Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10888 in astronomical counting style is the year 10889 BCE in historical counting style. -10888 Jul 30 j 14:34 21°**8**11'49 31.29207 AU retrograde -10882 Nov 24 i 11:18 6°**Ⅱ**45'59 max. Earth dist. -10888 Aug 14 j 22:39 21°**8**46'23 -10881 Feb 12 j 15:47 5°**Ⅲ**23'04 2°44'44 morning rise opposition -10888 Nov 10 j 18:41 23°**8**40'42 min. Earth dist. -10881 Feb 12 j 17:49 5°**Д**22'56 29.27022 AU retrograde -10887 Jan 29 j 09:26 22°**8**18'18 2°28'34 -10881 May 04 j 06:28 3°**Д**59'34 opposition direct -10887 Jan 29 j 16:43 22°**8**17'49 29.29307 AU -10881 Jul 31 j 13:18 5°**Д**53'59 min. Earth dist. evening set -10887 Apr 20 j 07:16 20°**8**54'40 direct -10881 Aug 15 j 12:37 6°**I**27'44 2°35'05 -10887 Jul 18 j 06:19 22°**8**49'42 evening set conjunction 6°**Ⅲ**27'44 2°35'37 minimum elong -10881 Aug 15 j 12:36 -10887 Aug 02 j 07:22 23°**8**23'36 2°20'36 conjunction max. Earth dist. -10881 Aug 15 j 11:26 6°**Ц**27'37 31.26675 AU minimum elong -10887 Aug 02 j 07:21 23°**8**23'36 2°21'04 morning rise -10881 Aug 30 j 11:48 7°**Ⅱ**01'30 max. Earth dist. -10887 Aug 01 j 23:24 23°**8**22'51 31.29013 AU retrograde -10881 Nov 26 j 23:12 8°**Д**56'40 -10887 Aug 17 j 07:34 23°**8**57'25 -10880 Feb 15 j 04:44 7°**Ⅲ**33'42 2°46'37 morning rise opposition -10887 Nov 13 j 07:36 25°**8**51'51 -10880 Feb 15 j 04:32 7°**Ⅲ**33'43 29.26779 AU retrograde min. Earth dist. opposition -10886 Jan 31 j 22:33 24°**8**29'23 2°31'49 direct -10880 May 05 j 17:04 6°**Ⅱ**10′16 min. Earth dist. -10886 Feb 01 j 05:31 24°**8**28'55 29.29055 AU evening set -10880 Aug 01 j 22:24 8°**Ⅱ**04'37 direct -10886 Apr 22 j 18:55 23°**8**05'46 evening set -10886 Jul 20 j 15:33 25°**8**00'42 conjunction -10880 Aug 16 j 21:28 8°II38'22 2°36'44 minimum elong -10880 Aug 16 j 21:28 8°II38'22 2°37'16 conjunction max. Earth dist. -10880 Aug 16 j 21:09 8°**Д**38'20 31.26456 AU minimum elong morning rise -10880 Aug 31 j 20:40 9°**II**12'09 max. Earth dist. -10886 Aug 04 j 10:10 25° \(\begin{aligned}
 33'59 31.28686 AU \) retrograde -10880 Nov 28 j 11:09 11°**Д**07'28 morning rise -10886 Aug 19 j 16:12 26°**8**08'23 opposition -10879 Feb 16 j 17:44 9°**II**44'28 2°48'16 retrograde -10886 Nov 15 j 17:06 28° **8**02'55 min. Earth dist. -10879 Feb 16 j 17:25 9°**II**44'29 29.26596 AU opposition -10885 Feb 03 j 11:42 26°840'22 2°34'51 direct -10879 May 08 j 02:31 8°**Д**21'07 min. Earth dist. evening set -10879 Aug 04 j 07:24 10°**I**I15'25 -10885 Apr 25 j 08:11 25°**8**16'46 direct -10885 Jul 23 j 00:58 27°**8**11'35 -10879 Aug 19 j 06:25 10°II49'09 2°38'10 evening set conjunction -10879 Aug 19 j 06:25 10°II49'09 2°38'44 minimum elong -10885 Aug 07 j 01:17 27°845'25 2°26'17 max. Earth dist. -10879 Aug 19 j 07:50 10°**Д**49'17 31.26285 AU conjunction -10885 Aug 07 j 01:16 27°**8**45'25 2°26'46 -10879 Sep 03 j 05:30 11°**Д**22'56 minimum elong morning rise -10885 Aug 06 j 18:56 27°**8**44'49 31.28260 AU -10879 Nov 30 j 23:15 13°**Д**18'25 max. Earth dist. retrograde -10878 Feb 19 j 06:48 11°**Д**55'24 2°49'40 -10885 Aug 22 j 01:05 28°**8**19'13 morning rise opposition -10885 Oct 20 j 06:31 0°**Ⅱ** -10878 Feb 19 j 04:42 11°**Д**55'33 29.26419 AU min. Earth dist. -10885 Nov 18 j 04:19 0°**Д**13'51 -10878 May 10 j 15:12 10°**Ⅲ**32'08 retrograde direct -10885 Dec 17 j 18:40 30°R8 -10878 Aug 06 j 16:27 12°**Ⅲ**26'24 evening set -10884 Feb 06 j 00:38 28°**8**51'11 2°37'40 opposition -10884 Feb 06 j 05:34 28°\(250'52\) 29.28228 AU -10878 Aug 21 j 15:11 13°**I**I 00'08 2°39'22 min. Earth dist. conjunction direct -10884 Apr 26 j 19:49 27°**8**27'36 minimum elong -10878 Aug 21 j 15:11 13°**Д**00'08 2°39'55 evening set -10884 Jul 24 j 10:04 29°**8**22'18 max. Earth dist. -10878 Aug 21 j 16:41 13°**Д**00'16 31.26094 AU morning rise -10878 Sep 05 j 14:26 13°**Д**33'55 conjunction -10884 Aug 08 j 10:14 29°**8**56'07 2°28'48 retrograde -10878 Dec 03 j 13:14 15°**Ц**29'35 minimum elong -10884 Aug 08 j 10:13 29°**8**56'07 2°29'18 opposition -10877 Feb 21 j 20:03 14°**Д**06'32 2°50'50 max. Earth dist. -10884 Aug 08 j 05:53 29°**8**55'42 31.27788 AU min. Earth dist. -10877 Feb 21 j 17:26 14°**Д**06'42 29.26216 AU -10884 Aug 10 j 03:14 0°**П** -10877 May 13 j 01:42 12°**Д**43'20 direct morning rise -10884 Aug 23 j 09:43 0°**Д**29'54 -10877 Aug 09 j 01:33 14°**Д**37'32 evening set -10884 Nov 19 і 13:39 2°**Д**24'39 retrograde -10883 Feb 07 j 13:42 1°**Д**01'53 2°40'15 -10877 Aug 24 j 00:22 15°**II**11'17 2°40'20 opposition conjunction -10883 Feb 07 j 18:12 1°**Д**01'35 29.27762 AU -10877 Aug 24 j 00:22 15°**II**11'17 2°40'54 min. Earth dist. minimum elong -10883 Mar 22 j 15:13 30°R**8** -10877 Aug 24 j 03:43 15°**Д**11'36 31.25845 AU max. Earth dist. direct -10883 Apr 29 i 08:30 29°838'19 morning rise -10877 Sep 07 i 23:30 15° **1** 145'05 -10883 Jun 04 j 18:07 0°**Ⅱ** retrograde -10877 Dec 05 j 23:47 17°**Д**40'54 -10883 Jul 26 j 19:13 1°ДЗ2'54 opposition -10876 Feb 24 j 09:06 16° II 17'49 2°51'45 evening set min. Earth dist. -10876 Feb 24 j 05:40 16° **Д**18'02 29.25918 AU conjunction -10883 Aug 10 j 18:57 2°**I**I06'41 2°31'07 direct -10876 May 14 j 13:54 14°**Д**54'41 minimum elong -10883 Aug 10 j 18:56 2°**I**I06'41 2°31'38 evening set -10876 Aug 10 j 10:48 16°**Ц**48'50 max. Earth dist. -10883 Aug 10 j 14:59 2°Д06'19 31.27339 AU morning rise -10883 Aug 25 j 18:23 2°**Ц**40'28 conjunction -10876 Aug 25 j 09:25 17°**Ⅲ**22'34 2°41'04 -10883 Nov 22 j 01:12 4°**Д**35'20 -10876 Aug 25 j 09:24 17°**Д**22'34 2°41'38 retrograde minimum elong -10876 Aug 25 j 12:28 17°**Д**22'51 31.25493 AU -10882 Feb 10 j 02:38 3°**II**12'29 2°42'37 opposition max. Earth dist. -10882 Feb 10 j 04:58 3°**П**12'20 29.27349 AU -10876 Sep 09 j 08:48 17°**Д**56'23 min. Earth dist. morning rise -10882 May 01 j 19:41 -10876 Dec 07 j 12:25 19°**Д**52'21 direct 1°**Ⅱ**48'56 retrograde -10882 Jul 29 j 04:18 3°**Д**43'26 evening set opposition -10875 Feb 25 j 22:17 18°**Д**29'13 2°52'25 min. Earth dist. -10875 Feb 25 j 17:51 18°**Д**29'31 29.25509 AU conjunction -10882 Aug 13 j 03:50 4°**Ⅲ**17'12 2°33'13 direct -10875 May 17 j 01:27 17°**Д**06'09 minimum elong -10882 Aug 13 j 03:49 4°**Ⅱ**17'12 2°33'43 evening set -10875 Aug 12 j 19:51 19°**Ⅲ**00'12 max. Earth dist. -10882 Aug 13 j 01:30 4°**I**16′59 31.26954 AU

conjunction

-10875 Aug 27 j 18:34 19°**Ⅲ**33'57 2°41'34

-10882 Aug 28 j 03:04 4°**Д**50'59

morning rise

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minimum elong				uuntina atrila ia tha rica	r 10076 DCE in historical	accounting stri	la .
minimum elong	nical year style is used: The -10875 Aug 27 j 18:34			opposition		3°548'18	
_	-10875 Aug 27 j 18:34 -10875 Aug 27 j 23:16			min. Earth dist.	-10868 Mar 13 j 18:03		29.20730 AU
max. Earth dist.	0 3		31.23004 AU		-10868 Mar 13 j 07:06		29.20/30 AU
morning rise	-10875 Sep 11 j 17:56			direct	-10868 Jun 01 j 06:57	2° © 25'18 4° © 18'40	
retrograde	-10875 Dec 09 j 23:05		2052150	evening set	-10868 Aug 27 j 10:53	4 2018 40	
opposition	-10874 Feb 28 j 11:36			:	100/0 0 11:10.20	40@50100	2020120
min. Earth dist.	-10874 Feb 28 j 07:03		29.24952 AU	conjunction	-10868 Sep 11 j 10:38		
direct	-10874 May 19 j 14:17			minimum elong	-10868 Sep 11 j 10:39	4°552'29	31.20242 AU
evening set	-10874 Aug 15 j 05:04	21°Щ11'3/		max. Earth dist.	-10868 Sep 11 j 22:26		31.20242 AU
	10074 A 20:02.44	210 1 45122	2041151	morning rise	-10868 Sep 26 j 11:58	5° © 26'29 7° © 23'20	
conjunction minimum elong	-10874 Aug 30 j 03:44 -10874 Aug 30 j 03:44			retrograde	-10868 Dec 25 j 08:57 -10867 Mar 16 j 07:03	5° © 59'31	2040151
max. Earth dist.	-10874 Aug 30 j 08:29			opposition min. Earth dist.	-10867 Mar 16 j 07.03		29.20247 AU
morning rise	-10874 Aug 30 J 08:29 -10874 Sep 14 j 03:22		31.24394 AU	direct	-10867 Jun 03 j 18:45	4°936'36	29.20247 AU
retrograde	-10874 Dec 12 j 11:17			evening set	-10867 Aug 29 j 19:51	6°929'52	
opposition	-10873 Mar 03 j 00:46		2°53'00	evening set	-1000/ Aug 29 j 19.51	0 32932	
min. Earth dist.	-10873 Mar 03 j 00.40			conjunction	-10867 Sep 13 j 19:43	7° © 03'43	2037118
direct	-10873 May 22 j 01:40		29.24263 AU	minimum elong	-10867 Sep 13 j 19:44	7° 5 03'43	
evening set	-10873 Aug 17 j 14:05			max. Earth dist.	-10867 Sep 14 j 07:41		31.19805 AU
evening set	-106/3 Aug 1/ J 14.03	23 1122 36		morning rise	-10867 Sep 28 j 21:36	7°937'45	31.19803 AU
conjunction	-10873 Sep 01 j 12:53	23°∏56'44	2041154	retrograde	-10867 Dec 27 j 22:55	9° 9 34'44	
minimum elong	-10873 Sep 01 j 12:53			opposition	-10867 Dec 27 j 22:33 -10866 Mar 18 j 20:08	8°9510'53	2017117
max. Earth dist.	-10873 Sep 01 j 12:33			min. Earth dist.	-10866 Mar 18 j 06:40		29.19835 AU
morning rise	-10873 Sep 01 j 18:42 -10873 Sep 16 j 12:44		31.23007 AU	direct	-10866 Jun 06 j 05:50	6°9548'01	29.19633 AU
retrograde	-10873 Dec 14 j 21:01			evening set	-10866 Sep 01 j 04:53	8°9341'14	
opposition	-10872 Mar 04 j 14:01		2°52'56	evening set	-10000 Sep 01 J 04.55	0 34114	
min. Earth dist.	-10872 Mar 04 j 07:56			conjunction	-10866 Sep 16 j 05:10	9° © 15'06	2°35'43
direct	-10872 May 23 j 12:51		29.23319 AU	minimum elong	-10866 Sep 16 j 05:11		
evening set	-10872 Aug 18 j 23:07			max. Earth dist.	-10866 Sep 16 j 18:58		31.19402 AU
evening set	-100/2 Aug 10 j 25.0/	23 113413		morning rise	-10866 Oct 01 j 07:24	9° 5 49'11	31.17402 AO
conjunction	-10872 Sep 02 j 22:02	26°∏08'00	2°41'43	retrograde	-10866 Dec 30 j 10:47		
minimum elong	-10872 Sep 02 j 22:02 -10872 Sep 02 j 22:02		2°42'18	opposition	-10865 Mar 21 j 09:13		2°45'29
max. Earth dist.	-10872 Sep 02 j 22:02			min. Earth dist.	-10865 Mar 20 j 19:32		
morning rise	-10872 Sep 17 j 22:05		31.22001110	direct	-10865 Jun 08 j 17:55	8°959'36	29.19 .20 110
retrograde	-10872 Dec 16 j 08:22			evening set	-10865 Sep 03 j 14:03		
opposition	-10871 Mar 07 j 02:55		2°52'37	evening sec	10002 Бер 03 ј 11.03	10 32 13	
min. Earth dist.	-10871 Mar 06 j 18:50			conjunction	-10865 Sep 18 j 14:39	11° © 26'39	2°33'55
direct	-10871 May 25 j 23:43			minimum elong	-10865 Sep 18 j 14:39		2°34'32
evening set	-10871 Aug 21 j 08:08			max. Earth dist.	-10865 Sep 19 j 04:42		
* · · · · · · · · · · · · · · · · · · ·				morning rise	-10865 Oct 03 j 17:26		
conjunction	-10871 Sep 05 j 07:05	28° Ⅱ 19'11	2°41'17	retrograde	-10864 Jan 01 j 23:47		
minimum elong	-10871 Sep 05 j 07:06			opposition	3		
max. Earth dist.	1 3				-10864 Mar 22 j 22:14	12°934'06	2°43'25
	-10871 Sep 05 i 14:36	28° Ⅱ 19'54	31.22094 AU		-10864 Mar 22 j 22:14 -10864 Mar 22 j 06:59		
morning rise	-10871 Sep 05 j 14:36 -10871 Sep 20 j 07:30		31.22094 AU	min. Earth dist.	-10864 Mar 22 j 06:59	12° © 35'08	
morning rise	-10871 Sep 20 j 07:30		31.22094 AU	min. Earth dist.	-10864 Mar 22 j 06:59 -10864 Jun 10 j 04:54	12°935'08 11°911'21	
morning rise	-10871 Sep 20 j 07:30 -10871 Oct 23 j 20:36	28°II53'06 0°ഇ	31.22094 AU	min. Earth dist.	-10864 Mar 22 j 06:59	12°935'08 11°911'21	
	-10871 Sep 20 j 07:30	28°II53'06 0°© 0°©49'37	31.22094 AU	min. Earth dist.	-10864 Mar 22 j 06:59 -10864 Jun 10 j 04:54	12°\$35'08 11°\$11'21 13°\$04'27	29.18986 AU
	-10871 Sep 20 j 07:30 -10871 Oct 23 j 20:36 -10871 Dec 18 j 20:14	28°II53'06 0°© 0°©49'37 30°RII		min. Earth dist. direct evening set	-10864 Mar 22 j 06:59 -10864 Jun 10 j 04:54 -10864 Sep 04 j 23:20	12°\$35'08 11°\$11'21 13°\$04'27 13°\$38'23	29.18986 AU
retrograde	-10871 Sep 20 j 07:30 -10871 Oct 23 j 20:36 -10871 Dec 18 j 20:14 -10870 Feb 16 j 01:11	28°耳53'06 0°\$ 0°\$49'37 30°R耳 29°耳26'01	2°52'03	min. Earth dist. direct evening set conjunction	-10864 Mar 22 j 06:59 -10864 Jun 10 j 04:54 -10864 Sep 04 j 23:20 -10864 Sep 20 j 00:17	12°\$35'08 11°\$11'21 13°\$04'27 13°\$38'23 13°\$38'23	29.18986 AU 2°31'53 2°32'28
retrograde opposition	-10871 Sep 20 j 07:30 -10871 Oct 23 j 20:36 -10871 Dec 18 j 20:14 -10870 Feb 16 j 01:11 -10870 Mar 09 j 16:07	28° \$\Pi\$53'06 0° \$\Pi\$ 0° \$\Pi\$49'37 30° \$\Pi\$ \$\Pi\$ 29° \$\Pi\$26'01 29° \$\Pi\$26'34	2°52'03	min. Earth dist. direct evening set conjunction minimum elong	-10864 Mar 22 j 06:59 -10864 Jun 10 j 04:54 -10864 Sep 04 j 23:20 -10864 Sep 20 j 00:17 -10864 Sep 20 j 00:17	12°\$35'08 11°\$11'21 13°\$04'27 13°\$38'23 13°\$38'23 13°\$39'47	29.18986 AU 2°31'53 2°32'28
retrograde opposition min. Earth dist.	-10871 Sep 20 j 07:30 -10871 Oct 23 j 20:36 -10871 Dec 18 j 20:14 -10870 Feb 16 j 01:11 -10870 Mar 09 j 16:07 -10870 Mar 09 j 07:52	28° \$\Pi\$53'06 0° \$\Pi\$ 0° \$\Pi\$49'37 30° \$\Pi\$ \$\Pi\$ 29° \$\Pi\$26'01 29° \$\Pi\$26'34 28° \$\Pi\$02'59	2°52'03	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-10864 Mar 22 j 06:59 -10864 Jun 10 j 04:54 -10864 Sep 04 j 23:20 -10864 Sep 20 j 00:17 -10864 Sep 20 j 00:17 -10864 Sep 20 j 15:06	12°\$35'08 11°\$11'21 13°\$04'27 13°\$38'23 13°\$38'23 13°\$39'47 14°\$12'33	29.18986 AU 2°31'53 2°32'28
retrograde opposition min. Earth dist. direct	-10871 Sep 20 j 07:30 -10871 Oct 23 j 20:36 -10871 Dec 18 j 20:14 -10870 Feb 16 j 01:11 -10870 Mar 09 j 16:07 -10870 Mar 09 j 07:52 -10870 May 28 j 09:29	28° \$\Pi\$53'06 0° \$\Sigma\$ 0° \$\Sigma49'37 30° \$\RII\$ 29° \$\PI\$26'01 29° \$\PI\$26'34 28° \$\PI\$02'59 29° \$\PI\$56'30	2°52'03	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-10864 Mar 22 j 06:59 -10864 Jun 10 j 04:54 -10864 Sep 04 j 23:20 -10864 Sep 20 j 00:17 -10864 Sep 20 j 00:17 -10864 Sep 20 j 15:06 -10864 Oct 05 j 03:32	12°\$35'08 11°\$11'21 13°\$04'27 13°\$38'23 13°\$38'23 13°\$39'47 14°\$12'33 16°\$09'54	29.18986 AU 2°31'53 2°32'28 31.18502 AU
retrograde opposition min. Earth dist. direct	-10871 Sep 20 j 07:30 -10871 Oct 23 j 20:36 -10871 Dec 18 j 20:14 -10870 Feb 16 j 01:11 -10870 Mar 09 j 16:07 -10870 Mar 09 j 07:52 -10870 May 28 j 09:29 -10870 Aug 23 j 16:56	28° \$\Pi\$53'06 0° \$\Sigma\$ 0° \$\Sigma49'37 30° \$\RII\$ 29° \$\PI\$26'01 29° \$\PI\$26'34 28° \$\PI\$02'59 29° \$\PI\$56'30	2°52'03	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-10864 Mar 22 j 06:59 -10864 Jun 10 j 04:54 -10864 Sep 04 j 23:20 -10864 Sep 20 j 00:17 -10864 Sep 20 j 00:17 -10864 Sep 20 j 15:06 -10864 Oct 05 j 03:32 -10863 Jan 03 j 10:31	12°\$35'08 11°\$11'21 13°\$04'27 13°\$38'23 13°\$38'23 13°\$39'47 14°\$12'33 16°\$09'54 14°\$45'57	29.18986 AU 2°31'53 2°32'28 31.18502 AU 2°41'08
retrograde opposition min. Earth dist. direct	-10871 Sep 20 j 07:30 -10871 Oct 23 j 20:36 -10871 Dec 18 j 20:14 -10870 Feb 16 j 01:11 -10870 Mar 09 j 16:07 -10870 Mar 09 j 07:52 -10870 May 28 j 09:29 -10870 Aug 23 j 16:56	28° \$\Pi\$53'06 0° \$\Sigma\$ 0° \$\Sigma49'37 30° \$\RII\$ 29° \$\PI\$26'01 29° \$\PI\$26'34 28° \$\PI\$02'59 29° \$\PI\$56'30	2°52'03 29.21967 AU	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-10864 Mar 22 j 06:59 -10864 Jun 10 j 04:54 -10864 Sep 04 j 23:20 -10864 Sep 20 j 00:17 -10864 Sep 20 j 00:17 -10864 Sep 20 j 15:06 -10864 Oct 05 j 03:32 -10863 Jan 03 j 10:31 -10863 Mar 25 j 11:18	12°S35'08 11°S11'21 13°S04'27 13°S38'23 13°S38'23 13°S39'47 14°S12'33 16°S09'54 14°S45'57 14°S46'57	29.18986 AU 2°31'53 2°32'28 31.18502 AU 2°41'08
opposition min. Earth dist. direct evening set	-10871 Sep 20 j 07:30 -10871 Oct 23 j 20:36 -10871 Dec 18 j 20:14 -10870 Feb 16 j 01:11 -10870 Mar 09 j 16:07 -10870 Mar 09 j 07:52 -10870 May 28 j 09:29 -10870 Aug 23 j 16:56 -10870 Aug 25 j 06:44	28° \$\Pi\$53'06 0° \$\Sigma\$0 \text{ \$\color{\text{8}}\$ \text{ \$\color{\text{9}}\$ \text{ \$\color{\text{8}}\$ \text{ \$\color{\text{9}}\$ \text{ \$\color{\text{8}}\$ \$\color{	2°52'03 29.21967 AU 2°40'39	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-10864 Mar 22 j 06:59 -10864 Jun 10 j 04:54 -10864 Sep 04 j 23:20 -10864 Sep 20 j 00:17 -10864 Sep 20 j 00:17 -10864 Sep 20 j 15:06 -10864 Oct 05 j 03:32 -10863 Jan 03 j 10:31 -10863 Mar 25 j 11:18 -10863 Mar 24 j 20:27	12°S35'08 11°S11'21 13°S04'27 13°S38'23 13°S38'23 13°S39'47 14°S12'33 16°S09'54 14°S45'57 14°S46'57 13°S23'15	29.18986 AU 2°31'53 2°32'28 31.18502 AU 2°41'08
retrograde opposition min. Earth dist. direct evening set conjunction	-10871 Sep 20 j 07:30 -10871 Oct 23 j 20:36 -10871 Dec 18 j 20:14 -10870 Feb 16 j 01:11 -10870 Mar 09 j 16:07 -10870 Mar 09 j 07:52 -10870 May 28 j 09:29 -10870 Aug 23 j 16:56 -10870 Aug 25 j 06:44 -10870 Sep 07 j 16:12	28° II 53'06 0° S 0° S49'37 30° R II 29° II 26'01 29° II 26'34 28° II 02'59 29° II 56'30 0° S 0° S30'17 0° S30'17	2°52'03 29.21967 AU 2°40'39	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-10864 Mar 22 j 06:59 -10864 Jun 10 j 04:54 -10864 Sep 04 j 23:20 -10864 Sep 20 j 00:17 -10864 Sep 20 j 00:17 -10864 Sep 20 j 15:06 -10864 Oct 05 j 03:32 -10863 Jan 03 j 10:31 -10863 Mar 25 j 11:18 -10863 Mar 24 j 20:27 -10863 Jun 12 j 15:53	12°S35'08 11°S11'21 13°S04'27 13°S38'23 13°S38'23 13°S39'47 14°S12'33 16°S09'54 14°S45'57 14°S46'57 13°S23'15	29.18986 AU 2°31'53 2°32'28 31.18502 AU 2°41'08
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-10871 Sep 20 j 07:30 -10871 Oct 23 j 20:36 -10871 Dec 18 j 20:14 -10870 Feb 16 j 01:11 -10870 Mar 09 j 16:07 -10870 Mar 09 j 07:52 -10870 May 28 j 09:29 -10870 Aug 23 j 16:56 -10870 Aug 25 j 06:44 -10870 Sep 07 j 16:12 -10870 Sep 07 j 16:12	28° II 53'06 0° S 0° S49'37 30° R II 29° II 26'01 29° II 26'34 28° II 02'59 29° II 56'30 0° S 0° S30'17 0° S30'17	2°52'03 29.21967 AU 2°40'39 2°41'14	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-10864 Mar 22 j 06:59 -10864 Jun 10 j 04:54 -10864 Sep 04 j 23:20 -10864 Sep 20 j 00:17 -10864 Sep 20 j 00:17 -10864 Sep 20 j 15:06 -10864 Oct 05 j 03:32 -10863 Jan 03 j 10:31 -10863 Mar 25 j 11:18 -10863 Mar 24 j 20:27 -10863 Jun 12 j 15:53	12°S35'08 11°S11'21 13°S04'27 13°S38'23 13°S38'23 13°S39'47 14°S12'33 16°S09'54 14°S45'57 14°S46'57 13°S23'15 15°S16'17	2°31'53 2°32'28 31.18502 AU 2°41'08 29.18445 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-10871 Sep 20 j 07:30 -10871 Oct 23 j 20:36 -10871 Dec 18 j 20:14 -10870 Feb 16 j 01:11 -10870 Mar 09 j 16:07 -10870 Mar 09 j 07:52 -10870 May 28 j 09:29 -10870 Aug 23 j 16:56 -10870 Aug 25 j 06:44 -10870 Sep 07 j 16:12 -10870 Sep 08 j 01:42	28° II 53'06 0° S 0° S49'37 30° R II 29° II 26'01 29° II 26'34 28° II 02'59 29° II 56'30 0° S 0° S30'17 0° S30'17 0° S31'11	2°52'03 29.21967 AU 2°40'39 2°41'14 31.21378 AU	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-10864 Mar 22 j 06:59 -10864 Jun 10 j 04:54 -10864 Sep 04 j 23:20 -10864 Sep 20 j 00:17 -10864 Sep 20 j 00:17 -10864 Sep 20 j 15:06 -10864 Oct 05 j 03:32 -10863 Jan 03 j 10:31 -10863 Mar 24 j 20:27 -10863 Jun 12 j 15:53 -10863 Sep 07 j 08:40	12°S35'08 11°S11'21 13°S04'27 13°S38'23 13°S38'23 13°S39'47 14°S12'33 16°S09'54 14°S45'57 14°S46'57 13°S23'15 15°S16'17	29.18986 AU 2°31'53 2°32'28 31.18502 AU 2°41'08 29.18445 AU 2°29'38
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-10871 Sep 20 j 07:30 -10871 Oct 23 j 20:36 -10871 Dec 18 j 20:14 -10870 Feb 16 j 01:11 -10870 Mar 09 j 16:07 -10870 Mar 09 j 07:52 -10870 May 28 j 09:29 -10870 Aug 23 j 16:56 -10870 Aug 25 j 06:44 -10870 Sep 07 j 16:12 -10870 Sep 08 j 01:42 -10870 Sep 22 j 16:47	28° II 53'06 0° S 0° S49'37 30° R II 29° II 26'01 29° II 26'34 28° II 02'59 29° II 56'30 0° S30'17 0° S30'17 0° S31'11 1° S04'13	2°52'03 29.21967 AU 2°40'39 2°41'14	min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-10864 Mar 22 j 06:59 -10864 Jun 10 j 04:54 -10864 Sep 04 j 23:20 -10864 Sep 20 j 00:17 -10864 Sep 20 j 00:17 -10864 Sep 20 j 15:06 -10864 Oct 05 j 03:32 -10863 Jan 03 j 10:31 -10863 Mar 24 j 20:27 -10863 Jun 12 j 15:53 -10863 Sep 07 j 08:40 -10863 Sep 22 j 10:05	12°S35'08 11°S11'21 13°S04'27 13°S38'23 13°S39'47 14°S12'33 16°S09'54 14°S45'57 14°S46'57 13°S23'15 15°S16'17	29.18986 AU 2°31'53 2°32'28 31.18502 AU 2°41'08 29.18445 AU 2°29'38 2°30'14
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-10871 Sep 20 j 07:30 -10871 Oct 23 j 20:36 -10871 Dec 18 j 20:14 -10870 Feb 16 j 01:11 -10870 Mar 09 j 16:07 -10870 Mar 09 j 07:52 -10870 May 28 j 09:29 -10870 Aug 23 j 16:56 -10870 Aug 25 j 06:44 -10870 Sep 07 j 16:12 -10870 Sep 07 j 16:12 -10870 Sep 08 j 01:42 -10870 Sep 22 j 16:47 -10870 Dec 21 j 08:08	28° II 53'06 0° S 0° S49'37 30° RII 29° II 26'01 29° II 26'34 28° II 02'59 29° II 56'30 0° S 0° S 0° S 11'11 1° S 1° S	2°52'03 29.21967 AU 2°40'39 2°41'14 31.21378 AU	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	-10864 Mar 22 j 06:59 -10864 Jun 10 j 04:54 -10864 Sep 04 j 23:20 -10864 Sep 20 j 00:17 -10864 Sep 20 j 00:17 -10864 Sep 20 j 15:06 -10864 Oct 05 j 03:32 -10863 Jan 03 j 10:31 -10863 Mar 25 j 11:18 -10863 Mar 24 j 20:27 -10863 Jun 12 j 15:53 -10863 Sep 07 j 08:40 -10863 Sep 22 j 10:05 -10863 Sep 22 j 10:05	12°S35'08 11°S11'21 13°S04'27 13°S38'23 13°S39'47 14°S12'33 16°S09'54 14°S45'57 14°S46'57 13°S23'15 15°S16'17	29.18986 AU 2°31'53 2°32'28 31.18502 AU 2°41'08 29.18445 AU 2°29'38 2°30'14
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-10871 Sep 20 j 07:30 -10871 Oct 23 j 20:36 -10871 Dec 18 j 20:14 -10870 Feb 16 j 01:11 -10870 Mar 09 j 16:07 -10870 Mar 09 j 07:52 -10870 May 28 j 09:29 -10870 Aug 23 j 16:56 -10870 Aug 25 j 06:44 -10870 Sep 07 j 16:12 -10870 Sep 07 j 16:12 -10870 Sep 08 j 01:42 -10870 Sep 22 j 16:47 -10870 Dec 21 j 08:08 -10869 Mar 12 j 05:08 -10869 May 30 j 21:40	28° II 53'06 0° S49'37 30° RII 29° II 26'01 29° II 26'34 28° II 02'59 29° II 56'30 0° S30'17 0° S30'17 0° S31'11 1° S04'13 3° S00'50 1° S37'09 1° S37'50 0° S14'08	2°52'03 29.21967 AU 2°40'39 2°41'14 31.21378 AU 2°51'14	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 max. Earth dist. morning rise retrograde	-10864 Mar 22 j 06:59 -10864 Jun 10 j 04:54 -10864 Sep 04 j 23:20 -10864 Sep 20 j 00:17 -10864 Sep 20 j 00:17 -10864 Sep 20 j 15:06 -10864 Oct 05 j 03:32 -10863 Jan 03 j 10:31 -10863 Mar 25 j 11:18 -10863 Mar 24 j 20:27 -10863 Jun 12 j 15:53 -10863 Sep 07 j 08:40 -10863 Sep 22 j 10:05 -10863 Sep 22 j 10:05 -10863 Sep 23 j 01:42 -10863 Oct 07 j 13:48 -10862 Jan 05 j 22:59	12°@35'08 11°@11'21 13°@04'27 13°@38'23 13°@38'23 13°@39'47 14°@12'33 16°@09'54 14°@45'57 14°@46'57 13°@23'15 15°@50'15 15°@50'15 15°@51'44 16°@24'28 18°@21'55	29.18986 AU 2°31'53 2°32'28 31.18502 AU 2°41'08 29.18445 AU 2°29'38 2°30'14 31.17918 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-10871 Sep 20 j 07:30 -10871 Oct 23 j 20:36 -10871 Dec 18 j 20:14 -10870 Feb 16 j 01:11 -10870 Mar 09 j 16:07 -10870 Mar 09 j 07:52 -10870 May 28 j 09:29 -10870 Aug 23 j 16:56 -10870 Aug 25 j 06:44 -10870 Sep 07 j 16:12 -10870 Sep 07 j 16:12 -10870 Sep 08 j 01:42 -10870 Sep 22 j 16:47 -10870 Dec 21 j 08:08 -10869 Mar 12 j 05:08 -10869 Mar 11 j 18:54	28° II 53'06 0° S 0° S49'37 30° RII 29° II 26'01 29° II 26'34 28° II 02'59 29° II 56'30 0° S 0° S 0° S 11'11 1° S 1° S	2°52'03 29.21967 AU 2°40'39 2°41'14 31.21378 AU 2°51'14	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 max. Earth dist. morning rise	-10864 Mar 22 j 06:59 -10864 Jun 10 j 04:54 -10864 Sep 04 j 23:20 -10864 Sep 20 j 00:17 -10864 Sep 20 j 00:17 -10864 Sep 20 j 15:06 -10864 Oct 05 j 03:32 -10863 Jan 03 j 10:31 -10863 Mar 25 j 11:18 -10863 Mar 24 j 20:27 -10863 Jun 12 j 15:53 -10863 Sep 07 j 08:40 -10863 Sep 22 j 10:05 -10863 Sep 22 j 10:05 -10863 Sep 23 j 01:42 -10863 Oct 07 j 13:48 -10862 Jan 05 j 22:59 -10862 Mar 27 j 07:54	12°@35'08 11°@11'21 13°@04'27 13°@38'23 13°@38'23 13°@39'47 14°@12'33 16°@09'54 14°@45'57 14°@46'57 13°@23'15 15°@50'15 15°@50'15 15°@50'15 15°@51'44 16°@24'28 18°@21'55 16°@59'03	29.18986 AU 2°31'53 2°32'28 31.18502 AU 2°41'08 29.18445 AU 2°29'38 2°30'14 31.17918 AU 29.17787 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	-10871 Sep 20 j 07:30 -10871 Oct 23 j 20:36 -10871 Dec 18 j 20:14 -10870 Feb 16 j 01:11 -10870 Mar 09 j 16:07 -10870 Mar 09 j 07:52 -10870 May 28 j 09:29 -10870 Aug 23 j 16:56 -10870 Aug 25 j 06:44 -10870 Sep 07 j 16:12 -10870 Sep 07 j 16:12 -10870 Sep 08 j 01:42 -10870 Sep 22 j 16:47 -10870 Dec 21 j 08:08 -10869 Mar 12 j 05:08 -10869 May 30 j 21:40 -10869 Aug 26 j 02:00	28° II 53'06 0° S49'37 30° RII 29° II 26'01 29° II 26'34 28° II 02'59 29° II 56'30 0° S30'17 0° S30'17 0° S31'11 1° S04'13 3° S00'50 1° S37'09 1° S37'50 0° S14'08	2°52'03 29.21967 AU 2°40'39 2°41'14 31.21378 AU 2°51'14	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 max. Earth dist. morning rise retrograde min. Earth dist. morning rise retrograde min. Earth dist. opposition	-10864 Mar 22 j 06:59 -10864 Jun 10 j 04:54 -10864 Sep 04 j 23:20 -10864 Sep 20 j 00:17 -10864 Sep 20 j 00:17 -10864 Sep 20 j 15:06 -10864 Oct 05 j 03:32 -10863 Jan 03 j 10:31 -10863 Mar 25 j 11:18 -10863 Mar 24 j 20:27 -10863 Jun 12 j 15:53 -10863 Sep 07 j 08:40 -10863 Sep 22 j 10:05 -10863 Sep 22 j 10:05 -10863 Sep 23 j 01:42 -10863 Oct 07 j 13:48 -10862 Jan 05 j 22:59 -10862 Mar 27 j 07:54 -10862 Mar 28 j 00:20	12°S35'08 11°S11'21 13°S04'27 13°S38'23 13°S38'23 13°S39'47 14°S12'33 16°S09'54 14°S45'57 14°S46'57 13°S23'15 15°S50'15 15°S50'15 15°S51'44 16°S24'28 18°S21'55 16°S59'03 16°S57'56	29.18986 AU 2°31'53 2°32'28 31.18502 AU 2°41'08 29.18445 AU 2°29'38 2°30'14 31.17918 AU 29.17787 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	-10871 Sep 20 j 07:30 -10871 Oct 23 j 20:36 -10871 Dec 18 j 20:14 -10870 Feb 16 j 01:11 -10870 Mar 09 j 16:07 -10870 Mar 09 j 07:52 -10870 May 28 j 09:29 -10870 Aug 23 j 16:56 -10870 Aug 25 j 06:44 -10870 Sep 07 j 16:12 -10870 Sep 07 j 16:12 -10870 Sep 08 j 01:42 -10870 Sep 22 j 16:47 -10870 Dec 21 j 08:08 -10869 Mar 12 j 05:08 -10869 Mar 11 j 18:54 -10869 Aug 26 j 02:00 -10869 Sep 10 j 01:20	28° II 53'06 0° S 0° S49'37 30° RII 29° II 26'01 29° II 26'34 28° II 02'59 29° II 56'30 0° S 0° S30'17 0° S30'17 0° S31'11 1° S04'13 3° S00'50 1° S37'09 1° S37'50 0° S14'08 2° S07'34	2°52'03 29.21967 AU 2°40'39 2°41'14 31.21378 AU 2°51'14 29.21291 AU	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 max. Earth dist. morning rise retrograde min. Earth dist. opposition direct	-10864 Mar 22 j 06:59 -10864 Jun 10 j 04:54 -10864 Sep 04 j 23:20 -10864 Sep 20 j 00:17 -10864 Sep 20 j 00:17 -10864 Sep 20 j 15:06 -10864 Oct 05 j 03:32 -10863 Jan 03 j 10:31 -10863 Mar 25 j 11:18 -10863 Mar 24 j 20:27 -10863 Jun 12 j 15:53 -10863 Sep 07 j 08:40 -10863 Sep 22 j 10:05 -10863 Sep 22 j 10:05 -10863 Sep 23 j 01:42 -10863 Oct 07 j 13:48 -10862 Jan 05 j 22:59 -10862 Mar 27 j 07:54 -10862 Mar 28 j 00:20 -10862 Jun 15 j 02:59	12°S35'08 11°S11'21 13°S04'27 13°S38'23 13°S38'23 13°S39'47 14°S12'33 16°S09'54 14°S45'57 14°S46'57 13°S23'15 15°S50'15 15°S50'15 15°S50'15 15°S51'44 16°S24'28 18°S21'55 16°S59'03 16°S57'56 15°S35'16	29.18986 AU 2°31'53 2°32'28 31.18502 AU 2°41'08 29.18445 AU 2°29'38 2°30'14 31.17918 AU 29.17787 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-10871 Sep 20 j 07:30 -10871 Oct 23 j 20:36 -10871 Dec 18 j 20:14 -10870 Feb 16 j 01:11 -10870 Mar 09 j 16:07 -10870 Mar 09 j 07:52 -10870 May 28 j 09:29 -10870 Aug 23 j 16:56 -10870 Aug 25 j 06:44 -10870 Sep 07 j 16:12 -10870 Sep 07 j 16:12 -10870 Sep 08 j 01:42 -10870 Sep 22 j 16:47 -10870 Dec 21 j 08:08 -10869 Mar 12 j 05:08 -10869 May 30 j 21:40 -10869 Sep 10 j 01:20 -10869 Sep 10 j 01:20	28°II.53'06 0°S 0°S49'37 30°RII 29°II.26'01 29°II.26'34 28°II.02'59 29°II.56'30 0°S 0°S30'17 0°S30'17 0°S31'11 1°S04'13 3°S00'50 1°S37'09 1°S37'50 0°S14'08 2°S07'34	2°52'03 29.21967 AU 2°40'39 2°41'14 31.21378 AU 2°51'14 29.21291 AU 2°39'46 2°40'22	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 max. Earth dist. morning rise retrograde min. Earth dist. morning rise retrograde min. Earth dist. opposition	-10864 Mar 22 j 06:59 -10864 Jun 10 j 04:54 -10864 Sep 04 j 23:20 -10864 Sep 20 j 00:17 -10864 Sep 20 j 00:17 -10864 Sep 20 j 15:06 -10864 Oct 05 j 03:32 -10863 Jan 03 j 10:31 -10863 Mar 25 j 11:18 -10863 Mar 24 j 20:27 -10863 Jun 12 j 15:53 -10863 Sep 07 j 08:40 -10863 Sep 22 j 10:05 -10863 Sep 22 j 10:05 -10863 Sep 23 j 01:42 -10863 Oct 07 j 13:48 -10862 Jan 05 j 22:59 -10862 Mar 27 j 07:54 -10862 Mar 28 j 00:20	12°S35'08 11°S11'21 13°S04'27 13°S38'23 13°S38'23 13°S39'47 14°S12'33 16°S09'54 14°S45'57 14°S46'57 13°S23'15 15°S50'15 15°S50'15 15°S50'15 15°S51'44 16°S24'28 18°S21'55 16°S59'03 16°S57'56 15°S35'16	29.18986 AU 2°31'53 2°32'28 31.18502 AU 2°41'08 29.18445 AU 2°29'38 2°30'14 31.17918 AU 29.17787 AU
retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-10871 Sep 20 j 07:30 -10871 Oct 23 j 20:36 -10871 Dec 18 j 20:14 -10870 Feb 16 j 01:11 -10870 Mar 09 j 16:07 -10870 Mar 09 j 07:52 -10870 May 28 j 09:29 -10870 Aug 23 j 16:56 -10870 Aug 25 j 06:44 -10870 Sep 07 j 16:12 -10870 Sep 07 j 16:12 -10870 Sep 08 j 01:42 -10870 Sep 22 j 16:47 -10870 Dec 21 j 08:08 -10869 Mar 12 j 05:08 -10869 Mar 11 j 18:54 -10869 Aug 26 j 02:00 -10869 Sep 10 j 01:20 -10869 Sep 10 j 01:20 -10869 Sep 10 j 10:59	28° II 53'06 0° S 0° S49'37 30° RII 29° II 26'01 29° II 26'34 28° II 02'59 29° II 56'30 0° S 0° S30'17 0° S30'17 0° S30'17 1° S04'13 3° S00'50 1° S37'09 1° S37'50 0° S14'08 2° S07'34 2° S41'21 2° S41'21 2° S42'16	2°52'03 29.21967 AU 2°40'39 2°41'14 31.21378 AU 2°51'14 29.21291 AU	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 max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set	-10864 Mar 22 j 06:59 -10864 Jun 10 j 04:54 -10864 Sep 04 j 23:20 -10864 Sep 20 j 00:17 -10864 Sep 20 j 00:17 -10864 Sep 20 j 15:06 -10864 Oct 05 j 03:32 -10863 Jan 03 j 10:31 -10863 Mar 25 j 11:18 -10863 Mar 24 j 20:27 -10863 Jun 12 j 15:53 -10863 Sep 07 j 08:40 -10863 Sep 22 j 10:05 -10863 Sep 22 j 10:05 -10863 Sep 23 j 01:42 -10863 Oct 07 j 13:48 -10862 Jan 05 j 22:59 -10862 Mar 28 j 00:20 -10862 Jun 15 j 02:59 -10862 Sep 09 j 18:04	12°S35'08 11°S11'21 13°S04'27 13°S38'23 13°S38'23 13°S39'47 14°S12'33 16°S09'54 14°S46'57 13°S23'15 15°S16'17 15°S50'15 15°S50'15 15°S51'44 16°S24'28 18°S21'55 16°S59'03 16°S57'56 15°S35'16 17°S28'13	29.18986 AU 2°31'53 2°32'28 31.18502 AU 2°41'08 29.18445 AU 2°29'38 2°30'14 31.17918 AU 29.17787 AU 2°38'36
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	-10871 Sep 20 j 07:30 -10871 Oct 23 j 20:36 -10871 Dec 18 j 20:14 -10870 Feb 16 j 01:11 -10870 Mar 09 j 16:07 -10870 Mar 09 j 07:52 -10870 May 28 j 09:29 -10870 Aug 23 j 16:56 -10870 Aug 25 j 06:44 -10870 Sep 07 j 16:12 -10870 Sep 07 j 16:12 -10870 Sep 08 j 01:42 -10870 Sep 22 j 16:47 -10870 Dec 21 j 08:08 -10869 Mar 12 j 05:08 -10869 May 30 j 21:40 -10869 Sep 10 j 01:20 -10869 Sep 10 j 01:20	28°II.53'06 0°S 0°S49'37 30°RII 29°II.26'01 29°II.26'34 28°II.02'59 29°II.56'30 0°S 0°S30'17 0°S30'17 0°S31'11 1°S04'13 3°S00'50 1°S37'09 1°S37'50 0°S14'08 2°S07'34	2°52'03 29.21967 AU 2°40'39 2°41'14 31.21378 AU 2°51'14 29.21291 AU 2°39'46 2°40'22	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 max. Earth dist. morning rise retrograde min. Earth dist. opposition direct	-10864 Mar 22 j 06:59 -10864 Jun 10 j 04:54 -10864 Sep 04 j 23:20 -10864 Sep 20 j 00:17 -10864 Sep 20 j 00:17 -10864 Sep 20 j 15:06 -10864 Oct 05 j 03:32 -10863 Jan 03 j 10:31 -10863 Mar 25 j 11:18 -10863 Mar 24 j 20:27 -10863 Jun 12 j 15:53 -10863 Sep 07 j 08:40 -10863 Sep 22 j 10:05 -10863 Sep 22 j 10:05 -10863 Sep 23 j 01:42 -10863 Oct 07 j 13:48 -10862 Jan 05 j 22:59 -10862 Mar 27 j 07:54 -10862 Mar 28 j 00:20 -10862 Jun 15 j 02:59	12°S35'08 11°S11'21 13°S04'27 13°S38'23 13°S39'47 14°S12'33 16°S09'54 14°S45'57 14°S46'57 13°S23'15 15°S50'15 15°S50'15 15°S50'15 15°S51'44 16°S24'28 18°S21'55 16°S59'03 16°S57'56 15°S35'16 17°S28'13	29.18986 AU 2°31'53 2°32'28 31.18502 AU 2°41'08 29.18445 AU 2°29'38 2°30'14 31.17918 AU 29.17787 AU

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10862 in astronomical counting style is the year 10863 BCE in historical counting style. -10862 Sep 25 j 11:27 18°\$03'42 31.17195 AU min. Earth dist. -10855 Apr 11 j 20:58 2°Ω23'30 29.11611 AU max. Earth dist. -10862 Oct 10 j 00:15 18°536'29 direct -10855 Jun 30 j 07:30 0°Ω59'23 morning rise -10861 Jan 08 j 11:16 20°534'03 evening set -10855 Sep 24 j 12:05 2°**Ω**51'48 retrograde -10861 Mar 30 j 13:32 19°509'59 2°35'51 opposition -10861 Mar 29 j 21:35 19°5511'04 29.16997 AU -10855 Oct 09 j 17:46 $3^{\circ}\Omega$ 26'07 $2^{\circ}04'07$ min. Earth dist. conjunction -10861 Jun 17 j 12:46 17°5547'19 -10855 Oct 09 j 17:47 3°**Ω**26'07 2°04'40 direct minimum elong -10861 Sep 12 j 03:27 19°540'11 -10855 Oct 10 j 15:05 evening set max. Earth dist. 3°**Ω**28'08 31.11109 AU -10855 Oct 25 j 02:47 morning rise 4°**Ω**00'45 -10861 Sep 27 j 05:51 20°514'14 2°24'28 conjunction retrograde -10854 Jan 24 j 03:58 5° **Ω**58'50 -10861 Sep 27 j 05:52 20°5014'14 2°25'04 minimum elong min. Earth dist. -10854 Apr 14 j 09:58 4° **Ω**35'42 29.10960 AU -10861 Sep 27 j 22:50 20°515'50 31.16350 AU max. Earth dist. opposition -10854 Apr 15 j 07:05 4°**Ω**34'16 2°10'28 -10861 Oct 12 j 10:44 20°548'32 -10854 Jul 02 j 18:37 morning rise direct 3°**£**11'38 -10860 Jan 10 j 23:12 22°546'10 -10854 Sep 26 j 21:37 retrograde evening set 5°**Ω**04'00 min. Earth dist. -10860 Mar 31 j 09:07 21°523'12 29.16082 AU opposition -10860 Apr 01 j 02:18 21°522'02 2°32'52 conjunction -10854 Oct 12 j 04:03 5° Ω 38'23 2°00'03 direct -10860 Jun 19 j 00:35 19°559'22 minimum elong -10854 Oct 12 j 04:04 5°**Ω**38'23 2°00'33 evening set -10860 Sep 13 j 12:57 21°552'09 max. Earth dist. -10854 Oct 13 j 02:29 5° Ω 40'30 31.10505 AU morning rise -10854 Oct 27 j 13:46 6° **Ω**13'04 conjunction -10860 Sep 28 j 15:42 22°526'14 2°21'35 retrograde -10853 Jan 26 j 17:28 $8^{\circ}\Omega$ 11'14 minimum elong -10860 Sep 28 j 15:43 22°526'14 2°22'09 opposition -10853 Apr 17 j 19:43 $6^{\circ}\Omega 46'39$ $2^{\circ}06'01$ max. Earth dist. -10860 Sep 29 j 08:13 22°527'48 31.15402 AU min. Earth dist. -10853 Apr 16 j 20:57 6°**Ω**48'12 29.10358 AU morning rise -10860 Oct 13 j 21:23 23°500'35 direct -10853 Jul 05 i 05:58 5°**Ω**24'04 retrograde -10859 Jan 12 i 12:59 24°558'18 evening set -10853 Sep 29 j 07:32 7° **Ω**16'24 opposition -10859 Apr 03 j 15:17 23°\$34'04 2°29'40 min. Earth dist. -10859 Apr 02 j 21:56 23°535'14 29.15105 AU conjunction -10853 Oct 14 i 14:29 $7^{\circ}\Omega$ 50'50 1° 55'47 -10859 Jun 21 j 09:48 22°511'22 -10853 Oct 14 j 14:30 $7^{\circ}\Omega$ 50'50 1° 56'18 direct minimum elong -10859 Sep 15 j 22:08 24°504'04 max. Earth dist. -10853 Oct 15 j 12:52 $7^{\circ}\Omega$ 52'57 31.09911 AU evening set -10853 Oct 30 j 01:04 8°**\O25**'35 morning rise -10859 Oct 01 j 01:34 24°538'11 2°18'29 -10852 Jan 29 j 05:14 10°**Ω**23'50 conjunction retrograde -10859 Oct 01 j 01:34 24°538'11 2°19'04 -10852 Apr 18 j 10:13 9° Ω 00'45 29.09757 AU minimum elong min. Earth dist. -10859 Oct 01 j 19:57 24°539'56 31.14415 AU -10852 Apr 19 j 08:19 8°**Ω**59'14 2°01'23 max. Earth dist. opposition -10859 Oct 16 j 07:43 25°512'36 -10852 Jul 06 j 15:22 7°**Ω**36'41 direct morning rise -10858 Jan 15 j 00:21 27°510'22 -10852 Sep 30 j 17:25 9°**Ω**28'59 retrograde evening set -10858 Apr 05 j 09:52 25°547'17 29.14112 AU min. Earth dist. -10852 Oct 16 j 01:10 10° Ω 03'28 1°51'22 -10858 Apr 06 j 04:10 25°546'02 2°26'15 opposition conjunction -10852 Oct 16 j 01:11 10° Ω 03'28 1°51'51 -10858 Jun 23 j 21:39 24°523'21 direct minimum elong -10858 Sep 18 j 07:38 26°515'57 -10852 Oct 17 j 00:54 10° Ω 05'42 31.09300 AU evening set max. Earth dist. morning rise -10852 Oct 31 j 12:20 10° **Ω**38'17 conjunction -10858 Oct 03 j 11:29 26°550'07 2°15'11 retrograde -10851 Jan 30 j 16:59 12°**Ω**36'36 minimum elong -10858 Oct 03 j 11:30 26°550'07 2°15'44 opposition -10851 Apr 21 j 20:56 11°Ω11'59 1°56'33 max. Earth dist. -10858 Oct 04 j 05:50 26°951'51 31.13459 AU min. Earth dist. -10851 Apr 20 j 21:44 11°**Ω**13'34 29.09099 AU -10858 Oct 18 j 18:27 27°524'34 -10851 Jul 09 j 02:35 9°**Ω**49'28 morning rise direct -10857 Jan 17 j 14:59 29°522'24 -10851 Oct 03 j 03:27 11° **Ω**41'44 retrograde evening set -10857 Apr 08 j 16:55 27°557'59 2°22'37 opposition -10857 Apr 07 j 21:35 27°559'18 29.13190 AU conjunction -10851 Oct 18 j 11:44 12° Ω 16'15 1°46'46 min. Earth dist. -10851 Oct 18 j 11:45 12° Ω 16'15 1°47'15 direct -10857 Jun 26 j 08:43 26°535'17 minimum elong -10851 Oct 19 j 10:43 12° Ω 18'26 31.08610 AU evening set -10857 Sep 20 j 17:03 28°\$27'49 max. Earth dist. -10851 Nov 02 j 23:50 $12^{\circ}\Omega$ 51'08 morning rise -10857 Oct 05 j 21:35 29°502'02 2°11'41 -10850 Feb 02 i 06:45 $14^{\circ}\Omega 49'33$ conjunction retrograde minimum elong -10857 Oct 05 i 21:36 29°502'02 2°12'15 min. Earth dist. -10850 Apr 23 j 10:48 $13^{\circ}\Omega$ 26'27 29.08356 AU max. Earth dist. -10857 Oct 06 j 17:35 29°503'56 31.12574 AU opposition $-10850 \text{ Apr } 24 \text{ j } 09:43 \quad 13^{\circ} \Omega 24'52 \quad 1^{\circ}51'33$ -10857 Oct 21 j 05:08 29°536'33 direct -10850 Jul 11 j 11:13 12° **Ω**02'21 morning rise -10857 Nov 01 j 01:38 0°Ω -10850 Oct 05 j 13:39 13° **Ω**54'35 evening set retrograde -10856 Jan 20 j 03:16 1°**Ω**34'28 -10856 Apr 09 j 10:04 -10850 Oct 20 j 22:47 14° Ω 29'10 1°42'00 min. Earth dist. 0°**Ω**11'19 29.12347 AU conjunction opposition -10856 Apr 10 j 05:41 $0^{\circ}\Omega$ 09'58 2° 18'47 minimum elong -10850 Oct 20 j 22:48 $14^{\circ}\Omega$ 29'10 $1^{\circ}42'28$ -10856 Apr 16 j 08:18 30°Rூ max. Earth dist. -10850 Oct 21 j 22:59 14° Ω 31'27 31.07808 AU -10856 Jun 27 j 20:38 28°547'17 -10850 Nov 03 j 15:09 15°**Ω** direct -10856 Sep 03 j 05:09 $0^{\circ}\Omega$ morning rise -10850 Nov 05 j 11:30 15° **Ω**04'06 -10856 Sep 22 j 02:31 $0^{\circ} \Omega 39'45$ -10849 Feb 04 j 18:53 17°**Ω**02'33 evening set retrograde -10849 Apr 26 j 22:15 15° **Ω**37'50 1°46'23 opposition conjunction -10856 Oct 07 j 07:36 1°Ω14'01 2°08'00 min. Earth dist. -10849 Apr 25 j 23:04 $15^{\circ}\Omega$ 39'25 29.07476 AU minimum elong -10856 Oct 07 j 07:37 1°Ω14'01 2°08'32 -10849 May 20 j 18:35 15°R**Ω** max. Earth dist. -10856 Oct 08 j 04:03 1°**Ω**15'57 31.11796 AU direct -10849 Jul 13 j 23:00 14°Ω15'17 morning rise -10856 Oct 22 j 15:53 1°**Ω**48'35 -10849 Sep 03 j 17:57 15°**Ω** -10855 Jan 21 j 16:28 3°**Ω**46'35 -10849 Oct 08 j 00:01 16° **Ω**07'28 retrograde evening set

-10855 Apr 12 j 18:18 2°Ω22'03 2°14'44

opposition

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10849 in astronomical counting style is the year 10850 BCE in historical counting style. $-10849 \text{ Oct } 23 \text{ j } 09:46 \ 16^{\circ} \Omega 42'06 \ 1^{\circ} 37'06$ retrograde -10842 Feb 20 i 12:53 2° m 32'26 conjunction -10849 Oct 23 j 09:47 $16^{\circ}\Omega$ 42'06 $1^{\circ}37'34$ min. Earth dist. -10842 May 11 j 10:33 1° Mp 09'00 29.00447 AU minimum elong 1°Mp07'13 1°06'17 -10849 Oct 24 j 09:09 $16^{\circ}\Omega$ 44'18 31.06879 AU -10842 May 12 j 12:13 max. Earth dist. opposition -10849 Nov 07 j 23:25 17° **Ω**17'06 -10842 Jun 28 j 13:42 30°R**Ω** morning rise -10848 Feb 07 j 09:43 19° Ω 15'35 -10842 Jul 29 j 05:15 29°**Ω**44'26 retrograde direct -10848 Apr 27 j 11:23 $17^{\circ}\Omega$ 52'24 29.06477 AU min. Earth dist. -10842 Aug 28 j 03:49 0° M -10848 Apr 28 j 10:50 17°Ω50'47 1°41'03 opposition evening set -10842 Oct 23 j 01:19 1° Mp 36'21 direct -10848 Jul 15 j 09:42 16°**\O**28'12 -10848 Oct 09 j 10:16 18° **Ω**20'19 evening set conjunction -10842 Nov 07 j 16:06 2° Mp 11'21 0°59'11 minimum elong -10842 Nov 07 j 16:06 2° Mp 11'21 0°59'30 conjunction -10848 Oct 24 j 20:47 $18^{\circ}\Omega$ 55'00 $1^{\circ}32'03$ max. Earth dist. -10842 Nov 08 j 18:15 2° Mp 13'48 31.00039 AU -10848 Oct 24 j 20:48 18° Ω 55'01 1°32'29 minimum elong morning rise -10842 Nov 23 j 11:12 2° Mp 46'44 -10848 Oct 25 j 21:06 18° Ω 57'18 31.05822 AU max. Earth dist. retrograde -10841 Feb 23 j 02:25 4° Mp 45'23 morning rise -10848 Nov 09 j 11:06 19°**Ω**30'03 min. Earth dist. -10841 May 13 j 22:49 3° m 21'55 28.99785 AU retrograde -10847 Feb 08 j 21:40 21° Ω 28'34 opposition -10841 May 15 j 00:13 3°m/20'09 1°00'05 opposition -10847 Apr 30 j 23:21 20°**Ω**03'40 1°35'35 direct -10841 Jul 31 j 13:31 1° m 57'22 min. Earth dist. -10847 Apr 30 j 00:16 $20^{\circ}\Omega$ 05'15 29.05368 AU evening set -10841 Oct 25 j 12:10 3°m/49'18 direct -10847 Jul 17 j 21:23 18°**Ω**41'02 evening set -10847 Oct 11 j 20:36 $20^{\circ}\Omega$ 33'05 conjunction -10841 Nov 10 j 03:49 4° m/24'22 0°53'20 minimum elong -10841 Nov 10 j 03:50 4° m/24'22 0°53'39 conjunction $-10847 \text{ Oct } 27 \text{ j } 07:50 \ 21^{\circ} \Omega 07'50 \ 1^{\circ} 26'52$ max. Earth dist. -10841 Nov 11 j 07:18 4° m/26'57 30.99416 AU minimum elong $-10847 \text{ Oct } 27 \text{ j } 07:51 \ 21^{\circ}\Omega 07'50 \ 1^{\circ}27'18$ morning rise -10841 Nov 25 i 23:30 4° m 59'49 -10847 Oct 28 j 08:05 21° Ω 10'07 31.04711 AU max. Earth dist. retrograde -10840 Feb 25 i 14:22 6° m 58'30 -10847 Nov 11 j 22:59 21°**Ω**42'56 morning rise min. Earth dist. -10840 May 15 j 10:28 5° m 35'04 28.99178 AU retrograde -10846 Feb 11 j 11:41 23° Ω 41'26 opposition -10840 May 16 j 12:12 5° m 33'17 0°53'47 -10846 May 02 j 11:30 22° Ω 18'07 29.04240 AU -10840 Aug 02 j 00:40 4° mb 10'31 min. Earth dist. direct -10846 May 03 j 11:39 22° Ω 16'27 1°29'59 -10840 Oct 26 j 23:11 6° M 02'29 evening set opposition -10846 Jul 20 j 08:47 20°**Ω**53'45 direct -10846 Oct 14 j 06:58 22°**Ω**45'45 -10840 Nov 11 j 15:24 6° mp 37'36 0°47'24 conjunction evening set -10840 Nov 11 j 15:25 6° m 37'36 0°47'40 minimum elong -10846 Oct 29 j 18:54 23° Ω 20'32 1°21'33 -10840 Nov 12 j 18:10 6° Mp 40'06 30.98838 AU conjunction max. Earth dist. 7° m 13'06 -10846 Oct 29 j 18:55 23° Ω 20'33 1°21'57 -10840 Nov 27 j 11:55 minimum elong morning rise -10839 Feb 27 j 05:00 9° **m** 11'51 -10846 Oct 30 j 19:33 23° Ω 22'52 31.03588 AU max. Earth dist. retrograde -10846 Nov 14 j 10:53 23° **Ω**55'43 -10839 May 17 j 22:18 7° Mp 48'26 28.98603 AU morning rise min. Earth dist. -10845 Feb 14 j 00:01 $25^{\circ}\Omega$ 54'13 -10839 May 19 j 00:12 7° m 46'38 0°47'23 retrograde opposition 6° m 23'53 -10845 May 05 j 23:59 24° Ω 29'08 1°24'14 -10839 Aug 04 j 10:35 opposition direct -10845 May 05 j 00:26 $24^{\circ}\Omega$ 30'46 29.03136 AU -10839 Oct 29 j 10:25 8° Mp 15'53 min. Earth dist. evening set direct -10845 Jul 22 j 20:29 23° Ω 06'24 -10845 Oct 16 j 17:27 24° **Ω**58'21 conjunction -10839 Nov 14 j 03:23 8° m 51'03 0°41'23 evening set minimum elong -10839 Nov 14 j 03:24 8° M 51'03 0°41'40 conjunction -10845 Nov 01 j 06:11 25°**Ω**33'11 1°16'08 max. Earth dist. -10839 Nov 15 j 06:54 8° m 53'38 30.98249 AU -10845 Nov 01 j 06:12 25° **Ω**33'11 1°16'31 -10839 Nov 30 j 00:31 9° **m** 26'37 minimum elong morning rise -10845 Nov 02 j 07:41 25° Ω 35'36 31.02532 AU retrograde -10838 Mar 01 j 17:18 11° m 25'24 max. Earth dist. -10845 Nov 16 j 22:50 26°**Ω**08'24 -10838 May 20 j 11:01 10° m 01'56 28.97989 AU morning rise min. Earth dist. -10844 Feb 16 j 13:35 28° **Ω**06'56 -10838 May 21 j 12:10 10° m 00'12 0°40'55 retrograde opposition -10844 May 06 j 10:57 $26^{\circ}\Omega 43'31$ 29.02119 AU min. Earth dist. direct -10838 Aug 06 j 21:11 8° m 37'27 -10844 May 07 j 11:57 $26^{\circ}\Omega$ 41'47 1° 18'22 opposition evening set -10838 Oct 31 j 21:51 10° m 29'29 -10844 Jul 24 i 08:24 25° Ω 19'00 direct -10838 Nov 16 j 15:32 11° m 04'42 0°35'19 evening set -10844 Oct 18 j 04:03 27° Ω 10'56 conjunction minimum elong -10838 Nov 16 i 15:32 11° m 04'42 0°35'33 $-10844 \text{ Nov } 02 \text{ i } 17:22 \quad 27^{\circ} \Omega 45'49 \quad 1^{\circ} 10'35$ max. Earth dist. -10838 Nov 17 j 18:26 11° Mp 07'14 30.97615 AU conjunction $-10844 \text{ Nov } 02 \text{ j } 17:22 \quad 27^{\circ} \Omega 45'49 \quad 1^{\circ}10'56$ -10838 Dec 02 j 13:24 11° mp 40'19 minimum elong morning rise max. Earth dist. -10844 Nov 03 j 18:42 $27^{\circ}\Omega$ 48'13 31.01573 AU -10837 Mar 04 j 08:24 13° m 39'08 retrograde morning rise -10844 Nov 18 j 10:54 $28^{\circ}\Omega$ 21'06 min. Earth dist. -10837 May 22 j 22:27 12° m 15'42 28.97304 AU -10843 Jan 13 j 22:29 0° Mp -10837 May 24 j 00:06 12° **m** 13'55 opposition 0°34'24 retrograde -10843 Feb 18 j 01:07 0° mp 19'39 direct -10837 Aug 09 j 08:26 10° M 51'08 -10843 Mar 25 j 19:15 30°R**Ω** evening set -10837 Nov 03 j 09:31 12° m 43'12 min. Earth dist. -10843 May 08 j 23:41 28° Ω 56'09 29.01224 AU -10843 May 10 j 00:10 28° **Ω**54'27 1°12'23 -10837 Nov 19 j 03:48 13° Mp 18'29 0°29'11 opposition conjunction -10843 Jul 26 j 18:01 27°**Ω**31'40 -10837 Nov 19 j 03:48 13° **m** 18'29 direct minimum elong 0°29'24 -10843 Oct 20 j 14:27 29°**\Oldot**23'34 evening set max. Earth dist. -10837 Nov 20 j 06:20 13° Mp 20'58 30.96871 AU morning rise -10837 Dec 05 j 02:21 13° m 54'09 conjunction -10843 Nov 05 j 04:40 29°**Q**58'31 1°04'56 retrograde -10836 Mar 05 j 21:51 15° M 52'58 minimum elong -10843 Nov 05 j 04:41 29°**Q**58'31 1°05'17 min. Earth dist. -10836 May 24 j 11:37 14° m 29'25 28.96508 AU -10843 Nov 05 j 20:27 0° M opposition -10836 May 25 j 12:00 14° m 27'43 0°27'49 max. Earth dist. -10843 Nov 06 j 07:31 0° Mp 01'03 31.00750 AU -10836 Aug 10 j 20:21 13° Mp 04'55 direct

evening set

-10836 Nov 04 j 21:07 14° m 56'59

-10843 Nov 20 j 22:50 0° m 33'51

morning rise

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 6

•	omena of Neptune fi		-	* **			page 6
	ical year style is used: The	-					le.
conjunction	-10836 Nov 20 j 16:11			evening set	-10830 Nov 18 j 20:37	28° m) 18'42	
minimum elong	-10836 Nov 20 j 16:11	-					
max. Earth dist.	-10836 Nov 21 j 18:47		30.96042 AU	conjunction	-10830 Dec 04 j 19:17		
morning rise	-10836 Dec 06 j 15:19			minimum elong	-10830 Dec 04 j 19:17	~	0°14'25
retrograde	-10835 Mar 08 j 12:10	-		behind sun begin	-10830 Dec 04 j 16:25	-•	
opposition	-10835 May 27 j 23:48			behind sun end	-10830 Dec 04 j 22:08	-•	
min. Earth dist.	-10835 May 26 j 22:39		28.95628 AU	max. Earth dist.	-10830 Dec 05 j 21:42		30.91366 AU
direct	-10835 Aug 13 j 09:03	-		morning rise	-10830 Dec 20 j 21:54	29° m 30'11	
evening set	-10835 Nov 07 j 08:48	17° m 10'45			-10829 Jan 03 j 23:18	0∘ ⊽	
				retrograde	-10829 Mar 22 j 13:19	1° ≏ 28'50	
conjunction	-10835 Nov 23 j 04:24	-		opposition	-10829 Jun 10 j 20:59	0° ჲ 03'19	
minimum elong	-10835 Nov 23 j 04:24			min. Earth dist.	-10829 Jun 09 j 21:21		28.91192 AU
max. Earth dist.	-10835 Nov 24 j 06:10	17° Mp 48'32	30.95132 AU		-10829 Jun 12 j 20:12	30°R, Mp	
morning rise	-10835 Dec 09 j 04:20			direct	-10829 Aug 27 j 00:14	28° Mp 40'07	
retrograde	-10834 Mar 11 j 00:05				-10829 Nov 06 j 00:15	0∘ ⊽	
min. Earth dist.	-10834 May 29 j 11:46			evening set	-10829 Nov 21 j 08:56	0° £ 32'23	
opposition	-10834 May 30 j 11:40		0°14'32				
direct	-10834 Aug 15 j 19:22	17° m 32'22		conjunction	-10829 Dec 07 j 08:06	1° ≏ 07'58	-0°20'42
evening set	-10834 Nov 09 j 20:34	19° Mp 24'26		minimum elong	-10829 Dec 07 j 08:06	1° ≏ 07'58	0°20'39
				max. Earth dist.	-10829 Dec 08 j 09:58	1° ≏ 10′23	30.90978 AU
conjunction	-10834 Nov 25 j 16:58	19° ™ 59'50	0°10'35	morning rise	-10829 Dec 23 j 11:14	1° ≏ 43'56	
minimum elong	-10834 Nov 25 j 16:59	19° m 59'50	0°10'44	retrograde	-10828 Mar 24 j 03:37	3° ≏ 42'35	
behind sun begin	-10834 Nov 25 j 11:59	19° m 59'24		min. Earth dist.	-10828 Jun 11 j 08:01	2° ≏ 18'47	28.90854 AU
behind sun end	-10834 Nov 25 j 21:58	20°M/00'17		opposition	-10828 Jun 12 j 08:12	2° ≏ 17'05	-0°25'30
max. Earth dist.	-10834 Nov 26 j 19:35	20°M 02'20	30.94209 AU	direct	-10828 Aug 28 j 11:21	0° £ 53'52	
morning rise	-10834 Dec 11 j 17:22	20°M 35'39		evening set	-10828 Nov 22 j 21:28	2° ≏ 46'13	
retrograde	-10833 Mar 13 j 12:37	22°M 34'23					
opposition	-10833 Jun 01 j 23:06	-	0°07'52	conjunction	-10828 Dec 08 j 21:05	3° £ 21'51	-0°26'54
min. Earth dist.	-10833 May 31 j 22:39		28.93786 AU	minimum elong	-10828 Dec 08 j 21:05	3° ≏ 21'51	
direct	-10833 Aug 18 j 07:36			max. Earth dist.	-10828 Dec 09 j 22:45		30.90674 AU
evening set	-10833 Nov 12 j 08:35	21°M 38'02		morning rise	-10828 Dec 25 j 00:40	3° ≏ 57'51	
				retrograde	-10827 Mar 26 j 16:42	5° ≏ 56'30	
conjunction	-10833 Nov 28 j 05:26		0°04'22	opposition	-10827 Jun 14 j 19:36	4° £ 31'02	
minimum elong	-10833 Nov 28 j 05:25	-	0°04'31	min. Earth dist.	-10827 Jun 13 j 20:41		28.90585 AU
behind sun begin	-10833 Nov 27 j 23:01			direct	-10827 Aug 30 j 22:33	3° Ω 07'49	
behind sun end	-10833 Nov 28 j 11:49			evening set	-10827 Nov 25 j 10:01	5° Ω 00'15	
max. Earth dist.	-10833 Nov 29 j 06:52		30.93324 AU			_	
morning rise	-10833 Dec 14 j 06:34	-		conjunction	-10827 Dec 11 j 10:15	5° Ω 35'55	
retrograde	-10832 Mar 15 j 01:41		20.02051 433	minimum elong	-10827 Dec 11 j 10:14	5° Ω 35'55	
min. Earth dist.	-10832 Jun 02 j 10:50			max. Earth dist.	-10827 Dec 12 j 11:52		30.90427 AU
opposition	-10832 Jun 03 j 10:43	=	0°01'11	morning rise	-10827 Dec 27 j 14:12	6° £ 11'56	
desc. node	-10832 Aug 06 j 09:15			retrograde	-10826 Mar 29 j 07:10	8° £ 10'35	20.00222.444
direct	-10832 Aug 19 j 16:53			min. Earth dist.	-10826 Jun 16 j 07:28		28.90333 AU
evening set	-10832 Nov 13 j 20:20	23°11/51'35		opposition	-10826 Jun 17 j 06:52	6° £ 45'10	-0°38'41
. ,.	10022 N 20 : 17 52	2.40 m. 2.710.4	0003101	direct	-10826 Sep 02 j 11:00	5° £ 21'56	
conjunction minimum elong	-10832 Nov 29 j 17:53 -10832 Nov 29 j 17:53	=		evening set	-10826 Nov 27 j 23:06	7° £ 14'28	
behind sun begin	-10832 Nov 29 j 17:33 -10832 Nov 29 j 11:21	=	0 01 34	conjunction	-10826 Dec 13 j 23:39	7° ჲ 50'10	0°30'11
behind sun end	-10832 Nov 29 j 11.21 -10832 Nov 30 j 00:25	=		minimum elong	-10826 Dec 13 j 23:38	7° ⊆ 50'10	
max. Earth dist.	-10832 Nov 30 j 20:29	-	30 92536 ATT	max. Earth dist.	-10826 Dec 14 j 23:59		30.90150 AU
morning rise	-10832 Nov 30 j 20.29 -10832 Dec 15 j 19:25		30.92330 AU	morning rise	-10826 Dec 30 j 04:06	8° £ 26'14	30.90130 AU
retrograde	-10832 Dec 13 j 19.23 -10831 Mar 17 j 12:19	=		retrograde	-10825 Mar 31 j 20:28		
opposition	-10831 Jun 05 j 22:11	=	0°05'30	opposition	-10825 Jun 19 j 18:10	8° £ 59'29	0°45'13
min. Earth dist.	-10831 Jun 04 j 22:02	=		min. Earth dist.	-10825 Jun 18 j 20:29		28.90039 AU
direct	-10831 Juli 04 j 22:02 -10831 Aug 22 j 04:35		20.92222 AU	direct	-10825 Sep 04 j 21:14	7° £ 36'14	28.90039 AU
evening set	-10831 Nov 16 j 08:26			evening set	-10825 Nov 30 j 12:10	9° £ 28'52	
evening set	10051 1101 10 1 00.20	20 mg 03 07		evening set	10025 140V 50 J 12.10) — 20 32	
conjunction	-10831 Dec 02 j 06:28	26° m 40'38	-0°08'15	conjunction	-10825 Dec 16 j 13:18	10° ≏ 04'36	-0°45'15
minimum elong	-10831 Dec 02 j 06:28	-		minimum elong	-10825 Dec 16 j 13:18		
behind sun begin	-10831 Dec 02 j 00:40		- -	max. Earth dist.	-10825 Dec 17 j 13:49		
behind sun end	-10831 Dec 02 j 12:15			morning rise	-10824 Jan 01 j 17:57		
max. Earth dist.	-10831 Dec 03 j 08:08	-	30.91884 AU	retrograde	-10824 Apr 02 j 10:29		
morning rise	-10831 Dec 18 j 08:40			min. Earth dist.	-10824 Jun 20 j 07:45		28.89654 AU
retrograde	-10830 Mar 20 j 01:32			opposition	-10824 Jun 21 j 05:27		
min. Earth dist.	-10830 Jun 07 j 09:17	-	28.91647 AU	direct	-10824 Sep 06 j 09:54		-
opposition	-10830 Jun 08 j 09:34			evening set	-10824 Dec 02 j 01:19		
direct	-10830 Aug 24 i 14:07			J	J		

direct

-10830 Aug 24 j 14:07 26° Mp 26'30

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10824 in astronomical counting style is the year 10825 BCE in historical counting style. -10824 Dec 18 j 02:42 12° \overline{\Omega} 19'08 -0°51'15 direct -10817 Sep 22 j 16:14 25° **2**31'23 conjunction minimum elong -10824 Dec 18 j 02:42 12° **2**19'08 0° 51'20 evening set -10817 Dec 18 j 23:48 27°**2**24'46 max. Earth dist. -10824 Dec 19 j 01:20 12° 221'15 30.89378 AU -10823 Jan 03 j 07:52 12°**♀**55'15 -10816 Jan 04 j 03:29 28° 200'39 -1°30'34 conjunction morning rise -10823 Apr 04 j 23:52 14°**£**53'50 -10816 Jan 04 j 03:28 28° **2**00'38 1°30'48 retrograde minimum elong -10823 Jun 23 j 16:51 13°**2**28'28 -0°58'02 -10816 Jan 04 j 22:04 28°**♀**02'23 30.86284 AU opposition max. Earth dist. -10823 Jun 22 j 20:22 13°**£**29'55 28.89180 AU -10816 Jan 20 j 10:07 28°**△**36'48 min. Earth dist. morning rise -10816 Mar 04 j 20:30 direct -10823 Sep 08 j 19:58 12°**♀**05'08 0°M -10823 Dec 04 j 14:33 13°**♀**57'56 -10816 Apr 20 j 15:19 0°M35'00 evening set retrograde -10816 Jun 07 j 05:16 30°R € conjunction -10823 Dec 20 j 16:31 14°**△**33'43 -0°57'11 opposition -10816 Jul 08 j 21:35 29°**2**09'41 -1°39'40 -10823 Dec 20 j 16:30 14°**2**33'43 0°57'16 min. Earth dist. -10816 Jul 08 j 05:13 29°**♀**10'51 28.86346 AU minimum elong -10823 Dec 21 j 15:24 14°**2**35'51 30.88854 AU max. Earth dist. direct -10816 Sep 24 j 02:47 27°**△**45'52 morning rise -10822 Jan 05 j 21:49 15°**♀**09'50 evening set -10816 Dec 20 j 13:23 29°**△**39'22 retrograde -10822 Apr 07 j 11:02 17°**♀**08'22 -10816 Dec 29 j 21:51 min. Earth dist. -10822 Jun 25 j 08:02 15° **△**44'25 28.88620 AU opposition -10822 Jun 26 j 03:56 15°**£**43'01 -1°04'20 conjunction -10815 Jan 05 j 17:28 0°M15'16 -1°35'43 direct -10822 Sep 11 j 08:09 14° **2**19'36 minimum elong -10815 Jan 05 j 17:27 0°M15'16 1°35'58 evening set -10822 Dec 07 j 04:01 16° **△**12'28 max. Earth dist. -10815 Jan 06 j 12:25 morning rise -10815 Jan 22 j 00:05 0°M51'25 conjunction -10822 Dec 23 j 06:15 16° \(\Omega\)48'16 -1°03'01 retrograde -10815 Apr 23 j 05:40 2°M49'34 minimum elong -10822 Dec 23 j 06:14 16° \(\Omega\)48'16 1°03'08 opposition -10815 Jul 11 i 08:23 1°M24'19 -1°45'05 max. Earth dist. -10822 Dec 24 i 03:22 16° \overline{9}50'15 30.88278 AU min. Earth dist. -10815 Jul 10 i 15:54 1°ML25'29 28.86342 AU morning rise -10821 Jan 08 j 12:00 17°**2**24'25 direct -10815 Sep 26 j 16:13 0°M00'29 retrograde -10821 Apr 10 j 00:06 19° \alpha 22'53 evening set -10815 Dec 23 j 03:29 1°M54'06 opposition -10821 Jun 28 i 15:03 17° \(\Omega\) 57'30 -1°10'31 min. Earth dist. -10821 Jun 27 j 19:39 17°**2**58'53 28.88043 AU -10814 Jan 08 i 07:36 2°M30'01 -1°40'42 conjunction -10821 Sep 13 j 18:18 16° **△**34'00 minimum elong -10814 Jan 08 i 07:35 2°M30'01 1°40'59 direct -10821 Dec 09 j 17:23 18° \alpha 26'58 max. Earth dist. -10814 Jan 09 j 00:44 2°M31'37 30.86262 AU evening set -10814 Jan 24 j 14:27 3°M06'11 morning rise -10821 Dec 25 j 20:01 19°**2**02'47 -1°08'45 -10814 Apr 25 j 18:50 5°ML04'17 conjunction retrograde -10821 Dec 25 j 20:00 19° **2**02'47 1°08'54 -10814 Jul 13 j 19:08 3°M 39'06 -1°50'21 minimum elong opposition -10821 Dec 26 j 17:23 19°**♀**04'47 30.87689 AU -10814 Jul 13 j 03:59 3°M40'10 28.86399 AU max. Earth dist. min. Earth dist. -10820 Jan 11 j 01:52 19°**೨**38'55 -10814 Sep 29 j 02:51 2°M15'14 morning rise direct -10820 Apr 11 j 11:21 21°**⊆**37'20 -10814 Dec 25 j 17:38 4°M09'00 retrograde evening set -10820 Jun 29 j 07:44 20°**2**13'15 28.87483 AU min. Earth dist. -10820 Jun 30 j 02:03 20°**⊆**11'57 -1°16'36 -10813 Jan 10 j 22:05 4°ML44'55 -1°45'33 opposition conjunction direct -10820 Sep 15 j 04:34 18°**£**48'22 minimum elong -10813 Jan 10 j 22:04 4°ML44'55 1°45'51 evening set -10820 Dec 11 j 06:50 20° **△**41'24 max. Earth dist. -10813 Jan 11 j 15:21 4°M 46'32 30.86309 AU morning rise -10813 Jan 27 j 04:49 5°M21'05 conjunction -10820 Dec 27 j 09:46 21°**2**17'14 -1°14'23 retrograde -10813 Apr 28 j 07:06 7° ML 19'08 -10820 Dec 27 j 09:45 21°**2**17'14 1°14'33 opposition -10813 Jul 16 j 05:56 5°ML54'00 -1°55'27 minimum elong max. Earth dist. -10820 Dec 28 j 06:07 21°**2**19'08 30.87171 AU min. Earth dist. -10813 Jul 15 j 15:33 5°M 55'02 28.86436 AU -10819 Jan 12 j 15:53 21°**♀**53'23 -10813 Oct 01 j 15:10 4°M30'07 morning rise direct -10819 Apr 14 j 00:30 23° **2**51'44 -10813 Dec 28 j 07:58 retrograde evening set 6°M24'01 -10819 Jul 02 j 12:55 22° \(\Omega\) 26'21 -1°22'33 opposition -10819 Jul 01 j 18:18 22° **2**27'40 28.87020 AU -10812 Jan 13 j 12:24 6°ML59'57 -1°50'14 min. Earth dist. conjunction -10812 Jan 13 j 12:23 6°ML59'57 1°50'34 direct -10819 Sep 17 i 16:13 21° \(\Omega\)02'41 minimum elong evening set -10819 Dec 13 j 20:21 22° **△**55'49 max. Earth dist. -10812 Jan 14 j 03:28 7° ML01'21 30.86316 AU morning rise -10812 Jan 29 i 19:16 7°M 36'06 -10812 Apr 29 j 21:01 9°MJ34'05 conjunction -10819 Dec 29 i 23:33 23° 231'40 -1°19'54 retrograde minimum elong -10819 Dec 29 i 23:32 23° **2**31'40 1°20'05 opposition -10812 Jul 17 i 16:45 8°M09'01 -2°00'22 max. Earth dist. -10819 Dec 30 j 19:34 23° **△**33'32 30.86746 AU min. Earth dist. -10812 Jul 17 j 03:09 8°ML09'59 28.86422 AU -10818 Jan 15 i 05:53 24° **2**07'50 morning rise direct -10812 Oct 03 j 01:46 6°M45'04 -10818 Apr 16 j 12:24 26° **2**06'08 retrograde evening set -10812 Dec 29 j 22:19 8°M39'05 -10818 Jul 04 j 23:55 24° **2**40'44 -1°28'24 opposition min. Earth dist. -10818 Jul 04 j 06:40 24° **2**41'58 28.86665 AU conjunction -10811 Jan 15 j 03:01 9°ML15'02 -1°54'45 -10818 Sep 20 j 03:45 23°**2**17'01 minimum elong -10811 Jan 15 j 03:00 9°M15'02 1°55'05 direct -10818 Dec 16 j 09:59 25°**2**10'16 max. Earth dist. -10811 Jan 15 j 17:49 9°**ጤ**16'25 30.86243 AU evening set -10811 Jan 31 j 09:44 9°M 51'11 morning rise -10817 Jan 01 j 13:34 25°**-**246'08 -1°25'18 -10811 May 02 j 08:09 11°M 49'05 conjunction retrograde minimum elong -10817 Jan 01 j 13:33 25°**2**46'08 1°25'31 opposition -10811 Jul 20 j 03:34 10°M24'03 -2°05'06 max. Earth dist. -10817 Jan 02 j 09:14 25°**△**47'58 30.86455 AU min. Earth dist. -10811 Jul 19 j 15:35 10°M24'54 28.86309 AU morning rise -10817 Jan 17 j 19:59 26° \alpha 22'17 direct -10811 Oct 05 j 12:36 9°ML00'02 retrograde -10817 Apr 19 j 02:05 28° \alpha 20'31 evening set -10810 Jan 01 j 12:48 10°ML54'10 -10817 Jul 07 j 10:38 26° **2**55'10 -1°34'06 opposition

conjunction

-10810 Jan 17 j 17:36 11°M 30'06 -1°59'06

min. Earth dist.

-10817 Jul 06 j 16:49 26°**♀**56'26 28.86442 AU

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10810 in astronomical counting style is the year 10811 BCE in historical counting style. -10810 Jan 17 j 17:35 11°M 30'06 1°59'27 opposition minimum elong -10804 Aug 04 j 05:29 26° ML06'39 -2°32'32 max. Earth dist. -10810 Jan 18 j 06:31 11°M 31'18 30.86086 AU min. Earth dist. -10804 Aug 03 j 22:51 26°ML07'08 28.85525 AU -10810 Feb 03 j 00:26 12°ML06'15 -10804 Oct 21 j 02:12 24° ML42'03 morning rise direct -10810 May 04 j 20:41 14° 11.04'02 -10803 Jan 17 j 18:15 26°M 36'59 retrograde evening set -10810 Jul 22 j 14:18 12°M39'02 -2°09'39 opposition -10810 Jul 22 j 02:39 12°M 39'51 28.86112 AU -10803 Feb 02 j 23:24 27°ML12'55 -2°24'03 min. Earth dist. conjunction -10810 Oct 08 j 00:50 11°ML14'54 -10803 Feb 02 j 23:23 27°ML12'55 2°24'31 direct minimum elong -10809 Jan 04 j 03:23 13°ML09'09 -10803 Feb 03 j 05:44 27°ML13'30 30.85485 AU evening set max. Earth dist. morning rise -10803 Feb 19 j 05:34 27° ML48'56 -10809 Jan 20 j 08:17 13°ML45'05 -2°03'16 conjunction retrograde -10803 May 20 j 12:29 29°M45'59 -10809 Jan 20 j 08:16 13°ML45'05 2°03'38 minimum elong opposition -10803 Aug 06 j 15:50 28°M21'13 -2°35'34 -10809 Jan 20 j 20:17 13°ML46'12 30.85837 AU -10803 Aug 06 j 09:40 28°M21'39 28.85860 AU max. Earth dist. min. Earth dist. -10809 Feb 05 j 15:00 14°M21'13 -10803 Oct 23 j 13:07 26°M56'34 morning rise direct -10802 Jan $20 \text{ j } 08:50 28^{\circ}\text{ML}51'40$ -10809 Feb 24 j 05:47 15°M evening set retrograde -10809 May 07 j 07:33 16° 118'54 -10809 Jul 21 j 11:06 15°RML conjunction -10802 Feb 05 j 14:08 29°M27'36 -2°26'47 opposition -10809 Jul 25 j 01:00 14°ML53'54 -2°14'00 minimum elong -10802 Feb 05 j 14:07 29°M27'36 2°27'17 min. Earth dist. -10809 Jul 24 j 15:15 14°M 54'35 28.85851 AU max. Earth dist. -10802 Feb 05 j 20:37 29°M28'12 30.85864 AU direct -10809 Oct 10 j 12:09 13°M29'40 -10802 Feb 20 j 04:21 0°**∡**7 -10809 Dec 26 j 10:14 15°M morning rise -10802 Feb 21 j 20:01 0°**х**¹03'37 evening set -10808 Jan 06 j 17:51 15°M24'01 retrograde -10802 May 22 j 23:27 2°**х**¹00'35 opposition -10802 Aug 09 i 02:19 0°**х** 35′54 -2°38′21 conjunction -10808 Jan 22 j 22:54 15° ML59'57 -2°07'14 min. Earth dist. -10802 Aug 08 j 21:36 0°**∡**36'15 28.86284 AU minimum elong -10808 Jan 22 j 22:52 15° ML59'57 2°07'38 -10802 Aug 30 j 18:23 30°RM max. Earth dist. -10808 Jan 23 j 09:54 16° ML00'58 30.85571 AU direct -10802 Oct 26 j 00:08 29°ML11'15 -10808 Feb 08 j 05:33 16°M 36'03 -10802 Dec 20 j 00:10 0°**√** morning rise -10808 May 08 j 20:32 18°M 33'37 -10801 Jan 22 j 23:37 1°**≯**06'30 retrograde evening set opposition -10808 Jul 26 j 11:32 17°ML08'37 -2°18'08 -10808 Jul 26 j 01:38 17°ML09'20 28.85595 AU conjunction -10801 Feb 08 j 04:48 1° ₹ 42'25 -2°29'17 min. Earth dist. -10808 Oct 12 j 00:51 15°ML44'18 -10801 Feb 08 j 04:47 1° ₹ 42'25 2°29'47 minimum elong direct -10807 Jan 08 j 08:15 17° ML38'45 -10801 Feb 08 j 09:30 1°**尽** 42'52 30.86321 AU max. Earth dist. evening set -10801 Feb 24 j 10:36 2° ₹ 18'25 morning rise -10807 Jan 24 j 13:16 18°ML14'40 -2°11'00 -10801 May 25 j 11:57 4° ₹ 15'18 conjunction retrograde -10807 Jan 24 j 13:15 18°M 14'40 2°11'25 -10801 Aug 11 j 12:39 2° ₹ 50'45 -2°40'54 minimum elong opposition -10807 Jan 24 j 22:59 18°M 15'34 30.85324 AU -10801 Aug 11 j 08:09 2° ₹ 51'04 28.86763 AU max. Earth dist. min. Earth dist. -10807 Feb 09 j 19:55 18°M 50'46 -10801 Oct 28 j 11:55 1° ₹ 26'05 morning rise direct -10807 May 11 j 08:29 20° ML48'13 -10800 Jan 25 j 14:25 3°**尽**21'29 retrograde evening set opposition -10807 Jul 28 j 22:10 19°M23'13 -2°22'04 min. Earth dist. -10807 Jul 28 j 13:58 19°M23'48 28.85399 AU conjunction -10800 Feb 10 j 19:36 3° ₹ 57'24 -2°31'33 direct -10807 Oct 14 j 12:15 17°ML58'48 minimum elong -10800 Feb 10 j 19:35 3°**尽** 57'24 2°32'05 evening set -10806 Jan 10 j 22:41 19°M 53'21 max. Earth dist. -10800 Feb 10 j 23:37 3°**尽** 57'47 30.86786 AU morning rise -10800 Feb 27 j 01:08 4° **₹** 33'23 -10806 Jan 27 j 03:55 20°M29'17 -2°14'35 retrograde -10800 May 26 j 23:06 6° ₹ 30'11 conjunction -10806 Jan 27 j 03:54 20°M29'16 2°15'01 -10800 Aug 12 j 23:15 5°**尽** 05'44 -2°43'12 minimum elong opposition max. Earth dist. -10806 Jan 27 j 13:35 20°M 30'11 30.85167 AU min. Earth dist. -10800 Aug 12 j 20:43 5° ₹ 05'55 28.87228 AU -10806 Feb 12 j 10:22 21°ML05'21 -10800 Oct 29 j 22:20 3° ₹ 41'02 morning rise direct -10806 May 13 j 21:35 23°M02'41 -10799 Jan 27 j 05:06 5° **₹** 36'34 retrograde evening set -10806 Jul 31 i 08:30 21°M 37'43 -2°25'47 opposition -10799 Feb 12 j 10:18 6° ₹ 12'29 -2°33'36 min. Earth dist. -10806 Jul 31 j 00:21 21°M 38'18 28.85299 AU conjunction direct -10806 Oct 17 j 02:12 20°ML13'13 minimum elong -10799 Feb 12 i 10:17 6°**х** 12'29 2°34'07 evening set -10805 Jan 13 j 13:20 22°ML07'53 max. Earth dist. -10799 Feb 12 j 12:52 6° ₹ 12'44 30.87224 AU -10799 Feb 28 j 15:42 6° ₹ 48'27 morning rise -10805 Jan 29 j 18:26 22°M 43'49 -2°17'57 -10799 May 29 j 11:48 8° ₹ 45'09 conjunction retrograde -10805 Jan 29 j 18:25 22° ML43'49 2°18'23 minimum elong opposition -10799 Aug 15 j 09:42 7°**х** 20'47 -2°45'16 -10805 Jan 30 j 02:20 22°M44'33 30.85124 AU max. Earth dist. min. Earth dist. -10799 Aug 15 j 07:19 7°**₹**20'57 28.87626 AU morning rise -10805 Feb 15 j 00:54 23°ML19'52 direct -10799 Nov 01 j 10:26 5°**х** 756′01 -10805 May 16 j 10:16 25° **Մ**ե17'07 retrograde evening set -10798 Jan 29 j 20:05 7°**х** 51′42 -10805 Aug 02 j 19:03 23°M 52'11 -2°29'16 opposition -10805 Aug 02 j 11:59 23°M 52'41 28.85343 AU conjunction -10798 Feb 15 j 01:11 8° ₹27'36 -2°35'24 min. Earth dist. -10805 Oct 19 j 13:28 22°M27'36 -10798 Feb 15 j 01:10 8°**₹**27'36 2°35'56 direct minimum elong -10804 Jan 16 j 03:39 24°M22'25 -10798 Feb 15 j 02:01 8°**∡**727'41 30.87567 AU evening set max. Earth dist. morning rise -10798 Mar 03 j 06:23 9°**х**¹03'33 conjunction -10804 Feb 01 j 08:56 24°ML58'20 -2°21'07 retrograde -10798 May 31 j 22:54 11°**х** 00'08 minimum elong -10804 Feb 01 j 08:55 24°M 58'20 2°21'34 opposition -10798 Aug 17 j 20:14 9° ₹35'49 -2°47'04 max. Earth dist. -10804 Feb 01 j 17:12 24°ML59'06 30.85228 AU min. Earth dist. -10798 Aug 17 j 19:58 9°**∡**'35'50 28.87936 AU

direct

evening set

-10798 Nov 03 j 22:17

-10797 Feb 01 j 10:56 10° ₹ 06'47

8°**х** 11′00

-10804 Feb 17 j 15:04 25°M34'22

-10804 May 17 j 22:29 27° M 31'31

morning rise

retrograde

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10797 in astronomical counting style is the year 10798 BCE in historical counting style. -10797 Feb 17 i 16:06 10° ₹42'41 -2°36'59 direct -10791 Nov 19 j 14:09 23° \$\frac{7}{51}\$'54 conjunction -10797 Feb 17 j 16:06 10° ₹ 42'41 2°37'31 evening set -10790 Feb 17 j 17:09 25° ₹ 48'17 minimum elong -10797 Feb 17 j 16:15 10° ₹ 42'42 30.87836 AU max. Earth dist. -10797 Mar 05 j 21:01 11° ₹ 18'36 -10790 Mar 05 j 21:48 26° ₹24'07 -2°41'15 conjunction morning rise -10797 Jun 03 j 11:10 13° ₹ 15'02 -10790 Mar 05 j 21:48 26° ₹24'07 2°41'52 retrograde minimum elong -10797 Aug 20 j 06:41 11° ₹ 50'46 -2°48'38 -10790 Mar 05 j 14:59 26°**₹** 23'29 30.90627 AU opposition max. Earth dist. -10790 Mar 22 j 01:12 26°**尽** 59'51 min. Earth dist. -10797 Aug 20 j 06:50 11°**尽** 50'46 28.88166 AU morning rise direct -10797 Nov 06 j 12:39 10°**尽** 25'52 retrograde -10790 Jun 18 j 22:00 28° ₹ 55'14 -10796 Feb 04 j 01:41 12° ₹21'45 evening set opposition -10790 Sep 04 j 06:54 27° ₹31'23 -2°52'17 min. Earth dist. -10790 Sep 04 j 12:21 27° ₹31'00 28.91274 AU conjunction -10796 Feb 20 j 06:38 12° ₹ 57'38 -2°38'19 direct -10790 Nov 22 j 02:11 26° ₹ 06'03 -10796 Feb 20 j 06:38 12°**х** 57'38 2°38'53 -10789 Feb 20 j 07:44 28°**尽**02'33 minimum elong evening set -10796 Feb 20 j 04:43 12°**₹**57'27 30.88039 AU max. Earth dist. morning rise -10796 Mar 07 j 11:28 13° ₹33'31 conjunction -10789 Mar 08 j 12:15 28°**х** 38'22 -2°40'53 retrograde -10796 Jun 04 j 23:21 15° **₹** 29'49 minimum elong -10789 Mar 08 j 12:15 28°**х** 38'22 2°41'29 opposition -10796 Aug 21 j 17:08 14°**₹**05'35 -2°49'56 max. Earth dist. -10789 Mar 08 j 04:24 28°**₹**'37'38 30.91468 AU min. Earth dist. -10796 Aug 21 j 18:44 14°**₹**05'28 28.88371 AU morning rise -10789 Mar 24 j 15:23 29° **₹** 14'05 direct -10796 Nov 08 j 00:22 12° ₹ 40'35 -10789 Apr 16 j 00:10 0°ਰ evening set -10795 Feb 05 j 16:19 14° ₹36'32 retrograde -10789 Jun 21 j 08:30 1°る09'22 -10789 Aug 29 j 05:56 30°R ⊀ conjunction -10795 Feb 21 j 21:24 15° ₹ 12'25 -2°39'25 opposition -10789 Sep 06 j 17:23 29° ₹ 45'37 -2°51'46 minimum elong -10795 Feb 21 j 21:24 15° ₹ 12'25 2°39'59 min. Earth dist. -10789 Sep 07 i 00:33 29° ₹ 45'07 28.92153 AU max. Earth dist. -10795 Feb 21 j 19:28 15° ₹ 12'14 30.88241 AU direct -10789 Nov 24 i 13:19 28° ₹20'18 morning rise -10795 Mar 10 j 01:52 15° ₹ 48'16 -10788 Feb 15 i 00:15 0°ಕ retrograde -10795 Jun 07 j 11:23 17° ₹ 44'24 evening set -10788 Feb 22 j 22:04 0°る16'54 -10795 Aug 24 j 03:23 16° ₹20'12 -2°50'58 opposition -10795 Aug 24 j 05:48 16° ₹20'01 28.88583 AU -10788 Mar 10 i 02:33 0° ₹52'43 -2°40'17 min Earth dist conjunction -10795 Nov 10 j 14:10 14° ₹ 55'07 -10788 Mar 10 j 02:33 0°る52'43 2°40'53 direct minimum elong -10794 Feb 08 j 07:07 16° ₹ 51'09 max. Earth dist. -10788 Mar 09 j 18:15 0°る51'56 30.92365 AU evening set -10788 Mar 26 j 05:25 1°♂28'25 morning rise -10794 Feb 24 j 11:59 17° ₹27'00 -2°40'16 -10788 Jun 22 j 20:14 3°る23'35 conjunction retrograde -10794 Feb 24 j 11:58 17° ₹27'00 2°40'51 -10788 Sep 08 j 03:46 1°₹59'57 -2°50'58 minimum elong opposition -10794 Feb 24 j 07:50 17°**尽** 26'37 30.88484 AU -10788 Sep 08 j 11:18 1° 중59'25 28.93038 AU max. Earth dist. min. Earth dist. -10794 Mar 12 j 16:24 18° ₹ 02'50 -10788 Nov 26 j 02:36 0°る34'38 morning rise direct -10794 Jun 10 j 00:51 19°**尽** 58'48 -10787 Feb 24 j 12:42 2°**궁**31'21 retrograde evening set -10794 Aug 26 j 13:42 18° ₹34'38 -2°51'45 opposition -10794 Aug 26 j 16:40 18° ₹34'25 28.88873 AU -10787 Mar 12 j 16:58 3°♂07'10 -2°39'25 min. Earth dist. conjunction direct -10794 Nov 13 j 02:55 17° ₹ 09'27 minimum elong -10787 Mar 12 j 16:58 3°る07'10 2°40'01 evening set -10793 Feb 10 j 21:40 19° **₹**05'34 max. Earth dist. -10787 Mar 12 j 06:43 3°**정**06'12 30.93231 AU morning rise -10787 Mar 28 j 19:40 3°**♂**42'51 conjunction -10793 Feb 27 j 02:35 19° ₹ 41'26 -2°40'53 retrograde -10787 Jun 25 j 08:22 5°**⋜**37'54 -10793 Feb 27 j 02:34 19°**х** 41'26 2°41'27 -10787 Sep 10 j 14:10 4°쥥14'23 -2°49'56 minimum elong opposition max. Earth dist. -10793 Feb 26 j 22:40 19°**х** 41'04 30.88811 AU min. Earth dist. -10787 Sep 10 j 23:13 4°る13'44 28.93879 AU -10793 Mar 15 j 06:34 20° ₹17'14 -10787 Nov 28 j 13:42 2°**⋜**49'02 morning rise direct -10793 Jun 12 j 10:57 22° ₹ 13'02 -10786 Feb 27 j 03:14 4°₹45′52 retrograde evening set -10793 Aug 29 i 00:04 20° ₹ 48'55 -2°52'17 opposition -10793 Aug 29 j 04:19 20° ₹ 48'37 28.89261 AU -10786 Mar 15 j 07:34 5°る21'40 -2°38'20 min. Earth dist. conjunction -10786 Mar 15 j 07:35 5°る21'40 2°38'56 direct -10793 Nov 15 j 15:23 19° ₹23'41 minimum elong evening set -10792 Feb 13 j 12:14 21° ₹ 19'52 max. Earth dist. -10786 Mar 14 j 20:59 5°る20'41 30.94024 AU morning rise -10786 Mar 31 i 09:53 5° ₹57'20 conjunction -10792 Feb 29 i 16:57 21° \$\infty\$ 55'43 -2°41'15 retrograde -10786 Jun 27 j 20:18 7°る52'15 -10792 Feb 29 i 16:57 21° ₹755'43 2°41'51 opposition -10786 Sep 13 j 00:46 6° ₹28'50 -2°48'38 minimum elong max. Earth dist. -10792 Feb 29 j 11:24 21° ₹ 55'12 30.89274 AU min. Earth dist. -10786 Sep 13 j 10:51 6°る28'07 28.94610 AU -10792 Mar 16 j 20:52 22° ₹31'30 morning rise direct -10786 Dec 01 j 03:49 5°る03'28 retrograde -10792 Jun 13 j 23:29 24° ₹27'09 evening set -10785 Mar 01 j 17:49 7°る00'22 opposition -10792 Aug 30 j 10:18 23° ₹03'05 -2°52'33 min. Earth dist. -10792 Aug 30 j 14:23 23°**₹**02'48 28.89801 AU conjunction -10785 Mar 17 j 21:51 7°る36'10 -2°37'00 -10792 Nov 17 j 03:28 21° ₹37'48 minimum elong -10785 Mar 17 j 21:51 7°る36'10 2°37'35 direct -10791 Feb 15 j 02:36 23° ₹34'05 -10785 Mar 17 j 08:49 7°る34'57 30.94706 AU evening set max. Earth dist. -10785 Apr 03 j 00:02 8°중11'48 morning rise -10791 Mar 03 j 07:21 24° ₹ 09'55 -2°41'23 -10785 Jun 30 j 09:32 10°♂06'36 conjunction retrograde minimum elong -10791 Mar 03 j 07:21 24° ₹ 09'55 2°41'57 opposition -10785 Sep 15 j 11:17 8°る43'14 -2°47'05 -10791 Mar 03 j 01:41 24° ₹ 09'23 30.89878 AU max. Earth dist. min. Earth dist. -10785 Sep 15 j 22:07 8°る42'28 28.95243 AU morning rise -10791 Mar 19 j 10:56 24° ₹ 45'41 direct -10785 Dec 03 j 16:58 7°る17'50 retrograde -10791 Jun 16 j 10:13 26° ₹ 41'12 evening set -10784 Mar 03 j 08:08 9°**る**14'48 -10791 Sep 01 j 20:43 25° ₹ 17'13 -2°52'33 opposition

conjunction

-10784 Mar 19 j 12:13 9°₹50'35 -2°35'26

min. Earth dist.

-10791 Sep 02 j 02:23 25° **₹**16'49 28.90476 AU

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 10 Attention, astronomical year style is used: The year -10784 in astronomical counting style is the year 10785 BCE in historical counting style.

Attention, astronom	nical year style is used: The	e year -10784	in astronomical co	unting style is the year	r 10785 BCE in historical	counting sty	le.
minimum elong	-10784 Mar 19 j 12:14			evening set	-10777 Mar 20 j 09:29	24° ප 51'35	
max. Earth dist.	-10784 Mar 18 j 23:05	9° ට 49'22	30.95291 AU				
morning rise	-10784 Apr 04 j 14:00	10° පි 26'12		conjunction	-10777 Apr 05 j 12:37		
retrograde	-10784 Jul 01 j 19:47			minimum elong	-10777 Apr 05 j 12:38		
opposition	-10784 Sep 16 j 21:48			max. Earth dist.	-10777 Apr 04 j 18:29		30.99861 AU
min. Earth dist.	-10784 Sep 17 j 10:18		28.95783 AU	morning rise	-10777 Apr 21 j 12:35		
direct	-10784 Dec 05 j 06:02			retrograde	-10777 Jul 17 j 23:13		
evening set	-10783 Mar 05 j 22:25			opposition	-10777 Oct 02 j 23:03		
max. Earth dist.	-10783 Mar 21 j 11:07	12° 5 03′28	30.95813 AU	min. Earth dist.	-10777 Oct 03 j 15:42		29.00538 AU
· · · · · · · · · · · ·	10792 M 22 : 02-17	120-204152	2022120	direct	-10777 Dec 21 j 19:40		
conjunction minimum elong	-10783 Mar 22 j 02:17 -10783 Mar 22 j 02:17			evening set max. Earth dist.	-10776 Mar 21 j 23:11 -10776 Apr 06 j 06:06		21 00962 AII
morning rise	-10783 Apr 07 j 04:01		2 34 13	max. Earm dist.	-10770 Apr 00 J 00.00	27 03630	31.00803 AU
retrograde	-10783 Jul 04 j 08:27			conjunction	-10776 Apr 07 j 01:59	27° 云 40'47	-2°14'52
opposition	-10783 Sep 19 j 08:12		-2°43'14	minimum elong	-10776 Apr 07 j 02:00		
min. Earth dist.	-10783 Sep 19 j 20:50			morning rise	-10776 Apr 23 j 01:50		2 10 20
direct	-10783 Dec 07 j 19:03				-10776 Jun 25 j 18:25		
evening set	-10782 Mar 08 j 12:33			retrograde	-10776 Jul 19 j 11:46		
C	,			Č	-10776 Aug 12 j 10:23	30°R₹	
conjunction	-10782 Mar 24 j 16:24	14° る 18'59	-2°31'37	opposition	-10776 Oct 04 j 09:29	28° る 46'58	-2°22'22
minimum elong	-10782 Mar 24 j 16:25	14° る 18'59	2°32'12	min. Earth dist.	-10776 Oct 05 j 02:29	28° る 45'46	29.01554 AU
max. Earth dist.	-10782 Mar 24 j 01:02	14° る 17'34	30.96297 AU	direct	-10776 Dec 23 j 08:09	27° ට 21'18	
morning rise	-10782 Apr 09 j 17:44	14° ප 54'33		evening set	-10775 Mar 24 j 12:41	29° ප 18'38	
retrograde	-10782 Jul 06 j 19:00						
opposition	-10782 Sep 21 j 18:40			conjunction	-10775 Apr 09 j 15:30		
min. Earth dist.	-10782 Sep 22 j 09:04		28.96768 AU	minimum elong	-10775 Apr 09 j 15:31		
direct	-10782 Dec 10 j 06:36			max. Earth dist.	-10775 Apr 08 j 19:54		31.01873 AU
evening set	-10781 Mar 11 j 02:36	15°₹57'10			-10775 Apr 12 j 04:31		
				morning rise	-10775 Apr 25 j 14:54		
conjunction	-10781 Mar 27 j 06:15			retrograde	-10775 Jul 21 j 22:09		2010120
minimum elong	-10781 Mar 27 j 06:16			opposition	-10775 Oct 06 j 20:13		
max. Earth dist.	-10781 Mar 26 j 13:43		30.9681 / AU	min. Earth dist.	-10775 Oct 07 j 14:42		29.02529 AU
morning rise	-10781 Apr 12 j 07:25 -10781 Jul 09 j 05:48			direct	-10775 Nov 15 j 15:28 -10775 Dec 25 j 20:52		
retrograde opposition	-10781 Sep 24 j 05:06		2038126	direct	-10774 Feb 03 j 13:19		
min. Earth dist.	-10781 Sep 24 j 19:05			evening set	-10774 Mar 27 j 02:22		
direct	-10781 Dec 12 j 19:19		20.97310710	max. Earth dist.	-10774 Apr 11 j 07:19		31.02823 AU
evening set	-10780 Mar 12 j 16:20						
				conjunction	-10774 Apr 12 j 04:49	2° ≈ 07'51	-2°07'36
conjunction	-10780 Mar 28 j 19:51	18° පි 46'40	-2°26'54	minimum elong	-10774 Apr 12 j 04:50	2° ≈ 07'51	
minimum elong	-10780 Mar 28 j 19:52			morning rise	-10774 Apr 28 j 04:04	2° ≈ 43'14	
max. Earth dist.	-10780 Mar 28 j 02:43	18° る 45'04	30.97401 AU	retrograde	-10774 Jul 24 j 11:08	4° ≈ 36'31	
morning rise	-10780 Apr 13 j 20:43	19° පි 22'11		opposition	-10774 Oct 09 j 06:51	3° ≈ 13'55	-2°14'24
retrograde	-10780 Jul 10 j 15:03	21° ප 16'11		min. Earth dist.	-10774 Oct 10 j 01:21	3° ≈ 12'37	29.03427 AU
opposition	-10780 Sep 25 j 15:38			direct	-10774 Dec 28 j 10:30	1° ≈ 48′17	
min. Earth dist.	-10780 Sep 26 j 07:01		28.97949 AU	evening set	-10773 Mar 29 j 15:52	3° ≈ 45'40	
direct	-10780 Dec 14 j 06:36				10550	40	2002:12
evening set	-10779 Mar 15 j 06:05	20° ℃ 24'32		conjunction	-10773 Apr 14 j 18:13	4°≈21'19	
	10770 14 21 : 00 22	210.7001	2024112	minimum elong	-10773 Apr 14 j 18:14	4°≈21'19	
conjunction	-10779 Mar 31 j 09:32			max. Earth dist.	-10773 Apr 13 j 20:38		31.03669 AU
minimum elong max. Earth dist.	-10779 Mar 31 j 09:32 -10779 Mar 30 j 16:10			morning rise	-10773 Apr 30 j 17:00 -10773 Jul 26 j 21:45	4°≈56'41 6°≈49'51	
max. Earth dist.	-10779 Mar 30 j 16:10 -10779 Apr 16 j 10:07		30.98100 AU	retrograde opposition	-10773 Jul 26 j 21:45 -10773 Oct 11 j 17:45	6°≈4931 5°≈27'18	2010/07
retrograde	-10779 Jul 13 j 01:33			min. Earth dist.	-10773 Oct 11 j 17:43 -10773 Oct 12 j 14:00		29.04217 AU
opposition	-10779 Sep 28 j 01:57		-2°32'41	direct	-10773 Dec 30 j 23:01	4°≈01'40	27.04217 AC
min. Earth dist.	-10779 Sep 28 j 17:14			evening set	-10772 Mar 31 j 05:10	5°≈59'02	
direct	-10779 Dec 16 j 19:05		20.70070110	max. Earth dist.	-10772 Apr 15 j 08:20		31.04417 AU
					r J 00.20		
evening set	-10778 Mar 17 i 19:57	22° る 38'04					
evening set	-10778 Mar 17 j 19:57	22° る 38'04		conjunction	-10772 Apr 16 j 07:14	6° ≈ 34'40	-1°59'36
evening set	-10778 Mar 17 j 19:57 -10778 Apr 02 j 23:08		-2°21'18	conjunction minimum elong	-10772 Apr 16 j 07:14 -10772 Apr 16 j 07:15	6°≈34'40 6°≈34'41	
-	-	23° ප 13'48		·			
conjunction	-10778 Apr 02 j 23:08	23° ට 13'48 23° ට 13'48	2°21'53	minimum elong	-10772 Apr 16 j 07:15	6° ≈ 34'41	
conjunction minimum elong	-10778 Apr 02 j 23:08 -10778 Apr 02 j 23:09	23°ත්13'48 23°ත්13'48 23°ත්12'04	2°21'53	minimum elong morning rise	-10772 Apr 16 j 07:15 -10772 May 02 j 05:52	6°≈34'41 7°≈10'01	2°00'08
conjunction minimum elong max. Earth dist. morning rise retrograde	-10778 Apr 02 j 23:08 -10778 Apr 02 j 23:09 -10778 Apr 02 j 04:32 -10778 Apr 18 j 23:30 -10778 Jul 15 j 12:36	23°ප13'48 23°ප13'48 23°ප12'04 23°ප49'17 25°ප43'00	2°21'53 30.98925 AU	minimum elong morning rise retrograde	-10772 Apr 16 j 07:15 -10772 May 02 j 05:52 -10772 Jul 28 j 08:37 -10772 Oct 13 j 04:26 -10772 Oct 14 j 00:28	6°≈34'41 7°≈10'01 9°≈03'02 7°≈40'33	2°00'08
conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-10778 Apr 02 j 23:08 -10778 Apr 02 j 23:09 -10778 Apr 02 j 04:32 -10778 Apr 18 j 23:30 -10778 Jul 15 j 12:36 -10778 Sep 30 j 12:30	23° ත13'48 23° ත13'48 23° ත12'04 23° ත49'17 25° ත43'00 24° ත20'03	2°21'53 30.98925 AU -2°29'28	minimum elong morning rise retrograde opposition min. Earth dist. direct	-10772 Apr 16 j 07:15 -10772 May 02 j 05:52 -10772 Jul 28 j 08:37 -10772 Oct 13 j 04:26 -10772 Oct 14 j 00:28 -10771 Jan 01 j 12:34	6°≈34'41 7°≈10'01 9°≈03'02 7°≈40'33 7°≈39'09 6°≈14'52	2°00'08 -2°05'40
conjunction minimum elong max. Earth dist. morning rise retrograde	-10778 Apr 02 j 23:08 -10778 Apr 02 j 23:09 -10778 Apr 02 j 04:32 -10778 Apr 18 j 23:30 -10778 Jul 15 j 12:36	23°ප13'48 23°ප13'48 23°ප12'04 23°ප49'17 25°ප43'00 24°ප20'03 24°ප18'54	2°21'53 30.98925 AU -2°29'28	minimum elong morning rise retrograde opposition min. Earth dist.	-10772 Apr 16 j 07:15 -10772 May 02 j 05:52 -10772 Jul 28 j 08:37 -10772 Oct 13 j 04:26 -10772 Oct 14 j 00:28	$6^{\circ} \approx 34'41$ $7^{\circ} \approx 10'01$ $9^{\circ} \approx 03'02$ $7^{\circ} \approx 40'33$ $7^{\circ} \approx 39'09$	2°00'08 -2°05'40

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10771 in astronomical counting style is the year 10772 BCE in historical counting style. -10771 Apr 18 j 20:22 8°≈47'51 -1°55'21 retrograde -10765 Aug 13 j 09:28 24°≈30'20 conjunction opposition -10771 Apr 18 j 20:23 8°≈47'52 1°55'50 -10765 Oct 29 j 07:44 23°≈08'06 -1°29'47 minimum elong -10771 Apr 17 j 20:41 8°≈45'39 31.05052 AU min. Earth dist. -10765 Oct 30 j 06:03 23°≈06'33 29.09781 AU max. Earth dist. -10771 May 04 j 18:37 9°≈23'11 direct -10764 Jan 18 j 02:52 21°≈42'22 morning rise -10771 Jul 30 j 18:03 11°≈16'03 -10764 Apr 18 j 11:14 23°≈39'39 retrograde evening set -10771 Oct 15 j 15:09 9°≈53'36 -2°01'01 max. Earth dist. -10764 May 03 j 10:16 24°≈12'49 31.10205 AU opposition -10771 Oct 16 j 12:47 9°≈52'05 29.05492 AU min. Earth dist. -10764 May 04 j 11:12 24°≈15'08 -1°21'17 direct -10770 Jan 03 j 23:56 8°≈27'53 conjunction evening set -10770 Apr 05 j 07:39 10°≈25'13 minimum elong -10764 May 04 j 11:13 24°≈15'08 1°21'41 max. Earth dist. -10770 Apr 20 j 09:18 10°≈58'35 31.05634 AU morning rise -10764 May 20 j 07:00 24°≈50'16 retrograde -10764 Aug 14 j 20:05 26°≈42'29 -10770 Apr 21 j 09:20 11°≈00'50 -1°50'55 -10764 Oct 30 j 18:43 25°≈20'20 -1°24'05 conjunction opposition -10770 Apr 21 j 09:21 11°≈00'50 1°51'25 -10764 Oct 31 j 18:16 25°≈18'42 29.10822 AU minimum elong min. Earth dist. morning rise -10770 May 07 j 07:16 11°≈36'07 direct -10763 Jan 19 j 15:19 23°≈54'40 retrograde -10770 Aug 02 j 04:05 13°≈28'51 evening set -10763 Apr 20 j 23:40 25°≈51'58 opposition -10770 Oct 18 j 01:54 12°≈06'26 -1°56'12 min. Earth dist. -10770 Oct 18 j 23:30 12°≈04'55 29.06040 AU conjunction -10763 May 06 j 23:10 26°≈27'25 -1°15'52 direct -10769 Jan 06 j 12:45 10°≈40'40 minimum elong -10763 May 06 j 23:11 26°≈27'25 1°16'14 evening set -10769 Apr 07 j 20:34 12°≈37'59 max. Earth dist. -10763 May 05 j 21:32 26°≈25'02 31.11272 AU morning rise -10763 May 22 j 18:42 27°≈02'33 conjunction -10769 Apr 23 j 21:54 13°≈13'34 -1°46'20 retrograde -10763 Aug 17 j 06:53 28°≈54'42 minimum elong -10769 Apr 23 j 21:54 13°≈13'34 1°46'48 opposition -10763 Nov 02 i 05:33 27°≈32'39 -1°18'15 max. Earth dist. -10769 Apr 22 j 20:52 13°≈11'14 31.06188 AU min. Earth dist. -10763 Nov 03 j 04:27 27°≈31'03 29.11872 AU morning rise -10769 May 09 j 19:33 13°≈48'51 direct -10762 Jan 22 i 04:31 26°≈07'02 -10769 Jun 15 i 17:23 15°≈ evening set -10762 Apr 23 j 12:02 28°≈04'20 -10769 Aug 04 j 14:10 15°≈41'28 max. Earth dist. -10762 May 08 j 09:20 28°≈37'22 31.12306 AU retrograde -10769 Sep 25 j 00:15 15°R≈ -10769 Oct 20 j 12:41 14°≈19'03 -1°51'13 -10762 May 09 j 11:12 28°≈39'47 -1°10'22 opposition conjunction -10769 Oct 21 j 10:59 14°≈17'29 29.06610 AU -10762 May 09 j 11:13 28°≈39'47 1°10'43 min. Earth dist. minimum elong -10768 Jan 08 j 23:42 12°≈53'15 -10762 May 25 j 06:14 29°≈14'52 direct morning rise -10768 Apr 09 j 09:17 14°**≈**50'32 -10762 Jun 16 j 04:34 0°**光** evening set -10768 Apr 13 j 16:59 15°≈ -10762 Aug 19 j 16:57 1°**米**07'00 retrograde -10762 Oct 26 j 15:28 30°R≈ -10768 Apr 24 j 10:08 15°≈23'50 31.06788 AU max. Earth dist. -10762 Nov 04 j 16:47 29°≈45'01 -1°12'18 opposition -10768 Apr 25 j 10:29 15°≈26'06 -1°41'36 -10762 Nov 05 j 16:53 29°≈43'20 29.12879 AU conjunction min. Earth dist. -10768 Apr 25 j 10:30 15°≈26'06 1°42'04 -10761 Jan 24 j 15:47 28°≈19'28 minimum elong direct -10768 May 11 j 07:43 16°≈01'21 -10761 Apr 18 j 04:53 0°**光** morning rise retrograde -10768 Aug 05 j 23:33 17°≈53'51 evening set -10761 Apr 26 j 00:12 0° **∺** 16'44 opposition -10768 Oct 21 j 23:20 16°≈31'27 -1°46'05 min. Earth dist. -10768 Oct 22 j 21:56 16°≈29'52 29.07233 AU conjunction -10761 May 11 j 22:59 0°**米** 52'10 -1°04'45 direct -10767 Jan 10 j 13:14 15°≈05'39 minimum elong -10761 May 11 j 22:59 0°**¥**52'10 1°05'05 -10767 Apr 11 j 22:02 17°≈02'55 max. Earth dist. -10761 May 10 j 21:02 0° **€** 49'44 31.13277 AU evening set -10761 May 27 j 17:37 1°**米**27'14 morning rise -10767 Apr 27 j 22:48 17°≈38'28 -1°36'44 -10761 Aug 22 j 03:11 3°**米** 19'18 conjunction retrograde -10767 Apr 27 j 22:48 17°≈38'28 1°37'10 -10761 Nov 07 j 03:58 1°**米** 57'23 -1°06'14 minimum elong opposition -10767 Apr 26 j 21:08 17°≈36'04 31.07468 AU -10761 Nov 08 j 03:54 1° **\(\)** 55'43 29.13785 AU max. Earth dist. min. Earth dist. -10767 May 13 i 19:50 18°≈13'41 -10760 Jan 27 i 04:29 morning rise direct 0°**)**€31'52 -10760 Apr 27 j 12:29 retrograde -10767 Aug 08 j 11:08 20°≈06'05 evening set 2°**¥**29′07 opposition -10767 Oct 24 j 10:03 18°≈43'43 -1°40'48 max. Earth dist. -10760 May 12 j 07:50 3° ★ 01'59 31.14132 AU min. Earth dist. -10767 Oct 25 j 08:23 18°≈42'10 29.07965 AU direct -10766 Jan 13 i 01:06 17°≈17'55 conjunction -10760 May 13 i 10:47 3°\colon 04'30 -0°59'02 -10766 Apr 14 j 10:30 19°≈15'11 minimum elong -10760 May 13 i 10:48 3° \(\pi\) 04'30 0°59'22 evening set max. Earth dist. -10766 Apr 29 j 10:27 19°≈48'24 31.08262 AU -10760 May 29 j 05:02 3° **X** 39'33 morning rise retrograde -10760 Aug 23 j 12:58 5°**)**(31'34 conjunction -10766 Apr 30 j 11:07 19°≈50'42 -1°31'43 opposition -10760 Nov 08 j 15:03 4°\;\;\)09'40 -1°00'06 -10760 Nov 09 j 15:43 4°**)** 07'58 29.14589 AU minimum elong -10766 Apr 30 j 11:07 19°≈50'42 1°32'09 min. Earth dist. -10766 May 16 j 07:36 20°≈25'54 morning rise direct -10759 Jan 28 j 15:30 2°**)**44'10 -10766 Aug 10 j 20:48 22°≈18'13 -10759 Apr 30 j 00:35 4°**)**41'23 retrograde evening set -10766 Oct 26 j 20:58 20°≈55'55 -1°35'22 opposition -10766 Oct 27 j 20:05 20°≈54'18 29.08809 AU -10759 May 15 j 22:36 5°**¥**16'45 -0°53'15 min. Earth dist. conjunction -10765 Jan 15 j 13:26 19°≈30'08 direct minimum elong -10759 May 15 j 22:37 5°**¥**16'45 0°53'33 evening set -10765 Apr 16 j 23:03 21°≈27'24 max. Earth dist. -10759 May 14 j 20:11 5°**₭**14'17 31.14881 AU morning rise -10759 May 31 j 16:19 5°**)** 51'45 conjunction -10765 May 02 j 23:11 22°≈02'54 -1°26'33 retrograde -10759 Aug 25 j 21:36 7°**)**(43'42 minimum elong -10765 May 02 j 23:11 22°≈02'54 1°26'58 opposition -10759 Nov 11 j 02:20 6°**∺**21'50 -0°53'52 max. Earth dist. -10765 May 01 j 21:28 22°≈00'30 31.09186 AU min. Earth dist. -10759 Nov 12 j 03:24 6°**升**20'06 29.15268 AU

direct

-10758 Jan 31 j 04:34

4°**)** 56'20

-10765 May 18 j 19:29 22°≈38'04

morning rise

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10758 in astronomical counting style is the year 10759 BCE in historical counting style. -10758 May 02 j 12:39 6° + 53'29 morning rise -10752 Jun 15 j 18:33 21° + 12'03 evening set max. Earth dist. -10758 May 17 j 06:20 7° **\(\)** 26'14 31.15524 AU -10752 Sep 09 j 22:21 23° ¥ 03'45 retrograde -10752 Nov 26 j 09:33 21°\dagger41'56 -0°08'48 opposition -10758 May 18 j 10:03 7° **H** 28'49 -0°47'24 -10752 Nov 27 j 09:22 21°**米**40'18 29.20135 AU min. Earth dist. conjunction -10758 May 18 j 10:04 7°**)** €28'49 0°47'41 -10751 Feb 15 j 20:24 20° **光** 16'36 minimum elong direct 8°**)**€03'48 -10758 Jun 03 j 03:27 -10751 May 17 j 20:51 22° **∺** 13'24 morning rise evening set -10758 Aug 28 j 08:44 retrograde 9°**)** 55'41 -10758 Nov 13 j 13:34 8° ★ 33'49 -0°47'35 -10751 Jun 02 j 14:46 22° **€** 48'28 -0°05'09 opposition conjunction min. Earth dist. 8°**¥**32'06 29.15876 AU -10751 Jun 02 j 14:46 22° **€** 48'28 0°05'17 -10758 Nov 14 j 14:23 minimum elong -10751 Jun 02 j 08:31 22°**)** 47'54 direct -10757 Feb 02 j 15:37 7°**₩**08'18 behind sun begin evening set -10757 May 05 j 00:24 9°**₭**05'24 behind sun end -10751 Jun 02 j 21:02 22° ¥49'02 -10751 Jun 01 j 12:57 22° ¥46'03 31.20578 AU max. Earth dist. -10757 May 20 j 21:32 9° **€** 40'41 -0°41'29 -10751 Jun 18 j 04:47 23°**∺**23'12 conjunction morning rise minimum elong -10757 May 20 j 21:32 9°**)** 40'41 0°41'44 retrograde -10751 Sep 12 j 08:32 25° ¥ 14'56 max. Earth dist. -10757 May 19 j 18:48 9° **∺** 38'12 31.16109 AU opposition -10751 Nov 28 j 21:08 23° **★**53'10 -0°02'14 morning rise -10757 Jun 05 j 14:20 10°**升** 15'38 min. Earth dist. -10751 Nov 29 j 21:03 23°**米**51'32 29.21083 AU retrograde -10757 Aug 30 j 17:53 12°**米**07'28 direct -10750 Feb 18 j 07:01 22°**∺**27'56 opposition -10757 Nov 16 j 00:53 10° **€**45'34 -0°41'13 asc. node -10750 Apr 01 j 19:17 22° **ਮ** 56'23 min. Earth dist. -10757 Nov 17 j 02:32 10°\(\pm\)43'48 29.16441 AU evening set -10750 May 20 j 07:54 24° **\(\)** 24'42 direct -10756 Feb 05 j 04:07 9° **★**20'04 max. Earth dist. -10750 Jun 04 j 00:45 24° ¥ 57'26 31.21513 AU evening set -10756 May 06 j 12:03 11° **€** 17'05 max. Earth dist. -10756 May 21 i 04:58 11° ** 49'45 31.16683 AU conjunction -10750 Jun 05 j 01:24 24° **H** 59'44 0°01'06 minimum elong -10750 Jun 05 i 01:22 24°**)** € 59'44 conjunction -10756 May 22 j 08:35 11° \(\frac{1}{52} \)'20 -0°35'31 behind sun begin -10750 Jun 04 j 18:55 24° **\(\)** 59'10 minimum elong -10756 May 22 j 08:35 11° \(\frac{1}{52} \)'20 0°35'45 behind sun end -10750 Jun 05 j 07:49 25° **ਮ** 00'19 -10756 Jun 07 j 01:07 12°**米**27'14 morning rise -10750 Jun 20 j 14:44 25° ¥ 34'26 morning rise -10756 Sep 01 j 05:45 14° **光** 19'01 -10750 Sep 14 j 17:18 27° **★** 26'13 retrograde retrograde -10756 Nov 17 j 12:04 12°\\$57'06 -0°34'49 -10750 Dec 01 j 08:53 26° \(\)04'30 0°04'20 opposition opposition -10756 Nov 18 j 12:46 12° **€** 55'24 29.17020 AU min. Earth dist. -10750 Dec 02 j 08:48 26° **米**02'52 29.21983 AU min. Earth dist. -10749 Feb 20 j 19:23 24°**)** 39'22 -10755 Feb 06 j 17:44 11° **€** 31'35 direct direct -10749 May 22 j 19:09 26° X 36'06 -10755 May 08 j 23:33 13°**米**28'32 evening set evening set -10749 Jun 06 j 10:19 27°**)** 08'42 31.22377 AU max. Earth dist. -10755 May 24 j 19:42 14° ¥ 03'46 -0°29'30 conjunction -10755 May 24 j 19:43 14°**米**03'46 0°29'42 -10749 Jun 07 j 11:53 27°**光** 11'06 0°07'16 minimum elong conjunction -10755 May 23 j 17:08 14°**米**01'17 31.17280 AU -10749 Jun 07 j 11:53 27°**光** 11'06 0°07'11 max. Earth dist. minimum elong -10755 Jun 09 j 11:35 14° **∺**38'37 -10749 Jun 07 j 05:55 27° **∺** 10'34 morning rise behind sun begin -10755 Sep 03 j 15:33 16° **★** 30'21 -10749 Jun 07 j 17:50 27° **₭** 11'38 retrograde behind sun end opposition -10755 Nov 19 j 23:25 15° ₭ 08'26 -0°28'22 morning rise -10749 Jun 23 j 00:51 27° ¥45'46 min. Earth dist. -10755 Nov 21 j 00:55 15° ¥ 06'41 29.17653 AU retrograde -10749 Sep 17 j 04:48 29° ₩ 37'36 direct -10754 Feb 09 j 06:14 13° **∺**42'56 opposition -10749 Dec 03 j 20:34 28° **★**15'55 0°10'53 evening set -10754 May 11 j 11:04 15° **∺** 39'50 min. Earth dist. -10749 Dec 04 j 19:57 28° **∺** 14'19 29.22807 AU max. Earth dist. -10754 May 26 j 03:57 16°**米** 12'31 31.17967 AU -10748 Feb 23 j 05:27 26° **∺** 50'50 direct -10748 May 24 j 06:09 28°**)** 47'33 evening set -10754 May 27 j 06:36 16°**米** 15'01 -0°23'26 conjunction -10754 May 27 j 06:36 16°**米** 15'01 0°23'38 conjunction -10748 Jun 08 j 22:28 29° **€** 22'30 0°13'22 minimum elong -10754 Jun 11 j 22:06 16° \(\frac{4}{4}9'50 \) -10748 Jun 08 j 22:28 29° \ 22'30 0°13'18 morning rise minimum elong -10754 Sep 06 j 02:13 18°\dagger41'32 -10748 Jun 08 j 18:42 29°\cdot\cdot 22'10 retrograde behind sun begin -10754 Nov 22 j 10:47 17° **¥** 19'38 -0°21'52 -10748 Jun 09 i 02:14 29° ₩ 22'51 opposition behind sun end -10748 Jun 07 j 21:58 29° \ 20'13 31.23129 AU min. Earth dist. -10754 Nov 23 j 10:53 17° **H** 17'59 29.18383 AU max. Earth dist. direct -10753 Feb 11 j 19:38 15° **€** 54'10 morning rise -10748 Jun 24 i 10:45 29° ¥ 57'09 -10753 May 13 j 22:17 17° **ਮ** 51'01 -10748 Jun 25 j 18:04 0°**Υ** evening set retrograde -10748 Sep 18 j 14:14 1°**Υ**49'01 -10753 May 29 j 17:20 18° \(\frac{1}{2} \) 26'09 -0°17'22 -10748 Dec 05 j 08:29 0°Υ27'22 0°17'26 conjunction opposition -10748 Dec 06 j 08:40 0°**Υ**25'42 29.23487 AU minimum elong -10753 May 29 j 17:20 18° **★** 26'09 0°17'32 min. Earth dist. max. Earth dist. -10753 May 28 j 15:10 18°**米**23'43 31.18750 AU -10748 Dec 22 j 07:55 30°R € -10747 Feb 24 j 17:38 29°**米**02'21 morning rise -10753 Jun 14 j 08:17 19°**米**00'57 direct $0^{\circ}\Upsilon$ retrograde -10753 Sep 08 j 12:28 20° **∺** 52'39 -10747 Apr 27 j 06:44 -10753 Nov 24 j 22:16 19° **★** 30'46 -0°15'21 evening set -10747 May 26 j 17:19 0°Y59'01 opposition -10753 Nov 25 j 22:50 19°**米**29'05 29.19224 AU max. Earth dist. -10747 Jun 10 j 07:26 1°**Υ**31'33 31.23740 AU min. Earth dist. -10752 Feb 14 j 07:22 18° **₭** 05'23 direct -10752 May 15 j 09:32 20° **米**02'11 -10747 Jun 11 j 08:51 1°**Υ**'33'56 0°19'28 evening set conjunction max. Earth dist. -10752 May 30 j 02:35 20° **★** 34'54 31.19643 AU minimum elong -10747 Jun 11 j 08:50 1°**Ƴ**33'56 0°19'26 2°Y08'32 morning rise -10747 Jun 26 j 20:43 conjunction -10752 May 31 j 04:06 20° ★ 37'17 -0°11'15 retrograde -10747 Sep 21 j 02:18 4°**Υ**00'27 minimum elong $-10752 \text{ May } 31 \text{ j } 04:05 \quad 20^{\circ} \text{ H} 37'17 \quad 0^{\circ}11'25$ opposition -10747 Dec 07 j 20:17 2°**Y**38'47 0°23'57 behind sun begin -10752 May 30 j 23:23 20° **ਮ** 36'52 min. Earth dist. -10747 Dec 08 j 19:31 2°Υ37'12 29.24026 AU

direct

-10746 Feb 27 j 06:29

1°Y13'49

behind sun end

-10752 May 31 j 08:48 20° **∺** 37'42

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 13 Attention, astronomical year style is used: The year -10746 in astronomical counting style is the year 10747 BCE in historical counting style.

Attention, astronom	nical year style is used: The	e year -10746	in astronomical co	ounting style is the yea	10747 BCE in historical counting style.	
evening set	-10746 May 29 j 04:16	3° Υ 10'26		opposition	-10740 Dec 23 j 08:14 17° Υ 55'24 1°07'54	
				min. Earth dist.	-10740 Dec 24 j 04:01 17° Υ 54'04 29.26481 AU	U
conjunction	-10746 Jun 13 j 19:19	3° Y 45'18	0°25'32	direct	-10739 Mar 14 j 20:34 16° Y 30'41	
minimum elong	-10746 Jun 13 j 19:19	3° Y 45'18	0°25'31	evening set	-10739 Jun 13 j 05:30 18° Y 26'48	
max. Earth dist.	-10746 Jun 12 j 18:47		31.24205 AU			
morning rise	-10746 Jun 29 j 06:30			conjunction	-10739 Jun 28 j 16:08 19° Y ′01'21 1°06'25	
retrograde	-10746 Sep 23 j 12:39	6° Ƴ 11'49		minimum elong	-10739 Jun 28 j 16:08 19° Y 01'21 1°06'34	
opposition	-10746 Dec 10 j 08:23			max. Earth dist.	-10739 Jun 27 j 20:07 18° Y 59'28 31.26685 AU	Ű
min. Earth dist.	-10746 Dec 11 j 08:29		29.24435 AU	morning rise	-10739 Jul 13 j 23:28 19° Y '35'39	
direct	-10745 Mar 01 j 18:21	3° Y 25'12		retrograde	-10739 Oct 08 j 09:45 21° Y 27'59	
evening set	-10745 May 31 j 15:02			opposition	-10739 Dec 25 j 20:30 20° Y 06'07 1°13'52	
max. Earth dist.	-10745 Jun 15 j 04:48	5°°\7'54'15	31.24564 AU	min. Earth dist.	-10739 Dec 26 j 16:25 20° Υ 04'46 29.27021 AU	J
	10745 1 16:05 24	500056124	0021124	direct	-10738 Mar 17 j 08:31 18° Υ 41'29	
conjunction	-10745 Jun 16 j 05:24			evening set	-10738 Jun 15 j 15:48 20° Y 37'33	rr
minimum elong	-10745 Jun 16 j 05:24		0°31′34	max. Earth dist.	-10738 Jun 30 j 05:28 21° Υ 10'10 31.27237 AU	IJ
morning rise	-10745 Jul 01 j 16:10			agniumation	-10738 Jul 01 j 01:38 21° Y °12'03 1°11'56	
retrograde	-10745 Sep 25 j 23:21 -10745 Dec 12 j 20:15		0026150	conjunction minimum elong	-10738 Jul 01 j 01:37 21° Y 12'03 1°12'06	
opposition min. Earth dist.	-10745 Dec 12 j 20:13		29.24742 AU	morning rise	-10738 Jul 16 j 08:35 21° \cdot \cdo	
direct	-10744 Mar 03 j 07:57		29.24/42 AU	retrograde	-10738 Oct 10 j 08.33 21 j 40 l 9 $-10738 \text{ Oct } 10 \text{ j} 21:33 \text{ 23}^{\circ} \text{ Y} 38'45$	
evening set	-10744 Jun 02 j 01:45			opposition	-10738 Dec 28 j 08:44 22° Y 16'54 1°19'43	
evening set	-10/44 Juli 02 j 01.43	7 1 32 34		min. Earth dist.	-10738 Dec 29 j 03:06 22° Y 15'39 29.27570 AU	ſΪ
conjunction	-10744 Jun 17 j 15:32	8° Ƴ 07'41	0°37'33	direct	-10737 Mar 19 j 19:32 20° Y52'21	U
minimum elong	-10744 Jun 17 j 15:31			evening set	-10737 Jun 18 j 01:49 22° \begin{picture}(\gamma 48') 22' \\ \gamma 48' 22' \end{picture}	
max. Earth dist.	-10744 Jun 16 j 15:13		31.24831 AU	evening set	10757 Juli 10 j 01.45 22 j 40 22	
morning rise	-10744 Jul 03 j 01:42		31.24031710	conjunction	-10737 Jul 03 j 11:08 23° Y 22'50 1°17'21	
retrograde	-10744 Sep 27 j 10:02			minimum elong	-10737 Jul 03 j 11:07 23° Y 22'50 1°17'33	
opposition	-10744 Dec 14 j 08:07		0°43'12	max. Earth dist.	-10737 Jul 02 j 16:14 23° Y 21'03 31.27749 AU	U
min. Earth dist.	-10744 Dec 15 j 07:28		29.25000 AU	morning rise	-10737 Jul 18 j 17:26 23° Y 57'04	
direct	-10743 Mar 05 j 20:32			retrograde	-10737 Oct 13 j 08:02 25° Y 49'37	
evening set	-10743 Jun 04 j 12:19			opposition	-10737 Dec 30 j 21:10 24° \begin{pmatrix} 27'45 & 1\circ 25'27 \end{pmatrix}	
max. Earth dist.	-10743 Jun 19 j 02:08		31.25082 AU	min. Earth dist.	-10737 Dec 31 j 16:08 24° Υ 26'28 29.28056 AU	U
	·			direct	-10736 Mar 21 j 06:00 23° Υ '03'17	
conjunction	-10743 Jun 20 j 01:30	10° Ƴ 18'38	0°43'28	evening set	-10736 Jun 19 j 12:03 24° Υ '59'16	
minimum elong	-10743 Jun 20 j 01:29	10° Ƴ 18'38	0°43'31			
morning rise	-10743 Jul 05 j 11:06	10° Ƴ 53'04		conjunction	-10736 Jul 04 j 20:40 25° Y 33'40 1°22'40	
retrograde	-10743 Sep 29 j 19:53			minimum elong	-10736 Jul 04 j 20:39 25° Y 33'40 1°22'52	
opposition	-10743 Dec 16 j 20:08			max. Earth dist.	-10736 Jul 04 j 01:59 25° Υ 31'55 31.28182 AU	U
min. Earth dist.	-10743 Dec 17 j 18:22		29.25254 AU	morning rise	-10736 Jul 20 j 02:29 26° Y 07'52	
direct	-10742 Mar 08 j 10:41			retrograde	-10736 Oct 14 j 19:20 28° Y 00'31	
evening set	-10742 Jun 06 j 22:45			opposition	-10735 Jan 01 j 09:24 26° Y 38'39 1°31'03	
max. Earth dist.	-10742 Jun 21 j 11:52	12° Y 27'14	31.25355 AU	min. Earth dist.	-10735 Jan 02 j 02:56 26° Y 37'28 29.28430 AU	Ű
		0 0		direct	-10735 Mar 23 j 19:09 25° Y 14'14	
conjunction	-10742 Jun 22 j 11:09			evening set	-10735 Jun 21 j 22:14 27° Υ 10'10	
minimum elong	-10742 Jun 22 j 11:09		0°49'23	max. Earth dist.	-10735 Jul 06 j 11:46 27° γ 42'48 31.28478 AU	J
morning rise	-10742 Jul 07 j 20:16				10707 1 07:06 10 07:00 100	
retrograde	-10742 Oct 02 j 05:30		0055142	conjunction	-10735 Jul 07 j 06:12 27°\partial 44'32 1°27'51	
opposition	-10742 Dec 19 j 08:13			minimum elong	-10735 Jul 07 j 06:11 27° Υ 44'32 1°28'05 -10735 Jul 22 j 11:29 28° Υ 18'41	
min. Earth dist.	-10742 Dec 20 j 05:57 -10741 Mar 10 j 21:39		47.43378 AU	morning rise	-10/35 Jul 22 j 11:29 28 7 18:41 -10735 Sep 21 j 06:28 0° 8	
direct evening set	-10741 Mar 10 j 21:39 -10741 Jun 09 j 09:03			retrograde	-10735 Sep 21 J 06:28 0°O -10735 Oct 17 J 07:06 0°O11'27	
evening set	-10/41 Juli 09 J 09.03	14 1 03 27		renograde	-10735 Nov 12 j 19:15 30°R Υ	
conjunction	-10741 Jun 24 j 20:57	14° ℃ ⊿∩'∩5	0°55'06	opposition	-10735 Nov 12 j 19:13 30° K 1 -10734 Jan 03 j 22:01 28° Y 49'32 1° 36'32	
minimum elong	-10741 Jun 24 j 20:57		0°55'11	min. Earth dist.	-10734 Jan 03 J 22.01 28 Y 4932 1 3032 $-10734 \text{ Jan } 04 \text{ j} 15:55 28^{\circ}\text{Y} 48'20 29.28675 \text{ AU}$	ſΪ
max. Earth dist.	-10741 Jun 23 j 23:27			direct	-10734 Mar $26 \text{ j } 07:12$ 27° \begin{picture}(25) \ 25\)25\]	U
morning rise	-10741 Jul 10 j 05:23		51.25/15 AU	evening set	-10734 Jun 24 j 08:13 29° Y 21'03	
retrograde	-10741 Oct 04 j 13:31			evening sec	1075 13th 215 00:15 25 121 05	
opposition	-10741 Dec 21 j 20:13		1°01'51	conjunction	-10734 Jul 09 j 15:36 29° Y 55'22 1°32'55	
min. Earth dist.	-10741 Dec 22 j 17:18			minimum elong	-10734 Jul 09 j 15:35 29° Υ 55'22 1°33'09	
direct	-10740 Mar 12 j 10:25			max. Earth dist.	-10734 Jul 08 j 22:12 29° Y 53'44 31.28647 AU	U
evening set	-10740 Jun 10 j 19:23				-10734 Jul 11 j 16:46 0°8	
max. Earth dist.	-10740 Jun 25 j 08:43		31.26166 AU	morning rise	-10734 Jul 24 j 20:20 0°\(29'29\)	
	- .	- •	-	retrograde	-10734 Oct 19 j 17:25 2°\(\overline{8}\)22'21	
conjunction	-10740 Jun 26 j 06:31	16° Ƴ 50'43	1°00'48	opposition	-10733 Jan 06 j 10:37 1°800'24 1°41'53	
minimum elong	-10740 Jun 26 j 06:30		1°00'55	min. Earth dist.	-10733 Jan 07 j 03:27 0°\(\begin{array}{cccccccccccccccccccccccccccccccccccc	U
morning rise	-10740 Jul 11 j 14:34				-10733 Feb 16 j 22:25 30°R Y	
retrograde	-10740 Oct 06 j 00:51	19° Ƴ 17'16		direct	-10733 Mar 28 j 21:09 29° Y 36′05	
-						

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10733 in astronomical counting style is the year 10734 BCE in historical counting style. -10733 May 06 i 13:11 0°8 minimum elong -10727 Jul 24 i 07:13 15°**8**08'38 2°04'34 -10733 Jun 26 j 18:17 max. Earth dist. -10727 Jul 23 j 19:54 15°**8**07'34 31.28424 AU evening set 1°**8**31'51 max. Earth dist. -10733 Jul 11 j 07:18 2°**8**04'28 31.28673 AU -10727 Aug 08 j 08:54 15°842'33 morning rise -10727 Nov 03 j 17:52 17°**8**36'12 retrograde -10733 Jul 12 j 00:58 2°806'08 1°37'51 -10726 Jan 22 j 02:43 16°**8**13'52 2°14'43 conjunction opposition -10733 Jul 12 j 00:57 minimum elong 2°**8**06'08 -10726 Jan 22 j 12:46 16°**8**13'12 29.28664 AU 1°38'07 min. Earth dist. -10733 Jul 27 j 05:19 2°**8**40'13 morning rise -10726 Mar 18 j 19:35 15°**₹**8 -10733 Oct 22 j 03:56 4°**8**33'10 -10726 Apr 13 j 05:40 14°**8**49'52 retrograde direct -10732 Jan 08 j 23:03 3°**8**11'09 1°47'04 opposition -10726 May 08 j 05:40 15°**8** -10726 Jul 11 j 13:11 16°**8**45'07 min. Earth dist. -10732 Jan 09 j 15:38 3°**8**10'02 29.28757 AU evening set direct -10732 Mar 30 j 08:15 1°**8**46'52 -10732 Jun 28 j 04:04 3°**8**42'33 -10726 Jul 26 j 16:02 17°**8**19'07 2°07'59 evening set conjunction -10726 Jul 26 j 16:00 17°**8**19'07 2°08'23 minimum elong conjunction -10732 Jul 13 j 10:19 4°**8**16'47 1°42'38 max. Earth dist. -10726 Jul 26 j 05:28 17°**8**18'07 31.28620 AU minimum elong -10732 Jul 13 j 10:18 4°**8**16'47 1°42'55 morning rise -10726 Aug 10 j 17:23 17°**8**53'01 max. Earth dist. -10732 Jul 12 j 18:17 4°**8**15'16 31.28599 AU retrograde -10726 Nov 06 j 06:39 19°**8**46'50 morning rise -10732 Jul 28 j 14:04 4°**8**50'50 opposition -10725 Jan 24 j 15:35 18°**8**24'29 2°18'41 retrograde -10732 Oct 23 j 12:26 6°843'52 min. Earth dist. -10725 Jan 25 j 01:27 18°**8**23'49 29.28892 AU opposition -10731 Jan 10 j 11:38 5°**8**21'47 1°52'07 direct -10725 Apr 15 j 16:36 17°**8**00'35 min. Earth dist. -10731 Jan 11 j 03:41 5°**8**20'42 29.28643 AU evening set -10725 Jul 13 j 22:34 18°855'47 direct -10731 Apr 01 j 21:51 3°**8**57'31 evening set -10731 Jun 30 j 13:50 5°**8**53'06 conjunction -10725 Jul 29 i 01:02 19°\(29'46 \) 2°11'36 minimum elong -10725 Jul 29 i 01:01 19°\(29'46 \) 2°12'01 -10725 Jul 28 j 16:04 19°**8**28'55 31.28842 AU conjunction -10731 Jul 15 j 19:19 6°\begin{align*} 6°\begin{align*} 227'18 1°47'16 \end{align*} max. Earth dist. minimum elong -10731 Jul 15 j 19:18 6°\27'18 1°47'35 morning rise -10725 Aug 13 j 01:58 20°**8**03'38 max. Earth dist. -10731 Jul 15 j 03:04 6°**8**25'46 31.28462 AU retrograde -10725 Nov 08 j 17:39 21°857'36 -10731 Jul 30 j 22:46 7°**8**01'19 morning rise opposition -10731 Oct 25 j 23:46 8°854'27 -10724 Jan 27 j 12:45 20°**8**34'41 29.29099 AU retrograde min. Earth dist. -10730 Jan 13 j 00:12 7°**8**32'18 1°56'59 -10724 Apr 17 j 05:20 19°**8**11'27 opposition direct -10730 Jan 13 j 14:50 7°**8**31'18 29.28512 AU -10724 Jul 15 j 08:06 21°806'37 min. Earth dist. evening set -10730 Apr 04 j 08:51 6°**8**08'03 direct -10730 Jul 02 j 23:23 8°**8**03'33 -10724 Jul 30 j 09:57 21°**8**40'33 2°15'02 evening set conjunction -10724 Jul 30 j 09:56 21°**8**40'33 2°15'28 minimum elong -10730 Jul 18 j 04:27 8°**8**37'41 1°51'44 -10724 Jul 30 j 00:55 21°**8**39'42 31.29015 AU max. Earth dist. conjunction -10730 Jul 18 j 04:26 8°**8**37'41 1°52'04 -10724 Aug 14 j 10:41 22°**8**14'25 minimum elong morning rise -10730 Jul 17 j 14:09 8°**8**36'20 31.28327 AU -10724 Nov 10 j 05:16 24°**8**08'33 max. Earth dist. retrograde -10730 Aug 02 j 07:17 9°**8**11'41 -10723 Jan 28 j 17:10 22°846'10 2°26'02 morning rise opposition retrograde -10730 Oct 28 j 08:28 11°**8**04'56 min. Earth dist. -10723 Jan 29 j 01:10 22°**8**45'38 29.29249 AU opposition -10729 Jan 15 j 12:54 9°**8**42'42 2°01'41 direct -10723 Apr 19 j 16:05 21°**8**22'27 min. Earth dist. -10729 Jan 16 j 03:16 9°**8**41'43 29.28414 AU evening set -10723 Jul 17 j 17:24 23°**8**17'34 direct -10729 Apr 06 j 20:56 8°**8**18'29 -10729 Jul 05 j 08:55 10°**8**13'53 conjunction -10723 Aug 01 j 18:58 23°**8**51'29 2°18'17 evening set -10723 Aug 01 j 18:57 23°**8**51'29 2°18'44 minimum elong -10729 Jul 20 j 13:18 10°**8**48'00 1°56'03 max. Earth dist. -10723 Aug 01 j 11:46 23°**8**50'48 31.29100 AU conjunction -10729 Jul 20 j 13:17 10°**8**48'00 1°56'24 -10723 Aug 16 j 19:13 24°**8**25'19 minimum elong morning rise -10729 Jul 19 j 23:21 10° \(\begin{aligned}
 46'40 31.28265 AU \) -10723 Nov 12 j 15:01 26°819'36 max. Earth dist. retrograde -10729 Aug 04 j 15:52 11°**8**21'57 -10722 Jan 31 j 06:15 24°\(\delta 57'12 \) 2°29'23 morning rise opposition -10729 Oct 30 j 19:49 13°815'19 retrograde min. Earth dist. -10722 Jan 31 j 13:38 24° 856'42 29.29276 AU -10728 Jan 18 j 01:25 11° \$\begin{align*} \begin{align*} \begin{al opposition direct -10722 Apr 22 j 06:01 23°\begin{align*} 23°\begin{align*} 233'34 \end{align*} min. Earth dist. -10728 Jan 18 i 13:42 11° 852'12 29.28403 AU evening set -10722 Jul 20 j 02:59 25°**8**28'36 direct -10728 Apr 08 j 07:34 10°**8**28'52 evening set -10728 Jul 06 j 18:23 12°824'13 conjunction -10722 Aug 04 j 03:57 26°802'29 2°21'20 minimum elong -10722 Aug 04 j 03:56 26°802'29 2°21'47 -10722 Aug 03 j 20:23 26°**8**01'46 31.29062 AU conjunction -10728 Jul 21 j 22:18 12°858'17 2°00'12 max. Earth dist. minimum elong -10728 Jul 21 j 22:17 12°858'17 2°00'34 morning rise -10722 Aug 19 j 04:07 26°**8**36'18 max. Earth dist. -10728 Jul 21 j 09:55 12°857'07 31.28288 AU retrograde -10722 Nov 15 j 03:35 28°\begin{align*} 28°\begin{align*} \begin{align*} 30'44 \end{align*} morning rise -10728 Aug 06 j 00:20 13°\begin{align*} 32'13 \end{align*} opposition -10721 Feb 02 j 19:13 27°**8**08'17 2°32'32 -10728 Sep 22 j 23:49 15°8 min. Earth dist. -10721 Feb 03 j 01:21 27°**8**07'52 29.29183 AU -10728 Nov 01 j 06:15 15°**8**25'44 direct -10721 Apr 24 j 17:12 25°**8**44'41 retrograde -10728 Dec 12 j 01:53 15°R8 -10721 Jul 22 j 12:17 27°\begin{align*} 239'38 \end{align*} evening set -10727 Jan 19 j 14:02 14°**8**03'24 2°10'33 opposition min. Earth dist. -10727 Jan 20 j 02:16 14°**8**02'35 29.28489 AU conjunction -10721 Aug 06 j 13:04 28°**8**13'30 2°24'10 direct -10727 Apr 10 j 17:09 12°\(\mathbf{3}39'19\) minimum elong -10721 Aug 06 j 13:03 28°**8**13'30 2°24'39 evening set -10727 Jul 09 j 03:52 14°**8**34'36 max. Earth dist. -10721 Aug 06 j 07:00 28°**8**12'55 31.28882 AU -10727 Jul 20 j 11:46 15°**8** morning rise -10721 Aug 21 j 12:52 28°**8**47'19 -10721 Sep 27 j 18:44 $0^{\circ}II$

retrograde

-10721 Nov 17 j 12:18 0°**Ⅲ**41'51

-10727 Jul 24 j 07:14 15°**8**08'38 2°04'11

conjunction

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 15 Attention, astronomical year style is used: The year -10720 in astronomical counting style is the year 10721 BCE in historical counting style.

Attention, astronom	nical year style is used: The	e year -10720	in astronomical co	ounting style is the year	r 10721 BCE in historical	counting sty	le.
	-10720 Jan 09 j 23:57	30°R₩		conjunction	-10714 Aug 21 j 03:09	13° Ⅲ 28′24	2°38'06
opposition	-10720 Feb 05 j 08:19	29° 8 19'20	2°35'28	minimum elong	-10714 Aug 21 j 03:08	13° Ⅲ 28′24	2°38'40
min. Earth dist.	-10720 Feb 05 j 14:32		29.28937 AU	max. Earth dist.	-10714 Aug 21 j 04:42		31.26442 AU
direct	-10720 Apr 26 j 05:30			morning rise	-10714 Sep 05 j 02:13	14° Ⅱ 02'10	
evening set	-10720 Jul 23 j 21:41			retrograde	-10714 Dec 02 j 19:59		
	-10720 Jul 28 j 02:43	$\Pi^{\circ}0$		opposition	-10713 Feb 21 j 03:27		
				min. Earth dist.	-10713 Feb 21 j 01:45		29.26592 AU
conjunction	-10720 Aug 07 j 22:00			direct	-10713 May 12 j 13:28		
minimum elong	-10720 Aug 07 j 21:59			evening set	-10713 Aug 08 j 13:10	15° Ⅱ 05'28	
max. Earth dist.	-10720 Aug 07 j 16:01		31.28573 AU			_	
morning rise	-10720 Aug 22 j 21:42	0° ∏ 58'15		conjunction	-10713 Aug 23 j 11:58		
retrograde	-10720 Nov 18 j 23:21	2° ∏ 52'55		minimum elong	-10713 Aug 23 j 11:57		
opposition	-10719 Feb 06 j 21:12	1° Ⅱ 30'19		max. Earth dist.	-10713 Aug 23 j 13:34		31.26293 AU
min. Earth dist.	-10719 Feb 07 j 01:43		29.28574 AU	morning rise	-10713 Sep 07 j 11:14		
direct	-10719 Apr 28 j 16:39			retrograde	-10713 Dec 05 j 09:13		
evening set	-10719 Jul 26 j 06:56	2° Ⅱ 01'30		opposition	-10712 Feb 23 j 16:32		
	10710 4 10:07.00	201125110	202011.4	min. Earth dist.	-10712 Feb 23 j 13:17		29.26448 AU
conjunction	-10719 Aug 10 j 07:00			direct	-10712 May 14 j 00:10		
minimum elong	-10719 Aug 10 j 06:59			evening set	-10712 Aug 09 j 22:08	1/°Щ16′28	
max. Earth dist.	-10719 Aug 10 j 02:14		31.28157 AU		10712 A 24: 20-57	170TE0112	2940105
morning rise	-10719 Aug 25 j 06:28	3° Ⅱ 09'06 5° Ⅱ 03'53		conjunction	-10712 Aug 24 j 20:57 -10712 Aug 24 j 20:57		
retrograde	-10719 Nov 21 j 09:54		2940140	minimum elong max. Earth dist.	-10/12 Aug 24 j 20:5/ -10712 Aug 25 j 00:17		
opposition	-10718 Feb 09 j 10:23	3° Ⅱ 41'10	29.28141 AU		-10712 Aug 25 j 00:17 -10712 Sep 08 j 20:08		31.20122 AU
min. Earth dist. direct	-10718 Feb 09 j 15:02		29.28141 AU	morning rise	-10712 Sep 08 j 20:08 -10712 Dec 06 j 18:52		
	-10718 May 01 j 02:56 -10718 Jul 28 j 15:59			retrograde opposition	-10712 Dec 06 j 18.32 -10711 Feb 25 j 05:45		2051126
evening set	-10/16 Jul 28 J 15.39	4 H 1213		min. Earth dist.	-10711 Feb 25 j 03:43 -10711 Feb 25 j 02:24		
conjunction	-10718 Aug 12 j 15:46	4° ∏ 46′02	2021127	direct	-10711 Feb 23 j 02.24 -10711 May 16 j 12:03		29.20233 AU
minimum elong	-10718 Aug 12 j 15:46	4° Ⅱ 46′02		evening set	-10711 May 10 j 12:03		
max. Earth dist.	-10718 Aug 12 j 13:40		31.27711 AU	evening set	-10/11 Aug 12 J 0/.19	19 112/39	
morning rise	-10718 Aug 12 j 12:10 -10718 Aug 27 j 15:08	5° Ⅱ 19'49	31.2//11 AU	conjunction	-10711 Aug 27 j 06:00	20°π01;23	2040/43
retrograde	-10718 Nov 23 j 21:18	7° Ⅱ 14'42		minimum elong	-10711 Aug 27 j 06:00		
opposition	-10717 Feb 11 j 23:21	5° I 51'54	2°42'55	max. Earth dist.	-10711 Aug 27 j 00:00 -10711 Aug 27 j 09:42		
min. Earth dist.	-10717 Feb 12 j 01:52		29.27696 AU	morning rise	-10711 Sep 11 j 05:22		31.230)) NO
direct	-10717 May 03 j 15:24		27.27070 AO	retrograde	-10711 Dec 09 j 06:57		
evening set	-10717 Jul 31 j 01:08			opposition	-10710 Feb 27 j 18:57		2°52'00
evening sec	10/1/041 515 01.00	0 22200		min. Earth dist.	-10710 Feb 27 j 13:50		
conjunction	-10717 Aug 15 j 00:37	6°∏56'39	2°33'27	direct	-10710 May 18 j 22:56		27.20703110
minimum elong	-10717 Aug 15 j 00:36			evening set	-10710 Aug 14 j 16:26		
max. Earth dist.	-10717 Aug 14 j 21:38		31.27271 AU				
morning rise	-10717 Aug 29 j 23:56	7° Ⅱ 30'25		conjunction	-10710 Aug 29 j 15:08	22° Ⅱ 12'45	2°41'08
retrograde	-10717 Nov 26 j 09:44	9° Ⅱ 25'25		minimum elong	-10710 Aug 29 j 15:08		
opposition	-10716 Feb 14 j 12:17	8° Ⅲ 02'31	2°44'56	max. Earth dist.	-10710 Aug 29 j 19:46		
min. Earth dist.	-10716 Feb 14 j 14:27	8° Ⅲ 02'22	29.27301 AU	morning rise	-10710 Sep 13 j 14:38	22° II 46'35	
direct	-10716 May 05 j 01:32	6° Ⅱ 39'01		retrograde	-10710 Dec 11 j 18:20	24° II 42'40	
evening set	-10716 Aug 01 j 10:09	8° Ⅲ 33'26		opposition	-10709 Mar 02 j 08:19	23° I I19'31	2°52'18
				min. Earth dist.	-10709 Mar 02 j 03:36	23° Ⅱ 19'50	29.25582 AU
conjunction	-10716 Aug 16 j 09:31		2°35'13	direct	-10709 May 21 j 08:58	21° 耳 56'31	
minimum elong	-10716 Aug 16 j 09:30	9° Ⅱ 07'11	2°35'45	evening set	-10709 Aug 17 j 01:41	23° Ⅱ 50′29	
max. Earth dist.	-10716 Aug 16 j 08:28		31.26910 AU				
morning rise	-10716 Aug 31 j 08:37	9° Ⅱ 40'57		conjunction	-10709 Sep 01 j 00:28		
retrograde	-10716 Nov 27 j 20:40			minimum elong	-10709 Sep 01 j 00:28		
opposition	-10715 Feb 16 j 01:16			max. Earth dist.	-10709 Sep 01 j 05:56		31.25087 AU
min. Earth dist.	-10715 Feb 16 j 01:35		29.26981 AU	morning rise	-10709 Sep 16 j 00:04		
direct	-10715 May 07 j 13:46	8° Ⅱ 49'40		retrograde	-10709 Dec 14 j 06:17		
evening set	-10715 Aug 03 j 19:09	10° Ⅱ 44′00		opposition	-10708 Mar 03 j 21:21		
		_		min. Earth dist.	-10708 Mar 03 j 14:57		29.25029 AU
conjunction	-10715 Aug 18 j 18:10			direct	-10708 May 22 j 20:58		
minimum elong	-10715 Aug 18 j 18:10			evening set	-10708 Aug 18 j 10:56	26° Ⅲ 02'01	
max. Earth dist.	-10715 Aug 18 j 17:28		31.26634 AU		40=00 =		
morning rise	-10715 Sep 02 j 17:24			conjunction	-10708 Sep 02 j 09:41		
retrograde	-10715 Nov 30 j 09:11		00.4015.5	minimum elong	-10708 Sep 02 j 09:41		
opposition	-10714 Feb 18 j 14:25			max. Earth dist.	-10708 Sep 02 j 15:10		31.24457 AU
min. Earth dist.	-10714 Feb 18 j 13:42		29.26759 AU	morning rise	-10708 Sep 17 j 09:36		
direct	-10714 May 10 j 00:23			retrograde	-10708 Dec 15 j 19:23		2052:15
evening set	-10714 Aug 06 j 04:06	12° ⊥ 54'40		opposition	-10707 Mar 06 j 10:43		2°52'12
				min. Earth dist.	-10707 Mar 06 j 04:25	∠/° Щ 43'07	29.24335 AU

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10707 in astronomical counting style is the year 10708 BCE in historical counting style. direct -10707 May 25 j 06:32 26° **1**19'45 minimum elong -10701 Sep 18 j 02:22 11°555'19 2°35'02 evening set -10707 Aug 20 j 19:53 28°**Д**13'32 max. Earth dist. -10701 Sep 18 j 15:16 11°556'33 31.19228 AU -10701 Oct 03 j 04:44 12°529'25 morning rise -10707 Sep 04 j 18:54 28° II 47'18 2°40'58 -10700 Jan 01 j 06:42 14°526'29 conjunction retrograde -10707 Sep 04 j 18:54 28° II 47'18 2°41'34 -10700 Mar 22 j 06:09 13°502'36 2°44'04 minimum elong opposition -10707 Sep 05 j 02:03 28°**Ц**47'58 31.23705 AU max. Earth dist. min. Earth dist. -10700 Mar 21 j 16:56 13°503'30 29.19188 AU -10707 Sep 19 j 18:57 29°**Ⅲ**21'11 morning rise direct -10700 Jun 09 j 15:10 11°539'47 -10707 Oct 08 j 02:33 0ಂತಾ evening set -10700 Sep 04 j 11:06 13°532'55 retrograde -10707 Dec 18 j 06:44 1°9517'39 -10706 Mar 05 j 10:23 30°RⅡ conjunction -10700 Sep 19 j 11:50 14°506'49 2°32'33 opposition -10706 Mar 08 j 23:57 29°**I** 54'15 2°51'46 minimum elong -10700 Sep 19 j 11:51 14°506'50 2°33'09 min. Earth dist. -10706 Mar 08 j 16:13 29°**I** 54'46 29.23523 AU max. Earth dist. -10700 Sep 20 j 02:05 14°508'11 31.18706 AU direct -10706 May 27 j 18:29 28°**Ⅲ**31'18 morning rise -10700 Oct 04 j 14:37 14°540'57 -10706 Aug 11 j 15:16 0ಂತಾ retrograde -10699 Jan 02 j 18:18 16°538'09 evening set -10706 Aug 23 j 05:04 0°924'59 opposition -10699 Mar 24 j 19:08 15°5014'14 2°41'56 min. Earth dist. -10699 Mar 24 j 04:01 15°\$15'15 29.18657 AU conjunction -10706 Sep 07 j 04:04 0°958'45 2°40'28 direct -10699 Jun 12 j 02:28 13°551'28 minimum elong -10706 Sep 07 j 04:04 0°958'45 2°41'04 evening set -10699 Sep 06 j 20:15 15°544'32 max. Earth dist. -10706 Sep 07 j 11:08 0°559'25 31.22863 AU morning rise -10706 Sep 22 j 04:35 1°532'40 conjunction -10699 Sep 21 j 21:15 16°518'28 2°30'26 retrograde -10706 Dec 20 j 19:59 3°529'13 minimum elong -10699 Sep 21 j 21:15 16°518'29 2°31'02 opposition -10705 Mar 11 j 13:02 2°505'43 2°51'06 max. Earth dist. -10699 Sep 22 j 11:37 16°519'50 31.18167 AU min. Earth dist. -10705 Mar 11 i 04:44 2°506'16 29.22670 AU morning rise -10699 Oct 07 i 00:40 16°552'39 direct -10705 May 30 j 05:20 0°9542'45 retrograde -10698 Jan 05 i 07:06 18°549'59 evening set -10705 Aug 25 j 14:00 2°536'20 opposition -10698 Mar 27 j 08:20 17°526'01 2°39'33 min. Earth dist. -10698 Mar 26 j 17:20 17°527'02 29.18099 AU -10705 Sep 09 j 13:21 3°910'07 2°39'43 -10698 Jun 14 j 11:25 16°503'17 conjunction direct -10705 Sep 09 j 13:21 3°9510'07 evening set -10698 Sep 09 j 05:30 17°556'18 minimum elong 2°40'19 -10705 Sep 09 j 22:28 3°5510'59 31.22001 AU max. Earth dist. -10705 Sep 24 j 14:02 3°544'04 -10698 Sep 24 j 07:05 18°530'17 2°28'06 morning rise conjunction -10705 Dec 23 j 07:40 5°540'42 -10698 Sep 24 j 07:05 18°530'17 2°28'41 retrograde minimum elong -10704 Mar 13 j 02:06 4°\$17'05 2°50'11 -10698 Sep 24 j 23:04 18°931'48 31.17579 AU max. Earth dist. opposition -10698 Oct 09 j 10:54 19°504'30 min. Earth dist. -10704 Mar 12 j 16:52 4°\$17'42 29.21814 AU morning rise -10704 May 31 j 18:37 2°554'08 -10697 Jan 07 j 19:06 21°501'56 direct retrograde -10697 Mar 29 j 21:13 19°537'56 2°36'56 evening set -10704 Aug 26 j 23:02 4°9547'36 opposition -10697 Mar 29 j 05:03 19°539'01 29.17456 AU min. Earth dist. -10704 Sep 10 j 22:25 5°521'24 2°38'45 conjunction direct -10697 Jun 16 j 22:42 18°515'14 minimum elong -10704 Sep 10 j 22:25 5°521'24 2°39'20 evening set -10697 Sep 11 j 15:00 20°508'11 max. Earth dist. -10704 Sep 11 j 07:42 5°522'17 31.21178 AU morning rise -10704 Sep 25 j 23:33 5°55'23 conjunction -10697 Sep 26 j 16:52 20°542'12 2°25'33 retrograde -10704 Dec 24 j 20:47 7°552'07 minimum elong -10697 Sep 26 j 16:52 20°542'12 2°26'08 -10703 Mar 15 j 15:08 6°\$28'24 2°49'02 max. Earth dist. -10697 Sep 27 j 08:21 20°5543'40 31.16889 AU opposition -10703 Mar 15 j 04:13 6°529'08 29.21032 AU -10697 Oct 11 j 21:25 21°516'28 min. Earth dist. morning rise -10703 Jun 03 j 05:14 5°9505'27 -10696 Jan 10 j 09:14 23°5014'01 direct retrograde -10703 Aug 29 j 07:58 -10696 Mar 31 j 10:19 21°5549'56 2°34'05 evening set 6°958'50 opposition min. Earth dist. -10696 Mar 30 j 17:58 21°551'03 29.16706 AU -10703 Sep 13 i 07:43 7°532'40 2°37'33 conjunction direct -10696 Jun 18 j 08:51 20°527'15 minimum elong -10703 Sep 13 i 07:43 7°532'40 2°38'09 evening set -10696 Sep 13 j 00:17 22°520'08 max. Earth dist. -10703 Sep 13 j 18:49 7°533'43 31.20435 AU -10703 Sep 28 i 09:08 8°\$06'40 -10696 Sep 28 j 02:45 22°554'11 2°22'47 morning rise conjunction -10703 Dec 27 j 06:48 10°503'31 -10696 Sep 28 i 02:46 22°\$54'12 2°23'21 retrograde minimum elong -10702 Mar 18 j 04:13 8°939'43 2°47'37 -10696 Sep 28 j 19:49 22°555'48 31.16073 AU opposition max. Earth dist. -10702 Mar 17 j 16:52 8°\$40'30 29.20338 AU -10696 Oct 13 j 07:43 23°528'30 min. Earth dist. morning rise direct -10702 Jun 05 j 17:27 7°9516'49 retrograde -10695 Jan 11 j 21:41 25°526'09 -10702 Aug 31 j 16:57 evening set 9°9510'05 opposition -10695 Apr 02 j 23:23 24°502'00 2°31'01 -10695 Apr 02 j 06:34 24°503'08 29.15816 AU min. Earth dist. conjunction -10702 Sep 15 j 16:59 9°5643'57 2°36'07 -10695 Jun 20 j 21:18 22°539'19 direct -10702 Sep 15 j 16:59 9°5643'57 2°36'42 -10695 Sep 15 j 09:48 24°532'07 minimum elong evening set -10702 Sep 16 j 04:50 9°545'04 31.19801 AU max. Earth dist. -10702 Sep 30 j 18:53 10°518'00 -10695 Sep 30 j 12:40 25°506'13 2°19'49 morning rise conjunction -10702 Dec 29 j 19:19 12°514'57 retrograde minimum elong -10695 Sep 30 j 12:41 25°506'13 2°20'23 opposition -10701 Mar 20 j 17:11 10°951'06 2°45'58 max. Earth dist. -10695 Oct 01 j 05:22 25°507'48 31.15144 AU min. Earth dist. -10701 Mar 20 j 03:48 10°552'00 29.19736 AU morning rise -10695 Oct 15 j 18:25 25°540'35 direct -10701 Jun 08 j 04:57 9°528'14 retrograde -10694 Jan 14 j 11:32 27°538'17 evening set -10701 Sep 03 j 02:02 11°521'26 opposition -10694 Apr 05 j 12:21 26°514'03 2°27'44 min. Earth dist. -10694 Apr 04 j 18:34 26°515'15 29.14830 AU

direct

-10694 Jun 23 j 07:45 24°551'21

-10701 Sep 18 j 02:21 11°555'19 2°34'27

conjunction

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 17 Attention, astronomical year style is used: The year -10694 in astronomical counting style is the year 10695 BCE in historical counting style.

Attention, astronomi	cal year style is	s used: The	e year -10694	in astronomical co	unting style is the year	10695 BCE in historica	counting styl	le.
evening set	-10694 Sep 1	7 j 19:10	26°5544'03		max. Earth dist.	-10688 Oct 16 j 09:30		31.08890 AU
					morning rise	-10688 Oct 30 j 21:58	11° Ω 04'54	
conjunction	-10694 Oct 0				retrograde	-10687 Jan 30 j 01:11		
minimum elong	-10694 Oct 0	-			min. Earth dist.	-10687 Apr 20 j 06:33		
max. Earth dist.				31.14116 AU	opposition	-10687 Apr 21 j 05:12		1°59'01
morning rise	-10694 Oct 1	5			direct	-10687 Jul 08 j 10:47		
retrograde	-10693 Jan 1			20.12565.133	evening set	-10687 Oct 02 j 14:01	12° 3 1 08'06	
min. Earth dist.				29.13767 AU		10007.0 + 17:01.50	100 0 4010 5	1040107
opposition	-10693 Apr 0	-		2°24'14	conjunction	-10687 Oct 17 j 21:52		
direct	-10693 Jun 2	-			minimum elong max. Earth dist.	-10687 Oct 17 j 21:53 -10687 Oct 18 j 21:47		
evening set	-10693 Sep 2	20] 04:37	28-90001					31.08303 AU
conjunction	-10693 Oct 0	05 ; 00:40	20.0230,06	2012!16	morning rise	-10687 Nov 02 j 09:10 -10686 Jan 01 j 07:27		
minimum elong	-10693 Oct 0			2°13'49	retrograde	-10686 Feb 01 j 14:01		
max. Earth dist.		5		31.13057 AU	renograde	-10686 Mar 05 j 13:28		
max. Earth dist.	-10693 Oct 1	-	0°Ω	31.13037710	opposition	-10686 Apr 23 j 17:44		1°54'08
morning rise	-10693 Oct 2	-	0° Ω 04'36		min. Earth dist.	-10686 Apr 22 j 18:44		
retrograde	-10692 Jan 1		2°Ω02'26		direct	-10686 Jul 10 j 21:55		29.001.0110
opposition	-10692 Apr 0	-	0° £ 38′00	2°20'32	evening set	-10686 Oct 05 j 00:03		
min. Earth dist.	-10692 Apr 0	-		29.12705 AU				
	-10692 May 0	5			conjunction	-10686 Oct 20 j 08:30	14° Ω 55'14	1°44'29
direct	-10692 Jun 2	-	29° © 15'16		minimum elong	-10686 Oct 20 j 08:31		
	-10692 Aug 1		$0^{\circ}\Omega$		max. Earth dist.	-10686 Oct 21 j 07:58	14° Ω 57'27	31.07723 AU
evening set	-10692 Sep 2	21 j 14:06	1° Ω 07'47			-10686 Oct 22 j 11:01		
					morning rise	-10686 Nov 04 j 20:41	15° Ω 30′07	
conjunction	-10692 Oct 0	06 j 18:39	1° Ω 42′01	2°09'43	retrograde	-10685 Feb 04 j 04:25	17° Ω 28'31	
minimum elong	-10692 Oct 0	06 j 18:40	1° Ω 42′01	2°10'14	min. Earth dist.	-10685 Apr 25 j 06:36	16° Ω 05′25	29.07535 AU
max. Earth dist.	-10692 Oct 0	07 j 13:48	1° Ω 43′50	31.12018 AU	opposition	-10685 Apr 26 j 06:18	16° Ω 03'48	1°49'05
morning rise	-10692 Oct 2	22 j 02:23	2° Ω 16′33			-10685 Jun 09 j 10:14	15° R Ω	
retrograde	-10691 Jan 2	20 j 23:28	4° Ω 14'27		direct	-10685 Jul 13 j 07:29	14° Ω 41'13	
min. Earth dist.	-10691 Apr 1	1 j 07:40		29.11704 AU		-10685 Aug 15 j 11:02		
opposition	-10691 Apr 1	-	2° Ω 49'55	2°16'38	evening set	-10685 Oct 07 j 10:12	16° Ω 33'28	
direct	-10691 Jun 2	-	1° Ω 27'11					
evening set	-10691 Sep 2	23 j 23:25	3° Ω 19'38		conjunction	-10685 Oct 22 j 19:21		1°39'41
					minimum elong	-10685 Oct 22 j 19:22		
conjunction	-10691 Oct 0	-	3° Ω 53'54		max. Earth dist.	-10685 Oct 23 j 19:38		31.07072 AU
minimum elong	-10691 Oct 0	-	3° Ω 53'54		morning rise	-10685 Nov 07 j 08:13		
max. Earth dist.	-10691 Oct 1	-		31.11078 AU	retrograde	-10684 Feb 06 j 17:17		1042152
morning rise	-10691 Oct 2	-			opposition	-10684 Apr 27 j 18:51		
retrograde opposition	-10690 Jan 2 -10690 Apr 1	5	6°Ω26'27 5°Ω01'52	2012/21	min. Earth dist. direct	-10684 Apr 26 j 19:39 -10684 Jul 14 j 19:43		29.06834 AU
min. Earth dist.	-10690 Apr 1	-		29.10806 AU	evening set	-10684 Oct 08 j 20:29		
direct	-10690 Apr 1	-	3° Ω 39'08	29.10800 AU	evening set	-10064 Oct 06 j 20.29	10 0640 22	
evening set	-10690 Sep 2	-	5° Ω 31'31		conjunction	-10684 Oct 24 j 06:21	19° Ω 21'01	1°34'44
evening set	10090 Sep 2	20] 07.04	3 003131		minimum elong	-10684 Oct 24 j 06:22		1°35'09
conjunction	-10690 Oct 1	1 i 14·50	6° Ω 05'51	2°02'01	max. Earth dist.	-10684 Oct 25 j 06:37		
minimum elong	-10690 Oct 1		6° Ω 05'51		morning rise	-10684 Nov 08 j 19:59		31.003.0110
max. Earth dist.	-10690 Oct 1			31.10241 AU	retrograde	-10683 Feb 08 j 08:20		
morning rise	-10690 Oct 2	-	6° Ω 40′29		min. Earth dist.	-10683 Apr 29 j 07:08		29.06034 AU
retrograde	-10689 Jan 2	-	8° Ω 38'32		opposition	-10683 Apr 30 j 07:23	20° Ω 29'44	1°38'30
min. Earth dist.	-10689 Apr 1	-	7° Ω 15′20	29.10027 AU	direct	-10683 Jul 17 j 07:52	19° Ω 07'10	
opposition	-10689 Apr 1	7 j 03:58	7° Ω 13'54	2°08'12	evening set	-10683 Oct 11 j 06:50	20° Ω 59'20	
direct	-10689 Jul 0	04 j 14:32	5° Ω 51'12					
evening set	-10689 Sep 2	28 j 18:36	7° Ω 43'32		conjunction	-10683 Oct 26 j 17:22	21° Ω 34′03	1°29'38
					minimum elong	-10683 Oct 26 j 17:23	21° Ω 34′03	1°30'03
conjunction	-10689 Oct 1		8° Ω 17'55		max. Earth dist.	-10683 Oct 27 j 17:38		31.05481 AU
minimum elong	-10689 Oct 1	14 j 01:11	8° Ω 17'55	1°58'24	morning rise	-10683 Nov 11 j 07:52	22° Ω 09'07	
max. Earth dist.	-10689 Oct 1	5		31.09523 AU	retrograde	-10682 Feb 10 j 20:18		
morning rise	-10689 Oct 2	-	8° £ 52'36		opposition	-10682 May 02 j 20:02		1°32'59
retrograde	-10688 Jan 2		10° Ω 50'44		min. Earth dist.	-10682 May 01 j 20:47		29.05112 AU
opposition	-10688 Apr 1		9° Ω 26'05		direct	-10682 Jul 19 j 18:47		
min. Earth dist.	-10688 Apr 1	-		29.09342 AU	evening set	-10682 Oct 13 j 17:16	23° {\ 12'18	
direct	-10688 Jul 0	-	8° Ω 03'25			10/00 0 . 201011	220 2 4=-2	100 40 5
evening set	-10688 Sep 3	80 յ 04:14	9° Ω 55'43		conjunction	-10682 Oct 29 j 04:40		1°24'25
aanium - ti	10600 0 4 1	£:11.16	100 0 20100	1052127	minimum elong	-10682 Oct 29 j 04:41		
conjunction minimum elong	-10688 Oct 1 -10688 Oct 1	-			max. Earth dist. morning rise	-10682 Oct 30 j 05:35 -10682 Nov 13 j 19:51		31.04322 AU
mmmum ciong	-10000 OCI 1	J 11.1/	10 063009	1 34 03	morning 1150	-10002 NOV 13 J 19:31	∠ → 0(∠∠ 11	

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 18

•	nical year style is used: The		-	* **			page 18
retrograde	-10681 Feb 13 j 08:27		in astronomical co	evening set	-10675 Oct 28 j 20:04		ie.
•	-10681 May 04 j 07:56		20.04006 ATT	evening set	-100/3 Oct 28 j 20.04	0 11/4210	
min. Earth dist.				:	10675 N 12 : 12-26	00 ms 1712 c	0044140
opposition	-10681 May 05 j 08:15		1°27'20	conjunction	-10675 Nov 13 j 12:26	9° Mp 17'25	0°44'48
direct	-10681 Jul 22 j 06:55			minimum elong	-10675 Nov 13 j 12:27 -10675 Nov 14 j 15:41	9° Mp 17'25	0°45'03
evening set	-10681 Oct 16 j 03:50	25-8625-12		max. Earth dist.	,	•	30.98602 AU
. ,.	10001 0 + 21 : 15 40	260 00001	1010104	morning rise	-10675 Nov 29 j 08:58	9° M 52'56	
conjunction	-10681 Oct 31 j 15:48			retrograde	-10674 Mar 01 j 03:46	-•	0944126
minimum elong	-10681 Oct 31 j 15:49		1°19'27	opposition	-10674 May 20 j 21:13		
max. Earth dist.	-10681 Nov 01 j 16:05		31.03486 AU	min. Earth dist.	-10674 May 19 j 18:50		28.98382 AU
morning rise	-10681 Nov 16 j 07:54			direct	-10674 Aug 06 j 09:19	9° m 03'38	
retrograde	-10680 Feb 15 j 21:03		1021124	evening set	-10674 Oct 31 j 07:25	10°11/25'37	
opposition	-10680 May 06 j 20:40				1067431 16:00.22	110 m- 20140	0020147
min. Earth dist.	-10680 May 05 j 21:00		29.03048 AU	conjunction	-10674 Nov 16 j 00:22		0°38'47
direct	-10680 Jul 23 j 16:38			minimum elong	-10674 Nov 16 j 00:23	-•	0°39'01
evening set	-10680 Oct 17 j 14:08	2/3/238/01		max. Earth dist.	-10674 Nov 17 j 03:32	-•	30.98063 AU
	10.00031 00:00.50	200 010152	101010	morning rise	-10674 Dec 01 j 21:39		
conjunction	-10680 Nov 02 j 02:58			retrograde	-10673 Mar 03 j 16:22	-	
minimum elong	-10680 Nov 02 j 02:59			min. Earth dist.	-10673 May 22 j 07:57	-•	
max. Earth dist.	-10680 Nov 03 j 04:44		31.02449 AU	opposition	-10673 May 23 j 09:09	-•	0°38'08
morning rise	-10680 Nov 17 j 19:41			direct	-10673 Aug 08 j 19:40		
	-10680 Dec 24 j 13:00	-		evening set	-10673 Nov 02 j 18:47	13° m)09'11	
retrograde	-10679 Feb 17 j 08:29	0° m/46'40					
	-10679 Apr 15 j 06:30			conjunction	-10673 Nov 18 j 12:32	-•	0°32'42
min. Earth dist.	-10679 May 08 j 08:11			minimum elong	-10673 Nov 18 j 12:33	-•	0°32'55
opposition	-10679 May 09 j 08:54		1°15'40	max. Earth dist.	-10673 Nov 19 j 16:10		30.97522 AU
direct	-10679 Jul 26 j 04:22			morning rise	-10673 Dec 04 j 10:22		
evening set	-10679 Oct 20 j 00:49			retrograde	-10672 Mar 05 j 06:14	-•	
	-10679 Oct 24 j 04:49	0° m		opposition	-10672 May 24 j 21:03		
				min. Earth dist.	-10672 May 23 j 19:05	14° M 55'26	28.97268 AU
conjunction	-10679 Nov 04 j 14:14	0°Mp25'40	1°08'02	direct	-10672 Aug 10 j 07:43	13° m 30'53	
minimum elong	-10679 Nov 04 j 14:15	0°Mp25'40	1°08'23	evening set	-10672 Nov 04 j 06:21	15° m 22'57	
max. Earth dist.	-10679 Nov 05 j 15:25	0° Mp 28′02	31.01467 AU				
morning rise	-10679 Nov 20 j 07:53	1°Mp00'58		conjunction	-10672 Nov 20 j 00:36	15° m 58'14	0°26'34
retrograde	-10678 Feb 19 j 21:23	2° m 59'32		minimum elong	-10672 Nov 20 j 00:37		
opposition	-10678 May 11 j 21:03	1° Mp 34'22	1°09'39	max. Earth dist.	-10672 Nov 21 j 03:09		30.96907 AU
min. Earth dist.	-10678 May 10 j 20:21	1° ™ 36'04	29.01088 AU	morning rise	-10672 Dec 05 j 23:15	16°₩33'54	
direct	-10678 Jul 28 j 13:45	0° Mp 11′35		retrograde	-10671 Mar 07 j 20:12	18° m 32'45	
evening set	-10678 Oct 22 j 11:28	2°M,03'30		min. Earth dist.	-10671 May 26 j 08:21	17° m 09'15	28.96608 AU
				opposition	-10671 May 27 j 09:08	17° ™ 07'32	0°25'01
conjunction	-10678 Nov 07 j 01:44	2°Mp38′27	1°02'22	direct	-10671 Aug 12 j 17:35	15° Mp 44'46	
minimum elong	-10678 Nov 07 j 01:45	2°M/38'27	1°02'42	evening set	-10671 Nov 06 j 18:04	17° Mp36′52	
max. Earth dist.	-10678 Nov 08 j 04:24	2°Mp40′58	31.00584 AU				
morning rise	-10678 Nov 22 j 20:00	3° Mp 13′48		conjunction	-10671 Nov 22 j 13:10	18°M/12'12	0°20'24
retrograde	-10677 Feb 22 j 09:11	5° Mp 12'24		minimum elong	-10671 Nov 22 j 13:10		0°20'34
min. Earth dist.	-10677 May 13 j 08:06	3°Mp48′54	29.00252 AU	max. Earth dist.	-10671 Nov 23 j 16:21	18° m 14'45	30.96194 AU
opposition	-10677 May 14 j 09:09	3° ™ 47'10	1°03'32	morning rise	-10671 Dec 08 j 12:18	18° ™ 47'56	
direct	-10677 Jul 31 j 00:35	2°M/24'22		retrograde	-10670 Mar 10 j 07:59	20° Mp 46'47	
evening set	-10677 Oct 24 j 22:14	4°Mp16′17		opposition	-10670 May 29 j 20:54	19° m 21'32	0°18'23
				min. Earth dist.	-10670 May 28 j 19:52	19° m 23'17	28.95827 AU
conjunction	-10677 Nov 09 j 13:07	4° m 51'17	0°56'36	direct	-10670 Aug 15 j 05:33	17° m 58'45	
minimum elong	-10677 Nov 09 j 13:07	4° ™ 51'17	0°56'54	evening set	-10670 Nov 09 j 06:05	19° m 50′52	
max. Earth dist.	-10677 Nov 10 j 15:21	4° M 53′46	30.99820 AU				
morning rise	-10677 Nov 25 j 08:12	5° Mp 26′41		conjunction	-10670 Nov 25 j 01:41	20° Mp 26'14	0°14'12
retrograde	-10676 Feb 24 j 23:28	7° m 25'20		minimum elong	-10670 Nov 25 j 01:41	20° Mp $26'14$	0°14'22
opposition	-10676 May 15 j 21:11	6° Mp 00′05	0°57'19	behind sun begin	-10670 Nov 24 j 22:44	20° Mp 25° 58	
min. Earth dist.	-10676 May 14 j 19:23	6°Mp01'52	28.99543 AU	behind sun end	-10670 Nov 25 j 04:37	20°M 26'30	
direct	-10676 Aug 01 j 10:03	4° Mp37′16		max. Earth dist.	-10670 Nov 26 j 03:21	20° m 28'39	30.95363 AU
evening set	-10676 Oct 26 j 09:06	6°Mp29'12		morning rise	-10670 Dec 11 j 01:37		
				retrograde	-10669 Mar 12 j 20:38	23°M 00'51	
conjunction	-10676 Nov 11 j 00:43	7° ™ 04'16	0°50'44	min. Earth dist.	-10669 May 31 j 08:34	$21^\circ\text{Mp}37'16$	28.94944 AU
minimum elong	-10676 Nov 11 j 00:43	7° ™ 04'16	0°51'02	opposition	-10669 Jun 01 j 08:50	$21^{\circ}\text{Mp}35'34$	0°11'44
max. Earth dist.	-10676 Nov 12 j 03:51	7° ™ 06'49	30.99162 AU	direct	-10669 Aug 17 j 15:16	20° My 12° 43	
morning rise	-10676 Nov 26 j 20:29	7° m 39'43		evening set	-10669 Nov 11 j 17:52	22°Mp04'51	
retrograde	-10675 Feb 26 j 12:27	9° m √38′24					
min. Earth dist.	-10675 May 17 j 07:50	8° m 14'54	28.98928 AU	conjunction	-10669 Nov 27 j 14:13	22° Mp $40^{\circ}16$	0°07'59
opposition	-10675 May 18 j 09:15	8° m 13'08	0°51'00	minimum elong	-10669 Nov 27 j 14:13	$22^{\circ} \mathrm{Mp} 40' 16$	0°08'07
direct	-10675 Aug 03 j 21:36	6° Mp 50′21		behind sun begin	-10669 Nov 27 j 08:25	22° m 39'45	

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 19

-	ical year style is used: The		_		ar 10670 BCE in historical		le.
behind sun end	-10669 Nov 27 j 20:00			evening set	-10663 Nov 24 j 19:09		
max. Earth dist.	-10669 Nov 28 j 16:41		30.94434 AU	S	,		
morning rise	-10669 Dec 13 j 14:35			conjunction	-10663 Dec 10 j 18:44	6° £ 03'20	-0°29'22
retrograde	-10668 Mar 14 j 07:56			minimum elong	-10663 Dec 10 j 18:43	6° ჲ 03'20	0°29'22
opposition	-10668 Jun 02 j 20:32	23° m/49'34	0°05'04	max. Earth dist.	-10663 Dec 11 j 19:40	6° £ 05'40	30.89919 AU
min. Earth dist.	-10668 Jun 01 j 20:36			morning rise	-10663 Dec 26 j 22:23	6° ≏ 39'21	
direct	-10668 Aug 19 j 02:08	22° m 26'38		retrograde	-10662 Mar 28 j 16:28	8° 亞 38'00	
evening set	-10668 Nov 13 j 05:53			opposition	-10662 Jun 16 j 17:09	7° £ 12'29	-0°34'44
	-			min. Earth dist.	-10662 Jun 15 j 18:24	7° £ 14'05	28.89772 AU
conjunction	-10668 Nov 29 j 02:47	24° Mp 54'14	0°01'45	direct	-10662 Sep 01 j 21:26	5° ≏ 49'13	
minimum elong	-10668 Nov 29 j 02:45	24° m 54'14	0°01'52	evening set	-10662 Nov 27 j 07:46	7° ≏ 41'39	
behind sun begin	-10668 Nov 28 j 20:14	24° m 53'39					
behind sun end	-10668 Nov 29 j 09:17	24° m 54'49		conjunction	-10662 Dec 13 j 08:00	8° £ 17′20	-0°35'29
max. Earth dist.	-10668 Nov 30 j 04:10	24° M 56'37	30.93477 AU	minimum elong	-10662 Dec 13 j 07:59	8° £ 17′20	0°35'30
morning rise	-10668 Dec 15 j 03:51	25° m/30'05		max. Earth dist.	-10662 Dec 14 j 09:40	8° £ 19'44	30.89564 AU
desc. node	-10667 Mar 10 j 07:33	27° m 28'09		morning rise	-10662 Dec 29 j 11:53	8° ჲ 53'22	
retrograde	-10667 Mar 16 j 21:42	27° m 28'52		retrograde	-10661 Mar 31 j 04:40	10° ≙ 52'01	
min. Earth dist.	-10667 Jun 04 j 08:05	26° Mp 05'09	28.93035 AU	min. Earth dist.	-10661 Jun 18 j 05:21	9° ჲ 28'09	28.89445 AU
opposition	-10667 Jun 05 j 08:08	26° m 03'28	-0°01'36	opposition	-10661 Jun 19 j 04:24	9° ≏ 26'32	-0°41'15
direct	-10667 Aug 21 j 12:01	-		direct	-10661 Sep 04 j 09:27	8° ≏ 03'15	
evening set	-10667 Nov 15 j 17:56	26° m 32'37		evening set	-10661 Nov 29 j 20:34	9° £ 55'47	
C	J	•		S	,		
conjunction	-10667 Dec 01 j 15:26	27° m 08'06	-0°04'37	conjunction	-10661 Dec 15 j 21:04	10° ≏ 31'29	-0°41'34
minimum elong	-10667 Dec 01 j 15:26			minimum elong	-10661 Dec 15 j 21:03		
behind sun begin	-10667 Dec 01 j 09:02			max. Earth dist.	-10661 Dec 16 j 21:17		
behind sun end	-10667 Dec 01 j 21:51			morning rise	-10660 Jan 01 j 01:29		
max. Earth dist.	-10667 Dec 02 j 17:18		30.92541 AU	retrograde	-10660 Apr 01 j 18:06		
morning rise	-10667 Dec 17 j 17:02			opposition	-10660 Jun 20 j 15:45		-0°47'44
retrograde	-10666 Mar 19 j 09:31			min. Earth dist.	-10660 Jun 19 j 17:33		
opposition	-10666 Jun 07 j 19:43		-0°08'16	direct	-10660 Sep 05 j 19:12		
min. Earth dist.	-10666 Jun 06 j 20:26	-		evening set	-10660 Dec 01 j 09:32		
direct	-10666 Aug 23 j 24:00			3	,		
evening set	-10666 Nov 18 j 06:07			conjunction	-10660 Dec 17 j 10:36	12° ≏ 45'48	-0°47'35
8				minimum elong	-10660 Dec 17 j 10:36		
conjunction	-10666 Dec 04 j 04:13	29°m21'55	-0°10'49	max. Earth dist.	-10660 Dec 18 j 11:21		
minimum elong	-10666 Dec 04 j 04:12			morning rise	-10659 Jan 02 j 15:13		30.00701110
behind sun begin	-10666 Dec 03 j 23:13	-	0 10 10	retrograde	-10659 Apr 04 j 06:07		
behind sun end	-10666 Dec 04 j 09:11			min. Earth dist.	-10659 Jun 22 j 05:30		28 88831 AII
max. Earth dist.	-10666 Dec 05 j 05:45		30 91694 AU	opposition	-10659 Jun 23 j 02:58		
morning rise	-10666 Dec 20 j 06:19		30.91091110	direct	-10659 Sep 08 j 06:01		0 3 1 0 7
morning rise	-10666 Dec 21 j 06:16	0∘ <mark>ರ</mark>		evening set	-10659 Dec 03 j 22:48		
retrograde	-10665 Mar 21 j 23:37	° - 1° - 256'32		evening set	1003) Bec 03 j 22.10	11 -2131	
min. Earth dist.	-10665 Jun 09 j 06:56		28.91345 AU	conjunction	-10659 Dec 20 j 00:13	15° Ω 00'16	-0°53'31
opposition	-10665 Jun 10 j 07:01	0° ⊆ 31'02		minimum elong	-10659 Dec 20 j 00:12		
оррозиюн	-10665 Jun 29 j 04:09		0 1100	max. Earth dist.	-10659 Dec 20 j 23:13		
direct	-10665 Aug 26 j 11:44			morning rise	-10658 Jan 05 j 05:18		30.00377710
direct	-10665 Oct 21 j 15:40	0° ರ		retrograde	-10658 Apr 06 j 19:45		
evening set	-10665 Nov 20 j 18:25	0 — 1° Ω 00'07		opposition	-10658 Jun 25 j 14:15		-1°00'27
January 301	10003 1101 20 J 10.23	. —000/		min. Earth dist.	-10658 Jun 24 j 17:13		
conjunction	-10665 Dec 06 j 16:57	1° £ 35'41	-0°17'01	direct	-10658 Sep 10 j 16:16		20.00111110
minimum elong	-10665 Dec 06 j 16:57	1° ⊆ 35'41		evening set	-10658 Dec 06 j 12:10		
max. Earth dist.	-10665 Dec 07 j 18:22		30.90961 AU	Storing Sot	10000 Dec 00 j 12.10	10 - 5703	
morning rise	-10665 Dec 22 j 19:36	2° £ 11'37	30.90901710	conjunction	-10658 Dec 22 j 13:59	17° Ω 1//50	-0°59'24
retrograde	-10664 Mar 23 j 12:06	4° £ 10'19		minimum elong	-10658 Dec 22 j 13:59		
opposition	-10664 Jun 11 j 18:31	2° £ 44'47	-0°21'33	max. Earth dist.	-10658 Dec 23 j 12:44		
min. Earth dist.	-10664 Jun 10 j 19:29		28.90689 AU	morning rise	-10657 Jan 07 j 19:16		30.88143 AU
direct	-10664 Aug 27 j 22:09	1° £ 21'35	20.70007 AC	retrograde	-10657 Apr 09 j 06:59		
evening set	-10664 Nov 22 j 06:32	3° £ 13'52		min. Earth dist.	-10657 Jun 27 j 05:50		28 87046 ATT
evening set	-1000+1N0V 22 J 00.32	J == 13 32		opposition	-10657 Jun 27 j 05:50 -10657 Jun 28 j 01:29		
conjunction	-10664 Dec 08 j 05:46	3° £ 49'28	-0°23'12	direct	-10657 Sep 13 j 03:49		1 00 40
minimum elong	-10664 Dec 08 j 05:45	3° 2 49′28 3° 2 49′28		evening set	-10657 Dec 09 j 01:32		
•	·			evening set	-1003/ Dec 09 J 01:32	10 == 33 3/	
max. Earth dist.	-10664 Dec 09 j 07:42		30.90380 AU	agniumation	10657 Dag 25 : 02:44	100.0 2012.5	1905!10
morning rise	-10664 Dec 24 j 08:48	4° Ω 25'27		conjunction	-10657 Dec 25 j 03:44		
retrograde	-10663 Mar 26 j 02:33	6° £ 24'07	29 00170 411	minimum elong max. Earth dist.	-10657 Dec 25 j 03:44		1°05'19
min. Earth dist.	-10663 Jun 13 j 05:57 -10663 Jun 14 j 05:50		28.90170 AU		-10657 Dec 26 j 01:19		30.0/018 AU
opposition	-	4° 쇼 58'35	-U 20 IU	morning rise	-10656 Jan 10 j 09:19		
direct	-10663 Aug 30 j 10:57	3° £ 35′21		retrograde	-10656 Apr 10 j 20:52	∠∠ = 04 04	

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10656 in astronomical counting style is the year 10657 BCE in historical counting style. -10656 Jun 29 j 12:33 20° **△**38'40 -1°12'48 conjunction -10649 Jan 10 i 05:07 5°M10'48 -1°42'21 opposition minimum elong min. Earth dist. -10656 Jun 28 j 16:45 20° **2**40'04 28.87394 AU -10649 Jan 10 j 05:06 5°ML10'48 1°42'38 -10656 Sep 14 j 15:35 19° **△**15'09 -10649 Jan 10 j 22:24 5°M12'25 30.85225 AU direct max. Earth dist. -10649 Jan 26 j 11:51 -10656 Dec 10 j 14:55 21°**Ω**08'09 evening set 5°M46'59 morning rise -10649 Apr 27 j 15:27 7°M45'04 retrograde conjunction -10656 Dec 26 j 17:25 21°**2**43'58 -1°10'51 -10649 Jul 15 j 16:32 opposition 6°M19'48 -1°52'04 -10656 Dec 26 j 17:24 21° **2**43'58 1°11'00 6°M20'56 28.85393 AU minimum elong min. Earth dist. -10649 Jul 15 j 00:44 max. Earth dist. -10656 Dec 27 j 14:16 21°**Ω**45'55 30.87036 AU direct -10649 Sep 30 j 23:49 4°M55'53 -10655 Jan 11 j 23:17 22°**♀**20'07 -10649 Dec 27 j 15:05 morning rise evening set 6°M49'38 -10655 Apr 13 j 08:59 24° £2 18'34 retrograde 7°M25'33 -1°47'07 opposition -10655 Jul 01 j 23:42 22°**⊆**53'09 -1°18'48 conjunction -10648 Jan 12 j 19:23 -10655 Jul 01 j 05:36 22°**2**54'26 28.86814 AU -10648 Jan 12 j 19:22 min. Earth dist. minimum elong 7°M25'33 1°47'26 -10655 Sep 17 j 02:27 21°**2**29'33 -10648 Jan 13 j 12:42 direct max. Earth dist. 7°M27'10 30.85349 AU evening set -10655 Dec 13 j 04:26 23°**♀**22'38 morning rise -10648 Jan 29 j 02:02 8°M01'43 retrograde -10648 Apr 29 j 02:13 9°M59'46 conjunction -10655 Dec 29 j 07:23 23° **2**58'28 -1°16'25 opposition -10648 Jul 17 j 03:19 8°M34'35 -1°57'04 minimum elong -10655 Dec 29 j 07:22 23°**⊆**58'28 1°16'37 min. Earth dist. -10648 Jul 16 j 12:54 8°MJ35'37 28.85557 AU max. Earth dist. -10655 Dec 30 j 04:02 24°**2**00'24 30.86468 AU direct -10648 Oct 02 j 10:36 7°M10'39 morning rise -10654 Jan 14 j 13:24 24° **△**34'37 evening set -10648 Dec 29 j 05:14 9°M04'33 retrograde -10654 Apr 15 j 23:07 26° **△**33'00 opposition -10654 Jul 04 j 10:28 25°**2**07'34 -1°24'42 conjunction -10647 Jan 14 j 09:42 9°M40'29 -1°51'42 min. Earth dist. -10654 Jul 03 j 16:03 25°**2**08'52 28.86272 AU minimum elong -10647 Jan 14 i 09:41 9°M40'28 1°52'02 direct -10654 Sep 19 i 15:54 23° **2**43'53 max. Earth dist. -10647 Jan 15 i 01:39 9°M41'58 30.85531 AU -10654 Dec 15 j 18:08 25°**♀**37'03 evening set morning rise -10647 Jan 30 j 16:28 10° ML16'38 retrograde -10647 May 01 j 16:23 12°ML14'38 -10654 Dec 31 j 21:13 26° \(\Omega\) 12'54 -1°21'52 -10647 Jul 19 j 14:02 10°ML49'32 -2°01'53 conjunction opposition -10654 Dec 31 j 21:12 26° **2**12'54 1°22'04 min. Earth dist. -10647 Jul 18 j 23:40 10°M 50'33 28.85740 AU minimum elong max. Earth dist. -10653 Jan 01 j 16:32 26° **2**14'42 30.85953 AU -10647 Oct 04 j 21:34 9°M25'33 direct -10653 Jan 17 j 03:30 26° **2**49'03 -10647 Dec 31 j 19:44 11° ML 19'37 morning rise evening set -10653 Apr 18 j 12:24 28° **△**47'22 retrograde -10653 Jul 06 j 21:27 27°**2**21'56 -1°30'28 -10646 Jan 17 j 00:17 11°ML55'33 -1°56'08 opposition conjunction -10653 Jul 06 j 04:21 27°**£**23'09 28.85824 AU -10646 Jan 17 j 00:16 11°ML55'32 1°56'30 min. Earth dist. minimum elong -10653 Sep 22 j 03:12 25°**♀**58'10 -10646 Jan 17 j 15:12 11°ML56'56 30.85678 AU max. Earth dist. direct -10653 Dec 18 j 07:32 27°**♀**51'26 -10646 Feb 02 j 07:02 12°M31'42 evening set morning rise -10646 May 04 j 03:41 14° M29'38 retrograde -10652 Jan 03 j 11:02 28° **2**27'18 -1°27'11 -10646 Jul 22 j 00:50 13°ML04'36 -2°06'32 conjunction opposition -10652 Jan 03 j 11:01 28°**2**27'18 1°27'26 -10646 Jul 21 j 12:32 13°M 05'28 28.85872 AU minimum elong min. Earth dist. max. Earth dist. -10652 Jan 04 j 06:53 28° **2**29'09 30.85556 AU direct -10646 Oct 07 j 08:14 11°ML40'34 morning rise -10652 Jan 19 j 17:19 29°**♀**03'28 evening set -10645 Jan 03 j 10:13 13°M 34'46 -10652 Feb 16 j 17:17 0°M retrograde -10652 Apr 20 j 00:42 1°ML01'43 conjunction -10645 Jan 19 j 14:59 14°ML10'42 -2°00'23 -10652 Jun 24 j 05:31 30°R € -10645 Jan 19 j 14:58 14°ML10'42 2°00'45 minimum elong -10652 Jul 08 j 08:15 29°**2**36'18 -1°36'05 max. Earth dist. -10645 Jan 20 j 05:00 14°ML12'00 30.85769 AU opposition min. Earth dist. -10652 Jul 07 j 14:52 29°**2**37'32 28.85498 AU morning rise -10645 Feb 04 j 21:39 14°M46'50 direct -10652 Sep 23 j 15:46 28°**♀**12'28 -10645 Feb 11 j 00:14 15°M -10645 May 06 j 17:17 16° ML44'42 -10652 Dec 17 i 04:42 0°M retrograde -10652 Dec 19 j 21:19 -10645 Jul 24 j 11:36 15°ML19'42 -2°10'59 evening set 0°M05'50 opposition min. Earth dist. -10645 Jul 23 j 23:25 15°M20'34 28.85920 AU -10651 Jan 05 i 00:55 0°ML41'43 -1°32'23 conjunction -10645 Aug 05 j 03:19 15°RM minimum elong -10651 Jan 05 i 00:54 0°ML41'43 1°32'37 direct -10645 Oct 09 j 22:03 13°ML55'37 max. Earth dist. -10651 Jan 05 i 19:11 0°ML43'26 30.85301 AU -10645 Dec 12 j 12:12 15°ML -10651 Jan 21 j 07:30 1°ML17'53 -10644 Jan 06 j 00:41 15° ML49'56 morning rise evening set -10651 Apr 22 j 14:34 3°M 16'05 retrograde -10651 Jul 10 j 19:02 opposition 1°M50'41 -1°41'34 conjunction -10644 Jan 22 j 05:26 16°M25'52 -2°04'28 -10651 Jul 10 j 02:26 min. Earth dist. 1°M51'52 28.85333 AU minimum elong -10644 Jan 22 j 05:25 16°M25'52 2°04'51 -10651 Sep 26 j 02:10 direct 0°M26'49 max. Earth dist. -10644 Jan 22 j 17:35 16°ML27'00 30.85760 AU evening set -10651 Dec 22 j 11:06 2°M20'18 morning rise -10644 Feb 07 j 12:10 17° ML01'59 retrograde -10644 May 08 j 05:53 18°M 59'45 -10650 Jan 07 j 15:05 2°M56'13 -1°37'26 -10644 Jul 25 j 22:28 17°M34'47 -2°15'14 conjunction opposition -10650 Jan 07 j 15:04 -10644 Jul 25 j 12:10 17°M 35'31 28.85884 AU minimum elong 2°M56'13 1°37'43 min. Earth dist. -10650 Jan 08 j 09:57 -10644 Oct 11 j 09:48 16° ML10'37 max. Earth dist. 2°M57'58 30.85196 AU direct morning rise -10650 Jan 23 j 21:37 3°M32'22 evening set -10643 Jan 07 j 15:11 18°ML05'02 retrograde -10650 Apr 25 j 02:38 5°M30'30 opposition -10650 Jul 13 j 05:50 4°M05'11 -1°46'54 conjunction -10643 Jan 23 j 20:13 18°ML40'58 -2°08'20 min. Earth dist. -10650 Jul 12 j 13:48 4°M06'19 28.85299 AU minimum elong -10643 Jan 23 j 20:12 18°ML40'58 2°08'44 -10650 Sep 28 j 13:24 2°M41'17 max. Earth dist. -10643 Jan 24 j 08:02 18°ML42'04 30.85683 AU direct

-10650 Dec 25 j 01:04

evening set

4°M34'54

morning rise

-10643 Feb 09 j 02:45 19°ML17'04

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10643 in astronomical counting style is the year 10644 BCE in historical counting style. -10643 May 10 j 18:43 21° ML14'43 retrograde min. Earth dist. -10637 Aug 10 j 19:30 3°**₹**18'00 28.86399 AU opposition -10643 Jul 28 j 09:01 19°ML49'46 -2°19'16 direct -10637 Oct 27 j 20:06 1°×752'59 min. Earth dist. -10643 Jul 27 j 23:07 19° M 50'28 28.85778 AU -10636 Jan 24 j 21:12 3°**∡**¹48'12 evening set -10643 Oct 13 j 23:05 18°M25'30 direct -10642 Jan 10 j 05:55 20°M20'01 -10636 Feb 10 j 02:26 4°**₹**24'07 -2°29'43 evening set conjunction -10636 Feb 10 j 02:25 4°**₹**24'07 2°30'14 minimum elong -10636 Feb 10 j 07:42 -10642 Jan 26 j 10:52 20°M 55'57 -2°12'01 4°**✗¹**24'36 30.86433 AU conjunction max. Earth dist. 5°**х**¹00'06 -10642 Jan 26 j 10:51 20°M 55'57 2°12'28 minimum elong morning rise -10636 Feb 26 j 08:09 -10642 Jan 26 j 20:27 20°ML56'50 30.85560 AU 6°**х** 56'58 max. Earth dist. retrograde -10636 May 26 j 07:59 -10642 Feb 11 j 17:30 21°M32'02 morning rise opposition -10636 Aug 12 j 10:30 5° ₹32'24 -2°41'19 retrograde -10642 May 13 j 08:40 23°M29'33 min. Earth dist. -10636 Aug 12 j 05:49 5°**∡**32'44 28.86887 AU -10642 Jul 30 j 19:41 22°ML04'37 -2°23'06 -10636 Oct 29 j 09:21 4°**х**¹07'42 opposition direct -10642 Jul 30 j 11:03 22°ML05'14 28.85670 AU -10635 Jan 26 j 12:04 6°**х**¹03'05 min. Earth dist. evening set direct -10642 Oct 16 j 11:02 20°ML40'15 evening set -10641 Jan 12 j 20:22 22°M34'51 conjunction -10635 Feb 11 j 17:11 6°**х** 39'00 -2°31'53 minimum elong -10635 Feb 11 j 17:10 6°**х** 39′00 2°32′24 conjunction -10641 Jan 29 j 01:30 23°ML10'47 -2°15'30 max. Earth dist. -10635 Feb 11 j 20:54 6°**∡**39'21 30.86941 AU minimum elong -10641 Jan 29 j 01:29 23°M 10'47 2°15'57 morning rise -10635 Feb 27 j 22:47 7°**х** 14′58 max. Earth dist. -10641 Jan 29 j 11:19 23°M 11'42 30.85448 AU retrograde -10635 May 28 j 20:09 9°**∡**11'46 morning rise -10641 Feb 14 j 07:50 23°ML46'52 opposition -10635 Aug 14 j 20:57 7°**∡**47'17 -2°43'31 retrograde -10641 May 15 j 20:05 25° ML44'15 min. Earth dist. -10635 Aug 14 j 18:08 7°**∡**747'29 28.87420 AU opposition -10641 Aug 02 j 06:12 24°ML19'20 -2°26'43 direct -10635 Oct 31 i 20:27 6°**х** 22′34 min. Earth dist. -10641 Aug 01 j 22:26 24°ML19'53 28.85588 AU evening set -10634 Jan 29 i 02:54 8°**х** 18′07 direct -10641 Oct 18 j 23:44 22° ML54'53 evening set -10640 Jan 15 j 10:57 24°M49'35 conjunction -10634 Feb 14 i 08:08 8° ₹ 54'01 -2°33'50 minimum elong -10634 Feb 14 j 08:08 8°**₹**54'01 2°34'22 -10640 Jan 31 j 16:00 25° M25'30 -2°18'47 max. Earth dist. -10634 Feb 14 j 11:24 8°**✗**54'20 30.87466 AU conjunction -10640 Jan 31 j 15:59 25°M25'30 2°19'15 -10634 Mar 02 j 13:27 9° ₹29'59 minimum elong morning rise max. Earth dist. -10640 Jan 31 j 23:56 25°M26'15 30.85407 AU -10634 May 31 j 09:06 11°**х** 26'40 retrograde -10640 Feb 16 j 22:23 26°M01'34 -10634 Aug 17 j 07:26 10° ₹02'19 -2°45'27 morning rise opposition -10640 May 17 j 08:50 27° ML58'50 -10634 Aug 17 j 05:08 10° ₹ 02'28 28.87924 AU min. Earth dist. retrograde -10640 Aug 03 j 16:39 26°M33'56 -2°30'06 -10634 Nov 03 j 09:33 8°**尽**37'34 opposition direct -10640 Aug 03 j 09:14 26°MJ34'28 28.85610 AU -10633 Jan 31 j 17:50 10° ₹33'16 min. Earth dist. evening set -10640 Oct 20 j 11:08 25°ML09'24 direct -10633 Feb 16 j 22:50 11°**尽** 09'10 -2°35'32 -10639 Jan 17 j 01:25 27° ML04'13 evening set conjunction -10633 Feb 16 j 22:49 11°**х** 09'09 2°36'04 minimum elong -10639 Feb 02 j 06:38 27°ML40'08 -2°21'51 -10633 Feb 16 j 23:44 11°**尽**09'14 30.87932 AU conjunction max. Earth dist. minimum elong -10639 Feb 02 j 06:37 27°ML40'08 2°22'18 morning rise -10633 Mar 05 j 04:04 11°**х** 45'06 max. Earth dist. -10639 Feb 02 j 14:36 27°M 40'53 30.85468 AU retrograde -10633 Jun 02 j 23:12 13°**х** 41'42 morning rise -10639 Feb 18 j 12:47 28°M16'11 opposition -10633 Aug 19 j 18:02 12°**х** 17'24 -2°47'09 -10639 Apr 21 j 13:38 0°**尽** min. Earth dist. -10633 Aug 19 j 17:07 12°**₹**17'28 28.88365 AU retrograde -10639 May 19 j 19:30 0° **₹**13'19 direct -10633 Nov 05 j 22:02 10° ₹ 52'38 -10639 Jun 17 j 06:20 30°RML -10632 Feb 03 j 08:39 12° ₹ 48'26 evening set -10639 Aug 06 j 03:12 28°M48'29 -2°33'16 opposition min. Earth dist. -10639 Aug 05 j 21:06 28°M 48'55 28.85739 AU conjunction -10632 Feb 19 j 13:48 13°**尽** 24'21 -2°37'00 -10639 Oct 22 j 22:26 27° ML23'53 -10632 Feb 19 i 13:48 13° **2**24'21 2°37'34 direct minimum elong -10638 Jan 19 j 16:04 29° **M** 18'49 -10632 Feb 19 j 14:26 13° ₹24'24 30.88318 AU evening set max. Earth dist. -10632 Mar 06 j 18:40 14° ₹00'15 morning rise -10638 Feb 04 j 21:14 29° M.54'45 -2°24'41 -10632 Jun 04 i 10:41 15° ₹ 56'43 conjunction retrograde -10638 Feb 04 i 21:13 29°ML54'44 2°25'11 minimum elong opposition -10632 Aug 21 j 04:31 14° ₹32'30 -2°48'36 max. Earth dist. -10638 Feb 05 j 03:44 29° M 55'21 30.85664 AU min. Earth dist. -10632 Aug 21 j 04:54 14° ₹32'29 28.88701 AU -10638 Feb 07 i 05:38 0° ₹ direct -10632 Nov 07 j 11:31 13° ₹07'40 evening set morning rise -10638 Feb 21 j 03:19 30'46 **ای** -10631 Feb 04 j 23:38 15° **₹** 03'35 -10638 May 22 j 08:51 retrograde 2°**х** 27′48 -10631 Feb 21 j 04:36 15° ₹39'29 -2°38'14 opposition -10638 Aug 08 j 13:32 1°**₹**'03'02 -2°36'11 conjunction min. Earth dist. -10638 Aug 08 j 07:14 1°**尽**03'29 28.86006 AU minimum elong -10631 Feb 21 j 04:36 15° ₹39'29 2°38'47 -10631 Feb 21 j 02:45 15° ₹739'18 30.88612 AU -10638 Sep 19 j 03:17 30°RML max. Earth dist. -10638 Oct 25 j 09:32 29°M38'23 morning rise -10631 Mar 09 j 09:28 16° **₹**15'22 direct -10638 Nov 30 j 08:35 0°**∡** -10631 Jun 06 j 23:54 18° ₹ 11'42 retrograde -10637 Jan 22 j 06:44 1°**∡**³33'28 -10631 Aug 23 j 15:00 16° ₹ 47'32 -2°49'47 evening set opposition -10631 Aug 23 j 16:10 16° ₹ 47'27 28.88958 AU min. Earth dist. conjunction -10637 Feb 07 j 11:54 2° ₹ 09'23 -2°27'19 direct -10631 Nov 09 j 23:49 15°**₹**22'36 minimum elong -10637 Feb 07 j 11:53 2°**₹**09'23 2°27'48 evening set -10630 Feb 07 j 14:27 17° **尽** 18'37 max. Earth dist. -10637 Feb 07 j 17:49 2°**尽**09'56 30.85984 AU morning rise -10637 Feb 23 j 17:46 2°**х** 45′23 conjunction -10630 Feb 23 j 19:31 17°**尽** 54'30 -2°39'13 -10637 May 24 j 19:14 4°**х** 42′20 minimum elong -10630 Feb 23 j 19:31 17°**х** 54'30 2°39'48 retrograde

max. Earth dist.

-10630 Feb 23 j 17:20 17°**х** 54'18 30.88825 AU

-10637 Aug 11 j 00:08 3°**₹**17'40 -2°38'52

opposition

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10630 in astronomical counting style is the year 10631 BCE in historical counting style. -10630 Mar 11 j 23:58 18° ₹ 30'22 direct -10624 Nov 25 i 12:26 1°る02'49 morning rise -10630 Jun 09 j 10:56 20° ₹26'31 evening set -10623 Feb 23 j 19:59 2°る59'23 retrograde opposition -10630 Aug 26 j 01:27 19° ₹ 02'24 -2°50'43 -10630 Aug 26 j 04:22 19°**✗**02'12 28.89152 AU -10623 Mar 12 j 00:37 3°る35'12 -2°39'22 min. Earth dist. conjunction -10630 Nov 12 j 12:03 17° ₹37'24 -10623 Mar 12 j 00:37 3°る35'12 2°39'59 direct minimum elong -10629 Feb 10 j 05:15 19° ₹33'28 -10623 Mar 11 j 16:22 3°る34'26 30.92030 AU evening set max. Earth dist. morning rise -10623 Mar 28 j 03:31 4°♂10'54 -10629 Feb 26 j 10:10 20° ₹09'21 -2°39'58 6°**ප**06'01 conjunction retrograde -10623 Jun 24 j 18:03 -10629 Feb 26 j 10:09 20° ₹09'21 2°40'33 4°る42'20 -2°49'57 minimum elong opposition -10623 Sep 10 j 01:42 max. Earth dist. -10629 Feb 26 j 06:05 20° ₹ 08'58 30.89022 AU min. Earth dist. -10623 Sep 10 j 09:39 4°る41'46 28.92689 AU morning rise -10629 Mar 14 j 14:33 20° ₹ 45'11 direct -10623 Nov 28 j 01:46 3°**ප**16'56 -10629 Jun 11 j 23:41 22° ₹ 41'11 -10622 Feb 26 j 10:32 5°**る**13'36 retrograde evening set opposition -10629 Aug 28 j 11:47 21° ₹ 17'05 -2°51'23 min. Earth dist. -10629 Aug 28 j 14:41 21°**⋌** 16'53 28.89359 AU conjunction -10622 Mar 14 j 14:52 5°る49'24 -2°38'25 direct -10629 Nov 14 j 23:54 19° ₹ 51'59 minimum elong -10622 Mar 14 j 14:52 5°る49'25 2°39'01 evening set -10628 Feb 12 j 19:44 21° ₹ 48'08 max. Earth dist. -10622 Mar 14 j 04:34 5°る48'27 30.92896 AU morning rise -10622 Mar 30 j 17:39 6°**る**25'05 conjunction -10628 Feb 29 j 00:39 22°**х** 23'59 -2°40'29 retrograde -10622 Jun 27 j 07:23 8°る20'05 minimum elong -10628 Feb 29 j 00:39 22° ₹23'59 2°41'04 opposition -10622 Sep 12 j 12:02 6°**ප**56'30 -2°48'48 max. Earth dist. -10628 Feb 28 j 20:01 22° ₹23'34 30.89240 AU min. Earth dist. -10622 Sep 12 j 20:30 6°る55'54 28.93563 AU morning rise -10628 Mar 16 j 04:45 22° ₹ 59'49 direct -10622 Nov 30 j 13:54 5°**ට**31'06 retrograde -10628 Jun 13 j 08:46 24° ₹ 55'38 evening set -10621 Mar 01 j 00:54 7°る27'52 opposition -10628 Aug 29 j 22:12 23° ₹31'35 -2°51'48 min. Earth dist. -10628 Aug 30 j 02:56 23° ₹31'15 28.89616 AU conjunction -10621 Mar 17 j 05:17 8°**ට**03'41 -2°37'14 direct -10628 Nov 16 j 11:18 22° ₹ 06'23 minimum elong -10621 Mar 17 j 05:17 8°る03'41 2°37'50 -10627 Feb 14 j 10:20 24° ₹02'36 max. Earth dist. -10621 Mar 16 j 18:56 8°る02'43 30.93753 AU evening set -10621 Apr 02 j 07:39 8°る39'20 morning rise -10627 Mar 02 j 15:12 24° ₹ 38'27 -2°40'45 -10621 Jun 29 j 18:47 10°る34'12 conjunction retrograde -10627 Mar 02 j 15:11 24° ₹38'27 2°41'19 opposition minimum elong -10627 Mar 02 j 09:39 24° ₹37'56 30.89545 AU min. Earth dist. -10621 Sep 15 j 08:45 9°**궁**10'00 28.94396 AU max. Earth dist. -10627 Mar 18 j 19:07 25° ₹14'14 -10621 Dec 03 j 02:31 morning rise direct 7°る45'20 -10627 Jun 15 j 20:14 27° ₹09'54 -10620 Mar 02 j 15:15 9°정42'10 retrograde evening set -10627 Sep 01 j 08:22 25°**х** 45'53 -2°51'57 opposition -10627 Sep 01 j 12:56 25° ₹ 45'34 28.89969 AU -10620 Mar 18 j 19:26 10° ₹ 17'58 -2°35'48 min. Earth dist. conjunction -10627 Nov 19 j 00:19 24° ₹20'37 -10620 Mar 18 j 19:26 10°♂17'58 2°36'23 direct minimum elong -10626 Feb 17 j 00:56 26° ₹ 16'54 -10620 Mar 18 j 07:01 10°정16'49 30.94559 AU evening set max. Earth dist. -10620 Apr 03 j 21:44 10°₹53'37 morning rise conjunction -10626 Mar 05 j 05:39 26° ₹ 52'45 -2°40'46 retrograde -10620 Jul 01 j 07:31 12°₹48'21 minimum elong -10626 Mar 05 j 05:39 26° ₹ 52'45 2°41'21 opposition -10620 Sep 16 j 08:59 11°♂24'58 -2°45'45 max. Earth dist. -10626 Mar 04 j 22:59 26°**尽** 52'07 30.89955 AU min. Earth dist. -10620 Sep 16 j 19:18 11°중24'14 28.95150 AU morning rise -10626 Mar 21 j 09:20 27°**尽** 28'31 direct -10620 Dec 04 j 15:05 9°**궁**59'32 retrograde -10626 Jun 18 j 07:05 29° **₹** 24'01 -10619 Mar 05 j 05:40 11° ₹ 56'27 evening set -10626 Sep 03 j 18:47 28° ₹ 00'04 -2°51'51 opposition min. Earth dist. -10626 Sep 04 j 00:48 27°**х** 59'38 28.90459 AU -10619 Mar 21 j 09:49 12°₹32'15 -2°34'08 conjunction -10626 Nov 21 j 10:50 26° ₹34'43 -10619 Mar 21 j 09:49 12°₹32'15 2°34'43 direct minimum elong -10625 Feb 19 j 15:12 28° ₹31'06 -10619 Mar 20 j 20:36 12°る31'01 30.95259 AU evening set max. Earth dist. -10619 Apr 06 j 11:44 13°る07'52 morning rise -10625 Mar 07 j 19:56 29° ₹06'55 -2°40'33 -10619 Jul 03 j 17:07 15°る02'27 conjunction retrograde -10625 Mar 07 j 19:56 29° ₹06'55 2°41'08 minimum elong opposition -10619 Sep 18 j 19:30 13°₹39'09 -2°43'51 max. Earth dist. -10625 Mar 07 i 13:13 29° ₹06'18 30.90517 AU min. Earth dist. -10619 Sep 19i07:55 13°る38'16 28.95804 AU -10625 Mar 23 i 23:18 29° ₹ 42'40 direct -10619 Dec 07 j 02:41 12°る13'40 morning rise evening set -10625 Apr 01 j 01:52 0°る -10618 Mar 07 j 20:01 14°る10'39 -10625 Jun 20 j 18:19 1°る38'02 max. Earth dist. -10618 Mar 23 j 09:29 14°정45'04 30.95883 AU retrograde opposition -10625 Sep 06 j 05:06 0°る14'09 -2°51'29 -10618 Mar 24 j 00:01 14° ₹ 46'26 -2°32'15 min. Earth dist. -10625 Sep 06 j 11:06 0° 정13'43 28.91084 AU conjunction -10625 Sep 14 j 12:36 30°R ⊀ minimum elong -10618 Mar 24 j 00:02 14°₹46'26 2°32'50 direct -10625 Nov 24 j 00:22 28°**х** 48'47 morning rise -10618 Apr 09 j 01:46 15°**⋜**22'01 -10624 Jan 31 j 04:23 0°る -10618 Jul 06 j 04:39 17°**궁**16'27 retrograde -10624 Feb 22 j 05:39 0°**る**45'14 -10618 Sep 21 j 05:58 15°₹53'12 -2°41'43 evening set opposition -10618 Sep 21 j 18:26 15°중52'19 28.96380 AU min. Earth dist. -10624 Mar 09 j 10:10 1°♂21'03 -2°40'05 conjunction direct -10618 Dec 09 j 15:34 14°**♂**27'41 minimum elong -10624 Mar 09 j 10:10 1°る21'03 2°40'41 evening set -10617 Mar 10 j 10:05 16°**♂**24'41 max. Earth dist. -10624 Mar 09 j 01:43 1°る20'16 30.91215 AU morning rise -10624 Mar 25 j 13:26 1°**る**56'47 conjunction -10617 Mar 26 j 13:56 17°♂00'28 -2°30'08 retrograde -10624 Jun 22 j 06:55 3°**る**52'01 minimum elong -10617 Mar 26 j 13:56 17°る00'28 2°30'43 -10624 Sep 07 j 15:18 2°**ප්**28'13 -2°50'51 max. Earth dist. -10617 Mar 25 j 22:14 16°る59'00 30.96435 AU opposition

-10617 Apr 11 j 15:24 17° ₹36'02

morning rise

min. Earth dist.

-10624 Sep 07 j 22:16 2°**궁**27'43 28.91850 AU

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 23

Attantian astronom					" 10619 DCE in historical	accounting atri	la .
	nical year style is used: The -10617 Jul 08 j 14:49	•	in astronomicai co		-10610 Mar 26 j 09:59	1°≈59'13	ie.
retrograde	-		2020120	evening set	-10610 Mar 26 J 09:59	1°≈39°13	
opposition	-10617 Sep 23 j 16:28				10610 4 11:12.52	20: -2454	2000121
min. Earth dist.	-10617 Sep 24 j 06:35		28.96924 AU	conjunction	-10610 Apr 11 j 12:53	2°≈34'54	
direct	-10617 Dec 12 j 01:55			minimum elong	-10610 Apr 11 j 12:54	2° ≈ 34'54	
evening set	-10616 Mar 12 j 00:02			max. Earth dist.	-10610 Apr 10 j 17:18		31.02075 AU
max. Earth dist.	-10616 Mar 27 j 11:53	19° ර 12'51	30.96985 AU	morning rise	-10610 Apr 27 j 12:26	3° ≈ 10'19	
		_		retrograde	-10610 Jul 23 j 20:35	5° ≈ 03'39	
conjunction	-10616 Mar 28 j 03:52			opposition	-10610 Oct 08 j 17:35	3° ≈ 40′58	
minimum elong	-10616 Mar 28 j 03:53		2°28'23	min. Earth dist.	-10610 Oct 09 j 11:44	3° ≈ 39'41	29.02813 AU
morning rise	-10616 Apr 13 j 05:04			direct	-10610 Dec 27 j 19:23	2° ≈ 15'19	
retrograde	-10616 Jul 10 j 00:58			evening set	-10609 Mar 28 j 23:18	4° ≈ 12'37	
opposition	-10616 Sep 25 j 02:43	20° る 20'51	-2°36'43	max. Earth dist.	-10609 Apr 13 j 05:27	4° ≈ 46′23	31.03216 AU
min. Earth dist.	-10616 Sep 25 j 17:05	20°る19'50	28.97469 AU				
direct	-10616 Dec 13 j 15:49	18° る 55'12		conjunction	-10609 Apr 14 j 01:57	4° ≈ 48'17	-2°05'34
evening set	-10615 Mar 14 j 14:04	20°る52'17		minimum elong	-10609 Apr 14 j 01:57	4° ≈ 48'17	2°06'05
				morning rise	-10609 Apr 30 j 01:18	5° ≈ 23'41	
conjunction	-10615 Mar 30 j 17:39	21° පි 28'01	-2°25'15	retrograde	-10609 Jul 26 j 08:28	7° ≈ 16'54	
minimum elong	-10615 Mar 30 j 17:39	21° る 28'01	2°25'50	opposition	-10609 Oct 11 j 04:09	5° ≈ 54'19	-2°12'11
max. Earth dist.	-10615 Mar 29 j 23:58	21° る 26'23	30.97560 AU	min. Earth dist.	-10609 Oct 11 j 22:09	5° ≈ 53'03	29.03922 AU
morning rise	-10615 Apr 15 j 18:41	22° る 03'33		direct	-10609 Dec 30 j 08:05	4°≈28'42	
retrograde	-10615 Jul 12 j 12:34			evening set	-10608 Mar 30 j 12:46	6° ≈ 26'01	
opposition	-10615 Sep 27 j 13:10		-2°33'53	C	,		
min. Earth dist.	-10615 Sep 28 j 04:20			conjunction	-10608 Apr 15 j 15:12	7° ≈ 01'42	-2°01'35
direct	-10615 Dec 16 j 03:57			minimum elong	-10608 Apr 15 j 15:13	7° ≈ 01'42	
evening set	-10614 Mar 17 j 03:44			max. Earth dist.	-10608 Apr 14 j 17:46		31.04294 AU
e vennig set	100111111111111111111111111111111111111	25 000 17		morning rise	-10608 May 01 j 14:13	7° ≈ 37'04	31.0.23.110
conjunction	-10614 Apr 02 j 07:18	23° Z /11'33	-2°22'20	retrograde	-10608 Jul 27 j 18:26	9° ≈ 30'11	
minimum elong	-10614 Apr 02 j 07:19			opposition	-10608 Oct 12 j 14:49	8° ≈ 07'41	2°07'50
max. Earth dist.	-10614 Apr 01 j 14:06			min. Earth dist.	-10608 Oct 12 j 14:49		29.04958 AU
morning rise	-10614 Apr 01 j 14:00		30.98220 AU	direct	-10608 Dec 31 j 18:19	6°≈42'04	29.04938 AU
•	-10614 Jul 14 j 22:39			evening set	•	8°≈39'25	
retrograde	=		2020140	- C	-10607 Apr 02 j 02:11		21.05202.411
opposition	-10614 Sep 29 j 23:38			max. Earth dist.	-10607 Apr 17 j 06:36	9 2 13 02	31.05282 AU
min. Earth dist.	-10614 Sep 30 j 15:28		28.98/8/ AU		10/07 4 10:04 20	0015104	1057106
direct	-10614 Dec 18 j 17:09	23°622'05		conjunction	-10607 Apr 18 j 04:28	9° ≈ 15'04	-1°5/26
	10(12)/ 10:17.20	250 710114				0015104	1057156
evening set	-10613 Mar 19 j 17:28	25° る 19'14		minimum elong	-10607 Apr 18 j 04:29	9°≈15'04	1°57'56
-	-			morning rise	-10607 Apr 18 j 04:29 -10607 May 04 j 03:09	9° ≈ 50'25	1°57'56
conjunction	-10613 Apr 04 j 20:43	25° ප 54'56		morning rise retrograde	-10607 Apr 18 j 04:29 -10607 May 04 j 03:09 -10607 Jul 30 j 04:02	9°≈50'25 11°≈43'24	
conjunction minimum elong	-10613 Apr 04 j 20:43 -10613 Apr 04 j 20:43	25°ප්54'56 25°ප්54'56	2°20'04	morning rise retrograde opposition	-10607 Apr 18 j 04:29 -10607 May 04 j 03:09 -10607 Jul 30 j 04:02 -10607 Oct 15 j 01:37	9°≈50'25 11°≈43'24 10°≈20'59	-2°03'18
conjunction minimum elong max. Earth dist.	-10613 Apr 04 j 20:43 -10613 Apr 04 j 20:43 -10613 Apr 04 j 01:56	25°පි54'56 25°පි54'56 25°පි53'12	2°20'04	morning rise retrograde	-10607 Apr 18 j 04:29 -10607 May 04 j 03:09 -10607 Jul 30 j 04:02 -10607 Oct 15 j 01:37 -10607 Oct 15 j 21:32	9°≈50'25 11°≈43'24 10°≈20'59 10°≈19'35	-2°03'18
conjunction minimum elong max. Earth dist. morning rise	-10613 Apr 04 j 20:43 -10613 Apr 04 j 20:43 -10613 Apr 04 j 01:56 -10613 Apr 20 j 21:13	25°\554'56 25°\554'56 25°\553'12 26°\530'25	2°20'04	morning rise retrograde opposition min. Earth dist. direct	-10607 Apr 18 j 04:29 -10607 May 04 j 03:09 -10607 Jul 30 j 04:02 -10607 Oct 15 j 01:37 -10607 Oct 15 j 21:32 -10606 Jan 03 j 08:16	9°≈50'25 11°≈43'24 10°≈20'59 10°≈19'35 8°≈55'22	-2°03'18
conjunction minimum elong max. Earth dist.	-10613 Apr 04 j 20:43 -10613 Apr 04 j 20:43 -10613 Apr 04 j 01:56 -10613 Apr 20 j 21:13 -10613 Jul 17 j 11:24	25° ප්54'56 25° ප්54'56 25° ප්53'12 26° ප්30'25 28° ප්24'06	2°20'04 30.99000 AU	morning rise retrograde opposition min. Earth dist.	-10607 Apr 18 j 04:29 -10607 May 04 j 03:09 -10607 Jul 30 j 04:02 -10607 Oct 15 j 01:37 -10607 Oct 15 j 21:32	9°≈50'25 11°≈43'24 10°≈20'59 10°≈19'35 8°≈55'22	-2°03'18
conjunction minimum elong max. Earth dist. morning rise	-10613 Apr 04 j 20:43 -10613 Apr 04 j 20:43 -10613 Apr 04 j 01:56 -10613 Apr 20 j 21:13	25° ප්54'56 25° ප්54'56 25° ප්53'12 26° ප්30'25 28° ප්24'06	2°20'04 30.99000 AU	morning rise retrograde opposition min. Earth dist. direct	-10607 Apr 18 j 04:29 -10607 May 04 j 03:09 -10607 Jul 30 j 04:02 -10607 Oct 15 j 01:37 -10607 Oct 15 j 21:32 -10606 Jan 03 j 08:16	9°≈50'25 11°≈43'24 10°≈20'59 10°≈19'35 8°≈55'22	-2°03'18
conjunction minimum elong max. Earth dist. morning rise retrograde	-10613 Apr 04 j 20:43 -10613 Apr 04 j 20:43 -10613 Apr 04 j 01:56 -10613 Apr 20 j 21:13 -10613 Jul 17 j 11:24	25° ් 554'56 25° ් 554'56 25° ් 553'12 26° ් 30'25 28° ් 524'06 27° ් 501'06	2°20'04 30.99000 AU -2°27'31	morning rise retrograde opposition min. Earth dist. direct	-10607 Apr 18 j 04:29 -10607 May 04 j 03:09 -10607 Jul 30 j 04:02 -10607 Oct 15 j 01:37 -10607 Oct 15 j 21:32 -10606 Jan 03 j 08:16	9°≈50'25 11°≈43'24 10°≈20'59 10°≈19'35 8°≈55'22 10°≈52'42	-2°03'18 29.05869 AU
conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-10613 Apr 04 j 20:43 -10613 Apr 04 j 20:43 -10613 Apr 04 j 01:56 -10613 Apr 20 j 21:13 -10613 Jul 17 j 11:24 -10613 Oct 02 j 10:00	25° ප්54'56 25° ප්54'56 25° ප්53'12 26° ප්30'25 28° ප්24'06 27° ප්01'06 27° ප්00'00	2°20'04 30.99000 AU -2°27'31	morning rise retrograde opposition min. Earth dist. direct evening set	-10607 Apr 18 j 04:29 -10607 May 04 j 03:09 -10607 Jul 30 j 04:02 -10607 Oct 15 j 01:37 -10607 Oct 15 j 21:32 -10606 Jan 03 j 08:16 -10606 Apr 04 j 15:31	9°≈50'25 11°≈43'24 10°≈20'59 10°≈19'35 8°≈55'22 10°≈52'42	-2°03'18 29.05869 AU -1°53'07
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-10613 Apr 04 j 20:43 -10613 Apr 04 j 20:43 -10613 Apr 04 j 01:56 -10613 Apr 20 j 21:13 -10613 Jul 17 j 11:24 -10613 Oct 02 j 10:00 -10613 Oct 03 j 01:45	25°る54'56 25°る54'56 25°る53'12 26°る30'25 28°る24'06 27°る01'06 27°る00'00 25°る35'23	2°20'04 30.99000 AU -2°27'31	morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-10607 Apr 18 j 04:29 -10607 May 04 j 03:09 -10607 Jul 30 j 04:02 -10607 Oct 15 j 01:37 -10607 Oct 15 j 21:32 -10606 Jan 03 j 08:16 -10606 Apr 04 j 15:31 -10606 Apr 20 j 17:26	9°≈50'25 11°≈43'24 10°≈20'59 10°≈19'35 8°≈55'22 10°≈52'42 11°≈28'20 11°≈28'20	-2°03'18 29.05869 AU -1°53'07 1°53'36
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-10613 Apr 04 j 20:43 -10613 Apr 04 j 20:43 -10613 Apr 04 j 01:56 -10613 Apr 20 j 21:13 -10613 Jul 17 j 11:24 -10613 Oct 02 j 10:00 -10613 Oct 03 j 01:45 -10613 Dec 21 j 05:30	25°る54'56 25°る54'56 25°る53'12 26°る30'25 28°る24'06 27°る01'06 27°る00'00 25°る35'23	2°20'04 30.99000 AU -2°27'31	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-10607 Apr 18 j 04:29 -10607 May 04 j 03:09 -10607 Jul 30 j 04:02 -10607 Oct 15 j 01:37 -10607 Oct 15 j 21:32 -10606 Apr 04 j 15:31 -10606 Apr 20 j 17:26 -10606 Apr 20 j 17:27	9°≈50'25 11°≈43'24 10°≈20'59 10°≈19'35 8°≈55'22 10°≈52'42 11°≈28'20 11°≈28'20 11°≈26'09	-2°03'18 29.05869 AU -1°53'07 1°53'36
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-10613 Apr 04 j 20:43 -10613 Apr 04 j 20:43 -10613 Apr 04 j 01:56 -10613 Apr 20 j 21:13 -10613 Jul 17 j 11:24 -10613 Oct 02 j 10:00 -10613 Oct 03 j 01:45 -10613 Dec 21 j 05:30	25° ් 54'56 25° ් 554'56 25° ් 53'12 26° ් 30'25 28° ් 24'06 27° ් 501'06 27° ් 500'00 25° ් 35'23 27° ් 32'33	2°20'04 30.99000 AU -2°27'31 28.99637 AU	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-10607 Apr 18 j 04:29 -10607 May 04 j 03:09 -10607 Jul 30 j 04:02 -10607 Oct 15 j 01:37 -10607 Oct 15 j 21:32 -10606 Apr 04 j 15:31 -10606 Apr 20 j 17:26 -10606 Apr 20 j 17:27 -10606 Apr 19 j 17:53	9°≈50'25 11°≈43'24 10°≈20'59 10°≈19'35 8°≈55'22 10°≈52'42 11°≈28'20 11°≈28'20 11°≈26'09 12°≈03'40	-2°03'18 29.05869 AU -1°53'07 1°53'36
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conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-10613 Apr 04 j 20:43 -10613 Apr 04 j 20:43 -10613 Apr 04 j 01:56 -10613 Apr 20 j 21:13 -10613 Jul 17 j 11:24 -10613 Oct 02 j 10:00 -10613 Oct 03 j 01:45 -10613 Dec 21 j 05:30 -10612 Mar 21 j 06:52	25° ් 54'56 25° ් 554'56 25° ් 53'12 26° ් 30'25 28° ් 24'06 27° ් 501'06 27° ් 500'00 25° ් 35'23 27° ් 32'33 28° ් 508'16 28° ් 508'16	2°20'04 30.99000 AU -2°27'31 28.99637 AU -2°16'19 2°16'52	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-10607 Apr 18 j 04:29 -10607 May 04 j 03:09 -10607 Jul 30 j 04:02 -10607 Oct 15 j 01:37 -10607 Oct 15 j 21:32 -10606 Apr 04 j 15:31 -10606 Apr 20 j 17:26 -10606 Apr 20 j 17:53 -10606 Apr 19 j 17:53 -10606 May 06 j 15:51 -10606 Aug 01 j 14:52	9°≈50'25 11°≈43'24 10°≈20'59 10°≈19'35 8°≈55'22 10°≈52'42 11°≈28'20 11°≈28'20 11°≈26'09 12°≈03'40 13°≈56'32 12°≈34'09	-2°03'18 29.05869 AU -1°53'07 1°53'36 31.06140 AU -1°58'36
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-10613 Apr 04 j 20:43 -10613 Apr 04 j 20:43 -10613 Apr 04 j 01:56 -10613 Apr 20 j 21:13 -10613 Jul 17 j 11:24 -10613 Oct 02 j 10:00 -10613 Oct 03 j 01:45 -10613 Dec 21 j 05:30 -10612 Apr 06 j 10:10 -10612 Apr 06 j 10:11	25° ් 54'56 25° ් 554'56 25° ් 53'12 26° ් 30'25 28° ් 24'06 27° ් 501'06 27° ් 500'00 25° ් 35'23 27° ් 32'33 28° ් 508'16 28° ් 508'16 28° ් 506'34	2°20'04 30.99000 AU -2°27'31 28.99637 AU -2°16'19 2°16'52	morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-10607 Apr 18 j 04:29 -10607 May 04 j 03:09 -10607 Jul 30 j 04:02 -10607 Oct 15 j 01:37 -10607 Oct 15 j 21:32 -10606 Apr 04 j 15:31 -10606 Apr 20 j 17:26 -10606 Apr 20 j 17:53 -10606 Apr 19 j 17:53 -10606 Apr 20 j 15:51 -10606 Aug 01 j 14:52 -10606 Oct 17 j 12:27	9°≈50'25 11°≈43'24 10°≈20'59 10°≈19'35 8°≈55'22 10°≈52'42 11°≈28'20 11°≈26'09 12°≈03'40 13°≈56'32 12°≈34'09 12°≈32'41	-2°03'18 29.05869 AU -1°53'07 1°53'36 31.06140 AU -1°58'36
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conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-10613 Apr 04 j 20:43 -10613 Apr 04 j 20:43 -10613 Apr 04 j 01:56 -10613 Apr 20 j 21:13 -10613 Jul 17 j 11:24 -10613 Oct 02 j 10:00 -10613 Oct 03 j 01:45 -10613 Dec 21 j 05:30 -10612 Mar 21 j 06:52 -10612 Apr 06 j 10:10 -10612 Apr 06 j 10:11 -10612 Apr 05 j 16:01 -10612 Apr 02 j 10:15 -10612 Jul 01 j 15:12 -10612 Jul 18 j 22:26 -10612 Sep 05 j 07:01 -10612 Oct 03 j 20:31	25° で54'56 25° で554'56 25° で53'12 26° で30'25 28° で24'06 27° で01'06 27° で00'00 25° で335'23 27° で32'33 28° で08'16 28° で06'34 28° で06'34 28° で43'43 0° ※ 0° ※37'16 30° Rで 29° で14'22	2°20'04 30.99000 AU -2°27'31 28.99637 AU -2°16'19 2°16'52 30.99918 AU	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 max. Earth dist.	-10607 Apr 18 j 04:29 -10607 May 04 j 03:09 -10607 Jul 30 j 04:02 -10607 Oct 15 j 01:37 -10607 Oct 15 j 21:32 -10606 Jan 03 j 08:16 -10606 Apr 04 j 15:31 -10606 Apr 20 j 17:26 -10606 Apr 20 j 17:27 -10606 Apr 19 j 17:53 -10606 Apr 19 j 17:53 -10606 Aug 01 j 14:52 -10606 Oct 17 j 12:27 -10606 Oct 18 j 09:15 -10605 Apr 07 j 04:38 -10605 Apr 22 j 07:08	9°≈50'25 11°≈43'24 10°≈20'59 10°≈19'35 8°≈55'22 10°≈52'42 11°≈28'20 11°≈28'20 11°≈26'09 12°≈31'40 13°≈56'32 12°≈32'41 11°≈08'30 13°≈05'50 13°≈39'16 13°≈41'27	-2°03'18 29.05869 AU -1°53'07 1°53'36 31.06140 AU -1°58'36 29.06672 AU 31.06897 AU -1°48'38
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conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-10613 Apr 04 j 20:43 -10613 Apr 04 j 20:43 -10613 Apr 04 j 01:56 -10613 Apr 20 j 21:13 -10613 Jul 17 j 11:24 -10613 Oct 02 j 10:00 -10613 Oct 03 j 01:45 -10613 Dec 21 j 05:30 -10612 Mar 21 j 06:52 -10612 Apr 06 j 10:10 -10612 Apr 06 j 10:11 -10612 Apr 05 j 16:01 -10612 Apr 05 j 16:01 -10612 Jun 01 j 15:12 -10612 Jul 18 j 22:26 -10612 Sep 05 j 07:01 -10612 Oct 03 j 20:31 -10612 Oct 04 j 13:28 -10612 Dec 22 j 19:01	25° で54'56 25° で54'56 25° で53'12 26° で30'25 28° で24'06 27° で301'06 27° で300'00 25° で335'23 27° で32'33 28° で08'16 28° で08'16 28° で06'34 28° で308'16 30° Rで 29° で14'22 29° で13'10 27° で48'39	2°20'04 30.99000 AU -2°27'31 28.99637 AU -2°16'19 2°16'52 30.99918 AU	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 max. Earth dist.	-10607 Apr 18 j 04:29 -10607 May 04 j 03:09 -10607 Jul 30 j 04:02 -10607 Oct 15 j 01:37 -10607 Oct 15 j 21:32 -10606 Apr 04 j 15:31 -10606 Apr 20 j 17:26 -10606 Apr 20 j 17:27 -10606 Apr 19 j 17:53 -10606 Apr 19 j 17:53 -10606 Apr 04 j 15:51 -10606 Apr 04 j 15:51 -10606 Apr 19 j 17:53 -10606 Apr 20 j 17:27 -10606 Apr 19 j 17:53 -10606 Apr 20 j 17:22 -10605 Apr 07 j 04:38 -10605 Apr 22 j 07:08	9°≈50'25 11°≈43'24 10°≈20'59 10°≈19'35 8°≈55'22 10°≈52'42 11°≈28'20 11°≈28'20 11°≈26'09 12°≈03'40 13°≈56'32 12°≈34'09 12°≈32'41 11°≈08'30 13°≈05'50 13°≈39'16 13°≈41'27 13°≈41'27 14°≈16'45	-2°03'18 29.05869 AU -1°53'07 1°53'36 31.06140 AU -1°58'36 29.06672 AU 31.06897 AU -1°48'38
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conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-10613 Apr 04 j 20:43 -10613 Apr 04 j 20:43 -10613 Apr 04 j 01:56 -10613 Apr 20 j 21:13 -10613 Jul 17 j 11:24 -10613 Oct 02 j 10:00 -10613 Oct 03 j 01:45 -10613 Dec 21 j 05:30 -10612 Apr 06 j 10:10 -10612 Apr 06 j 10:11 -10612 Apr 06 j 10:11 -10612 Apr 05 j 16:01 -10612 Apr 05 j 16:01 -10612 Apr 22 j 10:15 -10612 Jul 18 j 22:26 -10612 Sep 05 j 07:01 -10612 Oct 03 j 20:31 -10612 Oct 04 j 13:28 -10612 Dec 22 j 19:01 -10611 Mar 23 j 20:30 -10611 Mar 30 j 07:10 -10611 Apr 08 j 23:28 -10611 Apr 08 j 23:29 -10611 Apr 08 j 03:52	25° で54'56 25° で554'56 25° で53'12 26° で30'25 28° で24'06 27° で301'06 27° で300'00 25° で335'23 27° で32'33 28° で08'16 28° で06'34 28° で343'43 0° ※ 0° ※37'16 30° Rで 29° で14'22 29° で13'10 27° で48'39 29° で45'52 0° ※ 0° ※21'34 0° ※21'34 0° ※19'44	2°20'04 30.99000 AU -2°27'31 28.99637 AU -2°16'19 2°16'52 30.99918 AU -2°24'00 29.00607 AU	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 max. Earth dist. conjunction minimum elong morning rise retrograde	-10607 Apr 18 j 04:29 -10607 May 04 j 03:09 -10607 Jul 30 j 04:02 -10607 Oct 15 j 01:37 -10607 Oct 15 j 21:32 -10606 Jan 03 j 08:16 -10606 Apr 04 j 15:31 -10606 Apr 20 j 17:26 -10606 Apr 20 j 17:27 -10606 Apr 19 j 17:53 -10605 Apr 19 j 19:26 -10605 Apr 07 j 04:38 -10605 Apr 22 j 07:08 -10605 Apr 23 j 06:27 -10605 Apr 23 j 06:28 -10605 Aug 04 j 00:32 -10605 Aug 04 j 00:32 -10605 Oct 12 j 06:28 -10605 Oct 19 j 23:13 -10605 Oct 20 j 20:57 -10604 Jan 08 j 08:21	9°≈50'25 11°≈43'24 10°≈20'59 10°≈19'35 8°≈55'22 10°≈52'42 11°≈28'20 11°≈28'20 11°≈26'09 12°≈31'40 13°≈56'32 12°≈32'41 11°≈08'30 13°≈55'50 13°≈39'16 13°≈41'27 14°≈16'45 15°≈ 16°≈09'29 15°R≈ 14°≈47'08 14°≈47'08 14°≈45'36 13°≈21'27	-2°03'18 29.05869 AU -1°53'07 1°53'36 31.06140 AU -1°58'36 29.06672 AU 31.06897 AU -1°48'38 1°49'07
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conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set	-10613 Apr 04 j 20:43 -10613 Apr 04 j 20:43 -10613 Apr 04 j 01:56 -10613 Apr 20 j 21:13 -10613 Jul 17 j 11:24 -10613 Oct 02 j 10:00 -10613 Oct 03 j 01:45 -10613 Dec 21 j 05:30 -10612 Apr 06 j 10:10 -10612 Apr 06 j 10:11 -10612 Apr 05 j 16:01 -10612 Apr 05 j 16:01 -10612 Apr 05 j 16:01 -10612 Jul 18 j 22:26 -10612 Sep 05 j 07:01 -10612 Oct 03 j 20:31 -10612 Oct 04 j 13:28 -10612 Dec 22 j 19:01 -10611 Mar 23 j 20:30 -10611 Mar 30 j 07:10 -10611 Apr 08 j 23:28 -10611 Apr 08 j 23:29 -10611 Apr 08 j 23:29 -10611 Apr 08 j 03:52 -10611 Apr 24 j 23:27 -10611 Jul 21 j 10:33	25° で54'56 25° で554'56 25° で53'12 26° で30'25 28° で24'06 27° で301'06 27° で300'00 25° で335'23 27° で32'33 28° で08'16 28° で06'34 28° で308'16 28° で308'16 28° で31'16 30° Rで 29° で314'22 29° で313'10 27° で48'39 29° で45'52 0° ※ 0° ※21'34 0° ※21'34 0° ※19'44 0° ※57'00 2° ※50'26	2°20'04 30.99000 AU -2°27'31 28.99637 AU -2°16'19 2°16'52 30.99918 AU -2°24'00 29.00607 AU -2°12'56 2°13'29 31.00961 AU	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 max. Earth dist. conjunction minimum elong morning rise retrograde opposition minimum elong morning rise	-10607 Apr 18 j 04:29 -10607 May 04 j 03:09 -10607 Jul 30 j 04:02 -10607 Oct 15 j 01:37 -10607 Oct 15 j 21:32 -10606 Jan 03 j 08:16 -10606 Apr 04 j 15:31 -10606 Apr 20 j 17:26 -10606 Apr 20 j 17:27 -10606 Apr 19 j 17:53 -10605 Apr 19 j 19:26 -10605 Apr 07 j 04:38 -10605 Apr 22 j 07:08 -10605 Apr 23 j 06:27 -10605 Apr 23 j 06:28 -10605 Aug 04 j 00:32 -10605 Aug 04 j 00:32 -10605 Oct 12 j 06:28 -10605 Oct 19 j 23:13 -10605 Oct 20 j 20:57 -10604 Jan 08 j 08:21	9°≈50'25 11°≈43'24 10°≈20'59 10°≈19'35 8°≈55'22 10°≈52'42 11°≈28'20 11°≈28'20 11°≈26'09 12°≈34'09 12°≈32'41 11°≈08'30 13°≈56'32 13°≈41'27 13°≈41'27 14°≈16'45 15°≈ 16°≈09'29 15°8≈ 14°≈47'08 14°≈47'08 13°≈21'27 15°≈	-2°03'18 29.05869 AU -1°53'07 1°53'36 31.06140 AU -1°58'36 29.06672 AU 31.06897 AU -1°48'38 1°49'07
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set	-10613 Apr 04 j 20:43 -10613 Apr 04 j 20:43 -10613 Apr 04 j 01:56 -10613 Apr 20 j 21:13 -10613 Jul 17 j 11:24 -10613 Oct 02 j 10:00 -10613 Oct 03 j 01:45 -10613 Dec 21 j 05:30 -10612 Mar 21 j 06:52 -10612 Apr 06 j 10:10 -10612 Apr 06 j 10:11 -10612 Apr 05 j 16:01 -10612 Apr 05 j 16:01 -10612 Apr 05 j 16:01 -10612 Jul 18 j 22:26 -10612 Sep 05 j 07:01 -10612 Oct 03 j 20:31 -10612 Oct 04 j 13:28 -10612 Dec 22 j 19:01 -10611 Mar 23 j 20:30 -10611 Mar 30 j 07:10 -10611 Apr 08 j 23:28 -10611 Apr 08 j 23:29 -10611 Apr 08 j 03:52 -10611 Apr 24 j 23:27 -10611 Jul 21 j 10:33 -10611 Oct 06 j 06:53	25° で54'56 25° で554'56 25° で53'12 26° で30'25 28° で24'06 27° で01'06 27° で00'00 25° で335'23 27° で32'33 28° で08'16 28° で06'34 28° で06'34 28° で43'43 0° ※ 0° ※37'16 30° Rで 29° で14'22 29° で13'10 27° で48'39 29° で45'52 0° ※ 0° ※21'34 0° ※21'34 0° ※21'34 0° ※57'00 2° ※50'26 1° ※27'38	2°20'04 30.99000 AU -2°27'31 28.99637 AU -2°16'19 2°16'52 30.99918 AU -2°24'00 29.00607 AU -2°12'56 2°13'29 31.00961 AU	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 max. Earth dist. conjunction minimum elong morning rise retrograde opposition minimum elong morning rise retrograde opposition minimum elong morning rise retrograde opposition min. Earth dist. direct	-10607 Apr 18 j 04:29 -10607 May 04 j 03:09 -10607 Jul 30 j 04:02 -10607 Oct 15 j 01:37 -10607 Oct 15 j 01:32 -10606 Jan 03 j 08:16 -10606 Apr 04 j 15:31 -10606 Apr 20 j 17:26 -10606 Apr 20 j 17:27 -10606 Apr 20 j 17:27 -10606 Apr 19 j 17:53 -10606 Apr 19 j 17:53 -10606 Apr 06 j 15:51 -10606 Apr 19 j 17:53 -10605 Apr 07 j 04:38 -10605 Apr 22 j 07:08 -10605 Apr 23 j 06:27 -10605 Apr 23 j 06:27 -10605 Apr 23 j 06:28 -10605 Apr 23 j 06:27 -10605 Apr 23 j 06:28 -10605 Apr 23 j 06:27	9°≈50'25 11°≈43'24 10°≈20'59 10°≈19'35 8°≈55'22 10°≈52'42 11°≈28'20 11°≈28'20 11°≈26'09 12°≈32'41 11°≈08'30 13°≈56'32 12°≈34'09 12°≈32'41 11°≈08'30 13°≈41'27 13°≈41'27 13°≈41'27 13°≈41'27 13°≈41'27 13°≈41'27 13°≈41'27 13°≈41'27 13°≈41'27 13°≈41'27 13°≈41'27 13°≈41'27 13°≈41'27 15°≈ 16°≈09'29 15°8≈ 14°≈47'08 14°≈45'36 13°≈21'27 15°≈ 15°≈18'45	-2°03'18 29.05869 AU -1°53'07 1°53'36 31.06140 AU -1°58'36 29.06672 AU 31.06897 AU -1°48'38 1°49'07 -1°53'44 29.07370 AU
conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set	-10613 Apr 04 j 20:43 -10613 Apr 04 j 20:43 -10613 Apr 04 j 01:56 -10613 Apr 20 j 21:13 -10613 Jul 17 j 11:24 -10613 Oct 02 j 10:00 -10613 Oct 03 j 01:45 -10613 Dec 21 j 05:30 -10612 Apr 06 j 10:10 -10612 Apr 06 j 10:11 -10612 Apr 05 j 16:01 -10612 Apr 05 j 16:01 -10612 Apr 05 j 16:01 -10612 Jul 18 j 22:26 -10612 Sep 05 j 07:01 -10612 Oct 03 j 20:31 -10612 Oct 04 j 13:28 -10612 Dec 22 j 19:01 -10611 Mar 23 j 20:30 -10611 Mar 30 j 07:10 -10611 Apr 08 j 23:28 -10611 Apr 08 j 23:29 -10611 Apr 08 j 23:29 -10611 Apr 08 j 03:52 -10611 Apr 24 j 23:27 -10611 Jul 21 j 10:33	25° で54'56 25° で554'56 25° で53'12 26° で30'25 28° で24'06 27° で01'06 27° で00'00 25° で335'23 27° で32'33 28° で08'16 28° で06'34 28° で06'34 28° で43'43 0° ※ 0° ※37'16 30° Rで 29° で14'22 29° で13'10 27° で48'39 29° で45'52 0° ※ 0° ※21'34 0° ※21'34 0° ※21'34 0° ※57'00 2° ※50'26 1° ※27'38	2°20'04 30.99000 AU -2°27'31 28.99637 AU -2°16'19 2°16'52 30.99918 AU -2°24'00 29.00607 AU -2°12'56 2°13'29 31.00961 AU	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 max. Earth dist. conjunction minimum elong morning rise retrograde opposition minimum elong morning rise	-10607 Apr 18 j 04:29 -10607 May 04 j 03:09 -10607 Jul 30 j 04:02 -10607 Oct 15 j 01:37 -10607 Oct 15 j 21:32 -10606 Jan 03 j 08:16 -10606 Apr 04 j 15:31 -10606 Apr 20 j 17:26 -10606 Apr 20 j 17:27 -10606 Apr 19 j 17:53 -10605 Apr 19 j 19:26 -10605 Apr 07 j 04:38 -10605 Apr 23 j 06:27 -10605 Apr 23 j 06:28 -10605 Apr 23 j 06:28 -10605 Apr 30 j 04:04 -10605 Apr 30 j 04:26 -10605 Apr 30 j 04:24	9°≈50'25 11°≈43'24 10°≈20'59 10°≈19'35 8°≈55'22 10°≈52'42 11°≈28'20 11°≈28'20 11°≈26'09 12°≈32'41 11°≈08'30 13°≈56'32 12°≈32'41 11°≈08'30 13°≈41'27 13°≈41'27 13°≈41'27 13°≈41'27 13°≈41'27 13°≈41'27 13°≈41'27 13°≈41'27 13°≈41'27 13°≈41'27 13°≈41'27 15°≈ 16°≈09'29 15°8≈ 14°≈47'08 14°≈45'36 13°≈21'27 15°≈ 15°≈18'45	-2°03'18 29.05869 AU -1°53'07 1°53'36 31.06140 AU -1°58'36 29.06672 AU 31.06897 AU -1°48'38 1°49'07 -1°53'44 29.07370 AU

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10604 in astronomical counting style is the year 10605 BCE in historical counting style. -10604 Apr 23 j 18:05 15°≈52'00 31.07573 AU direct -10597 Jan 24 i 01:18 28°≈47'35 max. Earth dist. -10604 May 10 j 16:59 16°≈29'37 -10597 Apr 03 j 14:39 0°**₩** morning rise -10604 Aug 05 j 12:26 18°≈22'13 -10597 Apr 25 j 09:16 0°\ 44'46 retrograde evening set -10604 Oct 21 j 09:55 16°≈59'53 -1°48'42 max. Earth dist. -10597 May 10 j 06:16 1°**升**17'47 31.13356 AU opposition -10604 Oct 22 j 07:44 16°≈58'22 29.08015 AU min. Earth dist. -10603 Jan 09 j 21:11 15°≈34'11 -10597 May 11 j 08:26 1° **★** 20'13 -1°07'47 direct conjunction -10603 Apr 11 j 06:32 17°≈31'27 1°**¥**20'13 1°08'08 evening set -10597 May 11 j 08:27 minimum elong -10597 May 27 j 03:38 max. Earth dist. -10603 Apr 26 j 07:26 18°≈04'45 31.08205 AU morning rise 1°**)** 55'18 3°**)** 47′21 retrograde -10597 Aug 21 j 12:34 2°**升**25′22 -1°09′32 -10603 Apr 27 j 07:51 18°≈07'01 -1°39'13 conjunction opposition -10597 Nov 06 j 13:58 -10603 Apr 27 j 07:52 18°≈07'01 1°39'39 2°**₭**23'44 29.13949 AU minimum elong min. Earth dist. -10597 Nov 07 j 13:33 -10603 May 13 j 05:10 18°≈42'15 0°**)** 59′50 morning rise direct -10596 Jan 26 j 11:03 -10603 Aug 07 j 22:28 20°≈34'44 retrograde evening set -10596 Apr 26 j 21:24 2°**)** 57'02 opposition -10603 Oct 23 j 20:46 19°≈12'25 -1°43'30 min. Earth dist. -10603 Oct 24 j 19:48 19°≈10'48 29.08637 AU conjunction -10596 May 12 j 20:21 3°**升**32'27 -1°02'09 direct -10602 Jan 12 j 11:03 17°≈46'41 minimum elong -10596 May 12 j 20:21 3°**升**32'27 1°02'28 evening set -10602 Apr 13 j 19:21 19°≈43'56 max. Earth dist. -10596 May 11 j 18:49 3°**升**30′04 31.14380 AU morning rise -10596 May 28 j 15:01 4°**)**(07'31 5°**)** € 59'32 conjunction -10602 Apr 29 j 20:13 20°≈19'28 -1°34'18 retrograde -10596 Aug 22 j 22:10 minimum elong -10602 Apr 29 j 20:14 20°≈19'28 1°34'42 opposition -10596 Nov 08 j 01:08 4°**)** 37'38 -1°03'28 max. Earth dist. -10602 Apr 28 j 18:36 20°≈17'05 31.08856 AU min. Earth dist. -10596 Nov 09 j 01:25 4°**)** 35′57 29.14920 AU morning rise -10602 May 15 j 17:21 20°≈54'41 direct -10595 Jan 27 i 23:07 3°**¥**12'09 retrograde -10602 Aug 10 j 10:04 22°≈47'03 evening set -10595 Apr 29 i 09:43 5°**)** 09'20 opposition -10602 Oct 26 j 07:32 21°≈24'45 -1°38'10 max. Earth dist. -10595 May 14 j 05:04 5°**)** 42'12 31.15310 AU min. Earth dist. -10602 Oct 27 j 05:47 21°≈23'11 29.09308 AU -10601 Jan 15 j 00:20 19°≈59'00 -10595 May 15 j 08:02 5° **X** 44'43 -0°56'26 direct conjunction -10601 Apr 16 j 07:44 21°≈56'13 -10595 May 15 j 08:03 5°\ 44'43 0°56'44 evening set minimum elong max. Earth dist. -10601 May 01 j 07:18 22°≈29'23 31.09565 AU -10595 May 31 j 02:24 6°**₩**19'46 morning rise -10595 Aug 25 j 09:59 8°**)** 11'45 retrograde -10601 May 02 j 08:25 22°≈31'44 -1°29'14 -10595 Nov 10 j 12:18 6° **€** 49'53 -0°57'18 conjunction opposition -10601 May 02 j 08:25 22°≈31'44 1°29'39 min. Earth dist. -10595 Nov 11 j 12:25 6°**)** 48'13 29.15796 AU minimum elong -10601 May 18 j 05:03 23°≈06'55 -10594 Jan 30 j 11:23 5°**)**€24'27 morning rise direct -10601 Aug 12 j 19:44 24°≈59'11 -10594 May 01 j 21:46 7°**米**21'37 retrograde evening set -10601 Oct 28 j 18:27 23°≈36'55 -1°32'42 opposition -10601 Oct 29 j 17:51 23°≈35'17 29.10061 AU -10594 May 17 j 19:50 7° **★** 56'59 -0°50'38 min. Earth dist. conjunction -10600 Jan 17 j 12:29 22°≈11'11 -10594 May 17 j 19:51 7° **★** 56'59 0°50'54 direct minimum elong -10600 Apr 17 j 20:15 24°≈08'22 -10594 May 16 j 17:36 7° **★** 54'32 31.16123 AU evening set max. Earth dist. morning rise -10594 Jun 02 j 13:34 8°**∺**31'59 conjunction -10600 May 03 j 20:33 24°≈43'52 -1°24'03 retrograde -10594 Aug 27 j 20:06 10°**米**23'56 minimum elong -10600 May 03 j 20:33 24°≈43'52 1°24'26 opposition -10594 Nov 12 j 23:40 9°**米**02'06 -0°51'04 max. Earth dist. -10600 May 02 j 19:01 24°≈41'29 31.10383 AU min. Earth dist. -10594 Nov 14 j 00:57 9°**米**00′21 29.16541 AU -10600 May 19 j 16:55 25°≈19'01 -10593 Feb 02 j 00:37 7° **∺** 36'41 morning rise direct -10600 Aug 14 j 06:59 27°≈11'12 -10593 May 04 j 09:44 9°**)** 33'49 retrograde evening set -10600 Oct 30 j 05:06 25°≈49'00 -1°27'06 max. Earth dist. -10593 May 19 j 03:46 10° **€** 06'34 31.16816 AU opposition min. Earth dist. -10600 Oct 31 j 03:45 25°≈47'25 29.10917 AU -10599 Jan 19 i 01:41 24°≈23'17 -10593 May 20 j 07:14 10° \(\) 09'08 -0°44'46 direct conjunction -10599 Apr 20 j 08:43 26°≈20'28 -10593 May 20 j 07:14 10°\tag{09'08} 0°45'02 evening set minimum elong -10599 May 05 j 07:02 26°≈53'33 31.11299 AU -10593 Jun 05 i 00:43 10°¥44'07 max. Earth dist. morning rise -10593 Aug 30 i 07:35 12°\cdot\d36'00 retrograde conjunction -10599 May 06 i 08:41 26°≈55'57 -1°18'45 opposition -10593 Nov 15 j 10:51 11°\dagger 14'11 -0°44'45 -10599 May 06 i 08:41 26°≈55'57 1°19'08 min. Earth dist. -10593 Nov 16 j 11:27 11° ¥ 12'29 29.17166 AU minimum elong -10599 May 22 j 04:36 27°≈31'05 direct -10592 Feb 04 j 13:25 9° **X** 48'46 morning rise retrograde -10599 Aug 16 j 16:42 29°≈23'12 evening set -10592 May 05 j 21:35 11° **€** 45'51 -10599 Nov 01 j 16:05 28°≈01'04 -1°21'21 opposition min. Earth dist. -10599 Nov 02 j 15:35 27°≈59'26 29.11883 AU conjunction -10592 May 21 j 18:44 12° **★** 21'08 -0°38'50 direct -10598 Jan 21 j 12:08 26°≈35'24 minimum elong -10592 May 21 j 18:45 12°**米**21'08 0°39'04 evening set -10598 Apr 22 j 20:56 28°≈32'35 max. Earth dist. -10592 May 20 j 15:36 12° **∺** 18'37 31.17385 AU -10592 Jun 06 j 11:37 12° **∺** 56'05 morning rise -10598 May 08 j 20:34 29°≈08'03 -1°13'19 -10592 Aug 31 j 17:35 14°\ 47'55 conjunction retrograde -10598 May 08 j 20:35 29°≈08'03 1°13'41 -10592 Nov 16 j 22:06 13° **★** 26'05 -0°38'24 minimum elong opposition -10598 May 07 j 19:23 29°≈05'42 31.12314 AU -10592 Nov 17 j 24:00 13° **∺** 24'18 29.17689 AU max. Earth dist. min. Earth dist. morning rise -10598 May 24 j 16:06 29°≈43'09 direct -10591 Feb 06 j 02:30 12° **★**00'40 -10598 Jun 01 j 12:43 0°**光** evening set -10591 May 08 j 09:23 13° **★** 57'41 retrograde -10598 Aug 19 j 01:50 1°**)** 35'14 max. Earth dist. -10591 May 23 j 02:29 14° **★** 30'22 31.17885 AU opposition -10598 Nov 04 j 03:04 0°**)** 13'11 -1°15'30 min. Earth dist. -10598 Nov 05 j 02:14 0°**⊁**11'34 29.12905 AU -10591 May 24 j 05:59 14° **€** 32'56 -0°32'52 conjunction

-10591 May 24 j 06:00 14° **€** 32'56 0°33'05

minimum elong

-10598 Nov 12 j 01:18 30°R≈

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10591 in astronomical counting style is the year 10592 BCE in historical counting style. -10591 Jun 08 j 22:30 15° ¥ 07'50 behind sun end -10585 Jun 07 i 04:45 27° **\(4**0'21 morning rise -10591 Sep 03 j 05:00 16° ¥ 59'36 max. Earth dist. -10585 Jun 05 j 21:36 27° ¥ 37'28 31.21711 AU retrograde opposition -10591 Nov 19 j 09:24 15° ¥ 37'46 -0°31'59 -10585 Jun 22 j 11:43 28°\ 14'28 morning rise -10591 Nov 20 j 10:28 15° **€** 36'02 29.18155 AU -10585 Aug 28 j 18:00 0°**Υ** min. Earth dist. -10590 Feb 08 j 16:58 14° **€** 12'20 -10585 Sep 16 j 14:02 0°**Υ**06'10 direct retrograde -10590 May 10 j 20:51 16°**米**09'17 -10585 Oct 05 j 18:19 30°R € evening set -10585 Dec 03 j 05:51 28°**)** 44'22 0°07'01 opposition -10590 May 26 j 16:58 16° **★** 44'30 -0°26'51 min. Earth dist. conjunction -10585 Dec 04 j 06:06 28° \ 42'43 29.22176 AU -10590 May 26 j 16:59 16°**米**44'30 0°27'02 minimum elong direct -10584 Feb 22 j 15:15 27° **∺** 19'09 max. Earth dist. -10590 May 25 j 13:34 16° **X** 41'56 31.18344 AU evening set -10584 May 23 j 15:57 29° **★** 15'48 -10590 Jun 11 j 08:57 17°**米** 19'21 morning rise max. Earth dist. -10584 Jun 07 j 07:24 29° ¥ 48'25 31.22578 AU -10590 Sep 05 j 14:08 19°**升** 11'05 retrograde -10590 Nov 21 j 20:47 17°**米**49'13 -0°25'32 -10584 Jun 08 j 08:43 29° **€** 50'47 0°09'45 opposition conjunction min. Earth dist. -10590 Nov 22 j 22:29 17°\ 47'27 29.18628 AU minimum elong -10584 Jun 08 j 08:42 29° **€** 50'47 0°09'42 direct -10589 Feb 11 j 04:33 16° **★**23'47 behind sun begin -10584 Jun 08 j 03:23 29° ₩ 50'18 evening set -10589 May 13 j 08:14 18° **∺**20'39 behind sun end -10584 Jun 08 j 14:02 29°**₭**51'15 max. Earth dist. -10589 May 28 j 01:17 18°**米** 53′20 31.18840 AU -10584 Jun 12 j 11:06 morning rise -10584 Jun 23 j 21:41 0°**Y**25′26 conjunction -10589 May 29 j 03:54 18° **H** 55'49 -0°20'48 retrograde -10584 Sep 18 j 01:38 2°Υ17'11 minimum elong -10589 May 29 j 03:54 18° **X** 55'49 0°20'59 opposition -10584 Dec 04 j 17:20 0°Υ55'26 0°13'32 morning rise -10589 Jun 13 j 19:23 19°**¥** 30'38 min. Earth dist. -10584 Dec 05 j 16:25 0°**Υ**53'51 29.23023 AU retrograde -10589 Sep 07 i 22:31 21° ¥ 22'19 -10583 Jan 10 j 11:41 30°R **)** € opposition -10589 Nov 24 i 07:59 20° \tag{00'26} -0°19'03 direct -10583 Feb 24 i 03:00 29° ★ 30'18 min. Earth dist. -10589 Nov 25 j 09:00 19° \(\)58'43 29.19146 AU -10583 Apr 08 i 15:33 $0^{\circ}\Upsilon$ direct -10588 Feb 13 i 17:59 18° ¥ 35'00 evening set -10583 May 26 j 02:58 1°Y26'55 -10588 May 14 j 19:37 20° **X** 31'48 evening set max. Earth dist. -10588 May 29 j 11:33 21°**米**04'24 31.19403 AU -10583 Jun 10 j 19:13 2°Y01'52 0°15'49 conjunction -10583 Jun 10 j 19:13 2°**Y**′01′52 0°15'47 minimum elong -10588 May 30 j 14:38 21° \(\text{\tinu}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tinit}\text{\text{\text{\text{\text{\text{\text{\text{\text{\tinit}}\xi\text{\ti}\xitit{\texi}\text{\text{\texi}\text{\text{\text{\texi}\texitt{\text{\texi}\text{\texit{\texiti}\text{\texit{\text{\texitiex{\texit{\texi{\texi{\texi{\texi}\texit{\texi{\texi{\t -10583 Jun 10 j 17:52 2°Υ01'44 conjunction behind sun begin -10588 May 30 j 14:39 21° **★** 06'56 0°14'53 -10583 Jun 10 j 20:34 2°**Υ**01'59 minimum elong behind sun end -10588 May 30 j 12:08 21° **★** 06'42 -10583 Jun 09 j 18:39 1°**Υ**'59'34 31.23389 AU behind sun begin max. Earth dist. -10588 May 30 j 17:09 21°**米**07'09 morning rise -10583 Jun 26 j 07:31 2°**Υ**36'29 behind sun end -10588 Jun 15 j 05:42 21°**)** 41'43 -10583 Sep 20 j 12:19 4°**Υ**28'17 morning rise retrograde -10588 Sep 09 j 08:38 23° **∺**33'22 -10583 Dec 07 j 05:15 3° **Y** 06'34 0° 20'02 retrograde opposition -10588 Nov 25 j 19:21 22° **∺** 11'29 -0°12'33 -10583 Dec 08 j 05:14 3° Υ 04'56 29.23803 AU opposition min. Earth dist. -10588 Nov 26 j 20:02 22° ₩ 09'47 29.19767 AU -10582 Feb 26 j 15:32 1°**Υ**41'31 min. Earth dist. direct -10587 Feb 15 j 04:20 20° ¥ 46'04 -10582 May 28 j 13:53 3°**Y**38'06 direct evening set evening set -10587 May 17 j 06:43 22° \ 42'49 max. Earth dist. -10582 Jun 12 j 04:51 4°Υ10'42 31.24119 AU max. Earth dist. -10587 May 31 j 23:41 23°**米** 15'31 31.20077 AU -10582 Jun 13 j 05:28 4°**Υ**°13'00 0°21'53 conjunction -10587 Jun $02 \text{ j } 01:20 \quad 23^{\circ} \text{H } 17'55 \quad -0^{\circ}08'40$ conjunction minimum elong -10582 Jun 13 j 05:27 4°Υ13'00 0°21'52 -10587 Jun 02 j 01:20 23° **∺** 17'55 0°08'48 -10582 Jun 28 j 17:16 4°**Υ**47'35 minimum elong morning rise -10587 Jun 01 j 19:45 23°**)** 17'25 -10582 Sep 22 j 24:00 6°**Υ**39'26 behind sun begin retrograde -10587 Jun 02 j 06:55 23°**米** 18'25 -10582 Dec 09 j 17:04 5° **Y** 17'44 0° 26'30 behind sun end opposition -10587 Jun 17 j 15:44 23°**)** 52'40 min. Earth dist. -10582 Dec 10 j 16:03 5°**Υ**16'10 29.24468 AU morning rise -10587 Sep 11 i 17:20 25° \(\frac{1}{2}\)44'19 -10581 Mar 01 i 05:30 3° Υ 52'44 retrograde direct -10587 Nov 28 j 06:51 24° \(\)22'27 -0°06'02 opposition evening set -10581 May 31 i 00:51 5°**Y**49'18 -10587 Nov 29 i 07:26 24° \(\)20'45 29.20485 AU min. Earth dist. -10581 Jun 15 j 15:48 6°**Y**'24'09 0°27'54 direct -10586 Feb 17 i 16:44 22° + 57'05 conjunction evening set -10586 May 19 j 17:57 24° **H** 53'47 minimum elong -10581 Jun 15 i 15:48 6°Υ24'09 0°27'54 max. Earth dist. -10586 Jun 03 j 09:36 25° ¥ 26'23 31.20858 AU max. Earth dist. -10581 Jun 14 i 15:09 6°Υ21'51 31.24716 AU -10581 Jul 01 j 03:03 6°**Υ**58'42 morning rise -10586 Jun 04 j 11:50 25° ★28'50 -0°02'35 -10581 Sep 25 j 09:56 8° Υ 50'36 conjunction retrograde -10586 Jun 04 j 11:50 25° **∺**28'50 0°02'41 7°**Y**28'54 0°32'56 minimum elong opposition -10581 Dec 12 j 04:50 7°**Y**27'17 29.25015 AU behind sun begin -10586 Jun 04 j 05:23 25° **★** 28'15 min. Earth dist. -10581 Dec 13 j 04:30 6°Y03'57 behind sun end -10586 Jun 04 j 18:17 25°**升**29'24 direct -10580 Mar 02 j 16:51 8°Υ00'27 morning rise -10586 Jun 20 j 01:53 26°**米**03'33 evening set -10580 Jun 01 j 11:43 8°**Ƴ**33'01 31.25197 AU -10586 Sep 14 j 04:22 27° **₭** 55'13 max. Earth dist. -10580 Jun 16 j 02:09 retrograde -10586 Nov 03 j 16:01 27°**米** 15'51 asc. node -10586 Nov 30 j 18:15 26° ₭ 33'23 0°00'29 -10580 Jun 17 j 02:07 8°**Y**35'16 0°33'54 opposition conjunction -10586 Dec 01 j 17:51 26° ₭ 31'46 29.21313 AU -10580 Jun 17 j 02:06 8°**Υ**35'16 0°33'55 min. Earth dist. minimum elong 9°Y09'46 direct -10585 Feb 20 j 03:36 25° ¥ 08'05 morning rise -10580 Jul 02 j 12:45 evening set -10585 May 22 j 04:49 27°**₭** 04'45 retrograde -10580 Sep 26 j 18:49 11°**Υ**01'42 opposition -10580 Dec 13 j 16:44 9°**Ƴ**40'00 0°39'18 conjunction -10585 Jun 06 j 22:19 27° **★** 39'46 0°03'40 min. Earth dist. -10580 Dec 14 j 15:49 9°**Υ**38'25 29.25427 AU -10585 Jun 06 j 22:20 27° **₭** 39'47 0°03'35 -10579 Mar 05 j 06:37 8°Y15'06 minimum elong direct -10585 Jun 06 j 15:56 27° **∺**39'12 -10579 Jun 03 j 22:26 10°**Υ**11'31 behind sun begin evening set

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 26

•	nical year style is used: Th		_	. //			le
max. Earth dist.	-10579 Jun 18 j 11:34			min. Earth dist.	-10573 Dec 30 j 23:14		
max. Lattii dist.	10377 Jun 10 J 11.54	10 1 44 00	31.23337710	direct	-10572 Mar 20 j 16:2		27.20200 710
conjunction	-10579 Jun 19 j 12:05	10° ℃ 46'17	0°39'50	evening set	-10572 Jun 18 j 22:14		
minimum elong	-10579 Jun 19 j 12:05		0°39'52	evening set	103/2 Juli 10 j 22.1	+ 23 2020	
morning rise	-10579 Jul 04 j 22:16		0 37 32	conjunction	-10572 Jul 04 j 07:2	5 26° ℃ 00'47	1°10'13
retrograde	-10579 Sep 29 j 05:17			minimum elong	-10572 Jul 04 j 07:2		
opposition	-10579 Dec 16 j 04:43		0°45'37	max. Earth dist.	-10572 Jul 04 j 07.2		
min. Earth dist.	-10579 Dec 10 j 04:43			morning rise	-10572 Jul 19 j 13:4		31.26431 AU
direct	-10578 Mar 07 j 17:32		29.23736 AU	retrograde	-10572 Oct 14 j 05:5		
evening set	-10578 Jun 06 j 08:57			opposition	-10572 Dec 31 j 17:1-		1027124
evening set	-103/6 Juli 00 J 06.3/	12 22 20		min. Earth dist.	-10571 Jan 01 j 11:4		
conjunction	-10578 Jun 21 j 22:08	120057112	0045142	direct	-10571 Mar 23 j 03:1		29.28800 AU
minimum elong	-10578 Jun 21 j 22:07		0°45'47	evening set	-10571 Jun 21 j 08:1.		
max. Earth dist.	-10578 Jun 20 j 23:03			evening set	-103/1 Juli 21 j 06.1.	3 21 13101	
morning rise	-10578 Jul 07 j 07:38		31.23633 AU	conjunction	-10571 Jul 06 j 16:5	n 200 V 11!21	1024127
-	-10578 Oct 01 j 13:50			-	-10571 Jul 06 j 16:4		
retrograde	-10578 Dec 18 j 16:40		0051151	minimum elong max. Earth dist.	-10571 Jul 05 j 22:5		
opposition					-10571 Jul 03 j 22:3:		31.28994 AU
min. Earth dist.	-10578 Dec 19 j 15:23		29.26035 AU	morning rise	,		
direct	-10577 Mar 10 j 06:22			. 1	-10571 Aug 29 j 13:2		
evening set	-10577 Jun 08 j 19:22		21.26127.444	retrograde	-10571 Oct 16 j 15:5		
max. Earth dist.	-10577 Jun 23 j 08:14	15*1/05/44	31.26127 AU	••	-10571 Dec 05 j 23:11		1022156
	10577 1 24:07 15	150000000	0951120	opposition	-10570 Jan 03 j 05:4		
conjunction	-10577 Jun 24 j 07:46			min. Earth dist.	-10570 Jan 03 j 23:1		29.29325 AU
minimum elong	-10577 Jun 24 j 07:45		0°51'36	direct	-10570 Mar 25 j 17:1:		
morning rise	-10577 Jul 09 j 16:54			evening set	-10570 Jun 23 j 18:2		
retrograde	-10577 Oct 04 j 00:14		00.5010.1	F 4 F	-10570 Jun 29 j 04:3		21 20 165 177
opposition	-10577 Dec 21 j 04:32			max. Earth dist.	-10570 Jul 08 j 07:5	9 0° 8 20'36	31.29467 AU
min. Earth dist.	-10577 Dec 22 j 02:03		29.26326 AU		10550 1 1 00:00 1		1000104
direct	-10576 Mar 11 j 17:09			conjunction	-10570 Jul 09 j 02:1		
evening set	-10576 Jun 10 j 05:36	16°'Y'43'56		minimum elong	-10570 Jul 09 j 02:1		1°29'50
		. ==000 + 010 +		morning rise	-10570 Jul 24 j 07:3		
conjunction	-10576 Jun 25 j 17:29			retrograde	-10570 Oct 19 j 03:2		
minimum elong	-10576 Jun 25 j 17:28			opposition	-10569 Jan 05 j 18:0		
max. Earth dist.	-10576 Jun 24 j 19:43		31.26426 AU	min. Earth dist.	-10569 Jan 06 j 11:0		29.29761 AU
morning rise	-10576 Jul 11 j 01:52			direct	-10569 Mar 28 j 04:3		
retrograde	-10576 Oct 05 j 09:21			evening set	-10569 Jun 26 j 04:2	1 1° 8 58'52	
opposition	-10576 Dec 22 j 16:37		1°04'06				
min. Earth dist.	-10576 Dec 23 j 14:16		29.26663 AU	conjunction	-10569 Jul 11 j 11:4		
direct	-10575 Mar 14 j 04:13			minimum elong	-10569 Jul 11 j 11:4		
evening set	-10575 Jun 12 j 15:56			max. Earth dist.	-10569 Jul 10 j 18:5		31.29821 AU
max. Earth dist.	-10575 Jun 27 j 05:20	19° Y ′27'04	31.26811 AU	morning rise	-10569 Jul 26 j 16:2		
				retrograde	-10569 Oct 21 j 12:2		
conjunction	-10575 Jun 28 j 03:01		1°02'52	opposition	-10568 Jan 08 j 06:4		
minimum elong	-10575 Jun 28 j 03:00		1°03'00	min. Earth dist.	-10568 Jan 08 j 23:3	_	29.30040 AU
morning rise	-10575 Jul 13 j 10:59			direct	-10568 Mar 29 j 17:3		
retrograde	-10575 Oct 07 j 20:41			evening set	-10568 Jun 27 j 14:2	7 4° 8 09'45	
opposition	-10575 Dec 25 j 04:40		1°10'05				
min. Earth dist.	-10575 Dec 26 j 00:22		29.27100 AU	conjunction	-10568 Jul 12 j 21:0		
direct	-10574 Mar 16 j 15:20			minimum elong	-10568 Jul 12 j 21:0		
evening set	-10574 Jun 15 j 01:57	21° Y ′05'04		max. Earth dist.	-10568 Jul 12 j 03:4		31.30020 AU
		4 -		morning rise	-10568 Jul 28 j 01:2		
conjunction	-10574 Jun 30 j 12:29		1°08'25	retrograde	-10568 Oct 22 j 22:5		
minimum elong	-10574 Jun 30 j 12:29		1°08'35	opposition	-10567 Jan 09 j 19:1		
max. Earth dist.	-10574 Jun 29 j 16:07		31.27286 AU	min. Earth dist.	-10567 Jan 10 j 11:0		29.30174 AU
morning rise	-10574 Jul 15 j 19:49	22° Y 13'53		direct	-10567 Apr 01 j 04:3		
retrograde	-10574 Oct 10 j 07:34			evening set	-10567 Jun 30 j 00:2	1 6° 8 20'34	
opposition	-10574 Dec 27 j 16:54		1°15'57				
min. Earth dist.	-10574 Dec 28 j 12:48		29.27628 AU	conjunction	-10567 Jul 15 j 06:3		
direct	-10573 Mar 19 j 03:32			minimum elong	-10567 Jul 15 j 06:2		
evening set	-10573 Jun 17 j 12:06	23° Y 15'40		max. Earth dist.	-10567 Jul 14 j 14:3		31.30071 AU
				morning rise	-10567 Jul 30 j 10:0		
conjunction	-10573 Jul 02 j 21:58		1°13'52	retrograde	-10567 Oct 25 j 08:2		
minimum elong	-10573 Jul 02 j 21:58		1°14'02	opposition	-10566 Jan 12 j 07:5		
max. Earth dist.	-10573 Jul 02 j 02:19		31.27850 AU	min. Earth dist.	-10566 Jan 13 j 00:0		29.30167 AU
morning rise	-10573 Jul 18 j 04:49			direct	-10566 Apr 03 j 15:5		
retrograde	-10573 Oct 12 j 19:25			evening set	-10566 Jul 02 j 10:0	9 8° 8 31'17	
opposition	-10573 Dec 30 j 04:52	24° Y ′54'55	1°21'44				

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10566 in astronomical counting style is the year 10567 BCE in historical counting style. -10566 Jul 17 j 15:37 9°**8**05'27 1°48'41 retrograde -10560 Nov 09 j 12:23 24°**8**35'40 conjunction minimum elong -10566 Jul 17 j 15:36 9°**8**05'27 1°49'01 opposition -10559 Jan 28 j 00:33 23°8 13'18 2°23'24 max. Earth dist. -10566 Jul 16 j 23:42 9°803'57 31.30008 AU min. Earth dist. -10559 Jan 28 j 09:42 23°8 12'41 29.29840 AU -10566 Aug 01 j 18:58 9°839'28 -10559 Apr 19 j 03:35 21°**8**49'30 direct morning rise -10559 Jul 17 j 04:29 23°**8**44'37 -10566 Oct 27 j 19:37 11°\begin{align*} 32'37 \end{align*} retrograde evening set -10565 Jan 14 j 20:31 10°8 10'32 1°58'28 opposition -10565 Jan 15 j 10:59 10°**8**09'34 29.30060 AU -10559 Aug 01 j 06:17 24°**8**18'32 2°15'53 min. Earth dist. conjunction -10565 Apr 06 j 03:31 8°**8**46'23 -10559 Aug 01 j 06:16 24°**8**18'32 2°16'19 direct minimum elong evening set -10565 Jul 04 j 19:51 10°**8**41'52 -10559 Jul 31 j 21:09 24°**8**17'40 31.29725 AU max. Earth dist. -10565 Jul 19 j 09:54 11°**8**14'36 31.29853 AU max. Earth dist. morning rise -10559 Aug 16 j 06:59 24°**8**52'23 retrograde -10559 Nov 11 j 23:28 26°**8**46'27 -10565 Jul 20 j 00:49 11°**8**16'00 1°53'05 -10558 Jan 30 j 13:25 25°**8**24'05 2°26'53 conjunction opposition -10565 Jul 20 j 00:48 11°**8**16'00 -10558 Jan 30 j 21:02 25°**8**23'35 29.29938 AU minimum elong 1°53'25 min. Earth dist. -10565 Aug 04 j 03:38 11°**8**49'59 morning rise direct -10558 Apr 21 j 14:21 24°**8**00'22 retrograde -10565 Oct 30 j 06:18 13°**8**43'13 evening set -10558 Jul 19 j 13:44 25°**8**55'26 opposition -10564 Jan 17 j 09:04 12°**8**21'04 2°03'05 min. Earth dist. -10564 Jan 17 j 23:48 12°**8**20'04 29.29900 AU conjunction -10558 Aug 03 j 15:15 26°**8**29'20 2°19'02 direct -10564 Apr 07 j 15:07 10°**8**56'56 minimum elong -10558 Aug 03 j 15:14 26°**8**29'20 2°19'30 evening set -10564 Jul 06 j 05:28 12°852'20 max. Earth dist. -10558 Aug 03 j 07:49 26°828'38 31.29777 AU morning rise -10558 Aug 18 j 15:32 27°**8**03'10 conjunction -10564 Jul 21 j 09:51 13°**8**26'25 1°57'19 retrograde -10558 Nov 14 j 09:30 28°857'25 minimum elong -10564 Jul 21 j 09:50 13°**8**26'25 1°57'42 opposition -10557 Feb 02 i 02:27 27° \(\delta 35'01 \) 2°30'08 max. Earth dist. -10564 Jul 20 j 19:58 13°**8**25'07 31.29688 AU min. Earth dist. -10557 Feb 02 j 10:13 27° \(\dag{3}34'30 \) 29.29955 AU morning rise -10564 Aug 05 j 12:15 14°**8**00'22 direct -10557 Apr 24 j 01:20 26°811'24 -10564 Sep 04 i 02:04 15°8 evening set -10557 Jul 21 j 23:12 28° 806'23 -10564 Oct 31 j 17:49 15°**8**53'42 retrograde -10564 Dec 31 j 21:50 15°R8 -10557 Aug 06 j 00:13 28°840'16 2°21'59 conjunction -10563 Jan 18 j 21:41 14°\(\mathbf{2}31'29\) 2°07'31 minimum elong -10557 Aug 06 j 00:12 28°840'16 2°22'27 opposition -10563 Jan 19 j 10:32 14°**8**30'37 29.29748 AU max. Earth dist. -10557 Aug 05 j 16:57 28°**8**39'35 31.29738 AU min. Earth dist. -10563 Apr 10 j 03:38 13°**8**07'22 -10557 Aug 21 j 00:18 29°**8**14'05 direct morning rise -10557 Sep 12 j 00:33 0°**Ц** -10563 Jul 07 j 09:32 15°**8** -10563 Jul 08 j 14:56 15°**8**02'42 -10557 Nov 16 j 21:11 1°**Ц**08'29 evening set retrograde -10556 Jan 26 j 22:50 30°R**႘** -10563 Jul 23 j 18:42 15°**8**36'45 2°01'24 -10556 Feb 04 j 15:15 29°**8**46'04 2°33'11 conjunction opposition -10563 Jul 23 j 18:41 15°**8**36'44 2°01'46 min. Earth dist. -10556 Feb 04 j 21:16 29°**8**45'40 29.29858 AU minimum elong -10563 Jul 23 j 05:31 15°**8**35'30 31.29550 AU -10556 Apr 25 j 12:32 28°**8**22'30 max. Earth dist. direct -10563 Aug 07 j 20:45 16°**8**10'40 -10556 Jul 15 j 08:05 0°**Ⅱ** morning rise retrograde -10563 Nov 03 j 04:44 18°**8**04'08 evening set -10556 Jul 23 j 08:38 0°**Ⅲ**17'26 opposition -10562 Jan 21 j 10:27 16°**8**41'51 2°11'47 -10556 Aug 07 j 09:17 0°**Д**51'17 2°24'44 min. Earth dist. -10562 Jan 21 j 22:52 16°**8**41'00 29.29666 AU conjunction direct -10562 Apr 12 j 14:21 15°**8**17'47 minimum elong -10556 Aug 07 j 09:16 0°**Д**51'17 2°25'13 -10562 Jul 11 j 00:21 17°**8**13'02 max. Earth dist. -10556 Aug 07 j 02:48 0°**Д**50'40 31.29561 AU evening set morning rise -10556 Aug 22 j 09:06 1°**Д**25'06 -10562 Jul 26 j 03:43 17°**8**47'03 2°05'17 retrograde -10556 Nov 18 j 08:35 3°**Д**19'39 conjunction -10562 Jul 26 j 03:42 17°**8**47'03 2°05'41 -10555 Feb 06 j 04:28 1°**Д**57'10 2°36'01 minimum elong opposition -10562 Jul 25 j 16:25 17° 845'59 31.29503 AU -10555 Feb 06 j 10:47 1°**Ц**56'44 29.29623 AU max. Earth dist. min. Earth dist. -10562 Aug 10 j 05:16 18°\begin{align*} 18°\begin{align*} 220'56 \end{align*} -10555 Apr 27 j 23:16 0°**Д**33'38 morning rise direct -10562 Nov 05 j 14:54 20°814'32 -10555 Jul 25 j 17:54 2°**Ⅲ**28'29 retrograde evening set opposition min. Earth dist. -10561 Jan 24 i 09:54 18° 851'29 29.29663 AU conjunction -10555 Aug 09 j 18:15 3°**II**02'19 2°27'16 direct -10561 Apr 15 j 03:58 17°828'13 minimum elong -10555 Aug 09 j 18:14 3°**Д**02'19 2°27'46 evening set -10561 Jul 13 j 09:49 19°**8**23'26 max. Earth dist. -10555 Aug 09 j 12:44 3°**Д**01'48 31.29253 AU morning rise -10555 Aug 24 j 17:51 3°**Д**36'07 -10555 Nov 20 j 20:29 5°**Ц**30'48 conjunction -10561 Jul 28 j 12:33 19°**8**57'25 2°09'00 retrograde -10554 Feb 08 j 17:32 4°**Д**08'14 2°38'38 minimum elong -10561 Jul 28 j 12:33 19°857'25 2°09'25 opposition 4°**Д**07'56 29.29241 AU max. Earth dist. -10561 Jul 28 j 01:19 19°**8**56'21 31.29536 AU min. Earth dist. -10554 Feb 08 j 22:11 morning rise -10561 Aug 12 j 13:55 20°**8**31'17 direct -10554 Apr 30 j 10:47 2°**Ⅱ**44'44 retrograde -10561 Nov 08 j 03:07 22°**8**25'02 evening set -10554 Jul 28 j 03:17 4°**Д**39'30 -10560 Jan 26 j 11:41 21°**8**02'41 2°19'44 opposition -10560 Jan 26 j 21:29 21°**8**02'02 29.29741 AU -10554 Aug 12 j 03:15 5°**I**I13'18 2°29'36 min. Earth dist. conjunction -10560 Apr 16 j 15:08 19°**8**38'47 direct minimum elong -10554 Aug 12 j 03:14 5°**Ⅱ**13'18 2°30'07 -10560 Jul 14 j 19:02 21°**8**33'56 evening set max. Earth dist. -10554 Aug 11 j 21:54 5°**Ⅱ**12'48 31.28799 AU morning rise -10554 Aug 27 j 02:47 5°**Ⅱ**47'06 conjunction -10560 Jul 29 j 21:27 22°**8**07'54 2°12'32 retrograde -10554 Nov 23 j 08:09 7°**Ⅱ**41'54 minimum elong -10560 Jul 29 j 21:26 22°807'54 2°12'59 opposition -10553 Feb 11 j 06:31 6°**Ⅱ**19'14 2°41'00 max. Earth dist. -10560 Jul 29 j 12:18 22°**8**07'02 31.29624 AU min. Earth dist. -10553 Feb 11 j 11:11 6°**Д**18'56 29.28746 AU

direct

-10553 May 02 j 21:30

4°**∏**55'45

morning rise

-10560 Aug 13 j 22:17 22°**8**41'45

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	nical year style is used: The						le.
evening set	-10553 Jul 30 j 12:25			opposition	-10546 Feb 27 j 01:45		
	·			min. Earth dist.	-10546 Feb 26 j 22:26		
conjunction	-10553 Aug 14 j 12:15	7° Ⅱ 24'11	2°31'43	direct	-10546 May 18 j 07:07	20° Ⅱ 10′54	
minimum elong	-10553 Aug 14 j 12:15	7° Ⅲ 24'11	2°32'15	evening set	-10546 Aug 14 j 03:14	22° I I04'56	
max. Earth dist.	-10553 Aug 14 j 08:37	7° Ⅱ 23'51	31.28253 AU				
morning rise	-10553 Aug 29 j 11:32	7° ∏ 57'58		conjunction	-10546 Aug 29 j 02:03		
retrograde	-10553 Nov 25 j 19:17	9° Ⅱ 52'52		minimum elong	-10546 Aug 29 j 02:03		
opposition	-10552 Feb 13 j 19:31	8° Ⅱ 30'06		max. Earth dist.	-10546 Aug 29 j 06:14		31.25421 AU
min. Earth dist.	-10552 Feb 13 j 22:51		29.28162 AU	morning rise	-10546 Sep 13 j 01:23		
direct	-10552 May 04 j 11:20	7° Ⅱ 06'37		retrograde	-10546 Dec 11 j 01:57		
evening set	-10552 Jul 31 j 21:30	9° Ⅱ 01'10		opposition	-10545 Mar 01 j 14:37		
i	10552 A 15: 20.55	00 Π 24156	2022127	min. Earth dist.	-10545 Mar 01 j 09:32		29.25526 AU
conjunction	-10552 Aug 15 j 20:55			direct	-10545 May 20 j 17:40 -10545 Aug 16 j 12:22		
minimum elong max. Earth dist.	-10552 Aug 15 j 20:55 -10552 Aug 15 j 17:18		31.27652 AU	evening set	-10343 Aug 10 J 12.22	24 H 10 00	
morning rise	-10552 Aug 30 j 20:16		31.27032 AU	conjunction	-10545 Aug 31 j 11:03	24°π49'44	2°40'39
retrograde	-10552 Nov 27 j 07:57			minimum elong	-10545 Aug 31 j 11:02		
opposition	-10551 Feb 15 j 08:35		2°45'05	max. Earth dist.	-10545 Aug 31 j 15:23		
min. Earth dist.	-10551 Feb 15 j 10:48			morning rise	-10545 Sep 15 j 10:38		31.201.0110
direct	-10551 May 06 j 22:46			retrograde	-10545 Dec 13 j 14:47		
evening set	-10551 Aug 03 j 06:28			opposition	-10544 Mar 03 j 03:50	25° II 56'23	2°51'45
	•			min. Earth dist.	-10544 Mar 02 j 22:42		
conjunction	-10551 Aug 18 j 05:50	11° ∏ 45'32	2°35'18	direct	-10544 May 22 j 03:33	24° Ⅲ 33′19	
minimum elong	-10551 Aug 18 j 05:50	11° Ⅱ 45'32	2°35'50	evening set	-10544 Aug 17 j 21:19	26° Ⅲ 27'15	
max. Earth dist.	-10551 Aug 18 j 04:24	11° Ⅱ 45′23	31.27075 AU				
morning rise	-10551 Sep 02 j 04:56			conjunction	-10544 Sep 01 j 20:10		
retrograde	-10551 Nov 29 j 17:15			minimum elong	-10544 Sep 01 j 20:10		
opposition	-10550 Feb 17 j 21:37			max. Earth dist.	-10544 Sep 02 j 02:17		31.24792 AU
min. Earth dist.	-10550 Feb 17 j 22:55		29.27037 AU	morning rise	-10544 Sep 16 j 19:46		
direct	-10550 May 09 j 11:19			retrograde	-10544 Dec 15 j 03:09		
evening set	-10550 Aug 05 j 15:29	13°Щ22'18		opposition	-10543 Mar 05 j 17:05		
. ,.	10550 4 20 : 14 22	120Tf 5 (102	2026146	min. Earth dist.	-10543 Mar 05 j 10:45		29.24803 AU
conjunction	-10550 Aug 20 j 14:32			direct	-10543 May 24 j 16:20 -10543 Aug 20 j 06:36		
minimum elong max. Earth dist.	-10550 Aug 20 j 14:32 -10550 Aug 20 j 13:26			evening set	-10543 Aug 20 J 06:36	28°Щ38'37	
morning rise	-10550 Sep 04 j 13:46		31.20381 AU	conjunction	-10543 Sep 04 j 05:21	20°π12'23	2°40'35
retrograde	-10550 Dec 02 j 04:36			minimum elong	-10543 Sep 04 j 05:21		
opposition	-10549 Feb 20 j 10:33		2°48'12	max. Earth dist.	-10543 Sep 04 j 11:04		
min. Earth dist.	-10549 Feb 20 j 09:56			morning rise	-10543 Sep 19 j 05:20		31.2.1312110
direct	-10549 May 11 j 22:54			5 5	-10543 Sep 25 j 11:52	0ಂತಾ	
evening set	-10549 Aug 08 j 00:24			retrograde	-10543 Dec 17 j 17:08	1°542'34	
				opposition	-10542 Mar 08 j 06:18	0°519'15	2°51'26
conjunction	-10549 Aug 22 j 23:24	16° Ⅱ 06'32	2°38'00	min. Earth dist.	-10542 Mar 07 j 23:16	0°9519'43	29.24265 AU
minimum elong	-10549 Aug 22 j 23:24	16° Ⅱ 06'32	2°38'33		-10542 Mar 20 j 06:38		
max. Earth dist.	-10549 Aug 23 j 00:14		31.26178 AU	direct	-10542 May 27 j 02:56	28° Ⅱ 56'17	
morning rise	-10549 Sep 06 j 22:30				-10542 Jul 29 j 10:32	0 \circ \odot	
retrograde	-10549 Dec 04 j 14:49			evening set	-10542 Aug 22 j 15:39	0°950'05	
opposition	-10548 Feb 22 j 23:32				10540 0 000000	1000000	20.4011.2
min. Earth dist.	-10548 Feb 22 j 22:34		29.26249 AU	conjunction	-10542 Sep 06 j 14:43	1°523'51	2°40'13
direct	-10548 May 13 j 10:17			minimum elong	-10542 Sep 06 j 14:43	1°923'51	2°40'49
evening set	-10548 Aug 09 j 09:23	17-Щ43'22		max. Earth dist.	-10542 Sep 06 j 22:04	1°957'45	31.23697 AU
conjunction	-10548 Aug 24 j 08:13	18°π1 <i>7'</i> Ω5	2°39'00	morning rise retrograde	-10542 Sep 21 j 14:49 -10542 Dec 20 j 03:39	1°95/'45 3°954'11	
minimum elong	-10548 Aug 24 j 08:13			opposition	-10542 Dec 20 j 03:39 -10541 Mar 10 j 19:32	2°930'47	2°50'55
max. Earth dist.	-10548 Aug 24 j 09:54			min. Earth dist.	-10541 Mar 10 j 12:06		29.23575 AU
morning rise	-10548 Sep 08 j 07:25		51.25007 AU	direct	-10541 May 29 j 15:18	1°907'51	27.23313 AU
retrograde	-10548 Dec 06 j 02:28			evening set	-10541 Aug 25 j 00:49	3°901'33	
opposition	-10547 Feb 24 j 12:32		2°50'21	S	<i>5</i> - <i>3</i>		
min. Earth dist.	-10547 Feb 24 j 09:16			conjunction	-10541 Sep 08 j 23:54	3°535'20	2°39'36
direct	-10547 May 15 j 21:14			minimum elong	-10541 Sep 08 j 23:54	3° © 35'20	2°40'12
evening set	-10547 Aug 11 j 18:14	19° Ⅱ 54′04		max. Earth dist.	-10541 Sep 09 j 07:09	3°536'01	31.22959 AU
				morning rise	-10541 Sep 24 j 00:24	4° © 09'15	
conjunction	-10547 Aug 26 j 17:00		2°39'47	retrograde	-10541 Dec 22 j 16:04	6° ୭ 05'47	
minimum elong	-10547 Aug 26 j 17:00			opposition	-10540 Mar 12 j 08:36	4°542'19	2°50'09
max. Earth dist.	-10547 Aug 26 j 19:48		31.25642 AU	min. Earth dist.	-10540 Mar 11 j 23:48		29.22787 AU
morning rise	-10547 Sep 10 j 16:18			direct	-10540 May 31 j 03:27	3°519'23	
retrograde	-10547 Dec 08 j 13:54	22° 1 57'17		evening set	-10540 Aug 26 j 09:49	5° © 12'58	

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10540 in astronomical counting style is the year 10541 BCE in historical counting style. -10540 Sep 10 i 09:10 5°546'46 2°38'46 direct -10533 Jun 16 j 06:07 18°540'03 conjunction 5°5046'46 2°39'23 -10540 Sep 10 j 09:10 evening set -10533 Sep 11 j 01:07 20°533'04 minimum elong 5°9347'36 31.22133 AU -10540 Sep 10 j 17:55 max. Earth dist. -10540 Sep 25 j 09:56 -10533 Sep 26 j 02:45 21°507'03 2°26'36 6°920'44 conjunction morning rise -10540 Dec 24 j 03:13 -10533 Sep 26 j 02:46 21°507'03 2°27'10 retrograde 8°9517'22 minimum elong -10539 Mar 14 j 21:52 -10533 Sep 26 j 18:54 21°508'35 31.17667 AU opposition 6°**∽**53'47 2°49'08 max. Earth dist. -10533 Oct 11 j 06:40 21°5541'16 min. Earth dist. -10539 Mar 14 j 13:02 6°554'23 29.21944 AU morning rise -10532 Jan 09 j 16:04 23°538'42 direct -10539 Jun 02 j 15:25 5°930'51 retrograde evening set -10539 Aug 28 j 18:46 7°**5**24'19 opposition -10532 Mar 30 j 16:57 22°514'42 2°35'17 min. Earth dist. -10532 Mar 30 j 00:54 22°515'48 29.17607 AU conjunction -10539 Sep 12 j 18:20 7°**9**58'09 2°37'43 direct -10532 Jun 17 j 17:59 20°552'02 -10539 Sep 12 j 18:20 7°**9**58'09 -10532 Sep 12 j 10:32 22°544'59 minimum elong 2°38'18 evening set -10539 Sep 13 j 03:55 max. Earth dist. 7°559'03 31.21300 AU morning rise -10539 Sep 27 j 19:30 8°932'08 conjunction -10532 Sep 27 j 12:30 23°\$19'00 2°23'59 retrograde -10539 Dec 26 j 14:27 10°528'52 minimum elong -10532 Sep 27 j 12:31 23°519'00 2°24'33 opposition -10538 Mar 17 j 10:53 9°**©**05'11 2°47'53 max. Earth dist. -10532 Sep 28 j 04:35 23°\$20'32 31.17124 AU min. Earth dist. -10538 Mar 16 j 23:58 9°905'55 29.21119 AU morning rise -10532 Oct 12 j 17:05 23°953'17 direct -10538 Jun 05 j 02:57 7°9542'15 retrograde -10531 Jan 11 j 06:31 25°550'49 9°935'38 evening set -10538 Aug 31 j 03:51 opposition -10531 Apr 02 j 06:00 24°\$26'47 2°32'22 min. Earth dist. -10531 Apr 01 j 12:49 24°527'56 29.17016 AU conjunction -10538 Sep 15 j 03:37 10°509'28 2°36'26 direct -10531 Jun 20 j 05:42 23°504'08 minimum elong -10538 Sep 15 i 03:37 10°509'28 2°37'01 evening set -10531 Sep 14 i 19:56 24°557'01 max. Earth dist. -10538 Sep 15 j 14:02 10°\$\sigma10'27 31.20496 AU morning rise -10538 Sep 30 j 05:12 10°543'29 conjunction -10531 Sep 29 j 22:26 25°531'06 2°21'08 retrograde -10538 Dec 29 i 01:07 12°540'19 minimum elong -10531 Sep 29 i 22:27 25°531'06 2°21'41 -10537 Mar 19 j 23:51 11°516'33 2°46'23 max. Earth dist. -10531 Sep 30 j 15:33 25°532'43 31.16471 AU opposition -10537 Mar 19 j 12:52 11°5517'18 29.20360 AU -10531 Oct 15 j 03:35 26°505'25 min. Earth dist. morning rise -10537 Jun 07 j 12:57 9°\$53'38 -10530 Jan 13 j 18:43 28°503'04 direct retrograde -10537 Sep 02 j 12:49 11°546'55 -10530 Apr 04 j 19:08 26°538'58 2°29'13 evening set opposition -10530 Apr 04 j 02:23 26°5540'06 29.16294 AU min. Earth dist. -10537 Sep 17 j 12:58 12°520'47 2°34'55 -10530 Jun 22 j 17:23 25°516'21 conjunction direct -10537 Sep 17 j 12:58 12°520'47 2°35'29 -10530 Sep 17 j 05:29 27°509'09 minimum elong evening set -10537 Sep 18 j 01:04 12°521'56 31.19789 AU max. Earth dist. -10537 Oct 02 j 14:52 12°554'50 -10530 Oct 02 j 08:32 27°5543'16 2°18'06 morning rise conjunction -10530 Oct 02 j 08:33 27°5543'16 2°18'39 -10537 Dec 31 j 12:45 14°951'46 retrograde minimum elong -10530 Oct 03 j 01:55 27°544'55 31.15694 AU -10536 Mar 21 j 12:48 13°\$27'56 2°44'39 opposition max. Earth dist. -10536 Mar 20 j 23:41 13°\$28'50 29.19692 AU -10530 Oct 17 j 14:17 28°517'39 min. Earth dist. morning rise direct -10536 Jun 08 j 23:26 12°505'03 -10530 Dec 16 j 09:05 0°**Ω** evening set -10536 Sep 03 j 21:48 13°958'15 retrograde -10529 Jan 16 j 06:55 0°**Ω**15'22 -10529 Feb 16 j 20:27 30°Rூ conjunction -10536 Sep 18 j 22:07 14°532'09 2°33'10 opposition -10529 Apr 07 j 07:56 28°\$51'12 2°25'51 -10536 Sep 18 j 22:08 14°532'09 2°33'46 min. Earth dist. -10529 Apr 06 j 13:47 28°552'26 29.15433 AU minimum elong max. Earth dist. -10536 Sep 19 j 10:36 14°533'20 31.19173 AU direct -10529 Jun 25 j 05:04 27°528'35 -10536 Oct 04 j 00:38 15°506'14 -10529 Sep 19 j 15:06 29°521'19 morning rise evening set -10535 Jan 02 j 01:43 17°503'19 retrograde -10535 Mar 24 i 01:58 15°539'25 2°42'40 -10529 Oct 04 j 18:36 29°\$55'28 2°14'51 opposition conjunction -10535 Mar 23 j 12:30 15°540'20 29.19125 AU -10529 Oct 04 j 18:37 29°\$55'28 2°15'23 min. Earth dist. minimum elong -10529 Oct 05 j 12:05 29°\$57'07 31.14766 AU direct -10535 Jun 11 i 09:10 14°516'35 max. Earth dist. evening set -10535 Sep 06 i 06:47 16°509'42 -10529 Oct 06 i 18:27 $0^{\circ}\Omega$ morning rise -10529 Oct 20 j 01:04 $0^{\circ}\Omega$ 29'54 -10535 Sep 21 i 07:40 16° \$\infty{943'37} 2°31'12 retrograde -10528 Jan 18 i 18:21 $2^{\circ}\Omega$ 27'41 conjunction -10535 Sep 21 i 07:40 16°543'38 2°31'47 opposition $-10528 \text{ Apr } 08 \text{ j } 21:02 \quad 1^{\circ} \Omega 03'26 \quad 2^{\circ} 22'17$ minimum elong max. Earth dist. -10535 Sep 21 j 22:13 16°5545'00 31.18647 AU min. Earth dist. -10528 Apr 08 j 03:25 1°Ω04'38 29.14441 AU -10535 Oct 06 j 10:30 17°5517'46 morning rise -10528 May 23 j 00:43 30°RS -10534 Jan 04 j 14:15 19°514'57 retrograde direct -10528 Jun 26 j 15:39 29°540'49 opposition -10534 Mar 26 j 14:52 17°551'01 2°40'27 -10528 Jul 30 j 05:29 $0^{\circ}\Omega$ min. Earth dist. -10534 Mar 26 j 00:01 17°\$52'01 29.18615 AU evening set -10528 Sep 21 j 00:27 1°**£**33′26 -10534 Jun 13 j 20:39 16°528'14 direct -10534 Sep 08 j 16:00 18°521'18 -10528 Oct 06 j 04:39 2°Ω07'38 2°11'24 evening set conjunction -10528 Oct 06 j 04:40 2°**Ω**07'38 2°11'57 minimum elong -10534 Sep 23 j 17:07 18°555'15 2°29'01 conjunction max. Earth dist. -10528 Oct 06 j 23:23 2°**Ω**09'25 31.13738 AU minimum elong -10534 Sep 23 j 17:07 18°555'15 2°29'37 morning rise -10528 Oct 21 j 11:41 2°**Ω**42'07 max. Earth dist. -10534 Sep 24 j 07:30 18°556'37 31.18163 AU retrograde $-10527 \text{ Jan } 20 \text{ j } 06:15 \quad 4^{\circ} \Omega 39'58$ morning rise -10534 Oct 08 j 20:40 19°529'26 opposition -10527 Apr 11 j 09:55 3°Ω15'37 2°18'30 retrograde -10533 Jan 07 j 04:26 21°526'45 min. Earth dist. -10527 Apr 10 j 14:47 3°**Ω**16'55 29.13358 AU -10533 Mar 29 j 03:55 20°502'47 2°37'59 -10527 Jun 29 j 03:03 1° € 52'58 opposition direct

evening set

-10527 Sep 23 j 10:06 3°**Ω**45'30

min. Earth dist.

-10533 Mar 28 j 12:19 20°503'50 29.18134 AU

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10527 in astronomical counting style is the year 10528 BCE in historical counting style. -10527 Oct 08 j 14:45 $4^{\circ}\Omega$ 19'44 $2^{\circ}07'47$ retrograde -10520 Feb 06 i 01:24 20° Ω 06'11 conjunction minimum elong -10527 Oct 08 j 14:45 $4^{\circ}\Omega$ 19'44 2° 08'17 min. Earth dist. -10520 Apr 26 j 02:32 $18^{\circ}\Omega43'04$ 29.07139 AU max. Earth dist. -10527 Oct 09 j 09:17 $4^{\circ}\Omega$ 21'30 31.12641 AU $-10520 \text{ Apr } 27 \text{ j } 02:24 \quad 18^{\circ} \Omega 41'26 \quad 1^{\circ} 46'40$ opposition -10527 Oct 23 j 22:39 $4^{\circ}\Omega$ 54'17 -10520 Jul 14 j 06:41 17°**Ω**18'50 direct morning rise -10520 Oct $08\,\mathrm{j}\,06:13$ $19^{\circ}\Omega11'03$ -10526 Jan 22 j 18:43 6° **Ω**52'11 retrograde evening set -10526 Apr 13 j 22:43 $5^{\circ}\Omega$ 27'44 2° 14'31 opposition -10526 Apr 13 j 03:48 5° Ω 29'02 29.12258 AU -10520 Oct 23 j 15:26 19°**Ω**45'39 1°37'24 min. Earth dist. conjunction -10526 Jul 01 j 12:52 4°**Ω**05'03 -10520 Oct 23 j 15:26 19° Ω 45'40 1°37'50 direct minimum elong -10526 Sep 25 j 19:36 5°**Ω**57'31 -10520 Oct 24 j 15:13 19° Ω 47'55 31.06675 AU evening set max. Earth dist. morning rise -10520 Nov 08 j 04:29 $20^{\circ}\Omega 20'37$ -10519 Feb 07 j 14:03 22°**Ω**19'04 conjunction -10526 Oct 11 j 01:01 $6^{\circ}\Omega$ 31'47 2° 03'58 retrograde -10526 Oct 11 j 01:02 $6^{\circ}\Omega$ 31'48 2° 04'29 -10519 Apr 29 j 15:05 $20^{\circ}\Omega$ 54'17 $1^{\circ}41'25$ minimum elong opposition -10526 Oct 11 j 21:21 6° Ω 33'43 31.11554 AU -10519 Apr 28 j 15:58 $20^{\circ}\Omega$ 55'52 29.06432 AU max. Earth dist. min. Earth dist. -10519 Jul 16 j 17:17 19°**Ω**31'43 morning rise -10526 Oct 26 j 09:27 7°**Ω**06′23 direct retrograde -10525 Jan 25 j 06:36 9° Ω 04'21 evening set -10519 Oct 10 j 16:27 21°**Ω**23'54 opposition -10525 Apr 16 j 11:24 7°**Ω**39'48 2°10'21 min. Earth dist. -10525 Apr 15 j 15:16 7° **Ω**41'11 29.11184 AU conjunction -10519 Oct 26 j 02:30 21° Ω 58'34 1°32'24 direct -10525 Jul 04 j 00:14 6°**Ω**17'06 minimum elong -10519 Oct 26 j 02:31 21° Ω 58'35 1°32'48 evening set -10525 Sep 28 j 05:11 $8^{\circ}\Omega$ 09'30 max. Earth dist. -10519 Oct 27 j 03:17 22° Ω 00'55 31.05950 AU morning rise -10519 Nov 10 j 16:12 $22^{\circ}\Omega$ 33'36 conjunction -10525 Oct 13 j 11:02 $8^{\circ}\Omega 43'49$ $1^{\circ}59'58$ retrograde -10518 Feb 10 j 02:59 $24^{\circ}\Omega$ 32'06 minimum elong -10525 Oct 13 j 11:03 8° Ω43'49 2°00'27 min. Earth dist. $-10518 \text{ May } 01 \text{ j } 03:14 \quad 23^{\circ} \Omega 08'58 \quad 29.05654 \text{ AU}$ max. Earth dist. -10525 Oct 14 i 07:09 $8^{\circ}\Omega$ 45'43 31.10528 AU opposition $-10518 \text{ May } 02 \text{ j } 03:26 \quad 23^{\circ} \Omega 07'18 \quad 1^{\circ}36'00$ morning rise -10525 Oct 28 i 20:19 $9^{\circ}\Omega$ 18'28 direct -10518 Jul 19 i 04:44 21° Ω 44'44 retrograde -10524 Jan 27 j 20:23 11° Ω 16'30 evening set -10518 Oct 13 j 02:58 23° **Ω**36'54 $-10524 \text{ Apr } 17 \text{ j } 03:15 \quad 9^{\circ} \Omega 53'19 \quad 29.10204 \text{ AU}$ min. Earth dist. -10524 Apr 18 j 00:07 9° Ω 51'53 2°05'59 conjunction -10518 Oct 28 j 13:33 24° Ω 11'37 1°27'17 opposition -10524 Jul 05 j 09:24 8° **Ω**29'11 minimum elong -10518 Oct 28 j 13:33 24° Ω 11'37 1°27'41 direct -10524 Sep 29 j 14:47 10°Ω21'31 max. Earth dist. -10518 Oct 29 j 13:32 24° Ω 13'53 31.05128 AU evening set -10518 Nov 13 j 04:10 24° **Ω**46'43 morning rise $-10524 \text{ Oct } 14 \text{ j } 21:23 \quad 10^{\circ} \Omega 55'54 \quad 1^{\circ} 55'47$ -10517 Feb 12 j 15:06 26° **Ω**45'16 conjunction retrograde $-10524 \text{ Oct } 14 \text{ j } 21:24 \quad 10^{\circ} \Omega 55'54 \quad 1^{\circ} 56'17$ -10517 May 04 j 16:02 $25^{\circ}\Omega$ 20'25 $1^{\circ}30'27$ minimum elong opposition -10524 Oct 15 j 19:16 $10^{\circ}\Omega$ 57'58 31.09600 AU min. Earth dist. -10517 May 03 j 16:34 $25^{\circ}\Omega$ 22'02 29.04777 AU max. Earth dist. -10524 Oct 30 j 07:17 11° **Ω**30'36 -10517 Jul 21 j 14:25 23°**Ω**57'51 morning rise direct -10523 Jan 29 j 08:30 13°**Ω**28'43 -10517 Oct 15 j 13:15 25°**Ω**49'58 retrograde evening set -10523 Apr 20 j 12:46 12°Ω04'03 2°01'25 opposition -10523 Apr 19 j 15:18 12° **Ω**05'31 29.09321 AU -10517 Oct 31 j 00:42 $26^{\circ}\Omega$ 24'44 1° 22'01 min. Earth dist. conjunction direct -10523 Jul 07 j 20:52 10° **Ω**41'21 minimum elong -10517 Oct 31 j 00:43 $26^{\circ}\Omega$ 24'45 1° 22'23 evening set -10523 Oct 02 j 00:29 12°**Ω**33'38 max. Earth dist. -10517 Nov 01 j 01:54 $26^{\circ}\Omega$ 27'07 31.04197 AU morning rise -10517 Nov 15 j 15:55 $26^{\circ}\Omega$ 59'53 -10523 Oct 17 j 07:42 13° Ω 08'04 1°51'26 conjunction retrograde -10516 Feb 15 j 02:28 28°**Ω**58'29 -10523 Oct 17 j 07:43 13° Ω 08'05 1°51'54 min. Earth dist. -10516 May 05 j 04:27 $27^{\circ}\Omega$ 35'14 29.03775 AU minimum elong max. Earth dist. -10523 Oct 18 j 05:43 13° Ω 10'09 31.08787 AU opposition -10516 May 06 j 04:31 27° Ω 33'34 1°24'46 -10523 Nov 01 j 18:28 13°**Ω**42'50 direct -10516 Jul 23 j 01:39 26°**Ω**10'58 morning rise -10523 Dec 11 j 17:45 15°**Ω** -10516 Oct 16 j 23:51 28° **Ω**03'03 evening set -10522 Jan 31 i 23:40 $15^{\circ}\Omega$ 41'02 retrograde -10522 Mar 26 j 01:56 15°RΩ -10516 Nov 01 j 11:53 $28^{\circ}\Omega$ 37'51 1° 16'39 conjunction -10522 Apr 22 j 02:38 $14^{\circ}\Omega$ 17'52 29.08544 AU -10516 Nov 01 j 11:54 $28^{\circ}\Omega$ 37'52 1°17'01 min. Earth dist. minimum elong $-10522 \text{ Apr } 23 \text{ j } 01:21 \quad 14^{\circ} \Omega 16'19 \quad 1^{\circ} 56'41$ $-10516 \text{ Nov } 02 \text{ j } 12:08 \quad 28^{\circ} \Omega 40'09 \quad 31.03164 \text{ AU}$ opposition max. Earth dist. direct -10522 Jul 10 i 08:16 12° Ω 53'39 morning rise -10516 Nov 17 j 04:03 $29^{\circ}\Omega$ 13'03 -10522 Oct 04 j 10:19 $14^{\circ}\Omega 45'55$ -10516 Dec 09 j 18:24 0° Mg evening set -10522 Oct 10 j 17:50 15° Ω retrograde -10515 Feb 16 j 16:19 1° mp 11'40 -10515 Apr 30 j 14:32 30°R**Ω** -10515 May 08 j 16:54 29° Ω 46'40 1°18'57 conjunction -10522 Oct 19 j 18:13 15° Ω 20'25 1°46'55 opposition -10515 May 07 j 16:54 29° Ω 48'20 29.02702 AU minimum elong -10522 Oct 19 j 18:14 15° Ω 20'25 1°47'23 min. Earth dist. -10515 Jul 25 j 10:48 28° **Ω**24'00 max. Earth dist. -10522 Oct 20 j 17:19 15° Ω 22'36 31.08043 AU direct morning rise -10522 Nov 04 j 05:41 15° **Ω**55'14 -10515 Oct 12 j 01:00 retrograde -10521 Feb 03 j 12:09 17°**Ω**53'31 -10515 Oct 19 j 10:22 0° Mp 16'02 evening set -10521 Apr 25 j 13:52 $16^{\circ}\Omega$ 28'47 $1^{\circ}51'46$ opposition min. Earth dist. -10521 Apr 24 j 15:29 $16^{\circ}\Omega 30'19$ 29.07823 AU -10515 Nov 03 j 23:16 0° m 50'54 1°11'09 conjunction -10521 Jul 12 j 19:14 15°**Ω**06'09 direct minimum elong -10515 Nov 03 j 23:16 0° m 50'54 1°11'29 -10521 Oct 06 j 20:12 $16^{\circ}\Omega$ 58'23 evening set max. Earth dist. -10515 Nov 05 j 00:37 0° m 53'18 31.02064 AU morning rise -10515 Nov 19 j 16:05 1° m 26'09 conjunction -10521 Oct 22 j 04:49 17° € 32'56 1°42'14 retrograde -10514 Feb 19 j 04:02 3° m 24'47 minimum elong -10521 Oct 22 j 04:50 17° Ω 32'56 1°42'40 min. Earth dist. -10514 May 10 j 05:11 2° Mp 01'21 29.01578 AU max. Earth dist. -10521 Oct 23 j 04:31 17° Ω 35'11 31.07362 AU -10514 May 11 j 05:09 1° m 59'41 1°13'01 opposition

direct

-10514 Jul 27 j 22:41

0° m/36'58

-10521 Nov 06 j 17:01 18° **Ω**07'50

morning rise

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 31 Attention, astronomical year style is used: The year -10514 in astronomical counting style is the year 10515 BCE in historical counting style.

Attention, astronom	nical year style is used: The	e year -10514	in astronomical co	ounting style is the yea	r 10515 BCE in historical	counting sty	le.
evening set	-10514 Oct 21 j 21:03	2°M/28'56		opposition	-10507 May 26 j 17:00	17° m 30'54	0°28'57
				min. Earth dist.	-10507 May 25 j 15:06	17° m 32'42	28.96187 AU
conjunction	-10514 Nov 06 j 10:34	3° ™ 03'51	1°05'34	direct	-10507 Aug 12 j 03:08	16°M)08'04	
minimum elong	-10514 Nov 06 j 10:35	3°Mp03'51	1°05'53	evening set	-10507 Nov 06 j 02:15	18° M 00'06	
max. Earth dist.	-10514 Nov 07 j 11:35	3°№06'13	31.00961 AU				
morning rise	-10514 Nov 22 j 04:12	3° m 39'09		conjunction	-10507 Nov 21 j 20:34	-	0°24'06
retrograde	-10513 Feb 21 j 18:33	5° Mp 37'46		minimum elong	-10507 Nov 21 j 20:34		0°24'16
opposition	-10513 May 13 j 17:11	4° Mp 12′36	1°07'00	max. Earth dist.	-10507 Nov 22 j 23:24		30.95895 AU
min. Earth dist.	-10513 May 12 j 16:26	4°Mp14'18	29.00493 AU	morning rise	-10507 Dec 07 j 19:15		
direct	-10513 Jul 30 j 09:49	2° Mp 49'48		retrograde	-10506 Mar 09 j 13:38	-	
evening set	-10513 Oct 24 j 07:43	4° Mp 41'45		min. Earth dist.	-10506 May 28 j 03:27	-	
				opposition	-10506 May 29 j 04:56	-	0°22'23
conjunction	-10513 Nov 08 j 21:56	5° Mp 16'43		direct	-10506 Aug 14 j 11:58	-	
minimum elong	-10513 Nov 08 j 21:57	5° Mp 16'43	1°00'10	evening set	-10506 Nov 08 j 13:55	20° m 13'51	
max. Earth dist.	-10513 Nov 09 j 23:47		30.99909 AU				
morning rise	-10513 Nov 24 j 16:17	5° m 52'04		conjunction	-10506 Nov 24 j 08:58		
retrograde	-10512 Feb 24 j 06:26	7° m 50'42		minimum elong	-10506 Nov 24 j 08:58	-	
min. Earth dist.	-10512 May 14 j 05:01	•	28.99491 AU	max. Earth dist.	-10506 Nov 25 j 12:27	-	30.95339 AU
opposition	-10512 May 15 j 05:20	6° Mp 25'26	1°00'52	morning rise	-10506 Dec 10 j 08:06		
direct	-10512 Jul 31 j 20:35	5° Mp 02'36		retrograde	-10505 Mar 12 j 01:23	-	
evening set	-10512 Oct 25 j 18:22	6° Mp 54′31		opposition	-10505 May 31 j 16:46		
				min. Earth dist.	-10505 May 30 j 15:46		28.95071 AU
conjunction	-10512 Nov 10 j 09:22	7° m/29'32	0°54'06	direct	-10505 Aug 16 j 23:16	-	
minimum elong	-10512 Nov 10 j 09:23	7° m 29'32		evening set	-10505 Nov 11 j 01:49	22° M) 27'46	
max. Earth dist.	-10512 Nov 11 j 11:43	~	30.98980 AU				
morning rise	-10512 Nov 26 j 04:27	8° Mp 04'57		conjunction	-10505 Nov 26 j 21:26		
retrograde	-10511 Feb 25 j 20:36		005.4120	minimum elong	-10505 Nov 26 j 21:26		0°11'52
opposition	-10511 May 17 j 17:20	8° Mp 38'16	0°54'38	behind sun begin	-10505 Nov 26 j 16:56		
min. Earth dist.	-10511 May 16 j 15:40	-•	28.98616 AU	behind sun end	-10505 Nov 27 j 01:56		20.04700.441
direct	-10511 Aug 03 j 08:31	7° m 15'24		max. Earth dist.	-10505 Nov 27 j 23:52		30.94709 AU
evening set	-10511 Oct 28 j 05:21	9° m)07'19		morning rise	-10505 Dec 12 j 21:17		
. ,.	10511 N 12:20 57	00 m. 40100	0040114	retrograde	-10504 Mar 13 j 16:08		20.04200.411
conjunction	-10511 Nov 12 j 20:57	-		min. Earth dist.	-10504 Jun 01 j 03:29	-	
minimum elong	-10511 Nov 12 j 20:58	9° m/42'24		opposition	-10504 Jun 02 j 04:37		0~09.08
max. Earth dist.	-10511 Nov 13 j 23:15		30.98167 AU	direct	-10504 Aug 18 j 10:11		
morning rise	-10511 Nov 28 j 16:51			evening set	-10504 Nov 12 j 13:46	24° 11 0 41'4/	
retrograde	-10510 Feb 28 j 09:49		20 07070 ATT	:	10504 NI 20 : 10.02	250m 17112	0905124
min. Earth dist.	-10510 May 19 j 04:18			conjunction	-10504 Nov 28 j 10:02 -10504 Nov 28 j 10:02		
opposition	-10510 May 20 j 05:16		0-48-20	•	·	-	0-0541
direct	-10510 Aug 05 j 19:12 -10510 Oct 30 j 16:17	-		behind sun begin	-10504 Nov 28 j 03:46	-	
evening set	-10310 Oct 30 J 10.17	11 111/2013		behind sun end max. Earth dist.	-10504 Nov 28 j 16:18	-	20 02070 AII
agniumation	-10510 Nov 15 j 08:44	110 m 55!21	0042110		-10504 Nov 29 j 12:29 -10504 Dec 14 j 10:29		30.93970 AU
conjunction minimum elong	-10510 Nov 15 j 08:45	-•	0°42'18 0°42'33	morning rise retrograde	-10504 Dec 14 j 10.29 -10503 Mar 16 j 04:16	-•	
max. Earth dist.	-10510 Nov 16 j 12:07	-		opposition	-10503 Jun 04 j 16:31	-	0°02'29
morning rise	-10510 Dec 01 j 05:13	-	30.97491 AU	min. Earth dist.	-10503 Jun 04 j 16:37	-	
•				direct	-10503 Juli 03 j 10.37 -10503 Aug 20 j 20:48		28.93001 AU
retrograde opposition	-10509 Mar 02 j 22:59 -10509 May 22 j 17:09		0°41'56	desc. node	-10503 Aug 20 j 20:48 -10503 Oct 18 j 10:00	-	
min. Earth dist.	-10509 May 21 j 14:57			evening set	-10503 Nov 15 j 01:51	-	
direct	-10509 May 21 j 14.57	-	20.71231 AU	evening set	10303 1101 13 101.31	20 III 33 30	
evening set	-10509 Nov 02 j 03:22	-•		conjunction	-10503 Nov 30 j 22:47	27°m131'12	-0°00'45
evening set	10507 1104 02 1 05.22	/ 1 לבלאוו בי		minimum elong	-10503 Nov 30 j 22:48	-	
conjunction	-10509 Nov 17 j 20:19	1.4° m 08'28	0°36'17	behind sun begin	-10503 Nov 30 j 22:48 -10503 Nov 30 j 16:18		0 00 40
minimum elong	-10509 Nov 17 j 20:19	-		behind sun end	-10503 Nov 30 j 10:18 -10503 Dec 01 j 05:19		
max. Earth dist.	-10509 Nov 17 j 20:19	-		max. Earth dist.	-10503 Dec 01 j 03:19 -10503 Dec 02 j 00:52	-	30 93155 AII
morning rise	-10509 Nov 18 j 23:00 -10509 Dec 03 j 17:39		50.70711 AU	morning rise	-10503 Dec 02 j 00.32 -10503 Dec 16 j 23:49		50.75133 AU
retrograde	-10508 Mar 04 j 11:25	-		morning risc	-10503 Bec 10 j 23:45 -10502 Feb 27 j 13:31	-	
min. Earth dist.	-10508 May 23 j 03:41	-	28 96696 ATT	retrograde	-10502 Mar 18 j 18:59		
opposition	-10508 May 24 j 05:13		0°35'28	Tonograde	-10502 Mar 18 j 18.39 -10502 Apr 07 j 03:07		
direct	-10508 May 24 j 05:15 -10508 Aug 09 j 16:18	-	3 33 20	min. Earth dist.	-10502 Jun 06 j 03:37		28 92753 AII
evening set	-10508 Aug 09 j 16.18 -10508 Nov 03 j 14:37			opposition	-10502 Jun 07 j 04:03		
evening set	10500 1101 05 1 14.5/	10 JH		direct	-10502 Juli 07 J 04:03 -10502 Aug 23 j 09:24	-	0 0-111
conjunction	-10508 Nov 19 j 08:25	16°m21'12	0°30'13	evening set	-10502 Aug 23 j 09.24 -10502 Nov 17 j 14:04		
minimum elong	-10508 Nov 19 j 08:25	-	0°30'26	Svennig set	10302 1101 1/ 1 14.04	27 IIV ∪332	
max. Earth dist.	-10508 Nov 19 j 08.25 -10508 Nov 20 j 12:27			conjunction	-10502 Dec 03 j 11:29	29° m 45'22	-0°07'00
morning rise	-10508 Nov 20 j 12:27		50.70370 AU	minimum elong	-10502 Dec 03 j 11:29	-	
retrograde	-10507 Mar 06 j 23:22			behind sun begin	-10502 Dec 03 j 11:29 -10502 Dec 03 j 05:26		0 00 00
. ca o grade	10307 Iviai 00 J 23.22	10 My 2013		ocimia sun ocgili	10302 Dec 03 j 03.20	עד דיר אָנוי ∞ב	

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10502 in astronomical counting style is the year 10503 BCE in historical counting style. -10502 Dec 03 j 17:33 29° m 45'54 morning rise behind sun end -10495 Jan 01 j 21:36 13° **2**45'36 max. Earth dist. -10502 Dec 04 j 12:53 29° mp 47'44 30.92290 AU -10495 Apr 03 j 12:58 15° **△**44'17 retrograde -10502 Dec 09 j 23:39 opposition -10495 Jun 22 j 11:56 14° **2**18'50 -0°50'03 0∘∙თ -10495 Jun 21 j 13:07 14°**2**20'26 28.88842 AU morning rise -10502 Dec 19 j 13:07 0°**£**21'15 min. Earth dist. -10501 Mar 21 j 08:37 2°**₽**20'04 -10495 Sep 07 j 14:18 12°**♀**55'32 retrograde direct -10501 Jun 09 j 15:45 0°**2**54'38 -0°10'49 -10495 Dec 03 j 05:50 14°**2**48'12 opposition evening set min. Earth dist. -10501 Jun 08 j 16:32 0°**£**56'15 28.91900 AU -10495 Dec 19 j 06:47 15° **2**23'55 -0°49'43 -10501 Jul 15 j 01:39 30°R TD conjunction direct -10495 Dec 19 j 06:46 15°**2**23'55 0°49'50 -10501 Aug 25 j 20:58 29° M 31'35 minimum elong -10501 Oct 05 j 15:59 0∘**⊽** max. Earth dist. -10495 Dec 20 j 07:18 15°**2**26'13 30.88675 AU evening set -10501 Nov 20 j 02:03 1°**£**23'49 morning rise -10494 Jan 04 j 11:24 16°**♀**00'01 -10494 Apr 06 j 00:57 17°**♀**58'41 retrograde -10501 Dec 06 j 00:10 -10494 Jun 24 j 23:10 16°**2**33'16 -0°56'24 conjunction 1°**2**59'22 -0°13'11 opposition minimum elong -10501 Dec 06 j 00:09 1° 259'22 0°13'09 min. Earth dist. -10494 Jun 24 j 01:48 16°**2**34'46 28.88610 AU behind sun begin -10501 Dec 05 j 20:21 1°**£**59'01 direct -10494 Sep 10 j 00:12 15° **2**09'57 behind sun end -10501 Dec 06 j 03:58 1°**≏**59'42 evening set -10494 Dec 05 j 19:02 17°**♀**02'43 max. Earth dist. -10501 Dec 07 j 02:12 2°**2**01'48 30.91462 AU morning rise -10501 Dec 22 j 02:12 2°**♀**35'17 conjunction -10494 Dec 21 j 20:25 17°**2**38'28 -0°55'37 4°**₽**34'04 retrograde -10500 Mar 22 j 21:43 minimum elong -10494 Dec 21 j 20:25 17°**2**38'28 0°55'45 min. Earth dist. -10500 Jun 10 j 03:10 3°**£**10'16 28.91102 AU max. Earth dist. -10494 Dec 22 j 20:12 17°**2**40'42 30.88438 AU opposition -10500 Jun 11 j 03:13 3°**♀**08'35 -0°17'27 morning rise -10493 Jan 07 j 01:21 18° **2** 14'35 direct -10500 Aug 27 i 09:45 1°**-**45′28 retrograde -10493 Apr 08 j 15:26 20° **2**13'14 evening set -10500 Nov 21 j 14:27 3°**△**37'45 opposition -10493 Jun 27 j 10:25 18° **2**47'51 -1°02'40 min. Earth dist. -10493 Jun 26 j 12:49 18° **2**49'23 28.88352 AU conjunction -10500 Dec 07 i 12:57 4° \omega 13'19 -0°19'22 direct -10493 Sep 12 j 12:45 17°**£**24'30 -10500 Dec 07 i 12:57 4° \omega 13'19 0°19'20 -10493 Dec 08 j 08:21 19° **2**17'23 minimum elong evening set max. Earth dist. -10500 Dec 08 j 13:59 4° **2**15'40 30.90707 AU -10500 Dec 23 j 15:38 4°**2**49'17 -10493 Dec 24 j 10:01 19° **2**53'09 -1°01'27 morning rise conjunction -10499 Mar 25 j 10:22 6° **2**48'01 -10493 Dec 24 j 10:01 19°**2**53'09 1°01'35 retrograde minimum elong -10499 Jun 13 j 14:40 5°**2**22'31 -0°24'03 max. Earth dist. -10493 Dec 25 j 08:42 19° **2**55'17 30.88129 AU opposition -10499 Jun 12 j 15:35 5°**2**24'08 28.90413 AU -10492 Jan 09 j 15:19 20° **2**29'17 min. Earth dist. morning rise -10492 Apr 10 j 04:39 22°**£**27'55 -10499 Aug 29 j 19:45 3°**♀**59'20 retrograde direct -10492 Jun 28 j 21:50 21°**£**02'33 -1°08'50 -10499 Nov 24 j 02:49 opposition 5°**£**51'39 evening set -10492 Jun 28 j 02:01 21°**⊆**03'57 28.88008 AU min. Earth dist. -10499 Dec 10 j 02:01 6° **2**27'16 -0°25'31 -10492 Sep 14 j 00:11 19°**△**39'10 conjunction direct -10499 Dec 10 j 02:00 6°**2**27'16 0°25'32 -10492 Dec 09 j 21:51 21°**△**32'07 minimum elong evening set -10499 Dec 11 j 04:03 6°**2**29'42 30.90073 AU max. Earth dist. morning rise -10499 Dec 26 j 05:00 7°**♀**03'15 conjunction -10492 Dec 26 j 00:02 22°**2**07'56 -1°07'10 retrograde -10498 Mar 27 j 22:56 9°**♀**01'58 minimum elong -10492 Dec 26 j 00:02 22°**2**07'56 1°07'19 min. Earth dist. -10498 Jun 15 j 02:33 7°**•**38'06 28.89841 AU max. Earth dist. -10492 Dec 26 j 22:22 22°**2**10'01 30.87733 AU opposition -10498 Jun 16 j 02:00 7°**2**36'27 -0°30'37 morning rise -10491 Jan 11 j 05:30 22°**2**44'04 -10498 Sep 01 j 07:31 6°**2**13'14 retrograde -10491 Apr 12 j 18:27 24° **2**42'39 direct -10498 Nov 26 j 15:20 -10491 Jul 01 j 08:56 23°**2**17'18 -1°14'54 evening set 8°**≏**05'37 opposition min. Earth dist. -10491 Jun 30 j 13:02 23°**2**18'42 28.87555 AU -10498 Dec 12 j 14:51 8°**-**241'15 -0°31'39 -10491 Sep 16 j 13:18 21°**♀**53'50 conjunction direct -10498 Dec 12 j 14:50 8° **△**41'15 0°31'40 -10491 Dec 12 j 11:36 23° **2**46'53 minimum elong evening set max. Earth dist. -10498 Dec 13 j 15:40 8° **2**43'34 30.89568 AU -10491 Dec 28 j 13:59 24° \(\Omega\) 22'43 -1°12'48 morning rise -10498 Dec 28 j 18:24 9°**2**17'16 conjunction retrograde -10497 Mar 30 j 12:09 11° **2**15'58 minimum elong -10491 Dec 28 i 13:58 24° \(\Omega\) 22'43 1°12'59 opposition -10497 Jun 18 i 13:22 9° **2** 50'27 -0°37'09 max. Earth dist. -10491 Dec 29 j 10:28 24° 224'38 30.87225 AU morning rise min. Earth dist. -10497 Jun 17 j 14:12 9°**2**52'05 28.89409 AU -10490 Jan 13 i 19:49 24° \$\omega\$58'52 direct -10497 Sep 03 j 16:59 8°**£**27'12 retrograde -10490 Apr 15 i 07:59 26° **2**57'23 -10497 Nov 29 j 03:55 10° **△**19'39 -10490 Jul 03 j 20:13 25° **2**32'01 -1°20'52 evening set opposition min. Earth dist. -10490 Jul 03 j 01:55 25° **△**33'19 28.87018 AU -10497 Dec 15 j 04:02 10°**2**55'20 -0°37'43 conjunction direct -10490 Sep 19 j 00:10 24° **△**08'29 minimum elong -10497 Dec 15 j 04:01 10° **2**55'20 0°37'47 evening set -10490 Dec 15 j 01:04 26°**2**01'36 max. Earth dist. -10497 Dec 16 j 05:38 10°**£**57'43 30.89188 AU -10497 Dec 31 j 07:52 11°**△**31'22 -10490 Dec 31 j 03:55 26°**2**37'27 -1°18'18 morning rise conjunction -10496 Mar 31 j 22:59 13°**♀**30'03 -10490 Dec 31 j 03:54 26°**△**37'27 1°18'31 retrograde minimum elong -10496 Jun 19 j 01:55 12°**2**06'10 28.89083 AU -10489 Jan 01 j 00:44 26°**2**39'24 30.86651 AU min. Earth dist. max. Earth dist. -10496 Jun 20 j 00:39 12°**2**04'34 -0°43'38 opposition morning rise -10489 Jan 16 j 09:47 27°**£**13'36 direct -10496 Sep 05 j 04:06 10° **2**41'18 retrograde -10489 Apr 17 j 21:03 29° **2**12'03 evening set -10496 Nov 30 j 16:44 12°**♀**33'51 opposition -10489 Jul 06 j 07:14 27°**Ω**46'40 -1°26'42 min. Earth dist. -10489 Jul 05 j 13:11 27°**-**247'57 28.86429 AU conjunction -10496 Dec 16 j 17:15 13°**2**09'32 -0°43'45 direct -10489 Sep 21 j 13:02 26°**£**23'03 minimum elong -10496 Dec 16 j 17:15 13°**2**09'32 0°43'50 -10489 Dec 17 j 14:49 28° **2**16'15 evening set

max. Earth dist.

-10496 Dec 17 j 17:47 13°**2**11'50 30.88915 AU

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10488 in astronomical counting style is the year 10489 BCE in historical counting style. -10488 Jan 02 j 17:48 28° **2**52'07 -1°23'42 retrograde -10482 May 03 j 12:10 14° M 54'00 conjunction minimum elong -10488 Jan 02 j 17:47 28° **2**52'06 1°23'56 opposition -10482 Jul 21 j 10:54 13°ML28'51 -2°03'20 max. Earth dist. -10488 Jan 03 j 12:48 28° **2**53'53 30.86067 AU min. Earth dist. -10482 Jul 20 j 20:36 13°M29'52 28.84890 AU -10488 Jan 19 j 00:02 29° **2**28'16 -10482 Oct 06 j 19:52 12°M04'49 morning rise direct -10488 Feb 03 j 00:50 -10481 Jan 02 j 16:26 13°M 58'54 0°M evening set -10488 Apr 19 j 09:50 retrograde 1°M26'38 -10488 Jul 07 j 18:11 -10481 Jan 18 j 20:51 14°M 34'49 -1°57'26 opposition 0°M01'15 -1°32'23 conjunction min. Earth dist. -10488 Jul 07 j 00:57 -10481 Jan 18 j 20:50 14°M 34'49 1°57'48 0°ML02'28 28.85877 AU minimum elong -10488 Jul 08 j 11:46 30°R **≏** -10481 Jan 19 j 11:27 14°ML36'11 30.84830 AU max. Earth dist. direct -10488 Sep 22 j 23:32 28°**♀**37'32 -10481 Jan 30 j 03:40 15°M -10488 Dec 04 j 13:22 0°M morning rise -10481 Feb 04 j 03:34 15°ML10'58 -10488 Dec 19 j 04:29 -10481 May 06 j 01:59 17° ML08'56 evening set 0°M30'49 retrograde -10481 Jul 23 j 21:44 15°ML43'51 -2°07'52 opposition -10487 Jan 04 j 07:55 conjunction 1°M06'41 -1°28'58 min. Earth dist. -10481 Jul 23 j 09:02 15°M44'45 28.85045 AU minimum elong -10487 Jan 04 j 07:54 1°ML06'41 1°29'13 -10481 Aug 19 j 22:15 15°RM max. Earth dist. -10487 Jan 05 j 03:18 1°ML08'30 30.85530 AU direct -10481 Oct 09 j 06:55 14°ML19'47 morning rise -10487 Jan 20 j 14:09 1°M42'52 -10481 Nov 27 j 15:26 15°M retrograde -10487 Apr 21 j 20:38 3°M41'09 evening set -10480 Jan 05 j 06:47 16°ML14'00 opposition -10487 Jul 10 j 05:06 2°M15'45 -1°37'57 min. Earth dist. -10487 Jul 09 j 12:35 2°M16'56 28.85386 AU conjunction -10480 Jan 21 j 11:30 16° ML49'57 -2°01'36 direct -10487 Sep 25 j 11:20 0°M51'57 minimum elong -10480 Jan 21 j 11:29 16° ML49'57 2°01'59 evening set -10487 Dec 21 j 18:22 2°M45'21 max. Earth dist. -10480 Jan 22 j 02:06 16° ML51'18 30.84966 AU morning rise -10480 Feb 06 i 18:02 17° ML 26'05 conjunction -10486 Jan 06 j 21:55 3°M21'14 -1°34'05 retrograde -10480 May 07 j 15:41 19° ML23'59 minimum elong -10486 Jan 06 j 21:54 3°M21'14 1°34'22 opposition -10480 Jul 25 j 08:22 17°ML58'57 -2°12'14 max. Earth dist. -10486 Jan 07 i 15:51 3°M22'54 30.85092 AU min. Earth dist. -10480 Jul 24 j 20:18 17°M 59'49 28.85158 AU -10486 Jan 23 j 04:23 3°M57'23 -10480 Oct 10 j 20:32 16°M34'52 morning rise direct -10486 Apr 24 j 10:01 -10479 Jan 06 j 21:29 18°M29'12 retrograde 5°M.55'37 evening set -10486 Jul 12 j 15:51 4°M 30'14 -1°43'21 opposition -10486 Jul 11 j 23:17 4°M31'25 28.85023 AU -10479 Jan 23 j 02:09 19°ML05'09 -2°05'35 min. Earth dist. conjunction -10486 Sep 27 j 21:44 -10479 Jan 23 j 02:08 19°ML05'09 2°05'59 direct 3°M06'21 minimum elong -10486 Dec 24 j 08:11 4°M59'52 max. Earth dist. -10479 Jan 23 j 14:21 19°M 06'18 30.85040 AU evening set -10479 Feb 08 j 08:50 19°ML41'17 morning rise -10479 May 10 j 04:44 21°**M**.39'06 -10485 Jan 09 j 12:00 5°M 35'46 -1°39'04 conjunction retrograde -10479 Jul 27 j 19:11 20°ML14'07 -2°16'23 -10485 Jan 09 j 11:59 5°M 35'45 1°39'22 minimum elong opposition -10485 Jan 10 j 06:02 5°M37'27 30.84782 AU -10479 Jul 27 j 08:22 20°M 14'53 28.85205 AU max. Earth dist. min. Earth dist. -10485 Jan 25 j 18:28 6°M 11'55 -10479 Oct 13 j 07:51 18°ML49'57 morning rise direct retrograde -10485 Apr 26 j 21:04 8°ML10'05 evening set -10478 Jan 09 j 12:03 20°M44'25 min. Earth dist. -10485 Jul 14 j 11:24 6°M 45'50 28.84797 AU opposition -10485 Jul 15 j 02:44 6°M44'44 -1°48'36 conjunction -10478 Jan 25 j 16:57 21°ML20'22 -2°09'22 direct -10485 Sep 30 j 07:26 5°**™**20'48 minimum elong -10478 Jan 25 j 16:56 21°ML20'22 2°09'47 -10485 Dec 26 j 21:56 7°ML14'26 max. Earth dist. -10478 Jan 26 j 04:56 21°M21'29 30.85025 AU evening set morning rise -10478 Feb 10 j 23:23 21°M 56'29 -10484 Jan 12 j 02:00 7°M 50'20 -1°43'54 retrograde -10478 May 12 j 16:33 23°M 54'11 conjunction -10484 Jan 12 j 01:59 7°ML50'20 1°44'13 -10478 Jul 30 j 05:53 22°M29'15 -2°20'19 minimum elong opposition -10484 Jan 12 j 19:21 7°ML51'57 30.84633 AU -10478 Jul 29 j 20:18 22°M 29'56 28.85152 AU max. Earth dist. min. Earth dist. -10484 Jan 28 j 08:36 8°M26'30 -10478 Oct 15 j 20:20 21° ML05'00 morning rise direct -10484 Apr 28 j 10:17 10°M24'37 -10477 Jan 12 j 02:43 22°M59'34 retrograde evening set opposition -10484 Jul 16 j 13:28 8°ML59'19 -1°53'41 min. Earth dist. -10484 Jul 15 i 21:44 9°ML00'26 28.84721 AU conjunction -10477 Jan 28 j 07:36 23°M 35'31 -2°12'57 direct -10484 Oct 01 j 20:12 7°MJ35'20 minimum elong -10477 Jan 28 i 07:34 23°ML35'31 2°13'24 evening set -10484 Dec 28 j 12:03 9°M29'06 max. Earth dist. -10477 Jan 28 j 17:23 23°M 36'26 30.84946 AU -10477 Feb 13 j 14:06 24°ML11'37 morning rise conjunction -10483 Jan 13 j 16:14 10°ML05'01 -1°48'35 retrograde -10477 May 15 j 06:13 26° ML09'11 minimum elong -10483 Jan 13 j 16:12 10°ML05'01 1°48'54 opposition -10477 Aug 01 j 16:30 24°M 44'16 -2°24'03 -10483 Jan 14 j 08:45 10°M 06'34 30.84608 AU max. Earth dist. min. Earth dist. -10477 Aug 01 j 07:22 24°ML44'55 28.85060 AU -10483 Jan 29 j 22:55 10°M 41'11 morning rise direct -10477 Oct 18 j 07:34 23°M 19'55 retrograde -10483 Apr 30 j 22:27 12°M39'15 evening set -10476 Jan 14 j 17:13 25° ML 14'35 -10483 Jul 18 j 10:06 11°ML15'01 28.84766 AU min. Earth dist. -10483 Jul 19 j 00:13 11°ML14'00 -1°58'36 -10476 Jan 30 j 22:15 25°M 50'31 -2°16'21 opposition conjunction -10483 Oct 04 j 07:08 9°ML50'00 -10476 Jan 30 j 22:14 25°M 50'31 2°16'48 direct minimum elong evening set -10483 Dec 31 j 02:10 11°ML43'55 max. Earth dist. -10476 Jan 31 j 07:42 25°ML51'24 30.84827 AU morning rise -10476 Feb 16 j 04:36 26° ML 26'37 conjunction -10482 Jan 16 j 06:38 12°M 19'51 -1°53'05 retrograde -10476 May 16 j 16:22 28°M24'03 minimum elong -10482 Jan 16 j 06:37 12°M 19'51 1°53'27 opposition -10476 Aug 03 j 03:09 26°M 59'08 -2°27'34 max. Earth dist. -10482 Jan 16 j 22:54 12°M21'22 30.84698 AU min. Earth dist. -10476 Aug 02 j 19:47 26°M 59'40 28.84949 AU

direct

-10476 Oct 19 j 18:27 25°M34'41

morning rise

-10482 Feb 01 j 13:15 12°M56'00

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 34 Attention, astronomical year style is used: The year -10475 in astronomical counting style is the year 10476 BCE in historical counting style.

Attention, astronomical year style is used: The year -10475 in astronomical counting style is the year 10476 BCE in historical counting style.										
evening set	-10475 Jan 16 j 07:52	27°M29'26		max. Earth dist.	-10469 Feb 16 j 08:24	11° ∡ ³33′25	30.86562 AU			
				morning rise	-10469 Mar 04 j 09:56	12° ₹ 09'01				
conjunction	-10475 Feb 01 j 12:58			retrograde	-10469 Jun 02 j 06:33					
minimum elong	-10475 Feb 01 j 12:57			opposition	-10469 Aug 19 j 04:07					
max. Earth dist.	-10475 Feb 01 j 21:03		30.84734 AU	min. Earth dist.	-10469 Aug 19 j 01:47		28.87106 AU			
morning rise	-10475 Feb 17 j 19:16			direct	-10469 Nov 05 j 07:52					
	-10475 Mar 31 j 04:02			evening set	-10468 Feb 02 j 14:15	13° ≯ 12'04				
retrograde	-10475 May 19 j 04:23				10460 F 1 10 10 10	120 7 47150	2025124			
.,.	-10475 Jul 08 j 00:19		2020151	conjunction	-10468 Feb 18 j 19:19					
opposition	-10475 Aug 05 j 13:30			minimum elong	-10468 Feb 18 j 19:18					
min. Earth dist. direct	-10475 Aug 05 j 06:05 -10475 Oct 22 j 07:21		20.04009 AU	max. Earth dist. morning rise	-10468 Feb 18 j 20:50 -10468 Mar 06 j 00:35		30.87219 AU			
evening set	-10474 Jan 18 j 22:32			retrograde	-10468 Jun 03 j 20:37					
evening set	-10474 Jan 26 j 03:36			opposition	-10468 Aug 20 j 14:33		-2°47'09			
	-104/4 Juli 20 j 05.50	· ^		min. Earth dist.	-10468 Aug 20 j 12:43					
conjunction	-10474 Feb 04 j 03:37	0° х 20′04	-2°22'29	direct	-10468 Nov 06 j 19:20		20.07737710			
minimum elong	-10474 Feb 04 j 03:36	0° ≯ 20'04		evening set	-10467 Feb 04 j 05:09					
max. Earth dist.	-10474 Feb 04 j 10:50		30.84701 AU							
morning rise	-10474 Feb 20 j 09:46	0° ∡ 756'07		conjunction	-10467 Feb 20 j 10:17	16° ∡ °03′00	-2°36'57			
retrograde	-10474 May 21 j 15:26	2° ∡ ¹53'17		minimum elong	-10467 Feb 20 j 10:16					
opposition	-10474 Aug 08 j 00:06	1° ∡ °28′25	-2°33'54	max. Earth dist.	-10467 Feb 20 j 11:17					
min. Earth dist.	-10474 Aug 07 j 18:20		28.84924 AU	morning rise	-10467 Mar 08 j 15:11	16° ∡ ³38'56				
direct	-10474 Oct 24 j 18:06	0° ∡ ¹03'46		retrograde	-10467 Jun 06 j 07:07	18° ∡ ³35′23				
evening set	-10473 Jan 21 j 12:54	1° ∡ 58'44		opposition	-10467 Aug 23 j 01:06	17° ∡ 11′09	-2°48'29			
				min. Earth dist.	-10467 Aug 23 j 01:18	17° ∡ 11′08	28.88344 AU			
conjunction	-10473 Feb 06 j 18:04	2° х 34′39	-2°25'14	direct	-10467 Nov 09 j 06:26	15° ∡ ¹46′18				
minimum elong	-10473 Feb 06 j 18:03	2° ∡ ³34'39	2°25'44	evening set	-10466 Feb 06 j 20:06	17° ∡ ¹42'13				
max. Earth dist.	-10473 Feb 07 j 00:54	2° ∡ ³35′17	30.84796 AU							
morning rise	-10473 Feb 23 j 00:03	3° ∡ 10'40		conjunction	-10466 Feb 23 j 01:07					
retrograde	-10473 May 24 j 03:51	5° ∡ 107'44		minimum elong	-10466 Feb 23 j 01:07					
opposition	-10473 Aug 10 j 10:29	3° ∡ ⁴42'54		max. Earth dist.	-10466 Feb 23 j 00:14		30.88379 AU			
min. Earth dist.	-10473 Aug 10 j 04:24		28.85090 AU	morning rise	-10466 Mar 11 j 05:55					
direct	-10473 Oct 27 j 07:02	2° √ 18'11		retrograde	-10466 Jun 08 j 19:25		20.4012.2			
evening set	-10472 Jan 24 j 03:32	4° ₰ 13'16		opposition	-10466 Aug 25 j 11:36					
	10472 F 1 00:00 26	40 7 40110	2027146	min. Earth dist.	-10466 Aug 25 j 12:00		28.88844 AU			
conjunction minimum elong	-10472 Feb 09 j 08:36			direct evening set	-10466 Nov 11 j 19:11 -10465 Feb 09 j 10:48					
max. Earth dist.	-10472 Feb 09 j 08:36		30.85029 AU	evening set	-10403 Feb 09 j 10:48	19-X-2/18				
morning rise	-10472 Feb 09 j 13:57 -10472 Feb 25 j 14:32			conjunction	-10465 Feb 25 j 15:48	200 733112	2028158			
retrograde	-10472 New 25 j 16:21	7° х 22′07		minimum elong	-10465 Feb 25 j 15:47					
opposition	-10472 May 25 j 10:21 -10472 Aug 11 j 20:53	5° ₹ 57'21	-2°39'18	max. Earth dist.	-10465 Feb 25 j 13:47					
min. Earth dist.	-10472 Aug 11 j 16:12		28.85415 AU	morning rise	-10465 Mar 13 j 20:21		20.00020110			
direct	-10472 Oct 28 j 18:25	4° ≯ ³32'35	20.00 110 110	retrograde	-10465 Jun 11 j 06:26					
evening set	-10471 Jan 25 j 18:07	6° ∡ ¹27'48		opposition	-10465 Aug 27 j 22:13		-2°50'22			
C	,			min. Earth dist.	-10465 Aug 28 j 00:43					
conjunction	-10471 Feb 10 j 23:22	7° ∡ 03'43	-2°30'04	direct	-10465 Nov 14 j 05:34					
minimum elong	-10471 Feb 10 j 23:21	7° ∡ °03'43	2°30'35	evening set	-10464 Feb 12 j 01:36	22° ∡ 12′20				
max. Earth dist.	-10471 Feb 11 j 04:52	7° ∡ 04'13	30.85422 AU							
morning rise	-10471 Feb 27 j 05:01	7° ∡ ³39'41		conjunction	-10464 Feb 28 j 06:37	22° ∡ ¹48'13	-2°39'37			
retrograde	-10471 May 28 j 05:06	9° ∡ ³36'32		minimum elong	-10464 Feb 28 j 06:37	22° ∡ ¹48'13	2°40'11			
opposition	-10471 Aug 14 j 07:17	8° ∡ 11'51		max. Earth dist.	-10464 Feb 28 j 03:28		30.89208 AU			
min. Earth dist.	-10471 Aug 14 j 02:54		28.85874 AU	morning rise	-10464 Mar 15 j 10:59					
direct	-10471 Oct 31 j 08:10	6° ∡ 747'04 −		retrograde	-10464 Jun 12 j 17:50					
evening set	-10470 Jan 28 j 08:50	8° ∡ 42′25		opposition	-10464 Aug 29 j 08:28					
	10450 5 1 10:10 50	00 310110	2022100	min. Earth dist.	-10464 Aug 29 j 11:11		28.89608 AU			
conjunction	-10470 Feb 13 j 13:53	9° 🗷 18'19		direct	-10464 Nov 15 j 18:41					
minimum elong	-10470 Feb 13 j 13:53	9° 🗷 18'19		evening set	-10463 Feb 13 j 16:28	24° × '2/13				
max. Earth dist.	-10470 Feb 13 j 17:28		30.85943 AU	aaniumatian	10/62 Mar 01 : 21:21	250.702105	2040101			
morning rise retrograde	-10470 Mar 01 j 19:30 -10470 May 30 j 18:08	9° ∡ 754'17		conjunction minimum elong	-10463 Mar 01 j 21:21 -10463 Mar 01 j 21:20					
opposition	-10470 May 30 j 18:08 -10470 Aug 16 j 17:42		-2°43'43	max. Earth dist.	-10463 Mar 01 j 21:20					
min. Earth dist.	-10470 Aug 16 j 14:12			morning rise	-10463 Mar 18 j 01:33		20.07273 AU			
direct	-10470 Nov 02 j 19:21	9° x ² 01'40	20.00-100 AU	retrograde	-10463 Jun 15 j 05:07					
evening set	-10469 Jan 30 j 23:27			opposition	-10463 Aug 31 j 18:58		-2°51'15			
	Jun 30 j 23.27	10		min. Earth dist.	-10463 Aug 31 j 23:21					
conjunction	-10469 Feb 16 j 04:40	11° ₹ ³33'04	-2°33'58	direct	-10463 Nov 18 j 06:49		-			
minimum elong	-10469 Feb 16 j 04:39			evening set	-10462 Feb 16 j 07:00					
- C	·			-	·					

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10462 in astronomical counting style is the year 10463 BCE in historical counting style. -10462 Mar 04 j 11:56 27° ₹ 17'47 -2°40'11 retrograde -10456 Jun 30 i 15:40 13°정14'04 conjunction minimum elong -10462 Mar 04 j 11:56 27° ₹ 17'47 2°40'46 opposition -10456 Sep 15 j 19:25 11° ₹ 50'37 -2°46'10 max. Earth dist. -10462 Mar 04 j 06:52 27° ₹ 17'19 30.89898 AU min. Earth dist. -10456 Sep 16 j 05:27 11°**⋜**49'54 28.94734 AU -10462 Mar 20 j 15:47 27° ₹ 53'34 -10456 Dec 03 j 21:39 10°₹25'13 direct morning rise -10455 Mar 04 j 12:05 12°₹22'03 -10462 Jun 17 j 16:31 29° ₹ 49'18 retrograde evening set -10462 Sep 03 j 05:19 28° ₹25'20 -2°51'18 opposition -10462 Sep 03 j 10:09 28°**尽** 25'00 28.90325 AU -10455 Mar 20 j 16:26 12°₹57'51 -2°34'36 min. Earth dist. conjunction -10462 Nov 20 j 21:05 27°**尽** 00'07 -10455 Mar 20 j 16:26 12°♂57'51 2°35'11 direct minimum elong -10461 Feb 18 j 21:38 28°**尽** 56'28 -10455 Mar 20 j 04:47 12°**궁**56'46 30.94962 AU evening set max. Earth dist. morning rise -10455 Apr 05 j 18:46 13°₹33'30 conjunction -10461 Mar 07 j 02:20 29° ₹32'18 -2°40'07 retrograde -10455 Jul 03 j 02:43 15°**♂**28'12 -10461 Mar 07 j 02:20 29°**х** 32'18 2°40'43 -10455 Sep 18 j 05:54 14° ₹ 04'51 -2°44'25 minimum elong opposition max. Earth dist. -10461 Mar 06 j 19:22 29°**х** 31'39 30.90310 AU -10455 Sep 18 j 16:04 14°중04'08 28.95611 AU min. Earth dist. -10461 Mar 19 j 13:30 0°ರ direct -10455 Dec 06 j 10:46 12°₹39'27 morning rise -10461 Mar 23 j 06:07 0°**ට**08'04 evening set -10454 Mar 07 j 02:27 14°**궁**36'21 retrograde -10461 Jun 20 j 04:55 2°る03'38 opposition -10461 Sep 05 j 15:35 0°る39'43 -2°51'05 conjunction -10454 Mar 23 j 06:35 15°**♂**12'08 -2°32'51 min. Earth dist. -10461 Sep 05 j 21:16 0° 중39'19 28.90797 AU minimum elong -10454 Mar 23 j 06:36 15°**ठ**12'09 2°33'25 -10461 Sep 29 j 19:53 30°R ⊀ max. Earth dist. -10454 Mar 22 j 17:17 15°る10'54 30.95796 AU direct -10461 Nov 23 j 08:31 29° ₹ 14'25 morning rise -10454 Apr 08 j 08:40 15°**⋜**47'46 -10460 Jan 15 j 21:21 0°궁 retrograde -10454 Jul 05 j 13:29 17°る42'21 evening set -10460 Feb 21 i 12:00 1°る10'50 opposition -10454 Sep 20 j 16:31 16°る19'05 -2°42'25 min. Earth dist. -10454 Sep 21 j 04:23 16°정18'14 28.96405 AU conjunction -10460 Mar 08 j 16:51 1°₹46'40 -2°39'48 direct -10454 Dec 08 j 22:08 14°る53'39 minimum elong -10460 Mar 08 j 16:51 1°る46'40 2°40'23 evening set -10453 Mar 09 j 16:42 16° ₹ 50'37 max. Earth dist. -10460 Mar 08 j 10:11 1°정46'03 30.90831 AU -10460 Mar 24 j 20:15 2°₹22'25 -10453 Mar 25 j 20:51 17°る26'24 -2°30'52 morning rise conjunction -10460 Jun 21 j 16:50 4°る17'49 -10453 Mar 25 j 20:52 17°る26'24 2°31'27 retrograde minimum elong -10460 Sep 07j01:59 2°る53'57 -2°50'37 max. Earth dist. -10453 Mar 25 j 07:04 17°₹25'07 30.96542 AU opposition -10460 Sep 07 j 08:35 2°る53'29 28.91369 AU -10453 Apr 10 j 22:37 18°る02'00 min. Earth dist. morning rise -10460 Nov 24 j 22:33 1°る28'37 -10453 Jul 08 j 00:23 19°る56'26 direct retrograde -10459 Feb 23 j 02:35 3°₹25'06 -10453 Sep 23 j 02:57 18°ਰ33'14 -2°40'11 evening set opposition -10453 Sep 23 j 15:34 18°중32'21 28.97085 AU min. Earth dist. -10459 Mar 11 j 07:10 4°**⋜**00'56 -2°39'14 -10453 Dec 11 j 11:42 17°**⋜**07'46 conjunction direct -10459 Mar 11 j 07:10 4°**⋜**00'56 2°39'50 -10452 Mar 11 j 07:02 19°**⋜**04'47 minimum elong evening set -10459 Mar 10 j 22:33 4°정00'08 30.91473 AU max. Earth dist. -10459 Mar 27 j 10:30 4°**궁**36'39 -10452 Mar 27 j 10:58 19°₹40'33 -2°28'40 morning rise conjunction retrograde -10459 Jun 24 j 05:48 6° 중31'54 minimum elong -10452 Mar 27 j 10:58 19°₹40'33 2°29'14 opposition -10459 Sep 09 j 12:15 5°る08'07 -2°49'54 max. Earth dist. -10452 Mar 26 j 19:00 19°중39'04 30.97179 AU min. Earth dist. -10459 Sep 09 j 18:53 5°**궁**07'38 28.92078 AU morning rise -10452 Apr 12 j 12:37 20°♂16'08 direct -10459 Nov 27 j 11:13 3°₹42'44 retrograde -10452 Jul 09 j 12:24 22°**궁**10'25 -10458 Feb 25 j 16:57 5°₹39'19 opposition -10452 Sep 24 j 13:28 20°₹47'16 -2°37'42 evening set min. Earth dist. -10452 Sep 25 j 03:08 20°정46'18 28.97680 AU -10458 Mar 13 j 21:35 6°**⋜**15'08 -2°38'26 direct -10452 Dec 12 j 23:21 19°**♂**21'44 conjunction -10458 Mar 13 j 21:35 6° ₹ 15'08 2°39'01 -10451 Mar 13 j 21:05 21°**♂**18'48 minimum elong evening set -10458 Mar 13 j 13:07 6°정14'20 30.92241 AU -10451 Mar 29 j 09:10 21°る53'05 30.97739 AU max. Earth dist. max. Earth dist. -10458 Mar 30 j 00:31 6°る50'50 morning rise -10458 Jun 26 j 16:11 8°정45'56 -10451 Mar 30 j 01:03 21°る54'33 -2°26'14 retrograde conjunction -10458 Sep 11 j 22:44 7°る22'15 -2°48'54 -10451 Mar 30 j 01:03 21°る54'33 2°26'49 opposition minimum elong min. Earth dist. -10458 Sep 12 i 06:53 7°る21'40 28.92901 AU morning rise -10451 Apr 15 i 02:17 22° ₹30'07 direct -10458 Nov 29 j 23:02 5°る56'52 retrograde -10451 Jul 11 j 23:30 24°る24'14 evening set -10457 Feb 28 j 07:12 7°る53'31 opposition -10451 Sep 26 j 23:58 23°る01'08 -2°35'00 min. Earth dist. -10451 Sep 27 j 14:50 23°る00'05 28.98204 AU conjunction -10457 Mar 16 j 11:41 8°중29'19 -2°37'24 direct -10451 Dec 15 j 13:52 21°₹35'33 minimum elong -10457 Mar 16 j 11:41 8°る29'19 2°38'00 evening set -10450 Mar 16 j 11:07 23°**궁**32'38 max. Earth dist. -10457 Mar 16 j 01:47 8°る28'24 30.93124 AU morning rise -10457 Apr 01 j 14:33 9°**⋜**05'00 conjunction -10450 Apr 01 j 14:48 24° ₹ 08'23 -2°23'36 retrograde -10457 Jun 29 j 04:43 10°**⋜**59'58 minimum elong -10450 Apr 01 j 14:48 24° ₹ 08'23 2°24'10 -10457 Sep 14 j 09:01 9°₹36'24 -2°47'40 max. Earth dist. -10450 Mar 31 j 20:53 24° ₹ 06'43 30.98267 AU opposition min. Earth dist. -10457 Sep 14 j 17:05 9°る35'50 28.93809 AU morning rise -10450 Apr 17 j 15:57 24°₹43'54 -10457 Dec 02 j 11:27 8°₹11'01 retrograde -10450 Jul 14 j 11:52 26° ₹37'52 direct evening set -10456 Mar 01 j 21:38 10°る07'45 opposition -10450 Sep 29 j 10:23 25°♂14'48 -2°32'04 min. Earth dist. -10450 Sep 30 j 01:19 25° ₹ 13'44 28.98735 AU -10456 Mar 18 j 02:04 10°₹43'34 -2°36'07 conjunction direct -10450 Dec 18 j 03:04 23°정49'10 minimum elong -10456 Mar 18 j 02:04 10°₹43'34 2°36'42 evening set -10449 Mar 19 j 00:43 25°**⋜**46'16 max. Earth dist. -10456 Mar 17 j 15:31 10° ₹42'35 30.94045 AU max. Earth dist. -10449 Apr 03 j 10:48 26°る20'21 30.98812 AU

morning rise

-10456 Apr 03 j 04:36 11°**♂**19'14

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10449 in astronomical counting style is the year 10450 BCE in historical counting style. -10449 Apr 04 j 04:26 26°る22'00 -2°20'46 opposition -10443 Oct 14 j 11:48 10°≈47'22 -2°05'33 conjunction -10449 Apr 04 j 04:26 26°る22'00 2°21'19 min. Earth dist. -10443 Oct 15 j 06:48 10°≈46'02 29.04806 AU minimum elong -10449 Apr 20j05:12 26°る57'30 -10442 Jan 02 j 14:15 9°≈21'43 morning rise direct -10442 Apr 03 j 22:52 11°≈19'01 -10449 Jul 16 j 21:49 28°る51'18 retrograde evening set -10449 Oct 01 j 20:53 27°₹28'17 -2°28'55 -10442 Apr 19 j 03:57 11°≈52'41 31.05176 AU opposition max. Earth dist. -10449 Oct 02 j 13:20 27°**궁**27'07 28.99300 AU min. Earth dist. -10449 Dec 20 j 15:42 26°**궁**02'36 -10442 Apr 20 j 01:17 11°≈54'41 -1°55'17 direct conjunction -10442 Apr 20 j 01:18 11°≈54'41 1°55'45 -10448 Mar 20 j 14:29 27°₹59'43 evening set minimum elong morning rise -10442 May 06 j 00:02 12°≈30'02 conjunction -10448 Apr 05 j 17:55 28°♂35'26 -2°17'42 retrograde -10442 Aug 01 j 00:21 14°≈23'00 minimum elong -10448 Apr 05 j 17:56 28°♂35'26 2°18'14 opposition -10442 Oct 16 j 22:33 13°≈00'33 -2°00'58 -10448 Apr 04 j 22:55 28°중33'40 30.99428 AU min. Earth dist. -10442 Oct 17 j 18:38 12°≈59'08 29.05814 AU max. Earth dist. -10448 Apr 21 j 18:34 29°**♂**10'55 -10441 Jan 05 j 04:13 11°≈34'55 morning rise direct -10448 May 15 j 20:32 evening set -10441 Apr 06 j 12:06 13°≈32'14 retrograde -10448 Jul 18 j 09:52 1°≈04'33 -10448 Sep 22 j 08:14 30°R ₹ conjunction -10441 Apr 22 j 14:09 14°≈07'52 -1°50'54 opposition -10448 Oct 03 j 07:10 29°₹41'35 -2°25'33 minimum elong -10441 Apr 22 j 14:10 14°≈07'52 1°51'22 min. Earth dist. -10448 Oct 03 j 23:12 29°₹40'27 28.99955 AU max. Earth dist. -10441 Apr 21 j 14:51 14°≈05'42 31.06148 AU direct -10448 Dec 22 j 04:49 28°る15'52 morning rise -10441 May 08 j 12:45 14°≈43'12 -10447 Mar 17 j 02:40 0°**≈** -10441 May 16 j 08:54 15°≈ evening set -10447 Mar 23 j 04:06 0°≈13'01 retrograde -10441 Aug 03 j 12:24 16°≈36'04 opposition -10441 Oct 19 i 09:14 15°≈13'39 -1°56'13 conjunction -10447 Apr 08 i 07:26 0°≈48'44 -2°14'27 min. Earth dist. -10441 Oct 20 j 05:23 15°≈12'15 29.06728 AU minimum elong -10447 Apr 08 i 07:27 0°≈48'44 2°15'00 -10441 Oct 27 j 13:05 15°R≈ max. Earth dist. -10447 Apr 07 j 12:24 0°≈46'57 31.00141 AU direct -10440 Jan 07 j 17:00 13°≈48'01 -10447 Apr 24 j 07:40 1°≈24'11 -10440 Mar 16 j 23:04 15°≈ morning rise -10447 Jul 20 j 20:19 3°≈17'41 -10440 Apr 08 j 01:14 15°≈45'20 retrograde evening set -10447 Oct 05 j 17:46 1°≈54'47 -2°21'58 max. Earth dist. -10440 Apr 23 j 04:01 16°≈18'48 31.07006 AU opposition -10447 Oct 06 j 11:10 1°≈53'33 29.00732 AU min. Earth dist. -10447 Dec 24 j 15:30 0°≈29'03 -10440 Apr 24 j 03:11 16°≈20'57 -1°46'22 direct conjunction -10446 Mar 25 j 17:27 2°≈26'13 -10440 Apr 24 j 03:12 16°≈20'57 1°46'48 evening set minimum elong -10440 May 10 j 01:17 16°≈56'16 morning rise -10446 Apr 10 j 20:35 3°≈01'55 -2°11'00 -10440 Aug 04 j 22:32 18°≈49'00 conjunction retrograde -10446 Apr 10 j 20:36 3°≈01'55 2°11'31 -10440 Oct 20 j 20:02 17°≈26'38 -1°51'17 minimum elong opposition -10446 Apr 10 j 01:07 3°≈00'06 31.00997 AU -10440 Oct 21 j 17:50 17°≈25'07 29.07524 AU max. Earth dist. min. Earth dist. -10446 Apr 26 j 20:37 3°≈37'21 -10439 Jan 09 j 05:55 16°≈00'59 morning rise direct -10446 Jul 23 j 06:07 5°≈30'44 -10439 Apr 10 j 14:24 17°≈58'17 retrograde evening set opposition -10446 Oct 08 j 04:12 4°≈07'55 -2°18'10 min. Earth dist. -10446 Oct 08 j 21:04 4°≈06'43 29.01636 AU conjunction -10439 Apr 26 j 15:57 18°≈33'52 -1°41'41 direct -10446 Dec 27 j 04:39 2°≈42'11 minimum elong -10439 Apr 26 j 15:58 18°≈33'53 1°42'08 evening set -10445 Mar 28 j 06:52 4°≈39'23 max. Earth dist. -10439 Apr 25 j 15:17 18°≈31'35 31.07772 AU morning rise -10439 May 12 j 13:52 19°≈09'09 -10445 Apr 13 j 09:49 5°≈15'04 -2°07'21 -10439 Aug 07 j 10:47 21°≈01'45 conjunction retrograde -10445 Apr 13 j 09:50 5°≈15'04 2°07'53 -10439 Oct 23 j 06:47 19°≈39'26 -1°46'12 minimum elong opposition max. Earth dist. -10445 Apr 12 j 13:31 5°≈13'11 31.01968 AU min. Earth dist. -10439 Oct 24 j 04:15 19°≈37'55 29.08239 AU -10445 Apr 29 i 09:34 5°≈50'30 morning rise direct -10438 Jan 11 j 20:04 18°≈13'45 -10445 Jul 25 i 16:06 retrograde 7°**≈**43'46 evening set -10438 Apr 13 j 03:08 20°≈11'00 -10445 Oct 10 j 14:37 6°≈21'02 -2°14'10 opposition max. Earth dist. -10438 Apr 28 i 03:50 20°≈44'17 31.08459 AU min. Earth dist. -10445 Oct 11 j 08:38 6°≈19'46 29.02660 AU direct -10445 Dec 29 j 14:56 4°≈55'19 conjunction -10438 Apr 29 j 04:30 20°≈46'35 -1°36'52 minimum elong -10444 Mar 29 j 20:13 6°≈52'33 -10438 Apr 29 i 04:31 20°≈46'35 1°37'17 evening set morning rise -10438 May 15 j 01:58 21°≈21'49 -10438 Aug 09 j 20:44 23°≈14'18 -10444 Apr 14 j 23:05 7°≈28'15 -2°03'30 retrograde conjunction -10444 Apr 14 j 23:06 minimum elong 7°≈28'15 2°04'00 opposition -10438 Oct 25 j 17:37 21°≈51'59 -1°40'58 -10444 Apr 14 j 02:53 max. Earth dist. 7°≈26'22 31.03038 AU min. Earth dist. -10438 Oct 26 j 16:34 21°≈50'23 29.08905 AU -10444 Apr 30 j 22:30 -10437 Jan 14 j 08:11 20°≈26'17 morning rise 8°≈03'39 direct -10444 Jul 27 j 02:23 retrograde 9°≈56'48 evening set -10437 Apr 15 j 15:52 22°≈23'30 -10444 Oct 12 j 01:10 8°≈34'11 -2°09'57 opposition -10444 Oct 12 j 19:30 conjunction -10437 May 01 j 16:56 22°≈59'02 -1°31'54 min. Earth dist. 8°≈32'54 29.03730 AU -10437 May 01 j 16:57 22°≈59'02 1°32'19 direct -10444 Dec 31 j 03:11 7°≈08'30 minimum elong -10443 Apr 01 j 09:38 evening set 9°≈05'47 max. Earth dist. -10437 Apr 30 j 15:46 22°≈56'42 31.09130 AU morning rise -10437 May 17 j 14:08 23°≈34'15 conjunction -10443 Apr 17 j 12:08 9°≈41'27 -1°59'29 retrograde -10437 Aug 12 j 06:17 25°≈26'36 minimum elong -10443 Apr 17 j 12:09 9°≈41'27 1°59'59 opposition -10437 Oct 28 j 04:10 24°≈04'18 -1°35'36 max. Earth dist. -10443 Apr 16 j 14:25 9°≈39'26 31.04122 AU min. Earth dist. -10437 Oct 29 j 02:40 24°≈02'44 29.09564 AU -10443 May 03 j 11:19 10°≈16'50 -10436 Jan 16 j 21:45 22°≈38'34 morning rise direct

evening set

-10436 Apr 17 j 04:30 24°≈35'44

retrograde

-10443 Jul 29 j 13:49 12°≈09'54

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 37 Attention, astronomical year style is used: The year -10436 in astronomical counting style is the year 10437 BCE in historical counting style.

Attention, astronomical year style is used: The year -10436 in astronomical counting style is the year 10437 BCE in historical counting style.											
max. Earth dist.	-10436 May 02 j 03:28	25° ≈ 08'52	31.09811 AU	morning rise	-10430 Jun 01 j 22:36	8° 升 57'46					
				retrograde	-10430 Aug 27 j 07:55						
conjunction	-10436 May 03 j 05:14			opposition	-10430 Nov 12 j 08:37	9° ∺ 27'49					
minimum elong	-10436 May 03 j 05:15		1°27'12	min. Earth dist.	-10430 Nov 13 j 08:02		29.16366 AU				
morning rise	-10436 May 19 j 02:04			direct	-10429 Feb 01 j 10:09	8° ₩ 02'22					
retrograde	-10436 Aug 13 j 15:58		1020106	evening set	-10429 May 03 j 17:44	9° ∺ 59'29					
opposition	-10436 Oct 29 j 15:00				10420 M 10 : 15 51	100 1/24/50	0040107				
min. Earth dist.	-10436 Oct 30 j 14:19		29.102/8 AU	conjunction	-10429 May 19 j 15:51						
direct evening set	-10435 Jan 18 j 08:33 -10435 Apr 19 j 16:50			minimum elong max. Earth dist.	-10429 May 19 j 15:51 -10429 May 18 j 13:50						
evening set	-10433 Apr 19 j 10.30	20 ~4/4/		morning rise	-10429 Jun 04 j 09:44		31.10810 AU				
conjunction	-10435 May 05 j 17:18	27°∞23'17	-1°21'36	retrograde	-10429 Aug 29 j 18:24						
minimum elong	-10435 May 05 j 17:19			opposition	-10429 Nov 14 j 19:47		-0°48'22				
max. Earth dist.	-10435 May 04 j 16:06			min. Earth dist.	-10429 Nov 15 j 20:37						
morning rise	-10435 May 21 j 13:41			direct	-10428 Feb 03 j 22:16		_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
retrograde	-10435 Aug 16 j 01:11			evening set	-10428 May 05 j 05:50						
opposition	-10435 Nov 01 j 01:52		-1°24'28	max. Earth dist.	-10428 May 20 j 00:58		31.17745 AU				
min. Earth dist.	-10435 Nov 02 j 00:58	28° ≈ 26'43	29.11073 AU								
direct	-10434 Jan 20 j 20:58	27° ≈ 02'35		conjunction	-10428 May 21 j 03:27	12°) 46′55	-0°42'15				
evening set	-10434 Apr 22 j 05:13	28° ≈ 59'41		minimum elong	-10428 May 21 j 03:27	12°) 46′55	0°42'28				
max. Earth dist.	-10434 May 07 j 03:08	29° ≈ 32'44	31.11434 AU	morning rise	-10428 Jun 05 j 20:55	13° ∺ 21'53					
				retrograde	-10428 Aug 31 j 04:15						
conjunction	-10434 May 08 j 05:13			opposition	-10428 Nov 16 j 07:04						
minimum elong	-10434 May 08 j 05:13		1°16'38	min. Earth dist.	-10428 Nov 17 j 07:23		29.18199 AU				
	-10434 May 19 j 08:47	0° ∀		direct	-10427 Feb 05 j 11:54						
morning rise	-10434 May 24 j 01:18	0° ₩ 10'18		evening set	-10427 May 07 j 17:44						
retrograde	-10434 Aug 18 j 11:43	2°) (02'21	1010142	max. Earth dist.	-10427 May 22 j 11:44	14° ★ 56′26	31.18527 AU				
opposition	-10434 Nov 03 j 12:37	0°) (40'09			1042734 22:14.50	140 1 50157	0027110				
min. Earth dist.	-10434 Nov 04 j 11:40		29.12003 AU	conjunction	-10427 May 23 j 14:50						
direct	-10434 Nov 28 j 12:50			minimum elong	-10427 May 23 j 14:51 -10427 Jun 08 j 07:49		0°36'32				
direct	-10433 Jan 23 j 07:44 -10433 Mar 18 j 16:02	29 ≈14 26 0° H		morning rise retrograde	-10427 Sep 02 j 14:24						
evening set	-10433 Mai 18 j 10.02 -10433 Apr 24 j 17:17	0 X 1° X 11'32		opposition	-10427 Nov 18 j 18:28		-0°35'42				
evening set	10433 Apr 24 j 17.17	1 /(1132		min. Earth dist.	-10427 Nov 19 j 19:37						
conjunction	-10433 May 10 j 17:06	1° ¥ 46'59	-1°10'50	direct	-10426 Feb 07 j 23:13		27.10723 110				
minimum elong	-10433 May 10 j 17:07	1°) (46'59		evening set	-10426 May 10 j 05:30						
max. Earth dist.	-10433 May 09 j 16:08		31.12429 AU	max. Earth dist.	-10426 May 24 j 23:31		31.19199 AU				
morning rise	-10433 May 26 j 12:41	2°) 22′05			, ,						
retrograde	-10433 Aug 20 j 21:20	4°) 14′05		conjunction	-10426 May 26 j 02:12	17° ₩ 10'52	-0°30'20				
opposition	-10433 Nov 05 j 23:33	2° 升 51′58	-1°12'50	minimum elong	-10426 May 26 j 02:12	17° ₩ 10'52	0°30'32				
min. Earth dist.	-10433 Nov 06 j 23:03	2° 升 50′20	29.13033 AU	morning rise	-10426 Jun 10 j 18:40	17°) 45′46					
direct	-10432 Jan 25 j 20:34	1° ¥ 26′17		retrograde	-10426 Sep 04 j 23:26						
evening set	-10432 Apr 26 j 05:34	3° ∺ 23′23		opposition	-10426 Nov 21 j 05:43						
max. Earth dist.	-10432 May 11 j 02:43	3° ¥ 56′23	31.13517 AU	min. Earth dist.	-10426 Nov 22 j 06:53		29.19533 AU				
				direct	-10425 Feb 10 j 12:02						
conjunction	-10432 May 12 j 04:49	3°) ₹58'49		evening set	-10425 May 12 j 17:11						
minimum elong	-10432 May 12 j 04:50	3° ¥ 58'49	1°05'36	max. Earth dist.	-10425 May 27 j 09:37	19° ∺ 20'01	31.19770 AU				
morning rise	-10432 May 28 j 00:09	4°) €33'54			10425 Mars 20 : 12.10	100 100	0924120				
retrograde	-10432 Aug 22 j 09:03	6°¥25'52	100/152	conjunction	-10425 May 28 j 13:18						
opposition min. Earth dist.	-10432 Nov 07 j 10:23 -10432 Nov 08 j 09:16	5° ¥ 03'49	29.14149 AU	minimum elong morning rise	-10425 May 28 j 13:18 -10425 Jun 13 j 05:24		0°24'30				
direct	-10432 Nov 08 j 09:10 -10431 Jan 27 j 08:02	3° X 38'13	29.14149 AU	retrograde	-10425 Sep 07 j 09:15						
evening set	-10431 Apr 28 j 17:39	5°\(\frac{1}{35}\)'20		opposition	-10425 Nov 23 j 17:00		-0°22'51				
evening set	1043171pi 20 j 17.37	3 7(33 20		min. Earth dist.	-10425 Nov 24 j 18:12						
conjunction	-10431 May 14 j 16:40	6°) 10'44	-0°59'39	direct	-10424 Feb 12 j 23:24		29.20070710				
minimum elong	-10431 May 14 j 16:40	6°) 10'44		evening set	-10424 May 14 j 04:36						
max. Earth dist.	-10431 May 13 j 15:26		31.14653 AU	max. Earth dist.	-10424 May 28 j 21:51		31.20291 AU				
morning rise	-10431 May 30 j 11:23	6°){ 45'47			, , , , , , , , , , , , , , , , , , ,						
retrograde	-10431 Aug 24 j 19:23	8°) €37'44		conjunction	-10424 May 30 j 00:20	21°) 34′07	-0°18'18				
opposition	-10431 Nov 09 j 21:34	7°) (15′46	-1°00'47	minimum elong	-10424 May 30 j 00:20						
min. Earth dist.	-10431 Nov 10 j 21:37	7° ℋ 14'06	29.15280 AU	morning rise	-10424 Jun 14 j 15:47	22° ₩ 08'57					
direct	-10430 Jan 29 j 20:17	5° ¥ 50′15		retrograde	-10424 Sep 08 j 17:37						
evening set	-10430 May 01 j 05:41	7°){ 47′22		opposition	-10424 Nov 25 j 04:25						
max. Earth dist.	-10430 May 16 j 01:57	8° ∺ 20′18	31.15779 AU	min. Earth dist.	-10424 Nov 26 j 05:58		29.20583 AU				
				direct	-10423 Feb 14 j 11:48						
conjunction	-10430 May 17 j 04:08	8°\(\frac{1}{22}\)'45		evening set	-10423 May 16 j 16:03		21 20010 :==				
minimum elong	-10430 May 17 j 04:09	8° ¥ 22'45	U~54 ¹ 11	max. Earth dist.	-10423 May 31 j 07:47	25° 大 42'52	31.20818 AU				

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10423 in astronomical counting style is the year 10424 BCE in historical counting style. -10423 Jun 01 j 11:04 23° ¥ 45'25 -0°12'15 max. Earth dist. -10418 Jun 11 i 14:29 4°Υ37'57 31.24503 AU conjunction -10423 Jun 01 j 11:04 23° \(\frac{1}{45}\)'25 0°12'22 -10418 Jun 28 j 03:49 5°**Y**14'53 minimum elong morning rise -10423 Jun 01 j 06:48 23°\ 45'02 -10418 Sep 22 j 09:16 7°**Y**′06′38 behind sun begin retrograde -10423 Jun 01 j 15:21 23° **∺**45'48 5°**Y**44'56 behind sun end -10418 Dec 09 j 01:21 0°22'33 opposition -10423 Jun 17 j 02:10 24° ¥ 20'13 -10418 Dec 10 j 00:55 5°**Y**43'19 29.24943 AU morning rise min. Earth dist. -10423 Sep 11 j 04:41 26°**米** 11'52 4°Υ19'54 retrograde direct -10417 Feb 28 j 12:53 6°Y16'26 opposition evening set -10417 May 30 j 10:07 6°**Y**49'04 31.25288 AU min. Earth dist. -10423 Nov 28 j 16:15 24° ¥ 48'22 29.21138 AU max. Earth dist. -10417 Jun 14 j 01:42 direct -10422 Feb 16 j 22:40 23° **★** 24'43 6°**Y**51′19 evening set -10422 May 19 j 03:05 25° **★**21'26 conjunction -10417 Jun 15 j 01:48 0°24'13 minimum elong -10417 Jun 15 j 01:47 6°**Y**51'19 0°24'13 -10422 Jun 03 j 21:42 25° ¥ 56'31 -0°06'12 7°**Y**25'53 conjunction morning rise -10417 Jun 30 j 13:33 -10422 Jun 03 j 21:43 25° **€** 56'31 0°06'17 9°Υ17'41 minimum elong retrograde -10417 Sep 24 j 18:34 behind sun begin -10422 Jun 03 j 15:36 25° ¥55'59 opposition -10417 Dec 11 j 13:09 7°**Υ**56'00 0°28'59 behind sun end -10422 Jun 04 j 03:50 25° **€** 57'04 min. Earth dist. -10417 Dec 12 j 12:27 7°**Υ**54'25 29.25670 AU max. Earth dist. -10422 Jun 02 j 19:47 25°**米**54'06 31.21400 AU direct -10416 Mar 02 j 02:01 6°Y31'03 morning rise -10422 Jun 19 j 12:09 26° **∺** 31'16 evening set -10416 May 31 j 21:05 8°Y27'33 retrograde -10422 Sep 13 j 14:08 28° **€**22'55 max. Earth dist. -10416 Jun 15 j 11:06 9°Υ00'03 31.25954 AU opposition -10422 Nov 30 j 03:17 27° ₭ 01'06 -0°03'23 min. Earth dist. -10422 Dec 01 j 04:21 26° \(\)59'23 29.21761 AU conjunction -10416 Jun 16 j 11:58 9°**Y**02′23 0°30'12 direct -10421 Feb 19 j 11:11 25° **★** 35'47 minimum elong -10416 Jun 16 j 11:57 9°**Υ**02'23 0°30'15 evening set -10421 May 21 j 14:18 27° **)** 32'27 morning rise -10416 Jul 01 i 23:15 9°**Y**36′55 max. Earth dist. -10421 Jun 05 j 05:58 28° ₩ 05'02 31.22077 AU retrograde $-10416 \text{ Sep } 26 \text{ i } 04:54 \text{ } 11^{\circ}\text{Y} 28'46$ opposition $-10416 \,\mathrm{Dec}\ 13 \,\mathrm{i}\ 01:03\ 10^{\circ} \,\mathrm{\Upsilon}07'06$ 0°35'22 conjunction -10421 Jun 06 j 08:14 28° ¥ 07'30 -0°00'04 min. Earth dist. -10416 Dec 14 j 00:07 10° Υ 05'32 29.26285 AU -10421 Jun 06 j 08:14 28° **★** 07'30 0°00'09 -10415 Mar 04 i 12:57 8° **Y** 42'12 minimum elong direct -10421 Jun 06 j 01:53 28° ¥ 06'56 -10415 Jun 03 j 07:53 10°**Υ**38'39 behind sun begin evening set -10421 Jun 06 j 14:35 28° ₩ 08'03 behind sun end -10421 Jun 09 j 11:43 28°**)** 14'34 $-10415 \text{ Jun } 18 \text{ j } 22:17 \ 11^{\circ} \Upsilon 13'27 \ 0^{\circ} 36'09$ conjunction asc. node -10421 Jun 21 j 22:16 28° ¥42'12 -10415 Jun 18 j 22:17 11° Υ 13'27 0°36'12 morning rise minimum elong -10421 Aug 02 j 04:44 0°**℃** -10415 Jun 17 j 22:40 11°**Υ**11'15 31.26493 AU max. Earth dist. -10421 Sep 16 j 01:52 0°**Υ**33'50 -10415 Jul 04 j 08:51 11°**Υ**47'57 retrograde morning rise -10421 Nov 01 j 12:01 30°**₹** -10415 Sep 28 j 13:36 13°**Υ**39'51 retrograde -10421 Dec 02 j 14:31 29° **€** 12'02 0°03'07 -10415 Dec 15 j 13:05 12° Υ 18'11 0°41'42 opposition opposition -10421 Dec 03 j 14:14 29° ¥ 10'24 29.22480 AU -10415 Dec 16 j 12:29 12°Υ16'36 29.26753 AU min. Earth dist. min. Earth dist. -10420 Feb 22 j 00:31 27° **₭** 46'46 -10414 Mar 07 j 00:59 10°**Υ**53'20 direct direct -10420 May 23 j 01:23 29° ¥ 43'24 -10414 Jun 05 j 18:38 12°**Υ**49'43 evening set evening set -10420 May 30 j 13:41 0°**℃** max. Earth dist. -10414 Jun 20 j 07:46 13°**Υ**22'11 31.26893 AU -10420 Jun 07 j 18:49 0°**Υ** 18'24 0°06'06 conjunction conjunction -10414 Jun 21 j 08:15 13°**Υ**24'29 0°42'03 -10420 Jun 07 j 18:49 0°**Υ**18'24 0°06'02 minimum elong -10414 Jun 21 j 08:15 13°**Y**24'29 0°42'08 minimum elong -10420 Jun 07 j 12:40 0°**Υ**17'51 -10414 Jul 06 j 18:27 13°**Υ**58'56 behind sun begin morning rise behind sun end -10420 Jun 08 j 00:59 0°**Υ**18'57 -10414 Oct 01 j 00:49 15° Υ 50'54 retrograde max. Earth dist. -10420 Jun 06 j 17:27 0°**Υ** 16'02 31.22839 AU -10414 Dec 18 j 00:58 14° Υ 29'12 0°47'58 opposition -10420 Jun 23 j 08:13 0°**Υ** 53'04 min. Earth dist. -10414 Dec 18 j 23:23 14°**Υ**27'41 29.27090 AU morning rise -10413 Mar 09 i 11:40 13°**Υ**04'23 retrograde -10420 Sep 17 i 12:13 2°**Y**44'44 direct -10413 Jun 08 j 05:14 15°**Υ**'00'42 -10420 Dec 04 i 02:09 opposition 1°\bar{\gamma}22'57 0°09'36 evening set min. Earth dist. $-10420 \text{ Dec } 05 \text{ j } 02:29 \quad 1^{\circ} \Upsilon 21'17 \quad 29.23284 \text{ AU}$ $-10413 \text{ Jun } 23 \text{ j } 18:22 \text{ } 15^{\circ} \Upsilon 35'25 \text{ } 0^{\circ} 47'53$ -10419 Feb 11 i 15:21 30°R ★ conjunction direct -10419 Feb 23 j 12:04 29° **X** 57'46 minimum elong $-10413 \text{ Jun } 23 \text{ i } 18:21 \quad 15^{\circ} \Upsilon 35'24 \quad 0^{\circ} 47'58$ -10419 Mar 07 j 08:07 $0^{\circ}\Upsilon$ max. Earth dist. -10413 Jun 22 j 18:58 15°**Υ**33'13 31.27160 AU -10419 May 25 j 12:17 1°Y54'21 -10413 Jul 09 j 03:49 16°**Υ**09'50 evening set morning rise max. Earth dist. -10419 Jun 09 j 04:12 2°**Υ**26'59 31.23673 AU -10413 Oct 03 j 10:17 18° Υ01'50 retrograde opposition $-10413 \text{ Dec } 20 \text{ j } 12:56 \text{ } 16^{\circ} \Upsilon 40'06 \text{ } 0^{\circ} 54'10$ -10419 Jun 10 j 05:06 2°**Υ**29'19 0°12'09 -10413 Dec 21 j 12:06 16° γ38'32 29.27309 AU conjunction min. Earth dist. 0°12'06 -10412 Mar 11 j 00:03 15°**Υ**15'19 minimum elong -10419 Jun 10 j 05:06 2°**Y**29'19 direct behind sun begin -10419 Jun 10 j 00:41 2°**Y**28'55 evening set -10412 Jun 09 j 15:49 17°**Υ**11'33 -10419 Jun 10 j 09:30 2°**Y**29'42 max. Earth dist. -10412 Jun 24 j 04:36 17°**Y**°44'00 31.27346 AU behind sun end -10419 Jun 25 j 18:00 3°**Y**03′57 morning rise -10419 Sep 19 j 22:23 4°**Y**55'39 -10412 Jun 25 j 04:11 17°**Υ**'46'13 0°53'38 retrograde conjunction 3°**Υ**33'55 0°16'06 -10412 Jun 25 j 04:11 17°**Υ**46'13 0°53'45 opposition -10419 Dec 06 j 13:44 minimum elong min. Earth dist. -10419 Dec 07 j 12:55 3°**Y**32'19 29.24119 AU morning rise -10412 Jul 10 j 13:14 18°**Υ**20'35 direct -10418 Feb 26 j 01:30 2°Υ08'48 retrograde -10412 Oct 04 j 22:00 20°**Y**12'38 evening set -10418 May 27 j 23:15 4°**Y**05′22 opposition -10412 Dec 22 j 00:55 18° \bigcap 50'52 1°00'16 min. Earth dist. -10412 Dec 22 j 22:38 18°**Υ**49'23 29.27469 AU -10418 Jun 12 j 15:26 4°**Υ**'40'17 0°18'11 -10411 Mar 13 j 12:57 17°**Υ**26'05 conjunction direct -10418 Jun 12 j 15:26 4°**Υ**'40'17 0°18'11 -10411 Jun 12 j 02:03 19°**Υ**22'15 minimum elong evening set

Planetary Phenomena of Neptune from -10900 through -10398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10411 in astronomical counting style is the year 10412 BCE in historical counting style. -10411 Jun 27 j 13:50 19°**Υ**′56'51 0°59'18 retrograde -10405 Oct 20 j 20:58 5°**8**26'20 conjunction -10411 Jun 27 j 13:49 19°**Υ**56'51 0°59'26 opposition -10404 Jan 07 j 13:48 4°804'26 1°40'04 minimum elong -10411 Jun 26 j 15:14 19°**Υ**54'44 31.27485 AU min. Earth dist. -10404 Jan 08 j 06:22 4°**8**03'19 29.29940 AU max. Earth dist. -10411 Jul 12 j 22:14 20°**Υ**31'12 -10404 Mar 29 j 00:07 2°840'06 direct morning rise $-10411 \text{ Oct } 07 \text{ j } 08:17 \ 22^{\circ} \Upsilon 23'19$ -10404 Jun 27 j 00:16 4°**8**35'53 retrograde evening set -10411 Dec 24 j 13:03 21°**Υ**01'28 1°06'17 opposition -10411 Dec 25 j 11:08 20° Y 59'58 29.27626 AU -10404 Jul 12 j 07:34 5°**8**10'11 1°36'09 min. Earth dist. conjunction -10404 Jul 12 j 07:33 -10410 Mar 16 j 00:14 19°**Y**36'42 5°810'11 1°36'26 direct minimum elong -10410 Jun 14 j 12:17 21°**Y**32'48 -10404 Jul 11 j 14:45 evening set max. Earth dist. 5°**8**08'36 31.30036 AU 5°**8**44'17 morning rise -10404 Jul 27 j 12:09 conjunction -10410 Jun 29 j 23:24 22°**Y**'07'21 1°04'53 retrograde -10404 Oct 22 j 06:34 7°**8**37'05 -10410 Jun 29 j 23:24 22°**Υ**'07'21 1°05'03 -10403 Jan 09 j 02:24 6°**8**15'10 1°45'15 minimum elong opposition -10410 Jun 29 j 01:42 22°**Υ**05'19 31.27659 AU 6°**8**14'01 29.30310 AU max. Earth dist. min. Earth dist. -10403 Jan 09 j 19:24 4°850'54 morning rise -10410 Jul 15 j 07:17 22°**Y**41'39 direct -10403 Mar 31 j 11:37 retrograde -10410 Oct 09 j 18:11 24° Υ33'49 evening set -10403 Jun 29 j 10:10 6°**8**46'38 opposition -10410 Dec 27 j 00:53 23°**Υ**11'57 1°12'12 min. Earth dist. -10410 Dec 27 j 21:24 23°**Υ**°10'33 29.27830 AU conjunction -10403 Jul 14 j 16:45 7°**8**20'53 1°40'55 direct -10409 Mar 18 j 13:57 21°**Y**47'13 minimum elong -10403 Jul 14 j 16:44 7°**と**20'53 1°41'13 evening set -10409 Jun 16 j 22:28 23°**Y**43'15 max. Earth dist. -10403 Jul 13 j 23:59 7°**8**19'18 31.30348 AU max. Earth dist. -10409 Jul 01 j 11:29 24°Υ 15'45 31.27896 AU morning rise -10403 Jul 29 j 20:58 7°**8**54'56 retrograde -10403 Oct 24 j 18:19 9°**8**47'52 conjunction -10409 Jul 02 j 08:54 24° Υ 17'45 1°10'22 opposition -10402 Jan 11 j 14:53 8°**8**25'55 1°50'17 minimum elong -10409 Jul 02 j 08:53 24° Υ 17'45 1°10'33 min. Earth dist. -10402 Jan 12 i 06:21 8°**8**24'53 29.30561 AU morning rise -10409 Jul 17 j 16:15 24°**Υ**52'01 direct -10402 Apr 02 i 23:08 7°**8**01'43 retrograde $-10409 \text{ Oct } 12 \text{ j } 05:26 \ 26^{\circ} \Upsilon 44'15$ evening set -10402 Jul 01 j 20:05 8°**8**57'22 opposition $-10409 \text{ Dec } 29 \text{ j } 12:59 \ 25^{\circ} \Upsilon 22'21 \ 1^{\circ} 18'01$ max. Earth dist. -10402 Jul 16 j 10:01 9°830'04 31.30517 AU min. Earth dist. -10409 Dec 30 j 09:09 25°**Υ**20'59 29.28131 AU -10408 Mar 20 j 01:54 23°**Y**57'40 -10402 Jul 17 j 02:07 9°\begin{align*} 31'35 1°45'33 \end{align*} direct conjunction -10408 Jun 18 j 08:26 25°**Y**53'39 -10402 Jul 17 j 02:06 9°**8**31'35 1°45'52 evening set minimum elong -10402 Aug 01 j 05:47 10°805'37 morning rise -10408 Jul 03 j 18:18 26°**Υ**'28'07 1°15'45 -10402 Oct 27 j 05:08 11°858'39 conjunction retrograde -10408 Jul $$ 03 j 18:17 $$ 26° $\mathbf{\Upsilon}$ 28'07 $$ 1°15'58 minimum elong opposition -10408 Jul 02 j 22:34 26° Υ 26'16 31.28241 AU -10401 Jan 14 j 19:22 10°**8**35'34 29.30678 AU max. Earth dist. min. Earth dist. -10408 Jul 19 j 00:59 27° \begin{pmatrix} \gamma 22'20 \end{pmatrix} -10401 Apr 05 j 09:29 9°**8**12'29 morning rise direct -10408 Oct 13 j 14:34 28°**Y**54'40 -10401 Jul 04 j 05:56 11°**8**08'04 retrograde evening set -10408 Dec 31 j 01:10 27° **Y** 32'45 1° 23'43 opposition -10401 Jul 19 j 11:24 11°**8**42'14 1°50'02 -10408 Dec 31 j 20:15 27° **Y** 31'28 29.28519 AU min. Earth dist. conjunction direct -10407 Mar 22 j 15:12 26°**Y**08'09 minimum elong -10401 Jul 19 j 11:23 11°842'14 1°50'22 evening set -10407 Jun 20 j 18:31 28°**Y**′04'05 max. Earth dist. -10401 Jul 18 j 20:04 11°**8**40'47 31.30564 AU -10407 Jul 05 j 07:49 28° Υ 36'38 31.28672 AU max. Earth dist. morning rise -10401 Aug 03 j 14:36 12°**8**16'14 retrograde -10401 Oct 29 j 15:56 14°**8**09'22 -10407 Jul 06 j 03:36 28°**Y**'38'30 1°21'02 -10400 Jan 16 j 15:56 12°**8**47'19 1°59'51 conjunction opposition -10407 Jul 06 j 03:35 28°**Y**'38'30 1°21'15 min. Earth dist. -10400 Jan 17 j 06:30 12°**8**46'20 29.30659 AU minimum elong -10407 Jul 21 j 09:54 29°**Y**12'41 direct -10400 Apr 06 j 23:25 11°**8**23'10 morning rise -10407 Aug 13 j 07:41 0°8 -10400 Jul 05 j 15:37 13°**8**18'40 evening set -10407 Oct 16 j 00:51 1°805'08 retrograde -10407 Dec 23 i 03:44 30° R**Y** conjunction $-10406 \text{ Jan } 02 \text{ j } 13:18 \ 29^{\circ} \Upsilon 43'13 \ 1^{\circ} 29'18$ opposition minimum elong -10406 Jan 03 j 07:26 29°**Υ**42'00 29.28997 AU -10400 Jul 20 j 05:10 13°851'21 31.30482 AU min. Earth dist. max. Earth dist. direct $-10406 \text{ Mar } 25 \text{ i } 01:42 \text{ } 28^{\circ}\text{°}18'42$ morning rise -10400 Aug 04 j 23:16 14°**8**26'45 -10406 Jun 16 j 10:51 0°8 -10400 Aug 20 j 14:55 15°8 -10406 Jun 23 j 04:19 0°**8**14'35 retrograde -10400 Oct 31 j 03:56 16°819'59 evening set -10399 Jan 16 j 20:45 15°R8 -10399 Jan 18 j 04:39 14°**8**57'51 2°04'23 conjunction -10406 Jul 08 j 12:56 0°848'58 1°26'11 opposition -10406 Jul 08 j 12:56 -10399 Jan 18 j 19:01 14°**8**56'53 29.30551 AU minimum elong 0°848'58 1°26'27 min. Earth dist. -10406 Jul 07 j 19:04 0°**8**47'17 31.29157 AU max. Earth dist. direct -10399 Apr 09 j 11:16 13°**8**33'44 morning rise -10406 Jul 23 j 18:35 1°**8**23'07 -10399 Jun 24 j 09:20 15°**8** retrograde -10406 Oct 18 j 09:23 3°**8**15'41 -10399 Jul 08 j 01:09 15°**8**29'08 evening set -10405 Jan 05 j 01:36 1°**8**53'47 1°34'45 opposition -10405 Jan 05 j 19:35 1°**8**52'34 29.29483 AU -10399 Jul 23 j 05:34 16°**8**03'13 1°58'30 min. Earth dist. conjunction -10405 Mar 27 j 13:39 0°**8**29'21 -10399 Jul 23 j 05:33 16°**8**03'13 1°58'53 direct minimum elong -10405 Jun 25 j 14:22 2°**8**25'11 -10399 Jul 22 j 15:58 16°**8**01'56 31.30337 AU evening set max. Earth dist. morning rise -10399 Aug 07 j 07:52 16°**8**37'09 conjunction -10405 Jul 10 j 22:10 2°**8**59'32 1°31'14 retrograde -10399 Nov 02 j 13:15 18°**8**30'28 minimum elong -10405 Jul 10 j 22:09 2°**8**59'32 1°31'30 max. Earth dist. -10405 Jul 10 j 03:58 2°857'49 31.29630 AU

morning rise

-10405 Jul 26 j 03:26 3°\begin{align*} 33'40 \end{align*}