Mar 10 j 23:35	13° Ƴ 09'27	
max. Earth dist.	-12851 Jan 08 j 16:34	18° ≏ 40'02	6.08556 AU		-12845 Jul 08 j 22:12	0°B	
morning rise	-12851 Jan 21 j 11:38	21° ≏ 37'35		evening set	-12845 Jul 13 j 22:26	1° 8 07'27	
	-12851 Feb 28 j 11:24	0°M					
retrograde	-12851 May 29 j 21:43	11°ML03'31		conjunction	-12845 Jul 26 j 06:19	3° 8 54'55	1°46'06
opposition	-12851 Jul 27 j 20:12	6°ML00'27	-2°36'49	minimum elong	-12845 Jul 26 j 06:17	3° 8 54'54	1°46'34
min. Earth dist.	-12851 Jul 27 j 09:12	6°ML04'13	4.11060 AU	max. Earth dist.	-12845 Jul 25 j 14:39	3° 8 46'01	6.29389 AU
direct	-12851 Sep 24 j 17:24			morning rise	-12845 Aug 07 j 14:03	6° 8 42'26	
	-12850 Jan 07 j 16:16			Č	-12845 Sep 15 j 06:29		
evening set	-12850 Jan 31 j 02:24			retrograde	-12845 Dec 10 j 20:58		
<i>3</i>	· · · · · · · · · · · · · · · · · · ·			opposition	-12844 Feb 10 j 14:10		2°37'48
conjunction	-12850 Feb 13 j 18:23	23°M.20'41	-1°45'12	min. Earth dist.	-12844 Feb 10 j 20:41		4.26546 AU
minimum elong	-12850 Feb 13 j 18:24			direct	-12844 Apr 11 j 19:12		55 15 110
max. Earth dist.	-12850 Feb 14 j 03:13			uncet	-12844 Jul 30 j 19:12		
morning rise	-12850 Feb 27 j 09:23		0.14074710	evening set	-12844 Aug 13 j 07:37		
morning risc	-12850 Mar 15 j 03:58			evening set	-120 11 Aug 13 j 07.37	3 1102 40	
ratra ara da				aaniumatian	12044 Aug 25 : 10:02	50T 52151	1°40'02
retrograde	-12850 Jul 02 j 16:07		2022117	conjunction	-12844 Aug 25 j 18:03		
opposition	-12850 Aug 30 j 12:04			minimum elong	-12844 Aug 25 j 18:06	5°II53'53	1°40'47
min. Earth dist.	-12850 Aug 30 j 11:10		4.1/6U/ AU	max. Earth dist.	-12844 Aug 25 j 15:04	5° Ⅱ 52'09	6.22928 AU
direct	-12850 Oct 29 j 13:27			morning rise	-12844 Sep 07 j 06:13	8°II45'57	
evening set	-12849 Mar 07 j 22:14	24° × '07'46		retrograde	-12843 Jan 13 j 12:29		200
		=		opposition	-12843 Mar 16 j 02:29		
conjunction	-12849 Mar 21 j 10:35			min. Earth dist.	-12843 Mar 15 j 23:56		4.19254 AU
minimum elong	-12849 Mar 21 j 10:41			direct	-12843 May 15 j 04:21		
max. Earth dist.	-12849 Mar 21 j 05:17		6.21534 AU		-12843 Aug 19 j 05:28	0 \circ \odot	
	-12849 Apr 02 j 22:25	0° ට		evening set	-12843 Sep 14 j 19:04	5° © 57'28	
morning rise	-12849 Apr 03 j 20:02						
retrograde	-12849 Aug 04 j 06:32	18° ප 11'34		conjunction	-12843 Sep 27 j 14:36	8° 9 55'42	1°02'03
opposition	-12849 Oct 02 j 11:25	13° る 15'38	-1°21'30	minimum elong	-12843 Sep 27 j 14:41	8°955'46	1°02'54
				-			

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		-			r 12844 BCE in historical		
max. Earth dist.	-12843 Sep 28 j 01:31		6.15512 AU	max. Earth dist.	-12837 Mar 25 j 20:49		6.22575 AU
morning rise	-12843 Oct 10 j 13:29			morning rise	-12837 Apr 08 j 14:42	4° る 54'18	
	-12842 Jan 19 j 07:39			retrograde	-12837 Aug 08 j 18:19		
retrograde	-12842 Feb 18 j 01:01	1° Ω 20'59		opposition	-12837 Oct 07 j 00:37	17° る 53'06	-1°10'37
	-12842 Mar 19 j 15:22	30° ₹		min. Earth dist.	-12837 Oct 07 j 10:29	17° ⋜ 49'50	4.26104 AU
opposition	-12842 Apr 20 j 03:40	26°\$\$19'03	0°49'26	direct	-12837 Dec 07 j 10:55	12° る 49'08	
min. Earth dist.	-12842 Apr 19 j 14:53	26°523'16	4.12223 AU		-12836 Apr 08 j 06:26	0° ≈	
direct	-12842 Jun 18 j 01:49			evening set	-12836 Apr 14 j 14:16	1°≈23'58	
	-12842 Sep 03 j 01:40			Ç	1 3		
evening set	-12842 Oct 19 j 00:06			conjunction	-12836 Apr 27 j 19:01	4° ≈ 20'54	-0°18'41
e vennig set	120.2 000 15 1 00.00	10 0001 00		minimum elong	-12836 Apr 27 j 19:03	4°≈20'55	
conjunction	-12842 Nov 01 j 07:01	130 006/56	0°02'16	max. Earth dist.	-12836 Apr 26 j 23:41	4°≈10'04	6.29102 AU
minimum elong	-12842 Nov 01 j 07:01		0°02'54	morning rise	-12836 May 10 j 20:10	7°≈16'02	0.27102 AC
behind sun begin	-12842 Oct 31 j 22:47		0 02 34	morning risc	-12836 Jun 16 j 04:29		
_					,		
behind sun end	-12842 Nov 01 j 15:14		C 0050C ATT	asc. node	-12836 Sep 01 j 08:22		
max. Earth dist.	-12842 Nov 02 j 05:57		6.09586 AU	retrograde	-12836 Sep 08 j 15:44		0014146
	-12842 Nov 09 j 08:44			opposition	-12836 Nov 07 j 15:01		0°14'46
morning rise	-12842 Nov 14 j 17:33			min. Earth dist.	-12836 Nov 08 j 06:46		4.31398 AU
desc. node	-12842 Nov 15 j 03:20	16° {\2 0'30			-12836 Dec 28 j 12:57		
	-12841 Jan 19 j 22:53	O° m y		direct	-12835 Jan 08 j 20:32	14° ≈ 48'19	
retrograde	-12841 Mar 26 j 02:58	6°Mp03′13			-12835 Jan 20 j 05:22	15° ≈	
opposition	-12841 May 25 j 08:41	0° ™ 58'50	-0°45'21		-12835 May 03 j 00:29	0° ∀	
min. Earth dist.	-12841 May 24 j 15:46	1° m 04'33	4.07894 AU	evening set	-12835 May 16 j 22:04	3°) €02'46	
	-12841 Jun 01 j 16:06	30°R Ω					
direct	-12841 Jul 22 j 16:16	26° Ω 02'38		conjunction	-12835 May 29 j 17:40	5°) 54′26	0°39'35
	-12841 Sep 10 j 14:51	0° m		minimum elong	-12835 May 29 j 17:36	5°) € 54'24	0°39'15
evening set	-12841 Nov 24 j 01:27	~		max. Earth dist.	-12835 May 28 j 15:57	5°) (40′03	6.32772 AU
e vennig set	120111107 21 9 01.27	10 19 00 50		morning rise	-12835 Jun 11 j 10:25	8°) (44'37	0.02772110
conjunction	-12841 Dec 07 j 16:23	18° m 11'01	-0°59'20	retrograde	-12835 Oct 10 j 14:37		
minimum elong	-12841 Dec 07 j 16:17	-		opposition	-12835 Dec 10 j 07:59		1°34'32
max. Earth dist.	3		6.07228 AU	min. Earth dist.			4.33255 AU
	-12841 Dec 08 j 19:43		0.07228 AU		-12835 Dec 11 j 01:48		4.33233 AU
morning rise	-12841 Dec 21 j 09:52			direct	-12834 Feb 10 j 19:20		
	-12840 Jan 29 j 09:01	0∘ ʊ			-12834 May 28 j 15:53	0°Υ	
retrograde	-12840 Apr 29 j 21:03			evening set	-12834 Jun 17 j 06:30	4° Υ 17'28	
opposition	-12840 Jun 28 j 06:56	6° Ω 05'09					
min. Earth dist.	-12840 Jun 27 j 14:40	6° ≏ 10'43	4.07851 AU	conjunction	-12834 Jun 29 j 17:58	7° Y °05′27	1°25'52
direct	-12840 Aug 25 j 14:01			minimum elong	-12834 Jun 29 j 17:52	7° Y ′05′24	1°25'57
evening set	-12840 Dec 30 j 05:29	20° ≏ 19′00		max. Earth dist.	-12834 Jun 28 j 20:04	6° Ƴ 53'08	6.32596 AU
				morning rise	-12834 Jul 12 j 03:34	9° Ƴ 52'37	
conjunction	-12839 Jan 12 j 22:38	23° ≏ 29'08	-1°39'25	retrograde	-12834 Nov 12 j 02:32		
minimum elong	-12839 Jan 12 j 22:32	23° ≏ 29'05	1°39'45	opposition	-12833 Jan 12 j 12:30	22° Y 38'33	2°26'49
max. Earth dist.	-12839 Jan 13 j 18:45	23° ≏ 40'47	6.09355 AU	min. Earth dist.	-12833 Jan 13 j 01:41	22° Y '34'23	4.31194 AU
morning rise	-12839 Jan 26 j 16:33	26° ♀ 39'30		direct	-12833 Mar 15 j 12:46	17° Y 42'33	
	-12839 Feb 10 j 09:48	0° M			-12833 Jun 22 j 09:50	9° 8	
	-12839 May 10 j 02:51			evening set	-12833 Jul 18 j 07:39	5° 8 40'38	
retrograde	-12839 Jun 03 j 16:01			C	,		
5 -	-12839 Jun 28 j 00:05			conjunction	-12833 Jul 30 j 15:20	8° 8 28'18	1°47'14
opposition	-12839 Aug 01 j 14:07		-2°38'06	minimum elong	-12833 Jul 30 j 15:19		1°47'45
min. Earth dist.	-12839 Aug 01 j 04:55			max. Earth dist.	-12833 Jul 30 j 01:19		6.28685 AU
direct	-12839 Sep 29 j 15:37		1.12011110	morning rise	-12833 Aug 11 j 23:16		0.20003 110
uncet	-12839 Sep 29 j 13.37 -12839 Dec 19 j 19:49			morning 1150	-12833 Aug 11 J 23.16 -12833 Aug 28 j 17:47		
avanina aat				ratra arada			
evening set	-12838 Feb 05 j 04:10	23 1160730		retrograde	-12833 Dec 15 j 17:08		2026106
	10000 7 1 10110	200 m 1	1042100	opposition	-12832 Feb 15 j 09:39		2°36'06
conjunction	-12838 Feb 18 j 19:55			min. Earth dist.	-12832 Feb 15 j 15:24		4.25748 AU
minimum elong	-12838 Feb 18 j 19:57			direct	-12832 Apr 16 j 12:15		
max. Earth dist.	-12838 Feb 19 j 03:44		6.15174 AU		-12832 Jul 13 j 12:52		
	-12838 Feb 26 j 12:48	0° ∡ ¹		evening set	-12832 Aug 17 j 18:58	7° Ⅱ 41'57	
morning rise	-12838 Mar 04 j 10:04	1° ∡ ¹20′22					
retrograde	-12838 Jul 07 j 06:17	19° ∡ 757′10		conjunction	-12832 Aug 30 j 06:19		
opposition	-12838 Sep 04 j 02:50	14° ∡ °58′01	-2°16'09	minimum elong	-12832 Aug 30 j 06:23	10° Ⅱ 33'46	1°37'17
min. Earth dist.	-12838 Sep 04 j 03:07	14° ∡ ¹57'56	4.18918 AU	max. Earth dist.	-12832 Aug 30 j 05:34	10° Ⅲ 33'18	6.22115 AU
direct	-12838 Nov 03 j 08:03	9° ∡ ¹53'50		morning rise	-12832 Sep 11 j 19:39	13° Ⅱ 26'41	
evening set	-12837 Mar 12 j 18:27	28° ₹ ′51′23			-12832 Dec 09 j 19:51	0°©	
-	-12837 Mar 17 j 20:34			retrograde	-12831 Jan 18 j 08:37	2° © 18'30	
	, , , , , , , , , , , , , , , , , , ,			-	-12831 Feb 27 j 02:01		
conjunction	-12837 Mar 26 j 05:56	1° る 53'37	-1°12'14	opposition	-12831 Mar 20 j 23:09		1°56'32
minimum elong	-12837 Mar 26 j 06:02	1° る 53'40		min. Earth dist.	-12831 Mar 20 j 18:12		

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12831 in astronomical counting style is the year 12832 BCE in historical counting style. -12831 May 19 j 20:22 22°**Д**26'46 direct evening set -12825 Mar 17 j 13:56 3°る34'08 -12831 Jul 31 i 06:56 0°€ -12831 Sep 19 j 10:38 10°543'41 -12825 Mar 31 j 00:49 6°**ට**35'51 -1°05'42 evening set conjunction -12825 Mar 31 j 00:55 6°る35'55 1°06'32 minimum elong 6.23275 AU -12831 Oct 02 j 07:39 13°542'52 0°54'40 -12825 Mar 30 j 14:55 6°**ප**30'16 conjunction max. Earth dist. -12831 Oct 02 j 07:44 13°542'55 0°55'29 minimum elong morning rise -12825 Apr 13 j 08:36 9°**る**35'56 -12831 Oct 02 j 20:38 13°550'24 max. Earth dist. 6.14855 AU retrograde -12825 Aug 13 j 06:58 27°₹26'24 -12831 Oct 15 j 08:05 16°543'57 morning rise opposition -12825 Oct 11 j 14:27 22°♂31'26 -0°59'14 -12831 Dec 18 j 09:18 0°**Ω** min. Earth dist. -12825 Oct 12 j 01:09 22°る27'54 4.26729 AU retrograde -12830 Feb 23 j 00:35 6°**£**12′16 direct -12825 Dec 12 j 03:35 17°**궁**27'44 min. Earth dist. -12830 Apr 24 j 11:31 1°**Ω**14'11 4.11703 AU -12824 Mar 22 j 08:59 -12830 Apr 25 j 00:30 1°Ω09'53 0°36'44 opposition evening set -12824 Apr 19 j 05:20 6°**≈**00′20 -12830 May 03 j 21:41 30°RS -12824 May 01 j 11:40 max. Earth dist. 8°**≈**44'45 6.29613 AU direct -12830 Jun 22 j 21:21 26°5515'56 -12830 Aug 10 j 13:04 $0^{\circ}\Omega$ conjunction -12824 May 02 j 08:52 8°≈56'37 -0°10'23 desc. node -12830 Sep 25 j 10:51 8°**Ω**29'18 minimum elong -12824 May 02 j 08:53 8°**≈**56'38 0°11'03 evening set -12830 Oct 23 j 20:45 14°**Ω**53'32 behind sun begin -12824 May 02 j 02:49 8°≈53'15 -12830 Oct 24 j 07:52 15°**Ω** behind sun end -12824 May 02 j 14:57 9°**≈**00'00 morning rise -12824 May 15 j 09:02 11°≈51'08 conjunction -12830 Nov 06 j 05:01 18° Ω 00'13 -0°06'45 -12824 May 29 j 16:34 15°≈ minimum elong -12830 Nov 06 j 05:00 18° Ω 00'12 0°06'11 asc. node -12824 Jul 11 j 09:44 23°≈22'54 behind sun begin -12830 Nov 05 j 21:10 $17^{\circ}\Omega$ 55'39 retrograde -12824 Sep 13 i 03:59 29°≈16'40 behind sun end -12830 Nov 06 j 12:50 $18^{\circ}\Omega$ 04'45 opposition -12824 Nov 12 j 05:13 24°≈24'07 0°26'54 max. Earth dist. -12830 Nov 07 i 05:05 $18^{\circ}\Omega$ 14'16 6.09254 AU min. Earth dist. -12824 Nov 12 j 21:23 24°≈18'54 4.31771 AU morning rise -12830 Nov 19 j 16:50 $21^{\circ}\Omega$ 08'48 direct -12823 Jan 13 j 12:02 19°≈22'26 -12830 Dec 29 i 19:13 0° m -12823 Apr 15 j 15:53 0°**光** -12829 Mar 31 j 01:17 10° m 57'43 -12823 May 21 j 09:16 7° **X** 34'53 retrograde evening set -12829 May 29 j 11:06 5° m 59'02 4.07790 AU max. Earth dist. -12823 Jun 02 j 03:51 10° **)** 12'34 6.32981 AU min. Earth dist. -12829 May 30 j 04:20 5° m 53'12 -0°57'56 opposition -12823 Jun 03 j 03:43 10° **★**25'56 0°47'11 -12829 Jul 27 j 10:14 0° m 56'34 direct conjunction -12823 Jun 03 j 03:39 10° **€**25'54 0°46'54 -12829 Nov 29 j 02:36 19° m 56'48 evening set minimum elong -12823 Jun 15 j 19:10 13°**米** 15'31 morning rise -12829 Dec 12 j 18:00 23° Mp 07'19 -1°06'33 -12823 Sep 24 j 20:20 0°**Υ** conjunction -12829 Dec 12 j 17:53 23° m 07'15 1°06'27 -12823 Oct 15 j 03:01 0° \(\gamma \) 38'28 minimum elong retrograde -12829 Dec 13 j 19:23 23° m 22'07 6.07329 AU -12823 Nov 04 j 10:52 30°R € max. Earth dist. -12829 Dec 26 j 11:55 26° m 19'04 -12823 Dec 14 j 23:21 25° ¥ 46'37 1°43'59 morning rise opposition -12828 Jan 11 j 15:04 0°**♀** -12823 Dec 15 j 16:14 25° ★41'16 4.33291 AU min. Earth dist. retrograde -12828 May 04 j 16:20 16° **2**03'56 direct -12822 Feb 15 j 09:45 20° **∺**47'58 min. Earth dist. -12828 Jul 02 j 09:33 11°**2**04'35 4.08155 AU -12822 May 10 j 19:58 0°**Υ** opposition -12828 Jul 03 j 00:38 10°**£**59'25 -2°12'18 evening set -12822 Jun 21 j 15:29 8°**Y**48'14 direct -12828 Aug 30 j 09:46 5°**♀**59'22 max. Earth dist. -12822 Jul 03 j 03:57 11°**Y**23'29 6.32418 AU -12827 Jan 04 j 07:53 25° **2**14'10 evening set conjunction -12822 Jul 04 j 01:53 11°**Υ**'35'50 1°30'36 -12827 Jan 18 j 01:12 28° **2**24'05 -1°42'14 minimum elong -12822 Jul 04 j 01:47 11°**Y**35'47 conjunction -12827 Jan 18 j 01:07 28°**♀**24'03 1°42'38 morning rise -12822 Jul 16 j 11:00 14°**Y**22'48 minimum elong -12827 Jan 18 j 20:43 28° **△**35'22 6.09833 AU -12822 Oct 10 j 10:19 0°8 max. Earth dist. -12827 Jan 24 i 23:14 0°M -12822 Nov 16 i 18:28 2°**8**04'37 retrograde -12822 Dec 24 j 12:02 30°RΥ morning rise -12827 Jan 31 j 18:38 1°M 34'02 -12821 Jan 17 i 05:29 27° Y 11'32 2° 30'56 -12827 Apr 06 i 19:27 15°M opposition retrograde -12827 Jun 08 i 09:30 20°M 49'35 min. Earth dist. -12821 Jan 17 i 18:11 27°**Υ**07'31 4.30809 AU opposition -12827 Aug 06 j 05:48 15°M47'23 -2°38'17 direct -12821 Mar 20 j 04:05 22°**Υ**15'51 min. Earth dist. -12827 Aug 05 j 22:04 15°ML50'02 4.12660 AU -12821 Jun 03 j 19:34 0°8 -12827 Aug 12 j 00:57 15°RML -12821 Jul 22 j 16:16 10°**8**13'24 evening set -12827 Oct 04 j 09:55 10°M44'31 direct -12827 Nov 26 j 14:57 15°M conjunction -12821 Aug 04 j 00:06 13°**8**01'17 1°47'44 evening set -12826 Feb 10 j 04:18 29°ML57'24 minimum elong -12821 Aug 04 j 00:06 13°**8**01'17 1°48'18 -12826 Feb 10 j 08:52 max. Earth dist. -12821 Aug 03 j 12:38 12°**8**54'45 6.28105 AU -12821 Aug 12 j 16:53 15°**8** conjunction -12826 Feb 23 j 19:34 3°**尽**03'51 -1°41'02 -12821 Aug 16 j 08:12 15°**8**49'27 morning rise -12826 Feb 23 j 19:37 3°**₹**03'53 1°41'47 -12821 Oct 27 j 21:14 0°**Ⅱ** minimum elong -12826 Feb 23 j 23:38 3°**∡**06'10 6.15865 AU max. Earth dist. retrograde -12821 Dec 20 j 09:57 4°**Ⅱ**05'35 morning rise -12826 Mar 09 j 09:19 6°**х** 09′21 -12820 Feb 13 j 13:29 30°R8 retrograde -12826 Jul 11 j 20:00 24° ₹ 41'08 opposition -12820 Feb 20 j 04:05 29°**8**09'45 2°33'28 opposition -12826 Sep 08 j 17:13 19° ₹ 42'31 -2°09'11 min. Earth dist. -12820 Feb 20 j 08:09 29°**8**08'28 4.25011 AU min. Earth dist. -12826 Sep 08 j 18:51 19° ₹ 41'58 4.19623 AU direct -12820 Apr 21 j 02:47 24°**8**16'16 -12826 Nov 08 j 02:25 14° ₹38'15 -12820 Jun 23 j 04:27 0°**Ⅱ** direct

evening set

-12820 Aug 22 j 05:52 12°**Д**20'15

-12825 Mar 01 j 10:17 0°ਰ

Planetary Pheno	omena of Jupiter fro	m -12900	through -12398	R (UT). Astrodien	st AG 18-Feb-2025	14:23.	page 8
•	nical year style is used: The		-				
conjunction	-12820 Sep 03 j 18:08			retrograde	-12814 Jul 16 j 13:13		
minimum elong	-12820 Sep 03 j 18:13			opposition	-12814 Sep 13 j 10:01		-2°01'14
max. Earth dist.	-12820 Sep 03 j 18:33			min. Earth dist.	-12814 Sep 13 j 13:11		
morning rise	-12820 Sep 05 j 18:55 -12820 Sep 16 j 08:46		0.21274 AU	direct	-12814 Nov 12 j 23:25		4.204/1 AC
morning risc	-12820 Sep 10 j 08:40 -12820 Nov 12 j 07:44			uncet	-12813 Feb 11 j 07:45		
ratra ara da		0 € 7°©03'28		avanina aat			
retrograde	-12819 Jan 23 j 06:17		1947/20	evening set	-12813 Mar 22 j 11:17	8 O 2120	
opposition	-12819 Mar 25 j 19:12		1°47'29		12012 4 04:21 22	110=700100	0050120
min. Earth dist.	-12819 Mar 25 j 13:35		4.17572 AU	conjunction	-12813 Apr 04 j 21:22		
	-12819 Apr 11 j 06:36			minimum elong	-12813 Apr 04 j 21:27		
direct	-12819 May 24 j 13:48			max. Earth dist.	-12813 Apr 04 j 09:59		6.24183 AU
	-12819 Jul 05 j 23:27	0ං ව		morning rise	-12813 Apr 18 j 04:16		
evening set	-12819 Sep 24 j 02:03	15° © 30'05			-12813 Jul 12 j 03:47		
				retrograde	-12813 Aug 17 j 19:47		
conjunction	-12819 Oct 07 j 00:43		0°46'57		-12813 Sep 23 j 16:45	30°Ŗ ⋜	
minimum elong	-12819 Oct 07 j 00:48	18° © 30'26	0°47'45	opposition	-12813 Oct 16 j 06:07	27°る13'02	-0°47'22
max. Earth dist.	-12819 Oct 07 j 15:45	18° © 39'07	6.13977 AU	min. Earth dist.	-12813 Oct 16 j 16:54	27° る 09'29	4.27628 AU
morning rise	-12819 Oct 20 j 02:49	21° © 32'37		direct	-12813 Dec 16 j 21:38	22° る 09'32	
	-12819 Nov 27 j 12:04	$0^{\circ}\Omega$			-12812 Mar 03 j 01:51	0° ≈	
retrograde	-12818 Feb 28 j 00:15	11° Ω 04'49		evening set	-12812 Apr 23 j 20:57	10° ≈ 38'37	
opposition	-12818 Apr 29 j 21:19	6° Ω 02'02	0°23'47	•			
min. Earth dist.	-12818 Apr 29 j 07:34	6° Ω 06'36	4.10931 AU	conjunction	-12812 May 06 j 23:15	13° ≈ 34'03	-0°01'59
direct	-12818 Jun 27 j 14:46	1° Ω 07'48		minimum elong	-12812 May 06 j 23:16		
desc. node	-12818 Aug 06 j 06:06			behind sun begin	-12812 May 06 j 15:12		0 0230
desc. node	-12818 Oct 07 j 15:49			behind sun end	-12812 May 07 j 07:20		
evening set	-12818 Oct 28 j 18:44			max. Earth dist.	-12812 May 06 j 02:29		6.30465 AU
evening set	-12818 Oct 28 j 18.44	17 064041		max. Earth dist.	• •		0.30403 AU
:	12010 N 11 : 04.12	220 05(110	0015120		-12812 May 13 j 08:50		
conjunction	-12818 Nov 11 j 04:13			morning rise	-12812 May 19 j 22:09		
minimum elong	-12818 Nov 11 j 04:10		0°15'07	asc. node	-12812 May 19 j 22:40		
behind sun begin	-12818 Nov 11 j 01:30				-12812 Jul 29 j 00:04		
behind sun end	-12818 Nov 11 j 06:51			retrograde	-12812 Sep 17 j 16:30		
max. Earth dist.	-12818 Nov 12 j 03:44	23° Ω 09'54	6.08648 AU		-12812 Nov 08 j 19:18	30°R ≈	
morning rise	-12818 Nov 24 j 17:20	26° Ω 05'33		opposition	-12812 Nov 16 j 20:21		0°38'52
	-12818 Dec 11 j 19:52	-		min. Earth dist.	-12812 Nov 17 j 12:47	28° ≈ 53'07	4.32499 AU
retrograde	-12817 Apr 05 j 00:19	15° m 55'58		direct	-12811 Jan 18 j 05:24	23° ≈ 57′10	
min. Earth dist.	-12817 Jun 03 j 07:45	10° m 57′04	4.07403 AU		-12811 Mar 26 j 06:05	0° ∀	
opposition	-12817 Jun 04 j 00:53	10° m 51'15	-1°10'14	evening set	-12811 May 25 j 20:10	12°) €06'09	
direct	-12817 Aug 01 j 06:11	5° m 54'05					
evening set	-12817 Dec 04 j 05:49			conjunction	-12811 Jun 07 j 13:12	14° ¥ 56′22	0°54'27
Č	,	ì		minimum elong	-12811 Jun 07 j 13:07		0°54'13
conjunction	-12817 Dec 17 j 22:00	28° m 08'34	-1°13'23	max. Earth dist.	-12811 Jun 06 j 12:44		6.33509 AU
minimum elong	-12817 Dec 17 j 21:53			morning rise	-12811 Jun 20 j 03:37		
max. Earth dist.	-12817 Dec 19 j 00:12		6.07193 AU		-12811 Aug 20 j 19:24		
max. Earth dist.	-12817 Dec 25 j 21:23	0ಂ ರ	0.07175710	retrograde	-12811 Oct 19 j 14:57	5° Υ 08'18	
morning rise	-12817 Dec 31 j 16:06	1° ≏ 20'25		opposition	-12811 Dec 19 j 14:22	0° Υ 16'21	1°52'42
retrograde	-12816 May 09 j 15:23			min. Earth dist.	-12811 Dec 10 j 14:22 -12811 Dec 20 j 06:43	0° Υ 11'09	4.33596 AU
opposition	-12816 Jul 07 j 20:22		2010/14	mm. Larm dist.	-12811 Dec 20 j 00:43		4.33370 AC
				direct	_		
min. Earth dist.	-12816 Jul 07 j 06:28		4.00294 AU	direct	-12810 Feb 20 j 00:14	25°π18'05 0°Υ	
direct	-12816 Sep 04 j 06:51			ovenint	-12810 Apr 19 j 05:07		
•	-12815 Jan 08 j 10:13	0°M		evening set	-12810 Jun 25 j 23:21	13-11-15	
evening set	-12815 Jan 09 j 12:51	0°M15'16			100107	1.000	102
				conjunction	-12810 Jul 08 j 09:03		1°34'44
conjunction	-12815 Jan 23 j 06:00	3°M24'58		minimum elong	-12810 Jul 08 j 08:58		1°34'58
minimum elong	-12815 Jan 23 j 05:56	3°M24'56		max. Earth dist.	-12810 Jul 07 j 13:23		6.32460 AU
max. Earth dist.	-12815 Jan 23 j 22:37	3°M34'34	6.10202 AU	morning rise	-12810 Jul 20 j 17:23		
morning rise	-12815 Feb 05 j 23:19	6°M34'36			-12810 Sep 13 j 08:33	9° 8	
	-12815 Mar 16 j 08:51	15° M ₊		retrograde	-12810 Nov 21 j 07:49	6° 8 34'07	
retrograde	-12815 Jun 13 j 03:54	25°M45'45		opposition	-12809 Jan 21 j 21:09	1° 8 40'46	2°34'03
opposition	-12815 Aug 11 j 00:03	20°M43'57	-2°37'23	min. Earth dist.	-12809 Jan 22 j 09:06	1° 8 37'00	4.30585 AU
min. Earth dist.	-12815 Aug 10 j 17:02	20°M46'21	4.13231 AU		-12809 Feb 04 j 10:29	30° Ŗ ♈	
direct	-12815 Oct 09 j 07:32			direct	-12809 Mar 24 j 17:57		
	-12814 Jan 24 j 06:54	0° ∡ 7			-12809 May 10 j 22:11	0°8	
evening set	-12814 Feb 15 j 06:41	4° х 53′06		evening set	-12809 Jul 26 j 23:34	_	
					-12809 Jul 28 j 07:13		
conjunction	-12814 Feb 28 j 21:37	7° ∡ ¹59'05	-1°37'51		.200, var 20 j 07.13	0	
minimum elong	-12814 Feb 28 j 21:41	7° 🖈 59'08	1°38'38	conjunction	-12809 Aug 08 j 07:22	17° × 30'11	1°47'34
max. Earth dist.	-12814 Mar 01 j 00:28	8°×700'43	6.16615 AU	minimum elong	-12809 Aug 08 j 07:22 -12809 Aug 08 j 07:22		1°48'10
morning rise	-12814 Mar 14 j 10:38		0.1001 <i>3 A</i> U	max. Earth dist.	-12809 Aug 08 j 07.22 -12809 Aug 07 j 19:40		6.27609 AU
morning risc	12017 IVIGI 17 J 10.30	11 > 0400		max. Darui dist.	12007 Aug 0/ J 19.40	11 023 32	5.27007 AU

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12809 in astronomical counting style is the year 12810 BCE in historical counting style. -12809 Aug 20 j 16:00 20°8 18'46 opposition -12803 Aug 15 j 18:34 25° ML41'47 -2°35'18 morning rise -12809 Oct 05 j 08:57 0°**Ⅱ** min. Earth dist. -12803 Aug 15 j 13:18 25°ML43'35 4.14030 AU -12809 Dec 25 j 02:46 8°**Д**39'22 -12803 Oct 14 j 06:25 20°M 38'19 retrograde direct -12808 Feb 24 j 21:08 3°**II**43'05 2°29'54 -12802 Jan 05 j 08:36 opposition 0°**∡**¹ min. Earth dist. -12808 Feb 25 j 00:20 3°**II**42'03 4.24258 AU -12802 Feb 20 j 08:44 9°**х** 48'55 evening set -12808 Mar 29 j 02:36 30°R8 -12808 Apr 25 j 16:39 28°**8**49'43 -12802 Mar 05 j 23:13 12° ₹ 54'19 -1°33'59 direct conjunction -12802 Mar 05 j 23:18 12°**х** 54'22 1°34'47 -12808 May 23 j 02:03 0°**Ⅱ** minimum elong -12808 Aug 26 j 15:27 16°**Ц**54'45 evening set max. Earth dist. -12802 Mar 06 j 00:47 12°**尽**55'12 6.17631 AU morning rise -12802 Mar 19 j 11:31 15° ₹ 58'29 conjunction -12808 Sep 08 j 04:58 19°**II**48'12 1°27'47 -12802 May 29 j 03:25 0°궁 -12808 Sep 08 j 05:04 19°**Д**48'16 -12802 Jul 21 j 02:47 4°る18'20 minimum elong 1°28'36 retrograde -12808 Sep 08 j 07:34 19°**Ц**49'42 6.20347 AU max. Earth dist. -12802 Sep 13 j 04:44 30°R ✓ -12808 Sep 20 j 20:50 22°**Д**43'04 morning rise opposition -12802 Sep 18 j 02:09 29° ₹20'43 -1°52'31 -12808 Oct 23 j 21:52 0ಂತಾ min. Earth dist. -12802 Sep 18 j 05:32 29° ₹ 19'35 4.21588 AU retrograde -12807 Jan 28 j 02:43 11°5545'08 direct -12802 Nov 17 j 18:42 24° ₹ 16'24 opposition -12807 Mar 30 j 13:47 6°**©**45'19 1°37'49 -12801 Jan 20 j 20:04 0°궁 min. Earth dist. -12807 Mar 30 j 07:33 6°5047'20 4.16531 AU evening set -12801 Mar 27 j 07:01 13°**⋜**05'58 direct -12807 May 29 j 04:28 1°952'19 evening set -12807 Sep 28 j 17:24 20°5514'26 conjunction -12801 Apr 09 j 16:03 16° ₹ 06'10 -0°51'17 minimum elong -12801 Apr 09 j 16:08 16°る06'13 0°52'05 conjunction -12807 Oct 11 j 17:31 23°\$15'53 0°39'00 max. Earth dist. -12801 Apr 09 j 02:48 15°る58'42 6.25308 AU minimum elong -12807 Oct 11 j 17:35 23°\$15'56 0°39'47 morning rise -12801 Apr 22 j 21:58 19°る04'39 max. Earth dist. -12807 Oct 12 j 08:13 23°524'27 6.12923 AU -12801 Jun 14 j 23:08 0°≈ morning rise -12807 Oct 24 j 21:24 26°519'22 retrograde -12801 Aug 22 j 08:33 6°≈45'32 -12807 Nov 10 j 00:32 $0^{\circ}\Omega$ -12801 Oct 20 j 20:31 1°≈51'19 -0°35'22 opposition -12806 Feb 08 j 09:30 15° Ω min. Earth dist. -12801 Oct 21 j 09:04 1°≈47'12 4.28625 AU -12806 Mar 04 j 22:45 $15^{\circ}\Omega$ 56'17 -12801 Nov 04 j 08:29 30°R 궁 retrograde -12806 Mar 29 j 07:54 15°R**Ω** -12801 Dec 21 j 16:33 26°₹48'01 direct -12806 May 04 j 17:15 $10^{\circ}\Omega$ 53'09 $0^{\circ}10'46$ -12800 Feb 07 j 00:15 0°≈ opposition -12806 May 04 j 02:46 $10^{\circ}\Omega$ 57'58 $4.09947~\mathrm{AU}$ -12800 Mar 29 j 05:08 8°≈44'27 min. Earth dist. asc. node -12806 Jun $\,$ 17 j 23:38 $\,$ 6° Ω 19'34 desc. node -12800 Apr 27 j 10:41 15°≈ -12806 Jul 02 j 07:44 5°**Ω**58'34 -12800 Apr 28 j 10:40 15°≈13'18 direct evening set -12806 Sep 19 j 08:11 15°Ω-12806 Nov 02 j 17:06 24° **Ω**44'02 -12800 May 11 j 11:47 18°≈07'54 0°06'29 evening set conjunction -12800 May 11 j 11:46 18°≈07'53 0°05'55 minimum elong -12806 Nov 16 j 04:03 27° **Ω**52'28 -0°24'22 -12800 May 11 j 04:05 18°≈03'37 conjunction behind sun begin minimum elong -12806 Nov 16 j 04:00 27° **Ω**52'26 0°23'56 behind sun end -12800 May 11 j 19:27 18°≈12'10 max. Earth dist. -12806 Nov 17 j 05:25 $28^{\circ}\Omega$ 07'18 6.07844 AU max. Earth dist. -12800 May 10 j 14:07 17°≈55'48 6.31238 AU -12806 Nov 25 j 06:22 0° Mp morning rise -12800 May 24 j 09:24 21°≈00'44 morning rise -12806 Nov 29 j 18:13 1° Mp 02'42 -12800 Jul 06 j 08:11 0°**光** retrograde -12805 Apr 10 j 01:24 20° m 55'19 retrograde -12800 Sep 22 j 02:06 8°**米**21'53 -12805 Jun 08 j 21:46 15° m 50'35 -1°22'01 -12800 Nov 21 j 09:58 3°**米**29'38 0°50'29 opposition opposition min. Earth dist. -12805 Jun 08 j 05:17 15° m 56'11 4.06881 AU min. Earth dist. -12800 Nov 22 j 02:15 3°**米**24'24 4.32999 AU -12805 Aug 06 j 02:16 10° m 53'03 -12800 Dec 21 j 15:51 30°R≈ direct -12805 Dec 09 i 10:16 0°**\Dimension**00'48 -12799 Jan 22 j 19:38 28°≈28'42 evening set direct -12799 Feb 24 i 03:04 0°**米** -12805 Dec 09 i 08:53 0° € -12799 May 30 j 05:51 16° \(\)35'16 evening set -12805 Dec 23 j 02:48 3°**2**11'53 -1°19'39 conjunction minimum elong -12805 Dec 23 i 02:40 3° \(\Omega\) 11'49 1°19'41 conjunction -12799 Jun 11 j 21:39 19°\ 24'52 1°01'22 max. Earth dist. -12805 Dec 24 j 03:19 3°**2**26'10 6.06979 AU minimum elong -12799 Jun 11 j 21:34 19° **)** 24'49 1°01'12 -12804 Jan 05 j 21:20 6°**£**23'55 max. Earth dist. -12799 Jun 10 j 21:38 19° H 11'26 6.33684 AU morning rise -12804 May 14 j 12:59 26°**♀**05'22 morning rise -12799 Jun 24 j 10:55 22° * 13'13 retrograde -12804 Jul 12 j 16:31 21° **2**01'17 -2°25'08 -12799 Jul 31 j 02:56 0°**Υ**° opposition -12804 Jul 12 j 02:27 21°**2**06'06 4.08446 AU min. Earth dist. retrograde -12799 Oct 24 j 03:46 9° **Y** 37'46 -12799 Dec 24 j 05:14 4°**Υ**45'45 2°00'48 direct -12804 Sep 09 j 04:28 16°**△**00'21 opposition -12799 Dec 24 j 22:03 4°**Υ**40'25 4.33438 AU -12804 Dec 22 j 03:03 0°M min. Earth dist. -12803 Jan 14 j 18:40 5°ML18'34 -12798 Feb 13 j 01:20 30°R ₩ evening set -12798 Feb 24 j 15:22 29°**₭**47'54 direct -12803 Jan 28 j 11:46 8°M28'00 -1°45'42 -12798 Mar 08 j 04:25 0°**Υ** conjunction -12803 Jan 28 j 11:44 -12798 Jun 30 j 07:23 17°**Y**44′59 minimum elong 8°M27'58 1°46'13 evening set max. Earth dist. -12803 Jan 29 j 03:45 8°**ጤ**37'13 6.10708 AU morning rise -12803 Feb 11 j 04:35 11°M 37'10 conjunction -12798 Jul 12 j 16:22 20°**Y**32'03 1°38'22 -12803 Feb 26 j 03:10 15°M minimum elong -12798 Jul 12 j 16:17 20°**Υ**32'01 1°38'39 -12803 May 28 j 04:39 max. Earth dist. -12798 Jul 11 j 20:08 20°**γ**'20'39 6.31951 AU retrograde -12803 Jun 18 j 00:25 0°**∡**¹43′08 morning rise -12798 Jul 25 j 00:27 23°**Y**18'44

-12798 Aug 24 j 22:58 0°8

-12803 Jul 08 j 14:04 30°RML

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12798 in astronomical counting style is the year 12799 BCE in historical counting style. retrograde -12798 Nov 25 j 23:09 11°**8**07'32 evening set -12791 Jan 19 j 22:10 10°M 15'52 -12797 Jan 26 j 14:17 6°813'49 2°36'24 opposition min. Earth dist. -12797 Jan 27 j 00:58 6°8 10'26 4.29776 AU -12791 Feb 02 j 14:59 13°M24'32 -1°46'16 conjunction -12797 Mar 29 j 07:37 1°**8**18'48 -12791 Feb 02 j 14:58 13°M24'31 1°46'50 direct minimum elong -12797 Jul 12 j 03:26 15°**8** -12791 Feb 03 j 05:44 13°ML33'01 6.12087 AU max. Earth dist. -12797 Jul 31 j 08:55 19°**8**16'27 -12791 Feb 09 j 13:06 15°M evening set morning rise -12791 Feb 16 j 07:11 16°ML32'48 conjunction -12797 Aug 12 j 17:14 22°**8**05'07 1°46'46 -12791 Apr 22 j 23:51 0°⊀ minimum elong -12797 Aug 12 j 17:15 22°**8**05'07 1°47'26 retrograde -12791 Jun 22 j 13:46 5°**∡**³30'27 max. Earth dist. -12797 Aug 12 j 08:17 22°**8**00'00 6.26565 AU opposition -12791 Aug 20 j 09:35 0° ₹29'36 -2°32'07 morning rise -12797 Aug 25 j 02:19 24°**8**54'21 min. Earth dist. -12791 Aug 20 j 04:46 0° **₹**31'14 4.15565 AU -12797 Sep 17 j 02:13 0°**П** -12791 Aug 24 j 00:38 30°RM -12797 Dec 29 j 23:44 13°**Д**21'06 -12791 Oct 19 j 00:52 25°M25'55 retrograde direct opposition -12796 Feb 29 j 17:10 8°**Ц**24'24 2°25'22 -12791 Dec 13 j 18:39 0°**∡**¹ min. Earth dist. -12796 Feb 29 j 19:39 8°**Ⅱ**23'36 4.23052 AU evening set -12790 Feb 25 j 05:41 14°**尽** 32'09 direct -12796 Apr 30 j 09:02 3°**Д**31'12 evening set -12796 Aug 31 j 05:10 21°**Д**38'47 conjunction -12790 Mar 10 j 19:22 17°**х** 36'36 -1°29'38 minimum elong -12790 Mar 10 j 19:27 17°**х** 36'39 1°30'26 6.19189 AU conjunction -12796 Sep 12 j 19:51 24°**Д**33'20 1°22'27 max. Earth dist. -12790 Mar 10 j 17:21 17°**х** 35'27 minimum elong -12796 Sep 12 j 19:57 24°**Д**33'24 1°23'16 morning rise -12790 Mar 24 j 06:54 20° ₹39'47 max. Earth dist. -12796 Sep 12 j 22:58 24°**Д**35'08 6.19091 AU -12790 May 07 j 03:15 0°る morning rise -12796 Sep 25 і 13:26 27°**Д**29'28 retrograde -12790 Jul 25 i 13:07 8°る52'01 -12796 Oct 06 i 14:08 0°5 opposition -12790 Sep 22 j 13:20 3°₹54'57 -1°43'26 retrograde -12795 Feb 02 i 03:09 16°537'47 min. Earth dist. -12790 Sep 22 j 19:28 3°る52'54 4.23003 AU opposition -12795 Apr 04 j 12:31 11°537'26 1°27'08 -12790 Oct 26 j 07:00 30°R ✓ min. Earth dist. -12795 Apr 04 j 04:14 11°540'08 4.15321 AU -12790 Nov 22 j 11:21 28° ₹ 50'39 direct -12795 Jun 02 j 22:33 6°544'22 -12790 Dec 19 j 23:01 0°궁 direct evening set -12795 Oct 03 j 13:26 25°510'05 -12789 Mar 31 j 20:33 17°**⋜**35'45 evening set -12795 Oct 16 j 15:24 28°512'46 0°30'28 conjunction -12789 Apr 14 j 04:48 20°る35'09 -0°43'58 conjunction -12795 Oct 16 j 15:27 28°512'48 0°31'12 -12789 Apr 14 j 04:52 20° 35'11 0°44'45 minimum elong minimum elong -12795 Oct 17 j 09:39 28°523'24 6.11918 AU max. Earth dist. max. Earth dist. -12789 Apr 13 j 14:03 20°♂26'52 6.26474 AU -12795 Oct 24 j 07:24 0°**Ω** morning rise -12789 Apr 27 j 09:33 23°♂32'45 -12795 Oct 29 j 20:52 $1^{\circ}\Omega$ 17'26 -12789 May 27 j 06:52 0°≈ morning rise -12789 Aug 26 j 13:56 11°≈09'17 -12794 Jan 04 j 02:42 15°**Ω** retrograde -12794 Mar 10 j 02:51 20° Ω 58'18 -12789 Oct 25 j 05:34 6°≈15'27 -0°23'46 retrograde opposition -12794 Apr 27 j 23:49 17° **Ω**27'25 -12789 Oct 25 j 18:42 6°≈11'10 4.29450 AU desc. node min. Earth dist. opposition -12794 May 09 j 17:29 15° Ω 54'54 -0°02'51 direct -12789 Dec 26 j 03:22 1°≈12'24 min. Earth dist. -12794 May 09 j 02:33 $15^{\circ}\Omega$ 59'53 4.09266 AUasc. node -12788 Feb 09 j 11:34 4°≈08'47 -12794 May 16 j 14:42 15°RΩ -12788 Apr 11 j 16:37 15°≈ direct -12794 Jul 07 j 05:40 11°**Ω**00'05 evening set -12788 May 02 j 18:58 19°≈34'58 -12794 Aug 26 j 13:05 15°**Ω** -12794 Nov 07 j 20:10 29° **Ω**48'49 conjunction -12788 May 15 j 18:45 22°≈28'53 0°14'21 evening set -12794 Nov 08 j 15:24 0° Mp -12788 May 15 j 18:43 22°≈28'52 0°13'50 minimum elong -12788 May 15 j 14:28 22°≈26'30 behind sun begin -12794 Nov 21 i 08:04 2° m 57'50 -0°33'14 -12788 May 15 j 22:59 22°≈31'14 conjunction behind sun end minimum elong -12794 Nov 21 i 08:00 2° m 57'48 0°32'50 max. Earth dist. -12788 May 14 i 18:41 22°≈15'26 6.31655 AU -12794 Nov 22 j 09:33 3° m 12'44 6.07573 AU -12788 May 28 j 15:21 25°≈21'07 max. Earth dist. morning rise morning rise -12794 Dec 04 i 23:24 6° m 08'37 -12788 Jun 18 i 23:53 0°**)**€ retrograde -12793 Apr 15 i 01:42 26° m 00'34 retrograde -12788 Sep 26 j 10:46 12°\colon 42'14 -12793 Jun 13 i 20:38 20° m 55'46 -1°33'23 opposition -12788 Nov 25 j 19:52 7°\ 50'12 1°01'18 opposition min. Earth dist. -12793 Jun 13 j 02:50 21° m 01'50 4.07097 AU min. Earth dist. -12788 Nov 26 j 13:58 7° **)** 44'24 4.32985 AU direct -12793 Aug 11 j 00:56 15° m 57'48 direct -12787 Jan 27 j 07:22 2°**升**49'40 -12793 Nov 22 j 03:18 0∘ ত evening set -12787 Jun 03 j 11:41 20° **ਮ** 55'47 evening set -12793 Dec 14 j 16:28 5°**£**06'41 max. Earth dist. -12787 Jun 15 j 01:55 23° **∺** 31'19 6.33218 AU conjunction -12793 Dec 28 j 09:21 8°**2**17'32 -1°25'23 conjunction -12787 Jun 16 j 02:30 23° **∺**45'06 1°07'40 -12793 Dec 28 j 09:14 8°**£**17'28 1°25'30 -12787 Jun 16 j 02:25 23° **★**45'03 1°07'34 minimum elong minimum elong -12793 Dec 29 j 10:26 8°**△**32'08 -12787 Jun 28 j 14:53 26° **∺** 33'15 max. Earth dist. 6.07662 AU morning rise -12792 Jan 11 j 03:42 11°**£**29'08 -12787 Jul 14 j 07:14 0°**Υ** morning rise -12787 Oct 28 j 13:52 14° Υ01'50 -12792 Apr 23 j 16:03 retrograde retrograde -12792 May 19 j 11:00 1°ML05'01 opposition -12787 Dec 28 j 17:50 9°**Ƴ**09'42 2°08'00 -12792 Jun 13 j 21:39 30°R € min. Earth dist. -12787 Dec 29 j 09:35 9°**Ƴ**04'42 4.32592 AU opposition -12792 Jul 17 j 12:13 26°**2**01'12 -2°29'50 direct -12786 Mar 01 j 00:52 4°**Υ**12'17 min. Earth dist. -12792 Jul 16 j 23:39 26°**♀**05'31 4.09536 AU evening set -12786 Jul 04 j 14:04 22°**Υ**11'04 direct -12792 Sep 14 j 04:16 20°**♀**59'52

conjunction

-12786 Jul 16 j 22:39 24°**Υ**'58'23 1°41'18

-12792 Dec 03 j 05:07 0°M

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12786 in astronomical counting style is the year 12787 BCE in historical counting style. -12786 Jul 16 j 22:35 24°**Υ**'58'21 1°41'38 minimum elong retrograde -12780 May 24 i 06:59 6°ML05'04 opposition max. Earth dist. -12786 Jul 16 j 04:04 24°**Υ**47'52 6.30782 AU -12780 Jul 22 j 07:39 1°ML01'33 -2°33'33 -12786 Jul 29 j 06:29 27°**Y**45'25 min. Earth dist. -12780 Jul 21 j 19:20 1°ML05'47 4.10434 AU morning rise -12786 Aug 08 j 07:56 0°**႘** -12780 Jul 29 j 20:33 30°R € -12786 Nov 09 j 11:47 15°8 -12780 Sep 19 j 01:26 25° **2**59'48 direct -12780 Nov 09 j 03:38 0°**M** -12786 Nov 30 j 16:57 15°841'01 retrograde -12779 Jan 24 j 00։39 15°**M** -12786 Dec 21 j 21:55 15°R8 -12785 Jan 31 j 07:26 10°**8**47'02 2°37'43 -12779 Jan 25 j 02:15 15°ML14'35 opposition evening set -12785 Jan 31 j 17:46 10°**8**43'45 min. Earth dist. 4.28375 AU direct -12785 Apr 02 j 21:46 5°**8**52'23 conjunction -12779 Feb 07 j 18:36 18°M22'36 -1°46'08 -12779 Feb 07 j 18:36 18°M22'36 1°46'45 -12785 Jun 24 j 08:21 15°**8** minimum elong -12785 Aug 04 j 18:53 23°**8**52'58 -12779 Feb 08 j 05:51 18°M29'03 6.13157 AU evening set max. Earth dist. -12779 Feb 21 j 10:17 21°M30'07 morning rise conjunction -12785 Aug 17 j 03:42 26°**8**42'28 1°45'13 -12779 Apr 01 j 11:28 minimum elong -12785 Aug 17 j 03:43 26°**8**42'29 1°45'55 retrograde -12779 Jun 27 j 06:06 10°**х** 20'53 max. Earth dist. -12785 Aug 16 j 19:41 26°**8**37'53 6.25042 AU opposition -12779 Aug 25 j 01:50 5°**尽** 20'31 -2°28'03 morning rise -12785 Aug 29 j 13:50 29°**8**32'45 min. Earth dist. -12779 Aug 24 j 23:26 5° ₹21'20 4.16702 AU -12785 Aug 31 j 13:49 0°**П** direct -12779 Oct 23 j 22:20 0° ₹ 16'36 retrograde -12784 Jan 03 j 21:42 18°**Ⅲ**07'14 evening set -12778 Mar 02 j 04:06 19° ₹ 19'56 opposition -12784 Mar 05 j 14:41 13°**Ⅲ**09'59 2°19'45 min. Earth dist. -12784 Mar 05 j 14:18 13°**II**10'07 4.21525 AU conjunction -12778 Mar 15 j 17:22 22° ₹23'43 -1°24'41 direct -12784 May 05 і 00:38 8°**Д**16'57 minimum elong -12778 Mar 15 j 17:27 22° ₹23'46 1°25'30 -12784 Sep 04 j 20:33 26°**Д**27'55 evening set max. Earth dist. -12778 Mar 15 j 14:16 22° ₹21'57 6.20318 AU morning rise -12778 Mar 29 j 03:56 25° ₹26'05 conjunction -12784 Sep 17 i 12:51 29° **I**I 23'45 1°16'25 -12778 Apr 18 j 20:08 0°る -12784 Sep 17 j 12:57 29° II 23'48 1°17'14 retrograde -12778 Jul 30 j 00:35 13°る32'18 minimum elong max. Earth dist. -12784 Sep 17 j 20:13 29° **II** 28'01 6.17705 AU -12778 Sep 27 j 03:15 8° 중35'45 -1°33'37 opposition -12784 Sep 20 j 03:26 0°5 min. Earth dist. -12778 Sep 27 j 10:00 8°る33'31 4.24023 AU -12784 Sep 30 j 07:53 2°521'10 -12778 Nov 27 j 04:25 3°₹31'33 morning rise direct -12783 Feb 07 j 06:39 21°535'42 -12777 Apr 05 j 13:09 22°**궁**13'26 retrograde evening set -12783 Apr 09 j 12:59 16°534'49 1°15'34 opposition -12783 Apr 09 j 03:40 16°537'52 4.14174 AU -12777 Apr 18 j 20:13 25°♂12'03 -0°36'11 min. Earth dist. conjunction -12783 Jun 07 j 19:44 11°5641'37 -12777 Apr 18 j 20:17 25°♂12'05 0°36'56 minimum elong direct -12783 Oct 07 j 17:36 0°**Ω** max. Earth dist. -12777 Apr 18 j 02:16 25°る01'59 6.27317 AU -12783 Oct 08 j 11:43 $0^{\circ}\Omega$ 10'30 -12777 May 02 j 00:05 28°**궁**08'56 evening set morning rise -12777 May 10 j 08:31 0°≈ -12783 Oct 21 j 15:07 $3^{\circ}\Omega$ 14'13 0° 21'34 -12777 Aug 10 j 04:13 15°≈ conjunction minimum elong -12783 Oct 21 j 15:10 $3^{\circ}\Omega$ 14'15 0° 22'15 retrograde -12777 Aug 31 j 01:53 15°≈42'16 max. Earth dist. -12783 Oct 22 j 10:33 3°**Ω**25'33 6.11096 AU -12777 Sep 20 j 22:52 15°R≈ morning rise -12783 Nov 03 j 22:23 6°**Ω**20'00 opposition -12777 Oct 29 j 18:56 10°≈48'48 -0°11'37 -12783 Dec 13 j 04:18 15°**Ω** min. Earth dist. -12777 Oct 30 j 09:59 10°≈43'54 4.30050 AU desc. node -12782 Mar 06 j 22:55 $25^{\circ}\Omega$ 56'53 asc. node -12777 Dec 21 j 03:30 5°≈54'40 retrograde -12782 Mar 15 j 04:33 26° Ω 03'26 direct -12777 Dec 30 j 20:25 5°≈46'00 -12782 May 14 j 18:00 20° Ω 59'36 -0°16'36 -12776 Mar 24 j 17:16 15°≈ opposition min. Earth dist. -12782 May 14 j 01:02 21° **Ω**05'18 4.08830 AU evening set -12776 May 07 j 06:58 24°≈06'15 -12782 Jul 12 j 03:41 $16^{\circ}\Omega$ 04'22 -12776 May 19 i 05:58 26°≈46'17 6.31975 AU direct max. Earth dist. -12782 Oct 22 i 09:03 -12776 May 20 j 05:40 26°≈59'32 0°22'28 evening set -12782 Nov 13 j 00:00 4° m 55'31 conjunction -12776 May 20 j 05:38 26°≈59'30 minimum elong 0°22'00 conjunction -12782 Nov 26 i 13:00 8° m 04'58 -0°41'54 morning rise -12776 Jun 02 i 00:56 29°≈51'07 minimum elong -12782 Nov 26 i 12:55 8° m 04'55 0°41'34 -12776 Jun 02 j 16:55 0°**光** max. Earth dist. -12782 Nov 27 j 16:04 8° Mp 20'47 6.07522 AU retrograde -12776 Sep 30 j 21:20 17° ¥ 12'25 -12782 Dec 10 j 04:59 11° m 16'01 opposition -12776 Nov 30 j 09:58 12° **€** 20'30 1°12'15 morning rise -12781 Mar 24 j 20:51 min. Earth dist. 0∘**⊽** -12776 Dec 01 j 03:14 12° ** 14'59 4.33030 AU retrograde -12781 Apr 20 j 03:52 1°**≏**06'21 direct -12775 Jan 31 j 20:37 7°**∺**20'26 -12775 Jun 07 j 21:27 25°**米** 25'35 -12781 May 16 j 02:46 30°R Mp evening set opposition -12781 Jun 18 j 19:28 26° m 01'29 -1°44'07 max. Earth dist. -12775 Jun 19 j 10:24 28° **米** 00'37 6.32984 AU min. Earth dist. -12781 Jun 18 j 02:44 26° Mp 07'12 4.07420 AU -12781 Aug 16 j 01:43 21° Mp 02'59 -12775 Jun 20 j 11:02 28° **X** 14'28 1°13'51 direct conjunction -12781 Nov 02 j 23:16 0°**♀** minimum elong -12775 Jun 20 j 10:57 28° **X** 14'24 1°13'50 -12781 Dec 19 j 22:36 10° **2**12'41 $0^{\circ}\Upsilon$ evening set -12775 Jun 28 j 07:06 morning rise -12775 Jul 02 j 22:35 1°**Y**02'18 conjunction -12780 Jan 02 j 15:38 13°**-**23'17 -1°30'32 retrograde -12775 Nov 02 j 05:58 18°**Y**34'05 minimum elong -12780 Jan 02 j 15:31 13°**⊆**23'13 1°30'43 opposition -12774 Jan 02 j 10:31 13°**Υ**41'51 2°14'46 max. Earth dist. -12780 Jan 03 j 16:01 13°**♀**37'25 6.08290 AU min. Earth dist. -12774 Jan 03 j 02:29 13°**Υ**36'48 4.32120 AU -12780 Jan 16 j 09:53 16°**2**34'27 -12774 Mar 05 j 16:43 8°**Υ**44'53 morning rise direct

evening set

-12774 Jul 08 j 23:18 26°**Y**43'42

-12780 Mar 21 j 00:15 0° M

Planetary Pheno	omena of Jupiter fro	m -12900	through -1239	8 (UT), Astrodier	st AG 18-Feb-2025 14:23, page	: 12
•			_	· //	r 12775 BCE in historical counting style.	
conjunction	-12774 Jul 21 j 07:32		1°43'47	conjunction	-12768 Jan 07 j 18:37 18° ♀ 20'31 -1°34	·'53
minimum elong	-12774 Jul 21 j 07:29		1°44'11	minimum elong	-12768 Jan 07 j 18:31 18° ♀ 20'28 1°35	
max. Earth dist.	-12774 Jul 20 j 14:29		6.30112 AU	max. Earth dist.	•	712 AU
max. Earth dist.	-12774 Jul 23 j 10:35		0.50112710	morning rise	-12768 Jan 21 j 12:49 21° ⊆ 31'24	/12/10
morning rise	-12774 Aug 02 j 15:16			morning risc	-12768 Feb 29 j 00:49 0°M	
morning risc	-12774 Aug 02 j 13:10 -12774 Oct 04 j 22:32			retrograde	-12768 May 29 j 00:58 10°M57'56	
rotro ara do	-			-	-12768 Jul 27 j 00:19 5°M.54'47 -2°36	100
retrograde	-12774 Dec 05 j 10:12		2°38'09	opposition min. Earth dist.	-12768 Jul 26 j 13:58 5°M58'20 4.11	
opposition	-12773 Feb 05 j 02:36					001 AU
min. Earth dist.	-12773 Feb 05 j 10:21		4.27587 AU	direct	-12768 Sep 23 j 21:36 0°M.52'38	
	-12773 Feb 08 j 08:02				-12767 Jan 07 j 04:13 15° M.	
direct	-12773 Apr 07 j 12:04			evening set	-12767 Jan 30 j 03:28 20°M 07'29	
	-12773 Jun 02 j 06:19					
evening set	-12773 Aug 09 j 05:59			conjunction	-12767 Feb 12 j 19:46 23°ML15'09 -1°45	
	-12773 Aug 15 j 17:02	0°Щ		minimum elong	-12767 Feb 12 j 19:47 23°ML15'10 1°45	
				max. Earth dist.	J.	830 AU
conjunction	-12773 Aug 21 j 15:26		1°43'05	morning rise	-12767 Feb 26 j 10:48 26°M22'08	
minimum elong	-12773 Aug 21 j 15:29	1° Ⅱ 21'38	1°43'48		-12767 Mar 14 j 14:59 0° ⊀	
max. Earth dist.	-12773 Aug 21 j 10:38	1° Ⅱ 18'52	6.24211 AU	retrograde	-12767 Jul 01 j 21:04 15° ₹707'45	
morning rise	-12773 Sep 03 j 02:18	4° Ⅱ 12'36		opposition	-12767 Aug 29 j 16:46 10° 尽 07'57 -2°23	'02
retrograde	-12772 Jan 08 j 20:38	22° Ⅱ 52'12		min. Earth dist.	-12767 Aug 29 j 15:21 10° 尽 08'26 4.17€	417 AU
opposition	-12772 Mar 10 j 11:51	17° Ⅱ 54′28	2°13'14	direct	-12767 Oct 28 j 16:06 5° ⊀ 03'57	
min. Earth dist.	-12772 Mar 10 j 10:46	17° Ⅱ 54'49	4.20696 AU	evening set	-12766 Mar 07 j 01:27 24° 尽 05'52	
direct	-12772 May 09 j 19:02	13° Ⅲ 01'32				
	-12772 Sep 04 j 02:45	0°€		conjunction	-12766 Mar 20 j 13:58 27° ₹ 09'08 -1°19	'11
evening set	-12772 Sep 09 j 11:17	1°9513'42		minimum elong	-12766 Mar 20 j 14:04 27° ₹ 09'11 1°20	00'
S	1 3			max. Earth dist.	-	028 AU
conjunction	-12772 Sep 22 j 04:53	4°9510'27	1°09'59	morning rise	-12766 Apr 02 j 23:58 0°♂10'58	
minimum elong	-12772 Sep 22 j 04:58	4°9510'30	1°10'49	morning rise	-12766 Apr 02 j 04:28 0°る	
max. Earth dist.	-12772 Sep 22 j 13:37	4°9915'31	6.16963 AU	retrograde	-12766 Aug 03 j 13:48 18°♂12'53	
morning rise	-12772 Oct 05 j 01:39	7°908'57	0.10703710	opposition	-12766 Oct 01 j 17:24 13° \(\frac{1}{3}\)16'50 -1°23	!13
retrograde	-12771 Feb 12 j 04:40			min. Earth dist.	-12766 Oct 02 j 01:48 13° ₹14'02 4.24	
opposition	-12771 Apr 14 j 10:34		1°03'45	direct	-12766 Dec 01 j 22:47 8° ₹12'41	004 AC
min. Earth dist.	-12771 Apr 14 j 10:34 -12771 Apr 13 j 23:01		4.13565 AU	evening set	-12765 Apr 10 j 05:44 26° ₹52'33	
direct	-12771 Jun 12 j 13:03		4.13303 AU	evening set	-12703 Apr 10 J 03.44 20 0 3233	
direct	-12771 Sep 21 j 01:14			anniumation	-12765 Apr 23 j 11:59 29°₹50'36 -0°28	100
avanina aat				conjunction minimum elong	-12765 Apr 23 j 12:02 29° ₹50'38 0°28	
evening set	-12771 Oct 13 j 07:18	3.9503.11		2		
. ,.	10771 0 + 06:10 16	00 007145	0010146	max. Earth dist.	-12765 Apr 22 j 18:21 29°₹40'42 6.275	8/4 AU
conjunction	-12771 Oct 26 j 12:16	8° Ω 07'45			-12765 Apr 24 j 04:45 0°≈	
minimum elong	-12771 Oct 26 j 12:17	8° Ω 07'46	0°13'25	morning rise	-12765 May 06 j 14:39 2°≈46'50	
behind sun begin	-12771 Oct 26 j 07:39	8° Ω 05'05		. 1	-12765 Jul 06 j 15:01 15°≈	
behind sun end	-12771 Oct 26 j 16:55	8° Ω 10′28		retrograde	-12765 Sep 04 j 13:28 20°≈17'55	
max. Earth dist.	-12771 Oct 27 j 09:45	8° Ω 20'18	6.10678 AU	asc. node	-12765 Oct 31 j 06:36 15°≈48'59	
morning rise	-12771 Nov 08 j 20:52			opposition	-12765 Nov 03 j 09:11 15°≈24'47 0°00	
	-12771 Nov 25 j 08:19			min. Earth dist.	•	482 AU
desc. node	-12770 Jan 14 j 22:08				-12765 Nov 06 j 13:36 15°R≈	
	-12770 Feb 23 j 02:48	0° m		direct	-12764 Jan 04 j 11:51 10°≈22'21	
retrograde	-12770 Mar 20 j 04:58	0° m 59′12			-12764 Mar 02 j 08:15 15°≈	
	-12770 Apr 14 j 00:45	30° R Ω		evening set	-12764 May 11 j 19:40 28°≈40'33	
opposition	-12770 May 19 j 14:52	25° Ω 55′06	-0°29'48		-12764 May 17 j 18:22 0° 光	
min. Earth dist.	-12770 May 18 j 22:29	26° Ω 00'36	4.08617 AU			
direct	-12770 Jul 17 j 00:27	20° Ω 59'27		conjunction	-12764 May 24 j 16:55 1° 米 33'08 0°30	'32
	-12770 Oct 03 j 21:28	0° ™		minimum elong	-12764 May 24 j 16:52 1° 米 33'07 0°30	'09
evening set	-12770 Nov 18 j 00:31	9° ™ 52'44		max. Earth dist.	-12764 May 23 j 15:55 1° 米 19'09 6.32	245 AU
				morning rise	-12764 Jun 06 j 11:12 4° € 24'10	
conjunction	-12770 Dec 01 j 14:21	13° Mp 02'32	-0°49'59	retrograde	-12764 Oct 05 j 11:29 21° € 45'48	
minimum elong	-12770 Dec 01 j 14:15		0°49'44	opposition	-12764 Dec 05 j 01:34 16° \(\) 53'54 1°22	:53
max. Earth dist.	-12770 Dec 02 j 17:16		6.07523 AU	min. Earth dist.	•	130 AU
morning rise	-12770 Dec 15 j 07:02	-		direct	-12763 Feb 05 j 12:57 11° 米 54'12	
<i>3</i>	-12769 Feb 19 j 12:07			evening set	-12763 Jun 12 j 07:20 29° 米 57'43	
retrograde	-12769 Apr 25 j 00:53				-12763 Jun 12 j 11:25 0° Υ	
opposition	-12769 Jun 23 j 14:10		-1°53'46		, 00 van 12 j 11.20 0 j	
min. Earth dist.	-12769 Jun 22 j 21:26		4.07656 AU	conjunction	-12763 Jun 24 j 20:00 2° Y ′46'09 1°19	'40
Zartii dist.	-12769 Jun 30 j 16:19		, 550 110	minimum elong	-12763 Jun 24 j 19:55 2° Υ 46'06 1°19	
direct	-12769 Aug 20 j 20:03			max. Earth dist.	3	888 AU
ancet	-12769 Oct 10 j 11:06	0° ⊡		morning rise	-12763 Jul 25 j 21.30 2 \ \ 733 31 \ 0.32 \\ -12763 Jul 07 j 06:33 \ 5\circ \mathbf{Y} 33'37	000 AU
evening set	-12769 Dec 25 j 01:33			retrograde	-12763 Nov 06 j 19:41 23° Υ 07'57	
evening set	12107 DOC 23 J 01.33	15 -1000		opposition	-12763 Nov 06 j 19.41 23 Υ 07 37 -12762 Jan 07 j 03:27 $18^{\circ}\Upsilon$ 15'27 $2^{\circ}20$	144
				эрролион	12,02 Juli 0, j 03.27 10 1 13 27 2 20	

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 13 Attention, astronomical year style is used: The year -12762 in astronomical counting style is the year 12763 BCE in historical counting style.

Attention, astronomic	cal year style is used: The	e year -12762	in astronomical co	unting style is the year	12763 BCE in historical	counting sty	le.
min. Earth dist.	-12762 Jan 07 j 17:33	18° Ƴ 10'59	4.31849 AU	evening set	-12757 Dec 30 j 06:24	20° ≏ 11'34	
direct	-12762 Mar 10 j 06:39	13° Y 18'54					
	-12762 Jul 07 j 15:22			conjunction	-12756 Jan 12 j 23:46	23° ≏ 21'56	-1°38'36
evening set	-12762 Jul 13 j 08:32	1° 8 16'49		minimum elong	-12756 Jan 12 j 23:41		
				max. Earth dist.	-12756 Jan 13 j 21:07		6.08960 AU
conjunction	-12762 Jul 25 j 16:21			morning rise	-12756 Jan 26 j 17:38		
minimum elong	-12762 Jul 25 j 16:18				-12756 Feb 10 j 23:08		
max. Earth dist.	-12762 Jul 25 j 00:30		6.29652 AU		-12756 May 10 j 06:13		
morning rise	-12762 Aug 07 j 00:04			retrograde	-12756 Jun 02 j 21:38		
	-12762 Sep 13 j 22:44				-12756 Jun 26 j 06:54		
retrograde	-12762 Dec 10 j 05:16		2025125	opposition	-12756 Jul 31 j 19:00		
opposition	-12761 Feb 09 j 21:21			min. Earth dist.	-12756 Jul 31 j 09:45		4.11474 AU
min. Earth dist.	-12761 Feb 10 j 04:46		4.26950 AU	direct	-12756 Sep 28 j 18:27		
direct	-12761 Apr 12 j 04:43				-12756 Dec 19 j 05:45		
. ,	-12761 Jul 30 j 16:45			evening set	-12755 Feb 04 j 07:11	25°11L05'06	
evening set	-12761 Aug 13 j 16:22	3°Д08′50		:	12755 E-k 17 : 22.02	200M 12122	1942127
	127(1 A 2(:02-2(50T50125	1940120	conjunction	-12755 Feb 17 j 23:02		
conjunction	-12761 Aug 26 j 02:36			minimum elong	-12755 Feb 17 j 23:04		
minimum elong	-12761 Aug 26 j 02:39			max. Earth dist.	-12755 Feb 18 j 05:46		0.14409 AU
max. Earth dist.	-12761 Aug 25 j 23:26 -12761 Sep 07 j 14:31		6.23444 AU	mamina risa	-12755 Feb 25 j 19:15		
Č	-12760 Jan 13 j 16:00			morning rise retrograde	-12755 Mar 03 j 13:41 -12755 Jul 06 j 13:40		
retrograde	-12760 Mar 15 j 08:02		2005155	opposition	-12755 Sep 03 j 09:51		201650
opposition min. Earth dist.	-12760 Mar 15 j 04:52			min. Earth dist.	-12755 Sep 03 j 09:31 -12755 Sep 03 j 09:44		
direct	-12760 May 14 j 10:24		4.1964/ AU	direct	-12755 Nov 02 j 13:34		4.18104 AU
direct	-12760 May 14 j 10.24 -12760 Aug 18 j 09:45			evening set	-12754 Mar 12 j 00:35		
evening set	-12760 Aug 18 j 09:43 -12760 Sep 14 j 01:38			evening set	-12754 Mar 16 j 18:26		
evening set	-12/00 Sep 14 J 01.38	3 330 10			-12/34 Widi 10 J 18.20	0 0	
conjunction	-12760 Sep 26 j 20:42	8°956'02	1°03'09	conjunction	-12754 Mar 25 j 12:33	1º云58'42	-1°13'04
minimum elong	-12760 Sep 26 j 20:48		1°03'58	minimum elong	-12754 Mar 25 j 12:39		
max. Earth dist.	-12760 Sep 27 j 07:19		6.16113 AU	max. Earth dist.	-12754 Mar 25 j 05:20		
morning rise	-12760 Oct 09 j 19:00		0.10113710	morning rise	-12754 Apr 07 j 21:36		0.21004710
morning rise	-12759 Jan 18 j 22:54			retrograde	-12754 Aug 08 j 04:44		
retrograde	-12759 Feb 17 j 04:41	1° Ω 18'10		opposition	-12754 Oct 06 j 09:32		-1°12'08
1011081444	-12759 Mar 18 j 06:01			min. Earth dist.	-12754 Oct 06 j 18:37		
opposition	-12759 Apr 19 j 07:43		0°51'32	direct	-12754 Dec 06 j 18:10		20000110
min. Earth dist.	-12759 Apr 18 j 20:08				-12753 Apr 07 j 20:49		
direct	-12759 Jun 17 j 08:31			evening set	-12753 Apr 14 j 23:27		
	-12759 Sep 02 j 13:48			max. Earth dist.	-12753 Apr 27 j 09:07		6.28680 AU
evening set	-12759 Oct 18 j 03:39	9° Ω 56'12			1 ,		
	•			conjunction	-12753 Apr 28 j 04:29	4° ≈ 31'39	-0°19'50
conjunction	-12759 Oct 31 j 10:05	13° Ω 01'44	0°03'55	minimum elong	-12753 Apr 28 j 04:31	4° ≈ 31'41	0°20'31
minimum elong	-12759 Oct 31 j 10:05	13° Ω 01'44	0°04'32	morning rise	-12753 May 11 j 06:08	7° ≈ 27'08	
behind sun begin	-12759 Oct 31 j 02:00	12° Ω 57'02			-12753 Jun 15 j 15:19	15° ≈	
behind sun end	-12759 Oct 31 j 18:10	13° Ω 06′25		retrograde	-12753 Sep 09 j 02:44	24° ≈ 55′22	
max. Earth dist.	-12759 Nov 01 j 08:32	13° Ω 14'50	6.10003 AU	asc. node	-12753 Sep 09 j 14:24	24° ≈ 55′20	
	-12759 Nov 08 j 20:56	15° Ω		opposition	-12753 Nov 08 j 00:52	20° ≈ 02'29	0°13'03
morning rise	-12759 Nov 13 j 20:10	16° Ω 09'14		min. Earth dist.	-12753 Nov 08 j 16:03	19° ≈ 57'34	4.31197 AU
desc. node	-12759 Nov 24 j 14:56	18° Ω 37′50		direct	-12752 Jan 09 j 05:36	15° ≈ 00′23	
	-12758 Jan 19 j 16:27	0° m			-12752 May 01 j 11:28	0°) €	
retrograde	-12758 Mar 25 j 04:50	5° m 56'11		evening set	-12752 May 16 j 08:31	3°) 15′25	
opposition	-12758 May 24 j 11:49	0° m ∕51'52	-0°42'50	max. Earth dist.	-12752 May 28 j 05:14	5°) 54′10	6.32825 AU
min. Earth dist.	-12758 May 23 j 18:53	0° m ,57'35	4.08151 AU				
	-12758 May 30 j 22:33			conjunction	-12752 May 29 j 04:32	6°) €07'12	0°38'26
direct	-12758 Jul 21 j 19:01	25° Ω 55'47		minimum elong	-12752 May 29 j 04:28	6° ∺ 07'10	0°38'06
	-12758 Sep 10 j 13:21	0° m)		morning rise	-12752 Jun 10 j 21:23	8° ¥ 57′26	
evening set	-12758 Nov 23 j 02:44	14° m 52'27		retrograde	-12752 Oct 09 j 23:39		
				opposition	-12752 Dec 09 j 17:04		1°32'55
conjunction	-12758 Dec 06 j 17:18		-0°57'47	min. Earth dist.	-12752 Dec 10 j 10:00		4.33535 AU
minimum elong	-12758 Dec 06 j 17:11	-	0°57'36	direct	-12751 Feb 10 j 04:18		
max. Earth dist.	-12758 Dec 07 j 18:56	-	6.07281 AU		-12751 May 27 j 04:58	0° Υ	
morning rise	-12758 Dec 20 j 10:39	21°M)14'15		evening set	-12751 Jun 16 j 16:50	4° Υ 28'25	
	-12757 Jan 29 j 02:06	0∘ ⊽		max. Earth dist.	-12751 Jun 28 j 05:21	7° Y 03'23	6.33059 AU
retrograde	-12757 Apr 29 j 23:25	11° ≏ 02'07					
opposition	-12757 Jun 28 j 10:21	5° ჲ 57'23		conjunction	-12751 Jun 29 j 04:17	7° Y 16′16	1°24'56
min. Earth dist.	-12757 Jun 27 j 18:39		4.07666 AU	minimum elong	-12751 Jun 29 j 04:11	7° Y 16′13	1°25'01
direct	-12757 Aug 25 j 17:41	0° £ 57'53		morning rise	-12751 Jul 11 j 14:10	10° Y 03′20	

Dlanatamy Dlaan	amana af Ismitan fua	12000	thmough 1220	O (LIT) A atma di am	at AC 10 Eab 2025	14.22	
•	omena of Jupiter fro ical year style is used: The		_	· //			page 14
retrograde	-12751 Nov 11 j 10:35		in astronomical co	min. Earth dist.	-12745 Jul 02 j 16:01		
opposition	-12750 Jan 11 j 19:43		2°25'44	direct	-12745 Aug 30 j 14:57		4.07000 AC
min. Earth dist.	-12750 Jan 12 j 09:40		4.31772 AU	evening set	-12744 Jan 04 j 12:38		
direct	-12750 Mar 14 j 21:42			evening sec	1271.0001 01912.30	20 -1000	
	-12750 Jun 21 j 05:06			conjunction	-12744 Jan 18 j 05:54	28° ≏ 26'13	-1°41'34
evening set	-12750 Jul 17 j 16:20			minimum elong	-12744 Jan 18 j 05:50		1°41'58
max. Earth dist.	-12750 Jul 29 j 10:26		6.29320 AU	max. Earth dist.	-12744 Jan 19 j 00:49		6.09226 AU
	J				-12744 Jan 25 j 00:05		
conjunction	-12750 Jul 30 j 00:06	8° 8 34'34	1°46'52	morning rise	-12744 Jan 31 j 23:44	1°M36'35	
minimum elong	-12750 Jul 30 j 00:05	8° 8 34'33	1°47'22		-12744 Apr 05 j 15:27	15° ™	
morning rise	-12750 Aug 11 j 07:47	11° 8 22'05		retrograde	-12744 Jun 07 j 17:20	20° M $55'06$	
	-12750 Aug 27 j 16:02	15° 8		opposition	-12744 Aug 05 j 14:17	15°M52'42	-2°38'00
retrograde	-12750 Dec 14 j 20:38	29° 8 30'41		min. Earth dist.	-12744 Aug 05 j 05:30	15°M55'43	4.12055 AU
opposition	-12749 Feb 14 j 14:37		2°36'04		-12744 Aug 12 j 01:00		
min. Earth dist.	-12749 Feb 14 j 20:34		4.26382 AU	direct	-12744 Oct 03 j 17:10	10°M49'51	
direct	-12749 Apr 16 j 18:18				-12744 Nov 25 j 06:14		
	-12749 Jul 13 j 15:41			evening set	-12743 Feb 09 j 11:04	0° ∡ 04'19	
evening set	-12749 Aug 18 j 01:45	7° Ⅱ 43'21			-12743 Feb 09 j 03:27	0° ∡ 7	
conjunction	-12749 Aug 30 j 12:42	10° Ⅱ 34'45	1°36'59	conjunction	-12743 Feb 23 j 02:38	3° ⊀ 11'06	-1°41'12
minimum elong	-12749 Aug 30 j 12:46		1°37'45	minimum elong	-12743 Feb 23 j 02:41	3° ∡ 11′08	
max. Earth dist.	-12749 Aug 30 j 10:15		6.22680 AU	max. Earth dist.	-12743 Feb 23 j 08:40	3° ∡ 14'33	6.15330 AU
morning rise	-12749 Sep 12 j 01:44			morning rise	-12743 Mar 08 j 16:34		
C	-12749 Dec 10 j 05:11			retrograde	-12743 Jul 11 j 07:30		
retrograde	-12748 Jan 18 j 12:06			opposition	-12743 Sep 08 j 03:16		-2°09'57
	-12748 Feb 26 j 22:36	30°RⅡ		min. Earth dist.	-12743 Sep 08 j 04:35	19° ∡ 51'49	4.19190 AU
opposition	-12748 Mar 20 j 02:38	27° Ⅱ 17'56	1°57'52	direct	-12743 Nov 07 j 11:29	14° ∡ °48′00	
min. Earth dist.	-12748 Mar 19 j 23:10	27° Ⅱ 19'04	4.18913 AU		-12742 Feb 27 j 23:30	8°0	
direct	-12748 May 19 j 02:24	22° II 25'00		evening set	-12742 Mar 16 j 22:49	3° る 44'53	
	-12748 Jul 30 j 16:35	0					
evening set	-12748 Sep 18 j 15:19	10°9540'57		conjunction	-12742 Mar 30 j 09:59	6° ප 46'51	-1°06'29
				minimum elong	-12742 Mar 30 j 10:05	6° る 46'54	
conjunction	-12748 Oct 01 j 11:59			max. Earth dist.	-12742 Mar 30 j 00:50		6.22962 AU
minimum elong	-12748 Oct 01 j 12:05		0°56'46	morning rise	-12742 Apr 12 j 18:08	9° ප් 47'11	
max. Earth dist.	-12748 Oct 02 j 00:05		6.15119 AU	retrograde	-12742 Aug 12 j 17:01		
morning rise	-12748 Oct 14 j 11:58			opposition	-12742 Oct 11 j 00:48		
	-12748 Dec 17 j 21:45			min. Earth dist.	-12742 Oct 11 j 10:28		4.26557 AU
retrograde	-12747 Feb 22 j 03:23	6° Ω 07'54		direct	-12742 Dec 11 j 12:30		
opposition	-12747 Apr 24 j 03:39				-12741 Mar 21 j 19:08	0° ≈	
min. Earth dist.	-12747 Apr 23 j 15:16		4.11784 AU	evening set	-12741 Apr 19 j 15:31	6°≈12'39	
1.	-12747 May 02 j 12:10				1074134 00:10.00	00 - 00102	0011120
direct	-12747 Jun 22 j 00:34			conjunction	-12741 May 02 j 19:20	9°≈09'03	
daga mada	-12747 Aug 10 j 04:39			minimum elong	-12741 May 02 j 19:22	9°≈09'03	0°12'08
desc. node evening set	-12747 Oct 05 j 01:49 -12747 Oct 23 j 00:05			behind sun begin behind sun end	-12741 May 02 j 13:54 -12741 May 03 j 00:50	9°≈06'01 9°≈12'06	
evening set	-12747 Oct 23 j 18:33			max. Earth dist.	-12741 May 03 j 00:30	8°≈57'56	6.29599 AU
	-12/4/ Oct 25 j 18.55	13 06		morning rise	-12741 May 01 j 23:30 -12741 May 15 j 19:43		0.29399 AU
conjunction	-12747 Nov 05 j 07:54	17°Ω55'49	-0°05'04	morning 1150	-12741 May 13 j 19.43 -12741 May 29 j 04:19		
minimum elong	-12747 Nov 05 j 07:54			asc. node	-12741 Jul 19 j 14:17		
behind sun begin	-12747 Nov 04 j 23:47			retrograde	-12741 Sep 13 j 14:42		
behind sun end	-12747 Nov 05 j 15:59			opposition	-12741 Nov 12 j 15:10		0°25'11
max. Earth dist.	-12747 Nov 06 j 06:01		6.09141 AU	min. Earth dist.	-12741 Nov 13 j 07:15		4.31889 AU
morning rise	-12747 Nov 18 j 19:27			direct	-12740 Jan 13 j 22:26		
	-12747 Dec 29 j 05:56				-12740 Apr 14 j 02:11	0°) €	
retrograde	-12746 Mar 30 j 04:44	10° m 54'17		evening set	-12740 May 20 j 19:39	7°){ 46′27	
opposition	-12746 May 29 j 08:38	5° ™ 49'45	-0°55'31				
min. Earth dist.	-12746 May 28 j 15:43	5° ™ 55'29	4.07482 AU	conjunction	-12740 Jun 02 j 14:17	10°) 37′30	0°46'01
direct	-12746 Jul 26 j 14:37	0° m 53′12		minimum elong	-12740 Jun 02 j 14:13		0°45'45
evening set	-12746 Nov 28 j 05:42	19° m 54'14		max. Earth dist.	-12740 Jun 01 j 13:34	10°) 23′41	6.33205 AU
				morning rise	-12740 Jun 15 j 06:06	13° ¥ 27′07	
conjunction	-12746 Dec 11 j 21:12	23° m 04'58	-1°05'08		-12740 Sep 21 j 15:24	$0^{\circ}\Upsilon$	
minimum elong	-12746 Dec 11 j 21:05		1°05'01	retrograde	-12740 Oct 14 j 11:49		
max. Earth dist.	-12746 Dec 13 j 00:02		6.06880 AU		-12740 Nov 06 j 10:05		
morning rise	-12746 Dec 25 j 14:57			opposition	-12740 Dec 14 j 07:59		1°42'24
	-12745 Jan 10 j 21:37			min. Earth dist.	-12740 Dec 15 j 00:53		4.33595 AU
retrograde	-12745 May 04 j 23:29			direct	-12739 Feb 14 j 18:40		
opposition	-12745 Jul 03 j 06:58	10° £ 59'40	-2°10'46		-12739 May 09 j 09:24	0 ° $\mathbf{\Upsilon}$	

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 15 Attention, astronomical year style is used: The year -12739 in astronomical counting style is the year 12740 BCE in historical counting style.

Attention, astronomic	cal year style is used: The	year -12739	in astronomical co	unting style is the year	12740 BCE in historical	counting styl	le.
evening set	-12739 Jun 21 j 01:25	8° Y 57'32		conjunction	-12734 Dec 17 j 04:04	28° Mp 13'34	-1°12'09
				minimum elong	-12734 Dec 17 j 03:57	28° m 13'29	1°12'06
conjunction	-12739 Jul 03 j 12:06	11° Y 45'06	1°29'43	max. Earth dist.	-12734 Dec 18 j 06:06	28° Mp 28'44	6.07196 AU
minimum elong	-12739 Jul 03 j 12:01	11° Y 45'03	1°29'53		-12734 Dec 24 j 18:55	0∘ ⊽	
max. Earth dist.	-12739 Jul 02 j 15:02		6.32776 AU	morning rise	-12734 Dec 30 j 22:16		
morning rise	-12739 Jul 15 j 21:08			retrograde	-12733 May 09 j 21:47		
	-12739 Oct 08 j 14:59			opposition	-12733 Jul 08 j 04:38		
retrograde	-12739 Nov 16 j 01:19			min. Earth dist.	-12733 Jul 07 j 13:11		4.08398 AU
	-12739 Dec 24 j 23:11			direct	-12733 Sep 04 j 14:35		
opposition	-12738 Jan 16 j 12:30				-12732 Jan 08 j 08:22		
min. Earth dist.	-12738 Jan 17 j 01:46		4.31179 AU	evening set	-12732 Jan 09 j 18:23	0°11∟19′29	
direct	-12738 Mar 19 j 12:28				10700 1 00:11 00	2010 2010 4	104044
	-12738 Jun 02 j 13:20			conjunction	-12732 Jan 23 j 11:33		
evening set	-12738 Jul 22 j 01:28	10° 8 19'55		minimum elong	-12732 Jan 23 j 11:30		
	12729 4 02:00:05	120 407127	1047120	max. Earth dist.	-12732 Jan 24 j 06:15		6.10417 AU
conjunction	-12738 Aug 03 j 09:05			morning rise	-12732 Feb 06 j 04:45		
minimum elong max. Earth dist.	-12738 Aug 03 j 09:04 -12738 Aug 02 j 19:15			retrograde	-12732 Mar 15 j 07:08 -12732 Jun 12 j 12:10		
max. Earm dist.	-12738 Aug 02 j 19.13 -12738 Aug 11 j 14:53		0.26441 AU	opposition	-12732 Jun 12 j 12.10 -12732 Aug 10 j 07:45		2027106
morning rise	-12738 Aug 11 j 14.33			min. Earth dist.	-12732 Aug 10 j 07:43 -12732 Aug 10 j 00:51		
morning risc	-12738 Oct 26 j 14:55			direct	-12732 Aug 10 j 00:31 -12732 Oct 08 j 15:42		4.13320 AU
retrograde	-12738 Dec 19 j 16:10			direct	-12731 Jan 23 j 07:39		
retrograde	-12737 Feb 13 j 10:11			evening set	-12731 Feb 14 j 11:08		
opposition	-12737 Feb 19 j 10:08		2°33'37	evening set	12/31100 14 111.00	7 X 3730	
min. Earth dist.	-12737 Feb 19 j 15:02			conjunction	-12731 Feb 28 j 02:09	8° ∡ 100'42	-1°38'09
direct	-12737 Apr 21 j 10:11			minimum elong	-12731 Feb 28 j 02:13		
	-12737 Jun 23 j 01:37			max. Earth dist.	-12731 Feb 28 j 06:00		
evening set	-12737 Aug 22 j 13:53			morning rise	-12731 Mar 13 j 15:17		
Ü	e j			retrograde	-12731 Jul 15 j 17:34		
conjunction	-12737 Sep 04 j 02:04	15° Ⅱ 16'54	1°32'56	opposition	-12731 Sep 12 j 16:02		-2°02'16
minimum elong	-12737 Sep 04 j 02:09			min. Earth dist.	-12731 Sep 12 j 18:14		
max. Earth dist.	-12737 Sep 04 j 02:22			direct	-12731 Nov 12 j 04:06		
morning rise	-12737 Sep 16 j 16:19	18° Ⅱ 10′34			-12730 Feb 10 j 12:17	0° ප	
	-12737 Nov 12 j 06:49	0ංම		evening set	-12730 Mar 21 j 15:15	8° る 20'36	
retrograde	-12736 Jan 23 j 12:07	7° 5 06'24					
opposition	-12736 Mar 25 j 01:05	2° © 07'12	1°48'48	conjunction	-12730 Apr 04 j 01:26	11° පි 21'36	-0°59'46
min. Earth dist.	-12736 Mar 24 j 20:17	2°508'46	4.17658 AU	minimum elong	-12730 Apr 04 j 01:32		
	-12736 Apr 10 j 23:33			max. Earth dist.	-12730 Apr 03 j 13:25		
direct	-12736 May 23 j 20:21	27° Ⅱ 14′20		morning rise	-12730 Apr 17 j 08:37	14° る 20'57	
	-12736 Jul 04 j 20:23	0			-12730 Jul 11 j 12:42		
evening set	-12736 Sep 23 j 09:33	15° © 33'38		retrograde	-12730 Aug 17 j 01:45		
					-12730 Sep 22 j 17:27		
conjunction	-12736 Oct 06 j 07:43		0°48'09	opposition	-12730 Oct 15 j 10:50		
minimum elong	-12736 Oct 06 j 07:48		0°48'55	min. Earth dist.	-12730 Oct 15 j 22:57		4.27719 AU
max. Earth dist.	-12736 Oct 06 j 20:42		6.13962 AU	direct	-12730 Dec 16 j 03:02		
morning rise	-12736 Oct 19 j 09:33				-12729 Mar 03 j 08:57		
. 1	-12736 Nov 26 j 12:01	0° Ω		evening set	-12729 Apr 24 j 01:15		C 20200 ATT
retrograde	-12735 Feb 27 j 06:09		0025151	max. Earth dist.	-12729 May 06 j 06:10	13°≈20′40	6.30380 AU
opposition	-12735 Apr 29 j 03:55	6° Ω 05'41	0°25'51 4.10837 AU	:	12720 M 07 : 04.00	1200 020150	0902122
min. Earth dist. direct	-12735 Apr 28 j 14:04 -12735 Jun 26 j 21:41	6° Ω 10'17 1° Ω 11'36	4.1065 / AU	conjunction minimum elong	-12729 May 07 j 04:00 -12729 May 07 j 03:59		
desc. node	-12735 Juli 20 j 21:41 -12735 Aug 14 j 08:42	4°Ω54'18		behind sun begin	-12729 May 07 j 03:39 -12729 May 06 j 20:01		0 04 08
desc. Hode	-12735 Aug 14 j 08.42 -12735 Oct 06 j 15:16			behind sun end	-12729 May 00 j 20:01 -12729 May 07 j 11:57		
evening set	-12735 Oct 00 j 15:10 -12735 Oct 28 j 01:29			bennia sun ena	-12729 May 07 j 11:37		
evening set	-12/33 Oct 28 j 01.29	19 063230		morning rise	-12729 May 13 j 13:40 -12729 May 20 j 03:11		
conjunction	-12735 Nov 10 j 10:49	23°Ω00'23	-0°14'11	asc. node	-12729 May 30 j 18:07		
minimum elong	-12735 Nov 10 j 10:47			dsc. node	-12729 Jul 29 j 07:38		
behind sun begin	-12735 Nov 10 j 10:47			retrograde	-12729 Sep 17 j 20:30	3° ¥ 50′09	
behind sun end	-12735 Nov 10 j 15:10			rourogrado	-12729 Nov 08 j 21:44		
max. Earth dist.	-12735 Nov 11 j 12:00		6.08536 AU	opposition	-12729 Nov 17 j 00:32		0°36'34
morning rise	-12735 Nov 23 j 23:31			min. Earth dist.	-12729 Nov 17 j 17:09		4.32248 AU
J	-12735 Dec 10 j 18:29	0° m)		direct	-12728 Jan 18 j 08:22		
retrograde	-12734 Apr 04 j 08:38				-12728 Mar 25 j 11:33	0°) €	
opposition	-12734 Jun 03 j 08:51	-	-1°08'11	evening set	-12728 May 25 j 01:58	12°) €06'45	
min. Earth dist.	-12734 Jun 02 j 15:45				-		
direct	-12734 Jul 31 j 13:56	5° m 59'29		conjunction	-12728 Jun 06 j 19:26	14° ¥ 57'19	0°53'00
evening set	-12734 Dec 03 j 12:14	25° My $02'48$		minimum elong	-12728 Jun 06 j 19:21	14°) € 57'16	0°52'46

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12728 in astronomical counting style is the year 12729 BCE in historical counting style. max. Earth dist. -12728 Jun 05 i 18:17 14° \(\frac{14}{43}\)'14 6.33110 AU -12723 Nov 23 j 15:51 -12728 Jun 19 j 10:08 17° **X** 46'30 -12723 Nov 29 j 04:51 morning rise morning rise 1° mb 17'18 -12722 Apr 09 j 09:54 21° **m** 08'18 -12728 Aug 19 j 21:14 0°**Υ** retrograde -12728 Oct 18 j 21:42 5°**Y**10′35 retrograde opposition -12722 Jun 08 j 08:54 16° M 03'30 -1°20'24 -12728 Dec 18 j 19:19 0°Υ18'42 1°50'55 min. Earth dist. -12722 Jun 07 j 14:37 16° m 09'43 4.07397 AU opposition -12728 Dec 19 j 13:09 0° **Y** 13'03 4.33065 AU min. Earth dist. direct -12722 Aug 05 j 13:30 11° M 06'05 -12728 Dec 21 j 06:17 30°R ★ -12722 Dec 07 j 23:53 0∘ಹ -12727 Feb 19 j 06:02 25°**米** 20'17 direct -12722 Dec 08 j 18:50 evening set 0°**£**10'57 -12727 Apr 18 j 03:29 0°**Υ** evening set -12727 Jun 25 j 07:19 13°**Υ**20'41 conjunction -12722 Dec 22 j 11:11 3°**2**21'38 -1°18'40 minimum elong -12722 Dec 22 j 11:04 3°**2**21'34 1°18'43 -12727 Jul 07 j 17:16 16°**Υ**08'17 1°33'48 -12722 Dec 23 j 13:35 conjunction max. Earth dist. 3°**₽**37'00 6.07630 AU -12727 Jul 07 j 17:11 16°**Υ**′08'14 1°34'02 minimum elong morning rise -12721 Jan 05 j 05:21 6°**♀**33'14 max. Earth dist. -12727 Jul 06 j 19:13 15°**Υ**55'51 6.31830 AU retrograde -12721 May 14 j 21:50 26°**♀**12'25 morning rise -12727 Jul 20 j 02:01 18°**Y**55'18 opposition -12721 Jul 13 j 01:50 21°**2**08'15 -2°23'56 -12727 Sep 12 j 02:22 0° 8 min. Earth dist. -12721 Jul 12 j 12:09 21°**2**12'56 4.09152 AU retrograde -12727 Nov 20 j 15:23 6°**8**41'09 direct -12721 Sep 09 j 15:19 16°**♀**07'26 opposition -12726 Jan 21 j 03:49 1°**8**47'52 2°33'16 -12721 Dec 22 j 01:08 0°M min. Earth dist. -12726 Jan 21 j 15:54 1°**8**44'03 4.29908 AU evening set -12720 Jan 15 j 00:13 5°M22'05 -12726 Feb 04 j 17:05 30° R**Y** direct -12726 Mar 23 j 23:56 26° **Y** 52′25 conjunction -12720 Jan 28 j 17:11 8°MJ31'09 -1°45'18 -12726 May 09 i 06:53 0°8 minimum elong -12720 Jan 28 i 17:09 8°MJ31'07 1°45'48 evening set -12726 Jul 26 j 09:43 14°**8**51'58 max. Earth dist. -12720 Jan 29 j 10:02 8°ML40'50 6.11397 AU -12726 Jul 26 j 23:55 15°8 morning rise -12720 Feb 11 i 09:56 11° M 39'59 -12720 Feb 26 j 04:04 15°M -12726 Aug 07 j 17:47 17°**8**40'23 1°47'20 -12720 May 27 j 04:41 0° ₹ conjunction -12726 Aug 07 j 17:47 17°**8**40'23 1°47'55 -12720 Jun 17 j 04:58 0° ₹ 44'02 minimum elong retrograde -12726 Aug 07 j 06:58 17°**8**34'13 6.26951 AU -12720 Jul 08 j 01:44 30°RM max. Earth dist. -12726 Aug 20 j 02:17 20°**8**29'13 -12720 Aug 15 j 01:22 25°M42'35 -2°35'14 morning rise opposition -12726 Oct 03 j 19:32 0°II min. Earth dist. -12720 Aug 14 j 19:01 25° ML44'45 4.14647 AU -12726 Dec 24 j 13:15 8°**Ц**51'23 -12720 Oct 13 j 12:12 20°M39'11 retrograde direct -12725 Feb 24 j 06:15 3°**Д**55'16 2°30'06 -12719 Jan 04 j 14:09 0° **₹**7 opposition -12725 Feb 24 j 09:56 3°**І**54'05 4.23678 AU -12719 Feb 19 j 12:08 min. Earth dist. evening set 9°**х¹**47'06 -12725 Apr 01 j 01:37 30°R8 -12725 Apr 26 j 02:10 29°**8**01'54 -12719 Mar 05 j 02:31 12° ₹ 52'15 -1°34'29 direct conjunction -12725 May 20 j 22:15 0°**Ⅱ** -12719 Mar 05 j 02:36 12° ₹ 52'18 1°35'15 minimum elong -12725 Aug 27 j 03:29 17°**耳**09'11 -12719 Mar 05 j 02:59 12° ₹ 52'31 6.18112 AU evening set max. Earth dist. morning rise -12719 Mar 18 j 15:01 15° ₹ 56'17 conjunction -12725 Sep 08 j 16:45 20° II 02'47 1°28'09 -12719 May 28 j 15:05 0°る minimum elong -12725 Sep 08 j 16:50 20° **I** 02'50 1°28'57 retrograde -12719 Jul 20 j 08:30 4°쥥15'25 max. Earth dist. -12725 Sep 08 j 18:19 20°**Д**03'41 6.19889 AU -12719 Sep 12 j 00:38 30°R ✓ -12725 Sep 21 j 08:38 22°**Д**57'48 -12719 Sep 17 j 07:11 29° ₹ 17'42 -1°53'49 morning rise opposition -12725 Oct 23 j 04:31 0°5 min. Earth dist. -12719 Sep 17 j 11:54 29° ₹ 16'07 4.21887 AU retrograde -12724 Jan 28 j 13:30 12°500'52 direct -12719 Nov 17 j 00:18 24° ₹ 13'21 -12724 Mar 30 j 00:46 7°501'03 1°38'46 -12718 Jan 20 j 07:56 0°**ਰ** opposition -12724 Mar 29 j 17:24 7°503'27 4.16242 AU min. Earth dist. evening set -12718 Mar 26 j 09:56 13°る02'00 direct -12724 May 28 j 15:10 2°508'06 -12718 Apr 08 j 19:24 16°る02'18 -0°52'34 evening set -12724 Sep 28 j 05:50 20°531'05 conjunction -12718 Apr 08 j 19:29 16°る02'21 0°53'21 minimum elong -12724 Oct 11 j 05:52 23°532'30 0°39'49 max. Earth dist. -12718 Apr 08 j 06:16 15°る54'55 6.25386 AU conjunction -12724 Oct 11 j 05:56 23°532'32 0°40'35 morning rise -12718 Apr 22 j 01:29 19°る00'52 minimum elong max. Earth dist. -12724 Oct 11 j 23:01 23°542'29 6.12836 AU -12718 Jun 14 j 11:31 0°≈ -12724 Oct 24 j 09:18 26°535'51 retrograde -12718 Aug 21 j 11:51 morning rise 6°≈42'13 -12724 Nov 08 j 07:01 $0^{\circ}\Omega$ opposition -12718 Oct 20 j 00:25 1°≈47'56 -0°37'34 -12723 Feb 04 j 10:55 15°**Ω** min. Earth dist. -12718 Oct 20 j 12:46 1°≈43'53 4.28492 AU -12723 Mar 04 j 10:58 16° Ω 12'28 retrograde -12718 Nov 03 j 01:18 30°R궁 -12723 Apr 01 j 04:16 15°R€ direct -12718 Dec 20 j 18:37 26°₹44'33 -12723 May 04 j 05:15 $11^{\circ}\Omega$ 09'24 $0^{\circ}12'12$ opposition -12717 Feb 06 j 13:58 0°≈ min. Earth dist. -12723 May 03 j 14:36 $11^{\circ}\Omega$ 14'17 4.10084 AU asc. node -12717 Apr 09 j 01:35 10°≈55'21 desc. node -12723 Jun 23 j 14:17 6°**£**21′56 -12717 Apr 27 j 19:16 15°≈ -12723 Jul 01 j 20:27 6°**Ω**14'59 direct evening set -12717 Apr 28 j 15:03 15°≈10'58 -12723 Sep 17 j 11:56 15°**Ω** evening set -12723 Nov 02 j 04:24 24° **Ω**59'14 conjunction -12717 May 11 j 16:25 18°≈05'51 0°04'54 minimum elong -12717 May 11 j 16:25 18°≈05'51 0°04'21 conjunction -12723 Nov 15 j 14:49 28°**Ω**07'20 -0°23'18 behind sun begin -12717 May 11 j 08:29 18°≈01'26 minimum elong -12723 Nov 15 j 14:47 28° Ω 07'18 0°22'53 behind sun end -12717 May 12 j 00:21 18°≈10'15

max. Earth dist.

-12717 May 10 j 16:49 17°≈52'39 6.30899 AU

max. Earth dist.

-12723 Nov 16 j 16:08 28° Ω22'07 6.08181 AU

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12717 in astronomical counting style is the year 12718 BCE in historical counting style. -12717 May 24 j 14:33 20°≈59'01 -12711 May 17 j 10:16 15°RΩ morning rise -12717 Jul 06 j 16:00 0°**)**€ -12711 Jul 06 j 15:30 11° Ω 11'07 direct -12717 Sep 22 j 09:11 -12711 Aug 24 j 18:27 15°**Ω** retrograde 8°**)**€21'35 -12717 Nov 21 j 14:41 3°**米**29'24 0°48'15 -12711 Nov 07 j 04:12 29° **Ω**57'23 opposition evening set -12717 Nov 22 j 08:42 3°**米**23'37 4.32484 AU -12711 Nov 07 j 08:43 min. Earth dist. 0° m -12717 Dec 21 j 18:50 30°R≈ -12711 Nov 20 j 15:49 direct -12716 Jan 23 j 00:48 28°≈28'22 conjunction 3° **m** $06'00 -0^{\circ}32'00$ -12716 Feb 24 j 07:58 0°**∀** minimum elong -12711 Nov 20 j 15:45 3° mg 05'58 0°31'36 evening set -12716 May 29 j 12:22 16° **★** 37'28 max. Earth dist. -12711 Nov 21 j 18:24 3°m/21'31 6.08090 AU max. Earth dist. -12716 Jun 10 j 03:36 19° **∺** 13'28 6.33032 AU morning rise -12711 Dec 04 j 06:37 6° Mp 16'19 -12710 Apr 14 j 09:39 26° Mp 06'29 retrograde -12716 Jun 11 j 04:43 19°**∺**27'33 -12710 Jun 13 j 04:56 21° m 01'37 -1°31'37 conjunction 1°00'00 opposition -12716 Jun 11 j 04:38 19°**∺**27'30 minimum elong 0°59'51 min. Earth dist. -12710 Jun 12 j 12:02 21° Mp 07'23 4.07544 AU morning rise -12716 Jun 23 j 18:23 22°\ 16'20 direct -12710 Aug 10 j 10:56 16° Mp 03'43 -12716 Jul 30 j 02:39 $0^{\circ}\Upsilon$ -12710 Nov 21 j 01:45 0∘**⊽** retrograde -12716 Oct 23 j 10:39 9°**Y**42'53 evening set -12710 Dec 13 j 21:49 5°**£**10'13 opposition -12716 Dec 23 j 11:24 4°**Υ**50'56 1°59'14 min. Earth dist. -12716 Dec 24 j 03:49 4°**Υ**45'44 4.32725 AU conjunction -12710 Dec 27 j 14:29 8°**£**20'51 -1°24'24 -12715 Feb 15 j 01:33 30°R € minimum elong -12710 Dec 27 j 14:22 8°**£**20'47 1°24'31 direct -12715 Feb 23 j 19:45 29° **€** 53'01 max. Earth dist. -12710 Dec 28 j 15:32 8°**£**35'24 6.07976 AU -12715 Mar 04 j 14:14 0°**Υ** morning rise -12709 Jan 10 j 08:47 11° **△**32'16 evening set -12715 Jun 29 j 16:49 17° Υ 53'18 -12709 Apr 23 i 09:03 0°M max. Earth dist. -12715 Jul 11 j 06:11 20°**Υ**29'32 6.31255 AU retrograde -12709 May 19 j 16:43 1°ML07'43 -12709 Jun 14 j 17:19 30°R ₽ conjunction -12715 Jul 12 j 02:07 20° γ 40'48 1°37'34 opposition -12709 Jul 17 j 19:26 26° **2**03'49 -2°28'50 -12715 Jul 12 j 02:02 20°**Υ**'40'45 min. Earth dist. -12709 Jul 17 j 06:06 26° **2**08'24 4.09687 AU minimum elong 1°37'50 -12715 Jul 24 j 10:21 23°**Y**27'50 direct -12709 Sep 14 j 09:52 21° **2**02'35 morning rise -12715 Aug 23 j 13:53 0°8 -12709 Dec 03 j 05:59 0°ML -12715 Nov 25 j 09:52 11°**8**18'26 -12708 Jan 20 j 02:38 10°ML17'36 retrograde evening set -12714 Jan 25 j 22:46 6°**8**24'55 2°35'45 opposition -12714 Jan 26 j 10:17 6°**8**21'17 4.29164 AU -12708 Feb 02 j 19:21 13°M26'16 -1°46'01 min. Earth dist. conjunction -12714 Mar 28 j 16:48 1°**8**29'55 direct minimum elong -12714 Jul 10 j 14:17 15°**8** max. Earth dist. -12708 Feb 03 j 08:44 13°ML33'57 6.12055 AU -12714 Jul 30 j 20:33 19°**8**30'06 -12708 Feb 09 j 14:27 15°M evening set -12708 Feb 16 j 11:45 16° ML34'36 morning rise -12714 Aug 12 j 04:49 22°**8**18'58 1°46'36 -12708 Apr 21 j 23:30 0° ₹ conjunction -12714 Aug 12 j 04:50 22°**8**18'59 1°47'15 minimum elong retrograde -12708 Jun 21 j 21:26 5° ₹ 33'30 max. Earth dist. -12714 Aug 11 j 19:02 22°**8**13'23 6.26104 AU opposition -12708 Aug 19 j 17:01 0°**尽** 32'30 -2°32'23 morning rise -12714 Aug 24 j 14:04 25°**8**08'26 min. Earth dist. -12708 Aug 19 j 13:07 0° ₹33'50 4.15358 AU -12714 Sep 15 j 11:07 0°**Ц** -12708 Aug 23 j 16:33 30°RM retrograde -12714 Dec 29 j 09:48 13°**Д**36'01 direct -12708 Oct 18 j 08:18 25°M28'51 -12713 Mar 01 j 03:22 8°**Д**39'23 2°25'37 -12708 Dec 12 j 16:13 0° ⊀ opposition min. Earth dist. -12713 Mar 01 j 04:24 8°**Д**39'03 4.22803 AU -12707 Feb 24 j 10:54 14° ₹35'38 evening set -12713 Apr 30 j 18:16 3°**Д**46'13 direct -12713 Aug 31 j 17:20 21°**Д**54'39 conjunction -12707 Mar 10 j 01:01 17° ₹ 40'22 -1°30'12 evening set -12707 Mar 10 j 01:06 17° ₹ 40'24 1°30'59 minimum elong -12713 Sep 13 j 08:00 24° II 49'10 1°22'53 -12707 Mar 10 j 00:23 17° ₹ 40'00 6.18840 AU conjunction max. Earth dist. -12713 Sep 13 j 08:05 24° **II** 49'13 1°23'41 minimum elong morning rise -12707 Mar 23 j 12:41 20° ₹ 43'48 max. Earth dist. -12713 Sep 13 j 13:24 24° II 52'18 6.19076 AU -12707 May 06 j 00:01 0°る -12713 Sep 26 j 01:09 27° **II**45'09 retrograde -12707 Jul 24 j 20:55 8°る58'04 morning rise -12713 Oct 05 j 22:04 0°95 opposition -12707 Sep 21 j 21:25 4° 중00'53 -1°44'42 -12712 Feb 02 j 14:25 16°552'42 min. Earth dist. -12707 Sep 22 j 02:37 3°る59'08 4.22565 AU retrograde -12712 Apr 03 j 23:16 11°952'24 1°28'10 -12707 Oct 26 j 19:42 30°R 🗷 opposition min. Earth dist. -12712 Apr 03 j 15:15 11°555'01 4.15536 AU direct -12707 Nov 21 j 17:16 28° ₹ 56'35 -12712 Jun 02 j 10:44 6°\$59'22 direct -12707 Dec 17 j 23:40 0°る evening set -12712 Oct 03 j 00:31 25°523'56 evening set -12706 Mar 31 j 04:16 17°₹43'20 -12712 Oct 16 j 01:55 28°526'13 0°31'25 -12706 Apr 13 j 12:43 20°₹43'02 -0°45'01 conjunction conjunction -12712 Oct 16 j 01:59 28°\$26'15 0°32'09 -12706 Apr 13 j 12:47 20°₹43'05 minimum elong minimum elong 0°45'46 -12712 Oct 16 j 19:36 28°536'31 6.12301 AU -12706 Apr 12 j 20:37 20°る34'00 6.25984 AU max. Earth dist. max. Earth dist. -12712 Oct 22 j 18:58 $0 {\circ} \Omega$ morning rise -12706 Apr 26 j 18:01 23°중41'02 morning rise -12712 Oct 29 j 07:08 1°**£**30′33 -12706 May 25 j 22:34 0°≈ -12711 Jan 02 j 07:33 15° Ω retrograde -12706 Aug 26 j 01:14 11°≈19'30 retrograde -12711 Mar 09 j 09:36 21°**Ω**09'21 opposition -12706 Oct 24 j 14:55 6°≈25'35 -0°25'26 desc. node -12711 May 04 j 09:47 16°**Ω**43'37 min. Earth dist. -12706 Oct 25 j 04:52 6°**≈**21'01 4.28958 AU

direct

asc. node

-12706 Dec 25 j 12:50

-12705 Feb 16 j 12:43

1°≈22'25

5°≈19'34

min. Earth dist.

opposition

-12711 May 08 j 10:45 $16^{\circ}\Omega$ 11'20 4.09760 AU

-12711 May 09 j 03:01 $16^{\circ}\Omega$ 05'54 -0° 01'08

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 18 Attention, astronomical year style is used: The year -12705 in astronomical counting style is the year 12706 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -12705	in astronomical co	ounting style is the year	r 12706 BCE in historical	counting sty	le.
	-12705 Apr 11 j 04:31	15° ≈		morning rise	-12700 Nov 03 j 05:03	6° Ω 23'54	
evening set	-12705 May 03 j 04:57				-12700 Dec 12 j 04:25		
max. Earth dist.	-12705 May 15 j 06:33	22° ≈ 28′25	6.31213 AU	retrograde	-12699 Mar 14 j 10:56		
				desc. node	-12699 Mar 14 j 21:09		
conjunction	-12705 May 16 j 05:17			min. Earth dist.	-12699 May 13 j 08:49		
minimum elong	-12705 May 16 j 05:15		0°12'42	opposition	-12699 May 14 j 00:30		-0°14'28
behind sun begin	-12705 May 16 j 00:09			direct	-12699 Jul 11 j 12:15		
behind sun end	-12705 May 16 j 10:22				-12699 Oct 21 j 12:52		
morning rise	-12705 May 29 j 02:05			evening set	-12699 Nov 12 j 04:59	4° Mp 56′01	
	-12705 Jun 18 j 10:38						
retrograde	-12705 Sep 26 j 20:52			conjunction	-12699 Nov 25 j 17:37		
opposition	-12705 Nov 26 j 06:05			minimum elong	-12699 Nov 25 j 17:32		
min. Earth dist.	-12705 Nov 26 j 22:55		4.32639 AU	max. Earth dist.	-12699 Nov 26 j 20:04	-	6.07742 AU
direct	-12704 Jan 27 j 15:51			morning rise	-12699 Dec 09 j 09:23		
evening set	-12704 Jun 02 j 23:39	21° ∺ 10'45			-12698 Mar 24 j 02:49	0∘ ত	
				retrograde	-12698 Apr 19 j 08:50	1° ≏ 06'08	
conjunction	-12704 Jun 15 j 14:39				-12698 May 15 j 07:28		
minimum elong	-12704 Jun 15 j 14:33			min. Earth dist.	-12698 Jun 17 j 08:20		
max. Earth dist.	-12704 Jun 14 j 13:44		6.33009 AU	opposition	-12698 Jun 18 j 01:31		-1°42'15
morning rise	-12704 Jun 28 j 03:21			direct	-12698 Aug 15 j 06:35	-	
	-12704 Jul 12 j 15:08				-12698 Nov 02 j 04:44		
retrograde	-12704 Oct 28 j 02:34			evening set	-12698 Dec 19 j 02:33	10° £ 12′10	
opposition	-12704 Dec 28 j 04:31						
min. Earth dist.	-12704 Dec 28 j 21:05		4.32527 AU	conjunction	-12697 Jan 01 j 19:25		
direct	-12703 Feb 28 j 12:48			minimum elong	-12697 Jan 01 j 19:19		
evening set	-12703 Jul 04 j 02:38	22°\\'26'50		max. Earth dist.	-12697 Jan 02 j 18:11		6.08118 AU
	10000 7 1 16:11 04	2.50001.441	104045	morning rise	-12697 Jan 15 j 13:46		
conjunction	-12703 Jul 16 j 11:24				-12697 Mar 21 j 03:41		
minimum elong	-12703 Jul 16 j 11:20		1°41'05	retrograde	-12697 May 24 j 13:41		2022145
max. Earth dist.	-12703 Jul 15 j 16:51		6.30870 AU	opposition	-12697 Jul 22 j 14:34		
morning rise	-12703 Jul 28 j 19:20			min. Earth dist.	-12697 Jul 22 j 03:01		4.10051 AU
	-12703 Aug 06 j 16:11			1	-12697 Jul 30 j 07:15		
. 1	-12703 Nov 05 j 09:32			direct	-12697 Sep 19 j 08:14		
retrograde	-12703 Nov 30 j 02:09				-12697 Nov 09 j 04:25		
	-12703 Dec 24 j 22:01		2027117		-12696 Jan 24 j 00:59		
opposition	-12702 Jan 30 j 17:31			evening set	-12696 Jan 25 j 07:07	15" 61/111	
min. Earth dist.	-12702 Jan 31 j 02:43		4.28622 AU	:	12000 E-L 07: 22:40	100 m 25124	1945150
direct	-12702 Apr 02 j 07:18 -12702 Jun 22 j 14:38			conjunction	-12696 Feb 07 j 23:49		
arranina aat	•			max. Earth dist.	-12696 Feb 07 j 23:49 -12696 Feb 08 j 12:27		
evening set	-12702 Aug 04 j 06:56	24 O 00 38			-12696 Feb 21 j 15:36		0.12009 AU
agniumation	-12702 Aug 16 j 15:39	260 456116	1045!14	morning rise	-12696 Mar 31 j 08:59	21 II 6 33 23	
conjunction minimum elong	• •			retrograde			
max. Earth dist.	-12702 Aug 16 j 15:40 -12702 Aug 16 j 08:33			opposition	-12696 Jun 26 j 15:13 -12696 Aug 24 j 10:29		2020127
morning rise	-12702 Aug 10 j 08:33		0.23431 AU	min. Earth dist.	-12696 Aug 24 j 10:29		4.16048 AU
morning rise	-12702 Aug 29 j 01:27 -12702 Aug 30 j 01:38			direct	-12696 Oct 23 j 04:20	0° ₹ 23'01	4.10046 AU
retrograde	-12701 Jan 03 j 07:48			evening set	-12695 Mar 01 j 11:45		
opposition	-12701 Jan 05 j 07:48 -12701 Mar 05 j 23:55		2°20'13	evening set	-12093 Wai 01 J 11.43	19 8 2031	
min. Earth dist.	-12701 Mar 06 j 00:37			conjunction	-12695 Mar 15 j 01:10	220 🗷 32150	-1°25'14
direct	-12701 May 05 j 12:13		7.2201 <i>J I</i> AU	minimum elong	-12695 Mar 15 j 01:16		
evening set	-12701 May 05 j 12:15 -12701 Sep 05 j 06:52			max. Earth dist.	-12695 Mar 14 j 21:03		6.19613 AU
evening set	-12701 Sep 05 j 00.52	20 113732		morning rise	-12695 Mar 28 j 12:18		0.19013 AU
conjunction	-12701 Sep 17 j 22:43	20°π33'17	1°17'06	morning rise	-12695 Apr 17 j 09:50		
minimum elong	-12701 Sep 17 j 22:49		1°17'54	retrograde	-12695 Jul 29 j 12:33		
max. Earth dist.				-			103447
max. Latui Uist.	-12701 Sep 18 j 04:55 -12701 Sep 19 j 20:54		0.10231 AU	opposition min. Earth dist.	-12695 Sep 26 j 13:57 -12695 Sep 26 j 20:44		4.23349 AU
morning rise	-12701 Sep 19 j 20:34 -12701 Sep 30 j 17:31	2°930'20			-12695 Nov 26 j 14:23		4.23349 AU
retrograde	-12701 Sep 30 j 17.31 -12700 Feb 07 j 12:00			direct evening set	-12694 Apr 04 j 23:47		
opposition	-12700 Feb 07 j 12:00 -12700 Apr 08 j 20:28		1°17'04	evening set	-12094 Apr 04 J 25:4/	22 02820	
min. Earth dist.	-12700 Apr 08 j 20.28 -12700 Apr 08 j 10:27		4.14730 AU	conjunction	-12694 Apr 18 j 07:24	วร∘₹วฃวด	-0°37'06
direct	-12700 Apr 08 j 10:27 -12700 Jun 07 j 03:21		7.17/30 AU	minimum elong	-12694 Apr 18 j 07:24 -12694 Apr 18 j 07:27		
direct	-12700 Jun 07 j 03:21 -12700 Oct 06 j 16:58			max. Earth dist.	-12694 Apr 18 j 07:27 -12694 Apr 17 j 15:46		6.26759 AU
evening set	-12700 Oct 06 j 16:38 -12700 Oct 07 j 19:22	0° Ω 15'16		max. Earth dist.	-12694 Apr 17 j 15:46 -12694 May 01 j 11:28		0.20/37 AU
evening set	-12700 Oct 0/J 19:22	0 0613 10		morning rise	-12694 May 01 j 11:28 -12694 May 08 j 15:08		
conjunction	-12700 Oct 20 j 22:24	3° Ω 18'35	0°22'50		-12694 May 08 j 15:08 -12694 Aug 05 j 16:23		
minimum elong	-12700 Oct 20 j 22:24 -12700 Oct 20 j 22:27	3° Ω 18'36	0°23'31	retrograde	-12694 Aug 30 j 14:14		
max. Earth dist.	-12700 Oct 20 j 22:27 -12700 Oct 21 j 18:04		6.11601 AU	renograde	-12694 Aug 30 j 14:14 -12694 Sep 24 j 13:14		
max. Earm dist.	-12/00 Oct 21 J 18:04	3 663 0 02	0.11001 AU		-12074 Sep 24 J 15:14	10 K~~	

Planetary Phen	omena of Jupiter fro	m -12900	through -1239	8 (UT), Astrodien	st AG 18-Feb-2025 14:23, page 19
Attention, astronom	nical year style is used: The	e year -12694	in astronomical co	ounting style is the year	r 12695 BCE in historical counting style.
opposition	-12694 Oct 29 j 06:49	11° ≈ 06′20	-0°13'03	minimum elong	-12688 Oct 25 j 18:26 8°Ω10'13 0°14'49
min. Earth dist.	-12694 Oct 29 j 20:27	11° ≈ 01'54	4.29666 AU	behind sun begin	-12688 Oct 25 j 15:12 8° Ω 08'21
asc. node	-12694 Dec 27 j 02:41			behind sun end	-12688 Oct 25 j 21:40 8° Ω 12'06
direct	-12694 Dec 30 j 06:37			max. Earth dist.	-12688 Oct 26 j 14:48 8° Q 22'06 6.10716 AU
direct	·				3
	-12693 Mar 23 j 14:30			morning rise	-12688 Nov 08 j 02:41 11° Ω 16'37
evening set	-12693 May 07 j 19:48	24°≈25'03			-12688 Nov 24 j 10:00 15° Ω
				desc. node	-12687 Jan 23 j 06:23 26° Ω 34'46
conjunction	-12693 May 20 j 18:37	27°≈18'30	0°21'29		-12687 Feb 21 j 20:34 0° Mp
minimum elong	-12693 May 20 j 18:35	27° ≈ 18′29	0°21'02	retrograde	-12687 Mar 19 j 10:51 1° Mp 01'33
max. Earth dist.	-12693 May 19 j 18:30	27°≈05'00	6.31806 AU		-12687 Apr 13 j 19:10 30°R Ω
	-12693 Jun 01 j 19:49	0° }{		opposition	-12687 May 18 j 21:24 25° Ω 57'34 -0°27'37
morning rise	-12693 Jun 02 j 14:20			min. Earth dist.	-12687 May 18 j 05:00 $26^{\circ}\Omega$ 03'04 4.08478 AU
•					
retrograde	-12693 Oct 01 j 11:09			direct	-12687 Jul 16 j 06:08 21° Ω 02'01
opposition	-12693 Nov 30 j 22:10		1°10'51		-12687 Oct 02 j 22:27 0° Mp
min. Earth dist.	-12693 Dec 01 j 15:36	12° 升 34′00	4.33083 AU	evening set	-12687 Nov 17 j 06:25 9° m 55'39
direct	-12692 Feb 01 j 09:26	7° ₩ 39'21			
evening set	-12692 Jun 07 j 10:26	25°) 44′15		conjunction	-12687 Nov 30 j 19:58 13° Mp 05'28 -0°48'37
max. Earth dist.	-12692 Jun 19 j 01:26	28° ¥ 20′15	6.33254 AU	minimum elong	-12687 Nov 30 j 19:53 13° m 05'25 0°48'22
	J			max. Earth dist.	-12687 Dec 01 j 21:42 13° m 20'30 6.07218 AU
conjunction	-12692 Jun 20 j 00:24	280¥33108	1°12'59	morning rise	-12687 Dec 14 j 12:34 16° m 16'52
,				morning risc	*
minimum elong	-12692 Jun 20 j 00:18		1°12'58		-12686 Feb 18 j 08:33 0° ♀
	-12692 Jun 26 j 11:15			retrograde	-12686 Apr 24 j 08:41 6° £ 07'29
morning rise	-12692 Jul 02 j 11:58			opposition	-12686 Jun 22 j 22:23 1° Ω 02'39 -1°52'07
retrograde	-12692 Nov 01 j 15:42	18° Ƴ 50'52		min. Earth dist.	-12686 Jun 22 j 06:02 1° ♀ 08'15 4.07206 AU
opposition	-12691 Jan 01 j 21:10	13° Y 58'36	2°13'38		-12686 Jun 30 j 15:04 30°R Mp
min. Earth dist.	-12691 Jan 02 j 12:07		4.32570 AU	direct	-12686 Aug 20 j 04:17 26° m 03'46
direct	-12691 Mar 05 j 03:01	9° Ƴ 01'30			-12686 Oct 09 j 03:59 0° ♀
evening set	-12691 Jul 08 j 11:29			evening set	-12686 Dec 24 j 08:10 15° ⊆ 16'16
evening set	-12071 Jul 00 j 11.27	20 1 30 30		evening set	-12000 Dec 24 j 00.10 13 =10 10
conjunction	-12691 Jul 20 j 19:36	20° V 46'07	1°43'17	conjunction	-12685 Jan 07 j 01:29 18° £ 27'00 -1°34'03
	•				
minimum elong	-12691 Jul 20 j 19:33		1°43'40	minimum elong	-12685 Jan 07 j 01:22 18° Ω 26'57 1°34'18
max. Earth dist.	-12691 Jul 20 j 01:56		6.30678 AU	max. Earth dist.	-12685 Jan 08 j 00:46 18° 2 40'31 6.08179 AU
	-12691 Jul 21 j 20:08			morning rise	-12685 Jan 20 j 19:40 21° 2 38'10
morning rise	-12691 Aug 02 j 03:19				-12685 Feb 27 j 17:18 0°M
	-12691 Oct 03 j 00:45	15° 8		retrograde	-12685 May 29 j 11:50 11° M 07'25
retrograde	-12691 Dec 04 j 19:56	20° 8 30'52		opposition	-12685 Jul 27 j 10:32 6°ML04'11 -2°35'31
opposition	-12690 Feb 04 j 11:20		2°37'46	min. Earth dist.	-12685 Jul 26 j 23:39 6°ML07'55 4.10437 AU
min. Earth dist.	-12690 Feb 04 j 20:31			direct	-12685 Sep 24 j 05:56 1°ML02'10
mm. Earth dist.	-12690 Feb 09 j 06:49		4.20174710	direct	-12684 Jan 06 j 17:16 15°M
1					
direct	-12690 Apr 06 j 23:20			evening set	-12684 Jan 30 j 12:14 20°M 18'32
	-12690 May 31 j 10:03				
evening set	-12690 Aug 08 j 16:10			conjunction	-12684 Feb 13 j 04:32 23°M26'30 -1°45'09
	-12690 Aug 14 j 09:35	Π \circ 0		minimum elong	-12684 Feb 13 j 04:33 23° M26'31 1°45'47
				max. Earth dist.	-12684 Feb 13 j 14:16 23°M32'05 6.13273 AU
conjunction	-12690 Aug 21 j 01:26	1° Ⅱ 31′28	1°43'13	morning rise	-12684 Feb 26 j 20:00 26°ML33'53
minimum elong	-12690 Aug 21 j 01:29			C	-12684 Mar 13 j 02:24 0° ⊀
max. Earth dist.	-12690 Aug 20 j 19:35		6.24798 AU	retrograde	-12684 Jul 01 j 08:52 15° ₹ 22'02
morning rise	-12690 Sep 02 j 12:05		3.2 . , , 0 110	opposition	-12684 Aug 29 j 04:43 10° ₹ 22'03 -2°23'24
=					2 3
retrograde	-12689 Jan 08 j 01:29		20121	min. Earth dist.	-12684 Aug 29 j 02:40 10° ₹22'45 4.16921 AU
opposition	-12689 Mar 10 j 18:41		2°13'57	direct	-12684 Oct 28 j 03:20 5° ₹ 18'02
min. Earth dist.	-12689 Mar 10 j 17:34		4.21217 AU	evening set	-12683 Mar 06 j 12:08 24° ₹21'15
direct	-12689 May 10 j 02:17	13° Ⅱ 08'19			
	-12689 Sep 04 j 01:16	0 \circ \odot		conjunction	-12683 Mar 20 j 01:01 27° х 24'48 -1°19'40
evening set	-12689 Sep 09 j 19:27	1°9519'08		minimum elong	-12683 Mar 20 j 01:07 27° ₹ 24'52 1°20'28
5 · • · · · · · · · · · · · · · · · · ·				max. Earth dist.	-12683 Mar 19 j 20:32 27° ₹22'16 6.20646 AU
agniumation	12690 Cap 22 ; 12:42	4°915'33	1010/52	max. Earth dist.	
conjunction	-12689 Sep 22 j 12:43				-12683 Mar 31 j 11:24 0°♂
minimum elong	-12689 Sep 22 j 12:48		1°11'42	morning rise	-12683 Apr 02 j 11:10 0°326'53
max. Earth dist.	-12689 Sep 22 j 20:30		6.17362 AU	retrograde	-12683 Aug 03 j 03:20 18°중30'17
morning rise	-12689 Oct 05 j 08:59			opposition	-12683 Oct 01 j 06:06 13°♂34'06 -1°24'14
retrograde	-12688 Feb 12 j 11:05	26°530'22		min. Earth dist.	-12683 Oct 01 j 13:44 13°중31'34 4.24408 AU
opposition	-12688 Apr 13 j 16:42	21° 5 29'06	1°05'32	direct	-12683 Dec 01 j 10:22 8°중29'58
min. Earth dist.	-12688 Apr 13 j 06:52	21° © 32'19	4.13790 AU	evening set	-12682 Apr 09 j 18:02 27°る10'26
direct	-12688 Jun 11 j 21:36			max. Earth dist.	-12682 Apr 22 j 06:26 29°♂58'31 6.27748 AU
	-12688 Sep 20 j 02:57			July William	-12682 Apr 22 j 09:04 0°≈
evening set	-12688 Oct 12 j 13:50				12002 ripi 22 j 07.01 0 700
evening set	12000 Oct 12 J 13.30	J 060349		agniumation	12692 Apr 22 ; 00:27 0000000 0020150
	12(00.0 + 25:10.24	00 0 10112	0014!11	conjunction	-12682 Apr 23 j 00:27 0°≈08'38 -0°28'59
conjunction	-12688 Oct 25 j 18:24	8-8610.15	0-14-11	minimum elong	-12682 Apr 23 j 00:30 0°≈08'39 0°29'41

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12682 in astronomical counting style is the year 12683 BCE in historical counting style. -12682 May 06 j 03:32 3°≈05'02 -12676 Sep 01 i 00:47 $0^{\circ}\Omega$ morning rise -12682 Jul 04 j 07:09 15°≈ -12676 Oct 17 j 13:30 10°**Ω**07'42 evening set -12682 Sep 04 j 02:44 20°≈36'22 retrograde -12682 Nov 02 j 21:49 15°≈43'06 -0°00'41 -12676 Oct 30 j 19:32 13°**Ω**13'09 0°05'06 opposition conjunction min. Earth dist. -12682 Nov 03 j 12:25 15°≈38'21 4.30484 AU -12676 Oct 30 j 19:33 $13^{\circ}\Omega$ 13'10 0°05'42 minimum elong -12682 Nov 06 j 00:51 15°≈18'43 -12676 Oct 30 j 11:40 13°**Ω**08'34 asc. node behind sun begin -12682 Nov 08 j 10:44 15°R≈ behind sun end -12676 Oct 31 j 03:27 13° Ω 17'45 -12681 Jan 04 j 00:10 10°≈40'32 -12676 Oct 31 j 16:55 13°**Ω**25'38 direct max. Earth dist. 6.09861 AU -12681 Feb 28 j 18:42 15°**≈** -12676 Nov 07 j 10:36 15°**Ω** evening set -12681 May 12 j 08:28 28°≈58'42 morning rise -12676 Nov 13 j 05:23 $16^{\circ}\Omega$ 20'38 -12681 May 16 j 22:46 0°**∀** desc. node -12676 Dec 01 j 12:49 $20^{\circ}\Omega$ 31'12 -12681 May 24 j 06:48 max. Earth dist. 1°**¥**38′20 6.32379 AU -12675 Jan 17 j 21:15 0° Mp retrograde -12675 Mar 24 j 14:45 6° Mp 08'32 conjunction -12681 May 25 j 06:05 1°**¥**51′21 0°29'34 opposition -12675 May 23 j 22:14 1° Mp 04'19 -0°41'03 minimum elong -12681 May 25 j 06:02 1°**米**51′19 0°29'11 min. Earth dist. -12675 May 23 j 05:05 1° m 10'06 4.07986 AU morning rise -12681 Jun 07 j 00:23 4°**)** 42'22 -12675 May 31 j 22:41 30°RΩ retrograde -12681 Oct 05 j 23:02 22°**米**03'07 direct -12675 Jul 21 j 05:39 26°**Ω**08'25 opposition -12681 Dec 05 j 13:12 17° **光** 11'13 1°21'27 -12675 Sep 08 j 12:56 0° Mp min. Earth dist. -12681 Dec 06 j 06:25 17°\cdot\cdot 05'44 evening set -12675 Nov 22 j 12:12 15° m 05'21 direct -12680 Feb 06 j 00:28 12°\mathbf{H} 11'27 -12680 Jun 10 j 18:12 $0^{\circ}\Upsilon$ conjunction -12675 Dec 06 j 02:44 18° m 15'35 -0°56'39 evening set -12680 Jun 11 j 20:04 0°**Υ**14'23 minimum elong -12675 Dec 06 j 02:38 18° m 15'32 0°56'29 -12680 Jun 23 j 08:41 2°**Υ**49'15 6.33192 AU max. Earth dist. max. Earth dist. -12675 Dec 07 i 06:49 18° m 31'59 6.07169 AU morning rise -12675 Dec 19 i 19:50 21° m 27'12 conjunction $-12680 \text{ Jun } 24 \text{ j } 08:45 \quad 3^{\circ} \Upsilon 02'45 \quad 1^{\circ} 18'49$ -12674 Jan 27 j 09:48 0°**♀** -12680 Jun 24 j 08:39 3°**Υ**'02'42 1°18'50 retrograde -12674 Apr 29 j 10:48 11° **△**15'50 minimum elong -12680 Jul 06 j 19:35 5°**Υ**50'11 -12674 Jun 27 j 21:48 6° **2**11'08 -2°01'19 morning rise opposition -12680 Nov 06 j 07:07 23°**Υ**22'55 min. Earth dist. -12674 Jun 27 j 05:28 6° **2**16'44 4.07663 AU retrograde -12679 Jan 06 j 13:44 18°**Y**'30'27 2°19'41 -12674 Aug 25 j 04:25 1°**£**11'53 opposition direct -12679 Jan 07 j 04:51 18°**Υ**25'40 4.32177 AU -12674 Dec 29 j 15:44 20° **2**24'44 min. Earth dist. evening set -12679 Mar 09 j 18:09 13°**Y**33'44 direct -12679 Jul 06 j 01:37 0°8 -12673 Jan 12 j 08:50 23°**2**34'59 -1°37'53 conjunction -12679 Jul 12 j 20:24 1°**8**31'03 -12673 Jan 12 j 08:45 23°**2**34'56 1°38'13 minimum elong evening set max. Earth dist. -12673 Jan 13 j 06:18 23°**2**47'24 6.09079 AU -12679 Jul 25 j 04:24 4°**8**18'21 1°45'14 -12673 Jan 26 j 02:54 26°**△**45'34 conjunction morning rise -12679 Jul 25 j 04:21 4°**8**18'19 1°45'41 -12673 Feb 09 j 09:04 0°M minimum elong -12679 Jul 24 j 12:42 4°**8**09'27 6.29976 AU -12673 May 07 j 23:52 15°M max. Earth dist. morning rise -12679 Aug 06 j 11:57 7°**8**05'34 retrograde -12673 Jun 03 j 07:01 16°ML08'08 -12679 Sep 12 j 07:08 15°8 -12673 Jun 29 j 09:00 15°RM retrograde -12679 Dec 09 j 13:26 25°**8**08'34 opposition -12673 Aug 01 j 06:05 11°ML05'14 -2°37'02 opposition -12678 Feb 09 j 06:20 20°**8**13'52 2°37'23 min. Earth dist. -12673 Jul 31 j 19:36 11°ML08'49 4.11714 AU min. Earth dist. -12678 Feb 09 j 13:55 20°8 11'28 4.27240 AU direct -12673 Sep 29 j 05:39 6°ML02'50 -12678 Apr 11 j 14:08 15°**8**19'47 -12673 Dec 18 j 14:14 15°M direct -12678 Jul 29 j 05:53 0°**П** -12672 Feb 04 j 15:28 25°M16'05 evening set -12678 Aug 13 j 03:25 3°**Ⅲ**20'51 evening set -12672 Feb 18 i 07:24 28°ML23'12 -1°43'34 conjunction -12678 Aug 25 j 13:21 6°**II**11'25 1°40'32 conjunction minimum elong -12672 Feb 18 i 07:26 28°ML23'13 1°44'15 -12678 Aug 25 j 13:25 6° II 11'26 1° 41'15 minimum elong max. Earth dist. -12672 Feb 18 j 16:14 28° ML 28'16 6.14822 AU -12678 Aug 25 j 08:36 6° **I**I 08'41 6.23662 AU -12672 Feb 25 i 08:42 0° ⊀ max. Earth dist. morning rise -12678 Sep 07 j 01:04 9°**Д**02'59 morning rise -12672 Mar 02 j 21:58 1° ₹ 29'32 retrograde -12677 Jan 13 j 01:12 27°**Ⅲ**46'22 retrograde -12672 Jul 05 j 23:56 20° ₹ 08'57 -12677 Mar 15 j 16:44 22° **II** 48'14 2°06'42 opposition -12672 Sep 02 j 19:41 15° ₹ 09'31 -2°17'25 opposition min. Earth dist. -12677 Mar 15 j 14:51 22°**Ⅱ**48'50 4.19959 AU min. Earth dist. -12672 Sep 02 j 19:31 15° ₹ 09'34 4.18574 AU -12672 Nov 01 j 23:32 10° ₹ 05'21 direct -12677 May 14 j 20:58 17°**Д**55'19 direct -12677 Aug 17 j 23:43 0ಂತಾ evening set -12671 Mar 11 j 07:41 29° ₹03'25 6°9509'09 evening set -12677 Sep 14 j 11:49 -12671 Mar 15 j 12:25 0°궁 -12677 Sep 27 j 06:40 9°9506'49 1°03'59 -12671 Mar 24 j 19:45 2°**궁**05'59 -1°13'47 conjunction conjunction -12677 Sep 27 j 06:46 9°906'52 -12671 Mar 24 j 19:51 2°**궁**06'02 1°14'35 minimum elong 1°04'47 minimum elong -12677 Sep 27 j 16:44 9°**©**12'39 -12671 Mar 24 j 12:18 2°**궁**01'46 6.22257 AU max. Earth dist. 6.16121 AU max. Earth dist. -12677 Oct 10 j 04:39 12°506'16 -12671 Apr 07 j 05:01 5°♂07'02 morning rise morning rise -12676 Jan 17 j 08:34 0 $^{\circ}\Omega$ retrograde -12671 Aug 07 j 11:37 23°る03'09 -12671 Oct 05 j 17:21 18°정07'24 -1°13'37 retrograde -12676 Feb 17 j 13:35 1°**£**28′43 opposition -12676 Mar 19 j 14:36 30° R 55 min. Earth dist. -12671 Oct 06 j 02:18 18°る04'26 4.25832 AU opposition -12676 Apr 18 j 16:48 26°\$27'06 0°53'07 direct -12671 Dec 06 j 01:16 13°♂03'18 min. Earth dist. -12676 Apr 18 j 05:20 26°530'52 4.12682 AU -12670 Apr 06 j 18:50

-12670 Apr 14 j 06:08

1°≈39'02

evening set

-12676 Jun 16 j 17:19 21°533'37

direct

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12670 in astronomical counting style is the year 12671 BCE in historical counting style. -12670 Apr 27 j 11:26 4°≈36'19 -0°21'06 min. Earth dist. -12664 Apr 23 i 04:40 1° Ω32'44 4.11587 AU conjunction -12670 Apr 27 j 11:28 4°≈36'20 -12664 May 05 j 01:41 30°RS minimum elong 0°21'46 4°≈25'21 -12670 Apr 26 j 15:53 -12664 Jun 21 j 15:12 26°534'31 max. Earth dist. 6.28883 AU direct morning rise -12670 May 10 j 13:16 7°≈31'47 -12664 Aug 07 j 03:03 0°**Ω** -12670 Jun 14 j 13:49 15°≈ -12664 Oct 09 j 10:31 12°**Ω**10'31 desc. node -12670 Sep 08 j 10:13 24°≈59'30 retrograde -12664 Oct 21 j 17:33 15°**Ω** -12670 Sep 17 j 23:39 24°≈50'34 -12664 Oct 22 j 14:42 15° Ω 12'16 asc. node evening set -12670 Nov 07 j 07:21 20°≈06'34 $0^{\circ}11'01$ opposition -12664 Nov 04 j 22:22 18° Ω 18'42 -0°04'17 min. Earth dist. -12670 Nov 07 j 23:37 20°≈01'17 4.31235 AU conjunction direct -12669 Jan 08 j 12:26 15°≈04'18 minimum elong -12664 Nov 04 j 22:23 18° **Ω**18'42 0°03'44 -12669 May 01 j 10:41 0°**∀** behind sun begin -12664 Nov 04 j 14:12 18°**Ω**13'57 -12664 Nov 05 j 06:34 18°**Ω**23'28 evening set -12669 May 16 j 15:45 3°**¥**19'41 behind sun end -12669 May 28 j 10:18 5°**米** 57'16 max. Earth dist. 6.32666 AU max. Earth dist. -12664 Nov 05 j 23:17 18°**Ω**33'15 6.09164 AU morning rise -12664 Nov 18 j 09:33 21° Ω 27'05 conjunction -12669 May 29 j 12:03 6°**米** 11'40 0°37'04 -12664 Dec 26 j 23:47 minimum elong -12669 May 29 j 11:59 6°**)** 11′38 0°36'44 retrograde -12663 Mar 29 j 19:29 11° Mp 16'33 morning rise -12669 Jun 11 j 05:21 9°**米**02'07 opposition -12663 May 28 j 23:31 6° Mp 12'03 -0°54'17 retrograde -12669 Oct 10 j 07:09 26°**∺**23'40 min. Earth dist. -12663 May 28 j 06:02 6° Mp 17'58 4.07741 AU opposition -12669 Dec 09 j 23:32 21°\dagger31'47 1°31'07 direct -12663 Jul 26 j 05:40 1° mp 15'43 min. Earth dist. -12669 Dec 10 j 17:28 21°\(\frac{1}{2}\)6'04 4.33198 AU evening set -12663 Nov 27 j 18:50 20° m 14'54 direct -12668 Feb 10 j 10:17 16° ¥ 32'19 -12668 May 26 j 01:27 $0^{\circ}\Upsilon$ conjunction -12663 Dec 11 j 09:52 23° m 25'16 -1°04'18 evening set -12668 Jun 16 j 01:28 4°**Ƴ**35′08 minimum elong -12663 Dec 11 i 09:45 23° m 25'12 1°04'12 max. Earth dist. -12663 Dec 12 j 12:49 23° m 40'59 6.07334 AU conjunction -12668 Jun 28 i 13:25 7°**Υ**'23'20 1°23'55 morning rise -12663 Dec 25 j 03:34 26° m 36'56 -12668 Jun 28 j 13:19 7°**Y**23′17 1°24'00 -12662 Jan 08 j 22:51 0°**♀** minimum elong max. Earth dist. -12668 Jun 27 j 14:28 7°**Υ**10'26 6.32569 AU -12662 May 04 j 10:23 16° **2**22'28 retrograde -12668 Jul 10 j 23:25 10°**Υ**10'40 -12662 Jul 02 j 20:26 11° **2**17'50 -2°09'38 morning rise opposition -12668 Nov 10 j 19:14 27°**Υ**48'10 min. Earth dist. -12662 Jul 02 j 03:58 11°**2**23'29 4.08214 AU retrograde -12667 Jan 11 j 03:20 22° Υ 55'31 2°24'42 -12662 Aug 30 j 04:39 6°**♀**18'03 opposition direct -12667 Jan 11 j 18:06 22° **Y** 50′51 4.31164 AU -12661 Jan 03 j 22:53 25°**£**31'06 min. Earth dist. evening set -12667 Mar 14 j 05:23 17°**Υ**59'13 direct -12661 Jan 17 j 16:05 28°**♀**40'56 -1°41'02 -12667 Jun 19 j 19:20 0°**8** conjunction -12661 Jan 17 j 16:01 28°**-**240'53 1°41'25 -12667 Jul 17 j 03:20 5°**8**58'32 evening set minimum elong max. Earth dist. -12661 Jan 18 j 12:57 28°**⊆**52'59 6.09938 AU -12667 Jul 29 j 11:07 8°**8**46'16 1°46'26 -12661 Jan 23 j 08:57 0°M conjunction -12667 Jul 29 j 11:05 8°**8**46'15 1°46'56 -12661 Jan 31 j 09:39 1°M 50'53 minimum elong morning rise max. Earth dist. -12667 Jul 28 j 19:08 8°\Z37'11 6.28632 AU -12661 Apr 04 j 19:07 15°M morning rise -12667 Aug 10 j 19:04 11°**8**34'08 retrograde -12661 Jun 08 j 04:34 21° ML07'11 -12667 Aug 26 j 04:34 15°**8** opposition -12661 Aug 06 j 01:29 16°ML04'44 -2°37'33 retrograde -12667 Dec 14 j 08:01 29°**8**44'36 min. Earth dist. -12661 Aug 05 j 17:06 16°ML07'36 4.12786 AU -12666 Feb 14 j 00:33 24°**8**49'27 2°35'58 -12661 Aug 14 j 00:05 15°RM opposition min. Earth dist. -12666 Feb 14 j 07:00 24°847'24 4.25669 AU -12661 Oct 04 j 05:27 11°ML02'00 direct -12666 Apr 16 j 04:17 19°**8**55'34 -12661 Nov 24 j 08:34 15°M direct -12666 Jul 11 j 21:01 0°**Ⅱ** -12660 Feb 08 j 19:27 0° ⊀ -12660 Feb 09 i 18:35 0° ₹ 13'06 evening set -12666 Aug 17 j 14:43 8°**Д**00'10 evening set -12666 Aug 30 i 01:49 10°**II**51'52 1°37'07 -12660 Feb 23 i 10:06 3° ₹ 19'33 -1°41'19 conjunction conjunction -12660 Feb 23 i 10:09 3° ₹ 19'35 1°42'02 minimum elong -12666 Aug 30 j 01:53 10°**Π**51'55 1°37'52 minimum elong max. Earth dist. -12666 Aug 30 j 00:17 10° **II** 50'59 6.22013 AU max. Earth dist. -12660 Feb 23 j 16:23 3° ₹23'08 6.16001 AU -12666 Sep 11 j 14:41 13°**Д**44'40 morning rise -12660 Mar 08 j 00:04 6° ₹25'06 morning rise -12666 Dec 06 j 23:57 0°5 retrograde -12660 Jul 10 j 14:10 24° ₹ 57'35 -12665 Jan 18 j 01:16 2°535'53 -12660 Sep 07 j 11:50 19° ₹ 58'41 -2°10'38 retrograde opposition -12665 Mar 01 j 09:29 30°RII min. Earth dist. -12660 Sep 07 j 12:30 19° ₹ 58'27 4.19754 AU opposition -12665 Mar 20 j 15:13 27° **II** 37'16 1°58'28 direct -12660 Nov 06 j 19:08 14° ₹ 54'26 min. Earth dist. -12665 Mar 20 j 11:28 27°**Ⅲ**38'29 4.18366 AU -12659 Feb 26 j 20:57 0°ಕ direct -12665 May 19 j 14:38 22°**II**44'25 -12659 Mar 16 j 04:49 3°**る**49'15 evening set -12665 Jul 29 j 10:46 0°ഇ -12665 Sep 19 j 05:58 11°502'20 conjunction -12659 Mar 29 j 16:03 6°**궁**51'04 -1°07'22 evening set -12659 Mar 29 j 16:09 6°**ප**51'08 1°08'09 minimum elong -12665 Oct 02 j 02:21 14°501'19 0°56'31 6°**る**45'24 6.23368 AU conjunction max. Earth dist. -12659 Mar 29 j 05:59 minimum elong -12665 Oct 02 j 02:27 14°501'22 0°57'17 morning rise -12659 Apr 12 j 00:26 9°る51'19 max. Earth dist. -12665 Oct 02 j 14:07 14°508'10 6.14727 AU retrograde -12659 Aug 12 j 01:07 27°정42'14 opposition morning rise -12665 Oct 15 j 02:15 17°502'12 -12659 Oct 10 j 07:36 22°♂47'02 -1°02'22 -12665 Dec 16 j 07:33 0 $^{\circ}\Omega$ min. Earth dist. -12659 Oct 10 j 18:43 22°**궁**43'21 4.26765 AU -12664 Feb 22 j 17:20 6°**£**30'30 -12659 Dec 10 j 19:46 17°₹43'08 retrograde direct

-12658 Mar 20 j 18:44 0°≈

-12664 Apr 23 j 18:03 1°Ω28'18 0°40'05

opposition

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 22

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Attention, astronomical year style is used: The year -12658 in astronomical counting style is the year 12659 BCE in historical counting style.
                    -12658 Apr 18 j 21:30 6°≈15'50
                                                                                            -12653 Jul 02 j 13:15 0°95
evening set
                    -12658 May 01 j 04:40 9°≈00'37 6.29574 AU
max. Earth dist.
                                                                                            -12653 Sep 23 j 23:33 15°554'35
                                                                        evening set
                    -12658 May 02 j 01:45 9°≈12'24 -0°12'51
                                                                        conjunction
                                                                                            -12653 Oct 06 j 21:37 18°954'34
                                                                                                                              0°48'46
conjunction
                                                                                            -12653 Oct 06 j 21:42 18°554'37
                    -12658 May 02 j 01:46
                                                                                                                               0°49'32
 minimum elong
                                           9°≈12'25 0°13'28
                                                                         minimum elong
                                           9°≈09'53
 behind sun begin
                    -12658 May 01 j 21:14
                                                                        max. Earth dist.
                                                                                            -12653 Oct 07 j 12:58 19°503'30
                                                                                                                               6.14077 AU
                                          9°≈14'56
 behind sun end
                    -12658 May 02 j 06:18
                                                                        morning rise
                                                                                            -12653 Oct 19 j 22:59 21°556'27
morning rise
                    -12658 May 15 j 02:26 12°≈07'09
                                                                                            -12653 Nov 25 j 09:47 0°Ω
                    -12658 May 28 j 04:35 15°≈
                                                                        retrograde
                                                                                            -12652 Feb 27 j 18:55 11°Ω27'38
asc. node
                    -12658 Jul 28 j 07:37 26°≈14'59
                                                                        opposition
                                                                                            -12652 Apr 28 j 16:48 6^{\circ}\Omega25'01
                                                                                                                               0°27'03
retrograde
                    -12658 Sep 12 j 20:51 29°≈32'55
                                                                        min. Earth dist.
                                                                                            -12652 Apr 28 j 03:02 6^{\circ}\Omega29'35
                                                                                                                              4.11142 AU
opposition
                    -12658 Nov 11 j 21:23 24°≈40'15
                                                      0°23'08
                                                                        direct
                                                                                            -12652 Jun 26 j 11:34 1° Ω 30'58
min. Earth dist.
                    -12658 Nov 12 j 13:45 24°≈34'58
                                                      4.31651 AU
                                                                        desc. node
                                                                                            -12652 Aug 19 j 10:50 6°Ω02'55
direct
                    -12657 Jan 13 j 03:13 19°≈38'21
                                                                                            -12652 Oct 04 j 19:13 15°Ω
                    -12657 Apr 13 j 23:10
                                          0°∀
                                                                        evening set
                                                                                            -12652 Oct 27 j 13:45 20^{\circ}\Omega 10'32
evening set
                    -12657 May 21 j 03:12 7°米51'57
                                                                        conjunction
                                                                                            -12652 Nov 09 j 22:31 23°\Omega17'34 -0°13'14
conjunction
                    -12657 Jun 02 j 22:14 10°米43'21 0°44'42
                                                                         minimum elong
                                                                                            -12652 Nov 09 j 22:30 23°\Omega17'33 0°12'45
 minimum elong
                    -12657 Jun 02 j 22:10 10°\(\mathbf{H}\)43'18 0°44'25
                                                                         behind sun begin
                                                                                            -12652 Nov 09 j 17:22 23°\Omega14'34
max. Earth dist.
                    -12657 Jun 01 j 20:43 10° ★29'03 6.32783 AU
                                                                         behind sun end
                                                                                            -12652 Nov 10 j 03:38 23°\Omega20'32
morning rise
                    -12657 Jun 15 j 14:21 13°¥33'16
                                                                        max. Earth dist.
                                                                                            -12652 Nov 10 j 22:47 23^{\circ}\Omega31'44
                                                                                                                               6.08949 AU
                    -12657 Sep 20 i 06:46 0°℃
                                                                        morning rise
                                                                                            -12652 Nov 23 j 11:02 26^{\circ}\Omega 26'33
                    -12657 \text{ Oct } 14 \text{ j } 20.58 \quad 0^{\circ} \Upsilon 56'19
                                                                                            -12652 Dec 09 j 00:15 0° m
retrograde
                    -12657 Nov 08 i 12:44 30°R ★
                                                                        retrograde
                                                                                            -12651 Apr 03 j 17:30 16° m 15'52
opposition
                    -12657 Dec 14 j 15:16 26° \tag{04'32} 1°40'44
                                                                        opposition
                                                                                            -12651 Jun 02 j 20:27 11° Mp 11'10 -1°06'41
min. Earth dist.
                    -12657 Dec 15 j 09:33 25° ★58'43
                                                                        min. Earth dist.
                                                                                            -12651 Jun 02 j 02:13 11° Mp 17'21 4.07780 AU
                                                      4.33022 AU
                    -12656 Feb 15 j 02:25 21° ★ 05'36
                                                                                            -12651 Jul 31 j 01:53 6° Mp 14'18
direct
                                                                        direct
                    -12656 May 07 j 23:02 0°Υ
                                                                                            -12651 Dec 02 j 21:33 25° m 15'13
                                                                        evening set
                    -12656 Jun 20 j 11:23 9°Y07'55
evening set
                                                                                            -12651 Dec 16 j 13:16 28^{\circ} Mp 25'40 -1°11'13
                                                                        conjunction
                    -12656 Jul 02 j 22:21 11°Υ'55'53 1°28'49
conjunction
                                                                         minimum elong
                                                                                            -12651 Dec 16 j 13:09 28° m 25'36 1°11'11
 minimum elong
                    -12656 Jul 02 j 22:16 11°Υ'55'50 1°28'59
                                                                        max. Earth dist.
                                                                                            -12651 Dec 17 j 16:17 28° Mp 41'24 6.07604 AU
max. Earth dist.
                    -12656 Jul 01 j 23:06 11°Y42'47 6.32103 AU
                                                                                            -12651 Dec 23 j 07:20 0°♀
                    -12656 Jul 15 j 07:50 14°Υ'43'08
                                                                                            -12651 Dec 30 j 07:05 1°237'13
morning rise
                                                                        morning rise
                    -12656 Oct 06 j 04:24 0°8
                                                                                            -12650 May 09 j 08:27 21°♀19'38
                                                                        retrograde
                                                                                            -12650 Jul 07 j 15:12 16° 215'10 -2°16'43
retrograde
                    -12656 Nov 15 j 11:28 2°824'54
                                                                        opposition
                    -12656 Dec 26 j 09:59 30°RY
                                                                        min. Earth dist.
                                                                                            -12650 Jul 07 j 00:42 16°£20'08 4.08692 AU
opposition
                    -12655 Jan 15 j 21:37 27°Υ'32'01 2°29'08
                                                                        direct
                                                                                            -12650 Sep 04 j 02:14 11°£14'53
min. Earth dist.
                    -12655 Jan 16 j 10:51 27°Υ27'50 4.30481 AU
                                                                                            -12649 Jan 07 j 00:22 0°M
direct
                    -12655 Mar 18 j 20:42 22°Y36'09
                                                                        evening set
                                                                                            -12649 Jan 09 j 02:09
                                                                                                                   0°M28'30
                    -12655 May 31 j 16:21 0°8
                    -12655 Jul 21 j 13:53 10°836'03
                                                                                            -12649 Jan 22 j 19:15 3°M 38'00 -1°43'21
evening set
                                                                        conjunction
                                                                                            -12649 Jan 22 j 19:12 3°M237'58 1°43'46
                                                                         minimum elong
                    -12655 Aug 02 j 21:49 13°824'07 1°47'08
                                                                        max. Earth dist.
                                                                                            -12649 Jan 23 j 13:46 3°M 48'40 6.10555 AU
conjunction
                    -12655 Aug 02 j 21:48 13°824'07 1°47'40
                                                                                            -12649 Feb 05 j 12:32 6°M47'29
 minimum elong
                                                                        morning rise
max. Earth dist.
                    -12655 Aug 02 i 09:11 13°816'55 6.27806 AU
                                                                                            -12649 Mar 14 j 21:47 15°M
                    -12655 Aug 09 i 22:13 15°8
                                                                        retrograde
                                                                                            -12649 Jun 12 j 20:34 25° ML58'37
morning rise
                    -12655 Aug 15 j 05:51 16° 812'24
                                                                        opposition
                                                                                            -12649 Aug 10 j 17:38 20°M 56'36 -2°36'58
                    -12655 Oct 24 j 02:33 0°Ⅱ
                                                                        min. Earth dist.
                                                                                            -12649 Aug 10 j 09:56 20°ML59'14 4.13501 AU
                    -12655 Dec 19 j 04:53 4°II28'19
                                                                        direct
                                                                                            -12649 Oct 08 j 23:53 15°ML53'32
retrograde
                    -12654 Feb 15 j 07:59 30°R8
                                                                                            -12648 Jan 22 j 23:01
                                                                                                                   0°×7
                    -12648 Feb 14 j 19:05 5° ₹03'53
opposition
                                                                        evening set
                    -12654 Feb 19 j 02:43 29°831'11 4.24775 AU
min. Earth dist.
direct
                    -12654 Apr 20 j 22:09 24°839'14
                                                                        conjunction
                                                                                            -12648 Feb 28 j 10:07
                                                                                                                   8°₹09'51 -1°38'25
                    -12654 Jun 20 j 15:58 0°Ⅱ
                                                                         minimum elong
                                                                                            -12648 Feb 28 j 10:11
                                                                                                                   8°₹09'53 1°39'10
                    -12654 Aug 22 j 04:01 12°Ⅲ44'52
                                                                        max. Earth dist.
                                                                                            -12648 Feb 28 j 13:02
                                                                                                                   8°∡11'30 6.16760 AU
evening set
                                                                                            -12648 Mar 12 j 23:32 11°尽 14'50
                                                                        morning rise
                    -12654 Sep 03 j 15:57 15°I37'21 1°33'06
                                                                                            -12648 Jul 15 j 05:20 29° ₹42'02
conjunction
                                                                        retrograde
                    -12654 Sep 03 j 16:02 15°Ⅲ37'23
 minimum elong
                                                      1°33'53
                                                                        opposition
                                                                                            -12648 Sep 12 j 02:32 24° ₹ 43'40 -2°03'07
                    -12654 Sep 03 j 15:35 15°Д37'08 6.21133 AU
max. Earth dist.
                                                                        min. Earth dist.
                                                                                            -12648 Sep 12 j 05:44 24° ₹ 42'36 4.20473 AU
morning rise
                    -12654 Sep 16 j 06:13 18°Д31'06
                                                                        direct
                                                                                            -12648 Nov 11 j 14:26 19° ₹39'21
                    -12654 Nov 09 j 21:39
                                                                                            -12647 Feb 08 j 22:33
                                                                                                                   0°ಕ
retrograde
                    -12653 Jan 23 j 00:47
                                           7°©27'19
                                                                        evening set
                                                                                            -12647 Mar 21 j 00:34
                                                                                                                   8°る32'25
opposition
                    -12653 Mar 25 j 13:59
                                           2°$28'07 1°49'26
min. Earth dist.
                    -12653 Mar 25 j 07:56 2°530'05 4.17554 AU
                                                                        conjunction
                                                                                            -12647 Apr 03 j 11:14 11°♂33'45 -1°00'34
                    -12653 Apr 14 j 14:18 30°R II
                                                                         minimum elong
                                                                                            -12647 Apr 03 j 11:20 11° 중33'48 1°01'21
direct
                    -12653 May 24 j 09:12 27°Д35'13
                                                                        max. Earth dist.
                                                                                            -12647 Apr 03 j 00:09 11°궁27'30 6.24012 AU
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Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12647 in astronomical counting style is the year 12648 BCE in historical counting style. -12647 Apr 16 j 18:39 14°る33'23 conjunction -12642 Sep 08 i 05:57 20° **П**20'42 1°28'32 morning rise minimum elong -12647 Jul 08 j 22:59 -12642 Sep 08 j 06:03 20° II 20'45 1°29'19 0°≈≈ -12647 Aug 16 j 12:27 2°≈20'45 -12642 Sep 08 j 08:54 20°**П**22'24 6.20356 AU retrograde max. Earth dist. -12647 Sep 24 j 08:50 30°R ₹ -12642 Sep 20 j 21:21 23°**Д**15'21 morning rise -12647 Oct 14 j 21:57 27°る25'58 -0°50'47 -12642 Oct 21 j 08:29 0°5 opposition -12647 Oct 15 j 09:04 27°**궁**22'18 4.27287 AU min. Earth dist. retrograde -12641 Jan 28 j 00:50 12°516'10 direct -12647 Dec 15 j 12:00 22°♂22'17 opposition -12641 Mar 30 j 11:40 7°516'30 1°39'43 -12646 Mar 01 j 10:33 0°≈ min. Earth dist. -12641 Mar 30 j 05:19 7°**©**18'34 4.16765 AU evening set -12646 Apr 23 j 13:01 10°≈53'08 direct -12641 May 29 j 03:54 2°523'35 evening set -12641 Sep 28 j 17:05 20°544'49 conjunction -12646 May 06 j 15:58 13°≈49'02 -0°04'31 -12646 May 06 j 15:59 13°≈49'03 0°05'05 -12641 Oct 11 j 16:33 23°545'47 0°40'45 minimum elong conjunction -12646 May 06 j 08:08 13°≈44'40 -12641 Oct 11 j 16:37 23°545'50 behind sun begin minimum elong 0°41'30 behind sun end -12646 May 06 j 23:50 13°≈53'25 max. Earth dist. -12641 Oct 12 j 08:02 23°554'48 6.13355 AU max. Earth dist. -12646 May 05 j 17:31 13°≈36'28 6.29954 AU morning rise -12641 Oct 24 j 19:45 26°548'46 -12646 May 11 j 22:41 15°≈ -12641 Nov 07 j 18:42 0°**Ω** morning rise -12646 May 19 j 15:37 16°≈43'12 -12640 Feb 02 j 17:13 15°**Ω** asc. node -12646 Jun 05 j 20:53 20°≈29'36 retrograde -12640 Mar 03 j 17:59 16°**\O**23'14 -12646 Jul 26 j 19:57 0°**∀** -12640 Apr 02 j 14:34 15°RΩ retrograde -12646 Sep 17 j 10:43 4°**)**€08'02 opposition -12640 May 03 j 14:38 $11^{\circ}\Omega$ 20'14 0° 13'53 -12646 Nov 10 j 18:26 30°R≈ min. Earth dist. -12640 May 02 j 23:20 11° Ω 25'20 4.10544 AU opposition -12646 Nov 16 j 12:45 29°≈15'36 0°35'11 desc. node -12640 Jun 30 i 03:46 $6^{\circ}\Omega$ 26'01 min. Earth dist. -12646 Nov 17 j 06:11 29°≈09'59 4.31864 AU direct -12640 Jul 01 i 05:59 $6^{\circ}\Omega$ 25'53 direct -12645 Jan 17 j 21:08 24°≈14'06 -12640 Sep 16 i 01:04 $15^{\circ}\Omega$ -12645 Mar 24 j 02:46 0°**米** evening set -12640 Nov 01 j 12:55 25° **Ω**08'19 -12645 May 25 j 15:31 12°\(\mathbf{x}\)26'10 evening set max. Earth dist. -12645 Jun 06 j 08:25 15° **X** 03'02 6.32805 AU $-12640 \text{ Nov } 14 \text{ j } 23:04 \ 28^{\circ} \Omega 16'07 \ -0^{\circ} 22'05$ conjunction -12640 Nov 14 j 23:02 $28^{\circ}\Omega$ 16'05 0° 21'40 minimum elong -12645 Jun 07 j 09:22 15° **€** 17'00 0°52'08 max. Earth dist. -12640 Nov 16 j 00:54 $28^{\circ}\Omega$ 31'12 $6.08538~\mathrm{AU}$ conjunction -12645 Jun 07 j 09:17 15°**¥** 16'58 0°51'54 -12640 Nov 22 j 09:03 0° m minimum elong -12645 Jun 20 j 00:19 18° **★** 06'26 -12640 Nov 28 j 12:34 1° m 25'43 morning rise morning rise -12645 Aug 18 j 08:46 0°**Υ** -12639 Apr 08 j 18:56 21° Mp 15'49 retrograde -12645 Oct 19 j 10:19 5°**Υ**31'05 -12639 Jun 07 j 17:46 16° Mp 11'03 -1°18'38 retrograde opposition -12645 Dec 19 j 08:05 0° **Y**39'12 1° 49'50 min. Earth dist. -12639 Jun 07 j 00:44 16° Mp 16'50 4.07593 AU opposition -12645 Dec 20 j 00:47 0° **Y** 33'53 4.32882 AU -12639 Aug 04 j 23:46 11° Mp 13'44 min. Earth dist. direct -12645 Dec 24 j 11:48 30°R € -12639 Dec 06 j 19:20 0°**♀** -12644 Feb 19 j 17:34 25° **¥** 40'42 -12639 Dec 08 j 01:31 0°**△**17'26 direct evening set -12644 Apr 15 j 08:42 0°**℃** evening set -12644 Jun 24 j 21:59 13°**Υ**42'03 conjunction -12639 Dec 21 j 17:41 3°**2**28'03 -1°17'39 max. Earth dist. -12644 Jul 06 j 11:01 16°**Υ**17'50 6.31793 AU minimum elong -12639 Dec 21 j 17:34 3°**2**27'59 1°17'42 max. Earth dist. -12639 Dec 22 j 19:31 3°**2**43'04 6.07641 AU -12644 Jul 07 j 08:08 16°**Y**29'44 1°33'13 morning rise -12638 Jan 04 j 11:51 6°**೨**39'39 conjunction -12644 Jul 07 j 08:02 16°**Υ**29'41 retrograde -12638 May 14 j 05:47 26° **2**19'38 minimum elong 1°33'26 -12644 Jul 19 j 16:54 19°**Y**16'49 -12638 Jul 12 j 10:43 21°**2**15'25 -2°22'53 morning rise opposition -12644 Sep 09 j 16:13 0°8 min. Earth dist. -12638 Jul 11 j 20:19 21°**2**20'21 4.08974 AU -12644 Nov 20 i 05:21 7°**8**02'06 retrograde direct -12638 Sep 08 j 22:21 16° **2** 14'42 -12643 Jan 20 j 16:36 2°808'56 2°32'39 opposition -12638 Dec 20 j 18:29 min. Earth dist. -12643 Jan 21 i 05:22 2°804'54 4.30016 AU evening set -12637 Jan 14 j 07:08 5°M29'44 -12643 Feb 07 i 06:35 30°R**℃** direct -12643 Mar 23 j 14:14 27°**Y**13'27 conjunction -12637 Jan 28 i 00:06 8°M38'58 -1°44'56 -12643 May 06 j 01:28 0°8 minimum elong -12637 Jan 28 i 00:03 8°M38'57 1°45'24 6.11038 AU -12643 Jul 25 j 01:30 15°8 max. Earth dist. -12637 Jan 28 j 15:41 8°M 47'57 -12643 Jul 26 j 00:23 15°**8**12'56 evening set -12637 Feb 10 j 17:05 11°ML48'04 morning rise -12637 Feb 24 j 20:21 15°M conjunction -12643 Aug 07 j 08:19 18°**8**01'15 1°47'10 -12637 May 25 j 05:06 minimum elong -12643 Aug 07 j 08:18 18°**8**01'15 1°47'44 retrograde -12637 Jun 17 j 15:53 0°**х** 54'32 max. Earth dist. -12643 Aug 06 j 20:27 17°**8**54'30 6.27193 AU -12637 Jul 10 j 21:23 30°RML -12643 Aug 19 j 16:52 20°**8**49'58 -12637 Aug 15 j 11:40 25°M 52'58 -2°35'17 morning rise opposition -12643 Oct 01 j 15:27 min. Earth dist. $0^{\circ}\Pi$ -12637 Aug 15 j 06:12 25°ML54'50 4.14126 AU 9°**Ⅱ**10'33 direct -12637 Oct 13 j 22:06 20°M 49'36 retrograde -12643 Dec 24 j 00:18 opposition -12642 Feb 23 j 18:12 4°**I**I4'30 2°30'11 -12636 Jan 03 j 23:27 0°**∡**™ min. Earth dist. -12642 Feb 23 j 20:58 4°**I**I13'37 4.24046 AU evening set -12636 Feb 19 j 20:51 9° ₹ 59'14 -12642 Apr 05 j 06:04 30°R**8** direct -12642 Apr 25 j 14:04 29°**8**21'07 conjunction -12636 Mar 04 j 11:40 13°**尽** 04'49 -1°34'47 -12642 May 15 j 21:46 0°**Ⅱ** minimum elong -12636 Mar 04 j 11:45 13°**尽**04'51 1°35'32 -12642 Aug 26 j 16:48 17°**Д**27'23 max. Earth dist. -12636 Mar 04 j 13:41 13°**✗** 05'57 6.17486 AU evening set

morning rise

-12636 Mar 18 j 00:20 16° **₹** 09'13

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12636 in astronomical counting style is the year 12637 BCE in historical counting style. -12636 May 26 j 10:33 0°る retrograde -12631 Dec 28 j 20:46 13°**Д**50'07 opposition -12636 Jul 19 j 20:17 4°**궁**31'17 -12630 Feb 28 j 13:32 8°II53'35 2°25'51 retrograde -12636 Sep 13 j 12:04 30°R ✓ min. Earth dist. -12630 Feb 28 і 16:14 8°**Д**52'43 4.23362 AU opposition -12636 Sep 16 j 19:08 29°**х** 33'29 -1°54'39 -12630 Apr 30 j 07:00 4°**Д**00'19 direct min. Earth dist. -12636 Sep 16 j 22:38 29° ₹32'18 4.21231 AU -12630 Aug 31 j 04:35 22°**Ⅲ**07'11 evening set -12636 Nov 16 j 09:45 24° ₹ 29'12 direct -12635 Jan 18 j 01:31 0°る -12630 Sep 12 j 18:49 25°**Ⅲ**01'20 1°23'25 conjunction -12630 Sep 12 j 18:54 25°**Д**01'23 -12635 Mar 25 j 21:44 13°**♂**20'07 1°24'12 evening set minimum elong -12630 Sep 12 j 22:13 25°**Д**03'18 6.19550 AU max. Earth dist. -12630 Sep 25 j 11:45 27°**Д**56'59 conjunction -12635 Apr 08 j 07:23 16°ਰ20'48 -0°53'16 morning rise minimum elong -12635 Apr 08 j 07:28 16°る20'51 0°54'02 -12630 Oct 04 j 11:48 0°9 -12635 Apr 07 j 17:29 16°**♂**12'59 -12629 Feb 01 j 21:14 17°502'27 max. Earth dist. 6.24766 AU retrograde -12635 Apr 21 j 14:01 19°**♂**19'49 morning rise opposition -12629 Apr 04 j 08:00 12°502'15 1°29'25 -12635 Jun 12 j 03:25 min. Earth dist. -12629 Apr 03 j 23:46 12°504'56 4.15885 AU retrograde -12635 Aug 21 j 03:19 7°≈03'26 direct -12629 Jun 02 j 19:26 7°509'13 opposition -12635 Oct 19 j 14:07 2°≈09'04 -0°38'43 evening set -12629 Oct 03 j 09:54 25°532'52 min. Earth dist. -12635 Oct 20 j 02:46 2°≈04'54 4.27974 AU -12635 Nov 05 j 12:42 30°R ₹ conjunction -12629 Oct 16 j 11:02 28°534'55 0°32'31 direct -12635 Dec 20 j 08:26 27°る05'37 minimum elong -12629 Oct 16 j 11:06 28°534'57 0°33'14 -12634 Feb 03 i 06:19 0°≈ max. Earth dist. -12629 Oct 17 j 04:29 28°545'05 6.12493 AU asc. node -12634 Apr 14 j 04:23 12°≈29'01 -12629 Oct 22 j 13:05 0°Ω -12634 Apr 25 i 16:16 15°≈ morning rise -12629 Oct 29 j 15:42 $1^{\circ}\Omega$ 38'58 evening set -12634 Apr 28 j 05:10 15°≈33'45 -12628 Jan 01 j 20:47 15°Ω -12634 May 10 j 09:30 18°≈16'53 max. Earth dist. 6.30548 AU retrograde -12628 Mar 08 j 18:54 21° Ω 17'15 opposition -12628 May 08 j 11:45 $16^{\circ}\Omega$ 13'54 0° 00'42 -12634 May 11 j 07:04 18°≈28'57 0°04'04 min. Earth dist. -12628 May 07 j 21:04 $16^{\circ}\Omega$ 18'49 4.09764 AU conjunction -12634 May 11 j 07:03 18°≈28'56 desc. node -12628 May 11 j 09:57 15°**Ω**50'30 minimum elong 0°03'32 -12634 May 10 j 23:02 18°≈24'29 -12628 May 17 j 19:37 15° R Ω behind sun begin -12634 May 11 j 15:03 18°≈33'24 -12628 Jul 06 j 01:55 11°Ω19'11 behind sun end direct -12634 May 24 j 05:19 21°≈22'20 -12628 Aug 23 j 05:06 15°**Ω** morning rise -12634 Jul 04 j 05:15 0°**)** -12628 Nov 06 j 12:34 0° m 05'26 evening set -12634 Sep 21 j 22:56 8° **∺**45'38 -12628 Nov 06 j 03:11 0° M retrograde -12634 Nov 21 j 04:58 3°**米**53'21 0°47'03 opposition -12628 Nov 19 j 23:51 3° mp 14'01 -0°30'44 min. Earth dist. -12634 Nov 21 j 21:15 3° **★**48'07 4.32338 AU conjunction -12634 Dec 26 j 00:55 30°R≈ -12628 Nov 19 j 23:48 3° Mp 13'59 0°30'21 minimum elong -12633 Jan 22 j 13:41 28°≈52'16 -12628 Nov 21 j 01:32 3° Mp 29'00 6.07916 AU direct max. Earth dist. -12633 Feb 19 j 06:19 0°**米** -12628 Dec 03 j 14:31 6° Mp 24'21 morning rise evening set -12633 May 30 j 03:43 17°**米**01'42 retrograde -12627 Apr 13 j 18:43 26° m 15'44 -12627 Jun 12 j 14:43 21° $m_{\!\!\!\!1} 10'56$ -1°29'57 opposition -12633 Jun 11 j 20:07 19° **€** 51'48 0°59'14 -12627 Jun 11 j 21:10 21° Mp 16'54 4.07222 AU conjunction min. Earth dist. minimum elong -12633 Jun 11 j 20:02 19° **★** 51'45 0°59'05 direct -12627 Aug 09 j 19:09 16° Mp 13'09 max. Earth dist. -12633 Jun 10 j 19:09 19° **★** 37'49 6.33113 AU -12627 Nov 19 j 16:13 0°**♀** morning rise -12633 Jun 24 j 10:02 22°**)** 40'37 -12627 Dec 13 j 06:23 5°**£**20'33 evening set -12633 Jul 28 j 17:43 0°**Υ** retrograde -12633 Oct 24 j 01:50 10°**Υ**06'08 conjunction -12627 Dec 26 j 22:57 8°**2**31'22 -1°23'29 -12633 Dec 24 i 01:17 5° \begin{pmatrix} \gamma^{1} \dots \gamma^{1} -12627 Dec 26 j 22:50 8° **2**31'18 1°23'36 opposition minimum elong -12633 Dec 24 j 18:17 5° Υ08'45 4.33002 AU -12627 Dec 27 j 23:16 8° **△**45'30 6.07539 AU min. Earth dist. max. Earth dist. -12626 Jan 09 i 17:20 11°**2**43'01 direct -12632 Feb 24 j 11:16 0°**Υ**16'03 morning rise -12626 Apr 20 j 07:40 0°M evening set -12632 Jun 29 j 07:38 18°**Y**15'21 retrograde -12626 May 19 i 04:30 1° ML21'01 conjunction -12632 Jul 11 j 17:03 21°Υ02'42 1°37'00 -12626 Jun 16 j 17:24 30°R ₽ opposition -12632 Jul 11 j 16:59 21°Υ02'40 1°37'16 -12626 Jul 17 j 07:07 26° **2**17'02 -2°27'59 minimum elong max. Earth dist. -12632 Jul 10 j 21:10 20°**γ**51'30 6.31690 AU min. Earth dist. -12626 Jul 16 j 18:10 26°**2**21'29 4.09168 AU -12632 Jul 24 j 01:19 23°**Υ**49'34 morning rise direct -12626 Sep 13 j 21:26 21°**£**15'52 -12632 Aug 21 j 11:31 0°8 -12626 Dec 01 j 11:11 0°M retrograde -12632 Nov 24 j 20:26 11°**8**37'45 evening set -12625 Jan 19 j 12:47 10°M32'24 opposition -12631 Jan 25 j 10:36 6°**8**44'12 2°35'08 min. Earth dist. -12631 Jan 25 j 21:17 6°840'49 4.29709 AU -12625 Feb 02 j 05:49 13°ML41'24 -1°45'42 conjunction -12631 Mar 28 j 04:31 1°**8**49'03 minimum elong -12625 Feb 02 j 05:47 13°ML41'24 1°46'15 direct -12631 Jul 08 j 18:24 15°**8** max. Earth dist. -12625 Feb 02 j 21:19 13°ML50'20 6.11516 AU -12631 Jul 30 j 09:51 19°**8**47'37 evening set -12625 Feb 07 j 22:22 15°M morning rise -12625 Feb 15 j 22:16 16°M 50'04 conjunction -12631 Aug 11 j 18:00 22°**8**36'12 1°46'30 -12625 Apr 20 j 18:20 0° ₹ minimum elong -12631 Aug 11 j 18:01 22°**8**36'12 1°47'08 retrograde -12625 Jun 22 j 11:00 5°**∡**751'31 max. Earth dist. -12631 Aug 11 j 08:26 22°**8**30'44 6.26693 AU opposition -12625 Aug 20 j 06:23 0°**х** 50'28 -2°32'25 -12631 Aug 24 j 02:56 25°**8**25'18 min. Earth dist. -12625 Aug 20 j 01:21 0°**∡**752'11 4.14853 AU morning rise

-12625 Aug 26 j 11:14 30°RM

-12631 Sep 13 j 17:22 0°**П**

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12625 in astronomical counting style is the year 12626 BCE in historical counting style. direct -12625 Oct 18 j 19:18 25°M 46'55 conjunction -12619 Aug 16 j 04:51 27°**8**14'23 1°45'12 minimum elong -12625 Dec 11 j 02:28 0° ₹ -12619 Aug 16 j 04:52 27°**8**14'24 1°45'52 -12624 Feb 24 j 23:16 14° ₹ 55'08 -12619 Aug 15 j 20:38 27°**8**09'42 max. Earth dist. 6.25672 AU evening set -12619 Aug 28 j 14:32 0°**Ⅲ**04'14 morning rise -12624 Mar 09 j 13:25 18°■00'07 -1°30'26 -12619 Aug 28 j 07:05 0°**Ц** conjunction -12624 Mar 09 j 13:30 18° ₹ 00'10 1°31'13 -12618 Jan 02 j 17:11 18°**Д**35'13 minimum elong retrograde -12624 Mar 09 j 12:17 17°**⊀** 59'28 max. Earth dist. 6.18402 AU opposition -12618 Mar 05 j 10:41 13°**Ⅱ**38'12 2°20'34 morning rise -12624 Mar 23 j 01:31 21°**尽**03'53 min. Earth dist. -12618 Mar 05 j 11:16 13°**Ⅲ**38'01 4.22180 AU -12624 May 03 j 18:32 0°궁 direct -12618 May 04 j 22:45 8°**П**45'07 retrograde -12624 Jul 24 j 12:08 9°**る**20'02 evening set -12618 Sep 04 j 19:21 26°**Д**54'31 opposition -12624 Sep 21 j 12:02 4°る22'41 -1°45'23 -12624 Sep 21 j 17:07 4°**궁**20'59 4.22228 AU -12618 Sep 17 j 10:59 29° **I** 49'48 1°17'38 min. Earth dist. conjunction -12618 Sep 17 j 11:04 29° **1**49'51 1°18'26 -12624 Oct 31 j 09:18 30°R ✓ minimum elong direct -12624 Nov 21 j 07:46 29° ₹ 18'22 max. Earth dist. -12618 Sep 17 j 16:33 29°**Д**53'02 6.18318 AU -12624 Dec 12 j 10:45 0°ರ -12618 Sep 18 j 04:36 0ಂತಾ evening set -12623 Mar 30 j 18:05 18°**궁**06'01 morning rise -12618 Sep 30 j 05:24 2°5546'41 retrograde -12617 Feb 06 j 23:57 21°558'19 conjunction -12623 Apr 13 j 02:57 21°**⋜**05'56 -0°45'38 opposition -12617 Apr 09 j 07:40 16°557'39 minimum elong -12623 Apr 13 j 03:01 21°る05'59 0°46'22 min. Earth dist. -12617 Apr 08 j 23:07 17°500'27 4.14678 AU max. Earth dist. -12623 Apr 12 j 13:12 20°る58'13 6.25780 AU direct -12617 Jun 07 j 16:29 12°504'30 morning rise -12623 Apr 26 j 08:21 24°る04'06 -12617 Oct 06 j 00:12 $0^{\circ}\Omega$ -12623 May 23 i 16:11 0°≈ evening set -12617 Oct 08 i 07:25 0°**Ω**31'57 retrograde -12623 Aug 25 j 15:47 11°≈43'11 opposition -12623 Oct 24 i 05:32 6°≈49'12 -0°26'30 conjunction -12617 Oct 21 j 10:12 $3^{\circ}\Omega 35'14 0^{\circ}23'47$ min. Earth dist. -12623 Oct 24 j 18:18 6°≈45'01 4.28886 AU minimum elong -12617 Oct 21 j 10:14 $3^{\circ}\Omega 35'15$ $0^{\circ}24'26$ -12623 Dec 25 j 02:17 1°≈46'01 max. Earth dist. -12617 Oct 22 j 05:11 3° **Ω**46'18 6.11452 AU direct -12622 Feb 21 j 06:54 6°≈27'47 -12617 Nov 03 j 16:40 6° **Ω**40'32 asc node morning rise -12622 Apr 08 j 21:54 15°≈ -12617 Dec 11 j 07:01 15°**Ω** -12622 May 02 j 19:50 20°≈10'38 -12616 Mar 13 j 22:52 26°**\O**22'48 retrograde evening set -12616 Mar 20 j 13:49 $26^{\circ}\Omega$ 18'35 desc. node -12616 May 13 j 12:45 21° Ω 19'13 -0° 12'59 -12622 May 15 j 20:13 23°≈04'57 0°12'24 conjunction opposition -12622 May 15 j 20:12 23°≈04'57 0°11'55 -12616 May 12 j 20:31 21° Ω 24'39 4.09012 AU minimum elong min. Earth dist. -12622 May 15 j 14:37 23°≈01'50 behind sun begin direct -12616 Jul 10 j 23:27 16°Ω24'13 -12622 May 16 j 01:48 23°≈08'03 -12616 Oct 19 j 16:19 0° M behind sun end -12622 May 14 j 20:32 22°≈51'42 6.31264 AU -12616 Nov 11 j 17:05 5° Mp 14'19 max. Earth dist. evening set -12622 May 28 j 17:25 25°≈57'35 morning rise -12622 Jun 16 j 05:05 0°**米** -12616 Nov 25 j 05:28 8° M 23'32 -0°39'28 conjunction retrograde -12622 Sep 26 j 12:20 13°**米** 19'22 minimum elong -12616 Nov 25 j 05:23 8° m 23'29 0°39'10 opposition -12622 Nov 25 j 20:12 8°**米**27'15 0°58'32 max. Earth dist. -12616 Nov 26 j 07:50 8° m/38'57 6.07539 AU min. Earth dist. -12622 Nov 26 j 13:42 8° **∺** 21'38 4.32794 AU morning rise -12616 Dec 08 j 21:06 11° Mp 34'26 direct -12621 Jan 27 j 06:49 3°**∺**26'30 -12615 Mar 19 j 21:51 0°**♀** -12621 Jun 03 j 14:21 21°**)** 33'36 -12615 Apr 18 j 22:07 1°**£**25'45 evening set retrograde max. Earth dist. -12621 Jun 15 j 05:55 24°**米**09'48 -12615 May 18 j 14:02 30°R M 6.33253 AU -12615 Jun 17 j 15:16 26° m 20'54 -1°40'57 opposition -12621 Jun 16 j 05:41 24° **€** 23'07 1°05'56 min. Earth dist. -12615 Jun 16 j 21:48 26° m 26'52 4.07303 AU conjunction minimum elong -12621 Jun 16 j 05:36 24° + 23'04 1°05'51 direct -12615 Aug 14 j 20:33 21° m 22'42 -12621 Jun 28 j 18:24 27° **H** 11'23 morning rise -12615 Oct 31 i 00:49 0° **Ω** -12621 Jul 11 i 12:29 0°**℃** evening set -12615 Dec 18 j 14:34 10° **△**31'47 retrograde -12621 Oct 28 j 14:40 14° γ38'39 -12621 Dec 28 j 17:18 9° Υ 46'34 2° 05'49 conjunction -12614 Jan 01 j 07:33 13° **2**42'28 -1°28'50 opposition min. Earth dist. -12621 Dec 29 j 09:13 9° **Y**41'32 4.32833 AU minimum elong -12614 Jan 01 j 07:26 13° **2**42'24 1°29'00 direct -12620 Feb 29 j 00:57 4°**Υ**48'56 max. Earth dist. -12614 Jan 02 j 09:18 13° **2**57'25 6.08094 AU -12620 Jul 03 j 16:54 22°**Y**47'32 -12614 Jan 15 j 01:45 16° **2**53'45 evening set morning rise -12620 Jul $15 \text{ j } 06:02 \ 25^{\circ} \Upsilon 23'42 \ 6.31199 \text{ AU}$ max. Earth dist. -12614 Mar 18 j 17:56 0°M retrograde -12614 May 24 j 03:25 6°M26'27 conjunction -12620 Jul 16 j 01:37 25°**Y**34'46 1°40'13 opposition -12614 Jul 22 j 04:38 1°M22'47 -2°31'58 -12620 Jul 16 j 01:33 25°**Y**34'44 1°40'33 min. Earth dist. -12614 Jul 21 j 15:56 1°ML27'08 4.10184 AU minimum elong -12620 Jul 28 j 09:36 28°**Y**21'41 -12614 Aug 01 j 09:21 30°R € morning rise -12620 Aug 04 j 17:43 0°**8** direct -12614 Sep 18 j 21:16 26° \(\Omega\)21'16 -12620 Oct 31 j 22:12 15°8 -12614 Nov 06 j 09:53 0°M -12620 Nov 29 j 15:19 16°**8**14'24 retrograde -12613 Jan 22 j 03:57 15°M -12620 Dec 28 j 10:05 15°R\text{8} evening set -12613 Jan 24 j 18:49 15°ML35'47 opposition -12619 Jan 30 j 05:08 11°**8**20'33 2°36'47 min. Earth dist. -12619 Jan 30 j 15:59 11°**8**17'06 4.28922 AU conjunction -12613 Feb 07 j 11:20 18°ML44'00 -1°45'43 direct -12619 Apr 01 j 20:47 6°**8**25'42 minimum elong -12613 Feb 07 j 11:20 18°ML44'00 1°46'19 -12619 Jun 20 j 13:08 15°8 max. Earth dist. -12613 Feb 07 j 23:59 18°ML51'16 6.12888 AU

morning rise

-12613 Feb 21 j 03:22 21°ML51'48

-12619 Aug 03 j 20:11 24°**8**25'12

evening set

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Attention, astronomical year style is used: The year -12613 in astronomical counting style is the year 12614 BCE in historical counting style. -12613 Mar 30 i 09:21 0° ₹ evening set -12607 Aug 08 j 05:38 28°**8**59'19 -12613 Jun 27 j 03:02 10° ₹ 44'47 -12607 Aug 12 j 15:59 0°**Ⅱ** retrograde -12613 Aug 24 j 23:36 5°**∡**¹44'09 -2°28'27 opposition -12607 Aug 20 j 14:52 1°**П**49'25 1°43'11 min. Earth dist. -12613 Aug 24 j 19:49 5° ₹ 45'26 4.16445 AU conjunction -12613 Oct 23 j 18:11 0° ₹ 40'20 -12607 Aug 20 j 14:55 1°**Ⅱ**49'26 1°43'52 direct minimum elong -12612 Feb 29 j 22:01 19°**х** 43'41 -12607 Aug 20 j 07:48 1°**Ⅱ**45'21 6.24065 AU evening set max. Earth dist. -12607 Sep 02 j 01:33 4°**Ц**40'21 morning rise -12606 Jan 07 j 16:13 23°**Ⅱ**19'30 conjunction -12612 Mar 14 j 11:36 22° ₹ 47'42 -1°25'36 retrograde minimum elong -12612 Mar 14 j 11:42 22° ₹ 47'45 1°26'23 opposition -12606 Mar 10 j 07:42 18°**Ⅲ**21'59 2°14'18 max. Earth dist. -12612 Mar 14 j 09:29 22° ₹ 46'30 6.20097 AU min. Earth dist. -12606 Mar 10 j 07:14 18°**Ⅲ**22'08 4.20493 AU morning rise -12612 Mar 27 j 22:40 25° ₹ 50'22 direct -12606 May 09 j 15:49 13°**Ⅲ**29'00 -12612 Apr 15 j 17:48 0°ਰ -12606 Sep 01 j 23:41 0°ഇ -12612 Jul 28 j 23:27 13°**⋜**58'15 -12606 Sep 09 j 10:48 retrograde evening set 1°**5**42'38 opposition -12612 Sep 26 j 01:00 9°중01'26 -1°35'43 min. Earth dist. -12612 Sep 26 j 07:30 8°**궁**59'16 4.23847 AU conjunction -12606 Sep 22 j 04:04 4°**©**39'19 1°11'14 direct -12612 Nov 26 j 01:16 3°る57'09 minimum elong -12606 Sep 22 j 04:09 4°**©**39'23 1°12'02 evening set -12611 Apr 04 j 08:56 22°**궁**39'21 max. Earth dist. -12606 Sep 22 j 12:34 4°9544'15 6.16721 AU morning rise -12606 Oct 05 j 00:14 7°537'41 conjunction -12611 Apr 17 j 16:38 25°る38'15 -0°38'03 retrograde -12605 Feb 12 j 02:42 26°556'21 minimum elong -12611 Apr 17 j 16:42 25°る38'17 0°38'45 opposition -12605 Apr 14 j 08:17 21°555'13 max. Earth dist. -12611 Apr 16 j 23:22 25°る28'34 6.27187 AU min. Earth dist. -12605 Apr 13 j 21:27 21°558'46 4.13309 AU morning rise -12611 Apr 30 j 21:03 28°る35'24 direct -12605 Jun 12 j 12:15 17°501'58 -12611 May 07 i 05:30 0°≈ -12605 Sep 18 i 17:38 $0^{\circ}\Omega$ -12611 Aug 03 i 02:44 15°≈ evening set -12605 Oct 13 j 06:36 5°**Ω**33'38 retrograde -12611 Aug 29 j 23:30 16°≈09'18 -12611 Sep 25 j 21:06 15°R≈ conjunction -12605 Oct 26 j 10:55 8° Ω38'05 0°14'44 -12611 Oct 28 j 15:48 11°≈15'38 -0°14'42 -12605 Oct 26 j 10:57 8°**Ω**38′05 0°15'21 opposition minimum elong min. Earth dist. -12611 Oct 29 j 06:21 11°≈10'53 4.29971 AU behind sun begin -12605 Oct 26 j 08:32 8° **Ω**36'41 -12611 Dec 29 j 15:45 6°≈12'37 -12605 Oct 26 j 13:22 8°**Ω**39'30 direct behind sun end -12610 Jan 03 j 06:03 6°≈14'34 max. Earth dist. -12605 Oct 27 j 07:47 8° Ω50'15 6.10426 AU asc. node -12610 Mar 22 j 04:34 15°≈ -12605 Nov 08 j 19:03 11°**Ω**44'33 morning rise -12610 May 07 j 04:31 24°≈33'26 -12605 Nov 23 j 00:21 15°**Ω** evening set -12610 May 19 j 03:42 27°≈13'30 6.31946 AU -12604 Jan 27 j 15:27 27°**Ω**35'35 max. Earth dist. desc. node -12604 Feb 16 j 23:18 0° Mp -12610 May 20 j 03:46 27°≈26'58 0°20'16 -12604 Mar 19 j 03:24 1° m 30'18 conjunction retrograde -12610 May 20 j 03:44 27°≈26'56 0°19'49 -12604 Apr 19 j 00:42 30°RΩ minimum elong -12610 May 31 j 13:49 0°**米** -12604 May 18 j 14:25 $26^{\circ}\Omega 26'18 -0^{\circ}26'43$ opposition morning rise -12610 Jun 01 j 23:35 0° **∺** 18'46 min. Earth dist. -12604 May 17 j 21:09 $26^{\circ}\Omega$ 32'07 4.08408 AUretrograde -12610 Sep 30 j 19:26 17°**米**39'37 direct -12604 Jul 15 j 23:43 21° Ω 30'53 opposition -12610 Nov 30 j 06:05 12°**米**47'39 1°09'06 -12604 Sep 30 j 04:32 0° Mg min. Earth dist. -12610 Dec 01 j 00:10 12° **★** 41'52 4.33033 AU evening set -12604 Nov 16 j 22:40 10° m 24'07 -12609 Jan 31 j 16:55 7°**)** 47'17 direct -12609 Jun 07 j 19:57 25° **∺**53'03 conjunction -12604 Nov 30 j 12:08 13° m 33'48 -0°47'58 evening set max. Earth dist. -12609 Jun 19 j 08:12 28° **∺**27'37 6.33002 AU -12604 Nov 30 j 12:03 13° m 33'45 0°47'44 minimum elong max. Earth dist. -12604 Dec 01 j 16:53 13° m 50'36 6.07384 AU -12609 Jun 20 j 10:04 28° \ 42'08 1°11'56 -12604 Dec 14 i 04:24 16° m 45'01 conjunction morning rise -12609 Jun 20 j 09:58 28° \ 42'05 1°11'54 -12603 Feb 15 i 07:44 0°**♀** minimum elong -12609 Jun 26 i 04:51 0°**Υ** retrograde -12603 Apr 24 i 00:51 6° **2**34'46 -12609 Jul 02 j 22:04 1°**Υ**30'09 morning rise opposition -12603 Jun 22 j 15:14 1° \(\Omega\) 29'55 -1°51'10 retrograde -12609 Nov 02 i 02:17 19° Υ 00'50 min. Earth dist. -12603 Jun 21 j 21:57 1°**2**35'49 4.07605 AU opposition $-12608 \text{ Jan } 02 \text{ j } 05:39 \quad 14^{\circ} \Upsilon 08'37 \quad 2^{\circ} 12'27$ -12603 Jul 03 j 18:50 30°R Mp min. Earth dist. -12608 Jan 02 j 22:18 14°**Υ**03'20 4.32129 AU -12603 Aug 19 j 20:52 26° m 31'14 direct direct -12608 Mar 04 j 11:43 9°**Υ**11'20 -12603 Oct 05 j 16:28 0°**♀** -12608 Jul 07 j 22:36 27°**Y**11'08 evening set evening set -12603 Dec 23 j 22:35 15°**£**41'18 conjunction -12608 Jul 20 j 07:07 29°**Y**58'38 1°42'42 conjunction -12602 Jan 06 j 15:31 18°**-**251'39 -1°33'31 minimum elong -12608 Jul 20 j 07:04 29°**Υ**58'36 1°43'06 minimum elong -12602 Jan 06 j 15:24 18°**♀**51'35 1°33'45 max. Earth dist. -12608 Jul 19 j 13:03 29°**Y**48'24 6.30088 AU max. Earth dist. -12602 Jan 07 j 14:53 19°**2**05'12 6.08752 AU -12608 Jul 20 j 09:32 0°8 -12602 Jan 20 j 09:44 22°**♀**02'32 morning rise -12608 Aug 01 j 14:54 2°**8**45'55 morning rise -12602 Feb 25 j 09:34 0°M -12608 Oct 01 j 02:11 15°8 retrograde -12602 May 29 j 00:25 11°M29'44 retrograde -12608 Dec 04 j 06:32 20°845'19 opposition -12602 Jul 27 j 01:24 6°M26'22 -2°34'53 opposition -12607 Feb 03 j 21:24 15° \$\frac{8}{51}'08 2°37'25 min. Earth dist. -12602 Jul 26 j 13:30 6°M30'27 4.11128 AU min. Earth dist. -12607 Feb 04 j 06:45 15°**8**48'10 4.27507 AU direct -12602 Sep 23 j 21:31 1°M24'25 -12607 Feb 10 j 15:36 15°R₩ -12601 Jan 04 j 16:49 15°M direct -12607 Apr 06 j 08:29 10°**8**56'40 -12601 Jan 29 j 23:53 20°M 37'28 evening set -12607 May 29 j 03:34 15°8

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Earth dist. -12595 Aug 25 j 00:38 6°**Ⅲ**31′08 6.23123 AU direct -12601 Oct 28 j 16:14 5° ₹ 33'56 morning rise -12595 Sep 06 j 15:44 9°**Д**24'55 evening set -12600 Mar 05 j 21:27 24° ₹34'08 retrograde -12594 Jan 12 j 15:17 28°**Ⅲ**09'26 opposition -12594 Mar 15 j 06:33 23°**I**I1'26 2°07'04 -12600 Mar 19 j 10:20 27° ₹ 37'24 -1°20'12 -12594 Mar 15 j 04:09 23°**I**I12'12 4.19597 AU conjunction min. Earth dist. -12600 Mar 19 j 10:26 27° **₹**'37'28 1°21'00 minimum elong direct -12594 May 14 j 10:47 18°**Ⅲ**18'34 max. Earth dist. -12600 Mar 19 j 05:07 27° ₹34'27 6.21278 AU -12594 Aug 15 j 18:03 0°ಅ -12600 Mar 29 j 22:49 0°₹ evening set -12594 Sep 14 j 03:34 6°933'34 morning rise -12600 Apr 01 j 20:38 0°**る**39'16 retrograde -12600 Aug 02 j 12:02 18°₹41'06 conjunction -12594 Sep 26 j 22:07 9°**©**31'12 1°04'23 opposition -12600 Sep 30 j 15:48 13°₹44'48 -1°25'25 minimum elong -12594 Sep 26 j 22:13 9°931'15 1°05'10 min. Earth dist. -12600 Sep 30 j 23:33 13°る42'13 4.24902 AU max. Earth dist. -12594 Sep 27 j 08:02 9°936'57 6.15958 AU direct -12600 Nov 30 j 19:32 8°る40'34 morning rise -12594 Oct 09 j 20:00 12°530'37 evening set -12599 Apr 09 j 02:16 27°る19'33 -12593 Jan 12 j 19:15 0 $^{\circ}\Omega$ -12599 Apr 21 i 01:22 0°≈ retrograde -12593 Feb 17 i 03:44 $1^{\circ}\Omega$ 52'59 -12593 Mar 24 i 09:23 30°RS conjunction -12599 Apr 22 j 08:56 0°≈17'42 -0°30'04 opposition -12593 Apr 19 i 07:35 26°551'18 0°53'58 minimum elong -12599 Apr 22 j 08:59 0°≈17'44 0°30'46 min. Earth dist. -12593 Apr 18 j 19:16 26°55'21 4.12720 AU max. Earth dist. -12599 Apr 21 i 14:30 0°≈07'22 6.28059 AU direct -12593 Jun 17 j 08:50 21°557'46 -12599 May 05 j 12:10 3°≈14'03 -12593 Aug 30 j 14:29 0°**Ω** morning rise -12599 Jul 02 j 19:17 15°≈ -12593 Oct 18 j 04:24 10° Ω 31'11 evening set -12599 Sep 03 j 12:03 20°≈44'47 retrograde -12599 Nov 02 j 05:57 15°≈51'32 -0°02'29 conjunction -12593 Oct 31 j 10:19 13° Ω 36'26 0°05'48 opposition min. Earth dist. -12599 Nov 02 j 21:47 15°≈46'24 4.30585 AU -12593 Oct 31 j 10:19 13°**Ω**36'26 0°06'23 minimum elong -12599 Nov 08 j 21:13 15°R≈ -12593 Oct 31 j 02:34 13° **Ω**31'56 behind sun begin -12599 Nov 13 j 12:20 14°≈24'52 asc. node behind sun end -12593 Oct 31 j 18:04 13°**Ω**40'57 -12598 Jan 03 j 08:29 10°≈48'52 max. Earth dist. -12593 Nov 01 j 09:51 13° Ω 50'10 6.10080 AU direct -12598 Feb 27 j 03:16 15°≈ -12593 Nov 06 j 09:29 15°Ω-12598 May 11 j 17:11 29°≈07'20 -12593 Nov 13 j 19:44 16° **Ω**43'38 evening set morning rise -12598 May 15 j 15:55 0°**光** desc. node -12593 Dec 06 j 17:55 $21^{\circ}\Omega$ 55'25 -12592 Jan 16 j 06:58 0° M conjunction -12598 May 24 j 15:05 2° \(\mathcal{H}\) 00'11 0°28'19 retrograde -12592 Mar 24 j 04:43 6° Mp 30'06 minimum elong -12598 May 24 j 15:02 2°**米**00′09 0°27′56 opposition -12592 May 23 j 12:38 1° m/25'51 -0°39'51 max. Earth dist. -12598 May 23 j 13:16 1° **∺** 45'45 6.32246 AU min. Earth dist. -12592 May 22 j 19:25 1° m 31'38 4.08334 AU -12598 Jun 06 j 09:49 4° **∺**51'25 -12592 Jun 03 j 07:23 30°RΩ morning rise retrograde -12598 Oct 05 j 08:14 22° **∺** 12'42 direct -12592 Jul 20 j 20:33 $26^{\circ}\Omega$ 30'00 -12598 Dec 04 j 21:19 17°¥20'48 1°19'46 -12592 Sep 05 j 16:16 0° Mp opposition -12598 Dec 05 j 15:35 17°**H** 14'58 4.33026 AU -12592 Nov 22 j 01:00 15° m/24'51 min. Earth dist. evening set direct -12597 Feb 05 i 07:57 12° \(\frac{1}{2}\)0'51 -12592 Dec 05 j 15:03 18° m 34'43 -0°55'50 -12597 Jun 10 j 08:00 0°**Υ**° conjunction -12592 Dec 05 j 14:57 18° m 34'40 0°55'40 evening set -12597 Jun 12 j 06:20 0° Υ 25'46 minimum elong max. Earth dist. -12592 Dec 06 j 18:00 18° m 50'26 6.07556 AU conjunction -12597 Jun 24 i 19:29 3°**Y**14'30 1°17'50 morning rise -12592 Dec 19 j 08:04 21° mp 46'03 minimum elong -12597 Jun 24 i 19:23 3°**Υ**'14'27 1°17'51 -12591 Jan 25 j 10:26 0°**♀** max. Earth dist. -12597 Jun 23 j 19:27 3°**Υ**01'00 6.32690 AU retrograde -12591 Apr 28 j 21:37 11°**△**33'18 -12597 Jul 07 j 06:26 6°**Y**02'14 -12591 Jun 27 j 10:56 6° **2**28'29 -2°00'13 morning rise opposition -12597 Nov 06 j 17:40 23°**Υ**36'22 retrograde min. Earth dist. -12591 Jun 26 j 17:52 6°**2**34'20 4.08013 AU -12596 Jan 06 j 23:09 18°**Υ**44'03 2°18'39 opposition direct -12591 Aug 24 j 17:46 1°**2**29'15 min. Earth dist. -12596 Jan 07 j 14:58 18°**Υ**39'03 4.31565 AU evening set -12591 Dec 29 j 02:17 20°**♀**40'10 -12596 Mar 09 j 03:32 13° **Y**47'16 direct -12596 Jul 04 j 09:04 0°8 conjunction -12590 Jan 11 j 19:26 23°**2**50'16 -1°37'21 -12596 Jul 12 j 09:07 1°**8**47'25 -12590 Jan 11 j 19:20 23°**2**50'13 1°37'40 evening set minimum elong -12590 Jan 12 j 17:52 24°**2**03'16 6.09347 AU max. Earth dist. -12596 Jul 24 j 17:10 4°**8**35'03 1°44'45 conjunction morning rise -12590 Jan 25 j 13:16 27°**♀**00'41 minimum elong -12596 Jul 24 j 17:07 4°**8**35'01 1°45'12 -12590 Feb 07 j 16:47 0°M max. Earth dist. -12596 Jul 23 j 23:22 4°**8**24'57 6.29312 AU -12590 May 04 j 15:39 15°M morning rise -12596 Aug 06 j 01:03 7°**8**22'38 retrograde -12590 Jun 02 j 20:06 16°ML22'58 -12596 Sep 10 j 08:40 15°8 -12590 Jul 01 j 15:49 15°RML -12596 Dec 09 j 02:31 25°**8**27'25 -12590 Jul 31 j 18:28 11°M20'02 -2°36'37 retrograde opposition min. Earth dist. -12590 Jul 31 j 08:51 11°ML23'19 4.11850 AU opposition

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12590 in astronomical counting style is the year 12591 BCE in historical counting style. direct -12590 Sep 28 j 18:26 6°ML17'42 -12584 Dec 03 i 18:52 -12590 Dec 16 j 18:39 15°M -12584 Dec 13 j 22:22 0°**Ⅱ**09'28 retrograde -12589 Feb 04 j 01:29 25°M30'10 -12584 Dec 24 j 02:03 30°R8 evening set -12583 Feb 13 j 14:48 25°**8**14'28 2°35'49 opposition -12589 Feb 17 j 17:29 28°M37'19 -1°43'36 min. Earth dist. -12583 Feb 13 j 21:30 25°**8**12'20 4.25927 AU conjunction -12589 Feb 17 j 17:31 28°M37'20 1°44'16 -12583 Apr 15 j 19:56 20°820'37 minimum elong direct -12589 Feb 18 j 01:55 28° ML42'09 6.14802 AU -12583 Jul 09 j 11:20 0°**Ⅱ** max. Earth dist. -12589 Feb 23 j 18:08 0°**∡**¹ evening set -12583 Aug 17 j 06:31 8°**Ⅲ**24'34 -12589 Mar 03 j 08:16 morning rise 1°**∡**°43'44 retrograde -12589 Jul 06 j 11:07 20° ₹ 24'06 conjunction -12583 Aug 29 j 17:15 11°**II**16'01 1°37'16 opposition -12589 Sep 03 j 07:55 15° ₹24'34 -2°17'53 minimum elong -12583 Aug 29 j 17:19 11°**II**16'03 1°38'01 min. Earth dist. -12589 Sep 03 j 07:05 15° ₹24'51 4.18419 AU -12583 Aug 29 j 14:26 11°**Д**14'24 6.22380 AU max. Earth dist. -12589 Nov 02 j 10:08 10° ₹20'27 -12583 Sep 11 j 06:02 14°**Д**08'36 direct morning rise evening set -12588 Mar 10 j 18:35 29° ₹ 19'07 -12583 Dec 03 j 12:07 0°5 -12588 Mar 13 j 19:24 0°る retrograde -12582 Jan 17 j 13:45 2°557'54 -12582 Mar 04 j 03:05 30°R II conjunction -12588 Mar 24 j 06:49 2°**궁**21'53 -1°14'21 opposition -12582 Mar 20 j 04:30 27°**I**59'20 1°59'01 minimum elong -12588 Mar 24 j 06:55 2°**궁**21'56 1°15'07 min. Earth dist. -12582 Mar 20 j 00:11 28°**Д**00'44 4.18813 AU max. Earth dist. -12588 Mar 23 j 23:04 2°る17'30 6.21996 AU direct -12582 May 19 j 04:34 23°**Д**06'28 morning rise -12588 Apr 06 j 16:23 5°₹23'10 -12582 Jul 27 j 01:48 0°5 retrograde -12588 Aug 07 j 02:17 23°る20'52 evening set -12582 Sep 18 j 19:42 11°522'52 opposition -12588 Oct 05 i 06:14 18° ₹25'06 -1°14'41 min. Earth dist. -12588 Oct 05 j 15:59 18°**궁**21'52 4.25494 AU conjunction -12582 Oct 01 j 15:55 14°521'31 0°57'09 direct -12588 Dec 05 j 13:47 13°る21'02 minimum elong -12582 Oct 01 j 16:00 14°521'35 0°57'55 -12587 Apr 04 j 20:51 0°**≈** max. Earth dist. -12582 Oct 02 j 05:00 14°\$29'08 6.15221 AU -12587 Apr 13 j 18:49 1°≈58'10 morning rise -12582 Oct 14 j 15:16 17°522'00 evening set max. Earth dist. -12587 Apr 26 j 04:56 4°**≈**44'48 6.28495 AU -12582 Dec 14 j 00:48 $0^{\circ}\Omega$ -12581 Feb 22 j 05:17 $6^{\circ}\Omega$ 48'06 retrograde -12587 Apr 27 j 00:32 4°≈55'46 -0°21'55 opposition -12581 Apr 24 j 06:09 1°Ω46'01 0°41'22 conjunction -12587 Apr 27 j 00:34 4°≈55'47 0°22'34 min. Earth dist. -12581 Apr 23 j 17:33 1° **Ω**50'11 4.12082 AU minimum elong -12587 May 10 j 02:41 7°≈51'33 -12581 May 07 j 22:51 30°RS morning rise -12587 Jun 12 j 11:01 15°≈ direct -12581 Jun 22 j 04:25 26°552'18 -12587 Sep 07 j 23:43 25°≈20'44 -12581 Aug 05 j 12:47 0°**Ω** retrograde -12587 Sep 23 j 04:15 24°≈58'22 -12581 Oct 16 j 05:27 13° Ω 52'58 asc. node desc. node -12587 Nov 06 j 20:52 20°≈27'46 0°09'48 -12581 Oct 21 j 01:44 15° Ω opposition min. Earth dist. -12587 Nov 07 j 12:27 20°≈22'42 4.30852 AU -12581 Oct 23 j 02:15 15° **Ω**28'07 evening set -12586 Jan 08 j 00:13 15°≈25'27 direct -12581 Nov 05 j 09:22 18° Ω 34'09 -0°03'16 -12586 Apr 29 j 07:02 0°**光** conjunction evening set -12586 May 16 j 06:27 3°**米**42'32 minimum elong -12581 Nov 05 j 09:21 18°**Q**34'09 0°02'44 max. Earth dist. -12586 May 28 j 01:52 6°**米** 20'41 6.32338 AU behind sun begin -12581 Nov 05 j 01:07 18°Ω29'21 behind sun end -12581 Nov 05 j 17:36 18°**Ω**38'56 -12586 May 29 j 03:03 6° **€** 34'47 0°36'16 max. Earth dist. -12581 Nov 06 j 08:19 18° **Ω**47'33 6.09594 AU conjunction -12586 May 29 j 03:00 6° **★** 34'45 0°35'57 -12581 Nov 18 j 20:18 21° Ω 42'11 minimum elong morning rise -12586 Jun 10 j 20:35 9° **∺**25'29 -12581 Dec 26 j 06:01 0° Mp morning rise -12586 Oct 09 j 22:54 26° **★**47'53 retrograde -12580 Mar 29 j 03:45 11° Mp 30'06 retrograde -12586 Dec 09 i 13:58 21° \(\) 56'04 1°30'04 -12580 May 28 j 10:20 6° m 25'37 -0°52'41 opposition opposition -12586 Dec 10 j 08:15 21° \(\) 50'15 4.32948 AU -12580 May 27 j 16:17 6° m 31'43 4.08058 AU min. Earth dist. min. Earth dist. direct -12585 Feb 10 j 01:18 16° \(\) 56'38 direct -12580 Jul 25 i 16:45 1° m 29'19 -12580 Nov 27 j 03:56 20° m 26'58 -12585 May 24 j 17:22 evening set -12585 Jun 16 i 17:28 5°**Y**′00′33 evening set max. Earth dist. -12585 Jun 28 j 05:39 7° **Y** 35'29 6.32422 AU conjunction -12580 Dec 10 j 18:51 23° m 37'10 -1°03'18 minimum elong -12580 Dec 10 j 18:45 23° m 37'06 1°03'12 conjunction -12585 Jun 29 j 05:33 7°**Υ**48'56 1°23'19 max. Earth dist. -12580 Dec 11 j 22:24 23° m 53'13 6.07509 AU -12585 Jun 29 i 05:27 7°**Υ**48'52 1°23'25 morning rise -12580 Dec 24 j 12:10 26° Mp 48'37 minimum elong -12585 Jul 11 j 15:50 10°**Υ**36'25 morning rise -12579 Jan 07 j 10:54 0° **♀** retrograde -12585 Nov 11 j 10:00 28° Υ 13'54 retrograde -12579 May 03 j 21:41 16°**♀**34'11 -12579 Jul $\;$ 02 j 07:11 $\;$ 11° $\! \underline{\bullet}\!$ 29'31 $\;$ -2°08'26 opposition -12584 Jan 11 j 18:00 23°**Y**21'17 2°24'02 opposition -12579 Jul 01 j 15:50 11°**2**34'47 4.08212 AU min. Earth dist. -12584 Jan 12 j 08:08 23°**Y**16'49 4.31144 AU min. Earth dist. -12584 Mar 13 j 19:53 18°**Y**24'55 direct -12579 Aug 29 j 16:09 6°**♀**29'48 direct -12584 Jun 17 j 09:20 -12578 Jan 03 j 07:18 25°**△**42'23 0° 8 evening set -12584 Jul 16 j 19:43 6°**8**24'37 evening set conjunction -12578 Jan 17 j 00:28 28°**-**52'18 -1°40'30 -12584 Jul 29 j 03:41 9°**8**12'21 1°46'09 conjunction minimum elong -12578 Jan 17 j 00:24 28°**⊆**52'15 1°40'52 minimum elong -12584 Jul 29 j 03:39 9°**8**12'20 1°46'39 max. Earth dist. -12578 Jan 17 j 20:49 29°**♀**04'04 6.09747 AU max. Earth dist. -12584 Jul 28 j 13:13 9°**8**04'08 6.28754 AU -12578 Jan 21 j 21:38 0°M -12584 Aug 10 j 11:26 12°800'08 morning rise -12578 Jan 30 j 18:12 2°M02'24 morning rise -12584 Aug 23 j 21:44 15°8 -12578 Apr 02 j 23:37 15°M

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12578 in astronomical counting style is the year 12579 BCE in historical counting style. retrograde -12578 Jun 07 j 14:46 21°M20'18 min. Earth dist. -12572 Jan 17 j 02:01 27° **Y** 52'12 4.30938 AU -12578 Aug 05 j 12:45 16°ML17'44 -2°37'16 direct -12572 Mar 18 j 13:11 23°**Υ**00'37 opposition min. Earth dist. -12578 Aug 05 j 03:33 16°M20'53 4.12429 AU -12572 May 29 j 02:17 0°8 -12578 Aug 15 j 02:38 15°RM -12572 Jul 21 j 05:28 10°859'06 evening set -12578 Oct 03 j 14:38 11°ML15'02 direct -12578 Nov 22 j 05:19 15°M -12572 Aug 02 j 13:15 13°**8**46'54 1°46'52 conjunction -12572 Aug 02 j 13:14 13°**8**46'54 1°47'23 -12577 Feb 07 j 04:14 0° ₹ minimum elong -12577 Feb 09 j 04:23 -12572 Aug 01 j 23:14 13°**8**38'56 6.28350 AU evening set 0°**х** 27′16 max. Earth dist. -12572 Aug 07 j 21:49 15°**8** conjunction -12577 Feb 22 j 20:00 3°**尽** 33'59 -1°41'25 morning rise -12572 Aug 14 j 21:20 16°**8**34'57 minimum elong -12577 Feb 22 j 20:02 3°**∡**°34′01 1°42′08 -12572 Oct 21 j 09:21 0°**Ⅱ** -12577 Feb 23 j 01:35 max. Earth dist. 3°**尽**37'11 6.15507 AU retrograde -12572 Dec 18 j 16:07 4°**Ⅱ**48'13 -12577 Mar 08 j 10:15 6° ₹ 39'53 -12571 Feb 17 j 11:09 30°R8 morning rise retrograde -12577 Jul 11 j 04:31 25° ₹ 14'56 opposition -12571 Feb 18 j 10:02 29°**8**52'43 2°33'29 opposition -12577 Sep 08 j 00:46 20° ₹ 15'55 -2°11'12 min. Earth dist. -12571 Feb 18 j 14:44 29°**8**51'13 4.25346 AU min. Earth dist. -12577 Sep 08 j 02:16 20° ₹ 15'25 4.19165 AU direct -12571 Apr 20 j 10:53 24°**8**59'02 direct -12577 Nov 07 j 07:34 15° **₹**11'41 -12571 Jun 18 j 05:32 0°**П** -12576 Feb 25 j 22:03 0°ਤ evening set -12571 Aug 21 j 17:34 13°**Д**03'04 evening set -12576 Mar 15 j 16:58 4°る08'30 conjunction -12571 Sep 03 j 05:23 15° II 55'14 1°33'22 conjunction -12576 Mar 29 j 04:39 7°る10'45 -1°07'55 minimum elong -12571 Sep 03 j 05:28 15° II 55'17 1°34'08 minimum elong -12576 Mar 29 j 04:45 7°る10'48 1°08'41 max. Earth dist. -12571 Sep 03 i 05:34 15°**Д**55'21 6.21675 AU max. Earth dist. -12576 Mar 28 j 20:01 7°る05'52 6.22744 AU morning rise -12571 Sep 15 j 19:10 18° **Д**48'36 morning rise -12576 Apr 11 j 13:16 10°る11'23 -12571 Nov 07 j 21:40 0°ഇ retrograde -12576 Aug 11 j 15:06 28°る04'46 retrograde -12570 Jan 22 j 12:20 7°5542'29 -12576 Oct 09 j 22:04 23°る09'27 -1°03'21 -12570 Mar 25 j 01:00 2°543'27 1°50'14 opposition opposition -12576 Oct 10 j 07:46 23°**궁**06'14 4.26186 AU min. Earth dist. -12570 Mar 24 j 20:33 2°544'53 4.18006 AU min. Earth dist. -12576 Dec 10 j 07:57 18°₹05'33 -12570 Apr 16 j 09:49 30°R II direct -12575 Mar 18 j 10:39 -12570 May 23 j 22:07 27°**Ц**50'33 direct 0°**≈** -12575 Apr 18 j 12:29 6°≈40'16 -12570 Jun 29 j 21:05 0°១ evening set -12570 Sep 23 j 11:13 16°508'42 evening set -12575 May 01 j 16:55 9°≈37'08 -0°13'33 conjunction -12575 May 01 j 16:57 9°≈37'08 0°14'10 -12570 Oct 06 j 08:48 19°508'22 0°49'37 conjunction minimum elong -12575 May 01 j 13:02 9°≈34'58 -12570 Oct 06 j 08:53 19°508'24 0°50'21 behind sun begin minimum elong -12575 May 01 j 20:52 9°≈39'19 -12570 Oct 06 j 21:43 19°515'52 6.14393 AU behind sun end max. Earth dist. -12575 Apr 30 j 19:56 9°≈25'22 6.29111 AU -12570 Oct 19 j 09:59 22°509'58 max. Earth dist. morning rise -12575 May 14 j 18:02 12°≈32'13 -12570 Nov 23 j 19:00 0°**Ω** morning rise -12575 May 25 j 21:52 15°≈ retrograde -12569 Feb 27 j 03:27 $11^{\circ}\Omega$ 40'04 asc. node -12575 Aug 01 j 18:26 27°≈17'51 opposition -12569 Apr 29 j 03:01 6°**Ω**37'33 0°28'35 retrograde -12575 Sep 12 j 14:14 29°≈59'18 min. Earth dist. -12569 Apr 28 j 13:00 6°Ω42'12 4.11292 AU opposition -12575 Nov 11 j 13:07 25°≈06'35 0°22'05 direct -12569 Jun 26 j 21:29 1°**Ω**43'34 min. Earth dist. -12575 Nov 12 j 05:46 25°≈01'12 4.31346 AU desc. node -12569 Aug 26 j 17:33 7°**Ω**21'56 -12574 Jan 12 j 19:36 20°≈04'38 -12569 Oct 04 j 07:18 15°**Ω** direct -12574 Apr 11 j 08:10 0°**米** -12569 Oct 27 j 23:56 20° **Ω**22'47 evening set -12574 May 20 j 19:44 8°**升** 19'10 evening set -12569 Nov 10 j 08:35 23° Ω 29'45 -0°12'06 conjunction -12574 Jun 02 j 15:06 11°\(\mathbf{H}\) 10'44 0°44'00 -12569 Nov 10 j 08:33 23° Ω 29'44 0°11'38 conjunction minimum elong -12574 Jun 02 j 15:02 11° ¥ 10'41 0°43'44 -12569 Nov 10 j 02:42 23° Ω 26'20 minimum elong behind sun begin max. Earth dist. -12574 Jun 01 i 14:33 10° + 57'00 6.32671 AU behind sun end -12569 Nov 10 j 14:23 23° Ω 33'08 -12574 Jun 15 i 07:23 14° ¥ 00'46 max. Earth dist. -12569 Nov 11 i 09:08 $23^{\circ}\Omega$ 44'06 6.08930 AU morning rise -12574 Sep 14 j 11:21 morning rise -12569 Nov 23 j 20:39 $26^{\circ}\Omega$ 38'36 -12574 Oct 14 j 11:52 1°Υ23'33 -12569 Dec 08 j 12:26 0° mg retrograde -12574 Nov 13 j 18:35 30°R € retrograde -12568 Apr 03 j 05:28 16° M 28'35 -12568 Jun 02 j 07:33 11° **m** 23'59 -1°05'05 opposition -12574 Dec 14 j 06:54 26° \times 31'39 1°39'46 opposition min. Earth dist. -12574 Dec 14 j 23:43 26° **∺** 26'18 4.33120 AU min. Earth dist. -12568 Jun 01 j 14:36 11° m 29'44 4.07584 AU direct -12573 Feb 14 j 17:17 21° **€** 32'38 direct -12568 Jul 30 j 13:47 6° Mp 27'16 -12573 May 06 j 06:09 $0^{\circ}\Upsilon$ evening set -12568 Dec 02 j 07:28 25° m 28'42 -12573 Jun 21 j 04:09 9°**Υ**34'32 evening set conjunction -12568 Dec 15 j 23:02 28° m 39'17 -1°10'16 -12573 Jul 03 j 15:13 12°**Y**22'26 1°28'15 -12568 Dec 15 j 22:55 28° m 39'12 1°10'14 conjunction minimum elong -12573 Jul 03 j 15:08 12°**Y**°22'22 max. Earth dist. -12568 Dec 17 j 01:32 28° m 54'43 6.07261 AU minimum elong 1°28'24 -12573 Jul 02 j 17:07 12°**Υ**'09'59 max. Earth dist. 6.32407 AU -12568 Dec 21 j 17:38 0∘ಹ morning rise -12573 Jul 16 j 00:40 15°**Υ**09'33 morning rise -12568 Dec 29 j 16:56 1°**≙**51'02 -12573 Oct 03 j 07:53 0° 8 retrograde -12567 May 08 j 20:22 21°**♀**35'31 retrograde -12573 Nov 16 j 02:31 2°**8**49'27 opposition -12567 Jul 07 j 03:40 16°**2**31'03 -2°15'41 -12573 Dec 30 j 16:36 30°R℃ min. Earth dist. -12567 Jul 06 j 12:05 16°**2**36'24 4.08251 AU -12572 Jan 16 j 12:06 27°**Υ**'56'36 2°28'26 -12567 Sep 03 j 12:40 11°**♀**30'55 opposition direct

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12566 in astronomical counting style is the year 12567 BCE in historical counting style. -12566 Jan 05 i 05:12 0°M direct -12561 Feb 19 i 09:58 26° + 06'15 -12566 Jan 08 j 13:18 0°M 45'51 -12561 Apr 13 j 00:30 0°**Υ** evening set -12561 Jun 25 j 13:35 14°**Υ**'06'51 evening set -12566 Jan 22 j 06:27 3°M 55'38 -1°42'53 conjunction -12566 Jan 22 j 06:23 3°M55'36 1°43'18 -12561 Jul 07 j 23:54 16°**Y**54'29 1°32'39 minimum elong conjunction -12566 Jan 23 j 00:37 -12561 Jul 07 j 23:49 16°**Y**54'26 1°32'52 max. Earth dist. 4°**ጤ**06'08 6.10061 AU minimum elong -12566 Feb 04 j 23:57 -12561 Jul 07 j 02:25 16°**Y**42'23 morning rise 7°**ጤ**05'27 max. Earth dist. 6.32104 AU -12561 Jul 20 j 08:45 19° Υ 41'27 -12566 Mar 12 j 21:17 15°M morning rise retrograde -12566 Jun 12 j 11:38 26°M 19'13 -12561 Sep 08 j 02:15 0°**8** opposition -12566 Aug 10 j 07:59 21°M 17'05 -2°36'44 retrograde -12561 Nov 20 j 17:46 7°**8**25'05 min. Earth dist. -12566 Aug 10 j 00:41 21°M 19'35 4.12992 AU opposition -12560 Jan 21 j 05:54 2°**8**31'55 2°32'01 -12566 Oct 08 j 13:55 16°ML14'05 -12560 Jan 21 j 18:08 2°**8**28'03 4.30338 AU direct min. Earth dist. -12560 Feb 11 j 07:01 30°R**Y** -12565 Jan 20 j 19:38 0°**∡** evening set -12565 Feb 14 j 08:05 5°**∡**¹25'55 direct -12560 Mar 23 j 03:00 27°**Y**36'17 -12560 May 02 j 11:00 0°**8** conjunction -12565 Feb 27 j 23:31 8°**∡**32'14 -1°38'28 -12560 Jul 23 j 01:05 15°**8** minimum elong -12565 Feb 27 j 23:35 8°**∡**'32'16 1°39'12 evening set -12560 Jul 25 j 15:18 15°**8**35'05 max. Earth dist. -12565 Feb 28 j 04:34 8°**尽** 35'07 6.16289 AU morning rise -12565 Mar 13 j 13:03 11° ₹37'31 conjunction -12560 Aug 06 j 23:12 18°\begin{aligned}
23'15 1°46'57
\end{aligned} -12565 Jul 07 j 15:54 0°ਤ minimum elong -12560 Aug 06 j 23:11 18°**8**23'15 retrograde -12565 Jul 15 j 20:25 0°る06'47 max. Earth dist. -12560 Aug 06 j 11:12 18°**8**16'25 6.27488 AU -12565 Jul 24 i 01:04 30° R ⊀ morning rise -12560 Aug 19 j 07:33 21°**8**11'47 opposition -12565 Sep 12 j 18:07 25° ₹08'19 -2°03'31 -12560 Sep 29 i 10:01 0°**Ⅱ** min. Earth dist. -12565 Sep 12 j 19:44 25° ₹07'46 4.20086 AU retrograde -12560 Dec 23 j 14:09 9°**Д**30'48 direct -12565 Nov 12 j 03:45 20° ₹ 04'03 opposition -12559 Feb 23 j 06:38 4°**II**34'51 2°30'14 -12564 Feb 07 j 09:22 0°る min. Earth dist. -12559 Feb 23 j 11:13 4°**Д**33'24 4.24267 AU -12559 Apr 11 j 02:56 30°R**∀** -12564 Mar 20 j 15:25 8°る58'09 evening set -12559 Apr 25 j 04:31 29°**8**41'21 direct -12564 Apr 03 j 02:09 11°る59'40 -1°00'59 -12559 May 09 j 04:27 0°**П** conjunction -12564 Apr 03 j 02:15 11°る59'43 1°01'46 -12559 Aug 26 j 06:49 17°**Ⅲ**47'19 minimum elong evening set -12564 Apr 02 j 14:40 11°중53'11 6.23735 AU max. Earth dist. -12564 Apr 16 j 10:00 14°중59'34 -12559 Sep 07 j 19:41 20° II 40'28 1°28'50 morning rise conjunction -12564 Jul 04 j 21:46 0°≈ -12559 Sep 07 j 19:46 20°**Ⅱ**40'31 1°29'37 minimum elong -12559 Sep 07 j 20:36 20°**II**41'00 6.20476 AU -12564 Aug 16 j 05:45 2°≈47'58 max. Earth dist. retrograde -12564 Sep 27 j 23:16 30°R♂ -12559 Sep 20 j 10:59 23°**Ⅲ**34'59 morning rise -12564 Oct 14 j 14:10 27°₹53'03 -0°51'35 -12559 Oct 19 j 08:58 0°9 opposition -12564 Oct 15 j 01:35 27°**⋜**49'17 4.27131 AU -12558 Jan 27 j 11:34 12°535'04 min. Earth dist. retrograde direct -12564 Dec 15 j 04:49 22°정49'18 opposition -12558 Mar 29 j 23:55 7°535'29 1°40'32 -12563 Feb 26 j 12:12 0°≈ min. Earth dist. -12558 Mar 29 j 17:15 7°537'39 4.16775 AU evening set -12563 Apr 23 j 04:50 11°≈20'29 direct -12558 May 28 j 15:34 2°542'33 max. Earth dist. -12563 May 05 j 11:33 14°≈04'59 6.29927 AU evening set -12558 Sep 28 j 06:26 21°504'04 -12563 May 06 j 08:13 14°≈16'32 -0°05'09 conjunction -12558 Oct 11 j 05:46 24°504'59 0°41'30 conjunction -12563 May 06 j 08:13 14°≈16'33 0°05'43 -12558 Oct 11 j 05:51 24°505'02 0°42'14 minimum elong minimum elong -12563 May 06 j 00:28 14°≈12'13 max. Earth dist. -12558 Oct 11 j 21:27 24°514'07 6.13256 AU behind sun begin -12563 May 06 j 15:59 14°≈20'52 -12558 Oct 24 i 08:34 27°507'52 behind sun end morning rise -12563 May 09 i 13:49 15°≈ -12558 Nov 05 i 21:36 $0^{\circ}\Omega$ -12563 May 19 i 07:56 17°≈10'46 -12557 Jan 29 i 19:05 $15^{\circ}\Omega$ morning rise asc. node -12563 Jun 10 j 00:23 21°≈54'10 retrograde -12557 Mar 04 j 08:15 $16^{\circ}\Omega$ 42'52 -12563 Jul 23 j 10:56 0°**米** -12557 Apr 06 j 15:25 15°R Ω opposition -12563 Sep 17 j 01:24 4° \(\mathre{\pm}\) 35'23 -12557 May 04 j 03:58 $11^{\circ}\Omega$ 39'59 $0^{\circ}15'10$ retrograde -12563 Nov 13 j 23:12 30°R≈ min. Earth dist. -12557 May 03 j 13:56 11° Ω 44'39 4.10340 AU -12563 Nov 16 j 04:19 29°≈42'53 0°34'09 direct -12557 Jul 01 j 20:42 6°**Q**45'42 opposition min. Earth dist. -12563 Nov 16 j 20:26 29°≈37'41 4.31958 AU desc. node -12557 Jul 06 j 02:37 6° **Ω**47'33 direct -12562 Jan 17 j 11:43 24°≈41'18 -12557 Sep 14 j 21:02 15°**Ω** -12562 Mar 20 j 22:02 0°**⊁** evening set -12557 Nov 02 j 02:26 $25^{\circ}\Omega$ 28'55 evening set -12562 May 25 j 07:45 12° **★** 53'05 max. Earth dist. -12562 Jun 06 j 00:03 15°**米**29'33 6.33007 AU -12557 Nov 15 j 12:21 $28^{\circ}\Omega 36'45$ -0°21'11 conjunction -12557 Nov 15 j 12:18 28° Ω36'43 0°20'47 minimum elong -12562 Jun 07 j 01:38 15° **X** 43'53 0°51'25 max. Earth dist. -12557 Nov 16 j 13:48 28° **Ω**51'37 6.08269 AU conjunction minimum elong -12562 Jun 07 j 01:33 15° ★ 43'50 0°51'12 -12557 Nov 21 j 10:52 0° M morning rise -12562 Jun 19 j 16:50 18° ¥33'17 morning rise -12557 Nov 29 j 01:46 1° m/46'27 -12562 Aug 15 j 09:26 $0^{\circ}\Upsilon$ retrograde -12556 Apr 08 j 09:00 21° Mp 37'51 retrograde -12562 Oct 19 j 02:25 5°**Y**56'48 opposition -12556 Jun 07 j 08:28 16° M 33'10 -1°17'24 opposition -12562 Dec 18 j 22:53 1°**Υ**04'54 1°48'49 min. Earth dist. -12556 Jun 06 j 14:12 16° m/39'22 4.07335 AU min. Earth dist. -12562 Dec 19 j 16:39 0°**Υ**59'16 4.33154 AU direct -12556 Aug 04 j 12:57 11° My 36'04

-12556 Dec 04 j 17:33 0°**♀**

-12562 Dec 27 j 12:38 30°R €

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Attention, astronomical year style is used: The year -12556 in astronomical counting style is the year 12557 BCE in historical counting style.
                    -12556 Dec 07 j 15:26 0°£40'20
                                                                                           -12550 Feb 16 i 05:10 0° ₩
evening set
                                                                                           -12550 May 29 j 13:54 17° ¥ 12'50
                                                                       evening set
conjunction
                    -12556 Dec 21 j 07:27 3°251'00 -1°16'55
                                                                       max. Earth dist.
                                                                                           -12550 Jun 10 j 05:20 19°) 48'49
                                                                                                                              6.33148 AU
                    -12556 Dec 21 j 07:20 3°250'56 1°16'58
 minimum elong
                    -12556 Dec 22 j 09:51 4°£06'22
                                                                                           -12550 Jun 11 j 06:45 20° ★03'04 0°58'10
max. Earth dist.
                                                      6.07459 AU
                                                                       conjunction
                    -12555 Jan 04 j 01:35
                                                                                           -12550 Jun 11 j 06:40 20° ₭ 03'01
morning rise
                                          7°♀02'41
                                                                        minimum elong
                                                                                                                              0°58'01
                                                                                           -12550 Jun 23 j 20:45 22° ∺51'56
retrograde
                    -12555 May 13 j 21:21 26°-243'45
                                                                       morning rise
                                                                                           -12550 Jul 27 j 05:51
min. Earth dist.
                    -12555 Jul 11 j 11:58 21°-244'30
                                                      4.08920 AU
opposition
                    -12555 Jul 12 j 02:40 21°△39'28 -2°22'03
                                                                       retrograde
                                                                                           -12550 Oct 23 j 10:36 10°Υ17'16
direct
                    -12555 Sep 08 j 14:43 16°△38'53
                                                                       opposition
                                                                                           -12550 Dec 23 j 10:01 5^{\circ} \cdot \cdot 25'22
                                                                                                                              1°56'50
                    -12555 Dec 18 j 12:39
                                           0°M
                                                                       min. Earth dist.
                                                                                           -12550 Dec 24 j 03:24 5^{\circ}Y19'52
                                                                                                                              4.32833 AU
                    -12554 Jan 13 j 20:57
evening set
                                           5^{\circ}M53'18
                                                                       direct
                                                                                           -12549 Feb 23 j 18:57 0°Υ27'10
                                                                       evening set
                                                                                           -12549 Jun 29 j 18:55 18°Υ27'58
conjunction
                    -12554 Jan 27 j 14:05
                                          9°ML02'31 -1°44'32
                                                                       max. Earth dist.
                                                                                           -12549 Jul 11 j 06:22 21°Y03'04
                                                                                                                              6.31326 AU
 minimum elong
                    -12554 Jan 27 j 14:02
                                           9°ML02'30 1°45'01
max. Earth dist.
                    -12554 Jan 28 j 08:44
                                          9°ጤ13'16 6.11157 AU
                                                                       conjunction
                                                                                           -12549 Jul 12 j 04:27 21°Υ15'33
                                                                                                                              1°36'18
morning rise
                    -12554 Feb 10 j 06:59 12°M11'34
                                                                        minimum elong
                                                                                           -12549 Jul 12 j 04:22 21°\Upsilon15'30
                                                                                                                              1°36'34
                    -12554 Feb 22 j 16:25 15°M
                                                                       morning rise
                                                                                           -12549 Jul 24 j 12:58 24°Y'02'39
                    -12554 May 20 j 03:18
                                                                                           -12549 Aug 20 j 21:21 0°8
retrograde
                    -12554 Jun 17 j 06:30
                                          1°∡17'41
                                                                       retrograde
                                                                                           -12549 Nov 25 j 09:02 11°851'52
                    -12554 Jul 15 j 03:34 30°RML
                                                                       opposition
                                                                                           -12548 Jan 25 j 20:28 6°858'29
                                                                                                                              2°34'34
opposition
                    -12554 Aug 15 i 03:08 26° ML16'01 -2°35'00
                                                                       min. Earth dist.
                                                                                           -12548 Jan 26 j 09:18 6° 854'25 4.29163 AU
min. Earth dist.
                    -12554 Aug 14 i 20:08 26° ML 18'25 4.14423 AU
                                                                       direct
                                                                                           -12548 Mar 27 j 15:06 2°803'12
direct
                    -12554 Oct 13 j 12:17 21°ML12'47
                                                                                           -12548 Jul 07 i 00:35 15°8
                    -12553 Jan 01 i 14:41 0° ⊀
                                                                       evening set
                                                                                           -12548 Jul 29 j 22:49 20°804'32
evening set
                    -12553 Feb 19 j 10:04 10° ₹20'32
                                                                                           -12548 Aug 11 j 07:09 22°853'27
                                                                                                                              1°46'20
                                                                       conjunction
                    -12553 Mar 05 j 00:42 13° ₹25'52 -1°34'53
                                                                                           -12548 Aug 11 j 07:10 22°853'28
                                                                                                                             1°46'57
conjunction
                                                                        minimum elong
                    -12553 Mar 05 j 00:47 13°₹25'55 1°35'37
                                                                       max. Earth dist.
                                                                                           -12548 Aug 10 j 20:15 22°847'14 6.26014 AU
 minimum elong
                                                                                           -12548 Aug 23 j 16:10 25°842'52
max. Earth dist.
                    -12553 Mar 05 j 02:25 13° ₹26'50 6.17926 AU
                                                                       morning rise
                    -12553 Mar 18 j 13:36 16° ₹ 30'08
                                                                                           -12548 Sep 11 j 21:26 0°Ⅱ
morning rise
                    -12553 May 24 j 20:19 0°る
                                                                                           -12548 Dec 28 j 08:56 14°Д09'44
                                                                       retrograde
                    -12553 Jul 20 j 09:33 4°궁50'48
                                                                                           -12547 Feb 28 j 01:36 9°Д13'22 2°26'03
retrograde
                                                                       opposition
                    -12553 Sep 16 j 11:36 30°R ✓
                                                                       min. Earth dist.
                                                                                           -12547 Feb 28 j 03:58 9°Д12'37 4.22616 AU
                    -12553 Sep 17 j 09:00 29° ₹752'49 -1°55'09
                                                                                           -12547 Apr 29 j 17:31 4°Д20'08
opposition
                                                                       direct
min. Earth dist.
                    -12553 Sep 17 j 12:35 29° ₹51'36 4.21761 AU
                                                                                           -12547 Aug 30 j 19:44 22°Ⅲ30'10
                                                                       evening set
                    -12553 Nov 17 j 00:44 24° ₹ 48'28
direct
                    -12552 Jan 16 j 15:07 0°궁
                                                                       conjunction
                                                                                           -12547 Sep 12 j 09:57 25°Ⅲ24'37 1°23'40
evening set
                    -12552 Mar 25 j 09:16 13°♂37'02
                                                                        minimum elong
                                                                                           -12547 Sep 12 j 10:03 25°Ⅲ24'40 1°24'26
                                                                       max. Earth dist.
                                                                                           -12547 Sep 12 j 13:28 25°Ц26'39
                                                                                                                              6.18801 AU
conjunction
                    -12552 Apr 07 j 19:10 16°る37'31 -0°53'55
                                                                       morning rise
                                                                                           -12547 Sep 25 j 02:44 28°Ц20'32
                    -12552 Apr 07 j 19:15 16°♂37'34 0°54'41
                                                                                           -12547 Oct 02 j 08:54 0°5
 minimum elong
max. Earth dist.
                    -12552 Apr 07 j 06:57 16°る30'39 6.25332 AU
                                                                                           -12546 Feb 01 j 14:13 17°528'33
                                                                       retrograde
                    -12552 Apr 21 j 01:44 19°⋜36'18
                                                                                           -12546 Apr 03 j 23:18 12°528'28 1°30'03
morning rise
                                                                       opposition
                    -12552 Jun 10 j 04:43 0°≈
                                                                       min. Earth dist.
                                                                                           -12546 Apr 03 j 15:45 12°530'56 4.15192 AU
retrograde
                    -12552 Aug 20 j 13:48 7°≈18'08
                                                                       direct
                                                                                           -12546 Jun 02 j 11:37 7°535'30
opposition
                    -12552 Oct 19 i 01:23 2°≈23'40 -0°40'00
                                                                       evening set
                                                                                           -12546 Oct 03 j 02:58 26°501'39
min. Earth dist.
                    -12552 Oct 19 i 13:38 2°≈19'39 4.28501 AU
                                                                                           -12546 Oct 16 j 03:59 29°503'56 0°32'59
                    -12552 Nov 07 i 02:05 30°Rる
                                                                       conjunction
direct
                    -12552 Dec 19 j 19:16 27°る20'08
                                                                        minimum elong
                                                                                           -12546 Oct 16 i 04:03 29°503'58 0°33'41
                    -12551 Jan 31 j 18:03 0°≈
                                                                       max. Earth dist.
                                                                                           -12546 Oct 16 j 22:00 29°514'26 6.11928 AU
                    -12551 Apr 20 j 15:02 14°≈13'36
                                                                                           -12546 Oct 20 j 04:06 0°Ω
asc. node
                    -12551 Apr 24 j 03:26 15°≈
                                                                                           -12546 Oct 29 j 08:38 2° Ω08'13
                                                                       morning rise
evening set
                    -12551 Apr 27 j 15:44 15°≈46'37
                                                                                           -12546 Dec 29 j 15:13 15°Ω
                                                                       retrograde
                                                                                           -12545 Mar 09 j 12:18 21°\Omega48'14
conjunction
                    -12551 May 10 j 17:39 18°≈41'41 0°03'01
                                                                       opposition
                                                                                           -12545 May 09 j 05:20 16^{\circ}\Omega44'59 0^{\circ}01'27
 minimum elong
                    -12551 May 10 j 17:39 18°≈41'42
                                                      0°02'29
                                                                       min. Earth dist.
                                                                                           -12545 May 08 j 13:10 16° Ω 50'22
                                                                                                                             4.09398 AU
 behind sun begin
                    -12551 May 10 j 09:34 18°≈37'12
                                                                                           -12545 May 15 j 05:43 15^{\circ}\Omega57'04
                                                                       desc. node
                    -12551 May 11 j 01:43 18°≈46'11
                                                                                           -12545 May 22 j 15:30 15°RΩ
 behind sun end
                    -12551 May 09 j 17:39 18°≈28'17 6.30956 AU
                                                                                           -12545 Jul 06 j 18:19 11° Ω 50'25
max. Earth dist.
                                                                       direct
morning rise
                    -12551 May 23 j 16:18 21°≈35'02
                                                                                           -12545 Aug 20 j 04:23 15°Ω
                    -12551 Jul 02 j 14:48
                                           0°)€
                                                                                           -12545 Nov 04 j 13:42
retrograde
                    -12551 Sep 21 j 09:45
                                           8°\57'05
                                                                       evening set
                                                                                           -12545 Nov 07 j 06:30
                                                                                                                  0° m 37'34
opposition
                    -12551 Nov 20 j 14:26
                                           4°)€04'48
                                                      0°45'25
min. Earth dist.
                    -12551 Nov 21 j 08:35
                                          3°¥58'58
                                                      4.32574 AU
                                                                       conjunction
                                                                                           -12545 Nov 20 j 17:36
                                                                                                                  3° Mp 46'08 -0°30'13
                    -12551 Dec 27 j 21:15 30°R≈
                                                                         minimum elong
                                                                                           -12545 Nov 20 j 17:33
                                                                                                                   3° m 46'06 0°29'51
direct
                    -12550 Jan 22 j 00:13 29°≈03'30
                                                                       max. Earth dist.
                                                                                           -12545 Nov 21 j 20:21
                                                                                                                  4° Mp 01'46 6.07773 AU
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Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12545 in astronomical counting style is the year 12546 BCE in historical counting style. -12545 Dec 04 i 08:06 6° m 56'28 -12539 Jun 14 i 18:30 0° ₩ morning rise -12544 Apr 13 j 12:50 26° mp 48'10 -12539 Sep 25 j 21:44 13° ¥ 30'09 retrograde retrograde -12544 Jun 12 j 09:19 21° Mp 43'17 -1°29'11 -12539 Nov 25 j 05:08 8° **H** 38'04 0°56'52 opposition opposition -12544 Jun 11 j 15:06 21° Mp 49'29 4.07314 AU min. Earth dist. min. Earth dist. -12539 Nov 25 j 23:21 8° **∺** 32'14 4.32774 AU -12538 Jan 26 j 15:16 3°**米** 37'12 -12544 Aug 09 j 14:30 16° m/45'38 direct direct -12544 Nov 16 j 23:43 -12538 Jun 03 j 00:53 21° **∺**45'09 0∘**⊽** evening set -12544 Dec 12 j 23:17 evening set 5°**£**51'45 -12538 Jun 15 j 16:21 24° **∺** 34'51 1°04'54 conjunction 1°04'50 conjunction -12544 Dec 26 j 15:49 9°**Ω**02'23 -1°23'00 minimum elong -12538 Jun 15 j 16:16 24° **★**34'48 minimum elong -12544 Dec 26 j 15:42 9°**♀**02'19 1°23'06 max. Earth dist. -12538 Jun 14 j 13:37 24°**米** 19'51 6.33015 AU max. Earth dist. -12544 Dec 27 j 19:21 9°**2**18'23 6.07866 AU morning rise -12538 Jun 28 j 05:30 27°**∺**23'22 -12543 Jan 09 j 09:57 12°**2**13'48 -12538 Jul 10 j 01:20 0°**Υ** morning rise -12543 Apr 14 j 22:51 0°M retrograde -12538 Oct 28 j 02:18 14° Υ 51'21 retrograde -12543 May 18 j 21:04 1° M 50'22opposition -12538 Dec 28 j 02:53 9°**Y**59'21 2°04'37 -12543 Jun 21 j 10:04 30°R Ω min. Earth dist. -12538 Dec 28 j 20:27 9°**Y**53'46 4.32408 AU min. Earth dist. -12543 Jul 16 j 10:35 26°**2**51'11 4.09704 AU direct -12537 Feb 28 j 10:41 5°**℃**01'32 opposition -12543 Jul 17 j 00:45 26°**2**46'19 -2°27'19 evening set -12537 Jul 04 j 04:57 23°**Y**02'24 direct -12543 Sep 13 j 14:34 21°**2**45'19 -12543 Nov 28 j 16:19 0°M conjunction -12537 Jul 16 j 14:05 25°**Υ**'50'00 1°39'37 evening set -12542 Jan 19 j 03:43 10°M 58'53 minimum elong -12537 Jul 16 j 14:01 25°**Υ**49'57 1°39'56 max. Earth dist. -12537 Jul 15 j 18:22 25°**Y**38'50 6.30640 AU conjunction -12542 Feb 01 i 20:26 14°ML07'29 -1°45'27 morning rise -12537 Jul 28 j 22:09 28° γ 37'12 minimum elong -12542 Feb 01 j 20:25 14° ML07'28 1°46'00 -12537 Aug 04 i 02:09 0°8 max. Earth dist. -12542 Feb 02 i 11:39 14° ML16'14 6.12193 AU -12537 Oct 29 i 06:29 15°8 -12542 Feb 05 j 15:50 15°M retrograde -12537 Nov 30 j 02:58 16°831'29 -12542 Feb 15 j 13:00 17° ML15'50 -12536 Jan 01 j 04:47 15°R8 morning rise -12542 Apr 17 j 23:45 0° ₹ opposition -12542 Jun 22 j 00:31 6° ₹ 14'57 min. Earth dist. -12536 Jan 31 j 03:08 11°834'21 4.28303 AU retrograde -12542 Aug 19 j 21:38 1°**х** 13'44 -2°32'17 direct -12536 Apr 01 j 07:06 6°842'56 opposition min. Earth dist. -12542 Aug 19 j 16:13 1° ₹ 15'35 4.15601 AU -12536 Jun 18 j 11:10 15°8 -12542 Aug 29 j 00:17 30°RML -12536 Aug 03 j 10:37 24°**8**45'12 evening set -12542 Oct 18 j 11:55 26°M10'12 direct -12536 Aug 15 j 19:14 27°**8**34'38 1°45'05 -12542 Dec 08 j 01:43 0° ₹ conjunction -12536 Aug 15 j 19:16 27°**8**34'39 1°45'45 -12541 Feb 24 j 11:31 15° ₹ 15'05 evening set minimum elong -12536 Aug 15 j 10:05 27°**8**29'24 6.25057 AU max. Earth dist. -12541 Mar 10 j 01:45 18° ₹ 19'43 -1°30'42 -12536 Aug 26 j 09:30 0°**Ⅱ** conjunction -12541 Mar 10 j 01:50 18° ₹ 19'46 1°31'27 -12536 Aug 28 j 04:59 0°**Ⅲ**24'45 minimum elong morning rise max. Earth dist. -12541 Mar 10 j 02:08 18° ₹ 19'56 6.19164 AU retrograde -12535 Jan 02 j 08:22 18°**Ц**57'27 morning rise -12541 Mar 23 j 13:42 21°**尽**23'07 opposition -12535 Mar 05 j 00:19 14°**Д**00'33 2°20'47 -12541 May 02 j 17:47 0°る min. Earth dist. -12535 Mar 05 j 01:23 14°**Д**00'13 4.21637 AU retrograde -12541 Jul 25 j 00:24 9°**궁**36'59 direct -12535 May 04 j 13:10 9°**Д**07'27 -12541 Sep 22 j 00:33 4°**궁**39'35 -1°46'06 -12535 Sep 04 j 11:11 27°**Д**18'54 opposition evening set min. Earth dist. -12541 Sep 22 j 05:37 4°**궁**37'53 4.22932 AU -12535 Sep 16 j 02:02 0°5 -12541 Nov 05 j 17:39 30°R ✓ direct -12541 Nov 21 j 20:22 29° ₹35'15 -12535 Sep 17 j 02:47 0°514'20 1°17'55 conjunction -12535 Sep 17 i 02:52 0°514'23 -12541 Dec 08 i 02:19 0°る minimum elong 1°18'42 -12535 Sep 17 i 09:17 evening set -12540 Mar 30 j 04:24 18°る20'16 max. Earth dist. 0°€18'06 6.17915 AU -12535 Sep 29 j 21:04 3°511'20 morning rise -12540 Apr 12 j 13:17 21°る19'59 -0°46'27 conjunction retrograde -12534 Feb 06 i 14:46 22°523'47 opposition minimum elong -12540 Apr 12 j 13:21 21°る20'01 0°47'11 -12534 Apr 08 j 23:04 17°523'13 1°18'53 max. Earth dist. -12540 Apr 11 j 21:40 21°る11'13 6.26346 AU min. Earth dist. -12534 Apr 08 j 13:24 17°526'22 4.14476 AU -12540 Apr 25 j 18:59 24°る17'59 direct -12534 Jun 07 j 07:23 12°530'09 morning rise -12540 May 22 j 01:08 0°≈ -12534 Oct 03 j 19:17 0°**Ω** retrograde -12540 Aug 25 j 02:09 11°≈55'36 evening set -12534 Oct 07 j 23:36 0° **Ω**57'58 opposition -12540 Oct 23 j 15:44 7°≈01'31 -0°27'59 -12540 Oct 24 j 05:30 min. Earth dist. 6°≈57'00 4.29281 AU conjunction -12534 Oct 21 j 02:04 4° **Ω**01'07 0°24'21 direct -12540 Dec 24 j 12:38 1°≈58'09 minimum elong -12534 Oct 21 j 02:07 $4^{\circ}\Omega$ 01'09 0°25'00 -12539 Feb 28 j 02:01 max. Earth dist. -12534 Oct 21 j 21:27 4° **Ω**12'26 6.11443 AU asc. node 7°≈48'30 -12539 Apr 07 j 09:39 15°≈ -12534 Nov 03 j 08:18 7°**Ω**06'18 morning rise evening set -12539 May 02 j 05:30 20°≈21'51 -12534 Dec $08 \text{ j } 21:00 \text{ } 15^{\circ}\Omega$ -12539 May 14 j 06:32 23°≈02'56 6.31457 AU max. Earth dist. retrograde -12533 Mar 14 j 13:48 26° Ω48'09 desc. node -12533 Mar 25 j 05:43 26°**Ω**37'08 conjunction -12539 May 15 j 06:18 23°≈16'14 0°11'17 min. Earth dist. -12533 May 13 j 11:49 21° Ω50'04 4.09169 AU minimum elong -12539 May 15 j 06:17 23°≈16'13 0°10'48 opposition -12533 May 14 j 04:32 21°**Ω**44'29 -0°11'59 behind sun begin -12539 May 15 j 00:07 23°≈12'47 direct -12533 Jul 11 j 16:25 16°**Ω**49'29 -12539 May 15 j 12:26 23°≈19'39 -12533 Oct 18 j 11:05 behind sun end morning rise -12539 May 28 j 03:34 26°≈08'50 -12533 Nov 12 j 07:47 evening set 5° m 38'18

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12533 in astronomical counting style is the year 12534 BCE in historical counting style. -12533 Nov 25 j 19:59 8° m 47'16 -0°38'45 -12527 May 29 j 08:36 conjunction minimum elong -12533 Nov 25 j 19:55 8° m 47'13 0°38'27 -12527 Jun 01 j 15:17 0°**)** 43'49 morning rise max. Earth dist. -12533 Nov 27 j 00:22 9° m 03'50 -12527 Sep 30 j 11:26 18° **★** 05'41 6.07816 AU retrograde -12527 Nov 29 j 21:10 13°**米** 13'43 1°08'04 morning rise -12533 Dec 09 j 11:14 11° m 57'53 opposition -12527 Nov 30 j 15:09 13°**米**07'56 4.32733 AU -12532 Mar 15 j 15:40 0∘ ত min. Earth dist. 1°**-**47'57 -12526 Jan 31 j 07:08 8° **∺** 13'16 retrograde -12532 Apr 18 j 12:22 direct -12532 May 21 j 23:10 30°R Mp evening set -12526 Jun 07 j 12:27 26°**∺**20'22 opposition -12532 Jun 17 j 06:14 26° Mp 43'04 -1°39'53 max. Earth dist. -12526 Jun 19 j 02:31 28° **★**55'58 6.32791 AU min. Earth dist. -12532 Jun 16 j 12:32 26° 70,49'06 4.07639 AU direct -12532 Aug 14 j 11:24 21° m 44'57 conjunction -12526 Jun 20 j 02:54 29° **★** 09'40 1°11'19 -12532 Oct 28 j 18:21 0°**♀** minimum elong -12526 Jun 20 j 02:49 29°**米**09'37 1°11'17 -12532 Dec 18 j 03:15 10° **2** 52'04 -12526 Jun 23 j 20:32 $0^{\circ}\Upsilon$ evening set morning rise -12526 Jul 02 j 14:56 1°**Y**57'49 conjunction -12532 Dec 31 j 19:50 14° \(\Omega\)02'28 -1°28'14 retrograde -12526 Nov 01 j 18:12 19°**Υ**28'45 minimum elong -12532 Dec 31 j 19:44 14°**2**02'24 1°28'24 opposition -12525 Jan 01 j 21:13 14°**Y**36'37 2°11'42 max. Earth dist. -12531 Jan 01 j 20:24 14°**£**16'43 6.08400 AU min. Earth dist. -12525 Jan 02 j 13:36 14°**Y**31'25 4.32029 AU morning rise -12531 Jan 14 j 14:06 17°**2**13'36 direct -12525 Mar 05 j 03:39 9°**Υ**39'20 -12531 Mar 16 j 10:08 evening set -12525 Jul 08 j 16:00 27°**Y**39'43 retrograde -12531 May 23 j 15:34 6°M45'40 -12525 Jul 19 j 00:21 0°8 opposition -12531 Jul 21 j 18:33 1°ML41'53 -2°31'21 max. Earth dist. -12525 Jul 20 j 05:12 0°**8**16'20 6.30110 AU min. Earth dist. -12531 Jul 21 j 05:32 1°ML46'21 4.10404 AU -12531 Aug 03 j 10:06 30°R **≏** conjunction -12525 Jul 21 i 00:27 0°**ප**27'15 1°42'21 direct -12531 Sep 18 j 11:16 26° \(\Omega\)40'25 minimum elong -12525 Jul 21 i 00:23 0°**8**27'13 1°42'44 -12531 Nov 03 i 15:33 0°M morning rise -12525 Aug 02 i 08:25 3°**8**14'34 -12530 Jan 20 i 07:39 15°M -12525 Sep 28 j 23:21 15°8 -12530 Jan 24 j 06:08 15° ML53'43 retrograde -12525 Dec 04 j 22:17 21°813'15 evening set opposition -12524 Feb 04 j 12:49 16°819'06 2°37'06 -12530 Feb 06 j 22:48 19°ML01'55 -1°45'34 min. Earth dist. -12524 Feb 04 j 22:12 16°816'08 4.27652 AU conjunction -12530 Feb 06 j 22:48 19°ML01'55 1°46'09 -12524 Feb 15 j 01:27 15°R8 minimum elong -12530 Feb 07 j 12:34 19°ML09'49 6.13000 AU max. Earth dist. -12524 Apr 06 j 00:55 11°**8**24'33 direct -12530 Feb 20 j 14:44 22°ML09'39 -12524 May 25 j 12:54 15°**8** morning rise -12530 Mar 28 j 10:09 0° ₹ -12524 Aug 07 j 22:35 29°**8**26'56 evening set -12530 Jun 26 j 17:38 11°**⋌**¹03'06 -12524 Aug 10 j 08:38 0°**Ⅱ** retrograde -12530 Aug 24 j 13:06 6° ₹ 02'28 -2°28'37 opposition -12530 Aug 24 j 09:52 6° ₹03'34 4.16427 AU -12524 Aug 20 j 07:53 2°**I**I16'55 1°43'11 min. Earth dist. conjunction -12530 Oct 23 j 07:19 0° ₹ 58'44 -12524 Aug 20 j 07:55 2°**I**I16'56 1°43'51 direct minimum elong -12529 Mar 01 j 09:46 20° ₹ 02'06 -12524 Aug 20 j 01:58 2°**Д**13'32 6.24334 AU evening set max. Earth dist. -12524 Sep 01 j 18:18 5°**Д**07'39 morning rise conjunction -12529 Mar 14 j 23:27 23° ₹ 06'15 -1°25'59 retrograde -12523 Jan 07 j 06:08 23°**II**45'05 minimum elong -12529 Mar 14 j 23:33 23°**х** 06'18 1°26'45 opposition -12523 Mar 09 j 22:23 18°**Д**47'42 2°14'35 max. Earth dist. -12529 Mar 14 j 20:33 23°**尽**04'36 6.19941 AU min. Earth dist. -12523 Mar 09 j 21:46 18°**II**47'54 4.20877 AU -12529 Mar 28 j 10:50 26° ₹ 09'05 direct -12523 May 09 j 07:34 13°**Д**54'44 morning rise -12529 Apr 14 j 19:17 0°ਰ -12523 Aug 30 j 20:00 0°5 retrograde -12529 Jul 29 j 12:58 14°**궁**18'17 -12523 Sep 09 j 02:27 2°907'05 evening set -12529 Sep 26 j 14:43 9°**궁**21'23 -1°36'34 opposition -12529 Sep 26 j 20:59 9°る19'18 4.23593 AU min. Earth dist. conjunction -12523 Sep 21 j 19:16 5°503'25 1°11'40 -12529 Nov 26 j 13:36 4°る17'06 direct minimum elong -12523 Sep 21 j 19:22 5°503'29 1°12'27 -12528 Apr 03 j 22:05 23°る00'24 -12523 Sep 22 i 02:44 5°507'45 evening set max. Earth dist. 6.17178 AU morning rise -12523 Oct 04 j 15:11 8°501'27 conjunction -12528 Apr 17 i 06:05 25° ₹59'34 -0°38'45 retrograde -12522 Feb 11 j 15:22 27°517'59 minimum elong -12528 Apr 17 i 06:09 25° ₹59'36 0°39'27 opposition -12522 Apr 13 j 21:50 22°516'52 1°07'14 max. Earth dist. -12528 Apr 16 j 13:26 25°る50'13 6.26876 AU min. Earth dist. -12522 Apr 13 j 10:56 22°\$20'26 4.13792 AU -12528 Apr 30 j 10:44 28°る56'58 direct -12522 Jun 12 j 03:08 17°523'35 morning rise -12528 May 05 j 04:11 0°≈ -12522 Sep 16 j 18:02 $0^{\circ}\Omega$ -12528 Jul 29 j 12:12 15°≈ evening set -12522 Oct 12 j 19:53 5°**£**53′23 -12528 Aug 29 j 15:28 16°≈32'16 retrograde -12528 Sep 29 j 19:38 15°R≈ conjunction -12522 Oct 25 j 23:59 $8^{\circ}\Omega$ 57'29 $0^{\circ}15'35$ -12528 Oct 28 j 06:06 11°≈38'38 -0°15'49 minimum elong -12522 Oct 26 j 00:01 8°**Ω**57'30 0°16'12 opposition min. Earth dist. -12528 Oct 28 j 20:57 11°≈33'47 4.29631 AU -12522 Oct 26 j 21:46 9°**Ω**10′11 6.10899 AU max. Earth dist. -12528 Dec 29 j 05:22 -12522 Nov 08 j 07:37 $12^{\circ}\Omega$ 03'33 direct 6°**≈**35'37 morning rise -12527 Jan 07 j 23:26 asc. node 6°**≈**44'18 -12522 Nov 21 j 03:40 15°**Ω** -12527 Mar 19 j 15:29 15°≈ desc. node -12521 Feb 01 j 22:40 28° **Ω**40'15 evening set -12527 May 06 j 19:32 24°≈57'55 -12521 Feb 13 j 11:51 0° m retrograde -12521 Mar 19 j 15:19 1°Mp47'21 conjunction -12527 May 19 j 19:03 27°≈51'42 0°19'30 -12521 Apr 22 j 10:37 30°R**Ω** minimum elong -12527 May 19 j 19:01 27°≈51'41 min. Earth dist. -12521 May 18 j 10:05 $26^{\circ}\Omega$ 49'00 4.08823 AU max. Earth dist. -12527 May 18 j 17:59 27°≈37'41 6.31605 AU -12521 May 19 j 02:45 $26^{\circ}\Omega 43'24$ -0°25'16 opposition

•	omena of Jupiter fro		-				page 34
	nical year style is used: The		in astronomical c				
direct	-12521 Jul 16 j 12:34			conjunction	-12515 May 24 j 08:09	2° H 28'19	
	-12521 Sep 29 j 06:56			minimum elong	-12515 May 24 j 08:06	2° ∺ 28'17	0°2'/'18
evening set	-12521 Nov 17 j 09:45	10° llþ 39′25		morning rise	-12515 Jun 06 j 03:06	5°) € 19'45	
				retrograde	-12515 Oct 05 j 01:43		
conjunction	-12521 Nov 30 j 22:43			opposition	-12515 Dec 04 j 13:48		1°18'51
minimum elong	-12521 Nov 30 j 22:38		0°46'46	min. Earth dist.	-12515 Dec 05 j 07:57		4.32959 AU
max. Earth dist.	-12521 Dec 02 j 01:25		6.07682 AU	direct	-12514 Feb 05 j 01:11		
morning rise	-12521 Dec 14 j 14:54				-12514 Jun 07 j 21:21	0° Υ	
	-12520 Feb 14 j 09:33	0∘ ⊽		evening set	-12514 Jun 11 j 23:54	0° Ƴ 54'44	
retrograde	-12520 Apr 23 j 10:26	6° £ 48'47					
min. Earth dist.	-12520 Jun 21 j 09:12	1° ≏ 49'54	4.07748 AU	conjunction	-12514 Jun 24 j 13:09	3° Ƴ 43'30	1°17'15
opposition	-12520 Jun 22 j 02:50	1° ≏ 43'53	-1°49'53	minimum elong	-12514 Jun 24 j 13:04	3° Ƴ 43′26	1°17'17
	-12520 Jul 05 j 02:07	30°R, Mp		max. Earth dist.	-12514 Jun 23 j 12:43	3° Y 29'46	6.32823 AU
direct	-12520 Aug 19 j 08:35	26° Mp 45'13		morning rise	-12514 Jul 07 j 00:21	6° Ƴ 31'14	
	-12520 Oct 03 j 11:08	0∘ ⊽		retrograde	-12514 Nov 06 j 09:08	24° Ƴ 04'15	
evening set	-12520 Dec 23 j 07:58	15° ≏ 54'18		opposition	-12513 Jan 06 j 14:58	19° Ƴ 11'52	2°17'53
· ·	·			min. Earth dist.	-12513 Jan 07 j 05:58		4.31886 AU
conjunction	-12519 Jan 06 j 00:57	19° Ω 04'38	-1°32'51	direct	-12513 Mar 09 j 19:32		
minimum elong	-12519 Jan 06 i 00:51				-12513 Jul 03 j 01:25	0°8	
max. Earth dist.	-12519 Jan 07 j 01:07			evening set	-12513 Jul 13 j 01:53	2° 8 14'07	
morning rise	-12519 Jan 19 j 19:00		0.00733 AC	evening set	-12515 Jul 15 J 01.55	2 01407	
morning risc	-12519 Feb 23 j 17:55			agniumation	-12513 Jul 25 j 10:05	5° 8 01'35	1°44'23
. 1	•			conjunction	3	_	
retrograde	-12519 May 28 j 13:23		202.412.0	minimum elong	-12513 Jul 25 j 10:02	5° 8 01'34	1°44'50
opposition	-12519 Jul 26 j 13:23			max. Earth dist.	-12513 Jul 24 j 17:46		6.29788 AU
min. Earth dist.	-12519 Jul 26 j 02:21		4.10936 AU	morning rise	-12513 Aug 06 j 17:45	7° 8 48'56	
direct	-12519 Sep 23 j 09:30	1°MJ38'19			-12513 Sep 08 j 22:24		
	-12518 Jan 03 j 00:38			retrograde	-12513 Dec 09 j 16:17		
evening set	-12518 Jan 29 j 09:52	20°M51'45		opposition	-12512 Feb 09 j 08:06	20° 8 56'49	2°36'49
				min. Earth dist.	-12512 Feb 09 j 16:34		4.27164 AU
conjunction	-12518 Feb 12 j 02:16	23°M59'33	-1°44'57	direct	-12512 Apr 10 j 17:49	16° 8 02'36	
minimum elong	-12518 Feb 12 j 02:17	23°M59'34	1°45'33		-12512 Jul 25 j 04:02	Π $^{\circ}0$	
max. Earth dist.	-12518 Feb 12 j 13:14	24°ML05'50	6.13662 AU	evening set	-12512 Aug 12 j 09:17	4° Ⅱ 04'39	
morning rise	-12518 Feb 25 j 17:49	27°ML06'48					
•	-12518 Mar 10 j 13:16			conjunction	-12512 Aug 24 j 19:02	6° Ⅱ 55'08	1°40'37
retrograde	-12518 Jul 01 j 09:24			minimum elong	-12512 Aug 24 j 19:05	6° Ⅱ 55'10	1°41'19
opposition	-12518 Aug 29 j 05:50		-2°23'55	max. Earth dist.	-12512 Aug 24 j 13:33	6° Ⅱ 51'59	6.23704 AU
min. Earth dist.	-12518 Aug 29 j 03:21			morning rise	-12512 Sep 06 j 06:30		0.23701110
direct	-12518 Oct 28 j 03:07		1.17101710	retrograde	-12511 Jan 12 j 02:38		
evening set	-12517 Mar 06 j 09:33			opposition	-12511 Mar 14 j 18:44		2007/22
evening set	-1231/ Wai 00 J 09.33	24 X 32 40		min. Earth dist.	-12511 Mar 14 j 16:44 -12511 Mar 14 j 16:28		
	-12517 Mar 19 j 22:39	279.756117	1920127		-12511 May 13 j 23:55		4.20127 AU
conjunction	,			direct	• •		
minimum elong	-12517 Mar 19 j 22:45				-12511 Aug 13 j 20:48		
max. Earth dist.	-12517 Mar 19 j 17:25		6.20/14 AU	evening set	-12511 Sep 13 j 16:29	6° © 51'15	
	-12517 Mar 29 j 01:21						
morning rise	-12517 Apr 02 j 09:16			conjunction	-12511 Sep 26 j 10:52		1°05'01
retrograde	-12517 Aug 03 j 04:36			minimum elong	-12511 Sep 26 j 10:58	9° © 48'39	1°05'47
opposition	-12517 Oct 01 j 06:28			max. Earth dist.	-12511 Sep 26 j 21:12	9° © 54'35	6.16393 AU
min. Earth dist.	-12517 Oct 01 j 14:41		4.24317 AU	morning rise	-12511 Oct 09 j 08:13		
direct	-12517 Dec 01 j 09:30	9° ට 02'18			-12510 Jan 09 j 19:12	$0 {\circ} \Omega$	
evening set	-12516 Apr 08 j 16:49	27° る 43'21		retrograde	-12510 Feb 16 j 15:20	2° Ω 08′21	
	-12516 Apr 18 j 21:13	0° ≈			-12510 Mar 26 j 07:58	30° Ŗ	
				opposition	-12510 Apr 18 j 18:52	27° © 06'51	0°55'15
conjunction	-12516 Apr 21 j 23:54	0° ≈ 41'54	-0°30'42	min. Earth dist.	-12510 Apr 18 j 07:50	27° © 10'28	4.13020 AU
minimum elong	-12516 Apr 21 j 23:57	0° ≈ 41'55	0°31'23	direct	-12510 Jun 16 j 21:01	22° © 13'24	
max. Earth dist.	-12516 Apr 21 j 06:09	0°≈31'56	6.27511 AU		-12510 Aug 28 j 18:18	$0^{\circ}\Omega$	
morning rise	-12516 May 05 j 03:29			evening set	-12510 Oct 17 j 15:44		
5	-12516 Jun 29 j 22:24			J	. ,		
retrograde	-12516 Sep 03 j 03:47			conjunction	-12510 Oct 30 j 21:09	13°Ω51'00	0°06'49
opposition	-12516 Nov 01 j 21:51		-0°03'27	minimum elong	-12510 Oct 30 j 21:10		0°07'24
min. Earth dist.	-12516 Nov 02 j 12:27			behind sun begin	-12510 Oct 30 j 13:40		
Darm dist.	-12516 Nov 12 j 00:04		1.50170 AU	behind sun end	-12510 Oct 30 j 13:40 -12510 Oct 31 j 04:40		
asa node	·				-12510 Oct 31 j 04.40 -12510 Oct 31 j 18:13		6 10210 417
asc. node	-12516 Nov 17 j 14:33			max. Earth dist.			0.10210 AU
direct	-12515 Jan 02 j 22:33				-12510 Nov 04 j 19:21		
i. ,	-12515 Feb 23 j 13:50			morning rise	-12510 Nov 13 j 06:27		
evening set	-12515 May 11 j 09:59			desc. node	-12510 Dec 12 j 19:19		
p. 4. **	-12515 May 13 j 06:34		6.21004 : **		-12509 Jan 14 j 08:24		
max. Earth dist.	-12515 May 23 j 07:34	2° 大 14'34	6.31984 AU	retrograde	-12509 Mar 24 j 14:07	6° Mp 44'29	

Planetary Phen	omena of Jupiter fro	m -12900	through -1239	8 (UT), Astrodier	nst AG 18-Feb-2025	14:23,	page 35
Attention, astronom	nical year style is used: The	e year -12509	in astronomical co	ounting style is the year	ar 12510 BCE in historica	l counting styl	le.
opposition	-12509 May 23 j 23:52	1° m 40'18	-0°38'16	conjunction	-12503 May 28 j 20:00	7° ₩ 03'03	0°35'36
min. Earth dist.	-12509 May 23 j 06:21	1°Mp46'12	4.08280 AU	minimum elong	-12503 May 28 j 19:57	7° ₩ 03'01	0°35'17
	-12509 Jun 05 j 16:22	30°R€		max. Earth dist.	-12503 May 27 j 19:20	6° ¥ 49'15	6.32469 AU
direct	-12509 Jul 21 j 07:26	26° Ω 44'33		morning rise	-12503 Jun 10 j 13:40	9° ¥ 53'45	
	-12509 Sep 04 j 09:16	0° m)		retrograde	-12503 Oct 09 j 13:24	27° ¥ 15′12	
evening set	-12509 Nov 22 j 11:26	15° m 39'35		opposition	-12503 Dec 09 j 05:24	22° ∺ 23′18	1°29'05
				min. Earth dist.	-12503 Dec 09 j 22:42	22° 升 17'47	4.33175 AU
conjunction	-12509 Dec 06 j 01:29	18° m 49'31	-0°54'50	direct	-12502 Feb 09 j 16:14	17°) €23'42	
minimum elong	-12509 Dec 06 j 01:23	18° ™ 49′28	0°54'40		-12502 May 22 j 06:54	0° Y	
max. Earth dist.	-12509 Dec 07 j 05:08	19° m 05'40	6.07343 AU	evening set	-12502 Jun 16 j 09:54	5° Y 26′58	
morning rise	-12509 Dec 19 j 18:11	22°M,00'53					
	-12508 Jan 24 j 15:31	0∘ ⊽		conjunction	-12502 Jun 28 j 22:05		1°22'43
retrograde	-12508 Apr 28 j 11:22	11° ≏ 49'45		minimum elong	-12502 Jun 28 j 21:59		1°22'49
opposition	-12508 Jun 26 j 23:34			max. Earth dist.	-12502 Jun 27 j 22:32		6.32730 AU
min. Earth dist.	-12508 Jun 26 j 07:24	6° ჲ 50'30	4.07660 AU	morning rise	-12502 Jul 11 j 08:22		
direct	-12508 Aug 24 j 06:33	1° ≏ 45'53		retrograde	-12502 Nov 11 j 01:02		
evening set	-12508 Dec 28 j 13:24	20° £ 57'46		opposition	-12501 Jan 11 j 08:20		
				min. Earth dist.	-12501 Jan 11 j 23:37		4.31484 AU
conjunction	-12507 Jan 11 j 06:32		-1°36'45	direct	-12501 Mar 14 j 12:06		
minimum elong	-12507 Jan 11 j 06:26		1°37'04		-12501 Jun 16 j 02:29	_	
max. Earth dist.	-12507 Jan 12 j 04:53		6.08893 AU	evening set	-12501 Jul 17 j 11:23	6° 8 48'12	
morning rise	-12507 Jan 25 j 00:37						
	-12507 Feb 05 j 19:29			conjunction	-12501 Jul 29 j 19:16		1°45'50
	-12507 Apr 30 j 16:57			minimum elong	-12501 Jul 29 j 19:15		1°46'19
retrograde	-12507 Jun 02 j 09:35			max. Earth dist.	-12501 Jul 29 j 03:00		6.29084 AU
	-12507 Jul 04 j 18:34			morning rise	-12501 Aug 11 j 03:08		
opposition	-12507 Jul 31 j 08:36				-12501 Aug 22 j 19:15		
min. Earth dist.	-12507 Jul 30 j 21:41		4.11355 AU		-12501 Nov 26 j 01:43		
direct	-12507 Sep 28 j 06:20			retrograde	-12501 Dec 14 j 10:36		
_	-12507 Dec 14 j 10:43				-12500 Jan 01 j 21:07		
evening set	-12506 Feb 03 j 14:27	25°M52'13		opposition	-12500 Feb 14 j 03:39		
		-		min. Earth dist.	-12500 Feb 14 j 10:17		4.26213 AU
conjunction	-12506 Feb 17 j 06:34			direct	-12500 Apr 15 j 08:47		
minimum elong	-12506 Feb 17 j 06:36				-12500 Jul 07 j 07:15		
max. Earth dist.	-12506 Feb 17 j 15:15		6.14317 AU	evening set	-12500 Aug 16 j 21:07	8° Ⅱ 45′26	
	-12506 Feb 21 j 15:59	0° ⊀ ⁷			10500 4 00:07.51	110 T 26145	100504
morning rise	-12506 Mar 02 j 21:38			conjunction	-12500 Aug 29 j 07:51		
retrograde	-12506 Jul 06 j 04:08		2010107	minimum elong	-12500 Aug 29 j 07:55		
opposition min. Earth dist.	-12506 Sep 02 j 23:44 -12506 Sep 02 j 23:16			max. Earth dist.	-12500 Aug 29 j 05:19		6.22392 AU
			4.17977 AU	morning rise	-12500 Sep 10 j 20:15 -12500 Nov 30 j 11:41		
direct	-12506 Nov 02 j 01:34			ratra ara da	-12499 Jan 17 j 03:20		
evening set	-12505 Mar 11 j 09:21 -12505 Mar 12 j 11:50			retrograde	-12499 Mar 06 j 08:36		
	-12303 Wai 12 J 11.30	0.0		opposition	-12499 Mar 19 j 17:04		1°50'36
conjunction	-12505 Mar 24 j 21:58	2° ප් 48'11	1014'30	min. Earth dist.	-12499 Mar 19 j 17:04		
minimum elong	-12505 Mar 24 j 21:38 -12505 Mar 24 j 22:03	2°る48'14		direct	-12499 May 18 j 18:40		4.16910 AU
max. Earth dist.	-12505 Mar 24 j 22:05		6.21636 AU	direct	-12499 May 18 j 18.40 -12499 Jul 24 j 20:13		
morning rise	-12505 Apr 07 j 07:41	5°る49'42	0.21030 AC	evening set	-12499 Sep 18 j 09:35		
retrograde	-12505 Apr 07 j 07:41 -12505 Aug 07 j 17:44			evening set	-12499 Sep 16 J 09.55	11 34221	
opposition	-12505 Aug 07 j 17:44 -12505 Oct 05 j 22:43		1015'21	conjunction	-12499 Oct 01 j 05:23	1.406340152	0°57'47
min. Earth dist.	-12505 Oct 05 j 22:45			minimum elong	-12499 Oct 01 j 05:29		0°58'31
direct	-12505 Dec 06 j 04:31		4.23231 AU	max. Earth dist.	-12499 Oct 01 j 05.29		
direct	-12504 Apr 02 j 09:19			morning rise	-12499 Oct 14 j 04:39		0.13177 AC
evening set	-12504 Apr 13 j 11:05			morning rise	-12499 Dec 11 j 17:58		
evening set	-12304 Apr 13 j 11.03	2 ~2023		retrograde	-12498 Feb 21 j 17:01		
conjunction	-12504 Apr 26 j 16:54	5°≈≈24'07	-0°22'28	opposition	-12498 Apr 23 j 19:08		0°42'31
minimum elong	-12504 Apr 26 j 16:56			min. Earth dist.	-12498 Apr 23 j 06:06		4.11931 AU
max. Earth dist.	-12504 Apr 25 j 21:22	5°≈13'10	6.28390 AU	mm. Durin dist.	-12498 May 10 j 04:37		1.11/31 AU
morning rise	-12504 May 09 j 19:25	8°≈20'03	0.20070710	direct	-12498 Jun 21 j 16:45		
	-12504 Jun 09 j 19:27				-12498 Aug 02 j 14:14		
retrograde	-12504 Sep 07 j 17:18				-12498 Oct 19 j 04:24		
asc. node	-12504 Sep 26 j 22:32			desc. node	-12498 Oct 21 j 02:56		
opposition	-12504 Nov 06 j 13:19		0°08'53	evening set	-12498 Oct 22 j 15:53		
min. Earth dist.	-12504 Nov 07 j 05:23		4.30871 AU		5 Oct 22 j 10.00	00.022	
direct	-12503 Jan 07 j 17:48			conjunction	-12498 Nov 04 j 22:55	18° Ω 54'27	-0°02'24
	-12503 Apr 26 j 18:32			minimum elong	-12498 Nov 04 j 22:56		
evening set	-12503 May 15 j 23:06			behind sun begin	-12498 Nov 04 j 14:41		
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Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12498 in astronomical counting style is the year 12499 BCE in historical counting style. behind sun end -12498 Nov 05 j 07:12 $18^{\circ}\Omega$ 59'16 retrograde -12492 Sep 11 j 23:41 0° **米** 13'59 max. Earth dist. -12498 Nov 05 j 22:42 19° Ω 08'21 6.09346 AU -12492 Sep 24 j 00:44 30°R≈ -12492 Nov 10 j 23:46 25°≈21'14 0°20'36 -12498 Nov 18 j 09:31 22° Ω 02'30 morning rise opposition -12498 Dec 24 j 03:32 0° m -12492 Nov 11 j 16:05 25°≈15'57 min. Earth dist. 4 31840 AU -12491 Jan 12 j 05:45 20°≈19'09 -12497 Mar 29 j 19:35 11° m 51'45 retrograde direct -12491 Apr 09 j 14:15 min. Earth dist. -12497 May 28 j 07:48 6° Mp 53'11 4.07743 AU 0°**∀** opposition -12497 May 29 j 00:57 6° Mp $47'23 - 0^{\circ}51'28$ evening set -12491 May 20 j 06:39 8° **∺** 32'31 direct -12497 Jul 26 j 07:58 1° m 51'16 max. Earth dist. -12491 May 31 j 23:15 11°**米**08'59 6.33006 AU -12497 Nov 27 j 18:12 20° Mp 49'56 evening set conjunction -12491 Jun 02 j 02:05 11°**米**24'00 0°42'57 conjunction -12497 Dec 11 j 08:56 24° m 00'15 -1°02'33 minimum elong -12491 Jun 02 j 02:01 11°**∺**23'57 0°42'41 -12497 Dec 11 j 08:50 24° m 00'11 1°02'26 -12491 Jun 14 j 18:39 14° **∺** 14'00 minimum elong morning rise -12497 Dec 12 j 12:38 24° m 16'24 6.07192 AU max. Earth dist. -12491 Sep 11 j 17:25 0°**Υ** morning rise -12497 Dec 25 j 02:19 27° m 11'53 retrograde -12491 Oct 13 j 22:46 1°**Y**35'39 -12496 Jan 06 j 07:32 0°**♀** -12491 Nov 15 j 09:41 30°R € retrograde -12496 May 03 j 12:59 16°**♀**59'04 opposition -12491 Dec 13 j 16:07 26°**)** 43'51 1°38'19 opposition -12496 Jul 01 j 23:19 11°**≏**54'26 -2°07'32 min. Earth dist. -12491 Dec 14 j 11:12 26° **€** 37'47 4.33252 AU min. Earth dist. -12496 Jul 01 j 06:12 12°**2**00'17 4.07982 AU direct -12490 Feb 14 j 04:03 21°**)** 44'38 direct -12496 Aug 29 j 06:32 6°**2**54'57 -12490 May 04 j 14:05 0°**Υ** evening set -12495 Jan 02 j 22:05 26° **2**07'50 evening set -12490 Jun 20 j 14:56 9°**Υ**46'56 max. Earth dist. -12490 Jul 02 j 02:28 12°**Υ**21'34 6.32317 AU conjunction -12495 Jan 16 j 15:12 29° **2**17'48 -1°40'02 minimum elong -12495 Jan 16 j 15:07 29° **2**17'45 1°40'24 conjunction -12490 Jul 03 i 02:18 12°**Υ**'34'59 1°27'26 -12490 Jul 03 j 02:13 12°**Υ**'34'56 max. Earth dist. -12495 Jan 17 i 12:32 29° **2**30'08 6.09667 AU minimum elong 1°27'36 -12495 Jan 19 i 16:09 0°M morning rise -12490 Jul 15 j 11:55 15° γ 22'14 -12495 Jan 30 j 08:59 2°M27'59 -12490 Oct 01 j 01:57 0°8 morning rise -12495 Mar 31 j 03:38 15°M -12490 Nov 15 j 11:41 3°**8**02'16 retrograde -12495 Jun 07 j 07:32 21°M 46'31 -12490 Dec 31 j 22:47 30°R**Y** retrograde -12495 Aug 05 j 05:33 16°M43'52 -2°36'51 -12489 Jan 15 j 21:10 28°**Y**′09'31 2°27'37 opposition opposition min. Earth dist. -12495 Aug 04 j 20:07 16° ML47'06 4.12525 AU min. Earth dist. -12489 Jan 16 j 11:25 28°**Υ**05'00 4.30640 AU -12495 Aug 18 j 03:31 15°RML direct -12489 Mar 18 j 21:01 23°**Y**13'23 -12495 Oct 03 j 07:58 11°ML41'18 -12489 May 28 j 06:16 0°**8** direct -12495 Nov 18 j 16:37 15°**™** evening set -12489 Jul 21 j 17:27 11°**8**13'49 -12494 Feb 04 j 22:18 0° **尽** max. Earth dist. -12489 Aug 02 j 10:26 13°**8**53'23 6.27869 AU -12494 Feb 08 j 18:57 0° ₹ 52'24 evening set -12489 Aug 03 j 01:22 14°**8**01'53 1°46'34 conjunction -12494 Feb 22 j 10:44 3° ₹ 59'03 -1°41'21 -12489 Aug 03 j 01:21 14°**8**01'52 1°47'05 conjunction minimum elong minimum elong -12494 Feb 22 j 10:47 3° ₹ 59'04 1°42'03 -12489 Aug 07 j 07:23 15°**8** max. Earth dist. -12494 Feb 22 j 19:07 4° ₹03'50 6.15795 AU morning rise -12489 Aug 15 j 09:25 16°**8**50'08 morning rise -12494 Mar 08 j 00:56 7°**尽** 04'49 -12489 Oct 20 j 03:37 0°**Ⅱ** retrograde -12494 Jul 10 j 18:31 25° **₹** 38'54 retrograde -12489 Dec 19 j 05:42 5°**Ⅲ**04'51 -12494 Sep 07 j 16:15 20° ₹ 39'47 -2°11'24 -12488 Feb 18 j 20:52 0°П09'32 2°33'30 opposition opposition min. Earth dist. -12494 Sep 07 j 16:01 20° ₹39'52 4.19622 AU min. Earth dist. -12488 Feb 19 j 03:36 0°**П**07'24 4.24708 AU -12494 Nov 06 j 21:48 15° ₹35'38 -12488 Feb 20 j 02:49 30°R8 direct -12493 Feb 23 j 18:22 0°♂ direct -12488 Apr 19 j 22:31 25°**8**15'47 evening set -12493 Mar 16 j 06:30 4°る30'15 -12488 Jun 15 i 20:56 0°**Ⅱ** evening set -12488 Aug 21 j 07:25 13°**Ⅲ**22'44 -12493 Mar 29 j 18:02 7°る32'13 -1°08'21 conjunction -12493 Mar 29 j 18:08 7°る32'17 1°09'07 -12488 Sep 02 j 19:09 16° II 15'12 1°33'34 minimum elong conjunction max. Earth dist. -12493 Mar 29 j 08:47 7°る27'00 6.23318 AU minimum elong -12488 Sep 02 j 19:13 16° II 15'15 1°34'19 morning rise -12493 Apr 12 j 02:53 10°る32'40 max. Earth dist. -12488 Sep 02 j 17:28 16° II 14'14 6.20933 AU retrograde -12493 Aug 12 j 04:38 28°る24'13 morning rise -12488 Sep 15 j 09:01 19°**Д**08'53 -12493 Oct 10 j 11:29 23°₹28'46 -1°04'18 -12488 Nov 05 j 12:41 0°5 opposition min. Earth dist. -12493 Oct 10 j 21:54 23° ₹25'19 4.26807 AU retrograde -12487 Jan 22 j 01:31 8°**©**05'11 direct -12493 Dec 10 j 22:54 18°중24'47 opposition -12487 Mar 24 j 14:31 3°906'15 1°50'51 -12492 Mar 16 j 11:42 0°≈ min. Earth dist. -12487 Mar 24 j 09:18 3°507'56 4.17238 AU -12487 Apr 19 j 15:47 30°R**П** evening set -12492 Apr 18 j 00:10 6°≈57'12 max. Earth dist. -12492 Apr 30 j 08:44 9°≈42'37 6.29701 AU -12487 May 23 j 09:55 28°**Ⅲ**13'24 direct -12487 Jun 25 j 21:00 0°95 -12492 May 01 j 04:56 9°≈53'54 -0°14'26 -12487 Sep 23 j 03:05 16°534'30 conjunction evening set minimum elong -12492 May 01 j 04:57 9°**≈**53'55 0°15'02 behind sun begin -12492 May 01 j 02:05 9°≈52'19 conjunction -12487 Oct 06 j 00:41 19°534'28 0°50'05 behind sun end -12492 May 01 j 07:50 9°≈55'31 minimum elong -12487 Oct 06 j 00:46 19°534'30 0°50'49 morning rise -12492 May 14 j 06:02 12°≈48'47 max. Earth dist. -12487 Oct 06 j 14:54 19°542'45 6.13671 AU -12492 May 24 j 04:00 15°≈ morning rise -12487 Oct 19 j 01:36 22°536'19 -12492 Aug 07 j 17:29 28°≈17'22 -12487 Nov 21 j 06:44 0°**Ω** asc. node

retrograde

-12486 Feb 26 j 21:36 12°**Ω**08'56

-12492 Aug 31 j 00:02 0°**米**

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12486 in astronomical counting style is the year 12487 BCE in historical counting style. -12486 Apr 28 j 19:46 $7^{\circ}\Omega$ 06'30 0° 29'22 -12480 Feb 25 i 13:59 0°≈ opposition min. Earth dist. -12486 Apr 28 j 06:11 7° **Ω**11'00 4.10680 AU evening set -12480 Apr 22 j 15:24 11°≈33'43 -12486 Jun 26 j 15:08 $2^{\circ}\Omega$ 12'34 direct -12486 Aug 29 j 16:43 8°**Ω**25'12 -12480 May 05 j 18:47 14°≈29'37 -0°06'10 desc node conjunction -12486 Oct 01 j 17:10 15°**Ω** -12480 May 05 j 18:48 14°≈29'38 0°06'43 minimum elong -12486 Oct 27 j 17:28 20° **Ω**53'41 -12480 May 05 j 11:15 14°≈25'26 evening set behind sun begin behind sun end -12480 May 06 j 02:22 14°≈33'50 6.30397 AU -12486 Nov 10 j 01:56 24° Ω 00'48 -0°11'35 conjunction max. Earth dist. -12480 May 04 j 19:36 14°≈16'40 -12486 Nov 10 j 01:54 $24^{\circ}\Omega$ 00'47 0° 11'07 minimum elong -12480 May 08 j 01:06 15°≈ behind sun begin -12486 Nov 09 j 19:47 23°**Ω**57'13 morning rise -12480 May 18 j 18:54 17°≈23'47 behind sun end -12486 Nov 10 j 08:02 24°**Ω**04'21 asc. node -12480 Jun 16 j 13:47 23°≈35'33 -12486 Nov 11 j 03:17 24°**Ω**15'37 max. Earth dist. 6.08486 AU -12480 Jul 21 j 14:14 0°**米** -12486 Nov 23 j 14:02 27°**Ω**09'50 morning rise retrograde -12480 Sep 16 j 12:27 4°**)** 47'06 -12486 Dec 05 j 22:12 -12480 Nov 14 j 21:20 30°R≈ retrograde -12485 Apr 03 j 23:15 17° m 01'09 opposition -12480 Nov 15 j 14:05 29°≈54'36 min. Earth dist. -12485 Jun 02 j 07:15 12° Mp 02'55 4.07368 AU min. Earth dist. -12480 Nov 16 j 08:02 29°≈48'48 4.32236 AU opposition -12485 Jun 03 j 02:06 11° m 56'32 -1°04'20 direct -12479 Jan 16 j 22:27 24°≈52'49 direct -12485 Jul 31 j 07:05 6° m 59'57 -12479 Mar 19 j 02:28 0°**米** evening set -12485 Dec 03 j 01:19 26° m 01'23 evening set -12479 May 24 j 17:58 13°\cdot\dot04'21 max. Earth dist. -12479 Jun 05 j 10:21 15°**)** € 40'44 6.33071 AU conjunction -12485 Dec 16 j 16:41 29° m 11'52 -1°09'47 minimum elong -12485 Dec 16 j 16:34 29° m 11'48 1°09'45 conjunction -12479 Jun 06 j 12:19 15° **\(\)** 55'16 0°50'21 max. Earth dist. -12485 Dec 17 j 20:38 29° m 28'10 6.07288 AU minimum elong -12479 Jun 06 j 12:14 15°**)** ₹55'14 -12485 Dec 20 i 03:14 0° **△** morning rise -12479 Jun 19 i 03:37 18° **)** 44'44 morning rise -12485 Dec 30 i 10:27 2°**£**23'33 -12479 Aug 13 j 17:10 0°**Υ** -12484 May 08 j 14:26 22°**£**07'46 retrograde -12479 Oct 18 j 11:28 6° Υ 08'04 retrograde opposition -12484 Jul 06 j 22:33 17°**2**03'09 -2°15'02 -12479 Dec 18 j 07:55 1° **Y**16'16 1° 47'27 opposition -12484 Jul 06 j 06:29 17° **2**08'40 4.08509 AU min. Earth dist. -12479 Dec 19 j 02:01 1° **Y** 10'31 4.33011 AU min. Earth dist. -12484 Sep 03 j 08:30 12°**೨**03'06 -12479 Dec 28 j 10:38 30°R € direct -12483 Jan 02 j 16:42 0°M direct -12478 Feb 18 j 17:56 26° **₭** 17'32 -12483 Jan 08 j 05:40 -12478 Apr 11 j 00:51 0°**Υ** 1°M15'59 evening set -12478 Jun 25 j 00:55 14°**Υ**19'31 evening set -12483 Jan 21 j 22:50 4°M25'31 -1°42'34 -12478 Jul 06 j 11:45 16°**Υ**54'02 6.31775 AU conjunction max. Earth dist. -12483 Jan 21 j 22:47 4° M25'28 1°42'58 minimum elong -12478 Jul $\,$ 07 j 11:20 $\,$ 17° Υ 07'21 $\,$ 1°31'55 $\,$ -12483 Jan 22 j 20:05 4°M 37'46 6.10536 AU max. Earth dist. conjunction -12483 Feb 04 j 16:09 7°M 35'03 -12478 Jul 07 j 11:15 17°**Υ**07'18 morning rise minimum elong 1°32'08 -12483 Mar 10 j 05:45 15°M -12478 Jul 19 j 20:27 19°**Υ**54'34 morning rise retrograde -12483 Jun 12 j 03:20 26°M 46'57 -12478 Sep 06 j 07:47 0°8 opposition -12483 Aug 10 j 01:06 21°M 44'42 -2°36'25 retrograde -12478 Nov 20 j 06:34 7°**8**39'12 min. Earth dist. -12483 Aug 09 j 16:22 21°M-47'41 4.13636 AU opposition -12477 Jan 20 j 16:09 2°**8**46'13 2°31'21 direct -12483 Oct 08 j 06:16 16°ML41'48 min. Earth dist. -12477 Jan 21 j 06:19 2°**8**41'44 4.29855 AU -12482 Jan 18 j 10:59 0° **尽** -12477 Feb 12 j 22:57 30°R**Y** -12482 Feb 13 j 22:25 5° ₹ 50'25 direct -12477 Mar 23 j 13:56 27°**Y**50'30 evening set -12477 Apr 30 j 17:45 0°8 -12482 Feb 27 j 13:35 8°**х** 56'19 -1°38'32 -12477 Jul 22 j 08:36 15°8 conjunction -12482 Feb 27 i 13:39 8° \$\inf 56'21 1°39'15 -12477 Jul 26 i 04:21 15°**8**51'49 minimum elong evening set -12482 Feb 27 j 17:59 8° ₹ 58'50 6.17030 AU max. Earth dist. -12477 Aug 07 j 12:27 18°\delta40'18 1°46'44 morning rise -12482 Mar 13 j 03:17 12°**尽** 01'17 conjunction -12482 Jun 28 i 15:38 0°る minimum elong -12477 Aug 07 j 12:26 18°**8**40'17 1°47'18 -12482 Jul 15 i 10:04 0°중28'10 max. Earth dist. -12477 Aug 06 j 23:31 18°\begin{align*} 32'55 & 6.26915 AU retrograde -12482 Aug 01 j 02:45 30°R ✓ morning rise -12477 Aug 19 j 20:54 21°**8**29'06 -12482 Sep 12 j 08:43 25° ₹29'33 -2°03'55 -12477 Sep 28 j 10:33 0°**П** opposition -12477 Dec 24 j 02:13 9°**Д**49'45 min. Earth dist. -12482 Sep 12 j 10:40 25° ₹28'53 4.20849 AU retrograde -12482 Nov 11 j 19:53 20° ₹25'15 direct opposition -12476 Feb 23 j 18:40 4°**I**I54'00 2°30'20 -12481 Feb 05 j 05:55 0°る min. Earth dist. -12476 Feb 23 j 22:39 4°**Д**52'43 4.23690 AU evening set -12481 Mar 21 j 03:16 9°**궁**16'13 direct -12476 Apr 24 j 15:09 0°**Ц**00'33 evening set -12476 Aug 25 j 21:46 18°**Д**09'03 -12481 Apr 03 j 14:12 12°♂17'27 -1°01'36 conjunction -12481 Apr 03 j 14:17 12°♂17'30 1°02'22 conjunction -12476 Sep 07 j 10:35 21°**П**02'24 1°29'04 minimum elong -12481 Apr 03 j 04:03 12°る11'44 6.24463 AU -12476 Sep 07 j 10:40 21°**I**I02'27 1°29'49 max. Earth dist. minimum elong -12476 Sep 07 j 11:54 21°**Д**03'10 6.19961 AU morning rise -12481 Apr 16 j 21:56 15° ₹ 17'02 max. Earth dist. -12481 Jul 03 j 08:05 morning rise -12476 Sep 20 j 01:42 23°**I**57'05 retrograde -12481 Aug 16 j 16:36 3°**≈**03'19 -12476 Oct 17 j 05:10 0°95 -12481 Sep 30 j 14:11 30°R♂ retrograde -12475 Jan 27 j 03:29 12°558'41 opposition -12481 Oct 15 j 01:53 28°중08'21 -0°52'47 opposition -12475 Mar 29 j 14:23 7°**©**59'13 1°41'10 min. Earth dist. -12481 Oct 15 j 13:02 28°**궁**04'40 4.27762 AU min. Earth dist. -12475 Mar 29 j 08:14 8°901'13 4.16378 AU -12481 Dec 15 j 16:08 23°₹04'33 -12475 May 28 j 07:13 3°506'21 direct direct

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 38

	omena of Jupiter from nical year style is used: The						page 38 le.
evening set	-12475 Sep 27 j 22:13			conjunction	-12469 Apr 08 j 08:07		
				minimum elong	-12469 Apr 08 j 08:12	16° る 58'29	0°55'19
conjunction	-12475 Oct 10 j 21:20	24° © 30'09	0°42'02	max. Earth dist.	-12469 Apr 07 j 18:31	16° ප 50'47	6.25085 AU
minimum elong	-12475 Oct 10 j 21:25	24° © 30'12	0°42'44	morning rise	-12469 Apr 21 j 15:07	19° る 57'28	
max. Earth dist.	-12475 Oct 11 j 13:37	24° © 39'38	6.13018 AU		-12469 Jun 08 j 19:04	0° ≈	
morning rise	-12475 Oct 24 j 00:00	27° 5 33'04		retrograde	-12469 Aug 21 j 04:57	7° ≈ 40'36	
	-12475 Nov 03 j 16:16			opposition	-12469 Oct 19 j 15:36	2° ≈ 46′03	
	-12474 Jan 25 j 07:32			min. Earth dist.	-12469 Oct 20 j 04:12		4.28198 AU
retrograde	-12474 Mar 03 j 22:54				-12469 Nov 10 j 23:52		
	-12474 Apr 10 j 10:22			direct	-12469 Dec 20 j 08:39		
opposition	-12474 May 03 j 19:34				-12468 Jan 29 j 00:21		
min. Earth dist.	-12474 May 03 j 04:07		4.10298 AU		-12468 Apr 21 j 22:59		
direct	-12474 Jul 01 j 11:38			asc. node	-12468 Apr 25 j 12:08		
desc. node	-12474 Jul 09 j 19:35	7° Ω 18′29		evening set	-12468 Apr 27 j 06:03		(20(20 AII
	-12474 Sep 12 j 07:22			max. Earth dist.	-12468 May 09 j 09:41	18°≈52′51	6.30639 AU
evening set	-12474 Nov 01 j 17:49	25-8654-16		conjunction	-12468 May 10 j 08:26	1000005125	0°02'14
conjunction	-12474 Nov 15 j 03:26	200 001/55	0°20'20	minimum elong	-12468 May 10 j 08:25		0°01'43
minimum elong	-12474 Nov 15 j 03:24			behind sun begin	-12468 May 10 j 08:25		0 01 43
max. Earth dist.	-12474 Nov 16 j 05:32			behind sun end	-12468 May 10 j 16:31		
max. Earth dist.	-12474 Nov 19 j 06:50	0° m)	0.00370710	morning rise	-12468 May 23 j 07:14		
morning rise	-12474 Nov 28 j 16:35	2° m) 11'26		morning rise	-12468 Jun 30 j 03:35		
retrograde	-12473 Apr 08 j 23:47			retrograde	-12468 Sep 21 j 01:15		
opposition	-12473 Jun 07 j 23:54		-1°16'20	opposition	-12468 Nov 20 j 05:09		0°44'20
min. Earth dist.	-12473 Jun 07 j 05:37			min. Earth dist.	-12468 Nov 20 j 22:54		
direct	-12473 Aug 05 j 05:42				-12467 Jan 02 j 23:03		
	-12473 Dec 03 j 15:51	0∘ <u>⊽</u>		direct	-12467 Jan 21 j 13:48		
evening set	-12473 Dec 08 j 04:56	1° ≏ 02'55			-12467 Feb 09 j 06:58		
C	J			evening set	-12467 May 29 j 06:03		
conjunction	-12473 Dec 21 j 20:52	4° ≙ 13'23	-1°16'16	· ·	, ,		
minimum elong	-12473 Dec 21 j 20:45	4° ≙ 13'19	1°16'19	conjunction	-12467 Jun 10 j 23:01	20° ¥ 29'41	0°57'29
max. Earth dist.	-12473 Dec 23 j 01:08	4° ہ 29'50	6.07736 AU	minimum elong	-12467 Jun 10 j 22:55	20° ∺ 29'38	0°57'21
morning rise	-12472 Jan 04 j 14:43	7° ≏ 24'50		max. Earth dist.	-12467 Jun 09 j 20:14	20°) 14'41	6.32896 AU
retrograde	-12472 May 13 j 11:00	27° ≏ 05'03		morning rise	-12467 Jun 23 j 13:25	23° ¥ 18'48	
opposition	-12472 Jul 11 j 17:12	22° ≏ 00'41	-2°21'16		-12467 Jul 24 j 16:52	$0^{\circ}\Upsilon$	
min. Earth dist.	-12472 Jul 11 j 02:03	22° ≏ 05'53	4.09186 AU	retrograde	-12467 Oct 23 j 03:38	10° Ƴ 44'34	
direct	-12472 Sep 08 j 04:25	17° ≏ 00'13		opposition	-12467 Dec 23 j 01:26	5° Y 52'41	1°56'00
	-12472 Dec 16 j 11:38	0° M		min. Earth dist.	-12467 Dec 23 j 19:20		4.32658 AU
evening set	-12471 Jan 13 j 08:57	6°M13′02		direct	-12466 Feb 23 j 10:35		
				evening set	-12466 Jun 29 j 11:54	18° Y 56′00	
conjunction	-12471 Jan 27 j 01:50	9° ™ 22'06					
minimum elong	-12471 Jan 27 j 01:47	9° M 22′05	1°44'44	conjunction	-12466 Jul 11 j 21:45		1°35'52
max. Earth dist.	-12471 Jan 27 j 19:06	9° ™ 32'03	6.11342 AU	minimum elong	-12466 Jul 11 j 21:40		1°36'07
morning rise	-12471 Feb 09 j 18:56			max. Earth dist.	-12466 Jul 11 j 00:57		6.31261 AU
	-12471 Feb 20 j 17:31			morning rise	-12466 Jul 24 j 06:14		
	-12471 May 16 j 04:55	0° ∡			-12466 Aug 18 j 08:39		
retrograde	-12471 Jun 16 j 19:20	1° ∡ 737'18		retrograde	-12466 Nov 24 j 23:59		202.407
	-12471 Jul 18 j 04:00		202456	opposition	-12465 Jan 25 j 11:55	7° 8 26'18	2°34'07
opposition	-12471 Aug 14 j 16:56			min. Earth dist.	-12465 Jan 25 j 23:56	7° 8 22'30	4.29231 AU
min. Earth dist.	-12471 Aug 14 j 10:07		4.14496 AU	direct	-12465 Mar 28 j 06:26	2° 8 31'00	
direct	-12471 Oct 13 j 02:28			ovenint	-12465 Jul 05 j 13:26		
	-12471 Dec 30 j 10:02			evening set	-12465 Jul 30 j 16:05	20°032'20	
evening set	-12470 Feb 18 j 21:44	10 X'39'33		agniumation	12465 Ave 12:00:16	220 2 2 1 100	1016112
agniumation	12470 Mar 04 : 12:20	120,7/45100	1025100	conjunction minimum elong	-12465 Aug 12 j 00:16 -12465 Aug 12 j 00:16		1°46'13 1°46'50
conjunction	-12470 Mar 04 j 12:39						
minimum elong max. Earth dist.	-12470 Mar 04 j 12:43 -12470 Mar 04 j 15:30		1°35'51 6.17885 AU	max. Earth dist. morning rise	-12465 Aug 11 j 12:53 -12465 Aug 24 j 09:15		6.26208 AU
max. Earth dist.	-12470 Mar 04 j 15:30 -12470 Mar 18 j 01:32		0.17003 AU	morning rise	-12465 Sep 10 j 12:06		
morning 118¢	-12470 Mar 18 j 01:32 -12470 May 22 j 07:35	16° x '49'20'		retrograde	-12465 Dec 29 j 00:23		
retrograde	-12470 May 22 j 07:35 -12470 Jul 20 j 00:05	0°5 5° る 10'53		opposition	-12465 Dec 29 j 00:23 -12464 Feb 28 j 16:38		2°26'00
opposition	-12470 Jul 20 j 00:05 -12470 Sep 16 j 22:41		-1°55'50	opposition min. Earth dist.	-12464 Feb 28 j 19:33		4.22919 AU
min. Earth dist.	-12470 Sep 16 j 22:41 -12470 Sep 17 j 02:16		4.21614 AU	direct	-12464 Apr 29 j 10:27	9°Щ38°41 4°Щ46'18	7.44717 AU
min. Barui dist.	-12470 Sep 17 j 02:16 -12470 Sep 18 j 13:02		7.21014 AU	evening set	-12464 Apr 29 j 10:27 -12464 Aug 30 j 11:51		
direct	-12470 Sep 18 j 13:02 -12470 Nov 16 j 13:24			evening set	12704 Aug 30 J 11.31	22 11 3323	
ancet	-12469 Jan 13 j 23:06			conjunction	-12464 Sep 12 j 01:54	25°π40'37	1°23'59
evening set	-12469 Mar 25 j 22:05			minimum elong	-12464 Sep 12 j 01:59		1°24'44
c venning set	12-10) IVIAI 23 J 22.03	.5 05/45		minimum ciong			
				max. Earth dist.	-12464 Sep 12 j 05:47	25°T51'51	6.19197 AU

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12464 in astronomical counting style is the year 12465 BCE in historical counting style. morning rise -12464 Sep 24 j 18:24 28°**Д**45'15 retrograde -12458 Jul 24 i 14:06 9°**ප**56'14 opposition -12464 Sep 30 j 05:10 0°5 -12458 Sep 21 j 14:11 4° 중58'44 -1°46'54 -12463 Feb 01 j 02:40 17°551'07 min. Earth dist. -12458 Sep 21 j 18:51 4°る57'10 4.22363 AU retrograde -12463 Apr 03 j 13:14 12°551'09 1°30'49 opposition -12458 Nov 13 j 17:31 30°R ✓ -12463 Apr 03 j 05:11 12°553'46 min. Earth dist. direct -12458 Nov 21 j 08:20 29°**尽** 54'24 4.15667 AU -12463 Jun 02 j 02:05 7°558'13 direct -12458 Nov 28 j 23:51 0°る -12463 Oct 02 j 17:08 26°\$22'37 evening set evening set -12457 Mar 30 j 17:48 18°₹41'34 conjunction -12463 Oct 15 j 17:43 29°524'29 0°33'44 conjunction -12457 Apr 13 j 03:01 21°₹41'40 -0°47'06 -12463 Oct 15 j 17:47 29°524'31 0°34'25 minimum elong minimum elong -12457 Apr 13 j 03:06 21°₹41'43 0°47'48 max. Earth dist. -12463 Oct 16 j 11:03 29°534'36 6.12428 AU max. Earth dist. -12457 Apr 12 j 12:27 21°る33'28 6.25775 AU -12463 Oct 18 j 06:38 -12457 Apr 26 j 08:59 24°₹40'02 $0^{\circ}\Omega$ morning rise -12463 Oct 28 j 22:00 2°**Ω**28'22 -12457 May 20 j 20:15 0°≈ morning rise -12463 Dec 27 j 08:52 15°**Ω** retrograde -12457 Aug 25 j 19:08 12°≈19'54 retrograde -12462 Mar 08 j 24:00 22°**Ω**06'21 opposition -12457 Oct 24 j 06:56 7°≈25'49 -0°29'00 opposition -12462 May 08 j 18:05 17°**Ω**03'05 0°02'48 min. Earth dist. -12457 Oct 24 j 20:33 7°≈21'21 4.28765 AU min. Earth dist. -12462 May 08 j 02:17 17°**Ω**08'21 4.09863 AU direct -12457 Dec 25 j 02:47 2°≈22'31 desc. node -12462 May 20 j 09:33 15°**Ω**31'33 asc. node -12456 Mar 04 j 10:58 9°≈00'47 -12462 May 24 j 15:39 15°RΩ -12456 Apr 04 j 23:23 15°≈ direct -12462 Jul 06 j 08:44 12° Ω 08'30 evening set -12456 May 01 j 21:21 20°≈48'07 -12462 Aug 17 j 11:25 15°Ω -12462 Nov 02 j 21:26 0° m conjunction -12456 May 14 j 22:25 23°≈42'48 0°10'35 evening set -12462 Nov 06 j 18:07 0° m 53'41 minimum elong -12456 May 14 j 22:24 23°≈42'47 0°10'07 behind sun begin -12456 May 14 i 15:56 23°≈39'11 conjunction -12462 Nov 20 j 05:01 4° m 01'57 -0°29'14 behind sun end -12456 May 15 j 04:52 23°≈46'23 minimum elong -12462 Nov 20 j 04:57 4° m 01'54 0°28'52 max. Earth dist. -12456 May 13 j 22:25 23°≈29'23 6.31049 AU max. Earth dist. -12462 Nov 21 j 08:31 4° Mp 18'00 6.08167 AU -12456 May 27 j 20:07 26°≈35'44 morning rise -12462 Dec 03 j 19:07 7° m 11'57 -12456 Jun 12 j 08:36 0°**光** morning rise -12461 Apr 14 j 00:03 27° m 02'21 -12456 Sep 25 j 14:35 13°**米**58'10 retrograde retrograde -12461 Jun 12 j 21:08 21° m 57'31 -1°27'46 -12456 Nov 24 j 21:10 9° **★** 06'03 0°55'54 opposition opposition -12461 Jun 12 j 03:13 22° m 03'36 4.07595 AU min. Earth dist. -12456 Nov 25 j 14:45 9° **★**00'24 4.32531 AU min. Earth dist. -12461 Aug 10 j 02:08 16° Mp 59'58 direct -12455 Jan 26 j 06:23 4°**₭**05'08 direct -12461 Nov 16 j 09:41 0°**♀** -12455 Jun 02 j 18:05 22°**米** 14'01 evening set -12455 Jun 14 j 09:13 24° ¥ 50'01 6.32982 AU -12461 Dec 13 j 09:05 6°**£**04'37 max. Earth dist. evening set -12461 Dec 27 j 01:15 9°**2**15'04 -1°22'12 -12455 Jun 15 j 09:54 25° **★** 03'52 1°04'17 conjunction conjunction -12461 Dec 27 j 01:08 9°**2**15'00 1°22'18 -12455 Jun 15 j 09:48 25° **∺** 03'48 1°04'13 minimum elong minimum elong max. Earth dist. -12461 Dec 28 j 02:53 9°**2**29'58 6.07990 AU morning rise -12455 Jun 27 j 23:03 27° **∺** 52'26 morning rise -12460 Jan 09 j 19:26 12°**2**26'26 -12455 Jul 07 j 13:51 0°**Υ** -12460 Apr 12 j 08:58 0°M retrograde -12455 Oct 27 j 18:18 15°**Υ**19'53 retrograde -12460 May 18 j 07:14 2°ML03'20 opposition -12455 Dec 27 j 18:48 10° **Y**27'55 2° 03'48 -12460 Jun 22 j 21:44 30°R ₽ min. Earth dist. -12455 Dec 28 j 11:44 10° \(\gamma 22'33 \) 4.32582 AU -12460 Jul 16 j 12:20 26°**2**59'11 -2°26'31 direct -12454 Feb 28 j 03:10 5°**Υ**30'08 opposition min. Earth dist. -12460 Jul 15 j 22:07 27°**2**04'04 4.09651 AU -12454 Jul 03 j 22:08 23°**Y**30'25 evening set direct -12460 Sep 13 j 01:58 21°**2**58'13 max. Earth dist. -12454 Jul 15 j 10:28 26°**Y**06'12 6.30999 AU -12460 Nov 26 j 23:03 0°M -12454 Jul 16 i 07:08 26°**Y**17'53 1°39'11 evening set -12459 Jan 18 j 13:01 11°ML11'38 conjunction -12454 Jul 16 i 07:04 26° Υ 17'51 minimum elong 1°39'30 -12459 Feb 01 i 05:57 14° ML 20'24 -1°45'12 -12454 Jul 28 j 15:22 29°**Υ**04'58 conjunction morning rise minimum elong -12459 Feb 01 i 05:56 14°ML20'23 1°45'44 -12454 Aug 01 j 17:38 0°8 max. Earth dist. -12459 Feb 01 j 22:14 14°M29'46 6.11980 AU -12454 Oct 24 j 12:27 15°8 -12459 Feb 04 i 02:48 15°M -12454 Nov 29 j 17:35 16°857'18 retrograde -12459 Feb 14 j 22:29 17° ML 28'53 -12453 Jan 05 j 07:09 15°R8 morning rise -12459 Apr 16 j 02:00 0° ₹ opposition -12453 Jan 30 j 06:58 12°803'35 2°35'52 retrograde -12459 Jun 21 j 14:12 6° ₹ 29'46 min. Earth dist. -12453 Jan 30 j 17:49 12°**8**00'08 4.28799 AU opposition -12459 Aug 19 j 09:55 1°**∡**128'30 -2°32'24 direct -12453 Apr 01 j 23:08 7°**8**08'36 1°**尽**30'10 4.15238 AU min. Earth dist. -12459 Aug 19 j 05:02 -12453 Jun 16 j 21:20 15°**8** -12459 Aug 30 j 09:28 30°RM -12453 Aug 04 j 02:16 25°**8**09'24 evening set -12459 Oct 17 j 23:20 26°M25'02 direct -12459 Dec 05 j 17:08 0° ₹ -12453 Aug 16 j 10:55 27°**8**58'35 1°45'01 conjunction -12458 Feb 23 j 22:28 15° ₹31'10 evening set minimum elong -12453 Aug 16 j 10:56 27°**8**58'36 1°45'40 max. Earth dist. -12453 Aug 16 j 02:30 27°**8**53'47 6.25637 AU conjunction -12458 Mar 09 j 12:53 18° ₹36'07 -1°31'01 -12453 Aug 25 j 07:24 Π $^{\circ}0$ minimum elong -12458 Mar 09 j 12:58 18° ₹36'10 1°31'46 morning rise -12453 Aug 28 j 20:21 0°**Ⅱ**48'22 max. Earth dist. -12458 Mar 09 j 12:32 18°**尽** 35'55 6.18668 AU retrograde -12452 Jan 02 j 19:51 19°**Ⅲ**18'16 -12458 Mar 23 j 01:14 21° ₹ 39'53 opposition -12452 Mar 04 j 12:51 14°**Д**21'30 2°21'00 morning rise

min. Earth dist.

-12452 Mar 04 j 14:16 14°**I**I21'03 4.22238 AU

-12458 Apr 30 j 18:19 0°ਰ

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12452 in astronomical counting style is the year 12453 BCE in historical counting style. direct -12452 May 04 j 03:11 9°**Д**28'23 minimum elong -12446 Mar 14 j 13:33 23° ₹29'47 1°26'59 -12452 Sep 04 j 00:52 27°**Д**38'07 max. Earth dist. -12446 Mar 14 j 11:24 23° ₹28'34 6.19519 AU evening set -12452 Sep 14 i 06:42 0°ഇ -12446 Mar 28 j 01:05 26° **₹** 32'52 morning rise -12446 Apr 12 j 13:37 0°る -12446 Jul 29 j 06:17 14°**정**43'43 1°18'23 conjunction -12452 Sep 16 j 15:59 0°933'09 retrograde -12452 Sep 16 j 16:05 minimum elong 0°933'13 1°19'10 opposition -12446 Sep 26 j 06:38 9°₹46'43 -1°37'10 -12452 Sep 16 j 20:33 max. Earth dist. 0°935'48 6.18460 AU min. Earth dist. -12446 Sep 26 j 13:00 9°**정**44'35 4.23264 AU -12452 Sep 29 j 09:59 morning rise 3°9529'46 direct -12446 Nov 26 j 05:13 4°₹42'25 retrograde -12451 Feb 06 j 01:23 22°540'00 evening set -12445 Apr 04 j 13:28 23°₹26'31 opposition -12451 Apr 08 j 10:10 17°539'31 1°19'58 min. Earth dist. -12451 Apr 08 j 01:07 17°542'28 4.14901 AU conjunction -12445 Apr 17 j 21:46 26°る25'53 -0°39'17 direct -12451 Jun 06 j 19:56 12°546'24 minimum elong -12445 Apr 17 j 21:50 26°る25'55 0°39'58 -12451 Oct 02 j 04:30 $0^{\circ}\Omega$ max. Earth dist. -12445 Apr 17 j 06:10 26°정17'08 6.26661 AU evening set -12451 Oct 07 j 10:53 1°**Ω**12'59 morning rise -12445 May 01 j 02:39 29°る23'28 -12445 May 03 j 20:16 conjunction -12451 Oct 20 j 13:09 $4^{\circ}\Omega$ 15'53 $0^{\circ}25'18$ -12445 Jul 25 j 18:29 15°≈ minimum elong -12451 Oct 20 j 13:11 $4^{\circ}\Omega$ 15'55 0° 25'56 retrograde -12445 Aug 30 j 06:39 16°≈59'19 max. Earth dist. -12451 Oct 21 j 08:40 $4^{\circ}\Omega$ 27'15 6.11722 AU -12445 Oct 05 j 00:33 15°R≈ morning rise -12451 Nov 02 j 18:55 $7^{\circ}\Omega$ 20'46 opposition -12445 Oct 28 j 22:10 12°≈05'31 -0°16'43 -12451 Dec 07 j 04:15 15°Ω min. Earth dist. -12445 Oct 29 j 11:46 12°≈01'04 4.29552 AU retrograde -12450 Mar 14 j 00:39 $27^{\circ}\Omega$ 01'46 direct -12445 Dec 29 j 20:14 7°≈02'24 desc. node -12450 Mar 31 j 07:16 $26^{\circ}\Omega$ 33'00 asc. node -12444 Jan 12 j 21:27 7°≈20'21 opposition -12450 May 13 j 15:18 21° Ω 58'14 -0°10'23 -12444 Mar 16 i 20:21 15°≈ min. Earth dist. -12450 May 12 j 23:29 $22^{\circ}\Omega$ 03'31 4.09279 AUevening set -12444 May 06 j 11:48 25°≈24'49 direct -12450 Jul 11 j 03:09 17°**Ω**03'21 max. Earth dist. -12444 May 18 j 11:19 28°≈05'09 6.31670 AU -12450 Oct 16 j 20:56 0° Mg -12450 Nov 11 j 18:04 5° m 51'47 -12444 May 19 j 11:30 28°≈18'40 0°18'50 conjunction evening set -12444 May 19 j 11:28 28°≈18'39 minimum elong 0°18'25 -12450 Nov 25 j 05:52 9° m 00'39 -0°37'40 -12444 May 27 j 00:44 0°**光** conjunction -12450 Nov 25 j 05:48 9° m 00'36 0°37'23 -12444 Jun 01 j 07:54 1° **₭** 10'49 minimum elong morning rise -12450 Nov 26 j 07:54 9° m 15'51 6.07742 AU -12444 Sep 30 j 03:30 18°**米** 32'01 max. Earth dist. retrograde -12450 Dec 08 j 21:04 12° Mp 11'15 opposition -12444 Nov 29 j 12:35 13°**米**40'00 1°07'03 morning rise -12444 Nov 30 j 06:53 13°**米**34'08 4.32917 AU -12449 Mar 13 j 20:21 0°**♀** min. Earth dist. -12449 Apr 18 j 22:15 2°**♀**02'13 -12443 Jan 30 j 23:43 8° **∺** 39'28 retrograde direct -12449 May 24 j 16:35 30°R M -12443 Jun 07 j 04:39 26° ¥45'59 evening set -12449 Jun 17 j 17:38 26° m 57'20 -1°38'29 opposition -12443 Jun 19 j 19:12 29° ★35'14 1°10'40 min. Earth dist. -12449 Jun 16 j 23:38 27° m 03'28 4.07390 AU conjunction direct -12449 Aug 14 j 22:28 21° Mp 59'18 minimum elong -12443 Jun 19 j 19:07 29°\\$35'11 1°10'38 -12449 Oct 27 j 22:18 0°**♀** max. Earth dist. -12443 Jun 18 j 17:47 29°**米**20'59 6.33062 AU evening set -12449 Dec 18 j 13:25 11°**♀**07'05 -12443 Jun 21 j 15:22 0°**Υ** morning rise -12443 Jul 02 j 07:27 2°**Υ**23'21 -12448 Jan 01 j 06:08 14°**2**17'40 -1°27'29 -12443 Nov 01 j 08:01 19°**Υ**52'46 conjunction retrograde -12448 Jan 01 j 06:01 14°**2**17'37 1°27'39 -12442 Jan 01 j 11:22 15°**Y**′00'35 2°10'50 minimum elong opposition -12448 Jan 02 j 07:52 14°**2**32'38 6.08027 AU min. Earth dist. -12442 Jan 02 j 03:29 14°**Υ**55'28 4.32364 AU max. Earth dist. -12448 Jan 15 j 00:14 17°**2**28'58 -12442 Mar 04 j 18:07 10°**Y**03'08 morning rise direct -12448 Mar 14 i 07:51 0°M evening set -12442 Jul 08 j 07:23 28°**Υ**'02'40 retrograde -12448 May 23 j 06:04 7° ML03'14 -12442 Jul 16 j 23:31 0°8 opposition -12448 Jul 21 j 07:42 1°ML59'26 -2°30'41 -12442 Jul 20 j 16:00 0°\(250'05\) 1°41'55 min. Earth dist. -12448 Jul 20 j 19:11 2°ML03'43 4.09945 AU conjunction -12448 Aug 05 j 06:09 30°R ₽ minimum elong -12442 Jul 20 i 15:56 0°850'03 1°42'18 direct -12448 Sep 18 j 00:08 26° **2**58'04 max. Earth dist. -12442 Jul 19 j 21:34 0°**8**39'39 6.30484 AU -12448 Oct 31 j 21:32 0°M -12442 Aug 01 j 23:47 3°**8**37'13 morning rise -12447 Jan 18 j 10:08 15°M -12442 Sep 26 j 11:17 15°8 -12447 Jan 23 j 17:48 16°ML12'37 retrograde -12442 Dec 04 j 11:06 21°833'59 evening set -12441 Feb 04 j 01:38 16°**8**39'56 2°36'43 opposition conjunction -12447 Feb 06 j 10:34 19°ML21'06 -1°45'22 min. Earth dist. -12441 Feb 04 j 11:56 16°**8**36'41 4.28019 AU minimum elong $\hbox{-}12447 \; \hbox{Feb} \;\; 06 \; \hbox{j} \; 10{:}34 \;\; 19 ^{\circ} \hbox{\it IL} 21 ^{\circ} \hbox{\it 06} \;\; 1 ^{\circ} 45 ^{\circ} \hbox{\it 56}$ -12441 Feb 17 j 11:26 15°R**8** -12447 Feb 07 j 00:27 19° ML 29'05 6.12493 AU -12441 Apr 06 j 15:18 11°**8**45'18 max. Earth dist. direct -12447 Feb 20 j 02:49 22°M29'12 morning rise -12441 May 23 j 13:43 15°**8** -12447 Mar 26 j 07:19 0° ✓ evening set -12441 Aug 08 j 13:01 29°**8**46'53 retrograde -12447 Jun 26 j 07:26 11°**尽** 25'03 -12441 Aug 09 j 12:05 $0^{\circ}\Pi$ opposition -12447 Aug 24 j 03:44 6°**х** 24′15 -2°28′43 min. Earth dist. -12447 Aug 23 j 23:15 6°**≯**25'46 4.15937 AU conjunction -12441 Aug 20 j 22:02 2°**Ⅱ**36'40 1°43'12 direct -12447 Oct 22 j 20:04 1°**×**⁷20'31 minimum elong -12441 Aug 20 j 22:04 2°**Ⅲ**36'41 1°43'51 evening set -12446 Feb 28 j 23:35 20° ₹25'20 max. Earth dist. -12441 Aug 20 j 13:47 2°**Ⅲ**31'56 6.24643 AU -12441 Sep 02 j 08:27 5°**П**27'14 morning rise -12446 Mar 14 j 13:28 23°**x** 29'44 -1°26'13 -12440 Jan 07 j 17:32 24°**Д**03'08 conjunction retrograde

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12440 in astronomical counting style is the year 12441 BCE in historical counting style. -12440 Mar 09 j 10:08 19°**II**05'50 2°14'59 conjunction -12434 Mar 19 j 12;45 28° ₹20'10 -1°20'54 opposition minimum elong min. Earth dist. -12440 Mar 09 j 09:54 19°**耳**05'54 4.21085 AU -12434 Mar 19 j 12:51 28° ₹20'13 1°21'40 -12440 May 08 j 19:57 14°**Д**12'46 max. Earth dist. -12434 Mar 19 j 09:48 28° **₹** 18'29 6.21165 AU direct -12440 Aug 29 j 01:48 0ംഉ -12434 Mar 26 j 21:24 0°る -12434 Apr 01 j 23:22 -12440 Sep 08 j 15:39 evening set 2°9524'54 morning rise 1°**る**22'13 retrograde -12434 Aug 02 j 16:57 19°♂25'02 -12440 Sep 21 j 08:23 conjunction 5°521'07 1°12'13 opposition -12434 Sep 30 j 20:47 14°♂28'31 -1°26'59 -12440 Sep 21 j 08:28 minimum elong 5°921'10 1°12'59 min. Earth dist. -12434 Oct 01 j 03:23 14°₹26′19 4.24906 AU -12440 Sep 21 j 16:07 max. Earth dist. 5°925'36 6.17268 AU direct -12434 Nov 30 j 22:55 9°♂24'19 morning rise -12440 Oct 04 j 03:51 8°9518'56 evening set -12433 Apr 09 j 05:19 28°**⋜**02'53 retrograde -12439 Feb 11 j 04:02 27°535'02 -12433 Apr 17 j 23:12 -12439 Apr 13 j 09:48 22°534'06 opposition 1°08'21 -12439 Apr 13 j 00:08 22°537'16 min. Earth dist. 4.13750 AU conjunction -12433 Apr 22 j 12:21 1°≈01'09 -0°31'28 direct -12439 Jun 11 j 15:43 17°5540'54 minimum elong -12433 Apr 22 j 12:25 1°**≈**01'11 0°32'08 -12439 Sep 14 j 22:23 $0^{\circ}\Omega$ max. Earth dist. -12433 Apr 21 j 18:10 0°≈50'57 6.28177 AU evening set -12439 Oct 12 j 08:38 6°**Ω**11'10 morning rise -12433 May 05 j 16:09 3°≈57'40 -12433 Jun 28 j 17:38 15°≈ conjunction -12439 Oct 25 j 12:19 9°**Ω**15'11 0°16'28 retrograde -12433 Sep 03 j 15:58 21°≈28'06 minimum elong -12439 Oct 25 j 12:21 9°Ω15'12 0°17'04 opposition -12433 Nov 02 j 09:39 16°≈34'40 -0°04'49 max. Earth dist. -12439 Oct 26 j 07:55 9° Ω 26'38 6.10720 AU min. Earth dist. -12433 Nov 03 j 01:20 16°≈29'34 4.30804 AU morning rise -12439 Nov 07 j 19:53 $12^{\circ}\Omega$ 21'16 -12433 Nov 14 j 17:25 15°R≈ -12439 Nov 19 j 08:20 15°Ω asc. node -12433 Nov 24 i 08:37 13°≈52'32 desc. node -12438 Feb 07 i 04:13 29° Ω 40'40 direct -12432 Jan 03 i 12:07 11°≈31'51 -12438 Feb 10 i 01:12 0° m -12432 Feb 22 i 00:50 15°≈ retrograde -12438 Mar 19 j 03:06 2° m 06'08 evening set -12432 May 10 j 20:51 29°≈49'44 -12438 Apr 24 j 23:50 30°RΩ -12432 May 11 j 15:23 0°**光** -12438 May 18 j 15:48 $27^{\circ}\Omega$ 02'18 -0°23'55 opposition min. Earth dist. -12438 May 17 j 22:34 $27^{\circ}\Omega$ 08'05 4.08523 AU -12432 May 23 j 19:18 2° **H** 42'40 0°26'37 conjunction -12438 Jul 16 j 00:52 22°**Ω**07'04 -12432 May 23 j 19:16 2°**)** 42'39 direct minimum elong 0°26'16 -12432 May 22 j 18:03 2° **∺**28'34 6.32548 AU -12438 Sep 27 j 03:11 0° Mp max. Earth dist. -12438 Nov 16 j 22:43 10° m 59'36 -12432 Jun 05 j 14:23 5°**米**33'56 evening set morning rise -12432 Oct 04 j 09:55 22° **∺**53'42 retrograde -12438 Nov 30 j 11:45 14° m 09'09 -0°46'08 -12432 Dec 03 j 22:55 18°**米**01'47 1°17'18 conjunction opposition -12438 Nov 30 j 11:40 14° m 09'06 0°45'55 min. Earth dist. -12432 Dec 04 j 17:10 17° **★**55'57 4.33378 AU minimum elong -12438 Dec 01 j 15:51 14° m 25'35 6.07321 AU -12431 Feb 04 j 10:05 13°**米**01'38 max. Earth dist. direct -12438 Dec 14 j 03:39 17° m 20'15 -12431 Jun 06 j 11:00 0°**Υ** morning rise -12437 Feb 11 j 22:15 0°**♀** -12431 Jun 11 j 10:06 1°**Y**06'01 evening set retrograde -12437 Apr 24 j 02:47 7°**♀**11'17 opposition -12437 Jun 22 j 17:57 2°**♀**06'29 -1°48'50 conjunction -12431 Jun 23 j 23:32 3°**Υ**54'45 1°16'20 min. Earth dist. -12437 Jun 22 j 00:41 2°**2**12'23 4.07384 AU minimum elong -12431 Jun 23 j 23:26 3°**Υ**'54'42 1°16'22 -12437 Jul 08 j 17:16 30°R Mp max. Earth dist. -12431 Jun 22 j 21:50 3°**Y**40'19 6.33057 AU -12437 Aug 19 j 23:36 27° Mp 08'05 morning rise -12431 Jul 06 j 10:50 6°**Υ**42'27 direct -12437 Oct 01 j 03:28 0°**♀** retrograde -12431 Nov 05 j 18:38 24°**Υ**14'31 -12437 Dec 23 j 21:54 16° **2**18'07 -12430 Jan 05 j 23:12 19°**Y**'22'15 2°16'49 evening set opposition min. Earth dist. -12430 Jan 06 j 16:22 19°**Υ**16'49 4.31901 AU -12436 Jan 06 j 14:47 19° **2**28'36 -1°32'17 -12430 Mar 09 i 05:19 14°**Υ**25'11 conjunction direct -12436 Jan 06 j 14:41 19° **2**28'33 1°32'31 minimum elong -12430 Jul 01 j 15:57 0°8 -12436 Jan 07 j 15:43 19° **2**43'04 6.08442 AU max. Earth dist. evening set -12430 Jul 12 j 12:18 2°**8**25'08 morning rise -12436 Jan 20 j 09:00 22°**2**39'40 -12436 Feb 22 i 09:07 0°ML conjunction -12430 Jul 24 j 20:34 5°812'44 1°43'56 retrograde -12436 May 28 j 04:40 12° ML09'21 minimum elong -12430 Jul 24 j 20:31 5°812'42 1°44'22 6.29576 AU -12436 Jul 26 j 05:40 7°M 05'54 -2°33'48 max. Earth dist. -12430 Jul 24 j 01:22 5°**8**01'51 opposition -12430 Aug 06 j 04:27 min. Earth dist. -12436 Jul 25 j 16:37 7°ML10'23 4.10799 AU morning rise 8°800'13 direct -12436 Sep 23 j 00:03 2°ML04'13 -12430 Sep 07 j 10:26 15°8 retrograde -12436 Dec 31 j 15:01 15°M -12430 Dec 09 j 01:27 26°803'06 -12429 Feb 08 j 16:49 21°**8**08'41 2°36'38 evening set -12435 Jan 29 j 00:25 21°ML17'29 opposition min. Earth dist. -12429 Feb 09 j 01:45 21°**8**05'51 4.26747 AU -12435 Feb 11 j 16:48 24° ML25'17 -1°44'46 direct -12429 Apr 11 j 01:39 16°**8**14'18 conjunction -12435 Feb 11 j 16:49 24° M25'17 1°45'22 -12429 Jul 24 j 14:49 Π $^{\circ}0$ minimum elong -12435 Feb 12 j 05:11 24° ML32'22 6.13731 AU -12429 Aug 12 j 20:59 4°**Ⅱ**18'38 max. Earth dist. evening set -12435 Feb 25 j 08:27 27° ML32'33 morning rise -12435 Mar 08 j 05:49 0° ₹ conjunction -12429 Aug 25 j 06:53 7°**Ⅱ**09'22 1°40'45 retrograde -12435 Jul 01 j 02:00 16° ₹ 20'34 minimum elong -12429 Aug 25 j 06:56 7°**Ⅱ**09'24 1°41'26 opposition -12435 Aug 28 j 22:03 11°**尽** 20'17 -2°23'56 max. Earth dist. -12429 Aug 25 j 01:20 7°**Ⅱ**06'11 6.23122 AU min. Earth dist. -12435 Aug 28 j 19:24 11°**尽**21'11 4.17433 AU morning rise -12429 Sep 06 j 18:08 10°**Д**00'59 -12435 Oct 27 j 19:49 6° **₹** 16'25 -12428 Jan 12 j 15:54 28°**Ⅲ**44'48 direct retrograde -12434 Mar 05 j 23:28 25° **₹** 16'41 -12428 Mar 14 j 05:44 23° **I** 47'03 2°08'10 evening set opposition

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -12428 in astronomical counting style is the year 12429 BCE in historical counting style. -12428 Mar 14 j 05:02 23°**II**47'16 4.19425 AU min. Earth dist. min. Earth dist. -12423 Sep 02 j 13:09 16° × 13'26 4.18685 AU direct -12428 May 13 j 11:21 18°Д54'06 direct -12423 Nov 01 j 16:03 11° ₹ 08'44 -12428 Aug 11 j 23:13 evening set -12422 Mar 10 j 22:17 0°る05'30 0ಂತಾ -12428 Sep 13 j 06:11 -12422 Mar 10 j 12:27 7°9510'35 0°ನ evening set -12428 Sep 26 j 00:19 10°508'10 1°05'33 -12422 Mar 24 j 10:41 3°**ට**08'10 -1°15'06 conjunction conjunction -12422 Mar 24 j 10:47 -12428 Sep 26 j 00:25 10°508'13 1°06'18 minimum elong minimum elong 3°**ප**08'13 1°15'51 -12428 Sep 26 j 08:51 10°513'07 max. Earth dist. 3°**る**04'20 6.15631 AU max. Earth dist. -12422 Mar 24 j 03:54 6.22395 AU -12428 Oct 08 j 21:43 13°507'31 morning rise morning rise -12422 Apr 06 j 20:35 6°**る**09'23 -12427 Jan 06 j 02:38 $0^{\circ}\Omega$ retrograde -12422 Aug 07 j 06:30 24°る06'08 retrograde -12427 Feb 16 j 04:51 2°**Ω**30′54 opposition -12422 Oct 05 j 11:31 19°♂10'07 -1°16'20 -12427 Mar 29 j 08:25 30°RS -12422 Oct 05 j 20:33 19°る07'07 4.25991 AU min. Earth dist. opposition -12427 Apr 18 j 08:55 27°\$29'26 0°56'12 direct -12422 Dec 05 j 18:53 14°**⋜**05'59 min. Earth dist. -12427 Apr 17 j 20:49 27°533'24 4.12276 AU -12421 Apr 01 j 16:49 direct -12427 Jun 16 j 09:37 22°536'02 evening set -12421 Apr 13 j 21:52 2°≈41'03 -12427 Aug 26 j 06:32 0°**Ω** max. Earth dist. -12421 Apr 26 j 09:09 5°**≈**28′02 6.29050 AU evening set -12427 Oct 17 j 07:10 11° Ω 11'12 conjunction -12421 Apr 27 j 03:58 5°≈38'34 -0°23'24 5°**≈**38'35 conjunction -12427 Oct 30 j 12:38 14° Ω 16'30 0°07'28 minimum elong -12421 Apr 27 j 04:01 minimum elong -12427 Oct 30 j 12:39 $14^{\circ}\Omega 16'30$ morning rise -12421 May 10 j 06:28 8°≈34'15 behind sun begin -12427 Oct 30 j 05:20 $14^{\circ}\Omega$ 12'14 -12421 Jun 09 j 03:54 15°≈ behind sun end -12427 Oct 30 i 19:59 $14^{\circ}\Omega$ 20'46 retrograde -12421 Sep 08 i 02:08 26°≈01'39 max. Earth dist. -12427 Oct 31 j 11:51 14° **Ω**30'05 6.09559 AU asc. node -12421 Oct 04 i 09:22 24°≈55'55 -12427 Nov 02 j 15:00 15° Ω opposition -12421 Nov 06 j 23:18 21°≈08'33 0°07'19 morning rise -12427 Nov 12 j 21:39 $17^{\circ}\Omega$ 23'46 min. Earth dist. -12421 Nov 07 j 15:04 21°≈03'26 4.31407 AU -12427 Dec 16 j 12:24 $24^{\circ}\Omega 54'35$ direct -12420 Jan 08 j 03:06 16°≈06'04 desc. node -12426 Jan 11 j 10:40 0° Mp -12420 Apr 25 j 07:18 0°**升** -12426 Mar 24 j 08:26 -12420 May 15 j 09:04 retrograde 7° m 12'34 evening set 4°\ 21'41 -12426 May 23 j 16:52 2° m 08'23 -0°37'22 max. Earth dist. -12420 May 27 j 03:04 opposition 6°**¥**58'50 6.32832 AU min. Earth dist. -12426 May 22 j 23:27 2° m 14'14 4.07787 AU -12426 Jun 09 j 03:59 30°R**Ω** -12420 May 28 j 06:04 7° **H** 13'55 0°34'29 conjunction -12426 Jul 21 j 00:58 27°**Ω**12'44 -12420 May 28 j 06:00 7°**光** 13'53 direct minimum elong 0°34'10 -12420 Jun 10 j 00:04 10°**米**04'36 -12426 Aug 31 j 11:50 0° Mp morning rise -12420 Oct 08 j 23:38 27° **∺**24'58 -12426 Nov 22 j 04:18 16° Mp 08'56 evening set retrograde -12420 Dec 08 j 13:55 22° ₭ 33'11 1°27'32 opposition -12426 Dec 05 j 18:08 19° Mp 18'57 -0°54'16 -12420 Dec 09 j 09:27 22° **★**26'57 4.33336 AU conjunction min. Earth dist. -12426 Dec 05 j 18:02 19° mp 18'54 0°54'07 -12419 Feb 09 j 02:13 17° **★** 33'26 minimum elong direct max. Earth dist. -12426 Dec 06 j 22:50 19° Mp 35'43 6.07046 AU -12419 May 20 j 21:20 0°**Υ** morning rise -12426 Dec 19 j 10:53 22° m 30'27 evening set -12419 Jun 15 j 19:52 5°**Y**37'05 -12425 Jan 21 j 23:22 0°**♀** max. Earth dist. -12419 Jun 27 j 07:16 8°**Y**11'25 6.32676 AU retrograde -12425 Apr 29 j 04:11 12°**2**20'10 -12425 Jun 27 j 17:42 7°**♀**15'18 -1°58'19 conjunction -12419 Jun 28 j 08:23 8°**Y**25'31 1°21'50 opposition min. Earth dist. -12425 Jun 26 j 23:22 7°**2**21'34 4.07607 AU -12419 Jun 28 j 08:17 8°**Υ**25'28 minimum elong -12425 Aug 24 j 23:29 2°**£**16'21 -12419 Jul 10 j 18:51 11°**Υ**13'01 direct morning rise -12425 Dec 29 j 05:58 21°**2**27'27 -12419 Nov 10 j 09:24 28°**Υ**48'57 evening set retrograde $-12418 \text{ Jan } 10 \text{ j } 16:38 \ 23^{\circ} \Upsilon 56'32 \ 2^{\circ} 22'20$ opposition -12424 Jan 11 j 22:56 24° **2**37'38 -1°36'22 conjunction min. Earth dist. $-12418 \text{ Jan } 11 \text{ j } 08:07 \text{ } 23^{\circ} \text{ } \Upsilon 51'38 \text{ } 4.31243 \text{ AU}$ -12424 Jan 11 j 22:51 24°**2**37'35 1°36'40 minimum elong direct $-12418 \text{ Mar } 13 \text{ j } 19:12 \quad 18^{\circ} \Upsilon 59'57$ -12424 Jan 12 j 22:47 24° **2**51'27 6.09085 AU max. Earth dist. -12418 Jun 14 j 13:58 0°8 -12424 Jan 25 j 16:56 27°**£**48'13 -12418 Jul 16 j 22:34 7°**8**00'37 morning rise evening set -12424 Feb 04 i 07:54 0°M -12424 Apr 25 j 22:22 15°M conjunction -12418 Jul 29 i 06:37 9°848'26 1°45'28 -12424 Jun 02 j 02:42 17° ML12'12 -12418 Jul 29 j 06:35 9°**8**48'25 retrograde minimum elong 1°45'56 -12424 Jul 08 j 22:35 15°RML max. Earth dist. -12418 Jul 28 j 13:36 9°**8**38'46 6.28699 AU opposition -12424 Jul 31 j 02:20 12°M09'01 -2°35'46 morning rise -12418 Aug 10 j 14:28 12°**8**36'17 min. Earth dist. -12424 Jul 30 j 15:10 12°ML12'51 4.11761 AU -12418 Aug 21 j 07:13 15°**8** direct -12424 Sep 28 j 01:08 7°ML06'51 -12418 Nov 21 j 17:04 $0^{\circ}\Pi$ -12424 Dec 11 j 15:39 15°M -12418 Dec 13 j 23:05 0°**Ⅱ**44'59 retrograde -12423 Feb 03 j 05:17 26°ML18'18 -12417 Jan 05 j 03:58 30°R₩ evening set -12417 Feb 13 j 13:32 25°850'16 2°35'34 opposition -12423 Feb 16 j 21:29 29°M25'28 -1°43'27 conjunction min. Earth dist. -12417 Feb 13 j 21:58 25°**8**47'35 4.25724 AU minimum elong -12423 Feb 16 j 21:30 29°M25'29 1°44'06 direct -12417 Apr 15 j 19:30 20°**8**56'14 max. Earth dist. -12423 Feb 17 j 08:46 29°ML31'55 6.14901 AU -12417 Jul 06 j 11:22 $0^{\circ}\Pi$ -12423 Feb 19 j 09:54 0°**∡**7 evening set -12417 Aug 17 j 09:58 9°**Ⅲ**02'11 morning rise -12423 Mar 02 j 12:25 2°**∡**³31'56 -12423 Jul 05 j 17:44 21° **₹** 12'32 -12417 Aug 29 j 20:38 11°**Д**53'43 1°37'35 retrograde conjunction -12423 Sep 02 j 15:10 16° **₹** 12'45 -2°18'17 -12417 Aug 29 j 20:41 11°**Д**53'45 1°38'19 opposition minimum elong

Planetary Phenomena of Jupiter from -12900 through -12398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 43								
Attention, astronom	ical year style is used: The	e year -12417	in astronomical co	ounting style is the year	ar 12418 BCE in historical	l counting sty	le.	
max. Earth dist.	-12417 Aug 29 j 16:35	11° Ⅱ 51'23	6.22066 AU	max. Earth dist.	-12411 Feb 22 j 04:19	4° ҂ 19'53	6.15829 AU	
morning rise	-12417 Sep 11 j 09:07	14° Ⅱ 46′18		morning rise	-12411 Mar 07 j 12:04	7° ∡ 1'51		
	-12417 Nov 28 j 17:09	0ංම		retrograde	-12411 Jul 10 j 07:27	25° х 56'33		
retrograde	-12416 Jan 17 j 14:47	3° © 35'59		opposition	-12411 Sep 07 j 05:07	20° ₹ 757'18	-2°11'57	
	-12416 Mar 08 j 10:25	30°RⅡ		min. Earth dist.	-12411 Sep 07 j 05:36	20° х 57′08	4.19543 AU	
opposition	-12416 Mar 19 j 04:55	28° Ⅱ 37'43	2°00'15	direct	-12411 Nov 06 j 11:12	15° ∡ 753′05		
min. Earth dist.	-12416 Mar 19 j 01:18	28° Ⅲ 38'53	4.18435 AU		-12410 Feb 21 j 20:54	5°0		
direct	-12416 May 18 j 05:06	23° Ⅱ 44'54		evening set	-12410 Mar 15 j 17:56	4°₹47'57		
	-12416 Jul 22 j 12:31	0ංම						
evening set	-12416 Sep 17 j 23:38	12°503'17		conjunction	-12410 Mar 29 j 05:53	7°る50'07	-1°08'57	
				minimum elong	-12410 Mar 29 j 05:59	7° ප 50'10	1°09'42	
conjunction	-12416 Sep 30 j 19:23	15° © 01'56	0°58'21	max. Earth dist.	-12410 Mar 28 j 21:51	7° る 45'35	6.23142 AU	
minimum elong	-12416 Sep 30 j 19:28		0°59'05	morning rise	-12410 Apr 11 j 14:49			
max. Earth dist.	-12416 Oct 01 j 07:36	15°909'02	6.14820 AU	retrograde	-12410 Aug 11 j 17:56			
morning rise	-12416 Oct 13 j 18:17	18°902'22		opposition	-12410 Oct 10 j 00:32		-1°05'24	
Ü	-12416 Dec 09 j 06:50			min. Earth dist.	-12410 Oct 10 j 10:24			
retrograde	-12415 Feb 21 j 07:51			direct	-12410 Dec 10 j 10:22			
opposition	-12415 Apr 23 j 09:04		0°43'34		-12409 Mar 15 j 09:17			
min. Earth dist.	-12415 Apr 22 j 20:29		4.11698 AU	evening set	-12409 Apr 18 j 13:11			
	-12415 May 12 j 23:09					,		
direct	-12415 Jun 21 j 08:05			conjunction	-12409 May 01 j 18:05	10°≈14'11	-0°15'16	
ancet	-12415 Jul 30 j 03:58			minimum elong	-12409 May 01 j 18:07			
	-12415 Oct 17 j 03:17			behind sun begin	-12409 May 01 j 17:00		0 13 31	
evening set	-12415 Oct 17 j 05:17 -12415 Oct 22 j 06:11			behind sun end	-12409 May 01 j 17:00			
desc. node	-12415 Oct 25 j 13:46			max. Earth dist.	-12409 May 01 j 19:14 -12409 Apr 30 j 20:18		6 20404 ATT	
desc. node	-12413 Oct 23 j 13.40	10 063/29			-12409 Apr 30 j 20:18 -12409 May 14 j 19:42		0.29404 AU	
agnismation	-12415 Nov 04 j 12:56	100 0 17!11	0001127	morning rise	, ,			
conjunction	-12415 Nov 04 j 12:56			aga mada	-12409 May 23 j 03:55			
minimum elong			0 01 00	asc. node	-12409 Aug 14 j 02:07			
behind sun begin	-12415 Nov 04 j 04:40			. 1	-12409 Aug 24 j 09:18			
behind sun end	-12415 Nov 04 j 21:11		C 00271 ATT	retrograde	-12409 Sep 12 j 15:15			
max. Earth dist.	-12415 Nov 05 j 13:05		6.09271 AU	•,•	-12409 Oct 01 j 20:38		0010122	
morning rise	-12415 Nov 17 j 23:25			opposition	-12409 Nov 11 j 13:30		0°19'22	
	-12415 Dec 21 j 21:58	-		min. Earth dist.	-12409 Nov 12 j 06:42		4.31531 AU	
retrograde	-12414 Mar 29 j 08:38		0050116	direct	-12408 Jan 12 j 19:33			
opposition	-12414 May 28 j 15:18	7° m 09'53			-12408 Apr 07 j 05:45			
min. Earth dist.	-12414 May 27 j 20:38	7° Mp 16'11	4.07827 AU	evening set	-12408 May 19 j 21:13	8° ¥ 55′20		
direct	-12414 Jul 25 j 21:42							
evening set	-12414 Nov 27 j 07:25	21° m) 11'25		conjunction	-12408 Jun 01 j 17:09		0°42'10	
				minimum elong	-12408 Jun 01 j 17:05		0°41'54	
conjunction	-12414 Dec 10 j 21:55			max. Earth dist.	-12408 May 31 j 15:31		6.32725 AU	
minimum elong	-12414 Dec 10 j 21:49			morning rise	-12408 Jun 14 j 09:51			
max. Earth dist.	-12414 Dec 12 j 02:12	-	6.07385 AU		-12408 Sep 07 j 10:28			
morning rise	-12414 Dec 24 j 15:05			retrograde	-12408 Oct 13 j 12:49			
	-12413 Jan 04 j 07:18				-12408 Nov 19 j 01:51			
retrograde	-12413 May 04 j 02:27			opposition	-12408 Dec 13 j 06:09			
opposition	-12413 Jul 02 j 13:21			min. Earth dist.	-12408 Dec 14 j 00:22		4.33036 AU	
min. Earth dist.	-12413 Jul 01 j 20:36		4.08206 AU	direct	-12407 Feb 13 j 16:45			
direct	-12413 Aug 29 j 21:39				-12407 May 01 j 23:58			
evening set	-12412 Jan 03 j 09:29	26° ≏ 26'24		evening set	-12407 Jun 20 j 06:57	10° Υ' 11'50		
conjunction	-12412 Jan 17 j 02:36	29° ≏ 36'14	-1°39'36	conjunction	-12407 Jul 02 j 18:23			
minimum elong	-12412 Jan 17 j 02:32	29° ≏ 36'12	1°39'57	minimum elong	-12407 Jul 02 j 18:17		1°27'02	
max. Earth dist.	-12412 Jan 18 j 01:35	29° ≏ 49'31	6.09871 AU	max. Earth dist.	-12407 Jul 01 j 17:55	12° Ƴ 46′13	6.32193 AU	
	-12412 Jan 18 j 19:43	0° M.		morning rise	-12407 Jul 15 j 04:13	15° Ƴ 47'22		
morning rise	-12412 Jan 30 j 20:15	2°M46'17			-12407 Sep 27 j 12:55	0° 8		
	-12412 Mar 28 j 22:37	15°M₊		retrograde	-12407 Nov 15 j 04:03	3° 8 27'14		
retrograde	-12412 Jun 06 j 19:45	22°ML04'31			-12406 Jan 04 j 01:24	30° ₹Ƴ		
opposition	-12412 Aug 04 j 18:42	17°ML01'45	-2°36'33	opposition	-12406 Jan 15 j 11:46	28° Ƴ 34'33	2°27'01	
min. Earth dist.	-12412 Aug 04 j 08:34			min. Earth dist.	-12406 Jan 16 j 02:54			
	-12412 Aug 20 j 01:26			direct	-12406 Mar 18 j 12:46			
direct	-12412 Oct 02 j 19:36				-12406 May 25 j 11:38			
	-12412 Nov 15 j 22:35			evening set	-12406 Jul 21 j 09:41			
	-12411 Feb 03 j 02:58			Ç	,			
evening set	-12411 Feb 08 j 05:51			conjunction	-12406 Aug 02 j 17:43	14° 8 27'09	1°46'21	
S	<i>J</i>			minimum elong	-12406 Aug 02 j 17:42		1°46'52	
conjunction	-12411 Feb 21 j 21:32	4° ∡ 16'01	-1°41'28	max. Earth dist.	-12406 Aug 02 j 03:00		6.27972 AU	
minimum elong	-12411 Feb 21 j 21:35				-12406 Aug 05 j 03:25			
*	j=1.00					_		

opposition

evening set

conjunction

minimum elong

max. Earth dist.

morning rise

retrograde

opposition

direct

min. Earth dist.

direct

min. Earth dist.

-12400 Aug 09 j 11:50 21°ML55'48 -2°36'17

-12399 Feb 26 j 22:43 9°**尽**08'32 -1°38'46

-12399 Feb 26 j 22:46 9°**尽**08'34 1°39'27

-12399 Sep 11 j 20:29 25°**х** 44'18 -2°04'40

-12399 Sep 11 j 22:22 25° ₹ 43'40 4.20349 AU

-12399 Feb 27 j 04:22 9° ₹ 11'45 6.16638 AU

-12400 Oct 07 j 16:47 16°M52'57

-12399 Mar 12 j 12:29 12°**尽** 13'45

-12399 Jul 14 j 23:03 0° ₹ 42'57 -12399 Aug 04 j 14:43 30° ₹ ₹

-12399 Nov 11 j 06:06 20°**х** 40'04

-12399 Jun 24 j 03:33 0°る

-12399 Jan 16 j 21:53 0° ₹ -12399 Feb 13 j 07:12 6° ₹ 02'20

-12400 Aug 09 j 03:25 21°M 58'41 4.13386 AU

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	cal year style is used: T		in astronomical co
morning rise	-12406 Aug 15 j 01:4		
	-12406 Oct 17 j 05:0		
retrograde	-12406 Dec 18 j 18:4		
opposition	-12405 Feb 18 j 11:0		
min. Earth dist.	-12405 Feb 18 j 16:4		4.24946 AU
	-12405 Feb 22 j 21:2		
direct	-12405 Apr 20 j 12:2		
	-12405 Jun 13 j 21:0		
evening set	-12405 Aug 21 j 23:1	2 13° Ⅱ 46′22	
conjunction	-12405 Sep 03 j 10:4-	4 16° Ⅲ 38'36	1°33'47
minimum elong	-12405 Sep 03 j 10:49	9 16° Ⅱ 38'39	1°34'32
max. Earth dist.	-12405 Sep 03 j 09:2	3 16° Ⅲ 37'53	6.21286 AU
morning rise	-12405 Sep 16 j 00:1	7 19° Ⅲ 32'00	
	-12405 Nov 04 j 03:2	₀ ංම	
retrograde	-12404 Jan 22 j 15:19	8°\$26'25	
opposition	-12404 Mar 24 j 03:5	3° 5 27'35	1°51'30
min. Earth dist.	-12404 Mar 23 j 23:3	3°528'59	4.17676 AU
	-12404 Apr 22 j 23:4	5 30°RⅡ	
direct	-12404 May 23 j 01:3		
	-12404 Jun 21 j 21:0) 0°9	
evening set	-12404 Sep 22 j 17:0		
<i>3</i>	, j		
conjunction	-12404 Oct 05 j 14:1:	3 19° © 53'58	0°50'47
minimum elong	-12404 Oct 05 j 14:1		
max. Earth dist.	-12404 Oct 06 j 03:59		
morning rise	-12404 Oct 18 j 14:50		0.14137710
morning rise	-12404 Nov 19 j 08:24		
retrograde	-12403 Feb 26 j 07:53		
opposition	-12403 Apr 28 j 07:53		0°30'42
min. Earth dist.	-12403 Apr 27 j 17:30		
direct	-12403 Jun 26 j 03:19		4.11193 AO
desc. node	-12403 Sep 04 j 08:4		
desc. node	-12403 Sep 04 j 08:4; -12403 Sep 30 j 00:1		
avanina aat	-12403 Sep 30 j 00.16 -12403 Oct 27 j 04:5:		
evening set	-12403 Oct 2/J 04.3.	21 860843	
	-12403 Nov 09 j 12:5	7 249 🖸 15120	0010122
conjunction	-		
minimum elong	-12403 Nov 09 j 12:5:		0°10'06
behind sun begin	-12403 Nov 09 j 06:19		
behind sun end	-12403 Nov 09 j 19:3		C 000 C 5 A T I
max. Earth dist.	-12403 Nov 10 j 13:50		6.08965 AU
morning rise	-12403 Nov 23 j 00:3		
	-12403 Dec 04 j 07:5		
retrograde	-12402 Apr 03 j 09:3	-	
opposition	-12402 Jun 02 j 13:0		
min. Earth dist.	-12402 Jun 01 j 19:0	•	4.07749 AU
direct	-12402 Jul 30 j 19:4		
evening set	-12402 Dec 02 j 10:2	26° m, 12'25	
conjunction	-12402 Dec 16 j 01:3		
minimum elong	-12402 Dec 16 j 01:2		1°08'48
max. Earth dist.	-12402 Dec 17 j 06:2		6.07539 AU
	-12402 Dec 18 j 17:3		
morning rise	-12402 Dec 29 j 19:0	4 2° ₽ 34'10	
retrograde	-12401 May 09 j 00:12	2 22° ♀ 18'04	
opposition	-12401 Jul 07 j 08:5	7 17° ♀ 13'29	-2°13'56
min. Earth dist.	-12401 Jul 06 j 16:4	3 17° ≏ 19'01	4.08610 AU
direct	-12401 Sep 03 j 17:5	2 12° ♀ 13'35	
	-12400 Jan 02 j 07:3	7 0° M ₊	
evening set	-12400 Jan 08 j 13:4	5 1° ™ 25'45	
	-		
conjunction	-12400 Jan 22 j 06:4	3 4°M35′15	-1°42'07
minimum elong	-12400 Jan 22 j 06:39		
max. Earth dist.	-12400 Jan 23 j 02:1		
morning rise	-12400 Feb 05 j 00:14		
-	-12400 Mar 08 j 18:4		
retrograde	-12400 Jun 11 j 13:2		
<u> </u>	j		