Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10400 in astronomical counting style is the year 10401 BCE in historical counting style. -10400 Jan 15 j 08:08 14°\$53'31 retrograde -10395 Jul 09 j 11:38 7°る26'22 retrograde -10400 Mar 16 j 21:09 9°957'43 2°06'46 -10395 Sep 06 j 11:31 2°324'45 -2°15'19 opposition opposition min. Earth dist. -10400 Mar 17 j 02:22 9°556'04 4.20803 AU min. Earth dist. -10395 Sep 06 j 03:57 2°る27'20 4.17260 AU -10395 Sep 25 j 00:02 30°R **✗**¹ -10400 May 16 j 14:03 5°9504'12 direct -10400 Sep 17 j 00:39 23°521'50 direct -10395 Nov 05 j 02:00 27°**尽**21'32 evening set -10395 Dec 16 j 13:31 0°る -10400 Sep 29 j 15:49 26°\$17'38 1°07'09 conjunction evening set -10394 Mar 13 j 13:36 16°중16'56 -10400 Sep 29 j 15:54 26°517'41 minimum elong 1°07'42 -10400 Sep 29 j 17:31 26°518'38 max. Earth dist. 6.16831 AU conjunction -10394 Mar 27 j 05:09 19°♂21'24 -1°15'25 morning rise -10400 Oct 12 j 09:12 29°514'47 minimum elong -10394 Mar 27 j 05:15 19°₹21'27 1°16'00 -10400 Oct 15 j 15:44 $0^{\circ}\Omega$ max. Earth dist. -10394 Mar 27 j 08:53 19°₹23'31 6.21099 AU -10399 Jan 01 j 02:21 15°**Ω** -10394 Apr 09 j 18:35 22°**♂**24'43 morning rise -10399 Feb 18 j 20:44 18° Ω 27'53 retrograde -10394 May 15 j 00:33 0°≈ -10399 Apr 09 j 04:32 15°R**Ω** retrograde -10394 Aug 11 j 03:22 10°≈32'24 opposition -10399 Apr 21 j 03:03 13°Ω28'19 1°02'20 opposition -10394 Oct 09 j 06:50 5°≈34'37 -1°19'43 min. Earth dist. -10399 Apr 20 j 20:10 13°**Q**30'33 4.13181 AU min. Earth dist. -10394 Oct 09 j 10:17 5°≈33'28 4.24926 AU direct -10399 Jun 19 j 14:57 8°**Ω**35'27 direct -10394 Dec 09 j 01:58 0°≈30'20 -10399 Aug 24 j 06:17 15°**Ω** -10393 Mar 29 j 04:46 15°≈ evening set -10399 Oct 20 j 13:06 $27^{\circ}\Omega$ 08'52 evening set -10393 Apr 17 j 02:03 19°≈06'53 -10399 Nov 01 j 17:31 0° Mp conjunction -10393 Apr 30 j 12:08 22°≈06'22 -0°27'45 conjunction -10399 Nov 02 j 13:54 0° m 11'57 0°13'44 minimum elong -10393 Apr 30 j 12:11 22°≈06'23 0°28'09 -10399 Nov 02 j 13:55 0° m 11'57 0°14'04 max. Earth dist. -10393 Apr 29 j 20:28 21°≈57'37 6.28304 AU minimum elong behind sun begin -10399 Nov 02 i 09:49 0° m 09'34 morning rise -10393 May 13 j 19:09 25°≈04'10 behind sun end -10399 Nov 02 j 18:02 0° m 14'21 -10393 Jun 05 j 12:17 0°**米** -10399 Nov 03 j 07:55 0° m 22'30 6.10094 AU -10393 Sep 12 j 00:27 12° ¥ 36'05 max Earth dist retrograde -10399 Nov 15 j 18:22 3° m 16'58 opposition -10393 Nov 10 j 14:06 7°**米**41'49 -0°01'10 morning rise -10398 Feb 02 j 02:31 18° mp 56'50 -10393 Nov 11 j 05:08 7° **∺** 36'54 4.31026 AU min. Earth dist. desc. node -10398 Mar 27 j 00:10 23° Mp 03'00 -10393 Nov 16 j 04:51 6°**米**57'49 asc. node retrograde -10398 May 26 j 17:30 17° m 59'54 -0°25'43 -10392 Jan 11 j 12:06 2° **∺** 38'15 direct opposition -10398 May 25 j 23:16 18° m 05'59 4.07896 AU evening set -10392 May 19 j 01:20 20° **∺** 57'07 min. Earth dist. -10398 Jul 24 j 05:21 13° **m** 05'43 -10392 May 31 j 00:18 23° ★ 36'24 6.32872 AU max. Earth dist. direct -10398 Nov 16 j 09:41 0°**♀** -10398 Nov 24 j 20:16 1°**⊆**57'24 -10392 Jun 01 j 02:48 23° **X** 51'10 0°27'28 evening set conjunction -10392 Jun 01 j 02:45 23° **∺** 51'08 0°27'21 minimum elong -10398 Dec 08 j 06:14 5°**2**05'53 -0°45'33 -10392 Jun 14 j 00:37 26° ¥ 43'25 conjunction morning rise -10398 Dec 08 j 06:09 5°**♀**05'50 0°45'32 -10392 Jun 29 j 00:33 0°**Υ** minimum elong max. Earth dist. -10398 Dec 09 j 13:49 5° **2**24'24 6.06736 AU retrograde -10392 Oct 12 j 14:28 14°**Υ**00'49 morning rise -10398 Dec 21 j 19:25 8°**2**16'05 opposition -10392 Dec 11 j 21:08 9° $\mathbf{\hat{\gamma}}$ 08'45 1° 16'15 retrograde -10397 May 02 j 05:25 28°**2**12'04 min. Earth dist. -10392 Dec 12 j 17:26 9° Υ 02'14 4.33808 AU -10397 Jun 30 j 06:00 23°**2**14'15 4.06879 AU direct -10391 Feb 12 j 07:34 4°**Y**07'28 min. Earth dist. -10397 Jul 01 j 03:08 23°**♀**07'04 -1°45'39 -10391 Jun 19 j 20:58 22°**Y**14'52 opposition evening set -10397 Aug 28 j 07:44 18°**♀**10'00 max. Earth dist. -10391 Jul 01 j 06:00 24°**Y**47'13 6.33580 AU direct -10397 Nov 29 j 02:11 0°M -10397 Dec 31 j 12:44 7°ML15'22 -10391 Jul 02 j 12:43 25°**Y**′04'25 1°14'03 evening set conjunction -10391 Jul 02 j 12:38 25°**Υ**'04'22 minimum elong -10396 Jan 14 j 04:00 10° M 25'21 -1°28'33 -10391 Jul 15 i 01:54 27°**Υ**52'42 conjunction morning rise -10396 Jan 14 j 03:55 10° M 25'18 1°28'52 -10391 Jul 24 j 16:29 0°8 minimum elong -10391 Oct 30 j 15:11 15°8 max. Earth dist. -10396 Jan 15 j 12:37 10°ML44'18 6.08020 AU -10396 Jan 27 j 21:18 13°M 36'17 -10391 Nov 13 j 18:02 15°**8**18'39 morning rise retrograde -10396 Feb 02 j 23:02 15°M -10391 Nov 27 j 20:30 15°R8 -10396 Apr 20 j 21:19 0° ₹ -10390 Jan 13 j 15:44 10°\begin{aligned} 26'59 2°11'21 \end{aligned} opposition -10396 Jun 05 j 11:38 3° **尽** 12'57 min. Earth dist. -10390 Jan 14 j 13:17 10°**8**20'08 4.32514 AU retrograde -10396 Jul 20 j 21:48 30°RML direct -10390 Mar 17 j 01:30 5°**8**28'40 opposition -10396 Aug 03 j 19:00 28°ML08'34 -2°26'39 -10390 Jun 10 j 21:02 15°**8** -10390 Jul 21 j 02:17 23°**8**32'24 min. Earth dist. -10396 Aug 03 j 00:50 28°ML14'47 4.10462 AU evening set direct -10396 Oct 01 j 08:10 23°ML08'04 max. Earth dist. -10390 Aug 01 j 10:01 26°**8**05'44 6.30251 AU -10396 Dec 08 j 21:50 0° ₹ -10395 Feb 05 j 12:11 12°**尽** 15'12 -10390 Aug 02 j 11:51 26°**8**20'22 1°39'09 evening set conjunction -10390 Aug 02 j 11:49 26°**8**20'20 1°39'36 minimum elong -10395 Feb 19 j 05:05 15° ₹23'22 -1°39'14 -10390 Aug 14 j 20:21 29°**8**07'54 conjunction morning rise minimum elong -10395 Feb 19 j 05:06 15° ₹23'22 1°39'47 -10390 Aug 18 j 17:12 0°**Ⅱ** max. Earth dist. -10395 Feb 20 j 01:48 15° ₹35'15 6.13481 AU retrograde -10390 Dec 16 j 19:37 17°**Ⅲ**02'02 morning rise -10395 Mar 04 j 22:04 18°**尽**31'24 opposition -10389 Feb 16 j 05:45 12°**Д**08'49 2°28'26 -10395 Apr 28 j 12:20 0°る min. Earth dist. -10389 Feb 16 j 20:05 12°**I**I04'16 4.27443 AU

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10389 in astronomical counting style is the year 10390 BCE in historical counting style. direct -10389 Apr 18 j 21:39 7° **II** 13'28 -10384 Nov 10 i 06:23 0° ₹ -10389 Aug 21 j 10:00 25°**Ⅲ**21'06 evening set -10383 Feb 10 j 13:23 17° ₹08'24 evening set -10389 Sep 02 j 19:37 28° II 11'33 1°34'58 -10383 Feb 24 j 06:30 20° ₹ 16'21 -1°37'49 conjunction conjunction -10389 Sep 02 j 19:40 28°Д11'35 1°35'32 -10383 Feb 24 j 06:32 20° ₹ 16'23 1°38'22 minimum elong minimum elong 6.14171 AU -10389 Sep 02 j 06:40 28°**Д**04'07 6.23804 AU -10383 Feb 25 j 02:15 20° ₹27'39 max. Earth dist. max. Earth dist. -10389 Sep 10 j 16:31 0ಂತಾ morning rise -10383 Mar 09 j 23:10 23°**尽**23'59 -10389 Sep 15 j 05:59 morning rise 1°902'34 -10383 Apr 08 j 22:26 0°**ਰ** retrograde -10388 Jan 20 j 06:09 19°537'25 retrograde -10383 Jul 14 j 02:27 12°중13'30 opposition -10388 Mar 21 j 18:23 14°541'10 1°59'59 opposition -10383 Sep 11 j 02:05 7°♂12'26 -2°09'48 -10383 Sep 10 j 19:22 7°る14'43 4.18027 AU min. Earth dist. -10388 Mar 21 j 22:36 14°539'49 4.20018 AU min. Earth dist. direct -10388 May 21 j 08:14 9°547'52 direct -10383 Nov 09 j 19:19 2°る09'01 -10388 Sep 21 j 14:14 28°506'13 evening set evening set -10382 Mar 18 j 11:23 21°る03'06 -10388 Sep 29 j 18:26 conjunction -10382 Apr 01 j 02:21 24°♂07'04 -1°09'49 conjunction -10388 Oct 04 j 06:25 $1^{\circ}\Omega$ 02'49 1° 00'47 minimum elong -10382 Apr 01 j 02:27 24°중07'07 1°10'23 minimum elong -10388 Oct 04 j 06:30 1°**Ω**02'52 1°01'19 max. Earth dist. -10382 Apr 01 j 02:18 24°**궁**07'02 6.21897 AU max. Earth dist. -10388 Oct 04 j 09:20 1°**Ω**04'31 6.16105 AU morning rise -10382 Apr 14 j 15:20 27° ₹ 09'51 morning rise -10388 Oct 17 j 01:20 $4^{\circ}\Omega$ 00'57 -10382 Apr 27 j 10:20 0°≈ -10388 Dec 07 j 08:14 15°Ω -10382 Aug 04 j 11:17 15°≈ retrograde -10387 Feb 23 j 18:07 23° Ω 18'14 retrograde -10382 Aug 15 j 16:26 15°≈12'35 opposition -10387 Apr 26 j 00:48 $18^{\circ}\Omega$ 18'08 $0^{\circ}50'55$ -10382 Aug 26 j 20:33 15°R≈ min. Earth dist. -10387 Apr 25 j 15:24 18° **Ω**21'12 4.12562 AU opposition -10382 Oct 13 j 20:10 10°≈15'18 -1°09'31 $-10387 \text{ May } 23 \text{ j } 21:07 \text{ } 15^{\circ}\text{R}\Omega$ min. Earth dist. -10382 Oct 14 j 01:44 10°≈13'27 4.25677 AU direct -10387 Jun 24 j 08:27 13°Ω25'11 direct -10382 Dec 13 j 20:14 5°≈11'00 -10387 Jul 25 j 14:35 15°Ω -10381 Mar 11 j 02:36 15°≈ -10387 Oct 16 j 15:42 0° Mg -10381 Apr 21 j 19:12 23°≈45'31 evening set -10387 Oct 25 j 07:10 2° m 00'05 evening set -10381 May 05 j 04:28 26°≈44'21 -0°20'02 conjunction -10387 Nov 07 j 09:26 5° Mp 03'58 0°05'27 -10381 May 05 j 04:30 26°≈44'22 0°20'25 conjunction minimum elong -10387 Nov 07 j 09:26 5° m 03'58 0°05'45 -10381 May 04 j 12:40 26°≈35'33 6.28977 AU max. Earth dist. minimum elong behind sun begin -10387 Nov 07 j 01:36 4° m 59'24 morning rise -10381 May 18 j 10:11 29°≈41'24 -10387 Nov 07 j 17:15 5° Mp 08'33 -10381 May 19 j 19:47 0°**光** behind sun end -10387 Nov 08 j 06:15 5° Mp 16'10 6.09639 AU -10381 Sep 16 j 10:30 17° **∺** 10'15 max. Earth dist. retrograde -10387 Nov 20 j 15:06 8° m 09'46 -10381 Sep 26 j 02:24 17°**米**01'07 morning rise asc. node -10387 Dec 13 j 07:51 13° mp 19'48 -10381 Nov 15 j 02:53 12° **★** 16'21 0°10'21 desc. node opposition -10386 Apr 01 j 00:53 27° m 58'01 -10381 Nov 15 j 17:52 12°**米**11'27 4.31571 AU retrograde min. Earth dist. -10386 May 31 j 14:49 22° m 54'34 -0°37'57 direct -10380 Jan 16 j 02:28 7° **∺** 13'02 opposition min. Earth dist. -10386 May 30 j 20:57 23° Mp 00'33 4.07636 AU evening set -10380 May 23 j 14:25 25°**米**29'52 direct -10386 Jul 29 j 01:58 18° Mp 00'04 max. Earth dist. -10380 Jun 04 j 10:04 28° ₩ 07'23 6.33237 AU -10386 Oct 30 j 06:23 0°**♀** -10386 Nov 29 j 19:13 6°**♀**53'37 -10380 Jun 05 j 14:20 28° **€** 23'08 0°34'53 evening set conjunction -10380 Jun 05 j 14:16 28°**)** 23'06 minimum elong 0°34'49 -10386 Dec 13 j 06:03 10° **2**02'30 -0°52'51 -10380 Jun 12 j 20:19 0°**Υ** conjunction -10386 Dec 13 j 05:58 10°**£**02'26 0°52'54 -10380 Jun 18 j 11:00 1°**Υ**14'43 minimum elong morning rise -10386 Dec 14 j 13:35 10° \DD 20'58 6.06678 AU -10380 Oct 17 j 03:02 18° γ 31'40 max. Earth dist. retrograde -10386 Dec 26 j 20:11 13° **2**13'04 -10380 Dec 16 j 10:58 13° γ 39'42 1°25'46 morning rise opposition $-10380 \text{ Dec } 17 \text{ j } 08:24 \quad 13^{\circ} \Upsilon 32'50 \quad 4.33963 \text{ AU}$ -10385 Mar 22 i 18:16 0°M min. Earth dist. retrograde -10385 May 07 j 02:26 3°ML08'12 direct $-10379 \text{ Feb} \ 16 \text{ i } 23:13 \ 8^{\circ} \Upsilon 38'43$ evening set -10385 Jun 21 i 06:01 30°R Ω -10379 Jun 24 j 06:35 26°**Y**44'36 -10385 Jul 05 i 22:22 28° **2**03'11 -1°54'05 opposition min. Earth dist. -10385 Jul 05 j 00:50 28° **2**10'31 4.07060 AU -10379 Jul 06 j 21:19 29° Υ 33'40 1°19'06 conjunction direct -10385 Sep 02 j 01:54 23° **2**05'41 -10379 Jul 06 j 21:14 29° Υ 33'37 1°19'19 minimum elong -10385 Nov 09 j 02:01 0°M -10379 Jul 05 j 15:38 29°**Y**17'02 6.33478 AU max. Earth dist. -10384 Jan 05 j 14:39 12°M 12'32 -10379 Jul 08 j 20:18 0°8 evening set -10384 Jan 17 j 15:36 15° ML morning rise -10379 Jul 19 j 09:26 2°**8**21'32 -10379 Sep 21 j 09:30 15°**8** -10384 Jan 19 j 06:19 15°M22'29 -1°32'06 -10379 Nov 18 j 06:22 19°**8**49'47 conjunction retrograde -10384 Jan 19 j 06:15 15°M22'27 1°32'28 -10378 Jan 18 j 07:15 14°**8**57'54 2°16'17 minimum elong opposition -10384 Jan 20 j 12:57 15°M-40'17 6.08403 AU -10378 Jan 18 j 00:39 15°R ₩ max. Earth dist. -10384 Feb 01 j 23:49 18°M 33'17 min. Earth dist. morning rise -10378 Jan 19 j 03:14 14°**8**51'34 4.32165 AU -10384 Mar 26 j 12:43 0°**∡** direct -10378 Mar 21 j 14:28 10°**8**00'00 retrograde -10384 Jun 10 j 06:26 8°**₹**06'12 -10378 May 20 j 14:29 15°**8** opposition -10384 Aug 08 j 11:48 3°**₹**02'05 -2°28'12 evening set -10378 Jul 25 j 10:55 28°**8**03'12 min. Earth dist. -10384 Aug 07 j 19:41 3°**₮**07'36 4.11013 AU -10378 Aug 03 j 01:44 $0^{\circ}\Pi$ -10384 Sep 01 j 09:22 30°RML

conjunction

-10378 Aug 06 j 19:58 0°**Д**51'10 1°40'25

direct

-10384 Oct 06 j 04:06 28° ML01'09

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10378 in astronomical counting style is the year 10379 BCE in historical counting style. -10378 Aug 06 j 19:57 0° II 51'09 1° 40'54 -10372 Mar 06 i 16:46 minimum elong max. Earth dist. -10378 Aug 05 j 19:23 0°**II**37'13 6.29657 AU -10372 Jun 15 j 04:25 13° ₹07'04 retrograde -10372 Aug 13 j 07:53 8°**∡**103'21 -2°28'44 -10378 Aug 19 j 04:16 3°**II**38'50 morning rise opposition min. Earth dist. -10378 Dec 21 j 13:45 21°**Д**37'30 retrograde -10372 Aug 12 j 16:12 8° ₹08'43 4.11685 AU -10377 Feb 20 j 23:53 16°**Д**43'55 2°27'13 -10372 Oct 11 j 02:09 opposition direct 3°**х** 02′06 -10377 Feb 21 j 14:07 16° **I**I 39'24 4.26622 AU -10371 Feb 15 j 18:08 22°**尽** 08'52 min. Earth dist. evening set -10377 Apr 23 j 13:51 11°**Ц**48'52 direct -10371 Mar 01 j 11:02 25°**х** 16'23 -1°35'42 evening set -10377 Aug 25 j 19:58 29°**Ⅲ**57'12 conjunction -10377 Aug 26 j 00:51 0 \circ \odot minimum elong -10371 Mar 01 j 11:05 25° ₹ 16'24 1°36'16 max. Earth dist. -10371 Mar 02 j 03:41 25° ₹25'53 6.15118 AU conjunction -10377 Sep 07 j 06:08 2°548'18 1°31'54 morning rise -10371 Mar 15 j 03:32 28°**尽**23'29 -10377 Sep 07 j 06:11 -10371 Mar 22 j 06:38 0°**ਰ** minimum elong 2°5548'20 1°32'29 -10377 Sep 06 j 18:21 -10371 Jul 18 j 19:27 17°**궁**06'25 max. Earth dist. 2°**5**41'31 6.22824 AU retrograde morning rise -10377 Sep 19 j 17:25 5°9540'07 opposition -10371 Sep 15 j 19:18 12°♂05'52 -2°03'19 retrograde -10376 Jan 25 j 01:52 24°520'43 min. Earth dist. -10371 Sep 15 j 13:53 12°**궁**07'42 4.19179 AU opposition -10376 Mar 26 j 15:01 19°523'54 1°52'29 direct -10371 Nov 14 j 17:26 7°る02'15 min. Earth dist. -10376 Mar 26 j 16:41 19°\$23'22 4.18940 AU evening set -10370 Mar 23 j 11:06 25° ₹53'24 direct -10376 May 25 j 23:52 14°530'44 -10376 Sep 13 j 17:25 $0^{\circ}\Omega$ conjunction -10370 Apr 06 j 01:36 28° ₹ 56'37 -1°03'43 evening set -10376 Sep 26 j 04:13 2°**Ω**51′05 minimum elong -10370 Apr 06 j 01:41 28° ₹ 56'40 1°04'15 max. Earth dist. -10370 Apr 06 j 01:15 28°る56'26 6.23215 AU conjunction -10376 Oct 08 j 21:46 $5^{\circ}\Omega$ 48'44 0° 54'01 -10370 Apr 10 j 18:13 0°≈ minimum elong -10376 Oct 08 j 21:51 5°**Ω**48'47 0°54'31 morning rise -10370 Apr 19 j 13:33 1°≈58'29 max. Earth dist. -10376 Oct 09 i 03:33 $5^{\circ}\Omega$ 52'06 6.15034 AU -10370 Jun 24 i 00:14 15°≈ morning rise -10376 Oct 21 j 18:02 8° **Ω**47'57 retrograde -10370 Aug 20 j 05:08 19°≈54'20 -10376 Nov 18 j 08:22 $15^{\circ}\Omega$ -10370 Oct 18 j 10:21 14°≈57'38 -0°58'49 opposition -10375 Feb 28 j 19:50 $28^{\circ}\Omega$ 10'50 -10370 Oct 18 j 03:14 15°R≈ retrograde -10375 Apr 30 j 23:38 23° Ω 10'11 0°39'03 min. Earth dist. -10370 Oct 18 j 16:33 14°≈55'34 4.27042 AU opposition -10375 Apr 30 j 13:46 23° Ω 13'25 4.11556 AU -10370 Dec 18 j 14:04 9°≈53'26 min. Earth dist. direct -10375 Jun 29 j 04:45 $18^{\circ}\Omega$ 17'06 -10369 Feb 17 j 03:11 15°≈ direct -10375 Sep 29 j 11:19 0° Mp -10369 Apr 26 j 12:17 28°≈23'39 evening set -10369 May 03 j 17:57 0°**米** -10375 Oct 22 j 22:33 5° **m** 14'44 desc. node -10375 Oct 30 j 03:28 6° m 55'04 evening set -10369 May 09 j 20:10 1°**米**21'26 -0°12'16 conjunction -10375 Nov 12 j 07:04 9° m 59'55 -0°03'07 -10369 May 09 j 20:12 1°**米**21'27 0°12'37 conjunction minimum elong -10375 Nov 12 j 07:03 9° m 59'54 0°02'52 -10369 May 09 j 15:02 1° **∺** 18'36 minimum elong behind sun begin -10375 Nov 11 j 22:52 9° m 55'08 -10369 May 10 j 01:21 1°**∺**24'19 behind sun begin behind sun end behind sun end -10375 Nov 12 j 15:14 10° m 04'41 max. Earth dist. -10369 May 09 j 01:36 1°**光** 11'06 6.30286 AU max. Earth dist. -10375 Nov 13 j 05:12 10° m 12'54 6.08795 AU morning rise -10369 May 23 j 00:47 4° **∺** 17'28 morning rise -10375 Nov 25 j 14:16 13° Mp 06'43 asc. node -10369 Aug 06 j 00:47 18°**∺**28'58 -10374 Feb 20 j 15:21 0°**♀** retrograde -10369 Sep 20 j 20:35 21°**米**41'26 -10374 Apr 06 j 02:28 2°**♀**58'19 -10369 Nov 19 j 15:04 16° **€** 47'53 0°21'37 retrograde opposition -10374 May 20 j 11:53 30°R M min. Earth dist. -10369 Nov 20 j 07:28 16° **X** 42'32 4.32726 AU -10374 Jun 05 j 13:58 27° m 54'32 -0°50'09 -10368 Jan 20 j 18:15 11°**)** 44'47 opposition direct min. Earth dist. -10374 Jun 04 j 18:36 28° M 01'02 4.07049 AU -10368 May 28 j 00:59 29° **€** 57'33 evening set -10374 Aug 02 j 21:46 22° m 59'41 -10368 May 28 j 05:26 0°**Υ** direct -10374 Oct 10 i 04:54 0° € -10374 Dec 04 j 21:52 11°**£**56'34 $-10368 \text{ Jun } 09 \text{ j } 23:36 \quad 2^{\circ} \Upsilon 49'51 \quad 0^{\circ} 41'56$ evening set conjunction $-10368 \text{ Jun } 09 \text{ j } 23:32 \quad 2^{\circ} \Upsilon 49'49$ minimum elong conjunction -10374 Dec 18 i 09:38 15° \(\Omega\) 05'57 -0°59'58 max. Earth dist. $-10368 \text{ Jun } 08 \text{ i } 19:52 \quad 2^{\circ} \mathbf{\hat{Y}} 34'25$ 6.34142 AU morning rise -10374 Dec 18 j 09:32 15° **2**05'54 1°00'03 -10368 Jun 22 j 18:41 5°**Υ**40'27 minimum elong max. Earth dist. -10374 Dec 19 j 17:11 15° **2**24'27 6.06379 AU retrograde -10368 Oct 21 j 10:24 22° Υ 55'36 -10373 Jan 01 j 00:33 18° **△**16'57 -10368 Dec 20 j 22:02 18°**Υ**'03'48 1°34'28 morning rise opposition -10368 Dec 21 j 19:13 17°**Υ**57'01 -10373 Feb 24 j 11:43 0°M min. Earth dist. 4.34564 AU -10367 Feb 21 j 10:17 13°**Y**'03'14 retrograde -10373 May 12 j 03:17 8°M11'51 direct opposition -10373 Jul 10 j 20:36 3°M06'47 -2°01'55 -10367 Jun 23 j 13:05 0°8 min. Earth dist. -10373 Jul 09 j 23:47 3°ML13'53 4.07087 AU evening set -10367 Jun 28 j 13:02 1°806'22 -10373 Aug 04 j 15:09 30°R € max. Earth dist. -10367 Jul 09 j 19:16 3°**8**37'20 6.33700 AU -10373 Sep 07 j 01:08 28°**♀**08'48 direct -10373 Oct 10 j 13:58 0°M -10367 Jul 11 j 02:26 3°854'49 1°23'31 conjunction -10373 Dec 31 j 20:03 15°M -10367 Jul 11 j 02:21 3°**8**54'46 1°23'48 minimum elong -10372 Jan 10 j 20:28 17°**M**17'41 evening set morning rise -10367 Jul 23 j 13:44 6°**8**42'12 -10367 Aug 31 j 19:29 15°**8** conjunction -10372 Jan 24 j 12:43 20°M27'42 -1°35'06 retrograde -10367 Nov 22 j 17:25 24°**8**12'01 minimum elong -10372 Jan 24 j 12:40 20°M27'40 1°35'31 opposition -10366 Jan 22 j 19:06 19°**8**20'03 2°20'13 max. Earth dist. -10372 Jan 25 j 19:50 20°M 45'45 min. Earth dist. -10366 Jan 23 j 16:03 19°**8**13'25 4.31993 AU 6.08756 AU

-10366 Mar 05 j 16:26 15°R8

morning rise

-10372 Feb 07 j 06:17 23°M38'21

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•	ical year style is used: The		_	` //		, .	le.
direct	-10366 Mar 26 j 02:03	-		evening set	-10360 Jan 16 j 02:		
	-10366 Apr 15 j 10:56	15° 8					
	-10366 Jul 18 j 19:43	Π $^{\circ}0$		conjunction	-10360 Jan 29 j 19:	00 25°MJ33′02	-1°37'21
evening set	-10366 Jul 29 j 15:33	2° Ⅱ 24'58		minimum elong	-10360 Jan 29 j 18:	58 25° M 33′00	1°37'47
max. Earth dist.	-10366 Aug 10 j 00:41	4° Ⅱ 59'33	6.29093 AU	max. Earth dist.	-10360 Jan 31 j 00:	15 25° M 49'58	6.09265 AU
				morning rise	-10360 Feb 12 j 12:	19 28°M₊43′26	
conjunction	-10366 Aug 11 j 00:26	5° Ⅱ 13′02	1°41'03		-10360 Feb 18 j 02:		
minimum elong	-10366 Aug 11 j 00:25		1°41'33	retrograde	-10360 Jun 20 j 00:		
morning rise	-10366 Aug 23 j 08:38			opposition	-10360 Aug 18 j 03:		
retrograde	-10366 Dec 26 j 01:53			min. Earth dist.	-10360 Aug 17 j 12:		4.12563 AU
opposition	-10365 Feb 25 j 13:59			direct	-10360 Oct 16 j 01:		
min. Earth dist.	-10365 Feb 26 j 02:46		4.25707 AU	evening set	-10359 Feb 20 j 21:		
direct	-10365 Apr 27 j 23:35				-10359 Mar 05 j 14:	40 0°る	
	-10365 Aug 10 j 09:24				1025034 06:14	7 00712122	1022154
evening set	-10365 Aug 30 j 02:31	4° © 25'26		conjunction	-10359 Mar 06 j 14:		
	10265 8 11: 12:20	70617110	1020122	minimum elong max. Earth dist.	-10359 Mar 06 j 14:		
conjunction	-10365 Sep 11 j 13:20		1°28'23		-10359 Mar 07 j 06:		6.16280 AU
minimum elong max. Earth dist.	-10365 Sep 11 j 13:24		1°28'59 6.21638 AU	morning rise retrograde	-10359 Mar 20 j 06:		
	-10365 Sep 11 j 02:42		0.21038 AU	-	-10359 Jul 23 j 11:		1956102
morning rise retrograde	-10365 Sep 24 j 01:33 -10364 Jan 29 j 21:18			opposition min. Earth dist.	-10359 Sep 20 j 11: -10359 Sep 20 j 07:		
opposition	-10364 Mar 31 j 08:36		1°44'32	direct	-10359 Nov 19 j 13:		4.20437 AU
min. Earth dist.	-10364 Mar 31 j 10:02		4.17547 AU	direct	-10359 Nov 19 j 15:		
direct	-10364 May 30 j 14:20		4.17547 AU	evening set	-10358 Mar 28 j 08:		
ancet	-10364 Aug 27 j 22:15			evening set	10550 War 20 J 00.	0 70 30 34	
evening set	-10364 Sep 30 j 16:15			conjunction	-10358 Apr 10 j 22:	20 3° ≈ 41'20	-0°57'15
evening sec	10301 S c p 30 J 10.13	7 0031 03		minimum elong	-10358 Apr 10 j 22:		
conjunction	-10364 Oct 13 j 11:11	10°Ω29'57	0°47'04	max. Earth dist.	-10358 Apr 10 j 18:		6.24481 AU
minimum elong	-10364 Oct 13 j 11:16			morning rise	-10358 Apr 24 j 09:		0
max. Earth dist.	-10364 Oct 13 j 18:40				-10358 Jun 02 j 10:		
morning rise	-10364 Oct 26 j 09:05			retrograde	-10358 Aug 24 j 15:		
Č	-10364 Nov 01 j 20:08			opposition	-10358 Oct 22 j 23:		-0°47'54
	-10363 Jan 19 j 17:20			min. Earth dist.	-10358 Oct 23 j 07:		
retrograde	-10363 Mar 05 j 18:42	3° m 00'17			-10358 Dec 05 j 20:	18 15°R ≈	
	-10363 Apr 20 j 01:50	30°R Ω		direct	-10358 Dec 23 j 06:	59 14° ≈ 31'25	
opposition	-10363 May 05 j 20:14	27° Ω 59'12	0°27'10		-10357 Jan 09 j 21:	37 15° ≈	
min. Earth dist.	-10363 May 05 j 08:31	28° Ω 03′03	4.10192 AU		-10357 Apr 17 j 13:	0° ∺	
direct	-10363 Jul 03 j 20:17	23° Ω 06′00		evening set	-10357 May 01 j 03:	12 2° ∺ 58'16	
desc. node	-10363 Sep 02 j 21:43	28° Ω 46′22					
	-10363 Sep 09 j 21:03			conjunction	-10357 May 14 j 10:		
evening set	-10363 Nov 03 j 23:22	11° m 48'46		minimum elong	-10357 May 14 j 10:		0°04'47
				behind sun begin	-10357 May 14 j 02:		
conjunction	-10363 Nov 17 j 04:21	-		behind sun end	-10357 May 14 j 18:		
minimum elong	-10363 Nov 17 j 04:19		0°11'12	max. Earth dist.	-10357 May 13 j 14:		6.31192 AU
behind sun begin	-10363 Nov 16 j 22:15	-		morning rise	-10357 May 27 j 13:		
behind sun end	-10363 Nov 17 j 10:24	•		asc. node	-10357 Jun 15 j 09:		
max. Earth dist.	-10363 Nov 18 j 03:56		6.07643 AU	retrograde	-10357 Sep 25 j 06:		0022145
morning rise	-10363 Nov 30 j 13:00			opposition	-10357 Nov 24 j 03:		
	-10362 Jan 25 j 04:29	0° ™		min. Earth dist.	-10357 Nov 24 j 20:		4.33339 AU
retrograde	-10362 Apr 11 j 04:13	7° £ 58'46	1001154	direct	-10356 Jan 25 j 08:		
opposition	-10362 Jun 10 j 12:35			. ,	-10356 May 12 j 00:		
min. Earth dist.	-10362 Jun 09 j 16:37		4.06229 AU	evening set	-10356 Jun 01 j 11:		(24205 ATT
direct	-10362 Jul 03 j 17:47			max. Earth dist.	-10356 Jun 13 j 02:	18 7° Υ 00'30	6.34395 AU
direct	-10362 Aug 07 j 18:40 -10362 Sep 11 j 16:07	0° ⊡		conjunction	-10356 Jun 14 j 09:	06 7° Υ 17'22	0°48'48
evening set	-10362 Sep 11 j 10.07 -10362 Dec 10 j 00:44			minimum elong	-10356 Jun 14 j 09:		
evening set	-10302 Dec 10 J 00:44	1/ ==00.23		morning rise	-10356 Jun 14 j 09: -10356 Jun 27 j 03:		U +0 40
conjunction	-10362 Dec 23 j 13:35	20° Ω 10'25	-1°06'34	retrograde	-10356 Oct 25 j 22:		
minimum elong	-10362 Dec 23 j 13:39			opposition	-10356 Dec 25 j 11:		1°42'52
max. Earth dist.	-10362 Dec 24 j 23:34			min. Earth dist.	-10356 Dec 26 j 09:		4.34462 AU
morning rise	-10361 Jan 06 j 05:12		5.057/2710	direct	-10356 Bec 26 j 09:		1.5 1702 /10
	-10361 Feb 04 j 15:15				-10355 Jun 07 j 04:		
retrograde	-10361 May 17 j 04:28			evening set	-10355 Jul 02 j 21:		
opposition	-10361 Jul 15 j 18:44	8° M .11'14	-2°08'47	max. Earth dist.	-10355 Jul 14 j 04:		6.33239 AU
min. Earth dist.	-10361 Jul 14 j 21:40		4.07159 AU				
direct	-10361 Sep 11 j 23:15			conjunction	-10355 Jul 15 j 10:	07 8° 8 22'02	1°27'37
	-10361 Dec 13 j 22:07			minimum elong	-10355 Jul 15 j 10:		
	ž			ū	•		

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10355 in astronomical counting style is the year 10356 BCE in historical counting style. morning rise -10355 Jul 27 j 20:29 11°**8**09'15 retrograde -10349 May 22 j 01:01 18° ML15'56 -10355 Aug 14 j 08:53 15°8 -10349 Jul 07 j 00:16 15°RML -10355 Nov 27 j 06:51 28°843'00 -10349 Jul 20 j 14:33 13°ML10'55 -2°14'31 retrograde opposition -10354 Jan 27 j 11:06 23°\(250'55\) 2°23'35 min. Earth dist. -10349 Jul 19 j 17:27 13°ML18'08 4.08053 AU opposition -10354 Jan 28 j 07:03 23°844'36 4.31220 AU -10349 Sep 16 j 21:13 8°M11'58 min. Earth dist. direct -10354 Mar 30 j 15:19 18°**8**53'50 -10349 Nov 23 j 14:06 15°M direct -10354 Jul 01 j 23:17 0°**Ⅱ** -10348 Jan 21 j 05:26 27° M21'00 evening set -10348 Feb 01 j 17:27 0° ₹ evening set -10354 Aug 03 j 00:37 6°**Ⅱ**57'20 max. Earth dist. -10354 Aug 14 j 09:53 9°**I**32'25 6.28059 AU -10348 Feb 03 j 22:08 conjunction 0°**∡**130′26 -1°38′50 conjunction -10354 Aug 15 j 09:13 9°**I**I45'42 1°41'09 minimum elong -10348 Feb 03 j 22:06 0°**∡**130′25 1°39′18 -10354 Aug 15 j 09:13 9°**Д**45'42 -10348 Feb 05 j 02:47 0°**∡**¹46'58 6.10425 AU minimum elong 1°41'39 max. Earth dist. -10354 Aug 27 j 17:40 12°**Д**34'05 -10348 Feb 17 j 15:38 3° ₹ 40'10 morning rise morning rise -10354 Dec 09 j 01:26 retrograde -10348 Jun 24 j 17:13 22°**尽** 56'17 retrograde -10354 Dec 30 j 22:07 0°5643'43 opposition -10348 Aug 22 j 18:29 17°**х** 53'12 -2°26'29 -10353 Jan 21 j 18:51 30°R II min. Earth dist. -10348 Aug 22 j 05:33 17°**尽** 57'37 4.13860 AU opposition -10353 Mar 02 j 09:49 25°**Ⅱ**49'27 2°22'11 direct -10348 Oct 20 j 20:38 12°**尽**51'04 min. Earth dist. -10353 Mar 02 j 21:45 25°**Ⅱ**45'39 4.24482 AU -10347 Feb 17 j 10:20 0°ਤ direct -10353 May 02 j 16:33 20°**Д**55'03 evening set -10347 Feb 25 j 20:01 1°**る**53'11 -10353 Jul 23 j 10:08 evening set -10353 Sep 03 j 14:39 9°907'07 conjunction -10347 Mar 11 j 12:35 4°る59'30 -1°29'36 minimum elong -10347 Mar 11 j 12:40 4°る59'32 1°30'11 conjunction -10353 Sep 16 j 02:26 11°559'56 1°24'09 max. Earth dist. -10347 Mar 12 j 00:51 5°**⋜**06'28 6.17586 AU minimum elong -10353 Sep 16 j 02:31 11°559'59 1°24'44 morning rise -10347 Mar 25 j 04:04 8°る05'07 -10353 Sep 15 j 18:54 11°555'35 max. Earth dist. 6.20358 AU retrograde -10347 Jul 27 j 21:18 26° 중33'14 -10353 Sep 28 j 15:42 14°553'42 -10347 Sep 24 j 22:24 21°る33'40 -1°48'22 morning rise opposition -10353 Dec 14 j 15:06 $0^{\circ}\Omega$ min. Earth dist. -10347 Sep 24 j 20:06 21° **정**34'27 4.21650 AU -10352 Feb 03 j 21:08 $3^{\circ}\Omega47'57$ -10347 Nov 24 j 04:20 16°る29'38 retrograde direct -10352 Mar 27 j 05:29 30°RS -10346 Mar 08 j 23:22 0°≈ -10352 Apr 05 j 07:51 28°550'15 1°35'27 5°≈14'19 -10346 Apr 02 j 01:31 opposition evening set -10352 Apr 05 j 06:51 28°550'35 4.16332 AU min. Earth dist. -10352 Jun 04 j 08:30 23°557'23 -10346 Apr 15 j 14:31 8°≈16'03 -0°50'41 direct conjunction -10352 Aug 07 j 08:21 0°**Ω** -10346 Apr 15 j 14:36 8°≈16'06 0°51'12 minimum elong -10352 Oct 05 j 09:54 12° **Ω**24'03 max. Earth dist. -10346 Apr 15 j 07:37 8°≈12'11 6.25483 AU evening set -10352 Oct 16 j 13:06 15° Ω -10346 Apr 29 j 00:46 11°≈16'17 morning rise -10346 May 16 j 00:40 15°≈ -10352 Oct 18 j 06:09 15° Ω 24'01 0°39'28 -10346 Aug 29 j 00:59 29°≈01'10 conjunction retrograde minimum elong -10352 Oct 18 j 06:12 15° Ω 24'03 0°39'55 opposition -10346 Oct 27 j 09:00 24°≈05'25 -0°37'06 max. Earth dist. -10352 Oct 18 j 16:02 15° Ω 29'48 6.12571 AU min. Earth dist. -10346 Oct 27 j 19:14 24°≈02'02 4.28883 AU morning rise -10352 Oct 31 j 05:38 18° Ω 25'45 direct -10346 Dec 27 j 20:26 19°≈01'18 -10352 Dec 24 j 06:21 0° M -10345 Mar 31 j 12:41 0°**米** -10351 Mar 10 j 22:03 8° M 00'30 -10345 Apr 26 j 01:12 5°**米** 20'01 retrograde asc. node -10351 May 10 j 21:16 2° m 58'55 0°14'35 -10345 May 05 j 15:53 7° **∺**26'24 opposition evening set min. Earth dist. -10351 May 10 j 07:42 3° Mp 03'23 4.09476 AU -10351 Jun 04 j 06:14 30°RΩ conjunction -10345 May 18 j 21:30 10° **★** 22'43 0°03'14 -10351 Jul 08 j 18:13 $28^{\circ}\Omega$ 05'34 -10345 May 18 j 21:31 10° \(\)22'43 0°02'59 direct minimum elong -10351 Jul 13 j 21:36 $28^{\circ}\Omega 08'17$ -10345 May 18 j 13:24 10° **H** 18'14 desc. node behind sun begin -10345 May 19 j 05:37 10° \(\frac{1}{27}\)'12 -10351 Aug 11 j 22:51 0° m behind sun end -10345 May 17 j 22:56 10° ★ 10'10 6.31559 AU evening set -10351 Nov 08 j 22:56 16° m 50'37 max. Earth dist. morning rise -10345 May 31 i 23:37 13° ¥ 17'14 conjunction -10351 Nov 22 i 05:16 19° m 57'19 -0°19'52 -10345 Sep 09 j 23:17 0°**Υ** minimum elong -10351 Nov 22 i 05:14 19° m 57'17 0°19'43 $-10345 \text{ Sep } 29 \text{ j } 14:24 \quad 0^{\circ} \Upsilon 37'08$ retrograde max. Earth dist. -10351 Nov 23 j 08:34 20° m 13'21 6.07317 AU -10345 Oct 19 j 06:15 30°R € -10351 Dec 05 j 15:03 23° m 05'54 -10345 Nov 28 j 13:29 25° **€** 44'13 0°43'28 morning rise opposition -10350 Jan 05 j 05:01 0°₽ -10345 Nov 29 j 07:55 25°**)** 38'14 4.33359 AU min. Earth dist. retrograde -10350 Apr 16 j 06:30 13°**♀**02'35 direct -10344 Jan 29 j 19:55 20°**)** 41'41 opposition -10350 Jun 15 j 12:19 7°**♀**58'13 -1°13'17 -10344 Apr 24 j 08:19 $0^{\circ}\Upsilon$ min. Earth dist. -10350 Jun 14 j 15:35 8°**2**05'12 4.06357 AU -10344 Jun 05 j 21:27 8°**Y**52'10 evening set -10350 Aug 12 j 17:03 3°**♀**02'39 -10344 Jun 17 j 11:23 11°**Υ**26'38 6.34066 AU direct max. Earth dist. -10350 Dec 15 j 04:23 22°**△**04'26 evening set -10344 Jun 18 j 17:22 11°**Υ**43'21 0°55'17 conjunction -10344 Jun 18 j 17:17 11°**Υ**43'18 conjunction -10350 Dec 28 j 17:41 25°**△**14'23 -1°12'40 minimum elong 0°55'20 minimum elong -10350 Dec 28 j 17:35 25°**△**14'19 1°12'52 morning rise -10344 Jul 01 j 10:06 14°**Υ**32'58 max. Earth dist. -10350 Dec 30 j 02:46 25°**△**33'43 6.06502 AU -10344 Sep 25 j 13:50 0°**8** morning rise -10349 Jan 11 j 09:55 28°**-**25'45 retrograde -10344 Oct 30 j 09:28 1°**8**51'23 -10349 Jan 18 j 05:13 0° M -10344 Dec 04 j 13:01 30°R℃

opposition

-10344 Dec 30 j 00:40 26° Υ 59'45 1°50'37

-10349 Apr 05 j 22:41 15°M

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10343 in astronomical counting style is the year 10344 BCE in historical counting style. -10344 Dec 30 j 22:58 26° Y 52'39 4.33828 AU min. Earth dist. evening set -10338 Dec 20 j 07:13 27°**£**05'48 -10343 Mar 02 j 13:10 22°**Y**00′00 -10337 Jan 01 j 18:17 0°M direct -10343 May 19 j 16:15 0°8 -10343 Jul 07 j 06:40 10°**8**03'44 -10337 Jan 02 j 21:19 conjunction 0°M15'47 -1°18'15 evening set -10337 Jan 02 j 21:13 0°ML15'43 1°18'30 minimum elong -10343 Jul 19 j 18:19 12°**8**51'53 1°31'09 conjunction max. Earth dist. -10337 Jan 04 j 07:28 0°**ጤ**35'43 6.07019 AU -10343 Jul 19 j 18:15 12°**8**51'51 1°31'30 minimum elong morning rise -10337 Jan 16 j 13:46 3°M26'58 -10343 Jul 18 j 12:11 12°**8**34'56 6.32332 AU max. Earth dist. -10337 Mar 11 j 08:49 15° M -10343 Jul 29 j 06:13 15°**8** retrograde -10337 May 26 j 23:24 23°ML13'11 morning rise -10343 Aug 01 j 04:15 15°**8**39'13 opposition -10337 Jul 25 j 09:48 18°ML08'20 -2°19'21 -10343 Oct 15 j 13:34 $\Pi^{\circ}0$ min. Earth dist. -10337 Jul 24 j 14:24 18°ML14'58 4.08829 AU -10343 Dec 01 j 23:21 3°**II**18'18 retrograde -10337 Aug 19 j 07:53 15°RM -10342 Jan 19 j 14:06 30°R ₩ direct -10337 Sep 21 j 19:02 13°ML08'55 opposition -10342 Feb 01 j 04:42 28°825'57 2°26'04 -10337 Oct 25 j 10:43 15°M min. Earth dist. -10342 Feb 01 j 23:33 28°**8**19'59 4.30126 AU -10336 Jan 16 j 06:45 direct -10342 Apr 04 j 06:25 23°**8**29'16 evening set -10336 Jan 26 j 08:07 2°**х** 17′13 -10342 Jun 12 j 03:19 0°**Ⅱ** evening set -10342 Aug 07 j 11:06 11°**Д**34'29 conjunction -10336 Feb 09 j 00:54 5°**₹** 26'16 -1°39'40 minimum elong -10336 Feb 09 i 00:53 5°**∡**126'15 1°40'10 conjunction -10342 Aug 19 j 19:56 14°**II**23'22 1°40'34 max. Earth dist. -10336 Feb 10 j 03:06 5°**∡**'41'22 6.11381 AU minimum elong -10342 Aug 19 j 19:56 14°**Ⅲ**23'22 1°41'06 morning rise -10336 Feb 22 j 18:22 8° ₹35'31 max. Earth dist. -10342 Aug 19 i 00:16 14°**Ⅲ**12'08 6.26875 AU retrograde -10336 Jun 29 i 08:07 27° ₹ 45'10 morning rise -10342 Sep 01 i 04:32 17° **I**I 12'20 opposition -10336 Aug 27 j 09:43 22° \$\frac{7}{42}\$'31 -2°23'56 -10342 Nov 03 i 10:11 0°5 min. Earth dist. -10336 Aug 26 j 21:35 22° 🗷 46'40 4.14916 AU retrograde -10341 Jan 04 j 19:06 5°528'22 direct -10336 Oct 25 j 14:23 17° ₹ 40'02 -10341 Mar 07 j 07:38 0°533'41 2°18'09 -10335 Jan 31 j 06:11 0°る opposition min. Earth dist. -10341 Mar 07 j 17:26 0°530'34 4.23295 AU -10335 Mar 02 j 19:00 6°**⋜**40'14 evening set -10341 Mar 11 j 17:43 30°R II -10341 May 07 j 10:17 25°**Д**39'37 -10335 Mar 16 j 11:18 9°**3**46'00 -1°25'42 direct conjunction -10341 Jun 30 j 18:18 0°១ minimum elong -10335 Mar 16 j 11:23 9°₹46'03 1°26'17 -10341 Sep 08 j 04:32 13°553'20 -10335 Mar 16 j 20:12 9°**⋜**51'03 6.18677 AU evening set max. Earth dist. -10335 Mar 30 j 02:17 12°**궁**50'57 morning rise -10341 Sep 20 j 17:05 16°5046'59 1°19'15 -10335 Jul 05 j 02:51 0°≈ conjunction -10341 Sep 20 j 17:10 16°5547'01 1°19'49 -10335 Aug 01 j 10:23 1°≈12'44 minimum elong retrograde -10341 Sep 20 j 11:33 16°543'46 6.19265 AU -10335 Aug 28 j 12:42 30°R♂ max. Earth dist. -10341 Oct 03 j 07:40 19°5541'46 -10335 Sep 29 j 11:02 26° ₹ 13'45 -1°39'57 morning rise opposition -10341 Nov 20 j 07:45 0°**Ω** -10335 Sep 29 j 11:30 26° **전**13'35 4.22655 AU min. Earth dist. retrograde -10340 Feb 08 j 22:14 $8^{\circ}\Omega$ 41'47 direct -10335 Nov 28 j 21:55 21°る09'37 opposition -10340 Apr 10 j 08:15 3° Ω43'26 1°25'32 -10334 Feb 18 j 12:33 0°≈ min. Earth dist. -10340 Apr 10 j 04:50 3°**Q**44'33 4.15390 AU evening set -10334 Apr 06 j 19:14 9°≈51'55 -10340 May 13 j 04:54 30°Rூ direct -10340 Jun 09 j 04:53 28°550'33 conjunction -10334 Apr 20 j 07:36 12°≈53'03 -0°43'44 -10340 Jul 06 j 00:46 0°**Ω** -10334 Apr 20 j 07:40 12°≈53'05 0°44'12 minimum elong -10340 Sep 30 j 03:51 15°**Ω** max. Earth dist. -10334 Apr 19 j 22:27 12°≈47'56 6.26338 AU -10340 Oct 10 j 04:26 17°**Ω**18'48 -10334 Apr 29 j 18:32 15°≈ evening set -10334 May 03 i 16:54 15°≈52'35 morning rise $-10340 \text{ Oct } 23 \text{ j } 02:12 \ 20^{\circ} \Omega 19'42 \ 0^{\circ} 31'32$ conjunction -10334 Jul 16 i 06:14 0°₩ $-10340 \text{ Oct } 23 \text{ j } 02:15 \ 20^{\circ} \Omega 19'44 \ 0^{\circ} 31'58$ -10334 Sep 02 i 09:46 3° ★33'24 minimum elong retrograde max. Earth dist. -10340 Oct 23 j 16:14 $20^{\circ}\Omega$ 27'54 6.11871 AU -10334 Oct 21 j 08:52 30°R≈ -10340 Nov 05 j 03:05 $23^{\circ}\Omega 22'23$ opposition -10334 Oct 31 j 20:24 28°≈38'07 -0°25'55 morning rise -10340 Dec 04 j 13:45 0° Mg min. Earth dist. -10334 Nov 01 j 07:22 28°≈34'30 4.29526 AU -10339 Mar 16 j 00:48 13° m 00'24 direct -10333 Jan 01 j 09:56 23°≈34'10 retrograde -10333 Mar 06 j 02:00 29°**≈**07'01 -10339 May 15 j 21:49 7° m 58'19 0°01'52 asc. node opposition min. Earth dist. -10339 May 15 j 07:12 8° m 03'09 4.09069 AU -10333 Mar 11 j 12:10 0°**米** 6° Tp 54'09 desc. node -10339 May 24 j 01:21 evening set -10333 May 10 j 05:20 11°**米**57'37 direct -10339 Jul 13 j 16:06 3° Mp 04'47 max. Earth dist. evening set -10339 Nov 13 j 22:45 21° m 51'14 -10333 May 23 j 09:39 14° **★** 53'15 0°10'56 conjunction -10339 Nov 27 j 06:04 24° m 58'26 -0°28'10 -10333 May 23 j 09:38 14° **★** 53'14 0°10'43 conjunction minimum elong -10339 Nov 27 j 06:01 24° m 58'24 0°28'03 -10333 May 23 j 03:25 14° **★** 49'48 minimum elong behind sun begin -10339 Nov 28 j 09:33 25° Mp 14'33 6.07211 AU max. Earth dist. behind sun end -10333 May 23 j 15:51 14° **★** 56'41 morning rise -10339 Dec 10 j 17:07 28° m 07'33 morning rise -10333 Jun 05 j 10:32 17° **€**47'06 -10339 Dec 18 j 19:22 -10333 Aug 06 j 01:47 0°**Υ** retrograde -10338 Apr 21 j 06:07 18°**♀**03'57 retrograde -10333 Oct 04 j 01:21 5°**Y**06′07 opposition -10338 Jun 20 j 10:50 12°**⊆**59'19 -1°24'07 opposition -10333 Dec 03 j 01:44 0°**Υ**13'34 0°54'07 min. Earth dist. -10338 Jun 19 j 13:07 13°**2**06'39 4.06576 AU min. Earth dist. -10333 Dec 03 j 21:41 0°**Υ**07'08 4.33490 AU

-10333 Dec 04 j 19:46 30°R €

-10338 Aug 17 j 14:51 8°**೨**03'18

direct

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10332 in astronomical counting style is the year 10333 BCE in historical counting style. direct -10332 Feb 03 j 10:42 25°**米** 11'27 minimum elong -10327 Dec 02 i 04:31 29° m 53'32 0°36'01 -10332 Apr 02 j 14:50 0°**℃** -10327 Dec 02 j 15:32 0∘ଫ -10332 Jun 10 j 07:55 13°**Y**21'14 evening set max. Earth dist. -10327 Dec 03 j 10:13 0°**£**10'58 6.07059 AU max. Earth dist. -10332 Jun 21 j 19:57 15°**Υ**54'49 3°**ഫ**03'07 6.33916 AU -10327 Dec 15 j 16:27 morning rise retrograde -10326 Apr 26 j 05:39 22°**♀**59'29 -10332 Jun 23 j 02:36 16°**Υ**11'55 conjunction 1°01'33 min. Earth dist. -10326 Jun 24 j 09:55 18°**♀**01'42 4.06661 AU -10332 Jun 23 j 02:31 16° **Y**11'52 minimum elong 1°01'40 opposition -10326 Jun 25 j 06:35 17°**2**54'42 -1°34'06 -10332 Jul 05 j 18:14 19°**Y**01'08 morning rise direct -10326 Aug 22 j 11:18 12°**⊆**58'14 -10332 Aug 28 j 20:20 0°**8** -10326 Dec 16 j 12:07 0°M retrograde -10332 Nov 03 j 21:20 6°**8**21'45 evening set -10326 Dec 25 j 08:17 2°M02'13 opposition -10331 Jan 03 j 15:14 1°**8**30'08 1°57'50 -10331 Jan 04 j 12:37 1°**8**23'19 4.33453 AU -10325 Jan 07 j 22:51 5°ML12'16 -1°23'09 min. Earth dist. conjunction -10331 Jan 15 j 14:57 30°R**Y** minimum elong -10325 Jan 07 j 22:46 5°M12'12 1°23'26 direct -10331 Mar 07 j 02:21 26°**Y**30'51 max. Earth dist. -10325 Jan 09 j 07:35 5°**M**₃31'20 6.07308 AU -10331 Apr 25 j 18:34 0°8 morning rise -10325 Jan 21 j 15:48 8°M23'27 evening set -10331 Jul 11 j 15:49 14°**8**34'39 -10325 Feb 20 j 02:34 15°M -10331 Jul 13 j 13:08 15°**8** retrograde -10325 May 31 j 17:21 28°M06'22 max. Earth dist. -10331 Jul 22 j 23:07 17°**8**07'05 6.31766 AU min. Earth dist. -10325 Jul 29 j 07:30 23°ML08'17 4.09323 AU opposition -10325 Jul 30 j 02:43 23°ML01'42 -2°23'08 conjunction -10331 Jul 24 j 02:46 17°822'41 1°34'13 direct -10325 Sep 26 j 12:37 18°M01'49 minimum elong -10331 Jul 24 j 02:42 17°**8**22'39 -10325 Dec 29 j 22:53 0°**∡**7 morning rise -10331 Aug 05 j 12:01 20°809'58 evening set -10324 Jan 31 i 09:26 7°**х** 10′35 -10331 Sep 21 i 13:38 0°**Ⅱ** retrograde -10331 Dec 06 j 15:42 7°**Ⅱ**53'20 conjunction -10324 Feb 14 i 02:21 10° ₹ 19'24 -1°39'46 opposition -10330 Feb 05 j 22:29 3°**Д**00'50 2°27'41 minimum elong -10324 Feb 14 i 02:21 10° ₹ 19'24 1°40'19 min. Earth dist. -10330 Feb 06 j 16:26 2° **II**55'09 4.29419 AU max. Earth dist. -10324 Feb 15 j 01:52 10° ₹32'55 6.12031 AU -10330 Mar 03 j 13:58 30°R8 -10324 Feb 27 j 19:44 13° ₹28'17 morning rise -10330 Apr 08 j 22:16 28°**8**04'37 -10324 May 24 j 21:19 0°る direct -10330 May 14 j 21:27 0°**Ⅱ** -10324 Jul 04 j 00:28 2°₹32'43 retrograde -10330 Aug 11 j 20:53 16°**Ⅲ**10'09 -10324 Aug 12 j 21:06 30°R 🗷 evening set -10330 Aug 23 j 10:54 18°**Ц**48'39 6.26078 AU -10324 Sep 01 j 00:27 27°**х** 30'30 -2°20'27 max. Earth dist. opposition -10324 Aug 31 j 14:50 27°**尽** 33'46 4.15654 AU min. Earth dist. -10330 Aug 24 j 05:40 18° \$\mathbb{I}\$59'22 1°39'24 -10324 Oct 30 j 09:30 22°**尽** 27'41 conjunction direct -10330 Aug 24 j 05:41 18°**耳**59'23 1°39'58 -10323 Jan 11 j 17:03 0°る minimum elong -10330 Sep 05 j 14:48 21°**Д**48'52 -10323 Mar 07 j 17:20 11°♂26'51 morning rise evening set -10330 Oct 13 j 10:33 0°5 -10329 Jan 09 j 14:39 10°5 10'05 -10323 Mar 21 j 09:31 14°♂32'15 -1°21'14 retrograde conjunction opposition -10329 Mar 12 j 03:53 5°514'54 2°13'17 minimum elong -10323 Mar 21 j 09:36 14°ਰ32'18 1°21'48 min. Earth dist. -10329 Mar 12 j 11:14 5°512'34 4.22458 AU max. Earth dist. -10323 Mar 21 j 16:57 14°**궁**36'27 6.19463 AU direct -10329 May 12 j 02:24 0°521'05 morning rise -10323 Apr 03 j 23:54 17°**⋜**36'39 -10329 Sep 12 j 16:41 18°535'30 -10323 Jun 03 j 19:39 0°≈ evening set -10323 Aug 05 j 21:46 5°≈53'05 retrograde -10329 Sep 25 j 06:23 21°529'57 1°13'57 -10323 Oct 03 j 23:49 0°≈54'37 -1°30'54 conjunction opposition -10329 Sep 25 j 06:28 21°530'00 1°14'30 min. Earth dist. -10323 Oct 04 j 00:53 0°≈54'16 4.23426 AU minimum elong -10329 Sep 25 j 04:50 21°529'03 6.18477 AU -10323 Oct 10 j 19:24 30°R ₹ max. Earth dist. -10329 Oct 07 j 21:59 24°\$25'36 -10323 Dec 03 j 13:27 25°る50'25 morning rise direct -10329 Nov 01 i 17:59 $0^{\circ}\Omega$ -10322 Jan 26 i 07:37 0°≈ retrograde -10328 Feb 13 j 21:33 13°Ω30'15 evening set -10322 Apr 11 j 13:31 14°≈30'57 opposition -10328 Apr 15 j 05:57 $8^{\circ}\Omega$ 31'23 $1^{\circ}15'14$ -10322 Apr 13 j 17:48 15°≈ min. Earth dist. -10328 Apr 15 j 01:25 8° **Q**32'51 4.14693 AU direct -10328 Jun 13 j 23:13 $3^{\circ}\Omega$ 38'32 -10322 Apr 25 j 00:53 17°≈31'26 -0°36'27 conjunction -10328 Sep 13 j 01:46 15°Ω minimum elong -10322 Apr 25 j 00:57 17°≈31'28 0°36'53 max. Earth dist. -10322 Apr 24 j 12:42 17°≈24'37 6.27054 AU -10328 Oct 14 j 20:56 22° **Ω**07'56 evening set morning rise -10322 May 08 j 09:21 20°≈30'19 conjunction -10328 Oct 27 j 19:52 25° Ω 09'38 0°23'34 -10322 Jun 22 j 21:19 0°**米** -10328 Oct 27 j 19:54 25° Ω 09'40 0°23'57 minimum elong retrograde -10322 Sep 06 j 21:30 8°**米**07'24 max. Earth dist. -10328 Oct 28 j 10:34 25° Ω 18'14 6.11317 AU opposition -10322 Nov 05 j 08:43 3° **∺** 12'33 -0°14'30 -10328 Nov 09 j 22:21 $28^{\circ}\Omega$ 13'15 min. Earth dist. -10322 Nov 05 j 21:44 3°**米**08'16 4.30128 AU morning rise -10328 Nov 17 j 15:09 0° M -10322 Dec 01 j 21:40 30°R≈ -10327 Mar 20 j 22:35 17° m 54'06 retrograde direct -10321 Jan 06 j 02:49 28°≈08'44 desc. node -10327 Apr 04 j 05:40 17° **m** 34'39 asc. node -10321 Jan 14 j 02:56 28°≈14'41 opposition -10327 May 20 j 19:12 12° m 51'32 -0°10'35 -10321 Feb 10 j 14:45 0°**米** min. Earth dist. -10327 May 20 j 02:44 12° m 57'00 4.08702 AU evening set -10321 May 14 j 19:03 16° **∺** 30'14 direct -10327 Jul 18 j 10:31 7° Mp 57'43 evening set -10327 Nov 18 j 20:02 26° Mp 45'50 conjunction -10321 May 27 j 22:14 19° **∺** 25'11 0°18'38 minimum elong -10321 May 27 j 22:12 19°**米**25'10 0°18'27

max. Earth dist.

-10327 Dec 02 j 04:35 29° m 53'34 -0°36'05

conjunction

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10321 in astronomical counting style is the year 10322 BCE in historical counting style. -10321 Jun 09 j 21:44 22°**)** 18'19 opposition -10315 May 25 j 17:46 17° m 47'59 -0°23'06 morning rise -10321 Jul 16 j 07:15 0°**℃** min. Earth dist. -10315 May 25 j 01:24 17° m 53'26 4.07975 AU -10321 Oct 08 j 10:40 9°**Y**36′08 -10315 Jul 23 j 07:29 12° m 53'53 retrograde direct -10321 Dec 07 j 14:34 4°**Υ**43'45 -10315 Nov 16 j 06:38 1°04'31 0∘**⊽** opposition -10321 Dec 08 j 09:56 4° **Y** 37'31 4.33755 AU -10315 Nov 23 j 20:12 min. Earth dist. evening set 1°**≏**45'22 -10320 Jan 24 j 22:01 30°R € -10320 Feb 07 j 23:51 29°**米**41'56 direct conjunction -10315 Dec 07 j 05:47 4°**Ω**53'46 -0°43'53 $0^{\circ}\Upsilon$ -10315 Dec 07 j 05:42 4°**£**53'44 0°43'52 -10320 Feb 22 j 04:08 minimum elong -10320 Jun 14 j 18:12 17° $\mathbf{\Upsilon}'50$ '09 evening set max. Earth dist. -10315 Dec 08 j 11:36 5°**£**11'16 6.06577 AU max. Earth dist. -10320 Jun 26 j 04:56 20°**Υ**23'09 6.33960 AU morning rise -10315 Dec 20 j 18:50 8°**△**03'59 retrograde -10314 May 01 j 05:52 28°**♀**01'15 -10320 Jun 27 j 11:29 20°**Y**40'13 conjunction 1°07'29 min. Earth dist. -10314 Jun 29 j 06:53 23°**2**03'42 4.06495 AU -10320 Jun 27 j 11:24 20°**Y**40'10 minimum elong 1°07'38 opposition -10314 Jun 30 j 04:30 22°**2**56'22 -1°43'38 morning rise -10320 Jul 10 j 01:59 23°**Y**28'54 direct -10314 Aug 27 j 07:28 17°**♀**59'28 -10320 Aug 09 j 11:33 0°8 -10314 Nov 28 j 20:55 0°M retrograde -10320 Nov 08 j 10:24 10°**8**50'59 evening set -10314 Dec 30 j 12:48 7°ML06'03 opposition -10319 Jan 08 j 05:48 5°**8**59'20 2°04'21 min. Earth dist. -10319 Jan 09 j 03:45 5°**8**52'22 4.33262 AU conjunction -10313 Jan 13 j 03:58 10°M 16'16 -1°27'35 direct -10319 Mar 11 j 17:28 1°**8**00'26 minimum elong -10313 Jan 13 j 03:53 10°ML16'13 1°27'54 -10319 Jun 27 j 13:16 15°8 max. Earth dist. -10313 Jan 14 j 11:51 10° ML34'51 6.07452 AU evening set -10319 Jul 16 j 00:14 19°**8**03'25 morning rise -10313 Jan 26 j 21:15 13°M27'29 max. Earth dist. -10319 Jul 27 j 07:02 21°**8**35'48 6.31318 AU -10313 Feb 02 j 14:11 15°M -10313 Apr 21 j 18:14 0° ₹ conjunction -10319 Jul 28 j 10:29 21°851'17 1°36'44 retrograde -10313 Jun 05 i 16:05 3° ₹ 07'33 minimum elong -10319 Jul 28 j 10:26 21°**8**51'16 1°37'09 -10313 Jul 20 j 08:26 30°RM -10319 Aug 09 j 19:20 24°838'33 -10313 Aug 03 j 23:01 28°ML03'07 -2°26'00 morning rise opposition -10319 Sep 03 j 07:10 0°**Ⅱ** -10313 Aug 03 j 05:22 28°ML09'10 4.09763 AU min Earth dist -10319 Dec 11 j 06:14 12°**Д**25'46 -10313 Oct 01 j 11:33 23°ML02'48 retrograde direct -10318 Feb 10 j 15:07 7°**Д**32'56 2°28'25 -10313 Dec 09 j 10:01 0° **✗**¹ opposition -10318 Feb 11 j 07:14 7°**І**27'49 4.28743 AU -10312 Feb 05 j 14:16 12° ₹ 12'05 min. Earth dist. evening set -10318 Apr 13 j 11:18 2°**Д**37'03 direct -10318 Aug 16 j 05:44 20°**Д**42'57 -10312 Feb 19 j 07:27 15°**尽** 20'42 -1°39'11 conjunction evening set -10312 Feb 19 j 07:29 15°**尽** 20'42 1°39'44 minimum elong -10318 Aug 28 j 14:51 23°**耳**32'37 1°37'40 max. Earth dist. -10312 Feb 20 j 06:37 15° ₹33'59 6.12749 AU conjunction -10318 Aug 28 j 14:54 23°**I**32'39 1°38'14 -10312 Mar 04 j 00:34 18°**尽** 29'10 minimum elong morning rise -10318 Aug 27 j 22:50 23°**II**23'27 6.25223 AU -10312 Apr 27 j 16:55 0°る max. Earth dist. -10318 Sep 10 j 00:22 26°**Ⅲ**22'40 -10312 Jul 08 j 18:09 7°**궁**27'44 morning rise retrograde -10318 Sep 26 j 04:00 0°ഇ opposition -10312 Sep 05 j 17:59 2°**궁**26'05 -2°15'55 retrograde -10317 Jan 14 j 10:59 14°9549'21 min. Earth dist. -10312 Sep 05 j 08:44 2°**궁**29'13 4.16601 AU opposition -10317 Mar 16 j 23:24 9°\$53'44 2°07'38 -10312 Sep 24 j 10:45 30°R 🗷 min. Earth dist. -10317 Mar 17 j 06:12 9°551'34 4.21458 AU direct -10312 Nov 04 j 05:49 27°**尽**23'05 -10317 May 16 j 18:43 5°500'08 -10312 Dec 15 j 12:11 0°ਰ direct -10317 Sep 17 j 04:41 23°516'05 -10311 Mar 12 j 18:43 16°**♂**20'21 evening set evening set -10317 Sep 29 j 19:21 26°5511'27 1°08'12 conjunction -10311 Mar 26 j 10:19 19°₹25'07 -1°16'08 conjunction -10317 Sep 29 j 19:26 26°511'29 1°08'45 -10311 Mar 26 j 10:25 19°る25'10 1°16'42 minimum elong minimum elong -10317 Sep 29 j 18:32 26°510'59 6.17423 AU max. Earth dist. max. Earth dist. -10311 Mar 26 j 14:31 19°る27'29 6.20599 AU -10317 Oct 12 j 12:28 29°508'11 morning rise morning rise -10311 Apr 09 i 00:14 22°る28'49 -10317 Oct 16 i 06:34 $0^{\circ}\Omega$ -10311 May 13 i 21:11 0°≈ -10316 Jan 02 j 05:52 15°Ω retrograde -10311 Aug 10 j 12:21 10°≈38'38 -10316 Feb 18 j 19:08 $18^{\circ}\Omega$ 18'35 opposition -10311 Oct 08 j 14:57 5°≈40'43 -1°21'09 retrograde -10316 Apr 06 j 23:12 15°RΩ min. Earth dist. -10311 Oct 08 j 17:51 5°≈39'44 4.24651 AU -10316 Apr 20 j 03:30 13°Ω19'10 1°04'27 direct -10311 Dec 08 j 10:10 0°≈36'29 opposition -10316 Apr 19 j 20:32 13° **Ω**21'26 4.13653 AU min. Earth dist. -10310 Mar 27 j 23:14 15°≈ direct -10316 Jun 18 j 15:58 $8^{\circ}\Omega$ 26'17 evening set -10310 Apr 16 j 08:34 19°≈13'20 -10316 Aug 24 j 05:58 15°**Ω** -10316 Oct 19 j 14:32 26° **Ω**58'28 conjunction -10310 Apr 29 j 19:06 22°≈12'56 -0°28'55 evening set -10310 Apr 29 j 19:09 22°≈12'58 minimum elong 0°29'19 -10316 Nov 01 j 15:02 0° Mp 01'14 0°15'24 -10310 Apr 29 j 06:57 22°≈06'09 conjunction max. Earth dist. 6.28310 AU -10316 Nov 01 j 15:03 0° Mp 01'15 0° 15'44 -10310 May 13 j 02:14 25°≈10'48 minimum elong morning rise -10316 Nov 01 j 13:16 behind sun begin 0° mp 00'12 -10310 Jun 04 j 06:58 0°**米** behind sun end -10316 Nov 01 j 16:51 0° My 02'18 retrograde -10310 Sep 11 j 07:03 12° **★**42'32 -10316 Nov 01 j 12:55 0° m opposition -10310 Nov 09 j 21:34 7° **★**48'07 -0°03'03 max. Earth dist. -10316 Nov 02 j 08:47 0° Mp 11'38 6.10399 AU min. Earth dist. -10310 Nov 10 j 10:31 7° **★**43'53 4.31312 AU morning rise -10316 Nov 14 j 18:51 3° My 05'53 asc. node -10310 Nov 24 j 14:40 5° **★**55'18 -10315 Feb 12 j 14:55 20° Mp 16'05 -10309 Jan 10 j 18:12 2° **€** 44'33 desc. node direct -10315 Mar 26 j 00:57 22° m 50'56 -10309 May 19 j 07:59 21°**米**01'56 retrograde evening set

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10309 in astronomical counting style is the year 10310 BCE in historical counting style. -10309 May 31 j 07:00 23° **H** 41'04 6.33415 AU max. Earth dist. max. Earth dist. -10304 Nov 07 i 03:45 5° 100'32 6.09146 AU -10304 Nov 19 j 14:22 morning rise 7° m 55'22 -10309 Jun 01 j 09:32 23° + 55'49 0°26'07 -10304 Dec 24 j 18:16 15° m 47'29 conjunction desc. node -10309 Jun 01 j 09:29 23°**米**55'48 0°26'00 -10303 Mar 31 j 00:49 27° m 45'44 minimum elong retrograde -10309 Jun 14 j 07:45 26° X 47'59 -10303 May 30 j 15:08 22° m/42'26 -0°35'17 morning rise opposition $0^{\circ}\Upsilon$ -10309 Jun 28 j 23:38 -10303 May 29 j 20:52 22° m 48'32 4.06962 AU min. Earth dist. $-10303 \; Jul \quad 28 \; j \; 00{:}45 \quad 17^{\circ} \, \rlap{m}_{\!\! 2} 48'02$ -10309 Oct 12 j 20:38 14°**Y**03'03 retrograde direct -10309 Dec 12 j 02:19 9°**Υ**10'53 1°14'17 opposition -10303 Oct 30 j 02:43 0∘ಹ min. Earth dist. $-10309 \text{ Dec } 12 \text{ j } 23:10 \quad 9^{\circ} \mathbf{Y}' 04'10$ 4.34536 AU evening set -10303 Nov 28 j 20:17 6°**£**44'03 direct -10308 Feb 12 j 14:32 4°**Υ**09'23 evening set -10308 Jun 19 j 01:58 22°**Υ**14'17 conjunction -10303 Dec 12 j 06:58 9°**£**53'14 -0°51'16 -10308 Jun 30 j 11:50 24°**Υ**'46'44 -10303 Dec 12 j 06:53 9°**2**53'11 0°51'19 max. Earth dist. 6.34423 AU minimum elong -10303 Dec 13 j 13:56 10°**£**11'25 max. Earth dist. 6.05890 AU conjunction -10308 Jul 01 j 18:04 25°**Y**03'37 1°12'52 morning rise -10303 Dec 25 j 20:57 13°**♀**04'07 minimum elong -10308 Jul 01 j 17:59 25°**Y**'03'34 1°13'03 -10302 Mar 22 j 15:28 0°M morning rise -10308 Jul 14 j 07:20 27°**Y**51'36 retrograde -10302 May 06 j 06:32 3°ML02'53 -10308 Jul 24 j 00:25 0°8 -10302 Jun 19 j 16:35 30°R **≏** -10308 Oct 31 j 13:34 15°8 min. Earth dist. -10302 Jul 04 j 04:52 28°**2**05'07 4.06220 AU retrograde -10308 Nov 12 j 18:33 15°**8**14'03 opposition -10302 Jul 05 j 02:14 27° **2**57'50 -1°52'20 -10308 Nov 25 j 00:52 15°R8 direct -10302 Sep 01 j 05:39 23° **2**00'27 opposition -10302 Nov 08 j 14:27 0° M min. Earth dist. -10307 Jan 13 j 14:28 10°**8**15'40 4.33391 AU evening set -10301 Jan 04 i 17:40 12° ML09'48 direct -10307 Mar 16 j 03:20 5°**8**23'49 -10301 Jan 16 j 22:49 15°M -10307 Jun 10 j 12:48 15°8 -10307 Jul 20 j 05:19 23°**8**25'06 conjunction -10301 Jan 18 j 09:28 15° ML 20'10 -1°31'18 evening set max. Earth dist. -10307 Jul 31 j 11:50 25° 857'28 minimum elong -10301 Jan 18 j 09:23 15°M20'07 1°31'40 6.31083 AU max. Earth dist. -10301 Jan 19 j 18:35 15°M 39'26 6.07610 AU -10307 Aug 01 j 14:52 26°**8**12'44 1°38'36 -10301 Feb 01 j 02:56 18°MJ31'21 conjunction morning rise -10307 Aug 01 j 14:50 26°**8**12'43 -10301 Mar 26 j 17:07 0° ⊀ minimum elong 1°39'03 -10307 Aug 13 j 23:20 28°**8**59'55 -10301 Jun 10 j 13:34 8° ₹ 07'43 morning rise retrograde -10301 Aug 08 j 18:44 3°**尽**03'31 -2°27'43 -10307 Aug 18 j 10:41 0°**Ⅱ** opposition -10307 Dec 15 j 19:39 16°**II**50'35 min. Earth dist. -10301 Aug 08 j 01:04 3°**尽**09'34 4.10352 AU retrograde -10301 Sep 01 j 21:20 30°RM -10306 Feb 15 j 04:40 11°**Д**57'29 2°28'14 opposition -10306 Feb 15 j 21:21 11°**Д**52'12 4.28142 AU -10301 Oct 06 j 08:53 28°ML02'46 min. Earth dist. direct -10306 Apr 17 j 23:22 7°**Д**01'54 -10301 Nov 10 j 05:09 0° ₹ direct -10306 Aug 20 j 11:11 25°**耳**08'06 -10300 Feb 10 j 18:38 17°**尽** 11'33 evening set evening set conjunction -10306 Sep 01 j 20:38 27° \$\mathbb{\pi}\$58'16 1°35'24 conjunction -10300 Feb 24 j 11:40 20°**х** 19'43 -1°37'52 minimum elong -10306 Sep 01 j 20:41 27° II 58'18 1°35'58 minimum elong -10300 Feb 24 j 11:42 20°**х** 19'44 1°38'25 max. Earth dist. -10306 Sep 01 j 04:51 27°**Ц**49'13 6.24305 AU max. Earth dist. -10300 Feb 25 j 07:56 20° ₹31'20 6.13685 AU -10306 Sep 10 j 17:03 0°€ morning rise -10300 Mar 09 j 04:40 23°**尽**27'41 -10306 Sep 14 j 06:52 0°549'00 -10300 Apr 07 j 20:13 0°る morning rise -10305 Jan 19 j 02:04 19°521'30 -10300 Jul 13 j 10:37 12°**⋜**19'20 retrograde retrograde -10305 Mar 21 j 15:24 14°\$25'24 2°01'24 opposition opposition -10305 Mar 21 j 20:14 14°523'52 4.20286 AU min. Earth dist. -10300 Sep 10 j 02:51 7°る20'40 4.17752 AU min. Earth dist. -10300 Nov 09 i 03:28 2°る14'40 direct -10305 May 21 j 05:41 9°531'58 direct evening set -10305 Sep 21 j 14:12 27°550'26 evening set -10299 Mar 17 j 17:48 21°중08'54 -10305 Sep 30 j 21:35 0°**Ω** -10299 Mar 31 j 09:04 24°る12'57 -1°10'35 conjunction -10305 Oct 04 i 06:08 $0^{\circ}\Omega 46'54$ $1^{\circ}02'11$ minimum elong -10299 Mar 31 i 09:09 24° ₹ 13'01 1°11'08 conjunction -10305 Oct 04 i 06:13 $0^{\circ}\Omega$ 46'57 $1^{\circ}02'43$ max. Earth dist. -10299 Mar 31 j 12:28 24°る14'53 6.21864 AU minimum elong max. Earth dist. -10305 Oct 04 j 07:44 $0^{\circ}\Omega$ 47'49 6.16118 AU -10299 Apr 13 j 22:02 27°る15'47 morning rise -10305 Oct 17 j 00:31 $3^{\circ}\Omega$ 44'48 -10299 Apr 26 j 06:22 0°≈ morning rise -10305 Dec 08 j 17:33 15°**Ω** -10299 Aug 01 j 06:37 15°≈ -10299 Aug 15 j 00:25 15°≈18'44 retrograde -10304 Feb 23 j 17:22 23° **Ω**01'58 retrograde opposition -10304 Apr 24 j 22:41 18°Ω02'04 0°53'30 -10299 Aug 28 j 16:38 15°R≈ -10304 Apr 24 j 15:32 18° Ω 04'23 4.12304 AU min. Earth dist. opposition -10299 Oct 13 j 04:21 10°≈21'19 -1°11'00 -10304 May 20 j 02:04 15°RΩ min. Earth dist. -10299 Oct 13 j 08:20 10°≈20'00 4.25872 AU -10304 Jun 23 j 08:10 13°**Ω**09'05 direct -10299 Dec 13 j 03:15 5°≈17'05 direct -10304 Jul 27 j 04:26 15°**Ω** -10298 Mar 09 j 21:55 15°≈ -10304 Oct 16 j 17:09 -10298 Apr 21 j 01:41 23°≈50'20 evening set evening set -10304 Oct 24 j 07:00 1° Mp 45'30 conjunction -10298 May 04 j 10:58 26°≈49'03 -0°21'17 conjunction -10304 Nov 06 j 08:53 4° mp 49'27 0°07'18 minimum elong -10298 May 04 j 11:00 26°≈49'04 0°21'40 minimum elong -10304 Nov 06 j 08:53 4° Mp 49'28 0°07'36 max. Earth dist. -10298 May 03 j 19:09 26°≈40'14 6.29372 AU behind sun begin -10304 Nov 06 j 01:28 4° m 45'08 -10298 May 17 j 17:05 29°≈46'02 morning rise

-10298 May 18 j 18:19 0°**米**

-10304 Nov 06 j 16:18

4° m 53'48

behind sun end

•	omena of Jupiter from		•	* **			page 10
	nical year style is used: The	-	in astronomical co				
retrograde	-10298 Sep 15 j 17:23	17° ∺ 13'31		conjunction	-10292 Nov 11 j 07:51	9° ™ 49'42	-0°01'17
asc. node	-10298 Oct 05 j 00:16	16°) ₹37'15		minimum elong	-10292 Nov 11 j 07:50	9° ™ 49'42	0°01'01
opposition	-10298 Nov 14 j 09:22	12° ₩ 19'29	0°08'20	behind sun begin	-10292 Nov 10 j 23:38	9° ™ 44'54	
min. Earth dist.	-10298 Nov 15 j 00:17	12°) 14′36	4.32128 AU	behind sun end	-10292 Nov 11 j 16:02	9° ™ 54'30	
direct	-10297 Jan 15 j 09:35	7° ₩ 16'04		max. Earth dist.	-10292 Nov 12 j 05:24	10° M 02′22	6.08523 AU
evening set	-10297 May 23 j 19:42			morning rise	-10292 Nov 24 j 14:41		
5 · • · · · · · · · · · · · · · · · · ·	,, j	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			-10291 Feb 20 j 21:42	0∘ ⊽	
conjunction	-10297 Jun 05 j 20:03	28°¥24'01	0°33'28	retrograde	-10291 Apr 05 j 03:45	° – 2° ⊆ 49'16	
minimum elong	-10297 Jun 05 j 20:00		0°33'24	retrograde	-10291 May 18 j 07:02		
max. Earth dist.	-10297 Jun 04 j 17:28			annagition	-10291 Jun 04 j 15:20	-	0047122
max. Earm dist.	3	28 χυ9 14 0° Υ	0.33914 AU	opposition	,	~	
	-10297 Jun 13 j 00:41			min. Earth dist.	-10291 Jun 03 j 20:11		4.06/60 AU
morning rise	-10297 Jun 18 j 16:46	1°Υ15'24		direct	-10291 Aug 01 j 23:51		
retrograde	-10297 Oct 17 j 05:41				-10291 Oct 10 j 01:00		
opposition	-10297 Dec 16 j 14:27		1°23'44	evening set	-10291 Dec 03 j 22:50	11° ≏ 48'20	
min. Earth dist.	-10297 Dec 17 j 11:15		4.34699 AU				
direct	-10296 Feb 17 j 02:16	8° Ƴ 36'49		conjunction	-10291 Dec 17 j 10:29	14° ≏ 57'46	-0°58'24
evening set	-10296 Jun 23 j 10:40	26° Ƴ 40'38		minimum elong	-10291 Dec 17 j 10:23	14° ≏ 57'43	0°58'30
max. Earth dist.	-10296 Jul 04 j 17:46	29° Ƴ 11'47	6.34211 AU	max. Earth dist.	-10291 Dec 18 j 19:54	15° ≏ 17'22	6.06129 AU
	·			morning rise	-10291 Dec 31 j 01:09	18° ≏ 08'48	
conjunction	-10296 Jul 06 j 01:25	29° Y ′29'30	1°17'56	C	-10290 Feb 24 j 04:41	0°M	
minimum elong		29° Y ′29'27	1°18'09	retrograde	-10290 May 11 j 05:50	8°M04'46	
minimum viong	-10296 Jul 08 j 07:58		1 10 0)	opposition	-10290 Jul 09 j 23:30	2°M59'41	-2°00'08
morning rise	-10296 Jul 18 j 13:50	2°817'10		min. Earth dist.	-10290 Jul 09 j 01:51	3°M07'04	4.06905 AU
morning rise	3			iiiii. Eartii tist.	,		4.00903 AU
	-10296 Sep 21 j 04:58			1:	-10290 Aug 02 j 15:28		
retrograde	-10296 Nov 17 j 08:46			direct	-10290 Sep 06 j 02:59		
	-10295 Jan 16 j 03:05				-10290 Oct 10 j 18:08	0°M	
opposition	-10295 Jan 17 j 08:06		2°14'57		-10290 Dec 31 j 09:36		
min. Earth dist.	-10295 Jan 18 j 05:53		4.32831 AU	evening set	-10289 Jan 09 j 21:12	17° M 10'24	
direct	-10295 Mar 20 j 17:23	9° 8 52'42					
	-10295 May 20 j 12:38	15° 8		conjunction	-10289 Jan 23 j 13:07	20°M20'22	-1°34'19
evening set	-10295 Jul 24 j 13:24	27° 8 54'32		minimum elong	-10289 Jan 23 j 13:03	20°M20'19	1°34'43
	-10295 Aug 02 j 19:52	\mathfrak{I}°		max. Earth dist.	-10289 Jan 24 j 19:51	20°M38'11	6.08634 AU
				morning rise	-10289 Feb 06 j 06:47	23°M31'04	
conjunction	-10295 Aug 05 j 22:40	0° Ⅱ 42'21	1°39'59	Č	-10289 Mar 07 j 06:42	0° ∡ ¹	
minimum elong	-10295 Aug 05 j 22:38	0° Ⅱ 42'20	1°40'28	retrograde	-10289 Jun 15 j 06:26		
max. Earth dist.	-10295 Aug 04 j 21:00	0° П 27'49	6.30210 AU	opposition	-10289 Aug 13 j 11:22	7° ∡ 56'42	-2°28'18
morning rise	-10295 Aug 18 j 06:53	3° Ⅱ 29'48	0.50210710	min. Earth dist.	-10289 Aug 12 j 18:49		
Č	0 3				U 3		4.11000 AU
retrograde	-10295 Dec 20 j 11:37		2027115	direct	-10289 Oct 11 j 05:36		
opposition	-10294 Feb 19 j 22:32		2°27'15	evening set	-10288 Feb 15 j 18:27	22° X '01'26	
min. Earth dist.	-10294 Feb 20 j 13:13		4.27033 AU				
direct	-10294 Apr 22 j 12:29			conjunction	-10288 Feb 29 j 11:31		
evening set	-10294 Aug 24 j 21:39			minimum elong	-10288 Feb 29 j 11:34		1°36'29
	-10294 Aug 25 j 22:45	0		max. Earth dist.	-10288 Mar 01 j 06:19		6.15065 AU
				morning rise	-10288 Mar 14 j 03:56	28° х 16′06	
conjunction	-10294 Sep 06 j 07:37	2° 5 36'36	1°32'28		-10288 Mar 21 j 20:19	0°ප	
minimum elong	-10294 Sep 06 j 07:41	2° © 36'38	1°33'03	retrograde	-10288 Jul 17 j 23:11	16° る 59'50	
max. Earth dist.	-10294 Sep 05 j 18:00	2°528'46	6.23061 AU	opposition	-10288 Sep 14 j 22:40	11° る 59'04	-2°04'20
morning rise	-10294 Sep 18 j 18:40	5° © 28'13		min. Earth dist.	-10288 Sep 14 j 17:01		
retrograde	-10293 Jan 24 j 01:34	24°907'40		direct	-10288 Nov 13 j 19:50		
opposition	-10293 Mar 26 j 13:19		1°54'03	evening set	-10287 Mar 22 j 12:01		
min. Earth dist.	-10293 Mar 26 j 17:12		4.18987 AU	evening sec	10207 11441 22 3 12.01	20 0 .0 10	
direct	-10293 May 26 j 00:24		4.10707 AC	conjunction	-10287 Apr 05 j 02:36	200₹40125	100440
unect					-10287 Apr 05 j 02:30 -10287 Apr 05 j 02:42		
	-10293 Sep 14 j 15:47			minimum elong			
evening set	-10293 Sep 26 j 05:22	2° 8(39'11		max. Earth dist.	-10287 Apr 05 j 01:29		6.230/5 AU
		0			-10287 Apr 10 j 07:48		
conjunction	-10293 Oct 08 j 22:36			morning rise	-10287 Apr 18 j 14:57		
minimum elong	-10293 Oct 08 j 22:41	5° Ω 36'48			-10287 Jun 23 j 18:32		
max. Earth dist.	-10293 Oct 09 j 02:52		6.14919 AU	retrograde	-10287 Aug 19 j 08:19	19° ≈ 48'35	
morning rise	-10293 Oct 21 j 18:34	8° Ω 35'53			-10287 Oct 16 j 12:38	15°R≈	
	-10293 Nov 19 j 06:52	15° Ω		opposition	-10287 Oct 17 j 13:42	14° ≈ 51'39	-1°00'51
retrograde	-10292 Feb 28 j 18:51			min. Earth dist.	-10287 Oct 17 j 19:46		
opposition	-10292 Apr 29 j 23:00		0°41'37	direct	-10287 Dec 17 j 16:19		
min. Earth dist.	-10292 Apr 29 j 13:03		4.11338 AU		-10286 Feb 16 j 20:25		
direct	-10292 Jun 28 j 03:37			evening set	-10286 Apr 25 j 14:19		
	-10292 Sep 29 j 08:08	0° m)		- ,	-10286 May 03 j 05:58		
avaning set		6° Mp 44'52			10200 Way 05 J 05.50	υ / (
evening set	-10292 Oct 29 j 04:36 -10292 Nov 03 j 00:35	7° My 52'42		aaniumati	10206 Mar- 00 : 22 41	1° ₩ 16'11	0012140
desc. node	-10272 INOV US J UU.SS	/ ny 32 42		conjunction	-10286 May 08 j 22:41	1 V 1011	-0 1347

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10286 in astronomical counting style is the year 10287 BCE in historical counting style. -10286 May 08 j 22:43 1°\(\mathbf{H}\) 16'12 0°14'10 -10280 Apr 18 j 19:51 30° R Ω minimum elong behind sun begin -10286 May 08 j 18:51 1°**H** 14'03 -10280 May 04 j 23:52 $27^{\circ}\Omega$ 56'31 $0^{\circ}29'18$ opposition -10286 May 09 j 02:34 1°**)** 18'20 min. Earth dist. -10280 May 04 j 12:15 $28^{\circ}\Omega$ 00'20 4.10689 AU behind sun end -10286 May 08 j 05:07 1°**米**06′24 6.30028 AU -10280 Jul 03 j 01:39 23° **Ω**03'23 max. Earth dist. direct -10286 May 22 j 03:34 4° **€** 12'27 -10280 Sep 09 j 08:44 0° mg morning rise -10280 Sep 12 j 07:33 -10286 Aug 16 j 12:33 19°\ 45'24 asc. node desc. node 0° Mp 32′45 -10286 Sep 20 j 00:49 21° **∺** 37'33 -10280 Nov 03 j 02:49 11° Mp 44'13 retrograde evening set -10286 Nov 18 j 18:33 16°**)** 43'54 0°19'18 opposition min. Earth dist. -10286 Nov 19 j 10:52 16°**米** 38'36 -10280 Nov 16 j 07:27 14° Mp 49'47 -0°09'49 4.32427 AU conjunction direct -10285 Jan 19 j 20:31 11° **∺** 40'45 minimum elong -10280 Nov 16 j 07:26 14° m 49'46 0°09'36 evening set -10285 May 28 j 04:59 29° **★** 54'43 behind sun begin -10280 Nov 16 j 00:38 14° m 45'48 -10285 May 28 j 14:33 $0^{\circ}\Upsilon$ -10280 Nov 16 j 14:13 14° m 53'44 behind sun end -10285 Jun 08 j 22:28 2°**Y**30'56 -10280 Nov 17 j 08:19 15° Mp 04'22 max. Earth dist. 6.33817 AU max. Earth dist. 6.08191 AU morning rise -10280 Nov 29 j 15:33 17° m 57'16 2°**Y**47'20 conjunction -10285 Jun 10 j 03:56 0°40'26 -10279 Jan 24 j 20:33 0∘ಹ minimum elong -10285 Jun 10 j 03:53 2°**Y**47'18 0°40'24 retrograde -10279 Apr 10 j 05:42 7°**£**51'04 morning rise -10285 Jun 22 j 23:38 5°**Y**38'16 opposition -10279 Jun 09 j 15:01 2°**△**47'03 -0°59'28 retrograde -10285 Oct 21 j 16:07 22°**Y**54'17 min. Earth dist. -10279 Jun 08 j 19:06 2°**2**53'45 4.06787 AU opposition -10285 Dec 21 j 01:56 18° \(\gamma \) 02'26 1°32'34 -10279 Jul 01 j 17:00 30°R Mp min. Earth dist. -10285 Dec 21 j 23:45 17° \begin{pmatrix} \cdot 55'26 \end{pmatrix} 4.34245 AU direct -10279 Aug 06 j 21:35 27° m 52'01 direct -10284 Feb 21 j 14:08 13°**Y**01'41 -10279 Sep 11 j 22:27 0°**♀** -10284 Jun 22 j 18:52 0°8 evening set -10279 Dec 09 j 01:17 16° **2**50'30 evening set -10284 Jun 27 j 18:45 1°**8**06'22 max. Earth dist. -10284 Jul 09 j 02:37 3°**8**38'15 6.33430 AU conjunction -10279 Dec 22 j 13:32 20° \(\Omega\)00'03 -1°05'07 minimum elong -10279 Dec 22 j 13:26 19°**2**59'59 1°05'15 -10284 Jul 10 j 08:42 3°855'07 1°22'29 max. Earth dist. -10279 Dec 23 j 22:03 20° **2**19'05 6.06473 AU conjunction -10284 Jul 10 j 08:37 3°**8**55'04 -10278 Jan 05 j 04:56 23°**♀**11'09 minimum elong 1°22'46 morning rise -10284 Jul 22 j 20:09 6°842'43 -10278 Feb 04 j 11:33 0°M morning rise -10284 Aug 31 j 00:28 15°8 -10278 May 16 j 03:13 13°ML04'10 retrograde -10284 Nov 21 j 21:50 24°**8**12'50 -10278 Jul 14 j 19:51 7°ML59'07 -2°07'05 retrograde opposition -10283 Jan 21 j 23:28 19°**8**20'57 2°19'11 -10278 Jul 13 j 22:18 8°ML06'28 4.07552 AU min. Earth dist. opposition -10283 Jan 22 j 20:00 19°**8**14'26 4.31803 AU -10278 Sep 11 j 00:55 3°ML00'49 min. Earth dist. direct -10283 Mar 05 j 02:27 15°R₩ -10278 Dec 13 j 22:07 15° ML -10283 Mar 25 j 05:51 14°**8**23'20 -10277 Jan 15 j 00:22 22° ML09'04 direct evening set -10283 Apr 14 j 10:11 15°**8** -10283 Jul 17 j 23:06 0°**Ⅱ** -10277 Jan 28 j 16:43 25°ML18'46 -1°36'41 conjunction -10283 Jul 28 j 22:39 2°**Ⅲ**26'59 -10277 Jan 28 j 16:40 25° ML 18'44 1°37'08 evening set minimum elong max. Earth dist. -10283 Aug 09 j 06:46 5°**Ц**01'04 6.29005 AU max. Earth dist. -10277 Jan 29 j 23:15 25°M 36'26 6.09527 AU morning rise -10277 Feb 11 j 10:12 28°M28'58 conjunction -10283 Aug 10 j 07:31 5°**I**I15'07 1°40'43 -10277 Feb 18 j 01:32 0° ⊀ -10283 Aug 10 j 07:30 5°**Ⅱ**15'07 1°41'13 retrograde -10277 Jun 20 j 01:10 17°**尽** 52'31 minimum elong -10283 Aug 22 j 15:54 8°**Д**03'06 -10277 Aug 18 j 03:47 12°**х** 48'58 -2°27'58 morning rise opposition retrograde -10283 Dec 25 j 08:04 26°**Д**06'00 min. Earth dist. -10277 Aug 17 j 13:12 12° ₹ 53'58 4.12665 AU -10282 Feb 24 j 18:45 21°**Ⅲ**12'12 2°25'16 -10277 Oct 16 j 01:30 7° ₹ 47'23 opposition direct min. Earth dist. -10282 Feb 25 j 08:12 21°**Д**07'56 4.25735 AU -10276 Feb 20 j 18:42 26° **₹**51'32 evening set direct -10282 Apr 27 j 05:55 16° **1**17'24 -10276 Mar 05 j 11:33 29° ₹ 58'33 -1°33'21 -10282 Aug 09 j 12:32 conjunction -10276 Mar 05 j 11:37 29° ₹ 58'35 1°33'57 evening set -10282 Aug 29 i 09:45 4°527'37 minimum elong -10276 Mar 05 j 14:06 0°る conjunction -10282 Sep 10 i 20:33 7°\$19'25 1°28'50 max. Earth dist. -10276 Mar 06 i 02:48 0°**⋜**07'14 6.16194 AU morning rise minimum elong -10282 Sep 10 i 20:37 7°\$19'27 1°29'26 -10276 Mar 19 j 03:43 3°る05'04 max. Earth dist. -10282 Sep 10 j 10:34 7°513'39 6.21795 AU retrograde -10276 Jul 22 j 11:14 21° 중42'01 -10282 Sep 23 j 08:31 10°511'59 -10276 Sep 19 j 11:40 16° ₹41'47 -1°57'27 morning rise opposition -10281 Jan 29 j 00:48 28°557'58 -10276 Sep 19 j 07:20 16°정43'15 4.20206 AU retrograde min. Earth dist. opposition -10281 Mar 31 j 12:55 24°500'55 1°45'46 direct -10276 Nov 18 j 12:05 11°る37'59 min. Earth dist. -10281 Mar 31 j 13:54 24°500'35 4.17850 AU -10275 Mar 25 j 07:47 0°≈ direct -10281 May 30 j 19:05 19°507'53 -10275 Mar 27 j 07:04 0°≈26'20 evening set -10281 Aug 28 j 03:47 0 $^{\circ}\Omega$ -10281 Sep 30 j 22:26 7°**Ω**31'03 conjunction -10275 Apr 09 j 21:05 3°≈29'01 -0°58'35 evening set 0°59'06 minimum elong -10275 Apr 09 j 21:10 3°≈29'04 -10281 Oct 13 j 16:53 $10^{\circ}\Omega$ 29'36 $0^{\circ}48'14$ conjunction max. Earth dist. -10275 Apr 09 j 17:27 3°**≈**26'59 6.24086 AU minimum elong -10281 Oct 13 j 16:58 $10^{\circ}\Omega$ 29'38 0°48'43 morning rise -10275 Apr 23 j 08:33 6°≈30'20 max. Earth dist. -10281 Oct 13 j 23:53 $10^{\circ}\Omega$ 33'41 6.14002 AU -10275 Jun 02 j 09:28 15°≈ morning rise -10281 Oct 26 j 14:22 13°**Ω**29'48 retrograde -10275 Aug 23 j 19:03 24°≈22'13 -10281 Nov 02 j 02:49 15°**Ω** opposition -10275 Oct 22 j 00:55 19°≈25'51 -0°50'13 -10280 Jan 20 j 04:36 0° Mp min. Earth dist. -10275 Oct 22 j 09:11 19°≈23'06 4.27659 AU retrograde -10280 Mar 04 j 21:42 2° m 57'29 -10275 Dec 02 j 01:50 15°R≈

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 12

•	nical year style is used: Th		_	· //			lage 12
direct	-10275 Dec 22 j 07:23	-	iii astronomicai c	ounting style is the yea	-10269 Oct 17 j 03:51		iC.
direct	-10274 Jan 11 j 17:26				-1020) Oct 17 J 05.51	15 66	
	-10274 Jan 17 j 17:20 -10274 Apr 17 j 04:56			conjunction	-10269 Oct 18 j 09:02	15°Ω17'02	0°40'52
evening set	-10274 Apr 30 j 04:36			minimum elong	-10269 Oct 18 j 09:06		0°41'19
		_ /(max. Earth dist.	-10269 Oct 18 j 19:36		
conjunction	-10274 May 13 j 11:51	5°){ 47'44	-0°06'09	morning rise	-10269 Oct 31 j 07:51		
minimum elong	-10274 May 13 j 11:51	5°) 47'45	0°06'27	C	-10269 Dec 25 j 03:42		
behind sun begin	-10274 May 13 j 04:11	5°) 43′30		retrograde	-10268 Mar 09 j 21:17	7° m/49'18	
behind sun end	-10274 May 13 j 19:31	5°) 51′59		opposition	-10268 May 09 j 21:27	2°Mp47'51	0°17'06
max. Earth dist.	-10274 May 12 j 15:34	5°) 36′27	6.30602 AU	min. Earth dist.	-10268 May 09 j 08:48	2° m 52'01	4.10211 AU
morning rise	-10274 May 26 j 15:37	8°) 43′19			-10268 Jun 01 j 13:06	30° R Ω	
asc. node	-10274 Jun 26 j 12:02	15° ∺ 19′05		direct	-10268 Jul 07 j 20:08	27° Ω 54'33	
retrograde	-10274 Sep 24 j 09:43	26°) €06′26		desc. node	-10268 Jul 24 j 08:58	28° Ω 21'59	
opposition	-10274 Nov 23 j 05:43	21° ℋ 13′08	0°30'23		-10268 Aug 12 j 17:54	0° ™	
min. Earth dist.	-10274 Nov 23 j 22:56		4.32734 AU	evening set	-10268 Nov 07 j 22:41	16°₩36'49	
direct	-10273 Jan 24 j 09:17						
	-10273 May 12 j 09:28	0 ° $\mathbf{\Upsilon}$		conjunction	-10268 Nov 21 j 04:20		
evening set	-10273 Jun 01 j 15:46			minimum elong	-10268 Nov 21 j 04:18	•	
max. Earth dist.	-10273 Jun 13 j 08:22	6° Y 59'06	6.33843 AU	max. Earth dist.	-10268 Nov 22 j 05:09	-	6.07920 AU
		••		morning rise	-10268 Dec 04 j 13:46		
conjunction	-10273 Jun 14 j 13:28	7° Y 15'19			-10267 Jan 05 j 08:14		
minimum elong	-10273 Jun 14 j 13:24	7° Υ 15'17	0°47'19	retrograde	-10267 Apr 15 j 02:51		
morning rise	-10273 Jun 27 j 07:49			opposition	-10267 Jun 14 j 10:58		
retrograde	-10273 Oct 26 j 03:04		1041104	min. Earth dist.	-10267 Jun 13 j 14:16		4.06752 AU
opposition	-10273 Dec 25 j 15:08		1°41'04	direct	-10267 Aug 11 j 16:28		
min. Earth dist.	-10273 Dec 26 j 13:08 -10272 Feb 26 j 03:38		4.34011 AU	evening set	-10267 Dec 14 j 01:10	21° 22 45'51	
direct	-10272 Feb 26 j 03:38 -10272 Jun 06 j 07:13	0° 8		aaniumatian	10267 Dec. 27 : 14:20	240 0 55127	1011112
evening set	-10272 Jul 00 j 07:13 -10272 Jul 02 j 03:46	_		conjunction minimum elong	-10267 Dec 27 j 14:20 -10267 Dec 27 j 14:14		
max. Earth dist.	-10272 Jul 13 j 10:00	_	6.32945 AU	max. Earth dist.	-10267 Dec 28 j 23:58		
max. Earm dist.	-102/2 Jul 13 J 10.00	8 O 00 34	0.32943 AU	morning rise	-10266 Jan 10 j 06:07		0.000/1 AU
conjunction	-10272 Jul 14 j 16:36	8° 8 24'05	1°26'40	morning rise	-10266 Jan 18 j 10:36		
minimum elong	-10272 Jul 14 j 16:31		1°26'59		-10266 Apr 07 j 05:24		
morning rise	-10272 Jul 27 j 03:25		1 2009	retrograde	-10266 May 21 j 00:33		
morning not	-10272 Aug 13 j 11:13			renograde	-10266 Jul 03 j 11:26		
retrograde	-10272 Nov 26 j 12:31			opposition	-10266 Jul 19 j 13:29		-2°13'00
opposition	-10271 Jan 26 j 15:48		2°22'41	min. Earth dist.	-10266 Jul 18 j 17:34		
min. Earth dist.	-10271 Jan 27 j 11:25			direct	-10266 Sep 15 j 20:23		
direct	-10271 Mar 29 j 20:30				-10266 Nov 24 j 04:43	15° ™	
	-10271 Jul 01 j 00:10	$\Pi^{\circ}0$		evening set	-10265 Jan 20 j 01:34	27°M02'24	
evening set	-10271 Aug 02 j 07:42	7° Ⅱ 00'22			-10265 Feb 01 j 21:28	0° ∡ ¹	
conjunction	-10271 Aug 14 j 16:33	9° Ⅱ 48'45	1°40'55	conjunction	-10265 Feb 02 j 18:07	0° ∡ 11′56	-1°38'20
minimum elong	-10271 Aug 14 j 16:33	9° Ⅱ 48'45	1°41'25	minimum elong	-10265 Feb 02 j 18:04	0° ∡ 11'54	1°38'48
max. Earth dist.	-10271 Aug 13 j 19:08	9° Ⅱ 36'34	6.28212 AU	max. Earth dist.	-10265 Feb 03 j 22:03		6.10114 AU
morning rise	-10271 Aug 27 j 00:51	12° Ⅲ 37′02		morning rise	-10265 Feb 16 j 11:46	3° ∡ ¹21'53	
	-10271 Dec 07 j 21:48	0 \circ \odot		retrograde	-10265 Jun 24 j 16:11		
retrograde	-10271 Dec 30 j 01:38	0°544'59		opposition	-10265 Aug 22 j 18:37		
	-10270 Jan 21 j 06:56			min. Earth dist.	-10265 Aug 22 j 04:45		4.13373 AU
opposition	-10270 Mar 01 j 13:54			direct	-10265 Oct 20 j 18:28		
min. Earth dist.	-10270 Mar 02 j 01:27		4.24881 AU		-10264 Feb 18 j 10:04		
direct	-10270 May 01 j 21:43			evening set	-10264 Feb 25 j 17:51	1° る 38'50	
	-10270 Jul 22 j 14:37				100(1)(10:10.0(40745100	1020111
evening set	-10270 Sep 02 j 20:57	9° © 07'15		conjunction	-10264 Mar 10 j 10:36		
aoniumati	10270 0 15:00:10	1100550141	1924144	minimum elong max. Earth dist.	-10264 Mar 10 j 10:40	4°る45'32	1°30'45 6.16986 AU
conjunction	-10270 Sep 15 j 08:19		1°24'44		-10264 Mar 10 j 23:03		0.10980 AU
minimum elong max. Earth dist.	-10270 Sep 15 j 08:24 -10270 Sep 14 j 23:48		1°25'19 6.20952 AU	morning rise	-10264 Mar 24 j 02:21 -10264 Jul 27 j 01:03	7°る51'29	
			0.20932 AU	retrograde	-10264 Jul 2/j 01:03 -10264 Sep 24 j 00:31		-1°/0'52
morning rise	-10270 Sep 27 j 21:23 -10270 Dec 14 j 03:09			opposition min. Earth dist.	-10264 Sep 24 j 00:31 -10264 Sep 23 j 22:44		
retrograde	-102/0 Dec 14 j 03:09 -10269 Feb 02 j 22:36			direct	-10264 Sep 23 j 22:44 -10264 Nov 23 j 05:37		7.40774 AU
renograue				ancei	-10264 Nov 23 j 05:37 -10263 Mar 08 j 16:32	0°≈	
		س مرتب ا			-10203 Iviai 08 J 10:32		
onnosition	-10269 Mar 26 j 19:22		1°36'55	evening set	-10263 Apr 01:02:12	5°2206'01	
opposition	-10269 Apr 05 j 10:07	28°5946'25	1°36'55 4 17054 AU	evening set	-10263 Apr 01 j 02:12	5°≈06'01	
min. Earth dist.	-10269 Apr 05 j 10:07 -10269 Apr 05 j 09:10	28°\$46'25 28°\$46'43		-			-0°51'58
**	-10269 Apr 05 j 10:07 -10269 Apr 05 j 09:10 -10269 Jun 04 j 12:45	28°\$46'25 28°\$46'43 23°\$53'25		conjunction	-10263 Apr 14 j 15:40	8° ≈ 08'12	
min. Earth dist.	-10269 Apr 05 j 10:07 -10269 Apr 05 j 09:10	28°\$46'25 28°\$46'43 23°\$53'25 0°\$\Omega\$		-			

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10263 in astronomical counting style is the year 10264 BCE in historical counting style. -10263 Apr 28 j 02:18 11°≈08'53 max. Earth dist. -10258 Sep 19 i 14:27 16°534'55 6.19959 AU morning rise -10263 May 15 j 15:30 15°≈ -10258 Oct 02 j 09:36 19°532'10 morning rise -10263 Aug 28 j 04:27 28°≈56'30 -10258 Nov 20 j 07:57 retrograde $0^{\circ}\Omega$ -10263 Oct 26 j 12:42 24°≈00'36 -0°39'13 opposition retrograde -10257 Feb 07 j 20:55 8°**Ω**28'54 -10263 Oct 26 j 21:29 23°≈57'41 3°**Ω**30'46 min. Earth dist. 4.28308 AU opposition -10257 Apr 10 j 06:51 1°27'29 -10263 Dec 26 j 21:30 18°≈56'29 -10257 Apr 10 j 04:54 3°**Q**31'24 4.16031 AU direct min. Earth dist. -10262 Mar 30 j 22:46 0°**∀** -10257 May 10 j 17:25 30°Rூ -10257 Jun 09 j 05:29 28°\$37'52 evening set -10262 May 04 j 19:21 7°**₩**23'27 direct asc. node -10262 May 05 j 22:01 7°**∺**38'11 -10257 Jul 08 j 11:34 0°**Ω** max. Earth dist. -10262 May 17 j 03:40 10° **★** 08'03 6.31125 AU -10257 Oct 01 j 04:51 15° Ω evening set -10257 Oct 10 j 04:29 17° **Ω**04'21 -10262 May 18 j 01:23 10° **€** 20'08 0°01'44 conjunction -10262 May 18 j 01:21 10° **₭** 20'07 -10257 Oct 23 j 01:34 20° Ω 04'46 0°33'13 minimum elong 0°01'29 conjunction behind sun begin -10262 May 17 j 17:12 10° ¥ 15'36 minimum elong -10257 Oct 23 j 01:38 20° Ω04'48 0°33'40 behind sun end -10262 May 18 j 09:30 10°**米**24'38 max. Earth dist. -10257 Oct 23 j 12:41 20°**Ω**11'16 6.12380 AU morning rise -10262 May 31 j 03:56 13° **∺** 15'00 morning rise -10257 Nov 05 j 02:04 23°**Ω**07'02 -10262 Sep 09 j 10:17 0°**℃** -10257 Dec 05 j 18:02 0° M retrograde -10262 Sep 28 j 20:38 0°**Υ**36'16 retrograde -10256 Mar 14 j 19:56 12° m 42'56 -10262 Oct 18 j 05:41 30°R € opposition -10256 May 14 j 19:14 7° mp 40'59 opposition -10262 Nov 27 j 18:04 25° **X** 43'18 0°41'22 min. Earth dist. -10256 May 14 j 04:44 7° Mp 45'46 4.09385 AU min. Earth dist. -10262 Nov 28 j 12:35 25°**)** 37'18 4.33090 AU desc. node -10256 Jun 04 j 12:35 5° m 05'22 direct -10261 Jan 29 i 00:44 20° **)** (40'44 direct -10256 Jul 12 j 14:13 2° m 47'27 -10261 Apr 24 j 13:44 $0^{\circ}\Upsilon$ evening set -10256 Nov 12 j 20:07 21° m 32'54 evening set -10261 Jun 06 j 02:40 8°**Υ**52'08 conjunction -10256 Nov 26 j 03:11 24° m 39'54 -0°26'14 -10261 Jun 18 j 23:02 11°**Υ**43'33 0°53'58 minimum elong -10256 Nov 26 j 03:09 24° m 39'53 0°26'07 conjunction -10261 Jun 18 j 22:57 11°**Υ**'43'30 0°54'02 max. Earth dist. -10256 Nov 27 j 06:40 24° m 56'02 6.07306 AU minimum elong max. Earth dist. -10261 Jun 17 j 17:16 11°**Υ**26'58 6.33981 AU -10256 Dec 09 j 13:39 27° m 48'47 morning rise -10261 Jul 01 j 16:11 14°**Y**33'22 -10256 Dec 19 j 00:39 0°**♀** morning rise -10261 Sep 25 j 18:50 0°8 d -10255 Apr 20 j 04:51 17°**♀**45'22 retrograde -10261 Oct 30 j 13:32 1°851'28 -10255 Jun 19 j 08:52 12° **2**40'51 -1°21'32 retrograde opposition -10261 Dec 04 j 17:25 30°R℃ -10255 Jun 18 j 12:46 12°**-**47'38 4.06414 AU min. Earth dist. opposition -10261 Dec 30 j 04:44 26°**Υ**59'46 1°48'59 direct -10255 Aug 16 j 14:04 7°**-**244'56 -10261 Dec 31 j 02:05 26° **Y** 52'58 4.33942 AU min. Earth dist. -10255 Dec 19 j 03:56 26°**£**47'48 evening set -10260 Mar 01 j 16:45 21°**Υ**59'55 direct -10260 May 18 j 21:31 0°8 -10254 Jan 01 j 17:43 29°**2**57'52 -1°16'52 conjunction -10260 Jul 06 j 12:23 10°**8**03'33 -10254 Jan 01 j 17:37 29°**2**57'49 1°17'07 evening set minimum elong max. Earth dist. -10260 Jul 17 j 19:40 12°**8**35'35 6.32648 AU -10254 Jan 01 j 21:21 0°M max. Earth dist. -10254 Jan 03 j 02:25 0°ML16'58 6.06608 AU conjunction -10260 Jul 19 j 00:20 12°**8**51'42 1°30'20 morning rise -10254 Jan 15 j 10:12 3°ML09'16 -10260 Jul 19 j 00:16 12°**8**51'40 1°30'41 -10254 Mar 11 j 17:13 15°M minimum elong -10260 Jul 28 j 12:39 15°8 retrograde -10254 May 25 j 22:06 22°M58'02 -10260 Jul 31 j 10:17 15°**8**38'57 -10254 Jul 24 j 09:38 17°ML53'11 -2°18'07 morning rise opposition -10260 Oct 14 j 23:15 0°**П** min. Earth dist. -10254 Jul 23 j 13:22 18°ML00'07 4.08217 AU -10260 Dec 01 j 02:30 3°**Д**16'05 -10254 Aug 15 j 23:30 15°RM retrograde -10259 Jan 18 j 09:48 30° R ₩ -10254 Sep 20 j 16:44 12°ML53'56 direct -10259 Jan 31 i 07:34 28°\(\mathbf{2}23\)'52 2°25'19 -10254 Oct 26 j 15:41 15°M opposition -10259 Feb 01 i 02:47 28° \$\begin{align*} 217'47 4.30613 AU min. Earth dist. -10253 Jan 16 i 04:22 0° ⊀ -10259 Apr 03 j 10:59 23°**8**27'06 -10253 Jan 25 j 06:08 direct evening set 2°**х** 04′06 -10259 Jun 11 i 13:51 0°**Ⅱ** -10259 Aug 06 i 15:56 11° II 31'06 conjunction -10253 Feb 07 j 22:57 5° ₹ 13'30 -1°39'20 evening set max. Earth dist. -10259 Aug 18 j 03:14 14°**Д**07'34 6.27484 AU minimum elong -10253 Feb 07 j 22:56 5° ₹ 13'29 1°39'49 max. Earth dist. -10253 Feb 09 j 01:19 5° ₹28'43 6.10636 AU conjunction -10259 Aug 19 j 00:35 14° II 19'43 1°40'30 morning rise -10253 Feb 21 j 16:33 8° ₹23'10 minimum elong -10259 Aug 19 j 00:35 14° II 19'43 1°41'03 retrograde -10253 Jun 29 j 12:05 27°**х** 36'48 morning rise -10259 Aug 31 j 09:14 17°**耳**08'25 opposition -10253 Aug 27 j 12:32 22°₹34'03 -2°24'16 -10253 Aug 27 j 00:46 22° 38'04 4.14120 AU-10259 Nov 03 j 03:36 min. Earth dist. -10258 Jan 03 j 19:20 5°921'27 direct -10253 Oct 25 j 16:22 17° ₹31'43 retrograde -10258 Mar 06 j 08:18 0°ഇ26'51 -10252 Jan 31 j 19:52 0°궁 opposition 2°18'41 -10258 Mar 06 j 18:04 -10252 Mar 01 j 19:56 6°**ප**34'16 min. Earth dist. 0°923'45 4.23977 AU evening set -10258 Mar 09 j 20:46 30°RⅡ direct -10258 May 06 j 12:13 25°**Ⅲ**32'38 conjunction -10252 Mar 15 j 12:36 9°**ට**40'31 -1°26'19 -10258 Jun 30 j 16:45 0°5 minimum elong -10252 Mar 15 j 12:41 9°**る**40'33 1°26'53 evening set -10258 Sep 07 j 07:12 13°544'37 max. Earth dist. -10252 Mar 16 j 00:04 9°**ට**47'01 6.17927 AU morning rise -10252 Mar 29 j 03:50 12°₹45'55 -10258 Sep 19 j 19:35 16°537'53 1°20'08 -10252 Jul 04 j 16:51 conjunction

-10252 Jul 31 j 14:54

retrograde

1°**≈**11′00

-10258 Sep 19 j 19:40 16°537'55

minimum elong

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10252 in astronomical counting style is the year 10253 BCE in historical counting style. -10252 Aug 27 j 09:52 30°R ₹ morning rise -10247 Sep 04 j 14:45 21°**Д**32'35 opposition -10252 Sep 28 j 16:00 26°る11'52 -1°41'23 -10247 Oct 13 j 21:00 0°5 min. Earth dist. -10252 Sep 28 j 14:24 26°る12'24 4.22059 AU -10246 Jan 08 j 11:04 retrograde 9°950'25 -10246 Mar 10 j 23:35 4°555'27 -10252 Nov 28 j 00:10 21°る07'51 direct opposition 2°14'15 -10251 Feb 17 j 18:05 4.23059 AU 0°≈ min. Earth dist. -10246 Mar 11 j 09:19 4°**©**52'21 -10251 Apr 05 j 23:12 evening set 9°**≈**51'42 direct -10246 May 11 j 00:40 0°501'28 evening set -10246 Sep 11 j 15:06 18°514'53 -10251 Apr 19 j 11:41 12°≈53'04 -0°44'56 conjunction -10251 Apr 19 j 11:46 12°≈53'06 0°45'24 minimum elong conjunction -10246 Sep 24 j 04:18 21°509'00 1°15'11 1°15'44 max. Earth dist. -10251 Apr 19 j 03:32 12°≈48'30 6.25976 AU minimum elong -10246 Sep 24 j 04:23 21°509'03 -10251 Apr 28 j 22:29 15°≈ max. Earth dist. -10246 Sep 23 j 23:06 21°505'59 6.18843 AU -10251 May 02 j 21:27 15°≈52'54 -10246 Oct 06 j 19:41 24°504'21 morning rise morning rise -10251 Jul 15 j 08:02 0°**∀** -10246 Nov 02 j 07:25 0°**Ω** retrograde -10251 Sep 01 j 17:00 3°**₩**34'57 retrograde -10245 Feb 12 j 15:08 13° **Ω**07'19 -10251 Oct 20 j 19:08 30°R≈ opposition -10245 Apr 15 j 00:41 8°**Ω**08'40 1°17'45 opposition -10251 Oct 31 j 02:23 28°≈39'30 -0°27'55 min. Earth dist. -10245 Apr 14 j 20:43 8°**Ω**09'58 4.14791 AU min. Earth dist. -10251 Oct 31 j 13:00 28°≈35'59 4.29435 AU direct -10245 Jun 13 j 18:20 3°**Ω**15'46 direct -10251 Dec 31 j 16:34 23°≈35'32 -10245 Sep 14 j 17:00 15°**Ω** -10250 Mar 10 j 13:49 0°₩ evening set -10245 Oct 14 j 17:57 21° Ω 45'41 asc. node -10250 Mar 15 j 11:46 0° ¥ 50'20 evening set -10250 May 09 j 10:15 11° **X** 58'39 conjunction -10245 Oct 27 j 16:38 $24^{\circ}\Omega 47'19 = 0^{\circ}25'33$ minimum elong -10245 Oct 27 j 16:41 24° Ω 47'21 0°25'56 conjunction -10250 May 22 j 15:02 14° \ 54'22 0°09'29 max. Earth dist. -10245 Oct 28 i 06:41 $24^{\circ}\Omega$ 55'32 6.11154 AU minimum elong -10250 May 22 j 15:01 14° ¥ 54'21 0°09'16 morning rise -10245 Nov 09 j 18:30 $27^{\circ}\Omega$ 50'46 behind sun begin -10250 May 22 j 08:12 14° ¥ 50'35 -10245 Nov 19 j 02:27 0° m -10250 May 22 j 21:50 14° **H** 58'08 -10244 Mar 19 j 20:15 17° m 32'31 behind sun end retrograde -10250 May 21 j 17:14 14° + 42'15 6.32157 AU -10244 Apr 16 j 18:33 16° m 19'13 max Earth dist desc. node -10250 Jun 04 j 16:08 17° **X** 48'14 -10244 May 19 j 15:36 12° m 30'10 -0°07'29 morning rise opposition -10250 Aug 05 j 06:13 0°**Υ** min. Earth dist. -10244 May 19 j 01:03 12° m 35'00 4.08278 AU -10250 Oct 03 j 04:36 5° \(\gamma \) 06'03 -10244 Jul 17 j 08:03 7° **m** 36'27 retrograde direct -10244 Nov 17 j 17:17 26° m 26'21 $-10250 \text{ Dec } 02 \text{ j } 06:13 \quad 0^{\circ} \Upsilon 13'19 \quad 0^{\circ} 51'59$ evening set opposition -10250 Dec 03 j 00:19 0°**Y**07'28 4.33963 AU min. Earth dist. -10250 Dec 03 j 23:24 30°R € -10244 Dec 01 j 01:29 29° m 34'16 -0°34'08 conjunction -10249 Feb 02 j 14:20 25°**米** 11'03 -10244 Dec 01 j 01:25 29° mg 34'14 0°34'03 direct minimum elong -10249 Apr 02 j 21:31 0°**Υ** max. Earth dist. -10244 Dec 02 j 05:17 29° m 50'36 6.06425 AU -10249 Jun 10 j 12:24 13°**Υ**18'59 -10244 Dec 02 j 21:17 0°**♀** evening set -10249 Jun 22 j 01:08 15° Υ 52'42 6.34619 AU -10244 Dec 14 j 13:18 2°**△**44'04 max. Earth dist. morning rise retrograde -10243 Apr 25 j 04:20 22°**♀**43'27 conjunction -10249 Jun 23 j 07:14 16°**Υ**09'28 1°00'11 min. Earth dist. -10243 Jun 23 j 08:16 17°**Ω**46'04 4.05883 AU minimum elong -10249 Jun 23 j 07:09 16°**Υ**09'26 1°00'18 opposition -10243 Jun 24 j 05:49 17°**2**38'46 -1°31'42 morning rise -10249 Jul 05 j 23:07 18°**Y**58'29 direct -10243 Aug 21 j 08:36 12°**♀**42'28 -10249 Aug 29 j 10:32 0°8 -10243 Dec 16 j 10:23 0°M -10249 Nov 03 j 23:40 6°**8**15'57 -10243 Dec 24 j 07:09 retrograde evening set -10248 Jan 03 j 16:57 1°**8**24'19 1°56'02 opposition min. Earth dist. -10248 Jan 04 j 15:13 1°**8**17'14 4.34295 AU conjunction -10242 Jan 06 j 21:41 4°ML59'27 -1°21'55 -10248 Jan 14 j 21:21 30° R**Y** -10242 Jan 06 j 21:36 4°ML59'24 1°22'12 minimum elong $-10248 \text{ Mar } 06 \text{ j } 06:28 \quad 26^{\circ} \Upsilon 24'50$ -10242 Jan 08 j 06:43 5°ML18'45 6.06468 AU direct max. Earth dist. -10248 Apr 25 i 16:52 0°8 -10242 Jan 20 j 14:36 8°ML11'03 morning rise -10242 Feb 19 j 22:51 15°M evening set -10248 Jul 10 j 18:21 14°826'01 -10248 Jul 13 j 07:10 15°8 retrograde -10242 May 30 j 21:00 27° ML58'03 max. Earth dist. -10248 Jul 22 j 00:18 16°**8**57'23 6.32662 AU min. Earth dist. -10242 Jul 28 j 10:32 22°ML59'52 4.08488 AU -10242 Jul 29 j 05:41 22°M 53'18 -2°22'09 opposition -10248 Jul 23 j 05:25 17°**8**13'45 1°33'23 direct -10242 Sep 25 j 15:02 17°M 53'35 conjunction -10248 Jul 23 j 05:21 17°**8**13'43 1°33'45 minimum elong -10242 Dec 29 j 12:54 0°×7 morning rise -10248 Aug 04 j 14:46 20°**8**00'43 evening set -10241 Jan 30 j 10:33 7°**҂**04'37 -10248 Sep 21 j 15:31 0°**П** -10248 Dec 05 j 13:01 7°**Д**40'13 retrograde conjunction -10241 Feb 13 j 03:41 10°**х** 13'51 -1°39'33 -10247 Feb 04 j 20:44 2°**I**47'44 2°26'59 minimum elong -10241 Feb 13 j 03:41 10° ₹ 13'51 1°40'05 opposition -10247 Feb 05 j 14:43 2°**II**42'02 4.30291 AU -10241 Feb 14 j 06:09 10° ₹29'06 6.11291 AU min. Earth dist. max. Earth dist. -10247 Feb 28 j 08:57 30°R8 -10241 Feb 26 j 21:09 13°**尽**23'09 morning rise -10247 Apr 07 j 21:17 27°**8**51'17 direct -10241 May 25 j 08:56 0°る -10247 May 16 j 00:48 0°**Ⅱ** retrograde -10241 Jul 04 j 05:21 2° 중30'54 evening set -10247 Aug 10 j 21:12 15°**Ⅲ**54'40 -10241 Aug 12 j 20:25 30°R ⊀ max. Earth dist. -10247 Aug 22 j 10:36 18°**Ⅲ**32'29 6.26853 AU opposition -10241 Sep 01 j 05:49 27° ₹28'32 -2°20'51 min. Earth dist. -10241 Aug 31 j 18:10 27°**尽**32'31 4.15081 AU -10247 Aug 23 j 05:57 18°**Д**43'32 1°39'31 -10241 Oct 30 j 12:19 22° ₹25'54 conjunction direct

-10240 Jan 11 j 23:22 0°**ਰ**

-10247 Aug 23 j 05:58 18°Д43'33 1°40'05

minimum elong

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 15 Attention, astronomical year style is used: The year -10240 in astronomical counting style is the year 10241 BCE in historical counting style.

Attention, astronom	nical year style is used: The	e year -10240	in astronomical co	ounting style is the year	r 10241 BCE in historica	l counting sty	le.
evening set	-10240 Mar 06 j 20:53	11° ට 26'18		minimum elong	-10235 Aug 27 j 15:07		
				max. Earth dist.	-10235 Aug 26 j 20:37		6.25691 AU
conjunction	-10240 Mar 20 j 13:04			morning rise	-10235 Sep 09 j 00:31		
minimum elong	-10240 Mar 20 j 13:09				-10235 Sep 26 j 07:39		
max. Earth dist.	-10240 Mar 20 j 21:10		6.19094 AU	retrograde	-10234 Jan 13 j 06:27		
morning rise	-10240 Apr 03 j 03:51			opposition	-10234 Mar 15 j 19:47		
	-10240 Jun 02 j 22:29			min. Earth dist.	-10234 Mar 16 j 02:54		4.21766 AU
retrograde	-10240 Aug 05 j 04:39			direct	-10234 May 15 j 15:15		
opposition	-10240 Oct 03 j 06:13			evening set	-10234 Sep 16 j 04:01	22°959'06	
min. Earth dist.	-10240 Oct 03 j 06:50		4.23277 AU		100246 20:10.27	250054117	1000120
J: 4	-10240 Oct 10 j 05:38			conjunction	-10234 Sep 28 j 18:27		1°09'30
direct	-10240 Dec 02 j 20:06			minimum elong	-10234 Sep 28 j 18:32		1°10'03
	-10239 Jan 25 j 08:24 -10239 Apr 10 j 18:00			max. Earth dist.	-10234 Sep 28 j 16:55 -10234 Oct 11 j 11:02		6.17556 AU
evening set	-10239 Apr 10 j 18:00 -10239 Apr 12 j 20:06			morning rise	-10234 Oct 11 j 11:36		
	-10239 Apr 12 j 20.00	13 🗢			-10234 Oct 10 j 11:50 -10233 Jan 03 j 10:55		
conjunction	-10239 Apr 24 j 05:46	17°∞32'//5	-0°37'41	retrograde	-10233 Feb 17 j 17:03		
minimum elong	-10239 Apr 24 j 05:50			retrograde	-10233 Apr 04 j 07:59		
max. Earth dist.	-10239 Apr 23 j 20:46			opposition	-10233 Apr 04 j 07:37 -10233 Apr 20 j 00:14		1°06'59
morning rise	-10239 May 07 j 14:18		0.27140710	min. Earth dist.	-10233 Apr 19 j 19:15		
morning rise	-10239 Jun 22 j 00:07			direct	-10233 Jun 18 j 14:48		1.13017 110
retrograde	-10239 Sep 06 j 01:58			4.1.001	-10233 Aug 25 j 19:36		
opposition	-10239 Nov 04 j 14:13		-0°16'34	evening set	-10233 Oct 19 j 13:17		
min. Earth dist.	-10239 Nov 05 j 01:20					_, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	-10239 Dec 01 j 06:28			conjunction	-10233 Nov 01 j 13:18	29° Ω 44'03	0°17'20
direct	-10238 Jan 05 j 06:57			minimum elong	-10233 Nov 01 j 13:20		0°17'40
asc. node	-10238 Jan 23 j 17:03			max. Earth dist.	-10233 Nov 02 j 05:28		6.10234 AU
	-10238 Feb 09 j 16:19				-10233 Nov 02 j 16:29		
evening set	-10238 May 13 j 23:24			morning rise	-10233 Nov 14 j 16:51		
max. Earth dist.	-10238 May 26 j 01:57	19°) 10′49	6.32884 AU	desc. node	-10232 Feb 25 j 17:16	21° Mp 20'20	
				retrograde	-10232 Mar 24 j 22:07	22° m/34'18	
conjunction	-10238 May 27 j 02:41	19° ∺ 24'34	0°17'07	opposition	-10232 May 24 j 15:58	17° m 31'32	-0°20'08
minimum elong	-10238 May 27 j 02:39	19°) 24′33	0°16'57	min. Earth dist.	-10232 May 23 j 22:46	17° m 37'16	4.07746 AU
morning rise	-10238 Jun 09 j 02:37			direct	-10232 Jul 22 j 04:48	12° m 37'35	
	-10238 Jul 15 j 14:51	0 ° Υ			-10232 Nov 16 j 08:12	0∘ ত	
retrograde	-10238 Oct 07 j 15:16			evening set	-10232 Nov 22 j 18:34	1° ≏ 29'43	
opposition	-10238 Dec 06 j 18:01		1°02'17				
min. Earth dist.	-10238 Dec 07 j 14:02		4.34374 AU	conjunction	-10232 Dec 06 j 03:53		
	-10237 Jan 23 j 00:48			_	-10232 Dec 06 j 03:49		
direct	-10237 Feb 07 j 04:51			max. Earth dist.	-10232 Dec 07 j 10:01		6.06333 AU
	-10237 Feb 22 j 09:02			morning rise	-10232 Dec 19 j 16:37		
evening set	-10237 Jun 14 j 21:23		C 24650 ATT	retrograde	-10231 Apr 30 j 05:23		4.06260.444
max. Earth dist.	-10237 Jun 26 j 08:56	20° ¥ 18'33	6.34659 AU	min. Earth dist.	-10231 Jun 28 j 07:04		
aaniumatian	10227 Jun 27: 15:04	200025121	1°06'07	opposition direct	-10231 Jun 29 j 04:31		-1°41′18
conjunction	-10237 Jun 27 j 15:04 -10237 Jun 27 j 14:59		1°06'16	direct	-10231 Aug 26 j 08:14		
minimum elong morning rise	-10237 Jun 27 j 14:59 -10237 Jul 10 j 05:42		1 00 10	evening set	-10231 Nov 28 j 22:22 -10231 Dec 29 j 10:52		
morning 1150	-10237 Jul 10 j 03:42 -10237 Aug 10 j 02:37			evening set	10231 DCC 29 J 10.32	0 1163141	
retrograde	-10237 Aug 10 j 02:37 -10237 Nov 08 j 09:49			conjunction	-10230 Jan 12 j 01:56	10°M.01'56	-1°26'24
opposition	-10236 Jan 08 j 06:08		2°02'38	minimum elong	-10230 Jan 12 j 01:51		
min. Earth dist.	-10236 Jan 09 j 03:32		4.33989 AU	max. Earth dist.	-10230 Jan 13 j 11:56		
direct	-10236 Mar 10 j 17:27			morning rise	-10230 Jan 25 j 19:03		
	-10236 Jun 27 j 08:46			Ü	-10230 Feb 02 j 12:54		
evening set	-10236 Jul 15 j 02:06				-10230 Apr 22 j 10:48		
max. Earth dist.	-10236 Jul 26 j 07:55		6.32017 AU	retrograde	-10230 Jun 04 j 16:09		
	,			C	-10230 Jul 17 j 14:45		
conjunction	-10236 Jul 27 j 12:24	21° 8 41'11	1°36'00	opposition	-10230 Aug 02 j 24:00		-2°25'02
minimum elong	-10236 Jul 27 j 12:20	21° 8 41'10	1°36'25	min. Earth dist.	-10230 Aug 02 j 04:58	27°M56'16	4.09636 AU
morning rise	-10236 Aug 08 j 21:16	24° 8 28'12		direct	-10230 Sep 30 j 11:03	22°M49'35	
	-10236 Sep 03 j 05:47	$\Pi^{\circ}0$			-10230 Dec 09 j 15:11	0° ∡ ¹	
retrograde	-10236 Dec 10 j 05:47	12° Ⅱ 12′28		evening set	-10229 Feb 04 j 12:09	11° ∡ 58′09	
opposition	-10235 Feb 09 j 13:10	7° Ⅱ 19'46	2°27'57				
min. Earth dist.	-10235 Feb 10 j 07:25		4.29350 AU	conjunction	-10229 Feb 18 j 05:06	15° ∡ ¹06'43	-1°39'05
direct	-10235 Apr 12 j 11:47			minimum elong	-10229 Feb 18 j 05:07		
evening set	-10235 Aug 15 j 06:04	20° Ⅱ 28'30		max. Earth dist.	-10229 Feb 19 j 03:58		6.12659 AU
				morning rise	-10229 Mar 03 j 22:26		
conjunction	-10235 Aug 27 j 15:05	23° ∐ 17'57	1°37'55		-10229 Apr 28 j 21:18	ぴる	

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10229 in astronomical counting style is the year 10230 BCE in historical counting style. retrograde -10229 Jul 08 j 18:34 7°る14'51 max. Earth dist. -10223 Aug 31 j 10:28 27°**Д**47'18 6.24309 AU -10229 Sep 05 j 19:09 2°る12'53 -2°16'34 opposition min. Earth dist. -10229 Sep 05 j 09:41 2°る16'07 4.16520 AU -10223 Sep 01 j 02:09 27° II 56'18 1°35'38 conjunction -10229 Sep 22 j 15:47 30°R ⊀ -10223 Sep 01 j 02:11 27°**Д**56'20 1°36'12 minimum elong direct -10229 Nov 04 j 07:00 27°**尽** 09'50 -10223 Sep 10 j 01:56 0°ഇ -10223 Sep 13 j 12:15 -10229 Dec 17 j 07:05 0°る morning rise 0°9546'59 -10228 Mar 11 j 16:39 16°**⋜**06'33 evening set retrograde -10222 Jan 18 j 06:13 19°518'40 opposition -10222 Mar 20 j 18:07 14°522'46 2°02'22 min. Earth dist. conjunction -10228 Mar 25 j 08:34 19°♂11'26 -1°17'05 -10222 Mar 20 j 23:56 14°520'55 4.20422 AU minimum elong -10228 Mar 25 j 08:40 19°♂11'29 1°17'39 direct -10222 May 20 j 10:33 9°529'19 max. Earth dist. -10228 Mar 25 j 14:55 19°♂15'01 6.20497 AU evening set -10222 Sep 20 j 19:17 27°547'47 -10228 Apr 07 j 22:31 22°쥥15'13 -10222 Sep 30 j 07:14 0°**Ω** morning rise -10228 May 13 j 22:30 0°≈ retrograde -10228 Aug 09 j 13:13 10°≈26'05 conjunction -10222 Oct 03 j 10:54 0°**Ω**44'01 1°03'13 opposition -10228 Oct 07 j 15:51 5°≈27'57 -1°23'07 minimum elong -10222 Oct 03 j 10:59 0°**Ω**44'04 1°03'46 min. Earth dist. -10228 Oct 07 j 18:02 5°**≈**27'14 4.24500 AU max. Earth dist. -10222 Oct 03 j 12:17 $0^{\circ} \Omega 44'49$ 6.16384 AU direct -10228 Dec 07 j 09:19 0°**≈**23'43 morning rise -10222 Oct 16 j 04:59 3°**Ω**41'40 -10227 Mar 27 j 21:55 15°≈ -10222 Dec 08 j 05:37 15°**Ω** evening set -10227 Apr 15 j 07:45 19°≈00'49 retrograde -10221 Feb 22 j 18:06 22° **Ω**57'01 opposition -10221 Apr 25 j 00:52 $17^{\circ}\Omega$ 57'20 conjunction -10227 Apr 28 j 18:27 22°≈00'37 -0°30'32 min. Earth dist. -10221 Apr 24 j 16:48 17° **Ω**59'58 4.12706 AU minimum elong -10227 Apr 28 j 18:30 22°≈00'38 0°30'56 -10221 May 19 j 10:27 15°RΩ max. Earth dist. -10227 Apr 28 j 04:52 21°≈53'02 6.28082 AU direct -10221 Jun 23 j 10:35 13° Ω 04'29 morning rise -10227 May 12 j 02:09 24°≈58'45 -10221 Jul 28 j 01:44 15°Ω -10227 Jun 04 i 05:41 0°**米** -10221 Oct 17 j 06:26 0° m -10227 Sep 10 j 09:30 12° ¥ 31'44 -10221 Oct 24 j 10:03 1° m 39'30 retrograde evening set opposition -10227 Nov 08 j 22:39 7° **★** 37'09 -0°05'36 -10227 Nov 09 j 12:16 7° **★** 32'40 4.31019 AU -10221 Nov 06 j 11:27 4° m 43'01 0°08'54 min. Earth dist. conjunction -10227 Dec 05 j 23:18 4° **∺**22'03 -10221 Nov 06 j 11:28 4° m 43'02 0°09'12 asc node minimum elong -10226 Jan 09 j 18:53 2° **∺** 33'25 -10221 Nov 06 j 04:33 4° m 39'00 direct behind sun begin -10226 May 18 j 08:44 20°**米** 51'59 evening set -10221 Nov 06 j 18:22 4° mp 47'04 behind sun end -10226 May 30 j 09:31 23° **∺** 32'06 6.33080 AU -10221 Nov 07 j 06:33 4° m 54'14 max. Earth dist. max. Earth dist. 6.09645 AU morning rise -10221 Nov 19 j 16:22 7° Mp 48'29 -10220 Jan 04 j 20:16 17° Mp 54'52 -10226 May 31 j 10:57 23° ¥ 46'14 0°24'24 conjunction desc. node -10226 May 31 j 10:55 23° **€** 46'13 0°24'16 -10220 Mar 30 j 01:33 27° m 36'40 minimum elong retrograde -10226 Jun 13 j 09:29 26° ★ 38'42 -10220 May 29 j 16:29 22° m 33'27 -0°32'43 morning rise opposition -10226 Jun 28 j 18:38 0°**Υ** -10220 May 28 j 22:36 22° m 39'25 4.07507 AU min. Earth dist. retrograde -10226 Oct 11 j 22:13 13°**Υ**54'52 direct -10220 Jul 27 j 04:04 17° m 39'11 opposition -10226 Dec 11 j 03:30 9°**Υ**02'39 1°11'58 -10220 Oct 29 j 22:51 0°**♀** min. Earth dist. -10226 Dec 11 j 23:45 8°**Y**56'08 4.34183 AU evening set -10220 Nov 27 j 20:13 6°**♀**32'43 direct -10225 Feb 11 j 13:46 4°**Y**01'04 -10225 Jun 19 j 04:58 22°**Υ**'07'41 conjunction -10220 Dec 11 j 06:32 9°**2**41'29 -0°49'37 evening set -10220 Dec 11 j 06:27 9°**2**41'26 0°49'40 minimum elong -10225 Jul 01 j 21:22 24°**Υ**'57'19 1°11'32 max. Earth dist. -10220 Dec 12 j 14:38 10°**2**00'18 6.06445 AU conjunction -10225 Jul 01 j 21:17 24°**Υ**'57'16 1°11'43 -10220 Dec 24 j 20:05 12° **2**51'57 minimum elong morning rise -10225 Jun 30 j 13:33 24°**Y**39'32 6.34080 AU -10219 Mar 23 j 09:28 0°M max. Earth dist. -10225 Jul 14 j 11:10 27°**Y**45'39 morning rise retrograde -10219 May 05 i 05:09 2° ML 48'42 -10225 Jul 24 j 15:01 0°8 -10219 Jun 16 j 18:13 30°R Ω -10225 Nov 03 i 07:07 15°8 min. Earth dist. -10219 Jul 03 i 04:27 27° **2**51'07 4.06737 AU -10225 Nov 12 j 23:12 15°808'47 opposition -10219 Jul 04 j 02:12 27° **2**43'44 -1°50'12 retrograde -10225 Nov 22 j 14:05 15°R8 direct -10219 Aug 31 j 05:12 22° **2**46'34 -10224 Jan 12 j 19:26 10°**8**17'08 2°08'27 -10219 Nov 08 j 22:06 0°ML opposition min. Earth dist. -10224 Jan 13 j 17:38 10°8 10'05 4.33080 AU -10218 Jan 03 j 14:43 11°ML53'17 evening set direct -10224 Mar 15 j 06:00 5°**8**18'30 -10224 Jun 10 j 01:30 15°**8** conjunction -10218 Jan 17 j 06:02 15°ML03'17 -1°30'17 -10224 Jul 19 j 09:52 23°**8**21'28 evening set minimum elong -10218 Jan 17 j 05:58 15° ML03'14 1°30'39 -10218 Jan 17 j 00:23 15° ML -10224 Jul 31 j 19:49 26°**8**09'21 1°37'59 max. Earth dist. -10218 Jan 18 j 13:41 15°M21'42 6.08026 AU conjunction -10224 Jul 31 j 19:46 26°**8**09'19 -10218 Jan 30 j 23:27 18° ML 14'14 minimum elong 1°38'26 morning rise -10224 Jul 30 j 16:58 25°854'11 6.30844 AU -10218 Mar 27 j 03:36 max. Earth dist. 0° **⊼** -10224 Aug 13 j 04:23 28°**8**56'42 morning rise retrograde -10218 Jun 09 j 10:46 7°**√**49'56 -10224 Aug 17 j 21:26 0°**Ⅱ** opposition -10218 Aug 07 j 17:43 2°**∡**'45'38 -2°26'59 retrograde -10224 Dec 14 j 21:49 16° **II** 47'25 min. Earth dist. -10218 Aug 06 j 23:57 2°**尽**51'43 4.10623 AU opposition -10223 Feb 14 j 07:05 11°**I**I54'27 2°27'58 -10218 Aug 29 j 03:53 30°RML min. Earth dist. -10223 Feb 14 j 22:55 11°**Ⅱ**49'26 4.28015 AU direct -10218 Oct 05 j 08:22 27°ML45'00 -10223 Apr 17 j 00:43 6°**Д**58'51 -10218 Nov 11 j 19:44 0° ⊀ direct

evening set

-10217 Feb 09 j 13:45 16° **₹** 52'05

-10223 Aug 19 j 16:46 25°**Д**06'08

evening set

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10217 in astronomical counting style is the year 10218 BCE in historical counting style. -10217 Feb 23 i 06:53 20° ₹00'12 -1°37'59 retrograde -10212 Dec 19 i 15:44 21° **П**23'36 conjunction minimum elong -10217 Feb 23 j 06:55 20° ₹00'13 1°38'32 opposition -10211 Feb 19 j 01:19 16°**Д**30'16 2°27'07 -10217 Feb 24 j 04:35 20° ₹ 12'38 6.13799 AU min. Earth dist. -10211 Feb 19 j 16:18 16°**Д**25'30 4.27147 AU max. Earth dist. -10217 Mar 08 j 23:45 23° ₹ 08'06 -10211 Apr 21 j 17:05 11°**Д**35'00 morning rise direct -10217 Apr 09 j 04:45 0°る -10211 Aug 24 j 02:49 29°**II**43'00 evening set -10217 Jul 13 j 09:36 12°る00'36 -10211 Aug 25 j 08:38 0°ഇ retrograde -10217 Sep 10 j 09:11 6° 중59'12 -2°11'28 opposition -10211 Sep 05 j 12:48 min. Earth dist. -10217 Sep 10 j 01:30 7°る01'49 4.17698 AU conjunction 2°933'46 1°32'49 -10211 Sep 05 j 12:52 2°**©**33'48 direct -10217 Nov 09 j 00:52 1°る55'56 minimum elong 1°33'24 evening set -10216 Mar 16 j 13:33 20°₹50'03 max. Earth dist. -10211 Sep 05 j 00:13 2°**©**26'32 6.23411 AU morning rise -10211 Sep 17 j 23:36 5°**©**25'09 -10216 Mar 30 j 04:54 23°₹54'16 -1°11'47 -10210 Jan 23 j 01:43 24°502'05 conjunction retrograde minimum elong -10216 Mar 30 j 04:59 23°중54'19 1°12'20 opposition -10210 Mar 25 j 14:53 19°505'40 1°55'12 max. Earth dist. -10216 Mar 30 j 06:55 23°**궁**55'24 6.21622 AU min. Earth dist. -10210 Mar 25 j 18:03 19°504'39 4.19560 AU morning rise -10216 Apr 12 j 18:19 26°**궁**57'21 direct -10210 May 25 j 02:50 14°512'25 -10216 Apr 26 j 12:10 0°≈ -10210 Sep 14 j 07:45 $0^{\circ}\Omega$ -10216 Aug 09 j 07:58 15°≈ evening set -10210 Sep 25 j 08:44 2°**Ω**31'47 retrograde -10216 Aug 13 j 23:38 15°≈02'11 -10216 Aug 18 j 14:53 15°R≈ conjunction -10210 Oct 08 j 01:26 $5^{\circ}\Omega$ 28'50 0°56'41 opposition -10216 Oct 12 j 03:15 10°≈04'35 -1°13'18 minimum elong -10210 Oct 08 j 01:31 $5^{\circ}\Omega$ 28'53 0°57'11 min. Earth dist. -10216 Oct 12 j 07:23 10°≈03'12 4.25478 AU max. Earth dist. -10210 Oct 08 j 05:14 $5^{\circ}\Omega$ 31'02 6.15632 AU direct -10216 Dec 12 i 00:41 5°≈00'15 morning rise -10210 Oct 20 j 20:54 $8^{\circ}\Omega$ 27'25 -10215 Mar 10 i 04:32 15°≈ -10210 Nov 19 i 02:07 $15^{\circ}\Omega$ evening set -10215 Apr 19 j 23:25 23°≈34'58 retrograde -10209 Feb 27 j 17:36 27° **Ω**47'01 opposition -10209 Apr 29 j 22:38 $22^{\circ}\Omega 46'43$ $0^{\circ}43'58$ -10215 May 03 j 09:15 26°≈34'05 -0°23'04 min. Earth dist. -10209 Apr 29 j 13:21 22° **Ω**49'46 4.12097 AU conjunction -10215 May 03 j 09:17 26°≈34'06 0°23'27 direct -10209 Jun 28 j 05:54 $17^{\circ}\Omega$ 53'43 minimum elong max. Earth dist. -10215 May 02 j 18:15 26°≈25'43 6.28864 AU -10209 Sep 30 j 10:10 0° mg -10215 May 16 j 15:41 29°≈31'27 -10209 Oct 29 j 04:12 6° m 30'03 morning rise evening set -10215 May 18 j 19:18 0° **∺** -10215 Sep 14 j 18:29 17°**米**01'08 -10209 Nov 11 j 06:59 9° m 34'20 0°00'36 retrograde conjunction -10215 Oct 16 j 23:38 15° ¥22'54 9°**™**34'20 0°00'53 -10209 Nov 11 j 06:58 asc. node minimum elong opposition -10215 Nov 13 j 09:17 12°**米**07′00 0°05′39 -10209 Nov 10 j 22:46 9° m 29'33 behind sun begin -10209 Nov 11 j 15:10 9° m 39'06 -10215 Nov 14 j 00:06 12° **X** 02'09 4.31547 AU min. Earth dist. behind sun end max. Earth dist. -10214 Jan 14 j 07:37 7°**米** 03'32 -10209 Nov 12 j 04:46 9° Mp 47'07 direct 6.09243 AU -10214 May 22 j 20:16 25°**升** 20'35 -10209 Nov 15 j 04:06 10° M 28'57 evening set desc. node -10209 Nov 24 j 13:12 12° m 40'32 morning rise conjunction -10214 Jun 04 j 21:03 28° ¥ 14'11 0°31'43 -10208 Feb 23 j 07:34 0°**♀** minimum elong -10214 Jun 04 j 21:00 28°**米** 14'09 0°31'39 retrograde -10208 Apr 04 j 00:16 2°**♀**30'20 max. Earth dist. -10214 Jun 03 j 16:52 27° **∺** 58'30 6.33300 AU -10208 May 14 j 12:06 30°R M -10214 Jun 12 j 19:19 0°**Υ** opposition -10208 Jun 03 j 13:09 27° m 26'45 -0°44'42 -10214 Jun 17 j 18:30 1°**Υ**06'04 min. Earth dist. -10208 Jun 02 j 18:30 27° m 33'00 4.07360 AU morning rise -10214 Oct 16 j 09:09 18°**Υ**22'24 direct -10208 Jul 31 j 22:22 22° m 32'10 retrograde -10214 Dec 15 j 15:42 13° Υ '30'22 1°21'30 -10208 Oct 10 j 17:19 0°₽ opposition min. Earth dist. -10214 Dec 16 j 13:00 13°**Υ**23'31 4.34114 AU -10208 Dec 02 j 19:02 11°**2**27'10 evening set direct $-10213 \text{ Feb} \quad 16 \text{ j} \quad 03:00 \quad 8^{\circ} \Upsilon 29'08$ -10208 Dec 16 j 06:06 14° \(\Omega\) 36'12 -0°56'39 evening set $-10213 \text{ Jun } 23 \text{ j } 13:57 \ 26^{\circ} \Upsilon 35'23$ conjunction -10213 Jul 04 j 23:11 29°**Υ**07'46 6.33726 AU max. Earth dist. minimum elong -10208 Dec 16 j 06:01 14° \(\Omega\) 36'09 0°56'44 max. Earth dist. -10208 Dec 17 i 13:15 14° \(\Omega\) 54'27 6.06532 AU conjunction -10213 Jul 06 i 05:22 29° Υ 24'40 1°16'42 morning rise -10208 Dec 29 j 20:31 17° **△**46'56 -10213 Jul 06 i 05:17 29°**Y**'24'37 1°16'55 -10207 Feb 25 j 00:20 0°M minimum elong -10213 Jul 08 j 20:29 0°8 retrograde -10207 May 10 j 00:56 7° ML42'07 -10213 Jul 18 j 18:01 2°**8**12'41 -10207 Jul 08 j 20:34 2°ML37'04 -1°58'04 morning rise opposition -10213 Sep 21 j 19:08 15°8 -10207 Jul 07 j 23:07 2°ML44'23 4.07058 AU min. Earth dist. -10213 Nov 17 j 11:14 19°**8**38'57 retrograde -10207 Jul 29 j 03:54 30°R ₽ -10212 Jan 15 j 18:06 15°R₩ direct -10207 Sep 05 j 00:30 27°**೨**39'24 opposition -10212 Jan 17 j 10:20 14°**8**47'15 2°13'40 -10207 Oct 12 j 22:17 0°ML min. Earth dist. -10212 Jan 18 j 07:18 14°840'35 4.32506 AU -10207 Dec 31 j 21:08 15°M -10212 Mar 19 j 18:48 9°**8**49'06 -10206 Jan 08 j 15:25 16° ML 46'57 direct evening set -10212 May 20 j 00:09 15°**8** -10212 Jul 23 j 18:43 27°**8**52'27 -10206 Jan 22 j 07:20 19°M 56'55 -1°33'26 evening set conjunction -10212 Aug 02 j 04:43 $0^{\circ}\Pi$ minimum elong -10206 Jan 22 j 07:16 19°M 56'53 1°33'50 max. Earth dist. -10212 Aug 04 j 01:54 0°**Ц**25'35 6.30092 AU max. Earth dist. -10206 Jan 23 j 15:05 20°ML15'21 6.08549 AU morning rise -10206 Feb 05 j 00:43 23°ML07'36 conjunction -10212 Aug 05 j 04:01 0°**I**I40'23 1°39'29 -10206 Mar 07 j 20:14 0° ⊀ minimum elong -10212 Aug 05 j 03:59 0°**Ⅱ**40′22 -10206 Jun 14 j 05:08 12° ₹ 38'56 1°39'58 retrograde morning rise -10212 Aug 17 j 12:29 3°**Ⅱ**27'57 -10206 Aug 12 j 09:17 7°**х** 34'58 -2°27'55 opposition

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 18 Attention, astronomical year style is used: The year -10206 in astronomical counting style is the year 10207 BCE in historical counting style.

Attention, astronomi	cal year style is used: The	e year -10206	in astronomical co	unting style is the year	r 10207 BCE in historical	counting sty	le.
min. Earth dist.	-10206 Aug 11 j 17:17	7° ∡ ¹40'27	4.11300 AU	evening set	-10200 Jul 28 j 02:36	2° Ⅱ 22'15	
direct	-10206 Oct 10 j 02:33	2° ∡ ³33'57					
evening set	-10205 Feb 14 j 13:28	21° х¹ 40′39		conjunction	-10200 Aug 09 j 11:41		
				minimum elong	-10200 Aug 09 j 11:40		1°40'53
conjunction	-10205 Feb 28 j 06:30	24° ∡ °48′27	-1°36'14	max. Earth dist.	-10200 Aug 08 j 12:16		6.29493 AU
minimum elong	-10205 Feb 28 j 06:33			morning rise	-10200 Aug 21 j 19:52		
max. Earth dist.	-10205 Mar 01 j 00:38		6.14566 AU	retrograde	-10200 Dec 24 j 07:18		
morning rise	-10205 Mar 13 j 23:17			opposition	-10199 Feb 23 j 18:55		
	-10205 Mar 23 j 03:22			min. Earth dist.	-10199 Feb 24 j 08:21		4.26367 AU
retrograde	-10205 Jul 17 j 22:13			direct	-10199 Apr 26 j 07:35		
opposition	-10205 Sep 14 j 22:07				-10199 Aug 09 j 07:29	0°©	
min. Earth dist.	-10205 Sep 14 j 15:42		4.18488 AU	evening set	-10199 Aug 28 j 12:14	4°छ18'11	
direct	-10205 Nov 13 j 16:54						
evening set	-10204 Mar 21 j 09:36	25° 6 31'18		conjunction	-10199 Sep 09 j 22:37		1°29'28
	100011 01:00 01	200-725102	100 (100	minimum elong	-10199 Sep 09 j 22:41		1°30'03
conjunction	-10204 Apr 04 j 00:34			max. Earth dist.	-10199 Sep 09 j 10:52		6.22504 AU
minimum elong	-10204 Apr 04 j 00:39			morning rise	-10199 Sep 22 j 10:21		
max. Earth dist.	-10204 Apr 04 j 00:34		6.22410 AU	retrograde	-10198 Jan 27 j 22:20		1045100
	-10204 Apr 10 j 07:22			opposition	-10198 Mar 30 j 10:47		1°47'23
morning rise	-10204 Apr 17 j 13:14			min. Earth dist.	-10198 Mar 30 j 12:32		4.18564 AU
	-10204 Jun 24 j 01:46			direct	-10198 May 29 j 19:16		
retrograde	-10204 Aug 18 j 11:24				-10198 Aug 28 j 08:23		
.,.	-10204 Oct 14 j 04:54		1002102	evening set	-10198 Sep 29 j 21:59	7° Ω 15'16	
opposition	-10204 Oct 16 j 15:03			. ,.	10100 0 4 12:16 06	100 0 12120	0040140
min. Earth dist.	-10204 Oct 16 j 21:02		4.26182 AU	conjunction	-10198 Oct 12 j 16:06		0°49'48
direct	-10204 Dec 16 j 16:08	9° ≈ 36'24		minimum elong	-10198 Oct 12 j 16:10		
. ,	-10203 Feb 16 j 22:29			max. Earth dist.	-10198 Oct 12 j 22:53		6.14657 AU
evening set	-10203 Apr 24 j 14:59			morning rise	-10198 Oct 25 j 12:55		
	-10203 May 02 j 22:07	υ•π			-10198 Nov 02 j 06:55		
	10202 M 07 : 22.47	10W07151	0015126		-10197 Jan 21 j 15:47	-	
conjunction	-10203 May 07 j 23:47	1°) €07'51 1°) €07'52		retrograde	-10197 Mar 04 j 17:19		
minimum elong	-10203 May 07 j 23:49	1° X 07'32 1° X 07'13	0-1546	amnagitian	-10197 Apr 15 j 20:14		0022100
behind sun begin behind sun end	-10203 May 07 j 22:40 -10203 May 08 j 00:57	1° X 0713		opposition min. Earth dist.	-10197 May 04 j 20:04 -10197 May 04 j 09:34		
max. Earth dist.	-10203 May 08 j 00:37	0° ¥ 58'11	6.29440 AU		-10197 May 04 j 09:34 -10197 Jul 02 j 23:12		4.11221 AU
	-10203 May 07 J 06:28	4° ∺ 04'34	0.29440 AU	direct	-10197 Jul 02 j 23:12 -10197 Sep 11 j 02:41		
morning rise asc. node	-10203 May 21 j 05:13 -10203 Aug 27 j 05:51			desc. node	-10197 Sep 11 j 02.41 -10197 Sep 25 j 14:36	-	
retrograde	-10203 Aug 27 j 03:31 -10203 Sep 19 j 04:04			evening set	-10197 Sep 23 j 14.30 -10197 Nov 02 j 23:25		
opposition	-10203 Sep 19 j 04.04 -10203 Nov 17 j 21:10		001657	evening set	-10197 NOV 02 J 23.23	11 111/2240	
min. Earth dist.	-10203 Nov 17 j 21.10 -10203 Nov 18 j 12:38			conjunction	-10197 Nov 16 j 03:22	1.4° m 27'56	0°07'46
direct	-10203 Nov 18 j 12:38		4.31907 AU	minimum elong	-10197 Nov 16 j 03:22 -10197 Nov 16 j 03:20	-	
evening set	-10202 Jan 18 j 21:21 -10202 May 27 j 08:04			behind sun begin	-10197 Nov 16 j 03:20 -10197 Nov 15 j 19:53		0 07 34
evening set	-10202 May 27 j 08:04 -10202 May 28 j 01:29	29 γ (3023		behind sun end	-10197 Nov 15 j 19:33	•	
max. Earth dist.	-10202 May 28 j 01:29 -10202 Jun 08 j 04:02	2° Υ 28'00	6.33542 AU	max. Earth dist.	-10197 Nov 10 j 10:47		6.08530 AU
max. Larm dist.	-10202 Juli 00 J 04.02	2 1 20 00	0.33342 AO	morning rise	-10197 Nov 29 j 11:03		0.00330 AC
conjunction	-10202 Jun 09 j 07:33	2° Y '43'20	0°38'55	morning risc	-10196 Jan 26 j 17:30	0° ʊ	
minimum elong	-10202 Jun 09 j 07:30	2° Υ 43'18	0°38'53	retrograde	-10196 Apr 08 j 23:26	0 — 7° ≏ 27'46	
morning rise	-10202 Jun 22 j 03:34	5° Υ '34'33	0 3033	opposition	-10196 Jun 08 j 10:44	2° £ 23'48	-0°56'30
retrograde	-10202 Oct 20 j 19:38			min. Earth dist.	-10196 Jun 07 j 15:08	2° ⊆ 30'23	4.06875 AU
opposition		17° Υ 59'09	1°30'37	mm. Latur dist.	-10196 Jun 27 j 03:18		4.00073710
min. Earth dist.	-10202 Dec 20 j 04:42		4.34164 AU	direct	-10196 Aug 05 j 18:00	-	
direct	-10201 Feb 20 j 16:53		1.5 110 1710	ancer	-10196 Sep 14 j 01:33	0° ರ	
unect	-10201 Jun 23 j 04:21	0°8		evening set	-10196 Dec 07 j 19:51		
evening set	-10201 Jun 27 j 23:07	1° 8 03'31		evening sec	101,00000 0, 11,01	10 —20	
max. Earth dist.	-10201 Jul 09 j 06:20	3° 8 35'01	6.33549 AU	conjunction	-10196 Dec 21 j 07:59	19° Ω 36'15	-1°03'23
ur. Durur dist.	10201341 07 100.20	5 35 01	J.JJJJ77 11U	minimum elong	-10196 Dec 21 j 07:53		
conjunction	-10201 Jul 10 j 13:16	3° 8 52'20	1°21'25	max. Earth dist.	-10196 Dec 21 j 07.53 -10196 Dec 22 j 16:58		
minimum elong	-10201 Jul 10 j 13:11	3° 8 52'18	1°21'42	morning rise	-10196 Dec 22 j 10:38 -10195 Jan 03 j 22:58		5.00512 AU
morning rise	-10201 Jul 23 j 01:08	6° 8 40'03	. 2. 12		-10195 Feb 05 j 01:36		
	-10201 Jul 23 j 01:08			retrograde	-10195 May 15 j 01:16		
retrograde	-10201 Aug 31 j 11.23 -10201 Nov 22 j 00:26			opposition	-10195 Jul 13 j 16:54		-2°05'15
opposition	-10201 Nov 22 j 00:20 -10200 Jan 22 j 01:28		2°18'05	min. Earth dist.	-10195 Jul 12 j 20:31		4.07136 AU
min. Earth dist.	-10200 Jan 22 j 21:56			direct	-10195 Sup 09 j 21:57		T.O / 130 AU
mm. Darm dist.	-10200 Jan 22 j 21.30 -10200 Mar 03 j 02:38		1.52112 AU	ancet	-10195 Sep 09 j 21:37 -10195 Dec 14 j 10:07		
direct	-10200 Mar 03 j 02:38 -10200 Mar 24 j 08:53			evening set	-10193 Dec 14 j 10.07 -10194 Jan 13 j 19:26		
211001	-10200 Mai 24 j 08:35 -10200 Apr 14 j 15:16			croning set	1017.3um 13 j 17.20	21 HO-7/30	
	-10200 Apr 14 j 13:10 -10200 Jul 17 j 11:26	0° Ⅱ		conjunction	-10194 Jan 27 j 11:36	24°M.57'53	-1°35'58
					2/j11.50	Hear 100	

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10194 in astronomical counting style is the year 10195 BCE in historical counting style. -10194 Jan 27 j 11:33 24°M 57'51 1°36'25 opposition minimum elong -10188 Jan 26 j 14:44 23°841'36 2°21'32 -10194 Jan 28 j 17:11 25°ML15'01 6.08888 AU min. Earth dist. max Earth dist -10194 Feb 10 j 05:18 28°ML08'27 -10188 Mar 28 j 21:46 18°**8**44'15 morning rise direct -10194 Feb 18 j 08:22 0°⊀ -10188 Jul 01 j 03:31 0°**Ц** -10194 Jun 18 j 23:40 17° ₹ 35'36 -10188 Aug 01 j 08:22 retrograde evening set 6°**Ⅱ**45'52 -10194 Aug 16 j 11:39 12°**尽** 37'16 4.11881 AU min. Earth dist. 9°**Ⅲ**33'51 1°40'41 opposition -10194 Aug 17 j 03:15 12° ₹31'55 -2°27'51 conjunction -10188 Aug 13 j 17:02 -10194 Oct 14 j 22:34 7° ₹30'27 -10188 Aug 13 j 17:01 1°41'12 direct minimum elong 9°**Ⅲ**33'51 -10193 Feb 19 j 16:12 26° ₹37'00 evening set max. Earth dist. -10188 Aug 12 j 17:00 9°**Ⅲ**20′13 6.29110 AU morning rise -10188 Aug 26 j 01:21 12°**Ⅲ**21'46 conjunction -10193 Mar 05 j 09:17 29° ₹ 44'29 -1°33'45 -10188 Dec 12 j 03:31 0ಂತಾ -10193 Mar 05 j 09:20 29°**х** 44'31 1°34'21 minimum elong retrograde -10188 Dec 28 j 21:05 0°925'51 -10193 Mar 06 j 01:33 29° ₹ 53'47 6.15355 AU max. Earth dist. -10187 Jan 14 j 15:37 30°R **I**I -10193 Mar 06 j 12:27 0°₹ opposition -10187 Feb 28 j 09:43 25°**Ⅲ**31'49 2°22'48 morning rise -10193 Mar 19 j 01:41 2°**る**51'28 min. Earth dist. -10187 Feb 28 j 22:07 25°**Ц**27'52 4.25691 AU retrograde -10193 Jul 22 j 15:17 21°**궁**32'30 direct -10187 Apr 30 j 19:12 20° ДЗ7'09 opposition -10193 Sep 19 j 14:05 16°♂32'07 -1°58'45 -10187 Jul 23 j 05:57 0ಂತಾ min. Earth dist. -10193 Sep 19 j 09:46 16°₹33'35 4.19404 AU evening set -10187 Sep 01 j 19:02 8°9546'15 direct -10193 Nov 18 j 13:26 11°る28'25 -10192 Mar 24 j 21:46 0°**≈** conjunction -10187 Sep 14 j 06:17 11°538'20 1°25'38 evening set -10192 Mar 26 j 08:04 0°≈19'08 minimum elong -10187 Sep 14 j 06:21 11°538'22 1°26'14 max. Earth dist. -10187 Sep 13 j 21:07 11°533'03 6.21607 AU conjunction -10192 Apr 08 j 22:28 3°≈22'16 -0°59'45 morning rise -10187 Sep 26 j 18:48 14°531'16 minimum elong -10192 Apr 08 j 22:33 3°≈22'19 1°00'16 -10187 Dec 15 j 21:31 $0^{\circ}\Omega$ max. Earth dist. -10192 Apr 08 j 20:51 3°≈21'22 6.23411 AU retrograde -10186 Feb 01 j 16:45 3° **Ω**19'23 -10192 Apr 22 j 10:20 6°≈24'02 -10186 Mar 22 j 05:28 30°RS morning rise -10192 Jun 01 j 22:47 15°≈ -10186 Apr 04 j 04:00 28°522'02 1°39'04 opposition -10192 Aug 22 j 22:34 24°≈18'31 min. Earth dist. -10186 Apr 04 j 05:04 28°521'41 4.17495 AU retrograde -10192 Oct 21 j 04:59 19°≈21'57 -0°52'14 direct -10186 Jun 03 j 08:21 23°529'00 opposition min. Earth dist. -10192 Oct 21 j 11:16 19°≈19'51 4.27204 AU -10186 Aug 09 j 04:08 0°**Ω** -10192 Nov 30 j 05:05 15°R≈ -10186 Oct 04 j 09:22 11° **Ω**52'38 evening set -10192 Dec 21 j 09:08 14°≈17'46 direct -10191 Jan 11 j 20:30 15°≈ -10186 Oct 17 j 04:38 14° Ω 51'45 0°42'45 conjunction -10186 Oct 17 j 04:42 14° Ω 51'47 0°43'13 -10191 Apr 16 j 13:37 0°**米** minimum elong -10186 Oct 17 j 11:35 14° Ω55'48 6.13520 AU -10191 Apr 29 j 08:07 2° ₩ 47'35 max. Earth dist. evening set -10186 Oct 17 j 18:46 15°**Ω** -10191 May 12 j 15:38 5° **★** 45'09 -0°07'39 -10186 Oct 30 j 03:06 $17^{\circ}\Omega 52'36$ conjunction morning rise minimum elong -10191 May 12 j 15:39 5° **X** 45'09 0°07'56 -10186 Dec 26 j 07:06 0° M behind sun begin -10191 May 12 j 08:22 5°**光**41'07 retrograde -10185 Mar 09 j 13:54 7° m 23'10 behind sun end -10191 May 12 j 22:56 5°**米**49'11 opposition -10185 May 09 j 15:22 2° m 21'55 0°20'19 max. Earth dist. -10191 May 11 j 21:11 5° **∺** 34'52 6.30437 AU min. Earth dist. -10185 May 09 j 03:17 2° m 25'54 4.10104 AU -10191 May 25 j 19:47 8° **∺**40'56 -10185 May 28 j 10:21 30°R**Ω** morning rise -10191 Jul 06 j 14:59 17°**∺**25'54 direct -10185 Jul 07 j 14:24 27°**\O**28'40 asc. node -10191 Sep 23 j 14:57 26° **₭**04'16 -10185 Aug 07 j 14:25 29°**Ω**02'58 retrograde desc. node -10191 Nov 22 j 09:58 21° **€** 10'50 0°28'08 -10185 Aug 16 j 05:04 0° Mp opposition -10191 Nov 23 j 02:42 21° + 05'24 4.32862 AU -10185 Nov 07 j 17:41 16° m 11'49 min. Earth dist. evening set -10190 Jan 23 j 14:14 16° **★** 07'55 direct -10185 Nov 20 j 23:10 19° m 18'01 -0°15'52 -10190 May 11 j 18:49 0°**Υ** conjunction -10185 Nov 20 j 23:08 19° m 18'00 0°15'42 evening set $-10190 \text{ May } 31 \text{ i } 19:39 \quad 4^{\circ} \Upsilon 20'03$ minimum elong behind sun begin -10185 Nov 20 j 21:27 19° mp 17'01 -10190 Jun 13 i 17:43 7° **Y** 12'05 0° 45'50 conjunction behind sun end -10185 Nov 21 j 00:49 19° m 19'00 minimum elong -10190 Jun 13 i 17:38 7° **Y**12'03 0° 45'50 max. Earth dist. -10185 Nov 22 j 00:01 19° m 32'37 6.07560 AU max. Earth dist. -10190 Jun 12 j 13:19 6°**Υ**56'18 6.34249 AU morning rise -10185 Dec 04 j 08:04 22° m 26'08 -10190 Jun 26 j 12:25 10°**Υ**02'28 morning rise -10184 Jan 07 j 00:20 0°**♀** -10184 Apr 14 j 00:19 12°**2**22'42 -10190 Oct 25 j 04:29 27° Υ 17'39 retrograde retrograde opposition $-10190 \,\mathrm{Dec}\, 24\,\mathrm{j}\, 17:15\, 22^{\circ}\mathbf{\Upsilon}25'49\, 1^{\circ}39'03$ min. Earth dist. -10184 Jun 12 j 11:57 7°**2**25'04 4.06165 AU -10190 Dec 25 j 14:16 22°**Y**19'06 4.34652 AU -10184 Jun 13 j 07:17 7°**£**18'33 -1°07'44 min. Earth dist. opposition -10184 Aug 10 j 13:09 2°**≏**23'14 -10189 Feb 25 j 05:57 17°**Y**25'23 direct direct -10189 Jun 06 j 23:41 0°8 -10184 Dec 12 j 21:02 21° \alpha 25'16 evening set -10189 Jul 02 j 06:33 5°**8**27'52 evening set -10184 Dec 26 j 09:56 24°**2**35'20 -1°09'34 conjunction conjunction -10189 Jul 14 j 19:38 8°**8**16'06 1°25'35 minimum elong -10184 Dec 26 j 09:50 24°**2**35'16 1°09'44 minimum elong -10189 Jul 14 j 19:34 8°**8**16'03 1°25'54 max. Earth dist. -10184 Dec 27 j 18:18 24°**£**54'17 6.05915 AU max. Earth dist. -10189 Jul 13 j 14:12 7°**8**59'36 6.33765 AU morning rise -10183 Jan 09 j 01:51 27°**△**46'53 morning rise -10189 Jul 27 j 06:27 11°**8**03'17 -10183 Jan 18 j 16:32 0° M -10189 Aug 14 j 06:37 15°8 -10183 Apr 08 j 09:08 15°M retrograde -10189 Nov 26 j 11:15 28°**8**33'35 -10183 May 19 j 23:12 17° ML41'11 retrograde

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10183 in astronomical counting style is the year 10184 BCE in historical counting style. -10183 Jun 30 j 06:14 15°RML direct -10177 Mar 01 j 19:48 21° Υ 52'30 opposition -10183 Jul 18 j 12:57 12°M 36'12 -2°11'26 -10177 May 19 j 17:25 0°8 min. Earth dist. -10183 Jul 17 j 15:44 12° ML43'27 4.07127 AU -10177 Jul 06 j 14:18 9°**8**54'13 evening set -10183 Sep 14 j 17:39 7°M237'36 -10177 Jul 17 j 20:19 12°**8**25'17 direct max. Earth dist. 6.33348 AU -10183 Nov 24 j 11:32 15°M -10182 Jan 18 j 23:31 26° ML 48'59 -10177 Jul 19 j 02:27 12°**8**42'11 evening set conjunction 1°29'20 -10177 Jul 19 j 02:23 12°**8**42'09 minimum elong 1°29'41 conjunction -10177 Jul 29 j 08:15 15°**8** minimum elong morning rise -10177 Jul 31 j 12:36 15°**8**29'14 -10182 Feb 01 j 18:00 0°**∡**¹ -10177 Oct 16 j 13:06 0°**Ⅱ** max. Earth dist. -10182 Feb 02 j 21:20 0°**∡**15′50 6.09267 AU retrograde -10177 Dec 01 j 00:12 3°**II**03'17 -10182 Feb 15 j 09:53 3° ₹ 09'20 morning rise -10176 Jan 16 j 12:50 30°R -10182 Jun 23 j 20:08 22°**√**32'01 retrograde opposition -10176 Jan 31 j 05:48 28°**8**11'05 2°24'22 opposition -10182 Aug 21 j 21:25 17°**尽** 28'40 -2°26'39 min. Earth dist. -10176 Feb 01 j 00:58 28°**8**05'01 4.31298 AU min. Earth dist. -10182 Aug 21 j 07:28 17°**尽** 33'26 4.12594 AU direct -10176 Apr 02 j 09:34 23°**8**14'06 direct -10182 Oct 19 j 20:18 12° ₹ 26'49 -10176 Jun 11 j 21:24 0°**П** -10181 Feb 17 j 22:34 0°₹ evening set -10176 Aug 05 j 16:17 11°**Ⅱ**16'32 6.28108 AU evening set -10181 Feb 24 j 18:23 1°**る**32'19 max. Earth dist. -10176 Aug 17 j 03:24 13°**Д**52'36 conjunction -10181 Mar 10 j 11:25 4°る39'21 -1°30'37 conjunction -10176 Aug 18 j 00:59 14°**I**I04'54 1°40'25 minimum elong -10181 Mar 10 j 11:29 4°る39'24 1°31'11 minimum elong -10176 Aug 18 j 00:59 14°**Д**04'54 max. Earth dist. -10181 Mar 11 j 02:44 4° ₹ 48'05 6.16343 AU morning rise -10176 Aug 30 j 09:22 16°**Д**53'16 morning rise -10181 Mar 24 i 03:24 7°₹45'45 -10176 Nov 03 j 21:08 0°€ retrograde -10181 Jul 27 j 04:31 26°る19'56 retrograde -10175 Jan 02 j 16:27 5°903'26 opposition -10181 Sep 24 j 05:00 21°る20'01 -1°51'07 opposition -10175 Mar 05 j 04:35 0°509'03 2°19'20 min. Earth dist. -10181 Sep 24 j 00:58 21°**궁**21'23 4.20545 AU min. Earth dist. -10175 Mar 05 j 16:21 0°505'19 4.24484 AU -10181 Nov 23 j 07:32 16°**ਰ**16'08 -10175 Mar 06 j 09:04 30°**₹Ⅱ** direct -10180 Mar 07 j 23:54 0°≈ -10175 May 05 j 10:42 25°**Ⅲ**14'43 direct -10180 Mar 31 j 04:59 5°≈03'44 -10175 Jul 01 j 14:49 0°ഇ evening set -10175 Sep 06 j 06:15 13°525'56 evening set -10180 Apr 13 j 18:34 8°≈06'05 -0°53'07 conjunction -10175 Sep 18 j 18:14 16°518'53 1°21'09 -10180 Apr 13 j 18:39 8°≈06'08 0°53'37 minimum elong conjunction -10180 Apr 13 j 13:54 8°≈03'28 6.24607 AU -10175 Sep 18 j 18:18 16°\$18'56 1°21'43 max. Earth dist. minimum elong -10175 Sep 18 j 09:53 16°5014'04 6.20306 AU -10180 Apr 27 j 05:38 11°≈07'00 max. Earth dist. morning rise -10180 May 14 j 22:11 15°≈ -10175 Oct 01 j 08:03 19°512'55 morning rise -10180 Aug 27 j 10:21 28°≈55'29 -10175 Nov 21 j 00:12 $0^{\circ}\Omega$ retrograde -10180 Oct 25 j 17:37 23°≈59'23 -0°41'14 -10174 Feb 06 j 15:19 $8^{\circ}\Omega$ 07'55 opposition retrograde min. Earth dist. -10180 Oct 26 j 02:13 23°≈56'31 4.28303 AU opposition -10174 Apr 09 j 02:10 3°**Ω**10'01 1°29'44 direct -10180 Dec 26 j 03:08 18°≈55'15 min. Earth dist. -10174 Apr 09 j 00:33 3°**Q**10'32 4.16204 AU -10179 Mar 30 j 05:20 0°**米** -10174 May 05 j 20:13 30°Rூ evening set -10179 May 03 j 22:43 7°**米**21'37 direct -10174 Jun 08 j 01:17 28°517'05 max. Earth dist. -10179 May 16 j 09:37 10° **★** 07'29 6.31335 AU -10174 Jul 10 j 22:55 0°**Ω** asc. node -10179 May 16 j 01:43 10°**米** 03'04 -10174 Oct 01 j 14:36 15°**Ω** -10174 Oct 09 j 02:16 16°**Ω**43'48 evening set -10179 May 17 j 05:11 10° **€** 18'21 0°00'09 conjunction -10179 May 17 j 05:10 10° \(\) 18'21 0°00'06 -10174 Oct 21 j 23:07 19° Ω 44'05 0°35'05 minimum elong conjunction -10179 May 16 j 21:20 10° ¥ 14'01 behind sun begin minimum elong -10174 Oct 21 j 23:11 19° Ω 44'07 0°35'31 -10174 Oct 22 j 10:14 19° Ω 50'35 6.12394 AU behind sun end -10179 May 17 j 13:00 10° \(22'41 max. Earth dist. morning rise -10179 May 30 j 07:57 13°**米** 13'14 morning rise -10174 Nov 03 j 22:58 22° Ω 46'06 -10179 Sep 09 i 08:06 0°**Υ** -10174 Dec 06 j 05:59 0° mg retrograde -10179 Sep 27 j 22:46 0° **Y** 33'32 -10173 Mar 14 j 17:25 12° m 21'56 retrograde -10179 Oct 16 j 15:09 30°R € -10173 May 14 j 15:42 7° m 20'15 0°07'47 opposition -10179 Nov 26 j 21:30 25° \(\dagger 40'24 \) 0°39'04 min. Earth dist. -10173 May 14 j 02:40 7° m/24'33 4.09266 AU opposition -10179 Nov 27 j 14:22 25° **X** 34'55 4.33492 AU min. Earth dist. desc. node -10173 Jun 17 j 21:50 3° m 26'42 direct -10178 Jan 28 j 03:10 20° ₩ 37'44 direct -10173 Jul 12 j 12:03 2° M 26'52 -10178 Apr 24 j 00:43 0°**℃** evening set -10173 Nov 12 j 17:18 21° m 12'53 -10178 Jun $\,$ 05 j 05:49 $\,$ 8° $\mathbf{\Upsilon}$ 47'36 evening set max. Earth dist. -10178 Jun 16 j 20:58 11°**Υ**22'30 6.34548 AU -10173 Nov 25 j 23:52 24° m 19'48 -0°24'11 conjunction -10173 Nov 25 j 23:49 24° m 19'46 0°24'04 minimum elong -10178 Jun 18 j 02:24 11°**Υ**'38'53 0°52'29 -10173 Nov 27 j 02:01 24° m 35'10 conjunction max. Earth dist. 6.07104 AU -10178 Jun 18 j 02:19 11°**Υ**'38'51 0°52'32 minimum elong morning rise -10173 Dec 09 j 10:10 27° m 28'41 morning rise -10178 Jun 30 j 19:51 14°**Y**28'36 -10173 Dec 20 j 07:56 0° € -10178 Sep 26 j 00:05 0°8 retrograde -10172 Apr 19 j 01:21 17°**2**26'16 retrograde -10178 Oct 29 j 15:26 1°**8**44'15 min. Earth dist. -10172 Jun 17 j 09:26 12°**£**29'04 4.06188 AU -10178 Dec 02 j 13:11 30°R**Y** opposition -10172 Jun 18 j 06:52 12°**2**21'50 -1°18'47 -10178 Dec 29 j 05:47 26° **Y** 52'33 1° 47'00 -10172 Aug 15 j 10:54 7°**♀**26'08 opposition direct

evening set

-10172 Dec 18 j 00:45 26° **2**29'13

-10178 Dec 30 j 04:00 26°**Υ**45'28 4.34604 AU

min. Earth dist.

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10171 in astronomical counting style is the year 10172 BCE in historical counting style. -10172 Dec 31 j 14:22 29°**2**39'18 -1°15'21 evening set $-10166 \text{ Jun } 09 \text{ j } 12:57 13^{\circ} \Upsilon 07'43$ conjunction -10172 Dec 31 j 14:16 29° **△**39'15 1°15'36 max. Earth dist. -10166 Jun 21 j 02:23 15°**Υ**41'51 6.34236 AU minimum elong max. Earth dist. -10171 Jan 02 j 00:02 29° **2**59'00 6.06404 AU -10171 Jan 02 j 01:45 0°**M** ⋅ -10166 Jun 22 j 08:28 15°**Υ**58'37 0°58'37 conjunction -10171 Jan 14 j 06:36 -10166 Jun 22 j 08:23 15°**Υ**58'35 0°58'43 morning rise 2°M50'43 minimum elong -10171 Mar 12 j 04:45 15°M -10166 Jul 05 j 00:44 18°**Υ**47'59 morning rise -10166 Aug 29 j 11:44 0°8 retrograde -10171 May 24 j 21:25 22° 11.40'48 -10171 Jul 23 j 09:05 17°M235'51 -2°16'37 opposition retrograde -10166 Nov 03 j 00:02 6°**8**06'24 -10171 Jul 22 j 12:59 17° ML42'43 4.08045 AU min. Earth dist. opposition -10165 Jan 02 j 16:50 1°**8**14'47 1°54'11 -10171 Aug 12 j 09:49 15°RM min. Earth dist. -10165 Jan 03 j 14:28 1°**8**07'53 4.33911 AU direct -10171 Sep 19 j 16:44 12° ML 36'45 -10165 Jan 12 j 14:09 30°R**Y** -10171 Oct 28 j 02:07 15°M -10165 Mar 06 j 04:26 26°**Υ**15'10 direct -10170 Jan 16 j 08:09 0°**∡**¹ -10165 Apr 26 j 20:50 0°**8** -10165 Jul 10 j 21:08 14°**8**18'25 evening set -10170 Jan 24 j 02:39 1°×746'29 evening set -10165 Jul 13 j 23:32 15°8 conjunction -10170 Feb 06 j 19:27 4° ₹ 55'55 -1°38'51 max. Earth dist. -10165 Jul 22 j 02:59 16°**8**49'49 6.32313 AU minimum elong -10170 Feb 06 j 19:26 4° ₹ 55'54 1°39'21 max. Earth dist. -10170 Feb 08 j 00:01 5°**∡**12'24 6.10511 AU conjunction -10165 Jul 23 j 08:29 17°**8**06'26 1°32'29 morning rise -10170 Feb 20 j 13:01 8° ₹05'38 minimum elong -10165 Jul 23 j 08:25 17°**8**06'23 retrograde -10170 Jun 28 j 10:28 27° ₹20'20 morning rise -10165 Aug 04 j 18:06 19°853'39 opposition -10170 Aug 26 j 12:22 22° ₹ 17'22 -2°24'26 -10165 Sep 22 j 09:20 0°**П** min. Earth dist. -10170 Aug 25 j 22:56 22° \$\infty\$21'58 4.14046 AU retrograde -10165 Dec 05 i 16:35 7° **II** 33'39 direct -10170 Oct 24 j 14:17 17° ₹ 15'09 opposition -10164 Feb 04 j 21:35 2°**Д**41'20 2°26'18 -10169 Feb 01 i 01:20 0°る min. Earth dist. -10164 Feb 05 j 16:53 2°**II**35'13 4.30001 AU evening set -10169 Mar 01 j 16:33 6°る17'01 -10164 Feb 27 j 09:01 30°R8 direct -10164 Apr 06 j 23:13 27°844'47 -10169 Mar 15 j 09:07 9°る23'15 -1°26'59 -10164 May 16 j 01:38 0°**I**I conjunction -10169 Mar 15 j 09:11 9°る23'18 1°27'34 -10164 Aug 10 j 01:20 15°**Ⅱ**49'52 minimum elong evening set max. Earth dist. -10169 Mar 15 j 20:13 9°**궁**29'33 6.17864 AU -10169 Mar 29 j 00:39 12°**♂**28'46 conjunction -10164 Aug 22 j 10:09 18°**Д**38'52 1°39'29 morning rise -10169 Jul 08 j 00:11 0°≈ -10164 Aug 22 j 10:11 18°**Д**38'53 1°40'02 minimum elong -10169 Jul 31 j 14:56 0°≈54'53 -10164 Aug 21 j 13:50 18°**Д**27'16 6.26653 AU retrograde max. Earth dist. -10169 Aug 24 j 01:40 30°R궁 -10164 Sep 03 j 19:04 21°**Ц**28'02 morning rise -10169 Sep 28 j 15:44 25° ₹55'29 -1°43'05 -10164 Oct 13 j 09:58 0°5 opposition -10169 Sep 28 j 14:35 25°**궁**55'52 4.21970 AU -10163 Jan 07 j 12:17 9°545'42 min. Earth dist. retrograde -10169 Nov 28 j 00:04 20°る51'24 -10163 Mar 10 j 01:03 4°550'52 2°14'52 direct opposition -10168 Feb 19 j 02:31 0°≈ min. Earth dist. -10163 Mar 10 j 09:51 4°548'04 4.22990 AU evening set -10168 Apr 04 j 20:23 9°≈35'09 -10163 May 04 j 07:55 30°R **Ⅱ** direct -10163 May 10 j 01:20 29°**Ц**56'52 conjunction -10168 Apr 18 j 09:21 12°≈36'43 -0°46'28 -10163 May 15 j 19:33 0°ഇ minimum elong -10168 Apr 18 j 09:25 12°≈36'45 0°46'56 evening set -10163 Sep 10 j 19:37 18°511'05 max. Earth dist. -10168 Apr 18 j 02:48 12°≈33'03 6.25828 AU -10168 Apr 29 j 01:22 15°≈ conjunction -10163 Sep 23 j 08:44 21°505'07 1°16'00 -10168 May 01 j 19:17 15°≈36'43 -10163 Sep 23 j 08:48 21°505'10 1°16'33 morning rise minimum elong -10168 Jul 16 j 04:26 0°**米** max. Earth dist. -10163 Sep 23 j 04:43 21°502'48 6.18915 AU -10168 Aug 31 j 15:48 3°¥ 19'50 -10163 Oct 05 j 23:41 24°500'17 retrograde morning rise -10168 Oct 17 j 18:25 30°R≈ -10163 Nov 01 i 18:59 $0^{\circ}\Omega$ -10168 Oct 30 j 01:39 28°≈24'14 -0°30'30 opposition retrograde -10162 Feb 11 j 17:45 $13^{\circ}\Omega$ 02'10 -10162 Apr 14 j 02:31 8°**Ω**03'43 1°19'32 min. Earth dist. -10168 Oct 30 j 11:21 28°≈21'02 4.29221 AU opposition direct -10168 Dec 30 j 13:46 23°≈20'12 min. Earth dist. -10162 Apr 13 j 23:29 8° **Ω**04'42 4.15006 AU -10167 Mar 10 j 23:46 0°₩ direct -10162 Jun 12 j 22:24 $3^{\circ}\Omega$ 10'52 -10167 Mar 27 j 15:09 3° **米** 00'40 -10162 Sep 14 j 06:25 15°Ω asc node -10167 May 08 j 09:04 11° **X** 44'12 -10162 Oct 13 j 21:22 21° **Ω**40'09 evening set evening set conjunction -10167 May 21 j 14:08 14° **X** 40'11 0°07'39 conjunction -10162 Oct 26 j 19:30 $24^{\circ}\Omega41'26$ $0^{\circ}27'02$ minimum elong -10167 May 21 j 14:07 14° \(\mathbf{H}\) 40'11 0°07'25 minimum elong -10162 Oct 26 j 19:33 24°**Ω**41'28 0°27'25 behind sun begin -10167 May 21 j 06:43 14° **∺** 36'05 max. Earth dist. -10162 Oct 27 j 08:58 24°**Ω**49'18 6.11492 AU -10167 May 21 j 21:31 14° \ 44'16 -10162 Nov 08 j 21:04 27° **Ω**44'34 behind sun end morning rise -10167 May 20 j 14:46 14° **★**27'11 6.31871 AU -10162 Nov 18 j 15:52 0° m max. Earth dist. -10167 Jun 03 j 15:51 17° ¥ 34'24 -10161 Mar 19 j 19:22 17° m 24'20 morning rise retrograde -10167 Aug 05 j 15:59 $0^{\circ}\Upsilon$ -10161 Apr 27 j 16:58 15° Mp 06'58 desc. node retrograde $-10167 \text{ Oct } 02 \text{ j } 06:35 \quad 4^{\circ} \Upsilon 53'21$ opposition -10161 May 19 j 16:48 12° m 22'07 -0°04'59 opposition -10167 Dec 01 j 05:49 0° \mathbf{Y} 00'34 0° 49'23 min. Earth dist. -10161 May 19 j 00:58 12° m 27'22 4.08734 AU -10167 Dec 01 j 07:34 30°R ★ direct -10161 Jul 17 j 09:30 7° Mp 28'31 min. Earth dist. -10167 Dec 02 j 01:11 29° **★**54'18 4.33618 AU evening set -10161 Nov 17 j 18:00 26° Mp 16'22 direct -10166 Feb 01 j 14:13 24° **€** 58'09 -10166 Apr 03 j 05:41 0°**Υ** -10161 Dec 01 j 01:47 29° m 23'50 -0°32'25 conjunction

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10161 in astronomical counting style is the year 10162 BCE in historical counting style. -10161 Dec 01 i 01:44 29° m 23'48 0°32'20 minimum elong behind sun begin -10155 May 25 j 22:33 19° **₭** 07'15 max. Earth dist. -10161 Dec 02 j 06:27 29° m 40'41 6.06958 AU -10155 May 26 j 04:17 19° ¥ 10'25 behind sun end -10161 Dec 03 j 15:21 0°₽ -10155 Jun 08 j 01:44 22° **ਮ** 02'21 morning rise -10161 Dec 14 j 13:03 -10155 Jul 15 j 20:21 0°**Υ** 2°**♀**33'11 morning rise -10155 Oct 06 j 15:09 -10160 Apr 24 j 03:31 22°**♀**30'29 9°**Y**20′19 retrograde retrograde -10155 Dec 05 j 17:16 4° \cdot \cdot 27'48 -10160 Jun 22 j 09:01 17°**2**32'55 4.06429 AU min. Earth dist. opposition 0°59'43 -10155 Dec $06\,\mathrm{j}\,12:37$ $4^\circ \Upsilon 21'33$ $4.33761~\mathrm{AU}$ opposition -10160 Jun 23 j 06:05 17°**2**25'47 -1°29'18 min. Earth dist. -10160 Aug 20 j 10:42 12°**♀**29'37 direct -10154 Jan 17 j 15:30 30°R ★ -10154 Feb 06 j 01:42 29°**∺**25'45 -10160 Dec 16 j 11:10 0°M₊ direct evening set -10160 Dec 23 j 04:40 1°M33'18 -10154 Feb 25 j 15:54 $0^{\circ}\Upsilon$ evening set -10154 Jun 13 j 22:33 17°**Y**'34'30 -10159 Jan 05 j 18:54 4°ML43'21 -1°20'38 -10154 Jun 25 j 09:04 20°**Y**07'16 conjunction max. Earth dist. 6.34064 AU -10159 Jan 05 j 18:48 4°M 43'18 1°20'55 minimum elong max. Earth dist. -10159 Jan 07 j 04:58 5°ML03'14 6.06984 AU conjunction -10154 Jun 26 j 16:37 20°**Y**24'53 1°04'36 morning rise -10159 Jan 19 j 11:31 7°M54'36 minimum elong -10154 Jun 26 j 16:32 20° **Y** 24'50 1°04'45 -10159 Feb 20 j 03:19 15°M morning rise -10154 Jul 09 j 07:53 23°**Υ**13'51 retrograde -10159 May 29 j 18:04 27° ML40'05 -10154 Aug 09 j 23:45 0°8 min. Earth dist. -10159 Jul 27 j 08:32 22°M-42'09 4.08929 AU retrograde -10154 Nov 07 j 13:27 10°**8**34'35 opposition -10159 Jul 28 j 04:33 22°M 35'18 -2°20'53 opposition -10153 Jan 07 j 06:50 5°**8**42'59 2°00'57 direct -10159 Sep 24 j 12:54 17° ML35'46 min. Earth dist. -10153 Jan 08 j 05:15 5°**8**35'51 4.33463 AU -10159 Dec 29 j 21:48 0° ₹ direct -10153 Mar 10 j 18:34 0°**8**43'48 evening set -10158 Jan 29 i 05:41 6° ₹ 44'18 -10153 Jun 28 j 00:20 15°8 evening set -10153 Jul 15 j 05:39 18°**8**47'18 conjunction -10158 Feb 11 j 22:28 9° ₹ 53'16 -1°39'17 minimum elong -10158 Feb 11 j 22:27 9° ₹753'16 1°39'49 conjunction -10153 Jul 27 j 16:24 21°835'17 1°35'13 max. Earth dist. -10158 Feb 12 j 23:36 10° ₹ 07'44 6.11603 AU minimum elong -10158 Feb 25 j 15:59 13° ₹02'25 max. Earth dist. -10153 Jul 26 j 12:31 21°8 19'33 6.31629 AU morning rise -10158 May 27 j 05:09 0°る -10153 Aug 09 j 01:29 24°**8**22'32 morning rise -10158 Jul 03 j 02:30 2°る10'10 -10153 Sep 03 j 20:22 0°**П** retrograde -10158 Aug 08 j 17:05 30°R ✓ -10153 Dec 10 j 07:11 12°**I**07'11 retrograde -10158 Aug 31 j 03:52 27°**尽** 07'37 -2°21'20 -10152 Feb 09 j 14:47 7° **I**I 14'35 2°27'26 opposition opposition -10158 Aug 30 j 16:36 27° ₹ 11'28 4.15233 AU min. Earth dist. -10152 Feb 10 j 07:45 7°**П**09'13 4.29163 AU min. Earth dist. -10158 Oct 29 j 10:44 22° ₹ 05'01 direct -10152 Apr 11 j 12:17 2°**Ⅲ**18'31 direct -10157 Jan 12 j 17:37 0°궁 -10152 Aug 14 j 10:52 20°**Ⅲ**24'23 evening set -10157 Mar 06 j 15:10 11°**⋜**04'17 evening set -10152 Aug 26 j 19:49 23°**I**I13'48 1°38'00 conjunction -10157 Mar 20 j 07:37 14°♂09'56 -1°22'48 -10152 Aug 26 j 19:51 23°**I**I13'49 1°38'34 conjunction minimum elong minimum elong -10157 Mar 20 j 07:42 14°る09'59 1°23'22 max. Earth dist. -10152 Aug 26 j 02:07 23°**Д**03'40 6.25738 AU max. Earth dist. -10157 Mar 20 j 17:12 14°る15'22 6.19077 AU morning rise -10152 Sep 08 j 05:08 26°**Ц**03'32 morning rise -10157 Apr 02 j 22:25 17°쥥14'41 -10152 Sep 25 j 19:59 0°5 -10157 Jun 04 j 21:33 0°≈ retrograde -10151 Jan 12 j 09:30 14°526'47 -10157 Aug 05 j 02:18 5°≈33'56 -10151 Mar 14 j 21:34 9°531'30 2°09'34 retrograde opposition -10157 Oct 03 j 03:50 0°≈35'07 -1°34'23 min. Earth dist. -10151 Mar 15 j 05:21 9°529'01 4.22048 AU opposition min. Earth dist. -10157 Oct 03 j 03:58 0°≈35'05 4.23095 AU -10151 May 14 j 19:27 4°537'45 direct -10157 Oct 07 j 12:31 30°R ₹ -10151 Sep 15 j 08:00 22°552'57 evening set direct -10157 Dec 02 j 15:44 25°る30'57 -10151 Sep 27 j 22:05 25°\$47'48 1°10'27 -10156 Jan 27 i 13:26 0°≈ conjunction -10151 Sep 27 j 22:10 25°547'51 evening set -10156 Apr 09 j 13:46 14°≈11'52 minimum elong 1°11'00 -10151 Sep 27 j 20:23 25°5546'49 6.18044 AU -10156 Apr 13 j 04:16 15°≈ max. Earth dist. -10151 Oct 10 i 14:21 28°543'54 morning rise -10156 Apr 23 i 01:44 17°≈12'42 -0°39'25 -10151 Oct 16 j 02:57 $0^{\circ}\Omega$ conjunction -10156 Apr 23 j 01:48 17°≈12'44 0°39'51 -10150 Jan 03 j 17:12 15° Ω minimum elong max. Earth dist. -10156 Apr 22 j 14:51 17°≈06'37 6.26789 AU -10150 Feb 16 j 15:09 17° **Ω**50'37 retrograde -10156 May 06 j 10:52 20°≈11'57 morning rise -10150 Apr 01 j 23:02 15°RΩ -10156 Jun 22 j 14:10 0°**)** opposition -10150 Apr 19 j 00:23 12°**Ω**51'37 1°08'59 retrograde -10156 Sep 05 j 01:58 7°**₩** 50'40 min. Earth dist. -10150 Apr 18 j 18:30 12° **Ω**53'31 4.14272 AU opposition -10156 Nov 03 j 12:31 2° **∺** 55'31 -0°19'21 direct -10150 Jun 17 j 15:37 7°**Ω**58'47 min. Earth dist. -10156 Nov 04 j 00:32 2° **∺**51'33 4.29944 AU -10150 Aug 25 j 20:42 15°**Ω** -10156 Nov 27 j 06:30 30°R≈ -10150 Oct 18 j 14:19 26° Ω29'23 evening set -10155 Jan 04 j 04:33 27°≈51'33 direct -10150 Oct 31 j 13:48 29° Ω31'28 0°19'00 asc. node -10155 Feb 05 j 05:43 29°≈23'02 conjunction -10155 Feb 11 j 10:15 0°**光** minimum elong -10150 Oct 31 j 13:50 29° Ω 31'30 0°19'21 evening set -10155 May 12 j 21:26 16° **₭** 13'32 max. Earth dist. -10150 Nov 01 j 05:59 29° **Ω**40'57 6.10959 AU max. Earth dist. -10155 May 25 j 01:42 18° **米** 55'38 6.32310 AU -10150 Nov 02 j 14:29 0° m morning rise -10150 Nov 13 j 16:39 2° m 35'27 -10155 May 26 j 01:26 19° **★** 08'51 0°15'13 -10149 Mar 08 j 16:14 21° m 53'15 conjunction desc. node

retrograde

-10149 Mar 24 j 19:51 22° m 17'54

-10155 May 26 j 01:25 19° **★** 08'50 0°15'02

minimum elong

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10149 in astronomical counting style is the year 10150 BCE in historical counting style. -10149 May 24 j 14:22 17° m 15'13 -0°17'21 max. Earth dist. -10143 May 29 j 10:57 23° **H**25'01 6.32631 AU opposition min. Earth dist. -10149 May 23 j 22:12 17° m 20'36 4.08433 AU -10149 Jul 22 j 05:48 12° m 21'19 -10143 May 30 j 13:01 23° + 39'31 0°22'46 direct conjunction -10149 Nov 17 j 14:11 0°**♀** -10143 May 30 j 12:59 23°**)** 39'30 minimum elong 0°22'38 -10149 Nov 22 j 15:40 -10143 Jun 12 j 12:12 26°**米** 32'24 evening set 1°**≏**10'37 morning rise -10143 Jun 28 j 08:46 -10143 Oct 11 j 02:20 13°**Y**49'46 -10149 Dec 06 j 00:30 4° **2**18'34 -0° 40'09 conjunction retrograde -10143 Dec 10 j 05:46 8° **Y** 57'28 minimum elong -10149 Dec 06 j 00:26 4°**£**18'31 0°40'08 opposition 1°09'47 -10143 Dec 11 j 02:03 8°**Υ**50'55 max. Earth dist. -10149 Dec 07 j 06:35 4°**£**36′13 6.06904 AU min. Earth dist. 4.33896 AU morning rise -10149 Dec 19 j 12:45 7°**≏**28'19 direct -10142 Feb 10 j 15:41 3°**Υ**55'44 retrograde -10148 Apr 29 j 01:01 27° **△**24'59 evening set -10142 Jun 18 j 08:22 22°**Y**'03'25 -10148 Jun 27 j 04:05 22°**2**27'27 4.06651 AU -10142 Jun 29 j 19:33 24°**Υ**36'39 min. Earth dist. max. Earth dist. 6.33992 AU opposition -10148 Jun 28 j 01:33 22°**2**20'11 -1°38'52 direct -10148 Aug 25 j 04:46 17°**♀**23'37 conjunction -10142 Jul 01 j 01:22 24°**Υ**53'18 1°10'16 -10148 Nov 29 j 12:07 0°M minimum elong -10142 Jul 01 j 01:17 24°**Y**53'16 1°10'27 evening set -10148 Dec 28 j 05:21 6°ML28'18 morning rise -10142 Jul 13 j 15:21 27°**Υ**41'47 -10142 Jul 24 j 02:22 0°8 conjunction -10147 Jan 10 j 19:58 9°M38'19 -1°25'11 -10142 Nov 05 j 04:40 15°8 minimum elong -10147 Jan 10 j 19:53 9°MJ38'16 1°25'30 retrograde -10142 Nov 12 j 00:43 15°**8**04'24 max. Earth dist. -10147 Jan 12 j 03:58 9°ML56'57 6.07423 AU -10142 Nov 18 j 20:44 15°R8 morning rise -10147 Jan 24 j 12:59 12°M 49'27 opposition -10141 Jan 11 j 21:14 10°812'45 2°07'01 -10147 Feb 03 i 00:29 15°M min. Earth dist. -10141 Jan 12 j 18:28 10° **8**06'00 4.33198 AU -10147 Apr 24 j 09:53 0° ₹ direct -10141 Mar 15 j 07:26 5°**8**14'02 retrograde -10147 Jun 03 j 11:49 2° ₹31'13 -10141 Jun 10 j 14:06 15°8 -10147 Jul 13 j 06:33 30°RML evening set -10141 Jul 19 j 13:57 23°**8**16'53 -10147 Aug 01 j 20:58 27° M26'38 -2°24'04 opposition -10147 Aug 01 j 02:21 27°M33'01 4.09548 AU -10141 Jul 31 j 23:53 26°804'41 1°37'24 min Earth dist conjunction -10147 Sep 29 j 08:14 22°M26'38 -10141 Jul 31 j 23:50 26°**8**04'40 1°37'51 direct minimum elong -10147 Dec 10 j 12:37 0°**₰** max. Earth dist. -10141 Jul 30 j 20:22 25°849'09 6.31158 AU -10146 Feb 03 j 05:59 11°**尽** 35'07 -10141 Aug 13 j 08:40 28°**8**51'59 evening set morning rise -10141 Aug 18 j 10:19 0°**Ⅱ** -10146 Feb 16 j 23:06 14°**х** 43'51 -1°39'02 -10141 Dec 14 j 23:29 16°**Ц**40'35 conjunction retrograde -10140 Feb 14 j 07:47 11°**Д**47'39 2°27'40 -10146 Feb 16 j 23:06 14° ₹ 43'52 1°39'34 opposition minimum elong -10146 Feb 17 j 23:19 14° ₹ 57'47 6.12358 AU min. Earth dist. -10140 Feb 15 j 00:25 11°**Д**42'23 4.28496 AU max. Earth dist. -10146 Mar 02 j 16:18 17° ₹ 52'34 -10140 Apr 16 j 03:53 6°**Д**51'54 morning rise direct -10146 Apr 29 j 16:16 0°궁 -10140 Aug 18 j 19:35 24°**I**57'55 evening set -10146 Jul 07 j 17:32 6°**궁**54'44 retrograde opposition -10146 Sep 04 j 17:22 1°る52'43 -2°17'24 conjunction -10140 Aug 31 j 04:57 27°**Ⅱ**47'49 1°35'57 min. Earth dist. -10146 Sep 04 j 07:43 1° ₹56'01 4.16050 AU minimum elong -10140 Aug 31 j 04:59 27°**Ц**47'50 1°36'30 -10146 Sep 18 j 20:37 30°R ✓ max. Earth dist. -10140 Aug 30 j 13:32 27°**Д**38'59 6.24923 AU direct -10146 Nov 03 j 03:18 26°**х** 49'52 -10140 Sep 09 j 19:55 0°5 -10146 Dec 18 j 17:33 0°ਰ -10140 Sep 12 j 14:46 0°538'07 morning rise -10145 Mar 11 j 12:27 15°**⋜**48'01 -10139 Jan 17 j 03:00 19°506'30 evening set retrograde -10139 Mar 19 j 16:41 14°5510'43 2°03'30 opposition -10145 Mar 25 j 04:29 18°₹53'14 -1°18'07 min. Earth dist. -10139 Mar 19 j 22:14 14°508'57 4.21132 AU conjunction -10145 Mar 25 i 04:34 18° ₹53'17 1°18'41 minimum elong direct -10139 May 19 i 10:13 9°517'11 max. Earth dist. -10145 Mar 25 j 09:51 18° 중56'16 6.19894 AU evening set -10139 Sep 19 i 19:52 27°533'37 -10139 Sep 30 j 08:32 0°Ω morning rise -10145 Apr 07 j 18:56 21°る57'28 -10145 May 15 i 04:54 0°≈ retrograde -10145 Aug 09 i 13:52 10°≈11'35 -10139 Oct 02 j 11:00 $0^{\circ}\Omega$ 29'20 $1^{\circ}04'31$ conjunction -10145 Oct 07 j 15:43 5°≈13'18 -1°25'11 minimum elong -10139 Oct 02 i 11:05 $0^{\circ}\Omega$ 29'23 $1^{\circ}05'03$ opposition max. Earth dist. 6.17108 AU min. Earth dist. -10145 Oct 07 j 17:41 -10139 Oct 02 j 11:15 $0^{\circ}\Omega$ 29'29 5°≈12'38 4.23842 AU direct -10145 Dec 07 j 07:27 0°≈09'03 -10139 Oct 15 j 04:35 3°**\O2**6'26 morning rise -10139 Dec 08 j 16:45 $15^{\circ}\Omega$ -10144 Mar 27 j 20:35 15°≈ -10144 Apr 14 j 06:33 18°≈48'25 retrograde -10138 Feb 21 j 14:21 22°**Ω**38'23 evening set opposition -10138 Apr 23 j 21:29 17°**\O**38'48 0°58'03 -10144 Apr 27 j 17:48 21°≈48'41 -0°32'08 conjunction min. Earth dist. -10138 Apr 23 j 14:45 17° **Ω**41'00 4.13360 AU -10144 Apr 27 j 17:51 21°≈48'42 0°32'33 -10138 May 15 j 09:54 15°RΩ minimum elong -10144 Apr 27 j 06:03 21°≈42'07 6.27441 AU -10138 Jun 22 j 10:02 12°**Ω**45'52 max. Earth dist. direct -10144 May 11 j 01:48 24°≈47'15 -10138 Jul 29 j 20:03 15°**Ω** morning rise -10144 Jun 04 j 02:33 0°**米** -10138 Oct 17 j 15:35 retrograde -10144 Sep 09 j 11:59 12° ¥22'46 evening set -10138 Oct 23 j 07:18 1° Mp 18'44 opposition -10144 Nov 08 j 00:00 7° **★**28'07 -0°08'03 min. Earth dist. -10144 Nov 08 j 12:50 7°**米**23'54 4.30450 AU conjunction -10138 Nov 05 j 08:13 4° mg 21'47 0°10'52 asc. node -10144 Dec 16 j 21:46 3° ¥ 12'30 minimum elong -10138 Nov 05 j 08:14 4° Mp 21'48 0°11'11 -10143 Jan 08 j 18:10 2° **∺**24'25 behind sun begin -10138 Nov 05 j 02:11 4° m) 18'16 direct

behind sun end

-10138 Nov 05 j 14:18

4° Mp 25'20

-10143 May 17 j 10:27 20° **ਮ** 44'54

evening set

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10138 in astronomical counting style is the year 10139 BCE in historical counting style. opposition -10138 Nov 06 i 02:42 4° m 32'36 6.10170 AU -10132 Nov 12 j 13:19 12° \(\)03'44 0°03'24 max. Earth dist. -10138 Nov 18 j 12:33 7° m 26'45 min. Earth dist. -10132 Nov 13 j 02:46 11° **★**59'19 4.31302 AU morning rise -10137 Jan 17 j 07:05 20° Mp 06'08 -10131 Jan 13 j 10:08 7° **€** 00'14 desc. node direct -10137 Mar 29 j 19:45 27° **m** 12'44 retrograde -10131 May 21 j 23:58 25° **★** 17'44 evening set -10137 May 29 j 11:57 22° m 09'39 -0°29'37 -10131 Jun 02 j 23:47 27°**米** 57'21 opposition max. Earth dist. 6.33366 AU -10137 May 28 j 18:40 22° Mp 15'24 4.07847 AU min. Earth dist. -10137 Jul 26 j 23:59 17° **m** 15'27 conjunction -10131 Jun 04 j 01:12 28°₩11'30 0°30'12 direct 0∘**⊽** -10131 Jun 04 j 01:09 28° **∺** 11'28 0°30'08 -10137 Oct 31 j 15:39 minimum elong -10137 Nov 27 j 14:48 -10131 Jun 12 j 04:18 0°**Υ** evening set 6°**₽**07'33 morning rise -10131 Jun 16 j 22:53 1°**Y**03′28 conjunction -10137 Dec 11 j 00:36 9°**2**16'02 -0°47'40 retrograde -10131 Oct 15 j 12:28 18°Υ19'03 -10137 Dec 11 j 00:31 9°**△**15'59 -10131 Dec 14 j 18:53 13°**Υ**26'56 minimum elong 0°47'42 opposition 1°19'23 -10137 Dec 12 j 06:20 9°**೨**33'29 max. Earth dist. 6.06551 AU min. Earth dist. -10131 Dec 15 j 15:14 13° **Y**20'25 4.34464 AU morning rise -10137 Dec 24 j 13:53 12°**£**26'20 direct -10130 Feb 15 j 06:29 8°**Y**25'40 -10136 Mar 25 j 16:37 0°M evening set -10130 Jun 22 j 17:36 26°**Y**30'35 retrograde -10136 May 03 j 23:31 2°M23'23 max. Earth dist. -10130 Jul 04 j 02:16 29° Υ 02'29 6.34321 AU -10136 Jun 11 j 23:37 30°R € opposition -10136 Jul 02 j 22:02 27°**2**18'23 -1°47'50 conjunction -10130 Jul 05 j 09:09 29°**γ**19'45 1°15'27 min. Earth dist. -10136 Jul 02 j 00:42 27°**£**25'39 4.06568 AU minimum elong -10130 Jul 05 j 09:04 29°**Υ**19'42 direct -10136 Aug 30 j 01:27 22° **2**21'18 -10130 Jul 08 j 09:12 0°8 -10136 Nov 09 j 23:13 0°M morning rise -10130 Jul 17 j 22:11 2°807'39 evening set -10135 Jan 02 j 08:21 11°M28'10 -10130 Sep 21 j 16:11 15°8 retrograde -10130 Nov 16 j 12:03 19°**8**31'05 conjunction -10135 Jan 15 j 23:44 14°M 38'22 -1°29'11 -10129 Jan 13 j 17:46 15°R minimum elong -10135 Jan 15 j 23:39 14°M 38'19 1°29'33 opposition max. Earth dist. -10135 Jan 17 j 08:27 14° ML57'25 6.07614 AU min. Earth dist. -10129 Jan 17 j 08:05 14°\begin{array}{c} 32'37 \end{array} 4.33276 AU -10135 Jan 17 j 12:54 15°M direct -10129 Mar 19 j 20:57 9°**8**40'59 -10135 Jan 29 j 16:55 17° ML 49'28 -10129 May 21 j 00:16 15°8 morning rise -10135 Mar 28 j 01:01 0° ⊀ -10129 Jul 23 j 20:34 27°842'07 evening set -10135 Jun 08 j 09:36 7°**尽** 27'59 -10129 Aug 03 j 01:25 0°**Ⅱ** retrograde -10135 Aug 06 j 15:32 2°**尽**23'38 -2°26'19 max. Earth dist. -10129 Aug 04 j 04:40 0°**Ⅱ**15′24 opposition 6.30967 AU min. Earth dist. -10135 Aug 05 j 22:09 2°**尽**29'35 4.09996 AU -10135 Aug 24 j 21:41 30°RM -10129 Aug 05 j 06:04 0°II29'46 1°38'56 conjunction -10129 Aug 05 j 06:03 0°**П**29'45 1°39'25 -10135 Oct 04 j 04:46 27° M23'10 direct minimum elong -10129 Aug 17 j 14:21 3°**Ц**16'57 -10135 Nov 13 j 17:08 0° ₹ morning rise -10134 Feb 08 j 09:07 16° **₹** 32'03 -10129 Dec 19 j 11:57 21°**Д**08'41 evening set retrograde -10128 Feb 18 j 22:42 16° **I**I 15'30 2°26'57 opposition conjunction -10134 Feb 22 j 02:14 19° ₹ 40'33 -1°38'04 min. Earth dist. -10128 Feb 19 j 14:07 16°**Ц**10'37 4.28045 AU minimum elong -10134 Feb 22 j 02:15 19° ₹ 40'34 1°38'37 direct -10128 Apr 20 j 16:15 11°**Ц**20'08 max. Earth dist. -10134 Feb 22 j 23:17 19°**尽** 52'37 6.13006 AU evening set -10128 Aug 23 j 02:21 29°**Ⅲ**25'51 morning rise -10134 Mar 07 j 19:29 22°**尽** 48'56 -10128 Aug 25 j 14:17 0°ഇ -10134 Apr 09 j 11:36 0°ਰ -10134 Jul 12 j 09:44 11°₹45'38 conjunction -10128 Sep 04 j 11:56 2°516'09 1°33'20 retrograde -10134 Sep 09 j 09:37 6°₹44'04 -2°12'26 minimum elong -10128 Sep 04 j 11:59 2°516'11 1°33'55 opposition min. Earth dist. -10134 Sep 09 j 00:59 6°**정**47'00 4.16836 AU max. Earth dist. -10128 Sep 03 j 20:45 2°507'27 6.24237 AU -10134 Nov 07 j 22:55 1°**⋜**40'54 -10128 Sep 16 j 22:30 5°\$07'04 direct morning rise -10127 Jan 21 j 20:32 23°\$40'30 evening set -10133 Mar 16 j 12:13 20°る37'43 retrograde opposition -10127 Mar 24 j 09:41 18°544'15 1°56'47 -10133 Mar 30 i 03:58 23°₹42'27 -1°12'48 conjunction min. Earth dist. -10127 Mar 24 i 14:26 18°542'44 4.20232 AU minimum elong -10133 Mar 30 i 04:04 23°₹42'30 1°13'21 direct -10127 May 24 j 00:08 13°950'51 max. Earth dist. -10133 Mar 30 j 07:59 23° ₹ 44'43 6.20796 AU -10127 Sep 14 j 21:00 $0^{\circ}\Omega$ -10133 Apr 12 j 17:41 26°る46'02 -10127 Sep 24 j 05:39 $2^{\circ}\Omega$ 08'50 morning rise evening set -10133 Apr 27 j 07:43 0°≈ retrograde -10133 Aug 14 j 04:11 14°≈54'31 conjunction -10127 Oct 06 j 22:03 $5^{\circ}\Omega$ 05'32 $0^{\circ}58'17$ opposition -10133 Oct 12 j 06:07 9°≈56'48 -1°15'14 minimum elong -10127 Oct 06 j 22:08 5°**Ω**05'34 0°58'47 5°**Ω**07'00 6.16095 AU min. Earth dist. -10133 Oct 12 j 09:37 9°≈55'38 4.24774 AU max. Earth dist. -10127 Oct 07 j 00:35 direct -10133 Dec 12 j 01:51 4°≈52'36 morning rise -10127 Oct 19 j 16:55 8° **Ω**03'41 -10127 Nov 19 j 19:17 15°Ω-10132 Mar 09 j 19:16 15°≈ -10132 Apr 19 j 01:26 23°≈29'22 retrograde -10126 Feb 26 j 11:11 27° **Ω**21'16 evening set -10126 Apr 28 j 16:18 22° Ω21'16 0°46'57 opposition -10132 May 02 j 11:39 26°≈28'52 -0°24'32 conjunction min. Earth dist. -10126 Apr 28 j 08:27 22° Ω 23'50 4.12316 AU minimum elong -10132 May 02 j 11:41 26°≈28'53 0°24'55 direct -10126 Jun 27 j 00:18 17° Ω 28'19 max. Earth dist. -10132 May 01 j 21:43 26°≈21'05 6.28359 AU -10126 Oct 01 j 04:43 0° M morning rise -10132 May 15 j 18:38 29°≈26'39 evening set -10126 Oct 27 j 23:24 6° Mp 04'31 -10132 May 18 j 06:50 0°**米** -10132 Sep 13 j 22:45 16° **★** 58'02 -10126 Nov 10 j 01:34 9° Mp 08'36 0°02'50 retrograde conjunction -10132 Oct 27 j 01:32 14° **米** 09'02 -10126 Nov 10 j 01:33 9° m 08'35 0°03'07 asc. node minimum elong

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10126 in astronomical counting style is the year 10127 BCE in historical counting style. minimum elong behind sun begin -10126 Nov 09 i 17:25 9° m 03'50 -10120 May 07 j 03:24 1°\(\mathcal{H}\) 05'34 0°17'13 -10126 Nov 10 j 09:42 9° m 13'21 -10120 May 20 j 09:08 4°\color=02'25 behind sun end morning rise -10120 Sep 06 j 04:55 21°**米** 15'12 -10126 Nov 10 j 20:14 9° m 19'32 max. Earth dist. 6.09190 AU asc. node -10126 Nov 23 j 07:25 12° Mp 14'38 -10120 Sep 18 j 08:56 21° **光** 29'37 morning rise retrograde -10126 Nov 28 j 16:09 13° m 29'19 desc. node opposition -10125 Feb 25 j 19:45 -10120 Nov 17 j 16:29 16° ★ 30'43 4.32117 AU 0∘**⊽** min. Earth dist. -10125 Apr 03 j 17:53 2°**₽**05'05 retrograde direct -10119 Jan 18 j 02:16 11° **∺** 32'23 -10125 May 10 j 11:43 30°R Mp evening set -10119 May 26 j 11:39 29° **★** 47'04 $0^{\circ}\Upsilon$ opposition -10125 Jun 03 j 07:56 27° M 01'38 -0°41'30 -10119 May 27 j 11:06 min. Earth dist. -10125 Jun 02 j 13:50 27° m 07'42 4.07029 AU max. Earth dist. -10119 Jun 07 j 08:15 2°**Ƴ**24'52 6.33879 AU direct -10125 Jul 31 j 17:22 22° m 07'07 2°**Y**'40'00 -10125 Oct 12 j 16:19 -10119 Jun 08 j 11:29 0∘**⊽** conjunction 0°37'24 -10125 Dec 02 j 13:35 11°**♀**03'21 2°**Y**39'58 evening set minimum elong -10119 Jun 08 j 11:26 0°37'21 morning rise -10119 Jun 21 j 07:53 5°**Y**31'13 conjunction -10125 Dec 16 j 00:37 14° **2**12'35 -0°54'44 retrograde -10119 Oct 19 j 21:16 22°**γ**'46'01 minimum elong -10125 Dec 16 j 00:31 14° **2**12'32 0° 54'49 opposition -10119 Dec 19 j 06:55 17°**Υ**54'00 1°28'31 max. Earth dist. -10125 Dec 17 j 08:31 14°**△**31'19 6.05980 AU min. Earth dist. -10119 Dec 20 j 03:34 17°**Υ**47'23 4.34657 AU morning rise -10125 Dec 29 j 14:41 17°**2**23'29 direct -10118 Feb 19 j 19:09 12°**Υ**53'01 -10124 Feb 26 j 19:09 0°M₊ -10118 Jun 22 j 19:31 0°႘ retrograde -10124 May 08 j 23:52 7°**ጤ**21'40 evening set -10118 Jun 27 j 02:01 0°**8**56'38 opposition -10124 Jul 07 j 18:12 2°ML16'40 -1°55'56 max. Earth dist. -10118 Jul 08 j 10:31 3°**8**28'34 6.34162 AU min. Earth dist. -10124 Jul 06 j 21:26 2°ML23'44 4.06334 AU -10124 Jul 25 i 03:52 30°R **≏** conjunction -10118 Jul 09 j 16:30 3°**8**45'21 1°20'14 direct -10124 Sep 03 i 21:41 27° **2**19'11 minimum elong -10118 Jul 09 j 16:25 3°**8**45'18 1°20'30 -10124 Oct 14 j 12:51 0°M morning rise -10118 Jul 22 j 04:26 6°\begin{align*} 6°\begin{align*} \begin{align*} 32'52 \end{align*} -10123 Jan 01 j 01:21 15°M -10118 Aug 31 j 07:26 15°8 -10123 Jan 07 j 11:45 16°M28'54 -10118 Nov 21 j 00:09 23°858'52 retrograde evening set -10117 Jan 21 j 01:06 19°**8**07'03 2°16'45 opposition -10123 Jan 21 j 03:30 19°M 39'13 -1°32'28 min. Earth dist. -10117 Jan 21 j 22:18 19°**8**00'21 4.32781 AU conjunction -10123 Jan 21 j 03:26 19°M 39'11 1°32'53 -10117 Feb 28 j 13:41 15°R8 minimum elong -10123 Jan 22 j 10:38 19°M 57'20 6.07714 AU -10117 Mar 24 j 10:24 14°**8**09'08 max. Earth dist. direct -10123 Feb 03 j 21:10 22°M50'23 -10117 Apr 17 j 05:49 15°**8** morning rise -10123 Mar 07 j 23:25 0°⊀ -10117 Jul 18 j 10:01 0°**Ⅱ** -10123 Jun 13 j 04:59 12°**尽** 25'46 -10117 Jul 28 j 04:13 2°**Ⅲ**10'26 retrograde evening set -10123 Aug 11 j 10:00 7° ₹21'39 -2°27'27 -10117 Aug 08 j 11:15 4°**Ц**43'30 opposition max. Earth dist. 6.30154 AU -10123 Aug 10 j 16:37 7° ₹27'36 4.10445 AU min. Earth dist. -10123 Oct 09 j 01:11 2° ₹20'44 -10117 Aug 09 j 13:13 4°**I**I58'12 1°39'59 direct conjunction evening set -10122 Feb 13 j 12:22 21°**尽**29'49 minimum elong -10117 Aug 09 j 13:12 4°**I**58'11 morning rise -10117 Aug 21 j 21:32 7°**Ⅱ**45'41 conjunction -10122 Feb 27 j 05:36 24° ₹38'02 -1°36'22 retrograde -10117 Dec 24 j 04:41 25°**Ⅱ**42'48 minimum elong -10122 Feb 27 j 05:38 24°**х** 38'03 1°36'56 opposition -10116 Feb 23 j 16:13 20° **1**49'14 2°25'28 max. Earth dist. -10122 Feb 28 j 01:43 24° ₹ 49'34 6.13777 AU min. Earth dist. -10116 Feb 24 j 06:29 20°**II**44'43 4.26965 AU -10122 Mar 12 j 22:31 27° ₹ 45'57 direct -10116 Apr 25 j 06:18 15°**Д**54'09 morning rise -10122 Mar 22 j 20:10 0°る -10116 Aug 09 j 13:18 0°95 -10122 Jul 17 j 02:59 16° ₹36'27 -10116 Aug 27 j 12:06 retrograde evening set -10122 Sep 14 j 01:35 11°る35'19 -2°06'32 opposition -10116 Sep 08 j 22:28 6°\$52'42 1°30'06 min. Earth dist. -10122 Sep 13 j 18:51 11°る37'37 4.17825 AU conjunction -10116 Sep 08 j 22:32 6°552'44 1°30'41 direct -10122 Nov 12 j 19:19 6°る31'53 minimum elong evening set -10121 Mar 21 j 11:07 25°중26'15 max. Earth dist. -10116 Sep 08 i 10:26 6°545'46 6.22999 AU morning rise -10116 Sep 21 j 09:46 9°5544'29 -10121 Apr 04 j 02:23 28°る30'20 -1°07'01 retrograde -10115 Jan 26 j 18:30 28°524'37 conjunction minimum elong -10121 Apr 04 j 02:29 28°る30'23 1°07'33 opposition -10115 Mar 29 j 06:42 23°527'57 1°49'06 max. Earth dist. -10121 Apr 04 j 04:25 28°る31'28 6.21914 AU min. Earth dist. -10115 Mar 29 j 10:01 23°526'53 4.18922 AU -10121 Apr 10 j 17:32 0°≈ direct -10115 May 28 j 16:38 18°534'45 -10121 Apr 17 j 15:24 morning rise 1°≈33'09 -10115 Aug 28 j 20:05 $0^{\circ}\Omega$ -10121 Jun 24 j 13:20 15°≈ evening set -10115 Sep 28 j 20:36 6°**£**55'39 retrograde -10121 Aug 18 j 14:45 19°≈35'10 -10121 Oct 14 j 01:08 15°R≈ -10115 Oct 11 j 14:10 9°**Ω**53'26 0°51'24 conjunction -10121 Oct 16 j 19:27 14°≈37'52 -1°04'54 -10115 Oct 11 j 14:14 0°51'53 opposition minimum elong 9°**£**53′28 -10121 Oct 16 j 23:37 14°≈36'28 4.25893 AU -10115 Oct 11 j 17:57 6.14845 AU min. Earth dist. max. Earth dist. 9°**Ω**55'38 direct -10121 Dec 16 j 18:35 9°**≈**33'35 morning rise -10115 Oct 24 j 10:40 12° Ω 52'50 -10120 Feb 17 j 08:08 15°≈ -10115 Nov 02 j 15:57 15°**Ω** evening set -10120 Apr 23 j 18:19 28°≈06'57 -10114 Jan 23 j 12:28 -10120 May 02 j 05:51 0°**)**€ retrograde -10114 Mar 03 j 12:22 2° Mp 16'38 max. Earth dist. -10120 May 06 j 11:37 0°**¥**56'47 6.29382 AU -10114 Apr 11 j 13:21 30°R**Ω** -10114 May 03 j 16:03 27° Ω 16'06 0°35'00 opposition -10120 May 07 j 03:23 1°₩ 05'34 -0°16'52 min. Earth dist. -10114 May 03 j 05:52 $27^{\circ}\Omega$ 19'27 4.11236 AU conjunction

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 26

,	cal year style is used: The		2	` //		, 1	age 20
direct	-10114 Jul 01 j 19:48		iii astronomicai co	evening set	-10108 Apr 28 j 05:51		ic.
direct	-10114 Jul 01 j 19:48 -10114 Sep 11 j 19:58	0°m		evening set	-10106 Apr 26 J 05.51	2 N 3133	
daga mada		•		agniumation	10100 May 11 : 12:55	5°) 29'43	0000120
desc. node	-10114 Oct 08 j 00:10	5° Mp 22'53		conjunction minimum elong	-10108 May 11 j 13:55	5° X 29'44	0°09'45
evening set	-10114 Nov 01 j 20:47	11 11/02 30		U	-10108 May 11 j 13:56	5° X 2944	0 0943
	10114 NI 15 : 00-21	1.40 m , 0.714.1	0005144	behind sun begin	-10108 May 11 j 07:16	5° H 33'25	
conjunction	-10114 Nov 15 j 00:31			behind sun end	-10108 May 11 j 20:36		C 20250 ATT
minimum elong	-10114 Nov 15 j 00:30		0°05'31	max. Earth dist.	-10108 May 10 j 19:53	5° 光 19'41 8° 光 25'45	6.30259 AU
behind sun begin	-10114 Nov 14 j 16:36	-		morning rise	-10108 May 24 j 18:25		
behind sun end	-10114 Nov 15 j 08:24	-	C 00 422 A I I	asc. node	-10108 Jul 18 j 21:43		
max. Earth dist.	-10114 Nov 15 j 23:16		6.08422 AU	retrograde	-10108 Sep 22 j 13:26		0005106
morning rise	-10114 Nov 28 j 07:39			opposition	-10108 Nov 21 j 08:53		0°25'26
	-10113 Jan 27 j 10:18	0∘ ত		min. Earth dist.	-10108 Nov 22 j 00:57		4.32602 AU
retrograde	-10113 Apr 08 j 21:44	7° Ω 08'04	0050104	direct	-10107 Jan 22 j 11:18		
opposition	-10113 Jun 08 j 08:21	2° ₽ 04'21			-10107 May 11 j 19:40	0°Υ 1° Ω 0 (145	
min. Earth dist.	-10113 Jun 07 j 13:30	2° ⊆ 10'40	4.06690 AU	evening set	-10107 May 30 j 19:06	4° Y 06'45	
	-10113 Jun 24 j 07:33	-			10105 1 10:15 25	co 0 0 = 010 =	004406
direct	-10113 Aug 05 j 16:09			conjunction	-10107 Jun 12 j 17:35	6° Y 59'07	0°44'06
	-10113 Sep 16 j 12:31	0∘ ⊽		minimum elong	-10107 Jun 12 j 17:31	6° Y 59'05	0°44'06
evening set	-10113 Dec 07 j 16:51	16° ± 07'54		max. Earth dist.	-10107 Jun 11 j 12:31	6° Y 42'55	6.33923 AU
				morning rise	-10107 Jun 25 j 12:48	9° Y 49'49	
conjunction	-10113 Dec 21 j 04:34			retrograde	-10107 Oct 24 j 05:54		
minimum elong	-10113 Dec 21 j 04:29		1°01'46	opposition	-10107 Dec 23 j 16:34		1°36'52
max. Earth dist.	-10113 Dec 22 j 12:40		6.06100 AU	min. Earth dist.	-10107 Dec 24 j 14:49		4.34270 AU
morning rise	-10112 Jan 03 j 19:33			direct	-10106 Feb 24 j 05:50		
	-10112 Feb 06 j 08:46	0° M			-10106 Jun 06 j 20:36	0°8	
retrograde	-10112 May 13 j 22:34			evening set	-10106 Jul 01 j 08:02	5° 8 17'57	
opposition	-10112 Jul 12 j 15:53	7° ™ 19'18					
min. Earth dist.	-10112 Jul 11 j 17:57	7° M 26'47	4.06944 AU	conjunction	-10106 Jul 13 j 21:34	8° 8 06'32	1°24'25
direct	-10112 Sep 08 j 19:48	2°M21'21		minimum elong	-10106 Jul 13 j 21:30	8° 8 06'30	1°24'44
	-10112 Dec 14 j 15:38			max. Earth dist.	-10106 Jul 12 j 14:31	7° 8 49'08	6.33346 AU
evening set	-10111 Jan 12 j 16:09	21°M30'33		morning rise	-10106 Jul 26 j 08:50		
					-10106 Aug 14 j 01:52		
conjunction	-10111 Jan 26 j 08:17	24°M40'32	-1°35'08	retrograde	-10106 Nov 25 j 12:04		
minimum elong	-10111 Jan 26 j 08:13	24°M40'30	1°35'34	opposition	-10105 Jan 25 j 14:40		2°20'28
max. Earth dist.	-10111 Jan 27 j 15:27	24°M58'37	6.08753 AU	min. Earth dist.	-10105 Jan 26 j 10:49	23° 8 26'50	4.31625 AU
morning rise	-10111 Feb 09 j 01:49	27°M51'09		direct	-10105 Mar 28 j 20:32	18° 8 35'42	
	-10111 Feb 18 j 11:24	0° ∡ ¹			-10105 Jul 01 j 19:57	Π $^{\circ}0$	
retrograde	-10111 Jun 18 j 00:02	17° ∡ 19'31		evening set	-10105 Aug 01 j 11:45	6° Ⅱ 39'28	
min. Earth dist.	-10111 Aug 15 j 11:44	12° ∡ ¹21′02	4.11796 AU				
opposition	-10111 Aug 16 j 03:16	12° ∡ 15'43	-2°27'28	conjunction	-10105 Aug 13 j 20:41	9° ∏ 27'42	1°40'22
direct	-10111 Oct 13 j 22:36	7° ∡ 14'24		minimum elong	-10105 Aug 13 j 20:41	9° ∏ 27'42	1°40'52
evening set	-10110 Feb 18 j 12:42	26° х 20′12		max. Earth dist.	-10105 Aug 12 j 21:20	9° Ⅱ 14′26	6.28750 AU
				morning rise	-10105 Aug 26 j 04:58	12° Ⅱ 15'46	
conjunction	-10110 Mar 04 j 05:49	29° ∡ ¹27'42	-1°34'04		-10105 Dec 14 j 03:46	0 \circ \odot	
minimum elong	-10110 Mar 04 j 05:52	29° ∡ ¹27'44	1°34'39	retrograde	-10105 Dec 29 j 00:06	0°ഇ20'16	
max. Earth dist.	-10110 Mar 04 j 23:59	29° ∡ ³38′04	6.15310 AU		-10104 Jan 12 j 19:36	30°RⅡ	
	-10110 Mar 06 j 14:24	0° ප		opposition	-10104 Feb 28 j 10:57	25° Ⅱ 26′24	2°23'01
morning rise	-10110 Mar 17 j 22:19	2° る 34'45		min. Earth dist.	-10104 Feb 29 j 00:13	25° Ⅱ 22'12	4.25415 AU
retrograde	-10110 Jul 21 j 13:13	21° ප 16'40		direct	-10104 Apr 29 j 21:17	20° Ⅲ 31'42	
opposition	-10110 Sep 18 j 13:47	16° る 16'02	-1°59'58		-10104 Jul 22 j 19:00	0°ಅ	
min. Earth dist.	-10110 Sep 18 j 07:53	16° る 18'02	4.19385 AU	evening set	-10104 Aug 31 j 23:35	8°9542'18	
direct	-10110 Nov 17 j 11:05	11° る 12'23					
evening set	-10109 Mar 26 j 04:57	0° ≈ 02'31		conjunction	-10104 Sep 13 j 10:36	11° © 34'23	1°26'11
	-10109 Mar 26 j 00:26	0° ≈		minimum elong	-10104 Sep 13 j 10:40	11° © 34'25	1°26'47
				max. Earth dist.	-10104 Sep 13 j 00:00	11° 5 28'16	6.21436 AU
conjunction	-10109 Apr 08 j 19:26	3° ≈ 05'43	-1°01'03	morning rise	-10104 Sep 25 j 23:08	14° 5 27'20	
minimum elong	-10109 Apr 08 j 19:32	3° ≈ 05'46	1°01'34		-10104 Dec 15 j 13:08	$0^{\circ}\Omega$	
max. Earth dist.	-10109 Apr 08 j 17:33	3° ≈ 04'39	6.23378 AU	retrograde	-10103 Jan 31 j 18:22	3° Ω 15′13	
morning rise	-10109 Apr 22 j 07:40	6° ≈ 07'36			-10103 Mar 20 j 18:04	30° ₹ 5	
	-10109 Jun 03 j 06:04	15° ≈		opposition	-10103 Apr 03 j 06:01		1°40'29
retrograde	-10109 Aug 22 j 22:57	24° ≈ 02'52		min. Earth dist.	-10103 Apr 03 j 06:11		4.17461 AU
opposition	-10109 Oct 21 j 04:14		-0°54'37	direct	-10103 Jun 02 j 10:20		
min. Earth dist.	-10109 Oct 21 j 11:23				-10103 Aug 08 j 16:51	$0^{\circ}\Omega$	
	-10109 Nov 26 j 09:44			evening set	-10103 Oct 03 j 13:40	11° Ω 48'54	
direct	-10109 Dec 21 j 08:42			-	·		
	-10108 Jan 15 j 13:34	15° ≈		conjunction	-10103 Oct 16 j 08:46	14° Ω 47'51	0°44'01
	-10108 Apr 16 j 16:28	0°) €		minimum elong	-10103 Oct 16 j 08:50	14° Ω 47'53	0°44'28
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Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10103 in astronomical counting style is the year 10104 BCE in historical counting style. max. Earth dist. -10103 Oct 16 j 17:29 14° Ω52'56 6.13631 AU -10097 May 16 j 08:44 15°≈ -10103 Oct 17 j 05:34 15° Ω -10097 Aug 27 j 07:45 28°≈36'03 retrograde -10103 Oct 29 j 06:40 $17^{\circ}\Omega 48'26$ -10097 Oct 25 j 15:26 23°≈39'49 -0°43'52 morning rise opposition -10097 Oct 25 j 23:22 23°≈37'11 4.28031 AU min. Earth dist. -10103 Dec 25 j 20:15 0° Mg -10102 Mar 08 j 16:30 retrograde 7° Mp 17'47 direct -10097 Dec 25 j 22:40 18°≈35'38 opposition -10102 May 08 j 17:42 2° Mp 16'41 0°22'32 -10096 Mar 30 j 15:53 0°**)**€ min. Earth dist. -10102 May 08 j 06:08 2° Mp 20'29 4.10365 AU evening set -10096 May 02 j 19:54 7°**₩**03'11 max. Earth dist. -10102 May 26 j 18:42 30°R**Ω** -10096 May 15 j 05:18 9° **★**48'21 6.30917 AU direct -10102 Jul 06 j 18:31 27°**\O**23'32 -10102 Aug 16 j 01:58 0° Mp conjunction -10096 May 16 j 02:40 10° **★** 00'15 -0°01'48 desc. node -10102 Aug 17 j 01:17 0° Mp 07'17 minimum elong -10096 May 16 j 02:39 10° **★** 00'14 0°02'04 -10102 Nov 06 j 20:23 16° M 05'25 -10096 May 15 j 18:30 9° **∺** 55'43 evening set behind sun begin behind sun end -10096 May 16 j 10:48 10° **★** 04'46 conjunction -10102 Nov 20 j 01:13 19° Mp11'13 -0°14'15 asc. node -10096 May 28 j 19:09 12° **∺**49'30 minimum elong -10102 Nov 20 j 01:11 19° m 11'12 0°14'05 morning rise -10096 May 29 j 06:05 12°**米**55'32 behind sun begin -10102 Nov 19 j 21:08 19° m 08'49 -10096 Sep 13 j 12:18 0°**Υ** behind sun end -10102 Nov 20 j 05:15 19° Mp 13'34 retrograde -10096 Sep 26 j 23:56 0°**Υ**17'38 max. Earth dist. -10102 Nov 21 j 01:23 19° m 25'24 6.07939 AU -10096 Oct 10 j 10:26 30°R € morning rise -10102 Dec 03 j 09:49 22° m 18'59 opposition -10096 Nov 25 j 20:10 25° \(\frac{1}{2} \) 24'27 0°36'20 -10101 Jan 06 j 16:10 0°**♀** min. Earth dist. -10096 Nov 26 j 14:25 25° **★** 18'31 4.32960 AU retrograde -10101 Apr 13 j 23:25 12° **△**13'39 direct -10095 Jan 27 j 01:49 20° **★**21'38 opposition -10101 Jun 13 j 08:54 7°**2**09'31 -1°05'20 -10095 Apr 24 i 06:38 0°Υ min. Earth dist. -10101 Jun 12 j 12:02 7°**2**16'32 4.06642 AU evening set -10095 Jun 04 i 05:26 8°**Υ**'33'48 direct -10101 Aug 10 j 14:50 2° **2**14'20 max. Earth dist. -10095 Jun 15 j 21:18 11° Υ 09'13 6.33947 AU evening set -10101 Dec 12 j 20:38 21° **△**13'46 $-10095 \text{ Jun } 17 \text{ j } 02:44 \ 11^{\circ} \Upsilon 25'36 \ 0^{\circ} 50'48$ conjunction -10101 Dec 26 j 09:14 24° \Delta 23'25 -1°08'08 -10095 Jun 17 j 02:40 11° **Y** 25'34 conjunction minimum elong 0°50'50 -10101 Dec 26 j 09:08 24° \Delta 23'22 1° 08'19 -10095 Jun 29 j 20:38 14° \bullet 15'46 minimum elong morning rise -10101 Dec 27 j 18:49 24°**2**43'05 6.06448 AU -10095 Sep 26 j 23:29 0°8 max. Earth dist. -10100 Jan 09 j 00:39 27°**2**34'32 -10095 Oct 28 j 15:49 1°833'13 morning rise retrograde -10100 Jan 19 j 13:17 0°M -10095 Nov 29 j 14:59 30°R**Y** -10100 Apr 09 j 06:03 15°™ -10095 Dec 28 j 05:28 26° \begin{pmatrix} \quad 41'32 & 1\circ 44'59 \end{pmatrix} opposition -10100 May 18 j 22:43 17° ML 27'05 -10095 Dec 29 j 02:59 26°**Y**34'39 4.33996 AU min. Earth dist. retrograde -10100 Jun 27 j 05:57 15°RM -10094 Feb 28 j 17:14 21°**Υ**41'23 direct -10100 Jul 17 j 13:27 12° M22'01 -2°09'46 -10094 May 19 j 15:52 0°**8** opposition min. Earth dist. -10100 Jul 16 j 16:45 12°M29'05 4.07649 AU -10094 Jul 05 j 16:53 9°**8**45'52 evening set -10100 Sep 13 j 19:37 7°M23'33 -10094 Jul 16 j 23:11 12°**8**17'15 6.32799 AU direct max. Earth dist. -10100 Nov 24 j 19:17 15°M evening set -10099 Jan 17 j 20:20 26° ML32'00 conjunction -10094 Jul 18 j 05:24 12°834'14 1°28'18 minimum elong -10094 Jul 18 j 05:20 12°**8**34'12 1°28'38 conjunction -10099 Jan 31 j 12:43 29°M41'37 -1°37'09 -10094 Jul 29 j 01:09 15°**8** -10099 Jan 31 j 12:40 29°M41'36 1°37'37 -10094 Jul 30 j 15:55 15°**8**21'39 minimum elong morning rise -10099 Feb 01 j 20:29 0° ₹ -10094 Oct 16 j 12:50 0°**Ⅱ** max. Earth dist. -10099 Feb 01 j 18:53 29°M 59'05 6.09725 AU retrograde -10094 Nov 30 j 04:12 2°**Д**56'54 -10099 Feb 14 j 06:16 2° ₹ 51'45 -10093 Jan 14 j 16:42 30°R8 morning rise -10099 Jun 22 j 16:57 22° ₹ 13'29 -10093 Jan 30 j 07:04 28° 804'52 2°23'29 retrograde opposition -10099 Aug 20 j 20:24 17° ₹ 10'01 -2°26'33 -10093 Jan 31 j 03:15 27° 858'28 4.30857 AU opposition min. Earth dist. -10099 Aug 20 j 05:18 17° ₹15'11 4.12958 AU min. Earth dist. direct -10093 Apr 02 j 11:38 23°**8**07'50 direct -10099 Oct 18 j 18:00 12° ₹ 08'19 -10093 Jun 12 i 12:45 0°**Ⅱ** -10098 Feb 18 j 06:15 0°る evening set -10093 Aug 05 j 20:52 11°**Ⅲ**12'24 -10098 Feb 23 j 13:34 1°る11'45 max. Earth dist. -10093 Aug 17 j 07:34 13°**II**48'21 6.27833 AU evening set -10098 Mar 09 j 06:24 4°쥥18'37 -1°31'10 conjunction -10093 Aug 18 j 05:41 14°Д00'57 1°40'13 conjunction minimum elong -10098 Mar 09 j 06:28 4°정18'39 1°31'45 minimum elong -10093 Aug 18 j 05:41 14°**Д**00'57 1°40'45 max. Earth dist. -10098 Mar 09 j 20:40 4°**3**26'44 6.16566 AU morning rise -10093 Aug 30 j 14:14 16°**Ⅲ**49'29 -10093 Nov 04 j 10:33 0°5 morning rise -10098 Mar 22 j 22:32 7°**궁**24'57 -10098 Jul 26 j 02:56 25°**궁**59'32 retrograde retrograde -10092 Jan 02 j 18:19 4°559'38 -10098 Sep 23 j 03:13 20°₹59'26 -1°52'41 -10092 Mar 04 j 06:40 0°505'21 2°19'41 opposition opposition -10098 Sep 23 j 00:05 21°る00'30 4.20606 AU -10092 Mar 04 j 23:31 30°R II min. Earth dist. -10098 Nov 22 j 06:03 15°る55'34 min. Earth dist. direct -10092 Mar 04 j 17:08 0°502'02 4.24431 AU -10097 Mar 09 j 10:48 direct -10092 May 04 j 11:58 25°**Ⅲ**11'01 evening set -10097 Mar 31 j 00:10 4°≈42'40 -10092 Jul 01 j 03:43 0°9 evening set -10092 Sep 05 j 11:13 13°522'47 conjunction -10097 Apr 13 j 14:11 7°≈45'11 -0°54'38

minimum elong

max. Earth dist.

morning rise

-10097 Apr 13 j 14:16

-10097 Apr 13 j 10:36

-10097 Apr 27 j 01:25 10°≈46'15

7°≈45'14 0°55'09

7°≈43'10 6.24492 AU

conjunction

minimum elong

max. Earth dist.

-10092 Sep 17 j 23:07 16°515'37 1°21'48

-10092 Sep 17 j 23:12 16°\$15'40 1°22'22

-10092 Sep 17 j 16:32 16°5511'49 6.20490 AU

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10092 in astronomical counting style is the year 10093 BCE in historical counting style. opposition -10092 Sep 30 j 12:31 19°509'25 -10086 Sep 27 j 15:29 25°₹40'12 -1°44'48 morning rise -10092 Nov 20 j 12:48 min. Earth dist. -10086 Sep 27 j 13:26 25°る40'53 4.21419 AU $0^{\circ}\Omega$ -10091 Feb 05 j 17:55 8°**Ω**02'43 -10086 Nov 26 j 21:18 20°る36'12 retrograde direct -10085 Feb 19 j 06:19 0°≈ -10091 Apr 08 j 04:04 3°**Ω**04'57 1°31'16 opposition -10091 Apr 08 j 03:11 3° **Ω**05'14 4.16606 AU -10085 Apr 04 j 18:35 9°≈21'43 min. Earth dist. evening set -10091 May 04 j 02:09 30°RS direct -10091 Jun 07 j 05:35 28°512'02 -10085 Apr 18 j 07:46 12°≈23'41 -0°47'55 conjunction -10085 Apr 18 j 07:50 12°≈23'43 0°48'23 -10091 Jul 10 j 22:46 0°**Ω** minimum elong -10091 Oct 01 j 05:00 15°**Ω** max. Earth dist. -10085 Apr 18 j 00:06 12°≈19'23 6.25214 AU evening set -10091 Oct 08 j 05:37 $16^{\circ}\Omega$ 37'22 -10085 Apr 29 j 22:59 15°≈ morning rise -10085 May 01 j 18:20 15°≈24'09 -10091 Oct 21 j 01:53 19° Ω 37'10 0°36'29 -10085 Jul 17 j 12:57 conjunction 0°**∀** -10091 Oct 21 j 01:56 19° Ω 37'12 0°36'55 minimum elong retrograde -10085 Aug 31 j 19:02 3°**升** 10'01 max. Earth dist. -10091 Oct 21 j 12:11 19°**Ω**43'11 6.12951 AU -10085 Oct 16 j 11:42 30°R≈ morning rise -10091 Nov 03 j 01:23 22°**Ω**38'45 opposition -10085 Oct 30 j 02:58 28°≈14'15 -0°32'52 -10091 Dec 05 j 23:11 min. Earth dist. -10085 Oct 30 j 13:03 28°≈10'55 4.28608 AU retrograde -10090 Mar 13 j 15:08 12° m 11'36 direct -10085 Dec 30 j 14:15 23°≈10'08 opposition -10090 May 13 j 15:57 7° m 10'00 0°10'15 -10084 Mar 10 j 21:30 0°**米** min. Earth dist. -10090 May 13 j 01:54 7° **m**) 14'38 4.09914 AU asc. node -10084 Apr 07 j 13:29 5°**米** 13'15 desc. node -10090 Jun 28 j 01:22 2° m 35'05 evening set -10084 May 07 j 10:06 11° ¥ 36'13 direct -10090 Jul 11 j 12:59 2° Mp 16'41 evening set -10090 Nov 11 j 17:02 21° m 00'01 conjunction -10084 May 20 j 15:51 14° **\(\)** 32'40 minimum elong -10084 May 20 j 15:50 14° \(\frac{1}{2}\) 32'39 conjunction -10090 Nov 24 i 23:10 24° m 06'25 -0°22'25 behind sun begin -10084 May 20 j 08:04 14° **★**28'21 minimum elong -10090 Nov 24 j 23:07 24° m 06'24 0°22'18 behind sun end -10084 May 20 j 23:36 14° ¥ 36'58 max. Earth dist. -10090 Nov 26 j 01:46 24° m 22'03 6.07749 AU max. Earth dist. -10084 May 19 j 18:27 14° + 20'45 6.31326 AU -10090 Dec 08 j 08:47 27° m 14'44 -10084 Jun 02 j 17:53 17° **€** 27'16 morning rise morning rise -10090 Dec 20 j 07:21 0°₽ -10084 Aug 05 j 10:19 0°**Υ** -10089 Apr 18 j 23:37 17°**♀**09'54 -10084 Oct 01 j 09:17 4°**Υ**47'57 retrograde retrograde -10089 Jun 17 j 09:24 12° **2** 12'21 4.06723 AU -10084 Nov 29 j 16:58 30°R € min. Earth dist. -10089 Jun 18 j 05:42 12°**2**05'30 -1°16'14 -10084 Nov 30 j 08:13 29° **€** 55'03 0°47'06 opposition opposition -10089 Aug 15 j 11:48 7°**♀**09'54 min. Earth dist. -10084 Dec 01 j 02:12 29° ★ 49'14 4.33190 AU direct -10089 Dec 17 j 21:06 26°**△**10'28 direct -10083 Jan 31 j 14:16 24° **★** 52'35 evening set -10083 Apr 02 j 21:03 0°**℃** -10089 Dec 31 j 10:22 29°**£**20'14 -1°13'56 -10083 Jun 08 j 16:26 13°**Y**'03'38 conjunction evening set -10089 Dec 31 j 10:16 29°**£**20'11 1°14'10 max. Earth dist. -10083 Jun 20 j 05:39 15°**Υ**37'45 6.33969 AU minimum elong -10088 Jan 01 j 19:51 29°**2**39'48 6.06772 AU max. Earth dist. -10088 Jan 03 j 06:25 0°M conjunction -10083 Jun 21 j 12:15 15°**Υ**'54'49 0°57'14 morning rise -10088 Jan 14 j 02:20 2°M31'23 minimum elong -10083 Jun 21 j 12:10 15°**Υ**'54'46 0°57'20 -10088 Mar 12 j 19:55 15° M ⋅ morning rise -10083 Jul 04 j 05:05 18°**Y**44'28 retrograde -10088 May 23 j 17:47 22° M20'50 -10083 Aug 28 j 23:56 0°**8** -10088 Jul 21 j 10:22 17° ML22'57 4.08208 AU retrograde -10083 Nov 02 j 05:06 6°**8**03'10 min. Earth dist. -10088 Jul 22 j 07:00 17°ML15'54 -2°15'09 -10082 Jan 01 j 19:40 1°**8**11'30 1°52'31 opposition opposition -10088 Aug 08 j 12:42 15°RML min. Earth dist. -10082 Jan 02 j 17:55 1°**8**04'24 4.33819 AU direct -10088 Sep 18 j 13:04 12°ML17'00 -10082 Jan 11 j 05:57 30°R℃ -10088 Oct 29 i 16:46 15°M $-10082 \text{ Mar } 05 \text{ j } 08:09 \ 26^{\circ} \Upsilon 11'43$ direct -10082 Apr 26 j 09:43 0°8 -10087 Jan 16 j 15:39 0° ₹ -10087 Jan 22 j 21:33 1°**尽** 25'39 -10082 Jul 10 j 01:41 14°**8**15'28 evening set evening set -10082 Jul 13 j 09:22 15°8 -10087 Feb 05 i 14:05 4° ₹ 35'02 -1°38'25 max. Earth dist. -10082 Jul 21 j 08:45 16°847'27 6.32413 AU conjunction -10087 Feb 05 i 14:03 4° ₹ 35'01 1°38'55 minimum elong max. Earth dist. -10087 Feb 06 j 16:58 4° ₹750'33 6.10450 AU conjunction -10082 Jul 22 j 13:26 17°**8**03'35 1°31'41 -10087 Feb 19 j 07:43 7° ₹ 44'48 -10082 Jul 22 j 13:22 17°**8**03'33 1°32'03 morning rise minimum elong retrograde -10087 Jun 27 j 08:45 27° ₹01'10 morning rise -10082 Aug 03 j 23:12 19°**8**50'50 opposition -10087 Aug 25 j 10:56 21° ₹ 58'06 -2°24'42 -10082 Sep 21 j 21:24 0°**Ⅱ** min. Earth dist. -10087 Aug 24 j 22:07 22°**尽**02'29 4.13770 AU retrograde -10082 Dec 04 j 17:35 7°**Ц**29'29 direct -10087 Oct 23 j 12:46 16° ₹ 55'59 opposition -10086 Feb 01 j 08:35 0°る min. Earth dist. -10081 Feb 04 j 17:37 2°**II**31'25 4.30296 AU -10086 Feb 28 j 11:59 5°**る**58'27 -10081 Feb 25 j 19:17 30°R8 evening set -10081 Apr 07 j 00:40 27°**8**40'31 direct -10086 Mar 14 j 04:53 9°♂04'59 -1°27'42 -10081 May 16 j 20:31 0°**Ⅱ** conjunction minimum elong -10086 Mar 14 j 04:57 9°**ට**05'01 1°28'16 evening set -10081 Aug 10 j 05:43 15°**Ⅲ**44'58 max. Earth dist. -10086 Mar 14 j 17:40 9°る12'15 6.17419 AU morning rise -10086 Mar 27 j 20:29 12°중10'46 conjunction -10081 Aug 22 j 14:27 18°**Ⅱ**33'45 1°39'29 -10086 Jul 10 j 14:36 minimum elong -10081 Aug 22 j 14:28 18°**Д**33'46 1°40'02 -10086 Jul 30 j 15:01 0°≈39'43 max. Earth dist. -10081 Aug 21 j 18:24 18°**Ⅲ**22'19 6.27121 AU retrograde

morning rise

-10081 Sep 03 j 23:11 21°**Д**22'40

-10086 Aug 19 j 12:29 30°R ₹

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10081 in astronomical counting style is the year 10082 BCE in historical counting style. -10081 Oct 14 i 02:16 0°€ -10074 Jan 13 j 00:47 0°る -10080 Jan 07 j 13:43 evening set -10074 Mar 05 j 13:02 10°**⋜**50'13 retrograde 9°937'38 -10080 Mar 09 j 01:39 4°5642'55 2°15'30 opposition min. Earth dist. -10074 Mar 19 j 05:35 13°₹56'20 -1°23'34 -10080 Mar 09 j 11:41 4°539'43 4.23587 AU conjunction -10080 Apr 28 j 07:02 30°RⅡ -10074 Mar 19 j 05:40 13°₹56'23 1°24'09 minimum elong -10074 Mar 19 j 14:31 14°**정**01'24 6.18229 AU direct -10080 May 09 j 04:54 29°**Ⅲ**48'47 max. Earth dist. -10080 May 20 j 01:54 0°ഇ morning rise -10074 Apr 01 j 20:55 17°る01'39 -10080 Sep 09 j 22:05 18°501'19 evening set -10074 Jun 04 j 23:41 5°**≈**24'59 retrograde -10074 Aug 04 j 05:34 conjunction -10080 Sep 22 j 10:51 20°554'55 1°16'56 opposition -10074 Oct 02 j 06:13 0°≈26'00 -1°36'05 minimum elong -10080 Sep 22 j 10:56 20°554'58 1°17'29 min. Earth dist. -10074 Oct 02 j 05:53 0°≈26'07 4.22263 AU -10080 Sep 22 j 05:45 20°551'58 max. Earth dist. 6.19586 AU -10074 Oct 05 j 11:26 30°R♂ -10080 Oct 05 j 01:30 23°549'38 morning rise direct -10074 Dec 01 j 16:22 25°₹21'54 -10080 Nov 01 j 17:39 -10073 Jan 27 j 12:18 0°≈ retrograde -10079 Feb 10 j 14:02 12° Ω 48'08 evening set -10073 Apr 09 j 15:04 14°≈05'32 opposition -10079 Apr 13 j 00:55 7°**Ω**49'48 1°21'33 -10073 Apr 13 j 16:51 15°≈ min. Earth dist. -10079 Apr 12 j 21:30 7°**Ω**50'55 4.15703 AU direct -10079 Jun 11 j 21:35 2°**Ω**56'54 conjunction -10073 Apr 23 j 03:36 17°≈06'53 -0°40'46 -10079 Sep 14 j 11:07 15°Ω minimum elong -10073 Apr 23 j 03:40 17°≈06'55 0°41'12 evening set -10079 Oct 12 j 20:59 $21^{\circ}\Omega$ 24'02 max. Earth dist. -10073 Apr 22 j 19:23 17°≈02'17 6.26075 AU morning rise -10073 May 06 j 13:02 20°≈06'36 conjunction -10079 Oct 25 j 18:39 $24^{\circ}\Omega 24'48$ $0^{\circ}28'46$ -10073 Jun 23 i 02:03 0°**∀** minimum elong -10079 Oct 25 j 18:42 $24^{\circ}\Omega 24'50$ $0^{\circ}29'09$ retrograde -10073 Sep 05 i 07:08 7°**)** €48'02 max. Earth dist. -10079 Oct 26 j 07:34 24° Ω32'21 6.12135 AU opposition -10073 Nov 03 j 16:39 2°\f52'49 -0°21'30 morning rise -10079 Nov 07 j 19:31 $27^{\circ}\Omega 27'22$ min. Earth dist. -10073 Nov 04 j 03:19 2° **)** 49'18 4.29420 AU -10079 Nov 18 j 20:50 0° Mp -10073 Nov 26 j 23:52 30°R≈ -10078 Mar 18 j 16:03 17° mp 04'22 -10072 Jan 04 j 06:35 27°≈48'56 retrograde direct -10078 May 09 j 08:59 13° m 14'34 -10072 Feb 11 j 22:12 0°**米** desc. node opposition -10078 May 18 j 13:43 12° m/02'17 -0°02'05 -10072 Feb 16 j 00:16 0° **€** 27'38 asc. node -10078 May 17 j 23:28 12° m 07'00 4.09240 AU -10072 May 12 j 01:36 16° **升** 12'27 min. Earth dist. evening set -10078 Jul 16 j 09:04 7° Mp 08'41 -10072 May 24 j 06:17 18° **米** 54'55 6.32038 AU max. Earth dist. direct -10078 Nov 16 j 14:23 25° m 54'36 evening set -10072 May 25 j 05:53 19°**米**08'03 0°13'44 conjunction -10078 Nov 29 j 21:40 29° m 01'43 -0°30'27 -10072 May 25 j 05:51 19° **★** 08'02 0°13'33 conjunction minimum elong -10078 Nov 29 j 21:37 29° m 01'41 0°30'21 -10072 May 25 j 01:24 19°**米** 05'34 minimum elong behind sun begin -10078 Dec 01 j 01:30 29° Mp 18'03 6.07278 AU -10072 May 25 j 10:19 19° **₭** 10'30 max. Earth dist. behind sun end -10078 Dec 04 j 00:59 0°**♀** -10072 Jun 07 j 06:46 22° **米**01'51 morning rise morning rise -10078 Dec 13 j 08:30 2°**£**10'44 -10072 Jul 15 j 02:01 0°**Υ** retrograde -10077 Apr 23 j 22:43 22°**♀**07'08 retrograde -10072 Oct 05 j 21:08 9° **Y**20'21 min. Earth dist. -10077 Jun 22 j 05:31 17°**Ω**09'38 4.06526 AU opposition $-10072 \text{ Dec } 04 \text{ j } 21:52 \quad 4^{\circ} \mathbf{\hat{Y}} 27'43 \quad 0^{\circ} 57'38$ opposition -10077 Jun 23 j 02:32 17°**£**02'32 -1°26'40 min. Earth dist. -10072 Dec 05 j 16:49 4° **Y**21'36 4.33765 AU -10077 Aug 20 j 06:29 12°**೨**06'30 -10071 Jan 16 j 18:38 30°R € direct -10077 Dec 17 j 23:07 0°M direct -10071 Feb 05 j 06:10 29° **€**25'35 -10077 Dec 22 j 23:13 1°ML09'28 -10071 Feb 24 j 20:42 0°**Υ** evening set -10071 Jun 13 j 03:26 17°**Υ**'34'07 evening set -10076 Jan 05 j 13:06 4° ML 19'28 -1°19'15 conjunction -10076 Jan 05 j 13:00 4°ML19'25 1°19'31 -10071 Jun 25 j 22:01 20° Υ 24'34 1° 03'19 minimum elong conjunction max. Earth dist. -10076 Jan 06 j 21:19 4°ML38'17 6.06833 AU minimum elong $-10071 \text{ Jun } 25 \text{ j } 21:56 \ 20^{\circ} \Upsilon 24'31 \ 1^{\circ} 03'27$ -10071 Jun 24 j 17:00 20° Υ 08'23 6.34360 AU morning rise -10076 Jan 19 j 05:38 7°M 30'45 max. Earth dist. -10076 Feb 21 j 17:52 15°M morning rise -10071 Jul 08 j 13:24 23°**Y**13'30 retrograde -10076 May 28 j 14:51 27° ML18'01 -10071 Aug 09 j 06:47 0°8 min. Earth dist. -10076 Jul 26 j 06:43 22°ML19'48 4.08519 AU retrograde -10071 Nov 06 j 15:32 10°\begin{align*} 32'23 \end{align*} -10076 Jul 27 j 02:07 22°ML13'10 -2°19'40 -10070 Jan 06 j 09:36 5°840'45 1°59'18 opposition opposition direct -10076 Sep 23 j 10:29 17°ML13'45 min. Earth dist. -10076 Dec 30 j 09:10 0° ⊀ direct -10070 Mar 09 j 21:19 0°**8**41'28 -10070 Jun 27 j 11:08 15°**8** evening set -10075 Jan 28 j 00:41 6°**尽**23'22 -10070 Jul 14 j 09:49 18°**8**43'17 evening set -10075 Feb 10 j 17:40 9° ₹32'40 -1°39'01 conjunction -10075 Feb 10 j 17:40 9°**∡**32'39 -10070 Jul 26 j 20:32 21°**8**31'00 1°34'27 minimum elong 1°39'33 conjunction -10075 Feb 11 j 20:19 9° ₹ 48'01 6.10984 AU -10070 Jul 26 j 20:29 21°**8**30'58 1°34'51 max. Earth dist. minimum elong -10075 Feb 24 j 11:09 12°**尽** 42'08 -10070 Jul 25 j 15:48 21°**8**14'49 6.32365 AU morning rise max. Earth dist. -10075 May 28 j 18:28 0°₹ morning rise -10070 Aug 08 j 05:48 24°**8**18'01 retrograde -10075 Jul 02 j 03:11 1°る53'32 -10070 Sep 03 j 10:30 0°**Ⅱ**

retrograde

opposition

direct

min. Earth dist.

-10070 Dec 09 j 08:01 11°**I** 59'11

-10069 Apr 11 j 15:10 2°**Ⅲ**10'21

7°**Ⅱ**06'38

7°**Ⅲ**00′52

2°26'48

4.29998 AU

-10069 Feb 08 j 14:53

-10069 Feb 09 j 09:06

-10075 Aug 05 j 03:49 30°R.✓

-10075 Oct 28 j 08:09 21° **₹** 48'31

-10075 Aug 30 j 03:40 26° ₹ 50'56 -2°21'51

-10075 Aug 29 j 16:01 26° ₹ 54'54 4.14470 AU

opposition

direct

min. Earth dist.

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 30

Attention astronomic	ool woor style is used: The		in astronomical ac	(UI), ASHOULERS	r 10070 BCE in historical		2
evening set	-10069 Aug 14 j 12:42	-	iii astronomicai co	max. Earth dist.	-10063 Feb 16 j 21:34		
evening set	-10009 Aug 14 J 12.42	20 113 30					0.11328 AU
agniumation	-10069 Aug 26 j 21:38	220TI02150	1°38'08	morning rise	-10063 Mar 01 j 15:11	17 x 4048	
conjunction minimum elong	-10069 Aug 26 j 21:40		1°38'41	retrograde	-10063 Apr 29 j 14:22 -10063 Jul 06 j 20:06	6° ろ 46'49	
max. Earth dist.	-10069 Aug 26 j 03:17			opposition	-10063 Sur 00 j 20:00 -10063 Sep 03 j 20:25	1°る44'34	2017/56
morning rise	-10069 Aug 20 j 05:17 -10069 Sep 08 j 06:41		0.20394 AU	min. Earth dist.	-10063 Sep 03 j 20:25 -10063 Sep 03 j 09:35		4.15268 AU
morning rise	-10069 Sep 08 j 00.41 -10069 Sep 26 j 19:04	0°95		IIIII. Eartii tiist.	-10063 Sep 05 j 09:35 -10063 Sep 16 j 21:45		4.13208 AU
retrograde	-10069 Sep 20 j 19:04 -10068 Jan 12 j 04:39			direct	-10063 Sep 10 j 21:43 -10063 Nov 02 j 04:34		
opposition	-10068 Mar 13 j 18:38	9°9516'27	2°10'29	direct	-10063 Nov 02 j 04:34 -10063 Dec 18 j 18:02		
min. Earth dist.	-10068 Mar 14 j 02:41	9° © 13'53	4.22856 AU	evening set	-10063 Dec 18 j 18:02 -10062 Mar 10 j 13:37		
direct	-10068 May 13 j 17:48	4° © 22'37	4.22630 AU	evening set	-10002 Wai 10 j 13.37	13 04137	
evening set	-10068 Sep 14 j 07:19			conjunction	-10062 Mar 24 j 06:00	180=7.4713.4	1°18'50
evening set	-10000 Sep 14 J 07.17	22 3334)		minimum elong	-10062 Mar 24 j 06:05		
conjunction	-10068 Sep 26 j 20:58	25°630'12	1°11'39	max. Earth dist.	-10062 Mar 24 j 14:00		
minimum elong	-10068 Sep 26 j 21:03		1°12'12	morning rise	-10062 Apr 06 j 20:39		0.17237 AU
max. Earth dist.	-10068 Sep 26 j 17:23		6.18720 AU	morning risc	-10062 May 14 j 16:03	0°≈	
morning rise	-10068 Oct 09 j 12:45		0.10/20 AC	retrograde	-10062 May 14 j 10:05 -10062 Aug 08 j 19:52		
morning risc	-10068 Oct 16 j 09:22			opposition	-10062 Oct 06 j 20:37		-1°26'44
	-10067 Jan 05 j 09:52			min. Earth dist.	-10062 Oct 06 j 20:37	5°≈10'08	4.23348 AU
retrograde	-10067 Feb 15 j 10:45			direct	-10062 Dec 06 j 11:00	0°≈06'18	4.23340 AU
retrograde	-10067 Mar 28 j 16:31			direct	-10062 Dec 00 j 11:00 -10061 Mar 28 j 03:27		
opposition	-10067 Apr 17 j 19:40		1°11'27	evening set	-10061 Apr 14 j 10:09		
min. Earth dist.	-10067 Apr 17 j 15:51			evening set	-10001 Apr 14 j 10.09	10 24043	
direct	-10067 Jun 16 j 13:48		4.14/30 AO	conjunction	-10061 Apr 27 j 21:41	21°\$\$47'14	-0°33'24
direct	-10067 Aug 26 j 16:19			minimum elong	-10061 Apr 27 j 21:44		
evening set	-10067 Aug 20 j 10:17 -10067 Oct 17 j 11:12			max. Earth dist.	-10061 Apr 27 j 10:44		6.27133 AU
evening set	-1000/ Oct 1/j11.12	20 000730		morning rise	-10061 May 11 j 06:09		0.27133 AU
conjunction	-10067 Oct 30 j 10:15	200 000117	0°20'59	morning risc	-10061 Jun 04 j 08:58	0° ₩	
minimum elong	-10067 Oct 30 j 10:18		0°21'19	retrograde	-10061 Sep 09 j 17:04		
max. Earth dist.	-10067 Oct 30 j 10:18			opposition	-10061 Sep 09 j 17:04 -10061 Nov 08 j 05:11	7° H 27'40	0°10'06
max. Lartii dist.	-10067 Nov 03 j 00:53	0° m)	0.11160 AC	min. Earth dist.	-10061 Nov 08 j 17:01	7° H 23'46	4.30345 AU
morning rise	-10067 Nov 12 j 12:38	2° Mg 12'57		asc. node	-10061 Nov 08 j 17:01 -10061 Dec 27 j 04:03	2°\(\frac{1}{39}\)'05	4.30343 AU
desc. node	-1006/ Nov 12 j 12:36			direct	-10060 Jan 08 j 22:20	2° H 23'51	
retrograde	-10066 Mar 23 j 14:31	-		evening set	-10060 May 16 j 15:09		
opposition	-10066 May 23 j 09:38	-	-0°14'13	evening set	-10000 Way 10 J 15.07	20 /(4420	
min. Earth dist.	-10066 May 22 j 18:10			conjunction	-10060 May 29 j 18:08	23°¥39'04	0°21'19
direct	-10066 Jul 21 j 00:52		4.00370710	minimum elong	-10060 May 29 j 18:06		0°21'11
direct	-	0∘ ⊽		minimum crong	10000 11149 25 3 10.00		
_	-10000 NOV 1X 1 0 1 '01			max Earth dist	-10060 May 28 i 18:17	23° \ 25'48	6 32744 AU
evening set	-10066 Nov 18 j 01:01			max. Earth dist.	-10060 May 28 j 18:17		6.32744 AU
evening set	-10066 Nov 18 j 01:01 -10066 Nov 21 j 11:14	0° £ 47'52		max. Earth dist. morning rise	-10060 Jun 11 j 17:31	26°) 31′59	6.32744 AU
	-10066 Nov 21 j 11:14	0° ≏ 47'52	-0°38'08	morning rise	-10060 Jun 11 j 17:31 -10060 Jun 27 j 15:09	26°) 31'59 0° Υ	6.32744 AU
conjunction	-10066 Nov 21 j 11:14 -10066 Dec 04 j 19:38	0° Ω 47'52 3° Ω 55'46		morning rise retrograde	-10060 Jun 11 j 17:31 -10060 Jun 27 j 15:09 -10060 Oct 10 j 06:37	26°) (31'59 0° ° 13° ° (48'33	
conjunction minimum elong	-10066 Nov 21 j 11:14 -10066 Dec 04 j 19:38 -10066 Dec 04 j 19:34	0° △ 47'52 3° △ 55'46 3° △ 55'43	0°38'07	morning rise retrograde opposition	-10060 Jun 11 j 17:31 -10060 Jun 27 j 15:09 -10060 Oct 10 j 06:37 -10060 Dec 09 j 10:00	26°¥31'59 0°℃ 13°℃48'33 8°℃56'09	1°07'43
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conjunction minimum elong max. Earth dist. morning rise retrograde	-10066 Nov 21 j 11:14 -10066 Dec 04 j 19:38 -10066 Dec 04 j 19:34 -10066 Dec 05 j 23:29 -10066 Dec 18 j 07:38 -10065 Apr 28 j 21:28	0° Ω 47'52 3° Ω 55'46 3° Ω 55'43 4° Ω 12'07 7° Ω 05'32 27° Ω 04'05	0°38'07 6.06612 AU	retrograde opposition min. Earth dist. direct evening set	-10060 Jun 11 j 17:31 -10060 Jun 27 j 15:09 -10060 Oct 10 j 06:37 -10060 Dec 09 j 10:00 -10060 Dec 10 j 05:36 -10059 Feb 09 j 20:08 -10059 Jun 17 j 12:58	26°₩31'59 0°Ψ 13°Ψ48'33 8°Ψ56'09 8°Ψ49'50 3°Ψ54'21 22°Ψ00'58	1°07'43 4.34193 AU
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conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-10066 Nov 21 j 11:14 -10066 Dec 04 j 19:38 -10066 Dec 05 j 23:29 -10066 Dec 18 j 07:38 -10065 Apr 28 j 21:28 -10065 Jun 27 j 22:46 -10065 Jun 27 j 01:46 -10065 Aug 25 j 02:05 -10065 Nov 30 j 20:49 -10065 Dec 28 j 01:24 -10064 Jan 10 j 16:08 -10064 Jan 10 j 16:03 -10064 Jan 12 j 01:38 -10064 Jan 24 j 09:00 -10064 Feb 04 j 04:46 -10064 Apr 25 j 13:46	0° \$\Pi 47'52\] 3° \$\Pi 55'46\] 3° \$\Pi 55'43\] 4° \$\Pi 12'07\] 7° \$\Pi 05'32\] 27° \$\Pi 04'05\] 21° \$\Pi 06'24\] 17° \$\Pi 02'48\] 0° \$\mu \text{0}	0°38'07 6.06612 AU -1°36'22 4.06117 AU -1°23'55 1°24'13	retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct evening set	-10060 Jun 11 j 17:31 -10060 Jun 27 j 15:09 -10060 Oct 10 j 06:37 -10060 Dec 09 j 10:00 -10060 Dec 10 j 05:36 -10059 Feb 09 j 20:08 -10059 Jun 17 j 12:58 -10059 Jun 28 j 23:13 -10059 Jun 30 j 06:07 -10059 Jul 12 j 20:32 -10059 Jul 23 j 12:28 -10059 Jul 23 j 12:28 -10059 Jul 23 j 12:28 -10059 Jul 12 j 20:32 -10059 Jul 12 j 20:32 -10059 Jul 12 j 20:32 -10059 Jul 12 j 20:32 -10059 Jul 12 j 20:32 -10058 Jun 10 j 23:26 -10058 Jun 10 j 23:26 -10058 Jun 10 j 05:13 -10058 Jul 18 j 17:29	26°\\$31'59 0°\TY 13°\T48'33 8°\T56'09 8°\T49'50 3°\T54'21 22°\T00'58 24°\T50'47 24°\T50'44 27°\T39'14 0°\\$ 14°\\$59'42 10°\\$08'01 10°\\$01'07 5°\\$09'04 15°\\$ 23°\\$10'31	1°07'43 4.34193 AU 6.34437 AU 1°09'01 1°09'12 2°05'29 4.33747 AU
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-10066 Nov 21 j 11:14 -10066 Dec 04 j 19:38 -10066 Dec 05 j 23:29 -10066 Dec 18 j 07:38 -10065 Apr 28 j 21:28 -10065 Jun 27 j 22:46 -10065 Jun 27 j 01:46 -10065 Aug 25 j 02:05 -10065 Nov 30 j 20:49 -10065 Dec 28 j 01:24 -10064 Jan 10 j 16:08 -10064 Jan 10 j 16:03 -10064 Jan 12 j 01:38 -10064 Jan 24 j 09:00 -10064 Feb 04 j 04:46 -10064 Jun 02 j 13:14	0° \$\Pi\$47'52 3° \$\Pi\$55'46 3° \$\Pi\$55'43 4° \$\Pi\$12'07 7° \$\Pi\$05'32 27° \$\Pi\$04'05 21° \$\Pi\$59'17 22° \$\Pi\$06'24 17° \$\Pi\$02'48 0° \$\mi\$. 6° \$\mi\$09'04 9° \$\mi\$19'26 9° \$\mi\$19'22 9° \$\mi\$30'53 15° \$\mi\$. 0° \$\struct \frac{1}{2}\$ 2° \$\textit{30}^2 \textit{8} \mi\$.	0°38'07 6.06612 AU -1°36'22 4.06117 AU -1°23'55 1°24'13 6.06727 AU	retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct evening set	-10060 Jun 11 j 17:31 -10060 Jun 27 j 15:09 -10060 Oct 10 j 06:37 -10060 Dec 09 j 10:00 -10060 Dec 10 j 05:36 -10059 Feb 09 j 20:08 -10059 Jun 17 j 12:58 -10059 Jun 28 j 23:13 -10059 Jun 30 j 06:07 -10059 Jul 12 j 20:32 -10059 Jul 23 j 12:28 -10059 Jul 23 j 12:28 -10059 Jul 23 j 12:28 -10059 Jul 12 j 20:32 -10059 Jul 12 j 20:32 -10059 Jul 12 j 20:32 -10059 Jul 12 j 20:32 -10059 Jul 12 j 20:32 -10058 Jun 10 j 23:26 -10058 Jun 10 j 23:26 -10058 Jun 10 j 05:13 -10058 Jul 18 j 17:29	26°\\$31'59 0°\Y 13°\Y48'33 8°\Y56'09 8°\Y49'50 3°\Y54'21 22°\Y00'58 24°\Y33'33 24°\Y50'47 24°\Y50'44 27°\Y39'14 0°\\$ 14°\\$59'42 10°\\$08'01 10°\\$01'07 5°\\$09'04 15°\\$ 23°\\$10'31 25°\\$43'00	1°07'43 4.34193 AU 6.34437 AU 1°09'01 1°09'12 2°05'29 4.33747 AU
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conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-10066 Nov 21 j 11:14 -10066 Dec 04 j 19:38 -10066 Dec 05 j 23:29 -10066 Dec 18 j 07:38 -10065 Apr 28 j 21:28 -10065 Jun 27 j 22:46 -10065 Jun 27 j 01:46 -10065 Aug 25 j 02:05 -10065 Nov 30 j 20:49 -10065 Dec 28 j 01:24 -10064 Jan 10 j 16:08 -10064 Jan 10 j 16:03 -10064 Jan 12 j 01:38 -10064 Jan 24 j 09:00 -10064 Feb 04 j 04:46 -10064 Apr 25 j 13:46 -10064 Jun 02 j 13:14 -10064 Jul 31 j 21:09 -10064 Jul 31 j 21:09 -10064 Sep 28 j 06:54 -10064 Dec 10 j 17:32	0° \$\Pi 47'52 3° \$\Pi 55'46 3° \$\Pi 55'43 4° \$\Pi 12'07 7° \$\Pi 05'32 27° \$\Pi 04'05 21° \$\Pi 06'24 17° \$\Pi 02'48 0° \$\mu 09'04 9° \$\mu 19'26 9° \$\mu 19'26 9° \$\mu 19'22 9° \$\mu 30'53 15° \$\mu 0° \$\tilde{x}' 2° \$\tilde{x}' 16'12 30° \$\mu 17'58 22° \$\mu 11'43 0° \$\tilde{x}' 10° \$\tilde{x}'	0°38'07 6.06612 AU -1°36'22 4.06117 AU -1°23'55 1°24'13 6.06727 AU	retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction min. Earth dist. direct	-10060 Jun 11 j 17:31 -10060 Jun 27 j 15:09 -10060 Oct 10 j 06:37 -10060 Dec 09 j 10:00 -10060 Dec 10 j 05:36 -10059 Feb 09 j 20:08 -10059 Jun 17 j 12:58 -10059 Jun 28 j 23:13 -10059 Jun 30 j 06:07 -10059 Jun 30 j 06:02 -10059 Jul 12 j 20:32 -10059 Jul 23 j 12:28 -10059 Jul 23 j 12:28 -10059 Jul 12 j 20:32 -10058 Jul 10 j 03:27 -10058 Jun 10 j 03:27 -10058 Jun 10 j 05:13 -10058 Jul 18 j 17:29 -10058 Jul 30 j 00:46 -10058 Jul 31 j 03:42 -10058 Jul 31 j 03:42 -10058 Jul 31 j 03:42 -10058 Aug 12 j 12:22 -10058 Aug 18 j 02:21	26°\\$31'59 0°\Y 13°\Y48'33 8°\Y56'09 8°\Y49'50 3°\Y54'21 22°\Y00'58 24°\Y50'47 24°\Y50'44 27°\Y39'14 0°\\$14°\\$59'42 10°\\$08'01 10°\\$01'07 5°\\$09'04 15°\\$23°\\$10'31 25°\\$43'00 25°\\$58'11 25°\\$58'11 26°\\$130'56	1°07'43 4.34193 AU 6.34437 AU 1°09'01 1°09'12 2°05'29 4.33747 AU 6.31766 AU 1°36'44 1°37'11
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-10066 Nov 21 j 11:14 -10066 Dec 04 j 19:38 -10066 Dec 05 j 23:29 -10066 Dec 18 j 07:38 -10065 Apr 28 j 21:28 -10065 Jun 27 j 22:46 -10065 Jun 27 j 01:46 -10065 Aug 25 j 02:05 -10065 Nov 30 j 20:49 -10065 Dec 28 j 01:24 -10064 Jan 10 j 16:08 -10064 Jan 10 j 16:03 -10064 Jan 12 j 01:38 -10064 Jan 24 j 09:00 -10064 Feb 04 j 04:46 -10064 Apr 25 j 13:46 -10064 Jun 02 j 13:14 -10064 Jul 31 j 21:09 -10064 Jul 31 j 21:09 -10064 Sep 28 j 06:54 -10064 Dec 10 j 17:32	0° \$\Pi 47'52\] 3° \$\Pi 55'46\] 3° \$\Pi 55'43\] 4° \$\Pi 12'07\] 7° \$\Pi 05'32\] 27° \$\Pi 04'05\] 21° \$\Pi 59'17\] 22° \$\Pi 06'24\] 17° \$\Pi 02'48\] 0° \$\Pi 19'26\] 9° \$\Pi 19'48\] 10° \$\pi 12\] 10° \$\pi 12\] 20° \$\Pi 16'12\] 30° \$\Pi 16'12\] 30° \$\Pi 11'43\] 0° \$\pi 11'43\] 0° \$\pi 11'43\] 11° \$\pi 22'27\]	0°38'07 6.06612 AU -1°36'22 4.06117 AU -1°23'55 1°24'13 6.06727 AU -2°23'05 4.08755 AU	retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde	-10060 Jun 11 j 17:31 -10060 Jun 27 j 15:09 -10060 Oct 10 j 06:37 -10060 Dec 09 j 10:00 -10060 Dec 10 j 05:36 -10059 Feb 09 j 20:08 -10059 Jun 17 j 12:58 -10059 Jun 28 j 23:13 -10059 Jun 30 j 06:02 -10059 Jul 23 j 12:28 -10058 Jul 15 j 23:26 -10058 Jul 16 j 23:26 -10058 Jul 17 j 23:26 -10058 Jul 18 j 17:29 -10058 Jul 30 j 00:46 -10058 Jul 31 j 03:39 -10058 Jul 31 j 03:39 -10058 Aug 12 j 12:22 -10058 Aug 18 j 02:21 -10058 Dec 13 j 22:25	26°\\$31'59 0°\Y 13°\Y48'33 8°\Y56'09 8°\Y49'50 3°\Y54'21 22°\Y00'58 24°\Y50'47 24°\Y50'44 27°\Y39'14 0°\\$ 14°\\$59'42 10°\\$08'01 10°\\$01'07 5°\\$09'04 15°\\$ 23°\\$10'31 25°\\$43'00 25°\\$58'10 28°\\$45'14 0°\\$1 16°\\$130'56 11°\\$30'56 11°\\$30'99	1°07'43 4.34193 AU 6.34437 AU 1°09'01 1°09'12 2°05'29 4.33747 AU 6.31766 AU 1°36'44 1°37'11
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-10066 Nov 21 j 11:14 -10066 Dec 04 j 19:38 -10066 Dec 05 j 23:29 -10066 Dec 18 j 07:38 -10065 Apr 28 j 21:28 -10065 Jun 27 j 22:46 -10065 Jun 27 j 01:46 -10065 Aug 25 j 02:05 -10065 Nov 30 j 20:49 -10065 Dec 28 j 01:24 -10064 Jan 10 j 16:08 -10064 Jan 10 j 16:03 -10064 Jan 12 j 01:38 -10064 Jan 24 j 09:00 -10064 Feb 04 j 04:46 -10064 Jun 02 j 13:14 -10064 Jul 10 j 02:48 -10064 Jul 31 j 21:09 -10064 Sep 28 j 06:54 -10064 Dec 10 j 17:32 -10063 Feb 02 j 04:32	0° \$\Pi 47'52 3° \$\Pi 55'46 3° \$\Pi 55'43 4° \$\Pi 12'07 7° \$\Pi 05'32 27° \$\Pi 04'05 21° \$\Pi 59'17 22° \$\Pi 06'24 17° \$\Pi 02'48 0° \$\mu \text{0}'04 9° \$\mu 19'26 12° \$\mu 38'59 12° \$\mu 30'53 15° \$\mu \text{0}' \$\sigmu \text{1}'3'3 10° \$\sigmu \text{1}'134 27° \$\mu 11'43 0° \$\sigmu \text{1}'11'43 0° \$\sigmu \text{1}'11'43 11° \$\sigmu 22'27 14° \$\sigmu 31'35	0°38'07 6.06612 AU -1°36'22 4.06117 AU -1°23'55 1°24'13 6.06727 AU -2°23'05 4.08755 AU	retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction min Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition	-10060 Jun 11 j 17:31 -10060 Jun 27 j 15:09 -10060 Oct 10 j 06:37 -10060 Dec 09 j 10:00 -10060 Dec 10 j 05:36 -10059 Feb 09 j 20:08 -10059 Jun 17 j 12:58 -10059 Jun 28 j 23:13 -10059 Jun 30 j 06:02 -10059 Jul 23 j 12:28 -10058 Jun 10 j 23:26 -10058 Jun 10 j 05:13 -10058 Jul 18 j 17:29 -10058 Jul 30 j 00:46 -10058 Jul 31 j 03:39 -10058 Jul 31 j 03:39 -10058 Aug 12 j 12:22 -10058 Aug 18 j 02:21 -10058 Dec 13 j 22:25 -10057 Feb 13 j 07:27	26°\\$31'59 0°\Y 13°\Y48'33 8°\Y56'09 8°\Y49'50 3°\Y54'21 22°\Y00'58 24°\Y50'47 24°\Y50'44 27°\Y39'14 0°\\$ 14°\\$59'42 10°\\$08'01 10°\\$01'07 5°\\$09'04 15°\\$ 23°\\$10'31 25°\\$43'00 25°\\$58'10 28°\\$45'14 0°\\$1 16°\\$130'56 11°\\$30'56 11°\\$30'99	1°07'43 4.34193 AU 6.34437 AU 1°09'01 1°09'12 2°05'29 4.33747 AU 6.31766 AU 1°36'44 1°37'11

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 31

Planetary Pheno Attention, astronom	ical year style is used: The	e vear -10057	in astronomical c	ounting style is the ver	ar 10058 BCE in historical counting style.
evening set	-10057 Aug 18 j 21:47	-		evening set	-10051 Feb 07 j 07:10 16° ₹ 19'15
conjunction	-10057 Aug 31 j 06:51			conjunction	-10051 Feb 21 j 00:18 19° ₹27'45 -1°38'00
minimum elong	-10057 Aug 31 j 06:53		1°36'46	minimum elong	-10051 Feb 21 j 00:20 19° ₹27'46 1°38'33
max. Earth dist.	-10057 Aug 30 j 13:03		6.25485 AU	max. Earth dist.	-10051 Feb 21 j 23:32 19° ₹41'05 6.12974 AU
	-10057 Sep 10 j 17:46			morning rise	-10051 Mar 06 j 17:28 22° ₹36'08
morning rise	-10057 Sep 12 j 16:33				-10051 Apr 09 j 10:15 0°♂
retrograde	-10056 Jan 17 j 01:33		200 4127	retrograde	-10051 Jul 11 j 11:31 11° \(\frac{3}{3}\) 33'40
opposition	-10056 Mar 18 j 14:45		2°04'37	opposition	-10051 Sep 08 j 10:55 6° ₹31'53 -2°13'06
min. Earth dist.	-10056 Mar 18 j 21:45		4.21584 AU	min. Earth dist.	-10051 Sep 08 j 02:14 6°♂34'51 4.16864 AU -10051 Nov 06 j 23:53 1°♂28'48
direct	-10056 May 18 j 10:26			direct	3
evening set	-10056 Sep 18 j 20:13 -10056 Sep 30 j 10:17			evening set	-10050 Mar 15 j 10:10 20°₹24'36
	-10030 Sep 30 J 10.17	0 06		conjunction	-10050 Mar 29 j 02:01 23° ♂ 29'20 -1°13'45
conjunction	-10056 Oct 01 j 11:09	0° Ω 14'26	1°05'45	minimum elong	-10050 Mar 29 j 02:07 23°♂29'23 1°14'18
minimum elong	-10056 Oct 01 j 11:14		1°06'17	max. Earth dist.	-10050 Mar 29 j 06:56 23° \(\frac{32}{32}\)' 6.20844 AU
max. Earth dist.	-10056 Oct 01 j 10:31	0° Ω 14'04	6.17421 AU	morning rise	-10050 Apr 11 j 15:59 26° ₹32'59
morning rise	-10056 Oct 14 j 04:16		0.17 .21 110	morning rise	-10050 Apr 27 j 06:07 0°≈
morning rise	-10056 Dec 09 j 02:44			retrograde	-10050 Aug 13 j 03:02 14°≈41'52
retrograde	-10055 Feb 20 j 11:36			opposition	-10050 Oct 11 j 06:32 9°≈43'52 -1°17'12
opposition	-10055 Apr 22 j 18:55		1°00'29	min. Earth dist.	-10050 Oct 11 j 09:04 9°≈43'01 4.24814 AU
min. Earth dist.	-10055 Apr 22 j 13:03		4.13523 AU	direct	-10050 Dec 11 j 00:44 4°≈39'34
	-10055 May 11 j 20:43				-10049 Mar 10 j 20:58 15°≈
direct	-10055 Jun 21 j 07:53			evening set	-10049 Apr 18 j 23:49 23°≈15'52
	-10055 Jul 31 j 02:29			Ü	1 3
	-10055 Oct 17 j 18:44			conjunction	-10049 May 02 j 10:19 26°≈15'28 -0°26'10
evening set	-10055 Oct 22 j 06:35	1° m 02'36		minimum elong	-10049 May 02 j 10:22 26°≈15'29 0°26'33
C	J	•		max. Earth dist.	-10049 May 01 j 20:32 26°≈07'46 6.28352 AU
conjunction	-10055 Nov 04 j 06:58	4° Mp 05′28	0°12'43	morning rise	-10049 May 15 j 17:38 29°≈13'22
minimum elong	-10055 Nov 04 j 06:59	4° Mp 05′28	0°13'02		-10049 May 19 j 05:58 0° ∀
behind sun begin	-10055 Nov 04 j 02:02	4° Mp 02'35		retrograde	-10049 Sep 13 j 23:35 16°) 45'08
behind sun end	-10055 Nov 04 j 11:55	4° Mp 08′22		asc. node	-10049 Nov 08 j 13:46 12°) €21'52
max. Earth dist.	-10055 Nov 04 j 23:10	4° Mp 14'57	6.10174 AU	opposition	-10049 Nov 12 j 13:04 11°) 50'42 0°00'49
morning rise	-10055 Nov 17 j 10:55	7° Mp 10′16		min. Earth dist.	-10049 Nov 13 j 03:18 11°) 46'02 4.31208 AU
desc. node	-10054 Jan 28 j 22:26	21°M 57'35		direct	-10048 Jan 13 j 10:13 6° ∺ 47′05
retrograde	-10054 Mar 28 j 17:11	26° My $56'29$		evening set	-10048 May 20 j 23:23 25° 光 05′02
opposition	-10054 May 28 j 10:18	-		max. Earth dist.	-10048 Jun 01 j 22:21 27° X 44'11 6.33161 AU
min. Earth dist.	-10054 May 27 j 17:14	21° m 59'18	4.07715 AU		
direct	-10054 Jul 25 j 22:50			conjunction	-10048 Jun 03 j 01:05 27° € 59'03 0°28'26
	-10054 Oct 31 j 18:31	0∘ ⊽		minimum elong	-10048 Jun 03 j 01:03 27° ¥59'01 0°28'22
evening set	-10054 Nov 26 j 13:08	5° ≏ 52'13			-10048 Jun 12 j 02:39 0° Υ
				morning rise	-10048 Jun 15 j 23:18 0° Υ 51'18
conjunction	-10054 Dec 09 j 22:46	9° ჲ 00'43		retrograde	-10048 Oct 14 j 12:24 18° Y 07'33
minimum elong	-10054 Dec 09 j 22:42	9° Ω 00'40	0°45'54	opposition	-10048 Dec 13 j 18:27 13° Y 15'19 1°17'02
max. Earth dist.	-10054 Dec 11 j 06:01	9° ≙ 19'04	6.06354 AU	min. Earth dist.	-10048 Dec 14 j 15:01 13° Υ 08'42 4.34161 AU
morning rise	-10054 Dec 23 j 11:37			direct	-10047 Feb 14 j 05:10 8° Y 13'48
_	-10053 Mar 27 j 17:39	0°M		evening set	-10047 Jun 21 j 18:47 26° Y 20'17
retrograde	-10053 May 04 j 00:02	2°M09'18		max. Earth dist.	-10047 Jul 03 j 04:11 28° Υ 52'37 6.33948 AU
	-10053 Jun 09 j 21:36				
opposition	-10053 Jul 02 j 22:08			conjunction	-10047 Jul 04 j 10:53 29° Y °09'48 1°14'07
min. Earth dist.	-10053 Jul 02 j 00:50		4.06367 AU	minimum elong	-10047 Jul 04 j 10:48 29° Y °09'45 1°14'20
direct	-10053 Aug 30 j 01:26				-10047 Jul 08 j 04:39 0° 8
				morning rise	
	-10053 Nov 11 j 03:22			Č	-10047 Jul 17 j 00:12 1° 8 57'59
evening set	-10053 Nov 11 j 03:22 -10052 Jan 02 j 06:37			_	-10047 Sep 21 j 18:37 15°₩
	-10052 Jan 02 j 06:37	11°ML14'33	1020105	retrograde	-10047 Sep 21 j 18:37 15° 8 -10047 Nov 15 j 13:23 19° 8 22'10
conjunction	-10052 Jan 02 j 06:37 -10052 Jan 15 j 21:39	11°M14'33 14°M24'44		retrograde	-10047 Sep 21 j 18:37 15°8 -10047 Nov 15 j 13:23 19°822'10 -10046 Jan 11 j 13:50 15°88
conjunction minimum elong	-10052 Jan 02 j 06:37 -10052 Jan 15 j 21:39 -10052 Jan 15 j 21:34	11°M.14'33 14°M.24'44 14°M.24'41	1°28'26	retrograde	-10047 Sep 21 j 18:37 15°8 -10047 Nov 15 j 13:23 19°822'10 -10046 Jan 11 j 13:50 15°88 -10046 Jan 15 j 10:59 14°830'30 2°10'46
conjunction	-10052 Jan 02 j 06:37 -10052 Jan 15 j 21:39 -10052 Jan 15 j 21:34 -10052 Jan 17 j 06:09	11°M.14'33 14°M.24'44 14°M.24'41 14°M.43'39	1°28'26	retrograde opposition min. Earth dist.	-10047 Sep 21 j 18:37 15°8 -10047 Nov 15 j 13:23 19°822'10 -10046 Jan 11 j 13:50 15°88 -10046 Jan 15 j 10:59 14°830'30 2°10'46 -10046 Jan 16 j 08:57 14°823'31 4.32848 AU
conjunction minimum elong max. Earth dist.	-10052 Jan	11°M.14'33 14°M.24'44 14°M.24'41 14°M.43'39 15°M.	1°28'26	retrograde	-10047 Sep 21 j 18:37 15°8 -10047 Nov 15 j 13:23 19°822'10 -10046 Jan 11 j 13:50 15°88 -10046 Jan 15 j 10:59 14°830'30 2°10'46 -10046 Jan 16 j 08:57 14°823'31 4.32848 AU -10046 Mar 18 j 21:20 9°831'59
conjunction minimum elong	-10052 Jan	11°M.14'33 14°M.24'44 14°M.24'41 14°M.43'39 15°M. 17°M.35'57	1°28'26	retrograde opposition min. Earth dist. direct	-10047 Sep 21 j 18:37 15°8 -10047 Nov 15 j 13:23 19°822'10 -10046 Jan 11 j 13:50 15°88 -10046 Jan 15 j 10:59 14°830'30 2°10'46 -10046 Jan 16 j 08:57 14°823'31 4.32848 AU -10046 Mar 18 j 21:20 9°831'59 -10046 May 20 j 22:46 15°8
conjunction minimum elong max. Earth dist. morning rise	-10052 Jan 02 j 06:37 -10052 Jan 15 j 21:39 -10052 Jan 15 j 21:34 -10052 Jan 17 j 06:09 -10052 Jan 18 j 10:14 -10052 Jan 29 j 14:57 -10052 Mar 28 j 04:04	11°M.14'33 14°M.24'44 14°M.24'41 14°M.43'39 15°M. 17°M.35'57 0° 🗷	1°28'26	retrograde opposition min. Earth dist.	-10047 Sep 21 j 18:37 15°8 -10047 Nov 15 j 13:23 19°822'10 -10046 Jan 11 j 13:50 15°88 -10046 Jan 15 j 10:59 14°830'30 2°10'46 -10046 Jan 16 j 08:57 14°823'31 4.32848 AU -10046 Mar 18 j 21:20 9°831'59 -10046 May 20 j 22:46 15°8 -10046 Jul 22 j 23:53 27°835'17
conjunction minimum elong max. Earth dist. morning rise retrograde	-10052 Jan 02 j 06:37 -10052 Jan 15 j 21:39 -10052 Jan 15 j 21:34 -10052 Jan 17 j 06:09 -10052 Jan 18 j 10:14 -10052 Jan 29 j 14:57 -10052 Mar 28 j 04:04 -10052 Jun 07 j 08:55	11°M.14'33 14°M.24'44 14°M.24'41 14°M.43'39 15°M. 17°M.35'57 0°×7 7°×715'43	1°28'26 6.07441 AU	retrograde opposition min. Earth dist. direct evening set	-10047 Sep 21 j 18:37 15°8 -10047 Nov 15 j 13:23 19°822'10 -10046 Jan 11 j 13:50 15°88 -10046 Jan 15 j 10:59 14°830'30 2°10'46 -10046 Jan 16 j 08:57 14°823'31 4.32848 AU -10046 Mar 18 j 21:20 9°831'59 -10046 Jul 22 j 23:53 27°835'17 -10046 Aug 02 j 16:29 0°II
conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-10052 Jan 02 j 06:37 -10052 Jan 15 j 21:39 -10052 Jan 15 j 21:34 -10052 Jan 17 j 06:09 -10052 Jan 18 j 10:14 -10052 Jan 29 j 14:57 -10052 Mar 28 j 04:04 -10052 Jun 07 j 08:55 -10052 Aug 05 j 16:36	11°M.14'33 14°M.24'44 14°M.24'41 14°M.43'39 15°M. 17°M.35'57 0° ×7 7° ×7 15'43 2° ×7 11'15	1°28'26 6.07441 AU -2°25'26	retrograde opposition min. Earth dist. direct	-10047 Sep 21 j 18:37 15°8 -10047 Nov 15 j 13:23 19°822'10 -10046 Jan 11 j 13:50 15°88 -10046 Jan 15 j 10:59 14°830'30 2°10'46 -10046 Jan 16 j 08:57 14°823'31 4.32848 AU -10046 Mar 18 j 21:20 9°831'59 -10046 May 20 j 22:46 15°8 -10046 Jul 22 j 23:53 27°835'17
conjunction minimum elong max. Earth dist. morning rise retrograde	-10052 Jan 02 j 06:37 -10052 Jan 15 j 21:39 -10052 Jan 15 j 21:34 -10052 Jan 17 j 06:09 -10052 Jan 18 j 10:14 -10052 Jan 29 j 14:57 -10052 Mar 28 j 04:04 -10052 Jun 07 j 08:55 -10052 Aug 05 j 16:36 -10052 Aug 04 j 21:46	11°M.14'33 14°M.24'44 14°M.43'39 15°M. 17°M.35'57 0° × 7° × 15'43 2° × 11'15 2° × 17'42	1°28'26 6.07441 AU	retrograde opposition min. Earth dist. direct evening set max. Earth dist.	-10047 Sep 21 j 18:37 15°8 -10047 Nov 15 j 13:23 19°822'10 -10046 Jan 11 j 13:50 15°88 -10046 Jan 15 j 10:59 14°830'30 2°10'46 -10046 Jan 16 j 08:57 14°823'31 4.32848 AU -10046 Mar 18 j 21:20 9°831'59 -10046 May 20 j 22:46 15°8 -10046 Jul 22 j 23:53 27°835'17 -10046 Aug 02 j 16:29 0°II -10046 Aug 03 j 05:48 0°II07'32 6.30511 AU
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-10052 Jan 02 j 06:37 -10052 Jan 15 j 21:39 -10052 Jan 15 j 21:34 -10052 Jan 17 j 06:09 -10052 Jan 18 j 10:14 -10052 Jan 29 j 14:57 -10052 Mar 28 j 04:04 -10052 Jun 07 j 08:55 -10052 Aug 05 j 16:36 -10052 Aug 04 j 21:46 -10052 Aug 22 j 06:14	11°M.14'33 14°M.24'44 14°M.43'39 15°M. 17°M.35'57 0° \$\stacklet{x}\$ 7° \$\stacklet{x}\$ 15'43 2° \$\stacklet{x}\$ 11'15 2° \$\stacklet{x}\$ 17'42 30° \$\stacklet{k}\$	1°28'26 6.07441 AU -2°25'26	retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction	-10047 Sep 21 j 18:37 15°8 -10047 Nov 15 j 13:23 19°822'10 -10046 Jan 11 j 13:50 15°88 -10046 Jan 15 j 10:59 14°830'30 2°10'46 -10046 Jan 16 j 08:57 14°823'31 4.32848 AU -10046 Mar 18 j 21:20 9°831'59 -10046 May 20 j 22:46 15°8 -10046 Jul 22 j 23:53 27°835'17 -10046 Aug 02 j 16:29 0°I -10046 Aug 03 j 05:48 0°I07'32 6.30511 AU -10046 Aug 04 j 09:32 0°I23'13 1°38'22
conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-10052 Jan 02 j 06:37 -10052 Jan 15 j 21:39 -10052 Jan 15 j 21:34 -10052 Jan 17 j 06:09 -10052 Jan 18 j 10:14 -10052 Jan 29 j 14:57 -10052 Mar 28 j 04:04 -10052 Jun 07 j 08:55 -10052 Aug 05 j 16:36 -10052 Aug 04 j 21:46	11°M.14'33 14°M.24'44 14°M.43'39 15°M. 17°M.35'57 0° \$\stacklet{x}\$ 7° \$\stacklet{x}\$ 15'43 2° \$\stacklet{x}\$ 11'15 2° \$\stacklet{x}\$ 17'42 30° \$\stacklet{k}\$	1°28'26 6.07441 AU -2°25'26	retrograde opposition min. Earth dist. direct evening set max. Earth dist.	-10047 Sep 21 j 18:37 15°8 -10047 Nov 15 j 13:23 19°822'10 -10046 Jan 11 j 13:50 15°88 -10046 Jan 15 j 10:59 14°830'30 2°10'46 -10046 Jan 16 j 08:57 14°823'31 4.32848 AU -10046 Mar 18 j 21:20 9°831'59 -10046 May 20 j 22:46 15°8 -10046 Jul 22 j 23:53 27°835'17 -10046 Aug 02 j 16:29 0°II -10046 Aug 03 j 05:48 0°II07'32 6.30511 AU

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10046 in astronomical counting style is the year 10047 BCE in historical counting style. -10046 Dec 18 j 14:42 21°**Д**03'15 retrograde min. Earth dist. -10040 Aug 09 j 18:55 7°**҂**15'43 4.10951 AU -10045 Feb 18 j 00:02 16° II 10'08 2° 26' 47 direct -10040 Oct 08 j 03:52 2° ₹ 09'10 opposition min. Earth dist. -10045 Feb 18 j 15:49 16° **I**I 05'07 4.27598 AU -10039 Feb 12 j 10:11 21° ₹ 15'32 evening set -10045 Apr 20 j 17:36 11°**Ц**14'35 direct -10045 Aug 23 j 07:11 29°**Ⅲ**22'30 -10039 Feb 26 j 03:17 24° ₹23'30 -1°36'31 evening set conjunction -10045 Aug 26 j 00:56 -10039 Feb 26 j 03:19 24° ₹23'31 1°37'06 minimum elong -10039 Feb 27 j 00:06 24° ₹35'25 6.14199 AU max. Earth dist. -10045 Sep 04 j 16:58 2°513'00 -10039 Mar 11 j 20:11 27° ₹31'13 conjunction 1°33'36 morning rise -10039 Mar 22 j 20:25 0°る -10045 Sep 04 j 17:00 minimum elong 2°513'02 1°34'10 max. Earth dist. -10045 Sep 04 j 02:42 2°**5**04'49 6.23851 AU retrograde -10039 Jul 16 j 01:05 16° ₹21'11 morning rise -10045 Sep 17 j 03:19 5°504'01 opposition -10039 Sep 13 j 01:47 11°る19'54 -2°07'30 -10044 Jan 22 j 00:13 23°537'55 -10039 Sep 12 j 17:57 11°**궁**22'34 4.18139 AU retrograde min. Earth dist. -10044 Mar 23 j 12:34 18°9541'52 1°57'47 -10039 Nov 11 j 17:58 6°る16'33 opposition direct min. Earth dist. -10044 Mar 23 j 17:30 18°9540'17 4.19952 AU evening set -10038 Mar 20 j 07:55 25°**⋜**09'24 direct -10044 May 23 j 03:17 13°548'28 -10044 Sep 14 j 04:43 $0^{\circ}\Omega$ conjunction -10038 Apr 02 j 23:12 28°쥥13'25 -1°08'11 evening set -10044 Sep 23 j 11:30 2°**Ω**07'47 minimum elong max. Earth dist. -10038 Apr 03 j 00:32 28°정14'10 6.22083 AU conjunction -10044 Oct 06 j 03:32 $5^{\circ}\Omega$ 04'25 0°59'15 -10038 Apr 10 j 20:28 0°≈ minimum elong -10044 Oct 06 j 03:37 5°**Ω**04'28 0°59'45 morning rise -10038 Apr 16 j 12:29 1°≈16'17 max. Earth dist. -10044 Oct 06 j 05:01 $5^{\circ}\Omega$ 05'17 6.15939 AU -10038 Jun 25 i 07:36 15°≈ morning rise -10044 Oct 18 j 22:16 $8^{\circ}\Omega$ 02'32 retrograde -10038 Aug 17 j 15:13 19°≈18'49 -10044 Nov 19 i 02:25 15°Ω -10038 Oct 10 j 22:54 15°R≈ retrograde -10043 Feb 25 i 14:22 $27^{\circ}\Omega$ 19'56 opposition -10038 Oct 15 j 18:49 14°≈21'24 -1°07'07 opposition -10043 Apr 27 j 20:08 22°**Q**20'00 0°48'48 min. Earth dist. -10038 Oct 16 j 00:05 14°≈19'38 4.25898 AU min. Earth dist. -10043 Apr 27 j 11:31 22° Ω22'49 4.12302 AU direct -10038 Dec 15 j 18:02 9°≈17'06 -10043 Jun 26 j 04:44 $17^{\circ}\Omega$ 27'04 -10037 Feb 17 j 23:10 15°≈ direct -10043 Sep 30 j 12:10 0° mg -10037 Apr 23 j 15:47 27°≈50'33 evening set -10043 Oct 27 j 04:28 6° Mp 03'12 -10037 May 03 j 08:43 0°**光** evening set -10037 May 06 j 09:33 0° **★**40'37 6.29204 AU max. Earth dist. -10043 Nov 09 j 06:27 9° m 07'06 0°04'14 conjunction 9° m 07'06 0°04'30 -10037 May 07 j 01:21 0° **€** 49'25 -0°18'38 -10043 Nov 09 j 06:27 minimum elong conjunction -10043 Nov 08 j 22:26 9° m 02'25 minimum elong -10037 May 07 j 01:23 0°**米**49'26 0°18'58 behind sun begin -10043 Nov 09 j 14:27 9° m 11'47 -10037 May 20 j 07:28 3°**)** 46'31 behind sun end morning rise -10037 Sep 18 j 07:44 21° **∺** 14'58 -10043 Nov 10 j 03:13 9° Mp 19'17 6.09333 AU max. Earth dist. retrograde -10037 Sep 19 j 04:08 21° **∺** 14'53 -10043 Nov 22 j 11:45 12° m 12'52 morning rise asc. node -10043 Dec 07 j 07:53 15° m 37'38 -10037 Nov 17 j 00:17 16° **★** 20'56 0°12'02 desc. node opposition -10042 Feb 25 j 09:07 0°**♀** min. Earth dist. -10037 Nov 17 j 15:07 16° **★** 16'05 4.31785 AU retrograde -10042 Apr 02 j 21:58 2°**♀**02'11 direct -10036 Jan 17 j 23:16 11° **∺** 17'33 -10042 May 09 j 04:53 30°R Mp evening set -10036 May 25 j 11:14 29° **∺** 33'53 opposition -10042 Jun 02 j 12:08 26° m 58'51 -0°39'19 -10036 May 27 j 10:31 0°**Υ** min. Earth dist. -10042 Jun 01 j 18:00 27° m 04'54 4.07326 AU max. Earth dist. -10036 Jun 06 j 07:24 2°**Υ**11'34 6.33422 AU direct -10042 Jul 30 j 22:35 22° m 04'30 -10042 Oct 12 j 03:35 0°₽ conjunction -10036 Jun 07 j 11:31 2°**Υ**'27'13 0°35'40 -10042 Dec 01 j 16:39 10°**♀**58'55 -10036 Jun 07 j 11:28 2°**Υ**'27'11 0°35'37 evening set minimum elong -10036 Jun 20 i 08:26 5°**Υ**18'51 morning rise -10042 Dec 15 i 03:05 14° \(\Omega\) 07'45 -0°53'21 $-10036 \text{ Oct } 18 \text{ i } 23:34 \ 22^{\circ} \Upsilon 35'15$ conjunction retrograde -10042 Dec 15 i 03:00 14° \(\Omega\) 0°53'26 -10036 Dec 18 j 06:57 17° Υ 43'18 1° 26'18 minimum elong opposition -10036 Dec 19 j 04:50 17° **Y** 36'17 4.34106 AU max. Earth dist. -10042 Dec 16 j 10:27 14° \(\Omega\) 26'09 6.06392 AU min. Earth dist. $-10035 \text{ Feb} \quad 18 \text{ i } 19:15 \quad 12^{\circ} \Upsilon 42'13$ morning rise -10042 Dec 28 i 16:58 17° \overline{1}20 direct -10041 Feb 26 j 10:29 0°M -10035 Jun 22 j 12:43 0°8 retrograde -10041 May 09 j 00:23 7°ML14'51 -10035 Jun 26 j 04:06 0°848'23 evening set -10041 Jul 07 j 21:24 2°M 09'49 -1°54'08 max. Earth dist. -10035 Jul 07 j 11:37 3°**8**19'56 6.33560 AU opposition -10041 Jul 06 j 23:05 2°ML17'24 4.06826 AU min. Earth dist. -10041 Jul 24 j 09:09 30°R ₽ -10035 Jul 08 j 19:06 3°**8**37'34 1°19'01 conjunction -10041 Sep 04 j 00:52 27°**2**12'28 direct minimum elong -10035 Jul 08 j 19:01 3°**8**37'31 1°19'17 -10041 Oct 15 j 14:09 0°M morning rise -10035 Jul 21 j 07:33 6°**8**25'32 -10040 Jan 01 j 17:55 15° ML -10035 Aug 31 j 00:24 15°**8** -10040 Jan 07 j 11:54 16°M 19'24 retrograde -10035 Nov 20 j 02:40 23°853'11 evening set -10034 Jan 20 j 02:26 19°**8**01'26 2°15'33 opposition -10040 Jan 21 j 03:28 19°M29'22 -1°31'38 -10034 Jan 20 j 23:18 18°**8**54'48 4.32196 AU conjunction min. Earth dist. minimum elong -10040 Jan 21 j 03:24 19°M29'20 1°32'03 -10034 Feb 26 j 06:39 15°R₩ max. Earth dist. -10040 Jan 22 j 12:04 19°ML48'19 6.08248 AU direct -10034 Mar 23 j 10:17 14°**8**03'23 morning rise -10040 Feb 03 j 20:45 22°M 40'10 -10034 Apr 17 j 14:26 15°**8** -10040 Mar 07 j 19:20 0° **尽** -10034 Jul 17 j 20:20 $\Pi^{\circ}0$ -10040 Jun 12 j 06:27 12° ₹ 14'08 -10034 Jul 27 j 08:55 2°**Д**07'28 retrograde evening set

-10040 Aug 10 j 11:50 7°**∡** 09'56 -2°26'50

opposition

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10034 in astronomical counting style is the year 10035 BCE in historical counting style. -10034 Aug 08 j 18:16 4°**II**55'34 1°39'32 morning rise -10028 Feb 08 j 23:03 27° ML36'00 conjunction -10034 Aug 08 j 18:15 4° \$\mathbf{I}\$55'33 1°40'01 -10028 Feb 19 j 11:24 0° ₹ minimum elong 6.29656 AU -10034 Aug 07 j 17:22 4°**Ц**41'27 -10028 Jun 16 j 22:34 17° ₹04'48 max. Earth dist. retrograde -10034 Aug 21 j 02:37 7°**II**43'18 -10028 Aug 14 j 11:09 12° ₹ 06'31 4.11758 AU min. Earth dist. morning rise -10034 Dec 23 j 09:26 25°**Ⅲ**41'20 -10028 Aug 15 j 03:32 12°**尽** 00'55 -2°27'11 retrograde opposition -10033 Feb 22 j 19:10 20°**Ⅲ**48'00 -10028 Oct 12 j 20:58 6°**尽** 59'44 opposition 2°25'26 direct -10033 Feb 23 j 09:54 20°**Ⅲ**43'19 -10027 Feb 17 j 10:00 26° ₹05'13 min. Earth dist. 4.26617 AU evening set -10033 Apr 25 j 09:51 15°**Ц**52'54 direct -10027 Mar 03 j 03:02 29°**х** 12'48 -1°34'25 -10033 Aug 09 j 18:51 0ಂತಾ conjunction evening set -10033 Aug 27 j 18:22 4°902'03 minimum elong -10027 Mar 03 j 03:05 29° ₹ 12'50 1°35'00 max. Earth dist. -10027 Mar 03 j 20:06 29° ₹22'33 6.15081 AU -10033 Sep 09 j 04:32 -10027 Mar 06 j 13:40 0°**ਰ** conjunction 6°\$53'11 1°30'27 -10033 Sep 09 j 04:36 -10027 Mar 16 j 19:44 2°**♂**20'01 minimum elong 6°553'13 1°31'02 morning rise max. Earth dist. -10033 Sep 08 j 15:34 6°9545'43 6.22838 AU retrograde -10027 Jul 20 j 15:11 21°**⋜**04'04 morning rise -10033 Sep 21 j 15:53 9°5945'01 opposition -10027 Sep 17 j 14:59 16° ₹03'18 -2°01'13 retrograde -10032 Jan 26 j 22:02 28°524'46 min. Earth dist. -10027 Sep 17 j 09:53 16°**궁**05'01 4.18996 AU opposition -10032 Mar 28 j 10:26 23°528'10 1°50'11 direct -10027 Nov 16 j 12:03 10°**궁**59'41 min. Earth dist. -10032 Mar 28 j 12:39 23°527'28 4.18983 AU evening set -10026 Mar 25 j 03:46 29°**궁**50'55 direct -10032 May 27 j 20:16 18°534'57 -10026 Mar 25 j 20:01 -10032 Aug 28 j 01:23 $0^{\circ}\Omega$ evening set -10032 Sep 28 j 02:20 $6^{\circ}\Omega$ 55'42 conjunction -10026 Apr 07 j 18:44 2°≈54'29 -1°02'15 minimum elong -10026 Apr 07 i 18:49 2°≈54'32 1°02'46 conjunction -10032 Oct 10 j 19:45 9° Ω 53'16 0°52'28 max. Earth dist. -10026 Apr 07 j 18:19 2°≈54'15 6.22874 AU minimum elong -10032 Oct 10 j 19:50 9° Ω 53'19 0°52'56 morning rise -10026 Apr 21 i 07:11 5°≈56'43 max. Earth dist. -10032 Oct 11 j 01:38 9° **Ω**56'41 6.15122 AU -10026 Jun 03 j 03:07 15°≈ -10032 Oct 23 j 15:44 12° Ω 52'21 -10026 Aug 22 j 00:56 23°≈54'32 morning rise retrograde -10032 Nov 01 j 22:03 15°**Ω** opposition -10026 Oct 20 j 06:25 18°≈57'38 -0°56'44 $-10031 \text{ Jan } 22 \text{ j } 23:19 \quad 0^{\circ} \text{ Mp}$ min. Earth dist. -10026 Oct 20 j 12:20 18°≈55'40 4.26559 AU -10031 Mar 02 j 15:31 2° Mp 14'08 -10026 Nov 23 j 16:03 15°R≈ retrograde -10031 Apr 10 j 07:16 30°R**Ω** -10026 Dec 20 j 08:17 13°≈53'22 direct -10031 May 02 j 19:21 27° Ω 13'42 0°36'59 -10025 Jan 16 j 09:32 15°≈ opposition -10031 May 02 j 09:41 27° Ω 16'52 4.11694 AU -10025 Apr 17 j 06:31 0°**米** min. Earth dist. -10031 Jul 01 j 01:00 22°**\2**20'42 -10025 Apr 28 j 07:36 2°**升**25'18 direct evening set -10031 Sep 11 j 07:06 0° Mg -10031 Oct 17 j 04:50 7° m 33'32 -10025 May 11 j 15:58 5°**米** 23'31 -0°10'59 desc. node conjunction -10031 Nov 01 j 00:17 10° m 58'13 -10025 May 11 j 15:59 5° **★**23'32 0°11'17 evening set minimum elong -10025 May 11 j 10:02 5°**米** 20'13 behind sun begin conjunction -10031 Nov 14 j 03:22 14° m 02'48 -0°04'13 behind sun end -10025 May 11 j 21:57 5° **∺**26'50 minimum elong -10031 Nov 14 j 03:20 14° m 02'47 0°04'00 max. Earth dist. -10025 May 10 j 21:08 5° **∺** 13'01 6.29707 AU behind sun begin -10031 Nov 13 j 19:15 13° m 58'03 morning rise -10025 May 24 j 21:06 8° **∺** 19'59 behind sun end -10031 Nov 14 j 11:26 14° m 07'30 asc. node -10025 Jul 30 j 04:21 21° **∺** 18'47 max. Earth dist. -10031 Nov 15 j 00:58 14° mg 15'27 6.08974 AU retrograde -10025 Sep 22 j 19:21 25° **ਮ** 46'16 -10031 Nov 27 j 10:09 17° m 09'19 -10025 Nov 21 j 12:29 20° **€** 52'37 0°23'13 morning rise opposition -10030 Jan 27 j 03:08 0°**♀** min. Earth dist. -10025 Nov 22 j 05:12 20° **X** 47'09 4.32098 AU retrograde -10030 Apr 07 j 20:42 7°**♀**00'04 direct -10024 Jan 22 j 14:50 15°**)** 49'27 -10030 Jun 07 j 10:03 1°**2**56'21 -0°51'11 opposition -10024 May 11 i 04:11 0°Υ -10030 Jun 06 j 14:13 2°**2**02'59 4.07256 AU $-10024 \text{ May } 29 \text{ i } 23:14 \quad 4^{\circ} \Upsilon 04'37$ min. Earth dist. evening set -10030 Jun 22 j 07:44 30°R Mp -10030 Aug 04 i 18:30 27° m 01'38 $-10024 \text{ Jun } 11 \text{ j } 22:20 \quad 6^{\circ} \Upsilon 57'22 \quad 0^{\circ} 42'42$ direct conjunction -10030 Sep 16 i 16:35 0° € minimum elong $-10024 \text{ Jun } 11 \text{ i } 22:16 \quad 6^{\circ} \Upsilon 57'19$ 0°42'42 -10030 Dec 06 j 16:44 15° **2**57'13 max. Earth dist. -10024 Jun 10 j 18:15 6°**Υ**41'43 6.33518 AU evening set -10024 Jun 24 j 17:54 9°**Y**48'24 morning rise conjunction -10030 Dec 20 j 04:09 19° **2**06'20 -1°00'11 -10024 Oct 23 j 10:06 27° Υ 05'27 retrograde -10030 Dec 20 j 04:03 19°**2**06'16 1°00'18 -10024 Dec 22 j 20:43 22°Υ 13'35 1°35'07 minimum elong opposition -10024 Dec 23 j 17:38 22° Υ 06'53 4.34007 AU max. Earth dist. -10030 Dec 21 j 12:59 19° **2**25'34 6.06602 AU min. Earth dist. -10023 Feb 23 j 08:09 17°**Y**12'53 morning rise -10029 Jan 02 j 18:34 22° **2**17'01 direct -10029 Feb 06 j 06:28 0°M -10023 Jun 06 j 01:48 0°8 -10029 May 13 j 22:45 12° ML11'22 evening set -10023 Jun 30 j 14:00 5°**8**18'23 retrograde -10029 Jul 12 j 16:34 7°ML06'17 -2°01'32 -10023 Jul 11 j 21:21 7°850'03 6.33264 AU opposition max. Earth dist. min. Earth dist. -10029 Jul 11 j 19:43 7°**ጤ**13'24 4.07295 AU -10029 Sep 08 j 21:46 2°ML08'26 -10023 Jul 13 j 03:49 8°**8**07'09 1°23'29 direct conjunction -10029 Dec 15 j 16:32 15°M minimum elong -10023 Jul 13 j 03:44 8°**8**07'06 1°23'47 evening set -10028 Jan 12 j 13:38 21°ML15'39 morning rise -10023 Jul 25 j 15:21 10°**8**54'49 -10023 Aug 13 j 06:58 15°**8** conjunction -10028 Jan 26 j 05:33 24°M25'28 -1°34'25 retrograde -10023 Nov 24 j 17:57 28°**8**25'22 minimum elong -10028 Jan 26 j 05:30 24°M25'26 1°34'51 -10022 Jan 24 j 18:44 23°**8**33'30 2°19'31 opposition

min. Earth dist.

-10022 Jan 25 j 15:39 23°8 26'52 4.31718 AU

max. Earth dist.

-10028 Jan 27 j 12:35 24° ML43'27 6.08912 AU

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10022 in astronomical counting style is the year 10023 BCE in historical counting style. -10022 Mar 28 j 02:04 18°**8**35'52 direct min. Earth dist. -10017 Jul 16 j 15:11 12°ML11'38 4.07500 AU -10022 Jul 01 j 01:26 0°**Ⅱ** direct -10017 Sep 13 j 16:48 7° ML06'06 -10022 Jul 31 j 18:05 -10017 Nov 26 j 06:11 15°ML evening set 6°**Ⅲ**39'41 -10022 Aug 12 j 03:04 9°**Д**14'13 6.29012 AU max. Earth dist. -10016 Jan 17 j 16:59 26°ML14'44 evening set -10022 Aug 13 j 03:05 9°**Ⅲ**27'52 -10016 Jan 31 j 09:12 29°M24'29 -1°36'33 conjunction 1°40'06 conjunction -10022 Aug 13 j 03:05 9°**Ⅲ**27'51 -10016 Jan 31 j 09:09 29°M24'28 1°37'00 minimum elong 1°40'36 minimum elong morning rise -10022 Aug 25 j 11:29 12°**Ⅲ**15'50 max. Earth dist. -10022 Dec 14 j 00:09 0.ಂತಾ -10016 Feb 02 j 22:31 0°⊀ retrograde -10022 Dec 28 j 02:14 0°518'25 morning rise -10016 Feb 14 j 02:50 2°**₹**34'49 -10021 Jan 11 j 05:29 30°RⅡ retrograde -10016 Jun 21 j 17:38 21° ₹ 59'19 -10021 Feb 27 j 13:54 25°**Д**24'37 opposition 2°23'11 opposition -10016 Aug 19 j 20:56 16° ₹ 55'46 -2°26'32 -10021 Feb 28 j 02:17 25°**Ц**20'41 4.25839 AU min. Earth dist. min. Earth dist. -10016 Aug 19 j 06:36 17°**₹**00'40 4.12371 AU direct -10021 Apr 30 j 00:13 20°**Д**29'49 direct -10016 Oct 17 j 18:14 11° ₹ 54'09 -10021 Jul 23 j 04:52 0ಂತಾ -10015 Feb 18 j 02:42 0°궁 evening set -10021 Sep 01 j 04:47 8°939'25 evening set -10015 Feb 22 j 11:53 0°る59'26 conjunction -10021 Sep 13 j 15:40 11°531'11 1°26'45 conjunction -10015 Mar 08 j 05:03 4°**⋜**06'44 -1°31'37 minimum elong -10021 Sep 13 j 15:44 11°531'14 1°27'20 minimum elong -10015 Mar 08 j 05:06 4° ₹ 06'46 1°32'12 max. Earth dist. -10021 Sep 13 j 06:08 11°525'41 6.21990 AU max. Earth dist. -10015 Mar 08 j 21:01 4°る15'50 6.15831 AU morning rise -10021 Sep 26 j 03:44 14°523'45 morning rise -10015 Mar 21 j 21:17 7°る13'29 -10021 Dec 16 i 09:24 $0^{\circ}\Omega$ retrograde -10015 Jul 25 j 06:12 25°る51'51 retrograde $-10020 \text{ Jan } 31 \text{ j } 20:25 \quad 3^{\circ} \Omega 08'45$ opposition -10015 Sep 22 j 06:01 20°る51'40 -1°54'00 -10020 Mar 18 j 21:55 30°RS min. Earth dist. -10015 Sep 22 j 01:46 20°る53'06 4.19808 AU opposition -10020 Apr 02 i 07:32 28°511'39 1°41'54 direct -10015 Nov 21 j 05:59 15°₹47'55 min. Earth dist. -10020 Apr 02 j 09:02 28°511'10 4.18094 AU -10014 Mar 08 j 22:40 0°≈ -10020 Jun 01 j 14:32 23°518'34 -10014 Mar 30 j 01:50 4°≈37'40 direct evening set -10020 Aug 08 j 12:01 $0^{\circ}\Omega$ -10020 Oct 02 j 16:39 11°**Ω**40'42 -10014 Apr 12 j 16:02 7°≈40'39 -0°55'47 conjunction evening set minimum elong -10014 Apr 12 j 16:07 7°≈40'42 0°56'17 -10014 Apr 12 j 11:50 7°≈38'18 6.23697 AU -10020 Oct 15 j 11:10 $14^{\circ}\Omega 39'09$ $0^{\circ}45'22$ conjunction max. Earth dist. -10020 Oct 15 j 11:15 $14^{\circ}\Omega 39'12$ $0^{\circ}45'50$ morning rise -10014 Apr 26 j 03:53 10°≈42'17 minimum elong max. Earth dist. -10020 Oct 15 j 18:01 14° Ω 43'09 6.14276 AU -10014 May 15 j 17:46 15°≈ -10020 Oct 16 j 22:55 15° Ω -10014 Aug 26 j 14:45 28°≈35'25 retrograde -10020 Oct 28 j 08:44 17° Ω 39'16 -10014 Oct 24 j 20:31 23°≈39'02 -0°45'47 morning rise opposition $-10020 \text{ Dec } 25 \text{ j } 21:12 \quad 0^{\circ}\text{ Mp}$ -10014 Oct 25 j 04:27 23°≈36'24 4.27329 AU min. Earth dist. -10019 Mar 07 j 13:43 7° m 05'35 -10014 Dec 25 j 02:55 18°≈34'51 retrograde direct opposition -10019 May 07 j 17:13 2° m 04'37 0°25'00 -10013 Mar 30 j 18:42 0°**光** min. Earth dist. -10019 May 07 j 05:15 2° m 08'33 4.10960 AU evening set -10013 May 03 j 00:41 7°**米**04'40 -10019 May 24 j 01:51 30°RΩ direct -10019 Jul 05 j 18:38 27°**Ω**11'30 conjunction -10013 May 16 j 08:04 10° **★** 02'10 -0°03'11 -10019 Aug 16 j 18:17 0° Mp -10013 May 16 j 08:03 10° **光** 02'10 0°03'26 minimum elong desc. node -10019 Aug 27 j 17:01 1° M 32'18 behind sun begin -10013 May 15 j 23:58 9° **∺** 57'40 -10019 Nov 05 j 20:07 15° m 51'22 behind sun end -10013 May 16 j 16:09 10° **光** 06'39 evening set max. Earth dist. -10013 May 15 j 13:24 9° **★** 51'46 6.30395 AU -10019 Nov 19 i 00:34 18° m 56'44 -0°12'27 -10013 May 29 i 11:45 12° ¥ 57'49 conjunction morning rise -10019 Nov 19 i 00:32 18° m 56'43 0°12'17 -10013 Jun 07 j 23:47 15° ¥ 03'08 minimum elong asc. node -10019 Nov 18 j 19:05 18° m 53'32 -10013 Sep 12 j 09:42 0°Υ behind sun begin -10019 Nov 19 i 05:59 18° m 59'54 $-10013 \text{ Sep } 27 \text{ i } 06:04 \quad 0^{\circ} \Upsilon 21'26$ behind sun end retrograde max. Earth dist. -10019 Nov 20 i 00:44 19° m 10'55 6.08423 AU -10013 Oct 12 j 03:01 30°R € opposition -10019 Dec 02 j 08:29 22° m 04'02 -10013 Nov 26 j 02:12 25° \(\frac{1}{2} \) 28'09 0°34'22 morning rise -10018 Jan 06 j 19:59 0°**♀** min. Earth dist. -10013 Nov 26 j 18:36 25° \(\frac{1}{22}\)'50 4.32674 AU retrograde -10018 Apr 12 j 22:16 11° **△**57'00 direct -10012 Jan 27 j 05:44 20° **★** 25'21 opposition -10018 Jun 12 j 07:39 6°**♀**52'59 -1°02'42 -10012 Apr 23 j 03:54 0°**Υ** min. Earth dist. -10018 Jun 11 j 12:19 6° **2**59'29 4.06940 AU evening set -10012 Jun 03 j 12:15 8°**Υ**38'17 direct -10018 Aug 09 j 15:34 1°**♀**57'53 max. Earth dist. -10012 Jun 15 j 04:28 11°**Υ**13'55 6.33937 AU evening set -10018 Dec 11 j 17:45 20°**♀**55'55 -10012 Jun 16 j 09:43 11°**Υ**'30'13 0°49'32 conjunction -10018 Dec 25 j 05:57 24°**♀**05'23 -1°06'37 -10012 Jun 16 j 09:39 11°**Υ**30'11 conjunction minimum elong 0°49'34 -10012 Jun 29 j 04:05 14° **Y**20'32 -10018 Dec 25 j 05:52 24°**£**05'20 1°06'48 morning rise minimum elong -10018 Dec 26 j 14:45 24° **2**24'35 6.06530 AU max. Earth dist. -10012 Sep 25 j 12:57 0°8 morning rise -10017 Jan 07 j 21:11 27°**⊆**16'23 retrograde -10012 Oct 27 j 23:16 1°**8**37'17 -10017 Jan 19 j 17:34 0° **™** -10012 Nov 29 j 14:16 30°R**Y** -10017 Apr 11 j 17:26 15°M opposition -10012 Dec 27 j 11:13 26° Υ 45'31 1° 43'19 retrograde -10017 May 18 j 20:25 17° ML09'26 min. Earth dist. -10012 Dec 28 j 09:02 26° **Y** 38'33 4.34250 AU -10017 Jun 24 j 14:36 15°RML -10011 Feb 28 j 00:09 21°**Υ**45'13 direct

-10011 May 18 j 14:36 0°8

-10017 Jul 17 j 12:21 12°ML04'24 -2°08'09

opposition

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10011 in astronomical counting style is the year 10012 BCE in historical counting style. -10011 Jul 04 j 23:27 9°**8**48'45 minimum elong -10006 Dec 30 j 07:39 29°**2**03'46 1°12'42 evening set -10011 Jul 16 j 07:08 12°**8**20'41 6.33291 AU max. Earth dist. -10006 Dec 31 j 15:58 29° **2**22'41 6.06277 AU max. Earth dist. -10005 Jan 03 j 07:44 0°ML -10011 Jul 17 j 12:19 12°**8**37'03 1°27'25 -10005 Jan 12 j 23:39 2°M 15'11 conjunction morning rise -10005 Mar 14 j 02:46 15°M -10011 Jul 17 j 12:15 12°\begin{align*} 337'01 1°27'45 \end{align*} minimum elong -10011 Jul 28 j 03:21 15°8 retrograde -10005 May 23 j 18:29 22°ML07'32 -10005 Jul $\,$ 21 j 11:43 $\,$ 17° M 09'25 $\,$ 4.07540 AU $\,$ -10011 Jul 29 j 22:55 15°**8**24'19 morning rise min. Earth dist. -10011 Oct 15 j 16:21 0°**Ⅱ** opposition -10005 Jul 22 j 07:53 17°ML02'31 -2°13'45 -10011 Nov 29 j 06:21 2°**Д**56'51 -10005 Aug 06 j 17:53 15°RM retrograde -10010 Jan 13 j 20:01 30°R ₩ direct -10005 Sep 18 j 13:55 12°ML03'44 opposition -10010 Jan 29 j 10:26 28°**8**04'46 2°22'33 -10005 Oct 31 j 09:10 15°M min. Earth dist. -10010 Jan 30 j 05:35 27°858'42 4.31539 AU -10004 Jan 17 j 11:01 0° **₹** -10010 Apr 01 j 15:02 23°**8**07'33 -10004 Jan 22 j 20:40 direct evening set 1°**∡**14'18 -10010 Jun 11 j 20:14 0°**Ⅱ** evening set -10010 Aug 05 j 02:02 11°**Ц**10'08 conjunction -10004 Feb 05 j 13:26 4°**₹** 24'06 -1°37'56 minimum elong -10004 Feb 05 j 13:25 4°**∡**°24′04 1°38′25 conjunction -10010 Aug 17 j 10:45 13°**Д**58'19 1°40'02 max. Earth dist. -10004 Feb 06 j 18:28 4° **₹** 40'53 6.09693 AU minimum elong -10010 Aug 17 j 10:45 13°**Д**58'19 1°40'34 morning rise -10004 Feb 19 j 07:05 7° **₹** 34'16 max. Earth dist. -10010 Aug 16 j 12:27 13°**Д**45'39 6.28626 AU retrograde -10004 Jun 26 j 13:09 26° ₹ 54'21 morning rise -10010 Aug 29 j 19:07 16°**Ⅲ**46'28 opposition -10004 Aug 24 j 14:37 21° ₹ 51'11 -2°24'47 -10010 Nov 04 j 03:42 0°5 min. Earth dist. -10004 Aug 24 j 00:54 21° ₹ 55'52 4.12996 AU retrograde -10009 Jan 01 i 19:41 4°\$52'52 direct -10004 Oct 22 j 14:07 16° × 49'14 opposition -10009 Mar 04 i 07:24 29°**Ⅲ**58'41 2°20'00 -10003 Jan 31 i 20:21 0°ಕ -10009 Mar 04 i 03:17 30°R II evening set -10003 Feb 27 j 13:57 5°る53'51 min. Earth dist. -10009 Mar 04 j 19:40 29° II 54'48 4.25244 AU -10009 May 04 j 16:00 25°**Ⅲ**04'10 -10003 Mar 13 j 06:51 9°る00'44 -1°28'08 direct conjunction -10009 Jul 02 i 01:46 0°€ minimum elong -10003 Mar 13 j 06:56 9°る00'47 1°28'42 -10009 Sep 05 j 13:48 13°513'43 max. Earth dist. -10003 Mar 13 j 19:31 9°**궁**07'57 6.16684 AU evening set -10003 Mar 26 j 22:56 12°**⋜**07'00 morning rise -10009 Sep 18 j 01:21 16°506'06 1°22'33 -10003 Jul 10 j 00:26 0°≈ conjunction -10009 Sep 18 j 01:25 16°506'08 1°23'07 -10003 Jul 29 j 21:21 0°≈39'14 minimum elong retrograde -10009 Sep 17 j 16:42 16°501'07 6.21242 AU max. Earth dist. -10003 Aug 18 j 15:24 30°₹♂ -10009 Sep 30 j 14:28 18°559'25 opposition -10003 Sep 26 j 21:27 25°♂39'29 -1°45'58 morning rise -10009 Nov 21 j 14:52 0°**Ω** min. Earth dist. -10003 Sep 26 j 18:46 25° ₹ 40'23 4.20787 AU -10008 Feb 05 j 14:02 7° Ω 49'15 -10003 Nov 26 j 02:14 20°る35'30 retrograde direct -10008 Apr 07 j 02:20 2° **Ω**51'38 1°33'04 -10002 Feb 18 j 10:09 0°≈ opposition -10008 Apr 07 j 01:37 2° **Ω**51'51 4.17238 AU -10002 Apr 03 j 22:59 min. Earth dist. evening set 9°≈22'39 -10008 Apr 30 j 20:27 30°Rூ direct -10008 Jun 06 j 04:41 27°558'36 conjunction -10002 Apr 17 j 12:38 12°≈24'57 -0°48'57 -10008 Jul 12 j 02:14 0°**Ω** minimum elong -10002 Apr 17 j 12:42 12°≈25'00 0°49'25 -10008 Oct 01 j 06:55 15°**Ω** max. Earth dist. -10002 Apr 17 j 07:52 12°≈22'16 6.24746 AU -10008 Oct 07 j 05:35 16°**\O22**'22 -10002 Apr 29 j 01:15 15°≈ evening set -10002 Apr 30 j 23:23 15°≈25'44 morning rise -10008 Oct 20 j 01:28 19° Ω 21'47 0°38'06 -10002 Jul 16 j 10:28 0°**米** conjunction -10008 Oct 20 j 01:32 19° Ω 21'49 0°38'32 -10002 Aug 31 j 02:18 3°**光** 13'20 minimum elong retrograde -10008 Oct 20 j 10:38 19° Ω 27'08 6.13398 AU max. Earth dist. -10002 Oct 16 j 05:15 30°R≈ -10008 Nov 02 j 00:21 22° Ω 22'55 -10002 Oct 29 j 09:47 28°≈17'25 -0°34'37 morning rise opposition -10002 Oct 29 j 18:32 28°≈14'32 4.28323 AU -10008 Dec 06 i 04:56 0° m min. Earth dist. -10002 Dec 29 i 19:23 23°≈13'19 retrograde -10007 Mar 12 j 13:10 11° m 53'57 direct -10007 May 12 j 13:28 6° m 52'31 0°13'02 -10001 Mar 10 i 19:16 0°¥ opposition min. Earth dist. -10007 May 12 j 01:33 6° m 56'27 4.10116 AU -10001 Apr 17 j 00:47 7° **★** 11'40 asc node desc. node -10007 Jul 09 j 12:07 1° m 59'17 -10001 May 07 j 16:22 11° \(\frac{1}{40}\)'00 evening set direct -10007 Jul 10 j 12:58 1° m 59'11 -10007 Nov 10 j 15:02 20° m 42'04 evening set conjunction -10001 May 20 j 22:18 14° **₭** 36'35 0°04'44 minimum elong -10001 May 20 j 22:18 14° **¥** 36'35 0°04'31 -10001 May 20 j 14:20 14°**米** 32'10 conjunction -10007 Nov 23 j 20:43 23° m 48'19 -0°20'30 behind sun begin minimum elong -10007 Nov 23 j 20:41 23° m/48'17 0°20'22 behind sun end -10001 May 21 j 06:16 14° **€**41'00 -10007 Nov 24 j 21:43 24° m 02'59 6.07699 AU -10001 May 20 j 00:40 14°**米**24'33 6.31230 AU max. Earth dist. max. Earth dist. -10007 Dec 07 j 06:02 26° m 56'30 -10001 Jun 03 j 00:53 17° **∺** 31'25 morning rise morning rise -10007 Dec 20 j 12:24 0°**♀** -10001 Aug 05 j 06:41 0°**Υ** -10006 Apr 17 j 21:04 16° **△**52'14 retrograde retrograde -10001 Oct 01 j 17:01 4° **Y** 52'10 min. Earth dist. -10006 Jun 16 j 07:46 11°**⊆**54'48 4.06434 AU opposition -10001 Nov 30 j 14:53 29°**米**59'09 0°45'13 opposition -10006 Jun 17 j 04:05 11°**Ω**47'58 -1°13'37 -10001 Nov 30 j 12:14 30°R₩ direct -10006 Aug 14 j 09:05 6° **2**52'30 min. Earth dist. -10001 Dec 01 j 08:51 29°**米**53'19 4.33275 AU evening set -10006 Dec 16 j 18:44 25°**△**53'55 direct -10000 Jan 31 j 21:02 24° **★** 56'33 -10000 Apr 01 j 17:07 0°Υ -10006 Dec 30 j 07:45 29° **2**03'49 -1°12'29 -10000 Jun 07 j 23:00 13°**Υ**'07'11 conjunction evening set

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10000 in astronomical counting style is the year 10001 BCE in historical counting style. $-10000 \text{ Jun } 20 \text{ j } 19:17 \ 15^{\circ} \Upsilon 58'26 \ 0^{\circ} 56'01$ -9995 Dec 03 i 17:29 0∘**⊽** conjunction -10000 Jun 20 j 19:12 15°**Υ**58'23 -9995 Dec 12 j 08:56 2°**₽**01'21 minimum elong 0°56'07 morning rise -10000 Jun 19 j 14:43 15°**Υ**42'31 -9994 Apr 22 j 23:58 21°**♀**58'52 max. Earth dist. 6.34232 AU retrograde -10000 Jul 03 j 12:13 18°**Υ**'48'04 -9994 Jun 21 j 07:34 min. Earth dist. 17°**£**01'27 4.06304 AU morning rise -10000 Aug 27 j 23:58 -9994 Jun 22 j 04:34 0° 8 opposition 16° 254'21 -1°24'25 -10000 Nov 01 j 09:35 retrograde 6°**8**05'21 direct -9994 Aug 19 j 08:50 11°**≏**58'32 opposition -9999 Jan 01 j 00:44 1°**8**13'39 1°50'56 -9994 Dec 17 j 13:13 0°M 1°**8**06'52 min. Earth dist. -9999 Jan 01 j 22:01 4.34226 AU evening set -9994 Dec 21 j 23:54 1°ML01'49 -9999 Jan 10 j 18:12 30°RΥ 26°**Y**13'48 direct -9999 Mar 04 j 12:49 conjunction -9993 Jan 04 j 13:45 4°M11'53 -1°18'01 -9999 Apr 25 j 10:03 0° 8 minimum elong -9993 Jan 04 j 13:39 4°M11'50 1°18'17 -9993 Jan 06 j 00:18 evening set -9999 Jul 09 j 07:55 14°**8**16'26 max. Earth dist. 4°M32'05 6.06623 AU -9999 Jul 12 j 13:58 15°8 morning rise -9993 Jan 18 j 06:01 7° ML23'13 -9993 Feb 21 j 07:58 15°M conjunction -9999 Jul 21 j 19:41 17°804'25 1°30'52 retrograde -9993 May 28 j 18:31 27°M11'47 minimum elong -9999 Jul 21 j 19:37 17°**8**04'23 1°31'14 min. Earth dist. -9993 Jul 26 j 09:25 22°M13'49 4.08375 AU max. Earth dist. -9999 Jul 20 j 13:49 16°**8**47'38 6.32921 AU opposition -9993 Jul 27 j 05:34 22°M06'56 -2°18'26 19°**8**51'33 morning rise -9999 Aug 03 j 05:42 direct -9993 Sep 23 j 13:10 17°ML07'44 -9999 Sep 21 j 04:03 $0^{\circ}\Pi$ -9993 Dec 30 j 22:17 0°×7 6°**∡**16'56 retrograde -9999 Dec 03 j 21:50 7°**Ⅲ**27'47 evening set -9992 Jan 28 j 01:36 opposition -9998 Feb 03 j 02:29 2°II35'32 2°24'52 min. Earth dist. -9998 Feb 03 i 22:00 2°**Ⅱ**29'21 4.30846 AU conjunction -9992 Feb 10 i 18:19 9°**х** 26'11 -1°38'38 -9998 Feb 24 i 16:16 30°R₩ -9992 Feb 10 i 18:18 9°**х** 26'10 1°39'10 minimum elong direct -9998 Apr 06 i 05:46 27°**8**38'42 max. Earth dist. -9992 Feb 11 i 21:02 9°**∡**′41'35 6.10918 AU -9998 May 16 j 07:45 $0^{\circ}\Pi$ -9992 Feb 24 j 11:58 12°**∡**35'44 morning rise -9998 Aug 09 j 10:33 15°**Ⅱ**41'56 -9992 May 28 j 18:42 0°궁 evening set -9992 Jul 01 j 05:27 1°る47'53 retrograde -9998 Aug 21 j 19:22 18°**Ⅲ**30'32 1°39'24 -9992 Aug 03 j 09:07 30°R x⁷ conjunction -9998 Aug 21 j 19:23 opposition -9992 Aug 29 j 07:22 18°**Ⅲ**30'32 1°39'58 26°**₹**45'03 -2°21'59 minimum elong -9998 Aug 20 j 22:37 -9992 Aug 28 j 18:38 26°**✗¹**49'25 4.14494 AU max. Earth dist. 18°**Ⅱ**18'43 6.27664 AU min. Earth dist. -9992 Oct 27 j 11:32 21°**х** 42'41 -9998 Sep 03 j 03:57 21°**Ⅱ**19′10 direct morning rise -9998 Oct 13 j 15:24 -9991 Jan 12 j 15:42 0°궁 0ಂಲ -9997 Jan 06 j 13:23 9°**©**31'32 -9991 Mar 04 j 13:33 10°る43'19 retrograde evening set -9997 Mar 09 j 02:39 opposition 4°936'58 2°16'01 -9997 Mar 09 j 12:42 4°933'46 4.24083 AU -9991 Mar 18 j 06:14 13°る49'23 -1°24'08 min. Earth dist. conjunction 13°**る**49'26 1°24'43 -9991 Mar 18 j 06:19 -9997 Apr 25 j 17:42 30°Ŗ**Ⅱ** minimum elong -9991 Mar 18 j 17:36 29°**Ⅲ**42'47 direct -9997 May 09 j 06:30 max. Earth dist. 13°る55'50 6.18340 AU -9997 May 22 j 19:40 0ಂತಾ morning rise -9991 Mar 31 j 21:31 16°る54'38 evening set -9997 Sep 10 j 01:27 17°954'25 -9991 Jun 04 j 18:28 0°≈ retrograde -9991 Aug 03 j 08:52 5°≈18'06 conjunction -9997 Sep 22 j 13:53 20°5947'43 1°17'45 -9991 Oct 01 j 09:17 0°≈18'53 -1°37'29 opposition -9997 Sep 22 j 13:58 20°9547'46 min. Earth dist. -9991 Oct 01 j 08:34 0°≈19'07 4.22423 AU minimum elong 1°18'19 -9997 Sep 22 j 07:24 20°9543'58 6.19984 AU -9991 Oct 03 j 17:20 30°Ŗる max. Earth dist. -9997 Oct 05 j 04:09 23°9542'07 -9991 Nov 30 j 18:46 25°る14'45 morning rise direct -9997 Nov 02 j 10:51 -9990 Jan 27 j 09:27 $0^{\circ}\Omega$ 0°≈ retrograde -9996 Feb 10 i 14:57 12°**Ω**38'51 evening set -9990 Apr 08 i 15:25 13°≈57'08 opposition -9996 Apr 12 j 01:08 7°Ω40'43 1°23'23 -9990 Apr 13 j 08:18 15°≈ min. Earth dist. -9996 Apr 11 j 23:29 7°**Ω**41'15 4.15954 AU direct -9996 Jun 11 i 00:16 2°**Ω**47'48 conjunction -9990 Apr 22 i 04:05 16°≈58'27 -0°42'06 -9996 Sep 14 j 06:20 15°Ω -9990 Apr 22 i 04:09 16°≈58'30 0°42'32 minimum elong -9996 Oct 11 j 22:57 21°Ω14'44 -9990 Apr 21 j 19:24 16°≈53'36 6.26220 AU evening set max. Earth dist. -9990 May 05 j 13:56 19°≈58'14 morning rise -9996 Oct 24 j 20:15 24°Ω15'19 0°30'18 -9990 Jun 22 j 21:59 0°\ conjunction minimum elong -9996 Oct 24 j 20:19 24°Ω15'20 0°30'41 retrograde -9990 Sep 04 j 08:31 7°**¥**39'33 2°**)**44′03 -0°23′45 max. Earth dist. -9996 Oct 25 j 07:52 24°**Ω**22'06 6.12231 AU opposition -9990 Nov 02 j 18:28 -9996 Nov 06 j 20:45 27°**Ω**17'41 min. Earth dist. -9990 Nov 03 j 05:11 2°**升**40'30 4.29512 AU morning rise -9990 Nov 24 j 17:01 -9996 Nov 18 j 15:00 0° m 30°R≈ -9995 Mar 17 j 16:07 -9989 Jan 03 j 07:44 27°≈39'58 retrograde 16° m 54'15 direct -9995 May 17 j 14:09 -9989 Feb 12 j 07:46 0°**)**€ opposition 11° Mp 52'26 0°00'27 1°**¥**48'32 min. Earth dist. -9995 May 17 j 00:01 11° **m** 57'07 4.09198 AU asc. node -9989 Feb 26 j 14:27 desc. node -9995 May 19 j 13:58 11° m 36'39 evening set -9989 May 12 j 02:19 16°**)**€03'07 direct -9995 Jul 15 j 09:01 6° m 59'01 max. Earth dist. -9989 May 24 j 08:07 18°**)** 46′05 6.32042 AU evening set -9995 Nov 15 j 15:32 25° m 45'22 conjunction -9989 May 25 j 07:05 18°**¥**58'52 0°12'06 conjunction -9995 Nov 28 j 22:25 28° m 52'24 -0°28'45 minimum elong -9989 May 25 j 07:03 18°**¥**58'51 0°11'55 -9995 Nov 28 j 22:22 28° m 52'22 -9989 May 25 j 01:28 18° **¥** 55'45 minimum elong 0°28'40 behind sun begin

max. Earth dist.

-9995 Nov 30 j 01:02

29° M 08'02 6.07124 AU

behind sun end

-9989 May 25 j 12:39

19°**₩**01'57

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -9989 in astronomical counting style is the year 9990 BCE in historical counting style. -9989 Jun 07 j 08:13 21°**)** 52'47 direct -9983 Jul 20 i 08:32 12° m 02'56 morning rise -9989 Jul 15 j 22:31 $0^{\circ}\Upsilon$ -9983 Nov 17 j 00:36 0∘**⊽** -9989 Oct 05 j 22:36 9°Υ11'20 -9983 Nov 20 j 17:56 0°₽52'01 retrograde evening set 4°**Υ**18'37 -9989 Dec 04 j 22:48 0°55'17 opposition 4°Υ12'22 4.33655 AU min. Earth dist. -9989 Dec 05 j 18:08 conjunction -9983 Dec 04 j 02:08 3°**£**59'44 -0°36'55 -9983 Dec 04 j 02:04 -9988 Jan 14 j 07:13 30°**₹** minimum elong 3°**£**59'41 0°36'53 29°¥16'19 direct -9988 Feb 05 j 06:49 max. Earth dist. -9983 Dec 05 j 08:23 4°**£**17'30 6.06795 AU $0^{\circ}\Upsilon$ -9988 Feb 27 j 10:05 morning rise -9983 Dec 17 j 13:40 7°**₽**09'15 17°**Y**25'38 evening set -9988 Jun 12 j 05:23 retrograde -9982 Apr 28 j 03:50 27°**2**06'49 max. Earth dist. -9988 Jun 23 j 16:47 19°**Y**58'46 6.34120 AU min. Earth dist. -9982 Jun 26 j 08:08 22°**₽**09'21 4.06463 AU opposition -9982 Jun 27 j 05:37 22°**₽**02'05 -1°34'40 -9988 Jun 25 j 00:16 20° Y16'20conjunction 1°01'54 direct -9982 Aug 24 j 09:18 17°**≏**05'50 -9988 Jun 25 j 00:11 minimum elong 20°**Y**16′17 1°02'02 -9982 Nov 29 j 23:22 0°M morning rise -9988 Jul 07 j 16:15 23°Y05'34 evening set -9982 Dec 27 j 06:02 6°ML09'54 -9988 Aug 09 j 01:09 0°8 retrograde -9988 Nov 05 j 18:21 10°825'00 conjunction -9981 Jan 09 j 20:16 9°M19'53 -1°23'00 opposition -9987 Jan 05 j 10:45 5°**8**33'19 1°57'39 minimum elong -9981 Jan 09 j 20:11 9°M19'50 1°23'18 min. Earth dist. -9987 Jan 06 j 09:11 5°**8**26'10 4.33655 AU max. Earth dist. -9981 Jan 11 j 05:28 9°**™**39'14 6.07185 AU direct -9987 Mar 08 j 22:35 0°**8**33'45 morning rise -9981 Jan 23 j 13:05 12°MJ31'04 -9987 Jun 27 j 01:51 15°8 -9981 Feb 03 j 08:39 evening set -9987 Jul 13 j 13:23 18°**8**37'30 -9981 Apr 25 j 21:37 0°×7 max. Earth dist. -9987 Jul 24 i 19:57 21°**8**09'24 6.31922 AU -9981 Jun 02 j 16:17 2°**∡**14'54 retrograde -9981 Jul 10 i 02:55 30°RML conjunction -9987 Jul 26 i 00:39 21°**8**25'35 1°33'40 min. Earth dist. -9981 Jul 31 i 06:44 27°M16'59 4.09279 AU -9987 Jul 26 j 00:36 21°**8**25'33 1°34'04 -9981 Aug 01 j 02:40 27°M10'10 -2°22'09 minimum elong opposition -9987 Aug 07 j 10:02 24°812'52 -9981 Sep 28 j 12:39 morning rise direct 22°M-10'27 -9987 Sep 03 j 00:04 -9981 Dec 11 j 02:25 0°Π 0°×7 -9987 Dec 08 j 10:34 11°**Ⅱ**54'55 -9980 Feb 02 j 06:30 11°**х** 18′22 retrograde evening set -9986 Feb 07 j 16:51 7°**I**02'28 2°26'16 opposition -9986 Feb 08 j 11:16 -9980 Feb 15 j 23:29 14°**∡**127'11 -1°38'40 min. Earth dist. 6°Ⅲ56'39 4.29505 AU conjunction 2°**Ⅱ**06′04 -9980 Feb 15 j 23:30 -9986 Apr 10 j 16:45 14° **2**7'11 1°39'12 direct minimum elong -9980 Feb 17 j 01:14 -9986 Aug 13 j 18:27 20°**Ⅲ**12′08 max. Earth dist. 14°**∡**′41'59 6.12077 AU evening set -9980 Feb 29 j 16:49 -9986 Aug 25 j 07:13 22°**Ⅱ**49'55 6.26081 AU 17°**∡**³36′05 max. Earth dist. morning rise -9980 Apr 29 j 04:55 0°궁 -9986 Aug 26 j 03:20 23°**I**101′25 1°38′08 -9980 Jul 06 j 00:07 6°る40'52 conjunction retrograde -9986 Aug 26 j 03:22 -9980 Sep 03 j 00:19 1°る38'32 -2°18'17 minimum elong 23°**Ⅲ**01′26 1°38'41 opposition -9986 Sep 07 j 12:32 -9980 Sep 02 j 13:48 morning rise 25°**Ⅲ**50′56 min. Earth dist. 1°る42'08 4.15777 AU -9986 Sep 26 j 02:43 0ಂತಾ -9980 Sep 15 j 06:44 30°R.✓ retrograde -9985 Jan 11 j 10:19 14°9511'25 direct -9980 Nov 01 j 08:41 26°**х** 35′52 -9985 Mar 13 j 22:31 9°516'24 2°11'06 -9980 Dec 18 j 15:27 0°ರ opposition min. Earth dist. -9985 Mar 14 j 07:23 9°513'34 4.22363 AU evening set -9979 Mar 09 j 13:42 15°る33'36 -9985 May 13 j 22:31 4°522'26 direct -9985 Sep 14 j 14:25 22°937'56 -9979 Mar 23 j 06:02 18°る39'01 -1°19'36 evening set conjunction -9979 Mar 23 j 06:07 18°る39'04 1°20'10 minimum elong -9985 Sep 27 j 04:05 25°532'28 1°12'20 -9979 Mar 23 j 13:59 18°る43'31 6.19642 AU conjunction max. Earth dist. -9985 Sep 27 i 04:10 minimum elong 25°532'31 1°12'54 morning rise -9979 Apr 05 i 20:50 21°る43'30 -9985 Sep 27 i 01:02 max. Earth dist. 25°530'42 6.18301 AU -9979 May 14 j 10:33 0°≈ -9985 Oct 09 i 19:40 morning rise 28°528'11 retrograde -9979 Aug 07 j 20:18 9°≈59'54 -9985 Oct 16 i 11:53 $0^{\circ}\Omega$ opposition -9979 Oct 05 i 22:43 5°≈01'15 -1°28'24 -9984 Jan 05 j 05:22 15°Ω min. Earth dist. -9979 Oct 05 i 23:20 5°≈01'02 4.23629 AU -9984 Feb 15 j 16:31 17°**Ω**32'46 -9979 Nov 29 j 23:14 30°Rる retrograde -9984 Mar 28 j 10:13 15°RΩ -9979 Dec 05 j 11:49 29°る57'02 direct -9979 Dec 11 j 01:15 -9984 Apr 17 j 01:21 12°Ω34'08 1°12'53 0°**≈** opposition min. Earth dist. -9984 Apr 16 j 21:00 12°**Ω**35'33 4.14449 AU -9978 Mar 27 j 22:07 15°**≈** direct -9984 Jun 15 j 19:02 7°**Ω**41'17 evening set -9978 Apr 13 j 09:47 18°**≈**36'24 -9984 Aug 25 j 15:12 15°€ -9984 Oct 16 j 19:00 26°**Ω**12'04 conjunction -9978 Apr 26 j 21:34 21°≈36'57 -0°34'52 evening set -9978 Apr 26 j 21:37 minimum elong 21°≈36′59 0°35'17 -9984 Oct 29 j 17:41 29°**Ω**13'48 0°22'06 -9978 Apr 26 j 10:23 conjunction max. Earth dist. 21°**≈**30'42 6.27263 AU -9984 Oct 29 j 17:44 minimum elong 29°**Ω**13'49 0°22'27 morning rise -9978 May 10 j 06:19 24°≈35'53 0°**)**€ max. Earth dist. -9984 Oct 30 j 07:54 29°**\Omega**22'07 6.11038 AU -9978 Jun 04 j 04:54 -9984 Nov 02 j 00:31 -9978 Sep 08 j 19:21 12° **€** 12'40 retrograde morning rise -9984 Nov 11 j 19:50 2° Mp 17'24opposition -9978 Nov 07 j 06:17 7° **★**17'43 -0°12'29 retrograde -9983 Mar 22 j 20:30 21° m 59'03 min. Earth dist. -9978 Nov 07 j 19:06 7° **★**13'30 4.30306 AU desc. node -9983 Mar 28 j 16:39 21° m 55'46 asc. node -9977 Jan 06 j 23:05 2°**H**13'57 -9983 May 22 j 16:27 -9977 Jan 07 j 23:21 2°) 13'51 opposition 16° m 56'39 -0°12'23 direct

-9977 May 16 j 15:45

20°**)** 34′50

-9983 May 22 j 00:22

17° Mp 01'59 4.08410 AU

evening set

min. Earth dist.

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -9977 in astronomical counting style is the year 9978 BCE in historical counting style. -9977 May 29 i 19:12 23° ★29'51 0°19'39 retrograde -9971 Mar 27 j 22:08 26° m 57'55 conjunction -9977 May 29 j 19:10 23°**)**€29'50 -9971 May 27 j 15:48 21° m 55'04 -0°24'47 minimum elong 0°19'32 opposition -9977 May 28 j 17:39 23°**¥**15'39 min. Earth dist. -9971 May 26 j 22:55 22° m 00'41 4.08169 AU max. Earth dist. 6.32519 AU -9971 Jul 25 j 05:37 -9977 Jun 11 j 19:07 17° mp 01'06 26°**¥**23′05 direct morning rise $0^{\circ}\Upsilon$ -9977 Jun 28 j 09:17 -9971 Oct 30 j 24:00 0∘ಹ 13°Y40'41 retrograde -9977 Oct 10 j 08:22 evening set -9971 Nov 25 j 17:44 5°**£**51'23 8° **Y**48'13opposition -9977 Dec 09 j 11:07 1°05'28 -9971 Dec 09 j 02:45 min. Earth dist. -9977 Dec 10 j 07:07 8°**Y**41'46 4.33812 AU conjunction 8°**£**59'26 -0°44'33 direct -9976 Feb 09 j 20:08 3°**Y**46′15 minimum elong -9971 Dec 09 j 02:40 8°**£**59'23 0°44'35 evening set -9976 Jun 16 j 15:33 21°**Y**54'50 max. Earth dist. -9971 Dec 10 j 08:38 9°**£**16'58 6.06841 AU max. Earth dist. -9976 Jun 28 j 02:27 24°**Y**27'51 6.33942 AU morning rise -9971 Dec 22 j 15:21 12°**2**09'19 -9970 Mar 27 j 08:50 0°M $24^{\circ} \Upsilon 45'04$ conjunction -9976 Jun 29 j 09:16 1°07'42 retrograde -9970 May 03 j 01:36 2°M05'37 minimum elong -9976 Jun 29 j 09:11 24°**Y**45'02 1°07'52 -9970 Jun 08 j 11:28 30°R<u>₽</u> morning rise -9976 Jul 11 j 24:00 27°**Y**33'53 min. Earth dist. -9970 Jul 01 j 04:07 27°**♀**08'12 4.06805 AU -9976 Jul 23 j 01:37 0°8 opposition -9970 Jul 02 j 02:17 27°**♀**00'40 -1°43'51 retrograde -9976 Nov 10 j 07:01 14°**8**55'48 direct -9970 Aug 29 j 05:58 22°**♀**03'54 opposition -9975 Jan 10 j 01:36 10°**8**04'12 2°04'01 -9970 Nov 10 j 16:32 0°M min. Earth dist. -9975 Jan 10 j 23:56 9°**8**57'06 4.33176 AU evening set -9969 Jan 01 j 08:07 11°ML08'27 direct -9975 Mar 13 j 12:52 5°805'10 -9975 Jun 09 j 14:06 15°8 conjunction -9969 Jan 14 j 23:01 14°M18'23 -1°27'12 evening set -9975 Jul 17 j 22:44 23°**8**09'20 minimum elong -9969 Jan 14 j 22:56 14°ML18'20 1°27'34 max. Earth dist. -9975 Jul 29 j 04:05 25°**8**40'57 6.31168 AU max. Earth dist. -9969 Jan 16 j 08:18 14°ML37'46 6.07775 AU -9969 Jan 17 j 22:31 15°M conjunction -9975 Jul 30 i 09:11 25°**8**57'22 1°36'04 morning rise -9969 Jan 28 j 15:56 17°M29'18 minimum elong -9975 Jul 30 j 09:08 25°**8**57'21 -9969 Mar 28 j 20:55 1°36'31 0°×7 -9975 Aug 11 j 18:18 28°844'48 -9969 Jun 07 j 12:27 morning rise retrograde 7° ×708'36 -9975 Aug 17 j 08:50 $0^{\circ}\Pi$ opposition -9969 Aug 05 j 20:06 2°×104'04 -2°24'44 -9975 Dec 13 j 03:53 -9969 Aug 05 j 02:10 2° ₹10'12 4.10055 AU 16°**Ⅲ**31'57 min. Earth dist. retrograde 11°**II**39'15 2°26'54 -9974 Feb 12 j 11:16 -9969 Aug 21 j 10:15 30°RML opposition -9974 Feb 13 j 04:28 11°**Ⅲ**33'48 direct -9969 Oct 03 j 09:01 27°M03'52 min. Earth dist. 4.28555 AU -9974 Apr 15 j 08:26 6° **1**143′16 -9969 Nov 15 j 09:46 0°×7 direct -9968 Feb 07 j 07:35 -9974 Aug 18 j 05:05 24°**I**I50'35 evening set 16°**₹**11'00 evening set -9974 Aug 30 j 14:25 27°**II**40'25 1°36'17 -9968 Feb 21 j 00:37 19° ₹19'28 -1°38'01 conjunction conjunction -9974 Aug 30 j 14:27 -9968 Feb 21 j 00:38 minimum elong 27°**Ⅱ**40′26 1°36'51 minimum elong 19°**✓**19'28 1°38'33 -9974 Aug 29 j 21:55 -9968 Feb 21 j 23:34 max. Earth dist. 27°**Ⅱ**30'58 6.25042 AU max. Earth dist. 19°**✗**32'38 6.12955 AU -9974 Sep 09 j 18:18 0ಂತಾ morning rise -9968 Mar 05 j 17:52 22°**х** 27′54 morning rise -9974 Sep 11 j 23:59 0°930'35 -9968 Apr 09 j 02:25 0°ರ retrograde -9973 Jan 16 j 07:49 18°957'02 retrograde -9968 Jul 10 j 13:22 11°**ප්**26'34 opposition -9973 Mar 18 j 20:18 14°901'36 2°05'16 opposition -9968 Sep 07 j 14:20 6°る24'41 -2°13'48 min. Earth dist. -9973 Mar 19 j 03:04 13°559'27 4.21322 AU min. Earth dist. -9968 Sep 07 j 04:44 6°る27'57 4.16682 AU -9973 May 18 j 16:07 9°9507'58 -9968 Nov 06 j 01:22 1°る21'41 direct direct -9973 Sep 19 j 04:34 27°524'52 -9967 Mar 14 j 11:19 20°る17'54 evening set evening set -9973 Sep 30 j 08:17 $0^{\circ}\Omega$ 23°る22'49 -1°14'37 conjunction -9967 Mar 28 i 03:16 -9973 Oct 01 i 19:08 0°Ω20'15 1°06'29 -9967 Mar 28 i 03:21 conjunction minimum elong 23°る22'52 1°15'10 minimum elong -9973 Oct 01 i 19:13 0°Ω20'18 1°07'01 max. Earth dist. -9967 Mar 28 i 07:48 23°**る**25'23 6.20520 AU max. Earth dist. -9973 Oct 01 i 18:00 0°**Ω**19'35 6.17358 AU morning rise -9967 Apr 10 i 17:30 26°る26'43 -9973 Oct 14 j 12:08 3°Ω16'58 -9967 Apr 26 j 18:51 0°**≈** morning rise -9973 Dec 08 j 21:46 15°Ω retrograde -9967 Aug 12 j 08:57 14°≈37'46 -9972 Feb 20 j 17:21 22°**Ω**26'45 -9967 Oct 10 j 10:55 9°≈39'39 -1°18'54 retrograde opposition -9972 Apr 22 j 01:06 17°**Ω**27'29 1°01'58 min. Earth dist. -9967 Oct 10 j 14:13 9°≈38'33 4.24389 AU opposition 4°≈35'23 min. Earth dist. -9972 Apr 21 j 18:26 17°**Ω**29'39 4.13666 AU direct -9967 Dec 10 j 04:37 -9972 May 11 j 21:21 15°R€ -9966 Mar 10 j 06:43 15°**≈** 12°**Ω**34'35 direct -9972 Jun 20 j 14:54 evening set -9966 Apr 18 j 02:56 23°≈13'07 -9972 Jul 29 j 17:20 15°Ω -9966 May 01 j 13:56 -9972 Oct 16 j 18:40 0° m conjunction 26°≈13'06 -0°27'30 -9972 Oct 21 j 13:46 -9966 May 01 j 13:59 evening set 1° Mp 06'48 minimum elong 26°≈13'08 0°27'53 -9966 May 01 j 00:49 6.27861 AU max. Earth dist. 26°≈05'47 -9972 Nov 03 j 13:56 conjunction 4° m 09'23 0°13'56 morning rise -9966 May 14 j 21:38 29°≈11'24 minimum elong -9972 Nov 03 j 13:57 4° Mp 09′24 0°14'14 -9966 May 18 j 13:26 0°**)**€ behind sun begin -9972 Nov 03 j 10:01 4° Mp 07'06 retrograde -9966 Sep 13 j 04:42 16°**)**45'16 behind sun end -9972 Nov 03 j 17:54 4° Mp 11'42 opposition -9966 Nov 11 j 18:19 11°\(\dagger)50'42 -0°01'12 max. Earth dist. -9972 Nov 04 j 08:08 4° Mp 20'02 6.10498 AU min. Earth dist. -9966 Nov 12 j 07:32 11°**)**46'22 4.30714 AU -9972 Nov 16 j 17:21 -9966 Nov 17 j 14:04 11°**米**05'01 morning rise 7° m 13'48 asc. node -9971 Feb 05 j 17:38 -9965 Jan 12 j 13:15 6°**)**€47'02 desc. node 23° m 15'33 direct

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -9965 in astronomical counting style is the year 9966 BCE in historical counting style. -9965 May 21 j 05:11 25°\ 06'53 morning rise -9960 Nov 21 j 14:41 12° m 07'57 evening set -9965 Jun 02 j 04:47 27°**)** 46'31 6.32719 AU -9960 Dec 16 j 17:47 17° m 50'06 max. Earth dist. desc. node -9959 Feb 25 j 12:30 0∘**⊽** -9959 Apr 01 j 21:24 -9965 Jun 03 j 07:16 28°\circ 01'16 0°27'07 1°£54'58 conjunction retrograde -9965 Jun 03 j 07:13 28°**₭**01'14 0°27'02 -9959 May 07 j 02:43 minimum elong 30°R, Mp $0^{\circ}\Upsilon$ -9965 Jun 12 j 04:39 -9959 Jun 01 j 13:59 opposition 26° **m** $51'44 - 0^{\circ}36'57$ 0°Y53'53 morning rise -9965 Jun 16 j 05:54 min. Earth dist. -9959 May 31 j 19:26 26° My 57'55 4.07756 AU 18°**Y**11′26 -9959 Jul 30 j 01:04 retrograde -9965 Oct 14 j 20:29 direct 21° m 57'27 opposition -9965 Dec 14 j 00:44 13°**Y**19'14 1°15'18 -9959 Oct 11 j 22:05 0∘ಹ min. Earth dist. -9965 Dec 14 j 21:43 13°**Y**12′29 4.33803 AU evening set -9959 Nov 30 j 17:29 10°**£**50'04 direct -9964 Feb 14 j 11:38 8°**Υ**17'41 26°**Y**25'37 -9959 Dec 14 j 03:39 evening set -9964 Jun 21 j 02:28 conjunction 13°**£**58'39 -0°51'51 -9964 Jul 02 j 11:46 28° Y57'58-9959 Dec 14 j 03:34 max. Earth dist. 6.33708 AU minimum elong 13°**≏**58'36 0°51'56 max. Earth dist. -9959 Dec 15 j 11:26 14°**£**17'17 6.06671 AU conjunction -9964 Jul 03 j 18:56 29°**Y**15′23 1°13'07 morning rise -9959 Dec 27 j 16:59 17°**2**08'54 minimum elong -9964 Jul 03 j 18:51 29°**Y**15′21 1°13'20 -9958 Feb 26 j 08:17 0°M -9964 Jul 07 j 02:42 0°8 retrograde -9958 May 08 j 02:20 7°ML04'57 morning rise -9964 Jul 16 j 08:40 2°803'50 opposition -9958 Jul 06 j 23:07 1°ML59'56 -1°52'19 -9964 Sep 20 j 10:32 15°8 min. Earth dist. -9958 Jul 06 j 02:08 2°ML07'05 4.06899 AU retrograde -9964 Nov 14 j 20:21 19°**8**28'15 -9958 Jul 22 j 02:41 30°R <u>Ω</u> -9963 Jan 11 j 15:44 15°R direct -9958 Sep 03 j 03:41 27°**£**02'43 opposition -9963 Jan 14 j 17:30 14°**8**36'34 2°09'41 -9958 Oct 15 j 22:11 0°M min. Earth dist. -9963 Jan 15 j 14:41 14°**8**29'51 4.32760 AU -9957 Jan 01 j 11:41 15°M direct -9963 Mar 18 i 03:05 9°**8**37'58 -9957 Jan 06 j 11:17 16°ML08'53 evening set -9963 May 19 j 14:27 15°8 -9963 Jul 22 j 08:32 27°841'58 -9957 Jan 20 j 02:38 19°ML18'51 -1°30'48 conjunction evening set -9963 Aug 01 j 13:28 $0^{\circ}II$ -9957 Jan 20 j 02:33 1°31'12 19°M.18'49 minimum elong -9957 Jan 21 j 10:33 6.08100 AU max. Earth dist. 19°M-37'25 -9963 Aug 03 j 18:28 0°**Д**29'58 1°37'55 morning rise -9957 Feb 02 j 19:56 22°M29'44 conjunction -9963 Aug 03 j 18:26 0°**Ⅱ**29'57 -9957 Mar 08 j 13:48 minimum elong 1°38'23 0°×7 0°**I**15'07 6.30594 AU 12°**∡**¹05'17 -9963 Aug 02 j 16:11 -9957 Jun 12 j 07:30 max. Earth dist. retrograde -9963 Aug 16 j 03:04 -9957 Aug 10 j 14:10 3°**Ⅱ**17'26 7°**х** 01'00 -2°26'21 morning rise opposition -9963 Dec 17 j 21:30 7°**∡**07'04 4.10596 AU 21°**Ⅲ**08'51 min. Earth dist. -9957 Aug 09 j 20:28 retrograde -9962 Feb 17 j 06:04 16°**I**I15'53 2°26'35 -9957 Oct 08 j 03:56 2°×100'22 opposition direct 16°**Ⅱ**10'44 4.27845 AU -9962 Feb 17 j 22:20 -9956 Feb 12 j 10:23 min. Earth dist. evening set 21°**х** 07'41 -9962 Apr 20 j 00:58 11°**Ⅲ**20′19 direct 24°**∡**15′54 -1°36′39 -9956 Feb 26 j 03:30 evening set -9962 Aug 22 j 15:33 29°**Ⅲ**27'50 conjunction -9962 Aug 24 j 23:59 0ಂತಾ minimum elong -9956 Feb 26 j 03:32 24°**∡**15'55 1°37'13 max. Earth dist. -9962 Sep 03 j 09:27 2°509'09 6.24236 AU max. Earth dist. -9956 Feb 26 j 23:23 24°**≯**27'18 6.13662 AU -9956 Mar 10 j 20:36 27°**∡**¹23'57 morning rise conjunction -9962 Sep 04 j 01:04 2°518'07 1°33'50 -9956 Mar 22 j 09:33 0°궁 -9962 Sep 04 j 01:06 2°9518'08 -9956 Jul 15 j 06:30 16°る17'05 minimum elong 1°34'25 retrograde -9962 Sep 16 j 11:24 5°908'55 -9956 Sep 12 j 06:12 11°る15'40 -2°08'21 morning rise opposition -9961 Jan 21 j 04:25 23°9540'36 -9956 Sep 11 j 23:07 11°る18'05 4.17461 AU retrograde min. Earth dist. -9961 Mar 23 j 17:23 18°**5**44'39 1°58'39 -9956 Nov 10 j 21:50 6°る12'23 opposition direct min. Earth dist. -9961 Mar 23 j 21:53 18°5643'12 4.20451 AU evening set -9955 Mar 19 i 10:30 25°る07'20 direct -9961 May 23 j 08:41 13°951'12 -9955 Apr 02 i 02:14 -9961 Sep 14 i 08:36 $0^{\circ}\Omega$ conjunction 28°る11'50 -1°09'04 -9955 Apr 02 i 02:19 evening set -9961 Sep 23 j 17:59 2°**Ω**09'09 minimum elong 28°る11'53 1°09'35 max. Earth dist. -9955 Apr 02 i 05:13 28°る13'31 6.21329 AU -9955 Apr 10 j 02:00 -9961 Oct 06 i 09:50 5°Ω05'25 1°00'13 0°**≈** conjunction -9961 Oct 06 i 09:55 5°Ω05'28 1°00'43 -9955 Apr 15 j 15:45 1°≈15'09 minimum elong morning rise -9961 Oct 06 j 12:28 5°**Ω**06'58 6.16513 AU -9955 Jun 24 j 09:43 max. Earth dist. 15°≈ morning rise -9961 Oct 19 j 03:58 8°**Ω**03'05 retrograde -9955 Aug 16 j 21:24 19°≈21'03 -9961 Nov 19 j 07:58 15°€ -9955 Oct 10 j 11:46 15°R≈ -9955 Oct 15 j 01:11 retrograde -9960 Feb 25 j 17:39 27°**Ω**17'40 opposition 14°≈23'29 -1°08'44 opposition -9960 Apr 26 j 23:29 22°**Ω**17'56 0°50'42 min. Earth dist. -9955 Oct 15 j 04:55 14°≈22'14 4.25157 AU -9960 Apr 26 j 16:00 22°**Ω**20′22 4.12899 AU direct -9955 Dec 14 j 21:40 9°≈19'14 min. Earth dist. -9960 Jun 25 j 10:01 17°**Ω**25′02 15°≈ direct -9954 Feb 16 j 20:46 27°≈55'06 -9960 Sep 29 j 22:45 0° m evening set -9954 Apr 22 j 21:48 0°**)**€ evening set -9960 Oct 26 j 08:23 5° m 59'11 -9954 May 02 j 06:16 conjunction -9960 Nov 08 j 09:42 9° m 02'35 0°05'43 conjunction -9954 May 06 j 07:38 0° **★**54'23 -0°19'49 minimum elong -9960 Nov 08 j 09:42 9° Mg 02'35 0°06'00 minimum elong -9954 May 06 j 07:40 0° **★**54'24 0°20'09 behind sun begin -9960 Nov 08 j 01:55 8° m 58'03 max. Earth dist. -9954 May 05 j 15:43 0°**)** 45′30 6.28555 AU -9960 Nov 08 j 17:28 9° m 07'08 -9954 May 19 j 14:20 3°\(\frac{1}{51}\)'57 behind sun end morning rise

-9954 Sep 17 j 17:58

21°\ 22'39

max. Earth dist.

-9960 Nov 09 j 04:20

9° Mp 13'31 6.09878 AU

retrograde

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -9954 in astronomical counting style is the year 9955 BCE in historical counting style. -9954 Sep 27 j 04:41 21°**)** 13'50 evening set -9948 Oct 31 j 01:47 10° m 47'57 asc. node 16°**¥**28'31 0°10'16 -9954 Nov 16 j 08:23 opposition -9954 Nov 16 j 23:23 -9948 Nov 13 j 04:34 min. Earth dist. 16°**¥**23'37 4.31291 AU 13° m $52'17 - 0^{\circ}02'33$ conjunction -9948 Nov 13 j 04:33 13°M 52'16 -9953 Jan 17 j 07:21 11°\(\)25'04 0°02'19 direct minimum elong 29°\ 42'54 -9948 Nov 12 j 20:22 evening set -9953 May 25 j 19:37 behind sun begin 13° m 47'29 $0^{\circ}\Upsilon$ -9953 May 27 j 02:34 behind sun end -9948 Nov 13 j 12:44 13° m 57'03 max. Earth dist. -9948 Nov 14 j 01:46 14° Mp 04'43 6.09149 AU 2°**Y**36'32 conjunction -9953 Jun 07 j 20:26 0°34'30 morning rise -9948 Nov 26 j 10:45 16° Mp 58'31 minimum elong -9953 Jun 07 j 20:23 2°**Y**36'30 0°34'27 -9947 Jan 27 j 04:27 0。ರ max. Earth dist. -9953 Jun 06 j 18:03 2°**Υ**21'51 6.33146 AU retrograde -9947 Apr 06 j 22:28 6°**£**48'54 morning rise -9953 Jun 20 j 17:39 5°**Y**28'24 opposition -9947 Jun 06 j 11:01 1°**2**45'20 -0°48'43 $22^{\circ} \mathbf{Y} 45'10$ retrograde -9953 Oct 19 j 07:32 min. Earth dist. -9947 Jun 05 j 16:59 1°**£**51'22 4.07185 AU opposition -9953 Dec 18 j 15:21 17°**Υ**53'05 1°24'44 -9947 Jun 19 j 21:02 30°R, M) min. Earth dist. -9953 Dec 19 j 11:26 17°**Y**46'38 4.34079 AU direct -9947 Aug 03 j 21:01 26° m 50'43 direct -9952 Feb 19 j 02:11 12°Υ51'55 -9947 Sep 17 j 02:43 0∘**⊽** -9952 Jun 21 j 04:31 0°8 evening set -9947 Dec 05 j 17:09 15°**£**46'33 evening set -9952 Jun 25 j 13:26 0°857'59 max. Earth dist. -9952 Jul 06 j 22:14 3°**8**30'10 6.33800 AU conjunction -9947 Dec 19 j 04:13 18°**≏**55'40 -0°58'42 minimum elong -9947 Dec 19 j 04:07 18°**♀**55'37 0°58'49 conjunction -9952 Jul 08 j 04:36 3°**8**47'09 1°18'06 max. Earth dist. -9947 Dec 20 j 11:52 19°**♀**14'13 6.06302 AU 3°**8**47'07 minimum elong -9952 Jul 08 j 04:31 1°18'23 morning rise -9946 Jan 01 j 18:32 22°**£**06'27 morning rise -9952 Jul 20 i 17:15 6°**8**35'06 -9946 Feb 06 i 01:27 0°M -9952 Aug 29 j 15:10 15°8 retrograde -9946 May 13 j 00:30 12°ML02'43 retrograde -9952 Nov 19 j 11:00 24°**8**01'02 opposition -9946 Jul 11 j 19:08 6°ML57'42 -1°59'53 -9951 Jan 19 j 09:44 19°**8**09'16 2°14'29 min. Earth dist. -9946 Jul 10 j 21:35 7°ML05'03 4.06809 AU opposition -9951 Jan 20 j 07:08 19°**8**02'29 4.32659 AU -9946 Sep 07 j 22:23 min. Earth dist. direct 2°M,00'02 -9951 Feb 27 j 09:41 -9946 Dec 15 j 07:37 15°R₩ 15°M. -9951 Mar 22 j 19:26 -9945 Jan 11 j 14:45 21°ML08'42 direct 14°**8**11'03 evening set -9951 Apr 15 j 03:45 15°8 -9945 Jan 25 j 06:35 -9951 Jul 16 j 17:23 $0^{\circ}\Pi$ conjunction 24°ML18'47 -1°33'41 -9945 Jan 25 j 06:32 -9951 Jul 26 j 17:24 2°**Ⅲ**13'36 24°ML18'45 1°34'06 evening set minimum elong 6.30285 AU 24°M36'28 max. Earth dist. -9951 Aug 07 j 01:07 4°**Ⅱ**46'57 max. Earth dist. -9945 Jan 26 j 13:02 6.08288 AU -9945 Feb 08 j 00:10 27°M29'39 morning rise -9951 Aug 08 j 02:46 5°**I**01'28 1°39'07 -9945 Feb 18 j 23:22 conjunction 0° **⊼** -9951 Aug 08 j 02:45 -9945 Jun 17 j 04:10 minimum elong 5°**I**101'27 1°39'37 retrograde 17°**∡**¹01'55 -9951 Aug 20 j 11:12 morning rise 7°**Ⅱ**48'57 opposition -9945 Aug 15 j 08:42 11°**₹**57'55 -2°26'51 retrograde -9951 Dec 22 j 12:54 25°**Ⅱ**43'47 min. Earth dist. -9945 Aug 14 j 16:43 12°**✗**03'24 4.11047 AU -9950 Feb 21 j 23:49 20°II50'25 2°25'18 -9945 Oct 13 j 01:46 6°**х** 56′51 opposition direct min. Earth dist. -9950 Feb 22 j 14:03 20°**I**45'54 4.27349 AU -9944 Feb 17 j 13:19 26°**х** 04′26 evening set -9950 Apr 24 j 15:02 15°**Ⅲ**55'08 direct -9950 Aug 09 j 00:18 conjunction -9944 Mar 02 j 06:39 29°**х** 12′26 -1°34′33 0ಂತಾ -9950 Aug 27 j 00:45 4°ഇ02'12 -9944 Mar 02 j 06:42 29°**х** 12′28 1°35′08 evening set minimum elong max. Earth dist. -9944 Mar 03 j 02:04 29°**₹**23'33 6.14355 AU -9950 Sep 08 j 10:47 6°952'56 1°30'48 -9944 Mar 05 j 17:48 0°정 conjunction -9950 Sep 08 j 10:51 -9944 Mar 15 j 23:26 2°る20'04 minimum elong 6°952'58 1°31'24 morning rise -9950 Sep 07 i 22:12 -9944 Jul 19 i 22:38 max. Earth dist. 6°545'42 6.23597 AU retrograde 21°る07'29 morning rise -9950 Sep 20 j 21:40 9°9544'17 opposition -9944 Sep 16 j 22:21 16°පි06'36 -2°01'58 retrograde -9949 Jan 26 i 00:48 28°9520'33 min. Earth dist. -9944 Sep 16 i 15:44 16°る08'51 4.18328 AU -9949 Mar 28 i 12:51 23°524'06 1°51'18 direct -9944 Nov 15 i 16:45 11°る03'07 opposition min. Earth dist. -9949 Mar 28 j 16:55 23°522'48 4.19687 AU -9943 Mar 24 j 09:50 29°る56'13 evening set direct -9949 May 28 j 01:32 18°930'47 -9943 Mar 24 j 16:36 0°≈ -9949 Aug 28 j 15:47 $\Omega^{\circ}\Omega$ -9949 Sep 28 j 06:09 -9943 Apr 07 j 00:52 3°≈00'06 -1°03'00 evening set 6°**Ω**49'37 conjunction minimum elong -9943 Apr 07 j 00:58 3°≈00'09 1°03'31 conjunction -9949 Oct 10 j 23:02 9°Ω46'43 0°53'39 max. Earth dist. -9943 Apr 07 j 00:23 2°≈59'49 6.22309 AU -9949 Oct 10 j 23:06 9°Ω46'46 0°54'08 -9943 Apr 20 j 13:50 6°≈02'44 minimum elong morning rise -9949 Oct 11 j 02:10 9°**Ω**48'33 6.15695 AU -9943 Jun 01 j 19:52 15°≈ max. Earth dist. -9949 Oct 23 j 18:43 12°**Ω**45'23 -9943 Aug 21 j 11:10 morning rise retrograde 24°≈02'54 15°€ -9949 Nov 02 j 13:25 opposition -9943 Oct 19 j 15:22 19°≈05'49 -0°58'07 -9948 Jan 24 j 09:26 0° m min. Earth dist. -9943 Oct 19 j 21:13 19°≈03'52 4.26136 AU retrograde -9948 Mar 01 j 14:18 2° Mp 04'43 -9943 Nov 24 j 17:22 15°R≈ -9948 Apr 07 j 20:31 30°R€ direct -9943 Dec 19 j 17:01 14°≈01'32 opposition -9948 May 01 j 20:04 27°**Ω**04'25 0°39'14 -9942 Jan 13 j 22:28 15°≈ min. Earth dist. -9948 May 01 j 10:31 27°**Ω**07'33 4.12084 AU -9942 Apr 15 j 21:37 0°**)**€ direct -9948 Jun 30 j 02:10 22°**Ω**11'24 evening set -9942 Apr 27 j 15:29 2°**)** 34'31 max. Earth dist. -9942 May 10 j 08:11 5°¥23'59 6.29459 AU -9948 Sep 11 j 05:51

desc. node

-9948 Oct 27 j 10:14

9° m 57'03

Planetary Phenomena of Jupiter from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -9942 in astronomical counting style is the year 9943 BCE in historical counting style. -9942 May 11 j 00:23 5°\(\frac{1}{33}\)'01 -0°12'03 -9937 Dec 26 j 06:23 0° m conjunction -9942 May 11 j 00:24 5°\mathfrak{H}33'01 0°12'21 -9936 Mar 06 j 17:59 7° m 02'49 minimum elong retrograde behind sun begin -9942 May 10 j 19:04 5° ¥ 30'04 -9936 May 06 j 20:31 2° m 02'03 opposition 0°27'05 -9942 May 11 j 05:44 2° m 05'23 4.10989 AU 5°\ 35'59 min. Earth dist. -9936 May 06 j 10:22 behind sun end -9942 May 24 j 05:41 -9936 May 22 j 20:33 morning rise 8°**升**29'42 30°R€ direct -9936 Jul 05 j 00:09 27°**Ω**08'57 asc. node -9942 Aug 06 j 11:05 22°**)** 36'36 -9942 Sep 22 j 03:56 retrograde 25°**)** 56'40 -9936 Aug 16 j 06:33 0° m 0°21'35 opposition -9942 Nov 20 j 21:24 21°**)** 02'55 desc. node -9936 Sep 05 j 14:07 3° Mp 04'33 min. Earth dist. -9942 Nov 21 j 12:33 20°**¥**57'58 4.32027 AU evening set -9936 Nov 05 j 00:25 15° Mp 49'04 direct -9941 Jan 21 j 22:05 15°**)** 59'43 -9941 May 10 j 17:27 $0^{\circ}\Upsilon$ conjunction -9936 Nov 18 j 04:31 18° m 54'21 -0°10'59 4°Υ14'58 -9936 Nov 18 j 04:29 evening set -9941 May 30 j 08:21 minimum elong 18° **m** 54'21 0°10'49 -9936 Nov 17 j 22:13 max. Earth dist. -9941 Jun 11 j 03:09 6°**Y**51'57 6.33625 AU behind sun begin 18° m 50'41 behind sun end -9936 Nov 18 j 10:45 18° m 58'00 conjunction -9941 Jun 12 j 07:34 7° **Y**07'460°41'36 max. Earth dist. -9936 Nov 19 j 03:24 19° **m** 07'47 6.08312 AU minimum elong -9941 Jun 12 j 07:30 7° Υ 07'44 0°41'36 morning rise -9936 Dec 01 j 12:14 22°Mp01'36 morning rise -9941 Jun 25 j 03:34 9°Y58'55 -9935 Jan 06 j 03:43 0∘**⊽** retrograde -9941 Oct 23 j 19:54 27°Y15'10 retrograde -9935 Apr 12 j 01:50 11°**≏**55'10 opposition -9941 Dec 23 j 04:59 22°**Y**23′15 1°33'36 opposition -9935 Jun 11 j 12:04 6° 251'19 -1°00'36 min. Earth dist. -9941 Dec 24 j 02:36 22°\bar{\gamma}16'20 4.34260 AU min. Earth dist. -9935 Jun 10 j 16:06 6°**≏**58'01 4.06735 AU direct -9940 Feb 23 j 17:33 17°**Y**22'25 direct -9935 Aug 08 j 18:46 1°**£**56'25 -9940 Jun 04 i 17:06 0°8 evening set -9935 Dec 10 j 21:46 20°**£**55'01 -9940 Jun 29 i 22:49 5°827'09 evening set max. Earth dist. -9940 Jul 11 j 07:07 7°**8**59'10 6.33640 AU conjunction -9935 Dec 24 i 09:44 24° **2**04'31 -1°05'23 -9935 Dec 24 i 09:38 24°**♀**04'27 1°05'33 minimum elong -9940 Jul 12 j 12:59 8°815'54 1°22'38 max. Earth dist. -9935 Dec 25 j 18:24 24°**₽**23'40 6.06290 AU conjunction -9940 Jul 12 j 12:55 8°**8**15'51 -9934 Jan 07 j 00:46 1°22'56 morning rise 27° £15'34 minimum elong -9940 Jul 25 j 00:38 11°**8**03'29 -9934 Jan 18 j 22:24 o°m. morning rise -9934 Apr 10 j 20:45 -9940 Aug 12 j 00:37 15°8 15°M. -9940 Nov 23 j 23:30 -9934 May 18 j 02:03 retrograde 28°**8**32'05 17°M10'06 retrograde -9939 Jan 24 j 01:03 -9934 Jun 23 j 22:41 23°**8**40'13 2°18'34 15°RM opposition -9939 Jan 24 j 21:11 -9934 Jul 16 j 18:30 23°**8**33'50 4.32184 AU min. Earth dist. opposition 12°M05'02 -2°06'46 min. Earth dist. -9939 Mar 27 j 07:54 18°**8**42'26 -9934 Jul 15 j 21:16 12°M12'17 4.07278 AU direct -9939 Jun 29 j 21:48 -9934 Sep 12 j 23:23 $0^{\circ}\Pi$ direct 7°ML06'55 -9934 Nov 25 j 09:10 evening set -9939 Jul 31 j 02:08 6°**Ⅱ**45′09 15°M -9933 Jan 16 j 21:05 max. Earth dist. -9939 Aug 11 j 10:43 9°**Ⅱ**19'17 6.29519 AU evening set 26°M15'33 conjunction -9939 Aug 12 j 11:08 9°**Ⅲ**33'08 1°39'47 conjunction -9933 Jan 30 j 13:22 29°M25'22 -1°35'57 -9939 Aug 12 j 11:08 9°Ⅱ33′08 1°40'18 minimum elong -9933 Jan 30 j 13:19 29°M25'21 1°36'24 minimum elong -9939 Aug 24 j 19:28 12°**Ⅲ**20'54 max. Earth dist. -9933 Jan 31 j 20:55 29°M43'39 6.09214 AU morning rise -9939 Dec 12 j 05:11 0ಂತಾ -9933 Feb 02 j 01:09 0°**∡**7 -9939 Dec 27 j 08:01 0°9521'00 -9933 Feb 13 j 06:53 2°**х** 35′45 retrograde morning rise -9938 Jan 11 j 09:20 30°R∏ -9933 Jun 22 j 00:10 22°**₹**'01'08 retrograde -9938 Feb 26 j 18:28 25°II27'20 2°23'13 -9933 Aug 20 j 03:47 16°**₹**57'28 -2°26'14 opposition opposition -9938 Feb 27 j 08:41 25°**Ⅲ**22'49 min. Earth dist. -9933 Aug 19 j 12:07 17°**∡**02'49 4.12359 AU min. Earth dist. 4.26326 AU direct -9938 Apr 29 i 07:16 20°**Ⅲ**32'23 direct -9933 Oct 17 i 23:48 11°**х** 56′01 -9938 Jul 22 i 07:19 0ಂತಾ -9932 Feb 18 i 05:13 0°정 evening set -9938 Aug 31 j 11:24 8°9540'58 evening set -9932 Feb 22 j 16:06 1°る00'21 -9938 Sep 12 j 22:04 11°932'29 1°27'12 -9932 Mar 07 j 09:04 4°る07'33 -1°31'49 conjunction conjunction -9938 Sep 12 j 22:08 11°932'31 1°27'47 -9932 Mar 07 i 09:08 4°る07'35 1°32'24 minimum elong minimum elong -9938 Sep 12 j 10:28 11°**©**25'48 6.22407 AU -9932 Mar 08 j 01:01 4°る16'38 6.15932 AU max. Earth dist. max. Earth dist. -9938 Sep 25 j 09:59 14°9524'46 -9932 Mar 21 j 01:35 7°る14'19 morning rise morning rise -9938 Dec 15 j 15:49 $0^{\circ}\Omega$ retrograde -9932 Jul 24 j 11:58 25°る52'44 -9932 Sep 21 j 12:30 retrograde -9937 Jan 30 j 21:50 3°**Ω**07'41 opposition 20°る52'17 -1°54'51 -9937 Mar 18 j 22:02 30°R95 min. Earth dist. -9932 Sep 21 j 07:51 20°る53'52 4.20002 AU opposition -9937 Apr 02 j 10:43 28°\$10'43 1°43'08 direct -9932 Nov 20 j 12:48 15°る48'30 -9937 Apr 02 j 12:11 28°9510'15 4.18411 AU -9931 Mar 08 j 03:32 min. Earth dist. 0°≈ -9937 Jun 01 j 18:01 23°917'35 -9931 Mar 29 j 05:17 direct evening set 4°≈36'43 $0^{\circ}\Omega$ -9937 Aug 08 j 19:48 -9931 Apr 11 j 19:47 evening set -9937 Oct 02 j 21:50 11°**Ω**39'15 conjunction 7°≈39'40 -0°56'44 minimum elong -9931 Apr 11 j 19:52 7°**≈**39'42 0°57'14 conjunction -9937 Oct 15 j 16:07 14°**Ω**37'30 0°46'32 max. Earth dist. -9931 Apr 11 j 17:53 7°**≈**38'36 6.23960 AU minimum elong -9937 Oct 15 j 16:11 14°**Ω**37'32 0°47'00 morning rise -9931 Apr 25 j 07:38 10°≈41'11 max. Earth dist. -9937 Oct 15 j 22:23 14°**Ω**41′09 6.14463 AU -9931 May 15 j 00:03 15°≈ -9937 Oct 17 j 06:42 15°**Ω** -9931 Aug 25 j 19:19 28°≈33'45 retrograde -9937 Oct 28 j 13:11 17°**Ω**37'21 -9931 Oct 24 j 01:28 morning rise opposition 23°≈37'10 -0°47'34

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Earth dist. -9930 May 14 j 15:06 9°**)**47'36 6.30612 AU minimum elong -9925 Oct 20 j 11:10 19°**Ω**31'55 0°39'24 morning rise -9930 May 28 j 15:41 12°**)** 54'41 max. Earth dist. -9925 Oct 20 j 20:29 19°**Ω**37'22 6.12963 AU -9925 Nov 02 j 09:51 asc. node -9930 Jun 17 j 10:28 17°**升** 12'33 morning rise 22°**Ω**33′08 $0^{\circ}\Upsilon$ -9930 Sep 12 j 22:31 -9925 Dec 05 j 17:55 0°m retrograde -9930 Sep 26 j 10:35 0° Y 17'45 retrograde -9924 Mar 11 j 22:07 12° m 05'17 -9930 Oct 09 j 21:37 30°**₹** opposition -9924 May 11 j 22:43 7° M 04'00 0°14'30 opposition -9930 Nov 25 j 05:42 25°**¥**24'18 0°32'14 min. Earth dist. -9924 May 11 j 09:37 7°m/08'19 4.09839 AU min. Earth dist. -9930 Nov 25 j 23:17 25°**升**18'35 4.32788 AU direct -9924 Jul 09 j 21:18 2° m 10'48 direct -9929 Jan 26 j 09:36 20°\ 21'15 desc. node -9924 Jul 15 j 12:22 2° m 14'00 -9929 Apr 23 j 15:47 $0^{\circ}\Upsilon$ evening set -9924 Nov 10 j 01:18 20° m 54'31 evening set -9929 Jun 03 j 15:42 8°Y34'08 max. Earth dist. -9929 Jun 15 j 08:49 11°**Y**10'09 6.33921 AU conjunction -9924 Nov 23 j 06:41 24° m/00'41 -0°19'29 minimum elong -9924 Nov 23 i 06:38 24° m 00'40 0°19'22 conjunction -9929 Jun 16 j 13:46 11°**Y**26'16 0°48'08 max. Earth dist. -9924 Nov 24 i 08:11 24° m 15'40 6.07594 AU minimum elong -9929 Jun 16 j 13:42 11°**Υ**26'14 0°48'12 morning rise -9924 Dec 06 i 15:42 27° m 08'48 morning rise -9929 Jun 29 j 08:20 14°Y16'43 -9924 Dec 19 j 00:20 0∘**⊽** -9929 Sep 26 j 08:59 0°8 -9923 Apr 17 j 06:27 17°**£**04'40 retrograde -9929 Oct 28 j 02:10 -9923 Jun 16 j 14:20 12°**₽**00'23 -1°12'10 1°**8**33'26 retrograde opposition -9929 Nov 29 j 01:04 30°**₹**Υ -9923 Jun 15 j 17:28 min. Earth dist. 12°**2**07'25 4.06508 AU -9929 Dec 27 j 14:00 26°**Y**41'40 1°41'34 direct -9923 Aug 13 j 20:11 7° 205'04 opposition -9929 Dec 28 j 11:51 26°**Y**34'41 evening set -9923 Dec 16 j 03:41 26°**≙**05'27 min. Earth dist. 4.34092 AU -9928 Feb 28 j 01:51 21°\dagger41'12 direct 29°**≙**15′09 -1°11′37 -9923 Dec 29 j 16:32 -9928 May 18 j 01:53 0°8 conjunction -9923 Dec 29 j 16:26 -9928 Jul 04 j 04:12 9°**8**45'59 29° 215'05 1°11'50 evening set minimum elong -9923 Dec 31 j 03:29 -9928 Jul 15 j 09:46 12°**8**16'50 max. Earth dist. 6.32991 AU max. Earth dist. 29°**♀**35'36 6.06532 AU -9922 Jan 01 j 21:12 0°M -9928 Jul 16 j 17:16 12°**8**34'32 1°26'29 -9922 Jan 12 j 08:05 conjunction morning rise 2°M26'16 -9928 Jul 16 j 17:12 -9922 Mar 12 j 11:34 minimum elong 12°**8**34'29 1°26'50 15°M -9928 Jul 27 j 12:46 15°8 retrograde -9922 May 23 j 03:28 22°M17'33 -9928 Jul 29 j 04:19 15°**8**22'05 -9922 Jul 21 j 17:41 17°M12'32 -2°12'44 morning rise opposition -9928 Oct 15 j 02:48 $0^{\circ}II$ min. Earth dist. -9922 Jul 20 j 20:33 17°M19'45 4.07961 AU retrograde -9928 Nov 28 j 12:15 2°II55'19 -9922 Aug 07 j 12:29 15°RM -9927 Jan 12 j 18:20 30°R₩ -9922 Sep 17 j 23:35 12°M13'57 direct -9927 Jan 28 j 13:50 28°803'19 2°21'44 -9922 Oct 29 j 11:42 opposition 15°M min. Earth dist. -9927 Jan 29 j 10:52 27°**8**56'39 4.31106 AU -9921 Jan 16 j 04:17 0°×7 -9927 Mar 31 j 19:10 23°**8**05'54 -9921 Jan 22 j 03:34 direct evening set 1°**х** 21′58 -9927 Jun 11 j 02:47 $\mathbb{I}^{\circ 0}$ -9921 Feb 04 i 19:55 evening set -9927 Aug 04 j 08:28 11°**Ⅱ**10'51 conjunction 4°**₹**31'23 -1°37'33 minimum elong -9921 Feb 04 i 19:53 4°**х** 31'21 1°38'02 conjunction -9927 Aug 16 j 17:31 13°**I**59'23 1°39'48 max. Earth dist. -9921 Feb 06 i 00:43 4° ₹ 48'01 6.10217 AU -9927 Aug 16 j 17:31 13°**I**I59'23 1°40'21 -9921 Feb 18 i 13:35 7°**∡**'41'17 minimum elong morning rise -9927 Aug 15 j 18:16 13°**Ц**46'09 6.28094 AU -9921 Jun 26 j 19:17 26°**₹**¹59'50 max. Earth dist. retrograde -9927 Aug 29 j 01:59 16°**Ⅱ**47'47 -9921 Aug 24 j 22:41 21° -2°24'40 morning rise opposition -9927 Nov 03 j 04:27 0ಂತಾ min. Earth dist. -9921 Aug 24 j 08:18 22°**尽**01'26 4.13569 AU -9921 Oct 22 j 22:53 16°**х** 54'37 retrograde -9926 Jan 01 j 00:41 4°955'29 direct opposition -9926 Mar 03 j 12:10 0°901'27 2°20'15 -9920 Jan 31 j 19:10 0°궁 -9926 Mar 03 j 16:43 30°R Ⅱ -9920 Feb 27 j 18:26 5°**る**56'23 evening set min. Earth dist. -9926 Mar 04 j 00:10 29°**Ц**57'38 4.24669 AU 25°**I**106′53 -9920 Mar 12 j 11:23 9°る02'59 -1°28'30 direct -9926 May 03 j 19:44 conjunction 0ಂತಾ -9920 Mar 12 j 11:27 9°る03'02 1°29'04 -9926 Jun 30 j 23:20 minimum elong -9926 Sep 04 j 22:17 -9920 Mar 13 j 01:55 9°**ප**11'16 6.17258 AU evening set 13°**©**19'14 max. Earth dist. 12°る08'57 morning rise -9920 Mar 26 j 03:14 conjunction -9926 Sep 17 j 09:47 16°9511'51 1°22'59 -9920 Jul 09 j 01:06 0°≈ minimum elong -9926 Sep 17 j 09:52 16°9511'53 1°23'33 retrograde -9920 Jul 29 j 03:26 0°≈39'50 max. Earth dist. -9926 Sep 17 j 00:40 16°906'34 6.20665 AU -9920 Aug 18 j 00:31 30°Ŗる opposition morning rise -9926 Sep 29 j 22:47 19°905'22 -9920 Sep 26 j 03:29 25°る39'59 -1°47'01 -9926 Nov 20 j 08:06 $0^{\circ}\Omega$ -9920 Sep 26 j 00:48 25°る40'54 4.21305 AU min. Earth dist. -9925 Feb 04 j 23:10 -9920 Nov 25 j 07:58 20°る36'05 retrograde 7°**Ω**56'50 direct

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Attention, astronomical year style is used: The year -9919 in astronomical counting style is the year 9920 BCE in historical counting style. -9919 Feb 17 i 15:10 0°≈ min. Earth dist. -9914 Mar 08 i 20:20 4°541'33 4.23567 AU -9919 Apr 03 j 02:01 -9914 Apr 28 j 15:37 30°R∏ 9° 21'00 evening set -9914 May 08 j 14:18 29°**I**I50'40 direct -9914 May 18 j 12:08 0ಂತಾ -9919 Apr 16 j 15:40 12°≈23'09 -0°50'03 conjunction -9919 Apr 16 j 15:45 -9914 Sep 09 j 11:35 minimum elong 12°≈23'12 0°50'31 evening set 18°904'31 -9919 Apr 16 j 09:49 12°≈19'52 6.25141 AU max. Earth dist. -9914 Sep 22 j 00:04 -9919 Apr 28 j 07:55 15°≈ conjunction 20°957'59 1°18'13 -9914 Sep 22 j 00:09 morning rise -9919 Apr 30 j 02:44 15°≈23'52 minimum elong 20°958'01 1°18'46 -9919 Jul 15 j 21:56 -9914 Sep 21 j 18:25 0°**∀** max. Earth dist. 20°954'43 6.19607 AU retrograde -9919 Aug 30 j 06:02 3°**¥**10′50 morning rise -9914 Oct 04 j 14:09 23°952'27 -9919 Oct 15 j 01:01 30°R≈ -9914 Nov 01 j 00:50 $0^{\circ}\Omega$ opposition -9919 Oct 28 j 14:01 28°≈14'46 -0°36'34 retrograde -9913 Feb 09 j 23:18 12°**Ω**49'36 min. Earth dist. -9919 Oct 28 j 23:09 28°≈11'44 4.28573 AU opposition -9913 Apr 12 j 09:43 7°**Ω**51'36 1°24'26 direct -9919 Dec 28 j 23:04 23°≈10'32 min. Earth dist. -9913 Apr 12 j 07:10 7°**Ω**52'26 4.15779 AU -9918 Mar 10 j 05:19 0°**)**€ direct -9913 Jun 11 j 08:33 2°£058'43 asc. node -9918 Apr 26 j 16:44 9°¥23'46 -9913 Sep 13 j 19:42 15°€ evening set -9918 May 06 j 19:11 11°**)** 36'31 evening set -9913 Oct 12 j 09:28 21° **Q**26'11 max. Earth dist. -9918 May 19 j 04:14 14°**₭**21'22 6.31314 AU conjunction -9913 Oct 25 j 06:26 24°**Ω**26'36 0°31'11 conjunction -9918 May 20 j 01:35 14°**)**€33'15 0°03'16 minimum elong -9913 Oct 25 j 06:29 24°**Ω**26'38 0°31'34 minimum elong -9918 May 20 j 01:34 14°**)** 33'14 0°03'02 max. Earth dist. -9913 Oct 25 j 18:06 24°**Ω**33'26 6.12257 AU behind sun begin -9918 May 19 j 17:27 14° **)** 28'45 morning rise -9913 Nov 07 i 06:39 27°**Ω**28'49 behind sun end -9918 May 20 j 09:40 14° **) (**37'43 -9913 Nov 18 i 05:20 0° m morning rise -9918 Jun 02 i 04:21 17°**)** 28'08 retrograde -9912 Mar 17 i 00:08 17° m 04'29 -9918 Aug 04 j 19:07 $0^{\circ}\Upsilon$ -9912 May 16 j 23:04 12° m 02'37 0°02'00 opposition -9918 Sep 30 j 20:52 4°Υ48'58 -9912 May 16 j 08:29 12° m 07'26 4.09401 AU retrograde min. Earth dist. -9918 Nov 29 j 18:06 -9912 May 25 j 20:50 10° m 52'42 29°**)** 55'55 0°43'04 desc node opposition -9918 Nov 29 j 05:30 -9912 Jul 14 j 19:19 7° m 09'10 30°**₹** direct -9918 Nov 30 j 12:37 -9912 Nov 15 j 00:22 25° m 54'14 min Earth dist 29°**)**49'55 4.33179 AU evening set -9917 Jan 30 j 23:44 direct 24°**)** 53'13 -9917 Apr 02 j 04:25 $0^{\circ}\Upsilon$ -9912 Nov 28 j 07:01 conjunction 29° m 00'58 -0°27'39 -9917 Jun 08 j 03:04 13°Y04'43 -9912 Nov 28 j 06:58 minimum elong 29° m 00'56 0°27'34 evening set max. Earth dist. -9912 Nov 29 j 11:22 29° m 17'37 6.07464 AU 15°Υ56'13 0°54'41 -9917 Jun 20 j 23:39 -9912 Dec 02 j 11:34 conjunction 0∘**⊽** -9917 Jun 20 j 23:34 -9912 Dec 11 j 17:04 minimum elong 15°**Y**56'11 0°54'47 morning rise 2°**2**09'34 15°**Υ**38'48 6.33952 AU -9917 Jun 19 j 16:23 -9911 Apr 22 j 07:22 max. Earth dist. retrograde 22°**♀**05'14 -9917 Jul 03 j 17:09 18°**Ƴ**46'11 morning rise opposition -9911 Jun 21 j 12:45 17°**⊆**00'43 -1°22'48 -9917 Aug 28 j 08:28 0°8 min. Earth dist. -9911 Jun 20 j 15:38 17°**♀**07'51 4.06714 AU retrograde -9917 Nov 01 j 15:01 6°804'21 -9911 Aug 18 j 17:32 12°**2**05'00 direct -9916 Jan 01 j 04:24 1°**8**12'38 1°49'20 -9911 Dec 16 j 12:07 0°M opposition min. Earth dist. -9916 Jan 02 j 03:00 1°805'25 4.33790 AU -9911 Dec 21 j 06:08 1°ML05'59 evening set -9916 Jan 10 j 18:08 30°**₹**Υ -9916 Mar 03 j 16:29 26°**Y**12'34 -9910 Jan 03 j 19:27 4°M15'40 -1°17'06 direct conjunction -9916 Apr 24 j 16:22 0° 8 -9910 Jan 03 j 19:22 4°M15'37 1°17'22 minimum elong -9916 Jul 08 j 13:55 14°817'26 -9910 Jan 05 j 04:37 4°M35'02 6.07009 AU evening set max. Earth dist. -9916 Jul 11 i 18:08 15°8 morning rise -9910 Jan 17 j 11:38 7°M26'44 -9916 Jul 19 j 20:29 -9910 Feb 20 i 07:36 max. Earth dist. 16°849'05 6.32377 AU 15°M retrograde -9910 May 27 j 23:19 27°M14'12 conjunction -9916 Jul 21 i 02:14 17°**8**05'50 1°30'04 opposition -9910 Jul 26 i 12:36 22°M09'14 -2°17'29 -9916 Jul 21 i 02:10 17°805'47 1°30'25 min. Earth dist. -9910 Jul 25 j 15:56 22°M16'19 4.08670 AU minimum elong -9916 Aug 02 j 12:25 19°**8**53'17 direct -9910 Sep 22 j 20:27 17°ML10'06 morning rise -9916 Sep 20 j 05:26 $0^{\circ}II$ -9910 Dec 30 j 00:54 0°×7 -9916 Dec 03 j 03:21 -9909 Jan 27 j 05:47 6°**х** 17′38 retrograde 7° TT 30'53 evening set opposition -9915 Feb 02 j 07:23 2°II38'44 2°24'13 min. Earth dist. -9915 Feb 03 j 02:55 2°**П**32'33 4.30253 AU conjunction -9909 Feb 09 j 22:31 9°×26'46 -1°38'22 -9915 Feb 24 j 08:43 30°**₹**8 minimum elong -9909 Feb 09 j 22:30 9° x 26'46 1°38'54 direct -9915 Apr 05 j 10:00 27°**8**41'50 -9909 Feb 11 j 02:16 9°**∡**¹42'46 6.11091 AU max. Earth dist. $0^{\circ}\Pi$ -9909 Feb 23 j 15:57 12°**∡**36'11 -9915 May 15 j 01:15 morning rise 15°**Ⅱ**47'52 0°정 evening set -9915 Aug 08 j 19:07 -9909 May 28 j 21:26 -9915 Aug 20 j 05:43 18°**Ⅲ**24′03 -9909 Jul 01 j 12:47 1°る48'41 max. Earth dist. 6.27078 AU retrograde -9909 Aug 03 j 18:45 30°₽**⋌**7 conjunction -9915 Aug 21 j 03:57 18°**Ⅲ**36'44 1°39'16 opposition -9909 Aug 29 j 14:02 26° ₹45'49 -2°22'11 minimum elong -9915 Aug 21 j 03:58 18°**Ⅲ**36'45 1°39'49 min. Earth dist. -9909 Aug 29 j 01:56 26°**≯**49'57 4.14515 AU morning rise -9915 Sep 02 j 12:45 21°**Ⅲ**25'40 direct -9909 Oct 27 j 17:53 21°×743'34 -9915 Oct 12 j 09:30 0ಂತಾ -9908 Jan 12 j 18:58 0°궁 -9914 Jan 05 j 22:13 9°539'24 -9908 Mar 03 j 17:41 10°る43'51 retrograde evening set

-9914 Mar 08 j 09:39

opposition

4°5544'57 2°16'20

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Earth dist. -9908 Sep 30 j 14:55 0°≈21'31 4.22155 AU direct -9902 May 13 j 07:48 4°934'09 -9908 Oct 03 j 06:44 30°Rる evening set -9902 Sep 14 j 00:39 22°5548'43 direct -9908 Nov 29 j 23:57 25°る17'00 -9907 Jan 26 j 08:10 0°≈ conjunction -9902 Sep 26 j 13:54 25°9542'55 1°12'57 -9902 Sep 26 j 13:59 evening set -9907 Apr 07 j 20:47 14°≈00′20 minimum elong 25°**©**42'58 1°13'30 -9902 Sep 26 j 09:42 -9907 Apr 12 j 07:56 15°**≈** max. Earth dist. 25°5540'29 6.18762 AU morning rise -9902 Oct 09 j 05:17 28°938'19 conjunction -9907 Apr 21 j 09:46 17°≈01'56 -0°43'09 -9902 Oct 15 j 03:52 $0^{\circ}\Omega$ minimum elong -9907 Apr 21 j 09:50 17°≈01'58 0°43'35 -9901 Jan 03 j 09:31 15°€ max. Earth dist. -9907 Apr 21 j 01:32 16°≈57'19 6.25864 AU retrograde -9901 Feb 14 j 23:16 17°**Ω**40'33 morning rise -9907 May 04 j 19:54 20°≈02'00 -9901 Mar 29 j 20:34 15°RΩ -9907 Jun 21 j 18:38 0°**)**€ opposition -9901 Apr 17 j 08:32 12°**Ω**41'59 1°14'13 retrograde -9907 Sep 03 j 17:48 7°**)**(45'13 min. Earth dist. -9901 Apr 17 j 04:10 12°**Ω**43'24 4.14969 AU opposition -9907 Nov 02 j 02:13 2°\dagger49'41 -0°25'27 direct -9901 Jun 16 j 03:29 7°**Ω**49'05 min. Earth dist. -9907 Nov 02 j 13:16 2°**)**(46'02 4.29104 AU -9901 Aug 25 i 08:06 15°Ω -9907 Nov 24 i 20:47 30°R≈ -9901 Oct 17 j 02:48 26°Ω18'07 evening set direct -9906 Jan 02 j 14:36 27°≈45'39 -9906 Feb 10 j 17:09 0°**∀** conjunction -9901 Oct 30 i 01:15 29°Ω19'28 0°23'15 -9906 Mar 06 j 11:00 3°**¥**11'34 -9901 Oct 30 j 01:17 29°Ω19'30 0°23'36 asc node minimum elong -9906 May 11 j 09:53 max. Earth dist. -9901 Oct 30 j 16:25 16°**)** 10′22 29°**Ω**28'21 6.11575 AU evening set -9901 Nov 01 j 22:28 0° m -9906 May 24 j 15:03 19°**)** € 06'28 0°10'55 -9901 Nov 12 j 02:49 morning rise 2° m 22'37 conjunction -9906 May 24 j 15:02 -9900 Mar 22 j 01:45 minimum elong 19°**₭**06'28 0°10'45 22° Mp 01'48 retrograde -9906 May 24 j 08:49 -9900 Apr 05 j 11:57 19°**)** 03'01 21° m/41'55 behind sun begin desc. node -9900 May 21 j 22:18 -9906 May 24 j 21:14 19°**₩**09'54 16° m 59'31 -0°10'25 behind sun end opposition 6.31613 AU -9900 May 21 j 06:57 min. Earth dist. -9906 May 23 j 15:27 18°**¥**53′21 17° Mp 04'36 4.08911 AU max. Earth dist. -9906 Jun 06 j 16:41 -9900 Jul 19 j 15:26 12° m 05'53 morning rise 22°**)** € 00'46 direct -9906 Jul 14 j 13:37 -9900 Nov 16 j 04:10 $0^{\circ}\Upsilon$ 0∘**⊽** -9906 Oct 05 j 07:45 9°**Υ**20'52 -9900 Nov 19 j 23:10 0°**£**52'57 retrograde evening set opposition -9906 Dec 04 j 07:19 4°**Υ**28'05 0°53'41 min. Earth dist. -9906 Dec 05 j 02:16 4°**Υ**21'57 4.33259 AU conjunction -9900 Dec 03 j 06:46 4°**2**00'15 -0°35'34 -9905 Jan 16 j 04:18 30°**₹**₩ minimum elong -9900 Dec 03 j 06:42 4°**2**00'12 0°35'33 direct -9905 Feb 04 j 14:05 29°\ 25'43 max. Earth dist. -9900 Dec 04 j 10:54 4°**2**16'45 6.07191 AU -9905 Feb 24 j 03:46 $0^{\circ}\Upsilon$ morning rise -9900 Dec 16 j 18:04 7°**♀**09'27 -9905 Jun 12 j 15:01 17° **Y**36'43 -9899 Apr 27 j 06:31 27°**♀**05'40 evening set retrograde 6.33809 AU -9905 Jun 24 j 04:09 20° Y10'52-9899 Jun 26 j 10:29 22°**2**00'55 -1°32'51 max. Earth dist. opposition -9899 Jun 25 j 12:36 22°**£**08'20 4.06702 AU min. Earth dist. -9905 Jun 25 j 10:22 20°**Y**27'43 1°00'55 -9899 Aug 23 j 14:38 17°**♀**04'43 conjunction direct -9905 Jun 25 i 10:17 minimum elong 20°**℃**27'41 1°01'04 -9899 Nov 29 i 06:42 0°M -9905 Jul 08 i 02:32 23°Y17'12 morning rise evening set -9899 Dec 26 i 08:53 6°M₀07'26 -9905 Aug 08 j 11:55 0°8 retrograde -9905 Nov 06 i 04:14 10°837'19 conjunction -9898 Jan 08 i 23:01 9°M17'18 -1°22'03 -9904 Jan 05 i 19:56 5°**8**45'42 1°56'31 minimum elong -9898 Jan 08 i 22:56 9°ML17'15 1°22'21 opposition min. Earth dist. -9904 Jan 06 j 18:10 5°**8**38'37 4.33455 AU max. Earth dist. -9898 Jan 10 j 08:53 9°M37'03 6.07252 AU direct -9904 Mar 08 j 07:45 0°846'09 -9904 Jun 25 j 11:52 15°8 -9904 Jul 13 j 00:23 18°**8**50'53 evening set max. Earth dist. -9904 Jul 24 j 05:51 21°**8**22'15 6.31851 AU conjunction -9904 Jul 25 j 11:44 21°839'05 1°33'06 -9904 Jul 25 j 11:40 21°**8**39'03 1°33'31 minimum elong -9904 Aug 06 j 21:29 24°**8**26'31 morning rise -9904 Sep 01 j 09:21 $0^{\circ}\Pi$ -9904 Dec 07 j 20:32 retrograde 12°**Ⅲ**08'11 opposition -9903 Feb 07 j 02:02 7°**Ⅲ**15'47 2°25'49 min. Earth dist. -9903 Feb 07 j 20:23 7°**Ⅱ**09'58 4.29575 AU direct -9903 Apr 10 j 02:33 2°**Ⅱ**19'16 evening set -9903 Aug 13 j 05:35 20°**Ⅲ**25'30 -9903 Aug 25 j 14:39 23°**Ⅲ**14'44 1°38'07 conjunction