Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7400 in astronomical counting style is the year 7401 BCE in historical counting style. -7400 Mar 02 j 12:35 17°504'07 2°14'18 -7395 Mar 15 j 14:50 0°정 opposition -7400 Mar 03 j 10:57 -7395 Jun 27 j 00:58 13°る43'09 min. Earth dist. 16°957'01 4 28867 AU retrograde -7400 May 03 j 12:03 8° පි38'17 -2°16'32 direct 12°907'13 opposition -7395 Aug 25 j 12:11 -7400 Sep 04 j 12:20 8°る46'10 4.09299 AU $0^{\circ}\Omega$ min. Earth dist. -7395 Aug 24 j 13:09 -7400 Sep 05 j 18:48 -7395 Oct 22 j 22:36 evening set 0°**Ω**17'18 direct 3°る38'52 $2^{\circ}\Omega53'47$ max. Earth dist. -7400 Sep 17 j 04:42 6.24691 AU evening set -7394 Feb 26 j 12:39 22°る43'44 conjunction -7400 Sep 18 j 05:22 3°**Ω**07'56 1°23'25 conjunction -7394 Mar 12 j 06:10 25°**ප්**52'30 -1°26'54 1°27'23 minimum elong -7400 Sep 18 j 05:26 3°**Ω**07'58 1°23'52 minimum elong -7394 Mar 12 j 06:14 25°**る**52'32 morning rise -7400 Sep 30 j 16:00 5°**Ω**58'46 max. Earth dist. -7394 Mar 13 j 14:07 26°**る**10'50 6.12989 AU -7400 Nov 11 j 13:48 15°€ morning rise -7394 Mar 26 j 00:07 29°る01'22 retrograde -7399 Feb 03 j 14:44 24°**Ω**23'21 -7394 Mar 30 j 07:28 0°**≈** opposition -7399 Apr 05 j 22:15 19°**Ω**28'41 1°41'23 -7394 Jun 17 j 03:12 15°≈ min. Earth dist. -7399 Apr 06 j 11:07 19°**Ω**24'34 4.20248 AU retrograde -7394 Jul 31 j 03:07 18°≈00'44 -7399 May 20 j 08:50 15°R€ -7394 Sep 12 j 22:43 15°R≈ direct -7399 Jun 05 j 21:14 14°**Ω**34'22 opposition -7394 Sep 28 j 06:56 12°≈58'16 -1°50'33 -7399 Jun 22 j 07:18 15°€ min. Earth dist. -7394 Sep 27 j 16:40 13°**≈**03'07 4.17441 AU -7399 Sep 24 j 21:04 0° M direct -7394 Nov 26 j 16:27 7°≈55'54 evening set -7399 Oct 07 j 21:03 2° m 58'33 -7393 Feb 05 j 12:15 evening set -7393 Apr 03 j 13:01 26°≈44'12 conjunction -7399 Oct 20 j 12:20 5° m 55'01 0°48'05 minimum elong -7399 Oct 20 j 12:24 5° m 55'03 0°48'21 conjunction -7393 Apr 17 j 06:10 29°≈49'07 -0°56'01 max. Earth dist. -7399 Oct 20 i 04:39 5° m 50'32 6.15698 AU -7393 Apr 17 i 06:15 29°**≈**49'09 0°56'19 minimum elong -7399 Nov 02 i 05:36 8° m 52'40 max. Earth dist. -7393 Apr 17 i 17:38 29°≈55'34 6.22003 AU morning rise -7398 Mar 11 i 05:13 28° m 05'52 -7393 Apr 18 j 01:31 0°**∀** retrograde -7398 May 11 j 10:15 23° m 07'27 0°33'34 -7393 Apr 30 j 22:00 2°\ 53'09 morning rise opposition -7398 May 11 j 06:59 23°Mp08'31 -7393 Sep 01 j 15:55 21°\(\cdot\)00'03 min. Earth dist. 4 11492 AU retrograde -7398 Jul 10 j 01:03 -7393 Oct 30 j 21:40 16°**¥**01'17 -0°49'19 direct 18° m 14'30 opposition -7393 Oct 30 j 20:43 -7398 Oct 10 j 19:14 0∘ഹ min. Earth dist. 16°**升**01'36 4.26420 AU -7398 Oct 22 j 15:22 -7393 Dec 30 j 13:47 10°¥57'21 2°**£**36′26 direct desc. node -7392 May 07 j 00:32 -7398 Nov 10 j 11:29 6°**£**56'55 29°**H**24'51 evening set evening set -7392 May 09 j 16:16 $0^{\circ}\Upsilon$ -7398 Nov 23 j 10:53 10° **2**00'17 -0°04'27 conjunction -7398 Nov 23 j 10:52 -7392 May 20 j 12:34 2°Y24'16 -0°08'00 minimum elong 10°**£**00'17 0°04'29 conjunction -7398 Nov 23 j 02:54 -7392 May 20 j 12:35 2°\bar{Y}24'16 0°08'02 behind sun begin 9°**£**55'35 minimum elong -7392 May 20 j 05:16 2°Y20'14 behind sun end -7398 Nov 23 j 18:51 10°**♀**04'58 behind sun begin -7392 May 20 j 19:53 max. Earth dist. -7398 Nov 24 j 01:33 10°**£**08'55 6.08035 AU behind sun end 2°Υ28'18 -7398 Dec 06 j 13:22 13°**♀**05'24 max. Earth dist. -7392 May 20 j 04:01 2°**Υ**19'32 6.30367 AU morning rise -7397 Mar 03 j 08:34 0° M morning rise -7392 Jun 02 j 21:23 5°Y22'00 -7397 Apr 16 j 21:12 2°M58'09 -7392 Jul 21 j 19:43 15°**Y**24'41 retrograde asc. node -7397 May 31 j 11:15 30°**₹**Ω -7392 Oct 02 j 04:09 22° Y 48' 49 retrograde -7397 Jun 16 j 12:55 27°**♀**55'52 -0°48'27 -7392 Nov 30 j 19:14 17°**Υ**53'47 0°24'45 opposition opposition -7397 Jun 15 j 20:22 28°**£**01'23 4.05616 AU -7392 Dec 01 j 07:00 17°**Ƴ**49'55 4.33484 AU min. Earth dist. min. Earth dist. -7397 Aug 14 j 02:39 23°**♀**02'20 -7391 Jan 31 j 14:11 12°Y50'05 direct direct -7397 Oct 21 j 01:50 -7391 Jun 04 j 08:14 0° 8 0°M evening set -7397 Dec 15 j 21:00 12°ML02'17 evening set -7391 Jun 08 j 22:27 1°800'11 -7397 Dec 28 j 10:22 15°M max. Earth dist. -7391 Jun 20 j 22:12 3°**8**38'44 6.35560 AU conjunction -7397 Dec 29 i 04:32 15°M10'44 -0°56'21 conjunction -7391 Jun 22 i 01:10 3°**8**53'38 0°41'23 minimum elong -7397 Dec 29 i 04:27 15°M10'41 0°56'39 -7391 Jun 22 i 01:06 3°**8**53'36 0°41'37 minimum elong -7397 Dec 30 j 13:22 15°M-30'08 6.04432 AU -7391 Jul 05 j 00:32 6°845'22 max. Earth dist. morning rise -7396 Jan 11 j 15:30 18°M20'59 -7391 Aug 13 j 13:12 15°8 morning rise -7396 Mar 05 j 07:15 0°×7 -7391 Nov 02 j 09:58 23°**8**54'29 retrograde -7390 Jan 01 j 14:04 retrograde -7396 May 22 j 10:31 8°×727'16 opposition 19°**8**02'03 1°30'00 min. Earth dist. -7396 Jul 20 j 10:20 3°**≯**30'55 4.04801 AU min. Earth dist. -7390 Jan 02 j 12:23 18°**8**54'51 4.36538 AU -7396 Jul 21 j 11:12 3°**₹**22'30 -1°53'46 -7390 Feb 07 j 03:44 15°R₩ opposition -7396 Aug 18 j 00:33 30°RM -7390 Mar 05 j 01:59 13°**8**59'57 direct -7396 Sep 17 j 12:26 28°M26'30 -7390 Mar 31 j 03:58 15°8 direct -7390 Jul 01 j 10:36 $0^{\circ}\Pi$ -7396 Oct 18 j 02:40 0° **₹** -7395 Jan 20 j 14:29 17°**∡**³35'55 -7390 Jul 10 j 15:45 evening set evening set 2°**Ⅱ**00'55 -7390 Jul 21 j 22:32 max. Earth dist. 4°**Д**30'51 6.36108 AU conjunction -7395 Feb 03 j 04:11 20° ₹ 46'02 -1°27'48 minimum elong -7395 Feb 03 j 04:09 20°**х** 46′01 1°28'16 conjunction -7390 Jul 23 j 09:03 4°**I**50′03 1°18′13 max. Earth dist. -7395 Feb 04 j 18:49 21°**х** 08′38 6.06321 AU minimum elong -7390 Jul 23 j 08:59 4°**Ⅲ**50′01 1°18'38 morning rise -7395 Feb 16 j 20:29 23°**х** 57'22 morning rise -7390 Aug 04 j 23:17 7°**Ⅲ**37'46

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7390 in astronomical counting style is the year 7391 BCE in historical counting style. -7390 Dec 04 i 01:33 24°**Ⅲ**53'44 opposition -7384 Jul 26 j 07:50 8°**₹**20'30 -1°59'41 retrograde -7384 Sep 22 j 09:19 opposition -7389 Feb 02 j 20:32 20°II02'16 2°09'32 3°×24'03 direct min. Earth dist. -7389 Feb 03 j 21:59 19°**Ⅲ**54′10 4.34671 AU -7383 Jan 25 j 16:40 22°**х** 35′36 evening set -7389 Apr 06 j 08:56 15°**Ⅲ**02'49 direct -7389 Jul 27 j 21:14 -7383 Feb 08 j 07:18 25°**∡**¹46′00 -1°29′35 0°9 conjunction -7383 Feb 08 j 07:16 1°30'05 evening set -7389 Aug 10 j 18:58 3°904'02 minimum elong 25° × 45'59 max. Earth dist. -7383 Feb 09 j 23:26 -7389 Aug 21 j 19:27 5°932'36 6.31847 AU max. Earth dist. 26°**₹**09'26 6.06506 AU 28°**₹**57'25 morning rise -7383 Feb 22 j 00:00 conjunction -7389 Aug 23 j 05:57 5°952'03 1°32'45 -7383 Feb 26 j 12:27 0°ಕ minimum elong -7389 Aug 23 j 05:57 5°952'03 1°33'15 retrograde -7383 Jul 01 j 22:16 18°る39'48 morning rise -7389 Sep 04 j 15:34 8°939'29 min. Earth dist. -7383 Aug 29 j 08:06 13°**る**42'50 4.09841 AU -7388 Jan 05 j 22:41 retrograde 26°524'29 opposition -7383 Aug 30 j 06:37 13°る35'08 -2°15'37 -7383 Oct 27 j 18:39 opposition -7388 Mar 07 j 03:14 21°**©**32'04 2°12'05 direct 8°**る**35'16 min. Earth dist. -7388 Mar 08 j 01:51 21°9524'54 4.28320 AU evening set -7382 Mar 03 j 15:05 27°る39'48 direct -7388 May 08 j 01:48 16°935'32 -7382 Mar 13 j 20:24 0°≈ -7388 Aug 19 j 16:33 $0^{\circ}\Omega$ evening set -7388 Sep 10 j 01:22 4°**Ω**45'30 conjunction -7382 Mar 17 j 08:44 0°≈48'18 -1°24'06 minimum elong -7382 Mar 17 j 08:48 0°**≈**48′20 1°24'33 conjunction -7388 Sep 22 j 12:15 7°**Ω**36'35 1°20'01 max. Earth dist. -7382 Mar 18 j 13:54 1°≈05'00 6.13835 AU minimum elong -7388 Sep 22 j 12:18 7°**Ω**36'37 1°20'26 morning rise -7382 Mar 31 j 02:53 3°≈56'49 max. Earth dist. -7388 Sep 21 j 12:32 7°**Ω**22'58 6.23920 AU -7382 May 22 j 12:33 morning rise -7388 Oct 04 i 23:25 10°Ω28'00 retrograde -7382 Aug 04 i 17:58 22°≈49'42 -7388 Oct 25 i 05:38 15°Ω opposition -7382 Oct 02 j 22:06 17°≈47'34 -1°43'32 retrograde -7387 Feb 08 i 05:57 28°**Ω**57'44 min. Earth dist. -7382 Oct 02 i 08:58 17°≈52'02 4.18494 AU -7387 Apr 10 j 15:17 24°Ω02'38 1°33'55 -7382 Oct 24 j 18:27 15°R≈ opposition -7387 Apr 11 j 01:51 4.19293 AU -7382 Dec 01 j 11:26 12°≈44'49 min. Earth dist. 23°**Ω**59'15 direct -7387 Jun 10 j 09:44 19°**Ω**08'34 -7381 Jan 08 j 15:40 15°≈ direct -7387 Sep 08 j 05:31 -7381 Apr 01 j 16:01 0°\ 0° m -7387 Oct 12 j 06:47 -7381 Apr 08 j 11:22 1°)(30'41 7° Tp 34'17 evening set evening set -7387 Oct 24 j 22:59 10° m 31'36 0°41'43 -7381 Apr 22 j 04:15 4°\;\;434'57 -0°49'54 conjunction conjunction -7381 Apr 22 j 04:19 minimum elong -7387 Oct 24 j 23:03 10° mg 31'38 0°41'56 minimum elong 4°\\$35'00 0°50'09 -7381 Apr 22 j 14:37 max. Earth dist. -7387 Oct 24 j 17:39 10°Mp28'29 6.14654 AU max. Earth dist. 4°**¥**40'47 6.23196 AU -7387 Nov 06 j 17:16 -7381 May 05 j 19:15 7°**¥**38′10 morning rise 13° mp 30'11 morning rise -7381 Sep 06 j 03:22 25°**)** 38'21 -7386 Jan 31 j 12:06 0∘**⊽** retrograde 2°**-**49′26 -7386 Mar 16 j 03:14 -7381 Nov 04 j 09:54 20°\(\pm\)40'02 -0°39'07 retrograde opposition -7381 Nov 04 j 10:28 20°**★**39'51 4.27605 AU -7386 Apr 29 j 01:46 30°₽,₩ min. Earth dist. opposition -7386 May 16 j 05:45 27° m 50'32 0°22'48 direct -7380 Jan 04 j 06:12 15°\ 36'01 min. Earth dist. -7386 May 16 j 01:58 27° m 51'46 4.10422 AU -7380 Apr 23 j 04:59 $0^{\circ}\Upsilon$ direct -7386 Jul 14 j 17:47 22° m 57'34 -7380 May 11 j 17:17 4°Y00'16 evening set desc. node -7386 Sep 03 j 14:05 26° M 58'29 -7386 Sep 21 j 17:57 -7380 May 25 j 04:06 6°Y58'46 -0°00'47 0∘**⊽** conjunction -7386 Nov 15 j 03:01 11°**≏**43′02 -7380 May 25 j 04:04 6°Υ58'45 0°00'47 evening set minimum elong -7380 May 24 j 19:51 6°Y54'13 behind sun begin -7386 Nov 28 j 03:35 14°**-**47'20 -0°11'51 -7380 May 25 j 12:17 7°**Y**03'17 conjunction behind sun end -7386 Nov 28 i 03:33 -7380 May 24 j 15:59 6°**Y**52'04 minimum elong 14°**≏**47'19 0°11'56 max. Earth dist. 6.31418 AU -7386 Nov 27 j 21:53 8°Υ17'33 behind sun begin 14°**£**43'59 asc. node -7380 May 31 i 02:19 9°Y55'34 behind sun end -7386 Nov 28 i 09:13 14°**£**50'39 morning rise -7380 Jun 07 j 11:47 max. Earth dist. -7386 Nov 28 i 19:57 14°**£**57'00 6.07051 AU retrograde -7380 Oct 06 i 12:31 27°Y17'58 -7386 Dec 11 j 07:24 17°**♀**53'28 -7380 Dec 05 i 05:44 22°Υ23'16 0°34'51 morning rise opposition -7385 Feb 05 j 11:53 0°M min. Earth dist. -7380 Dec 05 j 19:19 22°**Y**18'48 4.34310 AU -7385 Apr 21 j 19:54 7°M50'56 direct -7379 Feb 05 j 04:13 17°**Y**19'37 retrograde -7385 Jun 21 j 09:43 2°ML48'17 -0°58'52 -7379 May 18 j 19:59 0°8 opposition min. Earth dist. -7385 Jun 20 j 15:28 2°M54'21 4.04842 AU evening set -7379 Jun 13 j 10:03 5°827'21 -7385 Jul 13 j 20:44 30°R Ω max. Earth dist. -7379 Jun 25 j 08:08 8°**8**04'54 6.36072 AU direct -7385 Aug 18 j 19:19 27°**♀**54'31 -7385 Sep 23 j 11:41 0°M conjunction -7379 Jun 26 j 11:29 8°**8**20'01 0°47'32 15°M₀ -7379 Jun 26 j 11:25 8°**8**19'59 0°47'49 -7385 Dec 12 j 09:01 minimum elong -7385 Dec 20 j 19:03 -7379 Jul 09 j 09:17 11°**8**10'55 evening set 16°M57'57 morning rise -7379 Jul 27 j 01:16 15°8 -7384 Jan 03 j 03:35 20° ML07'03 -1° 02'08 -7379 Nov 06 j 17:42 28°**8**18'59 conjunction retrograde minimum elong -7384 Jan 03 j 03:30 20° M 07'001°02'29 opposition -7378 Jan 06 j 00:37 23°**8**26'46 1°37'21 max. Earth dist. -7384 Jan 04 j 12:56 20° M $_{2}6'46$ 6.03922 AU min. Earth dist. -7378 Jan 06 j 23:25 23°**8**19'27 4.36706 AU morning rise -7384 Jan 16 j 15:34 23°M17'56 direct -7378 Mar 09 j 13:37 18°**8**25'00 -7384 Feb 15 j 02:58 0°**∡** -7378 Jun 14 j 20:33 $0^{\circ}\Pi$ -7384 May 27 j 09:36 13°**∡**¹25'28 -7378 Jul 15 j 00:07 6°**Ⅲ**25'03 retrograde evening set -7384 Jul 25 j 06:57 8°**₹**28'58 4.04626 AU max. Earth dist. -7378 Jul 26 j 03:31 8°**Д**53'22 6.35884 AU min. Earth dist.

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7378 in astronomical counting style is the year 7379 BCE in historical counting style. -7378 Jul 27 j 16:07 9°**I**13'44 1°21'44 -7372 Jan 28 j 14:27 0°×7 conjunction -7378 Jul 27 j 16:03 9°II13'42 1°22'10 -7372 Jun 01 j 11:54 18°**∡**³31'16 minimum elong retrograde -7378 Aug 09 j 05:33 12°**Ⅱ**01'09 -7372 Jul 30 j 05:52 13°**✗**34'51 4.05263 AU min. Earth dist. morning rise -7378 Dec 08 j 13:43 29°**Ⅱ**19'41 -7372 Jul 31 j 07:11 13°**₹**26'15 -2°04'52 retrograde opposition -7377 Feb 07 j 09:44 24°**Ⅲ**28'11 -7372 Sep 27 j 09:16 opposition 2°12'16 direct 8°**х** 29′25 27°**∡**³39'54 -7371 Jan 30 j 21:14 min. Earth dist. -7377 Feb 08 j 12:05 24°**Ⅱ**19'48 4.34073 AU evening set -7371 Feb 09 j 22:22 direct -7377 Apr 10 j 21:57 19°**Ⅲ**29'04 0°ಕ -7377 Jul 10 j 23:25 0°9 0°る50'00 -1°30'49 evening set -7377 Aug 15 j 02:19 7°930'59 conjunction -7371 Feb 13 j 12:15 -7371 Feb 13 j 12:14 max. Earth dist. -7377 Aug 26 j 03:55 10°900'29 6.30915 AU minimum elong 0°る50'00 1°31'19 max. Earth dist. -7371 Feb 15 j 03:06 1°**る**12'37 6.07603 AU -7377 Aug 27 j 13:05 -7371 Feb 27 j 05:28 4°る01'03 conjunction 10°9519'13 1°32'38 morning rise -7377 Aug 27 j 13:05 -7371 Jul 06 j 15:53 23°**る**36'12 minimum elong 10°9519'13 1°33'08 retrograde morning rise -7377 Sep 08 j 22:26 13°906'57 min. Earth dist. -7371 Sep 03 j 02:27 18°**る**39'21 4.11286 AU -7377 Dec 16 j 13:26 $0^{\circ}\Omega$ opposition -7371 Sep 04 j 00:43 18°る31'43 -2°13'43 retrograde -7376 Jan 10 j 13:38 0°**Ω**57'30 direct -7371 Nov 01 j 15:47 13°る31'23 -7376 Feb 04 j 17:21 30°Rூ -7370 Feb 25 j 09:03 0°≈ opposition -7376 Mar 11 j 20:13 26°904'49 2°09'11 evening set -7370 Mar 08 j 15:37 2°≈32'12 min. Earth dist. -7376 Mar 12 j 17:03 25°958'13 4.27116 AU direct -7376 May 12 j 14:49 21°9508'42 conjunction -7370 Mar 22 j 09:28 5°≈40'02 -1°20'48 -7376 Aug 01 j 20:19 $0^{\circ}\Omega$ minimum elong -7370 Mar 22 j 09:32 5°≈40'04 1°21'13 evening set -7376 Sep 14 j 11:12 9° Ω 20'51 max. Earth dist. -7370 Mar 23 j 13:19 5°≈55'55 6.15514 AU morning rise -7370 Apr 05 i 03:14 8°≈47'40 conjunction -7376 Sep 26 j 22:26 12°**Ω**12'40 1°16'05 -7370 May 03 i 08:27 15°≈ -7376 Sep 26 j 22:29 12°**Ω**12'43 1°16'29 retrograde -7370 Aug 09 j 06:48 27°≈31'27 minimum elong -7376 Sep 26 j 00:19 11°**Ω**59'56 -7370 Oct 07 j 10:36 22°≈29'48 -1°36'02 max. Earth dist. 6.22550 AU opposition -7376 Oct 09 j 10:21 15°**Ω**05'00 -7370 Oct 06 j 23:48 22°≈33'28 4.20210 AU morning rise min. Earth dist. -7376 Oct 09 j 01:37 -7370 Dec 06 j 04:49 15°€ direct 17°≈26'48 0° M -7369 Mar 15 j 20:34 -7376 Dec 24 j 17:46 0° H -7375 Feb 13 j 05:03 3° m/42'07 -7369 Apr 13 j 05:35 6°¥08'02 evening set retrograde -7375 Apr 05 j 21:02 30°R€ -7369 Apr 26 j 21:49 9°\;\;11'24 -0°43'42 -7375 Apr 15 j 12:46 28°**Ω**46'34 1°25'37 conjunction opposition -7369 Apr 26 j 21:53 min. Earth dist. -7375 Apr 15 j 22:15 28°**Ω**43'32 4.17834 AU minimum elong 9° **★**11'26 0°43'54 -7369 Apr 27 j 04:14 -7375 Jun 15 j 03:41 9°**升**15'00 6.24805 AU direct 23°**Ω**52'45 max. Earth dist. -7375 Aug 19 j 00:02 -7369 May 10 j 12:04 0° m morning rise 12°**升** 13′37 -7375 Oct 16 j 21:31 -7369 Sep 02 j 09:13 $0^{\circ}\Upsilon$ evening set 12° m 21'45 -7369 Sep 10 j 08:54 0°**Υ**06'24 retrograde conjunction -7375 Oct 29 j 14:53 15° m/20'11 0°34'48 -7369 Sep 18 j 08:56 30°**₹**₩ -7375 Oct 29 j 14:57 15° m 20'13 0°34'59 opposition -7369 Nov 08 j 17:59 25°\#08'35 -0°29'06 minimum elong max. Earth dist. -7375 Oct 29 j 12:36 15° Mp 18'50 6.13263 AU min. Earth dist. -7369 Nov 08 j 20:26 25°**)** €07'46 4.28970 AU morning rise -7375 Nov 11 j 10:30 18° **m** 19'58 direct -7368 Jan 08 j 18:21 20°**)**€04'27 -7374 Jan 04 j 22:43 -7368 Apr 05 j 21:13 $0^{\circ}\Upsilon$ 0∘**⊽** -7374 Mar 21 j 05:38 -7368 Apr 11 j 04:40 1°Y02'16 retrograde 7°**£**46'18 asc. node -7374 May 21 j 06:44 2°**2**46'56 0°11'20 -7368 May 16 j 05:14 8°Y25'20 opposition evening set -7374 May 21 j 00:10 2°**2**49'05 4.09239 AU min. Earth dist. -7368 May 29 j 14:55 11°\bar{\gamma}22'55 0°06'13 -7374 Jun 12 j 23:23 30°R ₩ conjunction -7368 May 29 j 14:55 desc. node -7374 Jul 14 j 14:20 27° m 56'33 minimum elong 11°**Υ**22'54 0°06'15 11°Y18'39 direct -7374 Jul 19 j 13:01 27° m 54'05 behind sun begin -7368 May 29 i 07:11 11°Y27'10 -7374 Aug 24 j 15:59 0∘**⊽** behind sun end -7368 May 29 j 22:38 -7374 Nov 20 j 00:32 16°**£**42'59 max. Earth dist. -7368 May 29 j 00:06 11°Y14'43 6.32438 AU evening set 14°**Y**18'47 -7368 Jun 11 i 21:18 morning rise -7374 Dec 03 j 02:13 19°**2**48'11 -0°19'34 -7368 Sep 08 j 14:02 0°8 conjunction -7374 Dec 03 j 02:11 19°**△**48'10 0°19'40 -7368 Oct 10 j 17:42 1°837'33 minimum elong retrograde max. Earth dist. -7374 Dec 03 j 21:13 19°**♀**59'26 6.06193 AU -7368 Nov 11 j 22:10 30°RY -7374 Dec 16 j 07:22 morning rise 22°**£**55'17 opposition -7368 Dec 09 j 12:23 26° Y 43'19 0° 44'21 26°**Y**38'08 4.34911 AU -7373 Jan 16 j 11:58 0°M min. Earth dist. -7368 Dec 10 j 04:13 21°Y39'51 retrograde -7373 Apr 26 j 23:39 12°M56'43 direct -7367 Feb 09 j 14:15 -7373 Jun 26 j 11:42 -7367 Apr 30 j 23:15 0°8 opposition 7°ML53'38 -1°09'21 -7373 Jun 25 j 15:43 4.04430 AU -7367 Jun 17 j 17:34 9°**8**46'10 min. Earth dist. 8°ML00'19 evening set -7367 Jun 29 j 10:38 12°**8**21'05 direct -7373 Aug 23 j 19:21 2°M59'40 max. Earth dist. 6.36177 AU -7373 Nov 24 j 18:07 15°M evening set -7373 Dec 25 j 22:11 22° ML 05'04conjunction -7367 Jun 30 j 17:38 12°**8**38'13 0°53'13 minimum elong -7367 Jun 30 j 17:34 12°**8**38'11 0°53'30 conjunction -7372 Jan 08 j 07:48 25°M14'33 -1°07'43 -7367 Jul 11 j 10:21 15°8 minimum elong -7372 Jan 08 j 07:44 25°M14'31 1°08'05 morning rise -7367 Jul 13 j 14:20 15°**8**28'36 -7372 Jan 09 j 20:51 25° M $_{3}6'25$ 6.04016 AU -7367 Sep 30 j 10:59 $0^{\circ}\Pi$ max. Earth dist.

-7372 Jan 21 j 20:32

morning rise

28°M25'43

-7367 Nov 11 j 00:24

retrograde

2°**Ⅲ**37'28

•	l		•				ge 4
Attention, astronomi		-	n astronomical cou		7368 BCE in historical co		101010.5
	-7367 Dec 23 j 04:00	30°₽ 8		opposition	-7361 Jul 01 j 14:16	13°ML01'13	
opposition	-7366 Jan 10 j 08:54		1°43'58	min. Earth dist.	-7361 Jun 30 j 17:00		4.04390 AU
min. Earth dist.	-7366 Jan 11 j 09:10	27° 8 37'38	4.36336 AU	direct	-7361 Aug 28 j 20:20	8°M06'56	
direct	-7366 Mar 13 j 22:33	22° 8 43'53			-7361 Nov 04 j 07:36	15° M ₊	
	-7366 May 27 j 08:00	Π $^{\circ}0$		evening set	-7361 Dec 31 j 02:22	27°M12'53	
evening set	-7366 Jul 19 j 05:59	10° Ⅱ 44'53			-7360 Jan 11 j 22:30	0° ∡ ¹	
max. Earth dist.	-7366 Jul 30 j 09:05	13° Ⅱ 13'20	6.35055 AU				
	-			conjunction	-7360 Jan 13 j 12:40	0° ∡ ¹22'29	-1°12'49
conjunction	-7366 Jul 31 j 21:11	13° ∏ 33′29	1°24'42	minimum elong	-7360 Jan 13 j 12:36	0° ∡ 22'27	1°13'13
minimum elong	-7366 Jul 31 j 21:08		1°25'09	max. Earth dist.	-7360 Jan 15 j 01:50	0° ∡ ¹44'23	6.04434 AU
morning rise	-7366 Aug 13 j 09:40	16° Ⅲ 20'52	1 20 0)	morning rise	-7360 Jan 27 j 02:19	3° х¹ 33'45	0.01.51.10
morning rise	-7366 Oct 23 j 14:37	0°95		retrograde	-7360 Jun 06 j 11:11	23° × 35'50	
retrograde	-7366 Dec 13 j 00:17	3°5944'04		min. Earth dist.	-7360 Aug 04 j 03:50		4.06103 AU
retrograde	·	30°R∏			• .		
•.•	-7365 Feb 02 j 23:32		201.4112	opposition	-7360 Aug 05 j 05:58	18°× 7 30'41	-2-0908
opposition	-7365 Feb 11 j 22:01	28° Ⅱ 52'33		direct	-7360 Oct 02 j 08:42	13° ∡ ³33′20	
min. Earth dist.	-7365 Feb 13 j 00:05		4.32857 AU		-7359 Jan 24 j 05:56	0°ਰ	
direct	-7365 Apr 15 j 08:03	23° Ⅱ 53'52		evening set	-7359 Feb 05 j 01:23	2° る 42'13	
	-7365 Jun 21 j 06:01	0 \circ					
evening set	-7365 Aug 19 j 09:42	11° © 58'29		conjunction	-7359 Feb 18 j 17:01	5° る 52'01	-1°31'24
max. Earth dist.	-7365 Aug 30 j 10:43	14° © 28'17	6.29400 AU	minimum elong	-7359 Feb 18 j 17:01	5°₹52'01	1°31'54
				max. Earth dist.	-7359 Feb 20 j 07:44	6° る 14'30	6.08775 AU
conjunction	-7365 Aug 31 j 20:06	14° 5 47'12	1°31'56	morning rise	-7359 Mar 04 j 10:19	9° る 02'34	
minimum elong	-7365 Aug 31 j 20:07	14°5947'13	1°32'26	retrograde	-7359 Jul 11 j 11:13	28° ට 30'25	
morning rise	-7365 Sep 13 j 05:41	17°535'36	1 3220	opposition	-7359 Sep 08 j 18:19	23° පි 26'15	-2°10'58
morning rise	-7365 Nov 13 j 15:12	0° Ω		min. Earth dist.	-7359 Sep 07 j 22:08		4.12661 AU
ratra ara da	-7364 Jan 15 j 08:26	5° Ω 33'41			-7359 Nov 06 j 13:12	18° る 25'30	4.12001 AC
retrograde	3		2005125	direct	•		
opposition	-7364 Mar 16 j 14:24	0° Ω 40'41	2°05'25		-7358 Feb 07 j 20:00	0° ≈	
min. Earth dist.	-7364 Mar 17 j 10:16	0° Ω 34'22	4.25402 AU	evening set	-7358 Mar 13 j 16:14	7° ≈ 23'10	
	-7364 Mar 21 j 22:46	30°₹ ©					
direct	-7364 May 17 j 05:27	25°5644'53		conjunction	-7358 Mar 27 j 10:04	10° ≈ 30′23	-1°16'59
	-7364 Jul 10 j 09:08	$0 {\circ} \Omega$		minimum elong	-7358 Mar 27 j 10:08	10° ≈ 30′26	1°17'24
evening set	-7364 Sep 18 j 22:19	14° Ω 00'44		max. Earth dist.	-7358 Mar 28 j 11:00	10° ≈ 44'34	6.16978 AU
	-7364 Sep 23 j 05:29	15° Ω		morning rise	-7358 Apr 10 j 03:38	13° ≈ 37'18	
					-7358 Apr 16 j 06:53	15° ≈	
conjunction	-7364 Oct 01 j 10:23	16° £ 53′36	1°11'33		-7358 Jul 07 j 08:40	0° ∀	
minimum elong	-7364 Oct 01 j 10:27	16° Ω 53'39	1°11'56	retrograde	-7358 Aug 13 j 17:49	2° 升 12'57	
max. Earth dist.	-7364 Sep 30 j 15:55	16° Ω 42'56	6.20804 AU	Č	-7358 Sep 19 j 23:00	30°R≈	
morning rise	-7364 Oct 13 j 23:08	19° Ω 47'03		opposition	-7358 Oct 11 j 23:10	27°≈11'50	-1°27'59
morning rise	-7364 Nov 30 j 15:18	0°m/		min. Earth dist.	-7358 Oct 11 j 13:33		4.21636 AU
retrograde	·	8° Mp 32'36		direct	-7358 Oct 11 j 13:33	27 ≈13 03 22°≈08'35	4.21030 AU
-	-7363 Feb 18 j 05:22	-	1017122	unect			
opposition	-7363 Apr 20 j 12:33	3° Mp 36'33	1°16'32		-7357 Feb 24 j 18:28	0° ∀	
min. Earth dist.	-7363 Apr 20 j 19:11	3° m 34'25	4.16193 AU	evening set	-7357 Apr 18 j 00:38	10°) 46′34	
	-7363 May 22 j 05:03	30°R Ω					
direct	-7363 Jun 19 j 21:47	28° Ω 43′00		conjunction	-7357 May 01 j 16:12	13°) 49′08	
	-7363 Jul 18 j 09:24	0° m		minimum elong	-7357 May 01 j 16:16	13°) (49′10	0°37'23
evening set	-7363 Oct 21 j 14:57	17° m 15'38		max. Earth dist.	-7357 May 01 j 18:54	13° ∺ 50′39	6.26102 AU
				morning rise	-7357 May 15 j 05:37	16° ¥ 50′28	
conjunction	-7363 Nov 03 j 09:20	20°M/15'08	0°27'30		-7357 Jul 21 j 04:56	$0^{\circ}\mathbf{\Upsilon}$	
minimum elong	-7363 Nov 03 j 09:23	20°M 15'09	0°27'37	retrograde	-7357 Sep 14 j 18:43	4° Ƴ 37'14	
max. Earth dist.	-7363 Nov 03 j 10:06	20° m 15'35	6.11875 AU		-7357 Nov 10 j 15:42	30°₽)	
morning rise	-7363 Nov 16 j 06:22	23° Mp 16'08		opposition	-7357 Nov 13 j 03:51	29°) 40'01	-0°18'50
•	-7363 Dec 16 j 02:10	0∘ ರ		min. Earth dist.	-7357 Nov 13 j 09:11	29°) 38′15	4.30026 AU
retrograde	-7362 Mar 26 j 09:57	12° ≏ 49'06		direct	-7356 Jan 13 j 09:04	24°) €35'55	
desc. node	-7362 May 24 j 02:52	8° ჲ 07'03		asc. node	-7356 Feb 20 j 12:36	26°) 44′55	
opposition	-7362 May 26 j 09:45	7° Ω 49'03	-0°00'29	use. Houe	-7356 Mar 15 j 21:19	0° Υ	
min. Earth dist.	-7362 May 26 j 00:24	7° ⊆ 52'07	4.08222 AU	evening set	-7356 May 20 j 18:52	12° Υ 54'24	
			4.06222 AU	•		15° Υ 41'23	6 22160 ATT
direct	-7362 Jul 24 j 12:26	2° £ 56'08		max. Earth dist.	-7356 Jun 02 j 09:35	13 41 23	6.33168 AU
evening set	-7362 Nov 25 j 00:21	21° ≏ 47'34			#0.54 × 00:::::		0012:
				conjunction	-7356 Jun 03 j 03:24	15° Y 51'13	0°13'11
conjunction	-7362 Dec 08 j 03:21	24° £ 53'34		minimum elong	-7356 Jun 03 j 03:23	15° Y 51'12	0°13'16
minimum elong	-7362 Dec 08 j 03:18	24° ≏ 53'32	0°27'25	behind sun begin	-7356 Jun 02 j 22:43	15° Ƴ 48'38	
max. Earth dist.	-7362 Dec 09 j 03:13	25° ≏ 07'41	6.05632 AU	behind sun end	-7356 Jun 03 j 08:02	15° Y 53'46	
morning rise	-7362 Dec 21 j 09:36	28° ≏ 01'23		morning rise	-7356 Jun 16 j 08:30	18° Ƴ 46′18	
	-7362 Dec 29 j 21:01	0° M			-7356 Aug 11 j 08:04	9° 8	
	-7361 Mar 17 j 23:57	15° ™		retrograde	-7356 Oct 15 j 00:34	6° 8 02'34	
retrograde	-7361 May 02 j 04:55	18°M04'45		opposition	-7356 Dec 13 j 21:39	1° 8 08'44	0°53'50
	-7361 Jun 16 j 09:47	15°RM		min. Earth dist.	-7356 Dec 14 j 14:37	1° 8 03'12	4.35296 AU
	,				3	-	

-	ical year style is used: Th		•	* * * · · · · · · · · · · · · · · · · ·		, .	150 3
recontroll, astrolloll	-7356 Dec 22 j 18:32	30°R Y	n ustronomicui coc	conjunction	-7350 Dec 13 j 01:36	29° ♀ 52'20	-0°34'33
direct	-7355 Feb 14 j 01:14	26°Υ°05'28		minimum elong	-7350 Dec 13 j 01:33	29° ⊆ 52'18	
uncet	-7355 Apr 08 j 00:49	0°8		minimum ciong	-7350 Dec 13 j 14:35	0°M	0 54 45
evening set	-7355 Jun 22 j 03:39	14° 8 11'04		max. Earth dist.	-7350 Dec 14 j 02:39	0°ML07'08	6.05452 AU
evening set	-7355 Jun 25 j 20:39	15°8		morning rise	-7350 Dec 26 j 09:07	3°M 00'43	0.05452 AC
max. Earth dist.		16° 8 44'51	6.36183 AU	morning rise	-7349 Feb 19 j 19:44	15°M	
max. Earth dist.	-7355 Jul 03 j 18:26	10 044 31	0.30183 AU	ratra ara da	-7349 Feb 19 j 19.44 -7349 May 07 j 04:17	23°M04'40	
aaniunatian	7255 1.1 05:02.22	17° 8 02'33	0°58'45	retrograde opposition		18°M00'45	1020122
conjunction	-7355 Jul 05 j 02:23	_	0°59'03		-7349 Jul 06 j 12:48	18°M08'30	
minimum elong	-7355 Jul 05 j 02:19	17° 8 02'31	0-3903	min. Earth dist.	-7349 Jul 05 j 13:46		4.04574 AU
morning rise	-7355 Jul 17 j 21:44	19° 8 52'23		11.	-7349 Jul 30 j 17:53	15°RM 130 m octo5	
	-7355 Sep 05 j 13:40	0°II		direct	-7349 Sep 02 j 17:18	13°M06'05	
retrograde	-7355 Nov 15 j 10:11	7° I I02'22	1050112		-7349 Oct 06 j 14:08	15°M	
opposition	-7354 Jan 14 j 20:04	2° I 10'37	1°50'13	. ,	-7349 Dec 26 j 15:21	0° ∡ ⁷	
min. Earth dist.	-7354 Jan 15 j 21:28	2° I 102'29	4.35986 AU	evening set	-7348 Jan 05 j 02:55	2° ∡ 12'10	
1.	-7354 Feb 01 j 10:14	30° ₹8			7240 Y 10:14 00	50 701150	1017112
direct	-7354 Mar 18 j 10:28	27° 8 09'30		conjunction	-7348 Jan 18 j 14:09	5° ₹ 21'53	
	-7354 May 02 j 04:00	0°II		minimum elong	-7348 Jan 18 j 14:05	5° ∡ 21'50	
evening set	-7354 Jul 23 j 14:26	15° Ⅱ 11'11		max. Earth dist.	-7348 Jan 20 j 04:57	5° ∡ ′44'41	6.04948 AU
max. Earth dist.	-7354 Aug 03 j 15:13	17° ⊥ 38'44	6.34357 AU	morning rise	-7348 Feb 01 j 04:17	8° ∡ ³33′05	
				retrograde	-7348 Jun 11 j 08:17	28° ∡ ³31'30	
conjunction	-7354 Aug 05 j 04:38	17° Ⅱ 59'39		min. Earth dist.	-7348 Aug 09 j 00:01		4.06891 AU
minimum elong	-7354 Aug 05 j 04:35	17° Ⅱ 59'38	1°27'46	opposition	-7348 Aug 10 j 00:40	23° ∡ ¹26′19	-2°12'19
morning rise	-7354 Aug 17 j 16:31	20° Ⅱ 47'03		direct	-7348 Oct 07 j 05:26	18° ∡ 28′29	
	-7354 Sep 30 j 19:48	0ಂಣ			-7347 Jan 06 j 20:38	0°ප	
retrograde	-7354 Dec 17 j 14:17	8° छ 14'37		evening set	-7347 Feb 10 j 02:03	7° る 36'12	
opposition	-7353 Feb 16 j 13:09	3° 5 23'02	2°15'26				
min. Earth dist.	-7353 Feb 17 j 14:34	3° © 14'58	4.31885 AU	conjunction	-7347 Feb 23 j 18:08	10° る 45'46	-1°31'19
	-7353 Mar 17 j 23:00	30°RⅡ		minimum elong	-7347 Feb 23 j 18:09	10° る 45'47	1°31'48
direct	-7353 Apr 19 j 20:44	28° Ⅲ 24'47		max. Earth dist.	-7347 Feb 25 j 07:07	11° る 07'10	6.09756 AU
	-7353 May 22 j 15:55	0 \circ \odot		morning rise	-7347 Mar 09 j 11:46	13° る 55'58	
evening set	-7353 Aug 23 j 18:38	16°ණ31'07			-7347 May 30 j 22:43	0° ≈	
max. Earth dist.	-7353 Sep 03 j 22:51	19° 5 03'04	6.28256 AU	retrograde	-7347 Jul 16 j 01:17	3° ≈ 17'19	
					-7347 Aug 31 j 02:01	30°Ŗる	
conjunction	-7353 Sep 05 j 05:04	19° 5 20'15	1°30'44	opposition	-7347 Sep 13 j 08:32	28° る 13'28	-2°07'26
minimum elong	-7353 Sep 05 j 05:05	19° 5 20'16	1°31'12	min. Earth dist.	-7347 Sep 12 j 12:59	28° る 20'09	4.13740 AU
morning rise	-7353 Sep 17 j 14:34	22° © 09'08		direct	-7347 Nov 11 j 05:37	23° る 12'18	
	-7353 Oct 23 j 22:45	$0^{\circ}\Omega$			-7346 Jan 18 j 21:57	0° ≈	
retrograde	-7352 Jan 20 j 03:36	10° Ω 13'31		evening set	-7346 Mar 18 j 13:52	12° ≈ 07'59	
opposition	-7352 Mar 21 j 10:02	5° Ω 20′15	2°00'51		-7346 Mar 31 j 05:42	15° ≈	
min. Earth dist.	-7352 Mar 22 j 04:13	5° Ω 14'29	4.24175 AU				
direct	-7352 May 21 j 21:16	0° Ω 24'56		conjunction	-7346 Apr 01 j 07:40	15° ≈ 14'44	-1°12'45
	-7352 Sep 07 j 00:35	15° Ω		minimum elong	-7346 Apr 01 j 07:45	15° ≈ 14'47	1°13'08
evening set	-7352 Sep 23 j 10:24	18° Ω 42'45		max. Earth dist.	-7346 Apr 02 j 04:39	15° ≈ 26'39	6.18083 AU
C	1 3			morning rise	-7346 Apr 15 j 01:02	18° ≈ 21'04	
conjunction	-7352 Oct 05 j 22:56	21° Ω 36′22	1°06'36	C	-7346 Jun 10 j 09:48	0° ∀	
minimum elong	-7352 Oct 05 j 23:00	21° Ω 36′24	1°06'58	retrograde	-7346 Aug 18 j 06:01	6°) 50′15	
max. Earth dist.	-7352 Oct 05 j 06:14	21° Ω 26'42	6.19617 AU	opposition	-7346 Oct 16 j 10:16	1°)(49'39	-1°19'35
morning rise	-7352 Oct 18 j 12:43	24° Ω 30'45		min. Earth dist.	-7346 Oct 16 j 03:38		4.22645 AU
Č	-7352 Nov 11 j 23:30	0° m/y			-7346 Oct 30 j 06:34	30°R≈	
retrograde	-7351 Feb 23 j 04:43	13° m/22'42		direct	-7346 Dec 15 j 13:15	26° ≈ 46'10	
opposition	-7351 Apr 25 j 11:37	8° Mp 26'05	1°07'01		-7345 Jan 31 j 03:08	0°) €	
min. Earth dist.	-7351 Apr 25 j 15:32	8° m/24'50	4.15128 AU	evening set	-7345 Apr 22 j 18:02	15°) €22'10	
direct	-7351 Jun 24 j 16:21	3° m/32'44			, , , , , , , , , , , , , , , , , , ,	,,, ,,	
evening set	-7351 Oct 26 j 07:22	22° m 07'11		conjunction	-7345 May 06 j 09:05	18°) 24'10	-0°30'33
evening sec	7551 000 20 0 0 7.22	22 m/0/11		minimum elong	-7345 May 06 j 09:08	18° \(\) 24'12	
conjunction	-7351 Nov 08 j 03:01	25° mp 07'34	0°20'07	max. Earth dist.	-7345 May 06 j 09:26	18°) 24'22	
minimum elong	-7351 Nov 08 j 03:02	25° m) 07'35	0°20'13	morning rise	-7345 May 19 j 21:32	21°) 24'47	0.20701710
max. Earth dist.	-7351 Nov 08 j 03:02	25° m) 10'49	6.11049 AU		-7345 Jun 29 j 17:47	21 χ2447 0° Υ	
morning rise	-7351 Nov 21 j 01:09	28° m) 09'28	5.11515110	retrograde	-7345 Sep 19 j 02:16	9° Υ 07'05	
	-7351 Nov 28 j 23:46	0∘ ⊽		opposition	-7345 Nov 17 j 13:17	4°Υ10'22	-0°08'33
retrograde	-7351 Nov 28 j 23.40 -7350 Mar 31 j 12:02	0 == 17° £ 46'48		min. Earth dist.	-7345 Nov 17 j 19:30	4°Υ08'18	4.30684 AU
desc. node	-7350 Mai 31 j 12:02	17 = 40 48 17° £ 45'37		mm. Darm dist.	-7345 Dec 24 j 21:01	4 1 00 10 30°R ∺	7.5000 7 AU
opposition	-7350 Apr 04 j 00.36	17 ≗ 43 37 12° ₽ 46'15	-0°12'00	asc. node	-7344 Jan 01 j 10:43	30 KX 29° X 31'41	
min. Earth dist.	-7350 May 30 j 23:14	12 ≗ 46 13 12° ₽ 49'50	4.07710 AU	direct	-7344 Jan 17 j 20:53	29 X 31 41 29° X 06'18	
direct	-7350 May 30 j 23.14 -7350 Jul 29 j 09:56	7° £ 53'17	-1.0 / / 10 AU	direct	-7344 Feb 11 j 04:40	29 χυσ 18 0° Υ	
evening set	-7350 Nov 29 j 21:44	7 ≗ 33 17 26° ₽ 45'52		evening set	-7344 Feb 11 j 04.40	17° Υ 23'34	
evening set	-1330 NOV 29 J 21.44	20 = 43 32		evening set	-1344 Way 23 J Uo.28	1/ 1/23/34	

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7344 in astronomical counting style is the year 7345 BCE in historical counting style. conjunction -7344 Jun 07 j 15:41 20° Υ 19'41 0°20'04 min. Earth dist. -7338 Jun 04 j 19:48 17° Ω 45'06 -7338 Jun 04 j 19:48 17°**2**45'06 4.07030 AU

minimum elong	7344 Jun 07 j 15:41	20° Ƴ 19'40	0920112	direct	7229 Aug 02: 05:12	12° ≏ 47'34	
U	-7344 Jun 07 j 15:39			direct	-7338 Aug 03 j 05:12		
max. Earth dist.	-7344 Jun 06 j 19:00		6.33589 AU		-7338 Nov 27 j 11:55	0°M	
morning rise	-7344 Jun 20 j 19:35	23° Y 14′05		evening set	-7338 Dec 04 j 19:05	1°M42'25	
	-7344 Jul 22 j 17:52	9° 8					
retrograde	-7344 Oct 19 j 10:29	10° 8 28'48		conjunction	-7338 Dec 18 j 00:10	4°M49'33	-0°41'34
opposition	-7344 Dec 18 j 07:51	5° 8 35'21	1°03'01	minimum elong	-7338 Dec 18 j 00:07	4°M49'30	0°41'49
min. Earth dist.	-7344 Dec 19 j 02:52	5° 8 29'10	4.35466 AU	max. Earth dist.	-7338 Dec 19 j 04:23		6.05042 AU
direct	-7343 Feb 18 j 14:23	0° 8 32'18		morning rise	-7338 Dec 31 j 08:35	7°M58'31	
direct	-7343 Jun 09 j 19:53	15° 8		morning rise	-7337 Jan 31 j 07:26	15°M	
				. 1			
evening set	-7343 Jun 26 j 13:58	18° 8 37'24		retrograde	-7337 May 12 j 06:13	28°M04'02	
max. Earth dist.	-7343 Jul 08 j 02:36	21° 8 10′10	6.36074 AU	opposition	-7337 Jul 11 j 11:09	22°M59'49	
				min. Earth dist.	-7337 Jul 10 j 12:28	23°M07'28	4.04485 AU
conjunction	-7343 Jul 09 j 11:28	21° 8 28'23	1°03'57	direct	-7337 Sep 07 j 15:12	18° M 04'46	
minimum elong	-7343 Jul 09 j 11:24	21° 8 28'20	1°04'18		-7337 Dec 09 j 07:23	0° ∡	
morning rise	-7343 Jul 22 j 05:36	24° 8 17'44		evening set	-7336 Jan 10 j 04:31	7° ∡ 12'21	
Č	-7343 Aug 17 j 21:01	0° I I		J	J		
retrograde	-7343 Nov 19 j 20:07	11° Ⅲ 29'08		conjunction	-7336 Jan 23 j 16:31	10° ∡ ¹22'18	1°21'05
-	•	6° ∏ 37'26	1055150	·			
opposition	-7342 Jan 19 j 08:30			minimum elong	-7336 Jan 23 j 16:27	10° ₹ 22'16	
min. Earth dist.	-7342 Jan 20 j 09:21		4.35636 AU	max. Earth dist.	-7336 Jan 25 j 07:27	10° ∡ ¹45'10	6.05158 AU
direct	-7342 Mar 22 j 21:52	1° Ⅱ 36'40		morning rise	-7336 Feb 06 j 07:27	13° ≯ 33'41	
evening set	-7342 Jul 27 j 23:08	19° ∏ 38'31			-7336 Apr 29 j 10:05	0°ප	
max. Earth dist.	-7342 Aug 08 j 00:43	22° Ⅱ 06'46	6.33783 AU	retrograde	-7336 Jun 16 j 05:04	3° る 29'24	
				-	-7336 Aug 02 j 23:12	30°₽ ⋌ ¹	
conjunction	-7342 Aug 09 j 12:27	22° ∏ 26'48	1°29'22	opposition	-7336 Aug 14 j 20:13	28° ₹ 24'18	-2°14'37
minimum elong	-7342 Aug 09 j 12:25	22° I I26'47		min. Earth dist.	-7336 Aug 13 j 19:12		4.07399 AU
			1 29 31				4.07399 AU
morning rise	-7342 Aug 21 j 23:33	25° Ⅱ 14'05		direct	-7336 Oct 12 j 00:46	23° ₹ 26'00	
	-7342 Sep 12 j 20:07	0∘ ௐ			-7336 Dec 17 j 09:24	0°₹	
retrograde	-7342 Dec 22 j 04:54	12° © 45'23		evening set	-7335 Feb 15 j 04:26	12° る 33'44	
opposition	-7341 Feb 21 j 04:49	7° © 53'41	2°15'51				
min. Earth dist.	-7341 Feb 22 j 06:02	7° © 45'41	4.31115 AU	conjunction	-7335 Feb 28 j 20:57	15° る 43'10	-1°30'35
direct	-7341 Apr 24 j 11:12	2° © 55'51		minimum elong	-7335 Feb 28 j 20:59	15° ප් 43'11	1°31'04
evening set	-7341 Aug 28 j 03:32	21° © 02'49		max. Earth dist.	-7335 Mar 02 j 07:30	16° ප 03'08	6.10499 AU
max. Earth dist.	-7341 Sep 08 j 08:00		6.27331 AU	morning rise	-7335 Mar 14 j 14:51	18° ප 53'07	
max. Larm dist.	-7341 Sep 00 J 00.00	23 333 10	0.27331 AO	morning risc	-7335 May 05 j 19:17	0°≈	
	7241 0 00:12 46	220652116	1020150	. 1	• •		
conjunction	-7341 Sep 09 j 13:46		1°28'59	retrograde	-7335 Jul 20 j 19:16	8°≈08'53	
			1020127	min. Earth dist.	7335 San 17 i 07:20	3°∞211'19	4.14625 AU
minimum elong	-7341 Sep 09 j 13:48	23° © 52'17	1 29 27		-7335 Sep 17 j 07:29		
morning rise	-7341 Sep 09 j 13:48 -7341 Sep 21 j 23:36	26°541'38	1 2921	opposition	-7335 Sep 17 j 07:29	3°≈05'25	
_			1 2921				
_	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22	26°5541'38	1 2921		-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30	3° ≈ 05′25	
morning rise	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25	26°€41'38 0°Ω 14°Ω51'25		opposition	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18	3°≈05'25 30°Ŗる 28°る03'50	
morning rise retrograde opposition	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04	26°\$41'38 0°\$\Omega\$ 14°\$\Omega\$51'25 9°\$\Omega\$57'42	1°55'31	opposition	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21	3°≈05'25 30°Rで 28°で03'50 0°≈	
morning rise retrograde opposition min. Earth dist.	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 Mar 26 j 21:02	26°\$41'38 0°\$\Omega\$ 14°\$\Omega\$51'25 9°\$\Omega\$52'37		opposition direct	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈	
morning rise retrograde opposition	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 Mar 26 j 21:02 -7340 May 26 j 12:05	26°\$41'38 0°Ω 14°Ω51'25 9°Ω57'42 9°Ω52'37 5°Ω02'40	1°55'31	opposition	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21	3°≈05'25 30°Rで 28°で03'50 0°≈	
morning rise retrograde opposition min. Earth dist. direct	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 Mar 26 j 21:02 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56	26°\$41'38 0°\$Ω 14°\$\O\$51'25 9°\$\O\$52'37 5°\$\O\$02'40 15°\$\O\$	1°55'31	opposition direct evening set	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Mar 23 j 13:47	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11	-2°02'59
morning rise retrograde opposition min. Earth dist.	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 Mar 26 j 21:02 -7340 May 26 j 12:05	26°\$41'38 0°Ω 14°Ω51'25 9°Ω57'42 9°Ω52'37 5°Ω02'40	1°55'31	opposition direct evening set conjunction	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Mar 23 j 13:47 -7334 Apr 06 j 07:42	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35	-2°02'59 -1°07'57
morning rise retrograde opposition min. Earth dist. direct	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 Mar 26 j 21:02 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56 -7340 Sep 27 j 21:27	26°\$41'38 0°\$Ω 14°\$\O\$51'25 9°\$\O\$52'37 5°\$\O\$02'40 15°\$\O\$	1°55'31	opposition direct evening set	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Mar 23 j 13:47	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11	-2°02'59
morning rise retrograde opposition min. Earth dist. direct	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 Mar 26 j 21:02 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56	26°\$41'38 0°\$Ω 14°\$\O\$51'25 9°\$\O\$52'37 5°\$\O\$02'40 15°\$\O\$	1°55'31	opposition direct evening set conjunction	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Mar 23 j 13:47 -7334 Apr 06 j 07:42	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35	-2°02'59 -1°07'57
morning rise retrograde opposition min. Earth dist. direct evening set	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 Mar 26 j 21:02 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56 -7340 Sep 27 j 21:27	26°Φ41'38 0°Ω 14°Ω51'25 9°Ω57'42 9°Ω52'37 5°Ω02'40 15°Ω 23°Ω21'50	1°55'31 4.23137 AU	opposition direct evening set conjunction minimum elong	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Mar 23 j 13:47 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35 20°≈04'37	-2°02'59 -1°07'57 1°08'18
morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 Mar 26 j 21:02 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56 -7340 Sep 27 j 21:27 -7340 Oct 10 j 10:50 -7340 Oct 10 j 10:54	26°\$41'38 0°Ω 14°Ω51'25 9°Ω57'42 9°Ω52'37 5°Ω02'40 15°Ω 23°Ω21'50 26°Ω16'13 26°Ω16'16	1°55'31 4.23137 AU 1°01'16	opposition direct evening set conjunction minimum elong max. Earth dist.	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Mar 23 j 13:47 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47 -7334 Apr 07 j 03:18 -7334 Apr 20 j 00:36	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35 20°≈04'37 20°≈15'40 23°≈10'20	-2°02'59 -1°07'57 1°08'18
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 Mar 26 j 21:02 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56 -7340 Sep 27 j 21:27 -7340 Oct 10 j 10:50 -7340 Oct 10 j 10:54 -7340 Oct 09 j 22:01	26°\$41'38 0°\$Ω 14°\$\Omega{5}1'25 9°\$\Omega{5}7'42 9°\$\Omega{5}2'37 5°\$\Omega{2}02'40 15°\$\Omega{2}3°\$\Omega{2}1'50 26°\$\Omega{1}6'13 26°\$\Omega{1}6'16 26°\$\Omega{6}08'47	1°55'31 4.23137 AU 1°01'16 1°01'35	opposition direct evening set conjunction minimum elong max. Earth dist. morning rise	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Mar 23 j 13:47 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47 -7334 Apr 07 j 03:18 -7334 Apr 20 j 00:36 -7334 May 21 j 11:06	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35 20°≈04'37 20°≈15'40 23°≈10'20 0°¥	-2°02'59 -1°07'57 1°08'18
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 Mar 26 j 21:02 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56 -7340 Oct 10 j 10:50 -7340 Oct 10 j 10:54 -7340 Oct 09 j 22:01 -7340 Oct 23 j 01:24	26°Φ41'38 0°Ω 14°Ω51'25 9°Ω57'42 9°Ω52'37 5°Ω02'40 15°Ω 23°Ω21'50 26°Ω16'13 26°Ω16'16 26°Ω08'47 29°Ω11'28	1°55'31 4.23137 AU 1°01'16 1°01'35	opposition direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Mar 23 j 13:47 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47 -7334 Apr 07 j 03:18 -7334 Apr 20 j 00:36 -7334 May 21 j 11:06 -7334 Aug 22 j 18:48	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35 20°≈04'37 20°≈15'40 23°≈10'20 0°ℋ 11°ℋ33'21	-2°02'59 -1°07'57 1°08'18 6.19058 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 Mar 26 j 21:02 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56 -7340 Sep 27 j 21:27 -7340 Oct 10 j 10:54 -7340 Oct 09 j 22:01 -7340 Oct 23 j 01:24 -7340 Oct 26 j 13:50	26°Φ41'38 0°Ω 14°Ω51'25 9°Ω57'42 9°Ω52'37 5°Ω02'40 15°Ω 23°Ω21'50 26°Ω16'13 26°Ω16'16 26°Ω08'47 29°Ω11'28 0°™	1°55'31 4.23137 AU 1°01'16 1°01'35	opposition direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47 -7334 Apr 07 j 03:18 -7334 Apr 20 j 00:36 -7334 Aug 22 j 18:48 -7334 Oct 20 j 23:28	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35 20°≈04'37 20°≈15'40 23°≈10'20 0°ℋ 11°ℋ33'21 6°ℋ33'20	-2°02'59 -1°07'57 1°08'18 6.19058 AU -1°10'29
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 Mar 26 j 21:02 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56 -7340 Sep 27 j 21:27 -7340 Oct 10 j 10:50 -7340 Oct 10 j 10:54 -7340 Oct 23 j 01:24 -7340 Oct 26 j 13:50 -7339 Feb 28 j 03:52	26°Φ41'38 0°Ω 14°Ω51'25 9°Ω57'42 9°Ω52'37 5°Ω02'40 15°Ω 23°Ω21'50 26°Ω16'13 26°Ω16'16 26°Ω08'47 29°Ω11'28 0°M 18°M09'25	1°55'31 4.23137 AU 1°01'16 1°01'35 6.18559 AU	opposition direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47 -7334 Apr 07 j 03:18 -7334 Apr 20 j 00:36 -7334 Aug 22 j 18:48 -7334 Oct 20 j 23:28 -7334 Oct 20 j 17:43	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35 20°≈04'37 20°≈15'40 23°≈10'20 0°₩ 11°₩33'21 6°₩33'20 6°₩35'17	-2°02'59 -1°07'57 1°08'18 6.19058 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56 -7340 Sep 27 j 21:27 -7340 Oct 10 j 10:50 -7340 Oct 10 j 10:54 -7340 Oct 23 j 01:24 -7340 Oct 26 j 13:50 -7339 Feb 28 j 03:52 -7339 Apr 30 j 09:41	26°Φ41'38 0°Ω 14°Ω51'25 9°Ω57'42 9°Ω52'37 5°Ω02'40 15°Ω 23°Ω21'50 26°Ω16'13 26°Ω16'16 26°Ω08'47 29°Ω11'28 0°ႃႃM 18°ႃ™09'25 13°ႃ™12'18	1°55'31 4.23137 AU 1°01'16 1°01'35 6.18559 AU	opposition direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47 -7334 Apr 06 j 07:47 -7334 Apr 07 j 03:18 -7334 Apr 20 j 00:36 -7334 May 21 j 11:06 -7334 Aug 22 j 18:48 -7334 Oct 20 j 23:28 -7334 Oct 20 j 17:43 -7334 Dec 20 j 05:21	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35 20°≈04'37 20°≈15'40 23°≈10'20 0°₩ 11°₩33'21 6°₩33'20 6°₩35'17 1°₩29'44	-2°02'59 -1°07'57 1°08'18 6.19058 AU -1°10'29
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56 -7340 Sep 27 j 21:27 -7340 Oct 10 j 10:50 -7340 Oct 10 j 10:54 -7340 Oct 23 j 01:24 -7340 Oct 26 j 13:50 -7339 Feb 28 j 03:52 -7339 Apr 30 j 09:41 -7339 Apr 30 j 12:22	26°\$41'38 0°\$\Omega\$140 \text{S51'25} 9°\$\Omega\$57'42 9°\$\Omega\$2'37 5°\$\Omega\$02'40 15°\$\Omega\$23°\$\Omega\$21'50 26°\$\Omega\$16'16 26°\$\Omega\$016'16 26°\$\Omega\$08'47 29°\$\Omega\$11'28 0°\$\Omega\$12'18 13°\$\Omega\$11'26	1°55'31 4.23137 AU 1°01'16 1°01'35 6.18559 AU	opposition direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47 -7334 Apr 07 j 03:18 -7334 Apr 20 j 00:36 -7334 Aug 22 j 18:48 -7334 Oct 20 j 23:28 -7334 Oct 20 j 17:43	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35 20°≈04'37 20°≈15'40 23°≈10'20 0°₩ 11°₩33'21 6°₩33'20 6°₩35'17	-2°02'59 -1°07'57 1°08'18 6.19058 AU -1°10'29
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56 -7340 Sep 27 j 21:27 -7340 Oct 10 j 10:50 -7340 Oct 10 j 10:54 -7340 Oct 23 j 01:24 -7340 Oct 26 j 13:50 -7339 Feb 28 j 03:52 -7339 Apr 30 j 09:41	26°Φ41'38 0°Ω 14°Ω51'25 9°Ω57'42 9°Ω52'37 5°Ω02'40 15°Ω 23°Ω21'50 26°Ω16'13 26°Ω16'16 26°Ω08'47 29°Ω11'28 0°ႃႃM 18°ႃ™09'25 13°ႃ™12'18	1°55'31 4.23137 AU 1°01'16 1°01'35 6.18559 AU	opposition direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47 -7334 Apr 06 j 07:47 -7334 Apr 07 j 03:18 -7334 Apr 20 j 00:36 -7334 May 21 j 11:06 -7334 Aug 22 j 18:48 -7334 Oct 20 j 23:28 -7334 Oct 20 j 17:43 -7334 Dec 20 j 05:21	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35 20°≈04'37 20°≈15'40 23°≈10'20 0°₩ 11°₩33'21 6°₩33'20 6°₩35'17 1°₩29'44	-2°02'59 -1°07'57 1°08'18 6.19058 AU -1°10'29
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56 -7340 Sep 27 j 21:27 -7340 Oct 10 j 10:50 -7340 Oct 10 j 10:54 -7340 Oct 23 j 01:24 -7340 Oct 26 j 13:50 -7339 Feb 28 j 03:52 -7339 Apr 30 j 09:41 -7339 Apr 30 j 12:22	26°\$41'38 0°\$\Omega\$140 \text{S51'25} 9°\$\Omega\$57'42 9°\$\Omega\$2'37 5°\$\Omega\$02'40 15°\$\Omega\$23°\$\Omega\$21'50 26°\$\Omega\$16'16 26°\$\Omega\$016'16 26°\$\Omega\$08'47 29°\$\Omega\$11'28 0°\$\Omega\$12'18 13°\$\Omega\$11'26	1°55'31 4.23137 AU 1°01'16 1°01'35 6.18559 AU	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47 -7334 Apr 06 j 07:47 -7334 Apr 07 j 03:18 -7334 Apr 20 j 00:36 -7334 May 21 j 11:06 -7334 Aug 22 j 18:48 -7334 Oct 20 j 23:28 -7334 Oct 20 j 17:43 -7334 Dec 20 j 05:21	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35 20°≈04'37 20°≈15'40 23°≈10'20 0°₩ 11°₩33'21 6°₩33'20 6°₩35'17 1°₩29'44	-2°02'59 -1°07'57 1°08'18 6.19058 AU -1°10'29 4.23622 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56 -7340 Sep 27 j 21:27 -7340 Oct 10 j 10:50 -7340 Oct 10 j 10:54 -7340 Oct 23 j 01:24 -7340 Oct 26 j 13:50 -7339 Feb 28 j 03:52 -7339 Apr 30 j 09:41 -7339 Apr 30 j 12:22 -7339 Jun 29 j 11:11	26°\$41'38 0°\$\Omega\$140'\$\Omega\$57'42 9°\$\Omega\$57'42 9°\$\Omega\$52'37 5°\$\Omega\$02'40 15°\$\Omega\$23°\$\Omega\$21'50 26°\$\Omega\$16'13 26°\$\Omega\$16'16 26°\$\Omega\$08'47 29°\$\Omega\$11'28 0°\$\Omega\$12'18 13°\$\Omega\$12'18 13°\$\Omega\$19'08	1°55'31 4.23137 AU 1°01'16 1°01'35 6.18559 AU	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47 -7334 Apr 06 j 07:47 -7334 Apr 20 j 00:36 -7334 Apr 20 j 00:36 -7334 Aug 22 j 18:48 -7334 Oct 20 j 23:28 -7334 Oct 20 j 17:43 -7334 Dec 20 j 05:21 -7333 Apr 27 j 13:51	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35 20°≈04'37 20°≈15'40 23°≈10'20 0°ℋ 11°ℋ33'21 6°ℋ35'17 1°ℋ29'44 20°ℋ03'52	-2°02'59 -1°07'57 1°08'18 6.19058 AU -1°10'29 4.23622 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-7341 Sep 21 j 23:36 -7340 Oct 06 j 18:22 -7340 Mar 26 j 05:04 -7340 Mar 26 j 21:02 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56 -7340 Sep 27 j 21:27 -7340 Oct 10 j 10:50 -7340 Oct 10 j 10:54 -7340 Oct 23 j 01:24 -7340 Oct 26 j 13:50 -7339 Feb 28 j 03:52 -7339 Apr 30 j 09:41 -7339 Apr 30 j 12:22 -7339 Oct 30 j 23:09	26°\$41'38 0°\$\Omega\$140'\$\Omega\$57'42 9°\$\Omega\$57'42 9°\$\Omega\$52'37 5°\$\Omega\$02'40 15°\$\Omega\$23°\$\Omega\$21'50 26°\$\Omega\$16'13 26°\$\Omega\$16'16 26°\$\Omega\$08'47 29°\$\Omega\$11'28 0°\$\Omega\$12'18 13°\$\Omega\$12'18 13°\$\Omega\$19'08	1°55'31 4.23137 AU 1°01'16 1°01'35 6.18559 AU	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47 -7334 Apr 06 j 07:47 -7334 Apr 00 j 00:36 -7334 Apr 20 j 00:36 -7334 Apr 20 j 11:06 -7334 Aug 22 j 18:48 -7334 Oct 20 j 23:28 -7334 Oct 20 j 17:43 -7334 Dec 20 j 05:21 -7333 Apr 27 j 13:51 -7333 May 11 j 03:58 -7333 May 11 j 04:00	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35 20°≈04'37 20°≈15'40 23°≈10'20 0° ₩ 11° ₩33'21 6° ₩35'17 1° ₩29'44 20° ₩03'52 23° ₩05'09	-2°02'59 -1°07'57 1°08'18 6.19058 AU -1°10'29 4.23622 AU -0°23'34 0°23'41
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56 -7340 Sep 27 j 21:27 -7340 Oct 10 j 10:50 -7340 Oct 10 j 10:54 -7340 Oct 23 j 01:24 -7340 Oct 26 j 13:50 -7340 Oct 26 j 13:50 -7339 Feb 28 j 03:52 -7339 Apr 30 j 09:41 -7339 Jun 29 j 11:11 -7339 Oct 30 j 23:09 -7339 Nov 12 j 19:42	26°Φ41'38 0°Ω 14°Ω51'25 9°Ω57'42 9°Ω52'37 5°Ω02'40 15°Ω 23°Ω21'50 26°Ω16'16 26°Ω16'16 26°Ω08'47 29°Ω11'28 0°M 18°M09'25 13°M12'18 13°M11'26 8°M19'08 26°M55'32	1°55'31 4.23137 AU 1°01'16 1°01'35 6.18559 AU 0°57'05 4.14109 AU	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47 -7334 Apr 07 j 03:18 -7334 Apr 20 j 00:36 -7334 Aug 22 j 18:48 -7334 Oct 20 j 23:28 -7334 Oct 20 j 17:43 -7334 Dec 20 j 05:21 -7333 Apr 27 j 13:51 -7333 May 11 j 04:00 -7333 May 11 j 04:00 -7333 May 11 j 00:27	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'37 20°≈15'40 23°≈10'20 0°₩ 11°₩33'21 6°₩33'20 6°₩35'17 1°₩29'44 20°₩03'52 23°₩05'09 23°₩05'11 23°₩05'11	-2°02'59 -1°07'57 1°08'18 6.19058 AU -1°10'29 4.23622 AU -0°23'34 0°23'41
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min minimum elong	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 Mar 26 j 21:02 -7340 May 26 j 12:05 -7340 Sep 27 j 21:27 -7340 Oct 10 j 10:50 -7340 Oct 10 j 10:54 -7340 Oct 23 j 01:24 -7340 Oct 23 j 01:24 -7340 Oct 26 j 13:50 -7339 Feb 28 j 03:52 -7339 Apr 30 j 09:41 -7339 Apr 30 j 12:22 -7339 Nov 12 j 19:42 -7339 Nov 12 j 19:44	26°Φ41'38 0°Ω 14°Ω51'25 9°Ω57'42 9°Ω52'37 5°Ω02'40 15°Ω 23°Ω21'50 26°Ω16'13 26°Ω16'16 26°Ω08'47 29°Ω11'28 0°™ 18°™09'25 13°™12'18 13°™11'26 8°™19'08 26°™55'32 29°™56'45 29°™56'45 29°™56'45	1°55'31 4.23137 AU 1°01'16 1°01'35 6.18559 AU 0°57'05 4.14109 AU	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47 -7334 Apr 07 j 03:18 -7334 Apr 20 j 00:36 -7334 May 21 j 11:06 -7334 Aug 22 j 18:48 -7334 Oct 20 j 23:28 -7334 Oct 20 j 17:43 -7334 Dec 20 j 05:21 -7333 Apr 27 j 13:51 -7333 May 11 j 03:58 -7333 May 11 j 04:00 -7333 May 11 j 00:27 -7333 May 24 j 15:37	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35 20°≈04'37 20°≈15'40 23°≈10'20 0°₩ 11°₩33'21 6°₩33'20 6°₩35'17 1°₩29'44 20°₩03'52 23°₩05'09 23°₩05'11 23°₩05'12 26°₩05'02	-2°02'59 -1°07'57 1°08'18 6.19058 AU -1°10'29 4.23622 AU -0°23'34 0°23'41
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min beath dist. direct evening set	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56 -7340 Sep 27 j 21:27 -7340 Oct 10 j 10:50 -7340 Oct 10 j 10:54 -7340 Oct 23 j 01:24 -7340 Oct 26 j 13:50 -7340 Oct 26 j 13:50 -7339 Feb 28 j 03:52 -7339 Apr 30 j 09:41 -7339 Apr 30 j 23:09 -7339 Nov 12 j 19:42 -7339 Nov 12 j 19:44 -7339 Nov 12 j 19:44 -7339 Nov 12 j 14:34	26°\$41'38 0°\$\Omega\$ 14°\$\Omega\$51'25 9°\$\Omega\$57'42 9°\$\Omega\$237 5°\$\Omega\$02'40 15°\$\Omega\$23°\$\Omega\$21'50 26°\$\Omega\$16'16 26°\$\Omega\$08'47 29°\$\Omega\$11'28 0°\$\Omega\$12'18 13°\$\Omega\$12'18 13°\$\Omega\$11'26 8°\$\Omega\$19'08 26°\$\Omega\$5'32 29°\$\Omega\$56'45 29°\$\Omega\$56'46 29°\$\Omega\$53'44	1°55'31 4.23137 AU 1°01'16 1°01'35 6.18559 AU 0°57'05 4.14109 AU	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47 -7334 Apr 06 j 07:47 -7334 Apr 07 j 03:18 -7334 Apr 20 j 00:36 -7334 Apr 20 j 00:36 -7334 Aug 22 j 18:48 -7334 Oct 20 j 23:28 -7334 Oct 20 j 17:43 -7334 Dec 20 j 05:21 -7333 Apr 27 j 13:51 -7333 May 11 j 03:58 -7333 May 11 j 03:58 -7333 May 11 j 00:27 -7333 May 24 j 15:37 -7333 Jun 11 j 15:11	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35 20°≈04'37 20°≈15'40 23°≈10'20 0°₩ 11°₩33'21 6°₩33'20 6°₩35'17 1°₩29'44 20°₩03'52 23°₩05'09 23°₩05'11 23°₩05'11 23°₩05'02 0°♥	-2°02'59 -1°07'57 1°08'18 6.19058 AU -1°10'29 4.23622 AU -0°23'34 0°23'41
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56 -7340 Sep 27 j 21:27 -7340 Oct 10 j 10:50 -7340 Oct 10 j 10:54 -7340 Oct 23 j 01:24 -7340 Oct 26 j 13:50 -7340 Oct 26 j 13:50 -7339 Feb 28 j 03:52 -7339 Apr 30 j 09:41 -7339 Apr 30 j 12:22 -7339 Nov 12 j 19:42 -7339 Nov 12 j 19:44 -7339 Nov 12 j 19:44 -7339 Nov 12 j 14:34 -7339 Nov 13 j 00:54	26° Φ41'38 0° Ω 14° Ω51'25 9° Ω57'42 9° Ω52'37 5° Ω02'40 15° Ω 23° Ω21'50 26° Ω16'13 26° Ω16'16 26° Ω08'47 29° Ω11'28 0° m 18° m 09'25 13° m 12'18 13° m 11'26 8° m 19'08 26° m 55'32 29° m 56'45 29° m 56'45 29° m 55'44 29° m 55'47	1°55'31 4.23137 AU 1°01'16 1°01'35 6.18559 AU 0°57'05 4.14109 AU 0°12'40 0°12'44	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47 -7334 Apr 06 j 07:47 -7334 Apr 06 j 07:47 -7334 Apr 07 j 03:18 -7334 Apr 20 j 00:36 -7334 Apr 20 j 00:36 -7334 Apr 20 j 11:06 -7334 Aug 22 j 18:48 -7334 Oct 20 j 23:28 -7334 Oct 20 j 23:28 -7334 Oct 20 j 17:43 -7334 Dec 20 j 05:21 -7333 Apr 27 j 13:51 -7333 May 11 j 03:58 -7333 May 11 j 04:00 -7333 May 11 j 00:27 -7333 May 24 j 15:37 -7333 Jun 11 j 15:11 -7333 Sep 23 j 14:23	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35 20°≈04'37 20°≈15'40 23°≈10'20 0°₩ 11°₩33'21 6°₩33'20 6°₩35'17 1°₩29'44 20°₩03'52 23°₩05'09 23°₩05'11 23°₩05'02 0°Ψ 13°Ψ42'44	-2°02'59 -1°07'57 1°08'18 6.19058 AU -1°10'29 4.23622 AU -0°23'34 0°23'41
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min beath dist. direct evening set	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 Mar 26 j 21:02 -7340 May 26 j 12:05 -7340 Sep 27 j 21:27 -7340 Oct 10 j 10:50 -7340 Oct 10 j 10:54 -7340 Oct 23 j 01:24 -7340 Oct 26 j 13:50 -7340 Oct 26 j 13:50 -7339 Feb 28 j 03:52 -7339 Apr 30 j 09:41 -7339 Apr 30 j 12:22 -7339 Jun 29 j 11:11 -7339 Nov 12 j 19:42 -7339 Nov 12 j 19:44 -7339 Nov 12 j 14:34 -7339 Nov 13 j 00:54 -7339 Nov 13 j 00:54 -7339 Nov 13 j 02:32	26°\$41'38 0°\$\Omega\$14'\Omega\$51'25 9°\Omega\$57'42 9°\Omega\$57'42 9°\Omega\$2'37 5°\Omega\$02'40 15°\Omega\$23°\Omega\$21'50 26°\Omega\$16'16 26°\Omega\$08'47 29°\Omega\$11'28 0°\Omega\$19'08 26°\Omega\$5'32 29°\Omega\$56'45 29°\Omega\$5'44 29°\Omega\$5'44 29°\Omega\$5'44 29°\Omega\$5'44 29°\Omega\$5'44 0°\Omega\$00'45	1°55'31 4.23137 AU 1°01'16 1°01'35 6.18559 AU 0°57'05 4.14109 AU	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47 -7334 Apr 06 j 07:47 -7334 Apr 06 j 07:47 -7334 Apr 20 j 00:36 -7334 Apr 20 j 00:36 -7334 Aug 22 j 18:48 -7334 Oct 20 j 23:28 -7334 Oct 20 j 17:43 -7334 Dec 20 j 05:21 -7333 Apr 27 j 13:51 -7333 May 11 j 03:58 -7333 May 11 j 04:00 -7333 May 11 j 04:00 -7333 May 24 j 15:37 -7333 Jun 11 j 15:11 -7333 Sep 23 j 14:23 -7333 Nov 11 j 12:43	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35 20°≈04'37 20°≈15'40 23°≈10'20 0°₩ 11°₩33'21 6°₩33'20 6°₩35'17 1°₩29'44 20°₩03'52 23°₩05'09 23°₩05'11 23°₩05'09 23°₩05'12 26°₩05'02 0°Ψ 13°Ψ42'44 10°Ψ08'54	-2°02'59 -1°07'57 1°08'18 6.19058 AU -1°10'29 4.23622 AU -0°23'34 0°23'41 6.27889 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min Earth dist. direct evening set	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 Mar 26 j 21:02 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56 -7340 Sep 27 j 21:27 -7340 Oct 10 j 10:50 -7340 Oct 10 j 10:54 -7340 Oct 23 j 01:24 -7340 Oct 26 j 13:50 -7339 Feb 28 j 03:52 -7339 Apr 30 j 09:41 -7339 Apr 30 j 12:22 -7339 Jun 29 j 11:11 -7339 Oct 30 j 23:09 -7339 Nov 12 j 19:42 -7339 Nov 12 j 19:44 -7339 Nov 12 j 19:44 -7339 Nov 13 j 00:54 -7339 Nov 13 j 01:15	26° Φ41'38 0° Ω 14° Ω51'25 9° Ω57'42 9° Ω52'37 5° Ω02'40 15° Ω 23° Ω21'50 26° Ω16'13 26° Ω16'16 26° Ω08'47 29° Ω11'28 0° m 18° m 09'25 13° m 12'18 13° m 11'26 8° m 19'08 26° m 55'32 29° m 56'45 29° m 56'45 29° m 55'44 29° m 55'47	1°55'31 4.23137 AU 1°01'16 1°01'35 6.18559 AU 0°57'05 4.14109 AU 0°12'40 0°12'44	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47 -7334 Apr 06 j 07:47 -7334 Apr 06 j 07:47 -7334 Apr 06 j 00:36 -7334 Apr 20 j 00:36 -7334 Aug 22 j 18:48 -7334 Oct 20 j 23:28 -7334 Oct 20 j 17:43 -7334 Dec 20 j 05:21 -7333 Apr 27 j 13:51 -7333 May 11 j 03:58 -7333 May 11 j 04:00 -7333 May 11 j 04:00 -7333 May 24 j 15:37 -7333 Nov 11 j 15:11 -7333 Sep 23 j 14:23 -7333 Nov 11 j 12:43 -7333 Nov 22 j 01:18	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35 20°≈04'37 20°≈15'40 23°≈10'20 0°ℋ 11°ℋ33'21 6°ℋ33'20 6°ℋ35'17 1°ℋ29'44 20°ℋ03'52 23°ℋ05'09 23°ℋ05'11 23°ℋ05'11 23°ℋ05'02 0°Ƴ 13°♈42'44 10°♈08'54 8°♈46'34	-2°02'59 -1°07'57 1°08'18 6.19058 AU -1°10'29 4.23622 AU -0°23'34 0°23'41 6.27889 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 Mar 26 j 21:02 -7340 May 26 j 12:05 -7340 Sep 27 j 21:27 -7340 Oct 10 j 10:50 -7340 Oct 10 j 10:54 -7340 Oct 23 j 01:24 -7340 Oct 26 j 13:50 -7340 Oct 26 j 13:50 -7339 Feb 28 j 03:52 -7339 Apr 30 j 09:41 -7339 Apr 30 j 12:22 -7339 Jun 29 j 11:11 -7339 Nov 12 j 19:42 -7339 Nov 12 j 19:44 -7339 Nov 12 j 14:34 -7339 Nov 13 j 00:54 -7339 Nov 13 j 00:54 -7339 Nov 13 j 02:32	26°\$41'38 0°\$\Omega\$14'\Omega\$51'25 9°\Omega\$57'42 9°\Omega\$57'42 9°\Omega\$2'37 5°\Omega\$02'40 15°\Omega\$23°\Omega\$21'50 26°\Omega\$16'16 26°\Omega\$08'47 29°\Omega\$11'28 0°\Omega\$19'08 26°\Omega\$5'32 29°\Omega\$56'45 29°\Omega\$5'44 29°\Omega\$5'44 29°\Omega\$5'44 29°\Omega\$5'44 29°\Omega\$5'44 0°\Omega\$00'45	1°55'31 4.23137 AU 1°01'16 1°01'35 6.18559 AU 0°57'05 4.14109 AU 0°12'40 0°12'44	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47 -7334 Apr 06 j 07:47 -7334 Apr 06 j 07:47 -7334 Apr 20 j 00:36 -7334 Apr 20 j 00:36 -7334 Aug 22 j 18:48 -7334 Oct 20 j 23:28 -7334 Oct 20 j 17:43 -7334 Dec 20 j 05:21 -7333 Apr 27 j 13:51 -7333 May 11 j 03:58 -7333 May 11 j 04:00 -7333 May 11 j 04:00 -7333 May 24 j 15:37 -7333 Jun 11 j 15:11 -7333 Sep 23 j 14:23 -7333 Nov 11 j 12:43	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35 20°≈04'37 20°≈15'40 23°≈10'20 0°₩ 11°₩33'21 6°₩33'20 6°₩35'17 1°₩29'44 20°₩03'52 23°₩05'09 23°₩05'11 23°₩05'09 23°₩05'12 26°₩05'02 0°Ψ 13°Ψ42'44 10°Ψ08'54	-2°02'59 -1°07'57 1°08'18 6.19058 AU -1°10'29 4.23622 AU -0°23'34 0°23'41 6.27889 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min Earth dist. direct evening set	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 Mar 26 j 21:02 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56 -7340 Sep 27 j 21:27 -7340 Oct 10 j 10:50 -7340 Oct 10 j 10:54 -7340 Oct 23 j 01:24 -7340 Oct 26 j 13:50 -7339 Feb 28 j 03:52 -7339 Apr 30 j 09:41 -7339 Apr 30 j 12:22 -7339 Jun 29 j 11:11 -7339 Oct 30 j 23:09 -7339 Nov 12 j 19:42 -7339 Nov 12 j 19:44 -7339 Nov 12 j 19:44 -7339 Nov 13 j 00:54 -7339 Nov 13 j 01:15	26° Φ41'38 0° Ω 14° Ω51'25 9° Ω57'42 9° Ω52'37 5° Ω02'40 15° Ω 23° Ω21'50 26° Ω16'16 26° Ω16'16 26° Ω08'47 29° Ω11'28 0° ™ 18° ™ 19'08 26° ™ 55'32 29° ™ 56'45 29° ™ 56'45 29° ™ 56'46 29° ™ 59'47 0° Ω00'45 0° Ω	1°55'31 4.23137 AU 1°01'16 1°01'35 6.18559 AU 0°57'05 4.14109 AU 0°12'40 0°12'44	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde aconjunction minimum elong max. Earth dist. morning rise	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47 -7334 Apr 06 j 07:47 -7334 Apr 06 j 07:47 -7334 Apr 06 j 00:36 -7334 Apr 20 j 00:36 -7334 Aug 22 j 18:48 -7334 Oct 20 j 23:28 -7334 Oct 20 j 17:43 -7334 Dec 20 j 05:21 -7333 Apr 27 j 13:51 -7333 May 11 j 03:58 -7333 May 11 j 04:00 -7333 May 11 j 04:00 -7333 May 24 j 15:37 -7333 Nov 11 j 15:11 -7333 Sep 23 j 14:23 -7333 Nov 11 j 12:43 -7333 Nov 22 j 01:18	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35 20°≈04'37 20°≈15'40 23°≈10'20 0°ℋ 11°ℋ33'21 6°ℋ33'20 6°ℋ35'17 1°ℋ29'44 20°ℋ03'52 23°ℋ05'09 23°ℋ05'11 23°ℋ05'11 23°ℋ05'02 0°℉ 13°℉42'44 10°℉08'54 8°℉46'34	-2°02'59 -1°07'57 1°08'18 6.19058 AU -1°10'29 4.23622 AU -0°23'34 0°23'41 6.27889 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise desc. node	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 Mar 26 j 21:02 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56 -7340 Sep 27 j 21:27 -7340 Oct 10 j 10:50 -7340 Oct 10 j 10:54 -7340 Oct 23 j 01:24 -7340 Oct 26 j 13:50 -7339 Feb 28 j 03:52 -7339 Apr 30 j 09:41 -7339 Apr 30 j 12:22 -7339 Jun 29 j 11:11 -7339 Oct 30 j 23:09 -7339 Nov 12 j 19:42 -7339 Nov 12 j 19:44 -7339 Nov 12 j 19:44 -7339 Nov 12 j 14:34 -7339 Nov 13 j 00:54 -7339 Nov 13 j 00:54 -7339 Nov 13 j 01:15 -7339 Nov 25 j 19:17 -7338 Feb 12 j 23:08	26°\$41'38 0°\$\Omega\$1'25 9°\$\Omega\$57'42 9°\$\Omega\$52'37 5°\$\Omega\$02'40 15°\$\Omega\$23°\$\Omega\$21'50 26°\$\Omega\$16'16 26°\$\Omega\$16'16 26°\$\Omega\$11'28 0°\$\Omega\$11'28 0°\$\Omega\$11'28 0°\$\Omega\$11'28 13°\$\Omega\$11'26 8°\$\Omega\$19'08 26°\$\Omega\$5'32 29°\$\Omega\$56'46 29°\$\Omega\$59'47 0°\$\Omega\$00'45 0°\$\Omega\$2 2°\$\Omega\$59'38	1°55'31 4.23137 AU 1°01'16 1°01'35 6.18559 AU 0°57'05 4.14109 AU 0°12'40 0°12'44	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde asc. node opposition min. Earth dist. direct	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47 -7334 Apr 06 j 07:47 -7334 Apr 00 j 00:36 -7334 Apr 20 j 00:36 -7334 Aug 22 j 18:48 -7334 Oct 20 j 23:28 -7334 Oct 20 j 17:43 -7334 Dec 20 j 05:21 -7333 May 11 j 03:58 -7333 May 11 j 04:00 -7333 May 11 j 04:00 -7333 May 24 j 15:37 -7333 Nov 11 j 12:43 -7333 Nov 22 j 01:18 -7333 Nov 22 j 13:16	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35 20°≈04'37 20°≈15'40 23°≈10'20 0°ℋ 11°ℋ33'21 6°ℋ33'20 6°ℋ35'17 1°ℋ29'44 20°ℋ03'52 23°ℋ05'09 23°ℋ05'11 23°ℋ05'11 23°ℋ05'11 23°ℋ05'12 26°ℋ05'02 0°℉ 13°℃42'44 10°℉08'54 8°℉46'34 8°℉43'44	-2°02'59 -1°07'57 1°08'18 6.19058 AU -1°10'29 4.23622 AU -0°23'34 0°23'41 6.27889 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun begin behind sun end max. Earth dist. morning rise desc. node retrograde	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 Mar 26 j 21:02 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56 -7340 Sep 27 j 21:27 -7340 Oct 10 j 10:50 -7340 Oct 10 j 10:54 -7340 Oct 23 j 01:24 -7340 Oct 26 j 13:50 -7339 Feb 28 j 03:52 -7339 Apr 30 j 09:41 -7339 Apr 30 j 12:22 -7339 Jun 29 j 11:11 -7339 Oct 30 j 23:09 -7339 Nov 12 j 19:42 -7339 Nov 12 j 19:44 -7339 Nov 12 j 19:44 -7339 Nov 13 j 00:54 -7339 Nov 13 j 00:54 -7339 Nov 13 j 01:15 -7339 Nov 25 j 19:17 -7338 Feb 12 j 23:08 -7338 Apr 05 j 11:41	26°\$41'38 0°\$\Omega\$ 14°\$\Omega\$57'42 9°\$\Omega\$57'42 9°\$\Omega\$52'37 5°\$\Omega\$02'40 15°\$\Omega\$23°\$\Omega\$21'50 26°\$\Omega\$16'16 26°\$\Omega\$016'16 26°\$\Omega\$011'28 0°\$\Omega\$11'28 0°\$\Omega\$11'28 0°\$\Omega\$12'18 13°\$\Omega\$12'18 13°\$\Omega\$19'08 26°\$\Omega\$55'32 29°\$\Omega\$56'45 29°\$\Omega\$56'45 29°\$\Omega\$59'38 18°\$\Omega\$47'47 22°\$\Omega\$41'45	1°55'31 4.23137 AU 1°01'16 1°01'35 6.18559 AU 0°57'05 4.14109 AU 0°12'40 0°12'44	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. direct evening set retrograde asc. node opposition min. Earth dist. direct evening set	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47 -7334 Apr 06 j 07:47 -7334 Apr 06 j 07:47 -7334 Apr 00 j 00:36 -7334 Apr 20 j 00:36 -7334 Apr 20 j 11:06 -7334 Apr 20 j 11:06 -7334 Apr 20 j 11:06 -7334 Apr 20 j 15:38 -7334 Oct 20 j 17:43 -7334 Dec 20 j 05:21 -7333 Apr 27 j 13:51 -7333 May 11 j 03:58 -7333 May 11 j 04:00 -7333 May 11 j 04:00 -7333 May 11 j 04:00 -7333 Nov 11 j 15:11 -7333 Sep 23 j 14:23 -7333 Nov 22 j 01:18 -7333 Nov 22 j 09:51 -7332 Jan 22 j 13:16 -7332 May 29 j 23:22	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35 20°≈04'37 20°≈15'40 23°≈10'20 0°ℋ 11°ℋ33'21 6°ℋ35'17 1°ℋ29'44 20°ℋ03'52 23°ℋ05'09 23°ℋ05'11 23°ℋ05'11 23°ℋ05'11 23°ℋ05'12 0°℉ 13°℉42'44 10°℉08'54 8°℉46'34 8°℉43'44 3°℉42'34 21°℉57'48	-2°02'59 -1°07'57 1°08'18 6.19058 AU -1°10'29 4.23622 AU -0°23'34 0°23'41 6.27889 AU 0°02'00 4.31506 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise desc. node	-7341 Sep 21 j 23:36 -7341 Oct 06 j 18:22 -7340 Jan 24 j 21:25 -7340 Mar 26 j 05:04 -7340 Mar 26 j 21:02 -7340 May 26 j 12:05 -7340 Aug 20 j 15:56 -7340 Sep 27 j 21:27 -7340 Oct 10 j 10:50 -7340 Oct 10 j 10:54 -7340 Oct 23 j 01:24 -7340 Oct 26 j 13:50 -7339 Feb 28 j 03:52 -7339 Apr 30 j 09:41 -7339 Apr 30 j 12:22 -7339 Jun 29 j 11:11 -7339 Oct 30 j 23:09 -7339 Nov 12 j 19:42 -7339 Nov 12 j 19:44 -7339 Nov 12 j 19:44 -7339 Nov 12 j 14:34 -7339 Nov 13 j 00:54 -7339 Nov 13 j 00:54 -7339 Nov 13 j 01:15 -7339 Nov 25 j 19:17 -7338 Feb 12 j 23:08	26° \$\times 41'38 0° \$\Omega\$ 14° \$\Omega 51'25 9° \$\Omega 55'42 9° \$\Omega 52'37 5° \$\Omega 02'40 15° \$\Omega\$ 23° \$\Omega 21'50 26° \$\Omega 16'16 26° \$\Omega 08'47 29° \$\Omega 11'28 0° \$\Omega\$ 13° \$\Omega 11'28 0° \$\Omega\$ 13° \$\Omega 11'26 8° \$\Omega 19'08 26° \$\Omega 55'32 29° \$\Omega 56'45 29° \$\Omega 56'46 29° \$\Omega 59'37 0° \$\Omega 00'45 0° \$\Omega\$ 2° \$\Omega 59'38 18° \$\Omega 47'47	1°55'31 4.23137 AU 1°01'16 1°01'35 6.18559 AU 0°57'05 4.14109 AU 0°12'40 0°12'44	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde asc. node opposition min. Earth dist. direct	-7335 Sep 18 j 00:46 -7335 Oct 12 j 12:30 -7335 Nov 16 j 02:18 -7335 Dec 21 j 00:21 -7334 Mar 14 j 18:27 -7334 Apr 06 j 07:42 -7334 Apr 06 j 07:47 -7334 Apr 06 j 07:47 -7334 Apr 00 j 00:36 -7334 Apr 20 j 00:36 -7334 Aug 22 j 18:48 -7334 Oct 20 j 23:28 -7334 Oct 20 j 17:43 -7334 Dec 20 j 05:21 -7333 May 11 j 03:58 -7333 May 11 j 04:00 -7333 May 11 j 04:00 -7333 May 24 j 15:37 -7333 Nov 11 j 12:43 -7333 Nov 22 j 01:18 -7333 Nov 22 j 13:16	3°≈05'25 30°R♂ 28°♂03'50 0°≈ 15°≈ 16°≈58'11 20°≈04'35 20°≈04'37 20°≈15'40 23°≈10'20 0°ℋ 11°ℋ33'21 6°ℋ35'17 1°ℋ29'44 20°ℋ03'52 23°ℋ05'09 23°ℋ05'11 23°ℋ05'11 23°ℋ05'11 23°ℋ05'12 0°℉ 13°℉42'44 10°℉08'54 8°℉46'34 8°℉43'44 3°℉42'34 21°℉57'48	-2°02'59 -1°07'57 1°08'18 6.19058 AU -1°10'29 4.23622 AU -0°23'34 0°23'41 6.27889 AU

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7332 in astronomical counting style is the year 7333 BCE in historical counting style. 24°**Y**′53'08 0°26'57 opposition -7332 Jun 12 j 05:25 -7326 Jun 10 j 05:59 22°**£**29'52 -0°34'22 conjunction minimum elong -7332 Jun 12 j 05:22 24°Y53'06 0°27'06 min. Earth dist. -7326 Jun 09 j 16:21 22°**△**34'23 4.06217 AU -7332 Jun 25 j 07:48 27°**Y**46'40 -7326 Aug 07 j 23:42 17°**£**36'35 direct morning rise -7332 Jul 05 j 12:31 0°8 -7326 Nov 10 j 19:46 oom. -7332 Oct 23 j 19:07 14°**8**59'06 -7326 Dec 09 j 14:56 6°M34'30 retrograde evening set opposition -7332 Dec 22 j 19:34 10°**8**05'58 1°11'55 9°M42'22 -0°48'09 -7326 Dec 22 j 21:03 min. Earth dist. -7332 Dec 23 j 14:21 9°**8**59'53 4.35976 AU conjunction -7326 Dec 22 j 20:59 direct -7331 Feb 23 j 02:55 5°**8**03'15 minimum elong 9°M42'19 0°48'24 -7331 May 23 j 05:01 15°8 max. Earth dist. -7326 Dec 24 j 02:17 9°M59'39 6.04426 AU evening set -7331 Jul 01 j 00:56 23°**8**06'28 morning rise -7325 Jan 05 j 06:43 12°M52'06 max. Earth dist. -7331 Jul 12 j 11:18 25°**8**38'03 6.36378 AU -7325 Jan 14 j 10:09 15°M -7325 Apr 02 j 19:36 0°×7 25°**8**56'42 -7325 May 17 j 04:32 conjunction -7331 Jul 13 j 20:55 1°08'48 retrograde 2°**х** 59'48 minimum elong -7331 Jul 13 j 20:50 25°**8**56'39 1°09'11 -7325 Jun 30 j 11:26 30°RML morning rise -7331 Jul 26 j 13:50 28°**8**45'24 min. Earth dist. -7325 Jul 15 j 07:44 28°MJ03'28 4.04166 AU -7331 Aug 01 j 05:49 $0^{\circ}II$ opposition -7325 Jul 16 j 07:42 27°M55'22 -1°44'43 retrograde -7331 Nov 24 j 07:36 15°**Ⅲ**56'53 direct -7325 Sep 12 j 09:10 22°M59'57 opposition -7330 Jan 23 j 21:14 11°**Ⅱ**05'19 2°00'43 -7325 Nov 19 j 13:20 0°×7 min. Earth dist. -7330 Jan 24 j 23:07 10°**Ⅲ**57′04 4.35719 AU evening set -7324 Jan 15 j 05:28 12°**҂**10′05 direct -7330 Mar 27 j 11:59 6°**Ⅱ**04'55 evening set -7330 Aug 01 j 07:01 24°**Ⅱ**05'18 conjunction -7324 Jan 28 j 18:19 15°**∡**120'23 -1°24'16 max. Earth dist. -7330 Aug 12 j 08:01 26°**Ⅲ**33'23 6.33619 AU minimum elong -7324 Jan 28 i 18:15 15°**∡** 20′21 1°24'44 max. Earth dist. -7324 Jan 30 i 08:55 15°**х** 43′02 6.05155 AU conjunction -7330 Aug 13 j 19:32 26°**Ⅱ**53'18 1°30'54 morning rise -7324 Feb 11 i 09:57 18°**≯**32'02 -7330 Aug 13 j 19:31 26°**Ⅲ**53'17 1°31'22 -7324 Apr 04 j 11:25 0°궁 minimum elong -7330 Aug 26 j 06:02 29°**Ⅱ**40′23 -7324 Jun 21 j 02:17 8°**궁**25'44 morning rise retrograde -7330 Aug 27 j 17:15 0ಂತಾ -7324 Aug 19 j 15:02 3°る20'41 -2°15'52 opposition -7330 Dec 26 j 16:38 -7324 Aug 18 j 15:05 3°る28'53 4.07720 AU retrograde 17°9314'10 min. Earth dist. -7329 Feb 25 j 19:20 -7324 Sep 15 j 14:11 12°522'13 2°15'22 30°R.✓ opposition -7329 Feb 26 j 18:55 -7324 Oct 16 j 22:03 28°×21'53 min. Earth dist. 12°9514'44 4.30714 AU direct -7324 Nov 17 j 10:30 -7329 Apr 28 j 23:00 7°524'45 0°궁 direct -7329 Sep 01 j 10:28 -7323 Feb 20 j 06:42 25°531'08 evening set 17°**ට**30'11 evening set -7329 Sep 13 j 20:44 28°520'49 1°26'42 -7323 Mar 05 j 23:54 20°る39'37 -1°29'08 conjunction conjunction -7329 Sep 13 j 20:46 -7323 Mar 05 j 23:57 minimum elong 28°\$20'50 1°27'10 minimum elong 20°る39'38 1°29'38 -7329 Sep 12 j 17:18 -7323 Mar 07 j 10:46 max. Earth dist. 28°905'09 6.26727 AU max. Earth dist. 20°る59'42 6.11140 AU -7329 Sep 21 j 02:36 -7323 Mar 19 j 17:55 0 $^{\circ}\Omega$ morning rise 23°**る**49'21 morning rise -7329 Sep 26 j 06:41 1°£10'31 -7323 Apr 16 j 12:37 0°≈ -7329 Dec 05 j 03:26 15°€ retrograde -7323 Jul 25 j 12:29 12°≈59'28 retrograde -7328 Jan 29 j 14:15 19°**Ω**24'46 opposition -7323 Sep 22 j 16:42 7°≈56'23 -1°57'38 -7328 Mar 27 j 01:49 15°RΩ min. Earth dist. -7323 Sep 21 j 23:59 8°≈02'05 4.15515 AU -7328 Mar 30 j 22:05 14°**Q**30'40 1°49'32 -7323 Nov 20 j 20:42 2°≈54'28 opposition direct min. Earth dist. -7328 Mar 31 j 13:42 14°**Ω**25'42 4.22335 AU -7322 Feb 25 j 08:47 15°≈ -7328 May 31 j 03:02 9°**Ω**35'55 -7322 Mar 28 j 13:27 21°≈47'07 direct evening set -7328 Jul 31 j 06:31 15°€ evening set -7328 Oct 02 i 06:27 27°**Ω**55'46 conjunction -7322 Apr 11 i 07:05 24°≈52'59 -1°02'39 -7328 Oct 11 j 04:57 0° m minimum elong -7322 Apr 11 i 07:09 24°≈53'02 1°02'58 max. Earth dist. -7322 Apr 11 j 23:04 25°≈02'01 6.20130 AU conjunction -7328 Oct 14 j 20:28 0° m 50'51 0°55'39 morning rise -7322 Apr 24 j 23:46 27°≈58'10 -7328 Oct 14 i 20:32 0° m 50'54 0°55'56 -7322 May 04 i 02:34 0°**₩** minimum elong -7328 Oct 14 j 08:14 0° m 43'45 6.17639 AU retrograde -7322 Aug 27 j 07:40 16°**¥**14'34 max. Earth dist. -7328 Oct 27 j 12:09 3° m 46'57 -7322 Oct 25 j 12:34 11°\(\dagger) 14'59 -1°00'55 morning rise opposition -7327 Mar 04 j 22:02 22° m 50'25 min. Earth dist. 11°**)** 16'15 4.24750 AU retrograde -7322 Oct 25 j 08:48 opposition -7327 May 05 j 04:40 17° Mp 52'46 0°46'59 direct -7322 Dec 24 j 23:12 6°¥11'10 -7327 May 05 j 04:54 min. Earth dist. 17° Mp 52'42 4.13129 AU evening set -7321 May 02 j 08:19 24°\(\pm\)42'25 -7327 Jul 04 j 01:30 12° m 59'39 direct -7327 Oct 28 j 11:54 0∘**⊽** conjunction -7321 May 15 j 21:42 27°**)** 42'55 -0°16'28 -7327 Nov 04 j 12:48 -7321 May 15 j 21:43 27°**)** 42'56 0°16'32 evening set 1°**മ**38'19 minimum elong -7321 May 15 j 17:18 27°**)** € 40′29 6.28990 AU max. Earth dist. -7327 Nov 17 j 10:37 4°**Ω**40'27 0°05'20 $0^{\circ}\Upsilon$ conjunction -7321 May 26 j 04:24 0°**Y**41'51 minimum elong -7327 Nov 17 j 10:37 4°**₽**40'27 0°05'21 morning rise -7321 May 29 j 08:04 behind sun begin -7327 Nov 17 j 02:47 4°**£**35'51 asc. node -7321 Sep 21 j 16:13 18°**Y**10′30 behind sun end -7327 Nov 17 j 18:27 4°**£**45'03 retrograde -7321 Sep 27 j 22:58 18°**Y**14′22 max. Earth dist. -7327 Nov 17 j 20:27 4°**£**46'14 6.09220 AU opposition -7321 Nov 26 j 12:05 13°**Y**18'39 0°12'27 morning rise -7327 Nov 30 j 11:18 7°**£**44'16 min. Earth dist. -7321 Nov 26 j 21:28 13°**Y**15'33 4.32464 AU -7327 Dec 25 j 19:35 13°**♀**31'02 -7320 Jan 27 j 02:49 8°Y14'45 desc. node direct

-7320 Jun 03 j 12:41

evening set

26°Y27'20

-7326 Apr 10 j 11:48

27°**₽**31'25

retrograde

Attention astronomi	-		•				0
		-		max. Earth dist.	7321 BCE in historical c		(00100 ATT
conjunction	-7320 Jun 16 j 17:11	29° Υ 21'46			-7315 Nov 22 j 19:21		6.08108 AU
minimum elong	-7320 Jun 16 j 17:08	29° Y 21'44	0°33'49	morning rise	-7315 Dec 05 j 08:58	12° ≙ 42'37	
max. Earth dist.	-7320 Jun 15 j 16:50	29° Y 08′18	6.34967 AU		-7314 Mar 05 j 06:06	0°M₊	
	-7320 Jun 19 j 14:22	0°8		retrograde	-7314 Apr 15 j 15:16	2°M35'05	
morning rise	-7320 Jun 29 j 18:21	2° 8 14'28			-7314 May 27 j 00:38	30° ₹ Ω	
	-7320 Sep 03 j 12:48	15° 8		opposition	-7314 Jun 15 j 07:44	27° ₽ 33'06	-0°45'38
retrograde	-7320 Oct 28 j 04:35	19° 8 24'48		min. Earth dist.	-7314 Jun 14 j 15:18	27° ≏ 38'34	4.05481 AU
-	-7320 Dec 23 j 15:15	15° ₹ 8		direct	-7314 Aug 12 j 20:44	22° £ 39'44	
opposition	-7320 Dec 27 j 06:08	14° 8 31'58	1°20'21		-7314 Oct 21 j 21:59	0° M .	
min. Earth dist.	-7320 Dec 28 j 03:02		4.36374 AU	evening set	-7314 Dec 14 j 16:38	11°M40'29	
direct	-7319 Feb 27 j 16:11	9° 8 29'27	4.50574710	evening set	7514 Dec 14 j 10.50	11 110-10-29	
uncci	•	15° 8		conjunction	7214 Dag 27 : 22:49	14° M .48'56	0054141
	-7319 May 02 j 13:34			5	-7314 Dec 27 j 23:48		
evening set	-7319 Jul 05 j 09:57	27° 8 31'15		minimum elong	-7314 Dec 27 j 23:44	14°M48'54	0°54′59
	-7319 Jul 16 j 15:03	0° II			-7314 Dec 28 j 18:30	15° M ₊	
max. Earth dist.	-7319 Jul 16 j 19:12	0° ∏ 02'18	6.36403 AU	max. Earth dist.	-7314 Dec 29 j 07:19	15° M 07'35	6.04135 AU
				morning rise	-7313 Jan 10 j 10:28	17° M 59'13	
conjunction	-7319 Jul 18 j 04:50	0° Ⅱ 20'57	1°13'15		-7313 Mar 06 j 22:38	0° ⊼ ¹	
minimum elong	-7319 Jul 18 j 04:46	0° Ⅱ 20'55	1°13'40	retrograde	-7313 May 22 j 07:07	8° ₰ 07'16	
morning rise	-7319 Jul 30 j 20:29	3° Ⅱ 09'09		min. Earth dist.	-7313 Jul 20 j 07:39	3° х 10′55	4.04397 AU
retrograde	-7319 Nov 28 j 16:52	20° Ⅱ 22'06		opposition	-7313 Jul 21 j 08:17	3° х 02'34	-1°51'54
opposition	-7318 Jan 28 j 09:24	15° Ⅲ 30'34	2°05'00		-7313 Aug 14 j 15:41	30°RM	
min. Earth dist.	-7318 Jan 29 j 10:42	15° Ⅱ 22'31	4.35383 AU	direct	-7313 Sep 17 j 10:02	28°MJ06'46	
	J		4.33363 AU	unect	1 2		
direct	-7318 Mar 31 j 22:41	10° Ⅲ 30'35			-7313 Oct 21 j 03:35	0° ∡ 7	
evening set	-7318 Aug 05 j 14:29	28° Ⅲ 31′06		evening set	-7312 Jan 20 j 10:16	17° ∡ 17′08	
	-7318 Aug 12 j 05:31	0					
max. Earth dist.	-7318 Aug 16 j 14:40	0° © 59'03	6.32929 AU	conjunction	-7312 Feb 02 j 23:56	20° ∡ ¹27'26	-1°26'58
				minimum elong	-7312 Feb 02 j 23:54	20° 渘 27′24	1°27'26
conjunction	-7318 Aug 18 j 02:13	1° © 19'02	1°31'57	max. Earth dist.	-7312 Feb 04 j 16:52	20° х 51′23	6.05898 AU
minimum elong	-7318 Aug 18 j 02:12	1° 5 919'01	1°32'26	morning rise	-7312 Feb 16 j 15:59	23° ҂ ³38'54	
morning rise	-7318 Aug 30 j 12:17	4°9506'13		•	-7312 Mar 15 j 19:36	0°ರ	
retrograde	-7318 Dec 31 j 08:09	21°5544'38		retrograde	-7312 Jun 26 j 00:39	13° ට 26'56	
opposition	-7317 Mar 02 j 11:01	16°552'32	2°14'13	min. Earth dist.	-7312 Aug 23 j 11:28		4.08922 AU
min. Earth dist.	-7317 Mar 02 j 11:01	16°944'55	4.29702 AU	opposition	-7312 Aug 24 j 11:23	8° පි 22'01	
	v		4.29/02 AU		• •		-2 1008
direct	-7317 May 03 j 13:14	11°955'28		direct	-7312 Oct 21 j 20:29	3° පි 22'47	
evening set	-7317 Sep 05 j 19:03	0° Ω 03′29		evening set	-7311 Feb 25 j 09:28	22° る 28'05	
	-7317 Sep 05 j 12:54	$0^{\circ}\Omega$					
max. Earth dist.	-7317 Sep 17 j 03:03	2° Ω 38'37	6.25479 AU	conjunction	-7311 Mar 11 j 02:42	25° る 36'53	-1°27'07
				minimum elong	-7311 Mar 11 j 02:45	25° る 36'55	1°27'36
conjunction	-7317 Sep 18 j 05:32	2° Ω 53'46	1°23'54	max. Earth dist.	-7311 Mar 12 j 10:46	25° る 55'18	6.12675 AU
minimum elong	-7317 Sep 18 j 05:36	2° Ω 53'48	1°24'21	morning rise	-7311 Mar 24 j 20:51	28° る 45'55	
morning rise	-7317 Sep 30 j 16:00	5° Ω 44'13		C	-7311 Mar 30 j 07:22	0° ≈	
Č	-7317 Nov 12 j 21:38	15° Ω			-7311 Jun 17 j 22:07	15° ≈	
retrograde	-7316 Feb 03 j 08:44	24° Ω 05'19		retrograde	-7311 Jul 30 j 02:10	17° ≈ 47'04	
opposition	-7316 Apr 04 j 17:51	19° Ω 10'49	1°42'47	retrograde	-7311 Sep 10 j 01:41	17 ~~ 7 0 1 15° R≈	
							1051124
min. Earth dist.	-7316 Apr 05 j 06:53	19° Ω 06'40	4.20937 AU	opposition	-7311 Sep 27 j 07:13	12°≈44'18	
	-7316 May 14 j 03:34	15°R Ω		min. Earth dist.	-7311 Sep 26 j 15:59	12° ≈ 49'30	4.17218 AU
direct	-7316 Jun 04 j 17:39	14° Ω 16′24					
				direct	-7311 Nov 25 j 15:56	7° ≈ 41'58	
	-7316 Jun 26 j 06:56	15° Ω		direct	-7310 Feb 05 j 17:45	15° ≈	
	-7316 Jun 26 j 06:56 -7316 Sep 25 j 05:05			evening set			
evening set	-	15° Ω			-7310 Feb 05 j 17:45	15° ≈	
evening set	-7316 Sep 25 j 05:05	15° Ω 0° m			-7310 Feb 05 j 17:45 -7310 Apr 02 j 10:12	15° ≈	-0°57'06
-	-7316 Sep 25 j 05:05 -7316 Oct 06 j 19:06	15° N 0° My 2° My 39'11	0°49'30	evening set	-7310 Feb 05 j 17:45 -7310 Apr 02 j 10:12 -7310 Apr 16 j 03:34	15°≈ 26°≈29'59 29°≈34'59	
conjunction	-7316 Sep 25 j 05:05 -7316 Oct 06 j 19:06 -7316 Oct 19 j 10:06	15°Ω 0° m 2° m/39'11 5° m/35'18	0°49'30 0°49'45	evening set conjunction minimum elong	-7310 Feb 05 j 17:45 -7310 Apr 02 j 10:12 -7310 Apr 16 j 03:34 -7310 Apr 16 j 03:39	15°≈ 26°≈29'59 29°≈34'59 29°≈35'02	0°57'24
conjunction minimum elong	-7316 Sep 25 j 05:05 -7316 Oct 06 j 19:06 -7316 Oct 19 j 10:06 -7316 Oct 19 j 10:09	15° Ω 0° m 2° m 39'11 5° m 35'18 5° m 35'20	0°49'45	evening set	-7310 Feb 05 j 17:45 -7310 Apr 02 j 10:12 -7310 Apr 16 j 03:34 -7310 Apr 16 j 03:39 -7310 Apr 16 j 17:49	15°≈ 26°≈29'59 29°≈34'59 29°≈35'02 29°≈43'01	
conjunction minimum elong max. Earth dist.	-7316 Sep 25 j 05:05 -7316 Oct 06 j 19:06 -7316 Oct 19 j 10:06 -7316 Oct 19 j 10:09 -7316 Oct 19 j 01:07	15° \(\Omega\) 0° \(\mathbf{m} \) 2° \(\mathbf{m} \) 39'11 5° \(\mathbf{m} \) 35'18 5° \(\mathbf{m} \) 35'20 5° \(\mathbf{m} \) 30'04		evening set conjunction minimum elong max. Earth dist.	-7310 Feb 05 j 17:45 -7310 Apr 02 j 10:12 -7310 Apr 16 j 03:34 -7310 Apr 16 j 03:39 -7310 Apr 16 j 17:49 -7310 Apr 17 j 23:59	15°≈ 26°≈29'59 29°≈34'59 29°≈35'02 29°≈43'01 0°¥	0°57'24
conjunction minimum elong max. Earth dist. morning rise	-7316 Sep 25 j 05:05 -7316 Oct 06 j 19:06 -7316 Oct 19 j 10:06 -7316 Oct 19 j 10:09 -7316 Oct 19 j 01:07 -7316 Nov 01 j 02:51	15°Ω 0°m, 2°m,39'11 5°m,35'18 5°m,35'20 5°m,30'04 8°m,32'31	0°49'45	evening set conjunction minimum elong max. Earth dist. morning rise	-7310 Feb 05 j 17:45 -7310 Apr 02 j 10:12 -7310 Apr 16 j 03:34 -7310 Apr 16 j 03:39 -7310 Apr 16 j 17:49 -7310 Apr 17 j 23:59 -7310 Apr 29 j 19:24	15°≈ 26°≈29'59 29°≈34'59 29°≈35'02 29°≈43'01 0°₩ 2°₩39'05	0°57'24
conjunction minimum elong max. Earth dist. morning rise retrograde	-7316 Sep 25 j 05:05 -7316 Oct 06 j 19:06 -7316 Oct 19 j 10:06 -7316 Oct 19 j 10:09 -7316 Oct 19 j 01:07 -7316 Nov 01 j 02:51 -7315 Mar 10 j 00:40	15° \(\Omega\) 0° m/2° m/39'11 5° m/35'18 5° m/35'20 5° m/30'04 8° m/32'31 27° m/43'28	0°49'45 6.16224 AU	evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-7310 Feb 05 j 17:45 -7310 Apr 02 j 10:12 -7310 Apr 16 j 03:34 -7310 Apr 16 j 03:39 -7310 Apr 16 j 17:49 -7310 Apr 17 j 23:59 -7310 Apr 29 j 19:24 -7310 Aug 31 j 16:07	15°≈ 26°≈29'59 29°≈34'59 29°≈35'02 29°≈43'01 0°∺ 2°∺39'05 20°∺46'54	0°57'24 6.21877 AU
conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-7316 Sep 25 j 05:05 -7316 Oct 06 j 19:06 -7316 Oct 19 j 10:06 -7316 Oct 19 j 10:09 -7316 Oct 19 j 01:07 -7316 Nov 01 j 02:51 -7315 Mar 10 j 00:40 -7315 May 10 j 04:39	15° \(\Omega\) 0° m/2° m/39'11 5° m/35'18 5° m/35'20 5° m/30'04 8° m/32'31 27° m/43'28 22° m/45'20	0°49'45 6.16224 AU 0°36'10	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-7310 Feb 05 j 17:45 -7310 Apr 02 j 10:12 -7310 Apr 16 j 03:34 -7310 Apr 16 j 03:39 -7310 Apr 16 j 17:49 -7310 Apr 17 j 23:59 -7310 Apr 29 j 19:24 -7310 Aug 31 j 16:07 -7310 Oct 29 j 21:55	15°≈ 26°≈29'59 29°≈34'59 29°≈35'02 29°≈43'01 0° ₩ 2° ₩ 39'05 20° ₩ 46'54 15° ₩ 47'51	0°57'24 6.21877 AU -0°51'20
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-7316 Sep 25 j 05:05 -7316 Oct 06 j 19:06 -7316 Oct 19 j 10:06 -7316 Oct 19 j 10:09 -7316 Oct 19 j 01:07 -7316 Nov 01 j 02:51 -7315 Mar 10 j 00:40 -7315 May 10 j 04:39 -7315 May 10 j 03:42	15° \(\Omega\) 0° m/ 2° m/39'11 5° m/35'18 5° m/35'20 5° m/30'04 8° m/32'31 27° m/43'28 22° m/45'20 22° m/45'38	0°49'45 6.16224 AU	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-7310 Feb 05 j 17:45 -7310 Apr 02 j 10:12 -7310 Apr 16 j 03:34 -7310 Apr 16 j 03:39 -7310 Apr 16 j 17:49 -7310 Apr 17 j 23:59 -7310 Apr 29 j 19:24 -7310 Aug 31 j 16:07 -7310 Oct 29 j 21:55 -7310 Oct 29 j 20:12	15°≈ 26°≈29'59 29°≈34'59 29°≈35'02 29°≈43'01 0° ₩ 2° ₩39'05 20° ₩46'54 15° ₩47'51 15° ₩48'26	0°57'24 6.21877 AU
conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-7316 Sep 25 j 05:05 -7316 Oct 06 j 19:06 -7316 Oct 19 j 10:06 -7316 Oct 19 j 10:09 -7316 Oct 19 j 01:07 -7316 Nov 01 j 02:51 -7315 Mar 10 j 00:40 -7315 May 10 j 04:39	15° \(\Omega\) 0° m/2° m/39'11 5° m/35'18 5° m/35'20 5° m/30'04 8° m/32'31 27° m/43'28 22° m/45'20	0°49'45 6.16224 AU 0°36'10	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-7310 Feb 05 j 17:45 -7310 Apr 02 j 10:12 -7310 Apr 16 j 03:34 -7310 Apr 16 j 03:39 -7310 Apr 16 j 17:49 -7310 Apr 17 j 23:59 -7310 Apr 29 j 19:24 -7310 Aug 31 j 16:07 -7310 Oct 29 j 21:55 -7310 Oct 29 j 20:12 -7310 Dec 29 j 12:59	15°≈ 26°≈29'59 29°≈34'59 29°≈35'02 29°≈43'01 0° ₩ 2° ₩39'05 20° ₩46'54 15° ₩47'51 15° ₩48'26 10° ₩43'54	0°57'24 6.21877 AU -0°51'20
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-7316 Sep 25 j 05:05 -7316 Oct 06 j 19:06 -7316 Oct 19 j 10:06 -7316 Oct 19 j 10:09 -7316 Oct 19 j 01:07 -7316 Nov 01 j 02:51 -7315 Mar 10 j 00:40 -7315 May 10 j 04:39 -7315 May 10 j 03:42	15° \(\Omega\) 0° m/ 2° m/39'11 5° m/35'18 5° m/35'20 5° m/30'04 8° m/32'31 27° m/43'28 22° m/45'20 22° m/45'38	0°49'45 6.16224 AU 0°36'10	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-7310 Feb 05 j 17:45 -7310 Apr 02 j 10:12 -7310 Apr 16 j 03:34 -7310 Apr 16 j 03:39 -7310 Apr 16 j 17:49 -7310 Apr 17 j 23:59 -7310 Apr 29 j 19:24 -7310 Aug 31 j 16:07 -7310 Oct 29 j 21:55 -7310 Oct 29 j 20:12	15°≈ 26°≈29'59 29°≈34'59 29°≈35'02 29°≈43'01 0° ₩ 2° ₩39'05 20° ₩46'54 15° ₩47'51 15° ₩48'26 10° ₩43'54 29° ₩10'51	0°57'24 6.21877 AU -0°51'20
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-7316 Sep 25 j 05:05 -7316 Oct 06 j 19:06 -7316 Oct 19 j 10:06 -7316 Oct 19 j 10:09 -7316 Oct 19 j 01:07 -7316 Nov 01 j 02:51 -7315 Mar 10 j 00:40 -7315 May 10 j 03:42 -7315 Jul 08 j 22:07	15° \(\Omega\) 0° m/ 2° m/39'11 5° m/35'18 5° m/35'20 5° m/30'04 8° m/32'31 27° m/43'28 22° m/45'20 22° m/45'38 17° m/52'20	0°49'45 6.16224 AU 0°36'10	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-7310 Feb 05 j 17:45 -7310 Apr 02 j 10:12 -7310 Apr 16 j 03:34 -7310 Apr 16 j 03:39 -7310 Apr 16 j 17:49 -7310 Apr 17 j 23:59 -7310 Apr 29 j 19:24 -7310 Aug 31 j 16:07 -7310 Oct 29 j 21:55 -7310 Oct 29 j 20:12 -7310 Dec 29 j 12:59	15°≈ 26°≈29'59 29°≈34'59 29°≈35'02 29°≈43'01 0° ₩ 2° ₩39'05 20° ₩46'54 15° ₩47'51 15° ₩48'26 10° ₩43'54	0°57'24 6.21877 AU -0°51'20
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-7316 Sep 25 j 05:05 -7316 Oct 06 j 19:06 -7316 Oct 19 j 10:06 -7316 Oct 19 j 10:09 -7316 Oct 19 j 01:07 -7316 Nov 01 j 02:51 -7315 Mar 10 j 00:40 -7315 May 10 j 03:42 -7315 Jul 08 j 22:07 -7315 Oct 11 j 09:11	15° \$\mathcal{O}\$ 0° \$\mathcal{m}\$ 2° \$\mathcal{m}\$39'11 5° \$\mathcal{m}\$35'18 5° \$\mathcal{m}\$35'20 5° \$\mathcal{m}\$30'04 8° \$\mathcal{m}\$32'31 27° \$\mathcal{m}\$43'28 22° \$\mathcal{m}\$45'20 22° \$\mathcal{m}\$45'38 17° \$\mathcal{m}\$52'20 0° \$\mathcal{\Omega}\$	0°49'45 6.16224 AU 0°36'10	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-7310 Feb 05 j 17:45 -7310 Apr 02 j 10:12 -7310 Apr 16 j 03:34 -7310 Apr 16 j 03:39 -7310 Apr 16 j 17:49 -7310 Apr 17 j 23:59 -7310 Apr 29 j 19:24 -7310 Aug 31 j 16:07 -7310 Oct 29 j 21:55 -7310 Oct 29 j 20:12 -7310 Dec 29 j 12:59 -7309 May 06 j 22:18	15°≈ 26°≈29'59 29°≈34'59 29°≈35'02 29°≈43'01 0° ₩ 2° ₩39'05 20° ₩46'54 15° ₩47'51 15° ₩48'26 10° ₩43'54 29° ₩10'51	0°57'24 6.21877 AU -0°51'20
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct desc. node	-7316 Sep 25 j 05:05 -7316 Oct 06 j 19:06 -7316 Oct 19 j 10:06 -7316 Oct 19 j 10:09 -7316 Oct 19 j 01:07 -7316 Nov 01 j 02:51 -7315 Mar 10 j 00:40 -7315 May 10 j 04:39 -7315 Jul 08 j 22:07 -7315 Oct 11 j 09:11 -7315 Nov 04 j 06:21	15° \$\mathcal{O}\$ 0° \$\mathbf{m}\$ 2° \$\mathbf{m}\$39'11\$ 5° \$\mathbf{m}\$35'18 5° \$\mathbf{m}\$35'20 5° \$\mathbf{m}\$30'04 8° \$\mathbf{m}\$32'31 27° \$\mathbf{m}\$43'28 22° \$\mathbf{m}\$45'20 22° \$\mathbf{m}\$45'20 0° \$\mathbf{L}\$ 5° \$\mathbf{L}\$23'32	0°49'45 6.16224 AU 0°36'10	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-7310 Feb 05 j 17:45 -7310 Apr 02 j 10:12 -7310 Apr 16 j 03:34 -7310 Apr 16 j 03:39 -7310 Apr 16 j 17:49 -7310 Apr 17 j 23:59 -7310 Apr 29 j 19:24 -7310 Aug 31 j 16:07 -7310 Oct 29 j 20:12 -7310 Dec 29 j 12:59 -7309 May 06 j 22:18 -7309 May 10 j 15:24	15°≈ 26°≈29'59 29°≈34'59 29°≈35'02 29°≈43'01 0° ₩ 2° ₩39'05 20° ₩46'54 15° ₩47'51 15° ₩48'26 10° ₩43'54 29° ₩10'51	0°57'24 6.21877 AU -0°51'20 4.26363 AU
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct desc. node evening set	-7316 Sep 25 j 05:05 -7316 Oct 06 j 19:06 -7316 Oct 19 j 10:06 -7316 Oct 19 j 10:09 -7316 Oct 19 j 01:07 -7316 Nov 01 j 02:51 -7315 Mar 10 j 00:40 -7315 May 10 j 04:39 -7315 May 10 j 03:42 -7315 Jul 08 j 22:07 -7315 Oct 11 j 09:11 -7315 Nov 04 j 06:21 -7315 Nov 09 j 07:51	15° Ω 0° m 2° m 39'11 5° m 35'18 5° m 35'20 5° m 30'04 8° m 32'31 27° m 43'28 22° m 45'20 22° m 45'38 17° m 52'20 0° Ω 5° Ω 23'32 6° Ω 34'30	0°49'45 6.16224 AU 0°36'10 4.11797 AU	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-7310 Feb 05 j 17:45 -7310 Apr 02 j 10:12 -7310 Apr 16 j 03:34 -7310 Apr 16 j 03:39 -7310 Apr 16 j 17:49 -7310 Apr 17 j 23:59 -7310 Apr 29 j 19:24 -7310 Aug 31 j 16:07 -7310 Oct 29 j 21:55 -7310 Dec 29 j 12:59 -7309 May 06 j 22:18 -7309 May 20 j 10:32	15°≈ 26°≈29'59 29°≈34'59 29°≈35'02 29°≈43'01 0° ₩ 2° ₩39'05 20° ₩46'54 15° ₩47'51 15° ₩48'26 10° ₩43'54 29° ₩10'51 0° Ψ 2° Ψ10'21	0°57'24 6.21877 AU -0°51'20 4.26363 AU -0°09'34
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct desc. node evening set conjunction	-7316 Sep 25 j 05:05 -7316 Oct 06 j 19:06 -7316 Oct 19 j 10:06 -7316 Oct 19 j 10:09 -7316 Oct 19 j 01:07 -7316 Nov 01 j 02:51 -7315 Mar 10 j 00:40 -7315 May 10 j 04:39 -7315 May 10 j 03:42 -7315 Jul 08 j 22:07 -7315 Nov 04 j 06:21 -7315 Nov 09 j 07:51 -7315 Nov 22 j 06:50	15° Ω 0° m 2° m 39'11 5° m 35'18 5° m 35'20 5° m 30'04 8° m 32'31 27° m 43'28 22° m 45'20 22° m 45'38 17° m 52'20 0° Ω 5° Ω 23'32 6° Ω 34'30 9° Ω 37'41	0°49'45 6.16224 AU 0°36'10 4.11797 AU	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-7310 Feb 05 j 17:45 -7310 Apr 02 j 10:12 -7310 Apr 16 j 03:34 -7310 Apr 16 j 03:39 -7310 Apr 16 j 17:49 -7310 Apr 17 j 23:59 -7310 Apr 29 j 19:24 -7310 Aug 31 j 16:07 -7310 Oct 29 j 21:55 -7310 Dec 29 j 12:59 -7309 May 06 j 22:18 -7309 May 20 j 10:32 -7309 May 20 j 10:33	15°≈ 26°≈29'59 29°≈34'59 29°≈35'02 29°≈43'01 0°	0°57'24 6.21877 AU -0°51'20 4.26363 AU
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct desc. node evening set conjunction minimum elong	-7316 Sep 25 j 05:05 -7316 Oct 06 j 19:06 -7316 Oct 19 j 10:06 -7316 Oct 19 j 10:09 -7316 Oct 19 j 01:07 -7316 Nov 01 j 02:51 -7315 Mar 10 j 00:40 -7315 May 10 j 04:39 -7315 May 10 j 03:42 -7315 Jul 08 j 22:07 -7315 Nov 04 j 06:21 -7315 Nov 09 j 07:51 -7315 Nov 22 j 06:50 -7315 Nov 22 j 06:49	15° Ω 0° m 2° m 35'18 5° m 35'20 5° m 30'04 8° m 32'31 27° m 43'28 22° m 45'20 22° m 45'38 17° m 52'20 0° Ω 5° Ω 23'32 6° Ω 34'30 9° Ω 37'41 9° Ω 37'40	0°49'45 6.16224 AU 0°36'10 4.11797 AU	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin	-7310 Feb 05 j 17:45 -7310 Apr 02 j 10:12 -7310 Apr 16 j 03:34 -7310 Apr 16 j 03:39 -7310 Apr 16 j 17:49 -7310 Apr 17 j 23:59 -7310 Apr 29 j 19:24 -7310 Aug 31 j 16:07 -7310 Oct 29 j 21:55 -7310 Oct 29 j 20:12 -7310 Dec 29 j 12:59 -7309 May 06 j 22:18 -7309 May 10 j 15:24 -7309 May 20 j 10:32 -7309 May 20 j 10:33 -7309 May 20 j 03:47	15°≈ 26°≈29'59 29°≈34'59 29°≈35'02 29°≈43'01 0°	0°57'24 6.21877 AU -0°51'20 4.26363 AU -0°09'34
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct desc. node evening set conjunction	-7316 Sep 25 j 05:05 -7316 Oct 06 j 19:06 -7316 Oct 19 j 10:06 -7316 Oct 19 j 10:09 -7316 Oct 19 j 01:07 -7316 Nov 01 j 02:51 -7315 Mar 10 j 00:40 -7315 May 10 j 04:39 -7315 May 10 j 03:42 -7315 Jul 08 j 22:07 -7315 Nov 04 j 06:21 -7315 Nov 09 j 07:51 -7315 Nov 22 j 06:50	15° Ω 0° m 2° m 39'11 5° m 35'18 5° m 35'20 5° m 30'04 8° m 32'31 27° m 43'28 22° m 45'20 22° m 45'38 17° m 52'20 0° Ω 5° Ω 23'32 6° Ω 34'30 9° Ω 37'41	0°49'45 6.16224 AU 0°36'10 4.11797 AU	evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-7310 Feb 05 j 17:45 -7310 Apr 02 j 10:12 -7310 Apr 16 j 03:34 -7310 Apr 16 j 03:39 -7310 Apr 16 j 17:49 -7310 Apr 17 j 23:59 -7310 Apr 29 j 19:24 -7310 Aug 31 j 16:07 -7310 Oct 29 j 21:55 -7310 Dec 29 j 12:59 -7309 May 06 j 22:18 -7309 May 20 j 10:32 -7309 May 20 j 10:33	15°≈ 26°≈29'59 29°≈34'59 29°≈35'02 29°≈43'01 0°	0°57'24 6.21877 AU -0°51'20 4.26363 AU -0°09'34

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7309 in astronomical counting style is the year 7310 BCE in historical counting style. 5°**Υ**08'16 -7309 Jun 02 j 19:53 desc. node -7303 Sep 12 j 22:16 28° m 29'09 morning rise -7303 Sep 21 j 11:37 -7309 Aug 03 j 07:43 17°**Y**19'31 0∘**⊽** asc. node -7309 Oct 02 j 03:52 22°Y35'30 -7303 Nov 14 j 05:56 11°**≏**36'18 retrograde evening set -7309 Nov 30 j 18:51 17°**Υ**'40'11 0°22'22 opposition -7309 Dec 01 j 06:49 17°**Ƴ**36'14 -7303 Nov 27 j 06:06 min. Earth dist. 4.33430 AU conjunction 14° 240'25 -0°10'25 12° Y 36'17 -7303 Nov 27 j 06:04 0°10'29 direct -7308 Jan 31 j 13:26 minimum elong 14°**£**40′25 -7303 Nov 26 j 23:41 -7308 Jun 04 j 08:03 0°8 behind sun begin 14°**£**36'39 0°846'25 evening set -7308 Jun 07 j 21:02 behind sun end -7303 Nov 27 j 12:28 14°**£**44'10 max. Earth dist. 6.35475 AU 6.07143 AU -7308 Jun 19 j 22:36 3°**8**25'53 max. Earth dist. -7303 Nov 27 j 22:06 14°**£**49'53 morning rise -7303 Dec 10 j 09:34 17°**£**46'22 conjunction -7308 Jun 21 j 00:21 3°**8**40'06 0°39'50 -7302 Feb 05 j 05:36 0°M -7308 Jun 21 j 00:17 3°**8**40'04 -7302 Apr 20 j 20:19 minimum elong 0°40'03 retrograde 7°ML43'01 -7308 Jul 03 j 24:00 6°832'01 -7302 Jun 20 j 11:07 morning rise opposition 2° ML $40'27 -0^{\circ}56'45$ -7308 Aug 13 j 16:59 15°8 min. Earth dist. -7302 Jun 19 j 16:46 2°M46'34 4.05017 AU retrograde -7308 Nov 01 j 08:57 23°**8**41'22 -7302 Jul 11 j 18:23 30°R<u>₽</u> opposition -7308 Dec 31 j 13:01 18°**8**48'49 1°28'01 direct -7302 Aug 17 j 22:08 27°**£**46'49 min. Earth dist. -7307 Jan 01 j 10:59 18°**8**41'44 4.36407 AU -7302 Sep 23 j 17:10 0°M -7307 Feb 03 j 06:59 15°R₩ -7302 Dec 12 j 01:10 15°M direct -7307 Mar 04 j 00:04 13°**8**46'34 evening set -7302 Dec 19 j 20:03 16°M49'12 -7307 Apr 01 j 22:17 15°8 -7307 Jul 01 j 09:47 $0^{\circ}\Pi$ conjunction -7301 Jan 02 j 04:20 19°ML58'03 -1°00'53 -7307 Jul 09 i 15:44 1°**Ⅱ**48'18 minimum elong -7301 Jan 02 i 04:15 19°M58'00 1°01'14 evening set max. Earth dist. -7307 Jul 20 j 20:45 4°**Ⅱ**17'20 6.35927 AU max. Earth dist. -7301 Jan 03 i 15:33 20°M18'51 6.04182 AU morning rise -7301 Jan 15 j 15:51 23°M08'39 -7307 Jul 22 j 09:19 4°II37'39 1°17'09 -7301 Feb 14 j 20:36 0° **₹** conjunction minimum elong -7307 Jul 22 j 09:15 4°**Ⅲ**37'37 -7301 May 27 j 10:24 13°**∡** 15′06 1°17'34 retrograde -7307 Aug 04 j 00:08 7°**Ⅱ**25'38 -7301 Jul 25 j 07:50 morning rise min. Earth dist. 8° **₹**18'47 4.04952 AU retrograde -7307 Dec 03 j 02:34 24°**Ⅱ**41'52 -7301 Jul 26 j 09:05 8°**₹**10'14 -1°58'15 opposition -7306 Feb 01 j 19:31 19°**I**I50′22 2°08′31 -7301 Sep 22 j 10:53 3° ×7 14'00 opposition direct -7306 Feb 02 j 22:17 4.34446 AU -7300 Jan 25 j 15:34 22°×23'33 min. Earth dist. 19°**Ⅱ**41'51 evening set -7306 Apr 05 j 08:38 14°**I**I50'41 direct -7306 Jul 27 j 18:26 -7300 Feb 08 j 05:41 25°**∡**133'37 -1°29'03 0°9 conjunction -7300 Feb 08 j 05:39 -7306 Aug 09 j 20:19 2°953'22 25°**х** 33′36 1°29′31 evening set minimum elong -7306 Aug 20 j 21:06 5°9522'06 -7300 Feb 09 j 21:01 25°**₹**56'34 max. Earth dist. 6.31596 AU max. Earth dist. 6.06853 AU -7300 Feb 21 j 22:19 28°**⋠**¹44'48 morning rise -7306 Aug 22 j 07:47 5°5641'39 1°32'27 -7300 Feb 27 j 08:46 conjunction o°ਤ -7306 Aug 22 j 07:47 -7300 Jun 30 j 20:18 minimum elong 5°5541'39 1°32'56 retrograde 18°**る**26'26 morning rise -7306 Sep 03 j 17:33 8°9529'16 min. Earth dist. -7300 Aug 28 j 07:34 13°る29'42 4.10173 AU retrograde -7305 Jan 04 j 21:58 26°9514'26 opposition -7300 Aug 29 j 06:59 13°る21'41 -2°15'29 -7305 Mar 07 j 02:26 21°522'07 2°12'17 direct -7300 Oct 26 j 18:57 8°る21'58 opposition min. Earth dist. -7305 Mar 08 j 00:45 21°515'02 4.28075 AU -7299 Mar 02 j 11:59 27°る24'33 evening set -7305 May 08 j 00:19 16°9525'28 -7299 Mar 13 j 20:13 direct -7305 Aug 20 j 11:08 $0^{\circ}\Omega$ -7305 Sep 10 j 04:12 4°**Ω**37′08 -7299 Mar 16 j 05:35 0°≈32'51 -1°24'32 evening set conjunction -7299 Mar 16 j 05:39 minimum elong 0°≈32'53 1°24'58 conjunction -7305 Sep 22 j 15:01 7°Ω28'18 1°20'32 max. Earth dist. -7299 Mar 17 j 12:21 0°≈50'28 6.14128 AU -7305 Sep 22 j 15:04 minimum elong 7°Ω28'20 1°20'57 morning rise -7299 Mar 29 i 23:28 3°≈41'10 -7305 Sep 21 j 14:24 max. Earth dist. 7°**Ω**14'10 6.23699 AU -7299 May 22 j 20:04 15°**≈** -7305 Oct 05 i 02:11 morning rise 10°Ω19'47 retrograde -7299 Aug 03 i 17:44 22°≈34'01 -7305 Oct 25 j 23:08 15°Ω -7299 Oct 01 i 21:44 17°≈31'47 -1°44'49 opposition -7304 Feb 08 j 08:05 28°**Ω**49'36 min. Earth dist. -7299 Oct 01 j 08:46 17°≈36'12 4.18714 AU retrograde -7304 Apr 09 j 15:33 23°Ω54'39 1°35'14 -7299 Oct 21 j 10:42 15°R≈ opposition min. Earth dist. -7304 Apr 10 j 03:15 23°**Ω**50'54 4.19114 AU -7299 Nov 30 j 10:36 12°≈29'12 direct -7304 Jun 09 j 11:34 direct 19°**Ω**00'31 -7298 Jan 09 j 20:56 15°22 -7304 Sep 07 j 22:18 0° m -7298 Apr 01 j 18:47 0°**)**€ -7304 Oct 11 j 10:05 7° m 27'29 evening set -7298 Apr 07 j 07:26 1°**)** 13'41 evening set -7304 Oct 24 j 02:11 10° m 24'48 0°42'53 -7298 Apr 21 j 00:19 4°**光**17'56 -0°51'11 conjunction conjunction -7304 Oct 24 j 02:14 10° Mp 24'50 -7298 Apr 21 j 00:23 0°51'27 minimum elong 0°43'06 minimum elong 4°**) (**17′59 -7304 Oct 23 j 20:43 10° Mp 21'36-7298 Apr 21 j 10:27 6.23303 AU max. Earth dist. 6.14546 AU max. Earth dist. 4°**)**(23'37 13° m 23'20 morning rise -7304 Nov 05 j 20:15 morning rise -7298 May 04 j 15:36 7°**∺**21'12 -7303 Jan 31 j 13:02 0∘**⊽** retrograde -7298 Sep 05 j 00:56 25°**∺**22'02 retrograde -7303 Mar 15 j 03:42 2°**£**42'10 opposition -7298 Nov 03 j 08:44 20°**)** €23'32 -0°41'23 -7303 Apr 27 j 02:21 30°R, Mp min. Earth dist. -7298 Nov 03 j 08:50 20°**∺**23'30 4.27604 AU opposition -7303 May 15 j 06:42 27° Mp 43'29 0°24'50 direct -7297 Jan 03 j 03:42 15° **★** 19'30 -7303 May 15 j 02:18 27° m 44'55 4.10418 AU -7297 Apr 24 j 09:01 $0^{\circ}\Upsilon$ min. Earth dist.

-7297 May 11 j 13:52

evening set

3°Y43'38

-7303 Jul 13 j 18:17

direct

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7297 in astronomical counting style is the year 7298 BCE in historical counting style. 6°**Y**42'19 -0°02'31 conjunction -7297 May 25 j 01:06 morning rise -7292 Nov 10 j 13:40 18° **m** 14'36 6°**Υ**42'18 0°02'31 minimum elong -7297 May 25 j 01:05 -7291 Jan 04 j 14:38 0∘**⊽**

minimum elong	-7297 May 25 J 01:05	6°°\\\'42'18	0°02'31		-7291 Jan 04 J 14:38	$0_{\circ}\overline{\mathbf{u}}$	
behind sun begin	-7297 May 24 j 16:53	6° Ƴ 37'47		retrograde	-7291 Mar 20 j 05:40	7° ≏ 38'54	
behind sun end	-7297 May 25 j 09:18	6° Ƴ 46'50		opposition	-7291 May 20 j 07:29	2° ₽ 39'33	0°13'29
max. Earth dist.	-7297 May 24 j 13:33	6° Ƴ 35'55	6.31308 AU	min. Earth dist.	-7291 May 20 j 00:48	2° ≏ 41'44	4.09660 AU
morning rise	-7297 Jun 07 j 09:07	9° Y 39'20			-7291 Jun 10 j 21:26	30°R, M⊅	
asc. node	-7297 Jun 13 j 09:07	10° Ƴ 58'14		direct	-7291 Jul 18 j 15:42	27° mp 46'39	
retrograde	-7297 Oct 06 j 11:56	27° Υ '02'43		desc. node	-7291 Jul 24 j 06:07	27° Mp 49'48	
-	-7297 Dec 05 j 04:14	22° Υ '07'56	0°32'24	dese. Hode	·	ე° <u>ი</u>	
opposition	•				-7291 Aug 24 j 21:09		
min. Earth dist.	-7297 Dec 05 j 18:11		4.34089 AU	evening set	-7291 Nov 19 j 02:04	16° ≙ 33'47	
direct	-7296 Feb 05 j 02:10	17° Y ′04'15					
	-7296 May 18 j 22:28	$_{0\circ}$ 8		conjunction	-7291 Dec 02 j 03:27	19° ≏ 38'35	-0°18'02
evening set	-7296 Jun 12 j 08:20	5° 8 12'57		minimum elong	-7291 Dec 02 j 03:25	19° ≏ 38'34	0°18'08
max. Earth dist.	-7296 Jun 24 j 05:01	7° 8 49'49	6.35744 AU	max. Earth dist.	-7291 Dec 02 j 23:47	19° ≙ 50'36	6.06716 AU
				morning rise	-7291 Dec 15 j 08:01	22° ₽ 45'12	
conjunction	-7296 Jun 25 j 10:12	8° と 05'57	0°45'59	Ü	-7290 Jan 16 j 08:11	0° M .	
minimum elong	-7296 Jun 25 j 10:09	8° 8 05'55	0°46'16	retrograde	-7290 Apr 25 j 22:24	12°M43'48	
morning rise	-7296 Jul 08 j 08:40	10° 8 57'14	0 40 10	opposition	-7290 Jun 25 j 11:07	7°M40'48	1907106
morning rise	3	_			•		
	-7296 Jul 27 j 02:20	15° 8		min. Earth dist.	-7290 Jun 24 j 15:32	7°M47'20	4.04982 AU
retrograde	-7296 Nov 05 j 17:57	28° 8 06'30		direct	-7290 Aug 22 j 20:06	2°M46'54	
opposition	-7295 Jan 04 j 23:34		1°35'28		-7290 Nov 24 j 20:03	15° ™	
min. Earth dist.	-7295 Jan 05 j 22:54	23° 8 06'41	4.36303 AU	evening set	-7290 Dec 24 j 20:30	21° M 49'41	
direct	-7295 Mar 08 j 11:56	18° 8 12'15					
	-7295 Jun 14 j 18:51	Π° 0		conjunction	-7289 Jan 07 j 05:28	24°ML58'42	-1°06'26
evening set	-7295 Jul 14 j 00:26	6° Ⅱ 14'11		minimum elong	-7289 Jan 07 j 05:23	24°M58'39	1°06'48
max. Earth dist.	-7295 Jul 25 j 05:14	8° Ⅱ 43'19	6.35450 AU	max. Earth dist.	-7289 Jan 08 j 16:36	25°M19'25	6.04499 AU
max. Earth dist.	7275 Jul 25 J 05.14	0 11 43 17	0.55450710	morning rise	-7289 Jan 20 j 17:55	28°ML09'27	0.044)) 110
	7205 1 1 26:17.04	00Д02117	1020146	morning rise	•		
conjunction	-7295 Jul 26 j 17:04	9° Ⅱ 03'16			-7289 Jan 28 j 16:02	0° ∡ ¹	
minimum elong	-7295 Jul 26 j 17:00	9° Ⅱ 03'14	1°21'12	retrograde	-7289 Jun 01 j 07:36	18° ∡ 13'21	
morning rise	-7295 Aug 08 j 06:45	11° Ⅱ 51′01		min. Earth dist.	-7289 Jul 30 j 03:38	13° ₮ 17'04	4.05603 AU
retrograde	-7295 Dec 07 j 14:04	29° Ⅱ 10'37		opposition	-7289 Jul 31 j 05:27	13° ∡ '08'17	-2°03'29
opposition	-7294 Feb 06 j 09:21	24° Ⅱ 19'10	2°11'25	direct	-7289 Sep 27 j 07:43	8° ҂ 11'32	
min. Earth dist.	-7294 Feb 07 j 11:38	24° Ⅱ 10'49	4.33651 AU	evening set	-7288 Jan 30 j 16:48	27° ∡ ¹20'10	
direct	-7294 Apr 09 j 20:53	19° Ⅱ 19'59		_	-7288 Feb 11 j 03:59	0°ಕ	
	-7294 Jul 10 j 16:41	0°ಅ			, , , , , , , , , , , , , , , , , ,		
evening set	-7294 Aug 14 j 05:04	7° 5 24'02		conjunction	-7288 Feb 13 i 07:40	0° ප 30'06	-1°30'23
max. Earth dist.	-7294 Aug 25 j 05:13	9°952'54	6 20542 ATT	minimum elong	-7288 Feb 13 j 07:39	0° ろ 30'05	
max. Earth dist.	-/294 Aug 23 J 03.13	9 2032 34	6.30543 AU	U	•		
				max. Earth dist.	-7288 Feb 14 j 23:07		6.07768 AU
conjunction	-7294 Aug 26 j 15:56	10°©12'31	1°32'27	morning rise	-7288 Feb 27 j 00:29	3° ප් 40'56	
minimum elong	-7294 Aug 26 j 15:56	10°©12'32	1°32'57	retrograde	-7288 Jul 05 j 14:28	23° る 16'35	
morning rise	-7294 Sep 08 j 01:39	13° © 00'31		opposition	-7288 Sep 02 j 23:03	18° る 12'03	-2°13'54
	-7294 Dec 16 j 23:50	$0^{\circ}\Omega$		min. Earth dist.	-7288 Sep 02 j 01:39	18° る 19'22	4.11249 AU
retrograde	-7293 Jan 09 j 16:16	0° Ω 51'35		direct	-7288 Oct 31 j 14:03	13° る 11'53	
C	-7293 Feb 02 j 10:01	30° ₹©			-7287 Feb 25 j 16:01	0° ≈	
opposition	-7293 Mar 11 j 20:52	25° © 59'02	2°09'31	evening set	-7287 Mar 07 j 10:53	2°≈12'22	
min. Earth dist.	-7293 Mar 12 j 18:19	25°952'13	4.26846 AU	evening sec	7207 Mar 07 J 10.55	2 / 4 / 12 22	
			4.20040 AU		7207 M 21:04-26	592011	1921126
direct	-7293 May 12 j 16:14	21°502'46		conjunction	-7287 Mar 21 j 04:36	5°≈20'16	
_	-7293 Aug 02 j 09:53	0 \circ Ω		minimum elong	-7287 Mar 21 j 04:40	5° ≈ 20'18	
evening set	-7293 Sep 14 j 15:08	9° Ω 16'29		max. Earth dist.	-7287 Mar 22 j 08:12	5° ≈ 36′01	6.15269 AU
max. Earth dist.	-7293 Sep 26 j 05:24	11° Ω 56'14	6.22431 AU	morning rise	-7287 Apr 03 j 22:30	8° ≈ 28′03	
					-7287 May 03 j 16:33	15° ≈	
conjunction	-7293 Sep 27 j 02:32	12° Ω 08′24	1°16'40	retrograde	-7287 Aug 08 j 04:32	27° ≈ 14′00	
minimum elong	-7293 Sep 27 j 02:35	12° Ω 08′26	1°17'04	opposition	-7287 Oct 06 j 09:39	22°≈12'14	-1°37'37
morning rise	-7293 Oct 09 j 14:16	15° Ω 00'43		min. Earth dist.	-7287 Oct 05 j 21:52	22°≈16'14	4.19814 AU
	-7293 Oct 09 j 13:02	15° Ω		direct	-7287 Dec 05 j 01:43	17° ≈ 09'20	
	-7293 Dec 25 j 10:05	0° m)		uncet	-7286 Mar 16 j 01:27	0° ∺	
		-			·		
retrograde	-7292 Feb 13 j 06:10	3° My 37'10		evening set	-7286 Apr 12 j 02:18	5° ¥ 51'42	
	-7292 Apr 04 j 06:38	30°R Ω					
opposition	-7292 Apr 14 j 13:58	28° Ω 41'47	1°27'01	conjunction	-7286 Apr 25 j 18:44	8° ¥ 55'21	
min. Earth dist.	-7292 Apr 14 j 22:54		4.17916 AU	minimum elong	-7286 Apr 25 j 18:48		0°45'17
direct	-7292 Jun 14 j 04:57	23° Ω 47'57		max. Earth dist.	-7286 Apr 26 j 01:26	8° ¥ 59'06	6.24303 AU
	-7292 Aug 18 j 14:21	0° m)		morning rise	-7286 May 09 j 09:19	11° ¥ 57'55	
evening set	-7292 Oct 16 j 01:20	12° m/ 16'54		retrograde	-7286 Sep 09 j 11:07	29° ¥ 53′26	
5	,			opposition	-7286 Nov 07 j 18:31	24° ¥ 55'31	-0°31'22
conjunction	-7292 Oct 28 j 18:19	15° m) 15'04	0°36'02	min. Earth dist.	-7286 Nov 07 j 21:20		4.28414 AU
minimum elong	-7292 Oct 28 j 18:22	15° My 15'06	0°36'12	direct	-7285 Jan 07 j 17:57	19° X 51'28	0111110
•	-	-		direct	-	19 π 31 28	
max. Earth dist.	-7292 Oct 28 j 15:39	15° Mp 13'31	6.13530 AU		-7285 Apr 06 j 20:57	U I	

•			_	· //	r 7286 BCE in historical of	, .	igo II
asc. node	-7285 Apr 23 j 14:27	3° Y ′22'37			-7280 May 19 j 06:18	30°RΩ	
evening set	-7285 May 16 j 04:29	8° Y 14'05		direct	-7280 Jun 18 j 22:18	28° Ω 32'42	
_					-7280 Jul 19 j 08:20	0° ™	
conjunction	-7285 May 29 j 14:40	11° Y 12'07	0°04'38	evening set	-7280 Oct 20 j 15:39	17° Mp 03'23	
minimum elong	-7285 May 29 j 14:40	11° Y 12'06	0°04'40				
behind sun begin	-7285 May 29 j 06:39	11° Y 07'41		conjunction	-7280 Nov 02 j 09:49	20° My $02'27$	0°28'59
behind sun end	-7285 May 29 j 22:41	11° Y 16'31		minimum elong	-7280 Nov 02 j 09:51	20° My $02'28$	0°29'07
max. Earth dist.	-7285 May 29 j 00:16	11° Y ′04'08	6.31872 AU	max. Earth dist.	-7280 Nov 02 j 11:09	20° Mp 03'14	6.12580 AU
morning rise	-7285 Jun 11 j 21:34	14° Ƴ 08'27		morning rise	-7280 Nov 15 j 06:14	23° m 02'54	
	-7285 Sep 10 j 03:01	0°8			-7280 Dec 16 j 03:45	0∘ ⊽	
retrograde	-7285 Oct 10 j 19:34	1° 8 29'27		retrograde	-7279 Mar 25 j 06:26	12° ≏ 32'28	
	-7285 Nov 10 j 13:43	30° ₹ Υ		opposition	-7279 May 25 j 06:46	7° Ω 32'38	0°02'06
opposition	-7285 Dec 09 j 13:59	26° Y 35′04	0°42'11	min. Earth dist.	-7279 May 24 j 22:39	7° Ω 35'18	4.08886 AU
min. Earth dist.	-7285 Dec 10 j 04:51	26° Y 30′12	4.34399 AU	desc. node	-7279 Jun 04 j 08:29	6° Ω 14'29	
direct	-7284 Feb 09 j 13:47	21° Y 31'34		direct	-7279 Jul 23 j 11:27	2° £ 39'45	
. ,	-7284 Apr 30 j 16:31	0°8		evening set	-7279 Nov 23 j 22:00	21° ≏ 29'00	
evening set	-7284 Jun 16 j 19:30	9° 8 39'42			7270 D 07:00 10	240 0 24120	0025120
· · · · · · · · · · · · ·	7204 I 20: 20:02	120 422107	0°51'53	conjunction minimum elong	-7279 Dec 07 j 00:19	24° Ω 34'29	
conjunction minimum elong	-7284 Jun 29 j 20:03 -7284 Jun 29 j 19:59	12° 8 32'07	0°52'10	max. Earth dist.	-7279 Dec 07 j 00:17 -7279 Dec 07 j 21:33	24° £ 34'27 24° £ 47'01	
max. Earth dist.	-7284 Jun 28 j 14:22	_	6.35781 AU	morning rise	-7279 Dec 07 j 21.33 -7279 Dec 20 j 06:13	24 ≗ 4701 27° £ 41'52	0.00172 AU
max. Earm dist.	-7284 Jul 10 j 23:38	12 8 13 41	0.55781 AU	morning rise	-7279 Dec 20 j 06:13	0°M	
morning rise	-7284 Jul 10 j 23.38	15° 8 22'50			-7279 Dec 30 j 03.33 -7278 Mar 19 j 15:15	15°M	
morning rise	-7284 Sep 30 j 06:27	0°Ⅱ		retrograde	-7278 Apr 30 j 22:27	17°M43'01	
retrograde	-7284 Nov 10 j 03:58	2° Ⅱ 32'47		retrograde	-7278 Jun 12 j 05:24	17 11043 01 15°RM	
retrograde	-7284 Dec 21 j 14:19	30°R 8		opposition	-7278 Jun 30 j 09:57	12°M39'37	-1°16'56
opposition	-7283 Jan 09 j 11:17	27° 8 40'45	1°42'23	min. Earth dist.	-7278 Jun 29 j 12:38		4.04736 AU
min. Earth dist.	-7283 Jan 10 j 11:23	27° 8 33'01	4.36083 AU	direct	-7278 Aug 27 j 16:48	7°M45'23	4.04730 AC
direct	-7283 Mar 13 j 00:43	22° 8 39'12	1.50005 110	uncet	-7278 Nov 05 j 03:37	15°M	
	-7283 May 26 j 20:16	0°II		evening set	-7278 Dec 29 j 20:54	26°M49'51	
evening set	-7283 Jul 18 j 09:42	10° Ⅱ 41'15			, _ , , , .		
max. Earth dist.	-7283 Jul 29 j 12:20	13° Ⅱ 09'29	6.34971 AU	conjunction	-7277 Jan 12 j 06:58	29°M59'15	-1°11'30
	J			minimum elong	-7277 Jan 12 j 06:53	29°M59'12	1°11'53
conjunction	-7283 Jul 31 j 01:10	13° Ⅲ 30′02	1°23'55		-7277 Jan 12 j 08:14	0° ∡ °	
minimum elong	-7283 Jul 31 j 01:07	13° II 30'00	1°24'22	max. Earth dist.	-7277 Jan 13 j 20:21	0° ∡ 21'17	6.04563 AU
morning rise	-7283 Aug 12 j 14:08	16° Ⅱ 17'38		morning rise	-7277 Jan 25 j 20:04	3° ∡ 10'15	
	-7283 Oct 23 j 04:27	0 \circ \odot		retrograde	-7277 Jun 06 j 07:26	23° ₹ 12'41	
retrograde	-7283 Dec 12 j 03:16	3°5640'29		min. Earth dist.	-7277 Aug 04 j 01:22	18° ∡ 15'58	4.05974 AU
	-7282 Feb 01 j 14:10	30°RⅡ		opposition	-7277 Aug 05 j 02:06	18° ₹ 07'33	-2°07'54
opposition	-7282 Feb 11 j 00:08	28° Ⅱ 48'58	2°13'33	direct	-7277 Oct 02 j 05:23	13° ∡ 10′20	
min. Earth dist.	-7282 Feb 12 j 01:50	28° Ⅱ 40'48	4.32957 AU		-7276 Jan 25 j 16:26	0°ಕ	
direct	-7282 Apr 14 j 10:11	23° Ⅱ 50′09		evening set	-7276 Feb 04 j 19:14	2° る 19'17	
	-7282 Jun 20 j 17:48	0 \circ \odot					
evening set	-7282 Aug 18 j 13:52	11° © 54'54		conjunction	-7276 Feb 18 j 10:38	5° る 29'10	
max. Earth dist.	-7282 Aug 29 j 16:48	14° © 25'37	6.29690 AU	minimum elong	-7276 Feb 18 j 10:38		1°31'36
				max. Earth dist.	-7276 Feb 20 j 00:39	5° ರ 51'14	6.08391 AU
conjunction	-7282 Aug 31 j 00:33	14°5643'36	1°31'53	morning rise	-7276 Mar 03 j 03:57	8° る 39'53	
minimum elong	-7282 Aug 31 j 00:34		1°32'22	retrograde	-7276 Jul 10 j 07:35	28°る10'24	2011125
morning rise	-7282 Sep 12 j 10:00	17° © 31'52		opposition	-7276 Sep 07 j 15:57	23° ろ 06'09	
ratrograda	-7282 Nov 13 j 06:20	0° Ω 5° Ω 28'00		min. Earth dist.	-7276 Sep 06 j 18:51	23°පි13'22 18°පි05'32	4.12065 AU
retrograde	-7281 Jan 14 j 09:21	0° Ω 35'11	2°05'54	direct	-7276 Nov 05 j 08:28	18° ℃ 05′32	
opposition min. Earth dist.	-7281 Mar 16 j 15:16 -7281 Mar 17 j 11:14	0° Ω 28'51	4.25869 AU	evening set	-7275 Feb 08 j 03:58 -7275 Mar 12 j 11:44	0 ≈ 7°≈04'59	
IIIII. Eartii dist.	·	30°RS	4.23809 AU	evening set	-/2/3 Mai 12 j 11.44	/ 204 39	
direct	-7281 Mar 21 j 06:20 -7281 May 17 j 07:23	30 k≌ 25° © 39'21		conjunction	-7275 Mar 26 j 05:36	10°≈12'33	1017144
direct	-7281 Jul 11 j 03:26	23 3 3921		minimum elong	-7275 Mar 26 j 05:41	10 ≈12 33 10°≈12'35	1°18'09
evening set	-7281 Sep 19 j 01:39	13° Ω 54'08		max. Earth dist.	-7275 Mar 27 j 06:04	10 ≈12 33 10°≈26'29	6.16220 AU
510ming 50t	-7281 Sep 19 j 01:39	15° Ω		morning rise	-7275 Apr 08 j 23:23	10 ≈2029 13°≈19'52	0.10220 AU
	7201 50p 25 J 20.22	10 06		11101111115 1130	-7275 Apr 16 j 09:35	15 ∞1932 15°≈	
conjunction	-7281 Oct 01 j 13:20	16° Ω 46'39	1°12'19		-7275 Jul 08 j 10:45	0° ∀	
minimum elong	-7281 Oct 01 j 13:24	16° Ω 46'41	1°12'42	retrograde	-7275 Aug 12 j 19:49	1° ¥ 59'31	
max. Earth dist.	-7281 Sep 30 j 17:25	16° Ω 35'09	6.21400 AU		-7275 Sep 16 j 22:11	30°R≈	
morning rise	-7281 Oct 14 j 01:58	19° Ω 39'46		opposition	-7275 Oct 10 j 23:34	26°≈58'14	-1°29'39
5	-7281 Dec 01 j 11:12	0° my		min. Earth dist.	-7275 Oct 10 j 14:29	27° ≈ 01'19	
retrograde	-7280 Feb 18 j 03:56	8° m/22'15		direct	-7275 Dec 09 j 20:38	21°≈55'04	
opposition	-7280 Apr 19 j 11:35	3° m)26'19	1°18'15		-7274 Feb 24 j 19:47	0° ∀	
min. Earth dist.	-7280 Apr 19 j 18:24	3° m/24'08	4.16870 AU	evening set	-7274 Apr 16 j 23:09	10°) 35'37	
	-				-		

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7274 in astronomical counting style is the year 7275 BCE in historical counting style. -7274 Apr 30 j 15:11 13°**)** 38'43 -0°38'32 conjunction -7269 Oct 05 j 22:43 21°Ω20'20 1°07'35 conjunction -7274 Apr 30 j 15:15 13°**)** ₹38'45 0°38'43 -7269 Oct 05 j 22:47 21°**Ω**20'22 1°07'57 minimum elong minimum elong -7274 Apr 30 j 19:46 -7269 Oct 05 j 06:04 21°Ω10'42 6.20590 AU max. Earth dist. 13°**)** 41′17 6.25235 AU max. Earth dist. -7274 May 14 j 04:57 -7269 Oct 18 j 11:57 16°**)** 40′36 24°**Ω**14'06 morning rise morning rise $0^{\circ}\Upsilon$ -7269 Nov 13 j 06:54 -7274 Jul 21 j 01:53 0° m 4° Y 30'59 retrograde -7274 Sep 13 j 21:18 retrograde -7268 Feb 22 j 23:41 13°Mp01'44 -7274 Nov 08 j 23:06 30°**₹** opposition -7268 Apr 24 j 06:42 8° Mp 05'19 1°09'06 opposition -7274 Nov 12 j 06:32 29°**₭**33'35 -0°20'56 min. Earth dist. -7268 Apr 24 j 12:38 8° m 03'25 4.15983 AU -7274 Nov 12 j 10:02 29°**)** ₹32′25 min. Earth dist. 4.29246 AU direct -7268 Jun 23 j 14:19 3°m 11'52 direct -7273 Jan 12 j 08:45 24°**¥**29'32 evening set -7268 Oct 25 j 04:09 21° My 44'03asc. node -7273 Mar 02 j 20:43 28°**)** 00'30 $0^{\circ}\Upsilon$ -7268 Nov 06 j 23:10 -7273 Mar 16 j 12:37 conjunction 24° Mp 43'55 0°21'54

conjunction -7273 Jun 03 j 05:54 15°**Ƴ**47'35 0°11'45 morning rise -7268 Nov 19 j 21:00 27° m/45'20 minimum elong -7273 Jun 03 j 05:52 15°**Ƴ**47'34 0°11'50 -7268 Nov 29 j 13:46 0∘**⊽** behind sun begin -7273 Jun 03 j 00:14 15°**Y**44′27 retrograde -7267 Mar 30 j 03:27 17° 219'59 behind sun end -7273 Jun 03 j 11:30 15°**Y**50'40 desc. node -7267 Apr 16 j 16:01 16°**♀**51'04 max. Earth dist. -7273 Jun 02 j 12:58 15°**Ƴ**38'12 6.32567 AU opposition -7267 May 30 j 03:22 12° 219'37 -0°09'04 morning rise -7273 Jun 16 j 11:34 18° **Y** 43'06 min. Earth dist. -7267 May 29 j 17:06 12°**£**22'59 4.08075 AU -7273 Aug 11 j 16:53 0°8 direct -7267 Jul 28 j 04:01 7°**£**26'37 retrograde -7273 Oct 15 i 06:48 6°801'17 evening set -7267 Nov 28 j 15:55 26° **△**18'28 -7273 Dec 14 i 01:50 1°807'20 0°51'53

minimum elong

max. Earth dist.

-7268 Nov 06 j 23:13

-7268 Nov 07 j 01:10

-7263 Mar 30 j 23:50

15°≈

24° Mp 43'56

 24° Mp 45'05

0°22'00

6.11694 AU

opposition min. Earth dist. -7273 Dec 14 i 18:35 1°**8**01'53 4.34929 AU conjunction -7267 Dec 11 i 19:32 29° **2**24'45 -0°32'37 -7273 Dec 22 j 18:00 30°RY -7267 Dec 11 i 19:29 29°**2**24'43 0°32'49 minimum elong -7272 Feb 14 j 05:16 26°Y04'03 max. Earth dist. -7267 Dec 12 j 19:50 29°**△**39'07 6.05518 AU direct -7267 Dec 14 j 07:08 -7272 Apr 07 j 07:26 0°8 o°m.

12°Y50'20

-7273 May 20 j 21:00

-7269 Jan 19 j 00:43

retrograde

10°**Ω**01′01

evening set

-7272 Jul 03 j 00:34 max. Earth dist. 16°**8**45'19 6.36104 AU retrograde -7266 Jul 04 j 09:52 min. Earth dist. 17°ML40'26 4.04318 AU -7272 Jul 04 j 07:06 17°**8**02'13 0°57'33 conjunction -7266 Jul 05 j 06:51 17°M33'23 -1°26'02 opposition -7272 Jul 04 j 07:02 0°57'51 17°**8**02'10 -7266 Jul 25 j 08:24 minimum elong 15°RM -7272 Jul 17 j 02:51 19°**8**52'14 -7266 Sep 01 j 12:32 morning rise direct 12°MJ38'50

-7272 Sep 04 j 19:32 -7266 Oct 09 j 08:19 $0^{\circ}\Pi$ 15°M retrograde -7272 Nov 14 j 13:46 7°**Ⅱ**01'50 -7266 Dec 27 j 06:39 0°×7 opposition -7271 Jan 13 j 23:57 2°**I**09'55 1°48'44 evening set -7265 Jan 03 j 20:31 1°**∡**¹45'56 min. Earth dist. -7271 Jan 14 j 23:38 2°**П**02'19 4.36212 AU

-7271 Jan 31 j 11:41 30°R₩ conjunction -7265 Jan 17 j 07:24 4° ₹ 55'47 -1°15'57 direct -7271 Mar 17 j 13:20 27°808'40 minimum elong -7265 Jan 17 j 07:20 4° ₹ 55'44 1°16'21 -7271 May 01 j 11:00 $0^{\circ}II$ max. Earth dist. -7265 Jan 18 j 20:48 5°**х** 17'48 6.04407 AU -7271 Jul 22 j 18:54 15°**Ⅲ**09'24 -7265 Jan 30 j 21:29 8°**х**¹07'13 evening set morning rise

17°**Ⅲ**37'59 -7265 Jun 11 j 04:12 28°**х** 08'45 max. Earth dist. -7271 Aug 02 j 21:57 6.34887 AU retrograde -7265 Aug 09 j 21:17 23° 🗷 03'38 -2°11'17 opposition -7271 Aug 04 j 09:21 17°**I**57'45 1°26'34 -7265 Aug 08 j 19:52 23°**∡**12'18 4.06133 AU conjunction min. Earth dist. 18°**х** 05′59 minimum elong -7271 Aug 04 i 09:18 17°**Ⅱ**57'44 1°27'02 direct -7265 Oct 06 i 23:40 morning rise -7271 Aug 16 j 21:20 20°**Ⅱ**44'59 -7264 Jan 08 i 07:40 0°정

-7271 Sep 30 i 06:57 0ಂತಾ evening set -7264 Feb 09 j 21:21 7°る16'14 retrograde -7271 Dec 16 j 16:13 8°9509'48 opposition -7270 Feb 15 j 14:50 3°518'12 2°14'48 -7264 Feb 23 j 13:24 10° ප්26'12 -1°31'06 conjunction min. Earth dist. -7270 Feb 16 j 16:29 3°510'04 4.32658 AU -7264 Feb 23 i 13:24 10°**පි**26'12 1°31'35 minimum elong

30°RⅡ -7264 Feb 25 j 02:01 10°る47'27 6.08855 AU -7270 Mar 16 j 03:56 max. Earth dist. -7264 Mar 08 j 07:07 direct 28°**Ⅱ**19'47 13°る36'52 -7270 Apr 19 j 00:22 morning rise -7270 May 22 j 16:51 0000 -7264 May 31 j 20:04 0°22 -7264 Jul 15 j 02:35 evening set -7270 Aug 22 j 21:34 16°923'41 retrograde 3°≈02'50 30°Ŗ₹ max. Earth dist. -7270 Sep 03 j 00:09 18°954'26 6.29184 AU -7264 Aug 28 j 04:02

opposition -7264 Sep 12 j 08:47 27°る58'53 -2°07'57 -7270 Sep 04 j 07:51 19°9512'26 -7264 Sep 11 j 13:34 28°る05'28 4.12776 AU conjunction 1°30'46 min. Earth dist. -7270 Sep 04 j 07:53 22°る57'52 minimum elong 19°9512'26 1°31'14 direct -7264 Nov 10 j 05:14 -7270 Sep 16 j 17:25 22°900'55 -7263 Jan 19 j 02:22 morning rise 0°≈ -7270 Oct 23 j 20:09 0° Ω evening set -7263 Mar 17 j 12:15 11°≈56'26

opposition -7269 Mar 21 j 08:10 5°**Ω**07'47 2°01'30 min. Earth dist. -7269 Mar 22 j 02:25 5°**Ω**01'58 4.25174 AU conjunction -7263 Mar 31 j 06:22 15°≈03'43 -1°13'27 direct -7269 May 21 j 20:56 0°**Ω**12'13 minimum elong -7263 Mar 31 j 06:27 15°**≈**03'45 1°13'50

evening set $-7269 \text{ Sep } 08 \text{ j } 03:46 \quad 15^{\circ}\Omega$ max. Earth dist. $-7263 \text{ Apr } 01 \text{ j } 06:05 \quad 15^{\circ}\approx 17'11 \quad 6.17144 \text{ AU}$ evening set $-7269 \text{ Sep } 23 \text{ j } 10:20 \quad 18^{\circ}\Omega 27'14$ morning rise $-7263 \text{ Apr } 13 \text{ j } 23:53 \quad 18^{\circ}\approx 10'33$

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 13 Attention, astronomical year style is used: The year -7263 in astronomical counting style is the year 7264 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ie year -7263 i	in astronomical co	ounting style is the year	7264 BCE in historical c	ounting style.	
	-7263 Jun 10 j 04:55	0° ∀		evening set	-7257 Sep 27 j 21:27	23° Ω 07'12	
retrograde	-7263 Aug 17 j 09:08	6°) 43′51					
opposition	-7263 Oct 15 j 13:21	1°) 43′05	-1°21'05	conjunction	-7257 Oct 10 j 10:27	26° Ω 01'12	1°02'21
min. Earth dist.	-7263 Oct 15 j 04:46	1° ¥ 45'59	4.21823 AU	minimum elong	-7257 Oct 10 j 10:32	26° Ω 01'14	1°02'39
	-7263 Oct 28 j 12:46	30°R ≈		max. Earth dist.	-7257 Oct 09 j 18:41	25° Ω 52'03	6.19197 AU
direct	-7263 Dec 14 j 13:21	26° ≈ 39'43		morning rise	-7257 Oct 23 j 00:50	28° Ω 56′02	
	-7262 Jan 30 j 22:45	0° ∀			-7257 Oct 27 j 16:18	0° my	
evening set	-7262 Apr 21 j 19:38	15°) 17′57		retrograde	-7256 Feb 27 j 21:46	17° m 51'02	
evening see	720211p1 21 j 15.50	10 /(1/0/		opposition	-7256 Apr 29 j 05:22	12° m 54'06	0°59'16
conjunction	-7262 May 05 j 10:51	18° ¥ 20'19	-0°31'44	min. Earth dist.	-7256 Apr 29 j 08:21	12° m 53'08	4.14585 AU
minimum elong	-7262 May 05 j 10:53	18° ¥ 20′21		direct	-7256 Jun 28 j 07:43	8° Mp 00'49	4.14303710
max. Earth dist.	-7262 May 05 j 11:45			evening set	-7256 Oct 29 j 21:02	26° Mp 36'21	
morning rise	-7262 May 18 j 23:51	21° H 21'24	0.20313 AC	evening set	-7230 Oct 27 j 21.02	20 11/3021	
morning risc	-7262 Jun 29 j 01:43	21 γ (2124 0° γ		conjunction	-7256 Nov 11 j 17:21	29° m 37'19	0°14'24
ratra ara da	-	9° Υ 06'10			-	29° m) 37'20	
retrograde	-7262 Sep 18 j 08:48		0910125	minimum elong	-7256 Nov 11 j 17:23		0-14-28
opposition	-7262 Nov 16 j 18:06	4°Υ09'16		behind sun begin	-7256 Nov 11 j 13:37	29° Mp 35'07	
min. Earth dist.	-7262 Nov 17 j 00:05		4.30250 AU	behind sun end	-7256 Nov 11 j 21:08	29° m 39'32	6 10 10 6 1 XX
	-7262 Dec 23 j 18:33	30° ₹		max. Earth dist.	-7256 Nov 11 j 23:24	29° m/40'52	6.10436 AU
asc. node	-7261 Jan 10 j 14:29	29° 米 09'06			-7256 Nov 13 j 07:55	0∘ ত	
direct	-7261 Jan 17 j 01:18	29° ₭ 05'10		morning rise	-7256 Nov 24 j 16:20	2° △ 39'51	
	-7261 Feb 10 j 13:33	0° Υ		desc. node	-7255 Feb 24 j 20:08	20° ≏ 06'27	
evening set	-7261 May 25 j 12:01	17° Y ′23′20		retrograde	-7255 Apr 04 j 08:18	22° ≏ 20'46	
				opposition	-7255 Jun 04 j 04:49	17° ≏ 19'55	-0°20'39
conjunction	-7261 Jun 07 j 19:48	20° Ƴ 19'45	0°18'46	min. Earth dist.	-7255 Jun 03 j 17:31	17° ≏ 23'39	4.07079 AU
minimum elong	-7261 Jun 07 j 19:46	20° Y 19'44	0°18'53	direct	-7255 Aug 02 j 02:48	12° ≏ 26'52	
max. Earth dist.	-7261 Jun 07 j 01:54	20° Y ′09'51	6.33399 AU		-7255 Nov 27 j 19:50	0° M	
morning rise	-7261 Jun 20 j 23:59	23° Y 14'21		evening set	-7255 Dec 03 j 15:48	1°M21'59	
	-7261 Jul 22 j 21:40	$_{0\circ}$ 8					
retrograde	-7261 Oct 19 j 14:25	10° 8 29'27		conjunction	-7255 Dec 16 j 20:28	4° M 29′02	-0°39'50
opposition	-7261 Dec 18 j 12:24	5° 8 35'51	1°01'12	minimum elong	-7255 Dec 16 j 20:24	4° M ₊29'00	0°40'04
min. Earth dist.	-7261 Dec 19 j 05:29	5° 8 30'18	4.35518 AU	max. Earth dist.	-7255 Dec 17 j 22:44	4°ML44'35	6.04883 AU
direct	-7260 Feb 18 j 17:06	0° 8 32'46		morning rise	-7255 Dec 30 j 04:41	7°M38'00	
	-7260 Jun 08 j 23:52	15° 8		, and the second	-7254 Jan 31 j 16:58	15° ™	
evening set	-7260 Jun 25 j 18:22	18° 8 37'25		retrograde	-7254 May 11 j 02:00	27° M 44'24	
max. Earth dist.	-7260 Jul 07 j 07:50		6.36368 AU	min. Earth dist.	-7254 Jul 09 j 08:51		4.04173 AU
man. Bartir dist.	7200 041 07 9 07.20	2. 0.002	0.50500110	opposition	-7254 Jul 10 j 08:09	22°M40'23	
conjunction	-7260 Jul 08 j 16:05	21° 8 28'24	1°02'50	direct	-7254 Sep 06 j 10:58	17°M45'32	1 3 1 3 1
minimum elong	-7260 Jul 08 j 16:00	21° 8 28'21		direct	-7254 Dec 09 j 14:47	0° √	
morning rise	-7260 Jul 21 j 10:36		1 05 11	evening set	-7253 Jan 09 j 01:05		
morning risc	-7260 Aug 17 j 02:35	24 О 1747		evening set	-7255 Jan 09 J 01.05	0 🗡 34 04	
retrograde	-7260 Nov 19 j 00:34	11° Ⅱ 27'39		conjunction	-7253 Jan 22 j 12:50	10° ∡ ¹04'06	1020/01
Č	-7259 Jan 18 j 11:44	6° П 35'56	1054120	minimum elong	-7253 Jan 22 j 12:30	10° × 04'04' 10° × 10° × 10° × 10° × 10° × 10° 10° 10° 10° 10° 10° 10° 10° 10° 10°	1°20'28
opposition			1°54'28	max. Earth dist.	3		
min. Earth dist.	-7259 Jan 19 j 13:03	6° Ⅱ 27'50	4.36125 AU		-7253 Jan 24 j 03:34	10° ₹ 26'53	6.04768 AU
direct	-7259 Mar 22 j 02:27	1° Ⅱ 35'02		morning rise	-7253 Feb 05 j 03:33	13° ∡ 15'36	
evening set	-7259 Jul 27 j 02:47	19° Ⅱ 35'18	6 0 4 4 0 5 4 X X		-7253 May 01 j 08:14	0°る	
max. Earth dist.	-7259 Aug 07 j 04:22	22° Ⅱ 03'19	6.34425 AU	retrograde	-7253 Jun 16 j 04:19	3°₹13'33	
					-7253 Jul 31 j 20:43	30°₹ ⋌	
conjunction	-7259 Aug 08 j 16:23	22° II 23'27	1°28'45	opposition	-7253 Aug 14 j 19:36	28° ₹ 08'24	
minimum elong	-7259 Aug 08 j 16:21	22° Ⅱ 23'26	1°29'13	min. Earth dist.	-7253 Aug 13 j 18:41		4.06991 AU
morning rise	-7259 Aug 21 j 03:40	25° Ⅱ 10'34		direct	-7253 Oct 12 j 00:41	23° ∡ 10'16	
	-7259 Sep 12 j 07:54	0 \circ			-7253 Dec 18 j 18:11	0°る	
retrograde	-7259 Dec 21 j 04:36	12° © 38'56		evening set	-7252 Feb 15 j 01:41	12° る 18'39	
opposition	-7258 Feb 20 j 05:12	7° 9 47'13	2°15'24				
min. Earth dist.	-7258 Feb 21 j 05:45	7° 5 39'26	4.31861 AU	conjunction	-7252 Feb 28 j 18:14	15° る 28'15	-1°30'30
direct	-7258 Apr 23 j 11:45	2° 5 49'11		minimum elong	-7252 Feb 28 j 18:16	15° る 28'16	1°30'59
evening set	-7258 Aug 27 j 05:39	20° © 54'12		max. Earth dist.	-7252 Mar 01 j 07:37	15° る 49'51	6.10145 AU
max. Earth dist.	-7258 Sep 07 j 10:12	23° 5 26'26	6.28116 AU	morning rise	-7252 Mar 13 j 12:01	18° る 38'21	
					-7252 May 05 j 22:56	0° ≈	
conjunction	-7258 Sep 08 j 15:55	23° 5 43'20	1°29'09	retrograde	-7252 Jul 19 j 19:42	7° ≈ 55'59	
minimum elong	-7258 Sep 08 j 15:57	23° 5 643'21	1°29'37	min. Earth dist.	-7252 Sep 16 j 06:44	2° ≈ 58'47	4.14370 AU
morning rise	-7258 Sep 21 j 01:31	26°532'19		opposition	-7252 Sep 17 j 01:32	2° ≈ 52'22	-2°03'35
	-7258 Oct 06 j 13:59	$0^{\circ}\Omega$			-7252 Oct 09 j 12:59	30°Ŗる	
retrograde	-7257 Jan 23 j 19:42	14° Ω 38'33		direct	-7252 Nov 15 j 01:16	27° る 50'56	
opposition	-7257 Mar 26 j 02:47	9° Ω 45'00	1°56'24		-7252 Dec 21 j 23:12	0° ≈	
min. Earth dist.	-7257 Mar 26 j 20:37	9° Ω 39'20	4.23885 AU		-7251 Mar 14 j 15:54	15° ≈	
direct	-7257 May 26 j 12:37	4° Ω 49'49		evening set	-7251 Mar 22 j 11:55	16° ≈ 45'12	
	-7257 Aug 21 i 19:26			C	<i>j</i>		

-7257 Aug 21 j 19:26 15°**Ω**

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7251 in astronomical counting style is the year 7252 BCE in historical counting style. -7251 Apr 05 j 05:40 19°≈51'37 -1°08'47 direct -7245 May 31 j 02:07 9°Ω27'58 conjunction -7251 Apr 05 j 05:44 -7245 Aug 01 j 02:19 minimum elong 19°≈51'39 1°09'07 15°Ω -7251 Apr 06 j 01:20 -7245 Oct 02 j 09:58 27°**Ω**49'47 max. Earth dist. 20°≈02'45 6.18904 AU evening set -7245 Oct 11 j 18:38 -7251 Apr 18 j 22:51 22°≈57'30 0° m morning rise -7251 May 21 j 10:09 0°**∀** 11°**米**21′36 retrograde -7251 Aug 21 j 19:47 conjunction -7245 Oct 14 j 23:56 0° Mp 44'58 0°56'37 -7251 Oct 20 j 00:40 opposition 6°**∺**21'17 -1°12'12 minimum elong -7245 Oct 14 j 24:00 0°Mp45'01 0°56'54 $0°\,\hbox{\it M}\,38'00$ min. Earth dist. -7251 Oct 19 j 18:39 6°**¥**23'19 4.23564 AU max. Earth dist. -7245 Oct 14 j 11:57 6.17353 AU direct -7251 Dec 19 j 06:27 1°**)** 17'38 morning rise -7245 Oct 27 j 15:20 3°m41'05 evening set -7250 Apr 26 j 12:02 19°**)** 51'04 retrograde -7244 Mar 04 j 01:15 22° m/45'00 opposition -7244 May 04 j 06:07 17° **m** 47'33 0°48'49 -7250 May 10 j 02:34 conjunction 22° **∺** 52'28 -0°25'00 min. Earth dist. -7244 May 04 j 07:30 17° Mp 47'06 4.12899 AU -7244 Jul 03 j 04:39 minimum elong -7250 May 10 j 02:36 22°**)** 52'29 0°25'07 direct 12° m 54'27 max. Earth dist. -7250 May 10 j 01:37 22°**)** 51'56 6.27907 AU -7244 Oct 27 j 22:48 0∘**⊽** morning rise -7250 May 23 j 14:19 25°¥52'24 evening set -7244 Nov 03 j 16:40 1°**£**34'19 -7250 Jun 11 j 13:56 $0^{\circ}\Upsilon$ retrograde -7250 Sep 22 j 14:02 13°**Y**30'22 conjunction -7244 Nov 16 j 14:11 4°**£**36′26 0°06'40 opposition -7250 Nov 21 j 01:36 8°**Y**33'57 -0°00'17 minimum elong -7244 Nov 16 j 14:12 4°**₽**36'26 0°06'41 min. Earth dist. -7250 Nov 21 j 09:04 8°Y31'29 4.31557 AU behind sun begin -7244 Nov 16 j 06:37 4°**£**31'59 asc. node -7250 Nov 22 j 13:12 8°Y22'10 behind sun end -7244 Nov 16 j 21:47 4°**£**40'53 direct -7249 Jan 21 j 12:01 3°Y29'53 max. Earth dist. -7244 Nov 16 j 23:32 4°**£**41'55 6.09070 AU evening set -7249 May 29 j 22:14 21°**Y**44'36 morning rise -7244 Nov 29 j 14:43 7°**♀**40'14 max. Earth dist. -7249 Jun 11 j 06:08 24°**Y**27'41 6.34298 AU desc. node -7243 Jan 03 j 18:39 15°**£**34'16 retrograde -7243 Apr 09 i 13:21 27°**2**27'19 conjunction -7249 Jun 12 j 04:31 24°**Y**'40'02 0°25'23 opposition -7243 Jun 09 j 08:23 22°**2**25'56 -0°32'20 -7249 Jun 12 j 04:28 24°**Y**40'01 0°25'32 min. Earth dist. -7243 Jun 08 j 17:36 22°**₽**30'49 4 06182 AU minimum elong -7249 Jun 25 j 07:30 27°**Y**33'45 -7243 Aug 07 j 01:18 direct 17°**£**32'47 morning rise -7249 Jul 06 j 12:11 -7243 Nov 10 j 06:04 0°8 oom. -7243 Dec 08 j 18:05 6°MJ30'40 -7249 Oct 23 j 20:05 14°**8**46'09 retrograde evening set -7249 Dec 22 j 19:00 9°**8**52'54 1°09'47 opposition -7249 Dec 23 j 14:58 9° MJ38'21 -0° 46'52 -7243 Dec 21 j 23:52 min. Earth dist. 9°**8**46'25 4.35960 AU conjunction 4°**8**49'57 -7248 Feb 23 j 02:50 minimum elong -7243 Dec 21 j 23:47 9°ML38'19 0°47'08 direct -7248 May 23 j 07:23 15°8 max. Earth dist. -7243 Dec 23 j 05:25 9°**ጤ**55'51 6.04503 AU -7248 Jun 30 j 00:29 22°**8**53'29 -7242 Jan 04 j 09:07 evening set morning rise 12°M47'54 -7242 Jan 13 j 19:53 max. Earth dist. -7248 Jul 11 j 11:43 25°**8**25'29 6.36292 AU 15°M -7242 Apr 02 j 12:05 0°**⊼** -7248 Jul 12 j 21:05 conjunction 25°**8**43'59 1°07'34 retrograde -7242 May 16 j 06:27 2°**₹**55'07 minimum elong -7248 Jul 12 j 21:01 25°**8**43'56 1°07'57 -7242 Jun 28 j 22:34 30°RML -7248 Jul 25 j 14:18 28°**8**32'52 min. Earth dist. -7242 Jul 14 j 10:37 27°M58'50 4.04339 AU morning rise -7248 Aug 01 j 05:16 $0^{\circ}II$ -7242 Jul 15 j 10:41 27°M50'42 -1°43'08 opposition retrograde -7248 Nov 23 j 06:30 15°**Ⅱ**44'27 direct -7242 Sep 11 j 13:27 22°M55'26 -7247 Jan 22 j 20:04 10°**Ⅲ**52'50 -7242 Nov 19 j 02:48 opposition 1°59'23 0°×7 min. Earth dist. -7247 Jan 23 j 21:30 10°**Ⅱ**44'43 -7241 Jan 14 j 06:46 4.35565 AU evening set 12°**₹**04'09 -7247 Mar 26 j 09:23 5°**I**52'17 direct -7247 Jul 31 j 07:58 23°**Ⅲ**53'53 -7241 Jan 27 j 19:22 15°**∡**14'13 -1°23'32 evening set conjunction max. Earth dist. -7247 Aug 11 i 07:57 26°**II**21'27 6.33401 AU minimum elong -7241 Jan 27 i 19:18 15°**∡**14'11 1°23'59 max. Earth dist. -7241 Jan 29 i 12:14 15°**∡**'38'11 6.05420 AU conjunction -7247 Aug 12 j 20:45 26°**Ⅱ**42'06 1°30'22 morning rise -7241 Feb 10 i 10:37 18°**х** 25′36 minimum elong -7247 Aug 12 j 20:43 26°**Ⅱ**42'05 1°30'50 -7241 Apr 05 j 02:31 0°정 -7247 Aug 25 j 07:35 29°**Ⅲ**29'25 -7241 Jun 21 j 04:15 8°**궁**18'29 morning rise retrograde -7247 Aug 27 j 14:33 0ಂತಾ -7241 Aug 19 j 17:37 3°₹13'26 -2°15'20 opposition -7247 Dec 25 j 18:13 min. Earth dist. -7241 Aug 18 j 16:43 3°る21'55 4.08057 AU retrograde 17°903'29 30°₽**⋌**7 -7241 Sep 14 j 12:37 opposition -7246 Feb 24 j 18:27 12°9511'39 2°15'13 28°**х** 14′50 min. Earth dist. -7246 Feb 25 j 19:49 12°903'36 4.30438 AU -7241 Oct 17 j 00:18 direct -7246 Apr 27 j 23:14 7°9514'01 -7241 Nov 18 j 17:05 0°궁 direct -7246 Aug 31 j 12:49 25°922'17 evening set -7240 Feb 20 j 06:10 17°る20'57 evening set -7240 Mar 04 j 22:55 20°る30'04 -1°29'15 conjunction -7246 Sep 12 j 23:15 28°**©**12'10 1°26'59 conjunction -7246 Sep 12 j 23:18 -7240 Mar 04 j 22:57 minimum elong 28°**©**12'11 1°27'27 minimum elong 20°る30'05 1°29'44 20°**る**49'49 max. Earth dist. -7246 Sep 11 j 18:16 27°955'37 6.26408 AU max. Earth dist. -7240 Mar 06 j 09:12 6.11495 AU 23°る39'36 -7246 Sep 20 j 20:15 0° Ω morning rise -7240 Mar 18 j 16:57 -7246 Sep 25 j 09:19 1°**Ω**02′02 -7240 Apr 16 j 06:29 0°≈ morning rise -7246 Dec 05 j 03:18 15°€ retrograde -7240 Jul 24 j 12:21 12°≈49'10 retrograde -7245 Jan 28 j 14:01 19°**Ω**16'43 opposition -7240 Sep 21 j 18:14 7°≈45'54 -1°58'27 -7245 Mar 26 j 00:46 15°RΩ min. Earth dist. -7240 Sep 21 j 01:09 7°≈51'44 4.15851 AU -7245 Mar 30 j 21:53 14°Ω22'46 1°50'33 -7240 Nov 19 j 22:25 2°≈44'04 opposition direct

min. Earth dist.

-7245 Mar 31 j 13:03

14°**Ω**17'57 4.22019 AU

-7239 Feb 25 j 05:51

15°≈

-	_				7240 BCE in historical c	_	50 13
evening set	-7239 Mar 27 j 11:17	-		retrograde	-7233 Feb 02 j 12:35	24° Ω 01'29	
				opposition	-7233 Apr 04 j 19:45	19° Ω 07'08	1°43'51
conjunction	-7239 Apr 10 j 05:00	24° ≈ 40′30	-1°03'39	min. Earth dist.	-7233 Apr 05 j 09:40	19° Ω 02'42	4.20716 AU
minimum elong	-7239 Apr 10 j 05:05	24° ≈ 40′32	1°03'58		-7233 May 13 j 07:02	15°R Ω	
max. Earth dist.	-7239 Apr 10 j 23:00	24° ≈ 50′39	6.20422 AU	direct	-7233 Jun 04 j 21:04	14° Ω 12'38	
morning rise	-7239 Apr 23 j 21:32	27° ≈ 45'31			-7233 Jun 27 j 07:15	15° Ω	
	-7239 May 03 j 23:35	0°) €			-7233 Sep 25 j 14:39	0° m)	
retrograde	-7239 Aug 26 j 07:49	16°) €01'47		evening set	-7233 Oct 06 j 23:59	2° Mp 36'37	
opposition	-7239 Oct 24 j 12:58	11°) 02′04					
min. Earth dist.	-7239 Oct 24 j 08:49		4.24969 AU	conjunction	-7233 Oct 19 j 14:52	5° Mp 32'42	0°50'30
direct	-7239 Dec 23 j 22:30	5° ¥ 58'19		minimum elong	-7233 Oct 19 j 14:56	5° m 32'44	
evening set	-7238 May 01 j 05:49	24°) €28′22		max. Earth dist.	-7233 Oct 19 j 06:07	5° Mp 27′36	6.16164 AU
				morning rise	-7233 Nov 01 j 07:26	8° m ,29'51	
conjunction	-7238 May 14 j 19:17	27° ∺ 28'53		retrograde	-7232 Mar 09 j 02:04	27° m 39'57	
minimum elong	-7238 May 14 j 19:19	27°) €28'54		opposition	-7232 May 09 j 07:02	22° m/41'56	0°38'01
max. Earth dist.	-7238 May 14 j 13:40	27° ¥ 25'46	6.29095 AU	min. Earth dist.	-7232 May 09 j 05:01	22° m/42'35	4.11932 AU
	-7238 May 26 j 03:35	0° Υ		direct	-7232 Jul 08 j 00:17	17° m) 48'58	
morning rise	-7238 May 28 j 06:09	0° Υ 27'56			-7232 Oct 10 j 20:11	0∘ ⊽	
retrograde	-7238 Sep 26 j 22:34	18° Y 00'48 17° Y 56'49		evening set	-7232 Nov 08 j 11:58	6° £ 30'36	
asc. node	-7238 Oct 03 j 06:10	1/° γ 56 49 13° γ 04'53	0°10'03	desc. node	-7232 Nov 13 j 09:16	7° ≏ 39'28	
opposition	-7238 Nov 25 j 11:34 -7238 Nov 25 j 21:29	13° Υ 04'33	4.32452 AU		7222 N 21 : 10-24	00 0 22120	0001100
min. Earth dist. direct	-7237 Jan 26 j 01:52	8° Υ 00'51	4.32432 AU	conjunction	-7232 Nov 21 j 10:34	9° ₤ 33'28	
evening set	-7237 Jun 03 j 10:52	26°Υ13'30		minimum elong behind sun begin	-7232 Nov 21 j 10:33 -7232 Nov 21 j 02:26	9° 2 28'41	0 01 11
evening set	-7237 Juli 03 j 10.32	20 11330		behind sun end	-7232 Nov 21 j 02.20 -7232 Nov 21 j 18:41	9° £ 38'14	
conjunction	-7237 Jun 16 j 15:59	29° Ƴ 08'12	0°32'02	max. Earth dist.	-7232 Nov 21 j 18:41 -7232 Nov 21 j 23:13	9° £ 40'55	6.08409 AU
minimum elong	-7237 Jun 16 j 15:57	29 γ 08 12 29° γ 08'11	0°32'12	morning rise	-7232 Nov 21 j 23.13 -7232 Dec 04 j 12:17	9 = 40 33 12° £ 38'04	0.06409 AU
max. Earth dist.	-7237 Jun 15 j 16:31	28° Υ 55'14	6.34839 AU	morning risc	-7232 Dec 04 j 12.17 -7231 Mar 05 j 04:47	0°ML	
max. Latin dist.	-7237 Jun 20 j 13:42	0°8	0.54057 AU	retrograde	-7231 Apr 14 j 16:02	2°M28'34	
morning rise	-7237 Jun 29 j 17:27	2° 8 01'07		renograde	-7231 May 25 j 02:55	30°R <u>₽</u>	
morning rise	-7237 Sep 04 j 23:36	15° 8		opposition	-7231 Jun 14 j 09:33	27° £ 26'35	-0°43'31
retrograde	-7237 Oct 28 j 03:47	19° 8 12'06		min. Earth dist.	-7231 Jun 13 j 17:18	27° ⊆ 31'59	4.05888 AU
remogrado	-7237 Dec 21 j 22:35	15°R 8		direct	-7231 Aug 12 j 00:41	22° £ 33'12	
opposition	-7237 Dec 27 j 05:11	14° 8 19'11	1°18'16		-7231 Oct 21 j 16:02	0° M	
min. Earth dist.	-7237 Dec 28 j 01:52	14° 8 12'30	4.36132 AU	evening set	-7231 Dec 13 j 18:02	11°ML31'57	
direct	-7236 Feb 27 j 14:02	9° 8 16'34		C	,		
	-7236 May 02 j 20:05	15° 8		conjunction	-7231 Dec 27 j 00:51	14°ML40'01	-0°53'22
evening set	-7236 Jul 04 j 09:59	27° 8 19'35		minimum elong	-7231 Dec 27 j 00:46	14°MJ39'58	0°53'40
max. Earth dist.	-7236 Jul 15 j 17:18	29° 8 49'40	6.36062 AU	max. Earth dist.	-7231 Dec 28 j 09:28	14°ML59'17	6.04589 AU
	-7236 Jul 16 j 11:55	Π $^{\circ}0$			-7231 Dec 28 j 10:41	15°M₊	
				morning rise	-7230 Jan 09 j 11:00	17°M49'52	
conjunction	-7236 Jul 17 j 05:11	0° Ⅱ 09'35	1°12'06		-7230 Mar 06 j 20:47	0° ∡ ¹	
minimum elong	-7236 Jul 17 j 05:06	0° Ⅱ 09'33	1°12'30	retrograde	-7230 May 21 j 06:56	7° ∡ 755'52	
morning rise	-7236 Jul 29 j 21:26	2° Ⅱ 58′07		min. Earth dist.	-7230 Jul 19 j 08:23	2° ∡ ¹59'34	4.04821 AU
retrograde	-7236 Nov 27 j 18:45	20° Ⅱ 12'01		opposition	-7230 Jul 20 j 09:03	2° ∡ 751'14	-1°50'17
opposition	-7235 Jan 27 j 09:06	15° Ⅱ 20′28	2°03'51		-7230 Aug 11 j 22:39	30°RM	
min. Earth dist.	-7235 Jan 28 j 11:45	15° Ⅱ 11'58	4.34967 AU	direct	-7230 Sep 16 j 11:11	27°M55'34	
direct	-7235 Mar 30 j 22:52	10° Ⅲ 20′16			-7230 Oct 21 j 22:25	0° ∡ ¹	
evening set	-7235 Aug 04 j 16:30	28° Ⅱ 22'51		evening set	-7229 Jan 19 j 08:48	17° ∡ ¹03'41	
_	-7235 Aug 11 j 22:08	0°€					
max. Earth dist.	-7235 Aug 15 j 17:09	0°€51′08	6.32484 AU	conjunction	-7229 Feb 01 j 21:55	20° ∡ 13'37	
				minimum elong	-7229 Feb 01 j 21:52	20° ∡ 13'35	
conjunction	-7235 Aug 17 j 04:46	1°511'09	1°31'32	max. Earth dist.	-7229 Feb 03 j 13:02	20° ∡ 36′30	6.06209 AU
minimum elong	-7235 Aug 17 j 04:45	1°5511'09	1°32'01	morning rise	-7229 Feb 15 j 13:49	23° ∡ ¹24'50	
morning rise	-7235 Aug 29 j 15:02	3°958'37			-7229 Mar 16 j 19:49	0°る	
retrograde	-7235 Dec 30 j 08:49	21°937'55	2014114	retrograde	-7229 Jun 25 j 22:38	13°る12'28	4.00072 411
opposition	-7234 Mar 01 j 11:30	16°945'55		min. Earth dist.	-7229 Aug 23 j 11:17	8° る 15'45	4.09072 AU
min. Earth dist.	-7234 Mar 02 j 10:58	16°938'28	4.29286 AU	opposition	-7229 Aug 24 j 11:28	8° る 07'29	-2~15′50
direct	-7234 May 02 j 12:40	11°9548'45		direct	-7229 Oct 21 j 20:36	3°る08'22	
evening set	-7234 Sep 04 j 23:14	29°958'58		evening set	-7228 Feb 25 j 06:28	22° る 12'37	
may Forth Ji-4	-7234 Sep 05 j 01:02	0°Ω 2°Ω34'01	6 25120 ATT	agniumation	7000 Mar 00 : 22:42	250=221124	1027125
max. Earth dist.	-7234 Sep 16 j 06:49	2° Ω 34'01	6.25138 AU	conjunction minimum elong	-7228 Mar 09 j 23:43 -7228 Mar 09 j 23:46	25°る21'24 25°る21'25	1°27'53
conjunction	-7234 Sep 17 j 09:44	2° Ω 49'26	1°24'16	max. Earth dist.	-7228 Mar 19 j 23:46 -7228 Mar 11 j 08:51	25° る 40'27	6.12656 AU
minimum elong	-7234 Sep 17 j 09:47	2° Ω 49′27	1°24'42	morning rise	-7228 Mar 11 j 08.31 -7228 Mar 23 j 17:36	23 3 4027 28° る 30'23	0.12030 AU
morning rise	-7234 Sep 17 j 09.47	5° Ω 40'01	1 4T TL	morning 1150	-7228 Mar 30 j 07:41	28 3 3023	
	-7234 Nov 12 j 09:39	15° Ω			-7228 Jun 18 j 20:03	0 ∞ 15°≈	
	, 23 . 1101 12 j 07.37	10 00			,0 van 10 j 20.03		

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 16 Attention, astronomical year style is used: The year -7228 in astronomical counting style is the year 7229 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	ne year -7228 i	in astronomical co	ounting style is the year	7229 BCE in historical c	ounting style.	
retrograde	-7228 Jul 29 j 03:11	17° ≈ 32'52			-7222 Aug 19 j 17:50	0 $^{\circ}$ Ω	
	-7228 Sep 07 j 02:29	15°R≈		evening set	-7222 Sep 09 j 09:18	4° Ω 36′02	
opposition	-7228 Sep 26 j 07:35	12° ≈ 30′05					
min. Earth dist.	-7228 Sep 25 j 16:42		4.17033 AU	conjunction	-7222 Sep 21 j 20:13	7° Ω 27'02	
direct	-7228 Nov 24 j 15:13	7° ≈ 27'56		minimum elong	-7222 Sep 21 j 20:16	7° Ω 27'04	
	-7227 Feb 05 j 23:07	15° ≈		max. Earth dist.	-7222 Sep 20 j 20:24	7° Ω 13'23	6.24114 AU
evening set	-7227 Apr 01 j 07:55	26° ≈ 16'19		morning rise	-7222 Oct 04 j 07:08	10° Ω 18'17	
					-7222 Oct 25 j 07:25	15° Ω	
conjunction	-7227 Apr 15 j 01:17	29°≈21'30		retrograde	-7221 Feb 07 j 08:41	28° Ω 45'35	100 (100
minimum elong	-7227 Apr 15 j 01:22	29°≈21'33		opposition	-7221 Apr 09 j 16:55	23° Ω 50'48	1°36'28
max. Earth dist.	-7227 Apr 15 j 14:54	29°≈29'10	6.21532 AU	min. Earth dist.	-7221 Apr 10 j 04:21	23° Ω 47'09	4.19669 AU
	-7227 Apr 17 j 21:39	0°) {		direct	-7221 Jun 09 j 13:38	18° Ω 56'37	
morning rise	-7227 Apr 28 j 17:28	2°\(\frac{1}{2}25'53			-7221 Sep 08 j 10:58	0°M) 70 M; 2210 €	
retrograde	-7227 Aug 30 j 16:46	20°) (36′04	0952122	evening set	-7221 Oct 11 j 13:35	7° Mp 22'05	
opposition min. Earth dist.	-7227 Oct 28 j 23:14 -7227 Oct 28 j 20:59	15° ¥ 36'52	4.25918 AU	amiumation	7221 Oct. 24 : 05:14	10° m) 18'57	0944104
	-7227 Oct 28 j 20:39 -7227 Dec 28 j 12:25	13° X 3/3/ 10° X 32'58	4.23918 AU	conjunction	-7221 Oct 24 j 05:14	10° Mg 18'59	
direct	·	29° X 01'21		minimum elong max. Earth dist.	-7221 Oct 24 j 05:18 -7221 Oct 23 j 22:47	10° My 15'11	6.15178 AU
evening set	-7226 May 05 j 21:52 -7226 May 10 j 08:05	29 χ 0121		morning rise	-7221 Oct 23 j 22:47 -7221 Nov 05 j 22:58	13°M)17'02	0.13178 AU
	-7220 May 10 J 08.03	U I		morning rise	-7221 Nov 03 j 22.38 -7220 Feb 01 j 19:07	0° ⊡	
conjunction	-7226 May 19 j 10:33	2° Y 01'14	0°11'04	retrograde	-7220 Mar 14 j 03:00	0 = 2° ⊆ 32'45	
minimum elong	-7226 May 19 j 10:34	2° Υ 01'14		renograde	-7220 Mar 14 j 05:00 -7220 Apr 24 j 16:33	2 <u>=</u> 32 43 30°R M)	
behind sun begin	-7226 May 19 j 04:30	1° Υ 57'53	0 11 00	opposition	-7220 Apr 24 j 10.33	27° Mp 34'09	0°27'02
behind sun begin	-7226 May 19 j 16:38	2° Υ '04'36		min. Earth dist.	-7220 May 14 j 00:24 -7220 May 14 j 02:42	27° m) 35'21	4.11065 AU
max. Earth dist.	-7226 May 19 j 02:40	1° Υ 56'52	6.29836 AU	direct	-7220 May 14 j 02:42	27 m/3321 22°m/41'12	4.11003 AO
morning rise	-7226 Jun 01 j 20:14	4°Υ59'32	0.29830 AU	direct	-7220 Sep 21 j 10:55	0° ⊡	
asc. node	-7226 Aug 14 j 02:21	18° Y 56'56		desc. node	-7220 Sep 21 j 10:33	0° £ 22'32	
retrograde	-7226 Oct 01 j 07:24	22° Υ 29'03		evening set	-7220 Nov 13 j 06:23	0 — 22 32 11° Ω 24'44	
opposition	-7226 Nov 29 j 21:14	17° Y 33'40	0°20'13	evening set	-7220 NOV 13 J 00.23	11 —2444	
min. Earth dist.	-7226 Nov 30 j 08:55	17° Υ 29'50	4.32937 AU	conjunction	-7220 Nov 26 j 06:15	14° ≏ 28'25	-0°08'48
direct	-7225 Jan 30 j 14:24	12° Υ 29'50	4.32/37 AO	minimum elong	-7220 Nov 26 j 06:13	14° ⊆ 28'24	
direct	-7225 Jun 04 j 19:01	0°8		behind sun begin	-7220 Nov 25 j 23:12	14° ⊆ 24'17	0 00 32
evening set	-7225 Jun 07 j 23:14	0° 8 41'41		behind sun end	-7220 Nov 26 j 13:14	14° Ω 32'31	
max. Earth dist.	-7225 Jun 20 j 00:20	3° 8 21'03	6.35020 AU	max. Earth dist.	-7220 Nov 26 j 22:31	14° £ 38'01	6.07749 AU
man. Darut dist.	/220 Van 20 j 00:20	5 02 1 05	0.50020110	morning rise	-7220 Dec 09 j 09:09	17° Ω 33'51	0.077.57120
conjunction	-7225 Jun 21 j 02:57	3° 8 35'46	0°38'27		-7219 Feb 05 j 10:39	0°M	
minimum elong	-7225 Jun 21 j 02:54	3° 8 35'44	0°38'41	retrograde	-7219 Apr 19 j 17:43	7° ™ 27'41	
morning rise	-7225 Jul 04 j 03:15	6° 8 28'06		opposition	-7219 Jun 19 j 09:15	2°M25'17	-0°54'18
5 5	-7225 Aug 14 j 03:29			min. Earth dist.	-7219 Jun 18 j 15:42		4.05517 AU
retrograde	-7225 Nov 01 j 13:32	23° 8 38'59			-7219 Jul 08 j 11:07	30° ₽ Ω	
opposition	-7225 Dec 31 j 16:17	18° 8 46'21	1°26'18	direct	-7219 Aug 16 j 21:21	27° Ω 31'43	
min. Earth dist.	-7224 Jan 01 j 14:09	18° 8 39'17	4.36036 AU		-7219 Sep 24 j 20:27	0° M	
	-7224 Feb 02 j 21:30	15° ₹ 8			-7219 Dec 12 j 04:01	15° ™	
direct	-7224 Mar 03 j 02:42	13° 8 44'02		evening set	-7219 Dec 18 j 17:35	16°M32'04	
	-7224 Apr 01 j 12:28	15° 8			· ·		
	-7224 Jun 30 j 16:03	$\Pi^{\circ}0$		conjunction	-7218 Jan 01 j 01:15	19°M40'32	-0°59'27
evening set	-7224 Jul 08 j 19:59	1° Ⅱ 47'15		minimum elong	-7218 Jan 01 j 01:10	19°M40'29	0°59'47
max. Earth dist.	-7224 Jul 20 j 03:21	4° Ⅱ 17'34	6.35694 AU	max. Earth dist.	-7218 Jan 02 j 10:00	19°M59'53	6.04509 AU
				morning rise	-7218 Jan 14 j 12:28	22°M50'49	
conjunction	-7224 Jul 21 j 14:08	4° Ⅱ 36′54	1°16'14		-7218 Feb 15 j 02:36	0° ∡	
minimum elong	-7224 Jul 21 j 14:04	4° ∏ 36′52	1°16'38	retrograde	-7218 May 26 j 06:03	12° ₹ 56′22	
morning rise	-7224 Aug 03 j 05:09	7° Ⅱ 25'07		min. Earth dist.	-7218 Jul 24 j 05:20	8° ₰ 00'05	4.05056 AU
retrograde	-7224 Dec 02 j 06:05	24° Ⅱ 41'38		opposition	-7218 Jul 25 j 06:40	7° ∡ 751'30	-1°56'38
opposition	-7223 Jan 31 j 22:59	19° ∏ 50′11	2°07'36	direct	-7218 Sep 21 j 08:47	2° ₹ 55'20	
min. Earth dist.	-7223 Feb 02 j 00:58	19° ∏ 41'55	4.34374 AU	evening set	-7217 Jan 24 j 11:03	22° ₰ 04'02	
direct	-7223 Apr 04 j 11:35	14° Ⅱ 50′28					
	-7223 Jul 26 j 22:58	0		conjunction	-7217 Feb 07 j 01:04	25° х 14′04	-1°28'26
evening set	-7223 Aug 09 j 01:47	2° © 53'45		minimum elong	-7217 Feb 07 j 01:02	25° ҂ 14′02	
max. Earth dist.	-7223 Aug 20 j 01:47	5° 5 22'04	6.31694 AU	max. Earth dist.	-7217 Feb 08 j 17:02	25° ∡ ³37′24	6.06734 AU
				morning rise	-7217 Feb 20 j 17:19	28° ₹ 25'11	
conjunction	-7223 Aug 21 j 13:18	5° © 42'05			-7217 Feb 27 j 13:56	8°0	
minimum elong	-7223 Aug 21 j 13:18	5° © 42'05	1°32'40	retrograde	-7217 Jun 30 j 19:29	18° る 08'24	
morning rise	-7223 Sep 02 j 23:22	8° 5 29'45		min. Earth dist.	-7217 Aug 28 j 07:07	13° る 11'18	4.09826 AU
retrograde	-7222 Jan 04 j 02:08	26° © 13'49		opposition	-7217 Aug 29 j 05:39	13° る 03'35	-2°15'24
opposition	-7222 Mar 06 j 05:22	21° © 21'34		direct	-7217 Oct 26 j 17:06	8° ප 03'59	
min. Earth dist.	-7222 Mar 07 j 04:12	21° © 14'19	4.28339 AU	evening set	-7216 Mar 01 j 08:07	27° る 07'20	
direct	-7222 May 07 j 04:50	16°524'46			-7216 Mar 13 j 21:57	0° ≈	

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7216 in astronomical counting style is the year 7217 BCE in historical counting style. -7216 Mar 15 i 01:37 0°≈15'52 -1°24'58 retrograde -7210 Jan 08 i 16:54 0°Ω46'55 conjunction -7216 Mar 15 j 01:41 0°≈15'54 1°25'24 -7210 Jan 31 j 08:24 30°R95 minimum elong -7216 Mar 16 j 07:47 0°≈33'09 opposition -7210 Mar 10 j 22:19 25°954'26 2°09'41 max. Earth dist. 6.13566 AU 3°≈24'30 -7210 Mar 11 j 19:51 -7216 Mar 28 j 19:44 min. Earth dist. 25°9547'36 4.27725 AU morning rise -7210 May 11 j 19:15 -7216 May 23 j 02:48 15°≈ direct 20°958'04 -7210 Aug 02 j 01:29 -7216 Aug 02 j 17:07 retrograde 22°≈20'36 0° Ω 9°**Ω**09'14 opposition -7216 Sep 30 j 22:13 17°≈18'12 -1°46'08 evening set -7210 Sep 13 j 18:22 11°**Ω**47'22 max. Earth dist. min. Earth dist. -7216 Sep 30 j 08:18 17°≈22'57 4.18002 AU -7210 Sep 25 j 06:17 6.23376 AU -7216 Oct 18 j 13:13 15°R≈ direct -7216 Nov 29 j 08:47 12°≈15'40 conjunction -7210 Sep 26 j 05:23 12°**Ω**00'39 1°17'16 -7210 Sep 26 j 05:27 -7215 Jan 10 j 15:26 15°≈ minimum elong 12°**Ω**00'41 1°17'40 0°**)**€ -7210 Oct 08 j 17:00 14°**Ω**52'28 -7215 Apr 01 j 14:01 morning rise -7210 Oct 09 j 06:12 evening set -7215 Apr 06 j 05:59 1°**)** 02′19 15°€ -7210 Dec 25 j 19:56 0° m conjunction -7215 Apr 19 j 23:07 4°¥07'00 -0°52'21 retrograde -7209 Feb 12 j 03:57 3° m 24'44 minimum elong -7215 Apr 19 j 23:12 4°**)**€07'03 0°52'36 -7209 Apr 02 j 12:25 30°R€ -7215 Apr 20 j 09:53 max. Earth dist. 4°**₩**13'03 6.22507 AU opposition -7209 Apr 14 j 12:16 28°**Ω**29'27 1°28'31 morning rise -7215 May 03 j 14:42 7°**)** 10'44 min. Earth dist. -7209 Apr 14 j 22:07 28°**Ω**26′17 4.18827 AU retrograde -7215 Sep 04 j 05:44 25°**)** 15′15 direct -7209 Jun 14 j 05:22 23°**Ω**35'28 opposition -7215 Nov 02 j 11:45 20°\ 16'36 -0°43'21 -7209 Aug 19 j 21:25 0° m min. Earth dist. -7215 Nov 02 j 11:55 20°**¥**16'33 4.26797 AU evening set -7209 Oct 16 j 01:12 12° m 01'55 direct -7214 Jan 02 i 05:27 15°**¥** 12'39 -7214 Apr 23 j 19:45 $0^{\circ}\Upsilon$ conjunction -7209 Oct 28 i 17:55 14° m 59'36 0°37'27 evening set -7214 May 10 j 15:41 3°Y39'11 minimum elong -7209 Oct 28 i 17:59 14° m 59'38 0°37'38 max. Earth dist. -7209 Oct 28 j 14:49 14° m 57'47 6.14326 AU -7214 May 24 j 03:25 6°Y38'23 -0°03'54 -7209 Nov 10 j 12:40 17° m 58'33 conjunction morning rise -7214 May 24 j 03:24 6°**Y**38′23 0°03'54 -7208 Jan 06 j 03:34 0∘**⊽** minimum elong -7214 May 23 j 19:16 6°**Y**33'54 -7208 Mar 19 j 01:13 7°**♀**19'24 behind sun begin retrograde -7214 May 24 j 11:31 6°Y42'52 -7208 May 19 j 03:28 behind sun end opposition 2°**2**20'19 0°16'02 -7214 May 23 j 16:47 -7208 May 18 j 22:28 6°**Ƴ**32'30 6.30565 AU min. Earth dist. max. Earth dist. 2°**£**21'57 4.10265 AU -7208 Jun 06 j 20:47 -7214 Jun 06 j 11:58 9°**Y**35'56 30°R, Mp morning rise 27° m/27'26 -7214 Jun 23 j 08:19 -7208 Jul 17 j 13:24 13°**Y**15'31 direct asc. node -7214 Oct 05 j 16:52 -7208 Aug 04 j 21:50 27°**Y**′02′02 28° m 00'44 retrograde desc. node -7214 Dec 04 j 08:56 22°Υ07'05 0°30'27 -7208 Aug 26 j 12:50 opposition 0∘ଫ -7214 Dec 04 j 21:27 22°Υ02'58 4.33496 AU -7208 Nov 17 j 23:13 min. Earth dist. evening set 16°**₽**13'02 -7213 Feb 04 j 04:43 17°**Y**03′23 direct -7208 Nov 30 j 23:59 -7213 May 19 j 01:52 0° 8 conjunction 19°**₽**17'27 -0°16'13 evening set -7213 Jun 12 j 13:04 5°**8**13'51 minimum elong -7208 Nov 30 j 23:57 19° 217'26 0°16'19 max. Earth dist. -7208 Dec 01 j 16:50 19°**≏**27'24 6.07062 AU conjunction -7213 Jun 25 j 15:25 8°807'12 0°44'46 morning rise -7208 Dec 14 j 04:14 22°**£**23'44 minimum elong -7213 Jun 25 j 15:22 8°807'10 0°45'02 -7207 Jan 16 j 20:50 0°M max. Earth dist. -7213 Jun 24 j 12:23 7°**と**52'15 6.35389 AU retrograde -7207 Apr 24 j 16:13 12°M21'12 -7213 Jul 08 j 14:16 10°**8**58'48 min. Earth dist. -7207 Jun 23 j 11:25 7°M24'45 4.05022 AU morning rise -7213 Jul 27 j 04:44 15°8 -7207 Jun 24 j 06:27 7°M18'24 -1°04'31 opposition -7213 Nov 06 j 00:08 28°**8**08'50 -7207 Aug 21 j 16:05 2°M24'34 retrograde direct -7212 Jan 05 i 04:58 23°**8**16'30 opposition 1°33'56 -7207 Nov 25 i 08:41 15°M -7212 Jan 06 i 03:31 min. Earth dist. 23°**8**09'15 4.36212 AU evening set -7207 Dec 23 j 15:51 21°M27'30 direct -7212 Mar 07 i 17:11 18°**8**14'33 -7212 Jun 13 j 19:47 $\mathbb{I}^{\circ 0}$ conjunction -7206 Jan 06 i 00:40 24°M36'32 -1°04'59 -7212 Jul 13 j 06:27 6°**Ⅱ**16'34 minimum elong -7206 Jan 06 i 00:35 24°MJ36'29 1°05'21 evening set 6.35647 AU max. Earth dist. -7212 Jul 24 j 11:28 8°**Ⅱ**45'45 max. Earth dist. -7206 Jan 07 i 11:49 24°ML57'17 6.04255 AU 27°M47'16 -7206 Jan 19 j 12:38 morning rise -7212 Jul 25 j 23:18 9°II05'42 1°19'56 -7206 Jan 29 j 01:05 0°**∡**7 conjunction 9°**Д**05'40 1°20'22 minimum elong -7212 Jul 25 j 23:15 retrograde -7206 May 31 j 06:00 17°**х** 53′03 morning rise -7212 Aug 07 j 13:25 11°**Ⅲ**53'30 min. Earth dist. -7206 Jul 29 j 02:17 12°**尽**56'25 4.05091 AU retrograde -7212 Dec 06 j 18:41 29°**Ⅱ**11'40 opposition -7206 Jul 30 j 02:44 12°**∡**148'06 -2°02'03 7°**∡**°51'33 opposition -7211 Feb 05 j 13:42 24°**Ⅲ**20′09 2°10'33 direct -7206 Sep 26 j 05:01 -7211 Feb 06 j 15:18 24°**Ⅱ**12'00 4.34120 AU -7205 Jan 29 j 12:48 27°**х** 01′52 min. Earth dist. evening set -7211 Apr 09 j 01:47 19°**Ⅲ**20'48 -7205 Feb 11 j 06:46 0°정 direct -7211 Jul 09 j 21:53 0ಂತಾ -7211 Aug 13 j 10:22 -7205 Feb 12 j 03:26 0°る12'04 -1°29'53 evening set 7°523'20 conjunction minimum elong -7205 Feb 12 j 03:25 0°**る**12'03 1°30'22 conjunction -7211 Aug 25 j 21:29 10°**©**11'37 1°32'14 max. Earth dist. -7205 Feb 13 j 18:10 0°**る**34'38 6.07042 AU minimum elong -7211 Aug 25 j 21:29 10°9511'37 1°32'43 morning rise -7205 Feb 25 j 20:23 3°る23'17 max. Earth dist. -7211 Aug 24 j 12:36 9°**©**53'04 6.31252 AU retrograde -7205 Jul 05 j 13:42 23°る02'51 -7211 Sep 07 j 07:03 12°959'18 -7205 Sep 02 j 23:10 17°る58'16 -2°14'00 morning rise opposition

min. Earth dist.

-7205 Sep 02 j 00:34

18°る06'00 4.10395 AU

-7211 Dec 17 j 03:29

 $0^{\circ}\Omega$

direct	-7205 Oct 31 j 11:23	12° る 58'16	a.a. onomicai ee	our io the year	r 7206 BCE in historical c -7199 Jun 20 j 01:06	0°9	
uncer	-7204 Feb 26 j 10:35	0°≈		evening set	-7199 Aug 17 j 18:27	11° © 52'35	
evening set	-7204 Mar 06 j 09:31	2° ≈ 01'27		max. Earth dist.	-7199 Aug 28 j 19:34	14°522'03	6.30373 AU
conjunction	-7204 Mar 20 j 03:20	5°≈09'47		conjunction	-7199 Aug 30 j 05:06	14°5541'01	1°31'48
minimum elong	-7204 Mar 20 j 03:24	5°≈09'50	1°22'18	minimum elong	-7199 Aug 30 j 05:07	14°5541'01	1°32'16
max. Earth dist.	-7204 Mar 21 j 07:24	5°≈25'51	6.14368 AU	morning rise	-7199 Sep 11 j 14:42	17°929'01	
morning rise	-7204 Apr 02 j 21:24	8°≈18'04			-7199 Nov 12 j 21:31	0°Ω 5°Ω21/57	
ratra ara da	-7204 May 03 j 08:57	15° ≈		retrograde	-7198 Jan 13 j 09:38	5° Ω 21'57	2°06'18
retrograde	-7204 Aug 07 j 09:22	27°≈08'15 22°≈06'19	1020150	opposition min. Earth dist.	-7198 Mar 15 j 15:47 -7198 Mar 16 j 12:01	0° Ω 29'07 0° Ω 22'42	4.26577 AU
opposition min. Earth dist.	-7204 Oct 05 j 12:59 -7204 Oct 05 j 01:21		4.18940 AU	IIIII. Eartii tiist.	-7198 Mar 19 j 11:35	0 8€ 22.42 30° ₹ 5	4.203// AU
direct	-7204 Oct 03 j 01:21 -7204 Dec 04 j 04:19	17°≈03'31	4.16940 AU	direct	-7198 May 16 j 09:02	25°933'02	
direct	-7204 Dec 04 j 04:19	0° ∺		direct	-7198 Jul 11 j 00:03	0°Ω	
evening set	-7203 Mar 13 j 10:42 -7203 Apr 11 j 04:01	5°) 48′21		evening set	-7198 Sep 18 j 04:17	13° Ω 46'06	
evening set	-7203 Apr 11 J 04.01	3 7(4021		evening set	-7198 Sep 23 j 13:15	15° Ω	
conjunction	-7203 Apr 24 j 20:49	8° ¥ 52'29	-0°46'06		-7176 Sep 25 j 15.15	13 66	
minimum elong	-7203 Apr 24 j 20:54	8° ¥ 52'31	0°46'19	conjunction	-7198 Sep 30 j 15:58	16° Ω 38'17	1°13'03
max. Earth dist.	-7203 Apr 25 j 05:46	8° ¥ 57'30	6.23526 AU	minimum elong	-7198 Sep 30 j 16:02	16° Ω 38'19	1°13'26
morning rise	-7203 May 08 j 11:41	11°) 55'31	0.23020110	max. Earth dist.	-7198 Sep 29 j 20:05	16° Ω 26'49	6.22069 AU
retrograde	-7203 Sep 08 j 15:56	29°) 54'06		morning rise	-7198 Oct 13 j 04:09	19° Ω 30'57	
opposition	-7203 Nov 06 j 23:50	24°) 55′57	-0°33'04	5 5	-7198 Dec 01 j 10:14	0° m/y	
min. Earth dist.	-7203 Nov 07 j 00:40		4.27803 AU	retrograde	-7197 Feb 17 j 02:26	8° m) 10'13	
direct	-7202 Jan 06 j 20:48	19°) (51'54		opposition	-7197 Apr 19 j 09:57	3° m/ 14'29	1°19'54
	-7202 Apr 05 j 22:00	0° Y		min. Earth dist.	-7197 Apr 19 j 18:33	3° mp 11'44	4.17440 AU
asc. node	-7202 May 02 j 08:10	5° Y ′25'56			-7197 May 17 j 02:14	30°R Ω	
evening set	-7202 May 15 j 08:49	8° Y 16'02		direct	-7197 Jun 18 j 23:02	28° Ω 20'45	
Č	, ,				-7197 Jul 21 j 11:05	0° m/y	
conjunction	-7202 May 28 j 19:17	11° Y °14'21	0°03'25	evening set	-7197 Oct 20 j 16:18	16° m 50'11	
minimum elong	-7202 May 28 j 19:17	11° Y °14'21	0°03'27		·	•	
behind sun begin	-7202 May 28 j 11:09	11° Y ′09'52		conjunction	-7197 Nov 02 j 09:56	19° m 48'53	0°30'26
behind sun end	-7202 May 29 j 03:26	11° Y 18'51		minimum elong	-7197 Nov 02 j 09:59	19° m 48'54	0°30'34
max. Earth dist.	-7202 May 28 j 05:58	11° Y ′06'59	6.31476 AU	max. Earth dist.	-7197 Nov 02 j 08:04	19° m 47'47	6.12987 AU
morning rise	-7202 Jun 11 j 02:40	14° Y 11'01		morning rise	-7197 Nov 15 j 06:07	22° Mp 49'00	
	-7202 Sep 08 j 17:58	9° 8			-7197 Dec 17 j 06:15	0∘ ⊽	
retrograde	-7202 Oct 10 j 03:16	1° 8 33'13		retrograde	-7196 Mar 24 j 02:26	12° ≏ 16'40	
	-7202 Nov 10 j 12:03	30° ŖƳ		opposition	-7196 May 24 j 04:10	7° ≙ 17'00	0°04'33
opposition	-7202 Dec 08 j 20:05	26° Ƴ 38'41	0°40'26	min. Earth dist.	-7196 May 23 j 20:29	7° ≏ 19'31	4.09089 AU
min. Earth dist.	-7202 Dec 09 j 10:49	26° Y 33'52	4.34221 AU	desc. node	-7196 Jun 15 j 02:39	4° ≙ 34'51	
direct	-7201 Feb 08 j 20:05	21° Y 35'06		direct	-7196 Jul 22 j 09:38	2° ≏ 24'04	
	-7201 Apr 30 j 13:41	9° 8		evening set	-7196 Nov 22 j 20:53	21° ≏ 13'09	
evening set	-7201 Jun 17 j 01:09	9° 8 43'26					
max. Earth dist.	-7201 Jun 28 j 21:29	12° 8 20'09	6.35825 AU	conjunction	-7196 Dec 05 j 23:02	24° ≏ 18'32	
				minimum elong	-7196 Dec 05 j 23:00	24° ≏ 18'30	
conjunction	-7201 Jun 30 j 02:09	12° 8 36'00	0°50'46	max. Earth dist.	-7196 Dec 06 j 20:08	24° ≙ 31'00	6.06173 AU
minimum elong	-7201 Jun 30 j 02:05	12° 8 35'57	0°51'04	morning rise	-7196 Dec 19 j 04:24	27° Ω 25'44	
	-7201 Jul 10 j 22:50	15° 8			-7196 Dec 30 j 05:43	0°M	
morning rise	-7201 Jul 12 j 23:36	15° 8 26'50			-7195 Mar 20 j 18:42	15°M	
	-7201 Sep 30 j 01:11	0°П		retrograde	-7195 Apr 29 j 22:06	17°M27'05	
retrograde	""" NI NI 10 : 00.47	2° Ⅱ 36′05			-7195 Jun 08 j 21:03	15°RM	
E	-7201 Nov 10 j 08:47				#10# Y #55	1000	
-	-7201 Dec 22 j 06:51	30° ₹ 8	1040/50	opposition	-7195 Jun 29 j 08:25	12°M23'55	
opposition	-7201 Dec 22 j 06:51 -7200 Jan 09 j 16:27	30° ₹8 27° 8 43'54	1°40'58	min. Earth dist.	-7195 Jun 28 j 12:45	12°M30'30	-1°14'41 4.04538 AU
opposition min. Earth dist.	-7201 Dec 22 j 06:51 -7200 Jan 09 j 16:27 -7200 Jan 10 j 15:18	30°R と 27° と 43'54 27° と 36'33	1°40'58 4.36339 AU		-7195 Jun 28 j 12:45 -7195 Aug 26 j 16:23	12°M30'30 7°M29'50	
opposition	-7201 Dec 22 j 06:51 -7200 Jan 09 j 16:27 -7200 Jan 10 j 15:18 -7200 Mar 12 j 05:06	30°R 8 27° 8 43'54 27° 8 36'33 22° 8 42'11		min. Earth dist. direct	-7195 Jun 28 j 12:45 -7195 Aug 26 j 16:23 -7195 Nov 05 j 11:13	12°M30'30 7°M29'50 15°M	
opposition min. Earth dist. direct	-7201 Dec 22 j 06:51 -7200 Jan 09 j 16:27 -7200 Jan 10 j 15:18 -7200 Mar 12 j 05:06 -7200 May 25 j 19:38	30°R8 27°843'54 27°836'33 22°842'11 0°耳		min. Earth dist.	-7195 Jun 28 j 12:45 -7195 Aug 26 j 16:23	12°M30'30 7°M29'50	
opposition min. Earth dist. direct	-7201 Dec 22 j 06:51 -7200 Jan 09 j 16:27 -7200 Jan 10 j 15:18 -7200 Mar 12 j 05:06 -7200 May 25 j 19:38 -7200 Jul 17 j 15:26	30°R8 27°843'54 27°836'33 22°842'11 0°Ⅲ 10°Ⅲ43'19	4.36339 AU	min. Earth dist. direct evening set	-7195 Jun 28 j 12:45 -7195 Aug 26 j 16:23 -7195 Nov 05 j 11:13 -7195 Dec 28 j 19:28	12°M30'30 7°M29'50 15°M 26°M35'06	4.04538 AU
opposition min. Earth dist. direct	-7201 Dec 22 j 06:51 -7200 Jan 09 j 16:27 -7200 Jan 10 j 15:18 -7200 Mar 12 j 05:06 -7200 May 25 j 19:38	30°R8 27°843'54 27°836'33 22°842'11 0°耳		min. Earth dist. direct evening set conjunction	-7195 Jun 28 j 12:45 -7195 Aug 26 j 16:23 -7195 Nov 05 j 11:13 -7195 Dec 28 j 19:28 -7194 Jan 11 j 05:08	12°M30'30 7°M29'50 15°M 26°M35'06 29°M44'32	4.04538 AU -1°10'17
opposition min. Earth dist. direct evening set max. Earth dist.	-7201 Dec 22 j 06:51 -7200 Jan 09 j 16:27 -7200 Jan 10 j 15:18 -7200 Mar 12 j 05:06 -7200 May 25 j 19:38 -7200 Jul 17 j 15:26 -7200 Jul 28 j 19:47	30°R႘ 27°႘43'54 27°႘36'33 22°႘42'11 0°Ⅲ 10°Ⅲ43'19 13°Ⅲ12'18	4.36339 AU 6.35426 AU	min. Earth dist. direct evening set	-7195 Jun 28 j 12:45 -7195 Aug 26 j 16:23 -7195 Nov 05 j 11:13 -7195 Dec 28 j 19:28 -7194 Jan 11 j 05:08 -7194 Jan 11 j 05:03	12°M30'30 7°M29'50 15°M 26°M35'06 29°M44'32 29°M44'29	4.04538 AU -1°10'17
opposition min. Earth dist. direct evening set max. Earth dist. conjunction	-7201 Dec 22 j 06:51 -7200 Jan 09 j 16:27 -7200 Jan 10 j 15:18 -7200 Mar 12 j 05:06 -7200 May 25 j 19:38 -7200 Jul 17 j 15:26 -7200 Jul 28 j 19:47 -7200 Jul 30 j 07:11	30°R8 27°843'54 27°836'33 22°842'11 0°Ⅲ 10°Ⅲ43'19 13°Ⅲ12'18	4.36339 AU 6.35426 AU 1°23'11	min. Earth dist. direct evening set conjunction minimum elong	-7195 Jun 28 j 12:45 -7195 Aug 26 j 16:23 -7195 Nov 05 j 11:13 -7195 Dec 28 j 19:28 -7194 Jan 11 j 05:08 -7194 Jan 11 j 05:03 -7194 Jan 12 j 07:21	12° M.30'30 7° M.29'50 15° M. 26° M.35'06 29° M.44'32 29° M.44'29 0° ⊀	4.04538 AU -1°10'17 1°10'40
opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong	-7201 Dec 22 j 06:51 -7200 Jan 09 j 16:27 -7200 Jan 10 j 15:18 -7200 Mar 12 j 05:06 -7200 May 25 j 19:38 -7200 Jul 17 j 15:26 -7200 Jul 28 j 19:47 -7200 Jul 30 j 07:11 -7200 Jul 30 j 07:07	30°R8 27°843'54 27°836'33 22°842'11 0°Ⅲ 10°Ⅲ43'19 13°Ⅲ12'18 13°Ⅲ32'02 13°Ⅲ32'00	4.36339 AU 6.35426 AU	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-7195 Jun 28 j 12:45 -7195 Aug 26 j 16:23 -7195 Nov 05 j 11:13 -7195 Dec 28 j 19:28 -7194 Jan 11 j 05:08 -7194 Jan 12 j 07:21 -7194 Jan 12 j 17:26	12°M30'30 7°M29'50 15°M 26°M35'06 29°M44'32 29°M44'29 0°\$\mathrm{7}\$ 0°\$\mathrm{7}\$05'57	4.04538 AU -1°10'17
opposition min. Earth dist. direct evening set max. Earth dist. conjunction	-7201 Dec 22 j 06:51 -7200 Jan 09 j 16:27 -7200 Jan 10 j 15:18 -7200 Mar 12 j 05:06 -7200 May 25 j 19:38 -7200 Jul 17 j 15:26 -7200 Jul 28 j 19:47 -7200 Jul 30 j 07:11 -7200 Jul 30 j 07:07 -7200 Aug 11 j 20:13	30°R8 27°843'54 27°836'33 22°842'11 0°Ш 10°Ш43'19 13°Ш12'18 13°Ш32'02 13°Ш32'00 16°Ш19'30	4.36339 AU 6.35426 AU 1°23'11	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-7195 Jun 28 j 12:45 -7195 Aug 26 j 16:23 -7195 Nov 05 j 11:13 -7195 Dec 28 j 19:28 -7194 Jan 11 j 05:08 -7194 Jan 11 j 05:03 -7194 Jan 12 j 07:21 -7194 Jan 12 j 17:26 -7194 Jan 24 j 18:09	12° M.30'30 7° M.29'50 15° M. 26° M.35'06 29° M.44'32 29° M.44'29 0° \$\mathref{X}\$ 0° \$\mathref{X}\$05'57 2° \$\mathref{X}\$55'40	4.04538 AU -1°10'17 1°10'40
opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise	-7201 Dec 22 j 06:51 -7200 Jan 09 j 16:27 -7200 Jan 10 j 15:18 -7200 Mar 12 j 05:06 -7200 May 25 j 19:38 -7200 Jul 17 j 15:26 -7200 Jul 28 j 19:47 -7200 Jul 30 j 07:11 -7200 Jul 30 j 07:07 -7200 Aug 11 j 20:13 -7200 Oct 22 j 08:44	30°R8 27°843'54 27°836'33 22°842'11 0°Ⅲ 10°Ⅲ43'19 13°Ⅲ12'18 13°Ⅲ32'02 13°Ⅲ32'00 16°Ⅲ19'30 0°\$	4.36339 AU 6.35426 AU 1°23'11	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-7195 Jun 28 j 12:45 -7195 Aug 26 j 16:23 -7195 Nov 05 j 11:13 -7195 Dec 28 j 19:28 -7194 Jan 11 j 05:08 -7194 Jan 11 j 05:03 -7194 Jan 12 j 07:21 -7194 Jan 12 j 17:26 -7194 Jan 24 j 18:09 -7194 Jun 05 j 06:42	12° M.30'30 7° M.29'50 15° M. 26° M.35'06 29° M.44'32 29° M.44'29 0° 🛪 05'57 2° 🛪 55'40 22° 🛪 59'59	4.04538 AU -1°10'17 1°10'40 6.04221 AU
opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong	-7201 Dec 22 j 06:51 -7200 Jan 09 j 16:27 -7200 Jan 10 j 15:18 -7200 Mar 12 j 05:06 -7200 May 25 j 19:38 -7200 Jul 17 j 15:26 -7200 Jul 28 j 19:47 -7200 Jul 30 j 07:11 -7200 Jul 30 j 07:07 -7200 Aug 11 j 20:13 -7200 Oct 22 j 08:44 -7200 Dec 11 j 06:58	30°R8 27°843'54 27°843'53 22°842'11 0°Ⅲ 10°Ⅲ43'19 13°Ⅲ12'18 13°Ⅲ32'02 13°Ⅲ32'00 16°Ⅲ19'30 0°\$ 3°\$40'03	4.36339 AU 6.35426 AU 1°23'11	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist.	-7195 Jun 28 j 12:45 -7195 Aug 26 j 16:23 -7195 Nov 05 j 11:13 -7195 Dec 28 j 19:28 -7194 Jan 11 j 05:08 -7194 Jan 11 j 05:03 -7194 Jan 12 j 07:21 -7194 Jan 24 j 18:09 -7194 Jun 05 j 06:42 -7194 Aug 03 j 00:32	12° M.30'30 7° M.29'50 15° M. 26° M.35'06 29° M.44'32 29° M.44'29 0° 🖈 05'57 2° 🗫 55'40 22° 🗫 59'59 18° 🗫 03'48	4.04538 AU -1°10'17 1°10'40 6.04221 AU 4.05573 AU
opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde	-7201 Dec 22 j 06:51 -7200 Jan 09 j 16:27 -7200 Jan 10 j 15:18 -7200 Mar 12 j 05:06 -7200 May 25 j 19:38 -7200 Jul 17 j 15:26 -7200 Jul 28 j 19:47 -7200 Jul 30 j 07:11 -7200 Jul 30 j 07:07 -7200 Aug 11 j 20:13 -7200 Oct 22 j 08:44 -7200 Dec 11 j 06:58 -7199 Jan 31 j 15:53	30°R8 27°843'54 27°843'54 27°842'11 0°Ⅲ 10°Ⅲ43'19 13°Ⅲ12'18 13°Ⅲ32'02 13°Ⅲ32'00 16°Ⅲ19'30 0°ഈ 3°ණ40'03 30°RⅢ	4.36339 AU 6.35426 AU 1°23'11 1°23'37	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition	-7195 Jun 28 j 12:45 -7195 Aug 26 j 16:23 -7195 Nov 05 j 11:13 -7195 Dec 28 j 19:28 -7194 Jan 11 j 05:08 -7194 Jan 11 j 05:03 -7194 Jan 12 j 07:21 -7194 Jan 12 j 17:26 -7194 Jan 24 j 18:09 -7194 Jun 05 j 06:42 -7194 Aug 03 j 00:32 -7194 Aug 04 j 02:34	12° M.30'30 7° M.29'50 15° M. 26° M.35'06 29° M.44'32 29° M.44'29 0° \$\stacksquare\text{30}\$ 5'57 2° \$\stacksquare\text{35}\$ 5'40 22° \$\stacksquare\text{35}\$ 9'59 18° \$\stacksquare\text{30}\$ 3'48 17° \$\stacksquare\text{55}\$ 54'57	4.04538 AU -1°10'17 1°10'40 6.04221 AU 4.05573 AU
opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition	-7201 Dec 22 j 06:51 -7200 Jan 09 j 16:27 -7200 Jan 10 j 15:18 -7200 Mar 12 j 05:06 -7200 May 25 j 19:38 -7200 Jul 17 j 15:26 -7200 Jul 28 j 19:47 -7200 Jul 30 j 07:11 -7200 Jul 30 j 07:07 -7200 Aug 11 j 20:13 -7200 Oct 22 j 08:44 -7200 Dec 11 j 06:58 -7199 Jan 31 j 15:53 -7199 Feb 10 j 03:24	30°R႘ 27°႘43'54 27°႘43'54 27°႘36'33 22°႘42'11 0°Ⅲ 10°Ⅲ43'19 13°Ⅲ12'18 13°Ⅲ32'02 13°Ⅲ32'00 16°Ⅲ19'30 0°Ϣ 3°Ϣ40'03 30°RⅢ 28°Ⅲ48'33	4.36339 AU 6.35426 AU 1°23'11 1°23'37	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist.	-7195 Jun 28 j 12:45 -7195 Aug 26 j 16:23 -7195 Nov 05 j 11:13 -7195 Dec 28 j 19:28 -7194 Jan 11 j 05:08 -7194 Jan 11 j 05:03 -7194 Jan 12 j 07:21 -7194 Jan 12 j 17:26 -7194 Jan 24 j 18:09 -7194 Jun 05 j 06:42 -7194 Aug 03 j 00:32 -7194 Aug 04 j 02:34 -7194 Oct 01 j 04:07	12° M.30'30 7° M.29'50 15° M. 26° M.35'06 29° M.44'32 29° M.44'29 0° \$\tilde{x}\$ 0° \$\tilde{x}\$05'57 2° \$\tilde{x}\$55'40 22° \$\tilde{x}\$59'59 18° \$\tilde{x}\$03'48 17° \$\tilde{x}\$57'59	4.04538 AU -1°10'17 1°10'40 6.04221 AU 4.05573 AU
opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde	-7201 Dec 22 j 06:51 -7200 Jan 09 j 16:27 -7200 Jan 10 j 15:18 -7200 Mar 12 j 05:06 -7200 May 25 j 19:38 -7200 Jul 17 j 15:26 -7200 Jul 28 j 19:47 -7200 Jul 30 j 07:11 -7200 Jul 30 j 07:07 -7200 Aug 11 j 20:13 -7200 Oct 22 j 08:44 -7200 Dec 11 j 06:58 -7199 Jan 31 j 15:53	30°R8 27°843'54 27°843'54 27°842'11 0°Ⅲ 10°Ⅲ43'19 13°Ⅲ12'18 13°Ⅲ32'02 13°Ⅲ32'00 16°Ⅲ19'30 0°ഈ 3°ණ40'03 30°RⅢ	4.36339 AU 6.35426 AU 1°23'11 1°23'37	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition	-7195 Jun 28 j 12:45 -7195 Aug 26 j 16:23 -7195 Nov 05 j 11:13 -7195 Dec 28 j 19:28 -7194 Jan 11 j 05:08 -7194 Jan 11 j 05:03 -7194 Jan 12 j 07:21 -7194 Jan 12 j 17:26 -7194 Jan 24 j 18:09 -7194 Jun 05 j 06:42 -7194 Aug 03 j 00:32 -7194 Aug 04 j 02:34	12° M.30'30 7° M.29'50 15° M. 26° M.35'06 29° M.44'32 29° M.44'29 0° \$\stacksquare\text{30}\$ 5'57 2° \$\stacksquare\text{35}\$ 5'40 22° \$\stacksquare\text{35}\$ 9'59 18° \$\stacksquare\text{30}\$ 3'48 17° \$\stacksquare\text{55}\$ 54'57	4.04538 AU -1°10'17 1°10'40 6.04221 AU 4.05573 AU

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 19 Attention, astronomical year style is used: The year -7193 in astronomical counting style is the year 7194 BCE in historical counting style.

Attention, astronomi	ical year style is used: Th	e year -7193 i	n astronomical cou	inting style is the year	7194 BCE in historical c	ounting style.	6 * ->
conjunction	-7193 Feb 17 j 09:33	5° ට 17'53	-1°30'45	max. Earth dist.	-7188 Aug 01 j 22:02	17° Ⅱ 28'00	6.34768 AU
minimum elong	-7193 Feb 17 j 09:33	5° る 17'53	1°31'14				
max. Earth dist.	-7193 Feb 19 j 00:21	5° る 40'28	6.08011 AU	conjunction	-7188 Aug 03 j 11:01	17° Ⅱ 48'39	1°25'50
morning rise	-7193 Mar 03 j 02:47	8° ⋜ 28'46		minimum elong	-7188 Aug 03 j 10:59	17° Ⅱ 48'37	1°26'18
retrograde	-7193 Jul 10 j 10:21	28° ට 01'30		morning rise	-7188 Aug 15 j 23:21	20° Ⅲ 36′04	
opposition	-7193 Sep 07 j 18:25	22° る 57'08	-2°11'35		-7188 Sep 30 j 03:59	0 \circ \odot	
min. Earth dist.	-7193 Sep 06 j 21:20	23° る 04'21	4.11755 AU	retrograde	-7188 Dec 15 j 16:40	8° © 00'59	
direct	-7193 Nov 05 j 11:16	17° ප 56'40		opposition	-7187 Feb 14 j 14:34	3° 5 09'25	2°14'18
	-7192 Feb 08 j 20:52	0° ≈		min. Earth dist.	-7187 Feb 15 j 16:12	3° 5 01'16	4.32440 AU
evening set	-7192 Mar 11 j 11:35	6°≈56'20			-7187 Mar 13 j 14:21	30°RⅡ	
•	v			direct	-7187 Apr 17 j 22:56	28° Ⅱ 10'49	
conjunction	-7192 Mar 25 j 05:33	10°≈04'01	-1°18'15		-7187 May 23 j 04:59	0°€	
minimum elong	-7192 Mar 25 j 05:37	10°≈04'03	1°18'40	evening set	-7187 Aug 22 j 00:14	16°9516'24	
max. Earth dist.	-7192 Mar 26 j 08:51	10° ≈ 19'34	6.16020 AU	max. Earth dist.	-7187 Sep 02 j 02:44	18° 5 47'10	6.28881 AU
morning rise	-7192 Apr 07 j 23:19	13° ≈ 11'27					
	-7192 Apr 16 j 00:31	15° ≈		conjunction	-7187 Sep 03 j 10:47	19° © 05'21	1°30'49
	-7192 Jul 08 j 15:59	0°) €		minimum elong	-7187 Sep 03 j 10:48	19° © 05'22	1°31'17
retrograde	-7192 Aug 11 j 21:43	1° ¥ 52'19		morning rise	-7187 Sep 15 j 20:21	21° © 53'59	
-	-7192 Sep 14 j 21:37	30° R ≈		-	-7187 Oct 23 j 12:24	$0^{\circ}\Omega$	
opposition	-7192 Oct 10 j 02:33	26° ≈ 50'52	-1°30'58	retrograde	-7186 Jan 18 j 03:17	9° Ω 54'37	
min. Earth dist.	-7192 Oct 09 j 15:34	26° ≈ 54'35	4.20713 AU	opposition	-7186 Mar 20 j 08:38	5° Ω 01'34	2°02'11
direct	-7192 Dec 08 j 21:39	21° ≈ 47'48		min. Earth dist.	-7186 Mar 21 j 04:33	4° Ω 55'14	4.24802 AU
	-7191 Feb 24 j 13:04	0° ∀		direct	-7186 May 20 j 22:16	0° Ω 05'55	
evening set	-7191 Apr 15 j 23:26	10°) 27'43			-7186 Sep 07 j 15:31	15° Ω	
C	1 3			evening set	-7186 Sep 22 j 14:28	18° Ω 23'09	
conjunction	-7191 Apr 29 j 15:25	13°) € 30'48	-0°39'43	max. Earth dist.	-7186 Oct 04 j 07:46	21° Ω 05'26	6.20172 AU
minimum elong	-7191 Apr 29 j 15:29	13°) € 30'50			,		
max. Earth dist.	-7191 Apr 29 j 20:07	13° ¥ 33'26	6.25280 AU	conjunction	-7186 Oct 05 j 02:44	21° Ω 16'24	1°08'21
morning rise	-7191 May 13 j 05:31	16°) 32'45		minimum elong	-7186 Oct 05 j 02:48	21° Ω 16'27	1°08'42
C	-7191 Jul 20 j 23:44	$0^{\circ}\mathbf{\Upsilon}$		morning rise	-7186 Oct 17 j 16:03	24° Ω 10′21	
retrograde	-7191 Sep 13 j 00:35	4° Υ 23'25		Č	-7186 Nov 12 j 17:18	0° m)	
C	-7191 Nov 07 j 02:07	30° ₹ ₩		retrograde	-7185 Feb 22 j 01:16	12° m 58'52	
opposition	-7191 Nov 11 j 09:04	29° ¥ 25'47	-0°22'57	opposition	-7185 Apr 24 j 08:43	8° m 02'37	1°10'40
min. Earth dist.	-7191 Nov 11 j 12:56	29°) 24'30	4.29367 AU	min. Earth dist.	-7185 Apr 24 j 14:06	8° mp 00'53	4.15566 AU
direct	-7190 Jan 11 j 11:49	24°) €21'40		direct	-7185 Jun 23 j 15:52	3° m 09'08	
asc. node	-7190 Mar 13 j 06:50	29°) 30'34		evening set	-7185 Oct 25 j 09:13	21° mp 43'21	
	-7190 Mar 16 j 09:55	$0^{\circ}\mathbf{\Upsilon}$		· ·	J	•	
evening set	-7190 May 19 j 21:07	12° Y 41'30		conjunction	-7185 Nov 07 j 04:13	24° mp 43'21	0°23'05
C	, ,			minimum elong	-7185 Nov 07 j 04:15	24° m/ 43'22	0°23'11
conjunction	-7190 Jun 02 j 06:30	15° Ƴ 38'50	0°10'16	max. Earth dist.	-7185 Nov 07 j 07:14	24° m/45'07	6.11322 AU
minimum elong	-7190 Jun 02 j 06:29	15° Ƴ 38'49	0°10'22	morning rise	-7185 Nov 20 j 01:38	27° m 44'48	
behind sun begin	-7190 Jun 02 j 00:05	15° Ƴ 35'18			-7185 Nov 29 j 19:12	0∘ ত	
behind sun end	-7190 Jun 02 j 12:53	15° Ƴ 42'21		retrograde	-7184 Mar 29 j 09:01	17° ≏ 20'19	
max. Earth dist.	-7190 Jun 01 j 15:05	15° Ƴ 30′19	6.32722 AU	desc. node	-7184 Apr 24 j 19:27	16° ≏ 15′01	
morning rise	-7190 Jun 15 j 12:24	18° Ƴ 34'25		opposition	-7184 May 29 j 07:27	12° ≙ 20'07	-0°07'11
	-7190 Aug 11 j 15:27	$6^{\circ}B$		min. Earth dist.	-7184 May 28 j 22:00	12° ≏ 23'13	4.07784 AU
retrograde	-7190 Oct 14 j 06:59	5° 8 52'15		direct	-7184 Jul 27 j 09:35	7° ≙ 27'11	
opposition	-7190 Dec 13 j 02:48	0° 8 58'08	0°49'45	evening set	-7184 Nov 27 j 21:27	26° ≏ 20'02	
min. Earth dist.	-7190 Dec 13 j 18:38	0° 8 52'58	4.35069 AU				
	-7190 Dec 20 j 14:06	30° ₹Ƴ		conjunction	-7184 Dec 11 j 00:40	29° ≏ 26'17	-0°31'24
direct	-7189 Feb 13 j 04:40	25° Y 54'43		minimum elong	-7184 Dec 11 j 00:37	29° ≙ 26′15	0°31'36
	-7189 Apr 08 j 10:53	9° 8		max. Earth dist.	-7184 Dec 12 j 00:31	29° ≏ 40'23	6.05331 AU
evening set	-7189 Jun 21 j 08:28	14° 8 00'50			-7184 Dec 13 j 09:40	0° M	
	-7189 Jun 25 j 20:07	15° 8		morning rise	-7184 Dec 24 j 07:27	2°M34'25	
max. Earth dist.	-7189 Jul 03 j 00:25	16° 8 35'11	6.36190 AU		-7183 Feb 20 j 01:30	15° ™	
				retrograde	-7183 May 05 j 02:53	22°M38'51	
conjunction	-7189 Jul 04 j 07:59	16° 8 52'39	0°56'14	opposition	-7183 Jul 04 j 11:59	17°M35'12	-1°24'27
minimum elong	-7189 Jul 04 j 07:55	16° 8 52'36	0°56'32	min. Earth dist.	-7183 Jul 03 j 13:26	17° M 42'46	4.04269 AU
morning rise	-7189 Jul 17 j 04:12	19° 8 42'49			-7183 Jul 24 j 20:24	15°RM₊	
	-7189 Sep 05 j 18:42	Π °0		direct	-7183 Aug 31 j 16:45	12°M40'48	
retrograde	-7189 Nov 14 j 15:43	6° Ⅱ 52'04			-7183 Oct 08 j 07:19	15° M ₊	
opposition	-7188 Jan 14 j 00:04	2° Ⅱ 00'09	1°47'10		-7183 Dec 26 j 08:42	0° ∡ ¹	
min. Earth dist.	-7188 Jan 15 j 01:17	1° Ⅱ 52'04	4.36204 AU	evening set	-7182 Jan 03 j 01:10	1° ∡ ¹47'26	
	-7188 Jan 30 j 01:36	30° ₹ 8					
direct	-7188 Mar 16 j 14:14	26° 8 58'44		conjunction	-7182 Jan 16 j 11:46	4° ∡ 757'07	-1°15'06
	-7188 May 01 j 19:14	$\Pi^{\circ}0$		minimum elong	-7182 Jan 16 j 11:41	4° ₰ 757'04	1°15'31
evening set	-7188 Jul 21 j 20:09	15° Ⅱ 00'04		max. Earth dist.	-7182 Jan 18 j 02:07	5° ∡ 19'42	6.04497 AU

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7182 in astronomical counting style is the year 7183 BCE in historical counting style. opposition -7182 Jan 30 i 01:28 8°**₹**'08'21 -7176 Jan 18 j 12:08 6°**Ⅱ**27'06 1°53'03 morning rise -7182 Jun 10 j 08:54 28°×709'32 -7176 Jan 19 j 13:08 6°**Ⅱ**19'06 4.35854 AU retrograde min. Earth dist. -7182 Aug 08 j 01:25 23°**✗**13'01 4.06342 AU -7176 Mar 21 j 01:17 1°**I**I26′03 min. Earth dist. direct 19°**Ⅲ**27'56 -7182 Aug 09 j 02:53 23°×104'20 -2°10'29 -7176 Jul 26 j 05:16 opposition evening set -7182 Oct 06 j 06:35 18°**∡**06'49 direct max. Earth dist. -7176 Aug 06 j 05:49 21°**Ⅲ**55′29 6.34057 AU 0°정 -7181 Jan 07 j 12:01 evening set -7181 Feb 09 j 00:11 7°**る**15'12 conjunction -7176 Aug 07 j 19:08 22°**Ⅱ**16′22 1°28'08 -7176 Aug 07 j 19:05 minimum elong 22°**Ⅲ**16′21 1°28'36 conjunction -7181 Feb 22 j 16:03 10°る24'55 -1°30'57 morning rise -7176 Aug 20 j 06:47 25°**Ⅲ**03'46 minimum elong -7181 Feb 22 j 16:03 10°**る**24'56 1°31'25 -7176 Sep 11 j 23:30 0ಂತಾ max. Earth dist. -7181 Feb 24 j 07:15 10°る47'38 6.09166 AU retrograde -7176 Dec 20 j 08:26 12°533'03 -7181 Mar 08 j 09:30 -7175 Feb 19 j 06:32 morning rise 13°る35'20 opposition 7°**9**641'25 2°15'04 -7181 Jun 01 j 05:38 0°≈ min. Earth dist. -7175 Feb 20 j 08:46 7°**9**33'06 4.31423 AU retrograde -7181 Jul 15 j 06:02 3°≈00'29 direct -7175 Apr 22 j 13:55 2°5643'15 -7181 Aug 28 j 00:49 30°Rる evening set -7175 Aug 26 j 10:04 20°950'37 opposition -7181 Sep 12 j 13:26 27°る56'25 -2°08'16 min. Earth dist. -7181 Sep 11 j 16:52 28°る03'26 4.13162 AU conjunction -7175 Sep 07 j 20:34 23°9540'02 1°29'17 direct -7181 Nov 10 j 09:04 22°る55'31 minimum elong -7175 Sep 07 j 20:36 23°9540'03 1°29'45 -7180 Jan 19 j 12:34 max. Earth dist. -7175 Sep 06 j 13:32 23°522'23 6.27651 AU 26°529'17 evening set -7180 Mar 16 j 13:36 11°≈51'45 morning rise -7175 Sep 20 j 06:23 -7175 Oct 05 j 23:59 $0^{\circ}\Omega$ conjunction -7180 Mar 30 i 07:23 14°≈58'44 -1°14'06 retrograde -7174 Jan 22 j 22:26 14°**Ω**36'30 minimum elong -7180 Mar 30 i 07:27 14°≈58'47 1°14'29 opposition -7174 Mar 25 i 05:19 9°**Ω**43'05 1°57'09 -7180 Mar 30 i 09:37 15°**≈** min. Earth dist. -7174 Mar 25 j 22:26 9°**Ω**37'38 4.23463 AU max. Earth dist. -7180 Mar 31 i 06:31 15°≈11'53 6.17548 AU direct -7174 May 25 j 14:06 4°**Ω**47'51 -7180 Apr 13 j 00:59 18°≈05'23 -7174 Aug 21 j 01:55 morning rise 15°Ω -7180 Jun 09 j 19:32 0°**₩** -7174 Sep 27 j 03:34 23°**Ω**07'27 evening set -7180 Aug 16 j 11:48 retrograde 6°**)**€37'56 -7180 Oct 14 j 16:40 -7174 Oct 09 j 16:35 26°Ω01'35 1°03'07 1° **★**36'57 -1°22'32 conjunction opposition -7180 Oct 14 j 08:23 -7174 Oct 09 j 16:39 min. Earth dist. 1°**¥**39'46 4.22204 AU minimum elong 26°**Ω**01'37 1°03'26 -7180 Oct 26 j 20:37 -7174 Oct 09 j 01:38 6.18873 AU 30°R≈ max. Earth dist. 25°**Ω**52'54 direct -7180 Dec 13 j 17:21 26°≈33'36 -7174 Oct 22 j 06:43 28°**Ω**56′29 morning rise 0°**)**€ -7179 Jan 30 j 20:01 -7174 Oct 26 j 21:23 0° m -7179 Apr 20 j 19:32 15°**)**€09'50 -7173 Feb 27 j 03:39 17° m 51'54 evening set retrograde -7173 Apr 29 j 09:32 12° m 55'08 1°00'47 opposition -7179 May 04 j 11:01 18°¥12'07 -0°33'02 -7173 Apr 29 j 13:21 12° m 53'54 4.14402 AU conjunction min. Earth dist. -7179 May 04 j 11:04 minimum elong 18°**¥**12'09 0°33'12 direct -7173 Jun 28 j 13:33 8° mp 01'53 max. Earth dist. -7179 May 04 j 13:48 18°**)** 13'41 6.26641 AU evening set -7173 Oct 30 j 03:29 26° m 38'15 morning rise -7179 May 17 j 24:00 21°¥13'05 -7179 Jun 28 j 20:17 $0^{\circ}\Upsilon$ conjunction -7173 Nov 11 j 23:31 29° m/39'07 0°15'34 retrograde -7179 Sep 17 j 09:40 8°Y57'24 -7173 Nov 11 j 23:32 29° m 39'08 0°15'38 minimum elong -7179 Nov 15 j 19:49 4°Υ00'20 -0°12'33 -7173 Nov 11 j 21:20 29° m 37'51 opposition behind sun begin min. Earth dist. -7179 Nov 16 j 01:03 3°**Υ**58'36 4.30493 AU behind sun end -7173 Nov 12 j 01:45 29° m/40'25 -7179 Dec 20 j 21:33 max. Earth dist. -7173 Nov 12 j 05:24 29° Mp 42'34 6.10417 AU 30°**₹** -7178 Jan 16 j 01:33 28°\ 56'13 0∘**ত** direct -7173 Nov 13 j 11:01 asc. node -7178 Jan 21 i 06:39 28° **)** 58'46 morning rise -7173 Nov 24 i 22:21 2°**£**41'34 -7178 Feb 11 i 14:17 $0^{\circ}\Upsilon$ desc. node -7172 Mar 04 j 22:14 21°**♀**00'59 evening set -7178 May 24 j 11:51 17°Y13'23 retrograde -7172 Apr 03 j 11:29 22°**₽**21'40 opposition -7172 Jun 03 j 09:23 17°**2**20'55 -0°18'46 -7178 Jun 06 j 19:49 20°Υ09'50 0°17'15 min. Earth dist. -7172 Jun 02 j 20:41 17°**£**25′06 4.07239 AU conjunction -7178 Jun 06 j 19:47 20°**Y**′09'49 0°17'22 direct -7172 Aug 01 j 06:57 12°**£**27'55 minimum elong -7178 Jun 06 j 00:08 19°**Y**58′58 6.33522 AU -7172 Nov 27 j 00:34 max. Earth dist. oom. -7178 Jun 20 j 00:34 23°Y04'35 -7172 Dec 02 j 20:54 morning rise evening set 1°M22'08 -7178 Jul 22 j 18:15 0°8 retrograde -7178 Oct 18 j 16:39 10°**8**19'41 conjunction -7172 Dec 16 j 01:14 4°ML28'54 -0°38'36 -7178 Dec 17 j 13:12 5°**8**25'57 0°59'05 minimum elong -7172 Dec 16 j 01:10 4°ML28'51 0°38'50 opposition min. Earth dist. -7178 Dec 18 j 07:41 5°**8**19'56 4.35507 AU max. Earth dist. -7172 Dec 17 j 04:03 4°M44'46 6.05179 AU -7177 Feb 17 j 18:21 0°**8**22'41 -7172 Dec 29 j 08:59 7°M37'31 direct morning rise 15°8 -7171 Jan 30 j 22:40 15°M -7177 Jun 09 j 18:56 18°**8**27'41 -7171 May 10 j 05:04 evening set -7177 Jun 25 j 19:00 retrograde 27°M42'22 -7177 Jul 07 j 09:05 -7171 Jul 09 j 12:17 max. Earth dist. 21°**8**01'04 6.36218 AU opposition 22°M38'19 -1°33'15 min. Earth dist. -7171 Jul 08 j 13:21 22°M46'02 4.04526 AU conjunction -7177 Jul 08 j 17:20 21°**8**18'56 1°01'35 direct -7171 Sep 05 j 16:52 17°ML43'32 minimum elong -7177 Jul 08 j 17:16 21°**8**18'54 1°01'55 -7171 Dec 09 j 00:09 0°**∡**7 morning rise -7177 Jul 21 j 12:09 24°**8**08'32 evening set -7170 Jan 08 j 03:29 6°**х** 50′03 -7177 Aug 17 j 22:10 $0^{\circ}\Pi$ -7177 Nov 19 j 01:04 11°**Ⅲ**18'52 -7170 Jan 21 j 14:56 9°**₹**59'46 -1°19'11 retrograde conjunction

•	nical year style is used: Th		•				ge 21
	-7170 Jan 21 j 14:52	9° √ 59'44			-7164 Jan 23 j 01:35	10° I 57′00	1050!10
minimum elong max. Earth dist.	-7170 Jan 23 j 06:49	10° × 23'12		opposition min. Earth dist.	-7164 Jan 24 j 03:36	10 Ⅲ 3700 10° Ⅲ 48'41	4.35354 AU
morning rise	-7170 Jan 23 j 06.49 -7170 Feb 04 j 05:17	10 x · 23 12 13° x 10′58	6.05116 AU	direct	-7164 Jan 24 j 05.36 -7164 Mar 25 j 15:29	10 Щ4841 5°Щ56'20	4.55554 AU
morning rise	-7170 Meb 04 j 03:17	0°る		evening set	-7164 Jul 30 j 14:50	23° I I58'54	
retrograde	-7170 Jun 15 j 06:36	3°る07'50		max. Earth dist.	-7164 Aug 10 j 16:15		6.33325 AU
retrograde	-7170 Jul 30 j 05:43	30°R. ✓		max. Earth dist.	-/104 Aug 10 j 10.13	20 112/13	0.55525 AU
opposition	-7170 Aug 13 j 22:52	28° × ⁷ 02'42	2013/06	conjunction	-7164 Aug 12 j 04:04	26° Ⅱ 47'18	1°20'54
min. Earth dist.	-7170 Aug 13 j 22:32		4.07275 AU	minimum elong	-7164 Aug 12 j 04:02	26° I I47'17	1°30'22
direct	-7170 Oct 11 j 03:31	23°×1121	4.07273 AO	morning rise	-7164 Aug 24 j 15:01	29° II 34'43	1 30 22
direct	-7170 Dec 18 j 09:59	0°る		morning risc	-7164 Aug 26 j 12:26	0°95	
evening set	-7169 Feb 14 j 02:08	00 12° る 11'26		retrograde	-7164 Aug 20 j 12:20 -7164 Dec 24 j 22:44	17° © 08'21	
evening set	-/109 FC0 14 J 02.08	12 011 20		opposition	-7164 Bec 24 j 22:44 -7163 Feb 23 j 23:41	17 \$30821 12°\$16'32	2°15'00
conjunction	-7169 Feb 27 j 18:17	15° る 20'49	1030/28	min. Earth dist.	-7163 Feb 24 j 23:54	12°908'51	4.30521 AU
minimum elong	-7169 Feb 27 j 18:17	15°る20'50		direct	-7163 Apr 27 j 03:51	7°9518'50	4.30321 AU
max. Earth dist.	-7169 Mar 01 j 06:08	15° る 41'32		evening set	-7163 Apr 27 j 03:31 -7163 Aug 30 j 20:22	25°\$27'11	
morning rise	-7169 Mar 13 j 12:05	13 3 41 32	0.10302 AU	max. Earth dist.	-7163 Aug 30 j 20:22 -7163 Sep 11 j 01:46	28°900'27	6.26646 AU
morning rise	·	0° ≈		max. Earth dist.	-/103 Sep 11 J 01.40	28 30027	0.20040 AU
	-7169 May 06 j 15:33 -7169 Jul 19 j 21:35			:	71(2 9 12:06.45	20061750	1°27'11
retrograde	J	7°≈48'58	4 14276 ATT	conjunction	-7163 Sep 12 j 06:45	28°516'59	
min. Earth dist.	-7169 Sep 16 j 09:50		4.14376 AU	minimum elong	-7163 Sep 12 j 06:47	28° © 17'01 0° Ω	1-2/38
opposition	-7169 Sep 17 j 04:27	2°≈45'15	-2 04 12		-7163 Sep 19 j 19:21		
1	-7169 Oct 08 j 14:39	30°Rる		morning rise	-7163 Sep 24 j 16:48	1° Ω 06'45	
direct	-7169 Nov 15 j 04:13	27° る 43'54		. 1	-7163 Dec 03 j 23:48	15° Ω	
	-7169 Dec 23 j 01:51	0° ≈		retrograde	-7162 Jan 27 j 19:31	19° Ω 19'41	
	-7168 Mar 14 j 05:17	15° ≈		• • •	-7162 Mar 25 j 14:48	15°R Ω	1051110
evening set	-7168 Mar 21 j 11:52	16° ≈ 37'47		opposition	-7162 Mar 30 j 02:19	14° Ω 25'51	1°51'19
	71 (0) 1 04:07.40	100 44110	1000125	min. Earth dist.	-7162 Mar 30 j 18:30	14° Ω 20'41	4.22393 AU
conjunction	-7168 Apr 04 j 05:49	19° ≈ 44'18		direct	-7162 May 30 j 08:57	9° Ω 30'54	
minimum elong	-7168 Apr 04 j 05:53	19° ≈ 44'21			-7162 Jul 31 j 02:01	15° Ω	
max. Earth dist.	-7168 Apr 05 j 03:05	19°≈56'21	6.18766 AU	evening set	-7162 Oct 01 j 16:27	27° Ω 51'48	
morning rise	-7168 Apr 17 j 22:56	22°≈50'17			-7162 Oct 10 j 21:51	0° m y	
	-7168 May 21 j 00:04	0°) {					
retrograde	-7168 Aug 20 j 23:40	11°) 16′00		conjunction	-7162 Oct 14 j 06:14	0° Mp 46'42	0°57'29
opposition	-7168 Oct 19 j 04:01	6°) €15'38		minimum elong	-7162 Oct 14 j 06:18	0° Mp 46'44	0°57'46
min. Earth dist.	-7168 Oct 18 j 21:37		4.23304 AU	max. Earth dist.	-7162 Oct 13 j 17:52	0°m/39'30	6.17833 AU
direct	-7168 Dec 18 j 07:49	1° 升 12'08		morning rise	-7162 Oct 26 j 21:24	3° m/42'29	
evening set	-7167 Apr 25 j 13:16	19°) 4 6′16		retrograde	-7161 Mar 04 j 02:41	22° m 43'38	
				opposition	-7161 May 04 j 09:02	17° m 46'19	0°50'31
conjunction	-7167 May 09 j 03:55	22°) 47′55		min. Earth dist.	-7161 May 04 j 09:50	17° m) 46'03	4.13464 AU
minimum elong	-7167 May 09 j 03:58	22°) 47′56	0°26'25	direct	-7161 Jul 03 j 07:57	12° m 53'11	
max. Earth dist.	-7167 May 09 j 01:54	22°) (46′47	6.27541 AU		-7161 Oct 28 j 08:09	0∘ ত	
morning rise	-7167 May 22 j 16:12	25°) 48′11		evening set	-7161 Nov 03 j 20:55	1° ≏ 31'12	
	-7167 Jun 10 j 23:23	0° Υ				_	
retrograde	-7167 Sep 21 j 18:54	13° Y 28′13		conjunction	-7161 Nov 16 j 18:01	4° ≏ 32'52	0°08'01
opposition	-7167 Nov 20 j 05:47	8° Ƴ 31'39		minimum elong	-7161 Nov 16 j 18:02	4° △ 32'52	0°08'02
min. Earth dist.	-7167 Nov 20 j 13:26	8° Y ′29'07	4.31138 AU	behind sun begin	-7161 Nov 16 j 10:48	4° ≏ 28'38	
asc. node	-7167 Dec 02 j 05:53	6° Y 57'49		behind sun end	-7161 Nov 17 j 01:16	4° ≏ 37'07	
direct	-7166 Jan 20 j 15:05	3° Y ′27′34		max. Earth dist.	-7161 Nov 17 j 02:52	4° ≙ 38'04	6.09658 AU
evening set	-7166 May 29 j 01:25	21° Y '43'42		morning rise	-7161 Nov 29 j 18:03	7° ≏ 36'11	
max. Earth dist.	-7166 Jun 10 j 11:41	24° Y ′28'07	6.33875 AU	desc. node	-7160 Jan 14 j 02:26	17° 2 34'53	
				retrograde	-7160 Apr 08 j 14:07	27° ♀ 20'30	
conjunction	-7166 Jun 11 j 08:20	24° Y 39'32	0°24'03	opposition	-7160 Jun 08 j 09:54	22° ≏ 19'10	
minimum elong	-7166 Jun 11 j 08:18	24° Y 39'31	0°24'12	min. Earth dist.	-7160 Jun 07 j 20:06	22° ≏ 23'44	4.06719 AU
morning rise	-7166 Jun 24 j 11:37	27° Y ′33′36		direct	-7160 Aug 06 j 05:12	17° ≏ 25'59	
	-7166 Jul 05 j 16:32	0°8			-7160 Nov 09 j 23:00	0° M ₊	
retrograde	-7166 Oct 23 j 01:12	14° 8 47'36		evening set	-7160 Dec 07 j 19:24	6° M 21'46	
opposition	-7166 Dec 21 j 23:46	9° 8 54'16	1°08'02				
min. Earth dist.	-7166 Dec 22 j 18:46	9° 8 48'06	4.35573 AU	conjunction	-7160 Dec 21 j 00:48	9° ™ 29'05	
direct	-7165 Feb 22 j 05:42	4° 8 51'20		minimum elong	-7160 Dec 21 j 00:44	9° M 29'02	0°45'44
	-7165 May 23 j 07:32	15° 8		max. Earth dist.	-7160 Dec 22 j 06:22	9°M46'33	6.04941 AU
evening set	-7165 Jun 30 j 06:03	22° 8 56'20		morning rise	-7159 Jan 03 j 09:36	12°M38'13	
max. Earth dist.	-7165 Jul 11 j 16:26	25° 8 27'58	6.35980 AU		-7159 Jan 13 j 13:16	15° ™	
					-7159 Apr 02 j 23:18	0° ∡ ¹	
conjunction	-7165 Jul 13 j 02:57	25° 8 47'06	1°06'34	retrograde	-7159 May 15 j 06:06	2° ∡ ′43′38	
minimum elong	-7165 Jul 13 j 02:52	25° 8 47'04	1°06'57		-7159 Jun 26 j 08:54	30°RML	
morning rise	-7165 Jul 25 j 20:45	28° 8 36'20		min. Earth dist.	-7159 Jul 13 j 11:22	27° M 47'20	4.04630 AU
	-7165 Aug 01 j 05:17	0°Щ		opposition	-7159 Jul 14 j 11:09	27°M39'20	-1°41'21
retrograde	-7165 Nov 23 j 13:57	15° Ⅱ 48'39		direct	-7159 Sep 10 j 14:05	22° M 44'10	

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 22 Attention, astronomical year style is used: The year -7159 in astronomical counting style is the year 7160 BCE in historical counting style.

Attention, astronomi	ical year style is used: Th	e year -7159 i	n astronomical cou	nting style is the year	7160 BCE in historical co	ounting style.	
	-7159 Nov 19 j 04:57	0° ∡ ¹		conjunction	-7153 Jul 17 j 13:28	0° Ⅱ 17'13	
evening set	-7158 Jan 13 j 05:45	11° ₹ '51'25		minimum elong	-7153 Jul 17 j 13:24		1°11'37
		_		morning rise	-7153 Jul 30 j 05:52	3° Ⅱ 05'55	
conjunction	-7158 Jan 26 j 17:51	15° ∡ 01'15		retrograde	-7153 Nov 28 j 01:13	20° Ⅱ 19'28	
minimum elong	-7158 Jan 26 j 17:47	15° ∡ '01'12		opposition	-7152 Jan 27 j 15:58	15° Ⅱ 27'56	
max. Earth dist.	-7158 Jan 28 j 08:27		6.05517 AU	min. Earth dist.	-7152 Jan 28 j 17:20	15° Ⅱ 19'51	4.35148 AU
morning rise	-7158 Feb 09 j 08:56	18° ∡ 12′29		direct	-7152 Mar 30 j 05:23	10° I I27'45	
	-7158 Apr 05 j 04:43	0°る		evening set	-7152 Aug 04 j 00:41	28° Ⅱ 29'46 0° ⑤	
retrograde	-7158 Jun 20 j 03:20 -7158 Aug 18 j 18:18	8°る05'49 3°る00'40	2014140	max. Earth dist.	-7152 Aug 10 j 18:07 -7152 Aug 15 j 01:01	0 ಳು 0°957'46	6.32925 AU
opposition min. Earth dist.	-7158 Aug 18 j 18:18		-2 1448 4.07937 AU	max. Earm dist.	-/132 Aug 13 J 01.01	0 93/40	0.32923 AU
iiiii. Eartii dist.	-7158 Sep 11 j 13:01	30°R <i>≯</i> 7	4.07937 AU	conjunction	-7152 Aug 16 j 12:56	1°917'56	1°31'09
direct	-7158 Oct 16 j 00:58	28° ₹ 02'09		minimum elong	-7152 Aug 16 j 12:55	1°917'56	1°31'37
4.1.000	-7158 Nov 19 j 17:01	0°ਰ		morning rise	-7152 Aug 28 j 23:28	4°905'18	1 313,
evening set	-7157 Feb 19 j 04:21	17° ට 08'14		retrograde	-7152 Dec 29 j 14:44	21°5642'14	
8	,			opposition	-7151 Feb 28 j 16:40	16°950'15	2°14'03
conjunction	-7157 Mar 04 j 21:10	20° る 17'29	-1°29'22	min. Earth dist.	-7151 Mar 01 j 16:36	16° © 42'39	4.29942 AU
minimum elong	-7157 Mar 04 j 21:12	20° ට 17'30	1°29'50	direct	-7151 May 01 j 20:03	11° © 52'55	
max. Earth dist.	-7157 Mar 06 j 08:33	20° ට 37'52	6.11175 AU	evening set	-7151 Sep 04 j 05:45	0° Ω 01'13	
morning rise	-7157 Mar 18 j 15:00	23° る 27'07			-7151 Sep 04 j 03:36	$0^{\circ}\Omega$	
	-7157 Apr 17 j 03:25	0° ≈					
retrograde	-7157 Jul 24 j 15:13	12° ≈ 39′04		conjunction	-7151 Sep 16 j 16:20	2° Ω 51′21	1°24'32
opposition	-7157 Sep 21 j 20:17	7° ≈ 35'43	-1°59'18	minimum elong	-7151 Sep 16 j 16:23	2° Ω 51′23	1°24'58
min. Earth dist.	-7157 Sep 21 j 03:28	7° ≈ 41'28	4.15355 AU	max. Earth dist.	-7151 Sep 15 j 14:00	2° Ω 36′19	6.25942 AU
direct	-7157 Nov 19 j 23:01	2° ≈ 34'00		morning rise	-7151 Sep 29 j 02:36	5° Ω 41'32	
	-7156 Feb 25 j 23:27	15° ≈			-7151 Nov 11 j 15:11	15° Ω	
evening set	-7156 Mar 26 j 11:16	21° ≈ 26′09		retrograde	-7150 Feb 01 j 13:15	23° Ω 59'10	
				opposition	-7150 Apr 03 j 21:49	19° Ω 04'57	1°44'47
conjunction	-7156 Apr 09 j 05:00	24°≈32'12		min. Earth dist.	-7150 Apr 04 j 11:45	19° Ω 00'31	4.21597 AU
minimum elong	-7156 Apr 09 j 05:05	24°≈32'15			-7150 May 11 j 21:27	15°R Ω	
max. Earth dist.	-7156 Apr 09 j 22:12		6.19769 AU	direct	-7150 Jun 04 j 00:19	14° Ω 10′22	
morning rise	-7156 Apr 22 j 21:55	27° ≈ 37'38 0° 升			-7150 Jun 27 j 01:09	15° Ω 0° m)	
ratragrada	-7156 May 03 j 13:49	15°) 57'14		ovening set	-7150 Sep 25 j 02:20 -7150 Oct 06 j 03:55	2°My31'53	
retrograde opposition	-7156 Aug 25 j 11:22 -7156 Oct 23 j 16:53	13 X 37 14 10° X 57'20	1004:23	evening set	-/130 Oct 00 J 03.33	2 الإياا 2	
min. Earth dist.	-7156 Oct 23 j 12:12		4.24235 AU	conjunction	-7150 Oct 18 j 18:21	5° m 27'26	0°51'33
direct	-7156 Dec 23 j 00:32	5° ¥ 53'37	1.2 1233 110	minimum elong	-7150 Oct 18 j 18:24		0°51'48
evening set	-7155 Apr 30 j 08:31	24°) €26'02		max. Earth dist.	-7150 Oct 18 j 07:56	-•	6.17014 AU
	,p y	, ,		morning rise	-7150 Oct 31 j 10:32	8° m/24'03	
conjunction	-7155 May 13 j 22:27	27°) 27′02	-0°19'17	retrograde	-7149 Mar 09 j 01:33	27° m/30'26	
minimum elong	-7155 May 13 j 22:29	27°) €27'03	0°19'21	opposition	-7149 May 09 j 06:33	22° m 32'34	0°40'03
max. Earth dist.	-7155 May 13 j 18:28	27°) €24'49	6.28357 AU	min. Earth dist.	-7149 May 09 j 06:05	22° M 32'43	4.12654 AU
	-7155 May 25 j 09:36	0° Υ		direct	-7149 Jul 08 j 02:12	17° m 39'31	
morning rise	-7155 May 27 j 09:36	0° Y 26′33			-7149 Oct 11 j 17:09	0∘ ত	
retrograde	-7155 Sep 26 j 05:45	18° Y 02′26		evening set	-7149 Nov 08 j 12:38	6° ₽ 19'09	
asc. node	-7155 Oct 12 j 05:50	17° Ƴ 37′09					
opposition	-7155 Nov 24 j 17:28	13° Y 06′26	0°08'13	conjunction	-7149 Nov 21 j 10:55	9° Ω 21'37	0°00'29
min. Earth dist.	-7155 Nov 25 j 02:45	13° Y 03′22	4.31778 AU	minimum elong	-7149 Nov 21 j 10:55	9° £ 21'37	0°00'27
direct	-7154 Jan 25 j 05:57	8°Υ02'30		behind sun begin	-7149 Nov 21 j 02:48	9° £ 16'52	
evening set	-7154 Jun 02 j 16:38	26° Y 17'19		behind sun end	-7149 Nov 21 j 19:01	9° £ 26′22	C 0004C ATT
:	7154 I 15: 22:00	29° Υ 12'26	0020150	max. Earth dist.	-7149 Nov 21 j 22:43	9° £ 28'33	6.08946 AU
conjunction minimum elong	-7154 Jun 15 j 22:08 -7154 Jun 15 j 22:05	29° \bigvee 12'26 29° \bigvee 12'24	0°30'50 0°31'01	desc. node morning rise	-7149 Nov 24 j 20:59 -7149 Dec 04 j 12:08	10° ♀ 09'59 12° ♀ 25'47	
max. Earth dist.	-7154 Jun 14 j 22:26	29 γ 12 24 28° γ 59'20	6.34295 AU	morning rise	-7149 Dec 04 j 12:08	0°M	
max. Earth dist.	-7154 Jun 19 j 12:09	0° 8	0.34293 AU	retrograde	-7148 Apr 13 j 13:40	2°MJ14'04	
morning rise	-7154 Jun 29 j 00:13	2° 8 05'48		retrograde	-7148 May 21 j 21:25	2 1101 ∓ 0 ∓ 30°R <u>Ω</u>	
morning rise	-7154 Sep 03 j 15:08	15° 8		opposition	-7148 Jun 13 j 07:47	27° £ 12'20	-0°41'05
retrograde	-7154 Oct 27 j 12:10	19° 8 18'29		min. Earth dist.	-7148 Jun 12 j 16:43	27° £ 17'19	4.06185 AU
5	-7154 Dec 22 j 01:33	15°R 8		direct	-7148 Aug 10 j 23:30	22° ⊆ 19'02	
opposition	-7154 Dec 26 j 12:19	14° 8 25'29	1°16'44		-7148 Oct 21 j 22:11	0°M	
min. Earth dist.	-7154 Dec 27 j 08:28	14° 8 18'57		evening set	-7148 Dec 12 j 16:39	11°ML17'03	
direct	-7153 Feb 26 j 20:30	9° 8 22'50		-	, i		
	-7153 May 02 j 09:54	15° 8		conjunction	-7148 Dec 25 j 22:58	14°M24'55	-0°51'54
evening set	-7153 Jul 04 j 17:45	27° 8 26'59		minimum elong	-7148 Dec 25 j 22:53	14°M24'52	0°52'11
max. Earth dist.	-7153 Jul 16 j 04:09	29° 8 58'44	6.35971 AU	max. Earth dist.	-7148 Dec 27 j 04:36		6.04613 AU
	-7153 Jul 16 j 06:26	$\Pi^{\circ}0$			-7148 Dec 28 j 10:19	15° ™	
				morning rise	-7147 Jan 08 j 08:53	17° M 34'39	

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 23 Attention, astronomical year style is used: The year -7147 in astronomical counting style is the year 7148 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ne year -7147 i	n astronomical co	unting style is the year	7148 BCE in historical c	ounting style.	
	-7147 Mar 07 j 03:03	0° ∡ ¹		min. Earth dist.	-7142 Dec 31 j 21:16	18° 8 47'34	4.36107 AU
retrograde	-7147 May 20 j 04:48	7° ∡ ¹41'09			-7141 Feb 03 j 20:12	15° ₹ 8	
min. Earth dist.	-7147 Jul 18 j 07:38	2° ∡ ¹44'51	4.04558 AU	direct	-7141 Mar 03 j 10:31	13° 8 52'03	
opposition	-7147 Jul 19 j 07:59	2° ∡ ³36'37	-1°48'34		-7141 Mar 31 j 04:39	15° 8	
	-7147 Aug 08 j 17:45	30°RM			-7141 Jun 30 j 09:55	Π °0	
direct	-7147 Sep 15 j 10:25	27°M41'03		evening set	-7141 Jul 09 j 03:55	1° Ⅱ 54'47	
	-7147 Oct 22 j 23:17	0° ∡		max. Earth dist.	-7141 Jul 20 j 10:55	4° ∏ 24'49	6.35954 AU
evening set	-7146 Jan 18 j 06:46	16° ∡ 750′04					
				conjunction	-7141 Jul 21 j 22:16	4° Ⅱ 44'27	
conjunction	-7146 Jan 31 j 19:52	20° ∡ 00'11		minimum elong	-7141 Jul 21 j 22:12	4° ∏ 44'24	1°15'51
minimum elong	-7146 Jan 31 j 19:49	20° ∡ 00′10		morning rise	-7141 Aug 03 j 13:41	7° Ⅲ 32'41	
max. Earth dist.	-7146 Feb 02 j 11:47		6.05715 AU	retrograde	-7141 Dec 02 j 12:45	24° Ⅱ 47'41	
morning rise	-7146 Feb 14 j 11:28	23° ∡ 11'34		opposition	-7140 Feb 01 j 05:22	19° Ⅱ 56'07	
	-7146 Mar 16 j 17:01	0°₹		min. Earth dist.	-7140 Feb 02 j 07:08	19° Ⅱ 47'55	4.34796 AU
retrograde	-7146 Jun 25 j 01:10	13° ろ 02'11		direct	-7140 Apr 03 j 18:37	14° Ⅱ 56′12	
opposition	-7146 Aug 23 j 12:55	7°る57'12			-7140 Jul 25 j 21:38	0°®	
min. Earth dist.	-7146 Aug 22 j 13:20		4.08396 AU	evening set	-7140 Aug 08 j 08:57	2° © 58'11	
direct	-7146 Oct 20 j 21:02	2° ප් 58'16		max. Earth dist.	-7140 Aug 19 j 10:36	5° © 27'09	6.32248 AU
evening set	-7145 Feb 24 j 06:20	22° る 04'34					
				conjunction	-7140 Aug 20 j 20:45	5°5546'22	
conjunction	-7145 Mar 09 j 23:30	25° ප 13'42		minimum elong	-7140 Aug 20 j 20:44		1°32'22
minimum elong	-7145 Mar 09 j 23:33	25° る 13'44		morning rise	-7140 Sep 02 j 06:42	8° 5 33'48	
max. Earth dist.	-7145 Mar 11 j 08:16		6.11856 AU	retrograde	-7139 Jan 03 j 05:31	26° © 15'10	
morning rise	-7145 Mar 23 j 17:41	28° පි 23'10		opposition	-7139 Mar 05 j 09:26	21° © 22'58	
	-7145 Mar 30 j 20:12	0° ≈		min. Earth dist.	-7139 Mar 06 j 08:27	21° © 15'41	4.28974 AU
	-7145 Jun 19 j 12:16	15° ≈		direct	-7139 May 06 j 09:59	16° © 26'02	
retrograde	-7145 Jul 29 j 06:24	17° ≈ 29'33			-7139 Aug 18 j 23:38	0 \circ Ω	
	-7145 Sep 06 j 19:13	15° Ŗ ≈		evening set	-7139 Sep 08 j 15:12	4° Ω 35'37	
opposition	-7145 Sep 26 j 11:45	12° ≈ 26′35		max. Earth dist.	-7139 Sep 19 j 23:53	7° Ω 11'25	6.24756 AU
min. Earth dist.	-7145 Sep 25 j 19:35	12° ≈ 32'06	4.16197 AU				
direct	-7145 Nov 24 j 17:02	7° ≈ 24'30		conjunction	-7139 Sep 21 j 01:50		1°21'25
	-7144 Feb 06 j 06:52	15° ≈		minimum elong	-7139 Sep 21 j 01:53	7° Ω 26′19	1°21'49
evening set	-7144 Mar 31 j 10:41	26° ≈ 15′21		morning rise	-7139 Oct 03 j 12:43	10° Ω 17'12	
					-7139 Oct 24 j 15:37	15° Ω	
conjunction	-7144 Apr 14 j 04:19	29° ≈ 20'58	-0°59'03	retrograde	-7138 Feb 06 j 10:32	28° Ω 41'30	
minimum elong	-7144 Apr 14 j 04:24	29° ≈ 21'01	0°59'20	opposition	-7138 Apr 08 j 18:41	23° Ω 46'48	1°37'35
max. Earth dist.	-7144 Apr 14 j 19:21	29° ≈ 29'27	6.20741 AU	min. Earth dist.	-7138 Apr 09 j 07:10	23° Ω 42'48	4.20252 AU
	-7144 Apr 17 j 01:28	0° ∀		direct	-7138 Jun 08 j 17:14	18° Ω 52′26	
morning rise	-7144 Apr 27 j 20:43	2°) €25'48			-7138 Sep 08 j 00:24	0° m	
retrograde	-7144 Aug 30 j 00:57	20° ∺ 39'18		evening set	-7138 Oct 10 j 17:19	7° Mp 16'34	
opposition	-7144 Oct 28 j 05:59	15° ∺ 39'55					
min. Earth dist.	-7144 Oct 28 j 03:25		4.25226 AU	conjunction	-7138 Oct 23 j 08:50	10° m 13'08	0°45'11
direct	-7144 Dec 27 j 18:13	10° ¥ 36′05		minimum elong	-7138 Oct 23 j 08:54	10° m) 13'10	0°45'24
evening set	-7143 May 05 j 03:17	29° ∺ 06′10		max. Earth dist.	-7138 Oct 23 j 01:55	10° m 09'06	6.15652 AU
	-7143 May 09 j 04:39	0° Y		morning rise	-7138 Nov 05 j 02:05	13° m 10'50	
					-7137 Feb 01 j 23:51	0∘ ⊽	
conjunction	-7143 May 18 j 16:19	2°Υ′06'25		retrograde	-7137 Mar 14 j 03:20	2° ≏ 24'17	
minimum elong	-7143 May 18 j 16:20	2° Y ′06'26	0°12'10		-7137 Apr 23 j 11:07	30°R, Mp	
behind sun begin	-7143 May 18 j 10:53	2° Y ′03'25		opposition	-7137 May 14 j 06:54	27° m 25'54	0°29'04
behind sun end	-7143 May 18 j 21:47	2° Υ ′09'27		min. Earth dist.	-7137 May 14 j 04:32	27° m 26'40	4.11386 AU
max. Earth dist.	-7143 May 18 j 09:41	2° Y ′02'45	6.29290 AU	direct	-7137 Jul 12 j 21:49	22° m 32'57	
morning rise	-7143 Jun 01 j 02:26	5° Y ′05'07			-7137 Sep 22 j 07:30	0∘ ⊽	
asc. node	-7143 Aug 21 j 20:53	20° Y ′08'43		desc. node	-7137 Oct 04 j 04:13	2° ≏ 19'24	
retrograde	-7143 Sep 30 j 14:55	22° Y '36'29		evening set	-7137 Nov 13 j 08:26	11° ≏ 15'55	
opposition	-7143 Nov 29 j 05:06	17° Y ′40′51	0°18'38				
min. Earth dist.	-7143 Nov 29 j 15:19	17° Ƴ 37'29	4.32579 AU	conjunction	-7137 Nov 26 j 07:47	14° ≏ 19'22	
direct	-7142 Jan 29 j 20:50	12° Y 36′56		minimum elong	-7137 Nov 26 j 07:46	14° ≏ 19'21	0°07'23
	-7142 Jun 03 j 11:56	0°8		behind sun begin	-7137 Nov 26 j 00:19	14° ≏ 14'59	
evening set	-7142 Jun 07 j 06:32	0° 8 49'31		behind sun end	-7137 Nov 26 j 15:12	14° ≏ 23'44	
max. Earth dist.	-7142 Jun 19 j 10:02	3° 8 30'11	6.34885 AU	max. Earth dist.	-7137 Nov 26 j 21:09	14° ≏ 27'15	6.07877 AU
				morning rise	-7137 Dec 09 j 10:27	17° ≏ 24'36	
conjunction	-7142 Jun 20 j 10:39		0°37'24		-7136 Feb 06 j 08:20	0° M	
minimum elong	-7142 Jun 20 j 10:36	3° 8 43'46	0°37'38	retrograde	-7136 Apr 18 j 17:17	7° M .18'05	
morning rise	-7142 Jul 03 j 11:14	6° 8 36'18		opposition	-7136 Jun 18 j 09:56	2°M15'51	
	-7142 Aug 12 j 18:23	15° 8		min. Earth dist.	-7136 Jun 17 j 16:43	2°M21'35	4.05432 AU
retrograde	-7142 Oct 31 j 21:31	23° 8 47'11			-7136 Jul 06 j 03:58	30° ₹ Ω	
opposition	-7142 Dec 30 j 23:55	18° 8 54'27	1°24'55	direct	-7136 Aug 15 j 22:31	27° ≏ 22'21	

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 24 Attention, astronomical year style is used: The year -7136 in astronomical counting style is the year 7137 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ne year -7136	in astronomical co	ounting style is the year	7137 BCE in historical c	counting style.	C
	-7136 Sep 25 j 03:57	0° M		minimum elong	-7130 Jun 24 j 18:16	8° 8 03'38	0°43'44
	-7136 Dec 11 j 20:22	15°M		max. Earth dist.	-7130 Jun 23 j 14:52	7° 8 48'30	6.35644 AU
evening set	-7136 Dec 17 j 18:45	16°M23'20		morning rise	-7130 Jul 07 j 17:32	10° 8 55'19	
					-7130 Jul 26 j 15:05	15° 8	
conjunction	-7136 Dec 31 j 02:18	19°M31'51	-0°58'11	retrograde	-7130 Nov 05 j 02:02	28° 8 04'30	
minimum elong	-7136 Dec 31 j 02:13	19°M31'48	0°58'32	opposition	-7129 Jan 04 j 07:08	23° 8 12'02	1°32'15
max. Earth dist.	-7135 Jan 01 j 11:47	19° M 51'39	6.04256 AU	min. Earth dist.	-7129 Jan 05 j 05:38	23° 8 04'47	4.36394 AU
morning rise	-7135 Jan 13 j 13:04	22°M42'08		direct	-7129 Mar 07 j 18:38	18° 8 09'51	
	-7135 Feb 14 j 18:34	0°⊀			-7129 Jun 14 j 07:44	Π °0	
retrograde	-7135 May 25 j 09:52	12° ∡ ⁴49'17		evening set	-7129 Jul 13 j 09:12	6° Ⅱ 11'42	
min. Earth dist.	-7135 Jul 23 j 08:46		4.04684 AU	max. Earth dist.	-7129 Jul 24 j 14:25	8° Ⅱ 40'54	6.35727 AU
opposition	-7135 Jul 24 j 09:15	7° ∡ ¹44'35 −	-1°55'16			_	
direct	-7135 Sep 20 j 11:27	2° ∡ ⁴48'41		conjunction	-7129 Jul 26 j 02:25	9° Ⅱ 00'56	
evening set	-7134 Jan 23 j 12:42	21° ≯ 58'31		minimum elong	-7129 Jul 26 j 02:22	9° Ⅱ 00'54	1°19'28
				morning rise	-7129 Aug 07 j 16:45	11° ∏ 48'49	
conjunction	-7134 Feb 06 j 02:23	25° 🗷 08'39		retrograde	-7129 Dec 06 j 21:10	29° I 106'29	2000111
minimum elong	-7134 Feb 06 j 02:21	25° ∡ 08'38		opposition	-7128 Feb 05 j 15:01	24° Ⅱ 15'02	
max. Earth dist.	-7134 Feb 07 j 18:15	25° ₹ 31'57	6.06313 AU	min. Earth dist.	-7128 Feb 06 j 18:01	24° I 106'27	4.34069 AU
morning rise	-7134 Feb 19 j 18:41	28° ₹ ′20′00		direct	-7128 Apr 08 j 03:43	19° Ⅱ 15'29	
	-7134 Feb 27 j 00:04	0°る			-7128 Jul 09 j 10:23	0°©	
retrograde	-7134 Jun 29 j 22:39	18°る05'33	4.00450 477	evening set	-7128 Aug 12 j 13:57	7° © 18'59	6 2 1 0 5 5 1 X X
min. Earth dist.	-7134 Aug 27 j 09:57		4.09452 AU	max. Earth dist.	-7128 Aug 23 j 13:30	47′16ف9°9	6.31057 AU
opposition	-7134 Aug 28 j 10:11	13°る00'43	-2°15'13		5100 A 05:01 10	100000000	1022102
direct	-7134 Oct 25 j 19:35	8°る01'22		conjunction	-7128 Aug 25 j 01:13		1°32'03
evening set	-7133 Mar 01 j 10:36	27° る 05'23		minimum elong	-7128 Aug 25 j 01:13	10°507'26	1°32'32
	-7133 Mar 14 j 03:39	0° ≈		morning rise	-7128 Sep 06 j 11:08	12° © 55'17	
	7122 M 15:04.05	001401	1005110	. 1	-7128 Dec 17 j 05:14	0°Ω	
conjunction	-7133 Mar 15 j 04:05	0°≈14'01		retrograde	-7127 Jan 07 j 19:50	0° Ω 43'09	
minimum elong	-7133 Mar 15 j 04:08	0°≈14'03		•,,•	-7127 Jan 29 j 11:56	30°₹©	2010101
max. Earth dist.	-7133 Mar 16 j 11:47		6.13303 AU	opposition	-7127 Mar 09 j 23:47	25°\$50'43	
morning rise	-7133 Mar 28 j 22:09	3°≈22'47		min. Earth dist.	-7127 Mar 10 j 22:04		4.27399 AU
ratra ara da	-7133 May 23 j 08:01	15° ≈ 22° ≈ 20'31		direct	-7127 May 10 j 20:27	20° © 54'07 0° Ω	
retrograde	-7133 Aug 02 j 23:24		1947100		-7127 Aug 01 j 11:18	9° Ω 07'24	
opposition min. Earth dist.	-7133 Oct 01 j 04:00 -7133 Sep 30 j 13:57	17°≈17'59	4.17873 AU	evening set max. Earth dist.	-7127 Sep 12 j 23:14 -7127 Sep 24 j 11:22		6.22944 AU
IIIII. Eartii dist.	-7133 Sep 30 j 13.37	17 ≈22 40 15°R≈	4.1/8/3 AU	max. Earth dist.	-/12/ Sep 24 J 11.22	11 6643 44	0.22944 AU
direct	-7133 Oct 18 j 17:38	13 k∞ 12°≈15'36		conjunction	-7127 Sep 25 j 10:30	11° Ω 59'02	1°17'/10
direct	-7132 Jan 10 j 20:02	12 ≈ 13 30		minimum elong	-7127 Sep 25 j 10:30	11° Ω 59'04	
	-7132 Mar 31 j 17:59	0° ∺		morning rise	-7127 Sep 23 j 10.33		
evening set	-7132 Mar 31 j 17:39	0 X 1° ¥ 01'49		morning risc	-7127 Oct 07 j 21:30	14 % 230 39	
evening set	-/132 Apr 03 J 09.00	1 /(0149			-7127 Dec 25 j 02:25	0° mp	
conjunction	-7132 Apr 19 j 02:15	4°) €06'31	-0°53'15	retrograde	-7126 Feb 11 j 08:25	3°Mp24'11	
minimum elong	-7132 Apr 19 j 02:13	4°) (06'34		renograde	-7126 Apr 01 j 14:08	30°RΩ	
max. Earth dist.	-7132 Apr 19 j 02:20		6.22518 AU	opposition	-7126 Apr 13 j 15:14	28° Ω 29'06	1°29'47
morning rise	-7132 May 02 j 17:55	7°) 10'18	0.22310 AC	min. Earth dist.	-7126 Apr 14 j 02:19	28° Ω 25'33	4.18328 AU
retrograde	-7132 Sep 03 j 09:22	25° H 15'08		direct	-7126 Jun 13 j 08:45	23° Ω 35'04	4.10320710
opposition	-7132 Nov 01 j 16:59	20° H 16'17	-0°44'59	direct	-7126 Aug 19 j 01:31	0° my	
min. Earth dist.	-7132 Nov 01 j 15:26	20°) 16'48		evening set	-7126 Oct 15 j 07:41	12° m 03'59	
direct	-7131 Jan 01 j 09:16	15° H 12'20	0/11/10		,120 300 13 j 07.41	w	
	-7131 Apr 23 j 01:06	0° Υ		conjunction	-7126 Oct 28 j 00:09	15° m 01'49	0°38'29
evening set	-7131 May 09 j 18:35	3° Y 37'43		minimum elong	-7126 Oct 28 j 00:12	15° mp 01'51	0°38'39
	, , ,			max. Earth dist.	-7126 Oct 27 j 18:54	14° m) 58'45	6.13793 AU
conjunction	-7131 May 23 j 06:25	6° Ƴ 36'51	-0°05'11	morning rise	-7126 Nov 09 j 18:54	18° m 00'57	
minimum elong	-7131 May 23 j 06:24	6° Ƴ 36'51	0°05'11	. 8	-7125 Jan 05 j 02:19	0∘ ⊽	
behind sun begin	-7131 May 22 j 22:27	6° Ƴ 32'28		retrograde	-7125 Mar 19 j 05:54	7° Ω 23'17	
behind sun end	-7131 May 23 j 14:22	6° Υ 41'15		opposition	-7125 May 19 j 08:42	2° £ 24'17	0°17'43
max. Earth dist.	-7131 May 22 j 20:15	6° Ƴ 31'14	6.30811 AU	min. Earth dist.	-7125 May 19 j 03:10	2° Ω 26'05	4.09749 AU
morning rise	-7131 Jun 05 j 15:17	9° Υ 34'24			-7125 Jun 07 j 16:18	30°R, Mp	
asc. node	-7131 Jul 02 j 17:19	15° Υ 22'21		direct	-7125 Jul 17 j 18:30	27° m/31'23	
retrograde	-7131 Oct 04 j 21:40	26° Y 59'54		desc. node	-7125 Aug 13 j 09:00	28° m/40'35	
opposition	-7131 Dec 03 j 12:53	22° Υ 04'47	0°28'30		-7125 Aug 26 j 04:53	0∘ ⊽	
min. Earth dist.	-7131 Dec 04 j 02:01	22°Υ00'29	4.33779 AU	evening set	-7125 Nov 18 j 06:40	16° ≏ 19'00	
direct	-7130 Feb 03 j 09:33	17° Υ 00'58	-	S	. ,		
	-7130 May 18 j 10:40	0°8		conjunction	-7125 Dec 01 j 07:28	19° ≏ 23'35	-0°15'06
evening set	-7130 Jun 11 j 15:33	5° 8 10'16		minimum elong	-7125 Dec 01 j 07:26	19° ≏ 23'34	
-	,			behind sun begin	-7125 Dec 01 j 04:37	19° ≏ 21'54	
conjunction	-7130 Jun 24 j 18:20	8° 8 03'40	0°43'29	behind sun end	-7125 Dec 01 j 10:15	19° ≙ 25'13	
-	ž				ž.		

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7125 in astronomical counting style is the year 7126 BCE in historical counting style. -7125 Dec 02 i 02:00 19°**2**34'32 6.06626 AU min. Earth dist. -7119 Dec 08 j 13:35 26°**Ƴ**30'11 4.34479 AU max. Earth dist. -7125 Dec 14 j 11:20 22°**₽**29'57 -7118 Feb 07 j 22:01 21°Y31'07 morning rise direct -7124 Jan 16 j 15:23 -7118 Apr 30 j 01:41 0°8 o°M. -7118 Jun 16 j 03:46 9°838'47 -7124 Apr 24 j 01:06 12°M28'38 retrograde evening set -7124 Jun 23 j 14:00 7°M25'54 -1°02'59 -7118 Jun 27 j 23:02 12°**8**14'52 opposition max. Earth dist. 6.35951 AU -7124 Jun 22 j 19:23 min. Earth dist. 7°ጤ32'06 4.04705 AU -7118 Jun 29 j 05:02 direct -7124 Aug 21 j 00:31 2°M32'09 conjunction 12°**8**31'27 0°49'31 15°M₀ -7118 Jun 29 j 04:58 -7124 Nov 24 j 01:57 minimum elong 12°**8**31'24 0°49'48 -7118 Jul 10 j 10:10 evening set -7124 Dec 22 j 23:48 21°M35'47 15°8 -7118 Jul 12 j 02:57 morning rise 15°**8**22'25 conjunction -7123 Jan 05 j 08:15 24°M44'46 -1°04'07 -7118 Sep 29 j 20:07 $0^{\circ}\Pi$ -7123 Jan 05 j 08:10 -7118 Nov 09 j 13:04 minimum elong 24°M44'43 1°04'29 retrograde 2°**Ⅲ**31′26 -7123 Jan 06 j 19:25 max. Earth dist. 25°M05'32 6.04079 AU -7118 Dec 20 j 17:08 30°₽₩ morning rise -7123 Jan 18 j 20:11 27°M55'31 opposition -7117 Jan 08 j 18:54 27°**8**39'16 1°39'25 -7123 Jan 27 j 18:04 0°**√** min. Earth dist. -7117 Jan 09 j 19:26 27°**8**31'23 4.36310 AU retrograde -7123 May 30 j 12:36 18°**∡**01'38 direct -7117 Mar 12 j 08:16 22°837'24 min. Earth dist. -7123 Jul 28 j 09:00 13°**∡**05'35 4.05084 AU -7117 May 26 j 08:31 $0^{\circ}\Pi$ opposition -7123 Jul 29 j 11:19 12°**₹**56'39 -2°01'07 evening set -7117 Jul 17 j 18:53 10°**Ⅲ**39'17 direct -7123 Sep 25 j 12:37 8°**х**¹00′13 max. Earth dist. -7117 Jul 28 j 21:55 13°**Ⅱ**07'33 6.35235 AU evening set -7122 Jan 28 j 19:45 27°**∡**09'37 -7122 Feb 10 j 00:33 0°궁 conjunction -7117 Jul 30 j 11:05 13°**Ⅱ**28′16 1°22'24 minimum elong -7117 Jul 30 j 11:01 13°**Ⅱ**28'14 1°22'51 -7122 Feb 11 i 10:11 0°る19'38 -1°29'32 morning rise -7117 Aug 12 j 00:30 16°**Ⅱ**15'57 conjunction minimum elong -7122 Feb 11 i 10:10 0°る19'37 1°30'01 -7117 Oct 22 j 22:11 0ಂತಾ max. Earth dist. -7122 Feb 13 j 02:26 0°る43'06 6.07203 AU retrograde -7117 Dec 11 j 10:16 3°937'04 -7122 Feb 25 j 02:51 3°る30'40 -7116 Jan 31 j 09:09 30°RⅡ morning rise -7122 Jul 04 j 21:44 23°る09'46 opposition -7116 Feb 10 j 05:54 28°**II**45'35 2°12'12 retrograde min. Earth dist. -7122 Sep 01 j 09:07 18°る12'46 4.10693 AU -7116 Feb 11 j 08:06 min. Earth dist. 28°**I**37'15 4.33235 AU -7122 Sep 02 j 07:42 18°る05'02 -2°13'56 -7116 Apr 12 j 16:03 direct 23°**Ⅱ**46'27 opposition -7122 Oct 30 j 21:15 -7116 Jun 19 j 10:25 direct 13°**る**05'07 000 -7121 Feb 25 j 07:28 -7116 Aug 16 j 23:36 evening set 11°951'31 0°≈ -7121 Mar 06 j 14:53 -7116 Aug 28 j 00:50 2°≈06'09 max. Earth dist. 14°9521'08 6.29950 AU evening set -7121 Mar 20 j 08:37 5°≈14'14 -1°22'12 -7116 Aug 29 j 10:34 14°5540'14 1°31'43 conjunction conjunction -7121 Mar 20 j 08:41 -7116 Aug 29 j 10:35 minimum elong 5°≈14'16 1°22'37 minimum elong 14°9540'15 1°32'11 -7121 Mar 21 j 15:00 -7116 Sep 10 j 20:15 17°528'29 max. Earth dist. 5°≈31'36 6.14770 AU morning rise -7116 Nov 12 j 02:31 morning rise -7121 Apr 03 j 02:33 8°≈22'16 0 $^{\circ}\Omega$ -7121 May 03 j 06:50 15°**≈** retrograde -7115 Jan 12 j 15:36 5°**Ω**22'32 retrograde -7121 Aug 07 j 14:36 27°≈11'21 -7115 Mar 14 j 19:33 0°**Ω**29'55 2°06'43 opposition opposition -7121 Oct 05 j 19:57 22°≈09'17 -1°39'46 min. Earth dist. -7115 Mar 15 j 17:11 0°**Ω**23'03 4.26097 AU min. Earth dist. -7121 Oct 05 j 06:48 22°≈13'45 4.19411 AU -7115 Mar 18 j 17:53 30°Rூ -7121 Dec 04 j 10:10 17°≈06'33 -7115 May 15 j 13:10 25°533'47 direct direct -7120 Mar 14 j 12:35 0°**)**€ -7115 Jul 10 j 01:24 $0^{\circ}\Omega$ -7120 Apr 10 j 07:53 5°**)** 48′59 -7115 Sep 17 j 11:29 13°**Ω**49'26 evening set evening set -7115 Sep 22 j 14:27 15°**Ω** conjunction -7120 Apr 24 i 00:32 8° \(\frac{1}{52'51}\) -0°47'04 -7120 Apr 24 i 00:36 -7115 Sep 29 i 23:07 minimum elong 8°\ 52'53 0°47'17 conjunction 16°Ω41'50 1°13'36 -7120 Apr 24 i 08:57 max. Earth dist. 8°**)** 57'34 6.24010 AU minimum elong -7115 Sep 29 i 23:11 16°Ω41'52 1°13'59 -7120 May 07 i 15:34 morning rise 11°**)** 55'42 max. Earth dist. -7115 Sep 29 i 01:17 16°**Ω**29'14 6.21578 AU -7120 Sep 07 j 21:40 29° ¥ 53'14 morning rise -7115 Oct 12 j 11:28 19°Ω34'45 retrograde -7120 Nov 06 j 05:11 24°\ 54'56 -0°34'48 -7115 Nov 30 j 07:46 0° m opposition min. Earth dist. -7120 Nov 06 j 06:48 24° ¥ 54'24 4.28250 AU retrograde -7114 Feb 16 j 07:56 8° mb 15'14 direct -7119 Jan 06 j 03:08 19°**)** 50'51 -7114 Apr 18 j 15:22 3° mp 19'38 1°21'08 opposition $0^{\circ}\Upsilon$ -7119 Apr 05 j 05:33 min. Earth dist. -7114 Apr 18 j 23:10 3° Mp 17'08 4.17014 AU 7°**Y**39'41 -7119 May 11 j 22:24 -7114 May 17 j 05:33 30° R Ω asc. node -7119 May 14 j 11:17 8°Y13'04 direct -7114 Jun 18 j 03:45 28° **Q**25'55 evening set -7114 Jul 19 j 19:24 0° m -7119 May 27 j 22:08 11°**Υ**11'21 0°02'05 -7114 Oct 20 j 00:43 conjunction evening set 16° Mp 57'23 -7119 May 27 j 22:09 11°**Υ**11'22 0°02'07 minimum elong -7119 May 27 j 13:56 11°Y06'50 -7114 Nov 01 j 18:22 behind sun begin conjunction 19° m 56'12 0°31'24 11°Υ15'53 behind sun end -7119 May 28 j 06:22 minimum elong -7114 Nov 01 j 18:24 19° **m** 56'14 0°31'32 max. Earth dist. -7119 May 27 j 09:50 11°**Υ**04'34 6.31841 AU max. Earth dist. -7114 Nov 01 j 18:03 19° Mp 56'01 6.12682 AU morning rise -7119 Jun 10 j 05:41 14°**Y**07′58 morning rise -7114 Nov 14 j 14:11 22° m 56'21 -7119 Sep 08 j 13:06 0°8 -7114 Dec 15 j 23:51 0∘**⊽** retrograde -7119 Oct 09 j 05:42 1°**8**29'27 retrograde -7113 Mar 24 j 10:54 12°**£**24'29 -7119 Nov 08 j 23:17 30°R℃ -7113 May 24 j 11:23 7°**£**24'58 0°06'10 opposition

-7119 Dec 07 j 23:30

opposition

26°**Y**34'48 0°38'27

min. Earth dist.

-7113 May 24 j 04:14

7°**£**27'19 4.08945 AU

-	nical year style is used: Th		•	` //		, .	50 2 0
desc. node	-7113 Jun 23 j 04:40	3° ≏ 56'14		evening set	-7107 May 19 j 02:30		
direct	-7113 Jul 22 j 18:18	2° ₽ 32'07					
evening set	-7113 Nov 23 j 05:17	21° ≏ 21'33		conjunction	-7107 Jun 01 j 12:05	15° Ƴ 43'17	0°09'04
				minimum elong	-7107 Jun 01 j 12:03	15° Ƴ 43'17	0°09'09
conjunction	-7113 Dec 06 j 07:03	24° ≏ 26'47	-0°22'44	behind sun begin	-7107 Jun 01 j 05:09	15° Ƴ 39'29	
minimum elong	-7113 Dec 06 j 07:00	24° ≏ 26'45	0°22'53	behind sun end	-7107 Jun 01 j 18:57	15° Ƴ 47'05	
max. Earth dist.	-7113 Dec 07 j 03:45	24° ≏ 39'01	6.06191 AU	max. Earth dist.	-7107 May 31 j 19:29	15° Ƴ 34'07	6.32386 AU
morning rise	-7113 Dec 19 j 12:17	27° ≏ 33'53		morning rise	-7107 Jun 14 j 18:33	18° Ƴ 39'13	
	-7113 Dec 29 j 23:18	0°M₊			-7107 Aug 10 j 09:02	0° S	
	-7112 Mar 18 j 23:47	15° ™		retrograde	-7107 Oct 13 j 15:58	5° 8 58'31	
retrograde	-7112 Apr 29 j 03:48	17°M34'31		opposition	-7107 Dec 12 j 09:59	1° 8 04'18	
	-7112 Jun 09 j 06:19	15°RM		min. Earth dist.	-7107 Dec 13 j 02:37	0° 8 58'52	4.34716 AU
opposition	-7112 Jun 28 j 15:51	12° ™ 31'21			-7107 Dec 20 j 16:11	30° ₹ Υ	
min. Earth dist.	-7112 Jun 27 j 18:39	12°M38'26	4.04708 AU	direct	-7106 Feb 12 j 11:40	26° Y ′00'47	
direct	-7112 Aug 25 j 23:17	7°M37'20			-7106 Apr 06 j 22:49	0°8	
. ,	-7112 Nov 04 j 03:55	15°M		evening set	-7106 Jun 20 j 15:39	14° 8 08'10	
evening set	-7112 Dec 28 j 02:13	26° ™ 41′20		Easth diet	-7106 Jun 24 j 13:57	15° 8	(25050 ATT
aaniumatian	7111 Ion 10:11:26	29°M50'31	1900/25	max. Earth dist.	-7106 Jul 02 j 09:17	16° 8 43'28	6.35859 AU
conjunction	-7111 Jan 10 j 11:36 -7111 Jan 10 j 11:31	29°M50'28		aaniumatian	7106 Jul 02: 15:46	17° 8 00'20	0°55'14
minimum elong	·	29°11⊾30/28 0° √ 7	1-094/	conjunction	-7106 Jul 03 j 15:46 -7106 Jul 03 j 15:42	17°800'20	0°55'32
may Earth dist	-7111 Jan 11 j 03:42	0° x ⁴ 12'21	6.04488 AU	minimum elong morning rise	•	17 800 18 19° 8 50'47	0 33 32
max. Earth dist. morning rise	-7111 Jan 12 j 00:39 -7111 Jan 24 j 00:11	3°×1221	0.04488 AU	morning rise	-7106 Jul 16 j 12:17 -7106 Sep 04 j 08:02	19 3 3047 0° Ⅱ	
retrograde	-7111 Jun 04 j 12:50	23° x *01'20		retrograde	-7106 Sep 04 j 08.02 -7106 Nov 13 j 23:13	0 Ⅱ 7°Ⅱ00'56	
min. Earth dist.	-7111 July 04 j 12:30	18° ✓ 08'06	4.05857 AU	opposition	-7106 Nov 13 j 23:13	2° I 08'57	1°45'50
opposition	-7111 Aug 02 j 06:03	17° ∡ 59′26		min. Earth dist.	-7105 Jan 14 j 07:38		4.35933 AU
direct	-7111 Sep 30 j 12:30	13°× 02'33	-2 03 40	mm. Latin dist.	-7105 Jan 30 j 15:17	30°R 8	4.55755 AO
direct	-7110 Jan 24 j 11:28	0°る		direct	-7105 Mar 16 j 19:55	27° 8 07'28	
evening set	-7110 Feb 02 j 22:47	2° ට 10'35		uncer	-7105 Apr 30 j 21:43	0°II	
e venning see	, 110 1 0 0 02 j 22 ,	2 01000		evening set	-7105 Jul 22 j 05:12	15° Ⅱ 09'58	
conjunction	-7110 Feb 16 j 13:50	5° る 20'22	-1°30'28	max. Earth dist.	-7105 Aug 02 j 07:10	17° I I38'00	6.34595 AU
minimum elong	-7110 Feb 16 j 13:50	5° る 20'22			,		
max. Earth dist.	-7110 Feb 18 j 05:56	5° ರ 43'41		conjunction	-7105 Aug 03 j 20:16	17° Ⅱ 58'43	1°25'15
morning rise	-7110 Mar 02 j 06:49	8° ප 31'03		minimum elong	-7105 Aug 03 j 20:13	17° Ⅱ 58'42	1°25'43
retrograde	-7110 Jul 09 j 15:33	28° る 03'25		morning rise	-7105 Aug 16 j 08:55	20° Ⅱ 46′19	
min. Earth dist.	-7110 Sep 06 j 02:45		4.11917 AU	C	-7105 Sep 29 j 15:11	0°©	
opposition	-7110 Sep 07 j 00:40	22° る 59'00	-2°11'43	retrograde	-7105 Dec 16 j 02:21	8°511'16	
direct	-7110 Nov 04 j 16:28	17° る 58'40		opposition	-7104 Feb 14 j 22:28	3°519'44	2°13'50
	-7109 Feb 07 j 22:34	0° ≈		min. Earth dist.	-7104 Feb 16 j 00:59	3°511'19	4.32378 AU
evening set	-7109 Mar 11 j 15:04	6° ≈ 57'12			-7104 Mar 14 j 17:13	30°RⅡ	
				direct	-7104 Apr 17 j 08:04	28° Ⅲ 21′02	
conjunction	-7109 Mar 25 j 08:48	10° ≈ 04'46	-1°18'44		-7104 May 20 j 19:29	0ංම	
minimum elong	-7109 Mar 25 j 08:52	10° ≈ 04'49	1°19'09	evening set	-7104 Aug 21 j 10:03	16° 5 27'08	
max. Earth dist.	-7109 Mar 26 j 10:48	10° ≈ 19′36	6.16059 AU				
morning rise	-7109 Apr 08 j 02:43	13° ≈ 12'13		conjunction	-7104 Sep 02 j 20:46	19° © 16'09	1°30'47
	-7109 Apr 16 j 02:31	15° ≈		minimum elong	-7104 Sep 02 j 20:48	19° © 16'09	1°31'14
	-7109 Jul 08 j 15:26	0° ∀		max. Earth dist.	-7104 Sep 01 j 12:17	18° © 57'42	6.28945 AU
retrograde	-7109 Aug 12 j 04:03	1° ¥ 53′59		morning rise	-7104 Sep 15 j 06:29	22° © 04'48	
	-7109 Sep 15 j 09:46	30° R ≈			-7104 Oct 22 j 01:03	0 \circ Ω	
opposition	-7109 Oct 10 j 08:45	26° ≈ 52′24		retrograde	-7103 Jan 17 j 09:50	10° Ω 04'21	
min. Earth dist.	-7109 Oct 09 j 22:28	26°≈55'53	4.20624 AU	opposition	-7103 Mar 19 j 15:55	5° Ω 11'19	2°02'33
direct	-7109 Dec 09 j 04:10	21° ≈ 49′21		min. Earth dist.	-7103 Mar 20 j 10:49	5° Ω 05'19	4.25009 AU
	-7108 Feb 24 j 13:52	0°) {		direct	-7103 May 20 j 05:21	0° Ω 15'34	
evening set	-7108 Apr 15 j 03:11	10°) 29′18			-7103 Sep 06 j 08:02	15° Ω	
	7100 4 20:40.01	1201/22/2	0040145	evening set	-7103 Sep 22 j 00:06	18° £ 32'31	
conjunction	-7108 Apr 28 j 19:31	13°) € 32'34			7102.0 . 04:12.12	210 02525	1000154
minimum elong	-7108 Apr 28 j 19:35	13°) € 32'36		conjunction	-7103 Oct 04 j 12:18	21° Ω 25'36	1°08'54
max. Earth dist.	-7108 Apr 29 j 01:53	13°) ₹36′08	6.25077 AU	minimum elong	-7103 Oct 04 j 12:22	21° Ω 25'39	1°09'14
morning rise	-7108 May 12 j 09:40	16°) (34′40		max. Earth dist.	-7103 Oct 03 j 18:13	21°Ω15'09	6.20505 AU
	-7108 Jul 19 j 21:37	0°Υ 4°Υ26149		morning rise	-7103 Oct 17 j 01:18	24° Ω 19'17	
retrograde	-7108 Sep 12 j 06:58	4°Υ26'48			-7103 Nov 11 j 10:23	0° M)	
annesitie-	-7108 Nov 06 j 18:35	30°₹ 光	0024120	retrograde	-7102 Feb 21 j 08:35	13° Mp 05'43	1011152
opposition min. Earth dist.	-7108 Nov 10 j 15:31	29° \ 29'05 29° \ 28'06	-0°24'39 4.29085 AU	opposition min. Earth dist.	-7102 Apr 23 j 15:10	8°M)09'36	1°11'53 4.15998 AU
direct	-7108 Nov 10 j 18:29 -7107 Jan 10 j 16:00	24° X 28'06 24° X 25'00	4.47083 AU	direct	-7102 Apr 23 j 21:44 -7102 Jun 23 j 00:48	8° Mp 07'29 3° Mp 16'04	4.13990 AU
uncet	-7107 Jan 10 j 16:00 -7107 Mar 15 j 05:56	24° Υ 25'00 0° Υ		evening set	-7102 Jun 23 j 00:48 -7102 Oct 24 j 17:15	3° lly 16'04 21° lly 49'00	
asc. node	-7107 Mar 13 j 05:56 -7107 Mar 21 j 22:50	1° Υ 06'05		evening set	-/102 Oct 24 J 1/.13	∠ı III/4900	
450. HOUC	/10/ Wiai 21 J 22.30	1 10003					

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7102 in astronomical counting style is the year 7103 BCE in historical counting style. -7102 Nov 06 i 11:51 24° m 48'37 0°24'08 max. Earth dist. -7096 May 03 j 17:15 18°**¥**15′20 6.25982 AU conjunction 21°**)** 15'48 -7102 Nov 06 j 11:53 24° m 48'38 -7096 May 17 j 05:01 minimum elong 0°24'14 morning rise -7102 Nov 06 j 13:45 24° m 49'44 -7096 Jun 27 j 17:55 $0^{\circ}\Upsilon$ max. Earth dist. 6.11814 AU -7096 Sep 16 j 18:18 27° m/49'43 9°Y03'07 -7102 Nov 19 j 09:02 morning rise retrograde -7102 Nov 28 j 18:08 -7096 Nov 15 j 03:26 4°Υ05'55 -0°14'12 0∘**⊽** opposition -7096 Nov 15 j 08:43 retrograde -7101 Mar 29 j 12:08 17°**£**22'37 min. Earth dist. 4°**Υ**04'10 4.29819 AU -7096 Dec 21 j 08:49 desc. node -7101 May 03 j 15:47 15°**≏**30'08 30°R₩ 29° ****01'49 opposition -7101 May 29 j 12:29 12°**º**22'32 -0°05'22 direct -7095 Jan 15 j 07:51 29°¥20'05 min. Earth dist. -7101 May 29 j 02:18 12°**≏**25'52 4.08300 AU asc. node -7095 Jan 29 j 07:52 direct -7101 Jul 27 j 14:47 7°**£**29'37 -7095 Feb 09 j 14:07 $0^{\circ}\Upsilon$ evening set -7101 Nov 28 j 02:58 26°**₽**20'36 evening set -7095 May 23 j 18:47 17°**Y**21'14 -7095 Jun 05 j 09:55 20° \bullet 08'31 max. Earth dist. 6.32909 AU -7101 Dec 11 j 05:51 conjunction 29°**2**26'27 -0°30'09 minimum elong -7101 Dec 11 j 05:48 29°**≏**26'25 0°30'21 conjunction -7095 Jun 06 j 03:21 20°**Υ**18'10 0°16'08 max. Earth dist. -7101 Dec 12 j 05:27 29°**-**40′25 6.05820 AU minimum elong -7095 Jun 06 j 03:20 20°Y18'09 0°16'16 -7101 Dec 13 j 14:34 0°M morning rise -7095 Jun 19 j 08:22 23°Y13'20 morning rise -7101 Dec 24 j 12:06 2°M34'10 -7095 Jul 21 j 07:37 0°8 -7100 Feb 20 j 08:25 15°M retrograde -7095 Oct 18 j 02:04 10°830'38 retrograde -7100 May 04 j 06:10 22°M36'32 opposition -7095 Dec 16 j 22:09 5°**8**36'52 0°57'37 opposition -7100 Jul 03 j 15:58 17°M32'57 -1°22'41 min. Earth dist. -7095 Dec 17 j 15:13 5°**8**31'18 4.35017 AU min. Earth dist. -7100 Jul 02 j 18:32 17°M40'08 4.04656 AU direct -7094 Feb 17 j 00:55 0°**8**33'41 -7100 Jul 23 i 17:01 15°RM -7094 Jun 08 i 04:46 15°8 direct -7100 Aug 30 j 22:45 12°MJ38'35 -7094 Jun 25 i 04:37 18°840'20 evening set -7100 Oct 07 j 20:13 15°M max. Earth dist. -7094 Jul 06 j 18:32 21°**8**13'47 6.35913 AU -7100 Dec 25 j 18:20 0°×7 -7099 Jan 02 j 04:05 1°**х** 43′33 -7094 Jul 08 j 03:11 21°**8**31'52 1°00'42 conjunction evening set -7094 Jul 08 j 03:06 21°**8**31'49 1°01'03 minimum elong -7099 Jan 15 j 14:22 4°**₹**52'57 -1°14'10 morning rise -7094 Jul 20 j 22:33 24°**8**21'47 conjunction -7094 Aug 16 j 06:24 -7099 Jan 15 j 14:17 4°**₹**52'54 1°14'34 0°П minimum elong -7094 Nov 18 j 12:35 -7099 Jan 17 j 04:44 11°**Ⅲ**32'45 max. Earth dist. 5°**≯**15'33 6.04747 AU retrograde 6°**Ⅱ**40'58 -7099 Jan 29 j 03:44 -7093 Jan 17 j 21:45 8°**х** 03′57 1°52'01 morning rise opposition 28°**₹**'04'34 -7093 Jan 18 j 22:52 -7099 Jun 09 j 11:38 min. Earth dist. 6°**Ⅲ**32'55 4.35768 AU retrograde 1°**Ⅲ**39'52 -7099 Aug 07 j 04:47 23°**₹**′08′11 4.06429 AU -7093 Mar 21 j 11:30 min. Earth dist. direct -7099 Aug 08 j 06:30 22°**х** 59′26 -2°09′36 -7093 Jul 26 j 15:50 19°**∏**42′04 opposition evening set -7099 Oct 05 j 09:29 18°**х** 02'05 22°**Ⅱ**10'38 direct max. Earth dist. -7093 Aug 06 j 18:26 6.34221 AU -7098 Jan 07 j 00:03 0°궁 $22^{\circ} II 30'34 \quad 1^{\circ}27'38$ -7098 Feb 08 j 01:44 -7093 Aug 08 j 06:05 evening set 7°**る**09'45 conjunction minimum elong -7093 Aug 08 j 06:03 22°**Ⅲ**30'33 1°28'05 conjunction -7098 Feb 21 j 17:14 10°る19'23 -1°30'46 morning rise -7093 Aug 20 j 17:48 25°**Ⅱ**17'58 -7098 Feb 21 j 17:14 10°る19'23 1°31'14 -7093 Sep 11 j 07:59 0ಂತಾ minimum elong max. Earth dist. -7098 Feb 23 j 06:31 10°る41'01 6.09062 AU retrograde -7093 Dec 20 j 15:54 12°9545'55 -7098 Mar 07 j 10:41 13°る29'50 -7092 Feb 19 j 15:11 7°554'16 2°14'39 morning rise opposition -7098 May 31 j 22:06 min. Earth dist. -7092 Feb 20 j 15:53 7°5546'26 4.31835 AU -7098 Jul 14 j 09:42 2°≈56'29 -7092 Apr 21 j 22:06 2°956'03 retrograde direct -7098 Aug 26 j 15:52 -7092 Aug 25 j 20:05 21°902'08 30°Ŗる evening set -7098 Sep 11 j 17:45 opposition 27°る52'19 -2°08'39 max. Earth dist. -7092 Sep 05 i 23:44 23°533'49 6.28270 AU -7098 Sep 10 j 21:33 min. Earth dist. 27°る59'14 4.12869 AU -7092 Sep 07 i 06:29 direct -7098 Nov 09 j 13:16 22°る51'30 conjunction 23°951'19 1°29'18 -7097 Jan 18 j 23:26 0°≈ minimum elong -7092 Sep 07 i 06:31 23°951'20 1°29'46 -7097 Mar 16 j 15:35 11°≈48'30 -7092 Sep 19 i 16:15 26°5940'16 evening set morning rise -7092 Oct 04 j 14:20 $0^{\circ}\Omega$ -7097 Mar 30 j 09:37 14°≈55'44 -1°14'43 -7091 Jan 22 j 05:26 14°Ω44'27 conjunction retrograde 9°**Ω**51'04 1°57'36 -7097 Mar 30 j 09:41 -7091 Mar 24 j 11:48 minimum elong 14° \$25'46 1° 15'05 opposition -7097 Mar 30 j 17:07 15°22 min. Earth dist. -7091 Mar 25 j 06:04 9°**Ω**45'16 4.24217 AU max. Earth dist. -7097 Mar 31 j 10:15 15°≈09'45 6.17096 AU direct -7091 May 24 j 23:34 4°Ω55'40 -7097 Apr 13 j 03:10 18°≈02'37 -7091 Aug 19 j 20:59 15°**Ω** morning rise -7097 Jun 10 j 01:59 0°**)**€ evening set -7091 Sep 26 j 11:21 23°**Ω**13'01 -7097 Aug 16 j 18:21 6°**)**€37'52 -7091 Oct 08 j 08:16 25°**Ω**57'31 6.19673 AU retrograde max. Earth dist. -7097 Oct 14 j 22:21 opposition 1°**¥**36′50 -1°23′51 -7097 Oct 14 j 13:39 -7091 Oct 09 j 00:09 26°**Ω**06'43 1°03'48 min. Earth dist. 1°**₭**39'47 4.21633 AU conjunction 1°04'06 -7097 Oct 27 j 01:48 30°R≈ minimum elong -7091 Oct 09 j 00:14 26°**Ω**06'45 direct -7097 Dec 13 j 20:47 26°≈33'35 morning rise -7091 Oct 21 j 14:02 29°**Ω**01′09 -7096 Jan 30 j 23:08 0°**)**€ -7091 Oct 25 j 20:40 0° m evening set -7096 Apr 19 j 23:55 15°**)** 11'42 retrograde -7090 Feb 26 j 05:24 17° Mp 52'46 opposition -7090 Apr 28 j 13:03 12° m 56'08 1°02'15 -7096 May 03 j 15:30 18°**升**14'22 -0°34'06 min. Earth dist. -7090 Apr 28 j 16:48 12° m 54'55 4.15179 AU

conjunction

minimum elong

-7096 May 03 j 15:34

18°**)** 14'24 0°34'15

direct

-7090 Jun 27 j 17:54

8° m 02'47

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 28 Attention, astronomical year style is used: The year -7090 in astronomical counting style is the year 7091 BCE in historical counting style.

Attention, astronomic	cal year style is used: Th	e year -7090 i	n astronomical cou	nting style is the year	7091 BCE in historical co	ounting style.	
evening set	-7090 Oct 29 j 08:20	26° My $36'52$		max. Earth dist.	-7084 May 08 j 11:32	22° ∺ 56'41	6.26930 AU
				morning rise	-7084 May 21 j 23:44	25° ∺ 57'10	
conjunction	-7090 Nov 11 j 03:57	29° m 37'15	0°16'49		-7084 Jun 09 j 13:33	0° Y	
minimum elong	-7090 Nov 11 j 03:58	29° m 37'16	0°16'53	retrograde	-7084 Sep 21 j 05:24	13° Ƴ 39'27	
max. Earth dist.	-7090 Nov 11 j 08:37	29° Mp 40'00	6.11082 AU	opposition	-7084 Nov 19 j 15:37	8° Ƴ 42'45	-0°03'39
	-7090 Nov 12 j 18:38	0∘ ত		min. Earth dist.	-7084 Nov 19 j 22:19	8° Ƴ 40'31	4.30674 AU
morning rise	-7090 Nov 24 j 02:15	2° ₽ 39'12		asc. node	-7084 Dec 08 j 22:47	6° Ƴ 15'55	
desc. node	-7089 Mar 14 j 20:44	21° ≏ 40'15		direct	-7083 Jan 19 j 23:33	3° Ƴ 38'42	
retrograde	-7089 Apr 03 j 13:22	22° ₽ 16'31		evening set	-7083 May 28 j 10:32	21° Y 55'51	
opposition	-7089 Jun 03 j 11:15	17° ≏ 15'53	-0°16'40				
min. Earth dist.	-7089 Jun 03 j 00:19	17° ≏ 19'29	4.07706 AU	conjunction	-7083 Jun 10 j 17:41	24° Y 51'56	0°23'06
direct	-7089 Aug 01 j 11:06	12° ≏ 22'50		minimum elong	-7083 Jun 10 j 17:39	24° Ƴ 51'55	0°23'15
	-7089 Nov 27 j 13:52	0° M .		max. Earth dist.	-7083 Jun 09 j 21:03	24° Y 40'32	6.33587 AU
evening set	-7089 Dec 02 j 23:01	1° M L15'37		morning rise	-7083 Jun 23 j 21:29	27° Ƴ 46′17	
					-7083 Jul 04 j 02:42	0°8	
conjunction	-7089 Dec 16 j 03:01	4°ML22'07	-0°37'13		-7083 Oct 19 j 06:55	15° 8	
minimum elong	-7089 Dec 16 j 02:57	4°ML22'05	0°37'26	retrograde	-7083 Oct 22 j 11:59	15° 8 01'01	
max. Earth dist.	-7089 Dec 17 j 04:52	4° M 37'24	6.05415 AU		-7083 Oct 25 j 16:55	15° ₹ 8	
morning rise	-7089 Dec 29 j 10:24	7° M .30'29		opposition	-7083 Dec 21 j 09:56	10° 8 07'31	1°06'45
	-7088 Jan 31 j 13:19	15° M ₊		min. Earth dist.	-7083 Dec 22 j 04:29	10° 8 01'29	4.35472 AU
retrograde	-7088 May 09 j 06:10	27° M .34'37		direct	-7082 Feb 21 j 15:46	5° 8 04'27	
opposition	-7088 Jul 08 j 13:54	22°MJ30'45	-1°31'27		-7082 May 21 j 13:55	15° 8	
min. Earth dist.	-7088 Jul 07 j 15:31	22°MJ38'16	4.04513 AU	evening set	-7082 Jun 29 j 16:06	23° 8 09'32	
direct	-7088 Sep 04 j 18:04	17° M .36'04		max. Earth dist.	-7082 Jul 11 j 05:11	25° 8 42'33	6.36080 AU
	-7088 Dec 08 j 15:27	0° ⊼			,		
evening set	-7087 Jan 07 j 04:33	6° ∡ 742'38		conjunction	-7082 Jul 12 j 13:27	26° 8 00'25	1°05'48
C	J			minimum elong	-7082 Jul 12 j 13:22	26° 8 00'23	1°06'10
conjunction	-7087 Jan 20 j 15:35	9° ∡ 752'19	-1°18'17	morning rise	-7082 Jul 25 j 07:22	28° 8 49'41	
minimum elong	-7087 Jan 20 j 15:31	9° ∡ 752'17		C	-7082 Jul 30 j 15:33	0° I I	
max. Earth dist.	-7087 Jan 22 j 05:05		6.04851 AU	retrograde	-7082 Nov 22 j 22:26	16° Ⅱ 01'08	
morning rise	-7087 Feb 03 j 05:49	13° ∡ '03'35		opposition	-7081 Jan 22 j 10:46	11° Ⅱ 09'27	1°57'21
	-7087 Apr 30 j 22:39	0°ප		min. Earth dist.	-7081 Jan 23 j 11:52	11° Ⅱ 01′26	4.35629 AU
retrograde	-7087 Jun 14 j 09:07	3° る 02'22		direct	-7081 Mar 26 j 00:26	6° Ⅱ 08'43	
	-7087 Jul 28 j 15:19	30°R ✓		evening set	-7081 Jul 31 j 00:54	24° Ⅱ 10′24	
min. Earth dist.	-7087 Aug 12 j 00:53		4.06784 AU	max. Earth dist.	-7081 Aug 11 j 01:23		6.33747 AU
opposition	-7087 Aug 13 j 02:05	27° ∡ 757'12			J		
direct	-7087 Oct 10 j 06:34	22° ₹ 59'20		conjunction	-7081 Aug 12 j 14:06	26° ∏ 58'40	1°29'29
	-7087 Dec 17 j 22:54	0°ਰ		minimum elong	-7081 Aug 12 j 14:04	26° Ⅲ 58'39	
evening set		12° る 07'30		morning rise	-7081 Aug 25 j 01:20		
5 · • · · · · · · · · · · · · · · · · ·	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				-7081 Aug 26 j 02:29	0.ಪ	
conjunction	-7086 Feb 26 j 20:06	15° ප 17'11	-1°30'23	retrograde	-7081 Dec 25 j 07:13	17°9517'35	
minimum elong	-7086 Feb 26 j 20:07	15° ට 17'12		opposition	-7080 Feb 24 j 07:17	12°525'46	2°14'42
max. Earth dist.	-7086 Feb 28 j 09:30	15° ට 38'50	6.09657 AU	min. Earth dist.	-7080 Feb 25 j 08:21	12° © 17'49	4.31041 AU
morning rise	-7086 Mar 12 j 13:44	18° る 27'28		direct	-7080 Apr 26 j 13:30	7°527'54	
8	-7086 May 05 j 21:52	0° ≈		evening set	-7080 Aug 30 j 05:09	25° © 34'52	
retrograde	-7086 Jul 19 j 04:27	7° ≈ 49'02		max. Earth dist.	-7080 Sep 10 j 10:54	28°9508'04	6.27221 AU
opposition	-7086 Sep 16 j 10:17	2° ≈ 45'13	-2°04'40		1 3		
min. Earth dist.	-7086 Sep 15 j 15:30	2° ≈ 51'39	4.13645 AU	conjunction	-7080 Sep 11 j 15:41	28°524'28	1°27'19
	-7086 Oct 07 j 19:56	30°Ŗる		minimum elong	-7080 Sep 11 j 15:43	28°524'29	1°27'46
direct	-7086 Nov 14 j 08:14	27° ප් 44'01		C	-7080 Sep 18 j 15:22	$0^{\circ}\Omega$	
	-7086 Dec 22 j 05:00	0° ≈		morning rise	-7080 Sep 24 j 01:34	1° Ω 13'56	
	-7085 Mar 14 j 05:51	15° ≈		C	-7080 Dec 02 j 16:44	15° Ω	
evening set	-7085 Mar 21 j 16:08	16° ≈ 40′01		retrograde	-7079 Jan 26 j 23:32	19° Ω 24'07	
Č	J			Ü	-7079 Mar 25 j 10:18	15°R Ω	
conjunction	-7085 Apr 04 j 10:06	19° ≈ 46'54	-1°10'10	opposition	-7079 Mar 29 j 07:32	14° Ω 30′24	1°51'57
minimum elong	-7085 Apr 04 j 10:11	19° ≈ 46'57	1°10'30	min. Earth dist.	-7079 Mar 29 j 23:47	14° Ω 25'13	4.22975 AU
max. Earth dist.	-7085 Apr 05 j 07:06	19° ≈ 58'49	6.18001 AU	direct	-7079 May 29 j 14:47	9° Ω 35'21	
morning rise	-7085 Apr 18 j 03:38	22° ≈ 53'21			-7079 Jul 29 j 23:10	15° Ω	
5	-7085 May 20 j 21:22	0° ∀		evening set	-7079 Sep 30 j 23:43	27° Ω 54'55	
retrograde	-7085 Aug 21 j 07:17	11° ¥ 22'28		U	-7079 Oct 09 j 23:56	0° m	
opposition	-7085 Oct 19 j 12:12	6° ¥ 21'52	-1°15'00			٩	
min. Earth dist.	-7085 Oct 19 j 04:54		4.22580 AU	conjunction	-7079 Oct 13 j 13:10	0° ™ 49'29	0°58'16
direct	-7085 Dec 18 j 14:23	1° ¥ 18′22		minimum elong	-7079 Oct 13 j 13:14	0° Mp 49'31	0°58'32
evening set	-7084 Apr 24 j 20:14	19° ¥ 54'31		max. Earth dist.	-7079 Oct 12 j 23:08	0° mp 41'20	6.18351 AU
<i>3</i>	r J			morning rise	-7079 Oct 26 j 04:05	3° Mp 44'56	
conjunction	-7084 May 08 j 11:16	22°) 56'32	-0°27'12	retrograde	-7078 Mar 03 j 06:58	22° m 43'44	
minimum elong	-7084 May 08 j 11:18	22°) 56'33		opposition	-7078 May 03 j 12:46	17° Mp 46'34	0°52'05
			-	11		4	

-			-		r 7079 BCE in historical c	_	50 2)
min. Earth dist.	-7078 May 03 j 15:10	•	4.13850 AU	evening set	-7072 Apr 29 j 14:37		
direct	-7078 Jul 02 j 13:45	12° m 53'20					
	-7078 Oct 27 j 14:25	0∘ ⊽		conjunction	-7072 May 13 j 04:41	27°) €33'48	-0°20'19
evening set	-7078 Nov 03 j 02:09	1° ≏ 30'37		minimum elong	-7072 May 13 j 04:43	27°) 33′49	0°20'22
				max. Earth dist.	-7072 May 13 j 01:37	27°) € 32'07	6.28605 AU
conjunction	-7078 Nov 15 j 23:02	4° ≏ 32'04	0°09'15		-7072 May 24 j 03:52	0° Y	
minimum elong	-7078 Nov 15 j 23:03	4° £ 32'05	0°09'15	morning rise	-7072 May 26 j 16:05	0° Y 33'18	
behind sun begin	-7078 Nov 15 j 16:12	4° £ 28'04		retrograde	-7072 Sep 25 j 11:40	18° Y ′08′29	
behind sun end	-7078 Nov 16 j 05:54	4° Ω 36'06		asc. node	-7072 Oct 20 j 05:23	17° Y ′09′05	
max. Earth dist.	-7078 Nov 16 j 07:03	4° Ω 36'46	6.09883 AU	opposition	-7072 Nov 24 j 00:44	13° Y 12'14	0°06'33
morning rise	-7078 Nov 28 j 22:41	7° Ω 35'09		min. Earth dist.	-7072 Nov 24 j 09:01	13° Y ′09′29 8° Y ′08′10	4.32130 AU
desc. node	-7077 Jan 22 j 13:04	19° £ 20'34		direct	-7071 Jan 24 j 12:49	8°°γ′08′10 26° γ ′21′19	
retrograde	-7077 Apr 08 j 17:13	27° Ω 18'29	0920112	evening set	-7071 Jun 01 j 21:58	26° γ 21°19 29° γ 03'51	C 24704 ATT
opposition min. Earth dist.	-7077 Jun 08 j 13:22 -7077 Jun 08 j 00:22	22° £ 17'23 22° £ 21'41	4.06763 AU	max. Earth dist.	-7071 Jun 14 j 05:07	29 1 03 31	6.34704 AU
direct	-7077 Aug 06 j 08:39	17° £ 21'41	4.00/03 AU	conjunction	-7071 Jun 15 j 03:46	29° Y 16'22	0°29'40
direct	-7077 Nov 10 j 06:19	0°M.		minimum elong	-7071 Jun 15 j 03:40	29°Υ16'20	0°29'51
evening set	-7077 Dec 07 j 23:45	6°M20'22		minimum clong	-7071 Jun 18 j 10:44	0°8	0 2731
evening set	7077 Dec 07 j 25.45	0 1102022		morning rise	-7071 Jun 28 j 06:03	2° 8 09'39	
conjunction	-7077 Dec 21 j 04:46	9°M27'36	-0°44'15	morning rise	-7071 Sep 02 j 13:16	15° 8	
minimum elong	-7077 Dec 21 j 04:42	9°M27'34		retrograde	-7071 Oct 26 j 17:16	19° 8 20'58	
max. Earth dist.	-7077 Dec 22 j 08:00	9°M43'44	6.04798 AU	C	-7071 Dec 21 j 14:00	15°R ∀	
morning rise	-7076 Jan 03 j 13:23	12°M36'44		opposition	-7071 Dec 25 j 17:32	14° 8 27'50	1°15'05
	-7076 Jan 13 j 19:26	15°M		min. Earth dist.	-7071 Dec 26 j 14:04	14° 8 21'11	4.36171 AU
	-7076 Apr 02 j 05:34	0° ∡ ¹		direct	-7070 Feb 26 j 02:23	9° 8 25'01	
retrograde	-7076 May 14 j 10:01	2° х 43′13			-7070 May 01 j 10:22	15° 8	
	-7076 Jun 25 j 12:18	30°RM		evening set	-7070 Jul 03 j 22:38	27° 8 27'57	
opposition	-7076 Jul 13 j 15:50	27°M39'03	-1°39'53	max. Earth dist.	-7070 Jul 15 j 07:06	29° 8 58'31	6.36267 AU
min. Earth dist.	-7076 Jul 12 j 16:09		4.04314 AU		-7070 Jul 15 j 09:47	Π °0	
direct	-7076 Sep 09 j 19:05	22°M44'03					
	-7076 Nov 18 j 08:46	0° ⊼		conjunction	-7070 Jul 16 j 18:34	0° Ⅱ 18'11	1°10'17
evening set	-7075 Jan 12 j 10:07	11° ≯ 52'31		minimum elong	-7070 Jul 16 j 18:30	0° Ⅱ 18′08	1°10'40
				morning rise	-7070 Jul 29 j 11:26	3° Ⅱ 06'54	
conjunction	-7075 Jan 25 j 22:13	15° ∡ 02'31		retrograde	-7070 Nov 27 j 05:28	20° Ⅱ 19'17	2001110
minimum elong	-7075 Jan 25 j 22:09	15° ₹ 02'29		opposition	-7069 Jan 26 j 19:32	15° Ⅱ 27'40	2°01'49
max. Earth dist.	-7075 Jan 27 j 14:25	15° ≯ 26'08 18° ≯ 13'53	6.05110 AU	min. Earth dist.	-7069 Jan 27 j 21:56	15° Ⅲ 19'14 10° Ⅲ 27'11	4.35311 AU
morning rise	-7075 Feb 08 j 13:00 -7075 Apr 04 j 03:49	0°중		direct evening set	-7069 Mar 30 j 09:31 -7069 Aug 04 j 05:38	10 П 2/11 28° П 29'17	
retrograde	-7075 Jun 19 j 11:25	8°号09'33		evening set	-7069 Aug 11 j 00:02	28 H 2917	
min. Earth dist.	-7075 Aug 17 j 00:27		4.07518 AU	max. Earth dist.	-7069 Aug 15 j 06:13	0° 9 57'20	6.32935 AU
opposition	-7075 Aug 18 j 01:18	3° ප 04'30		max. Earth dist.	7007 Hug 15 J 00:15	0 37 20	0.52755710
оррозии	-7075 Sep 11 j 10:35	30°R. ✓	2 1.10	conjunction	-7069 Aug 16 j 18:18	1° © 17'35	1°30'46
direct	-7075 Oct 15 j 07:11	28° ₹ 06'16		minimum elong	-7069 Aug 16 j 18:17	1° © 17'35	1°31'14
	-7075 Nov 18 j 07:23	ರ°0		morning rise	-7069 Aug 29 j 04:51	4°505'00	
evening set	-7074 Feb 18 j 09:46	17° る 13'22		retrograde	-7069 Dec 29 j 18:03	21° 5 641'32	
				opposition	-7068 Feb 28 j 19:43	16° 5 349'36	2°14'01
conjunction	-7074 Mar 04 j 02:23	20° る 22'44	-1°29'21	min. Earth dist.	-7068 Feb 29 j 20:35	16° 5 641'43	4.29790 AU
minimum elong	-7074 Mar 04 j 02:25	20° る 22'45	1°29'49	direct	-7068 Apr 30 j 23:04	11° © 52'05	
max. Earth dist.	-7074 Mar 05 j 14:10	20° る 43'23	6.10813 AU	evening set	-7068 Sep 03 j 11:44	0° Ω 01'48	
morning rise	-7074 Mar 17 j 20:23	23° る 32'36			-7068 Sep 03 j 08:33	0 ° Ω	
	-7074 Apr 15 j 21:48	0° ≈			5 0.00 C 1-1-1	20.05	100 (17)
retrograde	-7074 Jul 23 j 22:08	12°≈46'30		conjunction	-7068 Sep 15 j 22:16	2° Ω 52'05	1°24'51
min. Earth dist.	-7074 Sep 20 j 10:09	7°≈49'22	4.15125 AU	minimum elong	-7068 Sep 15 j 22:19	2° Ω 52'06	1°25'17
opposition	-7074 Sep 21 j 04:42	7°≈43'02	-1~59'46	max. Earth dist.	-7068 Sep 14 j 17:05	2° Ω 35'23	6.25621 AU
direct	-7074 Nov 19 j 05:44	2°≈41'28		morning rise	-7068 Sep 28 j 08:44	5° Ω 42'26	
evening set	-7073 Feb 24 j 15:24 -7073 Mar 26 j 17:27	15° ≈ 21° ≈ 33'38		retrograde	-7068 Nov 10 j 18:29 -7067 Jan 31 j 19:02	15° Ω 24° Ω 00'48	
evening set	1013 Wiai 20 J 11.21	∠ı <i>∞</i> 3338		opposition	-7067 Apr 03 j 01:50	19° Ω 06'39	1°45'45
conjunction	-7073 Apr 09 j 11:17	24° ≈ 39'44	-1°05'09	min. Earth dist.	-7067 Apr 03 j 17:05	19 δ 2 00 39 19° Ω 01'47	4.21123 AU
minimum elong	-7073 Apr 09 j 11:17	24°≈39'47	1°05'28	mm. Zurm tist.	-7067 May 11 j 10:15	15°RΩ	1.21123 AU
max. Earth dist.	-7073 Apr 10 j 06:36	24°≈50'40	6.19713 AU	direct	-7067 Jun 03 j 04:47	13 \δ ι 14° Ω 11'51	
morning rise	-7073 Apr 23 j 04:12	27°≈45'13			-7067 Jun 25 j 20:42	15° Ω	
<i>3</i>	-7073 May 03 j 06:25	0° ∀			-7067 Sep 24 j 03:04	0° m/y	
retrograde	-7073 Aug 25 j 20:16	16°) €05'21		evening set	-7067 Oct 05 j 11:16	2°m/35'53	
opposition	-7073 Oct 24 j 01:27	11°) €05'18	-1°05'45	-	v		
min. Earth dist.	-7073 Oct 23 j 20:21	11°) €07'01	4.24345 AU	conjunction	-7067 Oct 18 j 01:50	5° Mp 31'42	0°52'24
direct	-7073 Dec 23 j 09:04	6° ∺ 01'39		minimum elong	-7067 Oct 18 j 01:54	5° m 31'44	0°52'39

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -7067 in astronomical counting style is the year 7068 BCE in historical counting style. -7067 Oct 17 j 15:11 5° m 25'30 6.16432 AU -7061 Apr 16 j 14:53 0°) max. Earth dist. -7067 Oct 30 j 17:50 -7061 Apr 28 j 04:40 2°\ 36'05 8° m 28'29 morning rise morning rise -7066 Mar 08 j 08:46 -7061 Aug 30 j 08:00 20°\ 48'11 27° m 36'30 retrograde retrograde -7061 Oct 28 j 15:05 15°\(\pm\)48'40 -0°56'04 -7066 May 08 j 12:48 22° m 38'49 0°41'33 opposition opposition -7066 May 08 j 12:55 -7061 Oct 28 j 11:15 15°**)** 49′58 min. Earth dist. 22° Mp 38'47 4.12026 AU min. Earth dist. 4.25786 AU -7066 Jul 07 j 08:09 direct 17° m 45'46 direct -7061 Dec 28 j 02:26 10°**)** 44′52 -7066 Oct 10 j 11:00 0∘**⊽** evening set -7060 May 04 j 09:40 29°**)** 12'34 $0^{\circ}\Upsilon$ evening set -7066 Nov 07 j 21:46 6°**£**28'04 -7060 May 07 j 23:38 conjunction -7066 Nov 20 j 19:46 9°**₽**30'44 0°01'32 conjunction -7060 May 17 j 22:42 2°Υ12'36 -0°13'12 2°**Y**12'36 minimum elong -7066 Nov 20 j 19:47 9°**₽**30'44 0°01'30 minimum elong -7060 May 17 j 22:44 0°13'14 -7060 May 17 j 18:04 2°**Y**10'02 behind sun begin -7066 Nov 20 j 11:39 9°**£**25'58 behind sun begin 2° Y 15'11 behind sun end -7066 Nov 21 j 03:55 9°**£**35'31 behind sun end -7060 May 18 j 03:24 6.08317 AU max. Earth dist. -7066 Nov 21 j 06:08 9°**£**36'50 max. Earth dist. -7060 May 17 j 15:56 2°Y08'51 6.29846 AU desc. node -7066 Dec 01 j 17:50 12°**2**05'10 morning rise -7060 May 31 j 09:00 5°Y11'07 morning rise -7066 Dec 03 j 20:58 12°**△**35'08 asc. node -7060 Aug 29 j 23:58 21°Y10'07 -7065 Mar 04 j 22:17 0°M retrograde -7060 Sep 29 j 22:35 22° Y 41'08 retrograde -7065 Apr 13 j 22:26 2° M25'31 opposition -7060 Nov 28 j 12:11 17°**Y**45′27 0°16'55 -7065 May 23 j 23:50 min. Earth dist. -7060 Nov 28 j 23:21 17°**Y**41'47 4.33071 AU 27°**º**23'49 -0°39'39 opposition -7065 Jun 13 j 16:52 direct -7059 Jan 29 j 05:00 12° **Y**41'30 min. Earth dist. -7065 Jun 13 j 01:10 27°**♀**29'01 4.05614 AU -7059 Jun 02 j 11:50 0°8 direct -7065 Aug 11 j 08:29 22°**♀**30'32 evening set -7059 Jun 06 j 11:48 0°852'24 -7065 Oct 21 i 05:55 0°M evening set -7065 Dec 13 j 02:52 11°MJ30'27 conjunction -7059 Jun 19 i 16:16 3°**8**46'40 0°36'14 -7059 Jun 19 j 16:13 3°**8**46'38 0°36'28 minimum elong -7065 Dec 26 j 09:14 14°MJ38'30 -0°51'02 -7059 Jun 18 j 14:55 3°**8**32'40 6.35261 AU conjunction max. Earth dist. -7065 Dec 26 j 09:09 0°51'20 -7059 Jul 02 j 17:11 minimum elong 14°MJ38'27 morning rise 6°839'10 -7065 Dec 27 j 21:33 -7059 Aug 11 j 19:20 15°8 15°M. -7059 Oct 31 j 02:14 max. Earth dist. -7065 Dec 27 j 17:15 14°M57'27 6.04167 AU retrograde 23°**8**49'08 -7064 Jan 08 j 18:51 opposition -7059 Dec 30 j 04:59 17°M48'21 18°**8**56'20 1°23'20 morning rise -7064 Mar 05 j 05:39 -7059 Dec 31 j 02:27 min. Earth dist. 18°**8**49'23 4.36343 AU 0° **₹** -7064 May 19 j 17:17 -7058 Feb 03 j 10:00 7°**х** 756′19 15°R₩ retrograde direct -7064 Jul 18 j 19:19 2°**₹**51'48 -1°47'36 -7058 Mar 02 j 14:53 13°**8**53'46 opposition -7064 Jul 17 j 18:55 -7058 Mar 30 j 00:56 min. Earth dist. 3°**≯**00'03 4.04281 AU 15°**8** -7064 Aug 10 j 11:35 -7058 Jun 29 j 12:19 30°R,ML $0^{\circ}\Pi$ -7064 Sep 14 j 21:59 -7058 Jul 08 j 09:16 direct 27°M56'22 evening set 1°**I**I56′18 -7064 Oct 20 j 05:10 -7058 Jul 19 j 16:14 0°**√** max. Earth dist. 4°**I**I26′13 6.36033 AU evening set -7063 Jan 17 j 17:27 17°**∡**05'39 conjunction -7058 Jul 21 j 03:59 4°II46'05 1°14'34 conjunction -7063 Jan 31 j 06:11 20° ₹15'42 -1°25'05 minimum elong -7058 Jul 21 j 03:56 4°**Ⅱ**46′03 1°14'58 -7063 Jan 31 j 06:08 20°**∡**15'40 1°25'32 morning rise -7058 Aug 02 j 19:38 7°**Ⅲ**34'24 minimum elong -7063 Feb 01 j 22:41 20°**∡**³39′26 -7058 Dec 01 j 18:13 24°**Ⅱ**49'10 max. Earth dist. 6.05618 AU retrograde -7063 Feb 13 j 21:47 23°**х**⁴27′05 -7057 Jan 31 j 09:40 19°**I**57'44 2°05'50 morning rise opposition -7063 Mar 14 j 22:23 0°정 -7057 Feb 01 j 12:52 19°**耳**49'04 4.34700 AU min. Earth dist. -7063 Jun 24 j 11:00 13°る17'57 -7057 Apr 03 j 23:22 14°**I**57'42 retrograde direct -7057 Jul 25 i 23:05 min. Earth dist. -7063 Aug 21 i 23:17 8°る21'34 4.08496 AU 0ಂತಾ opposition -7063 Aug 23 j 00:47 8° ප12'51 -2°15'10 evening set -7057 Aug 08 j 15:20 3°900'53 direct -7063 Oct 20 i 07:55 3°る14'02 max. Earth dist. -7057 Aug 19 j 14:16 5°9528'26 6.31978 AU evening set -7062 Feb 23 j 15:56 22°る19'00 -7057 Aug 21 j 03:17 5°9349'17 1°31'36 conjunction -7062 Mar 09 i 08:58 25°**ප්**27'55 -1°27'39 -7057 Aug 21 j 03:17 5°9349'16 1°32'04 conjunction minimum elong -7062 Mar 09 i 09:01 25°**ප්**27'57 1°28'06 -7057 Sep 02 j 13:37 8°936'56 minimum elong morning rise -7062 Mar 10 j 19:36 25°る47'51 6.12143 AU -7056 Jan 03 j 12:00 26°919'04 max. Earth dist. retrograde morning rise -7062 Mar 23 j 02:56 28°る37'10 opposition -7056 Mar 04 j 14:18 21°**9**26'58 2°12'29 -7062 Mar 29 j 04:51 0°22 min. Earth dist. -7056 Mar 05 j 14:01 21°9519'26 4.28562 AU -7062 Jun 17 j 01:57 15°≈ direct -7056 May 05 j 14:19 16°929'53 -7062 Jul 28 j 17:25 17°≈42'46 -7056 Aug 17 j 20:39 0° Ω retrograde -7062 Sep 08 j 02:13 -7056 Sep 07 j 23:13 15°R≈ evening set 4°Ω41'55 -7062 Sep 25 j 22:55 -7056 Sep 19 j 08:23 opposition 12°≈39'40 -1°54'01 max. Earth dist. 7°**Ω**18′06 6.24253 AU min. Earth dist. -7062 Sep 25 j 06:47 12°≈45'10 4.16625 AU -7056 Sep 20 j 10:09 direct -7062 Nov 24 j 05:11 7°≈37'41 conjunction 7°**Ω**32'53 1°21'46 -7061 Feb 04 j 13:00 15°≈ minimum elong -7056 Sep 20 j 10:13 7°**Ω**32'55 1°22'09 evening set -7061 Mar 31 j 18:39 26°≈26'07 morning rise -7056 Oct 02 j 20:56 10°**Ω**24′00 -7056 Oct 23 j 10:45 15°€ conjunction -7061 Apr 14 j 12:16 29°≈31'29 -0°59'41 retrograde -7055 Feb 05 j 18:42 28°**Ω**49'38 -7061 Apr 14 j 12:21 -7055 Apr 08 j 01:10 23°Ω55'10 1°38'31 minimum elong 29°≈31'32 0°59'58 opposition

-7055 Apr 08 j 14:34

23°**Ω**50'54 4.19722 AU

min. Earth dist.

max. Earth dist.

-7061 Apr 15 j 04:51

29°≈40'50 6.21257 AU

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 31 Attention, astronomical year style is used: The year -7055 in astronomical counting style is the year 7056 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -7055	in astronomical co	ounting style is the year	7056 BCE in historical c	counting style.	
direct	-7055 Jun 07 j 23:33	19° Ω 00'49			-7049 Jan 08 j 22:36	15° ≈	
	-7055 Sep 06 j 14:24	0° ™			-7049 Mar 31 j 09:40	0°) €	
evening set	-7055 Oct 10 j 03:19	7° Mp 27'35		evening set	-7049 Apr 05 j 15:56	1°) 10′14	
conjunction	-7055 Oct 22 j 18:37	10° Mp 24'20	0°45'58	conjunction	-7049 Apr 19 j 09:07	4° 光 14'56	
minimum elong	-7055 Oct 22 j 18:41	10° m 24'22	0°46'11	minimum elong	-7049 Apr 19 j 09:12	4°) 14′59	
max. Earth dist.	-7055 Oct 22 j 10:00	10° m 19'17	6.15147 AU	max. Earth dist.	-7049 Apr 19 j 21:03		6.22479 AU
morning rise	-7055 Nov 04 j 11:56	13° m 22'14		morning rise	-7049 May 03 j 01:02	7°) 18'48	
	-7054 Jan 30 j 14:37	0∘ ⊽		retrograde	-7049 Sep 03 j 19:43	25°) €24'32	
retrograde	-7054 Mar 13 j 11:31	2° △ 37'00		opposition	-7049 Nov 02 j 02:13	20°) €25'34	
	-7054 Apr 24 j 17:24	30°R Mp		min. Earth dist.	-7049 Nov 02 j 01:38		4.26802 AU
opposition	-7054 May 13 j 15:33	27° m 38'43		direct	-7048 Jan 01 j 18:57	15°) €21'36	
min. Earth dist.	-7054 May 13 j 12:27	27° m 39'43	4.10973 AU	_	-7048 Apr 21 j 14:54	0° Υ	
direct	-7054 Jul 12 j 06:23	22° m 45'47		evening set	-7048 May 09 j 02:12	3° Ƴ 47'17	
	-7054 Sep 20 j 12:32	0∘ ⊽			T0.10.14 . 00:11.04	co 00 4 c12 o	000 (11.0
desc. node	-7054 Oct 10 j 13:13	3° Ω 59'55		conjunction	-7048 May 22 j 14:26	6° Y 46'39	
evening set	-7054 Nov 12 j 19:12	11° ≏ 30'21		minimum elong	-7048 May 22 j 14:26	6° Y 46'40	0°06'12
	50543Y 05:10.01	1 40 0 22152	000 (100	behind sun begin	-7048 May 22 j 06:40	6° Y 42'22	
conjunction	-7054 Nov 25 j 18:31	14° £ 33'52		behind sun end	-7048 May 22 j 22:13	6° Y 50'57	6 20 500 LVV
minimum elong	-7054 Nov 25 j 18:31	14° £ 33'52	0°06'26	max. Earth dist.	-7048 May 22 j 05:23	6° Y 41'39	6.30588 AU
behind sun begin	-7054 Nov 25 j 10:52	14° £ 29'21		morning rise	-7048 Jun 04 j 23:30	9° Υ 44'24	
behind sun end	-7054 Nov 26 j 02:11	14° Ω 38'22		asc. node	-7048 Jul 10 j 04:12	17° Y 10'35	
max. Earth dist.	-7054 Nov 26 j 09:55	14° Ω 42'57	6.07612 AU	retrograde	-7048 Oct 04 j 06:42	27° Y 11'05	
morning rise	-7054 Dec 08 j 20:49	17° Ω 39'06		opposition	-7048 Dec 02 j 22:19	22°Υ15'52	
_	-7053 Feb 04 j 09:44	0° ™		min. Earth dist.	-7048 Dec 03 j 10:26	22° Y 11'53	4.33511 AU
retrograde	-7053 Apr 19 j 04:30	7°M32'56	0050145	direct	-7047 Feb 02 j 16:48	17° Y 12'01	
opposition	-7053 Jun 18 j 20:14	2°M30'47			-7047 May 16 j 20:52	0° 8	
min. Earth dist.	-7053 Jun 18 j 03:14		4.05340 AU	evening set	-7047 Jun 11 j 00:48	5° 8 22'18	6 0 5 0 6 4 4 X X
1.	-7053 Jul 08 j 17:56	30° ₹ Ω		max. Earth dist.	-7047 Jun 22 j 23:59	8° O 00'32	6.35364 AU
direct	-7053 Aug 16 j 10:05	27° Ω 37'20			7047 1 24:02.50	00 1 515 6	0042124
	-7053 Sep 23 j 13:53	0°M		conjunction	-7047 Jun 24 j 03:50	8° 8 15'56	
	-7053 Dec 11 j 05:31	15°M		minimum elong	-7047 Jun 24 j 03:47	8° 8 15'54	0°42'47
evening set	-7053 Dec 18 j 05:17	16°M38'05		morning rise	-7047 Jul 07 j 03:30	11° 8 07'52	
	7052 D 21:12.24	100 M 461 2 6	0057120	. 1	-7047 Jul 25 j 01:01	15°8	
conjunction	-7053 Dec 31 j 12:24	19°M46'26		retrograde	-7047 Nov 04 j 13:56	28° 8 18'00	1021102
minimum elong	-7053 Dec 31 j 12:20	19°M46'23		opposition	-7046 Jan 03 j 17:07	23° 8 25'31	1°31'03
max. Earth dist.	-7052 Jan 01 j 21:28	20°M05'58	6.04313 AU	min. Earth dist.	-7046 Jan 04 j 16:25	23° 8 18'00 18° 8 23'15	4.36126 AU
morning rise	-7052 Jan 13 j 23:06	22°M56'35		direct	-7046 Mar 07 j 04:54		
ratra ara da	-7052 Feb 14 j 01:50			avanina aat	-7046 Jun 12 j 14:06		
retrograde	-7052 May 24 j 17:46	13° ∡ 02'58	1054115	evening set max. Earth dist.	-7046 Jul 12 j 20:02	6°П26'15 8°П55'29	6.35495 AU
opposition min. Earth dist.	-7052 Jul 23 j 19:26	7° × 758'11		max. Earth dist.	-7046 Jul 24 j 01:14	8°Щ33′29	0.35495 AU
	-7052 Jul 22 j 17:30 -7052 Sep 19 j 21:12	8° 尽 06'59 3° 尽 02'18	4.04858 AU	agniumation	7046 Int. 25: 12:40	9° Ⅱ 15'45	1010125
direct	-7051 Jan 22 j 21:28	22°×102'18		conjunction minimum elong	-7046 Jul 25 j 13:40 -7046 Jul 25 j 13:36	9° П 15'43	
evening set	-/031 Jan 22 j 21.28	22 🗴 10 40		morning rise	-7046 Aug 07 j 04:19	12° Ⅲ 03'51	1 16 50
conjunction	-7051 Feb 05 j 10:57	25° ∡ ¹20'34	1027126	retrograde	-7046 Dec 06 j 07:44	29° Ⅱ 21'55	
minimum elong	-7051 Feb 05 j 10:55	25° х 20′34 25° х 20′33	1°27'54	opposition	-7046 Dec 00 j 07:44 -7045 Feb 05 j 01:12	24° ∏ 30′26	2°09'06
max. Earth dist.	-7051 Feb 07 j 03:36	25° x '20'33' 25° x '44'20	6.06548 AU	min. Earth dist.	-7045 Feb 06 j 03:20	24° I I30′20 24° I I22'07	4.33914 AU
morning rise	-7051 Feb 19 j 02:53	28° х 44 20	0.00348 AU	direct	-7045 Apr 08 j 12:41	19° Ⅲ 30'48	4.33914 AU
morning rise	-7051 Feb 19 j 02.33	0°る		direct	-7045 Jul 08 j 13:56	0°9	
retrograde	-7051 Jun 29 j 08:04	18° පි 16'30		evening set	-7045 Aug 13 j 02:01	7° 9 35'14	
opposition	-7051 Aug 27 j 20:02	13°る10'30	2014/50	max. Earth dist.	-7045 Aug 13 j 02:01	10°504'11	6.31009 AU
min. Earth dist.	-7051 Aug 26 j 20:28		4.09670 AU	max. Earth dist.	-7043 Aug 24 J 02.46	10 30411	0.31009 AU
direct	-7051 Oct 25 j 06:44	8°る12'13	4.09070 AO	conjunction	-7045 Aug 25 j 13:30	10° © 23'46	1°31'51
evening set	-7050 Feb 28 j 17:41	8 81213 27° 8 14'39		minimum elong	-7045 Aug 25 j 13:30	10 \$2346 10°\$23'46	1°32'19
evening set	-7050 Mar 12 j 18:41	27 ⊙ 1439		morning rise	-7045 Aug 25 j 13.30 -7045 Sep 06 j 23:25	10 \$2340 13°\$11'40	1 32 19
	-7030 Mai 12 j 16.41	0 ~		morning rise	-7045 Dec 13 j 22:15	0°Ω	
conjunction	-7050 Mar 14 j 11:04	0° ≈ 23'09	_1°25'23	retrograde	-7044 Jan 08 j 07:21	0° Ω 59'07	
minimum elong	-7050 Mar 14 j 11:04	0°≈23'11	1°25'49	icuogiaue	-7044 Jan 08 j 07:21 -7044 Feb 02 j 17:30	0°8€3907 30°R©	
max. Earth dist.	-7050 Mar 14 j 11.07	0 ≈23 11 0°≈41'58	6.13453 AU	opposition	-7044 Feb 02 j 17.30	30 k≌ 26°©06'47	2°10'04
max. Earth dist.	-7050 Mar 15 j 19:53	0°≈41′38 3°≈31′48	0.15455 AU	min. Earth dist.	-7044 Mar 10 j 09:03	25°959'31	4.27469 AU
morning rise	-7050 May 21 j 19:34	3°≈31°48 15°≈		direct	-7044 May 10 j 07:44	23°939'31 21°910'09	4.4/409 AU
retrograde	-7050 May 21 j 19.34 -7050 Aug 02 j 07:17	13 ≈ 22°≈29'37		uncet	-7044 Jul 30 j 13:36	0°Ω	
opposition	-7050 Aug 02 j 07:17 -7050 Sep 30 j 13:09	22°≈29'37 17°≈26'58	-1°47'42	evening set	-7044 Jul 30 j 13:36 -7044 Sep 12 j 11:34	9° Ω 23'35	
min. Earth dist.	-7050 Sep 30 j 13:09 -7050 Sep 29 j 22:05		4.17939 AU	evening set	-70-т вер 12 ј 11.54	/ 0 . 23 33	
mm. Earm dist.	-7050 Sep 29 j 22.03 -7050 Oct 19 j 09:25	17 ≈32 00 15°R≈	т.1 <i>1333 I</i> AU	conjunction	-7044 Sep 24 j 22:42	12° Ω 15'08	1°18'06
direct	-7050 Oct 19 j 09:25 -7050 Nov 28 j 22:27	13° k ≈ 12°≈24'38		minimum elong	-7044 Sep 24 j 22:42 -7044 Sep 24 j 22:46	$12^{\circ} \Omega 15^{\circ} 10^{\circ}$	
ance	1030 110V 20 J 22.21	12 ~24 30		mmmum ciong	7077 Sep 27 J 22.40	12 0613 10	1 10 47

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 32 Attention, astronomical year style is used: The year -7044 in astronomical counting style is the year 7045 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -7044	in astronomical co	ounting style is the year	7045 BCE in historical c	ounting style.	
max. Earth dist.	-7044 Sep 23 j 22:15	12° Ω 01′05	6.23124 AU		-7038 May 02 j 04:04	15° ≈	
	-7044 Oct 06 j 21:57	15° Ω		retrograde	-7038 Aug 06 j 22:57	27° ≈ 17'01	
morning rise	-7044 Oct 07 j 10:14	15° Ω 07'01		opposition	-7038 Oct 05 j 03:48	22°≈14'50	-1°40'42
	-7044 Dec 22 j 17:06	O° Mp		min. Earth dist.	-7038 Oct 04 j 15:22	22° ≈ 19'04	4.19008 AU
retrograde	-7043 Feb 10 j 17:19	3°m/38'51		direct	-7038 Dec 03 j 18:06	17° ≈ 12'09	
C	-7043 Apr 02 j 23:57	30°RΩ			-7037 Mar 14 j 06:09	0° ∀	
opposition	-7043 Apr 13 j 00:48	28° Ω 43'49	1°30'34	evening set	-7037 Apr 10 j 13:48	5° ¥ 55'48	
min. Earth dist.	-7043 Apr 13 j 11:08	28° Ω 40'31	4.18620 AU	Č	1 3		
direct	-7043 Jun 12 j 18:34	23° Ω 49'45		conjunction	-7037 Apr 24 j 06:50	9° ₩ 00'01	-0°47'54
	-7043 Aug 17 j 03:17	0° ™		minimum elong	-7037 Apr 24 j 06:54	9°) 00'03	0°48'06
evening set	-7043 Oct 14 j 19:01	12° mp 18'01		max. Earth dist.	-7037 Apr 24 j 16:56	9°) €05'41	6.23493 AU
Č	J	•		morning rise	-7037 May 07 j 21:59	12°) €03'11	
conjunction	-7043 Oct 27 j 11:24	15° Mp 15'37	0°39'14	. <i>&</i>	-7037 Sep 02 j 12:20	0° Υ	
minimum elong	-7043 Oct 27 j 11:27	15° m) 15'39		retrograde	-7037 Sep 08 j 07:11	0° Y 03'19	
max. Earth dist.	-7043 Oct 27 j 07:23	15° mp 13'16		24428-1111	-7037 Sep 14 j 01:29	30°R) €	
morning rise	-7043 Nov 09 j 05:41	18° mp 14'25		opposition	-7037 Nov 06 j 14:25	25°) €04'57	-0°36'12
	-7042 Jan 03 j 08:49	0∘ ⊽		min. Earth dist.	-7037 Nov 06 j 14:59		4.27668 AU
retrograde	-7042 Mar 18 j 15:08	7° Ω 34'39		direct	-7036 Jan 06 j 09:43	20°) €00'57	27000110
opposition	-7042 May 18 j 17:26	2° Ω 35'49	0°19'07	ancer	-7036 Apr 03 j 14:27	0°Υ	
min. Earth dist.	-7042 May 18 j 12:56	2° ⊆ 37'17		evening set	-7036 May 13 j 19:46	8° Υ 25'04	
mm. Latin dist.	-7042 Jun 08 j 18:43	2 <u>—</u> 3/1/ 30°R, Mp	4.10174710	asc. node	-7036 May 19 j 02:49	9° Υ 35'08	
direct	-7042 Jul 17 j 05:19	27° m 42'58		use. Houe	7050 Way 17 J 02.47	7 1 33 00	
desc. node	-7042 Aug 20 j 00:32	29° m 33'23		conjunction	-7036 May 27 j 06:49	11° Y ′23'44	0°01'04
desc. flode	-7042 Aug 24 j 00:34	0° ʊ		minimum elong	-7036 May 27 j 06:49	11° Y 23'44	
evening set	-7042 Nov 17 j 16:04	0 = 16° £ 29'04		behind sun begin	-7036 May 26 j 22:35	11° Υ 19'12	0 01 07
evening set	-7042 NOV 17 J 10.04	10 = 29 04		behind sun end	-7036 May 27 j 15:02	11° Υ 28'16	
agniumation	7042 Nov. 20 : 16:21	19° ≏ 33'16	0014102	max. Earth dist.		11 γ 28 16 11° γ 16'26	6.31244 AU
conjunction	-7042 Nov 30 j 16:21	19 2 33 16			-7036 May 26 j 17:38	11 γ 10 20 14° γ 20'47	0.31244 AU
minimum elong	-7042 Nov 30 j 16:20		0 14 09	morning rise	-7036 Jun 09 j 14:54	0° 8	
behind sun begin	-7042 Nov 30 j 12:17	19° Ω 30'52			-7036 Sep 05 j 11:09		
behind sun end	-7042 Nov 30 j 20:23	19° Ω 35'38	C 07002 ATT	retrograde	-7036 Oct 08 j 18:36	1° 8 44'39	
max. Earth dist.	-7042 Dec 01 j 09:23	19° £ 43'19	6.07083 AU	***	-7036 Nov 11 j 01:50	30°₹ Υ	0027105
morning rise	-7042 Dec 13 j 20:01	22° Ω 39'18		opposition	-7036 Dec 07 j 10:25	26° Y 49'55	0°37'05
	-7041 Jan 15 j 07:15	0°M		min. Earth dist.	-7036 Dec 08 j 00:56	26° Y 45′09	4.33924 AU
retrograde	-7041 Apr 24 j 06:39	12°M35'51	1001104	direct	-7035 Feb 07 j 08:22	21° Y 46'14	
opposition	-7041 Jun 23 j 21:27	7°M33'14			-7035 Apr 28 j 00:36	0°8	
min. Earth dist.	-7041 Jun 23 j 02:02		4.05135 AU	evening set	-7035 Jun 15 j 14:36	9° 8 55'44	
direct	-7041 Aug 21 j 07:54	2°M39'34					
	-7041 Nov 23 j 21:51	15°M		conjunction	-7035 Jun 28 j 16:27		
evening set	-7041 Dec 23 j 06:36	21°IIL41'26		minimum elong	-7035 Jun 28 j 16:23		
				max. Earth dist.	-7035 Jun 27 j 12:13		6.35508 AU
conjunction	-7040 Jan 05 j 14:47	24°M50'08			-7035 Jul 08 j 13:51	15° 8	
minimum elong	-7040 Jan 05 j 14:42	24°M50'05	1°03'32	morning rise	-7035 Jul 11 j 14:37	15° 8 40'04	
max. Earth dist.	-7040 Jan 07 j 01:53	25°M10′52	6.04438 AU		-7035 Sep 26 j 19:00	0°II	
morning rise	-7040 Jan 19 j 02:14	28°M00'33		retrograde	-7035 Nov 09 j 00:42	2° Ⅱ 50′22	
_	-7040 Jan 27 j 15:37	0° ∡ 7			-7035 Dec 22 j 23:21	30°₹ 8	
retrograde	-7040 May 29 j 19:05	18° ∡ 05'38		opposition	-7034 Jan 08 j 06:32	27° 8 58'09	1°38'22
opposition	-7040 Jul 28 j 18:10	13° ∡ ′00'41		min. Earth dist.	-7034 Jan 09 j 05:22	27° 8 50'48	4.36036 AU
min. Earth dist.	-7040 Jul 27 j 17:01	13° ₹ 09'13	4.05308 AU	direct	-7034 Mar 11 j 17:45	22° 8 56'17	
direct	-7040 Sep 24 j 20:47	8° ∡ 04'22			-7034 May 24 j 00:04	0°Щ	
evening set	-7039 Jan 28 j 00:38	27° ∡ 12'33		evening set	-7034 Jul 17 j 07:36	10° Ⅱ 59'06	
	-7039 Feb 09 j 00:22	0°る		max. Earth dist.	-7034 Jul 28 j 11:25	13° Ⅱ 27'50	6.35180 AU
		_				_	
conjunction	-7039 Feb 10 j 14:50	0° る 22'26		conjunction	-7034 Jul 29 j 23:58	13° Ⅱ 48'12	
minimum elong	-7039 Feb 10 j 14:49	0° る 22'25		minimum elong	-7034 Jul 29 j 23:54	13° Ⅱ 48'10	1°22'17
max. Earth dist.	-7039 Feb 12 j 07:28	0° ح 46'07	6.07271 AU	morning rise	-7034 Aug 11 j 13:41	16° Ⅲ 36′01	
morning rise	-7039 Feb 24 j 07:18	3° る 33'22			-7034 Oct 20 j 02:19	0 \circ \odot	
retrograde	-7039 Jul 04 j 03:41	23° ප 13'00		retrograde	-7034 Dec 10 j 23:30	3° © 56'41	
opposition	-7039 Sep 01 j 14:34	18° る 08'17			-7033 Feb 02 j 12:07	30°R∏	
min. Earth dist.	-7039 Aug 31 j 15:21	18° පි 16'14	4.10606 AU	opposition	-7033 Feb 09 j 17:37	29° Ⅱ 05'13	2°11'37
direct	-7039 Oct 30 j 02:45	13° る 08'32		min. Earth dist.	-7033 Feb 10 j 20:10	28° Ⅱ 56'46	4.33402 AU
	-7038 Feb 24 j 06:05	0° ≈		direct	-7033 Apr 13 j 05:04	24° Ⅱ 06'01	
evening set	-7038 Mar 05 j 19:30	2° ≈ 09'31			-7033 Jun 17 j 23:55	0ಂಣ	
				evening set	-7033 Aug 17 j 12:20	12° © 10'28	
conjunction	-7038 Mar 19 j 13:02	5° ≈ 17'40	-1°22'32				
minimum elong	-7038 Mar 19 j 13:06	5° ≈ 17'42		conjunction	-7033 Aug 29 j 23:24	14° © 59'06	1°31'33
max. Earth dist.	-7038 Mar 20 j 18:00		6.14517 AU	minimum elong	-7033 Aug 29 j 23:25	14° © 59'06	1°32'00
morning rise	-7038 Apr 02 j 07:08	8° ≈ 25'53		max. Earth dist.	-7033 Aug 28 j 13:50	14° 5 40'06	6.30335 AU

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 33 Attention, astronomical year style is used: The year -7033 in astronomical counting style is the year 7034 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -7033 i	n astronomical cou	inting style is the year	7034 BCE in historical c	ounting style.	6
morning rise	-7033 Sep 11 j 09:10	17°5647'12		min. Earth dist.	-7027 Sep 05 j 10:26	23° る 10'18	4.11304 AU
	-7033 Nov 10 j 19:29	$0^{\circ}\Omega$		opposition	-7027 Sep 06 j 08:08	23° る 02'53	-2°11'51
retrograde	-7032 Jan 13 j 00:19	5° Ω 39'02		direct	-7027 Nov 03 j 23:32	18° る 02'37	
opposition	-7032 Mar 14 j 05:37	0° Ω 46′21	2°06'48		-7026 Feb 06 j 18:34	0° ≈	
min. Earth dist.	-7032 Mar 15 j 02:01	0° £ 39′52	4.26675 AU	evening set	-7026 Mar 10 j 20:50	7° ≈ 03'00	
	-7032 Mar 20 j 08:14	30° ℝ ∽					
direct	-7032 May 14 j 23:25	25° © 50'07		conjunction	-7026 Mar 24 j 14:50	10° ≈ 10′57	-1°19'05
	-7032 Jul 07 j 17:41	0 $^{\circ}\Omega$		minimum elong	-7026 Mar 24 j 14:55	10° ≈ 11′00	1°19'29
evening set	-7032 Sep 16 j 22:51	14° Ω 03'54		max. Earth dist.	-7026 Mar 25 j 18:59	10° ≈ 27'01	6.15376 AU
	-7032 Sep 21 j 00:52	15° Ω		morning rise	-7026 Apr 07 j 08:45	13° ≈ 18'45	
					-7026 Apr 14 j 20:38	15° ≈	
conjunction	-7032 Sep 29 j 10:23	16° Ω 55'57			-7026 Jul 06 j 13:14	0° ∀	
minimum elong	-7032 Sep 29 j 10:27	16° Ω 55'59		retrograde	-7026 Aug 11 j 14:33	2°) €03'47	
max. Earth dist.	-7032 Sep 28 j 13:22	16° Ω 43'51	6.22286 AU		-7026 Sep 16 j 08:26	30°R ≈	
morning rise	-7032 Oct 11 j 22:24	19° Ω 48'26		opposition	-7026 Oct 09 j 18:27	27° ≈ 02'06	
_	-7032 Nov 28 j 15:58	0° m)		min. Earth dist.	-7026 Oct 09 j 07:14		4.19941 AU
retrograde	-7031 Feb 15 j 15:46	8° Mp 25'28		direct	-7026 Dec 08 j 11:30	21°≈59'11	
opposition	-7031 Apr 17 j 23:00	3° m/29'57			-7025 Feb 22 j 22:44	0°)	
min. Earth dist.	-7031 Apr 18 j 08:20	~	4.17765 AU	evening set	-7025 Apr 15 j 11:47	10°) 41′07	
	-7031 May 18 j 10:56	30°R€					
direct	-7031 Jun 17 j 14:24	28° Ω 36′06		conjunction	-7025 Apr 29 j 04:11	13°) 44'44	
_	-7031 Jul 17 j 10:25	0° m)		minimum elong	-7025 Apr 29 j 04:15	13°) 44'46	
evening set	-7031 Oct 19 j 09:29	17° m 05'13		max. Earth dist.	-7025 Apr 29 j 10:11	13°) 48′06	6.24437 AU
	T00131 01:00 10	2007 02122	000000	morning rise	-7025 May 12 j 18:49	16°) 47'16	
conjunction	-7031 Nov 01 j 02:43	20° m 03'33			-7025 Jul 18 j 18:16	0° Υ	
minimum elong	-7031 Nov 01 j 02:45	20° m 03'35		retrograde	-7025 Sep 12 j 19:08	4° Y 42'00	
max. Earth dist.	-7031 Nov 01 j 00:25	20° m 02'13	6.13388 AU		-7025 Nov 09 j 03:24	30° ₹	
morning rise	-7031 Nov 13 j 22:17	23° m 03'15		opposition	-7025 Nov 11 j 03:03	29°) 44'06	
	-7031 Dec 14 j 20:10	0∘ ⊽		min. Earth dist.	-7025 Nov 11 j 05:41		4.28545 AU
retrograde	-7030 Mar 23 j 14:16	12° £ 28'07	0005151	direct	-7024 Jan 11 j 02:40	24°) (40′00	
opposition	-7030 May 23 j 16:42	7° £ 28'43	0°07'51		-7024 Mar 13 j 00:48	0° Υ	
min. Earth dist.	-7030 May 23 j 09:24	7° £ 31'06	4.09535 AU	asc. node	-7024 Mar 27 j 20:11	2°Υ29'22	
desc. node	-7030 Jun 30 j 19:34	3° £ 20′00		evening set	-7024 May 18 j 13:09	13° Y ′02′10	
direct	-7030 Jul 22 j 00:04	2° £ 35'48			7024 M 21 : 22 12	1.60000004	000011.5
evening set	-7030 Nov 22 j 11:09	21° ≏ 23′22		conjunction	-7024 May 31 j 23:12	16° Y 00'04	0°08'15
	7020 Dec 05 : 12:20	249 0 2011 5	0021121	minimum elong	-7024 May 31 j 23:11	16° Υ 00'04 15° Υ 56'06	0°08'20
conjunction	-7030 Dec 05 j 12:36	24° £ 28'15		behind sun begin	-7024 May 31 j 16:00		
minimum elong max. Earth dist.	-7030 Dec 05 j 12:34 -7030 Dec 06 j 08:30			behind sun end max. Earth dist.	-7024 Jun 01 j 06:22	16° Y 04'02	6.31998 AU
	-		0.00009 AU		-7024 May 31 j 09:17	13° γ 52′23 18° γ 56′16	0.31998 AU
morning rise	-7030 Dec 18 j 17:19 -7030 Dec 29 j 02:44	27° ♀ 34'57 0° ル		morning rise	-7024 Jun 14 j 05:50 -7024 Aug 08 j 02:51	0.8	
	-7029 Mar 19 j 04:38	บ แน 15° M		retrograde	-7024 Aug 08 j 02.31 -7024 Oct 13 j 04:04	6° 8 16'49	
retrograde	-7029 Mar 19 j 04.38 -7029 Apr 29 j 08:13	17°ML34'07		opposition	-7024 Oct 13 j 04:04	1° 8 22'29	0°46'56
renograde	-7029 Apr 29 j 08:13	17 1163407 15°RM		min. Earth dist.	-7024 Dec 11 j 22:10	1° 8 17'33	4.34500 AU
opposition	-7029 Jun 28 j 20:29	12°MJ31'02	1011124	mm. Latur dist.	-7024 Dec 22 j 13:54	1 0 17 33	4.54500 AO
min. Earth dist.	-7029 Jun 28 j 20:57	12°M37'34		direct	-7024 Bec 22 j 13:54	26° Y 19'00	
direct	-7029 Aug 26 j 05:45	7°M37'03	4.04890 AU	direct	-7023 Peb 11 j 21:34 -7023 Apr 04 j 04:30	0°8	
direct	-7029 Nov 04 j 10:05	15°M		evening set	-7023 Jun 20 j 03:44	14° 8 26'51	
evening set	-7029 Dec 28 j 06:23	26°M40'26		evening set	-7023 Jun 22 j 16:06	15° 8	
	, 02, 200 20 1 00.23	_0 NW 10 20		max. Earth dist.	-7023 Jul 01 j 21:03	17° 8 02'01	6.35825 AU
conjunction	-7028 Jan 10 j 15:30	29° M 49'30	-1°08'26	max. Earth dist.	7025 Jul 01 J 21:05	17 002 01	0.55025 110
minimum elong	-7028 Jan 10 j 15:25	29°M49'28	1°08'49	conjunction	-7023 Jul 03 j 04:00	17° 8 19'08	0°54'30
minimum crong	-7028 Jan 11 j 09:18	0° ₹ ¹	1 00 17	minimum elong	-7023 Jul 03 j 03:55	17° 8 19'06	0°54'48
max. Earth dist.	-7028 Jan 12 j 03:46	0° ∡ 10′53	6.04432 AU	morning rise	-7023 Jul 16 j 00:59	20° 8 09'45	0 3 1 10
morning rise	-7028 Jan 24 j 03:52	3° ₹ 100'16	0.01132110	morning rise	-7023 Sep 02 j 02:26	0°Ⅱ	
retrograde	-7028 Jun 03 j 17:40	23° × 704'16		retrograde	-7023 Sep 02 j 02:20 -7023 Nov 13 j 12:39	0 H 7°∏19'41	
opposition	-7028 Aug 02 j 14:51	17° х 59'15	-2°04'51	opposition	-7022 Jan 12 j 19:27	2° Ⅱ 27'38	1°45'03
min. Earth dist.	-7028 Aug 01 j 13:14	18° × ⁷ 07'57	4.05581 AU	min. Earth dist.	-7022 Jan 13 j 19:54	2° Ⅱ 19'47	4.36067 AU
direct	-7028 Sep 29 j 16:37	13° × 02'29			-7022 Feb 01 j 20:40	30°R 8	
~	-7027 Jan 23 j 14:31	0°る		direct	-7022 Mar 16 j 08:41	27° 8 26'02	
evening set	-7027 Feb 02 j 03:04	°311'24			-7022 Apr 27 j 18:38	0°Ⅱ	
		2 T		evening set	-7022 Jul 21 j 17:26	15° Ⅱ 28'07	
conjunction	-7027 Feb 15 j 17:51	5° ರ 21'19	-1°30'09	max. Earth dist.	-7022 Aug 01 j 20:59	17° Ⅱ 56'52	6.34885 AU
minimum elong	-7027 Feb 15 j 17:50	5° පි 21'18					
max. Earth dist.	-7027 Feb 17 j 08:08	5° ප් 43'36	6.07781 AU	conjunction	-7022 Aug 03 j 08:53	18° Ⅱ 16'53	1°24'46
morning rise	-7027 Mar 01 j 10:52	8° る 32'12		minimum elong	-7022 Aug 03 j 08:50	18° Ⅱ 16'52	1°25'14
retrograde	-7027 Jul 08 j 22:53	28° ට 07'24		morning rise	-7022 Aug 15 j 21:35	21° I I04'26	
_	. ,			<i>5</i>	5 ,	-	

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 34 Attention, astronomical year style is used: The year -7022 in astronomical counting style is the year 7023 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	ne year -7022 i	n astronomical co	ounting style is the year	7023 BCE in historical c	ounting style.	
	-7022 Sep 27 j 14:24	0 \circ			-7015 Jan 05 j 12:32	0°ප	
retrograde	-7022 Dec 15 j 11:35	8° 5 27'50		evening set	-7015 Feb 07 j 09:31	7° る 20'33	
opposition	-7021 Feb 14 j 08:49	3° 5 36'17	2°13'21				
min. Earth dist.	-7021 Feb 15 j 10:18	3° 5 28'12	4.32800 AU	conjunction	-7015 Feb 21 j 01:07	10° る 30'25	-1°30'34
	-7021 Mar 18 j 05:06	30°RⅡ		minimum elong	-7015 Feb 21 j 01:07	10° る 30'25	1°31'01
direct	-7021 Apr 17 j 17:50	28° Ⅲ 37'31		max. Earth dist.	-7015 Feb 22 j 16:52	10° る 53'30	6.08625 AU
	-7021 May 18 j 07:01	0°ಅ		morning rise	-7015 Mar 06 j 18:22	13° る 41'03	
evening set	-7021 Aug 21 j 21:42	16° 5 42'31			-7015 May 29 j 14:58	0° ≈	
max. Earth dist.	-7021 Sep 01 j 23:33	19° © 12'44	6.29457 AU	retrograde	-7015 Jul 13 j 21:15	3° ≈ 09'57	
					-7015 Aug 27 j 21:47	30°Ŗ₹	
conjunction	-7021 Sep 03 j 08:21	19° © 31'19	1°30'44	min. Earth dist.	-7015 Sep 10 j 07:36	28° る 12'57	4.12530 AU
minimum elong	-7021 Sep 03 j 08:22	19° © 31'20	1°31'11	opposition	-7015 Sep 11 j 04:38	28° る 05'46	-2°08'48
morning rise	-7021 Sep 15 j 18:04	22° © 19'46		direct	-7015 Nov 08 j 22:46	23° る 05'10	
	-7021 Oct 21 j 07:57	$0^{\circ}\Omega$			-7014 Jan 17 j 01:45	0° ≈	
retrograde	-7020 Jan 17 j 19:26	10° Ω 16′58		evening set	-7014 Mar 16 j 00:40	12° ≈ 02'38	
opposition	-7020 Mar 19 j 00:33	5° Ω 24'01	2°02'49				
min. Earth dist.	-7020 Mar 19 j 20:56	5° Ω 17'32	4.25551 AU	conjunction	-7014 Mar 29 j 18:33	15° ≈ 09'57	-1°15'04
direct	-7020 May 19 j 16:34	0° Ω 28′07		minimum elong	-7014 Mar 29 j 18:37	15° ≈ 09'59	1°15'25
	-7020 Sep 04 j 21:22	15° Ω			-7014 Mar 29 j 01:04	15° ≈	
evening set	-7020 Sep 21 j 10:10	18° Ω 43'45		max. Earth dist.	-7014 Mar 30 j 19:43	15° ≈ 24'15	6.16903 AU
				morning rise	-7014 Apr 12 j 12:23	18° ≈ 16'59	
conjunction	-7020 Oct 03 j 22:17	21° Ω 36′35	1°09'24		-7014 Jun 08 j 01:56	0°) €	
minimum elong	-7020 Oct 03 j 22:21	21° Ω 36′37	1°09'44	retrograde	-7014 Aug 16 j 04:24	6° ¥ 53'13	
max. Earth dist.	-7020 Oct 03 j 02:55	21° Ω 25′24	6.21021 AU	opposition	-7014 Oct 14 j 09:48	1° ¥ 51'59	-1°24'41
morning rise	-7020 Oct 16 j 11:09	24° Ω 29'59		min. Earth dist.	-7014 Oct 13 j 23:49		4.21624 AU
-	-7020 Nov 10 j 01:07	o∘ mp			-7014 Oct 28 j 13:06	30° R ≈	
retrograde	-7019 Feb 20 j 13:50	13° m) 13'55		direct	-7014 Dec 13 j 07:31	26° ≈ 48'46	
opposition	-7019 Apr 22 j 21:46	8° m 17'56	1°13'01		-7013 Jan 28 j 11:18	0°) €	
min. Earth dist.	-7019 Apr 23 j 04:22	8° m) 15'49	4.16444 AU	evening set	-7013 Apr 20 j 09:11	15° ¥ 26′05	
direct	-7019 Jun 22 j 07:45	3° m) 24'20		<i>3</i>	r		
evening set	-7019 Oct 24 j 01:39	21° Mp 56'20		conjunction	-7013 May 04 j 00:59	18° ¥ 28'42	-0°34'52
	,			minimum elong	-7013 May 04 j 01:02	18°) 28'44	
conjunction	-7019 Nov 05 j 19:59	24° m 55'42	0°25'07	max. Earth dist.	-7013 May 04 j 05:20	18°) (31'08	6.26175 AU
minimum elong	-7019 Nov 05 j 20:01	24° m 55'43		morning rise	-7013 May 17 j 14:30	21°) 30'04	0.20170110
max. Earth dist.	-7019 Nov 05 j 20:47	24° m/ 56'10	6.12133 AU	morning rise	-7013 Jun 26 j 22:42	0° Υ	
morning rise	-7019 Nov 18 j 16:46	27° m 56'30	0.12133710	retrograde	-7013 Sep 17 j 04:29	9° Υ 16'46	
morning 1130	-7019 Nov 27 j 14:14	ე∘ ი		opposition	-7013 Nov 15 j 14:03	4° Υ 19'24	-0°15'31
retrograde	-7018 Mar 28 j 19:10	ა <u>—</u> 17° ჲ 28'01		min. Earth dist.	-7013 Nov 15 j 18:26		4.30172 AU
desc. node	-7018 May 10 j 21:39	17 = 2801 14° £ 43'14		iiiii. Lattii tist.	-7013 Nov 13 j 18:20 -7013 Dec 24 j 22:25		4.30172 AO
opposition	-7018 May 28 j 18:32	14° ⊆ 43°14 12° ⊆ 28'05	0003143	direct	-7012 Jan 15 j 18:10	29°) 15'19	
min. Earth dist.	-7018 May 28 j 10:07	12 = 28 03 12° ⊆ 30'50	4.08440 AU	asc. node	-7012 Jan 13 j 18:10	29° X 57'31	
			4.06440 AU	asc. node	-7012 Feb 06 j 04:38	29 γ (3/31	
direct	-7018 Jul 26 j 22:39	7° £ 35'08				0° γ 17° Υ 32'47	
evening set	-7018 Nov 27 j 09:57	26° ≏ 26'02		evening set	-7012 May 23 j 03:20	1/ 1 324/	
conjunction	-7018 Dec 10 j 12:37	29° ₽ 31'49	0°20'02	conjunction	-7012 Jun 05 j 11:58	20° Y ′29'33	0°15'08
·	-7018 Dec 10 j 12:34			minimum elong	-7012 Jun 05 j 11:57	20° Υ 29'33	0°15'15
minimum elong max. Earth dist.	-7018 Dec 10 j 12.34	29 2 3147 29° 2 45'16	6.05777 AU	_	-7012 Jun 05 j 09:34	20 1 29 33 20° Υ 28'14	0 13 13
max. Earm dist.	,		6.03/// AU	behind sun begin behind sun end	-	20 γ 28 14 20° γ 30'51	
	-7018 Dec 12 j 12:15	0°M 2°M 20127			-7012 Jun 05 j 14:20	20° Υ 19'38	(22272 AII
morning rise	-7018 Dec 23 j 18:37	2°M39'27		max. Earth dist.	-7012 Jun 04 j 18:00	20 1 1938 23° Y 24'38	6.33372 AU
	-7017 Feb 19 j 02:46	15°M		morning rise	-7012 Jun 18 j 17:21	0° 8	
retrograde	-7017 May 04 j 12:40	22°M42'11	1021112		-7012 Jul 19 j 19:08		
opposition	-7017 Jul 03 j 22:46	17°M38'47		retrograde	-7012 Oct 17 j 10:22	10°840'21	0056106
min. Earth dist.	-7017 Jul 03 j 01:30		4.04440 AU	opposition	-7012 Dec 16 j 06:45	5° 8 46'21	0°56'06
	-7017 Jul 24 j 20:39	15°RM		min. Earth dist.	-7012 Dec 17 j 00:01	5° 8 40'43	4.35528 AU
direct	-7017 Aug 31 j 04:30	12°M44'34		direct	-7011 Feb 16 j 10:24	0° 8 42'57	
	-7017 Oct 07 j 06:43	15° ™			-7011 Jun 06 j 21:42	15° 8	
• .	-7017 Dec 25 j 13:29	0° ₹ ¹		evening set	-7011 Jun 24 j 11:59	18° 8 47'41	6.06440 : **
evening set	-7016 Jan 02 j 11:04	1° ∡ ′50′29		max. Earth dist.	-7011 Jul 06 j 03:16	21° ठ 21'36	6.36410 AU
	7016 1 15:21.01	40 7 50150	1012/22		7011 1 1 07:10.50	210	0050145
conjunction	-7016 Jan 15 j 21:04	4° 🗷 59'58		conjunction	-7011 Jul 07 j 10:58	21° 8 39'09	0°59'45
minimum elong	-7016 Jan 15 j 21:00	4° ⋌ ¹59'55		minimum elong	-7011 Jul 07 j 10:54	21° 8 39'06	1°00'06
max. Earth dist.	-7016 Jan 17 j 09:49	5° × ⁷ 21'38	6.04389 AU	morning rise	-7011 Jul 20 j 06:25	24° 8 28'55	
morning rise	-7016 Jan 29 j 10:23	8° √ 11'06			-7011 Aug 15 j 01:17	0°II	
retrograde	-7016 Jun 08 j 20:11	28° 🗷 13'48	2000:54	retrograde	-7011 Nov 17 j 17:46	11° Ⅱ 38'03	1050140
opposition	-7016 Aug 07 j 15:18	23°×708'44		opposition	-7010 Jan 17 j 03:50	6° Ⅱ 46'11	1°50'49
min. Earth dist.	-7016 Aug 06 j 13:28		4.05980 AU	min. Earth dist.	-7010 Jan 18 j 05:07	6° Ⅱ 38'05	4.36181 AU
direct	-7016 Oct 04 j 18:22	18° ∡ 11'32		direct	-7010 Mar 20 j 17:40	1° Ⅱ 44'53	

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 35 Attention, astronomical year style is used: The year -7010 in astronomical counting style is the year 7011 BCE in historical counting style.

Attention, astronom		ne year -7010 i	n astronomical co	unting style is the year	7011 BCE in historical c	ounting style.	
evening set	-7010 Jul 25 j 22:45	19° Ⅱ 46′08			-7004 Jul 31 j 06:02	30°₽ ✓	
max. Earth dist.	-7010 Aug 05 j 22:48	22° Ⅱ 13'13	6.34486 AU	opposition	-7004 Aug 12 j 16:40	28° ∡ °20′07	-2°11'56
				min. Earth dist.	-7004 Aug 11 j 14:49	28° ∡ ¹28'55	4.06620 AU
conjunction	-7010 Aug 07 j 13:05	22° Ⅱ 34'37	1°27'05	direct	-7004 Oct 09 j 20:54	23° ∡ *22'25	
minimum elong	-7010 Aug 07 j 13:03	22° Ⅱ 34'35	1°27'33		-7004 Dec 15 j 09:25	0°ප	
morning rise	-7010 Aug 20 j 01:10	25° Ⅱ 22'00		evening set	-7003 Feb 12 j 17:03	12° る 30'20	
	-7010 Sep 10 j 08:01	0					
retrograde	-7010 Dec 19 j 22:20	12° © 48'49		conjunction	-7003 Feb 26 j 09:00	15° る 39'54	
opposition	-7009 Feb 18 j 20:04	7° © 57'11	2°14'17	minimum elong	-7003 Feb 26 j 09:01	15° る 39'54	1°30'43
min. Earth dist.	-7009 Feb 19 j 22:48	7° © 48'41	4.31912 AU	max. Earth dist.	-7003 Feb 27 j 23:08	16° る 01'58	6.09704 AU
direct	-7009 Apr 22 j 04:39	2° 9 58'41		morning rise	-7003 Mar 12 j 02:42	18° る 50'08	
evening set	-7009 Aug 26 j 02:59	21° © 05'21			-7003 May 03 j 10:27	0° ≈	
max. Earth dist.	-7009 Sep 06 j 05:52	23° © 36'33	6.28146 AU	retrograde	-7003 Jul 18 j 16:54	8° ≈ 11'33	
				min. Earth dist.	-7003 Sep 15 j 04:13	3° ≈ 14'36	
conjunction	-7009 Sep 07 j 13:42	23° © 54'39	1°29'24	opposition	-7003 Sep 16 j 00:45	3° ≈ 07'35	-2°04'48
minimum elong	-7009 Sep 07 j 13:43	23° © 54'40	1°29'51		-7003 Oct 10 j 20:40	30°Ŗる	
morning rise	-7009 Sep 19 j 23:27	26° © 43'40		direct	-7003 Nov 13 j 21:52	28° ろ 06'30	
	-7009 Oct 04 j 15:19	$0 {\circ} \mathcal{O}$			-7003 Dec 18 j 09:06	0° ≈	
retrograde	-7008 Jan 22 j 10:11	14° Ω 47'55			-7002 Mar 12 j 04:27	15° ≈	
opposition	-7008 Mar 23 j 16:39	9° £ 54′39	1°58'14	evening set	-7002 Mar 21 j 04:01	17° ≈ 00'40	
min. Earth dist.	-7008 Mar 24 j 11:31	9° Ω 48'39	4.23905 AU				
direct	-7008 May 24 j 03:51	4° Ω 59'07		conjunction	-7002 Apr 03 j 21:56	20° ≈ 07'19	-1°10'30
	-7008 Aug 18 j 19:11	15° Ω		minimum elong	-7002 Apr 03 j 22:01	20° ≈ 07'22	1°10'50
evening set	-7008 Sep 25 j 19:36	23° Ω 18′32		max. Earth dist.	-7002 Apr 04 j 21:01	20° ≈ 20′24	6.18445 AU
				morning rise	-7002 Apr 17 j 15:18	23° ≈ 13'31	
conjunction	-7008 Oct 08 j 08:19	26° Ω 12'25	1°04'29		-7002 May 18 j 18:53	0° ∀	
minimum elong	-7008 Oct 08 j 08:23	26° Ω 12'27	1°04'46	retrograde	-7002 Aug 20 j 20:06	11°) 41′20	
max. Earth dist.	-7008 Oct 07 j 14:26	26° Ω 02'02	6.19185 AU	opposition	-7002 Oct 19 j 01:13	6°) 40′38	-1°15'48
morning rise	-7008 Oct 20 j 22:11	29° Ω 07'02		min. Earth dist.	-7002 Oct 18 j 17:45	6°) 43′10	4.23149 AU
	-7008 Oct 24 j 18:28	0° m)		direct	-7002 Dec 18 j 03:56	1°) 37′14	
retrograde	-7007 Feb 25 j 14:10	18° m 00'08		evening set	-7001 Apr 25 j 06:25	20°) 10′44	
opposition	-7007 Apr 27 j 19:47	13° m 03'39	1°03'35				
min. Earth dist.	-7007 Apr 28 j 01:07	13° m 01'56	4.14540 AU	conjunction	-7001 May 08 j 21:25	23°) 12 ′28	-0°27'59
direct	-7007 Jun 27 j 01:28	8° Mp 10'12		minimum elong	-7001 May 08 j 21:27	23°) 12′30	0°28'06
evening set	-7007 Oct 28 j 18:11	26° m 47'18		max. Earth dist.	-7001 May 08 j 22:01	23°) 12'49	6.27558 AU
C	· ·	•		morning rise	-7001 May 22 j 10:00	26°) 12′53	
conjunction	-7007 Nov 10 j 13:49	29° Mp 48'00	0°17'46		-7001 Jun 08 j 19:03	0° Y	
minimum elong	-7007 Nov 10 j 13:50	29° m 48'01	0°17'50	retrograde	-7001 Sep 21 j 14:19	13° Y 53'24	
max. Earth dist.	-7007 Nov 10 j 18:09	29° m 50'32	6.10358 AU	opposition	-7001 Nov 20 j 02:10	8° Y 56'33	-0°05'01
	-7007 Nov 11 j 10:13	0∘ <u>v</u>		min. Earth dist.	-7001 Nov 20 j 08:18		4.31311 AU
morning rise	-7007 Nov 23 j 12:00	2° ჲ 50'12		asc. node	-7001 Dec 16 j 18:24	5° Y 41'55	
desc. node	-7006 Mar 21 j 03:33	22° ≏ 14'26		direct	-7000 Jan 20 j 10:02	3° Y 52'29	
retrograde	-7006 Apr 02 j 23:40	22° ჲ 29'58		evening set	-7000 May 27 j 18:59	22° Y '07'17	
opposition	-7006 Jun 02 j 21:01	17° ≏ 29'30	-0°15'17	max. Earth dist.	-7000 Jun 09 j 06:16	24° Y ′52'06	6.34188 AU
min. Earth dist.	-7006 Jun 02 j 09:55	17° ≏ 33'09	4.06977 AU		J		
direct	-7006 Jul 31 j 19:44	12° ≏ 36'34		conjunction	-7000 Jun 10 j 02:20	25° Y ′03'11	0°22'05
	-7006 Nov 25 j 21:30	0° M		minimum elong	-7000 Jun 10 j 02:18	25° Y '03'10	0°22'13
evening set	-7006 Dec 02 j 10:48	1° M 32'09		morning rise	-7000 Jun 23 j 06:14	27° Y '57'21	
C	v			C	-7000 Jul 02 j 15:24	0°8	
conjunction	-7006 Dec 15 j 14:35	4° ™ 38'54	-0°36'22		-7000 Oct 11 j 11:06	15° 8	
minimum elong	-7006 Dec 15 j 14:32	4° ™ 38'52		retrograde	-7000 Oct 21 j 20:00	15° 8 10'25	
max. Earth dist.	-7006 Dec 16 j 15:51	4°M53'52	6.04742 AU		-7000 Nov 01 j 04:40	15°R ∀	
morning rise	-7006 Dec 28 j 21:57	7° ™ 47'33		opposition	-7000 Dec 20 j 18:09	10° 8 16'53	1°05'15
5 5	-7005 Jan 29 j 15:44	15° ™		min. Earth dist.	-7000 Dec 21 j 13:19	10° 8 10'40	4.35977 AU
retrograde	-7005 May 09 j 18:35	27°M54'13		direct	-6999 Feb 21 j 00:41	5° 8 13'46	
min. Earth dist.	-7005 Jul 08 j 03:30	22°M58'09	4.03953 AU		-6999 May 20 j 03:49	15° 8	
opposition	-7005 Jul 09 j 02:42	22°M50'20		evening set	-6999 Jun 28 j 23:39	23° 8 17'26	
direct	-7005 Sep 05 j 06:58	17°M55'46		max. Earth dist.	-6999 Jul 10 j 10:37	25° 8 49'09	6.36431 AU
	-7005 Dec 07 j 14:02	0° ∡ 7					
evening set	-7004 Jan 07 j 17:37	7° ∡ ¹03'57		conjunction	-6999 Jul 11 j 21:12	26° 8 08'17	1°04'53
				minimum elong	-6999 Jul 11 j 21:07	26° 8 08'15	1°05'15
conjunction	-7004 Jan 21 j 04:42	10° ∡ 13'49	-1°17'46	morning rise	-6999 Jul 24 j 15:32	28° 8 57'34	- 30 10
minimum elong	-7004 Jan 21 j 04:38	10 × 13 47			-6999 Jul 29 j 09:20	0°Ⅱ	
max. Earth dist.	-7004 Jan 22 j 21:10	10°×1347	6.04471 AU	retrograde	-6999 Nov 22 j 05:32	16° Ⅱ 07'59	
morning rise	-7004 Feb 03 j 18:40	13° × ⁷ 25'11		opposition	-6998 Jan 21 j 17:15	11° Д 16'16	1°56'17
	-7004 Apr 27 j 15:11	0°る		min. Earth dist.	-6998 Jan 22 j 19:30	11° Д 10'10	4.35802 AU
retrograde	-7004 Jun 14 j 00:27	³° ರ 25'17		direct	-6998 Mar 25 j 07:26	6° Ⅱ 15'19	
		- 02011			22.23.141 20 j 07.20		

-	_				6999 BCE in historical c	_	50 30
evening set	-6998 Jul 30 j 08:32	-		conjunction	-6992 Jan 26 j 09:57	15° ₹ '21'39	-1°21'28
max. Earth dist.	-6998 Aug 10 j 09:12		6.33731 AU	minimum elong	-6992 Jan 26 j 09:53	15° ∡ ¹21'36	1°21'54
	Ç ,			max. Earth dist.	-6992 Jan 28 j 01:55	15° ∡ ¹45′06	6.05207 AU
conjunction	-6998 Aug 11 j 22:10	27° Ⅱ 05'36	1°29'03	morning rise	-6992 Feb 09 j 00:42	18° ∡ ³32'54	
minimum elong	-6998 Aug 11 j 22:08	27° Ⅱ 05'35	1°29'30		-6992 Apr 01 j 23:48	ರ°0	
morning rise	-6998 Aug 24 j 09:25	29° Ⅱ 52'59		retrograde	-6992 Jun 18 j 21:45	8° る 27'55	
	-6998 Aug 24 j 22:01	0ංම		min. Earth dist.	-6992 Aug 16 j 11:48	3° ⋜ 31'38	4.07690 AU
retrograde	-6998 Dec 24 j 13:31	17° 5 24'28		opposition	-6992 Aug 17 j 13:57	3° る 22'43	-2°13'49
opposition	-6997 Feb 23 j 13:21	12° © 32'48	2°14'30		-6992 Sep 13 j 22:36	30°R. ✓	
min. Earth dist.	-6997 Feb 24 j 15:19	12° 5 24'33	4.30841 AU	direct	-6992 Oct 14 j 19:19	28° ∡ °24′28	
direct	-6997 Apr 26 j 19:25	7° 5 34'47			-6992 Nov 14 j 21:29	ರ°0	
evening set	-6997 Aug 30 j 14:04	25°5643'25		evening set	-6991 Feb 17 j 20:13	17° る 30'04	
max. Earth dist.	-6997 Sep 10 j 17:04	28°515'13	6.26849 AU				
				conjunction	-6991 Mar 03 j 12:42	20° る 39'15	-1°29'18
conjunction	-6997 Sep 12 j 00:34	28° © 33'11	1°27'28	minimum elong	-6991 Mar 03 j 12:44	20° る 39'16	1°29'45
minimum elong	-6997 Sep 12 j 00:37	28° © 33'13	1°27'54	max. Earth dist.	-6991 Mar 05 j 01:26	21° る 00'27	6.11006 AU
	-6997 Sep 18 j 08:50	$0^{\circ}\Omega$		morning rise	-6991 Mar 17 j 06:26	23° る 48'55	
morning rise	-6997 Sep 24 j 10:42	1° Ω 22'53		-	-6991 Apr 14 j 01:36	0° ≈	
	-6997 Dec 01 j 23:40	15° Ω		retrograde	-6991 Jul 23 j 10:23	13° ≈ 02'33	
retrograde	-6996 Jan 27 j 08:54	19° Ω 34'07		opposition	-6991 Sep 20 j 16:54	7° ≈ 58'57	-2°00'04
C	-6996 Mar 26 j 01:40	15°R Ω		min. Earth dist.	-6991 Sep 19 j 23:02	8° ≈ 05'03	4.15278 AU
opposition	-6996 Mar 28 j 14:51		1°52'38	direct	-6991 Nov 18 j 18:47	2° ≈ 57'25	
min. Earth dist.	-6996 Mar 29 j 08:18	14° Ω 34'58	4.22469 AU		-6990 Feb 22 j 20:20	15° ≈	
direct	-6996 May 28 j 22:23	9° Ω 45'20	.,	evening set	-6990 Mar 26 j 03:01	21° ≈ 48'26	
	-6996 Jul 28 j 05:24	15° Ω					
evening set	-6996 Sep 30 j 10:13	28° Ω 07'33		conjunction	-6990 Apr 08 j 20:52	24° ≈ 54'30	-1°05'38
evening sec	-6996 Oct 08 j 12:28	0° m		minimum elong	-6990 Apr 08 j 20:57	24°≈54'32	1°05'56
	0770 Oct 00 j 12.20	Ų ių		max. Earth dist.	-6990 Apr 09 j 16:44	25°≈05'43	6.19787 AU
conjunction	-6996 Oct 12 j 23:52	1° Mp 02'24	0°58'54	morning rise	-6990 Apr 22 j 13:52	27°≈59'58	0.17707710
minimum elong	-6996 Oct 12 j 23:56	1° m/02'24	0°59'10	morning rise	-6990 May 01 j 13:23	0° ∺	
max. Earth dist.	-6996 Oct 12 j 09:53	0° Mp 54'16	6.17778 AU	retrograde	-6990 Aug 25 j 06:32	16° ¥ 20'30	
morning rise	-6996 Oct 25 j 14:39	3° Mp 58'04	0.17778 AU	opposition	-6990 Oct 23 j 13:03	10 X 2030	1°06'44
retrograde	-6995 Mar 02 j 17:26	22° Mp 58'27		min. Earth dist.	-6990 Oct 23 j 07:04	11° X 20'19	
opposition	-6995 May 02 j 22:16	18° m) 01'28	0°53'17	direct	-6990 Dec 22 j 19:11	6° ¥ 16'41	4.24337 AO
min. Earth dist.	, ,	18° Mp 00'38	4.13293 AU		-6989 Apr 30 j 00:34	24°) 47'45	
	-6995 May 03 j 00:52 -6995 Jul 01 j 22:40	-	4.13293 AU	evening set	-0989 Apr 30 J 00.34	24 K 4/43	
direct	·	13° ™ 08'18 0° ≏		conjunction	-6989 May 13 j 14:44	27°) 48'47	0021100
	-6995 Oct 25 j 20:56			·		27° H 48'48	
evening set	-6995 Nov 02 j 14:27	1° ≏ 47'56		minimum elong	-6989 May 13 j 14:46		
	(005 N 15 : 11.04	49 0 40121	0010106	max. Earth dist.	-6989 May 13 j 11:19	2/°π46'33 0°Υ	6.28519 AU
conjunction	-6995 Nov 15 j 11:04	4° £ 49'31	0°10'06		-6989 May 23 j 10:52		
minimum elong	-6995 Nov 15 j 11:05	4° £ 49'32	0°10'06	morning rise	-6989 May 27 j 02:24	0° Υ 48'24	
behind sun begin	-6995 Nov 15 j 04:33	4° £ 45'42		retrograde	-6989 Sep 26 j 00:47	18° Y 24'28	
behind sun end	-6995 Nov 15 j 17:36	4° £ 53'21	C 0020 C 1 X X	asc. node	-6989 Oct 27 j 12:02	16° Y 49'37	000.511.6
max. Earth dist.	-6995 Nov 15 j 18:04	4° £ 53'38	6.09396 AU	opposition	-6989 Nov 24 j 12:33	13° Y 28'10	0°05'16
morning rise	-6995 Nov 28 j 10:39	7° £ 52'45		min. Earth dist.	-6989 Nov 24 j 21:38	13° Υ 25'10	4.31971 AU
desc. node	-6994 Jan 28 j 07:07	20° £ 47'05		direct	-6988 Jan 25 j 00:53	8° Υ 24'08	
retrograde	-6994 Apr 08 j 04:24	27° Ω 37'25		evening set	-6988 Jun 01 j 08:49	26° Ƴ 37'48	
min. Earth dist.	-6994 Jun 07 j 11:21		4.06399 AU		6000 Y 41115	200002222	0000115
opposition	-6994 Jun 08 j 01:06	22° ≏ 36′20	-0°26'55	conjunction	-6988 Jun 14 j 15:00	29° Y 33′05	0°28'47
direct	-6994 Aug 05 j 20:43	17° ≏ 43'16		minimum elong	-6988 Jun 14 j 14:57	29° Y 33′04	0°28'58
	-6994 Nov 08 j 06:59	0°M		max. Earth dist.	-6988 Jun 13 j 16:13	29° Y ′20′30	6.34488 AU
evening set	-6994 Dec 07 j 12:25	6° M 40′17			-6988 Jun 16 j 15:43	0°8	
				morning rise	-6988 Jun 27 j 17:38	2° 8 26'36	
conjunction	-6994 Dec 20 j 17:25	9° M 47'33	-0°43'27		-6988 Aug 31 j 02:43	15° 8	
minimum elong	-6994 Dec 20 j 17:21	9° M 47'31	0°43'42	retrograde	-6988 Oct 26 j 05:14	19° 8 38'55	
max. Earth dist.	-6994 Dec 21 j 23:05	10°ML05'07	6.04602 AU		-6988 Dec 23 j 09:27	15° ₹8	
morning rise	-6993 Jan 03 j 01:41	12°M56'39		opposition	-6988 Dec 25 j 05:30	14° 8 45'43	1°13'55
	-6993 Jan 11 j 21:13	15° M ₊		min. Earth dist.	-6988 Dec 26 j 01:28	14° 8 39'14	4.35935 AU
	-6993 Mar 31 j 01:24	0° ∡ ¹		direct	-6987 Feb 25 j 12:54	9° 8 42'49	
retrograde	-6993 May 14 j 23:44	3° ∡ 03'19			-6987 Apr 28 j 23:25	15° 8	
	-6993 Jun 28 j 19:17	30°RM₊		evening set	-6987 Jul 03 j 11:03	27° 8 46'50	
min. Earth dist.	-6993 Jul 13 j 05:06	28° ML 07'05	4.04288 AU		-6987 Jul 13 j 12:07	Π °0	
opposition	-6993 Jul 14 j 04:46	27°M59'06	-1°38'51	max. Earth dist.	-6987 Jul 14 j 20:40	0° Ⅱ 18′03	6.36051 AU
direct	-6993 Sep 10 j 08:43	23°ML04'08					
	-6993 Nov 17 j 02:36	0° ∡ ¹		conjunction	-6987 Jul 16 j 07:21	0°Ⅲ37'17	1°09'36
evening set	-6992 Jan 12 j 22:15	12° ₹ 11'51		minimum elong	-6987 Jul 16 j 07:17	0° Ⅱ 37'15	1°09'59
				morning rise	-6987 Jul 29 j 00:27	3° Ⅱ 26′13	

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6987 in astronomical counting style is the year 6988 BCE in historical counting style. -6987 Nov 26 j 18:46 20°**Ⅲ**39'11 opposition -6981 Jul 19 i 04:55 3°**х** 03′55 -1°46′26 retrograde -6986 Jan 26 j 07:45 15°**Ⅱ**47'39 2°01'04 -6981 Aug 12 j 19:12 opposition 30°RM -6986 Jan 27 j 10:32 15°**Д**39'06 4.35132 AU -6981 Sep 15 j 07:20 28°MJ08'34 min. Earth dist. direct -6981 Oct 18 j 18:54 -6986 Mar 29 j 21:53 10°**Ⅱ**47'08 0°**∡**¹ direct -6980 Jan 18 j 01:38 28°**Ⅲ**50′16 evening set -6986 Aug 03 j 19:22 evening set 17°**х** 16′24 -6986 Aug 09 j 00:13 0°9 1°9517'39 6.32810 AU max. Earth dist. -6986 Aug 14 j 18:39 conjunction -6980 Jan 31 j 14:12 20°**₹**26'14 -1°24'33 -6980 Jan 31 j 14:08 minimum elong 20°**х** 26′13 1°24′59 conjunction -6986 Aug 16 j 08:10 1°938'42 1°30'26 max. Earth dist. -6980 Feb 02 j 06:47 20°**₹**50'02 6.05828 AU minimum elong -6986 Aug 16 j 08:09 1°538'42 1°30'54 morning rise -6980 Feb 14 j 05:24 23°**х** 37′24 morning rise -6986 Aug 28 j 19:03 4°526'16 -6980 Mar 13 j 11:07 0°궁 -6986 Dec 29 j 07:28 -6980 Jun 23 j 20:25 13°る28'05 retrograde 22°902'51 retrograde opposition -6985 Feb 28 j 08:12 17°**©**10'59 2°13'49 min. Earth dist. -6980 Aug 21 j 09:49 8°**る**31'19 4.08564 AU min. Earth dist. -6985 Mar 01 j 08:48 17°**©**03'11 4.29746 AU opposition -6980 Aug 22 j 10:13 8°**る**22'59 -2°14'47 direct -6985 May 01 j 11:21 12°5513'23 direct -6980 Oct 19 j 18:12 3°**る**24'16 -6985 Sep 02 j 08:05 $0^{\circ}\Omega$ evening set -6979 Feb 22 j 23:03 22°る28'32 evening set -6985 Sep 04 j 01:56 0°**Ω**23'42 max. Earth dist. -6985 Sep 15 j 08:53 $2^{\circ}\Omega58'07$ 6.25682 AU conjunction -6979 Mar 08 j 15:58 25°る37'27 -1°27'43 minimum elong -6979 Mar 08 j 16:01 25°る37'29 1°28'10 conjunction -6985 Sep 16 j 12:41 3°**Ω**14'01 1°24'56 max. Earth dist. -6979 Mar 10 j 03:08 25°**る**57'41 6.12055 AU minimum elong -6985 Sep 16 j 12:44 3°**Ω**14'02 1°25'21 morning rise -6979 Mar 22 j 09:54 28°る46'43 morning rise -6985 Sep 28 i 22:59 6°**Ω**04'19 -6979 Mar 27 i 18:49 -6985 Nov 09 j 12:00 15°Ω -6979 Jun 15 i 00:36 15°**≈** retrograde -6984 Feb 01 i 07:47 24°**Ω**21'53 retrograde -6979 Jul 28 i 02:07 17°≈53'31 -6984 Apr 02 j 14:06 19°**Ω**27'54 1°46'11 -6979 Sep 08 j 23:23 15°R≈ opposition min. Earth dist. -6984 Apr 03 j 05:35 19°**£**22′59 4.21298 AU -6979 Sep 25 j 08:36 12°≈50'20 -1°54'34 opposition -6984 May 16 j 18:55 -6979 Sep 24 j 15:34 15°RΩ min. Earth dist. 12°256'09 4 16401 AU -6984 Jun 02 j 17:28 14°**Ω**33′08 -6979 Nov 23 j 13:06 direct direct 7°≈48'26 -6984 Jun 19 j 15:01 15°€ -6978 Feb 02 j 20:41 15°≈ -6984 Sep 22 j 03:35 0° M -6978 Mar 31 j 02:24 evening set 26°≈37'23 -6984 Oct 05 j 01:22 2° My 56'58evening set -6978 Apr 13 j 20:00 conjunction 29°≈42'55 -1°00'18 -6984 Oct 17 j 15:37 5° m 52'35 0°52'54 -6978 Apr 13 j 20:05 29°≈42'58 1°00'35 conjunction minimum elong -6984 Oct 17 j 15:41 -6978 Apr 14 j 11:39 minimum elong 5° m 52'37 0°53'08 max. Earth dist. 29°≈51'44 6.20903 AU -6984 Oct 17 j 03:33 -6978 Apr 15 j 02:18 max. Earth dist. 5° m 45'34 6.16698 AU 0°**₩** -6984 Oct 30 j 07:35 8°m/49'13 -6978 Apr 27 j 12:41 morning rise morning rise 2°**H**47'46 21°**米**01′59 retrograde -6983 Mar 07 j 19:07 27° m 55'39 retrograde -6978 Aug 29 j 20:17 -6983 May 08 j 00:13 22° m 58'03 0°42'35 opposition -6978 Oct 28 j 01:56 16°¥02'21 -0°57'13 opposition min. Earth dist. -6983 May 07 j 23:53 22° m 58'09 4.12368 AU min. Earth dist. -6978 Oct 27 j 23:00 16°**₭**03'20 4.25329 AU -6983 Jul 06 j 20:22 18° Mp 05'00 direct -6978 Dec 27 j 13:26 10°**¥**58'33 direct -6983 Oct 08 j 13:13 0∘**⊽** -6977 May 04 j 19:13 29°\ 27'40 evening set -6983 Nov 07 j 10:13 6°**£**46'17 -6977 May 07 j 05:46 $0^{\circ}\Upsilon$ evening set -6983 Nov 20 j 08:07 9°**△**48'42 0°02'23 -6977 May 18 j 08:42 2°Y28'04 -0°14'04 conjunction conjunction -6983 Nov 20 j 08:07 9°**△**48'42 0°02'21 -6977 May 18 j 08:43 2°Y28'05 0°14'06 minimum elong minimum elong -6983 Nov 20 j 00:00 -6977 May 18 j 04:51 2°Y25'57 behind sun begin 9°**£**43'56 behind sun begin behind sun end -6983 Nov 20 j 16:14 9°**£**53'27 behind sun end -6977 May 18 j 12:35 2°Y30'13 2°**Y**25'03 max. Earth dist. -6983 Nov 20 j 19:42 9°**£**55'31 6.08715 AU max. Earth dist. -6977 May 18 j 03:14 6.29318 AU 5°Υ26'56 morning rise -6983 Dec 03 i 08:47 12°**♀**52'44 morning rise -6977 May 31 j 19:13 -6983 Dec 07 j 09:26 13°**£**49′10 -6977 Sep 06 j 06:10 22°Y02'37 desc. node asc. node -6982 Mar 02 j 02:35 0°M -6977 Sep 30 j 10:28 22°Y59'09 retrograde -6982 Apr 13 j 09:17 2°M41'09 -6977 Nov 29 j 00:10 18°**Y**′03′22 0°15'40 retrograde opposition -6982 May 25 j 17:09 min. Earth dist. -6977 Nov 29 j 10:06 18°**Y**′00′05 4.32534 AU 30°R <u>Ω</u> -6976 Jan 29 j 14:28 12°Y59'24 opposition -6982 Jun 13 j 03:32 27°**△**39'37 -0°38'17 direct min. Earth dist. -6982 Jun 12 j 12:41 27°**₽**44'31 4.06032 AU -6976 May 31 j 11:41 0°8 direct -6982 Aug 10 j 20:58 22°**Ω**46'26 evening set -6976 Jun 05 j 23:48 1°812'06 -6982 Oct 19 j 08:36 0°M max. Earth dist. -6976 Jun 18 j 03:15 3°**8**52'43 6.34777 AU -6982 Dec 12 j 13:13 evening set 11°ML44'40 -6976 Jun 19 j 04:32 4°**8**06'41 0°35'25 conjunction -6976 Jun 19 j 04:29 4°**8**06'40 conjunction -6982 Dec 25 j 19:03 14°M52'22 -0°50'09 minimum elong 0°35'38 6°**8**59'33 minimum elong -6982 Dec 25 j 18:59 14°M52'19 0°50'27 morning rise -6976 Jul 02 j 05:53 -6982 Dec 26 j 07:59 15°M⋅ -6976 Aug 09 j 12:34 15°8 max. Earth dist. -6982 Dec 27 j 01:25 15°**M**ւ10'19 6.04553 AU retrograde -6976 Oct 30 j 17:34 24°**8**11'06 morning rise -6981 Jan 08 j 04:31 18°M01'56 opposition -6976 Dec 29 j 18:18 19°**8**18'17 1°22'18 -6981 Mar 04 j 11:30 0°**∡** min. Earth dist. -6976 Dec 30 j 16:06 19°**8**11'13 4.35957 AU -6981 May 20 j 00:44 8°**₹**'08'24 -6975 Feb 07 j 23:36 15°R₩ retrograde -6981 Jul 18 j 03:44 3°**х** 12′26 4.04595 AU -6975 Mar 02 j 04:08 14°**8**15'41 min. Earth dist. direct

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 38 Attention, astronomical year style is used: The year -6975 in astronomical counting style is the year 6976 BCE in historical counting style.

Attention, astronomical year style is used: The year -6975 in astronomical counting style is the year 6976 BCE in historical counting style.								
	-6975 Mar 24 j 10:48	15° 8		conjunction	-6970 Dec 30 j 19:07	19°M51'30	-0°56'22	
	-6975 Jun 27 j 07:29	Π \circ 0		minimum elong	-6970 Dec 30 j 19:03	19° M 51'27	0°56'42	
evening set	-6975 Jul 07 j 23:10	2° Ⅱ 19'30		max. Earth dist.	-6969 Jan 01 j 03:36	20°M10'42	6.04461 AU	
max. Earth dist.	-6975 Jul 19 j 07:00	4° Ⅱ 49'56	6.35797 AU	morning rise	-6969 Jan 13 j 05:23	23°ML01'27		
					-6969 Feb 12 j 23:09	0° ∡ ¹		
conjunction	-6975 Jul 20 j 18:18	5° Ⅱ 09'32	1°13'59	retrograde	-6969 May 25 j 01:23	13° ∡ 07'51		
minimum elong	-6975 Jul 20 j 18:14	5° Ⅱ 09'30	1°14'22	min. Earth dist.	-6969 Jul 23 j 02:20	8° ∡ 11'25	4.04771 AU	
morning rise	-6975 Aug 02 j 10:16	7° Ⅱ 58'05		opposition	-6969 Jul 24 j 02:44	8° ₺ 03'09		
retrograde	-6975 Dec 01 j 07:56	25° Ⅱ 13'09		direct	-6969 Sep 20 j 05:30	3° х 07′22	1 23 07	
opposition	-6974 Jan 30 j 23:14	20° I I21'38	2°05'10	evening set	-6968 Jan 23 j 03:46	22°×16'03		
min. Earth dist.	-6974 Feb 01 j 01:02	20° I I3'24	4.34660 AU	evening set	0700 Juli 25 j 05.40	22 × 10 03		
direct	-6974 Apr 03 j 11:40	15° Ⅲ 21'31	4.54000 AC	conjunction	-6968 Feb 05 j 17:06	25° ∡ ¹26′02	1026157	
direct		0°95		-	-			
	-6974 Jul 23 j 17:24			minimum elong	-6968 Feb 05 j 17:04	25° ₹ 26'00		
evening set	-6974 Aug 08 j 06:10	3°524'53	6 001 60 AYY	max. Earth dist.	-6968 Feb 07 j 09:31	25° ₹ '49'40	6.06248 AU	
max. Earth dist.	-6974 Aug 19 j 06:56	5°953'22	6.32162 AU	morning rise	-6968 Feb 19 j 08:59	28° ∡ ³37'14		
					-6968 Feb 25 j 08:16	0° ろ		
conjunction	-6974 Aug 20 j 18:18	6° ॐ 13'16	1°31'19	retrograde	-6968 Jun 28 j 16:18	18° る 24'05		
minimum elong	-6974 Aug 20 j 18:17	6° ୭ 13'16	1°31'47	min. Earth dist.	-6968 Aug 26 j 04:28		4.09208 AU	
morning rise	-6974 Sep 02 j 04:36	9° © 00'52		opposition	-6968 Aug 27 j 04:45	13° る 19'11	-2°14'47	
retrograde	-6973 Jan 03 j 01:31	26°5941'34		direct	-6968 Oct 24 j 13:33	8° る 20'02		
opposition	-6973 Mar 05 j 03:12	21° 5 49'30	2°12'19	evening set	-6967 Feb 28 j 01:06	27° る 23'58		
min. Earth dist.	-6973 Mar 06 j 03:10	21° 5 41'54	4.28955 AU		-6967 Mar 11 j 09:25	0° ≈		
direct	-6973 May 06 j 04:36	16° © 52'21			·			
	-6973 Aug 16 j 18:40	$0^{\circ}\Omega$		conjunction	-6967 Mar 13 j 18:21	0° ≈ 32'42	-1°25'31	
evening set	-6973 Sep 08 j 13:20	5° Ω 03'04		minimum elong	-6967 Mar 13 j 18:24	0° ≈ 32'44	1°25'56	
max. Earth dist.	-6973 Sep 19 j 21:18		6.24813 AU	max. Earth dist.	-6967 Mar 15 j 02:11	0° ≈ 50'58	6.12873 AU	
max. Earth dist.	0)75 Sep 1) j 21.10	7 003024	0.24015710	morning rise	-6967 Mar 27 j 12:32	3°≈41'42	0.12073710	
conjunction	-6973 Sep 21 j 00:06	7° Ω 53'46	1°21'54	morning risc	-6967 May 20 j 03:04	15° ≈		
-	-6973 Sep 21 j 00:09	$7^{\circ}\Omega_{53'47}$	1°22'17	ratra ara da		13 ≈ 22° ≈ 42'39		
minimum elong			1-22-17	retrograde	-6967 Aug 01 j 19:01		4 17201 444	
morning rise	-6973 Oct 03 j 10:57	10° Ω 44'38		min. Earth dist.	-6967 Sep 29 j 09:25	17°≈44'55	4.17301 AU	
_	-6973 Oct 22 j 11:31	15° Ω		opposition	-6967 Sep 30 j 00:07	17° ≈ 39'54	-1°48'19	
retrograde	-6972 Feb 06 j 04:18	29° Ω 07'23			-6967 Oct 20 j 16:38	15° R ≈		
opposition	-6972 Apr 07 j 11:58	24° Ω 12'53	1°39'03	direct	-6967 Nov 28 j 09:11	12° ≈ 37'39		
min. Earth dist.	-6972 Apr 08 j 00:43	24° Ω 08'48	4.20395 AU		-6966 Jan 06 j 10:33	15° ≈		
direct	-6972 Jun 07 j 11:15	19° Ω 18′23			-6966 Mar 29 j 16:27	0° ∀		
	-6972 Sep 04 j 19:07	0° m)		evening set	-6966 Apr 05 j 01:28	1° ∺ 25'12		
evening set	-6972 Oct 09 j 15:13	7° m 43'01						
				conjunction	-6966 Apr 18 j 19:02	4°) 30′18	-0°54'33	
conjunction	-6972 Oct 22 j 06:26	10° m 39'23	0°46'37	minimum elong	-6966 Apr 18 j 19:07	4°) 30′21	0°54'47	
minimum elong	-6972 Oct 22 j 06:30	10° m/39'25		max. Earth dist.	-6966 Apr 19 j 09:19		6.21849 AU	
max. Earth dist.	-6972 Oct 21 j 22:34		6.15857 AU	morning rise	-6966 May 02 j 11:04	7°) €34'32		
morning rise	-6972 Nov 03 j 23:16	13° m) 36'48		retrograde	-6966 Sep 03 j 08:38	25°) (43'00		
morning rise	-6971 Jan 28 j 08:26	0∘ ⊽		opposition	-6966 Nov 01 j 14:52	20°) 43'57	-0°47'19	
retrograde	-6971 Mar 12 j 20:16	ა <u>—</u> 2° ჲ 48'14		min. Earth dist.	-6966 Nov 01 j 12:48	20°) 44'38	4.26238 AU	
retrograde	-6971 Apr 25 j 16:58	2 ==48 14 30°R, Mp		direct	-6965 Jan 01 j 05:07	15°) (40'04	4.20238 AU	
			0021144	unect		13 γ (4004		
opposition	-6971 May 13 j 00:07	27° m 50'05			-6965 Apr 20 j 13:21			
min. Earth dist.	-6971 May 12 j 22:37	27° m 50'35	4.11634 AU	evening set	-6965 May 09 j 14:17	4° Υ ′07'26		
direct	-6971 Jul 11 j 17:23	22° m 57'06			(0(5)(00:00 00	500005105	0000154	
	-6971 Sep 18 j 23:44	0∘ ত		conjunction	-6965 May 23 j 02:38	7° Y ′07'05		
desc. node	-6971 Oct 17 j 06:24	5° ≏ 44'40		minimum elong	-6965 May 23 j 02:38	7° Y ′07'05	0°06'54	
evening set	-6971 Nov 12 j 04:26	11° ≏ 39'35		behind sun begin	-6965 May 22 j 19:01	7° Y ′02'52		
				behind sun end	-6965 May 23 j 10:16	7° Ƴ 11'18		
conjunction	-6971 Nov 25 j 03:16	14° ≏ 42'40	-0°05'21	max. Earth dist.	-6965 May 22 j 17:16	7° Ƴ 01'54	6.30132 AU	
minimum elong	-6971 Nov 25 j 03:15	14° ≏ 42'40	0°05'25	morning rise	-6965 Jun 05 j 12:11	10° Y 05'11		
behind sun begin	-6971 Nov 24 j 19:24	14° ≏ 38'03		asc. node	-6965 Jul 16 j 07:50	18° Ƴ 37'26		
behind sun end	-6971 Nov 25 j 11:06	14° ≏ 47'16		retrograde	-6965 Oct 04 j 22:16	27° Y 33'32		
max. Earth dist.	-6971 Nov 25 j 16:07		6.08146 AU	opposition	-6965 Dec 03 j 12:18	22° Y ′38'12	0°25'58	
morning rise	-6971 Dec 08 j 05:19	17° ≏ 47'32		min. Earth dist.	-6965 Dec 04 j 00:32		4.33192 AU	
0	-6970 Feb 03 j 01:38	0°M		direct	-6964 Feb 03 j 06:40	17° Υ '34'20		
retrograde	-6970 Apr 18 j 09:41	7°M39'09			-6964 May 14 j 13:17	0° と		
min. Earth dist.	-6970 Apr 18 j 09.41 -6970 Jun 17 j 10:05	2°M42'48	4.05691 AU	evening set	-6964 Jun 10 j 14:10	5° 8 45'24		
				evening set	-0204 Juli 10 J 14.10	J O 43 24		
opposition	-6970 Jun 18 j 03:15	2°M37'06	-0 49 09	i <i>(</i> *	(0(4) 22:17:11	00 4 2011 5	0041151	
1' 4	-6970 Jul 09 j 00:06	30° ₹ Ω		conjunction	-6964 Jun 23 j 17:41	8° 8 39'16	0°41'51	
direct	-6970 Aug 15 j 17:06	27° Ω 43'42		minimum elong	-6964 Jun 23 j 17:38	8° 8 39'14		
	-6970 Sep 22 j 00:45	0°M,		max. Earth dist.	-6964 Jun 22 j 15:53	8° 8 25'01	6.35210 AU	
	-6970 Dec 10 j 03:22	15° ™		morning rise	-6964 Jul 06 j 17:31	11° 8 31'21		
evening set	-6970 Dec 17 j 12:11	16° ™ 43'20			-6964 Jul 22 j 18:48	15° 8		

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6964 in astronomical counting style is the year 6965 BCE in historical counting style. opposition -6964 Nov 04 i 03:14 28°**8**41'47 -6958 Jun 23 j 05:53 7°ML43'21 -0°59'57 retrograde min. Earth dist. opposition -6963 Jan 03 j 06:53 23°849'12 1°30'09 -6958 Jun 22 j 12:05 7°ML49'17 4.05016 AU -6958 Aug 20 j 17:40 -6963 Jan 04 j 04:32 23°**8**42'13 4.36144 AU 2°M49'42 min. Earth dist. direct -6963 Mar 06 j 16:48 18°**8**46'55 -6958 Nov 22 j 11:29 15°M. direct -6963 Jun 10 j 04:57 -6958 Dec 22 j 15:19 $0^{\circ}\Pi$ evening set 21°M52'10 6°**Ⅱ**49'47 evening set -6963 Jul 12 j 10:13 max. Earth dist. -6963 Jul 23 j 15:41 9°**Ⅱ**19'07 6.35684 AU conjunction -6957 Jan 04 j 23:18 25°ML00'54 -1°02'20 minimum elong -6957 Jan 04 j 23:13 25°M00'52 1°02'41 conjunction -6963 Jul 25 j 03:57 9°**I**39'18 1°17'54 max. Earth dist. -6957 Jan 06 j 09:50 25°M21'19 6.04146 AU minimum elong -6963 Jul 25 j 03:54 9°耳39′16 1°18'19 morning rise -6957 Jan 18 j 10:39 28°M11'25 morning rise -6963 Aug 06 j 18:53 12°**Ⅲ**27'25 -6957 Jan 26 j 04:59 0°**∡**7 -6963 Dec 05 j 22:04 -6957 May 30 j 04:45 retrograde 29°**Ⅱ**44'22 retrograde 18°**≯**18′02 -6957 Jul 28 j 02:29 opposition -6962 Feb 04 j 14:00 24°**Ⅲ**52'54 2°08'31 min. Earth dist. 13°**∡**°21'55 4.04893 AU min. Earth dist. -6962 Feb 05 j 16:55 24°**Ⅲ**44'19 4.34239 AU opposition -6957 Jul 29 j 04:11 13° ₹ 13'12 -1°59'09 direct -6962 Apr 08 j 02:55 19°**Ⅲ**53'09 direct -6957 Sep 25 j 05:16 8°×717'03 -6962 Jul 06 j 07:18 0ಂತಾ evening set -6956 Jan 28 j 10:19 27°**х** 26′40 evening set -6962 Aug 12 j 15:39 7°956'40 -6956 Feb 08 j 09:28 0°ರ max. Earth dist. -6962 Aug 23 j 16:06 10°925'16 6.31436 AU conjunction -6956 Feb 11 j 00:19 0°る36'42 -1°28'47 conjunction -6962 Aug 25 j 03:16 10°9545'05 1°31'39 minimum elong -6956 Feb 11 j 00:17 0°る36'41 1°29'15 minimum elong -6962 Aug 25 j 03:16 10°9545'05 1°32'07 max. Earth dist. -6956 Feb 12 j 15:58 0°る59'51 6.06791 AU morning rise -6962 Sep 06 i 13:16 13°932'51 morning rise -6956 Feb 24 i 16:48 3°る47'52 -6962 Dec 09 j 11:49 $0^{\circ}\Omega$ retrograde -6956 Jul 03 i 15:57 23°る30'01 retrograde -6961 Jan 07 i 17:19 1°Ω18'12 min. Earth dist. -6956 Aug 31 i 03:22 18°る33'18 4.10141 AU -6961 Feb 06 j 03:38 30°R55 -6956 Sep 01 j 02:52 18°る25'15 -2°13'48 opposition -6961 Mar 09 j 21:08 -6956 Oct 29 j 15:00 13°**る**25'38 26°525'51 2°10'03 direct opposition -6961 Mar 10 j 19:19 -6955 Feb 22 j 08:46 min. Earth dist. 26°9518'48 4 27968 AU 0°≈≈ -6961 May 10 j 18:34 -6955 Mar 05 j 06:24 2°≈27'45 direct 21°929'06 evening set -6961 Jul 29 j 11:34 $0^{\circ}\Omega$ -6955 Mar 19 j 00:06 5°≈36'06 -1°22'40 evening set -6961 Sep 12 j 23:56 9°**Ω**41'13 conjunction -6955 Mar 19 j 00:10 max. Earth dist. -6961 Sep 24 j 10:57 12°**Ω**18'41 6.23647 AU 5°≈36'08 1°23'05 minimum elong -6955 Mar 20 j 08:12 max. Earth dist. 5°≈54'28 6.14168 AU conjunction -6961 Sep 25 j 11:02 12°**Ω**32'31 1°18'22 -6955 Apr 01 j 18:05 8°≈44'28 morning rise -6961 Sep 25 j 11:06 -6955 Apr 30 j 03:10 minimum elong 12°**Ω**32'33 1°18'45 15°≈ -6961 Oct 06 j 04:07 -6955 Aug 06 j 12:43 15°**Ω** retrograde 27°≈37'12 -6961 Oct 07 j 22:19 -6955 Oct 04 j 17:27 morning rise 15°**Ω**24'06 opposition 22°≈34'56 -1°41'13 -6955 Oct 04 j 03:28 -6961 Dec 21 j 07:46 0° M min. Earth dist. 22°≈39'41 4.18843 AU retrograde -6960 Feb 11 j 03:09 3° m 53'28 direct -6955 Dec 03 j 06:03 17°≈32'24 -6960 Apr 04 j 08:21 30°R€ -6954 Mar 12 j 03:32 0°**)**€ -6960 Apr 12 j 10:06 28°Ω58'33 1°31'19 evening set -6954 Apr 10 j 01:39 6° **X** 15'49 opposition min. Earth dist. -6960 Apr 12 j 22:11 28°**Ω**54'41 4.19103 AU -6960 Jun 12 j 06:29 24°**Ω**04′20 -6954 Apr 23 j 18:34 9°\(\frac{1}{20}\)'00 -0°48'27 direct conjunction -6960 Aug 15 j 05:04 -6954 Apr 23 j 18:38 9°\ 20'02 0°48'39 0° M minimum elong -6960 Oct 14 j 05:50 12° Mp 31'26 -6954 Apr 24 j 05:04 9°**¥**25'54 6.23531 AU evening set max. Earth dist. -6954 May 07 j 10:02 12°**)**€23'14 morning rise conjunction -6960 Oct 26 j 21:54 15° m 28'45 0°40'00 -6954 Aug 23 j 11:46 $0^{\circ}\Upsilon$ 0°Y23'18 minimum elong -6960 Oct 26 j 21:57 15° m 28'47 0°40'09 retrograde -6954 Sep 07 i 20:05 max. Earth dist. -6960 Oct 26 i 15:38 15° m 25'05 6.14559 AU -6954 Sep 23 i 02:19 30°R**)**€ morning rise -6960 Nov 08 j 16:03 18° m) 27'17 opposition -6954 Nov 06 i 03:48 25°\(\)24'42 -0°37'13 -6959 Jan 01 j 16:24 0∘**⊽** min. Earth dist. -6954 Nov 06 i 03:48 25°**¥**24'42 4.27908 AU -6959 Mar 17 j 21:38 7°**£**45'35 direct -6953 Jan 05 j 23:22 20°¥20'41 retrograde -6959 May 18 j 01:19 2°**2**46'53 0°20'31 -6953 Apr 02 j 10:56 $0^{\circ}\Upsilon$ opposition -6959 May 17 j 20:48 2°**2**48'21 4.10438 AU -6953 May 14 j 07:05 8°Y43'15 min. Earth dist. evening set 11° **Y** 19'39 -6959 Jun 09 j 19:54 30°R, Mp asc. node -6953 May 26 j 02:27 direct -6959 Jul 16 j 13:22 27° m 53'57 -6959 Aug 21 j 19:27 0∘**⊽** conjunction -6953 May 27 j 18:23 11°**Υ**41'47 0°00'13 11°**Y**41'47 desc. node -6959 Aug 26 j 13:55 0°**£**33'47 minimum elong -6953 May 27 j 18:24 0°00'16 -6959 Nov 17 j 01:19 -6953 May 27 j 10:14 11°Y37'17 evening set 16°**≏**39'38 behind sun begin 11°**Y**46'17 behind sun end -6953 May 28 j 02:34 11°**Y**36'00 -6959 Nov 30 j 01:24 19° 243'41 -0°13'03 -6953 May 27 j 07:55 6.31672 AU conjunction max. Earth dist. 14° \bar{\gamma} 38' 40 minimum elong -6959 Nov 30 j 01:23 19°**£**43'40 0°13'09 morning rise -6953 Jun 10 j 02:27 behind sun begin -6959 Nov 29 j 20:30 19°**£**40'47 -6953 Sep 03 j 06:57 0° 8 behind sun end -6959 Nov 30 j 06:15 19°**£**46'32 retrograde -6953 Oct 09 j 04:54 2°**8**01'00 max. Earth dist. -6959 Nov 30 j 17:50 19°**♀**53'23 6.07162 AU -6953 Nov 14 j 04:57 30°**₹**Υ opposition morning rise -6959 Dec 13 j 04:37 22°**£**49'30 -6953 Dec 07 j 21:55 27°**Y**06′06 0°35'47 -6953 Dec 08 j 11:12 27°**Y**′01′45 4.34482 AU -6958 Jan 13 j 20:48 0°M min. Earth dist.

retrograde

-6958 Apr 23 j 15:37

12°M45'53

direct

-6952 Feb 07 j 19:07

22°Y02'23

•	omena of Jupiter fro		_	` //			ige 40
Attention, astronom	nical year style is used: Th	0° 8	n astronomical co	evening set		counting style. 21° \triangle $40'35$	
avanina aat	-6952 Apr 26 j 01:42 -6952 Jun 15 j 00:44	10° 8 09'35		evening set	-6947 Nov 21 j 23:07	21 ==40 33	
evening set max. Earth dist.	-6952 Jun 15 j 00:44 -6952 Jun 26 j 21:06		6.36127 AU	aaniumatian	6047 Dag 05 : 00:21	249 0 45150	0020120
max. Earm dist.	-0932 Juli 20 J 21.00	12 04008	0.30127 AU	conjunction minimum elong	-6947 Dec 05 j 00:31 -6947 Dec 05 j 00:29	24° £ 45'50 24° £ 45'48	0°20'48
conjunction	-6952 Jun 28 j 02:36	13° 8 02'25	0°47'46	max. Earth dist.	-6947 Dec 05 j 20:23		6.05790 AU
minimum elong	-6952 Jun 28 j 02:32	13° 8 02'23	0°48'02	morning rise	-6947 Dec 18 j 05:11	24° ⊆ 57'55	0.03790 AC
minimum ciong	-6952 Jul 06 j 23:43	15°8	0 40 02	morning risc	-6947 Dec 27 j 06:58	0°M	
morning rise	-6952 Jul 11 j 01:08	15° 8 53'33			-6946 Mar 15 j 22:07	15°M	
morning rise	-6952 Sep 24 j 15:33	0°Ⅱ		retrograde	-6946 Apr 28 j 21:30	17°ML55'07	
retrograde	-6952 Nov 08 j 10:36	3° Ⅱ 01'40		rou ogrado	-6946 Jun 11 j 21:59	15°RM	
Tottogrado	-6952 Dec 23 j 22:15	30°R 8		opposition	-6946 Jun 28 j 09:28	12°M52'10	-1°10'19
opposition	-6951 Jan 07 j 15:34	28° 8 09'20	1°37'07	min. Earth dist.	-6946 Jun 27 j 13:07		4.04127 AU
min. Earth dist.	-6951 Jan 08 j 15:38	28° 8 01'35	4.36634 AU	direct	-6946 Aug 25 j 16:51	7° M 58'21	
direct	-6951 Mar 11 j 04:26	23° 8 07'15			-6946 Nov 01 j 23:28	15° ™	
	-6951 May 22 j 09:03	0°II		evening set	-6946 Dec 27 j 20:32	27°M04'23	
evening set	-6951 Jul 16 j 16:17	11° I 108'17			-6945 Jan 09 j 06:17	0° × 7	
max. Earth dist.	-6951 Jul 27 j 20:16		6.35684 AU		., .,	• •	
				conjunction	-6945 Jan 10 j 05:29	0° х 13'43	-1°07'50
conjunction	-6951 Jul 29 j 09:02	13° Ⅱ 57'18	1°21'11	minimum elong	-6945 Jan 10 j 05:25	0° х 13′40	
minimum elong	-6951 Jul 29 j 08:59	13° I 57'16	1°21'37	max. Earth dist.	-6945 Jan 11 j 17:47	0° х 13 10	6.03791 AU
morning rise	-6951 Aug 10 j 22:49	16° Ⅱ 44'59	1 213,	morning rise	-6945 Jan 23 j 17:52	3° х 24'47	0.03771110
morning rise	-6951 Oct 18 j 13:35	0.0		retrograde	-6945 Jun 04 j 09:08	23° x 31'14	
retrograde	-6951 Dec 10 j 05:07	4°903'45		min. Earth dist.	-6945 Aug 02 j 04:07		4.05113 AU
retrograde	-6950 Feb 02 j 17:27	30°RⅡ		opposition	-6945 Aug 03 j 06:34	18° ₹ 26'10	
opposition	-6950 Feb 09 j 00:11	29° Ⅱ 12'16	2°10'58	direct	-6945 Sep 30 j 08:40	13° ₹ 29'31	2 04 10
min. Earth dist.	-6950 Feb 10 j 02:54		4.33757 AU	uncer	-6944 Jan 22 j 04:44	0° る	
direct	-6950 Apr 12 j 11:08	24° I 12'53	4.55757 AC	evening set	-6944 Feb 02 j 18:13	2° る 39'27	
uncet	-6950 Jun 16 j 15:12	0°95		evening set	-07441C0 02 j 10.13	2 03721	
evening set	-6950 Aug 16 j 20:37	12° © 16'57		conjunction	-6944 Feb 16 j 09:04	5° る 49'29	1°20'55
max. Earth dist.	-6950 Aug 27 j 20:10		6.30496 AU	minimum elong	-6944 Feb 16 j 09:04	5° る 49'28	
max. Earth dist.	-0930 Aug 27 j 20.10	14 34320	0.30490 AO	max. Earth dist.	-6944 Feb 18 j 02:42		6.07543 AU
conjunction	-6950 Aug 29 j 07:43	15° © 05'32	1°31'26	morning rise	-6944 Mar 01 j 01:52	9° ප 00'26	0.07343 AO
minimum elong	-6950 Aug 29 j 07:43	15°905'32	1°31'53	retrograde	-6944 Jul 08 j 16:01	28° ප 36'24	
morning rise	-6950 Sep 10 j 17:34	17°953'36	1 31 33	min. Earth dist.	-6944 Sep 05 j 02:07		4.11311 AU
morning rise	-6950 Nov 09 j 12:56	0°Ω		opposition	-6944 Sep 06 j 00:59	23° る 39'39	
ratragrada	-6949 Jan 12 j 08:11	5° Ω 44'42		direct	-6944 Nov 03 j 15:45	23 ප 31 30	-2 11 44
retrograde opposition	-6949 Mar 14 j 11:33	$0^{\circ}\Omega52'09$	2°07'07	direct	-6943 Feb 04 i 03:03	0°≈	
min. Earth dist.	-6949 Mar 15 j 10:28	0° Ω 44'52	4.26606 AU	evening set	-6943 Mar 10 j 11:44	0 ∞ 7°≈31'07	
iiiii. Eartii tiist.	-6949 Mar 21 j 08:32	0 8€44 32 30°R©	4.20000 AU	evening set	-0943 Wai 10 j 11.44	/ ≈310/	
direct	-6949 May 15 j 07:15	25°\$55'43		conjunction	-6943 Mar 24 j 05:27	10° ≈ 38'53	1010/12
uncci	-6949 Jul 07 j 08:43	0° Ω		minimum elong	-6943 Mar 24 j 05:31		1°19'36
evening set	-6949 Sep 17 j 07:26	14° Ω 10'47		max. Earth dist.	-6943 Mar 25 j 10:11		6.15608 AU
evening set	-6949 Sep 20 j 21:21	14 δ (10 47		morning rise	-6943 Apr 06 j 23:30	10 ≈33 10 13°≈46'35	0.13008 AU
	-0949 Sep 20 j 21.21	13 06		morning risc	-6943 Apr 12 j 09:45	15°≈	
conjunction	-6949 Sep 29 j 19:02	17° Ω 02'59	1°14'29		-6943 Jul 02 j 05:18	0° ∀	
minimum elong	-6949 Sep 29 j 19:06	17° Ω 02'3)	1°14'50	retrograde	-6943 Aug 11 j 04:42	2°) 30'49	
max. Earth dist.	-6949 Sep 28 j 19:44	16°Ω49'33	6.21989 AU	retrograde	-6943 Sep 19 j 23:29	2 /(3049 30°R≈	
morning rise	-6949 Oct 12 j 07:05	19° Ω 55'35	0.21989 AU	opposition	-6943 Oct 09 j 10:27	27°≈28'57	1033127
morning 1150	-6949 Nov 28 j 08:31	0° m/		min. Earth dist.	-6943 Oct 09 j 10.27		4.20371 AU
retrograde	-6948 Feb 15 j 22:22	8° Mp 33'26		direct	-6943 Dec 08 j 03:23	27 ≈33 10 22°≈26'04	T.203/1 AU
opposition	-6948 Apr 17 j 05:41	3°My38'06	1°23'13	uncet	-6942 Feb 20 j 03:52	22 ≈ 20 04 0° H	
min. Earth dist.	-6948 Apr 17 j 15:22	3° My 35'00	4.17268 AU	evening set	-6942 Apr 15 j 01:06	0 X 11° ¥ 05'40	
mm. Earm uist.	-6948 May 19 j 06:56	30°RΩ	-T.1/200 AU	evening set	10772 Apr 13 J 01.00	11 /(0540	
direct	-6948 Jun 16 j 20:09	28°Ω44'10		conjunction	6042 Apr 28 i 17:36	14°) 09'01	0.042,00
direct	-6948 Jul 15 j 05:00	0° Mp		conjunction minimum elong	-6942 Apr 28 j 17:36 -6942 Apr 28 j 17:39	14° X 09'01	0°42'11
evening set	-6948 Oct 18 j 19:33	17° Mp 16'03		max. Earth dist.	-6942 Apr 29 j 01:50	14° X 13'38	6.25033 AU
evening set	-0946 Oct 16 j 19.33	17 111/1003		morning rise	-6942 May 12 j 08:05	17° X 11'15	0.23033 AU
conjunction	6048 Oat 21:12:45	20° m 14/20	0033113	morning 1150		1/ χ 1113	
conjunction	-6948 Oct 31 j 12:45	20° Mp 14'39 20° Mp 14'41	0°33'13 0°33'20	ratrograda	-6942 Jul 15 j 21:21	5° Υ 04'05	
minimum elong	-6948 Oct 31 j 12:48			retrograde	-6942 Sep 12 j 08:11	0° Υ 06'05	002650
max. Earth dist.	-6948 Oct 31 j 09:29	20° Mp 12'44	6.12726 AU	opposition	-6942 Nov 10 j 16:52	0°Υ06'05 0°Υ05'23	
morning rise	-6948 Nov 13 j 08:09	23° m 14'34		min. Earth dist.	-6942 Nov 10 j 18:58		4.29235 AU
notno ar- J-	-6948 Dec 13 j 07:31	0° <u>ጥ</u>		direct	-6942 Nov 11 j 11:07	30° ₹	
retrograde	-6947 Mar 23 j 02:12	12° £ 41'51	0000115	direct	-6941 Jan 10 j 16:32	25° ℋ 02'03 0° Ƴ	
opposition	-6947 May 23 j 02:17	7° £ 42'38	0°09'15	000 r-J-	-6941 Mar 11 j 06:34		
min. Earth dist.	-6947 May 22 j 20:26	7° £ 44'33	4.08753 AU	asc. node	-6941 Apr 03 j 17:43	4°Υ00'08	
desc. node	-6947 Jul 06 j 22:07	3° ₽ 10'36		evening set	-6941 May 19 j 00:41	13° Y 21′22	
direct	-6947 Jul 21 j 10:18	2° ≏ 49'44					

-	omena of Jupiter fro		•	· · · · · · · · · · · · · · · · · · ·		· •	ge 41
					6942 BCE in historical co		6 1 1 5 0 1 1 X X
conjunction	-6941 Jun 01 j 10:42	16° Y 18'59		max. Earth dist.	-6936 Nov 05 j 09:12	25° Mp 13'34	6.11531 AU
minimum elong	-6941 Jun 01 j 10:41	16° Y 18′59	0°07'31	morning rise	-6936 Nov 18 j 05:06	28° m 14'08	
behind sun begin	-6941 Jun 01 j 03:15	16° Y 14'53			-6936 Nov 25 j 19:34	0∘ ⊽	
behind sun end	-6941 Jun 01 j 18:07	16° Y 23′04		retrograde	-6935 Mar 28 j 07:23	17° ≏ 47'27	
max. Earth dist.	-6941 May 31 j 19:46	16° Y 10'44	6.32711 AU	desc. node	-6935 May 16 j 08:00	14° £ 19'56	
morning rise	-6941 Jun 14 j 17:35	19° Ƴ 14'57		opposition	-6935 May 28 j 06:35	12° ≏ 47'39	
	-6941 Aug 06 j 21:58	0°8		min. Earth dist.	-6935 May 27 j 21:42	12° ⊆ 50'34	4.07905 AU
retrograde	-6941 Oct 13 j 14:51	6° 8 33'22		direct	-6935 Jul 26 j 09:46	7° £ 54'48	
opposition	-6941 Dec 12 j 09:29	1° 8 38'53	0°45'36	evening set	-6935 Nov 26 j 23:48	26° ≏ 47'37	
min. Earth dist.	-6941 Dec 13 j 01:01	1° 8 33'48	4.35180 AU				
	-6941 Dec 25 j 05:45	30° ₹ Υ		conjunction	-6935 Dec 10 j 02:12	29° £ 53'30	
direct	-6940 Feb 12 j 10:12	26° Y 35′17		minimum elong	-6935 Dec 10 j 02:09	29° ♀ 53'29	0°28'25
	-6940 Apr 01 j 15:19	0° 8			-6935 Dec 10 j 13:11	0° M ₊	
evening set	-6940 Jun 19 j 13:26	14° 8 40'49		max. Earth dist.	-6935 Dec 11 j 00:43	0°M06'50	6.05356 AU
	-6940 Jun 21 j 00:27	15° 8		morning rise	-6935 Dec 23 j 08:07	3°ML01'16	
max. Earth dist.	-6940 Jul 01 j 07:51	17° 8 16'17	6.36423 AU	_	-6934 Feb 16 j 15:40	15° M ₊	
		4.4		retrograde	-6934 May 04 j 02:07	23°ML05'15	
conjunction	-6940 Jul 02 j 14:03	17° 8 32'58	0°53'37	opposition	-6934 Jul 03 j 12:54	18° M ₊01'47	
minimum elong	-6940 Jul 02 j 13:59	17° 8 32'56	0°53'55	min. Earth dist.	-6934 Jul 02 j 14:53	18°M09'10	4.04168 AU
morning rise	-6940 Jul 15 j 11:05	20° 8 23'24			-6934 Jul 28 j 00:02	15°RM	
	-6940 Aug 31 j 08:18	Π $^{\circ}$ 0		direct	-6934 Aug 30 j 19:16	13°ML07'36	
retrograde	-6940 Nov 12 j 20:23	7° Ⅱ 31'30			-6934 Oct 03 j 10:30	15°M	
opposition	-6939 Jan 12 j 04:12	2° Ⅱ 39'24	1°43'53		-6934 Dec 23 j 11:10	0° ∡ ¹	
min. Earth dist.	-6939 Jan 13 j 04:53	2° Ⅱ 31′29	4.36531 AU	evening set	-6933 Jan 02 j 00:57	2° ҂ 13′50	
	-6939 Feb 03 j 00:08	30° ₹ 8					
direct	-6939 Mar 15 j 17:30	27° 8 37'41		conjunction	-6933 Jan 15 j 10:57	5° ∡ ¹23'20	
	-6939 Apr 25 j 11:23	Π °0		minimum elong	-6933 Jan 15 j 10:52	5° ∡ ¹23'17	
evening set	-6939 Jul 21 j 02:36	15° Ⅱ 38'41		max. Earth dist.	-6933 Jan 17 j 02:25	5° ∡ ¹46'36	6.04285 AU
max. Earth dist.	-6939 Aug 01 j 03:29	18° Ⅱ 05'53	6.35165 AU	morning rise	-6933 Jan 28 j 23:57	8° ∡ ³34'24	
				retrograde	-6933 Jun 09 j 11:19	28° ∡ ³37'11	
conjunction	-6939 Aug 02 j 18:07	18° Ⅱ 27'25	1°24'11	min. Earth dist.	-6933 Aug 07 j 04:00	23° ∡ ¹40'54	4.06024 AU
minimum elong	-6939 Aug 02 j 18:04	18° Ⅱ 27'24	1°24'39	opposition	-6933 Aug 08 j 06:07	23° ∡ ³32′01	-2°08'15
morning rise	-6939 Aug 15 j 07:11	21° Ⅱ 14'58		direct	-6933 Oct 05 j 09:19	18° ∡ ³34'53	
	-6939 Sep 26 j 02:23	0 \circ \odot			-6932 Jan 04 j 07:15	0°ಕ	
retrograde	-6939 Dec 14 j 20:31	8°937'22		evening set	-6932 Feb 07 j 22:40	7° る 42'49	
opposition	-6938 Feb 13 j 16:18	3°545'52	2°12'52				
min. Earth dist.	-6938 Feb 14 j 19:48	3°537'07	4.32871 AU	conjunction	-6932 Feb 21 j 13:53	10°る52'30	
	-6938 Mar 19 j 09:16	30°RⅡ		minimum elong	-6932 Feb 21 j 13:53	10° ප 52'30	
direct	-6938 Apr 17 j 02:57	28° Ⅱ 46'50		max. Earth dist.	-6932 Feb 23 j 05:17	11° る 15'22	6.08748 AU
	-6938 May 15 j 19:18	0 \circ \odot		morning rise	-6932 Mar 06 j 07:10	14° පි 03'01	
evening set	-6938 Aug 21 j 07:01	16° © 52'28			-6932 May 26 j 11:32	0° ≈	
max. Earth dist.	-6938 Sep 01 j 08:11	19° 5 22'16	6.29316 AU	retrograde	-6932 Jul 13 j 09:33	3° ≈ 31'36	
					-6932 Aug 30 j 07:12	30°Ŗる	
conjunction	-6938 Sep 02 j 17:59	19° © 41'25	1°30'41	opposition	-6932 Sep 10 j 18:53	28° ට 27'14	
minimum elong	-6938 Sep 02 j 18:00	19° © 41'26	1°31'08	min. Earth dist.	-6932 Sep 09 j 20:52	28° る 34'46	4.12683 AU
morning rise	-6938 Sep 15 j 03:42	22°529'56		direct	-6932 Nov 08 j 12:24	23° පි 26'39	
	-6938 Oct 19 j 21:01	$0^{\circ}\Omega$			-6931 Jan 14 j 14:40	0° ≈	
retrograde	-6937 Jan 17 j 02:53	10° Ω 27'24		evening set	-6931 Mar 15 j 12:29	12° ≈ 22'54	
opposition	-6937 Mar 19 j 08:13	5° Ω 34'35	2°03'13		-6931 Mar 27 j 01:27	15° ≈	
min. Earth dist.	-6937 Mar 20 j 05:02	5° Ω 27'58	4.25229 AU				
direct	-6937 May 19 j 23:28	0° Ω 38'35		conjunction	-6931 Mar 29 j 06:23	15° ≈ 30'06	
	-6937 Sep 04 j 09:48	15° Ω		minimum elong	-6931 Mar 29 j 06:27	15° ≈ 30′09	1°15'40
evening set	-6937 Sep 21 j 20:52	18° Ω 56'15		max. Earth dist.	-6931 Mar 30 j 08:40	15° ≈ 45′03	6.17046 AU
max. Earth dist.	-6937 Oct 03 j 11:55	21° Ω 37′07	6.20546 AU	morning rise	-6931 Apr 12 j 00:04	18° ≈ 37'03	
					-6931 Jun 05 j 17:05	0° ∀	
conjunction	-6937 Oct 04 j 08:57	21° Ω 49'16	1°09'54	retrograde	-6931 Aug 15 j 18:36	7° ¥ 13'25	
minimum elong	-6937 Oct 04 j 09:01	21° Ω 49'19	1°10'13	opposition	-6931 Oct 13 j 23:36	2°) 12′04	
morning rise	-6937 Oct 16 j 21:51	24° Ω 42'53		min. Earth dist.	-6931 Oct 13 j 14:02		4.21715 AU
	-6937 Nov 09 j 11:11	0° m)			-6931 Oct 30 j 19:51	30°R ≈	
retrograde	-6936 Feb 21 j 01:34	13° m 28'20		direct	-6931 Dec 12 j 21:15	27°≈08'56	
opposition	-6936 Apr 22 j 07:23	8° m 32'29	1°14'04		-6930 Jan 25 j 08:28	0° ∀	
min. Earth dist.	-6936 Apr 22 j 15:20	8° m 29'56	4.15866 AU	evening set	-6930 Apr 19 j 20:46	15° ¥ 45'36	
direct	-6936 Jun 21 j 18:08	3° m 38'47					
evening set	-6936 Oct 23 j 14:04	22° m 13'29		conjunction	-6930 May 03 j 12:40	18° ¥ 48'16	
				minimum elong	-6930 May 03 j 12:43	18°) 48′18	0°35'39
conjunction	-6936 Nov 05 j 08:25	25° Mp 13'06	0°25'54	max. Earth dist.	-6930 May 03 j 16:42	18° ∺ 50'31	6.26182 AU
					• •		
minimum elong	-6936 Nov 05 j 08:27	25° m 13'08	0°26'00	morning rise	-6930 May 17 j 02:26	21° ¥ 49'44	

•	•		-	* **	r 6931 BCE in historical c		igc 42
7 ttention, astronom	-6930 Jun 24 j 18:14	0° Υ	in astronomical ex	min. Earth dist.	-6924 Apr 27 j 14:24	13° Mp 26'29	4.14804 AU
retrograde	-6930 Sep 16 j 17:05	9° Υ 37'03		direct	-6924 Jun 26 i 14:56	8° Mp 34'45	1.11001710
opposition	-6930 Nov 15 j 03:25	4° Υ 39'34	-0°16'36	evening set	-6924 Oct 28 j 09:03	27° Mg 11'10	
min. Earth dist.	-6930 Nov 15 j 07:26		4.30107 AU	evening set	-6924 Nov 09 j 08:35	ე∘ <u>ი</u>	
mm. Lartii dist.	-6930 Dec 30 j 04:33	30° ₹	4.50107 AC		-0724 NOV 07 J 00.55	· –	
direct	-6929 Jan 15 j 06:25	29°) 35′29		conjunction	-6924 Nov 10 j 04:18	0° ≏ 11'36	0°18'25
direct	-6929 Jan 31 j 13:02	29 γ (3329		minimum elong	-6924 Nov 10 j 04:18	0° ⊆ 11'37	0°18'28
asc. node	-6929 Feb 11 j 18:35	0° Υ 44'05		max. Earth dist.	-6924 Nov 10 j 07:25	0° ⊆ 13′25	6.10690 AU
evening set	-6929 May 23 j 15:35	17° Υ 53'13		morning rise	-6924 Nov 23 j 02:19	3° Ω 13'33	0.10090 AC
max. Earth dist.	-6929 Jun 05 j 07:14	20° Υ '40'37	6.33252 AU	desc. node	-6923 Mar 25 j 23:20	22° Ω 46'11	
max. Earm dist.	-0929 Juli 03 J 07.14	20 1 40 37	0.33232 AU	retrograde	-6923 Apr 02 j 10:55	22° £ 51'33	
conjunction	-6929 Jun 06 j 00:30	20° Y ′50′09	0°14'21	opposition	-6923 Jun 02 j 09:37	17° ⊆ 51'09	0014100
minimum elong	-6929 Jun 06 j 00:28	20° Υ 50'09	0°14'28	min. Earth dist.	-6923 Jun 01 j 22:24	17° ⊆ 51'09	
behind sun begin	-6929 Jun 05 j 20:58	20° Υ 48'13	0 1420	direct	-6923 Jul 31 j 09:35	17 ⊆ 5430	4.07545 AO
behind sun end	-6929 Jun 06 j 03:58	20° Υ 52'04		uncet	-6923 Nov 23 j 23:28	0°M	
morning rise	-6929 Jun 19 j 06:04	23° Y '45'23		evening set	-6923 Dec 01 j 23:33	1°M52'22	
morning risc	-6929 Jul 18 j 14:34	0° 8		evening set	-0723 Dec 01 j 25.55	1 1103222	
retrograde	-6929 Oct 18 j 00:26	11° 8 01'54		conjunction	-6923 Dec 15 j 03:11	4°M58'51	0025124
opposition	-6929 Dec 16 j 20:14	6° 8 07'56	0°55'00	minimum elong	-6923 Dec 15 j 03:11	4°M58'49	0°35'47
min. Earth dist.	-6929 Dec 17 j 13:42	6° 8 02'14	4.35365 AU	max. Earth dist.	-6923 Dec 16 j 05:40	5°M14'31	6.05125 AU
direct	-6928 Feb 16 j 23:35	1° 8 04'35	4.33303 AU	morning rise	-6923 Dec 28 j 10:04	8°M.07'08	0.03123 AO
direct	-6928 Jun 04 j 16:38	15° 8		morning risc	-6922 Jan 27 j 16:10	15°M	
evening set	-6928 Jun 24 j 01:25	19° 8 10'03		retrograde	-6922 May 09 j 06:49	28°M12'05	
max. Earth dist.	-6928 Jul 05 j 15:41	21° 8 43'29	6.36221 AU	opposition	-6922 Jul 08 j 14:33	23°M08'18	1°20'17
max. Earm dist.	-0926 Jul 05 j 15.41	21 043 29	0.30221 AU	min. Earth dist.	-6922 Jul 07 j 16:04	23°M15'51	4.04313 AU
agniumation	-6928 Jul 07 j 00:39	22° 8 01'43	0°59'04		-6922 Sep 04 j 20:03	18°M13'48	4.04313 AU
conjunction minimum elong	-6928 Jul 07 j 00:35	22° 8 01'41	0°59'24	direct	-6922 Sep 04 j 20.03 -6922 Dec 05 j 17:58	10 1161340 0° √	
Č	•	24° 8 51'45	0 39 24	avanina aat	·	0 x . 7° x 20'19	
morning rise	-6928 Jul 19 j 20:34 -6928 Aug 12 j 19:01	0° Ⅱ		evening set	-6921 Jan 07 j 04:26	/ X ·2019	
ratra ara da	-6928 Nov 17 j 08:18	12° ∏ 01'34		aaniumatian	-6921 Jan 20 j 15:04	10° ∡ ¹29'53	1017100
retrograde opposition	-6927 Jan 16 j 17:29	7° П 09'42	1°50'00	conjunction minimum elong	-6921 Jan 20 j 15:00	10 x ·29 33 10° x 29'50	
min. Earth dist.	-6927 Jan 17 j 18:58	7° Ⅱ 0942 7° Ⅱ 01'31	4.35994 AU	max. Earth dist.	-6921 Jan 22 j 05:55	10 x 29 30 10° x 52'44	6.04758 AU
direct	-6927 Mar 20 j 07:05	7 П 0131 2° П 08'19	4.33994 AU	morning rise	-6921 Feb 03 j 04:57	13° х 41'02	0.04738 AU
evening set	-6927 Jul 25 j 13:23	20° Ⅱ 10'37		morning risc	-6921 Apr 26 j 05:13	0°る	
max. Earth dist.	-6927 Aug 05 j 15:06		6.34337 AU	retrograde	-6921 Jun 14 j 09:21	3° る 40'16	
max. Lattii dist.	-0727 Aug 05 j 15.00	22 113030	0.54557 AO	retrograde	-6921 Aug 02 j 15:17	30°R. ✓	
conjunction	-6927 Aug 07 j 04:07	22° ∏ 59'18	1°26'40	min. Earth dist.	-6921 Aug 12 j 01:13		4.06803 AU
minimum elong	-6927 Aug 07 j 04:05	22° ∏ 59'16		opposition	-6921 Aug 13 j 03:42	28° × 35'03	
morning rise	-6927 Aug 19 j 16:16	25° ∏ 46'49	1 27 07	direct	-6921 Oct 10 j 07:30	23° х 33°03	2 11 10
morning 1130	-6927 Sep 08 j 00:15	0°95		uncet	-6921 Dec 14 j 10:37	0°る	
retrograde	-6927 Dec 19 j 12:01	13° © 13'51		evening set	-6920 Feb 13 j 02:17	12° る 44'16	
opposition	-6926 Feb 18 j 09:50	8°\$22'19	2°13'55	evening sec	0,20100 15 1 02.17	12 01110	
min. Earth dist.	-6926 Feb 19 j 12:17	8°913'56	4.31822 AU	conjunction	-6920 Feb 26 j 18:10	15° る 53'44	-1°30'07
direct	-6926 Apr 21 j 18:12	3°\$23'50		minimum elong	-6920 Feb 26 j 18:11	15° る 53'44	
evening set	-6926 Aug 25 j 18:39	21° © 31'15		max. Earth dist.	-6920 Feb 28 j 08:37	16° ප 16'00	
max. Earth dist.	-6926 Sep 05 j 20:11	24°9501'46	6.28129 AU	morning rise	-6920 Mar 11 j 11:36	19° る 03'51	
	.,pj				-6920 May 01 j 14:14	0° ≈	
conjunction	-6926 Sep 07 j 05:17	24° © 20'35	1°29'20	retrograde	-6920 Jul 18 j 04:32	8° ≈ 25'46	
minimum elong	-6926 Sep 07 j 05:19	24°\$20'36	1°29'46	opposition	-6920 Sep 15 j 12:02	3°≈21'45	-2°05'01
morning rise	-6926 Sep 19 j 15:14	27° © 09'40		min. Earth dist.	-6920 Sep 14 j 16:29	3° ≈ 28'26	4.13828 AU
<i>3</i>	-6926 Oct 02 j 07:45	0°Ω			-6920 Oct 12 j 15:06	30°Ŗる	
	-6925 Jan 10 j 00:17	15° Ω		direct	-6920 Nov 13 j 09:42	28° る 20'43	
retrograde	-6925 Jan 22 j 01:18	15° Ω 13'33			-6920 Dec 15 j 12:02	0° ≈	
C	-6925 Feb 03 j 02:19	15°RΩ			-6919 Mar 10 j 12:19	15° ≈	
opposition	-6925 Mar 24 j 06:36	10° Ω 20′22	1°58'25	evening set	-6919 Mar 20 j 13:03	17° ≈ 14'43	
min. Earth dist.	-6925 Mar 25 j 01:47	10° Ω 14'16	4.23971 AU	C	· ·		
direct	-6925 May 24 j 18:40	5° Ω 24'45		conjunction	-6919 Apr 03 j 07:01	20° ≈ 21′28	-1°10'55
	-6925 Aug 17 j 07:00	15° Ω		minimum elong	-6919 Apr 03 j 07:05	20° ≈ 21'31	1°11'14
evening set	-6925 Sep 26 j 11:11	23° Ω 44′20		max. Earth dist.	-6919 Apr 04 j 06:19	20° ≈ 34'41	6.18226 AU
max. Earth dist.	-6925 Oct 08 j 06:59	26° Ω 28'18	6.19347 AU	morning rise	-6919 Apr 17 j 00:31	23° ≈ 27'49	
	-				-6919 May 17 j 00:07	0°) €	
conjunction	-6925 Oct 09 j 00:01	26° Ω 38'10	1°04'47	retrograde	-6919 Aug 20 j 06:50	11° ¥ 57'12	
minimum elong	-6925 Oct 09 j 00:05	26° Ω 38'12	1°05'04	opposition	-6919 Oct 18 j 12:56	6° ¥ 56′21	-1°16'42
morning rise	-6925 Oct 21 j 13:40	29° Ω 32'39		min. Earth dist.	-6919 Oct 18 j 04:38	6° ¥ 59'10	4.22819 AU
	-6925 Oct 23 j 13:15	0° ™		direct	-6919 Dec 17 j 13:53	1° ¥ 52'57	
retrograde	-6924 Feb 26 j 03:29	18° m 24'30		evening set	-6918 Apr 24 j 16:53	20° ∺ 27′26	
opposition	-6924 Apr 27 j 09:10	13°M 28'10	1°04'18				

-6918 May 08 j 08:22 23°**¥**29'35 6.27141 AU min. Earth dist. -6912 May 02 j 11:45 18° **m**) 18'12 4.13970 AU max. Earth dist. -6918 May 21 j 20:58 26°**)**€30'08 -6912 Jul 01 j 10:54 direct 13° Mp 25'46 morning rise $0^{\circ}\Upsilon$ -6912 Oct 24 j 05:44 -6918 Jun 06 j 21:24 0∘ಹ -6918 Sep 21 j 04:52 14° Y12'35retrograde evening set -6912 Nov 02 j 02:05 2°**₽**03'20 -6918 Nov 19 j 15:04 9°Υ15'40 -0°06'11 opposition min. Earth dist. -6918 Nov 19 j 21:55 9°**Υ**13'23 4.30838 AU conjunction -6912 Nov 14 j 22:32 5°**£**04'32 0°10'56 asc. node -6918 Dec 22 j 11:20 5°**Y**26′27 minimum elong -6912 Nov 14 j 22:34 5°**£**04'32 0°10'56 direct -6917 Jan 19 j 22:54 4°Υ11'34 behind sun begin -6912 Nov 14 j 16:24 5°**⊆**00'56 evening set -6917 May 28 j 07:29 22°**Y**27'56 behind sun end -6912 Nov 15 j 04:43 5°**£**08'09 -6912 Nov 15 j 05:57 max. Earth dist. 5°**ഫ**08'53 6.10018 AU 25°**Y**24'12 0°21'18 conjunction -6917 Jun 10 j 15:14 morning rise -6912 Nov 27 j 21:36 8°**£**07'17 minimum elong -6917 Jun 10 j 15:12 25°**Y**24'11 0°21'27 desc. node -6911 Feb 03 j 06:25 22°**2**07'11 max. Earth dist. -6917 Jun 09 j 19:23 25°**Y**13'14 6.33695 AU retrograde -6911 Apr 07 j 13:35 27°**₽**49'15 morning rise -6917 Jun 23 j 19:30 28°Y18'43 opposition -6911 Jun 07 j 10:13 22°**£**48'22 -0°25'29 -6917 Jul 01 j 12:57 0°8 min. Earth dist. -6911 Jun 06 j 21:58 22°**♀**52'24 4.06894 AU -6917 Oct 03 j 19:03 15°8 direct -6911 Aug 05 j 07:41 17°**£**55'21 retrograde -6917 Oct 22 j 10:11 15°**8**33'33 -6911 Nov 06 j 20:24 -6917 Nov 10 j 02:13 15°R₩ evening set -6911 Dec 06 j 21:39 6°M50'49 opposition -6917 Dec 21 j 08:11 10°**8**39'56 1°04'13 min. Earth dist. -6917 Dec 22 i 02:26 10°**8**34'00 4.35528 AU conjunction -6911 Dec 20 i 02:07 9°M57'46 -0°42'30 direct -6916 Feb 21 i 12:56 5°**8**36'46 -6911 Dec 20 i 02:03 9°M57'44 0°42'44 minimum elong -6916 May 17 j 15:29 15°8 max. Earth dist. -6911 Dec 21 i 05:04 10°ML13'43 6.04913 AU -6916 Jun 28 j 14:14 23°842'01 morning rise -6910 Jan 02 j 10:14 13°ML06'38 evening set -6916 Jul 10 j 02:56 26°**8**14'45 -6910 Jan 10 j 12:33 15°M max. Earth dist. 6.36093 AU -6910 Mar 29 j 05:01 0°×7 -6916 Jul 11 j 12:08 26°**8**33'09 1°04'16 -6910 May 14 j 06:34 conjunction retrograde 3° × 12'24 -6916 Jul 11 j 12:04 26°**8**33'07 -6910 Jun 29 j 09:30 1°04'38 30°RM. minimum elong morning rise -6916 Jul 24 j 06:44 29°**8**22'41 -6910 Jul 13 j 13:15 opposition 28°M08'19 -1°37'35 -6916 Jul 27 j 02:39 -6910 Jul 12 j 13:20 $0^{\circ}\Pi$ min. Earth dist. 28°M16'23 4.04386 AU -6916 Nov 21 j 21:25 retrograde 16°**Ⅲ**33'56 -6910 Sep 09 j 16:50 23°M13'27 direct -6915 Jan 21 j 08:03 11°**II**42'15 1°55'33 -6910 Nov 15 j 14:49 0°×7 opposition 11°**Д**33'55 4.35613 AU -6915 Jan 22 j 10:08 -6909 Jan 12 j 06:00 12°**х** 20′54 min. Earth dist. evening set -6915 Mar 24 j 22:17 6°**Ⅱ**41'18 direct -6909 Jan 25 j 17:36 15°**∡** 30'42 -1°20'51 evening set -6915 Jul 30 j 00:32 24°**Ⅱ**43'54 conjunction -6909 Jan 25 j 17:33 max. Earth dist. -6915 Aug 10 j 00:41 27°**Ⅱ**11'21 6.33722 AU minimum elong 15°**∡** 30'40 1°21'16 max. Earth dist. -6909 Jan 27 j 09:20 15°**✗**′54′03 6.05099 AU conjunction -6915 Aug 11 j 14:17 27°II32'25 1°28'40 morning rise -6909 Feb 08 j 08:02 18°**∡**'41'55 -6915 Aug 11 j 14:15 27°II32'24 1°29'07 -6909 Apr 01 j 11:19 0°궁 minimum elong -6915 Aug 22 j 14:07 0ಂತಾ retrograde -6909 Jun 19 j 08:10 8°る38'18 -6915 Aug 24 j 01:51 0°9519'55 -6909 Aug 17 j 23:34 3°る33'09 -2°13'22 morning rise opposition -6915 Dec 24 j 04:36 17°950'48 min. Earth dist. -6909 Aug 16 j 22:43 3°る41'38 4.07380 AU retrograde -6914 Feb 23 j 03:53 12°959'06 2°14'10 -6909 Sep 16 j 03:52 30°R*x*7 opposition -6914 Feb 24 j 05:08 -6909 Oct 15 j 05:08 28°**₹**³35′04 min. Earth dist. 12°951'05 4.31034 AU direct direct -6914 Apr 26 j 10:02 8°901'00 -6909 Nov 13 i 10:09 0°정 evening set -6914 Aug 30 i 05:54 26°9509'06 evening set -6908 Feb 18 i 04:28 17°る41'42 max. Earth dist. -6914 Sep 10 j 10:53 28°5641'51 6.27243 AU 20°る51'05 -1°29'15 conjunction -6908 Mar 02 i 20:54 -6914 Sep 11 j 16:34 28°958'45 1°27'26 minimum elong -6908 Mar 02 i 20:56 20°**ප**51'06 1°29'42 conjunction -6914 Sep 11 j 16:36 28°958'47 1°27'52 -6908 Mar 04 i 10:00 21°る12'30 6.10533 AU minimum elong max. Earth dist. -6914 Sep 16 j 04:01 $0^{\circ}\Omega$ -6908 Mar 16 j 14:42 24°**ප**01'00 morning rise -6914 Sep 24 j 02:29 1°Ω48'14 -6908 Apr 12 j 10:26 0°**≈** morning rise -6908 Jul 22 j 21:09 -6914 Nov 28 j 23:56 15°Ω retrograde 13°≈17'19 retrograde -6913 Jan 26 j 21:52 19°**Ω**57'16 min. Earth dist. -6908 Sep 19 j 09:16 8°≈20'12 4.14715 AU -6913 Mar 29 j 04:03 -6908 Sep 20 j 04:16 15°**Ω**03'45 1°52'52 opposition 8°≈13'42 -2°00'26 opposition -6913 Mar 29 j 15:49 15°RΩ direct -6908 Nov 18 j 03:54 3°≈12'20 min. Earth dist. -6913 Mar 29 j 21:33 14°**Ω**58'10 4.23035 AU -6907 Feb 20 j 23:18 15°≈ -6913 May 29 j 12:35 10°**Ω**08'31 -6907 Mar 25 j 13:08 22°**≈**05'08 direct evening set -6913 Jul 26 j 10:32 15°€ 28°**Ω**28'56 -6907 Apr 08 j 07:01 evening set -6913 Oct 01 j 00:34 conjunction 25°≈11'29 -1°06'03 -6913 Oct 07 j 14:08 0° m minimum elong -6907 Apr 08 j 07:06 25°≈11'32 1°06'21 max. Earth dist. -6907 Apr 09 j 02:39 25°**≈**22'36 6.19187 AU conjunction -6913 Oct 13 j 13:52 1° m 23'24 0°59'19 morning rise -6907 Apr 22 j 00:18 28°≈17'20 minimum elong -6913 Oct 13 j 13:56 1° Mp 23'26 0°59'35 -6907 Apr 29 j 16:11 0°**)**€

-6913 Oct 12 j 22:22

-6913 Oct 26 j 04:34

max. Earth dist.

morning rise

1° Mp 14'24

4° m) 18'42

6.18438 AU

retrograde

opposition

-6907 Aug 24 j 21:28

-6907 Oct 23 j 02:28

16°**)** 40'44

11°\ 40'27 -1°07'34

Planetary Phenomena of Jupiter from -7400 through -6898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6907 in astronomical counting style is the year 6908 BCE in historical counting style. min. Earth dist. -6907 Oct 22 j 20:54 11°**)** 42′20 4.23754 AU conjunction -6901 Oct 18 i 03:59 6° m 09'31 0°53'28 -6907 Dec 22 j 08:39 6°\ 36'53 -6901 Oct 18 j 04:03 6° m 09'33 0°53'42 direct minimum elong -6906 Apr 29 j 12:53 25°**)**€09'38 -6901 Oct 17 j 16:15 6° Mp 02'41 6.17157 AU evening set max. Earth dist. 9° m 05'47 -6901 Oct 30 j 19:31 morning rise 28°**升**11′02 -0°21′46 -6906 May 13 j 03:28 -6900 Mar 07 j 05:06 28° Mp 09'57 conjunction retrograde -6906 May 13 j 03:30 -6900 May 07 j 09:44 0°43'44 minimum elong 28°**X**11'03 0°21'49 opposition 23° Mp 12'29 -6906 May 13 j 02:08 -6900 May 07 j 11:11 max. Earth dist. 28°**₭**10'17 6.28004 AU min. Earth dist. 23° Mp 12'01 4.12720 AU -6900 Jul 06 j 07:58 $0^{\circ}\Upsilon$ -6906 May 21 j 07:15 direct 18° Mp 19'20 1°Y10'59 morning rise -6906 May 26 j 15:20 -6900 Oct 06 j 22:36 0∘ಹ 6°**£**59'47 retrograde -6906 Sep 25 j 15:03 18°**Y**49′00 evening set -6900 Nov 06 j 21:06 16° **Y**43'21asc. node -6906 Nov 01 j 03:48 13°**Y**52'35 0°04'19 -6900 Nov 19 j 18:33 10°**≙**01'56 0°03'18 opposition -6906 Nov 24 j 03:08 conjunction -6900 Nov 19 j 18:33 min. Earth dist. -6906 Nov 24 j 10:34 13°**Y**50'08 4.31569 AU minimum elong 10°**≙**01'57 0°03'15 direct -6905 Jan 24 j 13:14 8°Y48'34 behind sun begin -6900 Nov 19 j 10:30 9°**£**57'13 evening set -6905 Jun 01 j 23:07 27° Y 03'19 behind sun end -6900 Nov 20 j 02:37 10°**♀**06'41 max. Earth dist. -6905 Jun 14 j 07:10 29°**Y**46'29 6.34238 AU max. Earth dist. -6900 Nov 20 j 03:25 10°**≏**07'09 6.08910 AU morning rise -6900 Dec 02 j 19:06 13°**2**05'48 conjunction -6905 Jun 15 j 05:27 29°**Y**58'48 0°28'08 desc. node -6900 Dec 13 j 14:00 15°**≏**36'06 minimum elong -6905 Jun 15 j 05:24 29°Y58'46 0°28'19 -6899 Feb 27 j 19:56 0°M -6905 Jun 15 j 07:37 0°8 retrograde -6899 Apr 12 j 17:03 2°M53'15 morning rise -6905 Jun 28 j 08:27 2°**8**52'33 -6899 May 26 j 19:41 30°R <u>Ω</u> -6905 Aug 28 j 22:00 15°8 opposition -6899 Jun 12 i 12:37 27°**2**51'49 -0°36'51 retrograde -6905 Oct 26 i 21:57 20°**8**05'31 min. Earth dist. -6899 Jun 11 i 21:38 27°**2**56'46 4.06041 AU opposition -6905 Dec 25 i 20:41 15°**8**12'15 1°13'02 direct -6899 Aug 10 i 05:46 22°**£**58'37 min. Earth dist. -6905 Dec 26 j 16:48 15°**8**05'44 4.35842 AU -6899 Oct 17 i 16:10 0°M -6905 Dec 27 j 10:28 15°R\ -6899 Dec 11 j 22:56 11°M 57'02 evening set direct -6904 Feb 26 j 04:31 10°809'20 -6899 Dec 24 j 20:41 15°M. -6904 Apr 25 j 16:25 15°8 -6904 Jul 03 j 02:06 -6899 Dec 25 j 04:40 15°ML04'44 -0°49'16 28°**8**13'25 conjunction evening set -6904 Jul 11 j 03:16 $\Pi^{\circ}0$ -6899 Dec 25 j 04:36 15°M04'41 0°49'34 minimum elong max. Earth dist. -6899 Dec 26 j 10:49 15°M22'35 6.04383 AU 1°**I**03'59 1°09'04 -6904 Jul 15 j 22:44 -6898 Jan 07 j 13:44 conjunction 18°MJ4'14 morning rise -6904 Jul 15 j 22:40 1°**I**103′56 1°09′26 minimum elong -6904 Jul 14 j 12:35 0°**Ц**45'03 6.36118 AU max. Earth dist. -6904 Jul 28 j 16:03 3°**Ⅱ**52'58 morning rise -6904 Nov 26 j 08:48 21°**Ⅲ**05′15 retrograde -6903 Jan 25 j 22:02 16°**Ⅱ**13'37 2°00'24 opposition min. Earth dist. -6903 Jan 26 j 23:38 16°**Д**05'26 4.35354 AU direct -6903 Mar 29 j 11:10 11°**Ⅱ**12'59 -6903 Aug 03 j 10:24 29°**Ⅱ**15'25 evening set -6903 Aug 06 j 18:26 0ಂತಾ max. Earth dist. -6903 Aug 14 j 10:55 1°5643'19 6.33173 AU -6903 Aug 15 j 23:21 2°503'46 1°30'08 conjunction -6903 Aug 15 j 23:20 2°503'45 1°30'36 minimum elong -6903 Aug 28 i 10:14 morning rise 4°951'12 -6903 Dec 28 j 21:00 retrograde 22°9525'54 -6902 Feb 27 i 21:05 opposition 17°534'04 2°13'36 -6902 Feb 28 i 22:24 min. Earth dist. 17°526'02 4.30205 AU direct -6902 May 01 j 01:40 12°936'22 -6902 Aug 31 j 07:45 $0^{\circ}\Omega$ -6902 Sep 03 j 15:57 0°Ω45'19 evening set -6902 Sep 14 j 21:04 max. Earth dist. 3°**Ω**18'33 6.26187 AU conjunction -6902 Sep 16 j 02:34 3°Ω35'23 1°25'02 minimum elong -6902 Sep 16 j 02:37 3°**Ω**35'25 1°25'26 morning rise -6902 Sep 28 j 12:56 $6^{\circ}\Omega 25'28$ -6902 Nov 07 j 08:07 15°€ -6901 Jan 31 j 17:56 24°**Ω**40'37 retrograde -6901 Apr 03 j 01:06 19°**Ω**46'36 1°46'38 opposition -6901 Apr 03 j 16:22 19°**Ω**41'44 4.21804 AU min. Earth dist. -6901 May 24 j 20:39 15°RΩ direct -6901 Jun 03 j 05:09 14°**£**51'41

-6901 Jun 12 j 14:33

-6901 Sep 21 j 09:10

-6901 Oct 05 j 13:45

evening set

15°€

0° m

3° m 14'09