Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6900 in astronomical counting style is the year 6901 BCE in historical counting style. -6900 Mar 07 i 05:06 28° m 09'57 max. Earth dist. -6895 Apr 14 i 04:15 0°**)** 16′52 6.20738 AU retrograde opposition -6900 May 07 j 09:44 0°43'44 -6895 Apr 27 j 01:52 3°**₩**11'04 23° m 12'29 morning rise -6900 May 07 j 11:11 -6895 Aug 29 j 10:40 21°\ 26'02 min. Earth dist. 23° Mp 12'01 4.12720 AU retrograde -6900 Jul 06 j 07:58 -6895 Oct 27 j 17:01 18° m 19'20 16°**¥**26′18 -0°57′59 direct opposition -6900 Oct 06 j 22:36 -6895 Oct 27 j 12:01 0∘ଫ min. Earth dist. 16°**∺**27'59 4.25393 AU 6°**£**59'47 -6895 Dec 27 j 02:50 evening set -6900 Nov 06 j 21:06 direct 11°**)** 22'37 29° ¥ 50'49 evening set -6894 May 04 j 08:40 -6900 Nov 19 j 18:33 $0^{\circ}\Upsilon$ conjunction 10°**£**01'56 0°03'18 -6894 May 05 j 01:19 minimum elong -6900 Nov 19 j 18:33 10°**≗**01'57 0°03'15 behind sun begin -6900 Nov 19 j 10:30 9°**£**57'13 conjunction -6894 May 17 j 22:03 2°Y51'06 -0°14'44 2° Y51'07 behind sun end -6900 Nov 20 j 02:37 10°**2**06'41 minimum elong -6894 May 17 j 22:05 0°14'45 -6894 May 17 j 19:01 2°**Y**49'25 max. Earth dist. -6900 Nov 20 j 03:25 10°**≏**07'09 6.08910 AU behind sun begin 2° Y52'48morning rise -6900 Dec 02 j 19:06 13°**≏**05'48 behind sun end -6894 May 18 j 01:09 desc. node -6900 Dec 13 j 14:00 15°**♀**36'06 max. Earth dist. -6894 May 17 j 16:50 2°**Y**48′13 6.29611 AU -6899 Feb 27 j 19:56 0°M morning rise -6894 May 31 j 08:53 5°Y49'55 retrograde -6899 Apr 12 j 17:03 2°M53'15 asc. node -6894 Sep 11 j 11:45 22° Y 47' 41 -6899 May 26 j 19:41 30°**₹**Ω retrograde -6894 Sep 30 j 00:53 23°Y21'07 18°**Y**25′11 opposition -6899 Jun 12 j 12:37 27°**♀**51'49 -0°36'51 opposition -6894 Nov 28 j 14:10 0°14'33 min. Earth dist. -6899 Jun 11 j 21:38 27°**♀**56'46 4.06041 AU min. Earth dist. -6894 Nov 29 j 00:08 18°**Y**21'53 4.33016 AU direct -6899 Aug 10 j 05:46 22°**♀**58'37 direct -6893 Jan 29 j 05:32 13°Y21'11 -6899 Oct 17 j 16:10 0°M -6893 May 30 j 11:27 0°8 evening set -6899 Dec 11 i 22:56 11°ML57'02 evening set -6893 Jun 06 j 11:59 1°831'45 -6899 Dec 24 j 20:41 15°M conjunction -6893 Jun 19 i 17:01 4°**8**26'10 0°34'36 -6899 Dec 25 i 04:40 15°M04'44 -0°49'16 -6893 Jun 19 j 16:58 4°**8**26'08 0°34'49 conjunction minimum elong -6899 Dec 25 i 04:36 15°ML04'41 0°49'34 max. Earth dist. -6893 Jun 18 j 17:32 4°**8**13'13 6.35403 AU minimum elong -6899 Dec 26 j 10:49 -6893 Jul 02 j 18:22 7°**8**18'48 max. Earth dist. 15°M-22'35 6.04383 AU morning rise -6898 Jan 07 j 13:44 -6893 Aug 08 j 10:58 18°M.14'14 15°8 morning rise -6898 Mar 02 j 17:31 -6893 Oct 31 j 03:30 0°×7 retrograde 24°**8**28'10 8°**х** 21′50 19°**8**35'13 1°21'04 -6898 May 19 j 11:56 -6893 Dec 30 j 05:40 retrograde opposition -6898 Jul 18 j 15:28 -6893 Dec 31 j 02:20 3°**х** 17′26 -1°45′24 min. Earth dist. 19°**8**28'31 4.36660 AU opposition 3°**₹**25'29 4.04246 AU -6892 Feb 13 j 05:52 min. Earth dist. -6898 Jul 17 j 15:36 15°R₩ -6898 Aug 14 j 11:00 -6892 Mar 01 j 14:37 14°**8**32'32 30°RM direct -6898 Sep 14 j 18:36 -6892 Mar 19 j 03:56 direct 28°M22'10 15°**8** -6898 Oct 16 j 00:40 -6892 Jun 25 j 14:36 0° **₹** $0^{\circ}\Pi$ -6892 Jul 07 j 09:47 evening set -6897 Jan 17 j 11:54 17°**∡**³31'14 evening set 2°**∏**33′59 max. Earth dist. -6892 Jul 18 j 16:39 5°**Ⅲ**03'40 6.36497 AU conjunction -6897 Jan 31 j 00:19 20° **₹**'41'16 -1°24'03 -6897 Jan 31 j 00:16 20°**∡**141'14 1°24'29 conjunction -6892 Jul 20 j 04:57 5°**Ⅲ**23'47 1°13'15 minimum elong max. Earth dist. -6897 Feb 01 j 16:57 21°**x** 05'06 6.05353 AU minimum elong -6892 Jul 20 j 04:53 5°**Ⅲ**23'45 1°13'39 -6897 Feb 13 j 15:32 23°**х** 52'39 morning rise -6892 Aug 01 j 21:09 8°II12'08 morning rise -6897 Mar 12 j 16:17 0°정 -6892 Nov 30 j 17:54 25°**Ⅲ**24'45 retrograde -6897 Jun 24 j 08:30 13°る45'44 -6891 Jan 30 j 07:55 20°II33'15 2°04'19 retrograde opposition -6897 Aug 22 j 22:45 8°る40'42 -2°14'29 -6891 Jan 31 j 11:30 20°**I**24'27 4.35267 AU opposition min. Earth dist. -6897 Aug 21 j 21:12 8°る49'26 4.08045 AU -6891 Apr 02 j 22:13 15°**Ⅲ**32'56 min. Earth dist. direct direct -6897 Oct 20 i 04:52 3°₹42'12 -6891 Jul 22 i 07:38 0ಂತಾ evening set -6896 Feb 23 j 10:55 22°る48'06 evening set -6891 Aug 07 i 15:23 3°934'52 max. Earth dist. -6891 Aug 18 j 14:21 6°9502'09 6.32601 AU conjunction -6896 Mar 08 i 03:43 25°**ප**57'13 -1°27'43 -6896 Mar 08 i 03:46 25°る57'14 1°28'09 -6891 Aug 20 j 03:43 6°\$23'09 1°31'01 minimum elong conjunction 26°る17'25 6.11574 AU -6896 Mar 09 i 14:48 -6891 Aug 20 j 03:42 6°923'08 1°31'29 max. Earth dist. minimum elong -6896 Mar 21 j 21:46 29°る06'45 -6891 Sep 01 j 14:09 9°910'37 morning rise morning rise -6896 Mar 25 j 19:16 -6890 Jan 02 j 07:42 0°≈≈ retrograde 26°9549'38 -6896 Jun 11 j 18:34 15°≈ opposition -6890 Mar 04 j 09:47 21°957'37 2°12'18 -6896 Jul 27 j 17:15 4.29188 AU retrograde 18°≈15'55 min. Earth dist. -6890 Mar 05 j 10:14 21°**©**49'52 -6890 May 05 j 10:38 -6896 Sep 11 j 13:22 15°R≈ direct 17°9500'17 opposition -6896 Sep 24 j 23:20 13°≈12'39 -1°54'53 -6890 Aug 15 j 12:14 $0^{\circ}\Omega$ -6896 Sep 24 j 06:01 -6890 Sep 07 j 22:11 min. Earth dist. 13°≈18'34 4.16040 AU evening set 5°**Ω**11'14 -6896 Nov 23 j 03:57 -6890 Sep 19 j 05:10 direct 8°≈10'55 max. Earth dist. 7°**Ω**45'59 6.24812 AU -6895 Jan 31 j 06:16 15°≈ 27°**≈**00′28 -6890 Sep 20 j 09:01 evening set -6895 Mar 30 j 15:23 conjunction 8°**Ω**01'57 1°22'13 -6895 Apr 12 j 22:22 0°**)**€ minimum elong -6890 Sep 20 j 09:04 8°**Ω**01'59 1°22'36 morning rise -6890 Oct 02 j 19:43 10°**Ω**52'47 conjunction -6895 Apr 13 j 09:14 0°**H**06'08 -1°00'40 -6890 Oct 21 j 05:21 15°€ minimum elong -6895 Apr 13 j 09:18 0° **★**06'10 1°00'57 retrograde -6889 Feb 05 j 12:48 29°**Ω**15′25

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 2 Attention, astronomical year style is used: The year -6889 in astronomical counting style is the year 6890 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ie year -6889 i	in astronomical co	unting style is the year	6890 BCE in historical c	ounting style.	.8-
opposition	-6889 Apr 07 j 18:41	24° Ω 21′07	1°39'58		-6884 Oct 25 j 05:24	15°R≈	
min. Earth dist.	-6889 Apr 08 j 09:58		4.20144 AU	direct	-6884 Nov 28 j 02:03	13° ≈ 09′08	
direct	-6889 Jun 07 j 19:32	19° Ω 26′29			-6883 Jan 01 j 09:09	15° ≈	
	-6889 Sep 04 j 10:16	0° ™			-6883 Mar 27 j 02:02	0° ∀	
evening set	-6889 Oct 10 j 00:47	7° m 53'03		evening set	-6883 Apr 04 j 17:04	1° ¥ 54'56	
:	(000 0-4 22 : 15.52	1.00 m , 4.012 5	0947126	:	(002 A 10:10-25	40 W 50140	0054152
conjunction minimum elong	-6889 Oct 22 j 15:53 -6889 Oct 22 j 15:56	10° Mp 49'35 10° Mp 49'37		conjunction minimum elong	-6883 Apr 18 j 10:25 -6883 Apr 18 j 10:29	4° ¥ 59'48 4° ¥ 59'50	
max. Earth dist.	-6889 Oct 22 j 05:08		6.15370 AU	max. Earth dist.	-6883 Apr 19 j 00:59		6.22271 AU
morning rise	-6889 Nov 04 j 08:47	13° Mp 47'12	0.13370 AO	morning rise	-6883 May 02 j 02:38	8° ¥ 03'51	0.22271 AU
morning risc	-6888 Jan 27 j 04:09	0° <u>م</u>		retrograde	-6883 Sep 02 j 23:57	26° ∺ 10'51	
retrograde	-6888 Mar 12 j 04:37	ა <u>~</u> 3° <u>~</u> 00'20		opposition	-6883 Nov 01 j 07:11	21°) 11'35	-0°48'01
ronogrado	-6888 Apr 26 j 19:32	30°R, Mp		min. Earth dist.	-6883 Nov 01 j 04:42		4.26830 AU
opposition	-6888 May 12 j 08:33	28° m) 02'22	0°33'09	direct	-6883 Dec 31 j 22:06	16°) €07'40	
min. Earth dist.	-6888 May 12 j 07:05		4.10955 AU		-6882 Apr 18 j 03:10	0° Υ	
direct	-6888 Jul 11 j 00:47	23°m/09'21		evening set	-6882 May 09 j 03:59	4° Υ 32'16	
	-6888 Sep 17 j 04:21	0∘ ⊽					
desc. node	-6888 Oct 23 j 15:59	7° ≏ 31'57		conjunction	-6882 May 22 j 16:32	7° Y 31'39	-0°07'34
evening set	-6888 Nov 11 j 15:42	11° ≙ 55'00		minimum elong	-6882 May 22 j 16:33	7° Y 31'39	0°07'34
				behind sun begin	-6882 May 22 j 09:06	7° Y 27'33	
conjunction	-6888 Nov 24 j 14:32	14° ≏ 58'27	-0°04'25	behind sun end	-6882 May 22 j 24:00	7° Ƴ 35'46	
minimum elong	-6888 Nov 24 j 14:32	14° ≏ 58'26	0°04'29	max. Earth dist.	-6882 May 22 j 09:28	7° Y 27'45	6.30849 AU
behind sun begin	-6888 Nov 24 j 06:34	14° ≙ 53'45		morning rise	-6882 Jun 05 j 02:00	10° Y ′29′27	
behind sun end	-6888 Nov 24 j 22:30	15° ≏ 03'08		asc. node	-6882 Jul 21 j 11:50	20° Y ′03'34	
max. Earth dist.	-6888 Nov 25 j 03:26	15° ≏ 06'03	6.07340 AU	retrograde	-6882 Oct 04 j 10:29	27° Y ′55'27	
morning rise	-6888 Dec 07 j 16:22	18° ≏ 03'36		opposition	-6882 Dec 03 j 01:57	23° Y ′00'00	
	-6887 Jan 31 j 22:28	0°M		min. Earth dist.	-6882 Dec 03 j 13:16	22° Y 56'17	4.33960 AU
retrograde	-6887 Apr 17 j 23:48	7°M58'25	00.4715.4	direct	-6881 Feb 02 j 19:47	17° Y 56′08	
opposition	-6887 Jun 17 j 15:17	2°M.56'29			-6881 May 13 j 10:38	0° 8	
min. Earth dist.	-6887 Jun 16 j 23:09	30°R ™	4.04822 AU	evening set max. Earth dist.	-6881 Jun 11 j 02:02	6° 8 04'18	6.35964 AU
direct	-6887 Jul 11 j 11:42 -6887 Aug 15 j 05:26	28° £ 03'08		max. Earm dist.	-6881 Jun 23 j 02:06	8 O 42 40	0.33904 AU
direct	-6887 Sep 18 j 14:50	0°M		conjunction	-6881 Jun 24 j 05:31	8° 8 57'53	0°41'00
	-6887 Dec 08 j 02:19	15° M ₊		minimum elong	-6881 Jun 24 j 05:27	8° 8 57'51	0°41'16
evening set	-6887 Dec 17 j 01:44	17°M06'02		morning rise	-6881 Jul 07 j 05:40	11° 8 49'45	0 11 10
					-6881 Jul 21 j 20:59	15° 8	
conjunction	-6887 Dec 30 j 08:37	20° ™ 14'34	-0°55'39	retrograde	-6881 Nov 04 j 14:53	28° 8 57'48	
minimum elong	-6887 Dec 30 j 08:32		0°55'58	opposition	-6880 Jan 03 j 17:53	24° 8 05'09	1°28'56
max. Earth dist.	-6887 Dec 31 j 17:40	20°M34'08	6.03622 AU	min. Earth dist.	-6880 Jan 04 j 16:53	23° 8 57'43	4.36819 AU
morning rise	-6886 Jan 12 j 18:56	23°M24'55		direct	-6880 Mar 06 j 05:30	19° 8 02'41	
	-6886 Feb 10 j 15:56	0° ∡ ¹			-6880 Jun 08 j 10:21	$\Pi^{\circ}0$	
retrograde	-6886 May 24 j 16:44	13° ∡ ³34'32		evening set	-6880 Jul 11 j 20:26	7° Ⅱ 03'30	
opposition	-6886 Jul 23 j 18:12	8° ∡ ¹29'52	-1°52'23	max. Earth dist.	-6880 Jul 23 j 02:05	9° Ⅲ 32'40	6.36227 AU
min. Earth dist.	-6886 Jul 22 j 16:18	8° ∡ ³38'37	4.04058 AU			_	
direct	-6886 Sep 19 j 18:49	3° ∡ ³34'14		conjunction	-6880 Jul 24 j 14:34	9° Ⅱ 52'55	
evening set	-6885 Jan 22 j 19:26	22° ∡ ¹45′00		minimum elong	-6880 Jul 24 j 14:30	9° Ⅱ 52'53	1°17'38
	C005 F 1 05:00 5	250 75555	100/25	morning rise	-6880 Aug 06 j 05:32	12° Ⅱ 40'53	
conjunction	-6885 Feb 05 j 08:39	25° ₹ 55'12		retrograde	-6880 Dec 05 j 05:28	29°II55'59	2007146
minimum elong max. Earth dist.	-6885 Feb 05 j 08:37 -6885 Feb 07 j 01:33	25° ₹ 55'11 26° ₹ 19'09	1°27'02 6.05718 AU	opposition min. Earth dist.	-6879 Feb 03 j 22:30 -6879 Feb 05 j 01:33	25° Ⅱ 04'30 24° Ⅱ 55'53	2°07'46 4.34611 AU
max. Earth dist.	-6885 Feb 0/j 01:33 -6885 Feb 19 j 00:35	26° x '19'09 29° x '06'40	0.05/18 AU	min. Earth dist.	-6879 Apr 07 j 10:52	24°Щ35°33 20°Щ04'35	4.54011 AU
morning rise	-6885 Feb 22 j 20:42	29° x *0640		direct	-6879 Jul 04 j 18:06	20°Щ0433 0°©	
retrograde	-6885 Jun 29 j 09:50	0 0 18° る 55'29		evening set	-6879 Aug 12 j 01:33	8° 5 07'37	
opposition	-6885 Aug 27 j 22:26	18 3 550'26	-2°14'32	max. Earth dist.	-6879 Aug 23 j 00:03	10°935'04	6.31603 AU
min. Earth dist.	-6885 Aug 26 j 21:22		4.08899 AU	Lui ui uist.	00.7.1ug 25 j 00.05		0.5.1005 710
direct	-6885 Oct 25 j 07:42	8° る 51'21		conjunction	-6879 Aug 24 j 13:13	10°956'01	1°31'26
evening set	-6884 Feb 28 j 17:21	27° る 55'26		minimum elong	-6879 Aug 24 j 13:13	10°956'01	1°31'53
Č	-6884 Mar 08 j 18:52	0° ≈		morning rise	-6879 Sep 05 j 23:22	13° © 43'46	
	,			-	-6879 Dec 06 j 23:06	$0^{\circ}\Omega$	
conjunction	-6884 Mar 13 j 10:42	1° ≈ 04'12	-1°25'30	retrograde	-6878 Jan 07 j 03:06	1° Ω 28′26	
minimum elong	-6884 Mar 13 j 10:45	1° ≈ 04'14	1°25'54		-6878 Feb 07 j 10:55	30° ₹ 5	
max. Earth dist.	-6884 Mar 14 j 22:06	1° ≈ 24'32	6.12821 AU	opposition	-6878 Mar 09 j 05:02	26°536'13	2°10'09
morning rise	-6884 Mar 27 j 04:41	4° ≈ 13'10		min. Earth dist.	-6878 Mar 10 j 05:39	26° © 28'24	4.27906 AU
	-6884 May 16 j 23:34	15° ≈		direct	-6878 May 10 j 04:20	21° © 39'17	
retrograde	-6884 Aug 01 j 12:31	23°≈14'10	10.40/2.5		-6878 Jul 27 j 22:22	0°N	
opposition	-6884 Sep 29 j 18:01	18°≈11'17		evening set	-6878 Sep 12 j 10:14	9° Ω 52'36	
min. Earth dist.	-6884 Sep 29 j 01:38	19.∞10.21	4.17504 AU				

Attantion actronom	ical records strela is used. Th	a rican 6070 :	m actromomaical ac	untina atrila ia tha rican	6070 DCE in historical a	aumtina atrila	
conjunction	ical year style is used: Th -6878 Sep 24 j 21:26	$12^{\circ}\Omega 44'04$		max. Earth dist.	-6872 Mar 19 j 20:38		6.14290 AU
minimum elong	-6878 Sep 24 j 21:30	$12^{\circ}\Omega44'04$	1°19'06	morning rise	-6872 Apr 01 j 07:23	0 ≈1748 9°≈08'10	0.14290 AU
max. Earth dist.	-6878 Sep 23 j 19:15	$12^{\circ}\Omega 29'00$	6.23370 AU	morning rise	-6872 Apr 01 j 07.23	9 ≈08 10 15°≈	
max. Earm dist.	-6878 Oct 04 j 18:14	12 δί 29 00	0.23370 AU	retrograde	-6872 Aug 06 j 02:17	13 ≈ 28°≈00'53	
morning rise	-6878 Oct 07 j 08:46	15° Ω 35'46		opposition	-6872 Oct 04 j 08:20	28 ≈ 00 33 22° ≈ 58'26	10/11/27
morning risc	-6878 Dec 19 j 07:36	0° m)		min. Earth dist.	-6872 Oct 04 j 08:20		4.18957 AU
retrograde	-6877 Feb 10 j 11:42	4° Mg 05'57		direct	-6872 Dec 02 j 20:29	17°≈55'55	4.16937 AU
retrograde	-6877 Apr 06 j 09:33	30°RΩ		direct	-6871 Mar 09 j 20:04	0° ∺	
opposition	-6877 Apr 12 j 18:51	29° Ω 11'12	1°32'14	evening set	-6871 Apr 09 j 14:16	6° ∺ 38'31	
min. Earth dist.	-6877 Apr 13 j 07:02	29°Ω07'18	4.18659 AU	evening set	-00/1 Apr 0/114.10	0 7(3031	
direct	-6877 Jun 12 j 14:08	24°Ω16'56	4.18039 AU	conjunction	-6871 Apr 23 j 07:22	9°) 42'42	0°48'56
direct	-6877 Aug 14 j 07:41	0° m)		minimum elong	-6871 Apr 23 j 07:27	9°) 42'44	
evening set	-6877 Oct 14 j 17:42	12° Mp 46'31		max. Earth dist.	-6871 Apr 23 j 19:10	9° H 49'19	6.23613 AU
evening set	-08// Oct 14 j 1/.42	12 1114031		morning rise	-6871 May 06 j 22:47	12°) 45'54	0.23013 AU
conjunction	-6877 Oct 27 j 09:46	15° m) 44'05	0°40'44	morning risc	-6871 Aug 16 j 15:52	12 γ (43 34 0° γ	
minimum elong	-6877 Oct 27 j 09:49	15° m) 44'07	0°40'53	retrograde	-6871 Sep 07 j 10:38	0° Υ 46'17	
max. Earth dist.	-6877 Oct 27 j 02:55	15° m/ 40'04	6.14004 AU	retrograde	-6871 Sep 29 j 01:13	30° R ₩	
morning rise	-6877 Nov 09 j 03:46	18° m) 42'49	0.14004 AU	opposition	-6871 Nov 05 j 18:10	25°) 47′39	0020107
morning rise	-6877 Dec 31 j 16:20	0° ⊽		min. Earth dist.	-6871 Nov 05 j 18:06		4.27933 AU
retrograde	-6876 Mar 17 j 11:02	ა 8° ჲ 03'02		direct	-6870 Jan 05 j 12:48	20°\(\frac{4}{4}\)	4.27933 AU
-	·	ა <u>⊶</u> 03 02 3° ഫ 04'31	0°21'46	direct	,	20 χ 4341 0° Υ	
opposition min. Earth dist.	-6876 May 17 j 12:31 -6876 May 17 j 09:16				-6870 Mar 30 j 23:48 -6870 May 13 j 20:08	9° Υ 06'05	
min. Earth dist.	, ,	3° ₾ 05'35	4.09832 AU	evening set	-68/0 May 13 J 20:08	9 1 06 05	
J: 4	-6876 Jun 12 j 03:23	30°RM)			(070 M 27 : 07-24	12° Ƴ 04'44	0900121
direct	-6876 Jul 16 j 01:27	28° Mp 11'36		conjunction	-6870 May 27 j 07:34	12° Υ 04'44 12° Υ 04'43	
1 1	-6876 Aug 18 j 13:03	0∘ ⊽		minimum elong	-6870 May 27 j 07:33		0.00.28
desc. node	-6876 Sep 01 j 05:40	1° 2 40'39		behind sun begin	-6870 May 26 j 23:20	12° Υ 00'12	
evening set	-6876 Nov 16 j 14:49	16° ≙ 59'51		behind sun end	-6870 May 27 j 15:46	12° Υ 09'15	6 2 1 6 2 2 1 X X
	(07/2) 20:14.40	200 2 0 4100	0010112	max. Earth dist.	-6870 May 26 j 19:44		6.31623 AU
conjunction	-6876 Nov 29 j 14:48	20° ₽ 04'08		asc. node	-6870 May 31 j 07:59	12° Y 58′06	
minimum elong	-6876 Nov 29 j 14:47	20° Ω 04'07	0°12'19	morning rise	-6870 Jun 09 j 15:59	15° Y ′01'46	
behind sun begin	-6876 Nov 29 j 09:21	20° ♀ 00'55			-6870 Aug 30 j 09:24	0°8	
behind sun end	-6876 Nov 29 j 20:14	20° ₽ 07'20	C 0 C 5 0 7 A 1 1	retrograde	-6870 Oct 08 j 19:34	2° 8 24'41	
max. Earth dist.	-6876 Nov 30 j 07:21	20° £ 13'54	6.06587 AU		-6870 Nov 17 j 10:14	30° ₹ Υ	000444
morning rise	-6876 Dec 12 j 17:59	23° △ 10'12		opposition	-6870 Dec 07 j 12:07	27° Y ′29'43	0°34'42
	-6875 Jan 11 j 18:38	0°M,		min. Earth dist.	-6870 Dec 08 j 01:47	27° Y °25'14	4.34375 AU
retrograde	-6875 Apr 23 j 05:12	13°M08'26	0050140	direct	-6869 Feb 07 j 09:06	22° Y 25'57	
opposition	-6875 Jun 22 j 19:37	8°M.06'01			-6869 Apr 24 j 09:35	0°8	
min. Earth dist.	-6875 Jun 22 j 00:47		4.04554 AU	evening set	-6869 Jun 15 j 14:34	10° 8 33'42	
direct	-6875 Aug 20 j 06:00	3°M12'30					
	-6875 Nov 20 j 06:00	15°M		conjunction	-6869 Jun 28 j 16:52	13° 8 26'44	0°47'04
evening set	-6875 Dec 22 j 05:48	22°M16'21		minimum elong	-6869 Jun 28 j 16:48	13° 8 26'42	
							0°47'20
conjunction				max. Earth dist.	-6869 Jun 27 j 12:36	13° 8 11'08	6.35989 AU
	-6874 Jan 04 j 13:33	25°M25'09			-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43	13° 8 11'08	
minimum elong	-6874 Jan 04 j 13:29	25°M25'07	1°02'00	max. Earth dist.	-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Jul 11 j 15:32	13° 8 11'08 15° 8 16° 8 18'02	
max. Earth dist.	-6874 Jan 04 j 13:29 -6874 Jan 06 j 00:19	25°M25'07 25°M45'43		morning rise	-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Jul 11 j 15:32 -6869 Sep 22 j 02:42	13°811'08 15°8 16°818'02 0°∏	
•	-6874 Jan 04 j 13:29 -6874 Jan 06 j 00:19 -6874 Jan 18 j 00:48	25°M25'07 25°M45'43 28°M35'46	1°02'00		-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Jul 11 j 15:32 -6869 Sep 22 j 02:42 -6869 Nov 09 j 00:33	13°♥11'08 15°♥ 16°♥18'02 0°Ⅲ 3°Ⅲ26'43	
max. Earth dist. morning rise	-6874 Jan 04 j 13:29 -6874 Jan 06 j 00:19 -6874 Jan 18 j 00:48 -6874 Jan 24 j 01:05	25°M25'07 25°M45'43 28°M35'46 0°X'	1°02'00	morning rise	-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Jul 11 j 15:32 -6869 Sep 22 j 02:42 -6869 Nov 09 j 00:33 -6869 Dec 27 j 23:44	13°႘11'08 15°႘ 16°႘18'02 0°Ⅲ 3°Ⅲ26'43 30°႙႘	6.35989 AU
max. Earth dist. morning rise retrograde	-6874 Jan 04 j 13:29 -6874 Jan 06 j 00:19 -6874 Jan 18 j 00:48 -6874 Jan 24 j 01:05 -6874 May 29 j 19:18	25° M 25'07 25° M 45'43 28° M 35'46 0° X' 18° X' 43'25	1°02'00 6.03830 AU	morning rise retrograde opposition	-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Jul 11 j 15:32 -6869 Sep 22 j 02:42 -6869 Nov 09 j 00:33 -6869 Dec 27 j 23:44 -6868 Jan 08 j 05:46	13°႘11'08 15°႘ 16°႘18'02 0°Ⅲ 3°Ⅲ26'43 30°℞႘ 28°႘34'23	6.35989 AU 1°36'13
max. Earth dist. morning rise retrograde opposition	-6874 Jan 04 j 13:29 -6874 Jan 06 j 00:19 -6874 Jan 18 j 00:48 -6874 Jan 24 j 01:05 -6874 May 29 j 19:18 -6874 Jul 28 j 19:30	25°M25'07 25°M45'43 28°M35'46 0° \$\tilde{x}\$ 18° \$\tilde{x}\$ 43'25 13° \$\tilde{x}\$ 38'29	1°02'00 6.03830 AU -1°58'22	morning rise retrograde opposition min. Earth dist.	-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Jul 11 j 15:32 -6869 Sep 22 j 02:42 -6869 Nov 09 j 00:33 -6869 Dec 27 j 23:44 -6868 Jan 08 j 05:46 -6868 Jan 09 j 05:24	13°δ11'08 15°δ 16°δ18'02 0°Π 3°Π26'43 30°Rδ 28°δ34'23 28°δ26'47	6.35989 AU
max. Earth dist. morning rise retrograde opposition min. Earth dist.	-6874 Jan 04 j 13:29 -6874 Jan 06 j 00:19 -6874 Jan 18 j 00:48 -6874 Jan 24 j 01:05 -6874 May 29 j 19:18 -6874 Jul 28 j 19:30 -6874 Jul 27 j 17:13	25°M25'07 25°M45'43 28°M35'46 0° × 1 18° × 43'25 13° × 38'29 13° × 47'25	1°02'00 6.03830 AU	morning rise retrograde opposition	-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Jul 11 j 15:32 -6869 Sep 22 j 02:42 -6869 Nov 09 j 00:33 -6869 Dec 27 j 23:44 -6868 Jan 08 j 05:46 -6868 Jan 09 j 05:24 -6868 Mar 10 j 17:41	13°δ11'08 15°δ 16°δ18'02 0°Π 3°Π26'43 30°Rδ 28°δ34'23 28°δ26'47 23°δ32'19	6.35989 AU 1°36'13
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-6874 Jan 04 j 13:29 -6874 Jan 06 j 00:19 -6874 Jan 18 j 00:48 -6874 Jan 24 j 01:05 -6874 May 29 j 19:18 -6874 Jul 28 j 19:30 -6874 Jul 27 j 17:13 -6874 Sep 24 j 21:29	25°M25'07 25°M45'43 28°M35'46 0° 🗷 18° 🗷 43'25 13° 🗷 38'29 13° 🗷 47'25 8° 🗷 42'22	1°02'00 6.03830 AU -1°58'22	morning rise retrograde opposition min. Earth dist. direct	-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Jul 11 j 15:32 -6869 Sep 22 j 02:42 -6869 Nov 09 j 00:33 -6869 Dec 27 j 23:44 -6868 Jan 08 j 05:46 -6868 Jan 09 j 05:24 -6868 Mar 10 j 17:41 -6868 May 19 j 11:26	13°႘11'08 15°႘ 16°႘18'02 0°Ⅲ 3°Ⅲ26'43 30°ℝ႘ 28°႘34'23 28°႘32'47 23°႘32'19 0°Ⅲ	6.35989 AU 1°36'13
max. Earth dist. morning rise retrograde opposition min. Earth dist.	-6874 Jan 04 j 13:29 -6874 Jan 06 j 00:19 -6874 Jan 18 j 00:48 -6874 Jan 24 j 01:05 -6874 May 29 j 19:18 -6874 Jul 28 j 19:30 -6874 Jul 27 j 17:13 -6874 Sep 24 j 21:29 -6873 Jan 28 j 00:36	25°M25'07 25°M45'43 28°M35'46 0° - 18° - 143'25 13° - 138'29 13° - 142'25 8° - 142'22 27° - 151'48	1°02'00 6.03830 AU -1°58'22	morning rise retrograde opposition min. Earth dist. direct evening set	-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Jul 11 j 15:32 -6869 Sep 22 j 02:42 -6869 Nov 09 j 00:33 -6869 Dec 27 j 23:44 -6868 Jan 08 j 05:46 -6868 Jan 09 j 05:24 -6868 Mar 10 j 17:41 -6868 May 19 j 11:26 -6868 Jul 16 j 07:21	13°႘11'08 15°႘ 16°႘18'02 0°Ⅲ 3°Ⅲ26'43 30°ℝ႘ 28°႘34'23 28°႘26'47 23°႘32'19 0°Ⅲ 11°Ⅲ34'09	6.35989 AU 1°36'13 4.36484 AU
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-6874 Jan 04 j 13:29 -6874 Jan 06 j 00:19 -6874 Jan 18 j 00:48 -6874 Jan 24 j 01:05 -6874 May 29 j 19:18 -6874 Jul 28 j 19:30 -6874 Jul 27 j 17:13 -6874 Sep 24 j 21:29	25°M25'07 25°M45'43 28°M35'46 0° 🗷 18° 🗷 43'25 13° 🗷 38'29 13° 🗷 47'25 8° 🗷 42'22	1°02'00 6.03830 AU -1°58'22	morning rise retrograde opposition min. Earth dist. direct	-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Jul 11 j 15:32 -6869 Sep 22 j 02:42 -6869 Nov 09 j 00:33 -6869 Dec 27 j 23:44 -6868 Jan 08 j 05:46 -6868 Jan 09 j 05:24 -6868 Mar 10 j 17:41 -6868 May 19 j 11:26	13°႘11'08 15°႘ 16°႘18'02 0°Ⅲ 3°Ⅲ26'43 30°ℝ႘ 28°႘34'23 28°႘32'47 23°႘32'19 0°Ⅲ	6.35989 AU 1°36'13
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-6874 Jan 04 j 13:29 -6874 Jan 06 j 00:19 -6874 Jan 18 j 00:48 -6874 Jan 24 j 01:05 -6874 May 29 j 19:18 -6874 Jul 28 j 19:30 -6874 Jul 27 j 17:13 -6874 Sep 24 j 21:29 -6873 Jan 28 j 00:36 -6873 Feb 06 j 04:42	25° M.25'07 25° M.45'43 28° M.35'46 0° 🖈 18° 🖈 43'25 13° 🖈 47'25 8° 🖈 42'22 27° 🖈 51'48 0° ጜ	1°02'00 6.03830 AU -1°58'22 4.04729 AU	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist.	-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Jul 11 j 15:32 -6869 Sep 22 j 02:42 -6869 Nov 09 j 00:33 -6869 Dec 27 j 23:44 -6868 Jan 08 j 05:46 -6868 Jan 09 j 05:24 -6868 Mar 10 j 17:41 -6868 May 19 j 11:26 -6868 Jul 16 j 07:21 -6868 Jul 27 j 10:00	13°♂11'08 15°♂ 16°♂18'02 0°Ⅲ 3°Ⅲ26'43 30°₨ 28°♂34'23 28°♂32'19 0°Ⅲ 11°Ⅲ34'09 14°Ⅲ02'04	6.35989 AU 1°36'13 4.36484 AU 6.35539 AU
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-6874 Jan 04 j 13:29 -6874 Jan 06 j 00:19 -6874 Jan 18 j 00:48 -6874 Jan 24 j 01:05 -6874 May 29 j 19:18 -6874 Jul 28 j 19:30 -6874 Jul 27 j 17:13 -6874 Sep 24 j 21:29 -6873 Jan 28 j 00:36 -6873 Feb 06 j 04:42	25°M25'07 25°M45'43 28°M35'46 0° ₹ 18° ₹43'25 13° ₹43'25 13° ₹47'25 8° ₹42'22 27° ₹51'48 0° ₹ 1°₹01'49	1°02'00 6.03830 AU -1°58'22 4.04729 AU	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction	-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Jul 11 j 15:32 -6869 Sep 22 j 02:42 -6869 Nov 09 j 00:33 -6869 Dec 27 j 23:44 -6868 Jun 08 j 05:46 -6868 Jun 09 j 05:24 -6868 Mar 10 j 17:41 -6868 May 19 j 11:26 -6868 Jul 16 j 07:21 -6868 Jul 27 j 10:00	13°811'08 15°8 16°818'02 0°Ⅲ 3°Ⅲ26'43 30°88 28°834'23 28°826'47 23°832'19 0°Ⅲ 11°Ⅲ34'09 14°Ⅲ02'04	6.35989 AU 1°36'13 4.36484 AU 6.35539 AU 1°20'41
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-6874 Jan 04 j 13:29 -6874 Jan 06 j 00:19 -6874 Jan 18 j 00:48 -6874 Jan 24 j 01:05 -6874 May 29 j 19:18 -6874 Jul 28 j 19:30 -6874 Jul 27 j 17:13 -6874 Sep 24 j 21:29 -6873 Jan 28 j 00:36 -6873 Feb 06 j 04:42 -6873 Feb 10 j 14:35 -6873 Feb 10 j 14:34	25°M25'07 25°M45'43 28°M35'46 0° ₹ 18° ₹43'25 13° ₹47'25 8° ₹42'22 27° ₹51'48 0° ₹ 1°₹01'49 1°₹01'48	1°02'00 6.03830 AU -1°58'22 4.04729 AU -1°28'25 1°28'53	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong	-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Jul 11 j 15:32 -6869 Sep 22 j 02:42 -6869 Nov 09 j 00:33 -6869 Dec 27 j 23:44 -6868 Jun 08 j 05:46 -6868 Jun 09 j 05:24 -6868 Mar 10 j 17:41 -6868 May 19 j 11:26 -6868 Jul 16 j 07:21 -6868 Jul 27 j 10:00 -6868 Jul 29 j 00:13 -6868 Jul 29 j 00:10	13°811'08 15°8 16°818'02 0° II 3° II 26'43 30° R8 28°834'23 28°826'47 23°832'19 0° II 11° II 34'09 14° II 02'04 14° II 23'20 14° II 23'18	6.35989 AU 1°36'13 4.36484 AU 6.35539 AU
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-6874 Jan 04 j 13:29 -6874 Jan 06 j 00:19 -6874 Jan 18 j 00:48 -6874 Jan 24 j 01:05 -6874 May 29 j 19:18 -6874 Jul 28 j 19:30 -6874 Jul 27 j 17:13 -6874 Sep 24 j 21:29 -6873 Jan 28 j 00:36 -6873 Feb 06 j 04:42 -6873 Feb 10 j 14:35 -6873 Feb 10 j 14:34 -6873 Feb 12 j 08:54	25°M25'07 25°M45'43 28°M35'46 0° ₹ 18° ₹43'25 13° ₹47'25 8° ₹42'22 27° ₹51'48 0° ₹ 1° ₹01'49 1° ₹01'48 1° ₹26'31	1°02'00 6.03830 AU -1°58'22 4.04729 AU	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction	-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Jul 11 j 15:32 -6869 Sep 22 j 02:42 -6869 Nov 09 j 00:33 -6869 Dec 27 j 23:44 -6868 Jun 08 j 05:46 -6868 Jun 09 j 05:24 -6868 Mar 10 j 17:41 -6868 May 19 j 11:26 -6868 Jul 16 j 07:21 -6868 Jul 27 j 10:00 -6868 Jul 29 j 00:13 -6868 Jul 29 j 00:10 -6868 Aug 10 j 14:26	13°♂11'08 15°♂18'02 0°Ⅲ 3°Ⅲ26'43 30°R♂ 28°♂34'23 28°♂34'23 28°♂32'19 0°Ⅲ 11°Ⅲ34'09 14°Ⅲ02'04 14°Ⅲ23'20 14°Ⅲ23'18 17°Ⅲ11'13	6.35989 AU 1°36'13 4.36484 AU 6.35539 AU 1°20'41
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-6874 Jan 04 j 13:29 -6874 Jan 06 j 00:19 -6874 Jan 18 j 00:48 -6874 Jan 24 j 01:05 -6874 May 29 j 19:18 -6874 Jul 28 j 19:30 -6874 Jul 27 j 17:13 -6874 Sep 24 j 21:29 -6873 Feb 06 j 04:42 -6873 Feb 10 j 14:35 -6873 Feb 10 j 14:34 -6873 Feb 12 j 08:54 -6873 Feb 24 j 06:48	25°M25'07 25°M45'43 28°M35'46 0°ズ 18°ズ43'25 13°ズ47'25 8°ズ42'22 27°ズ51'48 0°उ 1°♂01'49 1°♂01'48 1°♂26'31 4°♂12'54	1°02'00 6.03830 AU -1°58'22 4.04729 AU -1°28'25 1°28'53	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise	-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Jul 11 j 15:32 -6869 Sep 22 j 02:42 -6869 Nov 09 j 00:33 -6869 Dec 27 j 23:44 -6868 Jun 08 j 05:46 -6868 Jun 09 j 05:24 -6868 Mar 10 j 17:41 -6868 May 19 j 11:26 -6868 Jul 16 j 07:21 -6868 Jul 27 j 10:00 -6868 Jul 29 j 00:13 -6868 Jul 29 j 00:10 -6868 Aug 10 j 14:26 -6868 Oct 15 j 05:13	13°811'08 15°8 16°818'02 0°	6.35989 AU 1°36'13 4.36484 AU 6.35539 AU 1°20'41
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-6874 Jan 04 j 13:29 -6874 Jan 18 j 00:48 -6874 Jan 24 j 01:05 -6874 May 29 j 19:18 -6874 Jul 28 j 19:30 -6874 Jul 27 j 17:13 -6874 Sep 24 j 21:29 -6873 Feb 24 j 21:29 -6873 Feb 10 j 14:35 -6873 Feb 10 j 14:34 -6873 Feb 12 j 08:54 -6873 Feb 24 j 06:48 -6873 Jul 04 j 07:26	25°M25'07 25°M45'43 28°M35'46 0°ズ 18°ズ43'25 13°ズ47'25 8°ズ42'22 27°ズ51'48 0°उ 1°उ01'48 1°उ26'31 4°उ12'54 23°उ55'00	1°02'00 6.03830 AU -1°58'22 4.04729 AU -1°28'25 1°28'53 6.06774 AU	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong	-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Jul 11 j 15:32 -6869 Sep 22 j 02:42 -6869 Nov 09 j 00:33 -6869 Dec 27 j 23:44 -6868 Jun 09 j 05:24 -6868 Mar 10 j 17:41 -6868 May 19 j 11:26 -6868 Jul 29 j 00:13 -6868 Jul 29 j 00:10 -6868 Aug 10 j 14:26 -6868 Oct 15 j 05:13 -6868 Dec 09 j 21:05	13°811'08 15°8 16°818'02 0°Ⅲ 3°Ⅲ26'43 30°88 28°834'23 28°826'47 23°832'19 0°Ⅲ 11°Ⅲ34'09 14°Ⅲ02'04 14°Ⅲ23'18 17°Ⅲ11'13 0°99 4°930'17	6.35989 AU 1°36'13 4.36484 AU 6.35539 AU 1°20'41
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-6874 Jan 04 j 13:29 -6874 Jan 18 j 00:48 -6874 Jan 24 j 01:05 -6874 May 29 j 19:18 -6874 Jul 28 j 19:30 -6874 Jul 27 j 17:13 -6874 Sep 24 j 21:29 -6873 Feb 06 j 04:42 -6873 Feb 10 j 14:35 -6873 Feb 10 j 14:34 -6873 Feb 12 j 08:54 -6873 Feb 24 j 06:48 -6873 Jul 04 j 07:26 -6873 Sep 01 j 18:17	25°M25'07 25°M45'43 28°M35'46 0°ズ 18°ズ43'25 13°ズ47'25 8°ズ42'22 27°ズ51'48 0°उ 1°उ01'48 1°उ01'44 1°उ26'31 4°उ12'54 23°उ55'00 18°उ50'10	1°02'00 6.03830 AU -1°58'22 4.04729 AU -1°28'25 1°28'53 6.06774 AU	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde	-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Jul 11 j 15:32 -6869 Sep 22 j 02:42 -6869 Nov 09 j 00:33 -6869 Dec 27 j 23:44 -6868 Jun 08 j 05:46 -6868 Jun 09 j 05:24 -6868 Mar 10 j 17:41 -6868 May 19 j 11:26 -6868 Jul 27 j 10:00 -6868 Jul 29 j 00:13 -6868 Jul 29 j 00:10 -6868 Aug 10 j 14:26 -6868 Oct 15 j 05:13 -6868 Dec 09 j 21:05 -6867 Feb 05 j 20:03	13°811'08 15°8 16°818'02 0°Ⅲ 3°Ⅲ26'43 30°88 28°834'23 28°826'47 23°832'19 0°Ⅲ 11°Ⅲ34'09 14°Ⅲ02'04 14°Ⅲ23'20 14°Ⅲ23'18 17°Ⅲ11'13 0°\$\$ 4°\$30'17 30°8Ⅲ	6.35989 AU 1°36'13 4.36484 AU 6.35539 AU 1°20'41 1°21'07
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-6874 Jan 04 j 13:29 -6874 Jan 18 j 00:48 -6874 Jan 24 j 01:05 -6874 May 29 j 19:18 -6874 Jul 28 j 19:30 -6874 Jul 27 j 17:13 -6874 Sep 24 j 21:29 -6873 Feb 06 j 04:42 -6873 Feb 10 j 14:35 -6873 Feb 10 j 14:34 -6873 Feb 12 j 08:54 -6873 Feb 24 j 06:48 -6873 Sep 01 j 18:17 -6873 Aug 31 j 18:14	25°M25'07 25°M45'43 28°M35'46 0°ズ 18°ズ43'25 13°ズ47'25 8°ズ42'22 27°ズ51'48 0°उ 1°उ01'49 1°उ01'48 1°उ26'31 4°उ12'54 23°उ55'00 18°उ58'23	1°02'00 6.03830 AU -1°58'22 4.04729 AU -1°28'25 1°28'53 6.06774 AU	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition	-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Sep 22 j 02:42 -6869 Nov 09 j 00:33 -6869 Dec 27 j 23:44 -6868 Jun 08 j 05:46 -6868 Jun 09 j 05:24 -6868 Mar 10 j 17:41 -6868 May 19 j 11:26 -6868 Jul 16 j 07:21 -6868 Jul 27 j 10:00 -6868 Jul 29 j 00:10 -6868 Aug 10 j 14:26 -6868 Oct 15 j 05:13 -6868 Dec 09 j 21:05 -6867 Feb 05 j 20:03 -6867 Feb 08 j 14:37	13° 811'08 15° 8 16° 818'02 0° Π 3° Π26'43 30° R8 28° 826'47 23° 832'19 0° Π 11° Π34'09 14° Π02'04 14° Π23'20 14° Π23'18 17° Π11'13 0° 9 4° 930'17 30° R Π 29° Π38'50	6.35989 AU 1°36'13 4.36484 AU 6.35539 AU 1°20'41 1°21'07
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-6874 Jan 04 j 13:29 -6874 Jan 18 j 00:48 -6874 Jan 24 j 01:05 -6874 May 29 j 19:18 -6874 Jul 28 j 19:30 -6874 Jul 27 j 17:13 -6874 Sep 24 j 21:29 -6873 Feb 06 j 04:42 -6873 Feb 10 j 14:35 -6873 Feb 10 j 14:34 -6873 Feb 24 j 06:48 -6873 Feb 24 j 06:48 -6873 Sep 01 j 18:17 -6873 Aug 31 j 18:14 -6873 Oct 30 j 06:06	25°M25'07 25°M45'43 28°M35'46 0°ズ 18°ズ43'25 13°ズ47'25 8°ズ42'22 27°ズ51'48 0°उ 1°उ01'49 1°उ01'48 1°उ26'31 4°उ12'54 23°उ55'00 18°उ5'010 18°उ5'8'23 13°उ5'338	1°02'00 6.03830 AU -1°58'22 4.04729 AU -1°28'25 1°28'53 6.06774 AU	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist.	-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Jul 11 j 15:32 -6869 Sep 22 j 02:42 -6869 Nov 09 j 00:33 -6869 Dec 27 j 23:44 -6868 Jun 08 j 05:46 -6868 Jun 09 j 05:24 -6868 Mar 10 j 17:41 -6868 May 19 j 11:26 -6868 Jul 16 j 07:21 -6868 Jul 27 j 10:00 -6868 Jul 29 j 00:13 -6868 Jul 29 j 00:10 -6868 Aug 10 j 14:26 -6868 Oct 15 j 05:13 -6868 Dec 09 j 21:05 -6867 Feb 05 j 20:03 -6867 Feb 08 j 14:37 -6867 Feb 09 j 18:14	13° 811'08 15° 8 16° 818'02 0° Π 3° Π26'43 30° R8 28° 826'47 23° 832'19 0° Π 11° Π34'09 14° Π02'04 14° Π23'18 17° Π11'13 0° 9 4° 930'17 30° R Π 29° Π38'50 29° Π30'02	6.35989 AU 1°36'13 4.36484 AU 6.35539 AU 1°20'41 1°21'07
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-6874 Jan 04 j 13:29 -6874 Jan 18 j 00:48 -6874 Jan 24 j 01:05 -6874 May 29 j 19:18 -6874 Jul 28 j 19:30 -6874 Jul 27 j 17:13 -6874 Sep 24 j 21:29 -6873 Feb 06 j 04:42 -6873 Feb 10 j 14:35 -6873 Feb 10 j 14:34 -6873 Feb 12 j 08:54 -6873 Feb 24 j 06:48 -6873 Sep 01 j 18:17 -6873 Aug 31 j 18:14 -6873 Oct 30 j 06:06 -6872 Feb 21 j 03:15	25°M25'07 25°M45'43 28°M35'46 0°ズ 18°ズ43'25 13°ズ47'25 8°ズ42'22 27°ズ51'48 0°G 1°G01'49 1°G01'48 1°G26'31 4°G12'54 23°G55'00 18°G58'23 13°G50'38 0°≈	1°02'00 6.03830 AU -1°58'22 4.04729 AU -1°28'25 1°28'53 6.06774 AU	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition	-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Jul 11 j 15:32 -6869 Sep 22 j 02:42 -6869 Nov 09 j 00:33 -6869 Dec 27 j 23:44 -6868 Jun 08 j 05:46 -6868 Jun 09 j 05:24 -6868 Mar 10 j 17:41 -6868 Mar 10 j 17:41 -6868 Jul 16 j 07:21 -6868 Jul 27 j 10:00 -6868 Jul 29 j 00:13 -6868 Jul 29 j 00:10 -6868 Aug 10 j 14:26 -6868 Oct 15 j 05:13 -6867 Feb 05 j 20:03 -6867 Feb 08 j 14:37 -6867 Feb 09 j 18:14 -6867 Apr 12 j 02:40	13°811'08 15°8 16°818'02 0°Ⅲ 3°Ⅲ26'43 30°₨ 28°834'23 28°826'47 23°832'19 0°Ⅲ 11°Ⅲ34'09 14°Ⅲ02'04 14°Ⅲ23'18 17°Ⅲ11'13 0°% 4°©30'17 30°₨Ⅲ 29°Ⅲ38'50 29°Ⅲ38'50 29°Ⅲ30'02 24°Ⅲ39'20	6.35989 AU 1°36'13 4.36484 AU 6.35539 AU 1°20'41 1°21'07
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-6874 Jan 04 j 13:29 -6874 Jan 18 j 00:48 -6874 Jan 24 j 01:05 -6874 May 29 j 19:18 -6874 Jul 28 j 19:30 -6874 Jul 27 j 17:13 -6874 Sep 24 j 21:29 -6873 Feb 06 j 04:42 -6873 Feb 10 j 14:35 -6873 Feb 10 j 14:34 -6873 Feb 24 j 06:48 -6873 Feb 24 j 06:48 -6873 Sep 01 j 18:17 -6873 Aug 31 j 18:14 -6873 Oct 30 j 06:06	25°M25'07 25°M45'43 28°M35'46 0°ズ 18°ズ43'25 13°ズ47'25 8°ズ42'22 27°ズ51'48 0°उ 1°उ01'49 1°उ01'48 1°उ26'31 4°उ12'54 23°उ55'00 18°उ5'010 18°उ5'8'23 13°उ5'338	1°02'00 6.03830 AU -1°58'22 4.04729 AU -1°28'25 1°28'53 6.06774 AU	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct	-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Jul 11 j 15:32 -6869 Sep 22 j 02:42 -6869 Nov 09 j 00:33 -6869 Dec 27 j 23:44 -6868 Jun 08 j 05:46 -6868 Jun 09 j 05:24 -6868 Mar 10 j 17:41 -6868 May 19 j 11:26 -6868 Jul 16 j 07:21 -6868 Jul 27 j 10:00 -6868 Jul 29 j 00:13 -6868 Jul 29 j 00:10 -6868 Aug 10 j 14:26 -6868 Oct 15 j 05:13 -6867 Feb 09 j 21:05 -6867 Feb 09 j 18:14 -6867 Apr 12 j 02:40 -6867 Jun 13 j 11:24	13°811'08 15°8 16°818'02 0°Ⅲ 3°Ⅲ26'43 30°₨ 28°834'23 28°826'47 23°832'19 0°Ⅲ 11°Ⅲ34'09 14°Ⅲ02'04 14°Ⅲ23'18 17°Ⅲ11'13 0°% 4°©30'17 30°₨Ⅲ 29°Ⅲ38'50 29°Ⅲ30'02 24°Ⅲ39'20 0°©	6.35989 AU 1°36'13 4.36484 AU 6.35539 AU 1°20'41 1°21'07
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-6874 Jan 04 j 13:29 -6874 Jan 18 j 00:48 -6874 Jan 24 j 01:05 -6874 May 29 j 19:18 -6874 Jul 28 j 19:30 -6874 Jul 27 j 17:13 -6874 Sep 24 j 21:29 -6873 Feb 06 j 04:42 -6873 Feb 10 j 14:35 -6873 Feb 10 j 14:34 -6873 Feb 12 j 08:54 -6873 Feb 24 j 06:48 -6873 Feb 24 j 06:48 -6873 Sep 01 j 18:17 -6873 Aug 31 j 18:14 -6873 Oct 30 j 06:06 -6872 Feb 21 j 03:15 -6872 Mar 04 j 19:53	25°M25'07 25°M45'43 28°M35'46 0°ズ 18°ズ43'25 13°ズ47'25 8°ズ42'22 27°ズ51'48 0°G 1°G01'49 1°G01'48 1°G26'31 4°G12'54 23°G55'00 18°G50'10 18°G50'10 18°G50'38 0°≈ 2°≈51'40	1°02'00 6.03830 AU -1°58'22 4.04729 AU -1°28'25 1°28'53 6.06774 AU -2°13'32 4.10230 AU	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist.	-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Jul 11 j 15:32 -6869 Sep 22 j 02:42 -6869 Nov 09 j 00:33 -6869 Dec 27 j 23:44 -6868 Jun 08 j 05:46 -6868 Jun 09 j 05:24 -6868 Mar 10 j 17:41 -6868 Mar 10 j 17:41 -6868 Jul 16 j 07:21 -6868 Jul 27 j 10:00 -6868 Jul 29 j 00:13 -6868 Jul 29 j 00:10 -6868 Aug 10 j 14:26 -6868 Oct 15 j 05:13 -6867 Feb 05 j 20:03 -6867 Feb 08 j 14:37 -6867 Feb 09 j 18:14 -6867 Apr 12 j 02:40	13°811'08 15°8 16°818'02 0°Ⅲ 3°Ⅲ26'43 30°₨ 28°834'23 28°826'47 23°832'19 0°Ⅲ 11°Ⅲ34'09 14°Ⅲ02'04 14°Ⅲ23'18 17°Ⅲ11'13 0°% 4°©30'17 30°₨Ⅲ 29°Ⅲ38'50 29°Ⅲ38'50 29°Ⅲ30'02 24°Ⅲ39'20	6.35989 AU 1°36'13 4.36484 AU 6.35539 AU 1°20'41 1°21'07
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-6874 Jan 04 j 13:29 -6874 Jan 18 j 00:48 -6874 Jan 24 j 01:05 -6874 May 29 j 19:18 -6874 Jul 28 j 19:30 -6874 Jul 27 j 17:13 -6874 Sep 24 j 21:29 -6873 Feb 06 j 04:42 -6873 Feb 10 j 14:35 -6873 Feb 10 j 14:34 -6873 Feb 12 j 08:54 -6873 Feb 24 j 06:48 -6873 Sep 01 j 18:17 -6873 Aug 31 j 18:14 -6873 Oct 30 j 06:06 -6872 Feb 21 j 03:15	25°M25'07 25°M45'43 28°M35'46 0°ズ 18°ズ43'25 13°ズ47'25 8°ズ42'22 27°ズ51'48 0°G 1°G01'49 1°G01'48 1°G26'31 4°G12'54 23°G55'00 18°G58'23 13°G50'38 0°≈	1°02'00 6.03830 AU -1°58'22 4.04729 AU -1°28'25 1°28'53 6.06774 AU -2°13'32 4.10230 AU	morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct	-6869 Jun 27 j 12:36 -6869 Jul 05 j 17:43 -6869 Jul 11 j 15:32 -6869 Sep 22 j 02:42 -6869 Nov 09 j 00:33 -6869 Dec 27 j 23:44 -6868 Jun 08 j 05:46 -6868 Jun 09 j 05:24 -6868 Mar 10 j 17:41 -6868 May 19 j 11:26 -6868 Jul 16 j 07:21 -6868 Jul 27 j 10:00 -6868 Jul 29 j 00:13 -6868 Jul 29 j 00:10 -6868 Aug 10 j 14:26 -6868 Oct 15 j 05:13 -6867 Feb 09 j 21:05 -6867 Feb 09 j 18:14 -6867 Apr 12 j 02:40 -6867 Jun 13 j 11:24	13°811'08 15°8 16°818'02 0°Ⅲ 3°Ⅲ26'43 30°₨ 28°834'23 28°826'47 23°832'19 0°Ⅲ 11°Ⅲ34'09 14°Ⅲ02'04 14°Ⅲ23'18 17°Ⅲ11'13 0°% 4°©30'17 30°₨Ⅲ 29°Ⅲ38'50 29°Ⅲ30'02 24°Ⅲ39'20 0°©	6.35989 AU 1°36'13 4.36484 AU 6.35539 AU 1°20'41 1°21'07

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6867 in astronomical counting style is the year 6868 BCE in historical counting style. morning rise -6867 Aug 28 j 23:58 15°532'58 1°31'41 -6861 Mar 01 j 12:04 9°**ප**16'10 minimum elong -6867 Aug 27 j 13:03 -6861 Jul 09 j 02:06 28°る52'03 max. Earth dist. 15°9513'15 6.30424 AU retrograde -6867 Sep 10 j 09:49 18°921'06 opposition -6861 Sep 06 j 12:50 23°る47'23 -2°11'40 morning rise -6861 Sep 05 j 13:30 -6867 Nov 06 j 11:17 $0^{\circ}\Omega$ min. Earth dist. 23°る55'22 4.11355 AU -6866 Jan 11 j 21:42 6°Ω11'56 -6861 Nov 04 j 02:55 retrograde direct 18°**る**47'21 opposition -6866 Mar 14 j 01:55 1°**Ω**19'28 2°07'05 -6860 Feb 03 j 07:42 0°≈ min. Earth dist. -6866 Mar 15 j 00:08 1°**Ω**12'25 4.26615 AU evening set -6860 Mar 09 j 21:26 7°≈46'09 -6866 Mar 24 j 15:20 30°R95 direct -6866 May 14 j 21:10 26°523'01 conjunction -6860 Mar 23 j 15:11 10°≈53'57 -1°19'26 -6866 Jul 03 j 18:16 $0^{\circ}\Omega$ minimum elong -6860 Mar 23 j 15:16 10°≈53'59 1°19'49 evening set -6866 Sep 16 j 23:52 14°**Ω**38'27 max. Earth dist. -6860 Mar 24 j 20:37 11°≈10'44 6.15530 AU -6860 Apr 06 j 09:06 -6866 Sep 18 j 13:33 15°**Ω** morning rise 14°≈01'38 -6860 Apr 10 j 16:34 max. Earth dist. -6866 Sep 28 j 11:42 17°**Ω**16'57 6.22082 AU 15°≈ -6860 Jun 29 j 11:53 0°**)**€ conjunction -6866 Sep 29 j 11:22 17°**Ω**30'35 1°14'39 retrograde -6860 Aug 10 j 17:41 2°\ 47'01 minimum elong -6866 Sep 29 j 11:26 17°**Ω**30'37 1°15'00 -6860 Sep 21 j 18:07 30°R≈ morning rise -6866 Oct 11 j 23:23 20°**Ω**23'08 opposition -6860 Oct 08 j 22:45 27°≈45'04 -1°34'08 -6866 Nov 25 j 15:36 min. Earth dist. -6860 Oct 08 j 10:56 27°≈49'04 4.20171 AU retrograde -6865 Feb 15 j 13:55 9°100'06 direct -6860 Dec 07 j 15:21 22°≈42'15 opposition -6865 Apr 17 j 20:04 4° m 04'50 1°23'43 -6859 Feb 18 j 01:59 0°**)**€ 4° Mp 01′29 min. Earth dist. -6865 Apr 18 j 06:31 4.17443 AU evening set -6859 Apr 14 j 11:33 11°**¥**22'16 -6865 May 25 j 14:56 30°RΩ direct -6865 Jun 17 j 12:14 29°Ω10'49 conjunction -6859 Apr 28 i 04:09 14° \(\frac{1}{25}\)'49 -0°42'39 -6865 Jul 10 i 05:34 0° m minimum elong -6859 Apr 28 i 04:13 14°\(\frac{1}{25}\)'51 0°42'49 evening set -6865 Oct 19 j 11:20 17° m 42'20 max. Earth dist. -6859 Apr 28 j 12:01 14°**)**(30'13 6.24713 AU -6859 May 11 j 18:58 17°**₩**28'18 morning rise -6865 Nov 01 j 04:28 20° m 40'46 0°33'43 -6859 Jul 13 j 11:53 $0^{\circ}\Upsilon$ conjunction -6865 Nov 01 j 04:30 20° m 40'48 0°33'50 -6859 Sep 11 j 20:40 5°**Y**22'55 retrograde minimum elong -6865 Nov 01 j 01:25 20°m/38'59 -6859 Nov 10 j 05:47 0° **Y**24'47 -0° 27'55 max. Earth dist. 6.12980 AU opposition -6865 Nov 13 j 23:39 23° m 40'30 min. Earth dist. -6859 Nov 10 j 07:27 0°**Υ**24'13 4.28833 AU morning rise -6859 Nov 13 j 08:02 -6865 Dec 11 j 23:16 0∘**⊽** 30°**₹** 13°**≏**06′08 -6858 Jan 10 j 03:56 25°**¥**20'43 -6864 Mar 22 j 14:57 direct retrograde $0^{\circ}\Upsilon$ -6864 May 22 j 15:55 8°**2**07'01 0°10'13 -6858 Mar 08 j 15:38 opposition 5°Y30'00 -6864 May 22 j 09:43 8°**೨**09'02 4.09083 AU -6858 Apr 09 j 09:40 min. Earth dist. asc. node -6864 Jul 11 j 09:49 -6858 May 18 j 12:54 13°**Y**41′24 desc. node 3°**£**23′20 evening set -6864 Jul 20 j 23:59 direct 3°**£**14'09 -6858 May 31 j 23:16 16°**Y**39'20 0°06'39 evening set -6864 Nov 21 j 13:33 22°**₽**03'49 conjunction minimum elong -6858 May 31 j 23:16 16°**Ƴ**39'20 0°06'44 conjunction -6864 Dec 04 j 14:33 25°**2**08'44 -0°19'54 behind sun begin -6858 May 31 j 15:38 16°**Y**35′08 -6864 Dec 04 j 14:31 25°**♀**08'43 0°20'03 behind sun end -6858 Jun 01 j 06:54 16°**Y**43'32 minimum elong max. Earth dist. -6864 Dec 05 j 09:29 25°**£**19'57 6.06157 AU max. Earth dist. -6858 May 31 j 09:09 16°**Ƴ**31'32 6.32271 AU -6864 Dec 17 j 18:56 28°**♀**15'30 -6858 Jun 14 j 06:26 19° **Y**35'37 morning rise morning rise -6864 Dec 25 j 05:54 -6858 Aug 04 j 10:00 0°8 0°M -6863 Mar 12 j 17:02 -6858 Oct 13 j 05:55 6°**8**55'50 15°M₊ retrograde -6863 Apr 28 j 09:03 -6858 Dec 11 j 23:34 2°801'21 0°44'32 retrograde 18°**™**15'58 opposition -6863 Jun 14 i 06:35 15°RM min. Earth dist. -6858 Dec 12 j 15:08 1°**8**56'16 4.34732 AU opposition -6863 Jun 27 j 22:20 13°M13'02 -1°09'10 -6858 Dec 27 i 21:33 30°RΥ 26°**Y**57'48 min. Earth dist. -6863 Jun 27 i 02:05 13°ML19'48 4.04488 AU direct -6857 Feb 11 i 23:38 0°8 direct -6863 Aug 25 j 07:20 8°M19'13 -6857 Mar 30 j 04:42 -6863 Oct 30 j 16:09 15°M₀ -6857 Jun 19 j 18:46 15°8 evening set -6863 Dec 27 j 08:39 27°M23'35 -6857 Jun 20 j 03:43 15°**8**04'55 evening set -6862 Jan 07 j 10:09 0°×7 max. Earth dist. -6857 Jul 01 j 21:42 17°**8**40'17 6.36012 AU conjunction -6862 Jan 09 j 17:28 0°**х** 32'40 -1°07'09 conjunction -6857 Jul 03 j 04:37 17°857'22 0°52'56 minimum elong -6862 Jan 09 j 17:24 0° ₹32'37 1°07'31 minimum elong -6857 Jul 03 j 04:33 17°**8**57'20 0°53'14 0°**∡**754'55 6.04127 AU 20°848'08 max. Earth dist. -6862 Jan 11 j 07:09 morning rise -6857 Jul 16 j 02:06 -6857 Aug 29 j 16:11 -6862 Jan 23 j 05:26 3°**х** 43′25 $0^{\circ}II$ morning rise -6862 Jun 03 j 21:33 23°×748'38 -6857 Nov 13 j 12:23 7°**I**57'35 retrograde retrograde -6862 Aug 02 j 18:47 18°**х** 43'36 -2°03'27 -6856 Jan 12 j 19:18 3°**Д**05'28 1°43'03 opposition opposition -6862 Aug 01 j 16:47 18°**✗**52'26 4.05387 AU -6856 Jan 13 j 19:39 2°**П**57'38 4.36214 AU min. Earth dist. min. Earth dist. 13°**∡**¹47′02 -6862 Sep 29 j 21:17 -6856 Feb 07 j 18:52 direct 30°₹**८** -6861 Jan 20 j 10:50 0°궁 direct -6856 Mar 15 j 07:59 28°**8**03'43 evening set -6861 Feb 02 j 04:47 2°**る**55'31 -6856 Apr 20 j 23:24 $0^{\circ}\Pi$ evening set -6856 Jul 20 j 18:33 16°**Ⅲ**05'59 conjunction -6861 Feb 15 j 19:15 6°**ප**05'19 -1°29'36 max. Earth dist. -6856 Jul 31 j 21:51 18°**Ⅲ**34'30 6.35003 AU minimum elong -6861 Feb 15 j 19:14 6°පි05'19 1°30'03 max. Earth dist. -6861 Feb 17 j 11:23 6°る28'41 6.07710 AU -6856 Aug 02 j 10:28 18°**Д**54'55 1°23'44 conjunction

•	nical year style is used: Th			. //		, .	ige 3
minimum elong	-6856 Aug 02 j 10:25	18° ∏ 54'54		min. Earth dist.	-6850 Aug 06 j 13:11		4.05873 AU
morning rise	-6856 Aug 14 j 23:36	21° I I42'36	1 24 11	direct	-6850 Oct 04 j 18:06	18° √ 46'17	4.03673 AU
morning rise	-6856 Sep 23 j 08:53	0°95		direct	-6849 Jan 02 j 17:39	18 メ・4017 0°る	
retrograde	-6856 Dec 14 j 11:31	9° © 05'07		evening set	-6849 Feb 07 j 07:01	7°る54'45	
opposition	-6855 Feb 13 j 07:27		2°12'24	evening set	-0049 1 00 07 1 07.01	7 03443	
min. Earth dist.	-6855 Feb 14 j 10:07		4.32897 AU	conjunction	-6849 Feb 20 j 22:15	11° る 04'33	-1°30'07
iiiii. Eartii dist.	-6855 Mar 25 j 06:34	4 3 03 13	4.32897 AU	minimum elong	-6849 Feb 20 j 22:15	11°る04'33	1°30'34
direct	-6855 Apr 16 j 17:57	29° Ⅱ 14'42		max. Earth dist.	-6849 Feb 22 j 13:59	11° る 27'38	6.08420 AU
direct	-6855 May 09 j 05:20	0°95		morning rise	-6849 Mar 06 j 15:19	14° ට 15'11	0.00420710
evening set	-6855 Aug 20 j 23:41	17° © 20'25		morning rise	-6849 May 25 j 05:19	0°≈	
max. Earth dist.	-6855 Sep 01 i 00:05	19° © 49'47	6.29538 AU	retrograde	-6849 Jul 13 j 21:39	3°≈45'58	
max. Dartii dist.	ооз вер от ј оо.оз	1) 🔾 1) 17	0.27030110	renograde	-6849 Sep 01 j 14:01	30°Ŗ ට	
conjunction	-6855 Sep 02 j 10:34	20°509'19	1°30'32	min. Earth dist.	-6849 Sep 10 j 08:57		4.12213 AU
minimum elong	-6855 Sep 02 j 10:35	20°509'19	1°30'59	opposition	-6849 Sep 11 j 06:03	28° ප් 41'37	
morning rise	-6855 Sep 14 j 20:28	22°957'48	1 30 37	direct	-6849 Nov 08 j 23:25	23° ප් 41'10	2 00 50
morning 1130	-6855 Oct 17 j 07:24	0°Ω		uncet	-6848 Jan 13 j 14:00	0°≈	
retrograde	-6854 Jan 16 j 18:02	10° Ω 53'50		evening set	-6848 Mar 14 j 22:13	12°≈38'51	
opposition	-6854 Mar 18 j 22:42	6°Ω01'03	2°03'13	evening set	-6848 Mar 25 j 06:46	15° ≈	
min. Earth dist.	-6854 Mar 19 j 19:31	5° Ω 54'26	4.25632 AU		-0040 Mai 25 j 00.40	15 ~	
direct	-6854 May 19 j 15:20	1° Ω 04'59	4.23032 AU	conjunction	-6848 Mar 28 j 16:10	15° ≈ 46'20	1015137
direct	-6854 Sep 02 j 03:00	15°Ω		minimum elong	-6848 Mar 28 j 16:14	15°≈46'23	1°15'58
avanina aat	-6854 Sep 21 j 12:22	19° Ω 21'25		max. Earth dist.	-	15 ≈40 25 16°≈01'36	
evening set max. Earth dist.	-6854 Sep 21 j 12:22 -6854 Oct 03 j 04:29		6.21102 AU	max. Earth dist.	-6848 Mar 29 j 18:59 -6848 Apr 11 j 10:02	16°≈01'36 18°≈53'36	6.16479 AU
max. Earm dist.	-0834 Oct 03 J 04.29	22 8602 39	0.21102 AU	morning rise			
· · · · · · · · · · · ·	(054 0-4 04:00.20	220 (1 411 1	1010100	4 1 -	-6848 Jun 03 j 12:21	0°){	
conjunction	-6854 Oct 04 j 00:28	22°Ω14'11	1°10'08	retrograde	-6848 Aug 15 j 06:45	7°) (32'43	1026104
minimum elong	-6854 Oct 04 j 00:32	22°Ω14'14	1°10'27	opposition	-6848 Oct 13 j 12:32	2°) (31'16	
morning rise	-6854 Oct 16 j 13:05	25° Ω 07'28		min. Earth dist.	-6848 Oct 13 j 01:42		4.21131 AU
	-6854 Nov 07 j 05:57	0° m)			-6848 Nov 02 j 01:26	30°R≈	
retrograde	-6853 Feb 20 j 13:15	13° m 50'07		direct	-6848 Dec 12 j 08:03	27°≈28'12	
opposition	-6853 Apr 22 j 19:53	8° m 54'24	1°14'44		-6847 Jan 22 j 03:06	0° ∀	
min. Earth dist.	-6853 Apr 23 j 03:45	8° m 51'52	4.16525 AU	evening set	-6847 Apr 19 j 08:41	16°) €06'36	
direct	-6853 Jun 22 j 07:15	4° m 00'42					
evening set	-6853 Oct 24 j 03:30	22° m 33'17		conjunction	-6847 May 03 j 00:45	19°) €09'34	
				minimum elong	-6847 May 03 j 00:48	19° ∺ 09'36	
conjunction	-6853 Nov 05 j 21:25	25° Mp 32'28	0°26'35	max. Earth dist.	-6847 May 03 j 05:22	19° 米 12′09	6.25637 AU
minimum elong	-6853 Nov 05 j 21:27	25° m 32'29	0°26'41	morning rise	-6847 May 16 j 14:49	22°) 11'22	
max. Earth dist.	-6853 Nov 05 j 20:29	25° m 31'55	6.12200 AU		-6847 Jun 22 j 09:33	0° Υ	
morning rise	-6853 Nov 18 j 17:50	28° m 33'03		retrograde	-6847 Sep 16 j 09:11	10° Y ′00′55	
	-6853 Nov 24 j 23:44	0∘ ⊽		opposition	-6847 Nov 14 j 18:01	5° Y 03′20	
retrograde	-6852 Mar 27 j 16:17	18° ഫ 03'25		min. Earth dist.	-6847 Nov 14 j 22:13		4.29639 AU
desc. node	-6852 May 21 j 22:25	13° ≏ 48'52			-6846 Jan 12 j 01:36	30° ₹ ₩	
opposition	-6852 May 27 j 16:51	13° ≏ 03'42	-0°01'11	direct	-6846 Jan 14 j 21:07	29° ¥ 59'15	
min. Earth dist.	-6852 May 27 j 08:32	13° ჲ 06′26	4.08494 AU		-6846 Jan 17 j 16:34	0 ° Υ	
direct	-6852 Jul 25 j 21:40	8° ≙ 10'49		asc. node	-6846 Feb 16 j 11:39	1° Y 35'01	
evening set	-6852 Nov 26 j 10:20	27° ≏ 01'46		evening set	-6846 May 23 j 05:33	18° Ƴ 18'14	
conjunction	-6852 Dec 09 j 12:32	0° M ₀07'19		conjunction	-6846 Jun 05 j 14:49	21° Y 15'27	0°13'42
minimum elong	-6852 Dec 09 j 12:29	0° M 07′17	0°27'30	minimum elong	-6846 Jun 05 j 14:48	21° Y 15'26	0°13'49
	-6852 Dec 09 j 00:10	0°M₊		behind sun begin	-6846 Jun 05 j 10:37	21° Y 13'08	
max. Earth dist.	-6852 Dec 10 j 11:09	0° M 20'42	6.05813 AU	behind sun end	-6846 Jun 05 j 18:58	21° Y 17'44	
morning rise	-6852 Dec 22 j 17:55	3° M ₊14'41		max. Earth dist.	-6846 Jun 04 j 22:35	21° Y ′06′28	6.32896 AU
	-6851 Feb 14 j 22:11	15°M		morning rise	-6846 Jun 18 j 20:41	24° Y 10'56	
retrograde	-6851 May 03 j 11:43	23°M16'57			-6846 Jul 16 j 02:35	9° 8	
opposition	-6851 Jul 02 j 22:11	18° M ₊13'42	-1°18'48	retrograde	-6846 Oct 17 j 15:17	11° 8 28'31	
min. Earth dist.	-6851 Jul 02 j 01:27	18° M 20′38	4.04443 AU	opposition	-6846 Dec 16 j 11:27	6° 8 34'23	0°54'06
	-6851 Jul 29 j 08:32	15°RM		min. Earth dist.	-6846 Dec 17 j 03:38	6° 8 29'07	4.35154 AU
direct	-6851 Aug 30 j 05:45	13°M19'37		direct	-6845 Feb 16 j 13:29	1° 8 30'58	
	-6851 Sep 30 j 23:00	15° M ₊			-6845 Jun 03 j 04:34	15° 8	
	-6851 Dec 22 j 00:34	0° ∡ ¹		evening set	-6845 Jun 24 j 16:41	19° 8 36'54	
evening set	-6850 Jan 01 j 09:36	2° ∡ ¹24'54		max. Earth dist.	-6845 Jul 06 j 08:46	22° 8 11'19	6.36186 AU
conjunction	-6850 Jan 14 j 19:07	5° х ³34'12	-1°12'02	conjunction	-6845 Jul 07 j 16:09	22° 8 28'41	0°58'29
minimum elong	-6850 Jan 14 j 19:03	5° х 34′10	1°12'26	minimum elong	-6845 Jul 07 j 16:05	22° 8 28'38	0°58'49
max. Earth dist.	-6850 Jan 16 j 08:07	5° ∡ ¹56'01	6.04347 AU	morning rise	-6845 Jul 20 j 12:15	25° 8 18'48	
morning rise	-6850 Jan 28 j 08:04	8° ∡ ¹45′12			-6845 Aug 11 j 06:45	Π °0	
retrograde	-6850 Jun 08 j 19:16	28° ∡ ¹48'26		retrograde	-6845 Nov 17 j 23:53	12° ∏ 28′20	
opposition	-6850 Aug 07 j 15:37	23° х ⁴43′19	-2°07'32	opposition	-6844 Jan 17 j 08:30	7° ∏ 36′24	1°49'15

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 6 Attention, astronomical year style is used: The year -6844 in astronomical counting style is the year 6845 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	ie year -6844 i	in astronomical co	ounting style is the year	r 6845 BCE in historical c	ounting style.	
min. Earth dist.	-6844 Jan 18 j 09:49	7° Ⅱ 28'17	4.36123 AU	max. Earth dist.	-6838 Jan 21 j 16:00	11° ∡ ¹06'40	6.04367 AU
direct	-6844 Mar 19 j 22:38	2° Ⅱ 34'58		morning rise	-6838 Feb 02 j 14:31	13° ∡ ¹54'54	
evening set	-6844 Jul 25 j 04:51	20° Ⅲ 36'43			-6838 Apr 23 j 19:44	0°ප	
max. Earth dist.	-6844 Aug 05 j 05:48	23° Ⅱ 04'11	6.34609 AU	retrograde	-6838 Jun 13 j 22:35	3° る 56'26	
					-6838 Aug 04 j 04:24	30°Ŗ ⋌ 7	
conjunction	-6844 Aug 06 j 19:41	23° Ⅲ 25'21		opposition	-6838 Aug 12 j 15:44	28° ∡ ′51'18	
minimum elong	-6844 Aug 06 j 19:39	23° Ⅲ 25'19	1°26'43	min. Earth dist.	-6838 Aug 11 j 14:13		4.06286 AU
morning rise	-6844 Aug 19 j 08:07	26° Ⅱ 12'50		direct	-6838 Oct 09 j 19:26	23° ∡ 53′50	
	-6844 Sep 05 j 15:41	0°©			-6838 Dec 12 j 06:52	0°る	
retrograde	-6844 Dec 19 j 01:57	13°538'21	2012122	evening set	-6837 Feb 12 j 13:35	13° る 02'29	
opposition	-6843 Feb 17 j 23:31	8°5346'45	2°13'32		(027 F. 1 - 27 : 05 27	1/0710113	1020150
min. Earth dist.	-6843 Feb 19 j 01:39	8°538'27	4.32217 AU	conjunction	-6837 Feb 26 j 05:26	16° る 12'13	
direct	-6843 Apr 21 j 08:13	3°548'05		minimum elong	-6837 Feb 26 j 05:27	16° る 12'14	
evening set	-6843 Aug 25 j 09:19	21° © 54'21		max. Earth dist. morning rise	-6837 Feb 27 j 20:44 -6837 Mar 11 j 22:59	16° る 33'00	6.09200 AU
conjunction	-6843 Sep 06 j 20:07	24°5643'31	1°29'17	morning rise	-6837 Apr 30 j 08:08	0°≈	
minimum elong	-6843 Sep 06 j 20:08	24°543'32	1°29'44	retrograde	-6837 Jul 18 j 18:11	0 ∞ 8°≈47'24	
max. Earth dist.	-6843 Sep 05 j 12:11	24°\$25'23	6.28615 AU	min. Earth dist.	-6837 Sep 15 j 05:03	3°≈50'40	4.13313 AU
morning rise	-6843 Sep 19 j 05:51	27° © 32'21	0.20013 AC	opposition	-6837 Sep 16 j 02:18	3°≈43'24	
morning rise	-6843 Sep 30 j 05:48	0°Ω		оррозиюн	-6837 Oct 17 j 00:58	30°Rる	2 03 11
	-6842 Jan 02 j 09:44	15° Ω		direct	-6837 Nov 13 j 21:41	28° ප් 42'37	
retrograde	-6842 Jan 21 j 12:58	15° Ω 33'48		ancet	-6837 Dec 12 j 03:10	0°≈	
retrograde	-6842 Feb 09 j 16:31	15°RΩ			-6836 Mar 08 j 07:30	15° ≈	
opposition	-6842 Mar 23 j 18:29	10° Ω 40'42	1°58'38	evening set	-6836 Mar 20 j 02:09	17° ≈ 38'04	
min. Earth dist.	-6842 Mar 24 j 14:12	10°Ω34'26		evening sec	0050 1.141 20 1 02.05	1, 100001	
direct	-6842 May 24 j 07:38	5° Ω 44'59		conjunction	-6836 Apr 02 j 20:05	20° ≈ 45'00	-1°11'11
	-6842 Aug 15 j 04:52	15° Ω		minimum elong	-6836 Apr 02 j 20:10	20° ≈ 45'03	
evening set	-6842 Sep 26 j 00:30	24° Ω 03'04		max. Earth dist.	-6836 Apr 03 j 20:17	20°≈58'44	
S	1 3			morning rise	-6836 Apr 16 j 13:46	23° ≈ 51'36	
conjunction	-6842 Oct 08 j 13:01	26° Ω 56'35	1°05'13	C	-6836 May 14 j 15:15	0°) €	
minimum elong	-6842 Oct 08 j 13:05	26° Ω 56'37	1°05'29	retrograde	-6836 Aug 19 j 23:30	12°) 22'45	
max. Earth dist.	-6842 Oct 07 j 17:53	26° Ω 45'30		opposition	-6836 Oct 18 j 04:44	7° ¥ 21′50	-1°17'19
morning rise	-6842 Oct 21 j 02:37	29° Ω 50'47		min. Earth dist.	-6836 Oct 17 j 20:08	7°) €24'45	4.22647 AU
	-6842 Oct 21 j 18:40	0° m		direct	-6836 Dec 17 j 06:06	2°) 18′35	
retrograde	-6841 Feb 25 j 12:56	18° m 40'12		evening set	-6835 Apr 24 j 06:47	20°) 52′58	
opposition	-6841 Apr 27 j 19:17	13° m 43'53	1°05'16				
min. Earth dist.	-6841 Apr 28 j 00:55	13° m 42'04	4.15249 AU	conjunction	-6835 May 07 j 22:14	23°) ₹55′01	
direct	-6841 Jun 27 j 02:18	8° m 50'19		minimum elong	-6835 May 07 j 22:16	23° ¥ 55′03	
evening set	-6841 Oct 28 j 20:25	27° TD 25'37		max. Earth dist.	-6835 May 08 j 01:35	23° ¥ 56′53	6.27212 AU
	-6841 Nov 08 j 19:43	0∘ ⊽		morning rise	-6835 May 21 j 11:12	26° ¥ 55'45	
					-6835 Jun 04 j 12:11	0° Y	
conjunction	-6841 Nov 10 j 15:36	0° ჲ 25'49		retrograde	-6835 Sep 20 j 18:43	14° Ƴ 37'59	
minimum elong	-6841 Nov 10 j 15:38	0° ≏ 25'50	0°19'18	opposition	-6835 Nov 19 j 06:12	9° Y 40'56	
max. Earth dist.	-6841 Nov 10 j 18:47	0° Ω 27'41	6.11018 AU	min. Earth dist.	-6835 Nov 19 j 10:57	9° Y 39'22	4.31151 AU
morning rise	-6841 Nov 23 j 13:11	3° ≏ 27'28		asc. node	-6835 Dec 27 j 10:12	5° Y 26'49	
retrograde	-6840 Apr 01 j 20:45	23° Ω 03'54		direct	-6834 Jan 19 j 12:41	4°Υ36'54	
desc. node	-6840 Apr 01 j 01:20	23° Ω 03'50	0010110	evening set	-6834 May 27 j 21:04	22° Y 51'39	6 2 4222 AXX
opposition	-6840 Jun 01 j 18:57	18° 2 03'40		max. Earth dist.	-6834 Jun 09 j 09:39	25° Ƴ 37'08	6.34233 AU
min. Earth dist.	-6840 Jun 01 j 09:19	18° Ω 06'50	4.07508 AU		(0241 10:0450	2500047144	0020122
direct	-6840 Jul 30 j 20:16 -6840 Nov 22 j 12:29	13° ♀ 10'44 0° ጤ		conjunction minimum elong	-6834 Jun 10 j 04:50 -6834 Jun 10 j 04:48	25° Y 47'44 25° Y 47'43	0°20'33 0°20'42
	•			•	_	25° \ 4743 28° \ Y42'06	0°20'42
evening set	-6840 Dec 01 j 09:42	2°M04'38		morning rise	-6834 Jun 23 j 09:20 -6834 Jun 29 j 07:59	0° 8	
agnismation	6940 Dec 14 : 12:52	50 m 10150	0024120			15° 8	
conjunction minimum elong	-6840 Dec 14 j 12:53 -6840 Dec 14 j 12:50	5°M10'58 5°M10'56		retrograde	-6834 Sep 27 j 23:10 -6834 Oct 22 j 00:02	15° 8 55'01	
max. Earth dist.	-6840 Dec 14 j 12:34	5°M24'59	6.05093 AU	icuogiauc	-6834 Nov 14 j 23:12	15°R 8	
morning rise	-6840 Dec 27 j 19:41	8°M19'12	0.030/3 AU	opposition	-6834 Dec 20 j 21:28	11° 8 01'19	1°03'02
	-6839 Jan 26 j 03:20	15°M		min. Earth dist.	-6834 Dec 21 j 16:00	10° 8 55'18	4.36219 AU
retrograde	-6839 May 08 j 15:27	28°M24'31		direct	-6833 Feb 21 j 03:43	5° 8 58'06	1.50217 AU
min. Earth dist.	-6839 Jul 07 j 01:39	23°M28'29	4.04080 AU		-6833 May 16 j 09:14	15° 8	
opposition	-6839 Jul 08 j 00:25	23°M20'51		evening set	-6833 Jun 29 j 01:58	24° 8 00'43	
direct	-6839 Sep 04 j 05:16	18°M26'25	• •	max. Earth dist.	-6833 Jul 10 j 14:59	26° 8 33'19	6.36866 AU
	-6839 Dec 04 j 03:18	0° √		Durin dist.	0000 vai 10 j 14.07	20 033 17	0.55000710
evening set	-6838 Jan 06 j 14:16	7° ∡ ³33'54		conjunction	-6833 Jul 12 j 00:07	26° 8 51'38	1°03'30
<i>3</i>	jv			minimum elong	-6833 Jul 12 j 00:03	26° 8 51'36	1°03'52
conjunction	-6838 Jan 20 j 00:54	10° ∡ '43'37	-1°16'30	morning rise	-6833 Jul 24 j 18:51	29° 8 40'55	
minimum elong	-6838 Jan 20 j 00:50	10° х 43′35			-6833 Jul 26 j 05:36	0°Щ	
S	,	_			,		

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6833 in astronomical counting style is the year 6834 BCE in historical counting style. -6833 Nov 22 j 06:35 16°**Ⅱ**49'27 direct -6827 Sep 09 j 06:30 23°MJ35'40 retrograde -6832 Jan 21 j 18:12 11°**I**I57'40 1°54'32 -6827 Nov 13 j 00:44 0°**∡**¹ opposition -6832 Jan 22 j 19:46 11°**Ⅱ**49'29 4.36390 AU -6826 Jan 11 j 20:18 12°**∡**¹46′02 min. Earth dist. evening set -6832 Mar 24 j 08:04 6°**I**I56'32 direct -6832 Jul 29 j 10:35 24°**I**56'51 evening set conjunction -6826 Jan 25 j 07:52 15° **₹** 56'11 -1°20'20 max. Earth dist. -6826 Jan 25 j 07:48 -6832 Aug 09 j 10:34 27°**Ⅲ**23'56 6.34424 AU minimum elong 15°**₹** 56'09 1°20'45 -6826 Jan 27 j 00:48 max. Earth dist. 16°**х** 20′17 6.04310 AU conjunction -6832 Aug 11 j 00:29 27°**Ⅱ**45′08 1°28'13 morning rise -6826 Feb 07 j 22:25 19°**х** 07'49 minimum elong -6832 Aug 11 j 00:26 27°**Ⅱ**45′07 1°28'39 -6826 Mar 29 j 17:32 0°궁 -6832 Aug 21 j 01:52 0ಂತಾ retrograde -6826 Jun 19 j 00:15 9°る07'09 morning rise -6832 Aug 23 j 12:04 0°532'22 opposition -6826 Aug 17 j 16:17 4°る01'56 -2°12'57 -6832 Dec 23 j 12:50 retrograde 18°900'40 min. Earth dist. -6826 Aug 16 j 13:28 4°る11'05 4.06780 AU opposition -6831 Feb 22 j 11:14 13°**©**09'03 2°13'49 -6826 Sep 21 j 10:26 30°₽**⋌** min. Earth dist. -6831 Feb 23 j 14:21 13°9500'27 4.31578 AU direct -6826 Oct 14 j 20:03 29°**х** 03′57 direct -6831 Apr 25 j 18:58 8°9510'45 -6826 Nov 07 j 10:58 0°정 evening set -6831 Aug 29 j 14:44 26°9517'51 evening set -6825 Feb 17 j 20:45 18°る12'00 max. Earth dist. -6831 Sep 09 j 16:22 28°9548'35 6.27563 AU conjunction -6825 Mar 03 j 13:03 21°る21'31 -1°29'06 conjunction -6831 Sep 11 j 01:21 29°507'22 1°27'34 minimum elong -6825 Mar 03 j 13:05 21°**る**21'32 1°29'33 minimum elong -6831 Sep 11 j 01:23 29°**©**07'23 1°27'59 max. Earth dist. -6825 Mar 05 j 03:01 21°る43'28 6.10165 AU -6831 Sep 14 j 21:48 $0^{\circ}\Omega$ morning rise -6825 Mar 17 j 06:55 24°る31'36 -6831 Sep 23 j 11:24 1°Ω56'44 -6825 Apr 10 j 17:25 0°≈ morning rise -6831 Nov 27 j 12:25 15°Ω retrograde -6825 Jul 23 i 15:19 13°≈49'11 retrograde -6830 Jan 26 j 04:07 20°**Ω**04'28 opposition -6825 Sep 20 j 22:28 8°≈45'22 -2°00'28 -6830 Mar 28 j 10:06 15°**Ω**11'00 1°53'31 min. Earth dist. -6825 Sep 20 j 02:53 8°**≈**52'04 4.14599 AU opposition min. Earth dist. -6830 Mar 29 j 04:30 15°**Ω**05'08 4.23098 AU -6825 Nov 18 j 22:51 3°≈44'02 direct -6830 Mar 29 j 20:38 -6824 Feb 19 j 02:57 15°RΩ 15°≈ -6830 May 28 j 18:39 -6824 Mar 25 j 05:28 22°≈36'13 direct 10°**Ω**15'35 evening set -6830 Jul 24 j 23:33 15°€ -6824 Apr 07 j 23:27 25°≈42'30 -1°06'14 -6830 Sep 30 j 09:06 28°**Ω**36'48 conjunction evening set -6824 Apr 07 j 23:32 -6830 Oct 06 j 09:06 0° m minimum elong 25°≈42'33 1°06'32 -6824 Apr 08 j 22:36 max. Earth dist. 25°≈55'36 6.19335 AU -6830 Oct 12 j 22:30 28°≈48'15 conjunction 1° mp 31'21 1° 00'02 -6824 Apr 21 j 16:36 morning rise -6830 Oct 12 j 22:34 -6824 Apr 27 j 00:57 minimum elong 1°m/31'23 1°00'18 0°**₩** 1° Tp 21'56 -6824 Aug 24 j 13:45 max. Earth dist. -6830 Oct 12 j 06:18 6.18243 AU retrograde 17°**₩** 10'57 -6824 Oct 22 j 19:56 12°**光**10'31 -1°08'05 4° m 26'39 morning rise -6830 Oct 25 j 12:56 opposition 12° **€** 13'04 4.24146 AU retrograde -6829 Mar 02 j 11:35 23° m 24'33 min. Earth dist. -6824 Oct 22 j 12:23 -6829 May 02 j 16:08 18° m/27'48 0°55'38 direct -6824 Dec 22 j 00:59 7°**)**€07'00 opposition min. Earth dist. -6829 May 02 j 20:56 18° Mp 26'15 4.13520 AU -6823 Apr 29 j 04:10 25° ¥37'33 evening set -6829 Jul 01 j 18:53 13° Mp 34'26 direct -6829 Oct 23 j 20:32 0∘**⊽** conjunction -6823 May 12 j 18:35 28°\dagger38'39 -0°22'18 -6829 Nov 02 j 11:54 2°**₽**14'28 -6823 May 12 j 18:37 28°\circ\tag{38'40} 0°22'21 evening set minimum elong max. Earth dist. -6823 May 12 j 17:14 28°¥37'54 6.28593 AU -6829 Nov 15 j 08:09 5°**2**15'53 0°11'57 -6823 May 18 j 20:58 $0^{\circ}\Upsilon$ conjunction -6829 Nov 15 j 08:09 -6823 May 26 j 06:40 1°Y38'23 minimum elong 5°**Ω**15'54 0°11'56 morning rise 19°**Y**14'24 behind sun begin -6829 Nov 15 j 02:31 5°**♀**12'35 retrograde -6823 Sep 25 i 06:27 behind sun end -6829 Nov 15 j 13:48 5°**₽**19'13 asc. node -6823 Nov 05 i 22:06 16° Y 34'01 max. Earth dist. -6829 Nov 15 j 12:38 5°**£**18'31 6.09346 AU opposition -6823 Nov 23 j 18:32 14° \bar 17'50 0° 03'20 morning rise -6829 Nov 28 i 07:16 8°**₽**18'56 min. Earth dist. -6823 Nov 24 j 02:14 14°**℃**15'17 4.32290 AU desc. node -6828 Feb 11 i 03:30 23°**£**31'21 direct -6822 Jan 24 j 06:02 9°Υ13'45 -6828 Apr 06 j 23:09 28°**₽**03'26 -6822 Jun 01 j 12:22 27°**Y**25'37 retrograde evening set -6828 Jun 06 j 19:50 23°**£**02'40 -0°24'00 -6822 Jun 13 j 05:11 0°8 opposition -6828 Jun 06 j 07:15 23°**₽**06'49 4.06063 AU min. Earth dist. direct -6828 Aug 04 j 16:06 18°**♀**09'39 conjunction -6822 Jun 14 j 18:57 0°**8**20'50 0°27'22 -6828 Nov 05 j 01:15 0°M minimum elong -6822 Jun 14 j 18:55 0°**8**20'49 0°27'33 -6822 Jun 13 j 22:10 -6828 Dec 06 j 09:26 7°M08'30 max. Earth dist. 0°**8**09'22 6.35033 AU evening set morning rise -6822 Jun 27 j 21:54 3°**8**14'16 -6828 Dec 19 j 14:00 10°M15'52 -0°41'37 15°8 conjunction -6822 Aug 26 j 08:47 -6822 Oct 26 j 08:39 20°**8**24'38 minimum elong -6828 Dec 19 j 13:56 10°M₁5'50 0°41'52 retrograde 15°**8**31'17 1°11'49 max. Earth dist. -6828 Dec 20 j 17:45 10°M32′20 6.04014 AU opposition -6822 Dec 25 j 09:00 morning rise -6827 Jan 01 j 21:53 13°M25'05 min. Earth dist. -6822 Dec 26 j 04:14 15°**8**25'02 4.36647 AU -6827 Jan 08 j 16:06 15°M⋅ -6822 Dec 29 j 09:35 15°R₩ -6827 Mar 26 j 02:10 0°**∡** direct -6821 Feb 25 j 16:06 10°**8**28'17 retrograde -6827 May 13 j 21:43 3°**х** 34′32 -6821 Apr 24 j 03:08 15°8 -6827 Jul 01 j 20:54 30°RM. evening set -6821 Jul 03 j 13:32 28°**8**29'45 -6827 Jul 12 j 03:37 28°M38'19 4.03497 AU -6821 Jul 10 j 09:27 $0^{\circ}\Pi$ min. Earth dist. -6827 Jul 13 j 02:58 28°MJ30'27 -1°36'37 max. Earth dist. -6821 Jul 14 j 22:47 1°**Д**00'28 6.36872 AU opposition

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6821 in astronomical counting style is the year 6822 BCE in historical counting style. -6821 Jul 16 j 10:10 1°II20'03 1°08'19 min. Earth dist. -6815 Jul 17 j 04:19 3°**х** 49'38 4.03886 AU conjunction -6821 Jul 16 j 10:06 1°**Ⅲ**20′01 1°08'41 -6815 Jul 18 j 05:40 3°**₹**'41'05 -1°44'25 minimum elong opposition -6821 Jul 29 j 03:44 4°**Ⅱ**08'49 -6815 Aug 18 j 06:27 30°RM morning rise -6821 Nov 26 j 19:39 21°**II**18'38 -6815 Sep 14 j 07:03 28°M45'57 direct retrograde -6820 Jan 26 j 07:39 16°**Ⅲ**27′01 1°59'27 -6815 Oct 11 j 10:07 0°**⊼** opposition -6820 Jan 27 j 11:05 -6814 Jan 17 j 01:54 min. Earth dist. 16°**Ⅱ**18'15 4.35987 AU evening set 17°**₹**55'46 -6820 Mar 28 j 22:39 direct 11°**Ⅲ**26′13 29°**Ⅲ**27'09 -6814 Jan 30 j 14:08 21°**х** 05'49 -1°23'32 evening set -6820 Aug 02 j 20:23 conjunction -6814 Jan 30 j 14:04 -6820 Aug 05 j 07:26 0°9 minimum elong 21°**х** 05'47 1°23'58 21°**х** 29'49 max. Earth dist. -6820 Aug 13 j 19:14 1°953'56 6.33627 AU max. Earth dist. -6814 Feb 01 j 07:00 6.05149 AU 24°**∡**17'15 morning rise -6814 Feb 13 j 05:16 -6820 Aug 15 j 09:35 -6814 Mar 10 j 08:44 0°궁 conjunction 2°9515'25 1°29'45 -6820 Aug 15 j 09:33 -6814 Jun 23 j 23:12 14°る11'02 minimum elong 2°9515'24 1°30'12 retrograde morning rise -6820 Aug 27 j 20:36 5°9502'44 opposition -6814 Aug 22 j 13:58 9°る05'51 -2°14'02 retrograde -6820 Dec 28 j 04:09 22°935'47 min. Earth dist. -6814 Aug 21 j 12:07 9°る14'41 4.07973 AU opposition -6819 Feb 27 j 04:37 17°**5**644'01 2°13'24 direct -6814 Oct 19 j 21:03 4°る07'21 min. Earth dist. -6819 Feb 28 j 06:24 17°535'50 4.30453 AU evening set -6813 Feb 23 j 00:25 23°る12'40 direct -6819 Apr 30 j 08:34 12°5546'09 -6819 Aug 29 j 23:38 $0^{\circ}\Omega$ conjunction -6813 Mar 08 j 17:16 26°る21'44 -1°27'38 evening set -6819 Sep 03 j 01:43 0°**Q**55′21 minimum elong -6813 Mar 08 j 17:18 26°る21'45 1°28'02 max. Earth dist. -6819 Sep 14 j 05:55 3°**£**28′01 6.26212 AU max. Earth dist. -6813 Mar 10 j 06:47 26°る43'21 6.11607 AU morning rise -6813 Mar 22 i 11:05 29°る31'11 conjunction -6819 Sep 15 i 12:24 3°**Ω**45'26 1°25'13 -6813 Mar 24 i 13:38 0°≈ minimum elong -6819 Sep 15 i 12:27 3°**Ω**45′28 1°25'37 -6813 Jun 09 i 08:41 15°**≈** morning rise -6819 Sep 27 j 22:40 6°**Ω**35'29 -6813 Jul 28 j 08:03 18°≈40'20 retrograde -6819 Nov 05 j 21:36 15°**Ω** -6813 Sep 15 j 07:42 15°R≈ -6818 Jan 31 j 03:26 24°**Ω**50′26 -6813 Sep 25 j 14:22 retrograde opposition 13°≈36'58 -1°55'04 -6818 Apr 02 j 08:40 19°**Ω**56'41 1°47'21 -6813 Sep 24 j 20:10 min. Earth dist. 13°≈43'11 4.16130 AU opposition -6818 Apr 03 j 02:22 19°**Ω**51'02 4.21602 AU -6813 Nov 23 j 18:01 min. Earth dist. direct 8°≈35'17 -6818 Jun 02 j 14:13 -6812 Jan 29 j 12:35 direct 15°**Ω**01'40 15°≈ -6818 Sep 19 j 22:52 -6812 Mar 30 j 04:17 0° mb evening set 27°≈23'50 -6812 Apr 10 j 17:46 -6818 Oct 05 j 00:15 0°**)**€ 3° m 25'57 evening set -6818 Oct 17 j 14:22 6° Tp 21'28 0°54'10 -6812 Apr 12 j 21:55 0°¥29'25 -1°01'02 conjunction conjunction 6° To 21'31 $0^{\circ}54'24$ -6818 Oct 17 j 14:26 -6812 Apr 12 j 22:00 0°¥29'28 1°01'18 minimum elong minimum elong -6818 Oct 17 j 00:02 6° Mp 13'08 6.16760 AU -6812 Apr 13 j 15:57 0°**¥**39'35 6.20823 AU max. Earth dist. max. Earth dist. 3°**)** 34′22 -6818 Oct 30 j 06:00 -6812 Apr 26 j 14:47 morning rise 9° m 17'56 morning rise retrograde -6817 Mar 07 j 14:05 28° M 23'28 retrograde -6812 Aug 29 j 01:00 21°**)** 49'32 -6817 May 07 j 18:51 23° Mp 26'12 0°45'02 opposition -6812 Oct 27 j 07:35 16°¥49'37 -0°58'45 opposition min. Earth dist. -6817 May 07 j 20:07 23° m 25'47 4.12189 AU min. Earth dist. -6812 Oct 27 j 02:51 16°**)** 51'13 4.25445 AU -6817 Jul 06 j 16:05 18° Mp 33'05 direct -6812 Dec 26 j 17:21 11° **X** 45'53 direct -6817 Oct 06 j 05:01 0∘**⊽** -6811 May 02 j 20:35 $0^{\circ}\Upsilon$ -6817 Nov 07 j 09:04 7°**£**16'14 -6811 May 03 j 21:21 0°Y13'38 evening set evening set -6817 Nov 20 j 06:35 10°**△**18'40 0°04'13 conjunction -6811 May 17 j 11:05 3°Y14'00 -0°15'24 conjunction -6817 Nov 20 j 06:34 -6811 May 17 j 11:07 3°**Y**14′00 minimum elong 10°**♀**18'40 0°04'10 minimum elong 0°15'25 -6817 Nov 19 j 22:35 -6811 May 17 j 09:13 3°Y12'58 behind sun begin 10°**£**13'58 behind sun begin 3°Y15'03 behind sun end -6817 Nov 20 j 14:34 10°**£**23′21 behind sun end -6811 May 17 j 13:00 3°Υ11'56 max. Earth dist. -6817 Nov 20 j 15:52 10°**£**24'08 6.08321 AU max. Earth dist. -6811 May 17 j 07:22 6.29621 AU -6817 Dec 03 i 06:51 13°**£**22'43 morning rise -6811 May 30 i 21:56 6°Y12'52 morning rise -6817 Dec 20 j 19:40 17°**£**25'36 -6811 Sep 16 j 15:29 23°**Y**27'58 desc. node asc. node -6816 Feb 25 j 21:28 0°M -6811 Sep 29 j 14:38 23°**Y**44'25 retrograde 3°M12'21 -6811 Nov 28 j 04:12 18°**Ƴ**48'24 0°13'29 retrograde -6816 Apr 12 j 07:08 opposition 18°**Y**45'19 -6816 May 28 j 22:58 30°R<u>Ω</u> min. Earth dist. -6811 Nov 28 j 13:33 4.32977 AU -6810 Jan 28 j 17:51 13°Y44'25 min. Earth dist. -6816 Jun 11 j 10:32 28°**£**15'44 4.05459 AU direct -6816 Jun 12 j 00:37 opposition 28°**♀**11'04 -0°35'32 -6810 May 28 j 05:36 0°8 direct -6816 Aug 09 j 18:29 23°**♀**17'58 evening set -6810 Jun 06 j 01:31 1°**8**55'08 -6816 Oct 15 j 08:47 0°M -6810 Jun 18 j 05:33 4°**8**35'50 max. Earth dist. 6.35315 AU -6816 Dec 11 j 12:18 12°M18'33 evening set -6816 Dec 22 j 21:16 15°M⋅ -6810 Jun 19 j 06:40 4°**8**49'41 0°33'52 conjunction 4°**8**49'39 0°34'05 minimum elong -6810 Jun 19 j 06:37 conjunction -6816 Dec 24 j 17:52 15°M26'26 -0°48'28 morning rise -6810 Jul 02 j 08:29 7°**8**42'31 minimum elong -6816 Dec 24 j 17:48 15°M26'23 0°48'45 -6810 Aug 06 j 00:29 15°8 max. Earth dist. -6816 Dec 26 j 00:31 15°M44'35 6.03881 AU retrograde -6810 Oct 30 j 19:20 24°**8**52'20 morning rise -6815 Jan 07 j 02:55 18°M36'09 opposition -6810 Dec 29 j 19:53 19°**8**59'20 1°20'04 -6815 Feb 28 j 06:58 0°×7 min. Earth dist. -6810 Dec 30 j 17:31 19°**8**52'19 4.36535 AU -6815 May 19 j 01:29 8°**х** 45′27 -6809 Feb 24 j 01:58 15°R₩ retrograde

Attention, astronomic direct	-6809 Mar 02 j 05:19	14° 8 56'33	n astronomicar ce	evening set	-6804 Dec 16 j 14:30	17°M25'39	
direct	-6809 Mar 08 j 09:08	15° 8		evening set	-0804 Dec 10 J 14.30	1/ 11623 39	
	-6809 Jun 24 j 07:08	0° Ⅱ		conjunction	-6804 Dec 29 j 20:58	20°M33'51	0°54'54
evening set	-6809 Jul 08 j 00:06	2° I I58'35		minimum elong	-6804 Dec 29 j 20:54	20°M33'49	0°55'13
max. Earth dist.	-6809 Jul 19 j 08:18		6.36362 AU	max. Earth dist.	-6804 Dec 31 j 05:16	20°M52'59	6.03981 AU
max. Earth dist.	0000 341 10 3 00.10	3 112037	0.30302 110	morning rise	-6803 Jan 12 j 06:58	23°M43'54	0.03701710
conjunction	-6809 Jul 20 j 19:44	5° Ⅱ 48'36	1°12'40		-6803 Feb 08 j 17:44	0° ∡ 7	
minimum elong	-6809 Jul 20 j 19:40	5° Ⅱ 48'34	1°13'03	retrograde	-6803 May 24 j 03:41	13° ∡ ′52'09	
morning rise	-6809 Aug 02 j 12:04	8° Ⅱ 37'06		min. Earth dist.	-6803 Jul 22 j 04:51	8° ₹ ¹56'08	4.04369 AU
retrograde	-6809 Dec 01 j 07:19	25° Ⅱ 50'01		opposition	-6803 Jul 23 j 06:25	8° ∡ ¹47'29	-1°51'23
opposition	-6808 Jan 30 j 21:59	20° Ⅱ 58′29	2°03'38	direct	-6803 Sep 19 j 08:40	3° ∡ 751'54	
min. Earth dist.	-6808 Feb 01 j 00:44	20° Ⅱ 49'57	4.35148 AU	evening set	-6802 Jan 22 j 06:02	23° ∡ °01′05	
direct	-6808 Apr 02 j 10:55	15° Ⅱ 58′07					
	-6808 Jul 19 j 22:44	0 \circ \odot		conjunction	-6802 Feb 04 j 19:09	26° ₰ 11'06	-1°26'07
evening set	-6808 Aug 07 j 06:56	4°900'48		minimum elong	-6802 Feb 04 j 19:06	26° ∡ 11′05	
max. Earth dist.	-6808 Aug 18 j 05:31	6° © 27'55	6.32518 AU	max. Earth dist.	-6802 Feb 06 j 13:29	26° ₹ ¹35'53	6.05963 AU
				morning rise	-6802 Feb 18 j 10:43	29° ∡ ¹22'20	
conjunction	-6808 Aug 19 j 19:21	6°549'11	1°30'43		-6802 Feb 21 j 03:44	0°る	
minimum elong	-6808 Aug 19 j 19:20	6°949'11	1°31'10	retrograde	-6802 Jun 28 j 21:33	19°る10'41	4.00052 441
morning rise	-6808 Sep 01 j 06:00	9°536'46		min. Earth dist.	-6802 Aug 26 j 09:11		4.09052 AU
retrograde	-6807 Jan 01 j 23:34	27°515'38	201206	opposition	-6802 Aug 27 j 10:12	14°る05'40	-2°14'12
opposition min. Earth dist.	-6807 Mar 04 j 00:02 -6807 Mar 05 j 01:40	22° © 23'42 22° © 15'33	2°12'06 4.29152 AU	direct	-6802 Oct 24 j 19:05	9°る06'43 28°る09'51	
direct	-6807 May 05 j 02:39	17°926'16	4.29132 AU	evening set	-6801 Feb 28 j 03:03 -6801 Mar 08 j 03:22	28 3 0931 0° ≈	
direct	-6807 Aug 13 j 02:23	0°Ω			-0001 Wai 00 j 03.22	0 ~	
evening set	-6807 Sep 07 j 14:13	5° Ω 37'44		conjunction	-6801 Mar 13 j 20:05	1° ≈ 18'30	-1°25'34
max. Earth dist.	-6807 Sep 18 j 20:47		6.24838 AU	minimum elong	-6801 Mar 13 j 20:07	1°≈18'32	
man. Baran dige.	0007 5 0 p 10 j 2 0.17	0 001211	0.2 1030 110	max. Earth dist.	-6801 Mar 15 j 05:56		6.12846 AU
conjunction	-6807 Sep 20 j 01:08	8° Ω 28'28	1°22'16	morning rise	-6801 Mar 27 j 14:10	4° ≈ 27'28	
minimum elong	-6807 Sep 20 j 01:11	8° £ 28'30	1°22'39	Č	-6801 May 16 j 02:35	15° ≈	
morning rise	-6807 Oct 02 j 11:51	11° Ω 19'17		retrograde	-6801 Aug 01 j 23:11	23° ≈ 29'13	
-	-6807 Oct 18 j 21:14	15° Ω		opposition	-6801 Sep 30 j 05:44	18° ≈ 26'14	-1°48'59
retrograde	-6806 Feb 05 j 01:41	29° Ω 41'12		min. Earth dist.	-6801 Sep 29 j 13:15	18° ≈ 31'51	4.17405 AU
opposition	-6806 Apr 07 j 08:46	24° Ω 46′58	1°40'20		-6801 Oct 28 j 04:26	15°R ≈	
min. Earth dist.	-6806 Apr 07 j 23:06	24° Ω 42'23	4.20260 AU	direct	-6801 Nov 28 j 13:07	13° ≈ 24′08	
direct	-6806 Jun 07 j 09:10	19° Ω 52'19			-6801 Dec 30 j 07:46	15° ≈	
	-6806 Sep 01 j 23:26	0° m)			-6800 Mar 25 j 08:23	0° ∀	
evening set	-6806 Oct 09 j 16:36	8° Mp 18'45		evening set	-6800 Apr 04 j 02:43	2° ∺ 10′03	
conjunction	-6806 Oct 22 j 07:35	11° m 15'09	0°47'51	conjunction	-6800 Apr 17 j 20:16	5° ∺ 15'03	-0°55'26
minimum elong	-6806 Oct 22 j 07:39	11° m ₂ 15'07	0°48'02	minimum elong	-6800 Apr 17 j 20:20	5° ∺ 15'05	
max. Earth dist.							
	-	11°Mo9'10	6.15571 AU	max. Earth dist.	-6800 Apr 18 i 11:57	5° ₩ 23'53	6.22062 AU
	-6806 Oct 21 j 21:20	11° Mp 09'10 14° Mp 12'35	6.15571 AU	max. Earth dist. morning rise	-6800 Apr 18 j 11:57 -6800 May 01 j 12:27	5° ¥ 23'53 8° ¥ 19'14	6.22062 AU
morning rise	-	11° Mp 09'10 14° Mp 12'35 0° <u>Ω</u>	6.15571 AU	morning rise	-6800 May 01 j 12:27	5° ¥ 23'53 8° ¥ 19'14 26° ¥ 27'47	6.22062 AU
	-6806 Oct 21 j 21:20 -6806 Nov 04 j 00:13	14° m 12'35	6.15571 AU			8°) 19'14	
morning rise	-6806 Oct 21 j 21:20 -6806 Nov 04 j 00:13 -6805 Jan 23 j 15:29	14° Mp 12'35 0° <u>Ω</u>	6.15571 AU	morning rise retrograde	-6800 May 01 j 12:27 -6800 Sep 02 j 12:52	8° ¥ 19'14 26° ¥ 27'47	
morning rise	-6806 Oct 21 j 21:20 -6806 Nov 04 j 00:13 -6805 Jan 23 j 15:29 -6805 Mar 12 j 19:25	14° m 12'35 0° Ω 3° Ω 24'25 30° R m 28° m 26'33	6.15571 AU 0°34'00	morning rise retrograde opposition	-6800 May 01 j 12:27 -6800 Sep 02 j 12:52 -6800 Oct 31 j 19:30 -6800 Oct 31 j 17:00 -6800 Dec 31 j 09:02	8°\mathcal{H}19'14 26°\mathcal{H}27'47 21°\mathcal{H}28'28 21°\mathcal{H}29'19 16°\mathcal{H}24'39	-0°49'04
morning rise	-6806 Oct 21 j 21:20 -6806 Nov 04 j 00:13 -6805 Jan 23 j 15:29 -6805 Mar 12 j 19:25 -6805 Apr 30 j 16:55 -6805 May 12 j 22:23 -6805 May 12 j 21:54	14° m 12'35 0° Ω 3° Ω 24'25 30° R m 28° m 26'33 28° m 26'42		morning rise retrograde opposition min. Earth dist.	-6800 May 01 j 12:27 -6800 Sep 02 j 12:52 -6800 Oct 31 j 19:30 -6800 Oct 31 j 17:00 -6800 Dec 31 j 09:02 -6799 Apr 16 j 04:20	8°¥19'14 26°¥27'47 21°¥28'28 21°¥29'19 16°¥24'39 0°Υ	-0°49'04
morning rise retrograde opposition	-6806 Oct 21 j 21:20 -6806 Nov 04 j 00:13 -6805 Jan 23 j 15:29 -6805 Mar 12 j 19:25 -6805 Apr 30 j 16:55 -6805 May 12 j 22:23 -6805 May 12 j 21:54 -6805 Jul 11 j 16:39	14° m 12'35 0° Ω 3° Ω 24'25 30° R m 28° m 26'33 28° m 26'42 23° m 33'29	0°34'00	morning rise retrograde opposition min. Earth dist.	-6800 May 01 j 12:27 -6800 Sep 02 j 12:52 -6800 Oct 31 j 19:30 -6800 Oct 31 j 17:00 -6800 Dec 31 j 09:02	8°\mathcal{H}19'14 26°\mathcal{H}27'47 21°\mathcal{H}28'28 21°\mathcal{H}29'19 16°\mathcal{H}24'39	-0°49'04
morning rise retrograde opposition min. Earth dist. direct	-6806 Oct 21 j 21:20 -6806 Nov 04 j 00:13 -6805 Jan 23 j 15:29 -6805 Mar 12 j 19:25 -6805 Apr 30 j 16:55 -6805 May 12 j 22:23 -6805 May 12 j 21:54 -6805 Jul 11 j 16:39 -6805 Sep 15 j 14:09	14° m 12'35 0° <u>a</u> 3° <u>a</u> 24'25 30° R m 28° m 26'33 28° m 26'42 23° m 33'29 0° <u>a</u>	0°34'00	morning rise retrograde opposition min. Earth dist. direct evening set	-6800 May 01 j 12:27 -6800 Sep 02 j 12:52 -6800 Oct 31 j 19:30 -6800 Oct 31 j 17:00 -6800 Dec 31 j 09:02 -6799 Apr 16 j 04:20 -6799 May 08 j 15:05	8° X 19'14 26° X 27'47 21° X 28'28 21° X 29'19 16° X 24'39 0° Υ 4° Υ 50'14	-0°49'04 4.26527 AU
morning rise retrograde opposition min. Earth dist. direct desc. node	-6806 Oct 21 j 21:20 -6806 Nov 04 j 00:13 -6805 Jan 23 j 15:29 -6805 Mar 12 j 19:25 -6805 Apr 30 j 16:55 -6805 May 12 j 22:23 -6805 May 12 j 21:54 -6805 Jul 11 j 16:39 -6805 Sep 15 j 14:09 -6805 Oct 29 j 07:30	14° m 12'35 0° Ω 3° Ω 24'25 30° R m 28° m 26'33 28° m 26'42 23° m 33'29 0° Ω 9° Ω 03'56	0°34'00	morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-6800 May 01 j 12:27 -6800 Sep 02 j 12:52 -6800 Oct 31 j 19:30 -6800 Oct 31 j 17:00 -6800 Dec 31 j 09:02 -6799 Apr 16 j 04:20 -6799 May 08 j 15:05	8°\(\)\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	-0°49'04 4.26527 AU -0°08'22
morning rise retrograde opposition min. Earth dist. direct	-6806 Oct 21 j 21:20 -6806 Nov 04 j 00:13 -6805 Jan 23 j 15:29 -6805 Mar 12 j 19:25 -6805 Apr 30 j 16:55 -6805 May 12 j 22:23 -6805 May 12 j 21:54 -6805 Jul 11 j 16:39 -6805 Sep 15 j 14:09	14° m 12'35 0° <u>a</u> 3° <u>a</u> 24'25 30° R m 28° m 26'33 28° m 26'42 23° m 33'29 0° <u>a</u>	0°34'00	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-6800 May 01 j 12:27 -6800 Sep 02 j 12:52 -6800 Oct 31 j 19:30 -6800 Oct 31 j 17:00 -6800 Dec 31 j 09:02 -6799 Apr 16 j 04:20 -6799 May 08 j 15:05 -6799 May 22 j 03:48 -6799 May 22 j 03:49	8°\tau19'14 26°\tau27'47 21°\tau28'28 21°\tau29'19 16°\tau24'39 0°\tau 4°\tau50'14 7°\tau49'53 7°\tau49'53	-0°49'04 4.26527 AU
morning rise retrograde opposition min. Earth dist. direct desc. node evening set	-6806 Oct 21 j 21:20 -6806 Nov 04 j 00:13 -6805 Jan 23 j 15:29 -6805 Mar 12 j 19:25 -6805 Apr 30 j 16:55 -6805 May 12 j 22:23 -6805 May 12 j 21:54 -6805 Jul 11 j 16:39 -6805 Sep 15 j 14:09 -6805 Oct 29 j 07:30 -6805 Nov 12 j 06:26	14° m 12'35 0° Ω 3° Ω 24'25 30° R m 28° m 26'33 28° m 26'42 23° m 33'29 0° Ω 9° Ω 03'56 12° Ω 18'16	0°34'00 4.11225 AU	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin	-6800 May 01 j 12:27 -6800 Sep 02 j 12:52 -6800 Oct 31 j 19:30 -6800 Oct 31 j 17:00 -6800 Dec 31 j 09:02 -6799 Apr 16 j 04:20 -6799 May 08 j 15:05 -6799 May 22 j 03:48 -6799 May 22 j 03:49 -6799 May 21 j 20:36	8°\tau19'14 26°\tau27'47 21°\tau28'28 21°\tau29'19 16°\tau24'39 0°\tau 4°\tau50'14 7°\tau49'53 7°\tau49'53 7°\tau45'54	-0°49'04 4.26527 AU -0°08'22
morning rise retrograde opposition min. Earth dist. direct desc. node evening set conjunction	-6806 Oct 21 j 21:20 -6806 Nov 04 j 00:13 -6805 Jan 23 j 15:29 -6805 Mar 12 j 19:25 -6805 Apr 30 j 16:55 -6805 May 12 j 22:23 -6805 May 12 j 21:54 -6805 Jul 11 j 16:39 -6805 Oct 29 j 07:30 -6805 Nov 12 j 06:26 -6805 Nov 25 j 05:01	14° m 12'35 0° Ω 3° Ω 24'25 30° R m 28° m 26'33 28° m 26'42 23° m 33'29 0° Ω 9° Ω 03'56 12° Ω 18'16 15° Ω 21'27	0°34'00 4.11225 AU -0°03'43	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end	-6800 May 01 j 12:27 -6800 Sep 02 j 12:52 -6800 Oct 31 j 19:30 -6800 Oct 31 j 17:00 -6800 Dec 31 j 09:02 -6799 Apr 16 j 04:20 -6799 May 08 j 15:05 -6799 May 22 j 03:48 -6799 May 21 j 20:36 -6799 May 22 j 11:01	8°\tau19'14 26°\tau27'47 21°\tau28'28 21°\tau29'19 16°\tau24'39 0°\tau 4°\tau50'14 7°\tau49'53 7°\tau49'53 7°\tau49'53 7°\tau45'54 7°\tau53'51	-0°49'04 4.26527 AU -0°08'22 0°08'22
morning rise retrograde opposition min. Earth dist. direct desc. node evening set conjunction minimum elong	-6806 Oct 21 j 21:20 -6806 Nov 04 j 00:13 -6805 Jan 23 j 15:29 -6805 Mar 12 j 19:25 -6805 Apr 30 j 16:55 -6805 May 12 j 22:23 -6805 May 12 j 21:54 -6805 Jul 11 j 16:39 -6805 Oct 29 j 07:30 -6805 Nov 12 j 06:26 -6805 Nov 25 j 05:01 -6805 Nov 25 j 04:59	14° m 12'35 0° <u>a</u> 3° <u>a</u> 24'25 30° R m 28° m 26'33 28° m 26'42 23° m 33'29 0° <u>a</u> 9° <u>a</u> 03'56 12° <u>a</u> 18'16 15° <u>a</u> 21'27 15° <u>a</u> 21'27	0°34'00 4.11225 AU -0°03'43	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist.	-6800 May 01 j 12:27 -6800 Sep 02 j 12:52 -6800 Oct 31 j 19:30 -6800 Oct 31 j 17:00 -6800 Dec 31 j 09:02 -6799 Apr 16 j 04:20 -6799 May 08 j 15:05 -6799 May 22 j 03:48 -6799 May 22 j 03:49 -6799 May 21 j 20:36 -6799 May 22 j 11:01 -6799 May 21 j 19:34	8°\tau19'14 26°\tau27'47 21°\tau28'28 21°\tau29'19 16°\tau24'39 0°\tau40'\tau50'14 7°\tau49'53 7°\tau49'53 7°\tau45'54 7°\tau53'51 7°\tau45'19	-0°49'04 4.26527 AU -0°08'22
morning rise retrograde opposition min. Earth dist. direct desc. node evening set conjunction minimum elong behind sun begin	-6806 Oct 21 j 21:20 -6806 Nov 04 j 00:13 -6805 Jan 23 j 15:29 -6805 Mar 12 j 19:25 -6805 Apr 30 j 16:55 -6805 May 12 j 22:23 -6805 May 12 j 21:54 -6805 Jul 11 j 16:39 -6805 Oct 29 j 07:30 -6805 Nov 12 j 06:26 -6805 Nov 25 j 05:01 -6805 Nov 25 j 04:59 -6805 Nov 24 j 20:57	14° m 12'35 0° <u>a</u> 3° <u>a</u> 24'25 30° R m 28° m 26'33 28° m 26'42 23° m 33'29 0° <u>a</u> 9° <u>a</u> 03'56 12° <u>a</u> 18'16 15° <u>a</u> 21'27 15° <u>a</u> 21'27 15° <u>a</u> 16'43	0°34'00 4.11225 AU -0°03'43	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise	-6800 May 01 j 12:27 -6800 Sep 02 j 12:52 -6800 Oct 31 j 19:30 -6800 Oct 31 j 17:00 -6800 Dec 31 j 09:02 -6799 Apr 16 j 04:20 -6799 May 08 j 15:05 -6799 May 22 j 03:48 -6799 May 22 j 03:49 -6799 May 22 j 11:01 -6799 May 21 j 19:34 -6799 Jun 04 j 13:43	8°\tau19'14 26°\tau27'47 21°\tau28'28 21°\tau29'19 16°\tau24'39 0°\tau40'\tau50'14 7°\tau49'53 7°\tau49'53 7°\tau45'54 7°\tau53'51 7°\tau45'19 10°\tau48'00	-0°49'04 4.26527 AU -0°08'22 0°08'22
retrograde opposition min. Earth dist. direct desc. node evening set conjunction minimum elong behind sun begin behind sun end	-6806 Oct 21 j 21:20 -6806 Nov 04 j 00:13 -6805 Jan 23 j 15:29 -6805 Mar 12 j 19:25 -6805 Apr 30 j 16:55 -6805 May 12 j 22:23 -6805 May 12 j 21:54 -6805 Jul 11 j 16:39 -6805 Sep 15 j 14:09 -6805 Nov 29 j 07:30 -6805 Nov 25 j 05:01 -6805 Nov 25 j 04:59 -6805 Nov 24 j 20:57 -6805 Nov 25 j 13:02	14° m 12'35 0° Ω 3° Ω 24'25 30° R m 26'33 28° m 26'42 23° m 33'29 0° Ω 9° Ω 03'56 12° Ω 18'16 15° Ω 21'27 15° Ω 21'27 15° Ω 16'43 15° Ω 26'11	0°34'00 4.11225 AU -0°03'43 0°03'47	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node	-6800 May 01 j 12:27 -6800 Sep 02 j 12:52 -6800 Oct 31 j 19:30 -6800 Oct 31 j 17:00 -6800 Dec 31 j 09:02 -6799 Apr 16 j 04:20 -6799 May 08 j 15:05 -6799 May 22 j 03:48 -6799 May 22 j 03:49 -6799 May 22 j 11:01 -6799 May 21 j 19:34 -6799 Jun 04 j 13:43 -6799 Jul 27 j 08:59	8°\tau19'14 26°\tau27'47 21°\tau28'28 21°\tau29'19 16°\tau24'39 0°\tau40'\tau50'14 7°\tau49'53 7°\tau49'53 7°\tau45'54 7°\tau53'51 7°\tau45'19 10°\tau48'00 21°\tau31'29	-0°49'04 4.26527 AU -0°08'22 0°08'22
retrograde opposition min. Earth dist. direct desc. node evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist.	-6806 Oct 21 j 21:20 -6806 Nov 04 j 00:13 -6805 Jan 23 j 15:29 -6805 Mar 12 j 19:25 -6805 Apr 30 j 16:55 -6805 May 12 j 22:23 -6805 May 12 j 21:54 -6805 Jul 11 j 16:39 -6805 Sep 15 j 14:09 -6805 Oct 29 j 07:30 -6805 Nov 12 j 06:26 -6805 Nov 25 j 05:01 -6805 Nov 25 j 04:59 -6805 Nov 25 j 13:02 -6805 Nov 25 j 13:02 -6805 Nov 25 j 17:37	14° m 12'35 0° \(\oldsymbol{\Omega}\) 3° \(\oldsymbol{\Omega}\) 28° m 26'33 28° m 26'42 23° m 33'29 0° \(\oldsymbol{\Omega}\) 9° \(\oldsymbol{\Omega}\) 15° \(\oldsymbol{\Omega}\)	0°34'00 4.11225 AU -0°03'43	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node retrograde	-6800 May 01 j 12:27 -6800 Sep 02 j 12:52 -6800 Oct 31 j 19:30 -6800 Oct 31 j 17:00 -6800 Dec 31 j 09:02 -6799 Apr 16 j 04:20 -6799 May 08 j 15:05 -6799 May 22 j 03:48 -6799 May 22 j 03:49 -6799 May 21 j 20:36 -6799 May 21 j 19:34 -6799 Jun 04 j 13:43 -6799 Jul 27 j 08:59 -6799 Oct 04 j 00:26	8°\tau19'14 26°\tau27'47 21°\tau28'28 21°\tau29'19 16°\tau24'39 0°\tau 4°\tau50'14 7°\tau49'53 7°\tau49'53 7°\tau45'54 7°\tau5'54 7°\tau5'54 10°\tau48'00 21°\tau31'29 28°\tau15'51	-0°49'04 4.26527 AU -0°08'22 0°08'22 6.30460 AU
retrograde opposition min. Earth dist. direct desc. node evening set conjunction minimum elong behind sun begin behind sun end	-6806 Oct 21 j 21:20 -6806 Nov 04 j 00:13 -6805 Jan 23 j 15:29 -6805 Mar 12 j 19:25 -6805 Apr 30 j 16:55 -6805 May 12 j 22:23 -6805 May 12 j 21:54 -6805 Jul 11 j 16:39 -6805 Sep 15 j 14:09 -6805 Oct 29 j 07:30 -6805 Nov 12 j 06:26 -6805 Nov 25 j 05:01 -6805 Nov 25 j 04:59 -6805 Nov 25 j 13:02 -6805 Nov 25 j 13:02 -6805 Nov 25 j 17:37 -6805 Dec 08 j 06:36	14° m 12'35 0° Ω 3° Ω 24'25 30° R m 28° m 26'43 28° m 26'42 23° m 33'29 0° Ω 9° Ω 03'56 12° Ω 18'16 15° Ω 21'27 15° Ω 21'27 15° Ω 16'43 15° Ω 26'11 15° Ω 28'53 18° Ω 26'21	0°34'00 4.11225 AU -0°03'43 0°03'47	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node retrograde opposition	-6800 May 01 j 12:27 -6800 Sep 02 j 12:52 -6800 Oct 31 j 19:30 -6800 Oct 31 j 17:00 -6800 Dec 31 j 09:02 -6799 Apr 16 j 04:20 -6799 May 08 j 15:05 -6799 May 22 j 03:48 -6799 May 22 j 03:49 -6799 May 22 j 11:01 -6799 May 21 j 19:34 -6799 Jun 04 j 13:43 -6799 Jul 27 j 08:59 -6799 Oct 04 j 00:26 -6799 Dec 02 j 15:08	8°\tau19'14 26°\tau27'47 21°\tau28'28 21°\tau29'19 16°\tau24'39 0°\tau 4°\tau50'14 7°\tau49'53 7°\tau49'53 7°\tau45'54 7°\tau5'51 10°\tau48'00 21°\tau31'29 28°\tau15'51 23°\tau20'19	-0°49'04 4.26527 AU -0°08'22 0°08'22 6.30460 AU 0°23'39
morning rise retrograde opposition min. Earth dist. direct desc. node evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise	-6806 Oct 21 j 21:20 -6806 Nov 04 j 00:13 -6805 Jan 23 j 15:29 -6805 Mar 12 j 19:25 -6805 May 12 j 22:23 -6805 May 12 j 22:23 -6805 May 12 j 21:54 -6805 Jul 11 j 16:39 -6805 Sep 15 j 14:09 -6805 Oct 29 j 07:30 -6805 Nov 12 j 06:26 -6805 Nov 25 j 04:59 -6805 Nov 25 j 04:59 -6805 Nov 25 j 13:02 -6805 Nov 25 j 17:37 -6805 Dec 08 j 06:36 -6804 Jan 30 j 13:21	14° m 12'35 0° a 3° a 24'25 30° R m 26'43 28° m 26'42 23° m 33'29 0° a 9° a 03'56 12° a 18'16 15° a 21'27 15° a 26'11 15° a 28'53 18° a 26'21 0° m.	0°34'00 4.11225 AU -0°03'43 0°03'47	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist.	-6800 May 01 j 12:27 -6800 Sep 02 j 12:52 -6800 Oct 31 j 19:30 -6800 Oct 31 j 17:00 -6800 Dec 31 j 09:02 -6799 Apr 16 j 04:20 -6799 May 08 j 15:05 -6799 May 22 j 03:48 -6799 May 22 j 03:49 -6799 May 21 j 20:36 -6799 May 21 j 19:34 -6799 Jun 04 j 13:43 -6799 Jul 27 j 08:59 -6799 Oct 04 j 00:26 -6799 Dec 02 j 15:08 -6799 Dec 03 j 02:40	8°\tau19'14 26°\tau27'47 21°\tau28'28 21°\tau29'19 16°\tau24'39 0°\tau40'\tau50'14 7°\tau49'53 7°\tau49'53 7°\tau49'53 7°\tau45'54 7°\tau5'51 10°\tau48'00 21°\tau31'29 28°\tau15'51 23°\tau20'19 23°\tau16'31	-0°49'04 4.26527 AU -0°08'22 0°08'22 6.30460 AU
retrograde opposition min. Earth dist. direct desc. node evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise	-6806 Oct 21 j 21:20 -6806 Nov 04 j 00:13 -6805 Jan 23 j 15:29 -6805 Mar 12 j 19:25 -6805 May 12 j 22:23 -6805 May 12 j 22:23 -6805 May 12 j 21:54 -6805 Jul 11 j 16:39 -6805 Sep 15 j 14:09 -6805 Oct 29 j 07:30 -6805 Nov 12 j 06:26 -6805 Nov 25 j 05:01 -6805 Nov 25 j 04:59 -6805 Nov 25 j 13:02 -6805 Nov 25 j 17:37 -6805 Dec 08 j 06:36 -6804 Jan 30 j 13:21 -6804 Apr 17 j 11:16	14° m 12'35 0° a 3° a 24'25 30° R m 26'33 28° m 26'42 23° m 33'29 0° a 9° a 03'56 12° a 18'16 15° a 21'27 15° a 26'11 15° a 28'53 18° a 26'21 0° m 8° m 19'21	0°34'00 4.11225 AU -0°03'43 0°03'47 6.07660 AU	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node retrograde opposition	-6800 May 01 j 12:27 -6800 Sep 02 j 12:52 -6800 Oct 31 j 19:30 -6800 Dec 31 j 09:02 -6799 Apr 16 j 04:20 -6799 May 08 j 15:05 -6799 May 22 j 03:48 -6799 May 22 j 03:49 -6799 May 22 j 11:01 -6799 May 21 j 19:34 -6799 Jun 04 j 13:43 -6799 Jul 27 j 08:59 -6799 Oct 04 j 00:26 -6799 Dec 02 j 15:08 -6799 Dec 03 j 02:40 -6798 Feb 02 j 08:06	8°\tau19'14 26°\tau2'47 21°\tau2'19 16°\tau2'39 0°\tau 4°\tau50'14 7°\tau4'53 7°\tau4'53 7°\tau4'53 7°\tau4'54 7°\tau5'54 7°\tau5'54 7°\tau5'19 10°\tau4'8'00 21°\tau3'129 28°\tau15'51 23°\tau20'19 23°\tau16'31 18°\tau16'25	-0°49'04 4.26527 AU -0°08'22 0°08'22 6.30460 AU 0°23'39
retrograde opposition min. Earth dist. direct desc. node evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde min. Earth dist.	-6806 Oct 21 j 21:20 -6806 Nov 04 j 00:13 -6805 Jan 23 j 15:29 -6805 Mar 12 j 19:25 -6805 May 12 j 22:23 -6805 May 12 j 22:23 -6805 May 12 j 21:54 -6805 Jul 11 j 16:39 -6805 Sep 15 j 14:09 -6805 Oct 29 j 07:30 -6805 Nov 12 j 06:26 -6805 Nov 25 j 04:59 -6805 Nov 25 j 04:59 -6805 Nov 25 j 13:02 -6805 Nov 25 j 17:37 -6805 Dec 08 j 06:36 -6804 Jan 30 j 13:21 -6804 Jun 16 j 11:29	14° m 12'35 0° a 3° a 24'25 30° R m 26'33 28° m 26'42 23° m 33'29 0° a 9° a 03'56 12° a 18'16 15° a 21'27 15° a 26'11 15° a 28'53 18° a 26'21 0° m 8° m 19'21 3° m 23'04	0°34'00 4.11225 AU -0°03'43 0°03'47 6.07660 AU 4.05183 AU	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct	-6800 May 01 j 12:27 -6800 Sep 02 j 12:52 -6800 Oct 31 j 19:30 -6800 Dec 31 j 09:02 -6799 Apr 16 j 04:20 -6799 May 08 j 15:05 -6799 May 22 j 03:48 -6799 May 22 j 03:49 -6799 May 22 j 11:01 -6799 May 22 j 11:01 -6799 May 21 j 19:34 -6799 Jun 04 j 13:43 -6799 Jul 27 j 08:59 -6799 Oct 04 j 00:26 -6799 Dec 02 j 15:08 -6799 Dec 03 j 02:40 -6798 Feb 02 j 08:06 -6798 May 11 j 04:51	8°\(\)\\ 19'14\\ 26°\(\)\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	-0°49'04 4.26527 AU -0°08'22 0°08'22 6.30460 AU 0°23'39
retrograde opposition min. Earth dist. direct desc. node evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise	-6806 Oct 21 j 21:20 -6806 Nov 04 j 00:13 -6805 Jan 23 j 15:29 -6805 Mar 12 j 19:25 -6805 May 12 j 22:23 -6805 May 12 j 22:23 -6805 May 12 j 21:54 -6805 Jul 11 j 16:39 -6805 Sep 15 j 14:09 -6805 Oct 29 j 07:30 -6805 Nov 12 j 06:26 -6805 Nov 25 j 05:01 -6805 Nov 25 j 04:59 -6805 Nov 25 j 13:02 -6805 Nov 25 j 17:37 -6805 Dec 08 j 06:36 -6804 Jan 30 j 13:21 -6804 Apr 17 j 11:16	14° m 12'35 0° a 3° a 24'25 30° R m 26'33 28° m 26'42 23° m 33'29 0° a 9° a 03'56 12° a 18'16 15° a 21'27 15° a 26'11 15° a 28'53 18° a 26'21 0° m 8° m 19'21	0°34'00 4.11225 AU -0°03'43 0°03'47 6.07660 AU 4.05183 AU	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist.	-6800 May 01 j 12:27 -6800 Sep 02 j 12:52 -6800 Oct 31 j 19:30 -6800 Dec 31 j 09:02 -6799 Apr 16 j 04:20 -6799 May 08 j 15:05 -6799 May 22 j 03:48 -6799 May 22 j 03:49 -6799 May 22 j 11:01 -6799 May 21 j 19:34 -6799 Jun 04 j 13:43 -6799 Jul 27 j 08:59 -6799 Oct 04 j 00:26 -6799 Dec 02 j 15:08 -6799 Dec 03 j 02:40 -6798 Feb 02 j 08:06	8°\tau19'14 26°\tau2'47 21°\tau2'19 16°\tau2'39 0°\tau 4°\tau50'14 7°\tau4'53 7°\tau4'53 7°\tau4'53 7°\tau4'54 7°\tau5'54 7°\tau5'54 7°\tau5'19 10°\tau4'8'00 21°\tau3'129 28°\tau15'51 23°\tau20'19 23°\tau16'31 18°\tau16'25	-0°49'04 4.26527 AU -0°08'22 0°08'22 6.30460 AU 0°23'39
retrograde opposition min. Earth dist. direct desc. node evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde min. Earth dist.	-6806 Oct 21 j 21:20 -6806 Nov 04 j 00:13 -6805 Jan 23 j 15:29 -6805 Mar 12 j 19:25 -6805 May 12 j 22:23 -6805 May 12 j 21:54 -6805 Jul 11 j 16:39 -6805 Sep 15 j 14:09 -6805 Oct 29 j 07:30 -6805 Nov 12 j 06:26 -6805 Nov 25 j 05:01 -6805 Nov 25 j 04:59 -6805 Nov 25 j 13:02 -6805 Nov 25 j 17:37 -6805 Dec 08 j 06:36 -6804 Jan 30 j 13:21 -6804 Jun 16 j 11:29 -6804 Jun 17 j 04:10	14° m 12'35 0° \(\oldsymbol{\Omega} \) 3° \(\oldsymbol{\Omega} \) 28° m 26'33 28° m 26'42 23° m 33'29 0° \(\oldsymbol{\Omega} \) 9° \(\oldsymbol{\Omega} \) 9° \(\oldsymbol{\Omega} \) 15° \(\oldsymbol{\Omega} \) 16° \(\oldsymbol{\Omega} \) 15° \(\oldsymbol{\Omega} \) 16° \(\oldsymbol{\Omega} \) 16° \(\oldsymbol{\Omega} \) 18° \(\oldsymbol{\Omega} \) 18	0°34'00 4.11225 AU -0°03'43 0°03'47 6.07660 AU 4.05183 AU	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct	-6800 May 01 j 12:27 -6800 Sep 02 j 12:52 -6800 Oct 31 j 19:30 -6800 Dec 31 j 09:02 -6799 Apr 16 j 04:20 -6799 May 08 j 15:05 -6799 May 22 j 03:48 -6799 May 22 j 03:49 -6799 May 22 j 11:01 -6799 May 22 j 11:01 -6799 May 21 j 19:34 -6799 Jun 04 j 13:43 -6799 Jul 27 j 08:59 -6799 Oct 04 j 00:26 -6799 Dec 02 j 15:08 -6799 Dec 03 j 02:40 -6798 Feb 02 j 08:06 -6798 May 11 j 04:51	8°\(\)\\ 19'14\\ 26°\(\)\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	-0°49'04 4.26527 AU -0°08'22 0°08'22 6.30460 AU 0°23'39
morning rise retrograde opposition min. Earth dist. direct desc. node evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde min. Earth dist. opposition	-6806 Oct 21 j 21:20 -6806 Nov 04 j 00:13 -6805 Jan 23 j 15:29 -6805 Mar 12 j 19:25 -6805 May 12 j 22:23 -6805 May 12 j 21:54 -6805 Jul 11 j 16:39 -6805 Sep 15 j 14:09 -6805 Oct 29 j 07:30 -6805 Nov 12 j 06:26 -6805 Nov 25 j 05:01 -6805 Nov 25 j 04:59 -6805 Nov 25 j 13:02 -6805 Nov 25 j 13:02 -6805 Nov 25 j 17:37 -6805 Dec 08 j 06:36 -6804 Jan 30 j 13:21 -6804 Jun 16 j 11:29 -6804 Jun 17 j 04:10 -6804 Jul 14 j 12:21	14° m 12'35 0° \(\oldsymbol{\Omega} \) 3° \(\oldsymbol{\Omega} \) 28° m 26'33 28° m 26'42 23° m 33'29 0° \(\oldsymbol{\Omega} \) 9° \(\oldsymbol{\Omega} \) 9° \(\oldsymbol{\Omega} \) 15° \(\oldsymbol{\Omega} \) 16° \(\oldsymbol{\Omega} \) 18° \(\oldsymbol{\Omega} \) 18	0°34'00 4.11225 AU -0°03'43 0°03'47 6.07660 AU 4.05183 AU	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct evening set	-6800 May 01 j 12:27 -6800 Sep 02 j 12:52 -6800 Oct 31 j 19:30 -6800 Oct 31 j 17:00 -6800 Dec 31 j 09:02 -6799 Apr 16 j 04:20 -6799 May 08 j 15:05 -6799 May 22 j 03:48 -6799 May 22 j 03:49 -6799 May 22 j 11:01 -6799 May 21 j 19:34 -6799 Jun 04 j 13:43 -6799 Jul 27 j 08:59 -6799 Oct 04 j 00:26 -6799 Dec 02 j 15:08 -6799 Feb 02 j 08:06 -6798 May 11 j 04:51 -6798 Jun 10 j 15:04	8°\(\cdot\)19'14 26°\(\cdot\)27'47 21°\(\cdot\)28'28 21°\(\cdot\)29'19 16°\(\cdot\)24'39 0°\(\cdot\) 4°\(\cdot\)50'14 7°\(\cdot\)49'53 7°\(\cdot\)49'53 7°\(\cdot\)45'54 7°\(\cdot\)45'54 7°\(\cdot\)45'19 10°\(\cdot\)48'00 21°\(\cdot\)31'29 28°\(\cdot\)15'51 23°\(\cdot\)20'19 23°\(\cdot\)16'31 18°\(\cdot\)16'25 0°\(\cdot\)6'\(\cdot\)26'12	-0°49'04 4.26527 AU -0°08'22 0°08'22 6.30460 AU 0°23'39 4.33528 AU
morning rise retrograde opposition min. Earth dist. direct desc. node evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise retrograde min. Earth dist. opposition	-6806 Oct 21 j 21:20 -6806 Nov 04 j 00:13 -6805 Jan 23 j 15:29 -6805 Mar 12 j 19:25 -6805 May 12 j 22:23 -6805 May 12 j 21:54 -6805 Jul 11 j 16:39 -6805 Sep 15 j 14:09 -6805 Oct 29 j 07:30 -6805 Nov 12 j 06:26 -6805 Nov 25 j 05:01 -6805 Nov 25 j 04:59 -6805 Nov 25 j 13:02 -6805 Nov 25 j 13:02 -6805 Nov 25 j 17:37 -6805 Dec 08 j 06:36 -6804 Jan 30 j 13:21 -6804 Jun 16 j 11:29 -6804 Jun 17 j 04:10 -6804 Jul 14 j 12:21 -6804 Aug 14 j 18:09	14° m 12'35 0° \(\oldsymbol{\Omega} \) 3° \(\oldsymbol{\Omega} \) 28° m 26'42 23° m 33'29 0° \(\oldsymbol{\Omega} \) 9° \(\oldsymbol{\Omega} \) 9° \(\oldsymbol{\Omega} \) 15° \(\oldsymbol{\Omega} \) 16° \(\oldsymbol{\Omega} \) 16° \(\oldsymbol{\Omega} \) 18° \(\oldsymbol{\Omega} \) 18° \(\oldsymbol{\Omega} \) 28° \(\oldsymbol{\Omega} \) 28° \(\oldsymbol{\Omega} \) 28° \(\oldsymbol{\Omega} \) 24'16	0°34'00 4.11225 AU -0°03'43 0°03'47 6.07660 AU 4.05183 AU	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise asc. node retrograde opposition min. Earth dist. direct evening set conjunction	-6800 May 01 j 12:27 -6800 Sep 02 j 12:52 -6800 Oct 31 j 19:30 -6800 Oct 31 j 17:00 -6800 Dec 31 j 09:02 -6799 Apr 16 j 04:20 -6799 May 08 j 15:05 -6799 May 22 j 03:48 -6799 May 22 j 03:49 -6799 May 22 j 11:01 -6799 May 21 j 19:34 -6799 Jun 04 j 13:43 -6799 Jul 27 j 08:59 -6799 Oct 04 j 00:26 -6799 Dec 02 j 15:08 -6799 Bec 02 j 08:06 -6798 Feb 02 j 08:06 -6798 May 11 j 04:51 -6798 Jun 10 j 15:04	8°\cdot\19'14 26°\cdot\27'47 21°\cdot\28'28 21°\cdot\29'19 16°\cdot\24'39 0°\cdot\40'\750'14 7°\cdot\49'53 7°\cdot\45'54 7°\cdot\53'51 7°\cdot\45'19 10°\cdot\48'00 21°\cdot\31'29 28°\cdot\15'51 23°\cdot\20'19 23°\cdot\16'31 18°\cdot\16'25 0°\ddot\36'\ddot\20'12 9°\ddot\20'08	-0°49'04 4.26527 AU -0°08'22 0°08'22 6.30460 AU 0°23'39 4.33528 AU

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 10 Attention, astronomical year style is used: The year -6798 in astronomical counting style is the year 6799 BCE in historical counting style.

Attention, astronomi	ical year style is used: Th	e year -6798 i	n astronomical cou	nting style is the year	6799 BCE in historical co	ounting style.	
morning rise	-6798 Jul 06 j 19:22	12° 8 12'18		max. Earth dist.	-6793 Nov 30 j 16:29	20° ≏ 27'54	6.07178 AU
	-6798 Jul 19 j 16:19	15° 8		morning rise	-6793 Dec 13 j 04:28	23° ≏ 24'46	
retrograde	-6798 Nov 04 j 05:07	29° 8 21'53			-6792 Jan 11 j 03:09	0° M.	
opposition	-6797 Jan 03 j 08:00	24° 8 29'15	1°27'59	retrograde	-6792 Apr 22 j 13:02	13°M20'35	
min. Earth dist.	-6797 Jan 04 j 06:14	24° 8 22'05	4.36445 AU	min. Earth dist.	-6792 Jun 21 j 10:47	8°M24'13	4.04981 AU
direct	-6797 Mar 06 j 18:14	19° 8 26'52		opposition	-6792 Jun 22 j 04:43	8°M18'14	-0°57'21
	-6797 Jun 06 j 21:54	Π°		direct	-6792 Aug 19 j 16:50	3°M24'43	
evening set	-6797 Jul 12 j 11:29	7° Ⅱ 29'10			-6792 Nov 18 j 18:19	15°M	
max. Earth dist.	-6797 Jul 23 j 16:31	9° Ⅱ 58'07	6.35953 AU	evening set	-6792 Dec 21 j 14:21	22°M27'02	
	(505 X 1 05 : 05 45	100 110110	1017140		(501 X 00:01 5)	2.50M 2.512.0	1000145
conjunction	-6797 Jul 25 j 05:45	10° Ⅱ 18'48		conjunction	-6791 Jan 03 j 21:56	25°M35'38	
minimum elong	-6797 Jul 25 j 05:42	10° Ⅱ 18'46	1°17'04	minimum elong	-6791 Jan 03 j 21:51	25°M35'35	
morning rise	-6797 Aug 06 j 21:12	13° Ⅱ 07'03		max. Earth dist.	-6791 Jan 05 j 08:57	25°M56'20	6.04070 AU
	-6797 Nov 20 j 08:25	0°©		morning rise	-6791 Jan 17 j 08:45	28°M45'58 0° √	
retrograde	-6797 Dec 05 j 21:53	0°\$22'49 30°R∏		rotro ara do	-6791 Jan 22 j 15:30	0°×¹ 18° ∡ 753'08	
opposition	-6797 Dec 21 j 10:50 -6796 Feb 04 j 13:20	30 KII 25°II31'23	2°07'10	retrograde min. Earth dist.	-6791 May 29 j 04:49 -6791 Jul 27 j 02:59	13° ₹ 56'56	4.04762 AU
min. Earth dist.	-6796 Feb 05 j 16:42	25° I I22'39	4.34478 AU	opposition	-6791 Jul 28 j 04:25	13° х 30 30	
direct	-6796 Apr 07 j 02:29	20° II 31'27	4.34476 AU	direct	-6791 Sep 24 j 06:30	8° х 46 19	-1 3/22
direct	-6796 Jul 02 j 01:23	0°9		evening set	-6790 Jan 27 j 08:19	28° × ⁷ 01'31	
evening set	-6796 Aug 11 j 17:33	8°935'09		evening set	-6790 Feb 04 j 19:36	0°중	
max. Earth dist.	-6796 Aug 22 j 17:53		6.31652 AU		0770100 043 17.50	° O	
max. Earth dist.	0770 Mug 22 j 17.33	11 30334	0.51052710	conjunction	-6790 Feb 09 j 21:58	1°る11'30	-1°28'01
conjunction	-6796 Aug 24 j 05:33	11°523'40	1°31'10	minimum elong	-6790 Feb 09 j 21:56	1°る11'29	
minimum elong	-6796 Aug 24 j 05:33	11°523'40		max. Earth dist.	-6790 Feb 11 j 14:12	1° ට 35'00	6.06595 AU
morning rise	-6796 Sep 05 j 15:43	14°9511'26		morning rise	-6790 Feb 23 j 14:15	4° ට 22'40	
	-6796 Dec 02 j 00:21	0°N		retrograde	-6790 Jul 03 j 16:08	24° පි 06'21	
retrograde	-6795 Jan 06 j 16:16	1° Ω 55'17		min. Earth dist.	-6790 Aug 31 j 03:48	19° ට 09'47	4.09870 AU
	-6795 Feb 11 j 18:28	30° ℝ ∽		opposition	-6790 Sep 01 j 04:09	19° ට 01'27	
opposition	-6795 Mar 08 j 19:21		2°10'00	direct	-6790 Oct 29 j 14:49	14° ට 02'00	
min. Earth dist.	-6795 Mar 09 j 18:44	26°\$55'43	4.28160 AU		-6789 Feb 19 j 13:44	0° ≈	
direct	-6795 May 09 j 18:28	22° © 06'13		evening set	-6789 Mar 05 j 04:19	3° ≈ 04'09	
	-6795 Jul 25 j 04:45	$0^{\circ}\Omega$		-	-		
evening set	-6795 Sep 12 j 02:06	10° Ω 18'51		conjunction	-6789 Mar 18 j 21:52	6°≈12'35	-1°22'55
max. Earth dist.	-6795 Sep 23 j 10:59	12° Ω 55′05	6.23809 AU	minimum elong	-6789 Mar 18 j 21:55	6° ≈ 12'37	1°23'19
				max. Earth dist.	-6789 Mar 20 j 06:12	6° ≈ 31'07	6.13806 AU
conjunction	-6795 Sep 24 j 13:08	13° Ω 10′06	1°18'50	morning rise	-6789 Apr 01 j 15:53	9° ≈ 21'07	
minimum elong	-6795 Sep 24 j 13:11	13° Ω 10′08	1°19'12		-6789 Apr 27 j 03:28	15° ≈	
	-6795 Oct 02 j 12:39	15° Ω		retrograde	-6789 Aug 06 j 15:10	28° ≈ 16′29	
morning rise	-6795 Oct 07 j 00:23	16° Ω 01'35		opposition	-6789 Oct 04 j 20:12	23° ≈ 13'58	
	-6795 Dec 16 j 03:53	0° m		min. Earth dist.	-6789 Oct 04 j 06:05		4.18401 AU
retrograde	-6794 Feb 10 j 01:19	4° m/29′28		direct	-6789 Dec 03 j 07:30	18° ≈ 11'34	
	-6794 Apr 09 j 00:52	30°R Ω			-6788 Mar 07 j 22:00	0°)	
opposition	-6794 Apr 12 j 07:54	29° Ω 34'46	1°32'42	evening set	-6788 Apr 09 j 00:39	6°) 55′43	
min. Earth dist.	-6794 Apr 12 j 20:46	29° Ω 30'39	4.19236 AU				
direct	-6794 Jun 12 j 05:36	24° Ω 40′25		conjunction	-6788 Apr 22 j 17:53	10° ₩ 00'13	
. ,	-6794 Aug 11 j 14:31	0° M)		minimum elong	-6788 Apr 22 j 17:57	10°) €00'16	
evening set	-6794 Oct 14 j 07:35	13° Mp 08'06		max. Earth dist.	-6788 Apr 23 j 06:01	10° 米 07′02	6.23031 AU
agniumation	6704 Oat 26 : 22:20	160 m 05!17	0941110	morning rise	-6788 May 06 j 09:39	13° 光 03'49 0° Ƴ	
conjunction	-6794 Oct 26 j 23:30	16° Mp 05'17 16° Mp 05'19	0°41'19 0°41'27	rotro ara da	-6788 Aug 11 j 18:42	0° γ 1° Υ 06'44	
minimum elong max. Earth dist.	-6794 Oct 26 j 23:33 -6794 Oct 26 j 16:36	16° Mp 01'15	6.14662 AU	retrograde	-6788 Sep 06 j 23:36 -6788 Oct 03 j 01:43	1 1 00 44 30°R ∺	
morning rise		19° Mp 03'37	0.14002 AU	opposition	-6788 Nov 05 j 07:38	30 KX 26° ∺ 07'54	0°20'05
morning rise	-6794 Nov 08 j 17:12 -6794 Dec 29 j 11:48	0° ⊽		min. Earth dist.	-6788 Nov 05 j 06:32		4.27396 AU
retrograde	-6793 Mar 17 j 20:32	0 <u>₽</u> 8° ჲ 20'37		direct	-6787 Jan 05 j 00:35	20 X 08 10 21° X 03'57	4.27390 AU
opposition	-6793 May 17 j 23:14	3° £ 22'12	0°22'56	direct	-6787 Mar 28 j 15:20	21 γ (03 3 / 0° γ	
min. Earth dist.	-6793 May 17 j 19:56	3° ⊆ 23'17	4.10502 AU	evening set	-6787 May 13 j 08:47	9° Υ 27'50	
Larui dist.	-6793 Jun 15 j 15:43	30°RM)	10302 110	croming set	5757 111ay 13 J 00.47) 12/30	
direct	-6793 Jul 16 j 12:38	28° Mp 29'16		conjunction	-6787 May 26 j 20:31	12° Y 26'46	-0°01'15
	-6793 Aug 16 j 03:37	0° ರ		minimum elong	-6787 May 26 j 20:32	12° Υ 26'47	
desc. node	-6793 Sep 08 j 00:55	o — 2° ≏ 53'11		behind sun begin	-6787 May 26 j 12:18	12° Y 22'15	J V. 11
evening set	-6793 Nov 17 j 02:06	2 — 35 11 17° ≏ 15'18		behind sun end	-6787 May 27 j 04:46	12° Υ 31'19	
				max. Earth dist.	-6787 May 26 j 10:22	12° Υ 21'10	6.31189 AU
conjunction	-6793 Nov 30 j 01:40	20° ₽ 19'09	-0°11'18	asc. node	-6787 Jun 05 j 11:42	14° Υ 34'47	
minimum elong	-6793 Nov 30 j 01:38	20° ⊆ 19'08		morning rise	-6787 Jun 09 j 05:13	15° Y 24'07	
behind sun begin	-6793 Nov 29 j 19:42	20° ≏ 15'38		Č	-6787 Aug 26 j 17:24	0°8	
behind sun end	-6793 Nov 30 j 07:35	20° £ 22'38		retrograde	-6787 Oct 08 j 10:47	2° 8 48'32	
	J -			-	3	-	

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 11 Attention, astronomical year style is used: The year -6787 in astronomical counting style is the year 6788 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	ne year -6787 i	n astronomical co	ounting style is the year	r 6788 BCE in historical c	counting style.	
	-6787 Nov 20 j 11:38	30° Ŗ ♈		opposition	-6781 May 23 j 00:30	8° ≏ 18′25	0°11'38
opposition	-6787 Dec 07 j 02:36	27° Y ′53'28	0°33'42	min. Earth dist.	-6781 May 22 j 19:12	8° ഫ 20'08	4.09395 AU
min. Earth dist.	-6787 Dec 07 j 15:50	27° Y ′49'07	4.34067 AU	desc. node	-6781 Jul 18 j 21:48	3° £ 26′06	
direct	-6786 Feb 06 j 23:15	22° Y ′49'42		direct	-6781 Jul 21 j 09:58	3° ჲ 25′28	
	-6786 Apr 21 j 16:12	0° 8		evening set	-6781 Nov 21 j 23:01	22° ≙ 14'29	
evening set	-6786 Jun 15 j 04:53	10° 8 58'11					
max. Earth dist.	-6786 Jun 27 j 03:03	13° 8 35'45	6.35828 AU	conjunction	-6781 Dec 04 j 23:53	25° ≏ 19'14	-0°18'53
				minimum elong	-6781 Dec 04 j 23:51	25° ₽ 19'13	0°19'03
conjunction	-6786 Jun 28 j 07:24	13° 8 51'24	0°46'25	max. Earth dist.	-6781 Dec 05 j 18:36	25° ₽ 30'19	6.06290 AU
minimum elong	-6786 Jun 28 j 07:20	13° 8 51'22	0°46'41	morning rise	-6781 Dec 18 j 03:50	28° £ 25'47	
Č	-6786 Jul 03 j 11:37	15° 8		· ·	-6781 Dec 24 j 21:05	0° M.	
morning rise	-6786 Jul 11 j 06:29	16° 8 42'54			-6780 Mar 10 j 19:24	15°M	
C	-6786 Sep 18 j 17:23	Π°		retrograde	-6780 Apr 27 j 18:13	18°M25'49	
retrograde	-6786 Nov 08 j 15:32	3° Ⅱ 51'51		C	-6780 Jun 14 j 22:52	15°RM	
C	-6786 Dec 30 j 23:00	30° ₹ 8		min. Earth dist.	-6780 Jun 26 j 11:59	13°M29'24	4.04419 AU
opposition	-6785 Jan 07 j 20:28	28° 8 59'24	1°35'22	opposition	-6780 Jun 27 j 06:57	13°M23'05	
min. Earth dist.	-6785 Jan 08 j 19:33		4.36486 AU	direct	-6780 Aug 24 j 16:37	8°M29'21	
direct	-6785 Mar 11 j 08:14	23° 8 57'13			-6780 Oct 29 j 02:33	15° ™	
	-6785 May 17 j 13:31	0°II		evening set	-6780 Dec 26 j 17:29	27°M34'13	
evening set	-6785 Jul 16 j 22:09	11° I 58'54		evening sec	-6779 Jan 06 j 00:39	0° × 7	
max. Earth dist.	-6785 Jul 28 j 03:14		6.35716 AU		0779 Jun 00 J 00.59	· /	
max. Earth dist.	0700 Jul 20 J 05.11	11 112002	0.55710710	conjunction	-6779 Jan 09 j 01:54	0° ∡ ¹43'18	-1°06'20
conjunction	-6785 Jul 29 j 15:23	14° Ⅱ 48'08	1°20'13	minimum elong	-6779 Jan 09 j 01:49	0° х 43′15	
minimum elong	-6785 Jul 29 j 15:19	14° I I48'06	1°20'38	max. Earth dist.	-6779 Jan 10 j 13:04	1°×704'05	6.03850 AU
morning rise	-6785 Aug 11 j 05:37	17° I I36'00	1 20 38	morning rise	-6779 Jan 22 j 13:50	3° ₹ 54'09	0.03830 AO
morning risc	-6785 Oct 13 j 05:02	0°95		retrograde	-6779 Jun 03 j 06:38	24° × ⁷ 01'07	
retrograde	-6785 Dec 10 j 10:10	4°953'57		min. Earth dist.	-6779 Aug 01 j 02:28	19° × 05'08	4.04931 AU
•	-6784 Feb 09 j 04:16		2°09'55			19 x ·03 08 18° x 756′09	
opposition		0 €302 30 30°R∏	2 09 33	opposition direct	-6779 Aug 02 j 04:53	18 x ⋅ 30 09 13° x ⋅ 59'42	-2 02 38
i. David dia	-6784 Feb 09 j 12:06		4 22070 AII	direct	-6779 Sep 29 j 06:26	13 x·3942	
min. Earth dist.	-6784 Feb 10 j 07:13		4.33970 AU		-6778 Jan 18 j 19:35		
direct	-6784 Apr 11 j 16:36	25° Ⅱ 02'57 0° ⑤		evening set	-6778 Feb 01 j 14:19	3° る 09'53	
	-6784 Jun 10 j 13:34				(770 F.1. 15:04.52	60 -7 10150	1020110
evening set	-6784 Aug 16 j 03:07	13°506'51	6 20075 ATT	conjunction	-6778 Feb 15 j 04:52	6° る 19'59	
max. Earth dist.	-6784 Aug 27 j 02:17	34'59ف°15	6.30875 AU	minimum elong	-6778 Feb 15 j 04:52	6°る19'59	
				max. Earth dist.	-6778 Feb 16 j 21:58		6.07142 AU
conjunction	-6784 Aug 28 j 14:26	15°955'24		morning rise	-6778 Feb 28 j 21:32	9° ට 31'05	
minimum elong	-6784 Aug 28 j 14:26	15° © 55'24	1°31'31	retrograde	-6778 Jul 08 j 16:09	29° ට 10'04	
morning rise	-6784 Sep 10 j 00:29	18° © 43'24		min. Earth dist.	-6778 Sep 05 j 02:43		4.10743 AU
	-6784 Nov 03 j 23:56			opposition	-6778 Sep 06 j 01:33		-2°11'40
retrograde	-6783 Jan 11 j 10:13	6° Ω 32'04		direct	-6778 Nov 03 j 15:01	19° る 05'38	
opposition	-6783 Mar 13 j 13:51	1° Ω 39'37			-6777 Feb 01 j 05:24	0° ≈	
min. Earth dist.	-6783 Mar 14 j 12:36	1° Ω 32'23	4.27141 AU	evening set	-6777 Mar 10 j 09:08	8° ≈ 06'24	
	-6783 Mar 26 j 21:45	30° ₹ 5					
direct	-6783 May 14 j 10:42	26°5942'59		conjunction	-6777 Mar 24 j 02:55	11° ≈ 14'29	
	-6783 Jun 30 j 20:28	0 ° Ω		minimum elong	-6777 Mar 24 j 02:59	11° ≈ 14'32	
evening set	-6783 Sep 16 j 12:57	14° Ω 57'00		max. Earth dist.	-6777 Mar 25 j 09:39	11° ≈ 32'03	6.14959 AU
	-6783 Sep 16 j 18:12	15° Ω		morning rise	-6777 Apr 06 j 21:00	14° ≈ 22'32	
max. Earth dist.	-6783 Sep 28 j 01:08	17° Ω 35'27	6.22640 AU		-6777 Apr 09 j 15:15	15° ≈	
		_			-6777 Jun 27 j 01:44	0° ∀	
conjunction	-6783 Sep 29 j 00:30	17° Ω 48'54	1°14'56	retrograde	-6777 Aug 11 j 07:22	3° ₩ 10'31	
minimum elong	-6783 Sep 29 j 00:33	17° Ω 48'56	1°15'17		-6777 Sep 25 j 13:06	30° ₹ ≈	
morning rise	-6783 Oct 11 j 12:14	20° Ω 41′08		opposition	-6777 Oct 09 j 13:25	28° ≈ 08'31	
	-6783 Nov 23 j 17:02	O° m y		min. Earth dist.	-6777 Oct 08 j 23:41	28° ≈ 13'11	4.19748 AU
retrograde	-6782 Feb 14 j 23:07	9° m ,15′27		direct	-6777 Dec 08 j 03:56	23° ≈ 05'54	
opposition	-6782 Apr 17 j 06:03	4° Mp 20'18	1°24'31		-6776 Feb 16 j 08:33	0° ∀	
min. Earth dist.	-6782 Apr 17 j 16:49	4° Mp 16'51	4.17989 AU	evening set	-6776 Apr 14 j 00:57	11°) (46′51	
	-6782 May 29 j 01:36	30° ₹ Ω					
direct	-6782 Jun 16 j 22:45	29° Ω 26′14		conjunction	-6776 Apr 27 j 17:38	14°) € 50'32	
	-6782 Jul 05 j 18:57	0° m y		minimum elong	-6776 Apr 27 j 17:42	14°) ₹ 50'34	
evening set	-6782 Oct 18 j 22:40	17° m 56'18		max. Earth dist.	-6776 Apr 28 j 03:14		6.24518 AU
				morning rise	-6776 May 11 j 08:37	17° ¥ 53'11	
conjunction	-6782 Oct 31 j 15:24	20° My $54'25$	0°34'30		-6776 Jul 10 j 12:17	$0^{\circ}\Upsilon$	
minimum elong	-6782 Oct 31 j 15:27	20° My $54'26$	0°34'37	retrograde	-6776 Sep 11 j 12:50	5° Ƴ 48'37	
max. Earth dist.	-6782 Oct 31 j 10:14	20° My $51'23$	6.13442 AU	opposition	-6776 Nov 09 j 21:09	0° Y 50′23	-0°28'49
morning rise	-6782 Nov 13 j 10:24	23° m 53'49		min. Earth dist.	-6776 Nov 09 j 22:20	0° Ƴ 49'59	4.28890 AU
	-6782 Dec 10 j 10:02	0∘ ⊽			-6776 Nov 16 j 04:42	30° ₹	
retrograde	-6781 Mar 22 j 22:51	13° ≏ 17'27		direct	-6775 Jan 09 j 19:59	25°) 46′25	

•	-		_	` //	AG 18-Feb-2025 14		ige 12
Attention, astronom			n astronomical co		6776 BCE in historical c		
_	-6775 Mar 05 j 07:40	0° Υ		evening set	-6770 Oct 23 j 11:06	22° m 38'24	
asc. node	-6775 Apr 14 j 14:16	7° Υ ′01'28					
evening set	-6775 May 18 j 02:35	14° Y ′06′13		conjunction	-6770 Nov 05 j 05:06	25° m 37'44	
		••		minimum elong	-6770 Nov 05 j 05:08	25° m 37'45	0°27'45
conjunction	-6775 May 31 j 13:10	17° Y ′04'06	0°05'55	max. Earth dist.	-6770 Nov 05 j 03:26	25° Mp 36'45	6.11800 AU
minimum elong	-6775 May 31 j 13:09	17° Y ′04'06	0°06'01	morning rise	-6770 Nov 18 j 01:13	28° m 38'23	
behind sun begin	-6775 May 31 j 05:22	16° Y ′59'49			-6770 Nov 23 j 21:43	0∘ ⊽	
behind sun end	-6775 May 31 j 20:57	17° Y ′08′23		retrograde	-6769 Mar 28 j 00:30	18° ≏ 10'10	
max. Earth dist.	-6775 May 31 j 00:55	16° Y ′57'21	6.32585 AU	opposition	-6769 May 27 j 23:31	13° ≏ 10'40	
morning rise	-6775 Jun 13 j 20:30	20° Y ′00′19		min. Earth dist.	-6769 May 27 j 16:55	13° ≏ 12'49	4.07854 AU
	-6775 Aug 01 j 18:06	0°8		desc. node	-6769 May 30 j 14:43	12° ⊆ 50'00	
retrograde	-6775 Oct 12 j 18:23	7° 8 19'17		direct	-6769 Jul 26 j 04:39	8° £ 17'45	
opposition	-6775 Dec 11 j 13:25	2° 8 24'38	0°43'22	evening set	-6769 Nov 26 j 19:35	27° £ 11'40	
min. Earth dist.	-6775 Dec 12 j 03:27	2° 8 20'03	4.35277 AU		-6769 Dec 08 j 16:00	0°M	
	-6775 Dec 30 j 19:19	30° ₹ Υ					
direct	-6774 Feb 11 j 13:06	27° Y ′21'01		conjunction	-6769 Dec 09 j 21:32	0°M17'31	
	-6774 Mar 26 j 14:01	0° 8		minimum elong	-6769 Dec 09 j 21:30	0° ™ 17'29	
	-6774 Jun 17 j 16:58	15° 8		max. Earth dist.	-6769 Dec 10 j 17:33	0°M29'23	6.04989 AU
evening set	-6774 Jun 19 j 16:20	15° 8 25'52		morning rise	-6769 Dec 23 j 03:00	3°M25'15	
max. Earth dist.	-6774 Jul 01 j 11:50	18° 8 01'47	6.36750 AU		-6768 Feb 14 j 05:43	15° ™	
				retrograde	-6768 May 02 j 21:42	23°M30'51	
conjunction	-6774 Jul 02 j 17:20	18° 8 18'04	0°52'08	min. Earth dist.	-6768 Jul 01 j 10:55		4.03513 AU
minimum elong	-6774 Jul 02 j 17:16	18° 8 18'02	0°52'26	opposition	-6768 Jul 02 j 08:22	18°M27'40	-1°17'27
morning rise	-6774 Jul 15 j 14:54	21° 8 08'35			-6768 Jul 31 j 04:23	15°RM₊	
	-6774 Aug 27 j 11:15	0°П		direct	-6768 Aug 29 j 14:32	13°M33'37	
retrograde	-6774 Nov 12 j 23:15	8° Ⅱ 15'15			-6768 Sep 27 j 23:06	15°M	
opposition	-6773 Jan 12 j 06:26		1°41'54		-6768 Dec 20 j 06:31	0° ∡	
min. Earth dist.	-6773 Jan 13 j 07:01		4.37057 AU	evening set	-6768 Dec 31 j 21:05	2° ≯ 42'20	
	-6773 Feb 10 j 06:33	30° ₹ 8					
direct	-6773 Mar 15 j 20:42	28° 8 21'13		conjunction	-6767 Jan 14 j 06:45	5° ≯ 52'06	
	-6773 Apr 18 j 13:04	0°Щ		minimum elong	-6767 Jan 14 j 06:41	5° ₹ 52'03	
evening set	-6773 Jul 21 j 05:06	16° Ⅱ 20'36		max. Earth dist.	-6767 Jan 15 j 21:12		6.03420 AU
max. Earth dist.	-6773 Aug 01 j 06:42	18°Щ47'53	6.35860 AU	morning rise	-6767 Jan 27 j 19:31	9° ∡ 03'30	
		_		retrograde	-6767 Jun 08 j 10:59	29° х 10′35	
conjunction	-6773 Aug 02 j 21:06	19° Ⅱ 09'15	1°23'08	min. Earth dist.	-6767 Aug 06 j 03:37		4.05031 AU
minimum elong	-6773 Aug 02 j 21:03	19° Ⅱ 09'13	1°23'34	opposition	-6767 Aug 07 j 05:52	24° ₹ 05'25	-2°06'53
morning rise	-6773 Aug 15 j 10:28	21° Ⅱ 56'39		direct	-6767 Oct 04 j 07:59	19° ∡ ′08'31	
	-6773 Sep 22 j 16:46	0°9			-6767 Dec 31 j 10:07	0°₹	
retrograde	-6773 Dec 14 j 19:11	9° © 15'56		evening set	-6766 Feb 06 j 21:10	8° る 19'28	
opposition	-6772 Feb 13 j 15:14	4°524'26	2°11'45		(T((T) 00:10.00	110-70006	1020150
min. Earth dist.	-6772 Feb 14 j 18:31	4°©15'46	4.33681 AU	conjunction	-6766 Feb 20 j 12:23	11°る29'36	
	-6772 Mar 27 j 11:10	30°RⅡ		minimum elong	-6766 Feb 20 j 12:23	11° る 29'35	
direct	-6772 Apr 16 j 02:37	29° Ⅱ 25'11		max. Earth dist.	-6766 Feb 22 j 05:49		6.07741 AU
	-6772 May 05 j 19:13	0°©		morning rise	-6766 Mar 06 j 05:37	14° ප් 40'36	
evening set	-6772 Aug 20 j 08:17	17°528'52	6 201 25 1 11		-6766 May 21 j 17:10	0°≈	
max. Earth dist.	-6772 Aug 31 j 08:31	19° © 57'49	6.30175 AU	retrograde	-6766 Jul 13 j 13:18	4°≈13'51	
	(772 9 01:10.00	200617122	1920/27		-6766 Sep 04 j 18:01	30°Rる	2000151
conjunction	-6772 Sep 01 j 19:22	20°517'32	1°30'27	opposition	-6766 Sep 10 j 22:39	29° る 09'23	
minimum elong	-6772 Sep 01 j 19:23	20°517'33	1°30'53	min. Earth dist.	-6766 Sep 09 j 23:21	29°る17'21	4.11768 AU
morning rise	-6772 Sep 14 j 05:05	23°505'43		direct	-6766 Nov 08 j 14:11	24°る09'03	
. 1	-6772 Oct 16 j 01:43	0° Q		. ,	-6765 Jan 10 j 11:09	0°≈	
retrograde	-6771 Jan 15 j 23:29	10° Ω 59'10	2002124	evening set	-6765 Mar 15 j 13:51	13°≈07'29	
opposition	-6771 Mar 18 j 03:57		2°03'34		-6765 Mar 23 j 20:00	15° ≈	
min. Earth dist.	-6771 Mar 19 j 02:27	5° Ω 59'22	4.26056 AU		(7(5)) 20:07.42	16015102	1015142
direct	-6771 May 18 j 21:39	1° Ω 10'14		conjunction	-6765 Mar 29 j 07:43	16°≈15'02	
. ,	-6771 Sep 01 j 01:33	15° Ω		minimum elong	-6765 Mar 29 j 07:47	16°≈15'05	
evening set	-6771 Sep 20 j 19:58	19° Ω 26'11	6 21261 ATT	max. Earth dist.	-6765 Mar 30 j 11:52	16°≈31'04	6.16301 AU
max. Earth dist.	-6771 Oct 02 j 08:17	22° Ω 05'13	6.21261 AU	morning rise	-6765 Apr 12 j 01:40	19° ≈ 22'24	
aaminus -ti	6771 0-4 02:07.50	220 (110140	1010144	matma c J -	-6765 Jun 01 j 13:01	0°) (
conjunction	-6771 Oct 03 j 07:50	22° Ω 18'49	1°10'44	retrograde	-6765 Aug 16 j 00:31	8° ¥ 02'07	1007/100
minimum elong	-6771 Oct 03 j 07:54	22° Ω 18'51	1°11'03	opposition	-6765 Oct 14 j 05:57	3° ¥ 00′30	
morning rise	-6771 Oct 15 j 20:28	25° Ω 11'59		min. Earth dist.	-6765 Oct 13 j 18:43		4.21215 AU
ratragrada	-6771 Nov 06 j 05:06	0°M)		diract	-6765 Nov 07 j 03:05	30°R≈ 27°2057'30	
retrograde	-6770 Feb 19 j 18:37	13° m 53'53 8° m 58'14	1°16'04	direct	-6765 Dec 13 j 02:23	27°≈57'30 0° 米	
opposition min. Earth dist.	-6770 Apr 22 j 00:42 -6770 Apr 22 j 09:56	8° Mp 55'16		avaning sat	-6764 Jan 18 j 11:38	0° X 16° X 34'38	
direct	-6770 Jun 21 j 12:48	4° Mp 04'20	4.16392 AU	evening set	-6764 Apr 18 j 23:51	10 八 3438	
uncet	-0110 Jun 21 J 12.48	- 11yU41∠U					

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6764 in astronomical counting style is the year 6765 BCE in historical counting style. -6764 May 02 j 16:04 19°**)** ₹37'30 -0°36'33 retrograde -6758 Feb 24 i 21:15 18° m 48'31 conjunction -6764 May 02 j 16:07 19°**¥**37'32 0°36'40 -6758 Apr 27 j 02:09 13° m 52'29 1°06'34 minimum elong opposition -6764 May 02 j 23:41 19°**¥**41'46 6.25973 AU min. Earth dist. -6758 Apr 27 j 09:47 13° m 50'01 4.14926 AU max. Earth dist. -6764 May 16 j 06:06 22°**)** 39'10 -6758 Jun 26 j 10:00 8° m 58'56 morning rise direct $0^{\circ}\Upsilon$ -6764 Jun 19 j 17:52 -6758 Oct 28 j 06:04 27° m/36'19 evening set -6764 Sep 15 j 23:21 10°**Y**27'30 -6758 Nov 07 j 10:44 retrograde 0∘ಹ -6764 Nov 14 j 09:54 5°Υ29'47 -0°18'24 opposition -6758 Nov 10 j 01:00 min. Earth dist. -6764 Nov 14 j 12:07 5°**Y**29'02 4.30190 AU conjunction 0°**£**36'40 0°20'15 direct -6763 Jan 14 j 12:00 0°**Y**25'44 minimum elong -6758 Nov 10 j 01:02 0°**£**36'41 0°20'18 asc. node -6763 Feb 21 j 09:14 2°**Y**33'02 max. Earth dist. -6758 Nov 10 j 01:39 0°**₽**37'03 6.10536 AU evening set -6763 May 22 j 19:30 18°**Y**42'16 morning rise -6758 Nov 22 j 22:37 3°**£**38'32 -6757 Apr 02 j 05:23 retrograde 23° 216'45 21°**Y**'39'12 0°12'58 conjunction -6763 Jun 05 j 04:42 desc. node -6757 Apr 09 j 01:31 23°**₽**12'19 minimum elong -6763 Jun 05 j 04:40 21°**Y**39'11 0°13'05 opposition -6757 Jun 02 j 03:54 18° 216'42 -0°11'09 behind sun begin -6763 Jun 04 j 23:53 21°Y36'33 min. Earth dist. -6757 Jun 01 j 17:44 18°**♀**20'02 4.06939 AU behind sun end -6763 Jun 05 j 09:28 21°\bar{Y}41'49 direct -6757 Jul 31 j 04:27 13°**2**23′50 max. Earth dist. -6763 Jun 04 j 12:44 21°**Y**30'23 6.33617 AU -6757 Nov 21 j 21:01 0°M morning rise -6763 Jun 18 j 10:45 24° **Y**34'27 evening set -6757 Dec 01 j 20:36 2°M20'10 -6763 Jul 13 j 20:01 0°8 retrograde -6763 Oct 17 j 05:05 11°**8**49'38 conjunction -6757 Dec 14 j 23:49 5°M26'45 -0°33'38 0°52'53 opposition -6763 Dec 16 j 00:49 6°**8**55'27 minimum elong -6757 Dec 14 j 23:46 5°M26'43 0°33'51 min. Earth dist. -6763 Dec 16 j 17:33 6°**8**50'00 4.35968 AU max. Earth dist. -6757 Dec 16 i 00:43 5°M41'31 6.04521 AU direct -6762 Feb 16 i 04:31 1°852'00 morning rise -6757 Dec 28 i 06:17 8°M35'09 -6762 Jun 01 i 04:11 15°8 -6756 Jan 25 i 07:37 15°M -6762 Jun 24 j 04:30 19°**8**55'05 retrograde -6756 May 08 j 04:27 28°M42'40 evening set -6762 Jul 05 j 20:42 22°**8**29'13 -6756 Jul 07 j 12:13 23°MJ39'03 -1°26'48 max. Earth dist. 6.37024 AU opposition -6756 Jul 06 j 13:59 4.03567 AU min. Earth dist. 23°M-46'31 -6762 Jul 07 j 04:12 22°**8**46'37 0°57'41 -6756 Sep 03 j 17:35 18°M44'44 conjunction direct -6762 Jul 07 j 04:08 -6756 Dec 02 j 03:17 22°**8**46'34 0°58'01 0°×7 minimum elong -6762 Jul 20 j 00:24 25°**8**36'27 -6755 Jan 06 j 02:17 7°**х** 53′39 morning rise evening set -6762 Aug 09 j 10:16 $0^{\circ}\Pi$ -6762 Nov 17 j 09:04 -6755 Jan 19 j 12:42 11°**∡**103'29 -1°15'48 retrograde 12°**Ⅱ**43'14 conjunction -6761 Jan 16 j 18:42 7°**I**51'16 1°48'07 -6755 Jan 19 j 12:38 11°**∡**03'27 1°16'13 opposition minimum elong 7°**Ц**43'17 4.36927 AU -6761 Jan 17 j 19:37 -6755 Jan 21 j 04:42 11°**尽**27'04 6.03963 AU min. Earth dist. max. Earth dist. -6761 Mar 20 j 08:27 2°II49'43 -6755 Feb 02 j 02:19 14°**х** 14′56 direct morning rise 20°**Ⅱ**49'12 -6755 Apr 20 j 22:12 evening set -6761 Jul 25 j 14:49 o°ਤ -6755 Jun 13 j 10:43 max. Earth dist. -6761 Aug 05 j 15:33 23°**Ⅱ**16′17 6.35322 AU retrograde 4°る17'52 -6755 Aug 06 j 09:45 30°₽**⋌**7 conjunction -6761 Aug 07 j 05:49 23°**I**37'37 1°25'44 min. Earth dist. -6755 Aug 11 j 01:57 29°**✗**¹21'56 4.06033 AU -6761 Aug 07 j 05:46 23°**Ⅲ**37'36 1°26'10 opposition -6755 Aug 12 j 05:14 29°**∡**12'38 -2°10'05 minimum elong -6761 Aug 19 j 18:17 26°**Ⅲ**24'53 direct -6755 Oct 09 j 07:32 24°**х** 15′15 morning rise -6761 Sep 05 j 04:04 0ಂತಾ -6755 Dec 09 j 17:28 0°정 -6761 Dec 19 j 10:25 13°9547'57 -6754 Feb 12 j 01:50 13°**る**23'55 retrograde evening set -6760 Feb 18 j 07:04 8°956'29 2°13'01 opposition -6760 Feb 19 j 10:59 -6754 Feb 25 j 17:30 16°る33'38 -1°29'44 min. Earth dist. 8°947'37 4.32771 AU conjunction -6754 Feb 25 i 17:30 direct -6760 Apr 20 j 17:16 3°957'40 minimum elong 16°**ප**33'38 1°30'11 evening set -6760 Aug 24 j 18:14 22°9502'59 max. Earth dist. -6754 Feb 27 i 09:05 16°**る**56'35 6.09084 AU max. Earth dist. -6760 Sep 04 j 17:54 24°532'07 6.28956 AU morning rise -6754 Mar 11 i 11:00 19°る44'06 -6754 Apr 27 j 23:31 0°≈ -6760 Sep 06 j 05:01 24°952'02 1°29'18 retrograde -6754 Jul 18 i 07:59 9°≈09'21 conjunction -6760 Sep 06 i 05:02 24°952'03 1°29'44 -6754 Sep 15 j 16:22 4°≈05'07 -2°05'11 minimum elong opposition -6760 Sep 18 j 14:55 27°5940'46 min. Earth dist. -6754 Sep 14 j 19:11 4°≈12'22 4.13289 AU morning rise -6760 Sep 28 j 23:43 $0^{\circ}\Omega$ -6754 Oct 20 j 22:39 30°Rる 29°**ප**04'18 -6760 Dec 30 j 18:22 15°Ω direct -6754 Nov 13 j 12:47 -6754 Dec 07 j 07:29 retrograde -6759 Jan 20 j 19:25 15°**Ω**40′56 0°22 -6759 Feb 10 j 21:53 15°RΩ -6753 Mar 07 j 05:34 15°≈ opposition -6759 Mar 23 j 00:32 10°**Ω**47'57 1°59'07 evening set -6753 Mar 20 j 13:54 17°**≈**58'55 -6759 Mar 23 j 21:08 10°**Ω**41'24 4.24615 AU min. Earth dist. 5°**Ω**52′06 -6753 Apr 03 j 07:55 21°≈05'49 -1°11'26 direct -6759 May 23 j 13:31 conjunction 15°€ -6753 Apr 03 j 08:00 -6759 Aug 13 j 21:45 minimum elong 21°≈05'52 1°11'45 24°**Ω**10'59 -6753 Apr 04 j 10:21 evening set -6759 Sep 25 j 09:10 max. Earth dist. 21°**≈**20'49 6.17881 AU morning rise -6753 Apr 17 j 01:28 24°≈12'21 conjunction -6759 Oct 07 j 21:47 27°**Ω**04'33 1°05'50 -6753 May 13 j 11:38 0°**)**€ minimum elong -6759 Oct 07 j 21:51 27°**Ω**04'35 1°06'07 retrograde -6753 Aug 20 j 12:20 12°**)** 43'41 max. Earth dist. -6759 Oct 07 j 02:08 26°**£**53′10 6.19748 AU opposition -6753 Oct 18 j 18:23 7° **★**42'36 -1°18'00 -6759 Oct 20 j 11:07 29°**Q**58'43 min. Earth dist. -6753 Oct 18 j 08:34 7°**)** 45'55 4.22693 AU morning rise

-6753 Dec 17 j 18:15

direct

2°\#39'22

-6759 Oct 20 j 13:20

0° m

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 14 Attention, astronomical year style is used: The year -6752 in astronomical counting style is the year 6753 BCE in historical counting style.

Attention, astronomi	ical year style is used: Th	e year -6752 i	n astronomical cou	nting style is the year	6753 BCE in historical c	ounting style.	
evening set	-6752 Apr 23 j 18:27	21°) 13′01		max. Earth dist.	-6747 Oct 11 j 19:51	1° m 44'07	6.18382 AU
				morning rise	-6747 Oct 25 j 03:41	4° m 49'25	
conjunction	-6752 May 07 j 09:49	24°) 15′03	-0°29'56	retrograde	-6746 Mar 01 j 22:56	23°M/46'13	
minimum elong	-6752 May 07 j 09:52	24° ∺ 15′05	0°30'01	opposition	-6746 May 02 j 04:48	18° m 49'33	0°56'27
max. Earth dist.	-6752 May 07 j 12:06	24°) 16′20	6.27235 AU	min. Earth dist.	-6746 May 02 j 08:40	18° m 48'18	4.13743 AU
morning rise	-6752 May 20 j 23:07	27° ∺ 15'51		direct	-6746 Jul 01 j 07:25	13° m 56'13	
	-6752 Jun 02 j 10:50	0 ° $\mathbf{\gamma}$			-6746 Oct 21 j 21:33	0∘ ⊽	
retrograde	-6752 Sep 20 j 08:54	14° Y 58′26		evening set	-6746 Nov 02 j 01:58	2° ≏ 35'42	
opposition	-6752 Nov 18 j 19:31	10° Ƴ 01'14	-0°08'15				
min. Earth dist.	-6752 Nov 19 j 01:01	9° Ƴ 59'24	4.31134 AU	conjunction	-6746 Nov 14 j 22:05	5° ≏ 36'55	0°12'39
asc. node	-6751 Jan 01 j 23:52	5° Y 24'33		minimum elong	-6746 Nov 14 j 22:06	5° ≏ 36'56	0°12'38
direct	-6751 Jan 19 j 02:21	4° Ƴ 57'07		behind sun begin	-6746 Nov 14 j 16:52	5° ≙ 33'52	
evening set	-6751 May 27 j 09:02	23° Y 11'45		behind sun end	-6746 Nov 15 j 03:20	5° ≙ 40'00	
				max. Earth dist.	-6746 Nov 15 j 03:34	5° ≏ 40'08	6.09644 AU
conjunction	-6751 Jun 09 j 17:14	26° Ƴ 07'59		morning rise	-6746 Nov 27 j 20:47	8° ≏ 39'41	
minimum elong	-6751 Jun 09 j 17:13	26° Ƴ 07'58	0°19'53	desc. node	-6745 Feb 16 j 04:21	24° ₽ 39'00	
max. Earth dist.	-6751 Jun 08 j 23:12	25° Y 58′01	6.34173 AU	retrograde	-6745 Apr 07 j 12:10	28° ≏ 22'35	
morning rise	-6751 Jun 22 j 21:53	29° Y 02′28		opposition	-6745 Jun 07 j 07:58	23° ≏ 21'58	-0°22'48
	-6751 Jun 27 j 07:09	9° 8		min. Earth dist.	-6745 Jun 06 j 20:26	23° ≏ 25'46	4.06405 AU
	-6751 Sep 23 j 06:11	15° 8		direct	-6745 Aug 05 j 06:15	18° ≏ 28'59	
retrograde	-6751 Oct 21 j 12:24	16° 8 15'46			-6745 Nov 04 j 03:34	0° M.	
	-6751 Nov 18 j 19:42	15° ₹ 8		evening set	-6745 Dec 06 j 21:48	7°M26'34	
opposition	-6751 Dec 20 j 10:24	11° 8 21'59	1°01'53				
min. Earth dist.	-6751 Dec 21 j 04:01	11° 8 16'15	4.36124 AU	conjunction	-6745 Dec 20 j 01:58	10°M33'38	-0°40'47
direct	-6750 Feb 20 j 14:39	6° 8 18'43		minimum elong	-6745 Dec 20 j 01:55	10°M33'36	0°41'02
	-6750 May 14 j 00:58	15° 8		max. Earth dist.	-6745 Dec 21 j 05:16	10°ML49'48	6.04371 AU
evening set	-6750 Jun 28 j 15:05	24° 8 21'46		morning rise	-6744 Jan 02 j 09:38	13°ML42'34	
max. Earth dist.	-6750 Jul 10 j 03:22	26° 8 54'02	6.36755 AU	•	-6744 Jan 07 j 21:50	15° M ₊	
	v				-6744 Mar 23 j 14:21	0° ∡ ¹	
conjunction	-6750 Jul 11 j 13:22	27° 8 12'50	1°02'47	retrograde	-6744 May 13 j 07:25	3° ∡ ¹50'23	
minimum elong	-6750 Jul 11 j 13:18	27° 8 12'48	1°03'08	Ü	-6744 Jul 03 j 09:22	30°RM₊	
morning rise	-6750 Jul 24 j 08:28	0° Ⅲ 02'17		opposition	-6744 Jul 12 j 14:13	28°M46'26	-1°35'26
Ü	-6750 Jul 24 j 04:18	Π°		min. Earth dist.	-6744 Jul 11 j 14:03		4.03849 AU
retrograde	-6750 Nov 21 j 21:39	17° I I11'07		direct	-6744 Sep 08 j 17:02	23°M51'47	
opposition	-6749 Jan 21 j 07:19	12° Ⅱ 19'21	1°53'40		-6744 Nov 11 j 00:41	0° ∡ 7	
min. Earth dist.	-6749 Jan 22 j 10:01	12° Ⅲ 10'48	4.36272 AU	evening set	-6743 Jan 11 j 06:26	13° ∡ ¹00'33	
direct	-6749 Mar 24 j 22:00	7° Ⅱ 18'07			0, 10 tm. 11 j tt. 2		
evening set	-6749 Jul 30 j 00:34	25° I 19'07		conjunction	-6743 Jan 24 j 17:38	16° ∡ 10'25	-1°19'42
max. Earth dist.	-6749 Aug 10 j 00:26		6 34320 AU	minimum elong	-6743 Jan 24 j 17:34		
max. Darm dist.	071711ag 10 j 00.20	27 1007	0.5 1520 110	max. Earth dist.	-6743 Jan 26 j 09:45		6.04619 AU
conjunction	-6749 Aug 11 j 14:48	28° Ⅱ 07'34	1°27'47	morning rise	-6743 Feb 07 j 07:55	19° ∡ ¹21'47	0.01017110
minimum elong	-6749 Aug 11 j 14:46		1°28'13		-6743 Mar 27 j 23:04	0°る	
mmmum viong	-6749 Aug 19 j 23:59	0ಂತಿ	1 20 15	retrograde	-6743 Jun 18 j 10:08	9° る 20'25	
morning rise	-6749 Aug 24 j 02:37	0°954'57		min. Earth dist.	-6743 Aug 16 j 00:43	4°る24'10	4.07000 AU
retrograde	-6749 Dec 24 j 01:31	18° © 23'13		opposition	-6743 Aug 17 j 03:02	4° ට 15'11	
opposition	-6748 Feb 23 j 00:09	13° © 31'36	2°13'27	·FF	-6743 Sep 23 j 21:55	30°R .∕ 7	
min. Earth dist.	-6748 Feb 24 j 02:31	13° © 23'14	4.31516 AU	direct	-6743 Oct 14 j 08:01	29° ∡ 17'19	
direct	-6748 Apr 25 j 06:41	8°933'14			-6743 Nov 03 j 20:09	0°ਰ	
evening set	-6748 Aug 29 j 05:36	26°5541'00		evening set	-6742 Feb 17 j 05:14	18° පි 24'08	
max. Earth dist.	-6748 Sep 09 j 08:05	29°512'13	6.27563 AU	<i>3</i> ***			
		_,		conjunction	-6742 Mar 02 j 21:32	21° る 33'33	-1°29'01
conjunction	-6748 Sep 10 j 16:20	29° © 30'35	1°27'31	minimum elong	-6742 Mar 02 j 21:34	21° ට 33'34	
minimum elong	-6748 Sep 10 j 16:22	29°530'36		max. Earth dist.	-6742 Mar 04 j 12:53		6.10286 AU
	-6748 Sep 12 j 19:58	0°N		morning rise	-6742 Mar 16 j 15:08	24° පි 43'32	
morning rise	-6748 Sep 23 j 02:20	2° Ω 19'57			-6742 Apr 09 j 03:48	0°≈	
morning rise	-6748 Nov 24 j 17:24	15° Ω		retrograde	-6742 Jul 23 j 01:39	14° ≈ 01'25	
retrograde	-6747 Jan 25 j 18:30	20° Ω 27'08		opposition	-6742 Sep 20 j 08:53	8°≈57'37	-2°00'45
opposition	-6747 Mar 27 j 23:09	15° Ω 33'49	1°53'45	min. Earth dist.	-6742 Sep 19 j 12:54	9° ≈ 04'26	4.14611 AU
min. Earth dist.	-6747 Mar 28 j 18:40	15° Ω 27'36	4.23166 AU	direct	-6742 Nov 18 j 08:07	3°≈56'26	1.11011710
mm. Earth dist.	-6747 Apr 01 j 09:36	15°R Ω	4.23100710	ancet	-6741 Feb 17 j 11:45	15° ≈	
direct	-6747 May 28 j 09:23	10° Ω 38′23		evening set	-6741 Mar 25 j 13:48	13 ≈ 22° ≈ 48'17	
anout	-6747 Jul 22 j 01:32	10 δί 38 23		oronnig set	0, 11 14101 20 J 10.40	22 /VT0 1/	
evening set	-6747 Sep 30 j 00:01	28° Ω 59'46		conjunction	-6741 Apr 08 j 07:36	25° ≈ 54'36	-1°06'43
evening set	-6747 Oct 04 j 08:20	28 8 6 39 40		minimum elong	-6741 Apr 08 j 07:41	25°≈54'38	1°07'01
	5/7/ OCL 04 J 06.20	עווי		max. Earth dist.	-6741 Apr 09 j 05:10	25 ≈54 38 26°≈06'48	6.19218 AU
conjunction	-6747 Oct 12 j 13:15	1° m) 54'12	1°00'24	morning rise	-6741 Apr 22 j 01:00	20 ≈0048 29°≈00'27	5.17216 AU
minimum elong	-6747 Oct 12 j 13:19		1°00'24 1°00'39	morning 1150	-6741 Apr 26 j 11:23	29 ≈ 00 27 0° ∺	
mminum ciong	0/7/ Oct 12 j 15.19	1 11/2413	1 0037		0771 Apr 20 J 11.23	υ Λ	

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6741 in astronomical counting style is the year 6742 BCE in historical counting style. -6741 Aug 25 j 00:47 17°**)** 24'32 conjunction -6735 Oct 17 i 03:50 6° m 41'45 0°54'39 retrograde opposition -6741 Oct 23 j 06:48 12°**)** 23′58 -1°09′05 -6735 Oct 17 j 03:54 6° m 41'48 0°54'53 minimum elong 6° № 33'47 -6741 Oct 22 j 23:38 12°**)** €26′23 4.23917 AU -6735 Oct 16 j 14:07 6.17372 AU min. Earth dist. max. Earth dist. -6735 Oct 29 j 19:07 -6741 Dec 22 j 11:19 7°**¥**20′29 9° m 37'49 direct morning rise -6740 Apr 28 j 13:08 25°**)** 51'41 evening set retrograde -6734 Mar 07 j 01:00 28° m 40'17 opposition -6734 May 07 j 05:22 23° Mp 43'05 0°46'06 28°**¥**53′03 -0°23′08 min. Earth dist. 4.12871 AU conjunction -6740 May 12 j 03:58 -6734 May 07 j 07:51 23° Mp 42'17-6740 May 12 j 04:00 -6734 Jul 06 j 05:24 minimum elong 28°**X**53'04 0°23'10 direct 18° m/49'51 -6740 May 12 j 04:07 max. Earth dist. 28°**₭**53'08 6.28275 AU -6734 Oct 04 j 11:42 0∘ಹ $0^{\circ}\Upsilon$ -6740 May 17 j 04:19 evening set -6734 Nov 06 j 20:04 7°**♀**30'37 morning rise -6740 May 25 j 16:09 1°Y53'01 -6740 Sep 24 j 18:06 19°**Y**30'45 -6734 Nov 19 j 17:13 0°05'07 retrograde conjunction 10°**£**32'35 -6734 Nov 19 j 17:13 asc. node -6740 Nov 12 j 07:58 15°**Y**59'38 minimum elong 10°**≏**32'35 0°05'05 opposition -6740 Nov 23 j 05:57 14°**Y**34'08 0°02'02 behind sun begin -6734 Nov 19 j 09:21 10°**£**27'58 min. Earth dist. -6740 Nov 23 j 12:58 14°**Ƴ**31'49 4.31911 AU behind sun end -6734 Nov 20 j 01:06 10°**△**37'12 direct -6739 Jan 23 j 15:05 9°Y30'06 max. Earth dist. -6734 Nov 20 j 01:28 10°**♀**37'26 6.08990 AU evening set -6739 May 31 j 23:24 27° **Y**43'20 morning rise -6734 Dec 02 j 17:13 13°**♀**36'11 -6739 Jun 11 j 07:48 0°8 desc. node -6734 Dec 27 j 02:39 19°**♀**10'44 max. Earth dist. -6739 Jun 13 j 07:58 0°**8**26'36 6.34616 AU -6733 Feb 23 j 20:35 0°M retrograde -6733 Apr 12 j 13:32 3°M22'42 conjunction -6739 Jun 14 j 06:10 0°**ප**38'51 0°26'29 -6733 May 30 j 16:53 minimum elong -6739 Jun 14 i 06:08 0°**8**38'50 0°26'40 opposition -6733 Jun 12 j 08:53 28° **2**1'31 -0°33'59 morning rise -6739 Jun 27 i 09:41 3°**8**32'40 min. Earth dist. -6733 Jun 11 j 18:49 28°**♀**26'10 4.06044 AU -6739 Aug 23 j 21:56 15°8 direct -6733 Aug 10 j 02:59 23°**£**28'25 retrograde -6739 Oct 25 j 23:12 20°844'39 -6733 Oct 14 j 20:31 0°M -6739 Dec 24 j 21:27 15°**8**51'16 1°10'40 -6733 Dec 11 j 20:28 12°M26'55 evening set opposition -6739 Dec 25 j 17:26 15°**8**44'46 4.36232 AU -6733 Dec 22 j 15:31 min. Earth dist. 15°M -6739 Dec 31 j 11:58 15°R\ 10°**8**48'13 -6733 Dec 25 j 01:37 15°MJ34'25 -0°47'27 direct -6738 Feb 25 j 04:26 conjunction -6738 Apr 21 j 06:18 -6733 Dec 25 j 01:33 15°M34'23 0°47'45 15°8 minimum elong -6733 Dec 26 j 06:38 -6738 Jul 03 j 02:27 28°**8**51'18 max. Earth dist. 15°M51'36 6.04308 AU evening set -6732 Jan 07 j 10:15 -6738 Jul 08 j 07:19 $0^{\circ}\Pi$ 18°M43'46 morning rise -6732 Feb 27 j 23:32 0°**∡** -6738 Jul 15 j 23:38 1°**II**41'56 1°07'37 -6732 May 18 j 07:54 8°**х** 51′40 conjunction retrograde 3°**∡**′47′21 -1°43′08 -6738 Jul 15 j 23:34 -6732 Jul 17 j 13:05 minimum elong 1°**I**I41'54 1°07'59 opposition 1°**Д**23'07 6.36513 AU 3°**х** 55′33 4.04095 AU -6738 Jul 14 j 13:39 -6732 Jul 16 j 12:48 max. Earth dist. min. Earth dist. -6738 Jul 28 j 17:23 morning rise 4°**Ⅲ**30′58 -6732 Aug 18 j 19:24 30°RM retrograde -6738 Nov 26 j 08:29 21°**Ⅱ**41'48 direct -6732 Sep 13 j 16:12 28°M52'16 -6737 Jan 25 j 20:51 16°**耳**50'11 1°58'40 -6732 Oct 09 j 13:10 0°**⊼** opposition min. Earth dist. -6737 Jan 26 j 22:58 16°**Ⅱ**41'50 4.35739 AU evening set -6731 Jan 16 j 08:02 18°**₹**01'10 -6737 Mar 29 j 10:01 11°**Ⅱ**49'25 direct -6737 Aug 03 j 10:58 29°**Ⅲ**51'24 -6731 Jan 29 j 20:10 21°\$\mathbb{Z}\$\dagger{1}11'09 -1°22'56 evening set conjunction -6737 Aug 04 j 02:26 0ಂತಾ -6731 Jan 29 j 20:06 21° 🗷 11'07 1°23'21 minimum elong max. Earth dist. -6737 Aug 14 j 10:10 2°518'26 6.33535 AU -6731 Jan 31 j 13:42 21°**✗**35'32 6.05145 AU max. Earth dist. -6731 Feb 12 j 10:59 24°**₹**22'29 morning rise conjunction -6737 Aug 16 j 00:16 2°539'48 1°29'22 -6731 Mar 09 i 04:47 0°궁 minimum elong -6737 Aug 16 j 00:14 2°**©**39'47 1°29'49 retrograde -6731 Jun 23 i 07:35 14°る17'06 -6737 Aug 28 j 11:34 morning rise 5°9527'16 opposition -6731 Aug 21 j 22:00 9°**ප**11'58 -2°13'38 retrograde -6737 Dec 28 i 19:08 23°9500'07 min. Earth dist. -6731 Aug 20 j 20:25 9°る20'42 4.07769 AU -6736 Feb 27 i 18:03 18°908'24 2°13'06 direct -6731 Oct 19 j 04:08 4°る13'37 opposition 18°500'01 4.30542 AU min. Earth dist. -6736 Feb 28 j 20:26 -6730 Feb 22 j 06:52 23°**る**19'28 evening set direct -6736 Apr 29 j 23:44 13°9510'29 -6736 Aug 27 j 19:22 $0^{\circ}\Omega$ -6730 Mar 07 j 23:30 26° ත්28'39 -1°27'40 conjunction evening set -6736 Sep 02 j 16:34 1°**Ω**19'33 minimum elong -6730 Mar 07 j 23:32 26°**ප්**28'41 1°28'04 26°る49'18 6.11220 AU max. Earth dist. -6736 Sep 13 j 21:04 3°**£**52′17 6.26489 AU max. Earth dist. -6730 Mar 09 j 11:19 -6730 Mar 21 j 17:32 29°る38'21 morning rise conjunction -6736 Sep 15 j 03:22 4°Ω09'35 1°25'14 -6730 Mar 23 j 07:28 0°≈ -6736 Sep 15 j 03:24 4°Ω09'36 1°25'37 -6730 Jun 07 j 15:23 15°≈ minimum elong -6736 Sep 27 j 13:37 6°**£**59'31 -6730 Jul 27 j 17:05 morning rise retrograde 18°≈49'57 -6736 Nov 03 j 13:07 15°€ -6730 Sep 15 j 22:25 15°R≈ -6735 Jan 30 j 13:55 25°**Ω**12'37 retrograde opposition -6730 Sep 24 j 23:58 13°**≈**46′29 -1°55′36 -6735 Apr 01 j 20:55 20°**Ω**18'53 1°47'41 min. Earth dist. -6730 Sep 24 j 05:35 13°**≈**52'46 4.15614 AU opposition min. Earth dist. -6735 Apr 02 j 13:22 20°**Ω**13'38 4.22072 AU direct -6730 Nov 23 j 02:28 8°≈44'52 direct -6735 Jun 02 j 02:35 15°**Ω**23'49 -6729 Jan 27 j 20:51 15°≈ -6735 Sep 17 j 23:04 0° m evening set -6729 Mar 30 j 12:17 27°≈35'00 -6735 Oct 04 j 13:54 3° m 46'35 -6729 Apr 10 j 05:47 0°) evening set

-	_				6730 BCE in historical c	_	50 10
conjunction	-6729 Apr 13 j 06:12	0°) (40'55		evening set	-6723 Oct 09 j 03:00	8° mp 31'03	
minimum elong	-6729 Apr 13 j 06:17	0°) (40′57	1°01'51	Č	J	•	
max. Earth dist.	-6729 Apr 14 j 01:55		6.20248 AU	conjunction	-6723 Oct 21 j 17:50	11° m)27'07	0°48'34
morning rise	-6729 Apr 26 j 23:06	3°) 46′10		minimum elong	-6723 Oct 21 j 17:54	11° m)27'10	0°48'45
retrograde	-6729 Aug 29 j 13:19	22°) 04′07		max. Earth dist.	-6723 Oct 21 j 06:44	11° m) 20'39	6.16137 AU
opposition	-6729 Oct 27 j 19:05	17°) €04'07	-0°59'49	morning rise	-6723 Nov 03 j 10:11	14° m) 24'12	
min. Earth dist.	-6729 Oct 27 j 13:52	17°) €05'52	4.24870 AU		-6722 Jan 21 j 19:14	0∘ 亚	
direct	-6729 Dec 27 j 03:09	12°) €00'30		retrograde	-6722 Mar 12 j 01:37	3° ₾ 33'23	
	-6728 May 01 j 01:30	0 ° $\mathbf{\gamma}$			-6722 May 01 j 05:32	30°R, Mp	
evening set	-6728 May 03 j 07:45	0° Y 29′53		opposition	-6722 May 12 j 05:33	28° m 35'40	0°35'25
				min. Earth dist.	-6722 May 12 j 05:20	28° m 35'44	4.11704 AU
conjunction	-6728 May 16 j 21:40	3° Y 30'35		direct	-6722 Jul 11 j 00:06	23° Mp 42'36	
minimum elong	-6728 May 16 j 21:42	3° Y 30'36	0°16'12		-6722 Sep 14 j 03:19	0∘ 亚	
max. Earth dist.	-6728 May 16 j 17:43	3° Y 28′23	6.29091 AU	desc. node	-6722 Nov 05 j 15:54	11° ≙ 02'40	
morning rise	-6728 May 30 j 09:02	6° Y 29'51		evening set	-6722 Nov 11 j 14:53	12° ≏ 26′09	
asc. node	-6728 Sep 22 j 11:26	23° Y 59'02					
retrograde	-6728 Sep 29 j 04:00	24° Ƴ 03′29		conjunction	-6722 Nov 24 j 13:04	15° ≏ 29'02	-0°02'37
opposition	-6728 Nov 27 j 17:01	19° Ƴ 07'19	0°12'19	minimum elong	-6722 Nov 24 j 13:04	15° ≏ 29'02	0°02'41
min. Earth dist.	-6728 Nov 28 j 01:57	19° Ƴ 04'22	4.32545 AU	behind sun begin	-6722 Nov 24 j 04:58	15° ≏ 24'16	
direct	-6727 Jan 28 j 05:45	14° Ƴ 03'19		behind sun end	-6722 Nov 24 j 21:10	15° ≏ 33'48	
	-6727 May 26 j 04:42	9° 8		max. Earth dist.	-6722 Nov 24 j 23:39	15° ≏ 35'16	6.07989 AU
evening set	-6727 Jun 05 j 13:52	2° 8 15'16		morning rise	-6722 Dec 07 j 14:20	18° 亞 33'38	
					-6721 Jan 29 j 06:25	0° M	
conjunction	-6727 Jun 18 j 19:29	5° 8 10'06		retrograde	-6721 Apr 17 j 17:08	8°M25'21	
minimum elong	-6727 Jun 18 j 19:26	5° 8 10'04	0°33'19	opposition	-6721 Jun 17 j 10:37	3°M23'39	
max. Earth dist.	-6727 Jun 17 j 20:45	4° 8 57'33	6.35032 AU	min. Earth dist.	-6721 Jun 16 j 19:10		4.05296 AU
morning rise	-6727 Jul 01 j 21:29	8° 8 03'09			-6721 Jul 15 j 20:46	30° ₹ Ω	
	-6727 Aug 03 j 19:26	15° 8		direct	-6721 Aug 15 j 01:59	28° ♀ 30'22	
retrograde	-6727 Oct 30 j 08:20	25° 8 13'45			-6721 Sep 14 j 02:58	0° M ₊	
opposition	-6727 Dec 29 j 09:05	20° 8 20'42			-6721 Dec 06 j 01:47	15° ™	
min. Earth dist.	-6727 Dec 30 j 05:34	20° 8 14'04	4.36413 AU	evening set	-6721 Dec 16 j 21:24	17°M31'39	
direct	-6726 Mar 01 j 17:32	15° 8 17'58					
	-6726 Jun 22 j 03:47	0°II		conjunction	-6721 Dec 30 j 03:44	20°M39'49	
evening set	-6726 Jul 07 j 13:39	3° Ⅱ 20'17		minimum elong	-6721 Dec 30 j 03:40	20°M39'46	0°54'12
max. Earth dist.	-6726 Jul 18 j 21:25	5° Ⅱ 50′27	6.36414 AU	max. Earth dist.	-6721 Dec 31 j 11:53	20°M.58'51	6.03878 AU
	· · · · · · · · · · · · · · · · · · ·			morning rise	-6720 Jan 12 j 13:22	23°M49'47	
conjunction	-6726 Jul 20 j 09:23	6° Ⅱ 10′23	1°12'04		-6720 Feb 08 j 13:03	0° ∡ ¹	
minimum elong	-6726 Jul 20 j 09:19	6° Ⅱ 10'21	1°12′26	retrograde	-6720 May 23 j 12:10	13° ₹ 58'51	1050112
morning rise	-6726 Aug 02 j 02:09	8° Ⅱ 58'59		opposition	-6720 Jul 22 j 13:57	8° ∡ 754'21	
retrograde	-6726 Nov 30 j 21:12	26° I I11'21	2002157	min. Earth dist.	-6720 Jul 21 j 13:10	9°×702'44	4.04053 AU
opposition	-6725 Jan 30 j 10:48	21° Ⅱ 19'47	2°02'56	direct	-6720 Sep 18 j 15:57	3° ∡ 58'55	
min. Earth dist.	-6725 Jan 31 j 13:49	21° I I1'09	4.35366 AU	evening set	-6719 Jan 21 j 13:08	23° ∡ 09'16	
direct	-6725 Apr 03 j 00:52	16° Ⅱ 19'20		. ,.	(710 F. L. 04 : 01 55	260 710025	1025127
. ,	-6725 Jul 18 j 21:04	0°©		conjunction	-6719 Feb 04 j 01:55	26° ₹ 19'25	
evening set	-6725 Aug 07 j 20:19	4°921'23	(22002 ATT	minimum elong	-6719 Feb 04 j 01:53	26° 🖈 19'24	1°26'03
max. Earth dist.	-6725 Aug 18 j 20:27	6° 5 49'10	6.32893 AU	max. Earth dist.	-6719 Feb 05 j 18:20	26° ₹ 43'07	6.05458 AU
	(725 A 20:00-02	70600142	1920/25	morning rise	-6719 Feb 17 j 17:36	29° х ⁷ 30′55	
conjunction minimum elong	-6725 Aug 20 j 09:02	7°509'43	1°30'25	ratro ara da	-6719 Feb 19 j 19:43 -6719 Jun 28 j 06:36	0°る 19°る22'07	
2	-6725 Aug 20 j 09:02	7°909'43	1°30'52	retrograde	•		2012150
morning rise	-6725 Sep 01 j 19:39	9°957'11		opposition	-6719 Aug 26 j 19:56	14°る17'04	
retrograde	-6724 Jan 02 j 09:16	27°534'08	2011157	min. Earth dist.	-6719 Aug 25 j 18:25	14°る25'48	4.08418 AU
opposition	-6724 Mar 03 j 10:59	22°5942'14	2°11'57	direct	-6719 Oct 24 j 03:31	9° る 18'15	
min. Earth dist.	-6724 Mar 04 j 11:46	22°934'23	4.29659 AU	evening set	-6718 Feb 27 j 11:55	28° る 23'33	
direct	-6724 May 04 j 13:45	17°5944'46			-6718 Mar 06 j 12:11	0° ≈	
	-6724 Aug 11 j 05:29	0° Ω 5° Ω 5 4153			(710 M 12:05:00	1922124	1925120
evening set	-6724 Sep 07 j 02:40	5° £ 54'53	(25425 ATT	conjunction	-6718 Mar 13 j 05:09	1°≈32'34	
max. Earth dist.	-6724 Sep 18 j 08:19	8° Ω 28'42	6.25425 AU	minimum elong	-6718 Mar 13 j 05:11	1°≈32'36	
	(7248 10:12.21	00 0 45101	1922/27	max. Earth dist.	-6718 Mar 14 j 16:43	1°≈53'02	6.12175 AU
conjunction	-6724 Sep 19 j 13:26	8° Ω 45'21	1°22'27	morning rise	-6718 Mar 26 j 23:10	4°≈41'51	
minimum elong	-6724 Sep 19 j 13:29	8° Ω 45'23	1°22'49		-6718 May 14 j 03:07	15° ≈	
morning rise	-6724 Oct 02 j 00:05	11° Ω 35'54		retrograde	-6718 Aug 01 j 12:45	23°≈46'51	1040120
, 1	-6724 Oct 17 j 03:46	15° Ω		opposition	-6718 Sep 29 j 18:09	18° ≈ 43'50	
retrograde	-6723 Feb 04 j 11:29	29° Ω 55'08	1040/50	min. Earth dist.	-6718 Sep 29 j 01:29	18° ≈ 49'31	4.16786 AU
opposition	-6723 Apr 06 j 17:52	25° Ω 00'59	1°40'58	direct	-6718 Oct 30 j 19:57	15°R≈ 13°aa41'5°	
min. Earth dist.	-6723 Apr 07 j 09:29	24° \O 56'00	4.20863 AU	direct	-6718 Nov 28 j 00:28	13°≈41'58	
direct	-6723 Jun 06 j 20:52	20° Ω 06′13			-6718 Dec 26 j 13:09	15° ≈	
	-6723 Aug 31 j 08:22	0° т р			-6717 Mar 24 j 08:27	0° ∺	

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 17 Attention, astronomical year style is used: The year -6717 in astronomical counting style is the year 6718 BCE in historical counting style.

Attention, astronomi	cal year style is used: Th	e year -6717 i	n astronomical cou	inting style is the year	6718 BCE in historical co	ounting style.	
evening set	-6717 Apr 04 j 14:01	2°) 29'35		max. Earth dist.	-6712 Sep 22 j 16:08	12° Q 55'36	6.24323 AU
					-6712 Oct 01 j 17:07	15° Ω	
conjunction	-6717 Apr 18 j 07:38	5°) 34′51	-0°55'57	morning rise	-6712 Oct 06 j 06:32	16° £ 02'31	
minimum elong	-6717 Apr 18 j 07:42	5°) 34′54	0°56'10		-6712 Dec 15 j 10:24	0° m)	
max. Earth dist.	-6717 Apr 19 j 00:37	5°) 44′25	6.21580 AU	retrograde	-6711 Feb 09 j 03:47	4° m 28'09	
morning rise	-6717 May 02 j 00:07	8°) 39′22			-6711 Apr 07 j 23:59	30° R Ω	
retrograde	-6717 Sep 03 j 01:50	26°) 49′52		opposition	-6711 Apr 11 j 10:41	29° £ 33′38	1°33'52
opposition	-6717 Nov 01 j 09:26	21° ¥ 50′23	-0°50'00	min. Earth dist.	-6711 Apr 12 j 00:54	29° £ 29′05	4.19493 AU
min. Earth dist.	-6717 Nov 01 j 05:12	21° ¥ 51'49	4.26269 AU	direct	-6711 Jun 11 j 08:50	24° Ω 39′08	
direct	-6717 Dec 31 j 21:32	16°) 46′39			-6711 Aug 10 j 22:33	0° ™	
	-6716 Apr 13 j 22:21	0° Υ		evening set	-6711 Oct 13 j 13:07	13° m 06'59	
evening set	-6716 May 08 j 03:37	5° Ƴ 12'25					
				conjunction	-6711 Oct 26 j 04:43	16° M 04'04	0°42'24
conjunction	-6716 May 21 j 16:33	8° Ƴ 12'07	-0°09'07	minimum elong	-6711 Oct 26 j 04:46	16° Mp 04'06	0°42'33
minimum elong	-6716 May 21 j 16:34	8° Ƴ 12′08	0°09'06	max. Earth dist.	-6711 Oct 25 j 18:35	15° m 58'09	6.14626 AU
behind sun begin	-6716 May 21 j 09:36	8° Ƴ 08'18		morning rise	-6711 Nov 07 j 22:16	19° m 02'19	
behind sun end	-6716 May 21 j 23:31	8° Y 15'58			-6711 Dec 28 j 19:01	0∘ ত	
max. Earth dist.	-6716 May 21 j 11:01	8° Ƴ 09'05	6.30487 AU	retrograde	-6710 Mar 17 j 00:27	8° ≙ 19'27	
morning rise	-6716 Jun 04 j 02:36	11° Y 10'18		opposition	-6710 May 17 j 02:35	3° ₽ 21'11	0°24'51
asc. node	-6716 Aug 02 j 01:18	22° Y 56'08		min. Earth dist.	-6710 May 17 j 00:53	3° ₽ 21'44	4.10159 AU
retrograde	-6716 Oct 03 j 13:59	28° Ƴ 37'54			-6710 Jun 14 j 14:39	30°R, Mp	
opposition	-6716 Dec 02 j 04:45	23° Ƴ 42'14	0°22'27	direct	-6710 Jul 15 j 16:53	28° m/28'08	
min. Earth dist.	-6716 Dec 02 j 15:20	23° Y 38'46	4.33830 AU		-6710 Aug 15 j 12:09	0∘ ⊽	
direct	-6715 Feb 01 j 22:14	18° Υ 38'22		desc. node	-6710 Sep 16 j 23:15	ა — 4° ჲ 28'01	
	-6715 May 08 j 23:35	0°8		evening set	-6710 Nov 16 j 07:52	17° £ 16'16	
evening set	-6715 Jun 10 j 03:24	6° 8 46'29		evening sec	0/10/10/10/07:52	17 —1010	
max. Earth dist.	-6715 Jun 22 j 06:02		6.36090 AU	conjunction	-6710 Nov 29 j 07:27	20° ≏ 20'21	-0°00'50
max. Earth dist.	-0/13 Juli 22 j 00.02	9 02013	0.30090 AU	minimum elong	-6710 Nov 29 j 07:26	20° <u>₽</u> 20'20	0°10'05
conjunction	-6715 Jun 23 j 07:27	9° 8 40'15	0°20'24	behind sun begin	-6710 Nov 29 j 07:20	20° ⊆ 20′20 20° ⊆ 16′28	0 1003
•		9° 8 40'13		=	-	20° ⊆ 1028 20° ⊆ 24'12	
minimum elong	-6715 Jun 23 j 07:24	_	0-3939	behind sun end	-6710 Nov 29 j 13:59		C 0/575 ATT
morning rise	-6715 Jul 06 j 08:05	12° 8 32'17		max. Earth dist.	-6710 Nov 29 j 21:37	20° £ 28'44	6.06575 AU
. 1	-6715 Jul 17 j 16:09	15° 8		morning rise	-6710 Dec 12 j 09:59	23° Ω 26'09	
retrograde	-6715 Nov 03 j 15:48	29° 8 39'38	100 (110		-6709 Jan 10 j 04:52	0°M	
opposition	-6714 Jan 02 j 19:25	24° 8 46'49		retrograde	-6709 Apr 22 j 20:37	13°M24'28	0055124
min. Earth dist.	-6714 Jan 03 j 17:06	24° 8 39'49	4.37193 AU	opposition	-6709 Jun 22 j 10:51	8°M22'20	
direct	-6714 Mar 06 j 06:34	19° 8 44'16		min. Earth dist.	-6709 Jun 21 j 18:01	8°M27'56	4.04175 AU
	-6714 Jun 05 j 00:25	\mathbf{I}°		direct	-6709 Aug 19 j 22:35	3° M 28′55	
evening set	-6714 Jul 11 j 22:02	7° Ⅱ 43'47			-6709 Nov 18 j 14:10	15° M ₊	
max. Earth dist.	-6714 Jul 23 j 04:56	10°∏13'24	6.36841 AU	evening set	-6709 Dec 21 j 22:12	22°M34'32	
	(714) 1 24:1(24	100 T 22100	1015156		(700 I 04:05 21	250M 42120	0050146
conjunction	-6714 Jul 24 j 16:34	10° Ⅱ 33'09	1°15'56	conjunction	-6708 Jan 04 j 05:31	25°M43'29	
minimum elong	-6714 Jul 24 j 16:30	10° I 33′07	1°16'20	minimum elong	-6708 Jan 04 j 05:27	25°M43'27	1°00'06
morning rise	-6714 Aug 06 j 07:56	13° Ⅱ 21'03		max. Earth dist.	-6708 Jan 05 j 14:35	26°M03'05	6.03133 AU
	-6714 Nov 16 j 08:23	0.ee		morning rise	-6708 Jan 17 j 16:26	28°M54'17	
retrograde	-6714 Dec 05 j 04:41	0°533'23		_	-6708 Jan 22 j 08:37	0° ∡ ¹	
	-6714 Dec 24 j 02:22	30°RⅡ		retrograde	-6708 May 28 j 14:26	19° ∡ ¹05'30	
opposition	-6713 Feb 03 j 21:23	25° Ⅱ 41'53	2°06'15	opposition	-6708 Jul 27 j 14:29	14° ∡ °00'43	
min. Earth dist.	-6713 Feb 05 j 00:42	25° Ⅲ 33'11	4.35412 AU	min. Earth dist.	-6708 Jul 26 j 12:05	14° ₹ 09'41	4.03789 AU
direct	-6713 Apr 07 j 11:44	20° Ⅱ 41'47		direct	-6708 Sep 23 j 15:12	9° ∡ 04'51	
	-6713 Jul 01 j 15:37	0 \circ \odot		evening set	-6707 Jan 26 j 18:40	28° ∡ 17′20	
evening set	-6713 Aug 12 j 01:56	8°9542'37			-6707 Feb 03 j 02:33	0°ಕ	
max. Earth dist.	-6713 Aug 22 j 23:40	11° 5 09'19	6.32529 AU				
				conjunction	-6707 Feb 09 j 08:29	1° る 27'47	
conjunction	-6713 Aug 24 j 13:50	11° © 30'46	1°30'53	minimum elong	-6707 Feb 09 j 08:28	1° る 27'46	1°27'59
minimum elong	-6713 Aug 24 j 13:50	11° © 30'46	1°31'19	max. Earth dist.	-6707 Feb 11 j 03:00	1° る 52'41	6.05699 AU
morning rise	-6713 Sep 06 j 00:10	14° © 18'13		morning rise	-6707 Feb 23 j 00:39	4° る 39'22	
	-6713 Dec 01 j 16:00	$0^{\circ}\Omega$		retrograde	-6707 Jul 03 j 07:19	24° පි 26'50	
retrograde	-6712 Jan 06 j 21:37	1° Ω 58'39		opposition	-6707 Aug 31 j 17:54	19° る 21'53	-2°13'13
	-6712 Feb 12 j 12:28	30°R≌		min. Earth dist.	-6707 Aug 30 j 17:20	19° る 30'17	4.09127 AU
opposition	-6712 Mar 08 j 00:07	27° © 06'31	2°10'01	direct	-6707 Oct 29 j 03:52	14° る 22'35	
min. Earth dist.	-6712 Mar 09 j 01:12	26° © 58'34	4.28890 AU		-6706 Feb 17 j 10:31	0° ≈	
direct	-6712 May 09 j 01:17	22° © 09'18		evening set	-6706 Mar 04 j 17:12	3° ≈ 26'41	
	-6712 Jul 24 j 06:01	$0^{\circ}\Omega$		-	·		
evening set	-6712 Sep 11 j 08:26	10° Ω 20′18		conjunction	-6706 Mar 18 j 10:45	6° ≈ 35'24	-1°22'57
-	- •			minimum elong	-6706 Mar 18 j 10:48	6° ≈ 35'26	1°23'20
conjunction	-6712 Sep 23 j 19:33	13° Ω 11'19	1°19'16	max. Earth dist.	-6706 Mar 19 j 21:04	6° ≈ 55'04	6.13273 AU
minimum elong	-6712 Sep 23 j 19:36		1°19'38	morning rise	-6706 Apr 01 j 04:58	9° ≈ 44'14	
- C				-			

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 18 Attention, astronomical year style is used: The year -6706 in astronomical counting style is the year 6707 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -6706 i	in astronomical co	unting style is the year	6707 BCE in historical c	ounting style.	-
	-6706 Apr 24 j 20:51	15° ≈		morning rise	-6701 Sep 10 j 08:25	18° 5 49'51	
retrograde	-6706 Aug 06 j 05:15	28° ≈ 41'35			-6701 Nov 03 j 19:12	$0^{\circ}\Omega$	
opposition	-6706 Oct 04 j 11:40	23° ≈ 38'55		retrograde	-6700 Jan 11 j 15:11	6° Ω 36′05	
min. Earth dist.	-6706 Oct 03 j 19:20		4.18127 AU	opposition	-6700 Mar 12 j 18:32	1° Ω 43'49	
direct	-6706 Dec 02 j 21:12	18° ≈ 36'38		min. Earth dist.	-6700 Mar 13 j 18:48	1° Ω 36′07	4.27588 AU
	-6705 Mar 06 j 10:34	0° ∀			-6700 Mar 26 j 16:39	30°Rூ	
evening set	-6705 Apr 09 j 14:29	7°) €20'53		direct	-6700 May 13 j 16:18	26°9547'03	
	(705) 22:07 12	100 1/25/22	0040155		-6700 Jun 29 j 14:44	0°Ω	
conjunction	-6705 Apr 23 j 07:43	10° ¥ 25′23		evening set	-6700 Sep 15 j 19:57	15° Ω 00'36	
minimum elong	-6705 Apr 23 j 07:47	10°) 25′25 10°) 33′18	6.23043 AU	Danila dia	-6700 Sep 15 j 18:54 -6700 Sep 27 j 04:32	15° Ω	(22054 ATT
max. Earth dist. morning rise	-6705 Apr 23 j 21:49 -6705 May 06 j 23:33	10 X 33 18 13° X 29'00	0.23043 AU	max. Earth dist.	-0700 Sep 27 J 04.32	1/ 663036	6.22854 AU
morning rise	-6705 Aug 07 j 16:20	13 γ (2900		conjunction	-6700 Sep 28 j 07:17	17° Ω 52'21	1°15'27
retrograde	-6705 Sep 07 j 15:23	1° Υ 31'54		minimum elong	-6700 Sep 28 j 07:17	17° Ω 52'23	1°15'47
retrograde	-6705 Oct 08 j 09:24	30°R ₩		morning rise	-6700 Oct 10 j 19:04	20°Ω44'29	1 13 47
opposition	-6705 Nov 05 j 23:03	26°) 32′57	-0°39'55	morning rise	-6700 Nov 22 j 17:13	0° m)	
min. Earth dist.	-6705 Nov 05 j 21:29		4.27666 AU	retrograde	-6699 Feb 14 j 04:08	9° m) 17'53	
direct	-6704 Jan 05 j 16:56	21°) 29'05		opposition	-6699 Apr 16 j 10:09	4° m) 22'54	1°25'45
	-6704 Mar 26 j 00:32	0°Υ		min. Earth dist.	-6699 Apr 16 j 22:11	4° m) 19'03	4.17954 AU
evening set	-6704 May 12 j 21:56	9° Υ 51'15			-6699 May 28 j 23:51	30°R Ω	
C	, ,			direct	-6699 Jun 16 j 03:29	29° Ω 28'43	
conjunction	-6704 May 26 j 09:51	12° Y ′50′03	-0°01'59		-6699 Jul 04 j 06:30	0° m	
minimum elong	-6704 May 26 j 09:51	12° Y ′50'02	0°01'55	evening set	-6699 Oct 18 j 05:27	17° m 59'57	
behind sun begin	-6704 May 26 j 01:37	12° Y 45'30					
behind sun end	-6704 May 26 j 18:05	12° Y ′54'34		conjunction	-6699 Oct 30 j 22:14	20° m 58'09	0°35'34
max. Earth dist.	-6704 May 26 j 01:27	12° Y ′45'25	6.31687 AU	minimum elong	-6699 Oct 30 j 22:17	20° m 58'11	0°35'41
morning rise	-6704 Jun 08 j 18:40	15° Ƴ 47'13		max. Earth dist.	-6699 Oct 30 j 16:41	20° m 54'54	6.13192 AU
asc. node	-6704 Jun 10 j 21:05	16° Ƴ 14'53		morning rise	-6699 Nov 12 j 16:54	23° m 57'33	
	-6704 Aug 23 j 10:35	$0^{\circ}S$			-6699 Dec 09 j 09:04	0∘ ⊽	
retrograde	-6704 Oct 07 j 22:24	3° 8 09'56		retrograde	-6698 Mar 22 j 05:34	13° ≏ 22'02	
	-6704 Nov 22 j 23:44	30° Ŗ ♈		opposition	-6698 May 22 j 06:06	8° ≏ 23'17	
opposition	-6704 Dec 06 j 15:52	28° Y 14'44		min. Earth dist.	-6698 May 22 j 02:09	8° ≏ 24'34	4.08977 AU
min. Earth dist.	-6704 Dec 07 j 03:41	28° Y 10′51	4.34747 AU	direct	-6698 Jul 20 j 15:54	3° △ 30′24	
direct	-6703 Feb 06 j 12:11	23° Y 10'57		desc. node	-6698 Jul 27 j 02:07	3° △ 34'30	
	-6703 Apr 19 j 05:16	0°8		evening set	-6698 Nov 21 j 06:58	22° ≏ 21'31	
evening set	-6703 Jun 14 j 16:32	11° 8 16'50			((00 D 04: 07:21	25° £ 26'26	0017141
i	-6703 Jun 27 j 19:11	140 00146	0945122	conjunction	-6698 Dec 04 j 07:31 -6698 Dec 04 j 07:29	25° £ 26′26 25° £ 26′25	
conjunction	-6703 Jun 27 j 19:11 -6703 Jun 27 j 19:07			minimum elong max. Earth dist.	-6698 Dec 05 j 00:04		6.05764 AU
max. Earth dist.	-6703 Jun 26 j 15:51		6.36645 AU	morning rise	-6698 Dec 17 j 11:29	28° £ 33'11	0.03704 AU
max. Earth dist.	-6703 Jul 01 j 14:15	15° 8	0.30043 AU	morning risc	-6698 Dec 23 j 15:45	0°M	
morning rise	-6703 Jul 10 j 18:22	17° 8 01'00			-6697 Mar 10 j 00:56	15°M	
morning 1130	-6703 Sep 16 j 07:37	0° П		retrograde	-6697 Apr 28 j 01:43	18°M35'12	
retrograde	-6703 Nov 08 j 01:44	4° Ⅱ 07'11		renograde	-6697 Jun 16 j 12:59	15°RM	
	-6702 Jan 01 j 09:39	30°R ႘		opposition	-6697 Jun 27 j 14:57	13°M32'34	-1°06'05
opposition	-6702 Jan 07 j 06:52	29° 8 14'44	1°34'05	min. Earth dist.	-6697 Jun 26 j 19:08		4.03857 AU
min. Earth dist.	-6702 Jan 08 j 06:17	29° 8 07'12	4.37356 AU	direct	-6697 Aug 24 j 23:54	8°M38'54	
direct	-6702 Mar 10 j 20:10	24° 8 12'31			-6697 Oct 28 j 12:12	15° ™	
	-6702 May 15 j 12:24	Π °0		evening set	-6697 Dec 27 j 02:25	27°M45'42	
evening set	-6702 Jul 16 j 07:45	12° Ⅱ 11'24			-6696 Jan 05 j 13:57	0° ∡ 7	
max. Earth dist.	-6702 Jul 27 j 11:07	14° Ⅱ 39'18	6.36567 AU				
				conjunction	-6696 Jan 09 j 10:51	0° ∡ ′54'59	
conjunction	-6702 Jul 29 j 01:03	15° Ⅱ 00′21	1°19'30	minimum elong	-6696 Jan 09 j 10:47	0° ∡ 754'57	1°05'46
minimum elong	-6702 Jul 29 j 01:00	15° Ⅱ 00'19	1°19'55	max. Earth dist.	-6696 Jan 10 j 23:44	1° ∡ 16'49	6.03336 AU
morning rise	-6702 Aug 10 j 15:32	17° Ⅱ 47'58		morning rise	-6696 Jan 22 j 22:29	4° ∡ 05'59	
	-6702 Oct 11 j 12:16	0.22 0.22		retrograde	-6696 Jun 02 j 18:06	24° ∡ 14'58	2004120
retrograde	-6702 Dec 09 j 17:15	5°502'59	200010-	opposition	-6696 Aug 01 j 15:35	19° ∡ 09'57	
opposition	-6701 Feb 08 j 11:31	0°511'32	2~09'07	min. Earth dist.	-6696 Jul 31 j 13:21		4.04511 AU
min E-d 1'	-6701 Feb 09 j 23:42	30°ŖⅡ 0°≌02'46	4 2 4 7 2 0 4 1 1	direct	-6696 Sep 28 j 17:19	14° ∡ 13'37	
min. Earth dist.	-6701 Feb 09 j 15:00		4.34739 AU	ovomir	-6695 Jan 17 j 03:41	0°る 2° ろ 24/20	
direct	-6701 Apr 12 j 00:31 -6701 Jun 09 j 23:43	25° Ⅱ 11'47 0° ©		evening set	-6695 Jan 31 j 23:58	3° る 24'29	
evening set	-6701 Jun 09 j 23:43	13° © 13'46		conjunction	-6695 Feb 14 j 14:20	6° る 34'39	-1°28'52
max. Earth dist.	-6701 Aug 16 j 10:37	15°9941'37	6.31509 AU	minimum elong	-6695 Feb 14 j 14:19	6°る34'39	
max. Lattii Uist.	0/01 Aug 2/ J 10.00	1.5	0.51507 AU	max. Earth dist.	-6695 Feb 16 j 08:34		6.06840 AU
conjunction	-6701 Aug 28 j 22:30	16° © 02'08	1°30'54	morning rise	-6695 Feb 28 j 07:03	9° る 45'52	0.000TO AU
minimum elong	-6701 Aug 28 j 22:30	16°502'08	1°31'19	retrograde	-6695 Jul 08 j 02:11	29° る 25'59	
		3= 30					

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6695 in astronomical counting style is the year 6696 BCE in historical counting style. -6695 Sep 05 i 13:17 24°る21'10 -2°11'28 -6690 Sep 20 i 17:25 0ಂತಾ opposition -6695 Sep 04 j 12:37 24°る29'36 4.10573 AU -6690 Dec 14 j 07:49 9°933'25 min. Earth dist. retrograde -6695 Nov 03 j 01:28 19°**る**21'22 opposition -6689 Feb 13 j 02:20 4°9542'01 direct 2°11'12 min. Earth dist. -6694 Jan 30 j 09:07 4°933'05 4.33606 AU 0°≈≈ -6689 Feb 14 j 06:25 -6689 Apr 02 j 18:08 -6694 Mar 09 j 18:57 evening set 8°≈21'47 30°R,Ⅲ -6689 Apr 16 j 14:13 29°**Ⅱ**42'43 direct conjunction -6694 Mar 23 j 12:36 11°≈29'49 -1°19'46 -6689 Apr 30 j 09:46 0ಂತಾ -6694 Mar 23 j 12:40 17°5547'09 minimum elong 11°≈29'52 1°20'08 evening set -6689 Aug 20 j 21:04 max. Earth dist. -6694 Mar 24 j 19:47 11°**≈**47'38 6.14890 AU max. Earth dist. -6689 Aug 31 j 19:55 20°9515'22 6.30137 AU morning rise -6694 Apr 06 j 06:42 14°≈37'52 -6694 Apr 07 j 21:49 15°≈ conjunction -6689 Sep 02 j 08:15 20°935'55 1°30'18 -6694 Jun 24 j 13:15 -6689 Sep 02 j 08:15 0°**)**€ minimum elong 20°**©**35'56 1°30'43 -6689 Sep 14 j 18:15 retrograde -6694 Aug 10 j 19:38 3°**)** €26'22 morning rise 23°9524'13 -6694 Sep 27 j 02:00 30°R≈ -6689 Oct 15 j 02:46 0° Ω opposition -6694 Oct 09 j 01:23 28°≈24'08 -1°35'17 retrograde -6688 Jan 16 j 10:53 11°**Ω**17'21 min. Earth dist. -6694 Oct 08 j 12:01 28°≈28'40 4.19731 AU opposition -6688 Mar 17 j 14:55 6°**Ω**24'45 2°03'40 direct -6694 Dec 07 j 16:46 23°**≈**21′28 min. Earth dist. -6688 Mar 18 j 13:02 6°**Ω**17'43 4.26077 AU -6693 Feb 14 j 07:29 0°**)**€ direct -6688 May 18 j 08:03 1°Ω28'26 evening set -6693 Apr 14 j 10:27 12°\(\)01'43 -6688 Aug 30 j 04:19 15°Ω evening set -6688 Sep 20 j 09:04 19°**Ω**44'53 conjunction -6693 Apr 28 j 03:20 15°\(\mathbf{1}\)05'26 -0°43'48 minimum elong -6693 Apr 28 i 03:24 15°**)**€05'28 0°43'58 conjunction -6688 Oct 02 j 21:02 22°**Ω**37'31 1°11'03 max. Earth dist. -6693 Apr 28 j 14:39 15°**)** 11'46 6.24510 AU minimum elong -6688 Oct 02 j 21:06 22°**Ω**37'33 1°11'20 morning rise -6693 May 11 j 18:21 18°**¥**08'06 max. Earth dist. -6688 Oct 01 i 22:43 22°**Ω**24'38 6.21357 AU -6693 Jul 09 j 10:31 morning rise -6688 Oct 15 j 09:25 25°**Ω**30'35 -6693 Sep 11 j 23:08 6°**Y**03′56 -6688 Nov 04 j 08:10 retrograde 0° m -6693 Nov 10 j 08:35 1°Y05'31 -0°29'59 -6687 Feb 19 j 06:14 14° m 11'33 retrograde opposition -6693 Nov 10 j 08:32 1°**Υ**05'32 4.28877 AU -6687 Apr 21 j 11:36 9° m 16'07 min. Earth dist. opposition 1°16'51 -6693 Nov 18 j 14:22 -6687 Apr 21 j 21:40 9° m 12'53 30°**₹** min. Earth dist. 4.16572 AU -6687 Jun 21 j 00:55 -6692 Jan 10 j 05:38 26°**₩**01'32 4° m 22'16 direct direct -6687 Oct 22 j 23:44 -6692 Mar 02 j 23:20 $0^{\circ}\Upsilon$ 22° m 56'06 evening set 8°Y42'04 -6692 Apr 21 j 01:27 asc. node 14°\bar{Y}21'03 -6687 Nov 04 j 17:22 -6692 May 17 j 12:28 conjunction 25° m 55'12 0°28'23 evening set -6687 Nov 04 j 17:25 25° m 55'14 0°28'28 minimum elong 17°**Υ**19'01 0°05'02 -6692 May 30 j 23:10 -6687 Nov 04 j 14:18 25° m 53'24 6.12050 AU conjunction max. Earth dist. -6692 May 30 j 23:10 minimum elong 17°**Y**19′01 0°05'07 morning rise -6687 Nov 17 j 13:26 28° m 55'42 17°**Ƴ**14'39 -6692 May 30 j 15:13 behind sun begin -6687 Nov 22 j 04:03 0∘**⊽** behind sun end -6692 May 31 j 07:07 17°**Y**23′24 retrograde -6686 Mar 27 j 09:17 18°**♀**26'01 max. Earth dist. -6692 May 30 j 10:21 17°**Y**11′57 6.32548 AU opposition -6686 May 27 j 09:49 13°**≏**26'38 0°01'50 -6692 Jun 13 j 06:53 20°Υ15'23 min. Earth dist. -6686 May 27 j 02:23 13°**≏**29'04 4.08168 AU morning rise -6692 Jul 30 j 19:05 0°8 desc. node -6686 Jun 05 j 08:14 12°**£**17'14 -6692 Oct 12 j 07:07 7°**8**34'48 -6686 Jul 25 j 15:21 8°**£**33'46 retrograde direct -6692 Dec 11 j 00:39 2°840'04 0°42'02 -6686 Nov 26 j 06:35 27°**♀**26'40 opposition evening set -6692 Dec 11 j 15:32 2°**8**35'12 4.35205 AU -6686 Dec 07 j 01:58 min. Earth dist. 0°M -6691 Jan 01 j 12:58 30°**₹**Υ -6691 Feb 11 i 00:47 27°**Y**36'23 -6686 Dec 09 i 08:23 direct conjunction 0°M32'16 -0°25'16 -6691 Mar 23 j 18:29 0°8 -6686 Dec 09 i 08:21 minimum elong 0°MJ32'15 0°25'28 -6691 Jun 15 i 22:57 15°8 max. Earth dist. -6686 Dec 10 i 05:39 0°M44'52 6.05350 AU evening set -6691 Jun 19 i 03:02 15°**8**41'32 morning rise -6686 Dec 22 j 13:21 3°M39'40 max. Earth dist. -6691 Jun 30 j 22:53 18°**8**17'37 6.36644 AU -6685 Feb 12 i 10:57 15°M -6685 May 03 j 07:50 23°M43'38 retrograde -6691 Jul 02 j 04:29 18°**8**33'57 0°51'17 -6685 Jul 02 j 18:04 18°ML40'34 -1°16'03 conjunction opposition -6691 Jul 02 j 04:25 18°**8**33'55 0°51'34 min. Earth dist. -6685 Jul 01 j 21:38 18°ML47'25 4.03880 AU minimum elong -6691 Jul 15 j 02:21 21°**8**24'38 morning rise -6685 Aug 02 j 23:59 15°RM 13°M46'39 -6691 Aug 25 j 12:23 $0^{\circ}II$ direct -6685 Aug 30 j 01:59 retrograde -6691 Nov 12 j 10:14 8°**Ⅲ**31'41 -6685 Sep 26 j 01:12 15°M -6690 Jan 11 j 17:25 3°**Д**39'28 1°40'49 -6685 Dec 19 j 19:24 0°×7 opposition -6690 Jan 12 j 17:19 3°**耳**31'47 4.36939 AU -6684 Jan 01 j 05:57 2° 🖍 53'44 min. Earth dist. evening set -6690 Feb 12 j 17:31 30°₽₩ -6690 Mar 15 j 06:03 28°**8**37'31 -6684 Jan 14 j 15:11 6° ₹03'11 -1°10'30 direct conjunction -6684 Jan 14 j 15:07 -6690 Apr 14 j 23:29 Π °0 minimum elong 6°×703'09 1°10'54 evening set -6690 Jul 20 j 16:58 16°**Ⅲ**37'39 max. Earth dist. -6684 Jan 16 j 05:12 6°**х** 25′38 6.03759 AU max. Earth dist. -6690 Jul 31 j 19:21 19°**Ⅱ**05'23 6.35758 AU morning rise -6684 Jan 28 j 03:46 9°**х** 14′20 retrograde -6684 Jun 07 j 17:53 29°**х** 20′15

conjunction

morning rise

minimum elong

-6690 Aug 02 j 09:15

-6690 Aug 02 j 09:12

-6690 Aug 14 j 22:48

19°**Ⅲ**26′28

19°**Ⅲ**26′27

22°**Ⅲ**14′01

1°22'33

1°22'58

min. Earth dist.

opposition

direct

-6684 Aug 05 j 11:29

-6684 Aug 06 j 14:45

-6684 Oct 03 j 15:53

24°**≯**24'26 4.05322 AU

24°**₹**15'10 -2°05'59

19°**∡**18'25

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 20 Attention, astronomical year style is used: The year -6683 in astronomical counting style is the year 6684 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ne year -6683 i	in astronomical co	ounting style is the year	6684 BCE in historical c		
	-6684 Dec 30 j 00:25	ರ∘ರ		conjunction	-6678 Aug 06 j 18:11	23° Ⅱ 55'58	1°25'12
evening set	-6683 Feb 06 j 04:04	8° පි 27'51		minimum elong	-6678 Aug 06 j 18:09	23° Ⅱ 55'57	1°25'37
				morning rise	-6678 Aug 19 j 06:56	26° Ⅱ 43'26	
conjunction	-6683 Feb 19 j 19:00	11° る 37'46			-6678 Sep 03 j 06:03	0	
minimum elong	-6683 Feb 19 j 19:00	11° る 37'45		retrograde	-6678 Dec 18 j 21:28	14° © 06'50	
max. Earth dist.	-6683 Feb 21 j 11:39		6.07953 AU	opposition	-6677 Feb 17 j 18:18	9° © 15'20	
morning rise	-6683 Mar 05 j 12:03	14° る 48'35		min. Earth dist.	-6677 Feb 18 j 20:55	9°506'52	4.32693 AU
	-6683 May 20 j 02:46	0° ≈		direct	-6677 Apr 21 j 03:07	4°5516'29	
retrograde	-6683 Jul 12 j 21:39	4°≈21'51		evening set	-6677 Aug 25 j 07:18	22°5522'19	
i Batis	-6683 Sep 05 j 02:06	30°Rる	4.11066.433	max. Earth dist.	-6677 Sep 05 j 08:31	24° © 52'15	6.29073 AU
min. Earth dist.	-6683 Sep 09 j 08:42		4.11866 AU	. ,.	((77.6 0(:10.12	250611122	1920112
opposition	-6683 Sep 10 j 07:16	29°る17'19	-2°08'54	conjunction	-6677 Sep 06 j 18:13	25°©11'23	1°29'12
direct	-6683 Nov 07 j 23:45	24°る17'04		minimum elong	-6677 Sep 06 j 18:14		1°29'37
arranina aat	-6682 Jan 08 j 23:47	0° ≈ 13° ≈ 14'44		morning rise	-6677 Sep 19 j 04:06	28° © 00'04 0° Ω	
evening set	-6682 Mar 14 j 19:52 -6682 Mar 22 j 13:18	15 ≈14 44 15°≈			-6677 Sep 28 j 02:18 -6677 Dec 26 j 22:04	0 3 <i>t</i> 15° Ω	
	-0002 Mai 22 j 13.16	15 🗢		retrograde	-6676 Jan 21 j 07:14	15° € 58'59	
conjunction	-6682 Mar 28 j 13:49	16° ≈ 22'17	-1°16'06	retrograde	-6676 Feb 15 j 16:45	15°RΩ	
minimum elong	-6682 Mar 28 j 13:54	16°≈22'20	1°16'25	opposition	-6676 Mar 22 j 11:20		1°59'18
max. Earth dist.	-6682 Mar 29 j 19:21	16°≈39'06	6.16280 AU	min. Earth dist.	-6676 Mar 23 j 08:36	10° Ω 59'20	4.24930 AU
morning rise	-6682 Apr 11 j 07:41	19° ≈ 29'39	0.10200710	direct	-6676 May 23 j 02:26	6° Ω 10'11	4.24/30/10
morning rise	-6682 May 31 j 03:21	0°) €		ancer	-6676 Aug 11 j 21:37	15° Ω	
retrograde	-6682 Aug 15 j 08:41	8° ₩ 10'19		evening set	-6676 Sep 24 j 21:41	24° Ω 28'09	
opposition	-6682 Oct 13 j 14:35	3°) €08'39	-1°27'26	evening sec	осто Бер 211 21111	2.002009	
min. Earth dist.	-6682 Oct 13 j 02:26		4.21083 AU	conjunction	-6676 Oct 07 j 10:05	27° Ω 21'27	1°06'15
	-6682 Nov 07 j 18:17	30°R ≈		minimum elong	-6676 Oct 07 j 10:09	27° Ω 21'29	1°06'31
direct	-6682 Dec 12 j 09:09	28° ≈ 05'45		max. Earth dist.	-6676 Oct 06 j 13:34	27° Ω 09'35	6.20236 AU
	-6681 Jan 16 j 11:38	0° ∀			-6676 Oct 18 j 20:40	0° m	
evening set	-6681 Apr 19 j 06:28	16°) 43′04		morning rise	-6676 Oct 19 j 23:22	0° mp 15'21	
				retrograde	-6675 Feb 24 j 04:28	19° m 02'23	
conjunction	-6681 May 02 j 22:40	19°){ 46′04	-0°37'25	opposition	-6675 Apr 26 j 11:16	14° Mp 06'21	1°07'33
minimum elong	-6681 May 02 j 22:44	19°) 46′06	0°37'32	min. Earth dist.	-6675 Apr 26 j 17:56	14°Mp04'13	4.15557 AU
max. Earth dist.	-6681 May 03 j 04:55	19° ¥ 49′33	6.25730 AU	direct	-6675 Jun 25 j 19:47	9° m 12'43	
morning rise	-6681 May 16 j 13:05	22°) (47′57		evening set	-6675 Oct 27 j 16:14	27° m 47'58	
	-6681 Jun 19 j 06:55	0 ° Υ			-6675 Nov 06 j 01:34	0∘ ⊽	
retrograde	-6681 Sep 16 j 09:57	10° Ƴ 37'55					
opposition	-6681 Nov 14 j 19:11	5° Ƴ 40'03		conjunction	-6675 Nov 09 j 10:58	0° £ 47'52	0°21'09
min. Earth dist.	-6681 Nov 14 j 22:12		4.29858 AU	minimum elong	-6675 Nov 09 j 11:00	0° £ 47'54	
direct	-6680 Jan 14 j 21:02	0° Y 35′59		max. Earth dist.	-6675 Nov 09 j 12:23		6.11238 AU
asc. node	-6680 Feb 29 j 20:07	3° Y '40'08		morning rise	-6675 Nov 22 j 08:02	3° ≏ 49'12	
evening set	-6680 May 22 j 03:30	18° Ƴ 53'32		retrograde	-6674 Apr 01 j 12:51	23° Ω 24'06	
		******		desc. node	-6674 Apr 15 j 23:29	23° Ω 04'13	
conjunction	-6680 Jun 04 j 13:15	21° Υ ′50'48		opposition	-6674 Jun 01 j 11:04	18° £ 24'08	
minimum elong	-6680 Jun 04 j 13:14	21°Υ50'48	0°12'04	min. Earth dist.	-6674 Jun 01 j 02:26	18° £ 26'58	4.07617 AU
behind sun begin	-6680 Jun 04 j 07:44	21° Y 47'46		direct	-6674 Jul 30 j 14:19	13° Ω 31'12	
behind sun end max. Earth dist.	-6680 Jun 04 j 18:44 -6680 Jun 03 j 22:31	21° Y 53'49 21° Y 42'40	6.33224 AU		-6674 Nov 20 j 19:25	0°M 2°M 25107	
	-6680 Jun 17 j 19:33	24° Y 46'21	0.33224 AU	evening set	-6674 Dec 01 j 03:52	2°M25'07	
morning rise	-6680 Jul 12 j 05:19	0° 8		conjunction	-6674 Dec 14 j 06:35	5°M31'15	-0°32'30
ratrograda	-6680 Oct 16 j 14:52	12° 8 03'10		minimum elong	-6674 Dec 14 j 06:32	5°M31'13	
retrograde opposition	-6680 Dec 15 j 10:37	7° 8 08'53	0°51'28	max. Earth dist.	-6674 Dec 15 j 05:50	5°M45'01	6.05092 AU
min. Earth dist.	-6680 Dec 16 j 02:19	7° 8 03'46	4.35552 AU	morning rise	-6674 Dec 27 j 12:45	8°M39'14	0.03072710
direct	-6679 Feb 15 j 11:41	2° 8 05'24	1.55552 110	morning rise	-6673 Jan 24 j 07:24	15°M	
	-6679 May 30 j 09:56	15° 8		retrograde	-6673 May 08 j 08:04	28°M44'21	
evening set	-6679 Jun 23 j 14:48	20° 8 10'03		opposition	-6673 Jul 07 j 17:38	23°M40'52	-1°25'12
max. Earth dist.	-6679 Jul 05 j 06:35	22° 8 44'06	6.36627 AU	min. Earth dist.	-6673 Jul 06 j 19:14	23°M48'22	
		•		direct	-6673 Sep 03 j 22:43	18° M 46'37	
conjunction	-6679 Jul 06 j 14:46	23° 8 01'52	0°56'48		-6673 Dec 02 j 06:46	0° ∡ ¹	
minimum elong	-6679 Jul 06 j 14:42	23° 8 01'50	0°57'08	evening set	-6672 Jan 06 j 06:54	7° ∡ °54′03	
morning rise	-6679 Jul 19 j 11:27	25° 8 52'03		-	,		
=	-6679 Aug 07 j 15:13	0°II		conjunction	-6672 Jan 19 j 16:57	11° ∡ °03′39	-1°14'57
retrograde	-6679 Nov 16 j 22:22	13° Ⅱ 00′02		minimum elong	-6672 Jan 19 j 16:53	11° ∡ °03′36	1°15'21
opposition	-6678 Jan 16 j 05:38	8° Ⅱ 08′05	1°47'05	max. Earth dist.	-6672 Jan 21 j 07:23	11° ∡ ¹26′19	6.04158 AU
min. Earth dist.	-6678 Jan 17 j 07:20	7° Ⅱ 59'49	4.36584 AU	morning rise	-6672 Feb 02 j 06:13	14° ≯ 14'51	
direct	-6678 Mar 19 j 19:41	3° Ⅱ 06′28			-6672 Apr 20 j 02:35	0° ප	
evening set	-6678 Jul 25 j 02:48	21° Ⅲ 07′18		retrograde	-6672 Jun 12 j 15:47	4° る 17'50	
max. Earth dist.	-6678 Aug 05 j 04:11	23° Ⅱ 34'47	6.35084 AU		-6672 Aug 05 j 15:18	30°R. ✓	

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 21 Attention, astronomical year style is used: The year -6672 in astronomical counting style is the year 6673 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -6672 i	n astronomical cou	inting style is the year	6673 BCE in historical c	ounting style.	<i>U</i> -
min. Earth dist.	-6672 Aug 10 j 08:34	-	4.05991 AU	max. Earth dist.	-6666 Aug 09 j 12:29		6.34596 AU
opposition	-6672 Aug 11 j 10:46	29° ∡ 12'39	-2°09'19				
direct	-6672 Oct 08 j 14:06	24° ∡ 15′22		conjunction	-6666 Aug 11 j 02:41	28° Ⅲ 24'36	1°27'21
	-6672 Dec 08 j 22:05	0°ಕ		minimum elong	-6666 Aug 11 j 02:39	28° Ⅲ 24'34	1°27'46
evening set	-6671 Feb 11 j 05:31	13° පි 24'01			-6666 Aug 18 j 05:29	0 \circ \mathfrak{S}	
				morning rise	-6666 Aug 23 j 14:44	1° © 11'57	
conjunction	-6671 Feb 24 j 21:10	16° る 33'49	-1°29'35	retrograde	-6666 Dec 23 j 12:36	18° © 38'43	
minimum elong	-6671 Feb 24 j 21:11	16° る 33'49	1°30'01	opposition	-6665 Feb 22 j 09:59	13° 5 47'09	2°13'05
max. Earth dist.	-6671 Feb 26 j 13:42	16° ප 57'19	6.08834 AU	min. Earth dist.	-6665 Feb 23 j 13:10	13° © 38'31	4.31948 AU
morning rise	-6671 Mar 10 j 14:30	19° る 44'22		direct	-6665 Apr 25 j 18:33	8° 5 48'41	
	-6671 Apr 27 j 01:29	0° ≈		evening set	-6665 Aug 29 j 16:33	26° © 55'17	
retrograde	-6671 Jul 17 j 14:59	9° ≈ 11'39		max. Earth dist.	-6665 Sep 09 j 18:46	29° 5 26'08	6.28114 AU
opposition	-6671 Sep 14 j 23:07	4° ≈ 07'28	-2°05'32				
min. Earth dist.	-6671 Sep 14 j 01:32	4° ≈ 14'50	4.12877 AU	conjunction	-6665 Sep 11 j 03:23	29° 5 344'41	1°27'34
	-6671 Oct 20 j 18:00	30°Ŗる		minimum elong	-6665 Sep 11 j 03:25	29° © 44'42	1°27'58
direct	-6671 Nov 12 j 17:43	29° る 06'49			-6665 Sep 12 j 06:20	$0^{\circ}\Omega$	
	-6671 Dec 05 j 23:35	0° ≈		morning rise	-6665 Sep 23 j 13:21	2° Ω 33'49	
	-6670 Mar 06 j 04:04	15° ≈			-6665 Nov 23 j 21:03	15° Ω	
evening set	-6670 Mar 19 j 19:04	18° ≈ 02'46		retrograde	-6664 Jan 26 j 00:15	20° Ω 38'18	
				opposition	-6664 Mar 27 j 06:40	15° Ω 45'03	1°54'13
conjunction	-6670 Apr 02 j 12:58	21° ≈ 09'54	-1°11'58	min. Earth dist.	-6664 Mar 28 j 01:31	15° Ω 39'03	4.23804 AU
minimum elong	-6670 Apr 02 j 13:03	21° ≈ 09'57	1°12'16		-6664 Apr 02 j 04:52	15°R Ω	
max. Earth dist.	-6670 Apr 03 j 14:02	21° ≈ 24'09	6.17339 AU	direct	-6664 May 27 j 17:20	10° Ω 49'31	
morning rise	-6670 Apr 16 j 06:50	24°≈16'47			-6664 Jul 20 j 05:45	15° Ω	
-	-6670 May 12 j 07:46	0° ∀		evening set	-6664 Sep 29 j 09:17	29° Ω 09'12	
retrograde	-6670 Aug 19 j 21:34	12°) 51'04		· ·	-6664 Oct 03 j 01:28	0° m	
opposition	-6670 Oct 18 j 03:02	7°) 49′53	-1°19'07		3	•	
min. Earth dist.	-6670 Oct 17 j 17:20		4.22090 AU	conjunction	-6664 Oct 11 j 22:18	2°m)03'16	1°01'03
direct	-6670 Dec 17 j 01:58	2°) 46'43		minimum elong	-6664 Oct 11 j 22:22	2°m)03'18	1°01'18
evening set	-6669 Apr 24 j 01:41	21° ¥ 22'16		max. Earth dist.	-6664 Oct 11 j 04:43	1° m 53'04	6.19041 AU
5 · 5 · · · · · · · · · · · · · · · · ·	**************************************	,, ,,		morning rise	-6664 Oct 24 j 12:22	4° m) 58'04	
conjunction	-6669 May 07 j 17:29	24°) € 24'42	-0°30'50	retrograde	-6663 Mar 01 j 05:08	23° m 51'47	
minimum elong	-6669 May 07 j 17:32	24°) 24'43		opposition	-6663 May 01 j 10:22	18° m) 55'17	0°57'50
max. Earth dist.	-6669 May 07 j 22:03		6.26643 AU	min. Earth dist.	-6663 May 01 j 16:04	18° m 53'27	4.14351 AU
morning rise	-6669 May 21 j 06:55	27° ¥ 25'51	0.200.5110	direct	-6663 Jun 30 j 16:02	14° mp 01'49	
morning rise	-6669 Jun 01 j 23:56	0°Υ		uncet	-6663 Oct 20 j 21:18	0∘ ⊽	
retrograde	-6669 Sep 20 j 19:29	15° Υ 10'59		evening set	-6663 Nov 01 j 08:46	2° م 39'35	
opposition	-6669 Nov 19 j 05:43	10° Υ 13'43	-0°09'38	evening sec	0005 1107 01 1 00.10	2 -3733	
min. Earth dist.	-6669 Nov 19 j 09:59		4.30610 AU	conjunction	-6663 Nov 14 j 04:32	5° ≏ 40'27	0°13'48
asc. node	-6668 Jan 09 j 21:53	5° Υ 18'14	4.50010710	minimum elong	-6663 Nov 14 j 04:33	5° - 40'27	0°13'48
direct	-6668 Jan 19 j 10:00	5° Υ '09'42		behind sun begin	-6663 Nov 14 j 00:10	5° ⊆ 37'53	0 13 40
evening set	-6668 May 26 j 18:44	23° Υ 25'54		behind sun end	-6663 Nov 14 j 08:56	5° ≏ 43'01	
max. Earth dist.	-6668 Jun 08 j 08:36	26° Υ 12'13	6.33759 AU	max. Earth dist.	-6663 Nov 14 j 08:11	5° - 43'01	6.10139 AU
max. Lattii dist.	-0000 Juli 00 j 00.30	20 12 13	0.33737 AU	morning rise	-6663 Nov 27 j 02:57	8° ≏ 42'50	0.10137 AC
conjunction	-6668 Jun 09 j 03:08	26° Ƴ 22'27	0°18'48	desc. node	-6662 Feb 24 j 10:28	25° ⊆ 50'27	
minimum elong	-6668 Jun 09 j 03:06	26° Υ '22'26	0°18'57	retrograde	-6662 Apr 06 j 14:47	28° ⊆ 23'26	
morning rise	-6668 Jun 22 j 08:20	29° Υ 17'18	0 1037	opposition	-6662 Jun 06 j 11:59	23° ⊆ 23′20	0°20'52
morning risc	-6668 Jun 25 j 14:21	0°8		min. Earth dist.	-6662 Jun 06 j 00:43	23° <u>a</u> 22'37	4.06735 AU
	-6668 Sep 19 j 19:02	15° 8		direct	-6662 Aug 04 j 10:17	18° £ 29'58	4.00733 AO
retrograde	-6668 Oct 21 j 01:24	16° 8 32'02		direct	-6662 Nov 03 j 07:56	0°M₁	
retrograde	,	16 032 02 15°R8		avanina aat	3		
annagition	-6668 Nov 21 j 07:30	13 KO	1°00'37	evening set	-6662 Dec 06 j 02:34	7°M26'39	
opposition	-6668 Dec 19 j 21:34			:	(((2 D 10:0(-25	100 M 22121	0920122
min. Earth dist.	-6668 Dec 20 j 15:23	11° 8 32'21	4.35852 AU	conjunction	-6662 Dec 19 j 06:25	10°M33'31	
direct	-6667 Feb 20 j 01:45	6° 8 34'51		minimum elong	-6662 Dec 19 j 06:21	10°M33'28	0°39'47
	-6667 May 11 j 23:29	15° 8		max. Earth dist.	-6662 Dec 20 j 07:54	10°M48'37	6.04491 AU
evening set	-6667 Jun 28 j 02:16	24° 8 38'45	(2((50 AII	morning rise	-6661 Jan 01 j 13:41	13°M42'14	
max. Earth dist.	-6667 Jul 09 j 17:08	27° 8 12'23	6.36658 AU		-6661 Jan 07 j 02:31	15°M	
	222 m v · · · · · · · · ·	0 mot 3 a	1000105		-6661 Mar 23 j 19:27	0° ₹ ¹	
conjunction	-6667 Jul 11 j 01:03	27° 8 30'02	1°02'01	retrograde	-6661 May 13 j 11:18	3° ∡ 749'53	
minimum elong	-6667 Jul 11 j 00:59	27° 8 29'59	1°02'22		-6661 Jul 03 j 12:17	30°RM	
	-6667 Jul 22 j 08:36	Π $^{\circ}0$		opposition	-6661 Jul 12 j 18:33	28° ™ 46′00	
morning rise	-6667 Jul 23 j 20:19	0° Ⅱ 19'38		min. Earth dist.	-6661 Jul 11 j 19:43	28° ™ 53'41	4.03712 AU
retrograde	-6667 Nov 21 j 07:51	17° ∐ 28'26		direct	-6661 Sep 08 j 22:46	23°M51'23	
opposition	-6666 Jan 20 j 18:12	12° Ⅱ 36'37	1°52'45		-6661 Nov 11 j 05:52	0° ∡ ¹	
min. Earth dist.	-6666 Jan 21 j 19:24	12° Ⅱ 28'32	4.36361 AU	evening set	-6660 Jan 11 j 10:16	13° ∡ 00'37	
direct	-6666 Mar 24 j 07:30	7° Ⅱ 35'24					
evening set	-6666 Jul 29 j 12:24	25° Ⅱ 36'11		conjunction	-6660 Jan 24 j 21:22	16° ∡ 10'35	-1°18'55

	nical year style is used: Th						ge 22
minimum elong	-6660 Jan 24 j 21:19	16° ₹ 10'33		opposition	-6654 Jan 25 j 04:57	16° Ⅱ 59'37	1057121
max. Earth dist.	-6660 Jan 26 j 13:56	16° ₹ 34'28	6.04255 AU	min. Earth dist.	-6654 Jan 26 j 07:34	16° Ⅱ 59'37	4.36658 AU
morning rise	-6660 Feb 07 j 11:24	19° x 22'03	0.04233 AU	direct	-6654 Mar 28 j 20:13	10 Д 5107 11° Д 58'40	4.30038 AU
morning rise	-6660 Mar 27 j 00:37	19 メ ・22 03		evening set	-6654 Aug 02 j 18:35	29° 耳 57'35	
retrograde	-6660 Jun 17 j 17:05	9° る 22'51		evening set	-6654 Aug 02 j 22:58	0°95	
min. Earth dist.	-6660 Aug 15 j 07:03		4.06450 AU	max. Earth dist.	-6654 Aug 13 j 18:38	0 S 2°S24'41	6.34520 AU
opposition	-6660 Aug 16 j 09:15	4°る2037		max. Earth tist.	-0034 Aug 13 j 16.36	2 32441	0.54520 AO
opposition	-6660 Sep 23 j 19:11	4 O1/41 30°R.✓	-2 1140	conjunction	-6654 Aug 15 j 08:09	2° © 45'39	1°28'53
direct	-6660 Oct 13 j 12:57	29° 🖈 19'58		minimum elong	-6654 Aug 15 j 08:08	2°545'39	1°29'20
direct	-6660 Nov 02 j 09:47	0°る		morning rise	-6654 Aug 27 j 19:21	5°932'43	1 29 20
evening set	-6659 Feb 16 j 10:30	18°る28'34		retrograde	-6654 Dec 27 j 21:41	23°901'44	
evening set	-0039100 10 10.30	16 02634		opposition	-6653 Feb 26 j 22:16		2°12'46
conjunction	-6659 Mar 02 j 02:35	21° る 38'16	-1°28'57	min. Earth dist.	-6653 Feb 28 j 00:32	18°901'42	4.31503 AU
minimum elong	-6659 Mar 02 j 02:37	21°る38'17		direct	-6653 Apr 30 j 04:45	13°9511'57	4.51505 AO
max. Earth dist.	-6659 Mar 03 j 16:35	21° ろ 00'16	6.09597 AU	direct	-6653 Aug 28 j 02:27	0°Ω	
morning rise	-6659 Mar 15 j 20:27	24°る48'38	0.07371 AO	evening set	-6653 Sep 02 j 22:00	1° Ω 18'26	
morning 1130	-6659 Apr 07 j 22:42	0°≈		max. Earth dist.	-6653 Sep 14 j 00:10	3°Ω49'35	6.27324 AU
retrograde	-6659 Jul 22 j 10:19	0 ~ 14° ≈ 10'03		max. Lartii dist.	-0033 Sep 14 J 00.10	3 864733	0.27324 AO
opposition	-6659 Sep 19 j 17:49	9°≈06'09	-2°01'11	conjunction	-6653 Sep 15 j 08:36	4° Ω 08'04	1°25'28
min. Earth dist.	-6659 Sep 18 j 21:20	9° ≈ 13'09	4.13869 AU	minimum elong	-6653 Sep 15 j 08:39	4°Ω08'05	1°25'50
direct	-6659 Nov 17 j 15:38	4°≈05'04	4.13809 AU	morning rise	-6653 Sep 27 j 18:47	6° Ω 57'37	1 23 30
direct	-6658 Feb 15 j 23:36	15°≈		morning risc	-6653 Nov 03 j 23:52	15° Ω	
avanina aat	-6658 Mar 24 j 21:31	13 ≈ 22°≈59'13		retrograde	-6652 Jan 30 j 16:09	15 δι 25° Ω 07'24	
evening set	-0036 Wiai 24 J 21.31	22 ≈39 13		opposition	-6652 Mar 31 j 22:10	$20^{\circ}\Omega 13'48$	1°48'35
conjunction	-6658 Apr 07 j 15:38	26°≈05'56	1907!12	min. Earth dist.	-6652 Apr 01 j 17:04	$20^{\circ} \Omega 13^{48}$ $20^{\circ} \Omega 07'47$	4.22692 AU
minimum elong	-6658 Apr 07 j 15:43	26°≈05'59			-6652 Jun 01 j 06:39	20 δ <i>l</i> 0/4/ 15° Ω 18'31	4.22092 AU
max. Earth dist.	-6658 Apr 08 j 15:46	26°≈19'37	6.18533 AU	direct	-6652 Sep 17 j 13:33	0°m)	
	1 3	20 ≈1937 29°≈12'10	0.18333 AU	avanina aat		3°Mp40'13	
morning rise	-6658 Apr 21 j 09:04	29 ≈ 12 10		evening set	-6652 Oct 03 j 17:16	3 11/14/13	
	-6658 Apr 24 j 22:24	0 X 17° ¥ 39'13			((52.0-+ 1(:07.04	60 m 25110	0055140
retrograde opposition	-6658 Aug 24 j 12:52 -6658 Oct 22 j 18:12	17° X 39°13	1910/07	conjunction minimum elong	-6652 Oct 16 j 07:04 -6652 Oct 16 j 07:08	6° Mp 35'10 6° Mp 35'13	0°55'40 0°55'54
min. Earth dist.	-6658 Oct 22 j 18.12		4.23380 AU	max. Earth dist.	-6652 Oct 15 j 14:56	6° M) 25'48	6.17721 AU
direct	-6658 Dec 21 j 20:58	7° H 35'16	4.23380 AU	morning rise	-6652 Oct 28 j 22:06	9° m/30'58	0.17721 AU
evening set	-6657 Apr 28 j 23:13	26° ∺ 07'39		retrograde	-6651 Mar 06 j 00:37	28° My 31'56	
evening set	-003 / Apr 28 j 23.13	20 /(0/39		opposition	-6651 May 06 j 05:32	23° m) 34'58	0°48'05
conjunction	-6657 May 12 j 14:08	29° ₩ 09'13	0022157	min. Earth dist.	-6651 May 06 j 09:01	23° m) 33'51	4.12923 AU
minimum elong	-6657 May 12 j 14:10	29° X 09'15	0°23'59	direct	-6651 Jul 05 j 05:29	18° m) 41'41	4.12923 AU
max. Earth dist.	-6657 May 12 j 15:12	29° H 09'49	6.27961 AU	unect	-6651 Oct 04 j 04:38	0∘ ⊽	
max. Earth dist.	-6657 May 16 j 09:23	29 γ (0949	0.27901 AU	evening set	-6651 Nov 05 j 22:45	0 = 7° £ 23'19	
morning rise	-6657 May 26 j 02:44	2° Υ '09'28		evening set	-0031 NOV 03 J 22.43	/ ==23 19	
retrograde	-6657 Sep 25 j 06:08	19° Υ 48'19		conjunction	-6651 Nov 18 j 19:36	10° ≏ 25'16	0°06'36
asc. node	-6657 Nov 19 j 18:35	15° Υ 23'09		minimum elong	-6651 Nov 18 j 19:37	10° ⊆ 25'17	0°06'34
opposition	-6657 Nov 23 j 18:12	13 γ 23 09 14° γ 51'30	0°00'45	behind sun begin	-6651 Nov 18 j 12:01	10° ⊆ 23'17 10° ⊆ 20'49	0 00 34
min. Earth dist.	-6657 Nov 24 j 00:03	14° Υ 49'33	4.31871 AU	behind sun end	-6651 Nov 19 j 03:13	10° ⊆ 29'45	
direct	-6656 Jan 24 j 02:52	9° Υ 47'29	4.510/1710	max. Earth dist.	-6651 Nov 19 j 01:15	10° ⊆ 28'35	6.08736 AU
evening set	-6656 May 31 j 10:11	28° Υ '00'07		morning rise	-6651 Dec 01 j 19:20	13° ⊆ 28'53	0.00730710
evening set	-6656 Jun 09 j 12:26	0°8		desc. node	-6650 Jan 06 j 07:43	21° ⊆ 28'04	
	0030 Juli 07 j 12:20	ů O		desc. Hode	-6650 Feb 23 j 17:39	0°M	
conjunction	-6656 Jun 13 j 17:20	0° 8 55'39	0°25'33	retrograde	-6650 Apr 11 j 16:01	3°M16'42	
minimum elong	-6656 Jun 13 j 17:18	0° 8 55'38	0°25'44	readgrade	-6650 May 28 j 23:43	30°R Ω	
max. Earth dist.	-6656 Jun 12 j 22:23	0° 8 45'12	6.34887 AU	opposition	-6650 Jun 11 j 10:41	28° ♀ 15'42	-0°31'46
morning rise	-6656 Jun 26 j 20:56	3° 8 49'24	0.54007 710	min. Earth dist.	-6650 Jun 10 j 22:12		4.05483 AU
morning rise	-6656 Aug 21 j 18:32	15° 8		direct	-6650 Aug 09 j 05:29	23° Ω 22'36	1.03 103 110
retrograde	-6656 Oct 25 j 08:54	21° 8 00'07			-6650 Oct 14 j 10:22	0°M	
opposition	-6656 Dec 24 j 08:17	16° 8 06'37	1°09'16	evening set	-6650 Dec 11 j 00:00	12°M23'47	
min. Earth dist.	-6656 Dec 25 j 02:44	16° 8 00'37		evening sec	-6650 Dec 21 j 23:52	15°M	
dist.	-6655 Jan 01 j 23:13	15°R ႘				1197	
direct	-6655 Feb 24 j 15:10	11° 8 03'34		conjunction	-6650 Dec 24 j 05:07	15°M31'36	-0°46'07
	-6655 Apr 18 j 22:13	15°8		minimum elong	-6650 Dec 24 j 05:03	15°M31'34	
evening set	-6655 Jul 02 j 12:28	29° 8 04'21		max. Earth dist.	-6650 Dec 25 j 09:54	15°M48'41	6.03517 AU
	-6655 Jul 06 j 17:48	0°Ⅱ		morning rise	-6649 Jan 06 j 13:34	18°M41'17	
max. Earth dist.	-6655 Jul 13 j 23:14	1° Ⅱ 35'42	6.37286 AU		-6649 Feb 27 j 04:53	0° ∡ 7	
	July 10 J 20.14			retrograde	-6649 May 18 j 14:39	8° × 752'44	
	6655 I. 1. 15:00 40	1° ∏ 54'44	1°06'45	opposition	-6649 Jul 17 j 18:26	3° × ⁷ 48'36	-1°41'37
conjunction	-0022 Jul 12 109:40						
conjunction minimum elong	-6655 Jul 15 j 09:40 -6655 Jul 15 j 09:36	1° I I54'41	1°07'07	min. Earth dist.	-		4.03157 AU
minimum elong	-6655 Jul 15 j 09:36				-6649 Jul 16 j 18:29	3° ∡ 56'40	
	·	1° Ⅱ 54'41			-		

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 23 Attention, astronomical year style is used: The year -6649 in astronomical counting style is the year 6650 BCE in historical counting style.

Attention, astronomi		e year -6649 i	n astronomical cou		6650 BCE in historical co	ounting style.	
	-6649 Oct 09 j 10:19	0° ∡		morning rise	-6643 Aug 01 j 11:13	9° Ⅱ 09'37	
evening set	-6648 Jan 16 j 14:04	18° ∡ ¹06′03		retrograde	-6643 Nov 30 j 02:40	26° Ⅱ 18'47	
				opposition	-6642 Jan 29 j 17:25	21° Ⅱ 27'13	2°01'51
conjunction	-6648 Jan 30 j 01:58	21° ₰ 16′27	-1°22'12	min. Earth dist.	-6642 Jan 30 j 20:24	21° Ⅱ 18'37	4.36264 AU
minimum elong	-6648 Jan 30 j 01:54	21° ⊀ 16′25	1°22'37	direct	-6642 Apr 02 j 08:38	16° Ⅱ 26'40	
max. Earth dist.	-6648 Jan 31 j 18:24	21° ∡¹ 40′15	6.04144 AU		-6642 Jul 17 j 18:02	0 \circ 6	
morning rise	-6648 Feb 12 j 16:58	24° ₹ 28'19		evening set	-6642 Aug 07 j 03:15	4° 5 26'03	
	-6648 Mar 07 j 22:36	0° ට		max. Earth dist.	-6642 Aug 18 j 00:55	6°952'14	6.33734 AU
retrograde	-6648 Jun 22 j 16:40	14° る 27'24					
min. Earth dist.	-6648 Aug 20 j 04:42	9° る 31'19	4.06809 AU	conjunction	-6642 Aug 19 j 15:55	7° © 14'05	1°30'01
opposition	-6648 Aug 21 j 07:23	9° ට 22'12	-2°13'09	minimum elong	-6642 Aug 19 j 15:54	7°514'04	1°30'27
direct	-6648 Oct 18 j 12:08	4° る 23'59		morning rise	-6642 Sep 01 j 02:46	10° © 01'16	
evening set	-6647 Feb 21 j 15:35	23° る 32'47		retrograde	-6641 Jan 01 j 13:32	27° © 35'03	
				opposition	-6641 Mar 03 j 14:36	22°5643'11	2°11'47
conjunction	-6647 Mar 07 j 08:26	26° る 42'25	-1°27'35	min. Earth dist.	-6641 Mar 04 j 16:58	22° © 34'49	4.30372 AU
minimum elong	-6647 Mar 07 j 08:28	26° ප් 42'26	1°27'59	direct	-6641 May 04 j 19:17	17°5945'26	
max. Earth dist.	-6647 Mar 08 j 23:16	27° ප 04'51	6.10403 AU		-6641 Aug 11 j 11:19	$0^{\circ}\Omega$	
morning rise	-6647 Mar 21 j 02:25	29° る 52'30		evening set	-6641 Sep 07 j 07:49	5° Ω 54'01	
	-6647 Mar 21 j 15:31	0° ≈					
	-6647 Jun 05 j 03:40	15° ≈		conjunction	-6641 Sep 19 j 18:43	8° Ω 44'18	1°22'47
retrograde	-6647 Jul 27 j 06:35	19° ≈ 07'31		minimum elong	-6641 Sep 19 j 18:46	8° Ω 44'19	1°23'09
	-6647 Sep 17 j 15:11	15°R≈		max. Earth dist.	-6641 Sep 18 j 12:32	8° Ω 27'03	6.25956 AU
opposition	-6647 Sep 24 j 12:26	14° ≈ 03'56	-1°55'55	morning rise	-6641 Oct 02 j 05:09	11° £ 34'33	
min. Earth dist.	-6647 Sep 23 j 17:19	14° ≈ 10′28	4.15005 AU		-6641 Oct 17 j 11:47	15° Ω	
direct	-6647 Nov 22 j 13:48	9° ≈ 02'29		retrograde	-6640 Feb 04 j 12:44	29° Ω 51′29	
	-6646 Jan 25 j 13:00	15° ≈		opposition	-6640 Apr 05 j 19:24	24° Ω 57'32	1°42'01
evening set	-6646 Mar 29 j 23:18	27°≈53'55		min. Earth dist.	-6640 Apr 06 j 12:10	24° Ω 52'12	4.21179 AU
	-6646 Apr 08 j 07:02	0° ∀		direct	-6640 Jun 05 j 22:46	20° Ω 02'38	
					-6640 Aug 30 j 19:29	0° m)	
conjunction	-6646 Apr 12 j 17:13	1°) 00′00	-1°02'00	evening set	-6640 Oct 08 j 07:24	8° m 27'29	
minimum elong	-6646 Apr 12 j 17:18	1°) 00′03	1°02'15		· ·	·	
max. Earth dist.	-6646 Apr 13 j 14:40	1°) 12′07	6.19881 AU	conjunction	-6640 Oct 20 j 21:56	11° m 23'25	0°49'38
morning rise	-6646 Apr 26 j 10:22	4°) €05'30		minimum elong	-6640 Oct 20 j 22:00	11° m 23'28	0°49'48
retrograde	-6646 Aug 29 j 01:18	22°) € 24'46		max. Earth dist.	-6640 Oct 20 j 07:56	11° Mp 15'16	6.16210 AU
opposition	-6646 Oct 27 j 08:27	17°) €24'34	-1°00'40	morning rise	-6640 Nov 02 j 14:07	14° m) 20'23	
min. Earth dist.	-6646 Oct 27 j 01:23		4.24777 AU	Č	-6639 Jan 21 j 10:22	0∘ <u>⊽</u>	
direct	-6646 Dec 26 j 15:16	12°) €21'01		retrograde	-6639 Mar 11 j 04:13	3° ≏ 29'11	
	-6645 Apr 30 j 00:31	$0^{\circ}\Upsilon$		Ü	-6639 Apr 29 j 18:16	30°R, M⊅	
evening set	-6645 May 03 j 19:11	0° Ƴ 49'50		opposition	-6639 May 11 j 07:24		0°37'23
<i>3</i>	, ,			min. Earth dist.	-6639 May 11 j 08:41		4.11530 AU
conjunction	-6645 May 17 j 09:16	3° Y 50'30	-0°16'56	direct	-6639 Jul 10 j 03:05	23° m 38'30	
minimum elong	-6645 May 17 j 09:17	3° Y 50'30	0°16'58		-6639 Sep 13 j 15:11	0∘ <u>⊽</u>	
max. Earth dist.	-6645 May 17 j 08:02	3° Ƴ 49'48	6.29286 AU	evening set	-6639 Nov 10 j 19:13	12° £ 23'32	
morning rise	-6645 May 30 j 20:41	6° Ƴ 49'43		desc. node	-6639 Nov 15 j 05:49	13° ≏ 26'17	
retrograde	-6645 Sep 29 j 16:11	24° Y 22'36			3		
asc. node	-6645 Sep 29 j 11:56	24° Y 22'36		conjunction	-6639 Nov 23 j 17:22	15° ≏ 26'32	-0°01'11
opposition	-6645 Nov 28 j 05:28	19° Ƴ 26'19	0°11'03	minimum elong	-6639 Nov 23 j 17:22	15° ≏ 26'32	0°01'15
min. Earth dist.	-6645 Nov 28 j 13:33	19° Ƴ 23'39	4.32987 AU	behind sun begin	-6639 Nov 23 j 09:14	15° ≏ 21'45	
direct	-6644 Jan 28 j 18:50	14° Ƴ 22'22		behind sun end	-6639 Nov 24 j 01:30	15° ≏ 31'19	
	-6644 May 24 j 07:19	0°8		max. Earth dist.	-6639 Nov 24 j 03:35	15° ≏ 32'34	6.07629 AU
evening set	-6644 Jun 05 j 00:27	2° 8 32'10		morning rise	-6639 Dec 06 j 18:20	18° ≏ 31'12	
max. Earth dist.	-6644 Jun 17 j 07:42		6.35674 AU	C	-6638 Jan 28 j 13:57	0° M .	
	J			retrograde	-6638 Apr 16 j 21:56	8°M24'14	
conjunction	-6644 Jun 18 j 06:11	5° 8 26'48	0°32'09	opposition	-6638 Jun 16 j 14:30	3°M22'46	-0°43'00
minimum elong	-6644 Jun 18 j 06:08	5° 8 26'46	0°32'22	min. Earth dist.	-6638 Jun 15 j 23:45	3°M27'39	4.04816 AU
morning rise	-6644 Jul 01 j 08:29	8° 8 19'41			-6638 Jul 14 j 21:19	30° <u>R</u>Ω	
Z .	-6644 Aug 01 j 22:35	15° 8		direct	-6638 Aug 14 j 05:45	28° ≏ 29'36	
retrograde	-6644 Oct 29 j 17:24	25° 8 28'00			-6638 Sep 13 j 09:52	0°M	
opposition	-6644 Dec 28 j 19:00	20° 8 34'48	1°17'37		-6638 Dec 05 j 05:22	15° M ₊	
min. Earth dist.	-6644 Dec 29 j 15:05	20° 8 28'17	4.37200 AU	evening set	-6638 Dec 16 j 02:49	17°M32'52	
direct	-6643 Mar 01 j 04:15	15° 8 31'56	_	5	- J ~		
	-6643 Jun 20 j 14:43	0°II		conjunction	-6638 Dec 29 j 08:50	20°M41'11	-0°52'39
evening set	-6643 Jul 06 j 22:29	3° Ⅲ 31'30		minimum elong	-6638 Dec 29 j 08:45	20°M41'09	0°52'58
max. Earth dist.	-6643 Jul 18 j 07:58	6° Ⅲ 02'14	6.37294 AU	max. Earth dist.	-6638 Dec 30 j 15:19	20°M59'17	6.03341 AU
	J. J			morning rise	-6637 Jan 11 j 18:27	23°M51'23	
conjunction	-6643 Jul 19 j 18:30	6° Ⅱ 21′20	1°11'12	5	-6637 Feb 07 j 14:14	0° ₹	
minimum elong	-6643 Jul 19 j 18:26	6° Ⅲ 21'18		retrograde	-6637 May 23 j 17:38	14° ∡ ¹02'38	
5	J	,		-	J J 1889		

•	omena of Jupiter fro		•	* * * · · · · · · · · · · · · · · · · ·		, .	ge 24
	ical year style is used: Th	-					(2(722 AII
opposition	-6637 Jul 22 j 20:27	8° 1 58'08		max. Earth dist.	-6631 Jul 22 j 12:51	10°Щ23′41	6.36/22 AU
min. Earth dist.	-6637 Jul 21 j 18:40		4.03527 AU		((21 X 1 24 : 01 50	100 11116	1015110
direct	-6637 Sep 18 j 21:51	4° ₹ 02'48		conjunction	-6631 Jul 24 j 01:59	10° Ⅱ 44'16	
evening set	-6636 Jan 21 j 19:16	23° ∡ 14'33		minimum elong	-6631 Jul 24 j 01:55	10° Ⅱ 44'14	1°15'34
				morning rise	-6631 Aug 05 j 17:48	13° Ⅱ 32'23	
conjunction	-6636 Feb 04 j 08:05	26° ₹ 24'54			-6631 Nov 12 j 16:32	0° ©	
minimum elong	-6636 Feb 04 j 08:03	26° ₹ 24'52		retrograde	-6631 Dec 04 j 14:08	0°5544'59	
max. Earth dist.	-6636 Feb 06 j 02:47		6.05015 AU		-6631 Dec 26 j 13:37	30°RⅡ	
morning rise	-6636 Feb 17 j 23:29	29° ∡ 36'31		opposition	-6630 Feb 03 j 05:56	25° Ⅱ 53'30	2°05'27
	-6636 Feb 19 j 15:55	0°る		min. Earth dist.	-6630 Feb 04 j 09:14	25° Ⅱ 44'48	4.35304 AU
retrograde	-6636 Jun 27 j 15:58	19°る29'37	4.00004.477	direct	-6630 Apr 06 j 19:42	20° Ⅱ 53'18	
min. Earth dist.	-6636 Aug 25 j 03:02		4.08084 AU		-6630 Jun 29 j 23:48	0.22 0.22	
opposition	-6636 Aug 26 j 04:37	14°る24'28	-2°13'31	evening set	-6630 Aug 11 j 11:59	8°\$55'02	< 20161 1XX
direct	-6636 Oct 23 j 12:04	9°る25'45		max. Earth dist.	-6630 Aug 22 j 11:09	11° © 22'30	6.32461 AU
evening set	-6635 Feb 26 j 18:44	28° ප 31'17			((20 4 24:00 15	110642122	1020125
	-6635 Mar 05 j 05:22	0° ≈		conjunction	-6630 Aug 24 j 00:15	11°5643'22	
	((25)/ 12:11.10	10 10101	1005140	minimum elong	-6630 Aug 24 j 00:15	11°5643'21	1°31'00
conjunction	-6635 Mar 12 j 11:48	1°≈40'21		morning rise	-6630 Sep 05 j 10:37	14° © 30'53	
minimum elong	-6635 Mar 12 j 11:51	1°≈40′23			-6630 Nov 29 j 03:07	0° U	
max. Earth dist.	-6635 Mar 14 j 00:28	2°≈01'26	6.11949 AU	retrograde	-6629 Jan 06 j 06:45	2°Ω11'08	
morning rise	-6635 Mar 26 j 05:58	4° ≈ 49'45			-6629 Feb 13 j 22:08	30° ₹ 5	
	-6635 May 12 j 16:59	15° ≈		opposition	-6629 Mar 08 j 08:35	27° © 19'10	2°09'56
retrograde	-6635 Jul 31 j 20:11	23° ≈ 55'47		min. Earth dist.	-6629 Mar 09 j 09:53	27° © 11'08	4.28879 AU
min. Earth dist.	-6635 Sep 28 j 09:05		4.16658 AU	direct	-6629 May 09 j 09:49	22° © 21'56	
opposition	-6635 Sep 29 j 03:20	18° ≈ 52'33	-1°50'00		-6629 Jul 23 j 11:44	0 ° Ω	
	-6635 Oct 31 j 20:51	15° R ≈		evening set	-6629 Sep 11 j 19:17	10° Ω 33'38	
direct	-6635 Nov 27 j 08:17	13° ≈ 50'40		max. Earth dist.	-6629 Sep 23 j 01:18	13° Ω 08′00	6.24370 AU
	-6635 Dec 24 j 05:00	15° ≈				_	
	-6634 Mar 23 j 00:13	0° ∀		conjunction	-6629 Sep 24 j 06:17		1°19'30
evening set	-6634 Apr 03 j 21:01	2° ∺ 37'56		minimum elong	-6629 Sep 24 j 06:21	13° Ω 24'39	1°19'51
					-6629 Oct 01 j 04:40	15° Ω	
conjunction	-6634 Apr 17 j 14:39	5°) (43′13		morning rise	-6629 Oct 06 j 17:25	16° Ω 15'49	
minimum elong	-6634 Apr 17 j 14:43	5°) 43′16			-6629 Dec 14 j 10:12	0° m)	
max. Earth dist.	-6634 Apr 18 j 08:23	5° ¥ 53'13	6.21519 AU	retrograde	-6628 Feb 09 j 13:00	4° m/40'43	
morning rise	-6634 May 01 j 07:13	8°) 47'47			-6628 Apr 09 j 00:12	30°R Ω	
retrograde	-6634 Sep 02 j 11:51	26° ¥ 58'56		opposition	-6628 Apr 10 j 18:58		1°34'36
opposition	-6634 Oct 31 j 18:44	21° ¥ 59'17		min. Earth dist.	-6628 Apr 11 j 09:17	29° Ω 41'45	4.19609 AU
min. Earth dist.	-6634 Oct 31 j 14:51		4.26227 AU	direct	-6628 Jun 10 j 17:38	24° Ω 51'47	
direct	-6634 Dec 31 j 07:16	16°) ₹55'34			-6628 Aug 09 j 00:57	0° m)	
	-6633 Apr 13 j 12:54	0°Υ 2 2		evening set	-6628 Oct 12 j 23:34	13° m) 19'47	
evening set	-6633 May 08 j 10:42	5° Y 20′57					
		••		conjunction	-6628 Oct 25 j 15:10	16° Mp 16'46	0°43'07
conjunction	-6633 May 21 j 23:55	8° Y ′20'47		minimum elong	-6628 Oct 25 j 15:13	16° Mp 16'48	0°43'16
minimum elong	-6633 May 21 j 23:56	8° Y ′20′48	0°10'05	max. Earth dist.	-6628 Oct 25 j 06:09	16° m 11'30	6.14821 AU
behind sun begin	-6633 May 21 j 17:22	8° Y 17'11		morning rise	-6628 Nov 07 j 08:21	19° m 14'48	
behind sun end	-6633 May 22 j 06:30	8° Y ′24'25			-6628 Dec 27 j 03:20	0∘ ত	
max. Earth dist.	-6633 May 21 j 18:59	8° Y 18′04	6.30429 AU	retrograde	-6627 Mar 16 j 08:33	8° ≏ 30'34	
morning rise	-6633 Jun 04 j 10:15	11° Υ 19'06		opposition	-6627 May 16 j 10:42	3° ₾ 32'29	0°26'13
asc. node	-6633 Aug 10 j 12:26	24° Υ 21'54		min. Earth dist.	-6627 May 16 j 09:25	3° 2 32'54	4.10438 AU
retrograde	-6633 Oct 03 j 21:59	28° Y 47'18			-6627 Jun 16 j 01:06	30°R, M)	
opposition	-6633 Dec 02 j 13:33	23° Y 51'30	0°20'56	direct	-6627 Jul 15 j 01:49	28° m/39'32	
min. Earth dist.	-6633 Dec 02 j 23:17	23° Y 48'17	4.33754 AU		-6627 Aug 12 j 21:06	0∘ 亚	
direct	-6632 Feb 02 j 05:33	18° Y 47'34		desc. node	-6627 Sep 23 j 17:54	5° 2 58'42	
	-6632 May 07 j 12:29	0°8		evening set	-6627 Nov 15 j 17:13	17° ≏ 26'51	
evening set	-6632 Jun 09 j 11:24	6° 8 55'57			((27.))	200 2 2012	0000155
	((22 I 22 : 12 : 2	مولا بمبت	0020122	conjunction	-6627 Nov 28 j 16:19	20° ♀ 30'37	
conjunction	-6632 Jun 22 j 15:49	9° 8 49'54	0°38'22	minimum elong	-6627 Nov 28 j 16:18	20° ♀ 30'37	U~U9'U4
minimum elong	-6632 Jun 22 j 15:46	9° 8 49'52	0°38'37	behind sun begin	-6627 Nov 28 j 09:22	20° 2 26'31	
max. Earth dist.	-6632 Jun 21 j 14:46	9° 8 36'06	6.36003 AU	behind sun end	-6627 Nov 28 j 23:15	20° ₽ 34'42	(0 (0 0 0)
morning rise	-6632 Jul 05 j 16:45	12° 8 42'07		max. Earth dist.	-6627 Nov 29 j 05:03	20° ₽ 38'09	6.06908 AU
	-6632 Jul 16 j 06:36	15° 8		morning rise	-6627 Dec 11 j 18:41	23° ≏ 36'11	
retrograde	-6632 Nov 03 j 01:26	29° 8 49'53	100		-6626 Jan 08 j 19:37	0°M,	
opposition	-6631 Jan 02 j 03:58	24° 8 57'06	1°25'21	retrograde	-6626 Apr 22 j 02:16	13°M32'46	0053:
min. Earth dist.	-6631 Jan 03 j 02:06	24° 8 49'56	4.37087 AU	opposition	-6626 Jun 21 j 18:14	8°M30'45	
direct	-6631 Mar 05 j 15:16	19° 8 54'31		min. Earth dist.	-6626 Jun 21 j 00:39	8°M36'35	4.04536 AU
	-6631 Jun 03 j 11:08	0°П 7°П 5 4142		direct	-6626 Aug 19 j 06:45	3°M37'22	
evening set	-6631 Jul 11 j 07:10	7° ∏ 54'43			-6626 Nov 17 j 07:47	15° ™	

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		-	in astronomical co		r 6627 BCE in historical c	14° 8 16'47	0°44'28
evening set	-6626 Dec 21 j 05:19	22 11641 28		conjunction minimum elong	-6620 Jun 27 j 02:29 -6620 Jun 27 j 02:26	14° 8 16'45	0°44'43
conjunction	-6625 Jan 03 j 12:27	25°M50'09	-0°58'47	minimum ciong	-6620 Jun 30 j 08:49	15° 8	0 44 43
minimum elong	-6625 Jan 03 j 12:23	25°M50'06	0°59'07	morning rise	-6620 Jul 10 j 02:04	17° 8 08'21	
max. Earth dist.	-6625 Jan 04 j 22:48	26°M10'29	6.03503 AU	morning rise	-6620 Sep 14 j 17:17	0°Ⅱ	
morning rise	-6625 Jan 16 j 22:49	29°M00'35	0.03303710	retrograde	-6620 Nov 07 j 09:52	4° Ⅱ 15'57	
morning rise	-6625 Jan 21 j 04:19	0° ⊼		renegrade	-6619 Jan 01 j 20:54	30°R 8	
retrograde	-6625 May 28 j 21:15	19° ∡ 10′22		opposition	-6619 Jan 06 j 14:39	29° 8 23'24	1°32'45
opposition	-6625 Jul 27 j 21:18	14° х 05'39	-1°55'08	min. Earth dist.	-6619 Jan 07 j 13:14		4.36951 AU
min. Earth dist.	-6625 Jul 26 j 19:44	14° ∡ 14'19	4.04126 AU	direct	-6619 Mar 10 j 01:50	24° 8 21'06	
direct	-6625 Sep 23 j 23:13	9° ∡ '09'55			-6619 May 13 j 21:10	Π°	
evening set	-6624 Jan 26 j 23:38	28° ∡ ¹20'36		evening set	-6619 Jul 15 j 16:45	12° Ⅲ 21'37	
	-6624 Feb 03 j 01:56	ರ∘ರ		max. Earth dist.	-6619 Jul 26 j 21:19	14° Ⅱ 50'15	6.36238 AU
conjunction	-6624 Feb 09 j 13:02	1° る 30'46	-1°27'02	conjunction	-6619 Jul 28 j 10:25	15° Ⅱ 10′52	1°18'46
minimum elong	-6624 Feb 09 j 13:00	1° る 30'45	1°27'29	minimum elong	-6619 Jul 28 j 10:21	15° Ⅱ 10′50	1°19'11
max. Earth dist.	-6624 Feb 11 j 07:08	1° る 55'24	6.05967 AU	morning rise	-6619 Aug 10 j 01:10	17° Ⅱ 58'44	
morning rise	-6624 Feb 23 j 05:04	4° る 42'09			-6619 Oct 09 j 17:36	0 \circ \odot	
retrograde	-6624 Jul 02 j 11:15	24° る 29'05		retrograde	-6619 Dec 09 j 03:34	5° © 14'28	
min. Earth dist.	-6624 Aug 29 j 22:26	19° る 32'52	4.09313 AU	opposition	-6618 Feb 07 j 20:08	0°ള്23'05	2°08'24
opposition	-6624 Aug 31 j 00:06	19° る 24'06	-2°12'58	min. Earth dist.	-6618 Feb 09 j 00:01	0° © 14'12	4.34522 AU
direct	-6624 Oct 28 j 09:04	14° る 24'55			-6618 Feb 10 j 20:41	30°Ŗ Ⅱ	
	-6623 Feb 16 j 12:06	0°≈		direct	-6618 Apr 11 j 09:26	25° Ⅲ 23′19	
evening set	-6623 Mar 03 j 20:48	3° ≈ 27'47			-6618 Jun 08 j 01:16	0 \circ \odot	
				evening set	-6618 Aug 15 j 21:26	13° © 26'21	
conjunction	-6623 Mar 17 j 14:10	6° ≈ 36′22	-1°23'11	max. Earth dist.	-6618 Aug 26 j 20:00	15° © 53'53	6.31445 AU
minimum elong	-6623 Mar 17 j 14:13	6° ≈ 36′24	1°23'34				
max. Earth dist.	-6623 Mar 19 j 00:04	6° ≈ 55'48	6.13355 AU	conjunction	-6618 Aug 28 j 09:08	16°9514'50	1°30'39
morning rise	-6623 Mar 31 j 08:19	9° ≈ 45′08		minimum elong	-6618 Aug 28 j 09:08	16° © 14'50	1°31'04
	-6623 Apr 23 j 22:33	15° ≈		morning rise	-6618 Sep 09 j 19:21	19° 5 02'41	
retrograde	-6623 Aug 05 j 11:54	28° ≈ 43′08			-6618 Nov 02 j 00:50	$0^{\circ}\Omega$	
opposition	-6623 Oct 03 j 17:53	23° ≈ 40′21	-1°43'28	retrograde	-6617 Jan 11 j 00:03	6° Ω 48'25	
min. Earth dist.	-6623 Oct 03 j 02:26	23° ≈ 45'37	4.18088 AU	opposition	-6617 Mar 13 j 03:06	1° Q 56′10	2°07'20
direct	-6623 Dec 02 j 04:06	18° ≈ 38′08		min. Earth dist.	-6617 Mar 14 j 02:31	1° Ω 48'44	4.27714 AU
	-6622 Mar 05 j 12:08	0°) €			-6617 Mar 28 j 19:20	30° Ŗ	
evening set	-6622 Apr 08 j 18:05	7° ¥ 22′03		direct	-6617 May 14 j 00:32	26° © 59'20	
					-6617 Jun 28 j 09:57	$0^{\circ}\Omega$	
conjunction	-6622 Apr 22 j 11:30	10°) €26'41	-0°50'48		-6617 Sep 15 j 08:08	15° Ω	
minimum elong	-6622 Apr 22 j 11:34	10°) €26'43	0°50'59	evening set	-6617 Sep 16 j 06:35	15° Ω 12'47	
max. Earth dist.	-6622 Apr 23 j 02:43	10°) 35′13	6.22878 AU				
morning rise	-6622 May 06 j 03:25	13°) € 30′24		conjunction	-6617 Sep 28 j 18:01	18° Ω 04'26	1°15'46
	-6622 Aug 06 j 11:11	$0^{\circ}\Upsilon$		minimum elong	-6617 Sep 28 j 18:05	18° Ω 04'28	1°16'06
retrograde	-6622 Sep 06 j 20:57	1° Y '34'40		max. Earth dist.	-6617 Sep 27 j 17:06	17° Ω 50′06	6.23183 AU
	-6622 Oct 08 j 03:15	30°₽ , ₩		morning rise	-6617 Oct 11 j 05:32	20° Ω 56′20	
opposition	-6622 Nov 05 j 05:26	26°) ₹35'35	-0°41'29		-6617 Nov 22 j 04:31	0° m	
min. Earth dist.	-6622 Nov 05 j 02:49	26°) ₹36′28	4.27405 AU	retrograde	-6616 Feb 14 j 11:54	9° m ,27′34	
direct	-6621 Jan 04 j 21:09	21° ∺ 31'43		opposition	-6616 Apr 15 j 17:42	4° m 32′44	1°26'38
	-6621 Mar 25 j 23:00	0° ℃		min. Earth dist.	-6616 Apr 16 j 06:15	4° TD 28'43	4.18472 AU
evening set	-6621 May 13 j 02:51	9° Y 54'34			-6616 May 31 j 11:28	30° R Ω	
				direct	-6616 Jun 15 j 12:51	29° Ω 38'32	
conjunction	-6621 May 26 j 14:56	12° Y 53'36			-6616 Jun 30 j 12:53	0° m)	
minimum elong	-6621 May 26 j 14:56	12° Y 53'36	0°03'07	evening set	-6616 Oct 17 j 14:34	18° m 08'08	
behind sun begin	-6621 May 26 j 06:45	12° Y ′49′05					
behind sun end	-6621 May 26 j 23:08	12° Y ′58′07		conjunction	-6616 Oct 30 j 06:53	21°M _{05'53}	0°36'27
max. Earth dist.	-6621 May 26 j 05:51	12° Y ′48′35	6.31349 AU	minimum elong	-6616 Oct 30 j 06:56	21° m 05'55	0°36'34
morning rise	-6621 Jun 09 j 00:12	15° Y 51′05		max. Earth dist.	-6616 Oct 29 j 23:55	21° m 01'49	6.13838 AU
asc. node	-6621 Jun 20 j 12:49	18° Y ′21′48		morning rise	-6616 Nov 12 j 01:21	24° m 04'53	
	-6621 Aug 23 j 01:56	0°8			-6616 Dec 08 j 04:57	0∘ ⊽	
retrograde	-6621 Oct 08 j 07:29	3° 8 15'24		retrograde	-6615 Mar 21 j 09:00	13° ≏ 26′05	
	-6621 Nov 24 j 00:25	30° Ŗ ♈		opposition	-6615 May 21 j 11:34	8° م 27'23	0°15'07
opposition	-6621 Dec 06 j 23:01	28° Y ′20'06	0°30'47	min. Earth dist.	-6615 May 21 j 07:05	8° ≏ 28'51	4.09682 AU
min. Earth dist.	-6621 Dec 07 j 11:41	28° Y 15'56	4.34353 AU	direct	-6615 Jul 19 j 22:33	3° ჲ 34'29	
direct	-6620 Feb 06 j 19:12	23° Y 16'15		desc. node	-6615 Aug 03 j 22:14	3° ჲ 56'43	
	-6620 Apr 17 j 21:38	0°8		evening set	-6615 Nov 20 j 12:56	22° ≏ 23'07	
evening set	-6620 Jun 13 j 23:18	11° 8 23'28					
max. Earth dist.	-6620 Jun 25 j 23:19	14° 8 01'49	6.36222 AU	conjunction	-6615 Dec 03 j 13:14	25° ≏ 27'34	
				minimum elong	-6615 Dec 03 j 13:12	25° ≏ 27'33	0°16'36

max. Earth dist, memming rises 46/15 No. 91/16/20 28/23/35 60/15 No. 91/16/20 29/23/35 60/15 No. 91/16/20 70/220 20/23/10 70/220 20/23/10 70/220 60/23/10 70/220 60/23/10 70/220 60/23/10 70/22	•	ical year style is used: Th		•	, , , , , , , , , , , , , , , , , , ,		, .	gc 20
memming rise -6615 Dec 21 joil 33 258 3347 meming rise -6609 Jun 13 joil 313-7 20"7228 Coll Amer 97 (901) PTM entergrade -6618 Dec 21 join 30 18"8 (1974) returgrade -6614 Jun 21 joil 318 27"8 (1974) returgrade -6614 Jun 21 joil 318 27"8 (1974) returgrade -6614 Jun 21 joil 318 27"8 (1974) return 6614 Jun 21 joil 318 27"8 (1974)			-					6.32011 AU
	morning rise		28° ♀ 33'47		morning rise		20° Ƴ 22'58	
Mathematical Model March Model March Model March Model March Model March Model	Č	-			Ü	-6609 Jul 30 i 08:05		
recording -664 Am 27 (95.3) 18m2349 opposition -604 Bm 15 (98.3) 18m240 composition -604 Bm 15 (98.3) 18m240 control of color of col			15° M ₊		retrograde			
	retrograde	-6614 Apr 27 j 05:33	18°MJ32'49		opposition	-6609 Dec 11 j 09:03	2° 8 49'34	0°40'29
min Faridatidal (direct) 6614 July 261/0025 878-8024 bit 10.0000 6614 Out 271/2030 15 PM 6614 Dott 271/2030 15 PM 6613 Jan 05 10.000 75 PM 6613 Jan 05	S		15°RM			•	2° 8 45'15	4.34791 AU
min Land and direct 6614 Augu 26) 0025 1878-3024 40445 AU direct 6608 Mar 21 143 0°F 0°F 0°F 6608 Mar 21 143 0°F 0°F 6608 Mar 21 143 0°F 0°F 0°F 6608 Mar 11 163 0°F	opposition	-6614 Jun 26 j 18:34	13°M30'20	-1°04'11		-6608 Jan 03 j 07:50	30° Ŗ ♈	
divert 6614 Aug 24 j 0349 881 3624 6618 base 24 j 1233 1578 6618 base 24 j 1233 1578 6618 base 24 j 1233 1578 evening set 6608 Jan 18 j 1135 1578 252-19 6761 Jan 0 6 j 0.007 0°F evening set 6608 Jan 0 30 j 0.074 18°2 527-19 18°2 527-19 6708 Jan 0 5 j 0.007 0°F 18°2 527-19 6708 Jan 0 5 j 0.007 0°F 18°2 527-19 6708 Jan 0 5 j 0.007 0°F 6708 Jan 0 5 j 0.007 0°F 6608 Jan 0 5 j 0.007 0°F 6708 Jan 0 5 j 0.007 0°F 6608 Jan 0 5 j 0.007 0°F 18°F 6603 Jan 0 5 j 0.007 0°F 18°F 0°F	* *	-6614 Jun 26 j 00:25	13°MJ36'23	4.04425 AU	direct	-6608 Feb 11 j 06:23	27° Ƴ 45'55	
6614 100						-		
Compinetion Gel Jun 05 jun 05 7			15° M ₊			·		
1.0 1.0	evening set	-			evening set	-6608 Jun 18 j 11:29	15° 8 52'19	
Conjunction Gell Jan 08 13-11 07 28-021 1704118 Conjunction Gell Jan 08 13-11 07 28-021 1704118 Conjunction Gell Jan 08 13-11 07 28-021 1704118 Conjunction Gell Jan 13 130 18254/55 075076 Conjunction Gell Jan 13 130 130 131 131 122575 Conjunction Gell Jan 13 130 131 131 132575 Conjunction Gell Jan 131 13257 Conjunction Gell Jan 13257 Conjunction Gell Jan 131	C	-6613 Jan 05 j 00:07			max. Earth dist.	-6608 Jun 30 j 07:42	18° 8 28'42	6.36397 AU
minimendeng -6613 Jan 10 gl 313-11 0°Z9018 10°49 moming rise e6618 Jan 10 gl 20 12°H 20°H 20 18°H 24°H 20 18°H 24°H 20 18°H 20°H 20°H 20 18°H 20°H 20°H 20°H 20°H 20°H 20°H 20°H 20		v				,		
max Fart dist. -6613 haz 2 90 90 28 1*2*1106 6037 lbs 2 90 42*1006 6037 lbs 2 90 42*1009 43*1009 42*1009 43*1009	conjunction	-6613 Jan 08 j 13:15	0° ∡ 750′21	-1°04'18	conjunction	-6608 Jul 01 j 13:10	18° 8 44'58	0°50'18
morning rise retorgande -6613 mu 2j jou 39 4"Nolly 100 morning -6608 mu 2 3 j 21.70 O'TI **** 14 37 1 *** 14 37 1 **** 14 37 1	minimum elong	-6613 Jan 08 j 13:11	0° ∡ 750′18	1°04'39	minimum elong	-6608 Jul 01 j 13:06	18° 8 44'56	0°50'36
retrogade	max. Earth dist.	-6613 Jan 10 j 00:20	1° ∡ 11′06	6.03718 AU	morning rise	-6608 Jul 14 j 11:31	21° 8 35'56	
opposition min. Earth dist. -6613 Mag 0 J j 1820 19°-8'0407 20'026's opposition min. Earth dist. -6607 Jan 1 J 2 j 23:30 3° II 51 43937 3 43688 AU direct -6612 Mag 2 J 1910 41670 AU direct -6607 Jan 1 J 2 j 02:30 3° II 51 43688 AU direct -6607 Jan 1 J 2 j 02:30 3° II 50° NC 3° II 4378 AU direct -6607 Jan 1 J 10:51 3° III 40° NC 3° III 4378 AU direct -6607 Jan 1 J 10:52 28° B4911 S 0° II -6607 Jan 1 J 10:52 28° B4911 S 0° III 40° Jan 1 J 10:54 0° III 40° Jan 1	morning rise	-6613 Jan 22 j 00:38	4° ∡ ¹01'03			-6608 Aug 23 j 21:17	Π $^{\circ}0$	
opposition in Earth dist. direct -661 Jan Jan Ji 1520 1978/0477 200726 10005100 100	retrograde	-6613 Jun 02 j 19:04	24° ₹ ¹09'00		retrograde	-6608 Nov 11 j 21:08	8° Ⅱ 43'31	
min Earth dist. -6613 Ma 3 ji ji 540 19% 1710 4.04672 AU min Earth dist. -6607 Jan 1 j 1620 378787 37888 AU direct -6612 Jan 1 j 1610 75 direct -6607 Apr 1 j 1252 378187 70	-	-6613 Aug 01 j 18:20	19° ∡ ¹04'07	-2°00'26	opposition	-6607 Jan 11 j 02:13	3° Ⅱ 51'16	1°39'37
March		-6613 Jul 31 j 15:40	19° ∡ 13'10	4.04672 AU		-6607 Jan 12 j 02:30	3° Ⅱ 43'27	4.36868 AU
Part	direct	-6613 Sep 28 j 19:02	14° ∡ ¹07'57				30° ₹ 8	
Conjunction Gel 2 Fe 1 4 j 1508 6*82*12 1*28*28 max. Earth dist. Ge07 Jul 2 j 0;0221 0*11.04 0.53876 0.5387		-6612 Jan 17 j 16:10	0°ರ		direct		28° 8 49'15	
conjunction 6612 Feb 1 4 j 1 5 08 6°B2 812 1°2828 max. Earth dist. 6607 Jul 2 0 j 0.221 0°B 1 7 18 6.5878 A U minimum clong 6612 Feb 1 4 j 1 5 08 6°B2 811 1°2853 max. Earth dist. 6612 Feb 1 6 j 0.80 0°B 2811 1°2853 max. Earth dist. 6612 Feb 1 6 j 0.80 0°B 2812 1°2853 max. Earth dist. 6612 Feb 1 6 j 0.80 0°B 2812 0°B	evening set	-6612 Feb 01 j 01:02	3° ප 18'06			-6607 Apr 11 j 23:57	$\Pi^{\circ}0$	
minimum elong max. Earth dist. 6612 Feb 14 j 15.07 6782811 1°28'53 8782192 1°21'56 60612 Feb 16 j 08.07 678281 1°28'528 8782192 2 minimum elong 6607 Aug 01 j 18.57 19°13830 1°22'150 79731830 1°22'150 8782192 2 minimum elong 6607 Aug 01 j 18.57 19°13830 1°22'150 79731830 1°22'150 8782193 2 4°82'161'1 2°11'22 2 6607 Aug 01 j 18.57 19°13830 1°22'150 8782193 2 4°82'17 4 10.89 AU retrograde 6601 Sep 0 j 17:00 24°82'17 4 10.89 AU retrograde 6610 Nov 0 2 j 05.30 19°5 16'34 10°8 2 1		·			evening set		16° Ⅱ 49'37	
max. Earth dist. -6612 Feb 16 j0 807 6°55208 6.06775 AU conjunction -6607 Aug 0 j j j.00 19°13332 12'13's 12'12's 22'12'c minimum clong -6607 Aug 1 j j j.00 19°13332 12'13's 12'22'l 12'12's 12'12's 12'12's 12'12's 12'12's 12'12's 12'12's 12'12's 22'12's 12'12's 12'12's 6607 Aug 1 j j j.00 9'5's 12'12's 12'12's 6607 Aug 1 j j j.00 9'5's 12'12's 6607 Aug 1 j j j.00 9'5's 12'12's 12'12's 6607 Aug 1 j j j.00 9'5's 12'12's 12'12's 6607 Aug 1 j j j.00 9'5's 12'12's 12'12's 6606 Aug 1 j j.00 9'5's 12'10's 12'10's 4'10's 4'10's 12'10's 4'10's 4'10	conjunction	-6612 Feb 14 j 15:08	6° ප 28'12	-1°28'28	max. Earth dist.	-6607 Jul 31 j 05:45	19° Ⅱ 17'48	6.35876 AU
minimum elong -6612 Feb 28 j 073 9°\$3 vs - minimum elong -6607 Aug 01 j 18.75 19°18 vs 12°221 f 10°0 position -6612 Sep 04 j 17.00 24°\$5 l 11 21°132 - -6607 Sep 19 j 100 09°4413 - -6607 Sep 19 j 10°40 09°4413 - -6606 Feb 19 j 10°40 - -6606 Feb -6606 Feb 19 j 10°40 - -6606 Feb -	minimum elong	-6612 Feb 14 j 15:07	6° ප 28'11	1°28'53		· ·		
minimum elong -6612 Feb 28 j 073 9°\$3 vs - minimum elong -6607 Aug 01 j 18.75 19°18 vs 12°221 f 10°0 position -6612 Sep 04 j 17.00 24°\$5 l 11 21°132 - -6607 Sep 19 j 100 09°4413 - -6607 Sep 19 j 10°40 09°4413 - -6606 Feb 19 j 10°40 - -6606 Feb -6606 Feb 19 j 10°40 - -6606 Feb -	max. Earth dist.	-6612 Feb 16 j 08:07	6° る 52'08	6.06775 AU	conjunction	-6607 Aug 01 j 19:00	19° Ⅲ 38'32	1°21'56
retrograde	morning rise	-	9° ට 39'22		minimum elong		19° Ⅲ 38'30	1°22'21
opposition -6612 Sep 0 j 1 7:00 24" 51" 11 2" 1132 -6607 Sep 1 j 0 3.08 0°S -7 20 20 20 20 20 20 20 20 20 20 20 20 20	•		29° る 20'59		•		22° II 26'08	
min. Earth dist. -6612 Sep 0 3 j 17.20 24°52417 4.10289 AU retrograde -6607 Dec 1 3 j 15.11 9°84473 21036 direct -6611 Jan 2 9 j 19.40 0°8 min. Earth dist. -6606 Feb 1 3 j 13.01 4°82513 39°16 AU evening set -6611 Jan 2 9 j 19.40 1°82670 1°2013 retrograde -6606 Apr 1 5 j 13.03 3°64 M 3°3916 AU 4°82513 3°84 M 3°43143 3.3916 AU 4°84513 3°3916 AU 4°84513 3°3917 3	-	v		-2°11'32	C			
direct -6612 Nov 02 j 05:30 19°B 16'13 st opposition -6606 Feb 12 j 10:17 4°B33794 2°10'36 A evening set 6611 Mar 08 j 20:26 8°≈81'74" -6606 Apr 07 j 13:57 70°KT -6006 Apr 15 j 21:13 29°B 15'81 H conjunction 6611 Mar 22 j 14:17 11°≈26'07 12°02'12 6606 Apr 15 j 21:13 29°B 53'41 12°85'18 minimum clog 6611 Mar 23 j 24:13 11°≈26'07 12°033 evening set -6606 Apr 24 j 05:58 0°25'8 30302 AU max. Earth dist -6611 Mar 03 j 08:18 14°≈34'32 12°20'33 evening set -6606 Apr 31 j 06:18 20°25'58 30302 AU morning rise -6611 Mar 07 j 05:33 15°≈ conjunction -6606 Apr 31 j 03:20 20°25'58 30302 AU retrograde -6611 Mar 10 j 00:00 3°8'8'23'6 13°6'25' retrograde -6601 Apr 10 j 03:3 20°25'8 30303 AP opposition -6611 Cot 08 j 06:37 28°≈23'26 13°6'32 retrograde -6601 Apr 13 j 14' 12°24'35' 13°01' 13°24'35' 13°01' 13°02' 13°24'35' <td></td> <td>-6612 Sep 03 j 17:20</td> <td></td> <td></td> <td>retrograde</td> <td>-6607 Dec 13 j 15:11</td> <td>9°©44'32</td> <td></td>		-6612 Sep 03 j 17:20			retrograde	-6607 Dec 13 j 15:11	9° © 44'32	
evening set -6611 Jan 29 j 19.40 0°8 min. Earth dist -6606 Feb 13 j 13.03 4°834/33 4.33916 AU evening set -6611 Mar 0°3 j 20°2 8°8×17* direct -6606 Apr 15 j 21:13 2°B 153/41 conjunction -6611 Mar 22 j 14:13 11°8×2607 1°2012 evening set -6606 Apr 24 j 55:88 0°B max. Earth dist -6611 Mar 23 j 14:17 11°8×2607 1°2033 evening set -6606 Aug 31 j 6618 20°25758 63021 AU morning rise -6611 Apr 0°5 j 08:18 11°8×4733 6.1432 AU max. Earth dist -6606 Sep 0 j 117:31 20°82558 6.3021 AU retrograde -6611 Apr 0°5 j 08:18 3°8 0°9 minimum clong -6606 Sep 0 j 17:31 20°82558 3°907 retrograde -6611 Apr 0°5 j 08:23 3°82276 1°3625 retrograde -6606 Sep 11 j 118:20 1°9 Q 2°356 3°362 1°3625 retrograde -6601 Apr 19 j 14:31 9°34	direct		19° ට 16'34		-	-6606 Feb 12 j 10:17	4°953'04	2°10'36
conjunction 6611 Mar 22 j 14:13 1°s≈2604 1°2012 = 6606 Apr 12 j 10:58 0°9		-	0° ≈		min. Earth dist.		4°5944'33	4.33916 AU
conjunction -6611 Mar 22 j 14:13 11°≈2604 -2012 -6606 Apr 24 j 0.558 0°© -875715 max. Earth dist -6611 Mar 23 j 21:23 11°≈42607 12'033 evening set -6606 Aug 20 j 06:14 17°57515 30'021 Z 0.00 max. Earth dist -6611 Apr 07 j 05:33 11°≈443 Aug max. Earth dist -6606 Aug 31 j 06:18 20°©45525 630621 AUg e611 Apr 07 j 05:33 11°≈434 Aug morning rise -6601 Aug 10 j 00:49 3°H25'41 morning rise -6606 Sep 1 j 17:31 20°©4552 13011 retrograde -6611 Aug 10 j 00:49 3°H25'41 morning rise -6606 Sep 1 j 17:31 20°©45'52 30'30'37 opposition -6611 Cot 07 j 16:11 28°≈23'20 1'9625 retrograde -6605 Aug 18 j 16:44 11°Q24'37 23°933'55 direct -6611 Dec 06 j 19:34 28°≈23'20 1'9167AU opposition -6605 Mar 18 j 20:15 6°Q24'35 4'2694 AU evening set -6610 Apr 27 j 07:11 12°H030'0 -9*44'6 max. Earth dist -6605 Aug 18 j 16:44 19°Q5'23 2°Q24'1 AU	evening set	-6611 Mar 08 j 20:26	8° ≈ 17'47			-6606 Apr 07 j 13:57	30°RⅡ	
conjunction -6611 Mar 22 j 14:13 11°≈2604 -2012 -6606 Apr 24 j 0.558 0°% -75715 max. Earth dist -6611 Mar 23 j 21:35 11°≈42607 12°033 evening set -6606 Aug 20 j 0.614 17°57515 40°0000 max. Earth dist -6611 Apr 07 j 05:33 11°≈434 20 max. Earth dist -6606 Aug 31 j 0.618 20°92558 630621 AU e611 Apr 07 j 05:33 18°≈4342 eoinjunction -6606 Sep 0 j 17:31 20°94552 13011 retrograde -6611 Aug 10 j 0:049 3°¥2541 morning rise -6606 Sep 14 j 0:37 23°93375 13°037 opposition -6611 Oct 08 j 0:637 28°≈2326 1°3625 retrograde -6601 Aug 10 j 0:49 28°≈2326 1°3625 retrograde -6605 Mar 17 j 21:49 1°04243 2°30376 direct -6611 Oct 07 j 16:11 28°≈2326 1°3625 retrograde -6605 Mar 18 j 20:15 6°02434 1°2437 4°2694 M direct -6610 Dec 07 j 16:11 12°%3030 1°2 evening set -6605 Mar 18 j 20:15 6°22445 4°2694 M		·			direct		29° Ⅲ 53'41	
max. Earth dist. -6611 Mar 23 j 22:35 11°≈44'35 6.1432 AU max. Earth dist. -6606 Aug 31 j 06:18 20°25'58 6.30621 AU morning rise -6611 Apr 05 j 05:18 14°≈34'22 conjunction -6606 Sep 01 j 17:31 20°24'55 1°30'17 retrograde -6611 Aug 10 j 00:49 3°¥25'41 minimum elong -6606 Sep 01 j 17:31 20°24'55 1°30'37 retrograde -6611 Aug 10 j 00:49 3°¥25'41 morning rise -6606 Sep 14 j 03:27 23°33'35' -78'25' opposition -6611 Oct 0 8 j 06:37 28°≈23'26 -1°36'25 retrograde -6605 Aug 15 j 17:49 10°£24'37 direct -6611 Oct 0 7 j 16:11 28°≈23'26 -1°36'25 min. Earth dist. -6605 Aug 18 j 16:44 1°£02'43' 2°35'6 direct -6611 Oct 0 7 j 16:11 28°≈23'26 -1°36'25 min. Earth dist. -6605 May 18 j 16:44 1°£03'30'3 2°20'35'6 direct -6610 Apr 13 j 14:16 9°¥ 40°4'46' min. Earth dist. -6605 Aug 30 j 10:20 1°£0'45'3 2°20'48'4 1°£1'30'30'3 conjunction	conjunction	-6611 Mar 22 j 14:13	11° ≈ 26′04	-1°20'12		-6606 Apr 24 j 05:58	0°€	
moming rise 6611 Apr 05 j 08:18 14°≈34'22 conjunction 6606 Sep 0 j 17:31 20°⊊45'52 3'0'11 6611 Apr 07 j 05:33 15°≈ conjunction 6606 Sep 0 j 17:31 20°⊊45'52 3'0'37 retrograde 6611 Aug 10 j 00:49 3°¥25'4 moming rise 6606 Sep 14 j 03:27 20°⊊45'53 3'0'37 retrograde 6611 Aug 10 j 00:49 3°¥25'4 moming rise 6606 Sep 14 j 03:27 20°⊊45'53 3'0'37 retrograde 6611 Aug 10 j 00:49 3°¥25'4 moming rise 6606 Sep 14 j 03:27 20°⊊45'53 3'0'37 retrograde 6611 Aug 10 j 00:49 28°≈23'52 -1°36'25 retrograde 6606 Sep 14 j 03:27 11°£0'24'37	minimum elong	-6611 Mar 22 j 14:17	11° ≈ 26′07	1°20'33	evening set	-6606 Aug 20 j 06:14	17° 9 57'15	
Conjunction	max. Earth dist.	-6611 Mar 23 j 22:35	11° ≈ 44'35	6.14432 AU	max. Earth dist.	-6606 Aug 31 j 06:18	20° © 25'58	6.30621 AU
retrograde -6611 Aug 10 j 00.49 3°H 25′41 minimum elong -6606 Sep 1 j 17:31 20°Φ45′53 19'3037 retrograde -6611 Aug 10 j 00.49 3°H 25′41 morning rise -6606 Sep 1 j 17:32 23°E333′37 25°E33′37 opposition -6611 Oct 08 j 06:37 28°×823′26 -1°36′25 retrograde -6605 Aug 15 j 17:49 11°£Q24′35 -70° min. Earth dist. -6611 Oct 07 j 16:11 28°×828′20 4.19167 AU opposition -6605 Mar 18 j 10:46 6°£Q32′00 20°356 direct -6610 Dec 06 j 19:34 23°×820′57 min. Earth dist. -6605 Mar 18 j 16:44 1°£Q4′350 4.26694 AU evening set -6610 Apr 13 j 14:16 12°*M3′00 werning set -6605 Mar 18 j 10:48 1°°£Q5′20 5°£Q conjunction -6610 Apr 27 j 07:11 15°*M0′00 o°44′56 max. Earth dist. -6605 Nay 18 j 16:44 19°£Q5′20 11'13'6 max. Earth dist. -6610 Apr 27 j 07:14 15°*H0′20 o°44′56 minimum elong -6605 Cet 03 j 04:33 22°£Q42′3 11'13'6 morning rise -6610 Apr 27 j 0	morning rise	-6611 Apr 05 j 08:18	14° ≈ 34'22					
retrograde		-6611 Apr 07 j 05:33	15° ≈		conjunction	-6606 Sep 01 j 17:31	20°545'52	1°30'11
Proposition		-6611 Jun 23 j 20:58	0° ∀		minimum elong	-6606 Sep 01 j 17:31	20° © 45'53	1°30'37
opposition -6611 Oct 08 j 06:37 28°≈23'26 -l °36'25 retrograde -6605 Jan 15 j 17:49 11°Ω24'37 20'35'6 min. Earth dist. -6611 Oct 07 j 16:11 28°≈28'20 4.19167 AU opposition -6605 Mar 17 j 21:06 6°Ω2'06 2°03'56 direct -6610 Feb 13 j 10:48 0°% + direct -6605 Mar 18 j 10:43 1°Ω35'39 4.26694 AU evening set -6610 Apr 13 j 14:16 12°%03'00 evening set -6605 Nay 18 j 16:44 1°Ω35'30 -6010 Apr 27 j 07:14 15°%07'04 -0°44'46 max. Earth dist. -6605 Oct 02 j 04:33 22°Ω2'849 6.22041 AU minimum elong -6610 Apr 27 j 07:14 15°%07'06 0°44'56 retrograde -6605 Oct 03 j 04:33 22°Ω4'29 1°11'36 max. Earth dist. -6610 Apr 27 j 17:38 15°%15'5 6.23891 AU conjunction -6605 Oct 03 j 04:33 22°Ω4'29 1°11'36 morning rise -6610 Nov 10 j 10:23 18°%10'09 morning rise -6605 Oct 03 j 04:33 22°Ω42'41 1°11'53 retrograde -6610 Nov 09 j 15:55 1°°Y10'24 -0°31'35 re	retrograde	-6611 Aug 10 j 00:49	3°) €25'41		morning rise	-6606 Sep 14 j 03:27	23° © 33'57	
min. Earth dist.		-6611 Sep 26 j 05:25	30°R ≈			-6606 Oct 13 j 18:03	$\mathfrak{O}^{\circ} \mathfrak{O}$	
direct	opposition	-6611 Oct 08 j 06:37	28° ≈ 23′26	-1°36'25	retrograde	-6605 Jan 15 j 17:49	11° Ω 24'37	
evening set	min. Earth dist.	-6611 Oct 07 j 16:11	28° ≈ 28′20	4.19167 AU	opposition	-6605 Mar 17 j 21:06	6° Ω 32'06	2°03'56
evening set -6610 Apr 13 j 14:16 12° H03'00 evening set -6605 Aug 30 j 01:02 15° Ω -6202 H03'00 -6000 Aug 20 j 16:48 19° Ω50'23 -6000 Aug 20 j 04:33 22° Ω28'49 6.22041 AUg 20 j 04:40 minimum elong -6610 Apr 27 j 07:14 15° H07'06 0°44'56 -610 Apr 27 j 17:38 15° H12'55 6.23891 AUg 20 on innimum elong -6605 Oct 03 j 04:33 22° Ω42'39 1°11'36 morning rise -6610 May 10 j 22:38 18° H10'09 minimum elong -6605 Oct 03 j 04:33 22° Ω42'41 1°11'36 retrograde -6610 Sop 11 j 08:08 6° Υ08'8 morning rise -6605 Oct 03 j 04:37 22° Ω3'23 1°11'36 retrograde -6610 Sop 11 j 08:08 6° Υ08'8 retrograde -6605 Oct 15 j 16:51 25° Ω3'3'21 1°11'36 min. Earth dist. -6610 Nov 09 j 16:09 1°0 Υ02'12 4.28267 AU opposition -6604 Apr 20 j 15:12 9° № 14'27 4.17274 AU direct -6609 Jan 09 j 12:18 20° H06'29 0°0 Y	direct	-6611 Dec 06 j 19:34	23° ≈ 20′57		min. Earth dist.	-6605 Mar 18 j 20:15	6° Ω 24'45	4.26694 AU
conjunction		-6610 Feb 13 j 10:48	0° ∀		direct	-6605 May 18 j 16:44	1° Ω 35'39	
conjunction -6610 Apr 27 j 07:11 15° θ 07'04 - 0°44'46 max. Earth dist. -6605 Oct 02 j 04:33 22° Ω28'49 6.22041 AU minimum elong -6610 Apr 27 j 07:14 15° θ 07'06 0°44'56 -6605 Oct 03 j 04:33 22° Ω42'39 1°11'36 max. Earth dist. -6610 Apr 27 j 17:38 15° θ 12'55 6.23891 AU conjunction -6605 Oct 03 j 04:33 22° Ω42'49 1°11'36 morning rise -6610 May 10 j 22:38 18° θ 10'90 minimum elong -6605 Oct 03 j 04:33 22° Ω42'41 1°11'36 retrograde -6610 Jul 08 j 07:20 0°	evening set	-6610 Apr 13 j 14:16	12°) €03'00			-6605 Aug 30 j 01:02	15° Ω	
minimum elong -6610 Apr 27 j 07:14 15° \(\) 07'06 0°44'56 max. Earth dist. -6610 Apr 27 j 17:38 15° \(\) 12'55 6.23891 AU conjunction -6605 Oct 03 j 04:33 22° \(\) 042'39 1°11'36 morning rise -6610 May 10 j 22:38 18° \(\) 10'90 minimum elong -6605 Oct 03 j 04:37 22° \(\) 042'41 1°11'36 retrograde -6610 Jul 08 j 07:20 0° \(\) 0° \(\) morning rise -6605 Nov 04 j 07:38 0° \(\) opposition -6610 Nov 09 j 15:55 1° \(\) 10'20' -0° 31'35 retrograde -6604 Apr 20 j 15:12 9° \(\) 10'125 1'8'09 min. Earth dist. -6610 Nov 09 j 16:09 1° \(\) 10'21 4.28267 AU opposition -6604 Apr 20 j 15:12 9° \(\) 10'125 1'8'09 direct -6609 Jan 09 j 12:18 26° \(\) 40'629 direct -6604 Apr 21 j 00:58 9° \(\) 14'27 4.17274 AU direct -6609 May 02 j 13:19 0° \(\) 1'3' evening set -6604 Nov 03 j 22:21 25° \(\) 5'5'5'5 20° \(\) 5'5'5 asc. node -6609 May 17 j 18:33 14° \(\) 2'2'15'1 0°03'55 </td <td></td> <td></td> <td></td> <td></td> <td>evening set</td> <td></td> <td>19°Ω50′23</td> <td></td>					evening set		19° Ω 50′23	
max. Earth dist. -6610 Apr 27 j 17:38 15° ★12'55 6.23891 AU conjunction -6605 Oct 03 j 04:33 22° Ω42'39 1°11'36 morning rise -6610 May 10 j 22:38 18° ★10'09 minimum elong -6605 Oct 03 j 04:37 22° Ω42'41 1°11'36 retrograde -6610 Jul 08 j 07:20 0° Υ morning rise -6605 Nov 04 j 07:38 0° № opposition -6610 Nov 09 j 15:55 1° Υ 10'26 -0°31'35 retrograde -6604 Feb 19 j 07:56 14° № 12'58 min. Earth dist. -6610 Nov 09 j 16:09 1° Υ 10'21 4.28267 AU opposition -6604 Apr 20 j 15:12 9° № 11'35 1° 18'09 direct -6609 Jan 09 j 12:18 26° ★06'29 direct -6604 Apr 20 j 05:31 4° № 23'36 9° № 14'27 4.17274 AU direct -6609 Mar 02 j 13:19 0° Υ evening set -6604 Nov 03 j 22:21 25° № 55'24 22° № 55'24 asc. node -6609 Apr 30 j 08:26 10° Υ 21'46 evening set -6604 Nov 03 j 22:21 25° № 55'05 0° 29'34 conjunction -6609 May 31 j 05:48 17° Υ 26'15 0°03'	conjunction		15°) €07'04	-0°44'46	max. Earth dist.	-6605 Oct 02 j 04:33	22° Ω 28'49	6.22041 AU
morning rise	minimum elong	-6610 Apr 27 j 07:14	15°) €07'06	0°44'56				
Tetrograde -6610 Sup 11 j 08:08 6° Y 08'58 -6605 Nov 04 j 07:38 0° M -6604 Nov 03 j 15:12 0° M -6604 Nov 03 j 15:12 0° M -6604 Nov 03 j 15:12 0° M -6604 Nov 03 j 20:21 0° M -6604 Nov 03	max. Earth dist.	-6610 Apr 27 j 17:38	15°) 12′55	6.23891 AU	conjunction	-6605 Oct 03 j 04:33	22° Ω 42'39	1°11'36
retrograde	morning rise	-6610 May 10 j 22:38			minimum elong	-6605 Oct 03 j 04:37	22° Ω 42'41	1°11'53
opposition		-6610 Jul 08 j 07:20	0 ° $\mathbf{\gamma}$		morning rise	-6605 Oct 15 j 16:51	25° Ω 35'21	
min. Earth dist.	retrograde	-6610 Sep 11 j 08:08	6° Ƴ 08'58			-6605 Nov 04 j 07:38	0° m	
Georgian	opposition	-6610 Nov 09 j 15:55		-0°31'35	retrograde	-6604 Feb 19 j 07:56	14° m 12'58	
direct $-6609 \text{ Jan } 09 \text{ j } 12:18 \\ -6609 \text{ Mar } 02 \text{ j } 13:19 \\ 0^{\circ}\text{V}$ evening set $-6604 \text{ Jun } 20 \text{ j } 05:31 \\ -6609 \text{ Mar } 02 \text{ j } 13:19 \\ 0^{\circ}\text{V}$ evening set $-6604 \text{ Oct } 22 \text{ j } 04:57 \\ 0^{\circ}\text{V} = 000 \text{ j } 000 j$	min. Earth dist.	-6610 Nov 09 j 16:09	1° Y 10′21	4.28267 AU	opposition	-6604 Apr 20 j 15:12	9° m ,17'35	1°18'09
evening set -6604 Oct 22 j 04:57 22 1 575 24 asc. node -6609 Apr 30 j 08:26 10° 14146 evening set -6609 May 17 j 18:33 14° 172751 conjunction -6604 Nov 03 j 22:21 25° 1 54'06 0°29'34 conjunction -6609 May 31 j 05:49 17° 126'15 0°03'55 minimum elong -6604 Nov 03 j 12:22 25° 1 54'07 0°29'39 conjunction -6609 May 31 j 05:48 17° 126'14 0°04'01 morning rise -6604 Nov 16 j 17:50 28° 1 54'05 behind sun begin -6609 May 30 j 21:42 17° 121'46 evening set -6604 Nov 03 j 22:21 25° 1 54'06 0°29'34 conjunction -6604 Nov 03 j 12:22 25° 1 54'07 0°29'39 max. Earth dist6604 Nov 03 j 19:19 25° 1 54'05 0°29'34 morning rise -6604 Nov 16 j 17:50 28° 1 54'05 conjunction -6609 May 30 j 21:42 17° 1 21'46 conjunction -6604 Nov 21 j 11:26 0° 1 11:26 0°		-			min. Earth dist.			4.17274 AU
asc. node	direct	-				-		
evening set $-6609 \text{ May } 17 \text{ j } 18:33$ 14° \(\gamma\) 27'51 conjunction $-6604 \text{ Nov } 03 \text{ j } 22:21$ 25° \(\text{ loss } 16'06') 0° 29'34 conjunction $-6609 \text{ May } 31 \text{ j } 05:49$ 17° \(\gamma\) 26'15 0° 03'55 max. Earth dist. $-6604 \text{ Nov } 03 \text{ j } 22:24$ 25° \(\text{ loss } 52'19 612702 AU minimum elong $-6609 \text{ May } 31 \text{ j } 05:48$ 17° \(\gamma\) 26'14 0° 04'01 morning rise $-6604 \text{ Nov } 16 \text{ j } 17:50$ 28° \(\text{ loss } 52'19\$ 412702 AU behind sun begin $-6609 \text{ May } 30 \text{ j } 21:42$ 17° \(\gamma\) 21'46 17° \(\gamma\) 21'46 17° 11'46		-			evening set	-6604 Oct 22 j 04:57	22° m 55'24	
minimum elong -6604 Nov 03 j 22:24 25° 1 m 52'10 0°29'39 conjunction -6609 May 31 j 05:49 17° Υ 26'15 0°03'55 max. Earth dist6604 Nov 03 j 19:19 25° 1 52'19 6.12702 AU minimum elong -6609 May 31 j 05:48 17° Υ 26'14 0°04'01 morning rise -6604 Nov 16 j 17:50 28° 1 54'05 behind sun begin -6609 May 30 j 21:42 17° Υ 21'46 το -6604 Nov 21 j 11:26 0° Ω το -6604 Nov 21 j 11:26 10° Ω το -6604 N								
conjunction -6609 May 31 j 05:49 17° Y 26'15 0°03'55 max. Earth dist6604 Nov 03 j 19:19 25° W 52'19 6.12702 AU minimum elong -6609 May 31 j 05:48 17° Y 26'14 0°04'01 morning rise -6604 Nov 16 j 17:50 28° W 54'05 behind sun begin -6609 May 30 j 21:42 17° Y 21'46 -6604 Nov 21 j 11:26 0° £	evening set	-6609 May 17 j 18:33	14° Y 27'51		•	•	25° m 54'06	
minimum elong -6609 May 31 j 05:48 17° Y 26'14 0°04'01 morning rise -6604 Nov 16 j 17:50 28° ™ 54'05 behind sun begin -6609 May 30 j 21:42 17° Y 21'46 -6604 Nov 21 j 11:26 0° ♀					•	•		
behind sun begin -6609 May 30 j 21:42 17° Y 21'46 -6604 Nov 21 j 11:26 0° ♀								6.12702 AU
	_			0°04'01	morning rise	•	-	
behind sun end -6609 May 31 j 13:54 17° Y '30'42 retrograde -6603 Mar 26 j 11:46 18° ♀ 21'22	-							
	behind sun end	-6609 May 31 j 13:54	17° 'Y' 30'42		retrograde	-6603 Mar 26 j 11:46	18° £ 21'22	

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6603 in astronomical counting style is the year 6604 BCE in historical counting style. -6603 May 26 j 11:45 13°**△**22'08 0°03'55 direct -6597 Jan 14 i 04:18 0°Υ46'34 opposition -6603 May 26 j 06:19 13°**£**23'54 -6597 Mar 09 j 10:21 4°Y57'10 min. Earth dist. 4 08692 AU asc node -6603 Jun 14 j 15:07 -6597 May 22 j 11:59 19°**Y**04'47 desc. node 10°**£**58'42 evening set -6603 Jul 24 j 19:58 direct 8°<u>₽</u>29'11 22°**Y**02'11 evening set -6603 Nov 25 j 09:11 27°**£**20′26 conjunction -6597 Jun 04 j 21:50 0°10'54 22° Y02'10 0° M -6597 Jun 04 j 21:50 0°11'01 -6603 Dec 06 j 15:08 minimum elong -6597 Jun 04 j 15:44 21°Y58'49 behind sun begin 22°**Y**05'31 -6603 Dec 08 j 10:30 -6597 Jun 05 j 03:55 conjunction 0°M25'41 -0°23'50 behind sun end 21°**Y**54'26 minimum elong -6603 Dec 08 j 10:28 0°M25'40 0°24'00 max. Earth dist. -6597 Jun 04 j 07:48 6.33134 AU max. Earth dist. -6603 Dec 09 j 05:26 0°M36'54 6.05685 AU morning rise -6597 Jun 18 j 04:39 24°Y57'56 morning rise -6603 Dec 21 j 15:13 3°M32'47 -6597 Jul 11 j 16:06 0°8 -6597 Oct 17 j 01:31 12°814'53 -6602 Feb 12 j 04:02 15°M⋅ retrograde retrograde -6602 May 02 j 07:17 $23^{\circ}\text{ML}35'22$ opposition -6597 Dec 15 j 20:16 7°**8**20'28 0°49'56 opposition -6602 Jul 01 j 19:12 18°M32'25 -1°14'02 min. Earth dist. -6597 Dec 16 j 11:31 7°**8**15'29 4.35763 AU min. Earth dist. -6602 Jun 30 j 22:48 18°M39'13 4.03983 AU direct -6596 Feb 15 j 21:47 2°816'58 -6602 Jul 31 j 13:09 15°RM -6596 May 28 j 21:31 15°8 direct -6602 Aug 29 j 02:38 13°M38'31 evening set -6596 Jun 22 j 23:16 20°**8**20'22 -6602 Sep 26 j 15:19 15°M₁ -6602 Dec 19 j 11:10 0°×7 conjunction -6596 Jul 05 j 23:40 23°**8**12'09 0°55'48 evening set -6602 Dec 31 j 06:54 2°×745'17 minimum elong -6596 Jul 05 j 23:36 23°**8**12'07 0°56'08 max. Earth dist. -6596 Jul 04 j 18:17 22°**8**55'56 6.37142 AU conjunction -6601 Jan 13 i 15:50 5°**х** 54'39 -1°09'24 morning rise -6596 Jul 18 i 20:27 26°802'12 -6601 Jan 13 i 15:46 5°**х** 54'37 1°09'48 -6596 Aug 06 i 05:44 $\Pi^{\circ}0$ minimum elong max. Earth dist. -6601 Jan 15 i 04:24 6° ₹ 16'16 6.03614 AU retrograde -6596 Nov 16 i 04:09 13°**II**08'00 -6601 Jan 27 j 04:04 9°**х** 05'44 -6595 Jan 15 j 12:57 8°**Ⅱ**15'56 1°45'44 morning rise opposition -6601 Jun 07 j 20:17 29°**х** 12′58 -6595 Jan 16 j 13:00 8°**Ⅲ**08′13 retrograde min. Earth dist. 4.37350 AU -6601 Aug 06 j 17:12 24°**∡**¹07'53 -2°04'58 -6595 Mar 19 j 02:31 3°**Ⅱ**14'17 direct opposition -6601 Aug 05 j 15:09 24° ₹ 16'45 4.04917 AU -6595 Jul 24 j 09:55 21°**I**I12'26 min. Earth dist. evening set -6601 Oct 03 j 19:13 19°**х** 11′13 direct max. Earth dist. -6595 Aug 04 j 11:12 23°**Ⅲ**39'34 6.36038 AU -6601 Dec 30 j 14:35 0°정 24°**Ⅱ**00'46 -6600 Feb 06 j 05:12 8°**る**21'54 conjunction -6595 Aug 06 j 01:18 1°24'31 evening set -6595 Aug 06 j 01:16 minimum elong 24°**Ⅲ**00'45 1°24'56 -6600 Feb 19 j 20:07 11°る32'04 -1°29'15 -6595 Aug 18 j 14:13 26°**Ⅱ**47'56 conjunction morning rise -6600 Feb 19 j 20:07 11°る32'04 1°29'41 -6595 Sep 02 j 05:46 minimum elong 0°9 -6600 Feb 21 j 13:46 11°る56'19 6.07343 AU -6595 Dec 18 j 02:04 max. Earth dist. retrograde 14°9507'34 -6600 Mar 04 j 13:04 -6594 Feb 16 j 22:20 morning rise 14°**る**43'10 opposition 9°9516'06 2°11'52 -6594 Feb 18 j 02:13 -6600 May 19 j 13:50 0°≈ min. Earth dist. 9°507'14 4.33731 AU retrograde -6600 Jul 12 j 03:03 4°≈19'47 direct -6594 Apr 20 j 09:53 4°9517'05 -6600 Sep 04 j 00:51 30°Ŗ⋜ -6594 Aug 24 j 11:47 22°9519'50 evening set -6600 Sep 09 j 12:15 29°る15'14 -2°09'09 max. Earth dist. -6594 Sep 04 j 11:41 24°9548'40 6.30097 AU opposition min. Earth dist. -6600 Sep 08 j 13:00 29°る23'11 4.11127 AU -6600 Nov 07 j 02:25 24°る15'10 -6594 Sep 05 j 22:46 25°9508'31 1°29'11 direct conjunction -6599 Jan 08 j 06:07 -6594 Sep 05 j 22:47 25°9508'31 minimum elong 1°29'36 -6599 Mar 13 j 23:28 13°≈15'09 -6594 Sep 18 j 08:35 27°956'46 evening set morning rise -6599 Mar 21 j 15:45 -6594 Sep 27 j 13:11 $0^{\circ}\Omega$ 15°≈ -6594 Dec 27 i 13:55 15°Ω 16°≈23'05 -1°16'33 conjunction -6599 Mar 27 j 17:21 retrograde -6593 Jan 20 i 05:32 15°**Ω**51'34 minimum elong -6599 Mar 27 i 17:26 16°≈23'08 1°16'53 -6593 Feb 13 i 00:14 15°RΩ max. Earth dist. -6599 Mar 28 j 22:09 16°≈39'31 6.15479 AU opposition -6593 Mar 22 i 11:19 10°Ω58'46 1°59'51 -6599 Apr 10 i 11:35 19°≈30'57 min. Earth dist. -6593 Mar 23 j 08:49 10° Ω51'57 4.25853 AU morning rise -6599 May 30 j 01:47 0°₩ direct -6593 May 23 j 03:12 6°Ω02'41 -6599 Aug 14 j 17:12 8°¥15'27 -6593 Aug 12 j 17:29 15°Ω retrograde 3°**升**13'38 -1°28'31 -6599 Oct 12 j 22:25 -6593 Sep 24 j 23:41 24°Ω18'30 opposition evening set min. Earth dist. -6599 Oct 12 j 09:59 3°**升**17'52 4.20320 AU -6599 Nov 07 j 21:07 30°R≈ conjunction -6593 Oct 07 j 11:54 27°Ω11'25 1°07'07 direct -6599 Dec 11 j 15:52 28°≈10'51 minimum elong -6593 Oct 07 j 11:58 27°**Ω**11'27 1°07'22 -6598 Jan 14 j 20:49 0°**)**€ max. Earth dist. -6593 Oct 06 j 13:49 26° **Ω**58'40 6.20967 AU -6598 Apr 18 j 12:52 16°**¥** 50′23 -6593 Oct 19 j 16:18 evening set 0° m morning rise -6593 Oct 20 j 00:49 0° Mp 04'53 -6598 May 02 j 05:29 19°**升**53'47 -0°38'19 conjunction retrograde -6592 Feb 24 j 03:16 18° Mp 48'56 minimum elong -6598 May 02 j 05:32 19°**¥**53'49 0°38'26 opposition -6592 Apr 25 j 09:02 13° **m** 53'10 1°09'26 max. Earth dist. -6598 May 02 j 15:02 19°**¥**59'07 6.25116 AU min. Earth dist. -6592 Apr 25 j 18:32 13° **m** 50'06 4.16012 AU morning rise -6598 May 15 j 20:01 22°**)** 56'02 direct -6592 Jun 24 j 20:34 8° m 59'23 -6598 Jun 17 j 20:46 $0^{\circ}\Upsilon$ evening set -6592 Oct 26 j 16:17 27° m 34'08 retrograde -6598 Sep 15 j 19:37 10°**Y**48′26 -6592 Nov 06 j 01:06 0∘**⊽** -6598 Nov 14 j 04:50 5°Υ50'28 -0°21'18 opposition min. Earth dist. 5°Υ′50'07 4.29477 AU -6592 Nov 08 j 10:41 0°**2**33'51 0°22'43 -6598 Nov 14 j 05:53 conjunction

•	nical year style is used: Th		•	* *			ge 20
minimum elong	-6592 Nov 08 j 10:43	0° £ 33'52 0° £		opposition	-6586 Nov 18 j 16:28	10° Y 27'45	-0°10'58
max. Earth dist.	-6592 Nov 08 j 08:50	0° ⊆ 33'32'46	6.11380 AU	min. Earth dist.	-6586 Nov 18 j 19:37		4.30702 AU
	5		0.11380 AU		3	5° Υ 24'05	4.30/02 AU
morning rise	-6592 Nov 21 j 07:31	3° △ 35'00		asc. node	-6585 Jan 16 j 20:40 -6585 Jan 18 j 20:25	5° Υ 23'43	
retrograde	-6591 Mar 31 j 09:58	23° ♀ 09'20		direct	,	3 1 23 43 23° Υ 38'47	
desc. node	-6591 Apr 27 j 06:09	22° Ω 02'17	0006150	evening set	-6585 May 27 j 03:34	23 1 384/	
opposition	-6591 May 31 j 08:43	18° Ω 09'39		. ,.	(505 I 00:12 10	2600025116	0017147
min. Earth dist.	-6591 May 31 j 00:50	18° Ω 12'14	4.07433 AU	conjunction	-6585 Jun 09 j 12:18	26° Y 35'16 26° Y 35'15	0°17'47 0°17'56
direct	-6591 Jul 29 j 11:28	13° ≏ 16'43		minimum elong	-6585 Jun 09 j 12:17	26° Y 26'47	
	-6591 Nov 20 j 17:49	0°M		max. Earth dist.	-6585 Jun 08 j 20:54		6.34127 AU
evening set	-6591 Nov 30 j 03:35	2°M₁2'08		morning rise	-6585 Jun 22 j 17:35	29° Ƴ 30'01	
. ,.	(501 D 12:06 06	50 M 10100	0020151		-6585 Jun 25 j 00:24	0°B	
conjunction	-6591 Dec 13 j 06:06	5°M18'23		, 1	-6585 Sep 18 j 05:07	15° 8	
minimum elong	-6591 Dec 13 j 06:03	5°M18'21	0°31'03	retrograde	-6585 Oct 21 j 09:10	16° と 43'17 15° Rと	
max. Earth dist.	-6591 Dec 14 j 03:24	5°M31'01	6.04608 AU		-6585 Nov 23 j 15:00	13° KO 11° K 49'15	0050104
morning rise	-6591 Dec 26 j 11:58	8°M26'29		opposition	-6585 Dec 20 j 06:32	_	
	-6590 Jan 24 j 04:47	15°M		min. Earth dist.	-6585 Dec 20 j 22:59	11° 8 43'54	4.36446 AU
retrograde	-6590 May 07 j 09:08	28°M34'03	1022107	direct	-6584 Feb 20 j 10:40	6° 8 45'56	
opposition	-6590 Jul 06 j 17:55	23°M30'43			-6584 May 10 j 09:44	15° 8	
min. Earth dist.	-6590 Jul 05 j 21:01		4.03208 AU	evening set	-6584 Jun 27 j 10:10	24° 8 47'25	6 27 425 A X X
direct	-6590 Sep 02 j 23:27	18°M36'33		max. Earth dist.	-6584 Jul 09 j 00:22	27° 8 20'26	6.37425 AU
	-6590 Dec 01 j 23:21	0° ∡ ¹					
evening set	-6589 Jan 05 j 08:04	7° ∡ ¹47'01		conjunction	-6584 Jul 10 j 09:01	27° 8 38'27	
				minimum elong	-6584 Jul 10 j 08:57		1°01'23
conjunction	-6589 Jan 18 j 18:07	10° ₹ 57'03			-6584 Jul 21 j 01:53	0°II	
minimum elong	-6589 Jan 18 j 18:03	10° ∡ 757'01		morning rise	-6584 Jul 23 j 04:39	0° Ⅱ 27'51	
max. Earth dist.	-6589 Jan 20 j 09:09	11° × ⁷ 20'07	6.03217 AU	retrograde	-6584 Nov 20 j 14:10	17° Ⅱ 33'44	
morning rise	-6589 Feb 01 j 07:17	14° ₹ 08'42		opposition	-6583 Jan 20 j 00:18	12° Ⅱ 41'50	1°51'25
	-6589 Apr 20 j 13:23	0°る		min. Earth dist.	-6583 Jan 21 j 02:08	12° Ⅱ 33'33	4.37232 AU
retrograde	-6589 Jun 12 j 21:22	4°る15'58		direct	-6583 Mar 23 j 15:37	7° Ⅱ 40′25	
	-6589 Aug 05 j 14:14	30°Ŗ ⋌		evening set	-6583 Jul 28 j 18:15	25° Ⅱ 38'25	
opposition	-6589 Aug 11 j 15:09	29° ∡ 10'51		max. Earth dist.	-6583 Aug 08 j 19:10	28° Ⅱ 05'33	6.35510 AU
min. Earth dist.	-6589 Aug 10 j 12:27		4.04974 AU				
direct	-6589 Oct 08 j 16:33	24° ∡ 13'47		conjunction	-6583 Aug 10 j 08:52	28° Ⅱ 26'34	1°26'44
	-6589 Dec 09 j 02:58	0° ろ		minimum elong	-6583 Aug 10 j 08:50		1°27'09
evening set	-6588 Feb 11 j 09:36	13° る 25'46			-6583 Aug 17 j 08:27	0°®	
				morning rise	-6583 Aug 22 j 20:52	1°5513'35	
conjunction	-6588 Feb 25 j 01:06	16° පි 36'00		retrograde	-6583 Dec 22 j 13:41	18° © 36'48	
minimum elong	-6588 Feb 25 j 01:07	16°₹36'00		opposition	-6582 Feb 21 j 12:36	13° © 45'14	
max. Earth dist.	-6588 Feb 26 j 17:16	16° る 59'22	6.07829 AU	min. Earth dist.	-6582 Feb 22 j 15:34	13° © 36'40	4.32842 AU
morning rise	-6588 Mar 09 j 18:42	19° る 47'06		direct	-6582 Apr 24 j 21:49	8° © 46'36	
_	-6588 Apr 25 j 20:52	0° ≈		evening set	-6582 Aug 28 j 20:29	26° © 50'51	
retrograde	-6588 Jul 16 j 23:06	9° ≈ 18'48		max. Earth dist.	-6582 Sep 08 j 20:38	29° 5 20'17	6.28907 AU
min. Earth dist.	-6588 Sep 13 j 08:41	4°≈22'10	4.11980 AU				
opposition	-6588 Sep 14 j 07:17	4°≈14'25	-2°05'45	conjunction	-6582 Sep 10 j 07:11	29° © 39'54	1°27'40
	-6588 Oct 21 j 15:45	30°₹⋜		minimum elong	-6582 Sep 10 j 07:13	29° © 39'55	1°28'04
direct	-6588 Nov 12 j 00:35	29° る 13'52			-6582 Sep 11 j 18:35	0 \circ Ω	
	-6588 Dec 03 j 14:13	0° ≈		morning rise	-6582 Sep 22 j 17:09	2° Ω 28'42	
	-6587 Mar 04 j 18:31	15° ≈			-6582 Nov 23 j 16:59	15° Ω	
evening set	-6587 Mar 19 j 02:01	18° ≈ 12'15		retrograde	-6581 Jan 25 j 01:15	20° Ω 29'59	
				opposition	-6581 Mar 27 j 06:32	15° Ω 36'51	1°54'58
conjunction	-6587 Apr 01 j 20:13	21° ≈ 19'47		min. Earth dist.	-6581 Mar 28 j 03:43	15° Ω 30'07	4.24424 AU
minimum elong	-6587 Apr 01 j 20:18	21° ≈ 19′50			-6581 Apr 01 j 02:39	15°R Ω	
max. Earth dist.	-6587 Apr 03 j 00:43	21° ≈ 36′01	6.16643 AU	direct	-6581 May 27 j 19:56	10° Ω 41′05	
morning rise	-6587 Apr 15 j 14:06	24° ≈ 27'01			-6581 Jul 21 j 07:09	15° Ω	
	-6587 May 10 j 18:49	0° ∀		evening set	-6581 Sep 29 j 11:26	28° Ω 59'42	
retrograde	-6587 Aug 19 j 08:23	13° 米 03′59			-6581 Oct 03 j 20:06	0° m)	
opposition	-6587 Oct 17 j 13:26	8° ¥ 02'37		max. Earth dist.	-6581 Oct 11 j 04:31	1° Mp 42'04	6.19439 AU
min. Earth dist.	-6587 Oct 17 j 02:20	8° ∺ 06'22	4.21639 AU				
direct	-6587 Dec 16 j 10:47	2° ¥ 59'33		conjunction	-6581 Oct 12 j 00:22		1°02'01
evening set	-6586 Apr 23 j 10:34	21°) ₹35'44		minimum elong	-6581 Oct 12 j 00:26	1° m 53'36	1°02'15
				morning rise	-6581 Oct 24 j 14:12	4° Mp 48'06	
conjunction	-6586 May 07 j 02:23	24°) 38′17		retrograde	-6580 Feb 29 j 02:57	23° m 39'58	
minimum elong	-6586 May 07 j 02:26	24°) 38′18		opposition	-6580 Apr 30 j 08:53	18° m) 43'43	0°59'47
max. Earth dist.	-6586 May 07 j 07:58	24°) 41′23	6.26460 AU	min. Earth dist.	-6580 Apr 30 j 15:20	18° m)41'38	4.14512 AU
morning rise	-6586 May 20 j 16:11	27°) 39'37		direct	-6580 Jun 29 j 14:32	13° m 50'12	
	-6586 May 31 j 07:43	0° Υ			-6580 Oct 20 j 18:04	0∘ ত	
retrograde	-6586 Sep 20 j 05:39	15° Y 25'18		evening set	-6580 Oct 31 j 10:09	2° ≏ 28'29	

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6580 in astronomical counting style is the year 6581 BCE in historical counting style. -6580 Nov 13 i 05:37 5°**£**29'16 0°15'20 -6574 May 15 j 09:58 conjunction -6580 Nov 13 i 05:38 5°**£**29'17 -6574 May 25 j 07:12 2°Y11'37 minimum elong 0°15'20 morning rise behind sun begin -6580 Nov 13 j 02:54 -6574 Sep 24 j 12:52 19°Y51'13 5°**£**27'40 retrograde -6574 Nov 23 j 00:29 14°Υ54'16 -0°00'59 -6580 Nov 13 j 08:22 5° € 30'53 behind sun end opposition max. Earth dist. -6574 Nov 23 j 06:18 14°**Y**52'20 -6580 Nov 13 j 07:11 5°**£**30'11 6.10062 AU min. Earth dist. 4.31790 AU 14°**Y**12'19 morning rise -6580 Nov 26 j 03:42 8°**£**31'34 asc. node -6574 Nov 28 j 07:28 26°**♀**52'04 9°**Y**50′17 desc. node -6579 Mar 07 j 02:40 direct -6573 Jan 23 j 08:53 28°Y02'56 retrograde -6579 Apr 05 j 15:12 28°**♀**12'33 evening set -6573 May 31 j 15:01 opposition -6579 Jun 05 j 11:44 23°**£**12'17 -0°18'29 -6573 Jun 09 j 12:05 0° 8 min. Earth dist. -6579 Jun 05 j 01:56 23°**£**15'31 4.06435 AU direct -6579 Aug 03 j 11:13 18°**₽**19'21 conjunction -6573 Jun 13 j 22:27 0°**8**58'39 0°24'20 -6573 Jun 13 j 22:25 -6579 Nov 03 j 03:09 0° M minimum elong 0°**8**58'38 0°24'32 -6573 Jun 13 j 02:44 evening set -6579 Dec 05 j 04:01 7° M $_17'42$ max. Earth dist. 0°**8**47'47 6.34784 AU morning rise -6573 Jun 27 j 02:33 3°**8**52'38 conjunction -6579 Dec 18 j 07:44 10°M24'42 -0°38'01 -6573 Aug 21 j 16:22 15°8 minimum elong -6579 Dec 18 j 07:41 10° M $_{2}4'40$ 0°38'15 retrograde -6573 Oct 25 j 15:07 21°**8**03'56 max. Earth dist. -6579 Dec 19 j 09:11 10°M39'48 6.04046 AU opposition -6573 Dec 24 j 14:10 16°**8**10'18 1°07'37 morning rise -6579 Dec 31 j 14:47 13°M33'33 min. Earth dist. -6573 Dec 25 j 08:42 16°**8**04'17 4.36655 AU -6578 Jan 06 j 18:14 15°M -6572 Jan 02 j 16:26 15°R\ -6578 Mar 23 j 17:21 0°×7 direct -6572 Feb 24 j 20:30 11°807'09 retrograde -6578 May 12 j 14:04 3°**∡**¹43′07 -6572 Apr 17 j 16:35 15°8 -6578 Jul 01 j 18:00 30°RM evening set -6572 Jul 01 j 18:24 29°808'34 -6578 Jul 11 i 20:45 28°M39'26 -1°31'57 -6572 Jul 05 i 16:07 $\Pi^{\circ}0$ opposition min. Earth dist. -6578 Jul 10 j 21:55 28°M47'06 4.03201 AU max. Earth dist. -6572 Jul 13 j 06:48 1°**Ⅱ**40'46 6.37161 AU direct -6578 Sep 08 j 00:12 23°M45'02 -6578 Nov 10 j 21:31 0°×7 -6572 Jul 14 j 16:07 1°**Ⅱ**59'11 1°05'46 conjunction -6577 Jan 10 j 12:46 12°**₹**55'59 -6572 Jul 14 j 16:03 1°II59'09 1°06'07 evening set minimum elong -6572 Jul 27 j 10:25 4°**Ⅱ**48'11 morning rise 16°**₹**06'05 -1°17'57 -6572 Nov 24 j 22:36 21°**II**56'16 conjunction -6577 Jan 23 j 23:31 retrograde 17°**Ⅱ**04'35 -6577 Jan 23 j 23:27 -6571 Jan 24 j 10:37 minimum elong 16° **₹**06'03 1°18'21 opposition 1°56'24 -6571 Jan 25 j 13:01 -6577 Jan 25 j 15:05 4.36534 AU max. Earth dist. 16°**≯**29'25 6.03735 AU min. Earth dist. 16°**Ⅱ**56′09 -6577 Feb 06 j 13:32 19°**∡**17'46 -6571 Mar 28 j 01:34 12°**Ⅲ**03'36 morning rise direct -6577 Mar 27 j 09:30 0°ಕ -6571 Aug 01 j 19:45 0ಂಲ -6577 Jun 17 j 20:43 9°る20'58 retrograde evening set -6571 Aug 02 j 01:51 0°9503'23 -6577 Aug 15 j 10:46 4°る25'01 4.05978 AU min. Earth dist. max. Earth dist. -6571 Aug 13 j 00:16 2°529'39 6.34412 AU -6577 Aug 16 j 13:56 opposition 4°る15'44 -2°10'58 -6571 Aug 14 j 15:33 -6577 Sep 23 j 12:55 30°₽**⋌**7 conjunction 2°951'37 1°28'23 direct -6577 Oct 13 j 17:12 29°**х** 18′09 minimum elong -6571 Aug 14 j 15:31 2°951'36 1°28'49 -6577 Nov 03 j 00:03 0°ರ morning rise -6571 Aug 27 j 03:09 5°938'51 evening set -6576 Feb 16 j 13:36 18°る27'42 retrograde -6571 Dec 27 j 05:01 23°907'51 -6570 Feb 26 j 04:06 18°9516'12 2°12'28 opposition -6576 Mar 01 j 05:45 21°る37'33 -1°28'45 -6570 Feb 27 j 07:07 18°**5**07'37 4.31424 AU conjunction min. Earth dist. -6576 Mar 01 j 05:47 21°る37'34 1°29'10 -6570 Apr 29 j 11:21 13°9517'59 minimum elong direct -6576 Mar 02 j 22:36 22°る01'13 6.09229 AU -6570 Aug 26 j 22:08 max. Earth dist. 0° Ω -6576 Mar 14 j 23:23 24°る48'02 -6570 Sep 02 j 06:01 morning rise evening set 1°**£**25′21 -6576 Apr 07 i 02:16 0°≈ max. Earth dist. -6570 Sep 13 i 08:57 3°Ω56'53 6.27300 AU -6576 Jul 21 i 17:08 retrograde 14°≈11'17 -6570 Sep 14 i 16:55 min. Earth dist. -6576 Sep 18 i 03:10 9°≈14'22 4.13610 AU conjunction 4°Ω15'06 1°25'34 opposition -6576 Sep 19 i 00:04 9°≈07'14 -2°01'31 minimum elong -6570 Sep 14 i 16:57 4°**Ω**15'07 1°25'56 direct -6576 Nov 16 j 21:13 4°≈06'16 -6570 Sep 27 j 03:02 7°Ω04'39 morning rise -6575 Feb 15 j 01:27 15°**≈** -6570 Nov 02 j 18:03 15°Ω -6575 Mar 24 j 01:19 23°≈00'24 -6569 Jan 29 j 21:35 25°Ω13'48 evening set retrograde -6569 Apr 01 j 03:43 20°**Ω**20'22 1°49'12 opposition conjunction -6575 Apr 06 j 19:20 26°≈07'10 -1°07'47 min. Earth dist. -6569 Apr 01 j 22:20 20°Ω14'26 4.22747 AU minimum elong -6575 Apr 06 j 19:25 26°≈07'12 1°08'04 direct -6569 Jun 01 j 11:58 15°**Ω**25'03 max. Earth dist. -6575 Apr 07 j 20:06 26°≈21'12 6.18356 AU -6569 Sep 17 j 09:16 0° m -6575 Apr 20 j 13:00 29°≈13'31 -6569 Oct 04 j 01:38 3° Mp 47'11 morning rise evening set -6575 Apr 23 j 23:50 0°**)**€ 17°**)** 41'39 -6569 Oct 16 j 15:11 6° Mp 42'00 0°56'22 retrograde -6575 Aug 23 j 17:53 conjunction -6575 Oct 22 j 00:40 -6569 Oct 16 j 15:15 opposition 12°**)** 40'46 -1°11'21 minimum elong 6° Mp 42'03 0°56'35 min. Earth dist. -6575 Oct 21 j 15:21 12°**¥**43'55 4.23262 AU max. Earth dist. -6569 Oct 15 j 22:07 6° Mp 32'05 6.17849 AU direct -6575 Dec 21 j 02:09 7°**)** 37'27 morning rise -6569 Oct 29 j 06:05 9° m 37'41 evening set -6574 Apr 28 j 03:19 26°**₩**09'37 retrograde -6568 Mar 05 j 06:55 28° m 37'28 opposition -6568 May 05 j 11:04 23° Mp 40'38 0°49'29 conjunction -6574 May 11 j 18:28 29°**X**11'17 -0°25'01 min. Earth dist. -6568 May 05 j 15:01 23°M 39'21 4.13119 AU minimum elong -6574 May 11 j 18:30 29°**米**11'18 0°25'03 -6568 Jul 04 j 12:30 18° mp 47'18 direct

max. Earth dist.

-6574 May 11 j 20:58

29°**升**12'40 6.27879 AU

-6568 Oct 03 j 01:48

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Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 30 Attention, astronomical year style is used: The year -6568 in astronomical counting style is the year 6569 BCE in historical counting style.

	(560 N	-	in astronomicai co				
evening set	-6568 Nov 05 j 06:00	7° ≏ 28'30		evening set	-6562 May 02 j 20:42	0° Ƴ 44'55	
conjunction	-6568 Nov 18 j 02:42	10° ≏ 30'16	0°07'43	conjunction	-6562 May 16 j 11:03	3° Y 45'48	
minimum elong	-6568 Nov 18 j 02:43	10° ≏ 30'16	0°07'40	minimum elong	-6562 May 16 j 11:05	3° Y 45'49	0°18'15
behind sun begin	-6568 Nov 17 j 19:22	10° ≙ 25'57		max. Earth dist.	-6562 May 16 j 10:02	3° Y 45'14	6.29011 AU
behind sun end	-6568 Nov 18 j 10:03	10° ≏ 34'34		morning rise	-6562 May 29 j 22:48	6° Ƴ 45'16	
max. Earth dist.	-6568 Nov 18 j 09:06	10° ≙ 34'01	6.09004 AU	retrograde	-6562 Sep 28 j 19:44	24° Ƴ 19'45	
morning rise	-6568 Dec 01 j 02:01	13° ≏ 33'35		asc. node	-6562 Oct 09 j 04:48	24° Y 09'08	
desc. node	-6567 Jan 14 j 01:18	23° ₽ 17'01		opposition	-6562 Nov 27 j 09:32	19° Ƴ 23'18	0°09'06
	-6567 Feb 22 j 12:32	0°M		min. Earth dist.	-6562 Nov 27 j 16:52	19° Y ′20'52	4.32636 AU
retrograde	-6567 Apr 10 j 20:37	3° M ₁9'40		direct	-6561 Jan 27 j 20:55	14° Y 19'17	52050110
retrograde	-6567 May 28 j 14:39	30°R ≏		direct	-6561 May 24 j 14:14	0°8	
onnosition	• •	28° £ 18'50	0020157	avanina aat	, ,	2° 8 30'16	
opposition	-6567 Jun 10 j 15:51			evening set	-6561 Jun 05 j 03:42		6 2 5 2 0 1 A T T
min. Earth dist.	-6567 Jun 10 j 03:24	28° Ω 22'56	4.05819 AU	max. Earth dist.	-6561 Jun 17 j 11:47	5° 8 13'04	6.35281 AU
direct	-6567 Aug 08 j 11:18	23° Ω 25'50					
	-6567 Oct 13 j 10:33	0°M₊		conjunction	-6561 Jun 18 j 09:52	5° 8 25'14	0°30'51
evening set	-6567 Dec 10 j 05:34	12°M25'38		minimum elong	-6561 Jun 18 j 09:49	5° 8 25'13	0°31'04
	-6567 Dec 21 j 02:22	15°M		morning rise	-6561 Jul 01 j 12:35	8° 8 18'28	
					-6561 Aug 02 j 04:38	15° ∀	
conjunction	-6567 Dec 23 j 10:09	15°M33'06	-0°44'56	retrograde	-6561 Oct 29 j 23:40	25° 8 28'19	
minimum elong	-6567 Dec 23 j 10:05	15° ™ 33'04	0°45'14	opposition	-6561 Dec 28 j 23:46	20° 8 35'05	1°15'56
max. Earth dist.	-6567 Dec 24 j 13:27	15°M49'18	6.03882 AU	min. Earth dist.	-6561 Dec 29 j 20:12	20° 8 28'28	4.36787 AU
morning rise	-6566 Jan 05 j 18:20	18°M42'27	0.03002 710	direct	-6560 Feb 29 j 08:36	15° 8 32'11	4.50707710
morning risc	,	0° √		direct	3	0°Ⅱ	
. 1	-6566 Feb 26 j 08:13				-6560 Jun 19 j 16:51		
retrograde	-6566 May 17 j 17:02	8° ₹ 52'12		evening set	-6560 Jul 06 j 04:00	3° Ⅱ 33'24	
opposition	-6566 Jul 16 j 22:46	3° ∡ °48′07		max. Earth dist.	-6560 Jul 17 j 12:39	6° Ⅲ 03'48	6.36893 AU
min. Earth dist.	-6566 Jul 15 j 22:16	3° ≯ 56′22	4.03512 AU				
	-6566 Aug 18 j 09:43	30°RM₊		conjunction	-6560 Jul 19 j 00:25	6° Ⅲ 23'35	1°10'15
direct	-6566 Sep 13 j 01:39	28°M53'16		minimum elong	-6560 Jul 19 j 00:21	6° Ⅲ 23'33	1°10'37
	-6566 Oct 08 j 17:56	0° ∡ ¹		morning rise	-6560 Jul 31 j 17:41	9° Ⅱ 12'15	
evening set	-6565 Jan 15 j 17:05	18° ≯ 03'48		retrograde	-6560 Nov 29 j 09:27	26° Ⅲ 22'31	
Ü	J			opposition	-6559 Jan 28 j 22:56	21° II 30'57	2°00'50
conjunction	-6565 Jan 29 j 04:47	21° ҂ 13'55	-1°21'26	min. Earth dist.	-6559 Jan 30 j 01:43	21° II 22'24	4.35923 AU
minimum elong	-6565 Jan 29 j 04:44	21° 🖈 13'53		direct	-6559 Apr 01 j 13:13	16° Ⅱ 30'19	4.55725710
	•			direct	-6559 Jul 16 j 15:44	0°95	
max. Earth dist.	-6565 Jan 30 j 22:38	21° 🖈 38'32	6.04472 AU		3		
morning rise	-6565 Feb 11 j 19:16	24° ₹ 25'27		evening set	-6559 Aug 06 j 10:39	4° © 31'20	
	-6565 Mar 08 j 06:27	0°る		max. Earth dist.	-6559 Aug 17 j 10:20	6° © 58'38	6.33514 AU
retrograde	-6565 Jun 22 j 20:33	14° る 23'37					
min. Earth dist.	-6565 Aug 20 j 09:14	9° る 27'20	4.07074 AU	conjunction	-6559 Aug 18 j 23:45	7° © 19'37	1°29'36
opposition	-6565 Aug 21 j 11:22	9° る 18'25	-2°12'33	minimum elong	-6559 Aug 18 j 23:44	7° © 19'37	1°30'02
direct	-6565 Oct 18 j 16:38	4° ට 20'21		morning rise	-6559 Aug 31 j 10:40	10° ഇ 06'58	
evening set	-6564 Feb 21 j 16:47	23° る 27'27		retrograde	-6559 Dec 31 j 20:11	27°9540'56	
-	-			opposition	-6558 Mar 02 j 20:37	22°549'13	2°11'37
conjunction	-6564 Mar 06 j 09:16	26° る 36'52	-1°27'37	min. Earth dist.	-6558 Mar 03 j 22:41	22° © 40'57	4.30319 AU
minimum elong	-6564 Mar 06 j 09:18	26° る 36'53		direct	-6558 May 04 j 01:13	17° 9 51'30	
max. Earth dist.	-6564 Mar 07 j 23:44	26°₹59'05	6.10567 AU		-6558 Aug 10 j 06:48	0° Ω	
morning rise	-6564 Mar 20 j 03:14	29° ප් 46'50	0.10307 710	evening set	-6558 Sep 06 j 16:14	6° Ω 00'44	
morning risc	-6564 Mar 21 j 02:14	29 ○ 40 30		•		8° Ω 33'15	6.26088 AU
	,			max. Earth dist.	-6558 Sep 17 j 20:02	8 8633 13	0.20088 AU
	-6564 Jun 04 j 20:44	15° ≈					
retrograde	-6564 Jul 26 j 07:58	19° ≈ 02'04		conjunction	-6558 Sep 19 j 03:02	8° Ω 50'57	1°22'59
	-6564 Sep 16 j 02:10	15°R≈		minimum elong	-6558 Sep 19 j 03:05	8° Ω 50'59	1°23'21
opposition	-6564 Sep 23 j 15:55	13° ≈ 58′20	-1°56'34	morning rise	-6558 Oct 01 j 13:39	11° Ω 41'12	
min. Earth dist.	-6564 Sep 22 j 19:48	14° ≈ 05′13	4.15067 AU		-6558 Oct 16 j 08:12	15° Ω	
direct	-6564 Nov 21 j 16:09	8° ≈ 56'57		retrograde	-6557 Feb 03 j 19:00	29° Ω 56′52	
	-6563 Jan 25 j 04:31	15° ≈		opposition	-6557 Apr 06 j 00:58	25° Ω 03'01	1°42'46
evening set	-6563 Mar 29 j 00:02	27°≈47'40		min. Earth dist.	-6557 Apr 06 j 17:31	24° Ω 57'44	4.21508 AU
3	-6563 Apr 07 j 18:52	0°) €		direct	-6557 Jun 06 j 05:13	20° Ω 08'03	
	030371pi 07 j 10.32	٠,٨		ancer	-6557 Aug 30 j 16:54	0° m)	
agniumation	6562 Amm 11: 17.56	00W 52145	1902/50	avanina aat		-	
conjunction	-6563 Apr 11 j 17:56	0°) 53'45		evening set	-6557 Oct 08 j 14:54	8° Mg 32'06	
minimum elong	-6563 Apr 11 j 18:01	0°) €53'48			(555 C : 21 : 25 : 25	110** 0=::-	0050120
max. Earth dist.	-6563 Apr 12 j 15:31		6.19833 AU	conjunction	-6557 Oct 21 j 05:23	11° m) 27'47	0°50'28
morning rise	-6563 Apr 25 j 11:08	3° ¥ 59'17		minimum elong	-6557 Oct 21 j 05:27	11° m)27'50	0°50'38
retrograde	-6563 Aug 28 j 05:54	22° ∺ 19'41		max. Earth dist.	-6557 Oct 20 j 16:51	11° m)20'30	6.16719 AU
opposition	-6563 Oct 26 j 12:09	17° ∺ 19'21	-1°02'17	morning rise	-6557 Nov 02 j 21:09	14° m 24'22	
min. Earth dist.	-6563 Oct 26 j 05:47	17° ∺ 21'30	4.24616 AU		-6556 Jan 21 j 09:49	0∘ ত	
direct	-6563 Dec 25 j 19:05	12°) 15′51		retrograde	-6556 Mar 10 j 07:39	3° ₽ 30'17	
	-6562 Apr 29 j 11:04	0° Υ		<i>-</i>	-6556 Apr 29 j 02:01	30°R, M)	
	1 3				1 3		

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6556 in astronomical counting style is the year 6557 BCE in historical counting style. -6556 May 10 j 11:25 28° m/32'56 0°39'01 direct -6551 Dec 30 j 08:26 16°**¥**52′10 opposition -6556 May 10 j 12:59 28° m 32'26 -6550 Apr 12 j 19:07 $0^{\circ}\Upsilon$ min. Earth dist. 4.12186 AU -6556 Jul 09 j 08:26 23° m 39'50 -6550 May 07 j 13:15 5°Y19'28 direct evening set 0∘ଫ -6556 Sep 12 j 19:37 8°**Υ**19'41 -0°11'23 -6556 Nov 10 j 00:15 evening set 12°**≏**22'38 conjunction -6550 May 21 j 02:42 -6550 May 21 j 02:43 8°**Y**19'41 minimum elong 0°11'22 -6556 Nov 22 j 21:48 -6550 May 20 j 20:47 8°**Y**16'25 conjunction 15°**≙**25'05 0°00'09 behind sun begin -6556 Nov 22 j 21:49 8°Y22'58 minimum elong 15°**≙**25'05 0°00'06 behind sun end -6550 May 21 j 08:38 -6556 Nov 22 j 13:59 8° Y 17'02 6.29817 AU behind sun begin 15°**♀**20'29 max. Earth dist. -6550 May 20 j 21:54 $11^{\circ}\mathbf{\Upsilon}18'26$ behind sun end -6556 Nov 23 j 05:40 15°**£**29'42 morning rise -6550 Jun 03 j 13:31 max. Earth dist. -6556 Nov 23 j 06:24 15°**≏**30'08 6.08340 AU asc. node -6550 Aug 19 j 23:21 25°**Y**48'42 -6550 Oct 03 j 05:42 28° **Y**49'10desc. node -6556 Nov 24 j 00:58 15°**£**41'07 retrograde -6550 Dec 01 j 19:11 morning rise -6556 Dec 05 j 22:28 18°**≏**29'16 opposition 23°**Y**53'14 0°19'04 -6555 Jan 28 j 00:28 $0^{\circ}M$ min. Earth dist. -6550 Dec 02 j 05:08 23°**Y**49'57 4.33216 AU retrograde -6555 Apr 15 j 21:36 8° M 19'00direct -6549 Feb 01 j 10:45 18°**Y**49'18 opposition -6555 Jun 15 j 16:25 3°M17'38 -0°40'54 -6549 May 07 j 11:35 0°8 min. Earth dist. -6555 Jun 15 j 01:29 3°M22'34 4.05488 AU evening set -6549 Jun 09 j 16:19 6°**8**59'12 -6555 Jul 13 j 02:33 direct -6555 Aug 13 j 09:12 28°**♀**24'28 conjunction -6549 Jun 22 j 21:17 9°**8**53'31 0°37'10 -6555 Sep 13 j 10:56 0°M minimum elong -6549 Jun 22 j 21:14 9°**8**53'30 0°37'25 -6555 Dec 04 j 19:50 15°M₀ max. Earth dist. -6549 Jun 21 j 21:25 9°**8**40'22 6.35589 AU -6555 Dec 15 i 04:13 17°M25'12 morning rise -6549 Jul 05 i 22:39 12°846'05 evening set -6549 Jul 16 i 04:58 15°8 conjunction -6555 Dec 28 i 09:58 20°M33'07 -0°51'20 retrograde -6549 Nov 03 i 07:42 29°855'04 -6555 Dec 28 j 09:54 20°M33'04 0°51'38 opposition -6548 Jan 02 j 10:08 25°**8**02'08 1°23'51 minimum elong -6555 Dec 29 j 16:59 6.03903 AU min. Earth dist. -6548 Jan 03 j 06:50 max. Earth dist. 20°M.51'30 24°**8**55'26 4 36838 AU -6554 Jan 10 j 18:58 -6548 Mar 04 j 19:22 19°859'28 morning rise 23°M-42'49 direct -6554 Feb 07 j 06:58 -6548 Jun 02 j 06:00 $0^{\circ}\Pi$ 0°×7 8°**Ⅱ**00'26 -6554 May 22 j 18:26 13°**х** 52′07 evening set -6548 Jul 10 j 13:56 retrograde -6554 Jul 21 j 21:08 10°**Ⅲ**30′22 8°**∡**47'46 -1°47'10 -6548 Jul 21 j 21:25 max. Earth dist. 6.36677 AU opposition -6554 Jul 20 j 20:48 8°**х** 55'59 min. Earth dist. 4.03896 AU -6548 Jul 23 j 09:06 10°**Ⅱ**50′09 -6554 Sep 17 j 23:53 3°**х** 52′35 conjunction 1°14'19 direct -6548 Jul 23 j 09:02 -6553 Jan 20 j 18:09 23°× 02'46 10°**Ⅲ**50′07 1°14'43 evening set minimum elong -6548 Aug 05 j 01:12 13°**Ⅲ**38′24 morning rise 26°**⊀**12'52 -1°24'14 -6553 Feb 03 j 06:30 -6548 Nov 10 j 14:42 conjunction 0°9 -6553 Feb 03 j 06:27 -6548 Dec 03 j 21:20 minimum elong 26° **₹**12'50 1°24'39 retrograde 0°950'34 -6548 Dec 27 j 04:20 max. Earth dist. -6553 Feb 04 j 23:30 26° **₹**36'55 6.05150 AU 30°Ŗ**Ⅱ** morning rise -6553 Feb 16 j 21:46 29°×724'21 opposition -6547 Feb 02 j 11:55 25°II59'05 2°04'34 -6553 Feb 19 j 11:07 0°궁 min. Earth dist. -6547 Feb 03 j 15:19 25°**Ⅲ**50′21 4.35456 AU retrograde -6553 Jun 27 j 14:39 19°る17'56 direct -6547 Apr 06 j 02:23 20°**Ⅲ**58'48 -6553 Aug 25 j 03:01 14°る21'48 4.07989 AU -6547 Jun 28 j 19:16 0ಂತಾ min. Earth dist. -6553 Aug 26 j 05:18 14°る12'49 -2°13'10 -6547 Aug 10 j 19:07 9°900'05 opposition evening set -6553 Oct 23 j 11:15 9°る14'19 max. Earth dist. 11°9527'07 6.32801 AU direct -6547 Aug 21 j 17:42 -6552 Feb 26 j 17:00 28°る19'55 evening set -6552 Mar 04 j 23:21 -6547 Aug 23 j 07:30 11°5548'20 1°30'17 0°≈ conjunction minimum elong -6547 Aug 23 i 07:29 11°5548'20 1°30'42 1°≈29'04 -1°25'53 14°935'49 conjunction -6552 Mar 11 i 09:58 morning rise -6547 Sep 04 i 18:07 minimum elong -6552 Mar 11 j 10:00 1°≈29'06 1°26'16 -6547 Nov 27 j 21:16 $0^{\circ}\Omega$ max. Earth dist. -6552 Mar 12 j 22:07 1°≈49'54 6.11647 AU retrograde -6546 Jan 05 j 11:09 2°Ω14'05 -6552 Mar 25 j 04:03 4°≈38'37 -6546 Feb 13 j 13:28 30°R∽ morning rise -6552 May 12 j 13:00 15°**≈** -6546 Mar 07 j 13:06 27°522'04 2°09'57 opposition -6552 Jul 30 j 23:18 min. Earth dist. -6546 Mar 08 j 13:49 27°9514'13 4.29392 AU retrograde 23°≈47'10 direct -6546 May 08 j 14:35 22°524'40 opposition -6552 Sep 28 j 05:32 18° \$\$43'52 -1°51'00 -6546 Jul 22 j 12:56 min. Earth dist. -6552 Sep 27 j 12:07 18°≈49'49 4.16186 AU $0^{\circ}\Omega$ -6552 Oct 29 j 07:02 10°**Ω**34'56 15°R≈ evening set -6546 Sep 11 j 01:26 direct -6552 Nov 26 j 10:13 13°≈42'09 max. Earth dist. -6546 Sep 22 j 08:47 13°**Ω**09'47 6.25022 AU -6552 Dec 24 j 20:45 15°≈ 0°\ -6546 Sep 23 j 12:31 13°**Ω**25'40 1°19'54 -6551 Mar 22 j 13:31 conjunction -6546 Sep 23 j 12:34 13°**Ω**25'42 1°20'15 evening set -6551 Apr 02 j 20:50 2°**)** 30'46 minimum elong -6546 Sep 30 j 09:15 15°**Ω** -6551 Apr 16 j 14:44 16°**Ω**16′29 conjunction 5°****36'24 -0°57'33 morning rise -6546 Oct 05 j 23:19 minimum elong -6551 Apr 16 j 14:48 5°**)** 36'27 0°57'45 -6546 Dec 13 j 18:28 0° M max. Earth dist. -6551 Apr 17 j 09:46 5°**)**47'09 6.20925 AU retrograde -6545 Feb 08 j 15:08 4° m 38'05 morning rise -6551 Apr 30 j 07:30 8°**)**41'20 -6545 Apr 08 j 18:23 30°R€ retrograde -6551 Sep 01 j 15:17 26°**)** 55'34 opposition -6545 Apr 10 j 21:09 29°**Ω**43'49 1°35'43 -6551 Oct 30 j 22:37 21°\\$55'49 -0°52'59 -6545 Apr 11 j 12:28 29°**Ω**38'55 4.20347 AU opposition min. Earth dist.

-6545 Jun 10 j 22:04

24°**Ω**49'09

direct

-6551 Oct 30 j 17:19 21° ¥ 57'36 4.25591 AU

min. Earth dist.

•	omena of Jupiter fro ical year style is used: Th		_	· //		, .	ge 32
rittention, ustronom	-6545 Aug 09 j 13:10	0° mp	in ustronomical co	minimum elong	-6539 Apr 21 j 14:12	10° ¥ 25'00	0°51'56
evening set	-6545 Oct 13 j 03:36	13° m) 15'02		max. Earth dist.	-6539 Apr 22 j 05:13	10°) 33′27	6.22061 AU
	· ·			morning rise	-6539 May 05 j 06:29	13° ¥ 29′13	
conjunction	-6545 Oct 25 j 18:43	16°M 11'32	0°44'15		-6539 Aug 05 j 09:04	0° Y	
minimum elong	-6545 Oct 25 j 18:47	16°M 11'34	0°44'23	retrograde	-6539 Sep 06 j 05:09	1° Y 37'04	
max. Earth dist.	-6545 Oct 25 j 07:23	16°Mp04'55	6.15562 AU		-6539 Oct 07 j 19:51	30° ₹ ₩	
morning rise	-6545 Nov 07 j 11:42	19° m 09'06		opposition	-6539 Nov 04 j 11:56	26°) ₹37'53	-0°43'07
	-6545 Dec 27 j 20:59	0∘ ⊽		min. Earth dist.	-6539 Nov 04 j 09:05		4.26720 AU
retrograde	-6544 Mar 15 j 06:36	8° ≏ 21'18		direct	-6538 Jan 04 j 02:52	21°) 34′08	
opposition	-6544 May 15 j 10:29	3° ≏ 23'19	0°28'20		-6538 Mar 24 j 20:27	0° Υ	
min. Earth dist.	-6544 May 15 j 09:22	3° ≏ 23'41	4.11111 AU	evening set	-6538 May 12 j 08:07	9° Ƴ 58'54	
	-6544 Jun 13 j 09:00	30°R Mp					
direct	-6544 Jul 14 j 03:05	28° mp 30'15		conjunction	-6538 May 25 j 20:42	12° Y 58'17	
	-6544 Aug 13 j 15:20	0∘ ʊ		minimum elong	-6538 May 25 j 20:43	12° Y 58'18	0°04'17
desc. node	-6544 Oct 04 j 05:00	8° Ω 01'29		behind sun begin	-6538 May 25 j 12:38	12° Υ 53'50	
evening set	-6544 Nov 14 j 18:04	17° £ 15'30		behind sun end max. Earth dist.	-6538 May 26 j 04:49	13° Υ 02'46 12° Υ 55'05	6.30893 AU
agniumation	-6544 Nov 27 j 16:54	20° £ 18'52	0007122		-6538 May 25 j 14:52 -6538 Jun 08 j 06:12	12 γ 55 05 15° γ 56'07	0.30893 AU
conjunction minimum elong	-6544 Nov 27 j 16:54	20° £ 18'51		morning rise asc. node	-6538 Jun 29 j 06:08	20° Υ 27'56	
behind sun begin	-6544 Nov 27 j 09:29	20° ⊆ 1831 20° ⊆ 14'30	0 07 30	asc. node	-6538 Aug 21 j 14:29	0° 8	
behind sun end	-6544 Nov 28 j 00:18	20° ⊆ 23'13		retrograde	-6538 Oct 07 j 14:27	3° 8 22'01	
max. Earth dist.	-6544 Nov 28 j 05:42	20° £ 26'25	6.07455 AU	retrograde	-6538 Nov 24 j 05:22	30°RY	
morning rise	-6544 Dec 10 j 18:37	23° Ω 23'55	0.07433710	opposition	-6538 Dec 06 j 06:29	28° Υ 26'36	0°29'04
morning 113¢	-6543 Jan 08 j 18:44	0°M		min. Earth dist.	-6538 Dec 06 j 16:46	28° Y 23'13	4.34189 AU
retrograde	-6543 Apr 21 j 01:24	13°M18'10		direct	-6537 Feb 06 j 00:11	23° Y '22'51	
opposition	-6543 Jun 20 j 16:52	8°M16'17	-0°51'35		-6537 Apr 17 j 12:11	0°8	
min. Earth dist.	-6543 Jun 20 j 01:14	8°M21'28	4.04878 AU	evening set	-6537 Jun 14 j 06:04	11° 8 30'07	
direct	-6543 Aug 18 j 07:26	3°M22'55		max. Earth dist.	-6537 Jun 26 j 07:20	14° 8 09'07	6.36390 AU
	-6543 Nov 17 j 11:20	15°M					
evening set	-6543 Dec 20 j 03:54	22°M25'52		conjunction	-6537 Jun 27 j 09:26	14° 8 23'30	0°43'19
				minimum elong	-6537 Jun 27 j 09:22	14° 8 23'28	0°43'35
conjunction	-6542 Jan 02 j 10:31	25°M34'18	-0°57'23		-6537 Jun 30 j 03:37	15° 8	
minimum elong	-6542 Jan 02 j 10:27	25°M34'16	0°57'42	morning rise	-6537 Jul 10 j 09:28	17° 8 15'10	
max. Earth dist.	-6542 Jan 03 j 18:25	25°M53'11	6.03597 AU		-6537 Sep 14 j 07:50	Π °0	
morning rise	-6542 Jan 15 j 20:42	28°M44'35		retrograde	-6537 Nov 07 j 17:48	4° Ⅱ 21'47	
	-6542 Jan 21 j 05:33	0° ∡ ¹			-6536 Jan 02 j 21:24	30° ₹ 8	
retrograde	-6542 May 27 j 18:27	18° ∡ 54'24		opposition	-6536 Jan 06 j 21:12	29° 8 29'11	1°31'12
opposition	-6542 Jul 26 j 20:01	13° ∡ 49'47		min. Earth dist.	-6536 Jan 07 j 19:41		4.37424 AU
min. Earth dist.	-6542 Jul 25 j 18:12	13° 🖈 58'31	4.03952 AU	direct	-6536 Mar 09 j 09:31	24° 8 26'49	
direct	-6542 Sep 22 j 20:50	8° 🖈 54'09		· ,	-6536 May 12 j 14:21	0°Ⅱ 120Ⅲ25121	
evening set	-6541 Jan 25 j 21:24	28° ₹ 05'24		evening set	-6536 Jul 14 j 22:52 -6536 Jul 26 j 04:44	12° Ⅱ 25'31 14° Ⅱ 54'34	C 26000 ATT
	-6541 Feb 03 j 01:31	0°₹		max. Earth dist.	-0550 Jul 20 J 04:44	14°Щ34'34	6.36980 AU
conjunction	-6541 Feb 08 j 10:37	1°る15'40	1°26'26	conjunction	-6536 Jul 27 j 16:51	15° Ⅱ 14'35	1017'55
minimum elong	-6541 Feb 08 j 10:35	1°る15'39		minimum elong	-6536 Jul 27 j 16:48	15° Ⅱ 14'33	
max. Earth dist.	-6541 Feb 10 j 03:42		6.05542 AU	morning rise	-6536 Aug 09 j 07:47	18° Ⅱ 02'15	1 1017
morning rise	-6541 Feb 22 j 02:25	4° ට 27'11	0.033 12 110	morning rise	-6536 Oct 08 j 19:12	0°95	
retrograde	-6541 Jul 02 j 12:51	24° る 16'57		retrograde	-6536 Dec 08 j 05:53	5° © 14'50	
min. Earth dist.	-6541 Aug 30 j 00:27		4.08666 AU	opposition	-6535 Feb 06 j 23:37	0°523'22	2°07'25
opposition	-6541 Aug 31 j 01:08	19° る 11'56		min. Earth dist.	-6535 Feb 08 j 02:21	0° © 14'51	4.35470 AU
direct	-6541 Oct 28 j 10:03	14° る 12'55			-6535 Feb 10 j 01:03	30°RⅡ	
	-6540 Feb 17 j 05:56	0°≈		direct	-6535 Apr 10 j 12:51	25° Ⅲ 23'28	
evening set	-6540 Mar 02 j 20:00	3°≈17'50			-6535 Jun 07 j 07:14	0 \circ \odot	
				evening set	-6535 Aug 15 j 01:31	13° © 23'33	
conjunction	-6540 Mar 16 j 13:29	6° ≈ 26'49	-1°23'31	max. Earth dist.	-6535 Aug 26 j 00:40	15° 9 51'03	6.32516 AU
minimum elong	-6540 Mar 16 j 13:33	6° ≈ 26'51	1°23'53				
max. Earth dist.	-6540 Mar 18 j 00:45	6° ≈ 47'04	6.12555 AU	conjunction	-6535 Aug 27 j 13:15	16° © 11'38	1°30'24
morning rise	-6540 Mar 30 j 07:42	9° ≈ 36′01		minimum elong	-6535 Aug 27 j 13:15	16° © 11'38	1°30'49
	-6540 Apr 23 j 13:45	15° ≈		morning rise	-6535 Sep 08 j 23:21	18°959'02	
retrograde	-6540 Aug 04 j 15:44	28° ≈ 38'07			-6535 Nov 01 j 17:12	0 ° Ω	
opposition	-6540 Oct 02 j 21:41	23° ≈ 35'16		retrograde	-6534 Jan 10 j 00:10	6° Ω 40′24	
min. Earth dist.	-6540 Oct 02 j 04:48	23°≈41'01	4.17237 AU	opposition	-6534 Mar 12 j 02:48	1° Ω 48'15	
direct	-6540 Dec 01 j 04:57	18°≈33'14		min. Earth dist.	-6534 Mar 13 j 03:53	1° Ω 40'17	4.28801 AU
ovenina set	-6539 Mar 04 j 20:33	0°){ 7° ¥ 10'54		direct	-6534 Mar 26 j 15:56	30°R© 26°©51'14	
evening set	-6539 Apr 07 j 20:38	7° ∺ 19'54		direct	-6534 May 13 j 03:11	26°951'14	
conjunction	6530 Apr 21: 14:07	10°) 24′58	0°51'45	avaning set	-6534 Jun 28 j 14:30 -6534 Sep 15 j 07:46	0° Ω 15° Ω 01'43	
conjunction	-6539 Apr 21 j 14:07	10 /(24/38	-0 3143	evening set	-0554 Sep 15 J U / 146	15 660143	

•	omena of Jupiter fro		_	` //			ige 33
Attention, astronom	nical year style is used: The -6534 Sep 15 j 04:44		in astronomicai co	minimum elong	-6528 Mar 21 j 16:44	ounting style. 11°≈24'46	1°20'50
	-0334 Sep 13 J 04.44	13 06		max. Earth dist.	-6528 Mar 23 j 01:15	11°≈43'24	6.13485 AU
conjunction	-6534 Sep 27 j 18:58	17° Ω 52'53	1°16'24	morning rise	-6528 Apr 04 j 11:07	11 ≈43 24 14°≈33'33	0.13463 AU
minimum elong	-6534 Sep 27 j 19:01	17° Ω 52'55		morning risc	-6528 Apr 06 j 09:42	14 ≈ 33 33	
max. Earth dist.	-6534 Sep 26 j 15:06	17° Ω 36'54			-6528 Jun 22 j 19:34	0° ∀	
morning rise	-6534 Oct 10 j 06:23	20° Ω 44'19	0.24172 AO	retrograde	-6528 Aug 09 j 08:13	3° ∺ 28'51	
morning risc	-6534 Nov 22 j 08:22	0°M)		renograde	-6528 Sep 25 j 21:25	30°R≈	
retrograde	-6533 Feb 13 j 06:19	ابران 9° m و 11′24		opposition	-6528 Oct 07 j 13:26	28°≈26'20	103720
opposition	-6533 Apr 15 j 13:44	4° Mp 16'41	1°28'14	min. Earth dist.	-6528 Oct 06 j 22:19		4.18387 AU
min. Earth dist.		4° My 12'25	4.19277 AU	direct	-6528 Dec 06 j 01:28	23°≈23'53	4.16367 AU
iiiii. Eartii dist.	-6533 Apr 16 j 03:04 -6533 May 26 j 10:24	4 II/1223 30°RΩ	4.19277 AU	direct	-6527 Feb 12 j 07:16	25 ≈ 25 55	
direct		30 και 29° Ω 22'17		ovening set	,	0) € 07'46	
direct	-6533 Jun 15 j 10:10	29 3 C 22 1 /		evening set	-6527 Apr 12 j 19:27	12 7(0/40	
	-6533 Jul 05 j 09:49			:	(527 Apr. 26 : 12.46	150W 12010	0945127
evening set	-6533 Oct 17 j 12:59	17° m 50'11		conjunction	-6527 Apr 26 j 12:46	15°) 12'10	
	(522 0 + 20:05.06	200 m. 4712 f	0027157	minimum elong	-6527 Apr 26 j 12:50		
conjunction	-6533 Oct 30 j 05:06	20° mp 47'35	0°37'57	max. Earth dist.	-6527 Apr 27 j 02:57	15°) €20'08	6.23353 AU
minimum elong	-6533 Oct 30 j 05:09	20° mp 47'36	0°38'04	morning rise	-6527 May 10 j 04:19	18°) € 15'33	
max. Earth dist.	-6533 Oct 29 j 20:53	20° m/42'46	6.14386 AU		-6527 Jul 06 j 22:38	0°Υ	
morning rise	-6533 Nov 11 j 22:59	23° m/46'08		retrograde	-6527 Sep 10 j 16:00	6°Υ16'15	0000100
	-6533 Dec 09 j 13:47	0∘ 亚		opposition	-6527 Nov 09 j 00:09	1°Υ17'31	
retrograde	-6532 Mar 20 j 04:46	13° Ω 05'00		min. Earth dist.	-6527 Nov 08 j 22:20	1° Y 18′07	4.27998 AU
opposition	-6532 May 20 j 06:17	8° Ω 06'35	0°17'47		-6527 Nov 18 j 18:35	30°₽)	
min. Earth dist.	-6532 May 20 j 04:41	8° ≏ 07'06	4.09908 AU	direct	-6526 Jan 08 j 18:27	26°) 13′38	
direct	-6532 Jul 18 j 19:56	3° Ω 13'35		_	-6526 Feb 28 j 23:16	0°Υ	
desc. node	-6532 Aug 16 j 07:50	4° ≏ 32'48		asc. node	-6526 May 08 j 08:21	12° Y ′41′07	
evening set	-6532 Nov 19 j 09:42	22° ≏ 02'18		evening set	-6526 May 17 j 01:13	14° Y 35'00	
		_				• •	
conjunction	-6532 Dec 02 j 09:34	25° ≏ 06'38		conjunction	-6526 May 30 j 12:32	17° Ƴ 33'27	0°02'49
minimum elong	-6532 Dec 02 j 09:32	25° ≏ 06'37	0°14'43	minimum elong	-6526 May 30 j 12:32	17° Ƴ 33'26	0°02'55
behind sun begin	-6532 Dec 02 j 06:05	25° ≏ 04'35		behind sun begin	-6526 May 30 j 04:21	17° Y ′28′56	
behind sun end	-6532 Dec 02 j 12:59	25° ჲ 08'39		behind sun end	-6526 May 30 j 20:44	17° Ƴ 37'57	
max. Earth dist.	-6532 Dec 02 j 23:18	25° ≏ 14'46	6.06339 AU	max. Earth dist.	-6526 May 30 j 02:32	17° Y ′27'55	6.32025 AU
morning rise	-6532 Dec 15 j 12:42	28° ≙ 12'47		morning rise	-6526 Jun 12 j 20:58	20° Y ′30′18	
	-6532 Dec 23 j 04:08	0° M			-6526 Jul 28 j 23:43	8° 0	
	-6531 Mar 10 j 18:26	15°M		retrograde	-6526 Oct 11 j 23:55	7° 8 51'29	
retrograde	-6531 Apr 26 j 00:29	18° ™ 12'28		opposition	-6526 Dec 10 j 16:54	2° 8 56'27	0°38'49
	-6531 Jun 11 j 12:33	15°RM		min. Earth dist.	-6526 Dec 11 j 05:47	2° 8 52'13	4.35070 AU
opposition	-6531 Jun 25 j 14:22	13°M10'11			-6525 Jan 03 j 17:18	30° ₹Ƴ	
min. Earth dist.	-6531 Jun 24 j 20:32	13°M16'07	4.03985 AU	direct	-6525 Feb 10 j 14:51	27° Y ′52'43	
direct	-6531 Aug 23 j 00:36	8°M16'37			-6525 Mar 20 j 20:42	9° 8	
	-6531 Oct 28 j 15:06	15°M			-6525 Jun 14 j 08:07	15° 8	
evening set	-6531 Dec 25 j 02:20	27° ML $23'22$		evening set	-6525 Jun 18 j 17:47	15° 8 57'33	
	-6530 Jan 05 j 03:13	0° ∡					
				conjunction	-6525 Jul 01 j 19:56	18° 8 50'09	0°49'11
conjunction	-6530 Jan 07 j 10:07	0° х 32′33	-1°02'52	minimum elong	-6525 Jul 01 j 19:52	18° 8 50'07	0°49'29
minimum elong	-6530 Jan 07 j 10:03	0° ∡ ³32'30	1°03'12	max. Earth dist.	-6525 Jun 30 j 17:01	18° 8 35'19	6.36924 AU
max. Earth dist.	-6530 Jan 08 j 20:04	0° ∡ 752'40	6.03007 AU	morning rise	-6525 Jul 14 j 18:24	21° 8 40'59	
morning rise	-6530 Jan 20 j 21:15	3° ҂ ¹43′30			-6525 Aug 23 j 19:19	$\Pi^{\circ}0$	
retrograde	-6530 Jun 01 j 19:15	23° ₹ ′55′00		retrograde	-6525 Nov 12 j 00:56	8° Ⅱ 46′25	
opposition	-6530 Jul 31 j 17:44	18° ∡ ′50′10	-1°59'01	opposition	-6524 Jan 11 j 07:33	3° Ⅱ 54′02	1°38'05
min. Earth dist.	-6530 Jul 30 j 16:13	18° ∡ ′58′50	4.03740 AU	min. Earth dist.	-6524 Jan 12 j 06:20	3° Ⅱ 46'42	4.37590 AU
direct	-6530 Sep 27 j 18:43	13° ∡ ′54′07			-6524 Feb 15 j 05:05	30°₽ ႘	
	-6529 Jan 17 j 10:57	ರ°0		direct	-6524 Mar 13 j 20:14	28° 8 51'57	
evening set	-6529 Jan 31 j 00:10	3° る 07'28			-6524 Apr 10 j 16:56	Π°	
	·			evening set	-6524 Jul 19 j 07:31	16° Ⅱ 49'51	
conjunction	-6529 Feb 13 j 14:18	6° ප 18'02	-1°27'55	max. Earth dist.	-6524 Jul 30 j 10:35	19° Ⅱ 17'35	6.36740 AU
minimum elong	-6529 Feb 13 j 14:17	6° ප 18'02			,		
max. Earth dist.	-6529 Feb 15 j 08:44		6.05733 AU	conjunction	-6524 Aug 01 j 00:13	19° ∏ 38′29	1°21'08
morning rise	-6529 Feb 27 j 06:47	9° る 29'43	-	minimum elong	-6524 Aug 01 j 00:10	19° Ⅲ 38′27	1°21'32
retrograde	-6529 Jul 07 j 10:10	29° ප 16'03		morning rise	-6524 Aug 13 j 14:14	22° I I25'50	
opposition	-6529 Sep 04 j 20:30	24° ප 11'11	-2°11'30	0	-6524 Sep 18 j 11:16	0°95	
min. Earth dist.	-6529 Sep 03 j 19:33	24° ට 19'43		retrograde	-6524 Dec 12 j 18:14	9° 5 640'51	
direct	-6529 Nov 02 j 06:26	19° ට 11'43	10	opposition	-6523 Feb 11 j 12:36	4°9549'25	2°09'44
	-6528 Jan 30 j 03:50	0°≈		min. Earth dist.	-6523 Feb 12 j 16:40	4°9540'29	4.34839 AU
evening set	-6528 Mar 07 j 22:57	8°≈16'00		Zurur dist.	-6523 Apr 04 j 12:15	30°RⅡ	, 110
		2 - 2 - 2 0 0 0		direct	-6523 Apr 15 j 02:04	29° ∏ 49'52	
conjunction	-6528 Mar 21 j 16:40	11° ≈ 24'43	-1°20'29		-6523 Apr 25 j 15:56	0°95	
2011/11/1011	5525 Mai 21 J 10.40		. = 0 = 2		0020 11p1 20 J 10.00	· —	

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 34 Attention, astronomical year style is used: The year -6523 in astronomical counting style is the year 6524 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	ne year -6523	in astronomical co	ounting style is the year	6524 BCE in historical c	ounting style.	
evening set	-6523 Aug 19 j 09:10	17° © 50'47			-6517 May 20 j 09:37	0° ≈	
max. Earth dist.	-6523 Aug 30 j 08:05	20°5518'31	6.31531 AU	retrograde	-6517 Jul 12 j 05:13	4° ≈ 13′23	
					-6517 Sep 03 j 08:28	30°Ŗる	
conjunction	-6523 Aug 31 j 20:34	20° © 39'05	1°30'03	opposition	-6517 Sep 09 j 15:09	29° る 08'40	-2°09'12
minimum elong	-6523 Aug 31 j 20:34	20° © 39'05	1°30'28	min. Earth dist.	-6517 Sep 08 j 15:07	29° る 16'54	4.10732 AU
morning rise	-6523 Sep 13 j 06:29	23° 5 26'48		direct	-6517 Nov 07 j 05:04	24° る 08'43	
	-6523 Oct 13 j 12:33	$0^{\circ}\Omega$			-6516 Jan 08 j 22:19	0° ≈	
retrograde	-6522 Jan 14 j 15:14	11° Ω 13'48		evening set	-6516 Mar 12 j 23:51	13° ≈ 09′10	
opposition	-6522 Mar 16 j 19:54	6° Ω 21'22	2°04'18		-6516 Mar 21 j 02:35	15° ≈	
min. Earth dist.	-6522 Mar 17 j 19:05	6° Ω 14'00	4.27529 AU				
direct	-6522 May 17 j 16:06	1° Ω 24'45		conjunction	-6516 Mar 26 j 17:53	16° ≈ 17'14	-1°17'00
	-6522 Aug 30 j 00:45	15° Ω		minimum elong	-6516 Mar 26 j 17:57	16° ≈ 17'17	1°17'19
evening set	-6522 Sep 19 j 17:44	19° Ω 37'37		max. Earth dist.	-6516 Mar 28 j 01:43	16° ≈ 35'25	6.15191 AU
max. Earth dist.	-6522 Oct 01 j 04:06	22° Ω 15′01	6.22729 AU	morning rise	-6516 Apr 09 j 11:58	19° ≈ 25'12	
	·				-6516 May 29 j 13:41	0° ∀	
conjunction	-6522 Oct 02 j 05:20	22° Ω 29'32	1°12'21	retrograde	-6516 Aug 13 j 21:00	8°) 11′16	
minimum elong	-6522 Oct 02 j 05:24	22° Ω 29'34		opposition	-6516 Oct 12 j 02:11	3° ¥ 09'15	-1°29'42
morning rise	-6522 Oct 14 j 17:19	25° Ω 21'50		min. Earth dist.	-6516 Oct 11 j 12:49		4.20129 AU
5 5	-6522 Nov 04 j 09:29	0° m)			-6516 Nov 06 j 07:35	30°R≈	
retrograde	-6521 Feb 18 j 05:41	13° m 56'33		direct	-6516 Dec 10 j 18:15	28° ≈ 06'32	
opposition	-6521 Apr 20 j 11:47	9° Mp 01'26	1°19'54		-6515 Jan 14 j 16:04	0° ∀	
min. Earth dist.	-6521 Apr 21 j 00:12	8° m 57'27		evening set	-6515 Apr 17 j 14:06	16°) 45′53	
direct	-6521 Jun 20 j 04:58	4° Mp 07'21	4.17740710	evening set	031371pi 17 j 14.00	10 /(4333	
evening set	-6521 Oct 22 j 04:10	22° m 38'39		conjunction	-6515 May 01 j 06:41	19° ¥ 49'20	-0°39'24
evening set	0321 001 22 j 04.10	22 11/3037		minimum elong	-6515 May 01 j 06:44	19°) 49'22	
conjunction	-6521 Nov 03 j 21:14	25° m 37'07	0°31'06	max. Earth dist.	-6515 May 01 j 16:01	19° X 54'34	6.24978 AU
minimum elong	-6521 Nov 03 j 21:14	25° m 37'07	0°31'11	morning rise	-6515 May 14 j 21:35	22°) 51'45	0.24978 AU
max. Earth dist.	-6521 Nov 03 j 21:10	25° m 33'30	6.12927 AU	morning rise	-6515 Jun 17 j 06:44	22 γ (3143	
morning rise	-6521 Nov 16 j 16:28	28° Mp 36'53	0.12927 AU	retrograde	-6515 Sep 14 j 22:59	10° Υ 45'04	
morning rise	-6521 Nov 22 j 15:47	0₀ ʊ		opposition	-6515 Nov 13 j 08:32	5° Υ 46'50	0922110
ratra ara da	·	0 22 18° Ω 03'10			-6515 Nov 13 j 08.32		4.29367 AU
retrograde	-6520 Mar 25 j 07:13		0906120	min. Earth dist.	•	0° Υ 42'51	4.29307 AU
opposition	-6520 May 25 j 07:59	13° Ω 04'14	0°06'30	direct	-6514 Jan 13 j 07:17	6° Υ 31'10	
min. Earth dist.	-6520 May 25 j 02:58	13° Ω 05'53	4.08670 AU	asc. node	-6514 Mar 19 j 05:40		
desc. node	-6520 Jun 26 j 06:18	9° £ 24'06		evening set	-6514 May 21 j 13:42	19° Υ 00'59	(2202(ATT
direct	-6520 Jul 23 j 15:56	8° £ 11'22		max. Earth dist.	-6514 Jun 03 j 11:49	21 75150	6.33036 AU
evening set	-6520 Nov 24 j 07:34	27° Ω 03'33			6514 7 04:00 01	2100050124	0000122
	-6520 Dec 06 j 17:46	0°M		conjunction	-6514 Jun 04 j 00:01	21° Y 58'34	
				minimum elong	-6514 Jun 04 j 00:01	21° Y 58'33	0°09'39
conjunction	-6520 Dec 07 j 08:38			=	-6514 Jun 03 j 17:18		
minimum elong	-6520 Dec 07 j 08:36	0°M08'47		behind sun end	-6514 Jun 04 j 06:43	22°°°02'15	
max. Earth dist.	-6520 Dec 08 j 02:23	0°M19'20	6.05450 AU	morning rise	-6514 Jun 17 j 07:01	24° Y ′54'28	
morning rise	-6520 Dec 20 j 12:56	3°M15'53			-6514 Jul 11 j 01:13	0°8	
	-6519 Feb 12 j 11:45	15°M		retrograde	-6514 Oct 16 j 04:33	12° 8 12'00	
retrograde	-6519 May 01 j 06:14	23°M19'46		opposition	-6514 Dec 14 j 23:32	7° 8 17'26	0°47'59
opposition	-6519 Jun 30 j 17:26	18° ™ 17'02		min. Earth dist.	-6514 Dec 15 j 14:08	7° 8 12'40	4.35658 AU
min. Earth dist.	-6519 Jun 29 j 22:17		4.03570 AU	direct	-6513 Feb 14 j 23:54	2° 8 13'53	
	-6519 Jul 27 j 18:58	15°RM		_	-6513 May 29 j 05:44	15° 8	
direct	-6519 Aug 28 j 01:45	13°M23'18		evening set	-6513 Jun 23 j 02:09	20° 8 17'37	
	-6519 Sep 28 j 04:24	15° ™		max. Earth dist.	-6513 Jul 04 j 19:53	22° 8 52'31	6.37017 AU
	-6519 Dec 19 j 09:55	0° ∡					
evening set	-6519 Dec 30 j 05:44	2° ∡ 31'44		conjunction	-6513 Jul 06 j 02:50	23° 8 09'35	0°54'36
				minimum elong	-6513 Jul 06 j 02:46	23° 8 09'33	0°54'55
conjunction	-6518 Jan 12 j 14:30	5° ∡ 741'17		morning rise	-6513 Jul 19 j 00:13	25° 8 59'54	
minimum elong	-6518 Jan 12 j 14:26	5° ∡ 41'15			-6513 Aug 06 j 13:48	0°Щ	
max. Earth dist.	-6518 Jan 14 j 03:43	6° ₹ 03'19	6.03110 AU	retrograde	-6513 Nov 16 j 08:43	13° Ⅱ 06'03	
morning rise	-6518 Jan 26 j 02:32	8° ≯ 52'33		opposition	-6512 Jan 15 j 16:00	8° Ⅱ 13'54	1°44'17
retrograde	-6518 Jun 06 j 21:14	29° ∡ 02'08		min. Earth dist.	-6512 Jan 16 j 17:01	8° Ⅱ 05'52	4.37207 AU
opposition	-6518 Aug 05 j 17:58	23° ∡ 57'11		direct	-6512 Mar 18 j 06:07	3° Ⅱ 12'04	
min. Earth dist.	-6518 Aug 04 j 15:10	24° ₰ 06'17	4.04405 AU	evening set	-6512 Jul 23 j 14:00	21° Ⅱ 11′04	
direct	-6518 Oct 02 j 18:38	19° ∡ 00'45		max. Earth dist.	-6512 Aug 03 j 16:21	23° Ⅱ 38'45	6.35893 AU
	-6518 Dec 30 j 09:09	0°ಕ					
evening set	-6517 Feb 05 j 05:00	8° る 12'46		conjunction	-6512 Aug 05 j 05:56	23° Ⅱ 59'39	1°23'48
				minimum elong	-6512 Aug 05 j 05:53	23° Ⅱ 59'38	1°24'13
conjunction	-6517 Feb 18 j 19:36	11° る 23'03		morning rise	-6512 Aug 17 j 19:01	26° Ⅱ 46'59	
minimum elong	-6517 Feb 18 j 19:35	11° る 23'03			-6512 Sep 01 j 12:25	0 \circ 60	
max. Earth dist.	-6517 Feb 20 j 12:54	11° る 47'09	6.06868 AU	retrograde	-6512 Dec 17 j 04:38	14° 5 06'40	
morning rise	-6517 Mar 04 j 12:34	14° る 34'22		opposition	-6511 Feb 16 j 01:10	9° © 15'12	2°11'17

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6511 in astronomical counting style is the year 6512 BCE in historical counting style. min. Earth dist. -6511 Feb 17 j 04:25 9°506'32 4.33608 AU conjunction -6505 Feb 24 j 00:18 16°**ට**25'34 -1°29'05 direct minimum elong -6511 Apr 19 j 12:01 4°छ16'05 -6505 Feb 24 j 00:18 16°る25'34 1°29'31

	6511 Apr 17 j 12.01	22° © 19'50		Eth di-t	(505 Feb. 25 : 10:21	160 325 54	6.08085 AU
evening set	-6511 Aug 23 j 17:10			max. Earth dist.	-6505 Feb 25 j 18:21		6.08085 AU
max. Earth dist.	-6511 Sep 03 j 16:19	24°5548'17	6.30010 AU	morning rise	-6505 Mar 09 j 17:28	19° る 36'24	
					-6505 Apr 26 j 18:14	0° ≈	
conjunction	-6511 Sep 05 j 04:13	25°508'36	1°29'08	retrograde	-6505 Jul 17 j 00:42	9° ≈ 07'57	
minimum elong	-6511 Sep 05 j 04:14	25°508'37	1°29'33	min. Earth dist.	-6505 Sep 13 j 10:28	4°≈11'12	4.12158 AU
-	-6511 Sep 17 j 14:13	27°956'58	1 27 55			4°≈03'31	
morning rise				opposition	-6505 Sep 14 j 08:56		-2 00 03
	-6511 Sep 26 j 18:28	$0^{\circ}\Omega$			-6505 Oct 19 j 07:19	30°R₹	
	-6511 Dec 26 j 18:46	15° Ω		direct	-6505 Nov 12 j 01:55	29° る 03'09	
retrograde	-6510 Jan 19 j 10:27	15° Ω 51′25			-6505 Dec 06 j 01:56	0° ≈	
•	-6510 Feb 12 j 02:46	15°RΩ			-6504 Mar 04 j 14:28	15° ≈	
opposition	-6510 Mar 21 j 14:28	10° Ω 58'43	2°00'18	evening set	-6504 Mar 18 j 00:18	18° ≈ 00'11	
• •	·			evening set	0304 14141 10 3 00.10	10 70.00 11	
min. Earth dist.	-6510 Mar 22 j 13:12	10° Ω 51′29	4.25813 AU				
direct	-6510 May 22 j 08:04	6° Ω 02'29		conjunction	-6504 Mar 31 j 18:17	21° ≈ 07'38	-1°13'02
	-6510 Aug 11 j 22:11	15° Ω		minimum elong	-6504 Mar 31 j 18:21	21° ≈ 07'40	1°13'19
evening set	-6510 Sep 24 j 05:31	24° Ω 19′04		max. Earth dist.	-6504 Apr 01 j 22:17	21° ≈ 23'34	6.16707 AU
•				morning rise	-6504 Apr 14 j 12:20	24°≈14'52	
agniunation	6510 Oct 06 ; 17:47	27° Ω 11'59	1°07'45	morning rise		0°) €	
conjunction	-6510 Oct 06 j 17:47				-6504 May 10 j 16:04		
minimum elong	-6510 Oct 06 j 17:51	27° Ω 12'01	1°08'00	retrograde	-6504 Aug 18 j 08:13	12°) 52′40	
max. Earth dist.	-6510 Oct 05 j 19:08	26° Ω 58'54	6.20985 AU	opposition	-6504 Oct 16 j 14:42	7° ℋ 51'08	-1°21'34
	-6510 Oct 18 j 21:13	0° m)		min. Earth dist.	-6504 Oct 16 j 03:05	7°) 55′04	4.21595 AU
morning rise	-6510 Oct 19 j 06:37	0° Mp 05′24		direct	-6504 Dec 15 j 10:50	2°) 48′08	
retrograde	-6509 Feb 23 j 05:30	18° m 48'29		evening set	-6503 Apr 22 j 09:04	21°) €24'07	
		-	1010140	evening set	-0303 Apr 22 j 07.04	21 /(240/	
opposition	-6509 Apr 25 j 12:00	13° m 52'52	1°10'48				
min. Earth dist.	-6509 Apr 25 j 20:51	13° m 50'02	4.16115 AU	conjunction	-6503 May 06 j 01:10	24°) €26'48	
direct	-6509 Jun 24 j 23:15	8° m 59'04		minimum elong	-6503 May 06 j 01:13	24°) €26′50	0°33'01
evening set	-6509 Oct 26 j 21:50	27° Mp 33'53		max. Earth dist.	-6503 May 06 j 07:43	24°) 30'27	6.26313 AU
	-6509 Nov 06 j 07:07	0∘ ⊽		morning rise	-6503 May 19 j 15:07	27° ₩ 28'18	
	J			Ü	-6503 May 31 j 03:32	$0^{\circ}\Upsilon$	
agniumation	6500 Nov. 00 : 15.56	0° £ 33'25	0022152	natua ana da		15°Υ15'23	
conjunction	-6509 Nov 08 j 15:56			retrograde	-6503 Sep 19 j 07:58		0012106
minimum elong	-6509 Nov 08 j 15:59	0° £ 33'26		opposition	-6503 Nov 17 j 17:59	10° Y 17'45	
max. Earth dist.	-6509 Nov 08 j 14:02	0° £ 32'17	6.11561 AU	min. Earth dist.	-6503 Nov 17 j 21:16	10° Ƴ 16'40	4.30457 AU
morning rise	-6509 Nov 21 j 12:24	3° ₽ 34'19		direct	-6502 Jan 17 j 21:06	5° Ƴ 13'46	
retrograde	-6508 Mar 30 j 13:06	23° ♀ 07'18		asc. node	-6502 Jan 27 j 16:33	5° Y 22'45	
desc. node	-6508 May 05 j 17:07	21° ഫ 08'23		evening set	-6502 May 26 j 03:25	23° Y 29'32	
opposition	-6508 May 30 j 11:47	18° ♀ 07'42	-0°05'03	· · · · · · · · · · · · · · · · · · ·	•••• • • • • • • • • • • • • • • • • •		
**					(500 I 00 : 10 21	2600026120	0017110
min. Earth dist.	-6508 May 30 j 04:33		4.07677 AU	conjunction	-6502 Jun 08 j 12:31	26° Y 26′20	0°16'18
direct	-6508 Jul 28 j 16:30	13° ≏ 14'48		minimum elong	-6502 Jun 08 j 12:29	26° Y 26′19	0°16'27
	-6508 Nov 20 j 02:37	0° M ₊		max. Earth dist.	-6502 Jun 07 j 20:09	26° Ƴ 17'19	6.33790 AU
evening set	-6508 Nov 29 j 07:29	2° M 09'17		morning rise	-6502 Jun 21 j 18:23	29° Ƴ 21'27	
-	-			_	-6502 Jun 24 j 16:50	0°8	
conjunction	-6508 Dec 12 j 09:42	5°M15'15	0°20'32		-6502 Sep 18 j 12:36	15° 8	
	·			. 1			
minimum elong	-6508 Dec 12 j 09:40	5°M15'13	0°29'44	retrograde	-6502 Oct 20 j 11:48	16° 8 36'20	
max. Earth dist.	-6508 Dec 13 j 07:35	5°M28'13	6.04911 AU		-6502 Nov 21 j 12:29	15° ₹ 8	
morning rise	-6508 Dec 25 j 15:12	8°M23'03		opposition	-6502 Dec 19 j 08:30	11° 8 42'11	0°57'03
	-6507 Jan 23 j 14:39	15° M ₊		min. Earth dist.	-6502 Dec 20 j 01:02	11° 8 36'47	4.36052 AU
retrograde	-6507 May 06 j 10:46	28°M28'55		direct	-6501 Feb 19 j 11:27	6° 8 38'46	
opposition	-6507 Jul 05 j 20:32	23°M25'43	-1°21'17		-6501 May 11 j 01:05	15° 8	
	·				• •		
min. Earth dist.	-6507 Jul 04 j 23:15		4.03556 AU	evening set	-6501 Jun 27 j 12:08	24° 8 41'50	
direct	-6507 Sep 02 j 02:22	18°M31'42		max. Earth dist.	-6501 Jul 09 j 04:10	27° 8 15'54	6.37017 AU
	-6507 Dec 01 j 12:54	0° ∡					
evening set	-6506 Jan 04 j 09:51	7° х 40′25		conjunction	-6501 Jul 10 j 11:37	27° 8 33'16	0°59'49
				minimum elong	-6501 Jul 10 j 11:33	27° 8 33'14	1°00'10
conjunction	-6506 Jan 17 j 19:23	10° ∡ 750'06	-1°12'53		-6501 Jul 21 j 13:38	0°II	
minimum elong	-6506 Jan 17 j 19:19	10° × 50'03	1°13'16	morning rise	-6501 Jul 23 j 07:35	0° Ⅱ 23'01	
_				•	-		
max. Earth dist.	-6506 Jan 19 j 09:07	11° ≯ 12'23	6.03565 AU	retrograde	-6501 Nov 20 j 17:20	17° Ⅱ 30′13	
morning rise	-6506 Jan 31 j 08:18	14° ∡ *01′26		opposition	-6500 Jan 20 j 02:46	12° Ⅲ 38′21	1°50'03
	-6506 Apr 20 j 12:11	0° ප		min. Earth dist.	-6500 Jan 21 j 04:14	12° Ⅲ 30′11	4.36840 AU
retrograde	-6506 Jun 11 j 21:21	4° る 07'32		direct	-6500 Mar 22 j 17:05	7° Ⅱ 36'56	
-	J	30°₽ ✓		evening set	-6500 Jul 27 j 22:35	25° Ⅱ 36'46	
	-6506 Aug 03 i 15:06			•			C 25172 ATT
onnosition	-6506 Aug 03 j 15:06		2907126	may Earth dist	6500 4220 07 - 22-14	7001177771	
opposition	-6506 Aug 10 j 17:11	29° ₹ 02'24		max. Earth dist.	-6500 Aug 07 j 22:14	28° Ⅱ 03'21	6.35172 AU
min. Earth dist.	-6506 Aug 10 j 17:11 -6506 Aug 09 j 14:07	29° х 02′24 29° х 11′37	-2°07'26 4.05282 AU				
* *	-6506 Aug 10 j 17:11 -6506 Aug 09 j 14:07 -6506 Oct 07 j 19:24	29° 尽 02'24 29° 尽 11'37 24° 尽 05'27		conjunction	-6500 Aug 09 j 13:26	28° ∏ 25'12	1°26'06
min. Earth dist.	-6506 Aug 10 j 17:11 -6506 Aug 09 j 14:07	29° х 02′24 29° х 11′37					
min. Earth dist.	-6506 Aug 10 j 17:11 -6506 Aug 09 j 14:07 -6506 Oct 07 j 19:24	29° 尽 02'24 29° 尽 11'37 24° 尽 05'27		conjunction	-6500 Aug 09 j 13:26	28° ∏ 25'12	1°26'06
min. Earth dist. direct	-6506 Aug 10 j 17:11 -6506 Aug 09 j 14:07 -6506 Oct 07 j 19:24 -6506 Dec 09 j 01:05	29° メ 02'24 29° メ 11'37 24° メ 05'27 0°る		conjunction	-6500 Aug 09 j 13:26 -6500 Aug 09 j 13:23 -6500 Aug 16 j 15:25	28°Щ25'12 28°Щ25'11	1°26'06
min. Earth dist. direct	-6506 Aug 10 j 17:11 -6506 Aug 09 j 14:07 -6506 Oct 07 j 19:24 -6506 Dec 09 j 01:05	29° メ 02'24 29° メ 11'37 24° メ 05'27 0°る		conjunction minimum elong	-6500 Aug 09 j 13:26 -6500 Aug 09 j 13:23	28°∏25'12 28°∏25'11 0°©	1°26'06

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6500 in astronomical counting style is the year 6501 BCE in historical counting style. 29°**х** 01'48 -6500 Dec 21 j 19:00 18°936'31 direct -6494 Oct 12 i 16:06 retrograde opposition -6499 Feb 20 j 16:00 13°545'02 2°12'09 -6494 Nov 05 j 16:08 0°궁 -6499 Feb 21 j 19:27 13°536'19 4.32602 AU -6493 Feb 15 i 09:46 18°る10'31 min. Earth dist. evening set 8°9546'20 -6499 Apr 24 j 01:40 direct -6493 Mar 01 j 01:32 21°る20'16 -1°28'43 evening set -6499 Aug 28 j 02:10 26°951'58 conjunction max. Earth dist. -6499 Sep 08 j 03:48 -6493 Mar 01 j 01:33 1°29'08 29°**©**22'13 6.28819 AU minimum elong 21°**る**20'17 -6493 Mar 02 j 16:59 6.09109 AU max. Earth dist. 21°る43'09 -6499 Sep 09 j 13:13 -6493 Mar 14 j 19:11 conjunction 29°**©**41'11 1°27'43 morning rise 24°る30'48 -6499 Sep 09 j 13:15 minimum elong 29°5641'12 1°28'06 -6493 Apr 08 j 05:26 0°≈ -6493 Jul 21 j 14:39 -6499 Sep 10 j 22:22 $0^{\circ}\Omega$ retrograde 13°**≈**55'45 morning rise -6499 Sep 21 j 23:10 2°**Ω**30′03 opposition -6493 Sep 18 j 23:25 8°≈51'36 -2°02'13 -6499 Nov 22 j 19:27 -6493 Sep 18 j 01:47 15°€ min. Earth dist. 8°≈59'00 4.13290 AU retrograde -6498 Jan 24 j 04:25 20°**Ω**30′52 direct -6493 Nov 16 j 18:54 3°≈50'47 opposition -6498 Mar 26 j 10:00 15°**Ω**37'54 1°55'32 -6492 Feb 16 j 04:06 15°**≈** min. Earth dist. -6498 Mar 27 j 06:17 15°**Ω**31′28 4.24535 AU evening set -6492 Mar 22 j 22:07 22°≈45'42 -6498 Mar 31 j 09:36 15°R€ direct -6498 May 26 j 23:08 10°**Ω**42'10 conjunction -6492 Apr 05 j 16:14 25°≈52'42 -1°08'40 -6498 Jul 20 j 09:06 15°**Ω** minimum elong -6492 Apr 05 j 16:19 25°≈52'45 1°08'57 evening set -6498 Sep 28 j 17:33 29°**Ω**00'53 max. Earth dist. -6492 Apr 06 j 17:24 26°**≈**07'00 6.17876 AU -6498 Oct 03 j 00:15 0° m morning rise -6492 Apr 19 j 09:59 28°≈59'20 max. Earth dist. -6498 Oct 10 j 10:10 1° m 42'55 6.19744 AU -6492 Apr 23 j 22:08 0°**)**€ retrograde -6492 Aug 22 i 20:20 17°**)** € 30'24 conjunction -6498 Oct 11 i 06:15 1° m 54'33 1°02'44 opposition -6492 Oct 21 i 01:46 12°\(\frac{1}{29}\)'24 -1°13'08 minimum elong -6498 Oct 11 i 06:19 1° m 54'35 1°02'59 min. Earth dist. -6492 Oct 20 i 16:54 12°**)** 32'24 4.22678 AU morning rise -6498 Oct 23 j 19:57 4° m 48'52 direct -6492 Dec 20 j 02:35 7°**¥**26′11 -6497 Feb 28 j 06:23 23° m 38'41 -6491 Apr 27 j 02:34 26°₩00'02 retrograde evening set opposition -6497 Apr 30 j 11:30 18° mp 42'33 1°01'19 -6497 Apr 30 j 18:18 18° Mp 40'21 4.14992 AU -6491 May 10 j 18:03 29°\colon 026'23 min. Earth dist. conjunction -6497 Jun 29 j 19:08 -6491 May 10 j 18:05 29°**升**02'08 0°26'26 direct 13° m 48'59 minimum elong -6491 May 10 j 21:12 -6497 Oct 21 j 02:49 0∘**⊽** 29°**₭**03'52 6.27237 AU max. Earth dist. -6497 Oct 31 j 14:20 2°**£**25'45 -6491 May 15 j 01:56 0° evening set -6491 May 24 j 07:12 2°Y02'54 morning rise -6491 Sep 23 j 15:15 -6497 Nov 13 j 09:33 5°**2**26'08 0°16'37 19°Y45'18 conjunction retrograde -6497 Nov 13 j 09:34 -6491 Nov 22 j 03:10 14°Y48'10 -0°03'04 minimum elong 5°**£**26'08 0°16'36 opposition -6497 Nov 13 j 11:48 -6491 Nov 22 j 07:47 14°**Υ**46'38 4.31172 AU max. Earth dist. 5°**£**27'27 6.10673 AU min. Earth dist. -6497 Nov 26 j 07:09 -6491 Dec 08 j 17:58 12°**Y**40′11 morning rise 8°**£**27'57 asc. node -6496 Mar 16 j 10:50 -6490 Jan 22 j 09:18 9°**Υ**44'09 desc. node 27°**₽**31'14 direct retrograde -6496 Apr 04 j 14:50 28°**♀**05'39 -6490 May 30 j 17:00 27°Y58'40 evening set -6496 Jun 04 j 12:38 23°**2**05'32 -0°16'18 -6490 Jun 08 j 21:40 0°8 opposition min. Earth dist. -6496 Jun 04 j 02:52 23°**♀**08'44 4.07120 AU max. Earth dist. -6490 Jun 12 j 06:32 0°**8**44'39 6.34259 AU -6496 Aug 02 j 12:58 18°**♀**12'39 direct -6496 Nov 02 j 20:21 -6490 Jun 13 j 00:53 0°**8**54'46 0°22'57 0°M conjunction -6496 Dec 04 j 05:00 -6490 Jun 13 j 00:51 0°854'45 0°23'08 evening set 7° ML08'21 minimum elong -6490 Jun 26 j 05:25 3°**8**49'09 morning rise -6496 Dec 17 j 08:06 10°M14'49 -0°36'33 -6490 Aug 21 j 01:54 15°8 conjunction -6496 Dec 17 j 08:03 minimum elong 10°M14'47 0°36'47 retrograde -6490 Oct 24 i 20:21 21°802'13 16°808'29 1°05'47 max. Earth dist. -6496 Dec 18 i 07:43 10°M28'48 6.04702 AU opposition -6490 Dec 23 j 18:01 morning rise -6496 Dec 30 i 14:45 13°ML23'10 min. Earth dist. -6490 Dec 24 i 12:12 16°**8**02'34 4.36260 AU -6495 Jan 06 j 12:16 15°M -6489 Jan 01 i 14:24 15°R₩ -6495 Mar 24 j 04:18 0°×7 direct -6489 Feb 23 i 23:47 11°805'18 -6495 May 11 j 11:06 3°×29'59 -6489 Apr 18 j 00:04 15°8 retrograde -6495 Jun 29 j 00:17 30°RML -6489 Jul 01 j 22:34 29°807'54 evening set 28°M26'21 -1°29'57 -6495 Jul 10 j 19:52 -6489 Jul 05 j 21:25 $0^{\circ}\Pi$ opposition -6489 Jul 13 j 11:02 min. Earth dist. -6495 Jul 09 j 21:09 28°MJ33'59 4.03725 AU max. Earth dist. 1°**Д**40'12 6.36929 AU -6495 Sep 07 j 00:53 direct 23°MJ31'58 1°II58'48 1°04'43 -6495 Nov 11 j 03:57 0°×7 conjunction -6489 Jul 14 j 20:42 -6494 Jan 09 j 10:23 12°**х** 40′42 minimum elong -6489 Jul 14 j 20:38 1°**Ⅲ**58'46 1°05'03 evening set -6489 Jul 27 j 15:33 4°**Ⅱ**48′06 morning rise -6494 Jan 22 j 20:54 15° ₹ 50'30 -1°16'57 -6489 Nov 25 j 03:24 21°**I**I56′27 conjunction retrograde -6494 Jan 22 j 20:50 -6488 Jan 24 j 14:34 17°**I**04'41 1°55'13 minimum elong 15°**∡** 50'28 1°17'21 opposition 16°**∤**14′09 6.04080 AU -6488 Jan 25 j 16:23 4.36492 AU max. Earth dist. -6494 Jan 24 j 13:01 min. Earth dist. 16°**Ⅱ**56'25 morning rise -6494 Feb 05 j 10:22 19°**₹**01'50 direct -6488 Mar 27 j 04:59 12°**Ⅲ**03'33 -6494 Mar 27 j 15:42 0°궁 evening set -6488 Aug 01 j 07:05 0°903'37 retrograde -6494 Jun 16 j 19:29 9°**る**04'22 -6488 Aug 01 j 00:33 0ಂತಾ min. Earth dist. -6494 Aug 14 j 10:26 4°る08'07 4.06100 AU max. Earth dist. -6488 Aug 12 j 07:51 2°931'03 6.34580 AU -6494 Aug 15 j 12:35 3°る59'13 -2°10'08 opposition

-6488 Aug 13 j 21:11

conjunction

2°951'55 1°27'53

-6494 Sep 18 j 18:35

30°₽**х**

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6488 in astronomical counting style is the year 6489 BCE in historical counting style. -6488 Aug 13 j 21:09 2°951'54 1°28'19 retrograde -6482 Jun 21 j 16:35 14°る03'47 minimum elong -6488 Aug 26 j 08:50 min. Earth dist. -6482 Aug 19 j 06:11 9°る07'44 4.06621 AU morning rise 5°2639'09 -6488 Dec 26 j 07:58 opposition -6482 Aug 20 j 08:53 8°중58'37 -2°11'57 retrograde 23°906'45 -6487 Feb 25 i 07:05 -6482 Oct 17 j 12:22 4°**⋜**00'43 18°9515'09 2°12'11 direct opposition -6487 Feb 26 j 09:43 -6481 Feb 20 j 12:31 23°る09'16 min. Earth dist. 18°506'42 4.31795 AU evening set direct -6487 Apr 28 j 14:52 13°9516'52 -6481 Mar 06 j 04:58 26°ප18'58 -1°27'42 -6487 Aug 26 j 06:32 0° Ω conjunction -6487 Sep 01 j 11:00 -6481 Mar 06 j 05:00 evening set 1°**Ω**23'19 minimum elong 26°**る**18'59 1°28'05 max. Earth dist. -6481 Mar 07 j 19:15 26°**る**41'07 6.09901 AU conjunction -6487 Sep 13 j 21:45 4°**Ω**12'49 1°25'47 morning rise -6481 Mar 19 j 22:52 29°る29'14 minimum elong -6487 Sep 13 j 21:47 4°**Ω**12′50 1°26'09 -6481 Mar 22 j 04:35 0°**≈** -6487 Sep 12 j 12:42 -6481 Jun 06 j 11:48 max. Earth dist. 3°**£**54′01 6.27843 AU 15°≈ -6487 Sep 26 j 07:59 $7^{\circ} \Omega 02'10$ -6481 Jul 26 j 09:34 morning rise retrograde 18°≈48'24 -6487 Nov 02 j 05:12 15°€ -6481 Sep 14 j 09:11 15°R≈ retrograde -6486 Jan 28 j 23:03 25°**Ω**08'29 opposition -6481 Sep 23 j 16:17 13°≈44'37 -1°57'27 opposition -6486 Mar 31 j 04:48 20°**Ω**15′06 1°50'03 min. Earth dist. -6481 Sep 22 j 20:52 13°≈51'15 4.14247 AU min. Earth dist. -6486 Mar 31 j 23:46 20°**Ω**09'04 4.23420 AU direct -6481 Nov 21 j 15:38 8°≈43'26 direct -6486 May 31 j 14:42 15°**Ω**19'37 -6480 Jan 26 j 08:50 15°≈ -6486 Sep 17 j 00:45 evening set -6480 Mar 27 j 22:27 27°≈36'44 evening set -6486 Oct 03 j 04:39 3°m/39'57 -6480 Apr 07 j 12:06 0°\ conjunction -6486 Oct 15 i 18:09 6° m 34'24 0°57'22 conjunction -6480 Apr 10 j 16:37 0°\(\)43'19 -1°03'45 minimum elong -6486 Oct 15 j 18:13 6° m 34'27 0°57'35 minimum elong -6480 Apr 10 j 16:42 0°\(\)43'22 1°03'59 max. Earth dist. -6486 Oct 15 i 01:39 6° m 24'49 6.18598 AU max. Earth dist. -6480 Apr 11 j 15:42 0°**)** € 56'23 6.18937 AU morning rise -6486 Oct 28 j 08:37 9° m 29'35 morning rise -6480 Apr 24 j 10:05 3°**)**(49'24 -6485 Mar 05 j 04:47 28° m 25'39 -6480 Aug 27 j 08:39 22°¥13'58 retrograde retrograde opposition -6485 May 05 j 09:38 23° m/29'01 0°51'29 opposition -6480 Oct 25 j 15:11 17°**)** 13'32 -1°04'01 -6485 May 05 j 14:26 -6480 Oct 25 j 07:02 17°**)** € 16'17 4.23754 AU min. Earth dist. 23° m 27'28 4.13886 AU min. Earth dist. -6485 Jul 04 j 12:43 -6480 Dec 24 j 19:07 12°\ 10'11 direct 18° m 35'39 direct -6485 Oct 04 j 02:57 0∘**⊽** -6479 Apr 28 j 18:37 0° -6485 Nov 05 j 06:14 7°**£**14'37 -6479 May 01 j 22:43 0°Y41'55 evening set evening set -6485 Nov 18 j 02:20 -6479 May 15 j 13:20 3°Y43'15 -0°19'30 conjunction 10°**2**15'50 0°09'18 conjunction -6485 Nov 18 j 02:20 -6479 May 15 j 13:22 3°Y43'16 0°19'31 minimum elong 10°**Ω**15'50 0°09'16 minimum elong -6485 Nov 17 j 19:30 -6479 May 15 j 13:15 3°**Y**43'12 6.28286 AU behind sun begin 10°**£**11′50 max. Earth dist. -6485 Nov 18 j 09:10 -6479 May 29 j 01:34 6°**Y**43'13 behind sun end 10°**♀**19'51 morning rise -6485 Nov 18 j 06:18 -6479 Sep 28 j 03:05 24°**Y**20'33 max. Earth dist. 10°**£**18′09 6.09700 AU retrograde morning rise -6485 Dec 01 j 01:16 13°**≏**18'39 asc. node -6479 Oct 18 j 17:39 23°**Y**38'47 desc. node -6484 Jan 26 j 05:42 25°**-**22'21 opposition -6479 Nov 26 j 14:53 19°**Y**24'00 0°07'11 -6484 Feb 24 j 15:14 $0^{\circ}M$ min. Earth dist. -6479 Nov 26 j 21:47 19°**Y**21'43 4.32124 AU -6484 Apr 09 j 15:31 3°ML01'36 direct -6478 Jan 27 j 01:45 14° **Y**20'06 retrograde -6484 May 25 j 00:18 -6478 May 23 j 14:58 0° 8 -6484 Jun 09 j 12:30 28°**♀**00'55 -0°27'23 -6478 Jun 04 j 08:01 2°832'17 opposition evening set min. Earth dist. -6484 Jun 09 j 00:33 28°**♀**04'51 4.06360 AU -6484 Aug 07 j 09:39 23°**♀**07'54 -6478 Jun 17 j 14:40 5°**8**27'33 0°29'34 direct conjunction -6478 Jun 17 i 14:38 -6484 Oct 14 i 01:30 0°M minimum elong 5°**8**27'31 0°29'47 5°**8**16'36 evening set -6484 Dec 09 i 02:31 12°ML05'56 max. Earth dist. -6478 Jun 16 j 18:49 6.35055 AU -6484 Dec 21 j 08:45 15°M morning rise -6478 Jun 30 j 17:47 8°821'03 -6478 Aug 01 i 04:32 15°8 -6484 Dec 22 j 06:52 15°ML13'07 -0°43'18 retrograde -6478 Oct 29 j 04:38 25°**8**31'21 conjunction -6484 Dec 22 i 06:48 15°ML13'04 0°43'35 opposition -6478 Dec 28 j 05:10 20°**8**37'59 1°14'12 minimum elong -6484 Dec 23 j 10:14 15°M29'20 6.04227 AU min. Earth dist. -6478 Dec 28 j 23:33 20°**8**32'01 4.36881 AU max. Earth dist. -6483 Jan 04 j 14:27 18°M22'05 direct -6477 Feb 28 j 12:20 15°835'03 morning rise -6483 Feb 26 j 23:28 0° 🗸 -6477 Jun 19 j 17:27 $0^{\circ}II$ -6483 May 16 j 13:49 retrograde 8°**х** 30'45 evening set -6477 Jul 06 j 09:07 3°**I**I35'34 -6483 Jul 15 j 19:05 3°**х** 26'49 -1°38'01 max. Earth dist. -6477 Jul 17 j 20:12 6°**Д**07'07 6.37325 AU opposition min. Earth dist. -6483 Jul 14 j 20:12 3°**≯**34'31 4.03600 AU -6483 Aug 13 j 07:34 30°RML -6477 Jul 19 j 05:50 6°II25'43 1°09'13 conjunction -6483 Sep 11 j 23:01 28°M32'06 -6477 Jul 19 j 05:46 6°**Ⅲ**25'41 1°09'36 direct minimum elong -6483 Oct 11 j 12:36 -6477 Jul 31 j 23:20 9°**Ⅱ**14'18 0°**√** morning rise -6482 Jan 14 j 12:27 17°**х** 42′16 -6477 Nov 29 j 13:23 $26^{\circ} \Pi 22'26$ evening set retrograde -6476 Jan 29 j 02:25 21°**Ⅲ**30′50 1°59'36 opposition conjunction -6482 Jan 27 j 23:42 20°**₹**52'19 -1°20'29 min. Earth dist. -6476 Jan 30 j 05:01 21°**Ⅲ**22'21 4.36641 AU minimum elong -6482 Jan 27 j 23:38 20°**∡** 52'17 1°20'54 direct -6476 Mar 31 j 18:04 16°**Ⅲ**30′05 max. Earth dist. -6482 Jan 29 j 15:15 21°**х** 15′36 6.04282 AU -6476 Jul 15 j 23:30 0ಂತಾ -6482 Feb 10 j 14:06 24°**х** 03′53 -6476 Aug 05 j 14:32 4°528'39 morning rise evening set

max. Earth dist.

-6476 Aug 16 j 13:28

6°955'14 6.34447 AU

-6482 Mar 08 j 15:59

0°る

Attention astronom	ical vear style is used: Th	e vear -6476 i	n astronomical co	unting style is the year	6477 BCE in historical c	ounting style	
conjunction	-6476 Aug 18 j 03:40	7°516'36		running style is the year	-6470 Feb 19 j 17:21	0°중	
minimum elong	-6476 Aug 18 j 03:39	7°916'35		retrograde	-6470 Jun 26 j 15:01	. ට 19° ට 01'56	
morning rise	-6476 Aug 30 j 14:47	10°903'38	1 27 33	min. Earth dist.	-6470 Aug 24 j 02:59	19 3 0130	4.06947 AU
retrograde	-6476 Dec 30 j 19:37	27°933'35		opposition	-6470 Aug 25 j 04:34	13° る 56'46	
opposition	-6475 Mar 01 j 20:38	22° © 41'48	2°11'22	direct	-6470 Oct 22 j 10:12	8° る 58'24	-2 12 44
min. Earth dist.	-6475 Mar 02 j 22:31	22°933'35	4.31386 AU	evening set	-6469 Feb 25 j 15:08	8 ප්‍රියේද් 28°ප්‍රි07'16	
direct	-6475 May 03 j 02:19	17°943'50	4.31380 AU	evening set	-6469 Mar 05 j 18:55	28 3 07 10 0° ≈	
direct	-6475 Aug 10 j 02:47	0°Ω			-0409 Mai 03 j 18.33	0 ~	
evening set	-6475 Sep 05 j 17:17	5° Ω 49'53		conjunction	-6469 Mar 11 j 08:11	1°≈16'56	1°26'00
max. Earth dist.	-6475 Sep 16 j 21:36	8° Ω 22'15	6.27193 AU	minimum elong	-6469 Mar 11 j 08:14	1°≈16'58	
max. Earm dist.	-04/3 Sep 10 J 21.30	0 062213	0.2/193 AU	max. Earth dist.	-6469 Mar 12 j 22:18	1°≈38'56	6.10576 AU
conjunction	-6475 Sep 18 j 04:08	8° Ω 39'39	1°23'21	morning rise	-6469 Mar 25 j 02:23	4°≈27'02	0.10370 AC
minimum elong	-6475 Sep 18 j 04:08	8° Ω 39'40	1°23'42	morning risc	-6469 May 13 j 08:14	4 ∞27 02 15°≈	
morning rise	-6475 Sep 30 j 14:22	11° Ω 29'19	1 23 42	retrograde	-6469 Jul 31 j 02:12	23°≈40'18	
morning risc	-6475 Oct 16 j 07:35	11 0(2919		opposition	-6469 Sep 28 j 08:34	18°≈36'51	1°51'40
retrograde	-6474 Feb 02 j 14:46	29° Ω 40'15		min. Earth dist.	-6469 Sep 27 j 13:11	18°≈43'28	4.15201 AU
opposition	-6474 Apr 04 j 21:02	24°Ω46'32	1°43'58	iiiii. Eartii tiist.	-6469 Oct 28 j 02:49	15°R≈	4.13201 AO
min. Earth dist.	-6474 Apr 05 j 15:15	24°Ω40'44		direct	-6469 Nov 26 j 10:17	13°≈35'16	
direct	-6474 Jun 05 j 03:54	19° Ω 51'24	4.22346 AU	direct	-6469 Dec 26 j 03:31	15 ≈55 10 15°≈	
direct	-6474 Aug 31 j 03:17	0°M)			-6468 Mar 21 j 23:07	0° ∺	
ovening get		8° Mp 12'42		ovening set	3	2° ∺ 26'36	
evening set	-6474 Oct 07 j 13:02	-	(17570 AII	evening set	-6468 Apr 01 j 22:29	2 X 2030	
max. Earth dist.	-6474 Oct 19 j 10:53	10° m 58'28	6.17579 AU	conjunction	6460 Amm 15: 16:25	5°) 32'39	0050122
agnismation	6474 Oct. 20 : 02:01	110 m 07!50	0°51'47	3	-6468 Apr 15 j 16:25	5° X 32'39 5° X 32'42	
conjunction	-6474 Oct 20 j 03:01	11° Mp 07'50		minimum elong	-6468 Apr 15 j 16:30	5° H 43'49	
minimum elong	-6474 Oct 20 j 03:04	11° Mp 07'53	0°51'57	max. Earth dist.	-6468 Apr 16 j 12:10		6.20101 AU
morning rise	-6474 Nov 01 j 18:31	14° Mp 03'54		morning rise	-6468 Apr 29 j 09:36	8°) ₹38'04	
. 1	-6473 Jan 23 j 03:38	0° ⊽		retrograde	-6468 Aug 31 j 22:16	26° ¥ 55'37	0054120
retrograde	-6473 Mar 09 j 23:28	3° ≏ 06'04		opposition	-6468 Oct 30 j 04:18	21°) 55'36	
•,•	-6473 Apr 25 j 11:45	30°RM)	0041124	min. Earth dist.	-6468 Oct 29 j 22:33		4.24981 AU
opposition	-6473 May 10 j 04:32	28° Mp 08'52		direct	-6468 Dec 29 j 13:37	16° ¥ 52'00 0° Υ	
min. Earth dist.	-6473 May 10 j 07:20	28° Mp 07'57	4.12781 AU	. ,	-6467 Apr 11 j 21:28		
direct	-6473 Jul 09 j 03:19	23° m 15'35		evening set	-6467 May 06 j 17:14	5° Y 20′33	
	-6473 Sep 14 j 22:36	0° 亞			(4(7 M 20 : 07.00	8° Ƴ 21'03	0012122
evening set	-6473 Nov 09 j 19:27	11° ≏ 57'10		conjunction	-6467 May 20 j 07:08		-0°12'32 0°12'31
:	(472 N 22 : 16.46	1.40 0 50121	0002100	minimum elong	-6467 May 20 j 07:09	8° Υ 21'03 8° Υ 18'10	0-12/31
conjunction	-6473 Nov 22 j 16:46 -6473 Nov 22 j 16:47	14° £ 59'21	0°02'08	behind sun begin	-6467 May 20 j 01:56	8° Υ 23'56	
minimum elong	3	14° £ 59'21	0°02'05	behind sun end	-6467 May 20 j 12:21		6.29471 AU
behind sun begin	-6473 Nov 22 j 08:40	14° ♀ 54'35 15° ♀ 04'07		max. Earth dist.	-6467 May 20 j 05:41		6.294/1 AU
behind sun end	-6473 Nov 23 j 00:53		C 00C20 AII	morning rise	-6467 Jun 02 j 18:08	11° Y 20'03 26° Y 57'25	
max. Earth dist.	-6473 Nov 23 j 00:16	15° ≙ 03'45	6.08629 AU	asc. node	-6467 Aug 28 j 15:36	20 13/23	
morning rise desc. node						2000051151	
desc node	-6473 Dec 05 j 16:46	18° ₽ 03'09		retrograde	-6467 Oct 02 j 10:55	28° Y 51'51	0017110
dese. Hode	-6473 Dec 08 j 05:26	18° ≏ 38'38		opposition	-6467 Oct 02 j 10:55 -6467 Dec 01 j 01:20	23° Y ′55'43	0°17'18
	-6473 Dec 08 j 05:26 -6472 Jan 30 j 03:00	18° £ 38'38 0° ™		opposition min. Earth dist.	-6467 Oct 02 j 10:55 -6467 Dec 01 j 01:20 -6467 Dec 01 j 08:59	23° Y ′55'43 23° Y ′53'12	0°17'18 4.33149 AU
retrograde	-6473 Dec 08 j 05:26 -6472 Jan 30 j 03:00 -6472 Apr 14 j 15:46	18° 요 38'38 0° ጤ 7° ጤ 51'45	0°27!50	opposition	-6467 Oct 02 j 10:55 -6467 Dec 01 j 01:20 -6467 Dec 01 j 08:59 -6466 Jan 31 j 14:46	23° Y 55'43 23° Y 53'12 18° Y 51'50	
retrograde opposition	-6473 Dec 08 j 05:26 -6472 Jan 30 j 03:00 -6472 Apr 14 j 15:46 -6472 Jun 14 j 09:27	18° △ 38'38 0°M 7°M51'45 2°M50'38		opposition min. Earth dist. direct	-6467 Oct 02 j 10:55 -6467 Dec 01 j 01:20 -6467 Dec 01 j 08:59 -6466 Jan 31 j 14:46 -6466 May 06 j 11:47	23°Y55'43 23°Y53'12 18°Y51'50 0°8	
retrograde	-6473 Dec 08 j 05:26 -6472 Jan 30 j 03:00 -6472 Apr 14 j 15:46 -6472 Jun 14 j 09:27 -6472 Jun 13 j 20:59	18° \(\Omega \) 38'38 0° \(\mathref{M} \) 7° \(\mathref{M} \) 51'45 2° \(\mathref{M} \) 50'38 2° \(\mathref{M} \) 54'45	-0°37'59 4.05430 AU	opposition min. Earth dist. direct evening set	-6467 Oct 02 j 10:55 -6467 Dec 01 j 01:20 -6467 Dec 01 j 08:59 -6466 Jan 31 j 14:46 -6466 May 06 j 11:47 -6466 Jun 08 j 21:19	23°Y55'43 23°Y53'12 18°Y51'50 0°8 7°801'18	4.33149 AU
retrograde opposition min. Earth dist.	-6473 Dec 08 j 05:26 -6472 Jan 30 j 03:00 -6472 Apr 14 j 15:46 -6472 Jun 14 j 09:27 -6472 Jun 13 j 20:59 -6472 Jul 07 j 09:56	18° \$\infty\$38'38 0° \$\mathbb{M}\$. 7° \$\mathbb{M}\$.51'45 2° \$\mathbb{M}\$.50'38 2° \$\mathbb{M}\$.54'45 30° \$\mathbb{R}\$\$\infty\$		opposition min. Earth dist. direct	-6467 Oct 02 j 10:55 -6467 Dec 01 j 01:20 -6467 Dec 01 j 08:59 -6466 Jan 31 j 14:46 -6466 May 06 j 11:47	23°Y55'43 23°Y53'12 18°Y51'50 0°8	
retrograde opposition	-6473 Dec 08 j 05:26 -6472 Jan 30 j 03:00 -6472 Apr 14 j 15:46 -6472 Jun 14 j 09:27 -6472 Jun 13 j 20:59 -6472 Jul 07 j 09:56 -6472 Aug 12 j 03:51	18° \$\infty\$ 38'38 0° \$\mathbb{M}\$. 7° \$\mathbb{M}\$.51'45 2° \$\mathbb{M}\$.50'38 2° \$\mathbb{M}\$.54'45 30° \$\mathbb{R}\$\infty\$ 27° \$\infty\$ 57'28		opposition min. Earth dist. direct evening set max. Earth dist.	-6467 Oct 02 j 10:55 -6467 Dec 01 j 01:20 -6467 Dec 01 j 08:59 -6466 Jan 31 j 14:46 -6466 May 06 j 11:47 -6466 Jun 08 j 21:19 -6466 Jun 21 j 03:28	23°Y55'43 23°Y53'12 18°Y51'50 0°8 7°801'18 9°842'58	4.33149 AU 6.35810 AU
retrograde opposition min. Earth dist.	-6473 Dec 08 j 05:26 -6472 Jan 30 j 03:00 -6472 Apr 14 j 15:46 -6472 Jun 14 j 09:27 -6472 Jun 13 j 20:59 -6472 Jul 07 j 09:56 -6472 Aug 12 j 03:51 -6472 Sep 16 j 11:30	18° \$\infty\$ 38'38 0° \$\mathbb{M}\$. 7° \$\mathbb{M}\$.51'45 2° \$\mathbb{M}\$.50'38 2° \$\mathbb{M}\$.54'45 30° \$\mathbb{A}\$. \$\omega\$ 57'28 0° \$\mathbb{M}\$.		opposition min. Earth dist. direct evening set max. Earth dist. conjunction	-6467 Oct 02 j 10:55 -6467 Dec 01 j 01:20 -6467 Dec 01 j 08:59 -6466 Jan 31 j 14:46 -6466 May 06 j 11:47 -6466 Jun 08 j 21:19 -6466 Jun 21 j 03:28	23°Y55'43 23°Y53'12 18°Y51'50 0°8 7°801'18 9°842'58	4.33149 AU 6.35810 AU 0°35'58
retrograde opposition min. Earth dist. direct	-6473 Dec 08 j 05:26 -6472 Jan 30 j 03:00 -6472 Apr 14 j 15:46 -6472 Jun 14 j 09:27 -6472 Jun 13 j 20:59 -6472 Jul 07 j 09:56 -6472 Aug 12 j 03:51 -6472 Sep 16 j 11:30 -6472 Dec 05 j 11:28	18° \$\infty\$ 38'38 0° \$\mathbb{M}\$. 7° \$\mathbb{M}\$.51'45 2° \$\mathbb{M}\$.50'38 2° \$\mathbb{M}\$.54'45 30° \$\mathbb{A}\$. 27° \$\infty\$ 57'28 0° \$\mathbb{M}\$. 15° \$\mathbb{M}\$.		opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong	-6467 Oct 02 j 10:55 -6467 Dec 01 j 01:20 -6467 Dec 01 j 08:59 -6466 Jan 31 j 14:46 -6466 May 06 j 11:47 -6466 Jun 08 j 21:19 -6466 Jun 21 j 03:28 -6466 Jun 22 j 02:26 -6466 Jun 22 j 02:23	23°Y55'43 23°Y53'12 18°Y51'50 0°8 7°801'18 9°842'58 9°855'38 9°855'36	4.33149 AU 6.35810 AU
retrograde opposition min. Earth dist.	-6473 Dec 08 j 05:26 -6472 Jan 30 j 03:00 -6472 Apr 14 j 15:46 -6472 Jun 14 j 09:27 -6472 Jun 13 j 20:59 -6472 Jul 07 j 09:56 -6472 Aug 12 j 03:51 -6472 Sep 16 j 11:30	18° \$\infty\$ 38'38 0° \$\mathbb{M}\$. 7° \$\mathbb{M}\$.51'45 2° \$\mathbb{M}\$.50'38 2° \$\mathbb{M}\$.54'45 30° \$\mathbb{A}\$. \$\omega\$ 57'28 0° \$\mathbb{M}\$.		opposition min. Earth dist. direct evening set max. Earth dist. conjunction	-6467 Oct 02 j 10:55 -6467 Dec 01 j 01:20 -6467 Dec 01 j 08:59 -6466 Jan 31 j 14:46 -6466 May 06 j 11:47 -6466 Jun 08 j 21:19 -6466 Jun 21 j 03:28 -6466 Jun 22 j 02:26 -6466 Jun 22 j 02:23 -6466 Jul 05 j 04:14	23°Y55'43 23°Y53'12 18°Y51'50 0°& 7°801'18 9°842'58 9°855'38 9°855'36 12°848'15	4.33149 AU 6.35810 AU 0°35'58
retrograde opposition min. Earth dist. direct	-6473 Dec 08 j 05:26 -6472 Jan 30 j 03:00 -6472 Apr 14 j 15:46 -6472 Jun 14 j 09:27 -6472 Jun 13 j 20:59 -6472 Jul 07 j 09:56 -6472 Aug 12 j 03:51 -6472 Sep 16 j 11:30 -6472 Dec 05 j 11:28 -6472 Dec 13 j 22:22	18° \$\Omega 38'38 \\ 0° \$\mathbb{M}. \\ 7° \$\mathbb{M}.51'45 \\ 2° \$\mathbb{M}.50'38 \\ 2° \$\mathbb{M}.54'45 \\ 30° \$\mathbb{R}.\Omega \\ 27° \$\Omega 57'28 \\ 0° \$\mathbb{M}. \\ 15° \$\mathbb{M}. \\ 16° \$\mathbb{M}.58'55 \\ \end{align*}	4.05430 AU	opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise	-6467 Oct 02 j 10:55 -6467 Dec 01 j 01:20 -6467 Dec 01 j 08:59 -6466 Jan 31 j 14:46 -6466 May 06 j 11:47 -6466 Jun 08 j 21:19 -6466 Jun 21 j 03:28 -6466 Jun 22 j 02:23 -6466 Jul 05 j 04:14 -6466 Jul 15 j 06:43	23°Y55'43 23°Y53'12 18°Y51'50 0°B 7°B01'18 9°B42'58 9°B55'38 9°B55'36 12°B48'15 15°B	4.33149 AU 6.35810 AU 0°35'58
retrograde opposition min. Earth dist. direct evening set conjunction	-6473 Dec 08 j 05:26 -6472 Jan 30 j 03:00 -6472 Apr 14 j 15:46 -6472 Jun 14 j 09:27 -6472 Jun 13 j 20:59 -6472 Jul 07 j 09:56 -6472 Aug 12 j 03:51 -6472 Sep 16 j 11:30 -6472 Dec 05 j 11:28 -6472 Dec 13 j 22:22	18° \$\Omega 38'38 0° \$\mathbb{N}\$. 7° \$\mathbb{N}\$.51'45 2° \$\mathbb{N}\$.50'38 2° \$\mathbb{N}\$.54'45 30° \$\mathbb{A}\$. 27° \$\Omega 57'28 0° \$\mathbb{N}\$. 15° \$\mathbb{N}\$. 16° \$\mathbb{N}\$.58'55	4.05430 AU -0°49'35	opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde	-6467 Oct 02 j 10:55 -6467 Dec 01 j 01:20 -6467 Dec 01 j 08:59 -6466 Jan 31 j 14:46 -6466 May 06 j 11:47 -6466 Jun 08 j 21:19 -6466 Jun 22 j 03:28 -6466 Jun 22 j 02:23 -6466 Jul 05 j 04:14 -6466 Jul 15 j 06:43 -6466 Nov 02 j 13:51	23°Y55'43 23°Y53'12 18°Y51'50 0°8 7°801'18 9°842'58 9°855'38 9°855'36 12°848'15 15°8 29°856'11	4.33149 AU 6.35810 AU 0°35'58 0°36'12
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-6473 Dec 08 j 05:26 -6472 Jan 30 j 03:00 -6472 Apr 14 j 15:46 -6472 Jun 14 j 09:27 -6472 Jun 13 j 20:59 -6472 Jul 07 j 09:56 -6472 Aug 12 j 03:51 -6472 Dec 05 j 11:28 -6472 Dec 13 j 22:22 -6472 Dec 27 j 03:39 -6472 Dec 27 j 03:35	18° \$\Omega 38'38 0° \$\mathbb{N}\$. 7° \$\mathbb{N}\$.51'45 2° \$\mathbb{N}\$.50'38 2° \$\mathbb{N}\$.54'45 30° \$\mathbb{A}\$. 27° \$\Omega 57'28 0° \$\mathbb{N}\$. 15° \$\mathbb{N}\$. 16° \$\mathbb{N}\$.58'55 20° \$\mathbb{N}\$.06'50 20° \$\mathbb{N}\$.06'48	4.05430 AU -0°49'35 0°49'52	opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition	-6467 Oct 02 j 10:55 -6467 Dec 01 j 01:20 -6467 Dec 01 j 08:59 -6466 Jan 31 j 14:46 -6466 May 06 j 11:47 -6466 Jun 08 j 21:19 -6466 Jun 21 j 03:28 -6466 Jun 22 j 02:23 -6466 Jul 05 j 04:14 -6466 Jul 15 j 06:43 -6466 Nov 02 j 13:51 -6465 Jan 01 j 15:07	23°Y55'43 23°Y53'12 18°Y51'50 0°8 7°801'18 9°842'58 9°855'38 9°855'36 12°848'15 15°8 29°856'11 25°803'09	4.33149 AU 6.35810 AU 0°35'58 0°36'12
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retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-6473 Dec 08 j 05:26 -6472 Jan 30 j 03:00 -6472 Apr 14 j 15:46 -6472 Jun 14 j 09:27 -6472 Jun 13 j 20:59 -6472 Jul 07 j 09:56 -6472 Aug 12 j 03:51 -6472 Dec 05 j 11:28 -6472 Dec 13 j 22:22 -6472 Dec 27 j 03:35 -6472 Dec 28 j 07:35 -6471 Jan 09 j 12:33 -6471 Feb 07 j 23:25	18° № 38'38 0° M. 7° M.51'45 2° M.50'38 2° M.54'45 30° R. 27° № 57'28 0° M. 15° M. 16° M.58'55 20° M.06'50 20° M.06'48 20° M.23'24 23° M.16'39 0° 0° 7°	4.05430 AU -0°49'35 0°49'52	opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct	-6467 Oct 02 j 10:55 -6467 Dec 01 j 01:20 -6467 Dec 01 j 08:59 -6466 Jan 31 j 14:46 -6466 May 06 j 11:47 -6466 Jun 08 j 21:19 -6466 Jun 21 j 03:28 -6466 Jun 22 j 02:26 -6466 Jul 05 j 04:14 -6466 Jul 15 j 06:43 -6466 Nov 02 j 13:51 -6465 Jan 01 j 15:07 -6465 Jan 02 j 11:55 -6465 Mar 05 j 01:31 -6465 Jun 02 j 10:28	23°Y55'43 23°Y53'12 18°Y51'50 0°8 7°801'18 9°842'58 9°855'38 9°855'36 12°848'15 15°8 29°856'11 25°803'09 24°856'25 20°800'25 0°II	4.33149 AU 6.35810 AU 0°35'58 0°36'12
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-6473 Dec 08 j 05:26 -6472 Jan 30 j 03:00 -6472 Apr 14 j 15:46 -6472 Jun 14 j 09:27 -6472 Jun 13 j 20:59 -6472 Jul 07 j 09:56 -6472 Aug 12 j 03:51 -6472 Dec 05 j 11:28 -6472 Dec 13 j 22:22 -6472 Dec 27 j 03:39 -6472 Dec 28 j 07:35 -6471 Jan 09 j 12:33 -6471 Feb 07 j 23:25 -6471 May 21 j 12:36	18° № 38'38 0° M. 7° M.51'45 2° M.50'38 2° M.54'45 30° R. 27° № 57'28 0° M. 15° M. 16° M.58'55 20° M.06'50 20° M.06'48 20° M.23'24 23° M.16'39 0° 🎜 13° № 28'04	4.05430 AU -0°49'35 0°49'52 6.03509 AU	opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct evening set	-6467 Oct 02 j 10:55 -6467 Dec 01 j 01:20 -6467 Dec 01 j 08:59 -6466 Jan 31 j 14:46 -6466 May 06 j 11:47 -6466 Jun 08 j 21:19 -6466 Jun 21 j 03:28 -6466 Jun 22 j 02:26 -6466 Jul 05 j 04:14 -6466 Jul 15 j 06:43 -6466 Nov 02 j 13:51 -6465 Jan 01 j 15:07 -6465 Jan 02 j 11:55 -6465 Mar 05 j 01:31 -6465 Jun 02 j 10:28 -6465 Jul 10 j 18:12	23°Y55'43 23°Y53'12 18°Y51'50 0°8 7°801'18 9°842'58 9°855'38 9°855'36 12°848'15 15°8 29°856'11 25°803'09 24°856'25 20°800'25 0°11 7°1159'35	4.33149 AU 6.35810 AU 0°35'58 0°36'12 1°22'10 4.37303 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-6473 Dec 08 j 05:26 -6472 Jan 30 j 03:00 -6472 Apr 14 j 15:46 -6472 Jun 14 j 09:27 -6472 Jun 13 j 20:59 -6472 Jul 07 j 09:56 -6472 Aug 12 j 03:51 -6472 Dec 05 j 11:28 -6472 Dec 13 j 22:22 -6472 Dec 27 j 03:39 -6472 Dec 28 j 07:35 -6471 Jan 09 j 12:33 -6471 Feb 07 j 23:25 -6471 May 21 j 12:36 -6471 Jul 20 j 16:20	18° \$\Omega 38'38 0° \$\mathbb{\text{N}}.50'38 2° \$\mathbb{\text{N}}.50'38 2° \$\mathbb{\text{M}}.50'38 2° \$\mathbb{\text{N}}.50'38 20° \$\mathbb{\text{N}}.57'28 0° \$\mathbb{\text{N}}. 15° \$\mathbb{\text{N}}. 16° \$\mathbb{\text{M}}.58'55 20° \$\mathbb{\text{M}}.06'50 20° \$\mathbb{\text{M}}.06'48 20° \$\mathbb{\text{M}}.23'24 23° \$\mathbb{\text{M}}.16'39 0° \$\neq \mathbb{\text{N}}. 13° \$\neq 28'04 8° \$\neq 23'50	4.05430 AU -0°49'35 0°49'52 6.03509 AU -1°45'11	opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct	-6467 Oct 02 j 10:55 -6467 Dec 01 j 01:20 -6467 Dec 01 j 08:59 -6466 Jan 31 j 14:46 -6466 May 06 j 11:47 -6466 Jun 08 j 21:19 -6466 Jun 21 j 03:28 -6466 Jun 22 j 02:26 -6466 Jul 05 j 04:14 -6466 Jul 15 j 06:43 -6466 Nov 02 j 13:51 -6465 Jan 01 j 15:07 -6465 Jan 02 j 11:55 -6465 Mar 05 j 01:31 -6465 Jun 02 j 10:28	23°Y55'43 23°Y53'12 18°Y51'50 0°8 7°801'18 9°842'58 9°855'38 9°855'36 12°848'15 15°8 29°856'11 25°803'09 24°856'25 20°800'25 0°II	4.33149 AU 6.35810 AU 0°35'58 0°36'12
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retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-6473 Dec 08 j 05:26 -6472 Jan 30 j 03:00 -6472 Apr 14 j 15:46 -6472 Jun 14 j 09:27 -6472 Jun 13 j 20:59 -6472 Jul 07 j 09:56 -6472 Aug 12 j 03:51 -6472 Dec 05 j 11:28 -6472 Dec 13 j 22:22 -6472 Dec 27 j 03:39 -6472 Dec 27 j 03:35 -6471 Jun 09 j 12:33 -6471 Feb 07 j 23:25 -6471 Jul 20 j 16:20 -6471 Jul 19 j 15:47 -6471 Sep 16 j 17:35	18° \$\Omega 38'38 0° \$\mathbb{\text{N}}.50'38 2° \$\mathbb{\text{N}}.50'38 2° \$\mathbb{\text{N}}.50'38 2° \$\mathbb{\text{N}}.50'38 2° \$\mathbb{\text{N}}.50'38 20° \$\mathbb{\text{N}}.55'55 20° \$\mathbb{\text{N}}.06'50 20° \$\mathbb{\text{N}}.06'48 20° \$\mathbb{\text{N}}.23'24 23° \$\mathbb{\text{N}}.16'39 0° \$\neq \mathbb{\text{N}}.13' \$\neq 28'04 8° \$\neq 23'50 8° \$\neq 32'07 3° \$\neq 28'44	4.05430 AU -0°49'35 0°49'52 6.03509 AU -1°45'11	opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction	-6467 Oct 02 j 10:55 -6467 Dec 01 j 01:20 -6467 Dec 01 j 08:59 -6466 Jan 31 j 14:46 -6466 May 06 j 11:47 -6466 Jun 08 j 21:19 -6466 Jun 22 j 02:26 -6466 Jun 22 j 02:23 -6466 Jul 05 j 04:14 -6466 Jul 15 j 06:43 -6466 Nov 02 j 13:51 -6465 Jan 01 j 15:07 -6465 Jan 02 j 11:55 -6465 Jun 02 j 10:28 -6465 Jul 10 j 18:12 -6465 Jul 22 j 02:48	23°Y55'43 23°Y53'12 18°Y51'50 0°8 7°801'18 9°842'58 9°855'38 9°855'36 12°848'15 15°8 29°856'11 25°803'09 24°856'25 20°800'25 0°11 7°1159'35 10°1129'52	4.33149 AU 6.35810 AU 0°35'58 0°36'12 1°22'10 4.37303 AU 6.37347 AU 1°13'22
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-6473 Dec 08 j 05:26 -6472 Jan 30 j 03:00 -6472 Apr 14 j 15:46 -6472 Jun 14 j 09:27 -6472 Jun 13 j 20:59 -6472 Jul 07 j 09:56 -6472 Aug 12 j 03:51 -6472 Dec 05 j 11:28 -6472 Dec 13 j 22:22 -6472 Dec 27 j 03:39 -6472 Dec 27 j 03:35 -6472 Dec 28 j 07:35 -6471 Jan 09 j 12:33 -6471 Feb 07 j 23:25 -6471 Jul 20 j 16:20 -6471 Jul 19 j 15:47	18° \$\Omega 38'38 0° \$\mathbb{\text{N}}.50'38 2° \$\mathbb{\text{N}}.50'38 2° \$\mathbb{\text{N}}.50'38 2° \$\mathbb{\text{N}}.50'38 2° \$\mathbb{\text{N}}.50'28 0° \$\mathbb{\text{N}}. 15° \$\mathbb{\text{N}}. 16° \$\mathbb{\text{N}}.58'55 20° \$\mathbb{\text{N}}.06'50 20° \$\mathbb{\text{N}}.06'48 20° \$\mathbb{\text{N}}.23'24 23° \$\mathbb{\text{N}}.16'39 0° \$\neq \mathbb{\text{N}}. 13° \$\neq 28'04 8° \$\neq 23'50 8° \$\neq 32'07	4.05430 AU -0°49'35 0°49'52 6.03509 AU -1°45'11	opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong	-6467 Oct 02 j 10:55 -6467 Dec 01 j 01:20 -6467 Dec 01 j 08:59 -6466 Jan 31 j 14:46 -6466 May 06 j 11:47 -6466 Jun 21 j 03:28 -6466 Jun 22 j 02:23 -6466 Jul 05 j 04:14 -6466 Jul 15 j 06:43 -6466 Jul 15 j 06:43 -6465 Jul 02 j 11:55 -6465 Jun 02 j 11:55 -6465 Jun 02 j 11:55 -6465 Jul 02 j 02:28 -6465 Jul 22 j 02:48 -6465 Jul 23 j 13:45 -6465 Jul 23 j 13:45 -6465 Jul 23 j 13:45	23°Y55'43 23°Y53'12 18°Y51'50 0°8 7°801'18 9°842'58 9°855'38 9°855'36 12°848'15 15°8 29°856'11 25°803'09 24°856'25 20°800'25 0°11 7°1159'35 10°1129'52	4.33149 AU 6.35810 AU 0°35'58 0°36'12 1°22'10 4.37303 AU 6.37347 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	-6473 Dec 08 j 05:26 -6472 Jan 30 j 03:00 -6472 Apr 14 j 15:46 -6472 Jun 14 j 09:27 -6472 Jun 13 j 20:59 -6472 Jul 07 j 09:56 -6472 Aug 12 j 03:51 -6472 Dec 13 j 22:22 -6472 Dec 27 j 03:39 -6472 Dec 27 j 03:35 -6472 Dec 28 j 07:35 -6471 Jun 09 j 12:33 -6471 Feb 07 j 23:25 -6471 Jul 20 j 16:20 -6471 Jul 19 j 15:47 -6471 Sep 16 j 17:35 -6470 Jan 19 j 13:24	18° \$\alpha\$ 38'38 0° \$\mathbb{\text{N}}.51'45 2° \$\mathbb{\text{M}}.50'38 2° \$\mathbb{\text{M}}.54'45 30° \$\mathbb{\text{R}} \alpha 27° \$\alpha\$ 57'28 0° \$\mathbb{\text{M}}.15' \$\mathbb{\text{M}}. 15° \$\mathbb{\text{M}}. 16° \$\mathbb{\text{M}}.58'55 20° \$\mathbb{\text{M}}.06'50 20° \$\mathbb{\text{M}}.06'48 20° \$\mathbb{\text{M}}.23'24 23° \$\mathbb{\text{M}}.16'39 0° \$\nalpha\$ 13° \$\nalpha\$ 28'04 8° \$\nalpha\$ 23'50 8° \$\nalpha\$ 32'07 3° \$\nalpha\$ 28'44 22° \$\nalpha\$ 41'29	4.05430 AU -0°49'35 0°49'52 6.03509 AU -1°45'11 4.03203 AU	opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction	-6467 Oct 02 j 10:55 -6467 Dec 01 j 01:20 -6467 Dec 01 j 08:59 -6466 Jan 31 j 14:46 -6466 May 06 j 11:47 -6466 Jun 21 j 03:28 -6466 Jun 22 j 02:26 -6466 Jun 22 j 02:23 -6466 Jul 05 j 04:14 -6466 Jul 15 j 06:43 -6466 Nov 02 j 13:51 -6465 Jan 01 j 15:07 -6465 Jan 02 j 11:55 -6465 Mar 05 j 01:31 -6465 Jul 02 j 10:28 -6465 Jul 10 j 18:12 -6465 Jul 23 j 13:45 -6465 Jul 23 j 13:45 -6465 Jul 23 j 13:41 -6465 Aug 05 j 06:04	23°Y55'43 23°Y55'12 18°Y51'50 0°8 7°801'18 9°842'58 9°855'36 12°848'15 15°8 29°856'11 25°803'09 24°856'25 20°800'25 0°11 7°1159'35 10°1129'52 10°1149'11 10°1149'09 13°1137'17	4.33149 AU 6.35810 AU 0°35'58 0°36'12 1°22'10 4.37303 AU 6.37347 AU 1°13'22
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	-6473 Dec 08 j 05:26 -6472 Jan 30 j 03:00 -6472 Apr 14 j 15:46 -6472 Jun 14 j 09:27 -6472 Jun 13 j 20:59 -6472 Jul 07 j 09:56 -6472 Aug 12 j 03:51 -6472 Dec 05 j 11:28 -6472 Dec 13 j 22:22 -6472 Dec 27 j 03:39 -6472 Dec 27 j 03:35 -6472 Dec 28 j 07:35 -6471 Jun 09 j 12:33 -6471 Feb 07 j 23:25 -6471 Jul 20 j 16:20 -6471 Jul 19 j 15:47 -6470 Jan 19 j 13:24 -6470 Feb 02 j 01:41	18° \$\alpha\$ 38'38 0° \$\mathbb{\text{N}}.51'45 2° \$\mathbb{\text{M}}.50'38 2° \$\mathbb{\text{M}}.54'45 30° \$\mathbb{\text{R}} \alpha 27° \$\alpha\$ 57'28 0° \$\mathbb{\text{M}}.15'' \$\mathbb{\text{M}}. 15° \$\mathbb{\text{M}}. 16° \$\mathbb{\text{M}}.58'55 20° \$\mathbb{\text{M}}.06'50 20° \$\mathbb{\text{M}}.06'48 20° \$\mathbb{\text{M}}.23'24 23° \$\mathbb{\text{M}}.16'39 0° \$\nalpha'' 13° \$\nalpha' 28'04 8° \$\nalpha' 32'07 3° \$\nalpha' 28'44 22° \$\nalpha' 41'29 25° \$\nalpha' 51'58	4.05430 AU -0°49'35 0°49'52 6.03509 AU -1°45'11 4.03203 AU	opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise	-6467 Oct 02 j 10:55 -6467 Dec 01 j 01:20 -6467 Dec 01 j 08:59 -6466 Jan 31 j 14:46 -6466 May 06 j 11:47 -6466 Jun 08 j 21:19 -6466 Jun 21 j 03:28 -6466 Jun 22 j 02:23 -6466 Jul 05 j 04:14 -6466 Jul 15 j 06:43 -6466 Jul 05 j 04:14 -6465 Jul 05 j 01:35 -6465 Jun 02 j 11:55 -6465 Mar 05 j 01:31 -6465 Jul 02 j 10:28 -6465 Jul 22 j 02:48 -6465 Jul 23 j 13:45 -6465 Jul 23 j 13:41 -6465 Aug 05 j 06:04 -6465 Nov 11 j 14:50	23°Y55'43 23°Y55'12 18°Y51'50 0°8 7°801'18 9°842'58 9°855'38 9°855'36 12°848'15 15°8 29°856'11 25°803'09 24°856'25 20°800'25 0°11 7°1159'35 10°1129'52 10°1149'11 10°1149'09 13°1137'17 0°9	4.33149 AU 6.35810 AU 0°35'58 0°36'12 1°22'10 4.37303 AU 6.37347 AU 1°13'22
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	-6473 Dec 08 j 05:26 -6472 Jan 30 j 03:00 -6472 Apr 14 j 15:46 -6472 Jun 14 j 09:27 -6472 Jun 13 j 20:59 -6472 Jul 07 j 09:56 -6472 Aug 12 j 03:51 -6472 Dec 05 j 11:28 -6472 Dec 13 j 22:22 -6472 Dec 27 j 03:39 -6472 Dec 27 j 03:35 -6472 Dec 28 j 07:35 -6471 Jun 09 j 12:33 -6471 Feb 07 j 23:25 -6471 Jul 20 j 16:20 -6471 Jul 19 j 15:47 -6470 Feb 02 j 01:41 -6470 Feb 02 j 01:41 -6470 Feb 02 j 01:41 -6470 Feb 02 j 01:38	18° \$\Omega 38'38 0° \$\mathbb{\text{N}}.50'38 2° \$\mathbb{\text{N}}.50'38 2° \$\mathbb{\text{N}}.54'45 30° \$\mathbb{\text{R}} \Omega 27' \$\Omega 57'28 0° \$\mathbb{\text{N}}.15' \$\mathbb{\text{N}}. 15° \$\mathbb{\text{N}}. 16° \$\mathbb{\text{N}}.58'55 20° \$\mathbb{\text{N}}.06'50 20° \$\mathbb{\text{N}}.06'50 20° \$\mathbb{\text{N}}.06'48 20° \$\mathbb{\text{N}}.23'24 23° \$\mathbb{\text{N}}.16'39 0° \$\nall \text{N}}. 13° \$\nall 28'04 8° \$\nall 23'50 8° \$\nall 32'07 3° \$\nall 28'44 22° \$\nall 41'29 25° \$\nall 51'58 25° \$\nall 51'56	4.05430 AU -0°49'35 0°49'52 6.03509 AU -1°45'11 4.03203 AU -1°23'20 1°23'45	opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong	-6467 Oct 02 j 10:55 -6467 Dec 01 j 01:20 -6467 Dec 01 j 08:59 -6466 Jan 31 j 14:46 -6466 May 06 j 11:47 -6466 Jun 08 j 21:19 -6466 Jun 21 j 03:28 -6466 Jun 22 j 02:26 -6466 Jul 05 j 04:14 -6466 Jul 15 j 06:43 -6466 Nov 02 j 13:51 -6465 Jan 01 j 15:07 -6465 Jan 02 j 11:55 -6465 Mar 05 j 01:31 -6465 Jul 02 j 10:28 -6465 Jul 10 j 18:12 -6465 Jul 22 j 02:48 -6465 Jul 23 j 13:45 -6465 Aug 05 j 06:04 -6465 Nov 11 j 14:50 -6465 Dec 03 j 22:25	23°Y55'43 23°Y55'12 18°Y51'50 0°8 7°801'18 9°842'58 9°855'38 9°855'36 12°848'15 15°8 29°856'11 25°803'09 24°856'25 20°800'25 0°II 7°II59'35 10°II29'52 10°II49'11 10°II49'09 13°II37'17 0°99 0°9546'42	4.33149 AU 6.35810 AU 0°35'58 0°36'12 1°22'10 4.37303 AU 6.37347 AU 1°13'22
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	-6473 Dec 08 j 05:26 -6472 Jan 30 j 03:00 -6472 Apr 14 j 15:46 -6472 Jun 14 j 09:27 -6472 Jun 13 j 20:59 -6472 Jul 07 j 09:56 -6472 Aug 12 j 03:51 -6472 Dec 05 j 11:28 -6472 Dec 13 j 22:22 -6472 Dec 27 j 03:39 -6472 Dec 27 j 03:35 -6472 Dec 28 j 07:35 -6471 Jun 09 j 12:33 -6471 Feb 07 j 23:25 -6471 Jul 20 j 16:20 -6471 Jul 19 j 15:47 -6470 Jan 19 j 13:24 -6470 Feb 02 j 01:41	18° \$\alpha\$ 38'38 0° \$\mathbb{\text{N}}.51'45 2° \$\mathbb{\text{M}}.50'38 2° \$\mathbb{\text{M}}.54'45 30° \$\mathbb{\text{R}} \alpha 27° \$\alpha\$ 57'28 0° \$\mathbb{\text{M}}.15'' \$\mathbb{\text{M}}. 15° \$\mathbb{\text{M}}. 16° \$\mathbb{\text{M}}.58'55 20° \$\mathbb{\text{M}}.06'50 20° \$\mathbb{\text{M}}.06'48 20° \$\mathbb{\text{M}}.23'24 23° \$\mathbb{\text{M}}.16'39 0° \$\nalpha'' 13° \$\nalpha' 28'04 8° \$\nalpha' 32'07 3° \$\nalpha' 28'44 22° \$\nalpha' 41'29 25° \$\nalpha' 51'58	4.05430 AU -0°49'35 0°49'52 6.03509 AU -1°45'11 4.03203 AU	opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise retrograde opposition min. Earth dist. direct evening set max. Earth dist. conjunction minimum elong morning rise	-6467 Oct 02 j 10:55 -6467 Dec 01 j 01:20 -6467 Dec 01 j 08:59 -6466 Jan 31 j 14:46 -6466 May 06 j 11:47 -6466 Jun 08 j 21:19 -6466 Jun 21 j 03:28 -6466 Jun 22 j 02:23 -6466 Jul 05 j 04:14 -6466 Jul 15 j 06:43 -6466 Jul 05 j 04:14 -6465 Jul 05 j 01:35 -6465 Jun 02 j 11:55 -6465 Mar 05 j 01:31 -6465 Jul 02 j 10:28 -6465 Jul 22 j 02:48 -6465 Jul 23 j 13:45 -6465 Jul 23 j 13:41 -6465 Aug 05 j 06:04 -6465 Nov 11 j 14:50	23°Y55'43 23°Y55'12 18°Y51'50 0°8 7°801'18 9°842'58 9°855'38 9°855'36 12°848'15 15°8 29°856'11 25°803'09 24°856'25 20°800'25 0°11 7°1159'35 10°1129'52 10°1149'11 10°1149'09 13°1137'17 0°9	4.33149 AU 6.35810 AU 0°35'58 0°36'12 1°22'10 4.37303 AU 6.37347 AU 1°13'22 1°13'45

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min. Earth dist.	-6464 Feb 03 j 16:24		4.36277 AU	min. Earth dist.	-6459 Jul 24 j 16:47	13° ₹ 40'28	4.03466 AU
	-6464 Apr 05 j 04:17	20° I I54'46	4.30277 AU		-6459 Sep 21 j 19:07	8° x ⁷ 36'36	4.03400 AU
direct	1 3	20 п 3446		direct	1 3	8 x · 30 30 27° x ⁷ 49'17	
	-6464 Jun 28 j 09:10	8° © 53'39		evening set	-6458 Jan 24 j 18:20	2/* メ ・49*1/	
evening set	-6464 Aug 09 j 21:52		(22715 ATT		-6458 Feb 03 j 01:35	0.0	
max. Earth dist.	-6464 Aug 20 j 20:59	11 20 20 38	6.33715 AU	· · · · · · · · · · · ·	(450 E-L 07:07:24	00=50145	1925141
	(4(4.4	110641125	1020155	conjunction	-6458 Feb 07 j 07:24	0°る59'45 0°る59'43	
conjunction	-6464 Aug 22 j 10:21	11°5541'35	1°29'55 1°30'19	minimum elong	-6458 Feb 07 j 07:22 -6458 Feb 09 j 01:56		6.05028 AU
minimum elong	-6464 Aug 22 j 10:20 -6464 Sep 03 j 20:54	11°541'35	1-30-19	max. Earth dist.	3	4°る11'28	6.03028 AU
morning rise	1 3	14° © 28'42 0° Ω		morning rise	-6458 Feb 20 j 23:05 -6458 Jul 01 j 12:31	4 311 28 24° る 03'44	
ratra ara da	-6464 Nov 28 j 10:55 -6463 Jan 04 j 10:33	2° Ω 03'16		retrograde min. Earth dist.	3		4.08199 AU
retrograde	,	2 8 203 10 30°RS		opposition	-6458 Aug 28 j 23:01	19 80/3/ 18° る 58'41	
opposition	-6463 Feb 10 j 19:12 -6463 Mar 06 j 11:58	27°©11'24	2000155	direct	-6458 Aug 30 j 01:10 -6458 Oct 27 j 08:12	18 03841 13° る 59'52	-2 12 33
min. Earth dist.	-6463 Mar 07 j 14:11	27°503'05	4.30317 AU	direct	-6457 Feb 17 j 02:04	0° ≈	
direct	-6463 May 07 j 15:55	27 3 03 03 22° 5 13'53	4.50517 AU	evening set	-6457 Mar 02 j 17:53	0 ∞ 3°≈05'34	
direct	-6463 Jul 22 j 15:22	0°Ω		evening set	-043/ Wai 02 j 17.33	3 ~ 03 34	
evening set	-6463 Sep 10 j 01:57	10° Ω 21'47		conjunction	-6457 Mar 16 j 11:08	6°≈14'38	10231/15
max. Earth dist.	-6463 Sep 21 j 06:21	10° Ω 54'43	6.25875 AU	minimum elong	-6457 Mar 16 j 11:11	6°≈14'40	
max. Earm dist.	-0403 Sep 21 J 00.21	12 663443	0.23873 AU	max. Earth dist.	-6457 Mar 17 j 22:34	6°≈35'01	6.12166 AU
conjunction	-6463 Sep 22 j 12:50	13° Ω 12'08	1°20'24	morning rise	-6457 Mar 30 j 05:29	9°≈24'02	0.12100 AC
minimum elong	-6463 Sep 22 j 12:54	13° Ω 12'10	1°20'45	morning risc	-6457 Apr 24 j 09:13	9 ∞24 02 15°≈	
minimum clong	-6463 Sep 30 j 09:43	15° Ω	1 2043	retrograde	-6457 Aug 04 j 17:14	28°≈28'13	
morning rise	-6463 Oct 04 j 23:38	16° Ω 02'34		opposition	-6457 Oct 02 j 23:15	28 ≈28 13 23°≈25'07	1045!22
morning rise	-6463 Dec 14 j 12:29	0° M)		min. Earth dist.	-6457 Oct 02 j 06:01	23°≈30'59	4.16943 AU
retrograde	-6462 Feb 07 j 09:46	ابات 4° الله 20'35		direct	-6457 Dec 01 j 06:27	18°≈23'06	4.10943 AU
retrograde	-6462 Apr 05 j 07:32	4 11/2033 30°RΩ		direct	-6456 Mar 04 j 15:22	0°)	
opposition	-6462 Apr 09 j 16:50	29° Ω 26'27	1°37'07	evening set	-6456 Apr 06 j 19:11	7°) €09'44	
min. Earth dist.	-6462 Apr 10 j 08:45	29° Ω 20'27	4.21062 AU	evening set	-0430 Apr 00 j 19.11	/ /(0) 44	
direct	-6462 Jun 09 j 18:45	24° Ω 31'39	4.21002 AU	conjunction	-6456 Apr 20 j 12:57	10°) 14'56	0°52'46
direct	-6462 Aug 10 j 07:21	0°m)		minimum elong	-6456 Apr 20 j 13:01	10° X 14'58	
evening set	-6462 Oct 12 j 01:51	12° Mp 56'12		max. Earth dist.	-6456 Apr 21 j 07:00	10° X 14'38	6.21866 AU
evening set	-0402 Oct 12 j 01.31	12 11/2012		morning rise	-6456 May 04 j 05:20	13°) 19'18	0.21000 AC
conjunction	-6462 Oct 24 j 16:50	15° m 52'23	0°45'39	morning 1130	-6456 Aug 05 j 23:07	0°Υ	
minimum elong	-6462 Oct 24 j 16:53	15° m 52'25	0°45'47	retrograde	-6456 Sep 05 j 06:08	1° Υ 28'14	
max. Earth dist.	-6462 Oct 24 j 04:37	15° m 45'15	6.16081 AU	retrograde	-6456 Oct 05 j 08:11	30° ₹	
morning rise	-6462 Nov 06 j 09:16	18° Mp 49'33	0.10001710	opposition	-6456 Nov 03 j 13:33	26° ¥ 28'47	-0°44'59
morning rise	-6462 Dec 28 j 13:32	0∘ ⊽		min. Earth dist.	-6456 Nov 03 j 09:22	26° X 30'11	4.26598 AU
retrograde	-6461 Mar 15 j 01:59	ა – 7° ჲ 59'29		direct	-6455 Jan 03 j 02:32	21° H 25'01	1.20370710
opposition	-6461 May 15 j 04:55	ა01'51	0°30'53	uncer	-6455 Mar 24 j 16:12	0°Υ	
min. Earth dist.	-6461 May 15 j 06:21	3° ჲ 01'23	4.11385 AU	evening set	-6455 May 11 j 07:32	9° Υ 49'28	
	-6461 Jun 09 j 11:25	30°R, Mp			v		
direct	-6461 Jul 14 j 00:04	28° m) 08'47		conjunction	-6455 May 24 j 20:13	12° Y 48'58	-0°05'47
	-6461 Aug 17 j 01:13	0° ⊽		minimum elong	-6455 May 24 j 20:14	12°Υ48'58	0°05'43
desc. node	-6461 Oct 17 j 16:07	10° ≏ 31'50		behind sun begin	-6455 May 24 j 12:22	12° Υ 44'38	
evening set	-6461 Nov 14 j 14:47	16° ♀ 54'02		behind sun end	-6455 May 25 j 04:07	12° Y 53'19	
8	,			max. Earth dist.	-6455 May 24 j 13:35	12° Y 45'19	6.30803 AU
conjunction	-6461 Nov 27 j 13:08	19° ≏ 57'14	-0°05'33	morning rise	-6455 Jun 07 j 06:15	15° Ƴ 46'58	
minimum elong	-6461 Nov 27 j 13:08	19° ≏ 57'13	0°05'39	asc. node	-6455 Jul 09 j 22:51	22° Y '42'45	
behind sun begin	-6461 Nov 27 j 05:20	19° ≏ 52'38			-6455 Aug 21 j 17:44	0°8	
behind sun end	-6461 Nov 27 j 20:56	20° ჲ 01'49		retrograde	-6455 Oct 06 j 16:59	3° 8 13'29	
max. Earth dist.	-6461 Nov 27 j 22:40	20° ഫ 02'51	6.07473 AU	Č	-6455 Nov 22 j 02:29	30° ₹ Υ	
morning rise	-6461 Dec 10 j 14:38	23° ჲ 02'09		opposition	-6455 Dec 05 j 07:57	28° Y 17'48	0°26'55
C	-6460 Jan 10 j 06:33	0° M.		min. Earth dist.	-6455 Dec 05 j 18:52	28° Y 14'13	4.34100 AU
retrograde	-6460 Apr 19 j 19:31	12°M56'26		direct	-6454 Feb 05 j 01:42	23° Y 13'54	
opposition	-6460 Jun 19 j 12:00	7° M 54'51	-0°48'53		-6454 Apr 17 j 09:15	0°8	
min. Earth dist.	-6460 Jun 18 j 20:19	8°M00'03	4.04665 AU	evening set	-6454 Jun 13 j 06:05	11° 8 21'11	
direct	-6460 Aug 17 j 01:58	3°M01'38		max. Earth dist.	-6454 Jun 25 j 09:20	14° 8 01'10	6.36290 AU
	-6460 Nov 17 j 21:42	15° ™			,		
evening set	-6460 Dec 19 j 00:10	22°M05'47		conjunction	-6454 Jun 26 j 10:06	14° 8 14'49	0°41'55
-	·			minimum elong	-6454 Jun 26 j 10:02	14° 8 14'47	0°42'10
conjunction	-6459 Jan 01 j 06:36	25° ™ 14'19	-0°55'49	-	-6454 Jun 29 j 20:04	15° 8	
minimum elong	-6459 Jan 01 j 06:32	25° ™ 14'17	0°56'07	morning rise	-6454 Jul 09 j 10:26	17° 8 06'40	
max. Earth dist.	-6459 Jan 02 j 14:15	25°M33'06	6.03222 AU		-6454 Sep 14 j 07:50	Π °0	
morning rise	-6459 Jan 14 j 16:24	28°M24'40		retrograde	-6454 Nov 06 j 18:08	4° Ⅱ 13'38	
	-6459 Jan 21 j 11:18	0° ∡ ¹			-6454 Dec 31 j 20:27	30° ₹ 8	
retrograde	-6459 May 26 j 16:41	18° ∡ °36′32		opposition	-6453 Jan 05 j 22:00	29° 8 20'52	1°29'25
opposition	-6459 Jul 25 j 17:41	13° ∡ °32′02	-1°51'51	min. Earth dist.	-6453 Jan 06 j 19:38	29° 8 13'53	4.37305 AU

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direct	-6453 Mar 09 j 08:38	24° 8 18'22	n astronomicai co	min. Earth dist.	-6448 Jun 23 j 22:45		4.04239 AU
direct	-6453 May 13 j 11:44	0°Ⅱ			-	8°M09'15	4.04239 AU
	, ,	0 <u>II</u> 12° II 17'42		direct	-6448 Aug 22 j 04:00 -6448 Oct 28 j 10:20	8 11609 13 15°M	
evening set	-6453 Jul 15 j 00:25		C 2C045 ATT	. ,	-		
max. Earth dist.	-6453 Jul 26 j 05:33	14° 11 46°22	6.36845 AU	evening set	-6448 Dec 24 j 03:26	27° ™ 14'42 0° ҂ 7	
· · · · · · · · · · · · ·	(452 I-1 27: 10:42	1.50 Ποζίδο	1017150		-6447 Jan 04 j 19:01	0° X '	
conjunction	-6453 Jul 27 j 18:42	15° Ⅱ 06'58		. ,.	(447.1 0(:10.51	00 702126	1001140
minimum elong	-6453 Jul 27 j 18:38	15° Ⅱ 06'56	1°17'22	conjunction	-6447 Jan 06 j 10:51	0° ₹23'36	
morning rise	-6453 Aug 09 j 10:07	17° Ⅱ 54'51		minimum elong	-6447 Jan 06 j 10:47	0° 🗷 23'33	
. 1	-6453 Oct 09 j 16:01	0°©		max. Earth dist.	-6447 Jan 07 j 21:30		6.03303 AU
retrograde	-6453 Dec 08 j 08:36	5°907'32	2006121	morning rise	-6447 Jan 19 j 21:39	3° х 34'17	
opposition	-6452 Feb 07 j 00:18	0°516'05	2°06'31	retrograde	-6447 May 31 j 18:59	23° х 44'32	1057140
min. Earth dist.	-6452 Feb 08 j 04:26	0°507'07	4.35319 AU	opposition	-6447 Jul 30 j 18:46	18° 🗷 39'48	
Ji	-6452 Feb 09 j 02:47	30°ŖⅡ 25°₩1.000		min. Earth dist.	-6447 Jul 29 j 16:27	18° х 48'43 13° х 43'57	4.04063 AU
direct	-6452 Apr 09 j 14:38	25° Ⅱ 16'00 0° ©		direct	-6447 Sep 26 j 19:23		
	-6452 Jun 07 j 03:56				-6446 Jan 17 j 06:48	0°る 2°る55'27	
evening set	-6452 Aug 14 j 04:17	13°5517'09	C 222C1 ATT	evening set	-6446 Jan 29 j 23:10	2.033.21	
max. Earth dist.	-6452 Aug 25 j 02:46	15° © 44'17	6.32361 AU	. ,.	(446 E.L. 12 : 12.47	60 = 05142	1007105
	(452 4 26:16.22	1.0000512.0	1020100	conjunction	-6446 Feb 12 j 12:47	6°る05'42 6°る05'41	
conjunction	-6452 Aug 26 j 16:22	16°505'26	1°30'09	minimum elong	-6446 Feb 12 j 12:46		
minimum elong	-6452 Aug 26 j 16:22	16°505'26	1°30'34	max. Earth dist.	-6446 Feb 14 j 06:19	6°る30'00	6.06036 AU
morning rise	-6452 Sep 08 j 02:42	18° © 52'59		morning rise	-6446 Feb 26 j 05:03	9° る 17'08	
	-6452 Nov 01 j 10:10	0° N		retrograde	-6446 Jul 06 j 09:10	29°る02'59	0011105
retrograde	-6451 Jan 09 j 00:47	6° Ω 34'15	2007141	opposition	-6446 Sep 03 j 21:01	23°る58'02	
opposition	-6451 Mar 11 j 03:35	1° Ω 42'08	2°07'41	min. Earth dist.	-6446 Sep 02 j 19:59		4.09503 AU
min. Earth dist.	-6451 Mar 12 j 04:00	1° Ω 34'22	4.28675 AU	direct	-6446 Nov 01 j 07:47	18° る 58'43	
1	-6451 Mar 24 j 20:13	30°R≌			-6445 Jan 30 j 05:12	0° ≈	
direct	-6451 May 12 j 03:11	26°5544'59		evening set	-6445 Mar 07 j 19:59	8°≈01'21	
	-6451 Jun 28 j 11:16	0°N			(445.) (01:10.41	110 00156	1020157
evening set	-6451 Sep 14 j 11:31	14° Ω 56'37		conjunction	-6445 Mar 21 j 13:41	11°≈09'56	
	-6451 Sep 14 j 17:28	15° Ω		minimum elong	-6445 Mar 21 j 13:45		1°21'17
. ,.	(451.0 06:00.40	170 0 47150	1017155	max. Earth dist.	-6445 Mar 23 j 00:26	11°≈29'51	6.13671 AU
conjunction	-6451 Sep 26 j 22:48	17° Ω 47'50		morning rise	-6445 Apr 04 j 07:50	14°≈18'36	
minimum elong	-6451 Sep 26 j 22:52	17° Ω 47'52			-6445 Apr 07 j 08:51	15° ≈	
max. Earth dist.	-6451 Sep 25 j 19:13	17° Ω 32'00	6.24091 AU	. 1	-6445 Jun 24 j 13:13	0°) {	
morning rise	-6451 Oct 09 j 10:06	20° Ω 39'16		retrograde	-6445 Aug 09 j 08:03	3°) 14'18	
	-6451 Nov 21 j 22:20	0° m)			-6445 Sep 23 j 23:41 -6445 Oct 07 j 13:27	30°R≈	1020120
retrograde	-6450 Feb 12 j 09:12	9° Mp 05'54	1020120	opposition	-	28°≈11'42	
opposition	-6450 Apr 14 j 14:58	4° T0 11'21		min. Earth dist.	-6445 Oct 06 j 21:53	28°≈17'00 23°≈09'25	4.18493 AU
min. Earth dist.	-6450 Apr 15 j 05:37	4°№06'40 30°R Ω	4.19253 AU	direct	-6445 Dec 06 j 00:14 -6444 Feb 13 j 15:21	23°≈09°23 0° ∺	
direct	-6450 May 24 j 01:39	30 κδι 29° Ω 16'53		avanina aat		0 X 11° ¥ 52'26	
direct	-6450 Jun 14 j 13:15 -6450 Jul 05 j 21:20	0° m)		evening set	-6444 Apr 11 j 16:13	11 / 32 20	
evening set	-6450 Oct 16 j 17:00	0 iyi 17°Mo 45′27		conjunction	-6444 Apr 25 j 09:27	14° ¥ 56'50	0046!51
evening set	-0430 Oct 10 j 17.00	17 111/4327		minimum elong	-6444 Apr 25 j 09:31	14° X 56'52	0°47'01
conjunction	-6450 Oct 29 j 08:53	20° m 42'45	0°39'04	max. Earth dist.	-6444 Apr 25 j 22:38	15° X 04'13	6.23345 AU
minimum elong	-6450 Oct 29 j 08:56	20° my 42' 47	0°39'10	morning rise	-6444 May 09 j 01:22	18° X 04'13	0.23343 AU
max. Earth dist.	-6450 Oct 28 j 23:18	20° my 37'09	6.14421 AU	morning risc	-6444 Jul 07 j 07:27	0° Υ	
morning rise	-6450 Nov 11 j 02:40	23° m/41'13	0.14421 AU	retrograde	-6444 Sep 09 j 15:38	6° Υ '02'07	
morning risc	-6450 Dec 09 j 02:31	0° ⊽		opposition	-6444 Nov 07 j 23:54	1° Υ 03'13	-0°35'12
retrograde	-6449 Mar 20 j 04:49	0 — 12° ≏ 59'07		min. Earth dist.	-6444 Nov 07 j 22:21		4.27883 AU
opposition	-6449 May 20 j 07:33	8° ⊆ 00'52	0°19'44	mm. Darm dist.	-6444 Nov 15 j 22:02	30°R ₩	1.2,005 AU
min. Earth dist.	-6449 May 20 j 07:33	8° ⊆ 00'32	4.10028 AU	direct	-6443 Jan 07 j 17:17	25° ¥ 59'21	
direct	-6449 Jul 18 j 20:59	3° Ω 07'54	1.10020110	uncer	-6443 Mar 01 j 14:17	0°Υ	
desc. node	-6449 Aug 26 j 11:21	5° ₽ 30'00		evening set	-6443 May 15 j 22:42	14° Y 20'56	
evening set	-6449 Nov 19 j 12:45	21° ≏ 56'25		asc. node	-6443 May 20 j 02:06	15°Υ15'36	
evening sec	01.51.07 15 1 12.10	21 -0020		use. noue	01.13 1.149 20 9 02.00	10 11000	
conjunction	-6449 Dec 02 j 12:20	25° ჲ 00'32	-0°13'12	conjunction	-6443 May 29 j 10:32	17° Ƴ 19'39	0°01'12
minimum elong	-6449 Dec 02 j 12:19	25° ⊆ 00'31	0°13'20	minimum elong	-6443 May 29 j 10:32	17° Y 19'38	0°01'17
behind sun begin	-6449 Dec 02 j 07:34	24° Ω 57'43		behind sun begin	-6443 May 29 j 02:18	17° Y 15'06	
behind sun end	-6449 Dec 02 j 17:03	25° ♀ 03'19		behind sun end	-6443 May 29 j 18:46	17° Y °24′10	
max. Earth dist.	-6449 Dec 03 j 02:41	25° ♀ 09'01	6.06536 AU	max. Earth dist.	-6443 May 29 j 02:00	17° Y °14'56	6.31816 AU
morning rise	-6449 Dec 15 j 14:58	28° Ω 06'24		morning rise	-6443 Jun 11 j 19:12	20° Y 16'43	
<i>3</i>	-6449 Dec 23 j 17:31	0°M		<i>3</i>	-6443 Jul 29 j 03:12	0°8	
	-6448 Mar 10 j 18:07	15° M		retrograde	-6443 Oct 10 j 23:55	7° 8 39'16	
retrograde	-6448 Apr 25 j 01:57	18°M04'53		opposition	-6443 Dec 09 j 16:40	2° 8 44'08	0°36'32
S				* *	J		
	-6448 Jun 09 j 13:05	15°RM₊		min. Earth dist.	-6443 Dec 10 j 05:01	2° 8 40'05	4.34779 AU
opposition	-6448 Jun 09 j 13:05 -6448 Jun 24 j 15:53	15°Rጤ 13°ጤ02'42	-0°59'34	min. Earth dist.	-6443 Dec 10 j 05:01 -6443 Dec 31 j 18:37	2° ႘ 40'05 30°ℝ Ƴ	4.34779 AU

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 41 Attention, astronomical year style is used: The year -6442 in astronomical counting style is the year 6443 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ie year -6442 i	n astronomical co	unting style is the year	6443 BCE in historical c	ounting style.	
direct	-6442 Feb 09 j 12:51	27° Y ′40'25		minimum elong	-6437 Dec 07 j 09:25	29° ჲ 58'55	0°20'45
	-6442 Mar 21 j 16:19	0° 8			-6437 Dec 07 j 11:15	0° M	
	-6442 Jun 14 j 04:06	15° 8		max. Earth dist.	-6437 Dec 08 j 03:12	0° ™ 09'27	6.06067 AU
evening set	-6442 Jun 17 j 17:09	15° 8 46'22		morning rise	-6437 Dec 20 j 13:17	3°M05'30	
					-6436 Feb 13 j 12:20	15° ™	
conjunction	-6442 Jun 30 j 19:38	18° 8 39'18	0°47'46	retrograde	-6436 Apr 30 j 03:14	23°M06'15	1000100
minimum elong	-6442 Jun 30 j 19:34	18° 8 39'16	0°48'03	opposition	-6436 Jun 29 j 16:14	18°M03'36	
max. Earth dist.	-6442 Jun 29 j 15:04	18° 8 23'33	6.36568 AU	min. Earth dist.	-6436 Jun 28 j 20:53		4.04175 AU
morning rise	-6442 Jul 13 j 18:49	21° 8 30'32		1' 4	-6436 Jul 24 j 13:03	15°RM 130 m 0015€	
	-6442 Aug 23 j 17:01	0° Ц 8° Ц 37'18		direct	-6436 Aug 27 j 01:09 -6436 Sep 29 j 09:07	13°M09'56	
retrograde	-6442 Nov 11 j 03:13	3° Ц 3/18	1026122			15° ጤ 0° ҂ 7	
opposition min. Earth dist.	-6441 Jan 10 j 07:49 -6441 Jan 11 j 07:34		4.37194 AU	evening set	-6436 Dec 19 j 11:10 -6436 Dec 29 j 03:38	0 x . 2° x 15'44	
iiiii. Eartii dist.	-6441 Feb 12 j 07:30	30°R 8	4.37194 AU	evening set	-0430 Dec 29 J 03.38	2 *1344	
direct	-6441 Mar 13 j 20:21	28° 8 42'39		conjunction	-6435 Jan 11 j 11:50	5° ∡ ¹24'49	-1°06'53
direct	-6441 Apr 12 j 13:14	0°Ⅱ		minimum elong	-6435 Jan 11 j 11:46	5° × 24'46	
evening set	-6441 Jul 19 j 08:56	16° Ⅱ 42'20		max. Earth dist.	-6435 Jan 12 j 23:03	5° × ⁷ 45'39	
max. Earth dist.	-6441 Jul 30 j 13:16	19° Ⅱ 10'49	6.36343 AU	morning rise	-6435 Jan 24 j 23:30	8° × ⁷ 35'39	0.03010110
max. Dartii dist.	0111 Jul 30 J 15.10	17 110 17	0.505 15 710	retrograde	-6435 Jun 05 j 17:02	28° × ⁷ 43'34	
conjunction	-6441 Aug 01 j 02:17	19° Ⅱ 31'23	1°20'15	opposition	-6435 Aug 04 j 15:36	23°×738'36	-2°02'24
minimum elong	-6441 Aug 01 j 02:14	19° Ⅲ 31'21	1°20'39	min. Earth dist.	-6435 Aug 03 j 13:13		4.04715 AU
morning rise	-6441 Aug 13 j 16:36	22° I I19'02		direct	-6435 Oct 01 j 17:30	18° ∡ ′42'14	
5	-6441 Sep 19 j 02:51	0°99			-6435 Dec 30 j 18:42	0°ප	
retrograde	-6441 Dec 12 j 19:14	9° © 35'02		evening set	-6434 Feb 04 j 00:18	7° る 52'39	
opposition	-6440 Feb 11 j 13:21	4° 5 43'38	2°09'00	•	, and the second		
min. Earth dist.	-6440 Feb 12 j 16:35	4° © 34'58	4.34489 AU	conjunction	-6434 Feb 17 j 14:45	11° る 02'47	-1°28'27
	-6440 Mar 31 j 19:14	30° Ŗ Ⅱ		minimum elong	-6434 Feb 17 j 14:45	11° る 02'46	1°28'52
direct	-6440 Apr 14 j 01:31	29° Ⅱ 44'03		max. Earth dist.	-6434 Feb 19 j 09:00	11° る 27'25	6.06969 AU
	-6440 Apr 27 j 09:28	0ංම		morning rise	-6434 Mar 03 j 07:18	14° る 13'55	
evening set	-6440 Aug 18 j 12:46	17° 5 46'49			-6434 May 21 j 12:29	0° ≈	
max. Earth dist.	-6440 Aug 29 j 11:20	20°9514'28	6.31273 AU	retrograde	-6434 Jul 11 j 03:23	3° ≈ 53'36	
					-6434 Aug 30 j 19:04	30°Ŗる	
conjunction	-6440 Aug 31 j 00:18	20° © 35'19	1°29'55	opposition	-6434 Sep 08 j 13:05	28° る 48'53	
minimum elong	-6440 Aug 31 j 00:18	20° © 35'19	1°30'19	min. Earth dist.	-6434 Sep 07 j 13:28		4.10621 AU
morning rise	-6440 Sep 12 j 10:28	23° © 23'14		direct	-6434 Nov 06 j 02:09	23° る 49'07	
	-6440 Oct 12 j 23:09	0 \circ Ω			-6433 Jan 09 j 16:59	0° ≈	
retrograde	-6439 Jan 13 j 18:48	11°Ω10'28		evening set	-6433 Mar 12 j 18:56	12° ≈ 49'30	
opposition	-6439 Mar 15 j 21:34	6° Ω 18'09			-6433 Mar 22 j 07:50	15° ≈	
min. Earth dist.	-6439 Mar 16 j 21:38		4.27402 AU		(422.) (26.12.44	1.505712.0	1017141
direct	-6439 May 16 j 19:17	1° Ω 21′28		conjunction	-6433 Mar 26 j 12:44	15°≈57'39	
	-6439 Aug 29 j 09:26	15° Ω 19° Ω 35'20		minimum elong max. Earth dist.	-6433 Mar 26 j 12:48 -6433 Mar 27 j 19:28	15°≈57'42	1°17'59
evening set max. Earth dist.	-6439 Sep 18 j 22:16 -6439 Sep 30 j 08:41		6.22770 AU	max. Earth dist.	-6433 Mar 2/ j 19:28 -6433 Apr 09 j 07:02	16°≈15'13 19°≈05'49	6.14868 AU
max. Earm dist.	-0439 Sep 30 J 08.41	22 061244	0.22770 AU	morning rise	-6433 May 31 j 01:09	0°)	
conjunction	-6439 Oct 01 j 09:57	22° Ω 27'16	1°12'57	retrograde	-6433 Aug 13 j 19:02	7°) 54′23	
minimum elong	-6439 Oct 01 j 10:01	$22^{\circ}\Omega 27'18$	1°13'13	min. Earth dist.	-6433 Oct 11 j 11:27	2°) 56'54	4.19653 AU
morning rise	-6439 Oct 13 j 21:53	25°Ω19'32	1 13 13	opposition	-6433 Oct 12 j 01:16	2° H 52'12	
morning not	-6439 Nov 03 j 18:23	0° m		оррозмон	-6433 Nov 03 j 14:59	30°R≈	1 31 17
retrograde	-6438 Feb 17 j 06:06	13° m 53'01		direct	-6433 Dec 10 j 15:44	27° ≈ 49'34	
opposition	-6438 Apr 19 j 13:08	8° m) 58'02	1°21'16		-6432 Jan 17 j 04:01	0°) €	
min. Earth dist.	-6438 Apr 20 j 00:25	8° m 54'26	4.17993 AU	evening set	-6432 Apr 16 j 10:54	16° ¥ 30′17	
direct	-6438 Jun 19 j 06:18	4° Mp 03'55		•			
evening set	-6438 Oct 21 j 08:07	22° m 34'41		conjunction	-6432 Apr 30 j 03:50	19°) (34′06	-0°40'46
				minimum elong	-6432 Apr 30 j 03:54	19°) 34′08	0°40'53
conjunction	-6438 Nov 03 j 00:54	25° m 32'51	0°32'18	max. Earth dist.	-6432 Apr 30 j 14:34	19°) 40′06	6.24408 AU
minimum elong	-6438 Nov 03 j 00:56	25° m 32'53	0°32'22	morning rise	-6432 May 13 j 18:56	22°) 36′52	
max. Earth dist.	-6438 Nov 02 j 19:15	25° m 29'33	6.13350 AU		-6432 Jun 17 j 08:42	$0^{\circ}\Upsilon$	
morning rise	-6438 Nov 15 j 19:43	28° My $32'15$		retrograde	-6432 Sep 14 j 00:49	10° Y 33'03	
	-6438 Nov 22 j 03:16	0∘ ⊽		opposition	-6432 Nov 12 j 09:12	5° Y ′34'43	
retrograde	-6437 Mar 25 j 07:50	17° ≙ 55'54		min. Earth dist.	-6432 Nov 12 j 09:49	5° Y ′34'31	4.28759 AU
opposition	-6437 May 25 j 08:28	12° ≏ 57'03	0°08'37	direct	-6431 Jan 12 j 06:33	0° Ƴ 30'49	
min. Earth dist.	-6437 May 25 j 04:09	12° ≙ 58'27	4.09221 AU	asc. node	-6431 Mar 30 j 13:18	8° Y 26′28	
desc. node	-6437 Jul 06 j 22:38	8° ≏ 32'04		evening set	-6431 May 20 j 13:18	18° Ƴ 50'47	
direct	-6437 Jul 23 j 18:59	8° 2 04'07			2404 Y 22 1 1 1	0.1.000	0000:01
evening set	-6437 Nov 24 j 08:49	26° ≏ 54'10		conjunction	-6431 Jun 02 j 23:59	21° Y 48'48	0°08'01
. ,.	(427.5) 07:00.5	200 2 5015 5	0020124	minimum elong	-6431 Jun 02 j 23:59	21° Y 48'47	0°08'08
conjunction	-6437 Dec 07 j 09:27	29° £ 58'56	-U-2U34	behind sun begin	-6431 Jun 02 j 16:43	21° Y '44'48	

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6431 in astronomical counting style is the year 6432 BCE in historical counting style. -6431 Jun 03 i 07:14 21°**Υ**'52'47 direct -6425 Jul 28 j 13:33 12°**£**57'05 behind sun end -6431 Jun 02 j 11:27 21°**Y**41'53 6.32439 AU -6425 Nov 21 j 09:39 max Earth dist oom. -6431 Jun 16 j 07:36 24°Y45'10 -6425 Nov 29 j 04:33 1°M49'23 morning rise evening set -6431 Jul 10 j 19:08 0°8 retrograde -6431 Oct 15 j 07:26 12°**8**05'01 conjunction -6425 Dec 12 j 06:10 4°M54'52 -0°27'47 -6431 Dec 14 j 01:41 opposition 7°**8**10'17 0°45'55 minimum elong -6425 Dec 12 j 06:07 4°M54'50 0°27'58 min. Earth dist. -6431 Dec 14 j 15:49 7°**8**05'39 4.35138 AU max. Earth dist. -6425 Dec 13 j 01:42 5°M06'26 6.05453 AU direct -6430 Feb 14 j 00:43 2°806'40 morning rise -6425 Dec 25 j 11:12 8°M02'12 -6430 May 28 j 18:57 15°8 -6424 Jan 25 j 01:38 15°M evening set -6430 Jun 22 j 04:08 20°812'04 retrograde -6424 May 05 j 04:06 $28^{\circ}\text{ML}05^{\prime}58$ max. Earth dist. -6430 Jul 04 j 00:41 22°**8**48'33 6.36637 AU opposition -6424 Jul 04 j 15:37 23°M02'53 -1°18'52 min. Earth dist. -6424 Jul 03 j 19:00 23°ML09'47 4.03874 AU 23°**8**04'25 conjunction -6430 Jul 05 j 05:27 0°53'21 direct -6424 Aug 31 j 23:03 18° ML 08'54minimum elong -6430 Jul 05 j 05:23 23°**8**04'23 0°53'40 -6424 Dec 02 j 03:51 0°**⊼** morning rise -6430 Jul 18 j 03:10 25°855'04 evening set -6423 Jan 03 j 04:03 7°**х¹**16′25 -6430 Aug 06 j 01:46 $0^{\circ}II$ retrograde -6430 Nov 15 j 11:42 13°**Ⅲ**02'13 conjunction -6423 Jan 16 j 13:22 10° ₹25'55 -1°11'37 opposition -6429 Jan 14 j 18:37 8°**Ⅱ**10′02 1°42'48 minimum elong -6423 Jan 16 j 13:18 10°**∡**¹25'53 1°12'00 10°**∡**¹48'21 min. Earth dist. -6429 Jan 15 j 18:34 8°**I**102'20 4.36994 AU max. Earth dist. -6423 Jan 18 j 03:20 6.03640 AU direct -6429 Mar 18 j 07:43 3°**Ⅱ**08'11 morning rise -6423 Jan 30 j 01:47 13°**х** 37′04 evening set -6429 Jul 23 j 17:54 21°**Ⅲ**08′02 -6423 Apr 22 j 01:17 0°정 max. Earth dist. -6429 Aug 03 j 19:39 23°**II**35'25 6.35868 AU retrograde -6423 Jun 10 j 17:30 3°る43'39 -6423 Jul 30 i 10:30 30°R*x*7 conjunction -6429 Aug 05 j 10:02 23°**I**I56'46 1°23'05 min. Earth dist. -6423 Aug 08 j 10:48 28° ₹ 47'28 4.05087 AU -6429 Aug 05 j 09:59 23°**II**56'44 1°23'29 -6423 Aug 09 j 12:48 28°**₹**38'37 -2°06'18 minimum elong opposition -6429 Aug 17 j 23:36 26°**Ⅱ**44'16 -6423 Oct 06 j 14:59 direct 23° ×741'50 morning rise -6429 Sep 01 j 22:01 -6423 Dec 10 j 02:13 0°궁 0.00 -6429 Dec 17 j 08:26 -6422 Feb 09 j 02:44 12°る52'24 retrograde 14°903'22 evening set -6428 Feb 16 j 03:27 9°511'56 2°10'42 opposition -6428 Feb 17 j 07:01 16°**ප**02'30 -1°28'51 min. Earth dist. 9°903'10 4.33777 AU conjunction -6422 Feb 22 j 17:43 -6428 Apr 18 j 15:22 -6422 Feb 22 j 17:44 16°る02'30 1°29'17 direct 4°9512'41 minimum elong -6422 Feb 24 j 09:54 6.07619 AU -6428 Aug 22 j 21:15 max. Earth dist. 16°**る**25'53 evening set 22°9916'15 -6428 Sep 02 j 21:49 19°**る**13'34 24°9545'20 6.30373 AU -6422 Mar 08 j 10:57 max. Earth dist. morning rise -6422 Apr 27 j 09:05 0°≈ -6428 Sep 04 j 08:34 conjunction 25°904'58 1°29'08 retrograde -6422 Jul 15 j 20:49 8°≈48'11 minimum elong -6428 Sep 04 j 08:36 25°904'59 1°29'32 min. Earth dist. -6422 Sep 12 j 07:22 3°≈51'36 4.11477 AU morning rise -6428 Sep 16 j 18:29 27°953'11 opposition -6422 Sep 13 j 06:32 3°≈43'41 -2°06'37 -6428 Sep 26 j 05:47 $0^{\circ}\Omega$ -6422 Oct 14 j 06:09 30°Rる -6428 Dec 27 j 06:08 15°€ direct -6422 Nov 10 j 21:32 28°る43'27 -6427 Jan 18 j 10:17 15°**Ω**45′28 -6422 Dec 08 j 20:39 0°≈ retrograde -6427 Feb 09 j 17:21 15°R€ -6421 Mar 05 j 18:18 15°**≈** -6427 Mar 20 j 15:14 10°**Ω**52'53 2°00'49 -6421 Mar 17 j 19:47 opposition evening set 17°≈42'37 -6427 Mar 21 j 13:13 10°**Ω**45'54 min. Earth dist. 4.26362 AU -6427 May 21 j 09:10 5°**£**56'36 -6421 Mar 31 j 13:55 20°≈50'28 -1°13'48 direct conjunction -6421 Mar 31 j 13:59 -6427 Aug 11 j 14:23 15°€ minimum elong 20°≈50'30 1°14'06 evening set -6427 Sep 23 j 08:32 24° **Ω**11'49 max. Earth dist. -6421 Apr 01 i 18:46 21°≈06'55 6.15880 AU morning rise -6421 Apr 14 i 08:02 23°≈58'08 conjunction -6427 Oct 05 i 20:31 27°Ω04'23 1°08'32 -6421 May 11 j 18:05 0°) minimum elong -6427 Oct 05 i 20:35 27°**Ω**04'25 1°08'48 retrograde -6421 Aug 18 j 10:19 12°\ 40'11 opposition max. Earth dist. -6427 Oct 04 j 21:13 26°**Ω**50'57 6.21664 AU -6421 Oct 16 j 15:16 7° **₩**38'32 -1°23'15 29°**Ω**57'25 min. Earth dist. -6421 Oct 16 j 03:47 7°**¥**42'26 4.20701 AU morning rise -6427 Oct 18 j 09:10 2°\ 35'41 -6427 Oct 18 j 13:40 0° m direct -6421 Dec 15 j 09:57 21°**)** 14'24 retrograde -6426 Feb 22 j 04:41 18° m/37'11 evening set -6420 Apr 21 j 07:59 opposition -6426 Apr 24 j 10:36 13° Mp 41'42 1°12'32 min. Earth dist. -6426 Apr 24 j 20:32 13°Mp38'31 4.16863 AU conjunction -6420 May 05 j 00:24 24° **X** 17'37 -0°34'16 -6426 Jun 24 j 00:28 8° Mp 47'47 minimum elong -6420 May 05 j 00:27 24°**)** 17'39 0°34'20 direct -6426 Oct 25 j 22:08 27° m 20'31 24°**₭**21'52 6.25430 AU evening set max. Earth dist. -6420 May 05 j 08:01 0∘**⊽** 27° **X** 19'41 -6426 Nov 06 j 06:35 morning rise -6420 May 18 j 14:50 $0^{\circ}\Upsilon$ -6420 May 30 j 18:33 15°**Y**10′26 conjunction -6426 Nov 07 j 15:56 0°**2**5'22 0°25'22 retrograde -6420 Sep 18 j 10:42 minimum elong -6426 Nov 07 j 15:58 0°**₽**19'35 0°25'24 opposition -6420 Nov 16 j 21:00 10°**Y**12'38 -0°15'09 max. Earth dist. -6426 Nov 07 j 13:36 0°**₽**18'12 6.12308 AU min. Earth dist. -6420 Nov 16 j 22:40 10°**Y**12′04 4.29690 AU morning rise -6426 Nov 20 j 11:54 3°**£**19'57 direct -6419 Jan 16 j 21:43 5°**Y**08'42 retrograde -6425 Mar 30 j 08:07 22°**£**49'18 asc. node -6419 Feb 06 j 23:24 5°**Y**49'34 desc. node -6425 May 18 j 02:12 19°**£**24'17 evening set -6419 May 25 j 05:40 23°**Y**26'40

opposition

min. Earth dist.

-6425 May 30 j 08:00

-6425 May 30 j 01:18

17°**△**49'57 -0°02'29

17°**£**52'08 4.08364 AU

conjunction

-6419 Jun 07 j 15:12 26°**Y**23'52 0°14'55

Planetary Phenomena of Jupiter from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6419 in astronomical counting style is the year 6420 BCE in historical counting style. 26°**Y**'23'51 0°15'03 -6419 Jun 07 j 15:10 desc. node -6413 Mar 30 j 14:31 27°**♀**34'07 minimum elong 26°**Y**′22'22 -6419 Jun 07 j 12:29 -6413 Apr 04 j 05:43 behind sun begin retrograde 27°**£**36'11 -6419 Jun 07 j 17:52 26°**Y**25′20 opposition -6413 Jun 04 j 04:30 behind sun end 22°**2**36'15 -0°13'19 26°**Y**16′06 max. Earth dist. -6419 Jun 07 j 01:08 6.33245 AU min. Earth dist. -6413 Jun 03 j 20:10 22°**♀**38'59 4.07433 AU 29°Υ19'23 -6413 Aug 02 j 06:39 morning rise -6419 Jun 20 j 21:28 direct 17°**£**43'17 -6419 Jun 23 j 23:40 0° 8 -6413 Nov 04 j 20:36 0°M -6419 Sep 17 j 19:19 15°8 evening set -6413 Dec 03 j 22:04 6°M38'29 retrograde -6419 Oct 19 j 17:15 16°**8**35'59 -6419 Nov 20 j 15:43 15°R conjunction -6413 Dec 17 j 00:57 9°M44'49 -0°34'37 opposition -6419 Dec 18 j 12:55 11°**8**41'44 0°55'10 minimum elong -6413 Dec 17 j 00:54 9°**™**44'47 0°34'51 min. Earth dist. -6419 Dec 19 j 04:24 11°**8**36'41 4.35782 AU max. Earth dist. -6413 Dec 17 j 23:50 9° M $_{5}8'23$ 6.04685 AU direct -6418 Feb 18 j 15:21 6°**8**38'23 morning rise -6413 Dec 30 j 07:02 12°M52'59 -6418 May 10 j 04:53 15°8 -6412 Jan 08 j 08:27 15°M evening set -6418 Jun 26 j 16:12 24°841'49 -6412 Mar 26 j 14:47 0°**⊼** max. Earth dist. -6418 Jul 08 j 09:12 27°**8**16'24 6.37064 AU retrograde -6412 May 10 j 05:05 3°**х** 00′19 -6412 Jun 23 j 18:28 30°RM opposition conjunction -6418 Jul 09 j 16:02 27°**8**33'24 0°58'40 -6412 Jul 09 j 12:53 27°M56'55 -1°27'30 minimum elong -6418 Jul 09 j 15:58 27°**8**33'22 0°59'00 min. Earth dist. -6412 Jul 08 j 15:55 28°M03'57 4.03369 AU -6418 Jul 20 j 18:01 $0^{\circ}\Pi$ direct -6412 Sep 05 j 18:16 23°ML02'40 morning rise -6418 Jul 22 j 12:30 0°**I**I23'19 -6412 Nov 12 j 13:09 0°×7 retrograde -6418 Nov 19 j 21:10 17°**Ⅲ**29'44 evening set -6411 Jan 08 j 03:28 12°**∡**12'52 opposition -6417 Jan 19 i 06:24 12°**Ⅲ**37'42 1°48'38 min. Earth dist. -6417 Jan 20 i 06:48 12°**Ⅱ**29'52 4.37205 AU conjunction -6411 Jan 21 i 13:35 15° ₹22'51 -1°15'43 direct -6417 Mar 22 i 20:45 7°**Ⅱ**36′08 minimum elong -6411 Jan 21 i 13:31 15°**∡** 22'49 1°16'06 -6417 Jul 28 j 02:29 25°**Ⅱ**34'31 max. Earth dist. -6411 Jan 23 j 03:10 15°**∡** 45′02 6.03424 AU evening set -6417 Aug 08 j 04:53 28°**Ⅲ**02'19 -6411 Feb 04 i 03:04 18°**х** 34′29 max. Earth dist. 6.35843 AU morning rise -6411 Mar 28 j 14:16 0°궁 -6417 Aug 09 j 17:41 -6411 Jun 15 j 14:33 8°**정**40'32 28°TT22'48 1°25'25 retrograde conjunction -6417 Aug 09 j 17:38 -6411 Aug 13 j 05:42 28°**Ⅲ**22'47 1°25'50 min. Earth dist. 3°る44'34 4.05213 AU minimum elong -6417 Aug 17 j 00:12 -6411 Aug 14 j 08:31 0.00 3°**ප**35'26 -2°09'12 opposition -6411 Sep 12 j 23:57 -6417 Aug 22 j 06:11 1°909'54 30°₽.**✓** morning rise -6411 Oct 11 j 10:03 28°**₹**38'10 -6417 Dec 21 j 18:58 retrograde 18°930'39 direct -6416 Feb 20 j 16:53 13°539'09 2°11'33 -6411 Nov 09 j 00:29 0°궁 opposition -6416 Feb 21 j 19:50 -6410 Feb 14 j 04:50 17°**る**49'54 min. Earth dist. 13°**©**30'36 4.33511 AU evening set direct -6416 Apr 23 j 03:46 8°9540'19 21°**පි**00'09 -1°28'34 -6410 Feb 27 j 20:40 evening set -6416 Aug 27 j 04:12 26°9543'03 conjunction max. Earth dist. -6416 Sep 07 j 04:11 29°**©**12'03 6.29874 AU minimum elong -6410 Feb 27 j 20:41 21°る00'10 1°28'58 max. Earth dist. -6410 Mar 01 j 12:51 21°**る**23'31 6.08092 AU conjunction -6416 Sep 08 j 15:02 29°531'47 1°27'49 morning rise -6410 Mar 13 j 14:14 24°る11'09 -6416 Sep 08 j 15:04 29°931'48 1°28'11 -6410 Apr 08 j 11:03 minimum elong 0°≈ -6416 Sep 10 j 16:52 $0^{\circ}\Omega$ retrograde -6410 Jul 20 j 16:17 13°≈41'06 -6416 Sep 21 j 01:01 2°**Ω**20′12 -6410 Sep 17 j 23:35 8°≈36'52 -2°02'48 morning rise opposition -6416 Nov 23 j 03:02 min. Earth dist. -6410 Sep 17 j 02:08 8°≈44'12 4.12236 AU 15°€ -6415 Jan 23 j 01:35 20°**Ω**16'25 -6410 Nov 15 j 17:53 3°≈36'13 retrograde direct -6415 Mar 25 j 07:13 15°**Q**23'28 1°56'16 -6409 Feb 16 j 03:04 opposition 15°≈ min. Earth dist. -6415 Mar 26 i 04:29 15°**Ω**16'42 4.25631 AU evening set -6409 Mar 22 j 20:29 22°≈34'15 -6415 Mar 28 i 09:04 15°RΩ direct -6415 May 25 j 22:48 10°**Ω**27'27 conjunction -6409 Apr 05 i 14:48 25°≈41'47 -1°09'23 -6415 Jul 21 j 01:50 15°Ω minimum elong -6409 Apr 05 i 14:52 25°≈41'49 1°09'40 -6415 Sep 27 j 16:19 28°Ω43'02 max. Earth dist. -6409 Apr 06 i 18:03 25°≈57'16 6.16874 AU evening set -6415 Oct 03 j 06:15 -6409 Apr 19 j 08:50 28°≈48'59 0° mb morning rise max. Earth dist. -6415 Oct 09 j 08:21 1° Mp 24'18 6.20782 AU -6409 Apr 24 j 15:11 0°\ -6409 Aug 22 j 22:52 17° **)** 24'20 retrograde 1° Mp 36'11 1°03'47 -6409 Oct 21 j 04:56 conjunction -6415 Oct 10 j 04:55 opposition 12°\(\frac{1}{2}3'07\) -1°14'37 minimum elong -6415 Oct 10 j 04:59 1°M/36'13 1°04'01 min. Earth dist. -6409 Oct 20 j 17:53 12°**升**26'52 4.21826 AU -6415 Oct 22 j 18:08 4° m 29'53 direct -6409 Dec 20 j 02:51 7°**₩**20'01 morning rise -6414 Feb 26 j 22:53 23° m 15'04 -6408 Apr 26 j 04:17 25°****56'07 retrograde evening set opposition -6414 Apr 29 j 05:01 18° **m** 19'08 1°03'31 -6408 May 09 j 19:59 min. Earth dist. -6414 Apr 29 j 13:18 18° Mp 16'28 4.15880 AU conjunction 28°**)** 58'34 -0°27'34 direct -6414 Jun 28 j 14:33 13° m 25'26 minimum elong -6408 May 09 j 20:01 28°**)** 58'36 0°27'36 -6414 Oct 21 j 19:00 0∘**⊽** max. Earth dist. -6408 May 10 j 00:36 29°**米**01'09 6.26604 AU evening set -6414 Oct 30 j 10:01 1°**£**59'57 -6408 May 14 j 10:04 0° Υ morning rise -6408 May 23 j 09:33 1°**Y**59'47 conjunction -6414 Nov 12 j 04:38 4°**£**59'49 0°18'26 retrograde -6408 Sep 22 j 21:45 19°**Y**44'33 minimum elong -6414 Nov 12 j 04:40 4°**£**59'50 0°18'26 opposition -6408 Nov 21 j 08:04 14°**Y**47'14 -0°04'54 -6414 Nov 12 j 03:25 4°**£**59'06 min. Earth dist. 14°**Y**45'52 4.30782 AU max. Earth dist. 6.11313 AU -6408 Nov 21 j 12:12

-6414 Nov 25 j 01:51

morning rise

8°**2**01'09

-6408 Dec 17 j 20:43

asc. node

11°Y33'12

,	1		0	· //	r 6408 BCE in historical c	, 1	50 44
direct	-6407 Jan 21 j 13:56	9° Ƴ 43'16		max. Earth dist.	-6402 Nov 17 j 01:47		6.09984 AU
evening set	-6407 May 29 j 20:33	27° Y ′58'26		morning rise	-6402 Nov 29 j 20:53	12° ≙ 55'42	
	-6407 Jun 08 j 01:39	0°8		desc. node	-6401 Feb 07 j 17:56	27° ≏ 20'38	
					-6401 Feb 26 j 14:53	0° M.	
conjunction	-6407 Jun 12 j 04:52	0° 8 54'45	0°21'41	retrograde	-6401 Apr 09 j 10:21	2°M37'24	
minimum elong	-6407 Jun 12 j 04:50	0° 8 54'44	0°21'52		-6401 May 21 j 08:28	30° ₽ Ω	
max. Earth dist.	-6407 Jun 11 j 12:33	0° 8 45'45	6.34138 AU	opposition	-6401 Jun 09 j 06:25	27° ≏ 37'02	
morning rise	-6407 Jun 25 j 09:45	3° 8 49'20		min. Earth dist.	-6401 Jun 08 j 20:33		4.06392 AU
	-6407 Aug 20 j 05:55	15° 8		direct	-6401 Aug 07 j 05:14	22° Ω 44'06	
retrograde	-6407 Oct 24 j 00:17	21° 8 02'35	100401		-6401 Oct 16 j 00:22	0°M,	
opposition	-6407 Dec 22 j 22:39	16° 8 08'40	1°04'01	evening set	-6401 Dec 08 j 21:51	11° M 42'35	
min. Earth dist.	-6407 Dec 23 j 15:01 -6407 Dec 31 j 19:28	16° と 03'20 15°R と	4.36410 AU	conjunction	-6401 Dec 22 j 01:40	14° M 49'40	00/11/22
direct	-6406 Feb 23 j 02:59	11° 8 05'27		minimum elong	-6401 Dec 22 j 01:37	14°M49'38	0°41'49
direct	-6406 Apr 17 j 03:55	15°8		minimum ciong	-6401 Dec 22 j 19:05	15°M	0 41 47
evening set	-6406 Jul 01 j 02:27	29° 8 07'10		max. Earth dist.	-6401 Dec 23 j 02:20	15°ML04'18	6.04028 AU
e venning see	-6406 Jul 05 j 02:47	0°Ⅱ		morning rise	-6400 Jan 04 j 09:06	17°ML58'39	0.01020110
max. Earth dist.	-6406 Jul 12 j 17:05		6.37346 AU	5 5	-6400 Feb 28 j 18:20	0° ∡ ¹	
	J			retrograde	-6400 May 15 j 08:07	8° ₺ 08'28	
conjunction	-6406 Jul 14 j 00:54	1° Ⅱ 58'03	1°03'38	opposition	-6400 Jul 14 j 14:39	3° х 04′42	-1°35'52
minimum elong	-6406 Jul 14 j 00:50	1° Ⅱ 58′01	1°03'58	min. Earth dist.	-6400 Jul 13 j 15:13	3° ∡ 12'36	4.03224 AU
morning rise	-6406 Jul 26 j 20:01	4° Ⅱ 47'18			-6400 Aug 08 j 10:32	30°RML	
retrograde	-6406 Nov 24 j 06:31	21° Ⅱ 53'49		direct	-6400 Sep 10 j 17:37	28°M10'09	
opposition	-6405 Jan 23 j 17:16	17° Ⅲ 02'01	1°53'52		-6400 Oct 13 j 22:28	0° ∡ ¹	
min. Earth dist.	-6405 Jan 24 j 19:03	16° Ⅱ 53'46	4.37119 AU	evening set	-6399 Jan 13 j 07:49	17° ∡ ¹21'36	
direct	-6405 Mar 27 j 08:50	12° Ⅱ 00'48					
evening set	-6405 Aug 01 j 10:04	29° Ⅱ 58'53		conjunction	-6399 Jan 26 j 18:59	20° ₹ 31'48	
	-6405 Aug 01 j 12:06	0°©	(25250 AII	minimum elong	-6399 Jan 26 j 18:55	20° ₹ 31'46 20° ₹ 55'38	
max. Earth dist.	-6405 Aug 12 j 09:55	2-9925.33	6.35359 AU	max. Earth dist. morning rise	-6399 Jan 28 j 11:23 -6399 Feb 09 j 09:04	20° x '55'38	6.03817 AU
conjunction	-6405 Aug 14 j 00:17	2° © 46'57	1027'18	morning rise	-6399 Mar 08 j 23:13	23 x·43 30	
minimum elong	-6405 Aug 14 j 00:17	2°9546'56	1°27'44	retrograde	-6399 Jun 20 j 15:18	13° る 45'54	
morning rise	-6405 Aug 26 j 12:13	5°933'58	1 2/ 44	min. Earth dist.	-6399 Aug 18 j 04:55	8° る 49'41	4.06126 AU
retrograde	-6405 Dec 26 j 07:28	22° © 58'18		opposition	-6399 Aug 19 j 07:09	8° ප 40'44	
opposition	-6404 Feb 25 j 06:42	18° 5 06'42	2°11'47	direct	-6399 Oct 16 j 10:59	3° ට 43'01	
min. Earth dist.	-6404 Feb 26 j 09:23	17° © 58'14	4.32666 AU		· ·		
direct	-6404 Apr 27 j 15:23	13° © 08'13					
	-6404 Aug 26 j 02:55	$0^{\circ}\Omega$					
evening set	-6404 Aug 31 j 11:59	1° Ω 12′20					
conjunction	-6404 Sep 12 j 22:51	4° Ω 01′29	1°26'01				
minimum elong	-6404 Sep 12 j 22:53	4° Ω 01'31	1°26'22				
max. Earth dist.	-6404 Sep 11 j 14:16	3° Ω 43'00	6.28740 AU				
morning rise	-6404 Sep 25 j 08:46	6° Ω 50′24					
	-6404 Nov 02 j 07:43 -6403 Jan 27 j 19:31	15° Ω					
retrograde	-6403 Mar 30 j 01:17	24° Ω 52'53 19° Ω 59'40	1°51'01				
opposition min. Earth dist.	-6403 Mar 30 j 21:37	19° Ω 53'12	4.24272 AU				
direct	-6403 May 30 j 13:06	15° Ω 04'04	4.24272710				
	-6403 Sep 17 j 06:20	0° mp					
evening set	-6403 Oct 02 j 03:22	3° m/22'22					
Ž.	<i>y</i>	• -					
conjunction	-6403 Oct 14 j 16:27	6° Mp 16′23	0°58'31				
minimum elong	-6403 Oct 14 j 16:31	6° Mp 16′26	0°58'44				
max. Earth dist.	-6403 Oct 13 j 20:43	6° ™ 04'57	6.19316 AU				
morning rise	-6403 Oct 27 j 06:45	9° m 11'10					
retrograde	-6402 Mar 03 j 22:02	28° Mp 04'05					
opposition	-6402 May 04 j 03:44	23° Mp 07'37	0°53'47				
min. Earth dist.	-6402 May 04 j 09:39	23° m 05'43	4.14403 AU				
direct	-6402 Jul 03 j 08:18	18° Mp 14'07					
i.	-6402 Oct 04 j 16:50	0° ⊽					
evening set	-6402 Nov 04 j 02:38	6° £ 52'15					
conjunction	-6402 Nov 16 j 22:32	9° ≏ 53'13	0°11'06				
minimum elong	-6402 Nov 16 j 22:33	9° £ 53'13	0°11'04				
behind sun begin	-6402 Nov 16 j 16:28	9° ≏ 49'39	J 1. V I				
behind sun end	-6402 Nov 17 i 04:39	9° ≏ 56'48					

behind sun end -6402 Nov 17 j 04:39 9°**2**56'48