Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10388 in astronomical counting style is the year 10389 BCE in historical counting style. -10388 Aug 15 i 07:35 9°II59'45 2°31'55 direct -10381 May 20 j 01:21 22°**II**47'23 conjunction -10388 Aug 15 j 07:35 9°**II**59'45 2°32'27 evening set -10381 Aug 15 j 22:43 24°**Д**41'23 minimum elong -10388 Aug 15 j 04:07 9°Д59'26 31.29561 AU max. Earth dist. -10388 Aug 30 j 06:49 10°**Д**33'31 -10381 Aug 30 j 21:35 25°**Ⅲ**15'07 2°39'54 conjunction morning rise -10388 Nov 26 j 14:40 12°**Д**28'26 -10381 Aug 30 j 21:35 25° **Ⅲ**15'07 2°40'29 retrograde minimum elong -10387 Feb 14 j 14:50 11°**Д**05'47 2°43'19 -10381 Aug 31 j 01:43 25°**Ⅲ**15'30 31.26029 AU opposition max. Earth dist. -10387 Feb 14 j 18:28 11°**Д**05'32 29.29517 AU -10381 Sep 14 j 20:54 25°**Ц**48'55 min. Earth dist. morning rise -10387 May 06 j 07:48 9°**Ц**42'24 -10381 Dec 12 j 22:04 27°**II**44'43 direct retrograde -10387 Aug 02 j 16:57 11°**II**36'58 -10380 Mar 02 j 10:05 26°**Ⅲ**21'32 2°51'01 evening set opposition min. Earth dist. -10380 Mar 02 j 05:33 26°**Д**21'50 29.26092 AU conjunction -10387 Aug 17 j 16:24 12°**I**I10'44 2°33'44 direct -10380 May 21 j 13:28 24°**Д**58'23 -10387 Aug 17 j 16:23 12°**Ⅲ**10'44 2°34'16 -10380 Aug 17 j 07:48 26°**Д**52'20 minimum elong evening set -10387 Aug 17 j 12:55 12°**П**10'25 31.29027 AU max. Earth dist. morning rise -10387 Sep 01 j 15:42 12°**Д**44'31 conjunction -10380 Sep 01 j 06:31 27°**Д**26'04 2°40'08 retrograde -10387 Nov 29 j 02:40 14°**II**39'31 minimum elong -10380 Sep 01 j 06:31 27° II 26'04 2° 40'43 opposition -10386 Feb 17 j 03:50 13° II 16'47 2°45'08 max. Earth dist. -10380 Sep 01 j 10:40 27°**Ц**26'28 31.25692 AU min. Earth dist. -10386 Feb 17 j 05:46 13°**Ц**16'39 29.28943 AU morning rise -10380 Sep 16 j 06:09 27°**Д**59'53 direct -10386 May 08 j 19:17 11°**Д**53'24 retrograde -10380 Dec 14 j 11:29 29°**Д**55'51 evening set -10386 Aug 05 j 02:01 13°**耳**47'51 opposition -10379 Mar 04 j 23:15 28° **II** 32'38 2°51'08 min. Earth dist. -10379 Mar 04 j 17:40 28°Д33'00 29.25746 AU conjunction -10386 Aug 20 j 01:21 14°**II**21'36 2°35'19 direct -10379 May 24 j 00:21 27°**Д**09'33 -10379 Aug 19 j 16:44 29°**Ⅲ**03'26 minimum elong -10386 Aug 20 j 01:21 14°**II**21'36 2°35'52 evening set max. Earth dist. -10386 Aug 19 j 23:19 14°**Д**21'25 31.28412 AU morning rise -10386 Sep 04 i 00:30 14°Д55'23 conjunction -10379 Sep 03 j 15:39 29°**II**37'11 2°40'07 retrograde -10386 Dec 01 j 11:29 16°**Д**50'30 minimum elong -10379 Sep 03 j 15:39 29°**II**37'11 2°40'43 -10385 Feb 19 j 16:49 15° **II** 27'39 2°46'43 max. Earth dist. -10379 Sep 03 j 21:39 29°ДЗ7'45 31.25307 AU opposition -10385 Feb 19 j 18:46 15°**Д**27'31 29.28325 AU -10379 Sep 13 j 16:58 0°5 min Earth dist -10385 May 11 j 06:50 14°**Д**04'16 -10379 Sep 18 j 15:20 0°9511'02 direct morning rise -10385 Aug 07 j 11:05 15°**Ⅲ**58'37 -10379 Dec 16 j 22:41 2°507'09 evening set retrograde -10378 Mar 07 j 12:28 0°543'53 2°51'01 opposition -10385 Aug 22 j 10:11 16°**II**32'21 2°36'41 min. Earth dist. -10378 Mar 07 j 06:38 0°544'17 29.25317 AU conjunction -10385 Aug 22 j 10:11 16°**Ⅲ**32'21 2°37'14 -10378 Apr 05 j 02:19 30°RⅡ minimum elong -10385 Aug 22 j 09:05 16°**Д**32'15 31.27804 AU -10378 May 26 j 13:07 29°**Ⅲ**20'53 max. Earth dist. direct -10385 Sep 06 j 09:20 17°**Д**06'07 -10378 Jul 14 j 11:01 0°ഇ morning rise -10385 Dec 03 j 22:38 19°**Д**01'21 -10378 Aug 22 j 01:56 1°9514'42 retrograde evening set -10384 Feb 22 j 05:48 17°**I**38'24 2°48'04 opposition -10384 Feb 22 j 05:31 17°**Д**38'25 29.27736 AU -10378 Sep 06 j 00:48 1°548'28 2°39'53 min. Earth dist. conjunction direct -10384 May 12 j 17:51 16°**Д**15'02 minimum elong -10378 Sep 06 j 00:48 1°548'28 2°40'28 evening set -10384 Aug 08 j 19:59 18°**Д**09'16 max. Earth dist. -10378 Sep 06 j 06:45 1°549'02 31.24832 AU morning rise -10378 Sep 21 j 00:47 2°522'20 conjunction -10384 Aug 23 j 18:55 18°**Д**43'00 2°37'50 retrograde -10378 Dec 19 j 11:33 4°518'35 -10384 Aug 23 j 18:55 18°**Ⅲ**43'00 2°38'24 -10377 Mar 10 j 01:31 2°555'17 2°50'38 minimum elong opposition max. Earth dist. -10384 Aug 23 j 18:54 18°**Д**43'00 31.27238 AU min. Earth dist. -10377 Mar 09 j 18:09 2°555'47 29.24782 AU -10384 Sep 07 j 18:06 19°**Ⅲ**16'46 -10377 May 29 j 00:12 1°532'19 morning rise direct -10384 Dec 05 j 10:03 21°**Д**12'09 -10377 Aug 24 j 11:05 3°926'05 retrograde evening set -10383 Feb 23 j 19:00 19°**II**49'06 2°49'10 opposition -10383 Feb 23 j 18:28 19°**Д**49'08 29.27223 AU -10377 Sep 08 i 10:06 min. Earth dist. conjunction 3°959'51 2°39'25 -10377 Sep 08 i 10:06 direct -10383 May 15 j 03:32 18°**Д**25'46 minimum elong 3°959'51 2°40'00 -10377 Sep 08 i 17:06 evening set -10383 Aug 11 j 04:56 20°**Ⅲ**19'55 max. Earth dist. 4°500'31 31.24223 AU morning rise -10377 Sep 23 i 10:17 4°933'46 conjunction -10383 Aug 26 i 03:52 20° II 53'38 2°38'45 retrograde -10377 Dec 21 j 21:36 6°530'09 -10383 Aug 26 i 03:52 20° II 53'38 2°39'19 opposition -10376 Mar 11 j 14:52 5°906'47 2°50'01 minimum elong max. Earth dist. -10383 Aug 26 j 05:36 20°**Д**53'48 31.26768 AU min. Earth dist. -10376 Mar 11 j 07:45 5°507'16 29.24107 AU -10383 Sep 10 j 03:01 21°**Д**27'25 morning rise direct -10376 May 30 j 11:42 3°5643'52 -10383 Dec 07 j 21:40 23° **II** 22'55 -10376 Aug 25 j 20:09 retrograde evening set 5°937'32 -10382 Feb 26 j 07:51 21°**Д**59'49 2°50'02 opposition min. Earth dist. -10382 Feb 26 j 05:15 21°**Д**59'59 29.26792 AU conjunction -10376 Sep 09 j 19:21 6°911'19 2°38'44 -10382 May 17 j 15:46 20°**Ⅲ**36'31 minimum elong -10376 Sep 09 j 19:21 6°5511'19 2°39'19 direct -10382 Aug 13 j 13:56 22°**Ⅲ**30'36 -10376 Sep 10 j 03:02 6°512'03 31.23489 AU evening set max. Earth dist. morning rise -10376 Sep 24 j 19:50 6°9545'15 -10382 Aug 28 j 12:41 23°**Ⅲ**04'19 2°39'26 conjunction retrograde -10376 Dec 23 j 09:27 8°9541'46 -10382 Aug 28 j 12:41 23°**I**I04'19 2°40'01 minimum elong opposition -10375 Mar 14 j 04:04 7°**©**18'19 2°49'09 max. Earth dist. -10382 Aug 28 j 14:41 23°**Ⅲ**04'30 31.26372 AU min. Earth dist. -10375 Mar 13 j 19:11 7°518'55 29.23297 AU morning rise -10382 Sep 12 j 12:04 23°**Ⅲ**38'06 direct -10375 Jun 01 j 22:59 5°955'25 retrograde -10382 Dec 10 j 11:16 25° **I** 33'45 evening set -10375 Aug 28 j 05:21 7°549'00 -10381 Feb 28 j 20:57 24°**П**10'36 2°50'39 opposition min. Earth dist. -10381 Feb 28 j 17:43 24°**Д**10'49 29.26434 AU -10375 Sep 12 j 04:41 8°\$22'48 2°37'48 conjunction

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•	nical year style is used: Th		-	* **				page 3
minimum elong	-10375 Sep 12 j 04:41	-		evening set	-103/6 BCE II			ie.
max. Earth dist.				evening set	-10308 Sep	11 J 20.22	23 300033	
	-10375 Sep 12 j 12:45		31.22617 AU	· · · · · · · · · · · ·	10269 5	26:22.02	220@42125	2025107
morning rise	-10375 Sep 27 j 05:36			conjunction	-10368 Sep	-		
retrograde	-10375 Dec 25 j 21:06		2040102	minimum elong	-10368 Sep	-		
opposition	-10374 Mar 16 j 17:10			max. Earth dist.		5		31.17008 AU
min. Earth dist.	-10374 Mar 16 j 08:39		29.22380 AU	morning rise	-10368 Oct			
direct	-10374 Jun 04 j 08:45			retrograde	-10367 Jan			2022120
evening set	-10374 Aug 30 j 14:21	10-900/23		opposition	-10367 Apr			
	10274 0 14:14 02	100624114	2026140	min. Earth dist.		-		29.16939 AU
conjunction	-10374 Sep 14 j 14:03			direct	-10367 Jun	5		
minimum elong	-10374 Sep 14 j 14:03			evening set	-10367 Sep	14 J 05:37	25°920'19	
max. Earth dist.	-10374 Sep 14 j 23:37		31.21669 AU		10267.0	20:07.47	250654122	2022125
morning rise	-10374 Sep 29 j 15:12			conjunction	-10367 Sep			
retrograde	-10374 Dec 28 j 08:42		2016112	minimum elong	-10367 Sep	5		
opposition	-10373 Mar 19 j 06:10			max. Earth dist.	_	-		31.16470 AU
min. Earth dist.	-10373 Mar 18 j 19:55		29.21400 AU	morning rise	-10367 Oct			
direct	-10373 Jun 06 j 20:58			retrograde	-10366 Jan	-		
evening set	-10373 Sep 01 j 23:20	12°5511'45		min. Earth dist.		5		29.16379 AU
		<u>.</u>		opposition	-10366 Apr	5		2°30'39
conjunction	-10373 Sep 16 j 23:07			direct	-10366 Jun	5		
minimum elong	-10373 Sep 16 j 23:07			evening set	-10366 Sep	16 j 15:02	27°532'13	
max. Earth dist.	-10373 Sep 17 j 08:46		31.20689 AU				_	
morning rise	-10373 Oct 02 j 00:49			conjunction	-10366 Oct	-		
retrograde	-10373 Dec 30 j 22:13			minimum elong	-10366 Oct			
opposition	-10372 Mar 20 j 19:19			max. Earth dist.				31.15885 AU
min. Earth dist.	-10372 Mar 20 j 08:33		29.20441 AU	morning rise	-10366 Oct	9		
direct	-10372 Jun 08 j 06:10				-10366 Nov			
evening set	-10372 Sep 03 j 08:15	14°523'02		retrograde	-10365 Jan			
					-10365 Mar			
conjunction	-10372 Sep 18 j 08:29			opposition	-10365 Apr	-		
minimum elong	-10372 Sep 18 j 08:30	14° © 56'54	2°34'17	min. Earth dist.	-	-		29.15760 AU
max. Earth dist.	-10372 Sep 18 j 20:17	14° © 58'01	31.19759 AU	direct	-10365 Jun	24 j 12:16	27° 9 51'28	
morning rise	-10372 Oct 03 j 10:27	15° © 30'57		evening set	-10365 Sep	19 j 00:18	29°5544'16	
retrograde	-10371 Jan 01 j 09:07	17° 5 27'53			-10365 Sep	26 j 01:01	$0 {\circ} \Omega$	
opposition	-10371 Mar 23 j 08:14	16°504'02	2°43'18					
min. Earth dist.	-10371 Mar 22 j 20:05		29.19548 AU	conjunction	-10365 Oct	5	0° Ω 18′23	
direct	-10371 Jun 10 j 17:52	14°5941'07		minimum elong	-10365 Oct	04 j 03:30	0° Ω 18′23	2°16'56
evening set	-10371 Sep 05 j 17:19	16° © 34'18		max. Earth dist.	-10365 Oct	04 j 21:38		31.15228 AU
				morning rise	-10365 Oct		0° Ω 52'46	
conjunction	-10371 Sep 20 j 17:45	17° 5 08'12	2°31'53	retrograde	-10364 Jan	17 j 23:38	2° Ω 50′29	
minimum elong	-10371 Sep 20 j 17:46	17° 5 08'12	2°32'27	min. Earth dist.	-10364 Apr	07 j 08:36	1° Ω 27'33	29.15036 AU
max. Earth dist.	-10371 Sep 21 j 05:41	17° 5 09'19	31.18926 AU	opposition	-10364 Apr	08 j 02:55	1° Ω 26′18	2°24'01
morning rise	-10371 Oct 05 j 20:21	17° 5 42'17		direct	-10364 Jun	25 j 23:56	0° Ω 03'40	
retrograde	-10370 Jan 03 j 23:14			evening set	-10364 Sep	20 j 09:58	1° Ω 56′24	
opposition	-10370 Mar 25 j 21:11	18° © 15'23	2°41'15					
min. Earth dist.	-10370 Mar 25 j 07:48	18° © 16'18	29.18769 AU	conjunction	-10364 Oct	05 j 13:31	2° Ω 30'34	
direct	-10370 Jun 13 j 04:41	16° © 52'30		minimum elong	-10364 Oct	05 j 13:32	2° Ω 30'34	2°13'37
evening set	-10370 Sep 08 j 02:16	18° 5 45'37		max. Earth dist.	-10364 Oct	06 j 07:07		31.14452 AU
				morning rise	-10364 Oct	20 j 20:07	3° Ω 05′00	
conjunction	-10370 Sep 23 j 03:10	19° © 19'32	2°29'50	retrograde	-10363 Jan	19 j 13:04	5° Ω 02'48	
minimum elong	-10370 Sep 23 j 03:11	19° © 19'32	2°30'25	opposition	-10363 Apr	10 j 15:56	3° £ 38′33	2°20'22
max. Earth dist.	-10370 Sep 23 j 17:06	19° 5 20'51	31.18194 AU	min. Earth dist.	-10363 Apr	09 j 21:47	3° Ω 39'47	29.14198 AU
morning rise	-10370 Oct 08 j 06:06	19° © 53'40		direct	-10363 Jun	28 j 08:46	2° Ω 15'55	
retrograde	-10369 Jan 06 j 11:11	21° © 50'49		evening set	-10363 Sep	22 j 19:28	4° Ω 08'34	
opposition	-10369 Mar 28 j 10:05	20°526'50	2°38'57					
min. Earth dist.	-10369 Mar 27 j 20:05	20° 5 27'46	29.18082 AU	conjunction	-10363 Oct	07 j 23:47	4° Ω 42'47	2°09'35
direct	-10369 Jun 15 j 17:00	19° 5 03'59		minimum elong	-10363 Oct	07 j 23:48	4° Ω 42'47	2°10'06
evening set	-10369 Sep 10 j 11:20	20°557'02		max. Earth dist.	-10363 Oct	08 j 18:50	4° Ω 44'35	31.13554 AU
				morning rise	-10363 Oct	23 j 06:54	5° Ω 17'16	
conjunction	-10369 Sep 25 j 12:34	21° © 30'59	2°27'35	retrograde	-10362 Jan	22 j 00:49	7° Ω 15′08	
	-10369 Sep 25 j 12:34	21° 5 30'59	2°28'09	min. Earth dist.	-10362 Apr	12 j 09:57	5° Ω 52'05	29.13225 AU
minimum elong	-10307 Sep 23 j 12.34		21 17572 ATT	opposition	-10362 Apr	13 i 04·50	5° Ω 50'48	2°16'31
minimum elong max. Earth dist.	-10369 Sep 26 j 02:55	21° © 32'21	31.1/3/3 AU	оррозитон	1050 2 11 p 1	15 1 04.50	3 6630 48	2 1031
•			31.1/3/3 AU	direct	-10362 Jun	-	3 ∂ €30 48 4° Ω 28'09	2 1031
max. Earth dist.	-10369 Sep 26 j 02:55	22° © 05'10	31.1/3/3 AU	* *	_	30 j 20:41		2 1031
max. Earth dist. morning rise	-10369 Sep 26 j 02:55 -10369 Oct 10 j 16:06	22°©05'10 24°©02'26		direct evening set	-10362 Jun	30 j 20:41	4° Ω 28′09	2 10 31
max. Earth dist. morning rise retrograde	-10369 Sep 26 j 02:55 -10369 Oct 10 j 16:06 -10368 Jan 09 j 00:28	22°505'10 24°502'26 22°538'24	2°36'25	direct	-10362 Jun	30 j 20:41 25 j 05:05	4° Ω 28′09	2°05'53
max. Earth dist. morning rise retrograde opposition	-10369 Sep 26 j 02:55 -10369 Oct 10 j 16:06 -10368 Jan 09 j 00:28 -10368 Mar 29 j 23:01	22°S05'10 24°S02'26 22°S38'24 22°S39'28	2°36'25	direct evening set	-10362 Jun -10362 Sep	30 j 20:41 25 j 05:05 10 j 09:49	4° Ω 28'09 6° Ω 20'43	

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10362 in astronomical counting style is the year 10363 BCE in historical counting style. -10362 Oct 11 j 04:26 $6^{\circ}\Omega$ 56'44 31.12548 AU max. Earth dist. min. Earth dist. -10355 Apr 27 j 21:30 21° Ω 17'56 29.06935 AU -10362 Oct 25 i 17:46 7°Ω29'31 direct -10355 Jul 16 j 02:10 19° Ω 53'41 morning rise -10361 Jan 24 j 15:08 9°Ω27'26 -10355 Oct 10 j 01:15 21°**Ω**45'52 retrograde evening set -10361 Apr 15 j 17:40 8°**Ω**03'00 2°12'29 opposition -10361 Apr 14 j 22:13 8° **Ω**04'19 29.12178 AU -10355 Oct 25 j 10:32 22° Ω 20'28 1°35'12 min. Earth dist. conjunction -10361 Jul 03 j 07:14 6°**Ω**40'19 -10355 Oct 25 j 10:32 22° Ω 20'28 1°35'37 direct minimum elong -10361 Sep 27 j 14:37 8°**Ω**32'48 -10355 Oct 26 j 10:12 22° Ω 22'42 31.06517 AU evening set max. Earth dist. -10355 Nov 09 j 23:42 22°**Ω**55'26 morning rise -10361 Oct 12 j 20:03 9° Ω 07'06 2°02'01 -10354 Feb 09 j 07:03 24°**Ω**53'50 conjunction retrograde -10361 Oct 12 j 20:04 9° Ω 07'06 2°02'31 minimum elong min. Earth dist. -10354 Apr 30 j 10:18 23° **Q**30'40 29.06322 AU -10361 Oct 13 j 16:11 9° Ω 09'00 31.11483 AU max. Earth dist. opposition -10354 May 01 j 09:54 23°Ω29'03 1°39'03 -10361 Oct 28 j 04:36 9°**Ω**41'42 -10354 Jul 18 j 10:19 22°**Ω**06'27 morning rise direct -10360 Jan 27 j 03:16 11°**Ω**39'40 -10354 Oct 12 j 11:19 23° **Ω**58'38 retrograde evening set min. Earth dist. -10360 Apr 16 j 10:52 10° Ω16'28 29.11104 AU opposition -10360 Apr 17 j 06:29 $10^{\circ}\Omega$ 15'08 2° 08'15 conjunction -10354 Oct 27 j 21:24 24°**Ω**33'18 1°30'11 direct -10360 Jul 04 j 19:14 8°**Q**52'26 minimum elong -10354 Oct 27 j 21:25 24° **Ω**33'18 1°30'35 evening set -10360 Sep 29 j 00:10 10°**Ω**44'49 max. Earth dist. -10354 Oct 28 j 22:35 $24^{\circ}\Omega$ 35'40 31.05901 AU morning rise -10354 Nov 12 j 11:08 25° **Ω**08'19 conjunction -10360 Oct 14 j 06:12 11° Ω 19'10 1°57'58 retrograde -10353 Feb 11 j 19:10 $27^{\circ}\Omega$ 06'49 minimum elong $-10360 \text{ Oct } 14 \text{ j } 06:13 \text{ } 11^{\circ}\Omega 19'10 \text{ } 1^{\circ}58'27$ opposition -10353 May 03 j 22:22 25° Ω 42'01 1°33'37 max. Earth dist. -10360 Oct 15 j 02:33 11° Ω 21'05 31.10440 AU min. Earth dist. -10353 May 02 j 22:11 25° Ω 43'41 29.05678 AU -10353 Jul 20 j 21:37 24° Ω 19'27 morning rise -10360 Oct 29 i 15:33 $11^{\circ}\Omega$ 53'49 direct retrograde -10359 Jan 28 i 16:56 $13^{\circ}\Omega$ 51'50 evening set -10353 Oct 14 j 21:44 26° Ω 11'37 opposition -10359 Apr 19 j 19:09 12°**Ω**27'13 2°03'49 min. Earth dist. -10359 Apr 18 j 22:03 12° Ω 28'39 29.10080 AU conjunction -10353 Oct 30 j 08:23 $26^{\circ}\Omega 46'20$ 1°25'02 -10359 Jul 07 j 06:06 11° Ω 04'29 minimum elong -10353 Oct 30 j 08:24 26° Ω 46'20 1°25'24 direct -10359 Oct 01 j 09:54 12° **Ω**56'49 max. Earth dist. -10353 Oct 31 j 08:52 26° Ω 48'39 31.05246 AU evening set -10353 Nov 14 j 23:02 $27^{\circ}\Omega$ 21'25 morning rise -10359 Oct 16 j 16:32 13° Ω 31'12 1°53'45 -10352 Feb 14 j 09:58 29°**Ω**20'00 conjunction retrograde -10359 Oct 16 j 16:33 13° Ω 31'12 1°54'12 -10352 May 04 j 10:35 $27^{\circ}\Omega$ 56'51 29.04981 AU min. Earth dist. minimum elong -10359 Oct 17 j 13:49 13°**Q**33'13 31.09450 AU -10352 May 05 j 10:54 27° Ω 55'10 1° 28'01 max. Earth dist. opposition -10359 Nov 01 j 02:36 14°**Ω**05'55 -10352 Jul 22 j 07:26 $26^{\circ}\Omega$ 32'38 morning rise direct -10359 Nov 27 j 11:07 15°**Ω** -10352 Oct 16 j 08:12 28° **Ω**24'47 evening set -10358 Jan 31 j 04:33 16°**Ω**04'00 retrograde -10358 Apr 09 j 13:48 15°R**Ω** -10352 Oct 31 j 19:40 28°Ω59'33 1°19'44 conjunction -10358 Apr 21 j 10:47 $14^{\circ}\Omega 40'44$ 29.09137 AU -10352 Oct 31 j 19:41 28° Ω59'34 1°20'05 min. Earth dist. minimum elong -10358 Apr 22 j 07:43 14° **Ω**39'18 1°59'13 max. Earth dist. -10352 Nov 01 j 21:05 29° **Ω**01'57 31.04494 AU opposition direct -10358 Jul $09 \text{ j } 17:43 \ 13^{\circ} \Omega 16'35$ morning rise -10352 Nov 16 j 11:00 29°**Ω**34'42 -10358 Sep 29 j 18:37 15°**Ω** -10352 Nov 28 j 05:27 0° M evening set -10358 Oct 03 j 19:35 15°**Ω**08'51 retrograde -10351 Feb 15 j 22:30 1° Mp 33'20 opposition -10351 May 07 j 23:28 0° m 08'29 1°22'18 -10358 Oct 19 j 02:56 15° Ω 43'18 1°49'21 min. Earth dist. -10351 May 06 j 23:35 0° Mp 10'07 29.04159 AU conjunction -10358 Oct 19 j 02:57 15° Ω 43'18 1°49'49 -10351 May 13 j 02:44 30°RΩ minimum elong max. Earth dist. -10358 Oct 20 j 01:15 15° Ω 45'25 31.08577 AU -10351 Jul 24 j 18:41 28°**Ω**45'55 direct -10358 Nov 03 j 13:40 16°**Ω**18'04 -10351 Sep 30 j 16:55 0° mg morning rise -10357 Feb 02 i 18:14 $18^{\circ}\Omega$ 16'13 -10351 Oct 18 j 18:54 retrograde evening set 0°m/38'03 -10357 Apr 24 j 20:14 $16^{\circ}\Omega$ 51'28 1° 54'26 opposition -10357 Apr 23 j 21:28 $16^{\circ}\Omega$ 53'02 29.08308 AU -10351 Nov 03 i 07:03 1° m 12'53 1°14'20 min. Earth dist. conjunction direct -10357 Jul 12 j 05:21 15° Ω 28'46 minimum elong -10351 Nov 03 i 07:04 1° m 12'53 1°14'40 evening set -10357 Oct 06 j 05:17 $17^{\circ}\Omega 21'00$ max. Earth dist. -10351 Nov 04 i 07:54 1° 10 15'14 31.03623 AU morning rise -10351 Nov 18 j 23:11 1° m 48'05 -10357 Oct 21 j 13:11 17° Ω 55'30 1°44'48 retrograde -10350 Feb 18 j 13:01 3° m 46'45 conjunction -10357 Oct 21 j 13:12 17° Ω 55'30 1°45'14 min. Earth dist. -10350 May 09 j 11:14 2° m/23'32 29.03215 AU minimum elong -10357 Oct 22 j 11:50 17° Ω 57'38 31.07806 AU max. Earth dist. opposition -10350 May 10 j 11:47 2° m/21'50 1°16'27 -10350 Jul 27 j 05:27 -10357 Nov 06 j 00:47 18° **Ω**30'20 morning rise direct 0° m 59'15 retrograde -10356 Feb 05 j 05:56 $20^{\circ}\Omega$ 28'34 evening set -10350 Oct 21 j 05:37 2° m 51'21 min. Earth dist. -10356 Apr 25 j 10:31 19° Ω 05'20 29.07585 AU -10356 Apr 26 j 08:57 19° Ω 03'48 1°49'28 -10350 Nov 05 j 18:27 3° m/26'14 1°08'49 opposition conjunction -10356 Jul 13 j 15:01 17°**Ω**41'08 -10350 Nov 05 j 18:28 3° To 26'14 $1^{\circ}09'08$ direct minimum elong -10356 Oct 07 j 15:08 19°**Ω**33'19 -10350 Nov 06 j 19:27 3°My28'35 31.02619 AU evening set max. Earth dist. morning rise -10350 Nov 21 j 11:22 4° Mp 01'30 conjunction -10356 Oct 22 j 23:53 20°**Ω**07'52 1°40'05 retrograde -10349 Feb 21 j 02:03 6° Mp 00'10 minimum elong $-10356 \text{ Oct } 22 \text{ j } 23:54 \text{ } 20^{\circ}\Omega 07'52 \text{ } 1^{\circ}40'31$ min. Earth dist. -10349 May 12 j 00:34 4° Mp 36'49 29.02155 AU max. Earth dist. -10356 Oct 24 j 00:04 20° Ω 10'10 31.07136 AU opposition -10349 May 13 j 00:16 4° mp 35'11 1°10'30 morning rise -10356 Nov 07 j 12:07 20°**Ω**42'46 direct -10349 Jul 29 j 17:48 3° m 12'33 -10355 Feb 06 j 17:37 22°**Ω**41'05 -10349 Oct 23 j 16:11 5° m 04'36 retrograde evening set

-10355 Apr 28 j 21:19 21° Ω 16'18 1°44'21

opposition

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10349 in astronomical counting style is the year 10350 BCE in historical counting style. -10349 Nov 08 i 05:50 5° m 39'32 1°03'12 direct -10342 Aug 13 j 21:20 18° Mp 44'31 conjunction -10349 Nov 08 j 05:51 5° mp 39'32 1°03'29 evening set -10342 Nov 07 j 21:42 20° m 36'32 minimum elong max. Earth dist. -10349 Nov 09 j 07:16 5° mp 41'56 31.01540 AU -10342 Nov 23 j 16:05 21° m 11'48 0°21'41 -10349 Nov 23 j 23:28 6° m 14'51 conjunction morning rise -10348 Feb 23 j 16:28 -10342 Nov 23 j 16:05 21° m 11'48 0°21'50 retrograde 8° Mp 13'32 minimum elong -10342 Nov 24 j 19:07 21° **m** 14'21 30.95446 AU min. Earth dist. -10348 May 13 j 11:43 6° Mp 50'10 29.01040 AU max. Earth dist. -10342 Dec 09 j 14:41 21° **m** 47'29 1°04'27 opposition -10348 May 14 j 12:32 6° Mp 48'27 morning rise direct -10348 Jul 31 j 06:29 5° m 25'45 retrograde -10341 Mar 11 j 08:45 23° Mp 46'17 -10348 Oct 25 j 03:06 evening set 7° **m**) 17'45 min. Earth dist. -10341 May 29 j 22:30 22° m 22'44 28.95195 AU opposition -10341 May 31 j 00:24 22° Mp 20'56 0°19'48 7° m 52'44 0°57'29 conjunction -10348 Nov 09 j 17:20 direct -10341 Aug 16 j 07:44 20° m 58'04 -10341 Nov 10 j 09:17 22° m 50'07 minimum elong -10348 Nov 09 j 17:20 7° m 52'44 0°57'46 evening set max. Earth dist. -10348 Nov 10 j 18:27 7° Mp 55'06 31.00419 AU morning rise -10348 Nov 25 j 11:50 8° m 28'07 conjunction -10341 Nov 26 j 04:16 23° m 25'27 0°15'33 retrograde -10347 Feb 25 j 03:59 10° m 26'47 minimum elong -10341 Nov 26 j 04:16 23° Mp 25'27 0°15'40 min. Earth dist. -10347 May 16 j 00:47 9°My03'16 28.99931 AU behind sun begin -10341 Nov 26 j 02:58 23° m 25'20 opposition -10347 May 17 j 00:42 9°**™**01'37 0°58'17 behind sun end -10341 Nov 26 j 05:34 23° m 25'34 direct -10347 Aug 02 j 16:50 7° m 38'52 max. Earth dist. -10341 Nov 27 j 07:23 23° m 28'00 30.94863 AU evening set -10347 Oct 27 j 13:55 9° m 30'49 morning rise -10341 Dec 12 j 03:31 24° m 01'11 retrograde -10340 Mar 12 j 22:10 26° m 00'02 conjunction -10347 Nov 12 j 05:01 10° m 05'51 0°51'41 min. Earth dist. -10340 May 31 j 11:34 24° m 36'24 28.94601 AU minimum elong -10347 Nov 12 j 05:01 10° m 05'51 0°51'57 opposition -10340 Jun 01 i 12:20 24° m 34'41 0°13'12 max. Earth dist. -10347 Nov 13 j 07:18 10° m 08'20 30.99340 AU direct -10340 Aug 17 j 19:19 23° m 11'49 morning rise -10347 Nov 28 i 00:05 10° m 41'17 evening set -10340 Nov 11 j 21:09 25° m 03'56 retrograde -10346 Feb 27 i 16:03 12° m 39'57 -10346 May 18 j 11:41 11° Mp 16'26 28.98880 AU -10340 Nov 27 j 16:51 25° m 39'18 0°09'23 min. Earth dist. conjunction -10346 May 19 j 12:43 11° m 14'42 0°52'03 -10340 Nov 27 j 16:51 25° m 39'18 minimum elong opposition -10346 Aug 05 j 04:58 9° m 51'54 -10340 Nov 27 j 11:26 25° m/38'49 behind sun begin direct -10346 Oct 30 j 00:50 11° m 43'50 -10340 Nov 27 j 22:16 25° m 39'48 behind sun end evening set max. Earth dist. -10340 Nov 28 j 19:54 25° m 41'51 30.94254 AU -10346 Nov 14 j 16:26 12° m 18'55 0°45'49 -10340 Dec 13 j 16:39 26° m 15'05 conjunction morning rise -10346 Nov 14 j 16:26 12° m 18'55 0°46'03 -10339 Mar 15 j 13:02 28° m 13'57 minimum elong retrograde -10346 Nov 15 j 18:04 12° m/21'19 30.98340 AU max. Earth dist. -10339 Jun 03 j 23:59 26° Mp 48'36 0° 06'35 opposition -10346 Nov 30 j 12:22 12° m 54'23 -10339 Jun 02 j 22:38 26° m 50'22 28.93951 AU morning rise min. Earth dist. -10345 Mar 02 j 05:06 14° m 53'04 -10339 Aug 20 j 07:40 25° m 25'43 retrograde direct -10345 May 21 j 00:03 13° m 29'29 28.97939 AU -10339 Nov 14 j 09:19 27° m 17'54 min. Earth dist. evening set -10345 May 22 j 00:50 13° m 27'46 0°45'44 opposition -10339 Nov 30 j 05:30 27° m 53'19 0°03'12 direct -10345 Aug 07 j 14:07 12° m 04'55 conjunction -10345 Nov 01 j 11:47 13° m 56'51 minimum elong -10339 Nov 30 j 05:29 27° m 53'19 0°03'18 evening set behind sun begin -10339 Nov 29 j 23:00 27° m 52'44 conjunction -10345 Nov 17 j 04:14 14° m 31'58 0°39'52 behind sun end -10339 Nov 30 j 11:58 27° m 53'54 -10345 Nov 17 j 04:14 14° m 31'58 0°40'06 max. Earth dist. -10339 Dec 01 j 07:33 27° m 55'46 30.93554 AU minimum elong -10345 Nov 18 j 07:19 14° Mp 34'31 30.97460 AU -10339 Dec 16 j 05:58 28° m 29'09 max. Earth dist. morning rise -10345 Dec 03 j 00:43 15° m 07'30 -10338 Feb 04 j 00:53 0°**♀** morning rise -10344 Mar 03 j 16:23 17° m 06'12 -10338 Mar 18 j 01:50 0°**£**28'01 retrograde retrograde -10344 May 22 j 11:19 15° m 42'37 28.97113 AU -10338 Apr 29 j 21:17 30°R M min. Earth dist. opposition -10344 May 23 j 12:45 15° m 40'51 0°39'20 desc. node -10338 Jun 04 i 00:13 29° m 06'50 direct -10344 Aug 09 i 01:37 14° m 18'00 opposition -10338 Jun 06 j 11:55 29° m 02'40 -0°00'03 evening set -10344 Nov 02 j 22:59 16° M 09'56 min. Earth dist. -10338 Jun 05 j 12:01 29° m 04'20 28.93207 AU direct -10338 Aug 22 j 18:02 27° m 39'45 -10344 Nov 18 i 16:01 16° m 45'06 0°33'52 -10338 Nov 16 j 21:14 29° m 31'58 conjunction evening set -10344 Nov 18 i 16:01 16° m 45'06 0°34'04 -10338 Nov 29 j 11:07 0°**♀** minimum elong -10344 Nov 19 j 18:25 16° Mp 47'35 30.96705 AU max. Earth dist. -10344 Dec 04 j 13:22 17° mp 20'41 morning rise conjunction -10338 Dec 02 j 18:09 0°**2**07'26 -0°03'09 retrograde -10343 Mar 06 j 06:01 19° m 19'25 minimum elong -10338 Dec 02 j 18:09 0°**2**07'26 0°03'05 -10343 May 24 j 23:06 17° **m** 55'50 28.96408 AU min. Earth dist. behind sun begin -10338 Dec 02 j 11:39 0°**£**06'51 -10343 May 26 j 00:44 17° **m** 54'03 0°32'53 behind sun end -10338 Dec 03 j 00:39 0°₽08'01 opposition -10343 Aug 11 j 10:58 16° M 31'10 -10338 Dec 03 j 20:42 0°**2**09'55 30.92764 AU direct max. Earth dist. -10343 Nov 05 j 10:16 18° m 23'08 0°**ჲ**43'18 evening set morning rise -10338 Dec 18 j 19:03 retrograde -10337 Mar 20 j 15:22 2°**£**42'10 -10343 Nov 21 j 04:01 18° m 58'22 0°27'48 conjunction opposition -10337 Jun 08 j 23:38 1°**2**16'47 -0°06'41 minimum elong -10343 Nov 21 j 04:01 18° m 58'22 0°27'58 min. Earth dist. -10337 Jun 07 j 23:17 1°**2**18'29 28.92363 AU max. Earth dist. -10343 Nov 22 j 07:29 19° m 00'57 30.96037 AU -10337 Aug 06 j 05:26 30°R M morning rise -10343 Dec 07 j 01:55 19° Mp 34'00 direct -10337 Aug 25 j 06:43 29° M 53'49 retrograde -10342 Mar 08 j 17:56 21° m 32'45 -10337 Sep 12 j 23:52 0∘**⊽** -10342 May 27 j 11:17 20° m 09'09 28.95773 AU -10337 Nov 19 j 09:32 1°**≏**46'04 min. Earth dist. evening set

-10342 May 28 j 12:32 20° m 07'24 0°26'22

opposition

Planetary Pheno	omena of Neptune fi	rom -1040	0 through -989	98 (UT), Astrodie	nst AG 18-Feb-2025 14:23,	page 6
					ar 10338 BCE in historical counting	
conjunction	-10337 Dec 05 j 06:53	2° £ 21'34		morning rise	-10330 Jan 03 j 17:09 16° ≏ 21	•
minimum elong	-10337 Dec 05 j 06:53	2° £ 21'34		retrograde	-10330 Apr 05 j 08:02 18° ≏ 20	
behind sun begin	-10337 Dec 05 j 01:23	2° £ 21'05	0 05 10	min. Earth dist.	-10330 Jun 23 j 08:30 16° ♀ 56	
behind sun end	-10337 Dec 05 j 12:22	2° £ 22'04		opposition	-10330 Jun 24 j 07:24 16° ⊆ 55	
max. Earth dist.	-10337 Dec 06 j 07:58		30.91889 AU	direct	-10330 Sep 09 i 10:45 15° ⊆ 31	
morning rise	-10337 Dec 00 j 07:38	2° £ 57'28	30.91889 AU	evening set	-10330 Sep 09 j 10.43 13 = 31 -10330 Dec 05 j 01:15 17° 2 24	
retrograde	-10337 Dec 21 j 08:50 -10336 Mar 22 j 04:54	2 = 3728 4°		evening set	-10330 Dec 03 J 01.13 17 == 24	23
•	-10336 Mai 22 j 04.34 -10336 Jun 10 j 11:18	3° £ 30′54	0012110	agniumation	-10330 Dec 21 j 02:04 18° 2 00	107 0951146
opposition	•			conjunction minimum elong	•	
min. Earth dist.	-10336 Jun 09 j 12:01		28.91468 AU	U	-10330 Dec 21 j 02:03 18° 2 000	
direct	-10336 Aug 26 j 16:34	2° £ 07'52		max. Earth dist.	-10330 Dec 22 j 02:09 18° 2 02	
evening set	-10336 Nov 20 j 21:46	4° ჲ 00'08		morning rise	-10329 Jan 06 j 06:42 18° △ 36	
	10006 0 06:10.51	40.00.5141	001.510.0	retrograde	-10329 Apr 07 j 21:19 20° △ 34	
conjunction	-10336 Dec 06 j 19:51	4° £ 35'41		opposition	-10329 Jun 26 j 18:46 19° ♀ 09	
minimum elong	-10336 Dec 06 j 19:51	4° ≏ 35'41	0°15'29	min. Earth dist.	-10329 Jun 25 j 21:14 19° £ 10	
behind sun begin	-10336 Dec 06 j 18:17	4° £ 35'32		direct	-10329 Sep 11 j 21:06 17° £ 46	
behind sun end	-10336 Dec 06 j 21:25	4° £ 35'49		evening set	-10329 Dec 07 j 14:17 19° 2 38	'46
max. Earth dist.	-10336 Dec 07 j 21:42	4° £ 38'06	30.90979 AU			
morning rise	-10336 Dec 22 j 21:51	5° ≏ 11'37		conjunction	-10329 Dec 23 j 15:40 20° 2 14	'31 -0°57'36
retrograde	-10335 Mar 24 j 15:50	7° £ 10′26		minimum elong	-10329 Dec 23 j 15:39 20° ♀ 14	'31 0°57'44
opposition	-10335 Jun 12 j 22:49	5° - 44'57	-0°19'54	max. Earth dist.	-10329 Dec 24 j 16:10 20° £ 16	'49 30.87192 AU
min. Earth dist.	-10335 Jun 11 j 23:29	5° ≏ 46'36	28.90556 AU	morning rise	-10328 Jan 08 j 20:30 20° ♀ 50	'38
direct	-10335 Aug 29 j 04:46	4° £ 21'51		retrograde	-10328 Apr 09 j 11:55 22° ♀ 49	
evening set	-10335 Nov 23 j 10:11	6° £ 14'09		min. Earth dist.	-10328 Jun 27 j 08:05 21° £ 25	
				opposition	-10328 Jun 28 j 05:50 21° ⊆ 23	
conjunction	-10335 Dec 09 j 08:39	6° £ 49'43	-0°21'38	direct	-10328 Sep 13 j 10:09 20° Ω 00	
minimum elong	-10335 Dec 09 j 08:39	6° £ 49'43		evening set	-10328 Dec 09 j 03:44 21° ⊆ 53	
max. Earth dist.	-10335 Dec 09 j 08:39		30.90089 AU	evening set	-10328 Dec 09 J 03.44 21 == 33	10
	•	7° £ 25'42	30.90069 AU	agniumation	10229 Dec 25 : 05:10 229 0 20	106 1902122
morning rise	-10335 Dec 25 j 11:15			conjunction	-10328 Dec 25 j 05:19 22° \(\Omega\) 25 i 05:19 22° \(\Omega\) 25 i 05:10 22° \(\Omega\) 25 i 0	
retrograde	-10334 Mar 27 j 04:28	9° £ 24'28	20.00500 111	minimum elong	-10328 Dec 25 j 05:19 22° \times 29	
min. Earth dist.	-10334 Jun 14 j 11:05		28.89708 AU	max. Earth dist.	-10328 Dec 26 j 04:05 22° △ 31	
opposition	-10334 Jun 15 j 10:13	7° ≙ 58'57	-0°26'28	morning rise	-10327 Jan 10 j 10:36 23° Ω 05	
direct	-10334 Aug 31 j 14:24	6° ≏ 35'46		retrograde	-10327 Apr 12 j 01:45 25° £ 03	
evening set	-10334 Nov 25 j 22:33	8° ≏ 28'07		opposition	-10327 Jun 30 j 17:08 23° ♀ 38	
				min. Earth dist.	-10327 Jun 29 j 20:44 23° ♀ 39	'54 28.86967 AU
conjunction	-10334 Dec 11 j 21:37	9° ≏ 03'44	-0°27'45	direct	-10327 Sep 15 j 20:43 22° ♀ 15	'01
minimum elong	-10334 Dec 11 j 21:36	9° ჲ 03'44	0°27'48	evening set	-10327 Dec 11 j 17:07 24° ♀ 08	'00
max. Earth dist.	-10334 Dec 12 j 23:03	9° ≙ 06'07	30.89279 AU			
morning rise	-10334 Dec 28 j 00:33	9° £ 39'43		conjunction	-10327 Dec 27 j 19:12 24° ♀ 43	'49 -1°09'02
retrograde	-10333 Mar 29 j 15:57	11° ≏ 38'29		minimum elong	-10327 Dec 27 j 19:11 24° ♀ 43	'49 1°09'13
opposition	-10333 Jun 17 j 21:37		-0°33'00	max. Earth dist.	-10327 Dec 28 j 18:14 24° ♀ 45	
min. Earth dist.	-10333 Jun 16 j 22:59			morning rise	-10326 Jan 13 j 00:31 25° ⊆ 19	
direct	-10333 Sep 03 j 00:34			retrograde	-10326 Apr 14 j 13:45 27° ≏ 18	
evening set	-10333 Nov 28 j 10:59			min. Earth dist.	-10326 Jul 02 j 08:20 25° ♀ 54	
evening sec	10000 1101 20 1 10.05			opposition	-10326 Jul 03 j 04:19 25° ♀ 53	
conjunction	-10333 Dec 14 j 10:32	11° Ω 17'//3	-0°33'50	direct	-10326 Sep 18 j 09:00 24° \(\Omega\) 29	
minimum elong	3					
U	-10333 Dec 14 j 10:32			evening set	-10326 Dec 14 j 06:46 26° 2 22	40
max. Earth dist.	-10333 Dec 15 j 11:19		30.0000/ AU	aamineti	10226 Da- 20 : 00 02 260 2 50	120 1014125
morning rise	-10333 Dec 30 j 14:01			conjunction	-10326 Dec 30 j 09:03 26° 2 58	
retrograde	-10332 Mar 31 j 05:37			minimum elong	-10326 Dec 30 j 09:02 26° £ 58	
min. Earth dist.	-10332 Jun 18 j 09:46			max. Earth dist.	-10326 Dec 31 j 06:05 27° £ 00	
opposition	-10332 Jun 19 j 08:56		-0°39'28	morning rise	-10325 Jan 15 j 14:46 27° Ω 34	
direct	-10332 Sep 04 j 11:18			retrograde	-10325 Apr 17 j 03:28 29° £ 33	
evening set	-10332 Nov 29 j 23:42	12° ≏ 56'05		opposition	-10325 Jul 05 j 15:30 28° ♀ 07	'59 -1°22'45
				min. Earth dist.	-10325 Jul 04 j 20:20 28° ♀ 09	
conjunction	-10332 Dec 15 j 23:42	13° ≏ 31'45	-0°39'52	direct	-10325 Sep 20 j 19:19 26° £ 44	'27
minimum elong	-10332 Dec 15 j 23:41	13° ≏ 31'45	0°39'57	evening set	-10325 Dec 16 j 20:22 28° ♀ 37	'37
max. Earth dist.	-10332 Dec 17 j 00:30	13° ≏ 34'04	30.88064 AU			
morning rise	-10331 Jan 01 j 03:34	14° ≏ 07'48		conjunction	-10324 Jan 01 j 23:06 29° ♀ 13	'28 -1°20'02
retrograde	-10331 Apr 02 j 17:52			minimum elong	-10324 Jan 01 j 23:06 29° ⊆ 13	
opposition	-10331 Jun 21 j 20:12		-0°45'54	max. Earth dist.	-10324 Jan 02 j 20:11 29° ≏ 15	
min. Earth dist.	-10331 Jun 20 j 22:04			morning rise	-10324 Jan 18 j 04:56 29° ♀ 49	
direct	-10331 Sep 06 j 22:44				-10324 Jan 22 j 23:56 0°M	
evening set	-10331 Dec 02 j 12:26			retrograde	-10324 Apr 18 j 15:02 1°M.48	'07
evening set	10551 Dec 02 J 12.20	15 -10 10		min. Earth dist.		'02 28.85941 AU
conjunction	-10331 Dec 18 j 12:57	1501015152	-0°45'51	opposition		'45 -1°28'31
	·			оррознин	•	TJ =1 40 J1
minimum elong max. Earth dist.	-10331 Dec 18 j 12:57			direct	-10324 Jul 20 j 16:07 30°R △	100
man. Earth uist.	-10331 Dec 19 j 13:44	15 ==46 11	30.07074 AU	uncet	-10324 Sep 22 j 06:18 28° 2 59	U)

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10324 in astronomical counting style is the year 10325 BCE in historical counting style. -10324 Nov 22 i 14:22 0°M max. Earth dist. -10317 Jan 18 j 18:44 14° ML57'53 30.84226 AU -10324 Dec 18 j 10:13 0°ML52'24 -10317 Jan 19 j 17:27 15°ML evening set -10317 Feb 03 j 08:38 15°MJ32'29 morning rise conjunction -10323 Jan 03 j 13:12 1°M28'15 -1°25'22 -10317 May 05 j 09:00 17° ML30'30 retrograde -10323 Jan 03 j 13:11 1°M28'15 1°25'38 -10317 Jul 23 j 06:36 16°ML05'19 -2°04'36 minimum elong opposition -10323 Jan 04 j 08:42 1°M30'05 30.85633 AU -10317 Jul 22 j 16:32 16°M 06'19 28.84438 AU max. Earth dist. min. Earth dist. -10323 Jan 19 j 19:17 morning rise 2°M04'25 -10317 Sep 05 j 02:35 15°RML -10323 Apr 21 j 03:53 -10317 Oct 08 j 17:10 14°ML41'16 retrograde 4°Mc02'51 direct -10323 Jul 09 j 13:36 -10317 Nov 10 j 19:37 15°ML opposition 2°M37'28 -1°34'08 -10316 Jan 04 j 12:07 16°MJ35'20 min. Earth dist. -10323 Jul 08 j 19:50 2°M38'44 28.85482 AU evening set direct -10323 Sep 24 j 17:41 1°M13'46 -10323 Dec 21 j 00:03 -10316 Jan 20 j 16:30 17°ML11'16 -1°58'35 evening set 3°ML07'07 conjunction -10316 Jan 20 j 16:29 17°ML11'16 1°58'58 minimum elong conjunction -10322 Jan 06 j 03:17 3°M42'59 -1°30'34 max. Earth dist. -10316 Jan 21 j 07:10 17°ML12'39 30.84407 AU minimum elong -10322 Jan 06 j 03:16 3°M42'59 1°30'50 morning rise -10316 Feb 05 j 23:11 17° ML47'26 max. Earth dist. -10322 Jan 06 j 22:22 3°M44'46 30.85159 AU retrograde -10316 May 06 j 23:34 19°M45'24 morning rise -10322 Jan 22 j 09:29 4°**ጤ**19'09 opposition -10316 Jul 24 j 17:23 18°ML20'17 -2°09'04 retrograde -10322 Apr 23 j 15:05 6°**™**17'30 min. Earth dist. -10316 Jul 24 j 04:04 18°M21'14 28.84659 AU min. Earth dist. -10322 Jul 11 j 08:21 4°M53'16 28.85034 AU direct -10316 Oct 10 j 03:53 16°ML56'13 opposition -10322 Jul 12 j 00:39 4°ML52'07 -1°39'37 evening set -10315 Jan 06 j 02:33 18°M 50'27 direct -10322 Sep 27 j 05:04 3°M28'19 evening set -10322 Dec 23 j 13:42 5°M21'45 conjunction -10315 Jan 22 j 07:11 19°M26'24 -2°02'40 minimum elong -10315 Jan 22 j 07:10 19°M26'24 2°03'05 conjunction -10321 Jan 08 i 17:15 5°M57'38 -1°35'37 max. Earth dist. -10315 Jan 22 j 21:56 19° M27'46 30.84627 AU minimum elong -10321 Jan 08 j 17:14 5°M57'38 1°35'55 morning rise -10315 Feb 07 j 13:40 20°ML02'33 max. Earth dist. -10321 Jan 09 j 11:46 5°M59'22 30.84743 AU retrograde -10315 May 09 j 11:10 22° ML00'27 -10321 Jan 24 j 23:34 6°ML33'48 -10315 Jul 27 j 04:06 20°M 35'26 -2°13'20 morning rise opposition -10321 Apr 26 j 04:34 8°M32'04 min. Earth dist. -10315 Jul 26 j 16:11 20°M36'17 28.84886 AU retrograde -10321 Jul 14 j 11:29 7°ML06'42 -1°44'57 -10315 Oct 12 j 14:51 19°M11'21 opposition direct -10321 Jul 13 j 18:45 7°ML07'53 28.84664 AU -10314 Jan 08 j 17:10 21° ML05'44 min. Earth dist. evening set -10321 Sep 29 j 17:23 direct 5°M42'49 -10321 Dec 26 j 03:43 7°M36'22 -10314 Jan 24 j 21:48 21°M41'40 -2°06'34 evening set conjunction -10314 Jan 24 j 21:47 21°ML41'40 2°06'59 minimum elong -10320 Jan 11 j 07:23 8°ML12'15 -1°40'32 -10314 Jan 25 j 10:39 21°ML42'52 30.84843 AU max. Earth dist. conjunction -10320 Jan 11 j 07:22 8°ML12'15 1°40'50 -10314 Feb 10 j 04:22 22°M17'49 minimum elong morning rise -10320 Jan 12 j 00:55 8°M 13'53 30.84410 AU -10314 May 12 j 00:05 24° ML 15'40 max. Earth dist. retrograde -10320 Jan 27 j 13:52 8°ML48'25 -10314 Jul 29 j 14:53 22°M 50'43 -2°17'23 morning rise opposition retrograde -10320 Apr 27 j 17:05 10°ML46'37 min. Earth dist. -10314 Jul 29 j 03:19 22°M 51'33 28.85087 AU opposition -10320 Jul 15 j 22:19 9°M21'15 -1°50'07 direct -10314 Oct 15 j 02:18 21°M26'36 min. Earth dist. -10320 Jul 15 j 07:08 9°M22'20 28.84408 AU evening set -10313 Jan 11 j 07:41 23°M21'07 direct -10320 Oct 01 j 04:10 7°ML57'18 -10320 Dec 27 j 17:41 9°M50'58 conjunction -10313 Jan 27 j 12:28 23°M 57'04 -2°10'16 evening set -10313 Jan 27 j 12:27 23°M 57'04 2°10'42 minimum elong -10319 Jan 12 j 21:42 10°M26'52 -1°45'17 max. Earth dist. -10313 Jan 28 j 00:35 23°M 58'12 30.84986 AU conjunction -10319 Jan 12 j 21:41 10°M26'52 1°45'38 -10313 Feb 12 j 18:55 24°M33'12 minimum elong morning rise -10319 Jan 13 j 15:24 10°M 28'31 30.84214 AU max. Earth dist. retrograde -10313 May 14 j 11:11 26° M 30'58 -10319 Jan 29 i 04:09 11° ML03'02 morning rise opposition -10313 Aug 01 i 01:48 25° ML06'05 -2°21'15 -10319 Apr 30 i 07:10 13° ML01'09 retrograde min. Earth dist. -10313 Jul 31 j 16:12 25°ML06'46 28.85192 AU opposition -10319 Jul 18 j 09:05 11°M 35'50 -1°55'08 direct -10313 Oct 17 j 13:18 23°M41'54 min. Earth dist. -10319 Jul 17 i 17:36 11°ML36'56 28.84282 AU evening set -10312 Jan 13 j 22:26 25°M36'32 direct -10319 Oct 03 j 17:47 10°ML11'51 -10319 Dec 30 j 07:45 12° ML05'38 conjunction -10312 Jan 30 j 03:20 26°ML12'29 -2°13'46 evening set minimum elong -10312 Jan 30 j 03:20 26°ML12'29 2°14'12 -10312 Jan 30 j 13:55 26°ML13'28 30.85042 AU conjunction -10318 Jan 15 j 11:46 12°ML41'33 -1°49'53 max. Earth dist. minimum elong -10318 Jan 15 j 11:45 12°M 41'33 1°50'14 morning rise -10312 Feb 15 j 09:45 26°ML48'36 max. Earth dist. -10318 Jan 16 j 03:55 12°M 43'03 30.84149 AU retrograde -10312 May 16 j 00:31 28°ML46'15 morning rise -10318 Jan 31 j 18:22 13°ML17'42 opposition -10312 Aug 02 j 12:25 27°M21'25 -2°24'53 -10318 Apr 01 j 19:56 15°M min. Earth dist. -10312 Aug 02 j 02:58 27°M22'05 28.85200 AU -10318 May 02 j 20:23 15° ML15'47 -10312 Oct 19 j 01:16 25°M 57'08 retrograde direct -10318 Jun 03 j 01:08 15°RM -10311 Jan 15 j 13:18 27° ML51'54 evening set -10318 Jul 20 j 19:55 13°M 50'30 -1°59'57 opposition min. Earth dist. -10318 Jul 20 j 05:32 13°ML51'32 28.84303 AU conjunction -10311 Jan 31 j 18:12 28°ML27'50 -2°17'04 direct -10318 Oct 06 j 04:48 12°M26'29 minimum elong -10311 Jan 31 j 18:11 28°M27'50 2°17'33 evening set -10317 Jan 01 j 21:47 14° ML 20'24 max. Earth dist. -10311 Feb 01 j 03:14 28°M28'41 30.84994 AU morning rise -10311 Feb 17 j 00:33 29°ML03'56 -10317 Jan 18 j 02:09 14°M 56'20 -1°54'20 -10311 Mar 16 j 18:57 conjunction

-10311 May 18 j 11:42

1°**₹**01'28

retrograde

-10317 Jan 18 j 02:08 14°M 56'20 1°54'42

minimum elong

•	omena of Neptune fi		-				page 8
Attention, astronom	ical year style is used: The	-	in astronomical co				
	-10311 Jul 22 j 02:56			conjunction	-10304 Feb 18 j 00:55		
opposition	-10311 Aug 04 j 23:14			minimum elong	-10304 Feb 18 j 00:54		
min. Earth dist.	-10311 Aug 04 j 15:51		28.85131 AU	max. Earth dist.	-10304 Feb 18 j 04:06		30.85845 AU
direct	-10311 Oct 21 j 12:56			morning rise	-10304 Mar 05 j 06:14		
	-10310 Jan 14 j 20:43	0° ∡ 7		retrograde	-10304 Jun 03 j 01:50		
evening set	-10310 Jan 18 j 03:50	0° ₰ 07'08		opposition	-10304 Aug 20 j 00:31		
				min. Earth dist.	-10304 Aug 19 j 22:36		28.86344 AU
conjunction	-10310 Feb 03 j 08:54			direct	-10304 Nov 06 j 02:51		
minimum elong	-10310 Feb 03 j 08:53	0° ∡ 743'04		evening set	-10303 Feb 03 j 10:32	15° × ′50′26	
max. Earth dist.	-10310 Feb 03 j 17:28		30.84902 AU				
morning rise	-10310 Feb 19 j 15:04	1° ≯ 19'08		conjunction	-10303 Feb 19 j 15:40		
retrograde	-10310 May 21 j 00:20	3° ∡ 16'32		minimum elong	-10303 Feb 19 j 15:40		
opposition	-10310 Aug 07 j 09:47	1° ₹ 51'44		max. Earth dist.	-10303 Feb 19 j 17:32		30.86430 AU
min. Earth dist.	-10310 Aug 07 j 02:33		28.85030 AU	morning rise	-10303 Mar 07 j 20:52		
direct	-10310 Oct 24 j 03:10	0° ∡ ¹27'15		retrograde	-10303 Jun 05 j 14:47		
evening set	-10309 Jan 20 j 18:35	2° ∡ ¹22'11		opposition	-10303 Aug 22 j 10:54		
				min. Earth dist.	-10303 Aug 22 j 08:54		28.86956 AU
conjunction	-10309 Feb 05 j 23:33	2° ∡ ¹58'07		direct	-10303 Nov 08 j 14:21		
minimum elong	-10309 Feb 05 j 23:32	2° ∡ ¹58'07		evening set	-10302 Feb 06 j 01:15	18° ∡ ′05′18	
max. Earth dist.	-10309 Feb 06 j 06:13		30.84803 AU				
morning rise	-10309 Feb 22 j 05:44	3° ∡ 34'10		conjunction	-10302 Feb 22 j 06:17		
retrograde	-10309 May 23 j 12:47	5° ∡ ³31'26		minimum elong	-10302 Feb 22 j 06:17		
opposition	-10309 Aug 09 j 20:19	4° ∡ °06'38		max. Earth dist.	-10302 Feb 22 j 07:00		30.87044 AU
min. Earth dist.	-10309 Aug 09 j 14:34		28.84970 AU	morning rise	-10302 Mar 10 j 11:17		
direct	-10309 Oct 26 j 14:52	2° ∡ ¹42'03		retrograde	-10302 Jun 08 j 01:30		
evening set	-10308 Jan 23 j 09:11	4° ∡ ³37'05		opposition	-10302 Aug 24 j 21:28		
				min. Earth dist.	-10302 Aug 24 j 21:28		28.87580 AU
conjunction	-10308 Feb 08 j 14:22	5° ∡ 13'00		direct	-10302 Nov 11 j 01:32		
minimum elong	-10308 Feb 08 j 14:21	5° ∡ 13'00		evening set	-10301 Feb 08 j 16:03	20° ∡ °20′16	
max. Earth dist.	-10308 Feb 08 j 21:08		30.84766 AU				
morning rise	-10308 Feb 24 j 20:17	5° ∡ ¹49'02		conjunction	-10301 Feb 24 j 21:09		
retrograde	-10308 May 25 j 01:10	7° ∡ ¹46'09		minimum elong	-10301 Feb 24 j 21:09		
opposition	-10308 Aug 11 j 06:47	6° ≯ 21'22		max. Earth dist.	-10301 Feb 24 j 21:05		30.87649 AU
min. Earth dist.	-10308 Aug 11 j 01:30		28.84976 AU	morning rise	-10301 Mar 13 j 01:55		
direct	-10308 Oct 28 j 04:15	4° ≯ 56'42		retrograde	-10301 Jun 10 j 13:50		
evening set	-10307 Jan 24 j 23:55	6° ∡ 751'49		opposition	-10301 Aug 27 j 07:49		
				min. Earth dist.	-10301 Aug 27 j 08:14		28.88151 AU
conjunction	-10307 Feb 10 j 04:57	7° ∡ ¹27'44		direct	-10301 Nov 13 j 15:03		
minimum elong	-10307 Feb 10 j 04:56	7° ∡ ¹27'44	2°28'39	evening set	-10300 Feb 11 j 07:04	22° ∡ ³35′18	
max. Earth dist.	-10307 Feb 10 j 09:41		30.84823 AU				
morning rise	-10307 Feb 26 j 10:52	8° ∡ 03'45		conjunction	-10300 Feb 27 j 12:02		
retrograde	-10307 May 27 j 15:01	10° ∡ *00'44		minimum elong	-10300 Feb 27 j 12:01		
opposition	-10307 Aug 13 j 17:13	8° ∡ ³35'59		max. Earth dist.	-10300 Feb 27 j 09:46		30.88175 AU
min. Earth dist.	-10307 Aug 13 j 12:32	8° ∡ ³36′19	28.85111 AU	morning rise	-10300 Mar 14 j 16:41		
direct	-10307 Oct 30 j 16:23	7° ∡ 11'13		retrograde	-10300 Jun 12 j 02:10		
evening set	-10306 Jan 27 j 14:30	9° ∡ 06'28		opposition	-10300 Aug 28 j 18:26		
				min. Earth dist.	-10300 Aug 28 j 20:35		28.88643 AU
conjunction	-10306 Feb 12 j 19:40	9° ∡ ¹42'23		direct	-10300 Nov 15 j 02:30		
minimum elong	-10306 Feb 12 j 19:39	9° ∡ ¹42'23	2°30'51	evening set	-10299 Feb 12 j 21:51	24° ₹ ′50′20	
max. Earth dist.	-10306 Feb 13 j 00:44		30.85017 AU				
morning rise	-10306 Mar 01 j 01:15	10° ∡ 18′22		conjunction	-10299 Mar 01 j 02:54		
retrograde	-10306 May 30 j 01:51			minimum elong	-10299 Mar 01 j 02:54		
opposition	-10306 Aug 16 j 03:42			max. Earth dist.	-10299 Mar 01 j 00:15		30.88616 AU
min. Earth dist.	-10306 Aug 16 j 00:04	10° ∡ 50'47	28.85383 AU	morning rise	-10299 Mar 17 j 07:12	26° ∡ ¹02'05	
direct	-10306 Nov 02 j 04:28	9° ∡ ¹25'43		retrograde	-10299 Jun 14 j 14:20	27° ∡ 58′09	
evening set	-10305 Jan 30 j 05:02	11° ∡ ¹21'04		opposition	-10299 Aug 31 j 04:54		
				min. Earth dist.	-10299 Aug 31 j 07:53		28.89037 AU
conjunction	-10305 Feb 15 j 10:08			direct	-10299 Nov 17 j 16:21		
minimum elong	-10305 Feb 15 j 10:07			evening set	-10298 Feb 15 j 12:43	27° ∡ "05′16	
max. Earth dist.	-10305 Feb 15 j 13:33		30.85368 AU				
morning rise	-10305 Mar 03 j 15:44			conjunction	-10298 Mar 03 j 17:34		
retrograde	-10305 Jun 01 j 14:50	14° ₹ 29'41		minimum elong	-10298 Mar 03 j 17:33		
opposition	-10305 Aug 18 j 14:05	13° ₹ 05'05	-2°43'52	max. Earth dist.	-10298 Mar 03 j 12:28		30.88986 AU
min. Earth dist.	-10305 Aug 18 j 10:29	13° ₹ 05′20	28.85808 AU	morning rise	-10298 Mar 19 j 21:49		
direct	-10305 Nov 04 j 16:12				-10298 May 20 j 12:40		
evening set	-10304 Feb 01 j 19:45	13° ∡ ³35'42		retrograde	-10298 Jun 17 j 04:03		
					-10298 Jul 14 j 21:43	30°R. ✓	

Attention, astronom		10111 10-10	u through -989	/8 (∪1), Astroqiei	nst AG 18-Feb-2025 14:23, page 9
	nical year style is used: The				ir 10299 BCE in historical counting style.
opposition	-10298 Sep 02 j 15:18	28° ∡ ¹48'53	-2°50'39	conjunction	-10291 Mar 19 j 22:04 13°♂21'32 -2°34'58
min. Earth dist.	-10298 Sep 02 j 19:13	28° ∡ ¹48'37	28.89395 AU	minimum elong	-10291 Mar 19 j 22:04 13°る21'32 2°35'34
direct	-10298 Nov 20 j 05:23			max. Earth dist.	-10291 Mar 19 j 11:14 13°る20'32 30.93090 AU
evening set	-10297 Feb 18 j 03:13	29° ∡ ¹20'04		morning rise	-10291 Apr 05 j 00:45 13°る57'13
				retrograde	-10291 Jul 02 j 09:59 15°る52'02
conjunction	-10297 Mar 06 j 08:14	29° ₹ 55'56	-2°39'35	opposition	-10291 Sep 17 j 15:39 14°る28'31 -2°44'54
minimum elong	-10297 Mar 06 j 08:14	29° ₹ 55'56	2°40'10	min. Earth dist.	-10291 Sep 18j01:04 14°る27'51 28.93823 AU
max. Earth dist.	-10297 Mar 06 j 03:08	29° ₹ 55′28	30.89328 AU	direct	-10291 Dec 05 j 16:54 13° ⋜ 03'03
	-10297 Mar 08 j 03:57	8°0		evening set	-10290 Mar 06 j 07:49 14°る59'51
morning rise	-10297 Mar 22 j 12:09	0° る 31'44			
retrograde	-10297 Jun 19 j 14:27	2° る 27'29		conjunction	-10290 Mar 22 j 12:18 15°♂35'39 -2°33'22
opposition	-10297 Sep 05 j 01:44	1° る 03'32	-2°50'36	minimum elong	-10290 Mar 22 j 12:18 15°♂35'39 2°33'57
min. Earth dist.	-10297 Sep 05 j 07:05	1° る 03'09	28.89731 AU	max. Earth dist.	-10290 Mar 22 j 01:31 15°♂34'39 30.94120 AU
	-10297 Oct 17 j 01:43	30°₹ ҂ 7		morning rise	-10290 Apr 07 j 14:39 16°る11'19
direct	-10297 Nov 22 j 18:34	29° ₹ 38'19		retrograde	-10290 Jul 04 j 21:10 18° 정 06'00
	-10297 Dec 29 j 00:10	0° ප		opposition	-10290 Sep 20 j 01:59 16°₹42'36 -2°43'04
evening set	-10296 Feb 20 j 17:56	1° る 34'41		min. Earth dist.	-10290 Sep 20 j 12:04 16°る41'53 28.94856 AU
				direct	-10290 Dec 08 j 06:32 15° ♂ 17'08
conjunction	-10296 Mar 07 j 22:45	2° る 10'33	-2°39'25	evening set	-10289 Mar 08 j 22:09 17°る14'01
minimum elong	-10296 Mar 07 j 22:45	2° る 10'33	2°39'59		
max. Earth dist.	-10296 Mar 07 j 15:39	2° る 09'53	30.89686 AU	conjunction	-10289 Mar 25 j 02:24 17°₹49'49 -2°31'32
morning rise	-10296 Mar 24 j 02:37	2° る 46'20		minimum elong	-10289 Mar 25 j 02:25 17° ⋜ 49'49 2°32'07
retrograde	-10296 Jun 21 j 03:24	4° ප 41'54		max. Earth dist.	-10289 Mar 24 j 13:27 17°₹48'37 30.95156 AU
opposition	-10296 Sep 06 j 11:56	3° る 17'59	-2°50'17	morning rise	-10289 Apr 10 j 04:41 18°る25'27
min. Earth dist.	-10296 Sep 06 j 17:29	3° る 17'35	28.90118 AU	retrograde	-10289 Jul 07 j 10:11 20°る20'02
direct	-10296 Nov 24 j 07:11	1° る 52'41		opposition	-10289 Sep 22 j 12:26 18°♂56'43 -2°40'59
evening set	-10295 Feb 22 j 08:25	3° ⋜ 49'07		min. Earth dist.	-10289 Sep 22 j 23:22 18°중55'57 28.95874 AU
				direct	-10289 Dec 10 j 19:12 17°る31'15
conjunction	-10295 Mar 10 j 13:16	4° る 24'58	-2°39'00	evening set	-10288 Mar 10 j 12:25 19°る28'13
minimum elong	-10295 Mar 10 j 13:16	4° る 24'59			
max. Earth dist.	-10295 Mar 10 j 06:07	4° る 24'19	30.90104 AU	conjunction	-10288 Mar 26 j 16:43 20°る04'01 -2°29'29
morning rise	-10295 Mar 26 j 16:46	5°る00'44		minimum elong	-10288 Mar 26 j 16:43 20°₹04'01 2°30'02
retrograde	-10295 Jun 23 j 14:15	6° පි 56'08		max. Earth dist.	-10288 Mar 26 j 03:41 20°중02'48 30.96136 AU
opposition	-10295 Sep 08 j 22:24	5° ප 32'16	-2°49'43	morning rise	-10288 Apr 11 j 18:34 20°る39'37
min. Earth dist.	-10295 Sep 09 j 05:30		28.90591 AU	retrograde	-10288 Jul 08 j 20:49 22°る34'03
direct	-10295 Nov 26 j 18:39	4° ප 06'54		opposition	-10288 Sep 23 j 23:00 21°る10'50 -2°38'39
evening set	-10294 Feb 24 j 22:40	6° る 03'23		min. Earth dist.	-10288 Sep 24 j 11:29 21°중09'57 28.96801 AU
				direct	-10288 Dec 12j08:17 19°る45'22
conjunction	-10294 Mar 13 j 03:23	6° る 39'14		evening set	-10287 Mar 13 j 02:47 21° පි42'23
minimum elong	-10294 Mar 13 j 03:23	6° る 39'14			<u>_</u>
max. Earth dist.	-10294 Mar 12 j 19:02		30.90645 AU	conjunction	-10287 Mar 29 j 06:48 22°중18'10 -2°27'12
morning rise	-10294 Mar 29 j 06:46	7° る 14'58		minimum elong	-10287 Mar 29 j 06:49 22°중18'10 2°27'45
retrograde	-10294 Jun 26 j 01:57	9° ට 10'13		max. Earth dist.	-10287 Mar 28 j 15:33 22° 중16'45 30.97026 AU
opposition	-10294 Sep 11 j 08:40	7° る 46'25		morning rise	-10287 Apr 14 j 08:34 22°중53'45
min. Earth dist.	-10294 Sep 11 j 15:20		28.91195 AU	retrograde	-10287 Jul 11 j 10:06 24°₹48′02
direct	-10294 Nov 29 j 06:44	6° る 20'59		opposition	-10287 Sep 26 j 09:32 23°₹24'54 -2°36'06
evening set	-10293 Feb 27 j 13:00	8° る 17'33		min. Earth dist.	-10287 Sep 26 j 22:18 23°₹24′00 28.97639 AU
	1020234 15:17.10	00750100	2027120	direct	-10287 Dec 14 j 21:26 21° ₹59'24
conjunction	-10293 Mar 15 j 17:40	8°る53'23		evening set	-10286 Mar 15 j 16:44 23° ⋜ 56'27
minimum elong	-10293 Mar 15 j 17:40	8°る53'23			1000634 01:00.47 0407004 00044
max. Earth dist.	-10293 Mar 15 j 08:38		30.91317 AU	conjunction	-10286 Mar 31 j 20:47 24° ₹32'14 -2°24'41
morning rise	-10293 Mar 31 j 20:47	9° る 29'06		minimum elong	-10286 Mar 31 j 20:48 24° \(\frac{7}{32} \) 14 2°25' 15
retrograde	-10293 Jun 28 j 11:19		20.45140	max. Earth dist.	-10286 Mar 31 j 05:19 24° ₹30'47 30.97812 AU
opposition	-10293 Sep 13 j 18:56			morning rise	-10286 Apr 16 j 22:10 25° ₹07'47
min. Earth dist.	-10293 Sep 14 j 03:12		28.91946 AU	retrograde	-10286 Jul 13 j 20:52 27° ₹ 01'55
direct	-10293 Dec 01 j 17:53	8°る35'00		opposition	-10286 Sep 28 j 20:10 25° ₹38'51 -2°33'18
evening set	-10292 Mar 01 j 03:19	10.031.38		min. Earth dist.	-10286 Sep 29 j 10:48 25° \(\frac{3}{3}7'48 \) 28.98376 AU
	1020234 17:07.50	11070700	2027/20	direct	-10286 Dec 17 j 09:56 24° 5 13'18
conjunction	-10292 Mar 17 j 07:58			evening set	-10285 Mar 18 j 06:50 26° ₹ 10′23
	-10292 Mar 17 j 07:58			aaminyti	10295 Amr. 02:10:42 200\\ 40100 2001150
minimum elong			30.92148 AU	conjunction	-10285 Apr 03 j 10:42 26°정46'09 -2°21'59 -10285 Apr 03 j 10:42 26°정46'09 2°22'32
max. Earth dist.	-10292 Mar 16 j 22:29	110 2 / 2010		minimum elong	=10/83 ADE US 1 10/47 76*7546*09 7*7737
max. Earth dist.	-10292 Apr 02 j 10:51			_	
max. Earth dist. morning rise retrograde	-10292 Apr 02 j 10:51 -10292 Jun 29 j 22:42	13° පි 38'06	2046120	max. Earth dist.	-10285 Apr 02 j 17:33 26°₹44'33 30.98525 AU
max. Earth dist. morning rise retrograde opposition	-10292 Apr 02 j 10:51 -10292 Jun 29 j 22:42 -10292 Sep 15 j 05:16	13° ප 38'06 12° ප 14'29		max. Earth dist. morning rise	-10285 Apr 02 j 17:33 26°중44'33 30.98525 AU -10285 Apr 19 j 11:57 27°중21'41
max. Earth dist. morning rise retrograde opposition min. Earth dist.	-10292 Apr 02 j 10:51 -10292 Jun 29 j 22:42 -10292 Sep 15 j 05:16 -10292 Sep 15 j 13:25	13°ප38'06 12°ප14'29 12°ප13'54		max. Earth dist. morning rise retrograde	-10285 Apr 02 j 17:33 26°중44'33 30.98525 AU -10285 Apr 19 j 11:57 27°중21'41 -10285 Jul 16 j 08:25 29°중15'39
max. Earth dist. morning rise retrograde opposition	-10292 Apr 02 j 10:51 -10292 Jun 29 j 22:42 -10292 Sep 15 j 05:16	13°338'06 12°314'29 12°313'54 10°349'00		max. Earth dist. morning rise	-10285 Apr 02 j 17:33 26°중44'33 30.98525 AU -10285 Apr 19 j 11:57 27°중21'41

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10285 in astronomical counting style is the year 10286 BCE in historical counting style. -10285 Dec 19 j 23:03 26°**පි**27'02 direct conjunction -10278 Apr 19 j 08:15 12°≈19'23 -1°57'24 -10284 Mar 19 j 20:50 28°る24'08 minimum elong -10278 Apr 19 j 08:16 12°≈19'23 1°57'53 evening set max. Earth dist. -10284 Apr 04 j 06:40 28° 중58'13 30.99180 AU morning rise -10278 May 05 j 07:38 12°≈54'46 -10278 Jul 31 j 11:53 14°≈47'49 retrograde -10284 Apr 05 j 00:35 28°₹59'53 -2°19'03 -10278 Oct 16 j 08:04 13°≈25'16 -2°03'19 conjunction opposition -10284 Apr 05 j 00:35 28°る59'53 2°19'36 minimum elong min. Earth dist. -10278 Oct 17 j 02:29 13°≈23'59 29.05152 AU -10284 Apr 21 j 01:30 29°る35'24 morning rise direct -10277 Jan 04 j 12:50 11°≈59'37 -10284 May 02 j 16:01 0°≈ evening set -10277 Apr 05 j 18:49 13°≈56'54 -10284 Jul 17 j 17:52 1°≈29'12 retrograde opposition -10284 Oct 02 j 17:04 0°≈06'13 -2°27'04 conjunction -10277 Apr 21 j 21:24 14°≈32'34 -1°53'09 min. Earth dist. -10284 Oct 03 j 09:23 0°≈05'04 28.99698 AU minimum elong -10277 Apr 21 j 21:25 14°≈32'34 1°53'36 -10284 Oct 06 j 09:12 30°R ₹ -10277 Apr 21 j 00:09 14°≈30'35 31.05577 AU max. Earth dist. -10284 Dec 21 j 10:31 28°₹40'35 direct -10277 May 04 j 05:24 15°≈ -10283 Mar 04 j 07:10 0°**≈** morning rise -10277 May 07 j 20:18 15°≈07'55 evening set -10283 Mar 22 j 10:30 0°≈37'42 retrograde -10277 Aug 02 j 22:44 17°≈00'52 opposition -10277 Oct 18 j 18:44 15°≈38'26 -1°58'40 conjunction -10283 Apr 07 j 14:07 1°≈13'26 -2°15'56 min. Earth dist. -10277 Oct 19 j 14:49 15°≈37'01 29.06269 AU minimum elong -10283 Apr 07 j 14:08 1°≈13'26 2°16'28 -10277 Nov 11 j 11:15 15°R≈ max. Earth dist. -10283 Apr 06 j 19:42 1°≈11'43 30.99846 AU direct -10276 Jan 07 j 01:42 14°≈12'49 morning rise -10283 Apr 23 j 14:47 1°≈48'55 -10276 Mar 02 j 04:09 15°≈ retrograde -10283 Jul 20 j 04:29 3°**≈**42'34 evening set -10276 Apr 07 j 08:09 16°≈10'08 opposition -10283 Oct 05 i 03:31 2°≈19'38 -2°23'37 max. Earth dist. -10276 Apr 22 j 11:45 16°≈43'40 31.06678 AU min. Earth dist. -10283 Oct 05 i 19:43 2°≈18'30 29.00369 AU direct -10283 Dec 23 i 23:08 0°≈53'57 conjunction -10276 Apr 23 j 10:22 16°≈45'46 -1°48'44 evening set -10282 Mar 25 j 00:10 2°≈51'04 minimum elong -10276 Apr 23 j 10:23 16°≈45'46 1°49'10 max. Earth dist. -10282 Apr 09 j 08:03 3°≈24'59 31.00554 AU -10276 May 09 j 09:05 17°≈21'07 morning rise -10276 Aug 04 j 10:23 19°≈13'57 retrograde -10282 Apr 10 j 03:33 3°≈26'48 -2°12'37 -10276 Oct 20 j 05:28 17°≈51'36 -1°53'51 conjunction opposition -10282 Apr 10 j 03:33 min. Earth dist. -10276 Oct 21 j 01:15 17°≈50'13 29.07318 AU minimum elong 3°≈26'48 2°13'08 -10282 Apr 26 j 03:59 4°≈02'16 -10275 Jan 08 j 15:08 16°≈26'01 morning rise direct -10282 Jul 22 j 14:44 5°≈55'46 -10275 Apr 09 j 21:13 18°≈23'20 retrograde evening set -10282 Oct 07 j 13:56 4°≈32'53 -2°19'58 opposition -10282 Oct 08 j 07:10 4°≈31'40 29.01126 AU -10275 Apr 25 j 23:12 18°≈58'58 -1°44'09 min. Earth dist. conjunction -10282 Dec 26 j 09:30 3°≈07'10 -10275 Apr 25 j 23:13 18°≈58'58 1°44'34 direct minimum elong -10281 Mar 27 j 13:36 -10275 Apr 25 j 00:04 18°≈56'49 31.07674 AU evening set 5°≈04'19 max. Earth dist. -10275 May 11 j 21:28 19°≈34'16 morning rise -10281 Apr 12 j 16:57 5°≈40'01 -2°09'06 -10275 Aug 06 j 20:17 21°≈27'01 conjunction retrograde minimum elong -10281 Apr 12 j 16:58 5°≈40'01 2°09'36 opposition -10275 Oct 22 j 16:24 20°≈04'44 -1°48'53 max. Earth dist. -10281 Apr 11 j 21:47 5°≈38'14 31.01366 AU min. Earth dist. -10275 Oct 23 j 13:49 20°≈03'14 29.08259 AU morning rise -10281 Apr 28 j 17:03 6°≈15'28 direct -10274 Jan 11 j 02:40 18°≈39'09 retrograde -10281 Jul 25 j 00:39 8°≈08'50 evening set -10274 Apr 12 j 10:18 20°≈36'27 -10281 Oct 10 j 00:27 6°≈46'01 -2°16'06 opposition min. Earth dist. -10281 Oct 10 j 17:54 6°≈44'47 29.01973 AU conjunction -10274 Apr 28 j 12:02 21°≈12'04 -1°39'25 -10281 Dec 28 j 23:17 5°≈20'18 -10274 Apr 28 j 12:03 21°≈12'04 1°39'50 direct minimum elong -10280 Mar 29 j 03:08 7°≈17'28 max. Earth dist. -10274 Apr 27 j 12:13 21°≈09'51 31.08567 AU evening set max. Earth dist. -10280 Apr 13 j 09:25 7°≈51'14 31.02282 AU morning rise -10274 May 14 i 10:01 21°≈47'21 retrograde -10274 Aug 09 i 07:07 23°≈39'58 -10280 Apr 14 i 06:08 7°≈53'09 -2°05'23 -10274 Oct 25 i 03:04 22°≈17'44 -1°43'45 conjunction opposition -10280 Apr 14 j 06:09 minimum elong 7°≈53'09 2°05'53 min. Earth dist. -10274 Oct 26 j 00:33 22°≈16'14 29.09076 AU morning rise -10280 Apr 30 i 06:03 8°≈28'35 direct -10273 Jan 13 i 15:36 20°≈52'08 retrograde -10280 Jul 26 i 12:38 10°≈21'49 -10273 Apr 14 j 23:21 22°≈49'25 evening set -10280 Oct 11 j 10:56 8°≈59'05 -2°12'02 max. Earth dist. -10273 Apr 29 j 23:43 23°≈22'40 31.09333 AU opposition -10280 Oct 12 j 04:33 8°≈57'51 29.02948 AU min. Earth dist. direct -10280 Dec 30 j 11:18 7°≈33'22 conjunction -10273 May 01 j 00:46 23°≈25'00 -1°34'33 -10279 Mar 31 j 16:24 9°≈30'35 evening set minimum elong -10273 May 01 j 00:47 23°≈25'00 1°34'57 -10273 May 16 j 22:25 24°**≈**00'16 morning rise conjunction -10279 Apr 16 j 19:24 10°≈06'15 -2°01'29 retrograde -10273 Aug 11 j 16:39 25°≈52'46 -10279 Apr 16 j 19:25 10°≈06'16 2°01'59 -10273 Oct 27 j 13:56 24°≈30'33 -1°38'28 minimum elong opposition -10279 Apr 15 j 23:21 10°≈04'24 31.03319 AU -10273 Oct 28 j 12:32 24°≈28'58 29.09792 AU max. Earth dist. min. Earth dist. -10279 May 02 j 18:52 10°≈41'40 -10272 Jan 16 j 02:39 23°≈04'55 morning rise direct -10279 Jul 28 j 22:44 12°≈34'48 -10272 Apr 16 j 12:08 25°≈02'10 retrograde evening set opposition -10279 Oct 13 j 21:34 11°≈12'09 -2°07'46 min. Earth dist. -10279 Oct 14 j 16:10 11°≈10'51 29.04019 AU conjunction -10272 May 02 j 13:21 25°≈37'44 -1°29'32 direct -10278 Jan 01 j 23:32 9°≈46'29 minimum elong -10272 May 02 j 13:22 25°≈37'44 1°29'55 evening set -10278 Apr 03 j 05:37 11°≈43'43 max. Earth dist. -10272 May 01 j 12:33 25°≈35'25 31.10014 AU max. Earth dist. -10278 Apr 18 j 10:43 12°≈17'23 31.04441 AU -10272 May 18 j 10:34 26°≈12'57 morning rise

retrograde

-10272 Aug 13 j 01:20 28°≈05'19

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10272 in astronomical counting style is the year 10273 BCE in historical counting style. -10272 Oct 29 i 00:47 26°≈43'07 -1°33'03 direct -10265 Jan 31 j 18:41 8° **★** 28'48 opposition min. Earth dist. -10272 Oct 29 j 23:46 26°≈41'31 29.10424 AU -10265 May 03 j 02:00 10° ¥ 25'50 evening set -10271 Jan 17 j 16:17 25°≈17'28 max. Earth dist. -10265 May 17 j 22:48 10° **€** 58'48 31.15701 AU direct -10271 Apr 19 j 00:53 27°≈14'40 evening set -10271 May 03 j 23:25 27°≈47'45 31.10641 AU -10265 May 19 j 00:37 11° **★** 01'12 -0°51'25 max. Earth dist. conjunction -10265 May 19 j 00:38 11°**米**01'12 0°51'40 minimum elong -10271 May 05 j 01:39 27°≈50'12 -1°24'25 -10265 Jun 03 j 19:06 11° **∺** 36'13 conjunction morning rise -10271 May 05 j 01:40 27°≈50'12 1°24'46 -10265 Aug 29 j 03:10 13°**∺**28'03 minimum elong retrograde -10271 May 20 j 22:37 28°≈25'24 morning rise opposition -10265 Nov 14 j 04:53 12° **★** 06'07 -0°51'56 -10271 Jul 14 j 11:38 0°**∀** min. Earth dist. -10265 Nov 15 j 04:31 12° **★**04'28 29.16278 AU retrograde -10271 Aug 15 j 12:17 0° **∺** 17'39 direct -10264 Feb 03 j 07:38 10° **★** 40'36 -10271 Sep 17 j 03:23 30°R≈ evening set -10264 May 04 j 14:00 12° **∺** 37'38 -10271 Oct 31 j 11:33 28°≈55'26 -1°27'30 -10264 May 19 j 09:42 13°**光** 10'31 31.16748 AU opposition max. Earth dist. min. Earth dist. -10271 Nov 01 j 10:38 28°≈53'50 29.11050 AU direct -10270 Jan 20 j 03:28 27°≈29'45 conjunction -10264 May 20 j 12:06 13°**米** 12'58 -0°45'37 evening set -10270 Apr 21 j 13:10 29°≈26'54 minimum elong -10264 May 20 j 12:06 13°**米** 12'58 0°45'51 -10270 May 06 j 12:02 0°**米** morning rise -10264 Jun 05 j 06:06 13°**米**47'58 retrograde -10264 Aug 30 j 13:02 15°**)** 39'47 conjunction -10270 May 07 j 13:48 0°**)** 02′24 -1°19′10 opposition -10264 Nov 15 j 16:03 14°\ 17'55 -0°45'42 minimum elong -10270 May 07 j 13:49 0°**¥**02'24 1°19'31 min. Earth dist. -10264 Nov 16 j 16:22 14°\(\mathbf{1}6'14\) 29.17308 AU max. Earth dist. -10270 May 06 j 12:25 0°**升**00′02 31.11276 AU direct -10263 Feb 04 j 18:18 12° ¥ 52'28 morning rise -10270 May 23 j 10:16 0°**)**(37'34 evening set -10263 May 07 i 01:52 14° **★**49'29 retrograde -10270 Aug 17 j 21:23 2°**)** 29'43 opposition -10270 Nov 02 j 22:26 1°**)** € 07'31 -1°21'51 conjunction -10263 May 22 j 23:36 15° \(\frac{1}{2} \) 24'48 -0°39'45 min. Earth dist. -10270 Nov 03 j 22:20 1° ₭ 05'51 29.11692 AU minimum elong -10263 May 22 j 23:37 15°\ 24'48 0°39'57 -10270 Dec 19 j 11:52 30°R≈ max. Earth dist. -10263 May 21 j 21:49 15° \(22'24 \) 31.17743 AU direct -10269 Jan 22 j 16:00 29°≈41'48 -10263 Jun 07 j 17:04 15°**¥** 59'46 morning rise -10263 Sep 01 j 21:45 17°**米** 51'34 -10269 Feb 25 j 11:51 0°**米** retrograde -10269 Apr 24 j 01:38 -10263 Nov 18 j 03:16 16° **€** 29'45 -0°39'23 evening set 1°**)** 38'54 opposition -10263 Nov 19 j 03:46 16° **€**28'03 29.18247 AU max. Earth dist. -10269 May 08 j 23:11 2° **H** 11'54 31.11961 AU min. Earth dist. -10262 Feb 07 j 06:59 15°**米** 04'22 direct -10269 May 10 j 01:44 2° **光** 14'22 -1°13'49 -10262 May 09 j 13:45 17°**米**01′21 conjunction evening set -10269 May 10 j 01:45 2°**米** 14'22 1°14'08 -10262 May 24 j 07:46 17° **★** 34'07 31.18631 AU max. Earth dist. minimum elong -10269 May 25 j 21:58 2° **★**49'30 morning rise -10262 May 25 j 10:53 17° **€** 36'39 -0°33'49 -10269 Aug 20 j 09:13 4° **★**41'33 retrograde conjunction -10269 Nov 05 j 09:07 3° **∺** 19'22 -1°16'04 -10262 May 25 j 10:53 17° ★ 36'39 0°34'00 opposition minimum elong -10269 Nov 06 j 08:21 3° **∺** 17'45 29.12416 AU -10262 Jun 10 j 04:01 18° **∺** 11'35 min. Earth dist. morning rise direct -10268 Jan 25 j 05:20 1°**米**53'38 retrograde -10262 Sep 04 j 08:49 20°**米**03'21 evening set -10268 Apr 25 j 13:52 3°**米** 50'43 opposition -10262 Nov 20 j 14:29 18°**米**41'34 -0°33'02 min. Earth dist. -10262 Nov 21 j 14:58 18°**米**39'53 29.19077 AU conjunction -10268 May 11 j 13:44 4°**米**26'09 -1°08'21 direct -10261 Feb 09 j 17:15 17°**米** 16'13 -10268 May 11 j 13:44 4° **€**26'10 1°08'40 -10261 May 12 j 01:27 19°**米** 13'11 minimum elong evening set max. Earth dist. -10268 May 10 j 12:07 4°**光**23'46 31.12737 AU -10268 May 27 j 09:22 5°**米**01'15 -10261 May 27 j 22:15 19° **€** 48'26 -0°27'51 morning rise conjunction -10268 Aug 21 j 19:12 6°**)** 53'14 -10261 May 27 j 22:15 19° **€** 48'26 0°28'00 retrograde minimum elong -10268 Nov 06 j 20:09 5° ★ 31'04 -1°10'11 -10261 May 26 j 19:55 19°\ 45'58 31.19395 AU opposition max. Earth dist. -10268 Nov 07 j 20:18 5° \(\frac{1}{2}\)29'23 29.13245 AU -10261 Jun 12 j 14:43 20° **★** 23'20 min. Earth dist. morning rise -10261 Sep 06 j 17:48 22°\cdot\tau15'05 direct -10267 Jan 26 j 18:05 4° + 05'23 retrograde evening set -10267 Apr 28 i 01:56 6° \(\text{02'25} \) opposition -10261 Nov 23 j 01:47 20° \(\)53'20 -0°26'37 max. Earth dist. -10267 May 12 j 23:10 6° \(\frac{4}{35} \)'24 31.13639 AU min. Earth dist. -10261 Nov 24 j 03:12 20°\\$51'35 29.19773 AU direct -10260 Feb 12 j 05:26 19° **★**28'00 conjunction evening set -10267 May 14 j 01:18 6° \(\mathref{H}\) 37'50 -1°02'48 -10260 May 13 j 13:14 21°\color 24'55 6°**¥**37'50 1°03'05 -10267 May 14 j 01:18 max. Earth dist. minimum elong morning rise -10267 May 29 j 20:40 7°**)** 12′54 retrograde -10267 Aug 24 j 06:24 9°\colon 04'49 conjunction -10260 May 29 j 09:21 22° ₩ 00'07 -0°21'51 -10267 Nov 09 j 07:00 7°**)**(42'43 -1°04'11 opposition minimum elong -10260 May 29 j 09:21 22°\mathbf{H}00'07 0°22'00 min. Earth dist. -10267 Nov 10 j 06:04 7°**升**41'07 29.14190 AU morning rise -10266 Jan 29 j 07:16 6°**)** 17'04 -10260 Sep 08 j 05:36 24° **★** 26'42 direct retrograde -10266 Apr 30 j 13:58 -10260 Nov 24 j 13:07 23° **米** 04'56 -0°20'11 evening set 8°**)** 14'06 opposition -10266 May 15 j 11:10 8° ¥ 47'05 31.14636 AU -10260 Nov 25 j 13:48 23° **₭** 03'15 29.20379 AU max. Earth dist. min. Earth dist. -10259 Feb 13 j 18:29 21° **★** 39'37 direct conjunction -10266 May 16 j 13:00 8°**¥**49'30 -0°57'09 evening set -10259 May 16 j 00:33 23° **★** 36'28 minimum elong -10266 May 16 j 13:01 8°**¥**49'30 0°57'26 morning rise -10266 Jun 01 j 07:52 9°**∺**24'32 conjunction -10259 May 31 j 20:18 24° **★** 11'38 -0°15'50 retrograde -10266 Aug 26 j 16:26 11°**米** 16'24 minimum elong -10259 May 31 j 20:18 24° **H** 11'38 0°15'56 -10266 Nov 11 j 17:52 9°**)** 54'23 -0°58'06 behind sun begin -10259 May 31 j 19:34 24° **∺** 11'35 opposition min. Earth dist. -10266 Nov 12 j 17:59 9°**米** 52'42 29.15224 AU behind sun end -10259 May 31 j 21:03 24° **∺** 11'42

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10259 in astronomical counting style is the year 10260 BCE in historical counting style. -10259 May 30 j 17:43 24° \(\frac{1}{2}\)09'10 31.20614 AU opposition -10254 Dec 08 i 09:31 6°Υ11'05 0°18'34 max. Earth dist. -10254 Dec 09 j 09:02 -10259 Jun 16 j 11:48 24° **\(\)**46'28 min. Earth dist. 6°Υ09'28 29.24253 AU morning rise -10259 Sep 10 j 15:20 26° ¥ 38'10 -10253 Feb 27 j 22:17 4°**Y**45′56 retrograde direct -10259 Nov 27 j 00:33 25°**米**16'22 -0°13'44 6°**Y**42′26 -10253 May 29 j 19:01 opposition evening set 7°Υ15'01 31.24669 AU -10259 Nov 28 j 02:16 25° ¥ 14'36 29.20917 AU -10253 Jun 13 j 10:06 min. Earth dist. max. Earth dist. -10258 Feb 16 j 06:53 23° **₭** 51'03 direct -10258 May 18 j 11:57 25°**)** 47'51 -10253 Jun 14 j 11:10 7°**Υ**17'21 evening set conjunction 0°20'28 max. Earth dist. -10258 Jun 02 j 04:02 26° **€** 20'27 31.21146 AU minimum elong -10253 Jun 14 j 11:09 7°**Υ**17'21 0°20'30 7°**Y**51'57 morning rise -10253 Jun 29 j 23:35 9°**Y**43'38 conjunction -10258 Jun 03 j 07:04 26° **★** 22'58 -0°09'48 retrograde -10253 Sep 24 j 03:23 -10258 Jun 03 j 07:04 26° **★** 22'58 0°09'54 0°24'59 minimum elong opposition -10253 Dec 10 j 21:03 8°**Y**21'54 -10258 Jun 03 j 01:48 26° **∺**22'30 -10253 Dec 11 j 19:51 8°**Υ**20'20 29.25156 AU behind sun begin min. Earth dist. 6°**Y**56'50 -10258 Jun 03 j 12:20 26°**∺**23'26 behind sun end direct -10252 Mar 01 j 08:18 morning rise -10258 Jun 18 j 22:12 26° ¥ 57'45 evening set -10252 May 31 j 05:48 8°Y53'18 retrograde -10258 Sep 13 j 02:07 28° ¥49'24 9°**Υ**28'10 0°26'27 opposition -10258 Nov 29 j 11:40 27°**米**27'37 -0°07'16 conjunction -10252 Jun 15 j 21:29 min. Earth dist. -10258 Nov 30 j 12:15 27°**米**25'55 29.21440 AU minimum elong -10252 Jun 15 j 21:28 9°**Y**28′10 0°26'29 direct -10257 Feb 18 j 20:06 26° **米**02'17 max. Earth dist. -10252 Jun 14 j 21:52 9°**Υ**25'58 31.25571 AU evening set -10257 May 20 j 23:11 27° ¥ 59'01 morning rise -10252 Jul 01 j 09:11 10°**Υ**02'44 retrograde -10252 Sep 25 j 12:19 11° Υ 54'29 conjunction -10257 Jun 05 j 17:48 28° **X** 34'05 -0°03'46 opposition $-10252 \text{ Dec } 12 \text{ j } 08:54 \quad 10^{\circ} \Upsilon 32'46 \quad 0^{\circ} 31'22$ minimum elong -10257 Jun 05 j 17:48 28° ★ 34'05 0°03'51 min. Earth dist. $-10252 \text{ Dec } 13 \text{ j } 08:07 \quad 10^{\circ} \Upsilon 31'11 \quad 29.26044 \text{ AU}$ behind sun begin -10257 Jun 05 j 11:24 28° ★33'31 direct $-10251 \text{ Mar } 03 \text{ j } 20:16 \quad 9^{\circ} \Upsilon 07'48$ behind sun end -10257 Jun 06 j 00:12 28° + 34'40 evening set -10251 Jun 02 j 16:35 11° Υ 04'14 max. Earth dist. -10257 Jun 04 j 15:15 28° ¥31'37 31.21677 AU max. Earth dist. -10251 Jun 17 j 07:11 11° Υ 36'47 31.26434 AU -10257 Jun 21 j 08:18 29° ₩ 08'50 morning rise -10257 Jul 16 j 11:48 0°**℃** -10251 Jun 18 j 07:28 11°**Υ**'39'03 0°32'24 conjunction -10257 Sep 15 j 12:24 1° Υ 00'28 -10251 Jun 18 j 07:28 11°**Υ**'39'03 retrograde minimum elong 0°32'28 -10257 Nov 18 j 20:32 30°R € -10251 Jul 03 j 18:47 12°**Υ**13'35 morning rise -10251 Sep 27 j 23:49 14° **Y** 05'24 -10257 Dec 01 j 23:09 29°\dagger38'39 -0°00'48 opposition retrograde -10257 Dec 03 j 00:21 29° **€** 36'55 29.22004 AU -10251 Dec 14 j 20:38 12° Y 43'43 0° 37'42 min. Earth dist. opposition -10256 Jan 15 j 18:27 28°**)** 33'44 -10251 Dec 15 j 18:50 12°**Υ**42'12 29.26868 AU asc. node min. Earth dist. -10256 Feb 21 j 08:44 28°**米** 13'21 -10250 Mar 06 j 07:40 11°**Υ**18'49 direct direct -10256 May 17 j 19:19 0°**Υ** -10250 Jun 05 j 03:21 13°**Υ**15'12 evening set -10256 May 22 j 10:13 0°**Υ**10'00 evening set -10250 Jun 20 j 17:44 13°**Υ**'50'00 0°38'18 max. Earth dist. -10256 Jun 06 j 02:19 0°**Υ**42'37 31.22281 AU conjunction -10250 Jun 20 j 17:43 13°**Υ**50'00 0°38'23 minimum elong conjunction -10256 Jun 07 j 04:14 0°**Υ**45'02 0°02'25 max. Earth dist. -10250 Jun 19 j 18:26 13°**Y**47'49 31.27191 AU minimum elong -10256 Jun 07 j 04:13 0°**Υ**45'02 0°02'21 morning rise -10250 Jul 06 j 04:18 14°**Υ**24'29 behind sun begin -10256 Jun 06 j 21:46 0°**Y**44'27 retrograde -10250 Sep 30 j 09:46 16°**Υ**16'21 behind sun end -10256 Jun 07 j 10:41 0°**Y**45'36 opposition -10250 Dec 17 j 08:29 14° **Y** 54'41 0° 43'59 morning rise -10256 Jun 22 j 18:13 1°**Υ**19'44 min. Earth dist. -10250 Dec 18 j 07:39 14°**Υ**'53'06 29.27569 AU retrograde -10256 Sep 16 j 22:45 3°**Υ**11'21 direct -10249 Mar 08 j 18:49 13°**Υ**29'51 -10256 Dec 03 j 10:36 1°**Y**49'32 0°05'40 -10249 Jun 07 j 14:13 15°**Y**26'13 opposition evening set min. Earth dist. -10256 Dec 04 j 10:40 1°**Υ**47'53 29.22646 AU max. Earth dist. -10249 Jun 22 j 04:11 15°**Υ**′58'44 31.27822 AU -10255 Feb 22 i 22:48 0°**Υ**24'15 direct $-10249 \text{ Jun } 23 \text{ j } 03:50 \ 16^{\circ} \Upsilon 00'57 \ 0^{\circ} 44'09$ evening set -10255 May 24 j 21:16 2°Y20'51 conjunction -10249 Jun 23 j 03:50 16°**Y**00'57 minimum elong $-10255 \text{ Jun } 09 \text{ j } 14:38 \quad 2^{\circ} \Upsilon 55'50 \quad 0^{\circ} 08'27$ -10249 Jul 08 j 13:57 16°**Y**35'23 conjunction morning rise minimum elong -10255 Jun 09 i 14:38 2°**Υ**'55'50 0°08'25 retrograde -10249 Oct 02 i 21:06 18° Υ 27'19 -10255 Jun 09 i 08:56 2° Υ 55'20 behind sun begin opposition $-10249 \text{ Dec } 19 \text{ j } 20:25 \quad 17^{\circ} \Upsilon 05'39 \quad 0^{\circ} 50'12$ -10249 Dec 20 j 18:22 17°**Υ**'04'10 29.28126 AU behind sun end $-10255 \text{ Jun } 09 \text{ j } 20:19 \quad 2^{\circ} \Upsilon 56'21$ min. Earth dist. max. Earth dist. -10255 Jun 08 j 12:45 2°**Υ**53'26 31.22976 AU direct -10248 Mar 10 j 07:45 15°**Υ**40'52 -10255 Jun 25 j 04:06 3°**Y**30′30 evening set -10248 Jun 09 j 00:49 17°**Υ**37'10 morning rise -10255 Sep 19 j 08:07 5°Y22'08 retrograde -10248 Jun 24 j 13:49 18°**Υ**11'52 0°49'56 opposition -10255 Dec 05 j 22:00 4°Υ00'19 0°12'07 conjunction -10248 Jun 24 j 13:49 18°**Υ**11'52 min. Earth dist. -10255 Dec 06 j 22:00 3°**Y**58'40 29.23410 AU minimum elong 0°50'03 -10254 Feb 25 j 09:29 2°Y35'06 max. Earth dist. -10248 Jun 23 j 14:29 18°**Y**′09'41 31.28298 AU direct -10254 May 27 j 08:04 4° Y 31' 38 -10248 Jul 09 j 23:17 18°**Υ**46'16 evening set morning rise 5°**Υ**04'18 31.23790 AU -10254 Jun 11 j 00:29 -10248 Oct 04 j 08:03 20°**Y**38'15 max. Earth dist. retrograde -10248 Dec 21 j 08:33 19° Υ 16'34 0°56'20 opposition conjunction -10254 Jun 12 j 00:59 5°**Υ**06'36 0°14'28 min. Earth dist. -10248 Dec 22 j 07:11 19° Υ 15'02 29.28544 AU minimum elong -10254 Jun 12 j 00:59 5°**Y**06'36 0°14'27 direct -10247 Mar 12 j 20:13 17° **Y** 51'50 behind sun begin -10254 Jun 11 j 22:02 5°**Y**06′20 evening set -10247 Jun 11 j 11:24 19°**Υ**48'04 behind sun end -10254 Jun 12 j 03:56 5°**Y**06'51 -10254 Jun 27 j 13:51 5°**Y**41'13 -10247 Jun 26 j 23:47 20°**Υ**'22'42 0°55'38 morning rise conjunction retrograde -10254 Sep 21 j 16:23 7°**Y**32'52 -10247 Jun 26 j 23:46 20°**Υ**'22'42 0°55'47 minimum elong

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Earth dist. -10246 Jun 28 j 10:30 22°**Υ**31'16 31.28892 AU 6°810'06 morning rise -10240 Oct 21 j 16:33 8°**8**02'45 retrograde -10246 Jun 29 j 09:31 22°**Υ**'33'26 1°01'16 6°**8**40'52 1°41'44 conjunction opposition -10239 Jan 08 j 09:28 -10246 Jun 29 j 09:30 22°**Y**33'26 minimum elong 1°01'25 min. Earth dist. -10239 Jan 09 j 01:55 6°**8**39'45 29.31018 AU -10246 Jul 14 j 17:57 23°**Y**07'45 -10239 Mar 30 j 18:23 5°**8**16'32 morning rise direct -10246 Oct 09 j 04:25 24°**Y**59'50 7°**8**12'17 retrograde evening set -10239 Jun 28 j 19:55 opposition -10246 Dec 26 j 08:26 23°**Y**38'04 1°08'21 max. Earth dist. -10239 Jul 13 j 09:57 7°**8**44'57 31.31131 AU min. Earth dist. -10246 Dec 27 j 06:10 23°**Υ**'36'36 29.29055 AU direct $-10245 \text{ Mar } 17 \text{ j } 21:25 \quad 22^{\circ} \Upsilon 13'23$ conjunction -10239 Jul 14 j 03:07 7°846'34 1°37'40 evening set -10245 Jun 16 j 08:01 24°**Y**09'28 minimum elong -10239 Jul 14 j 03:06 7°**8**46'34 1°37'58 morning rise -10239 Jul 29 j 07:45 8°**8**20'39 conjunction -10245 Jul 01 j 19:10 24° Υ 44'01 1°06'47 retrograde -10239 Oct 24 j 04:29 10°813'25 minimum elong -10245 Jul 01 j 19:09 24°**Y**44'01 1°07'00 opposition -10238 Jan 10 j 21:49 8°851'32 1°46'50 max. Earth dist. -10245 Jun 30 j 21:40 24°**Υ**'42'00 31.29081 AU min. Earth dist. -10238 Jan 11 j 14:37 8°**と**50'24 29.31435 AU morning rise -10245 Jul 17 j 02:55 25°**Υ**18'18 direct -10238 Apr 02 i 05:52 7°**8**27'18 retrograde -10245 Oct 11 j 12:34 27° Υ 10'26 evening set -10238 Jul 01 j 05:47 9°**8**23'01 opposition -10245 Dec 28 j 20:32 25°**Υ**48'38 1°14'13 min. Earth dist. -10245 Dec 29 j 17:39 25°**Υ**47'12 29.29234 AU conjunction -10238 Jul 16 j 12:25 9°857'15 1°42'22 -10244 Mar 19 j 11:02 24°**Y**23'58 minimum elong -10238 Jul 16 j 12:24 9°857'15 1°42'41 direct -10244 Jun 17 j 18:16 26°**Y**19'58 max. Earth dist. -10238 Jul 15 j 20:12 9°**8**55'43 31.31498 AU evening set max. Earth dist. -10244 Jul 02 j 06:49 26°**Υ**52'25 31.29268 AU -10238 Jul 31 j 16:31 10°**8**31'18 morning rise retrograde -10238 Oct 26 j 15:42 12°**8**24'12 -10244 Jul 03 j 04:36 26°**Υ**'54'28 1°12'13 opposition -10237 Jan 13 j 10:17 11°**8**02'18 1°51'46 conjunction -10244 Jul 03 j 04:35 26°**Y**'54'28 1°12'25 -10237 Jan 14 j 01:55 11°**8**01'14 29.31743 AU min. Earth dist. minimum elong -10244 Jul 18 j 11:57 27° **Y** 28'43 -10237 Apr 04 j 19:11 9°**8**38'08 morning rise direct -10244 Oct 12 j 23:33 29° Υ 20'55 -10237 Jul 03 j 15:41 11°**8**33'48 retrograde evening set -10244 Dec 30 j 08:37 27°**Υ**59'04 1°19'58 opposition min. Earth dist. -10244 Dec 31 j 04:32 27°**Υ**'57'43 29.29461 AU -10237 Jul 18 j 21:35 12°**8**08'00 1°46'55 conjunction -10237 Jul 18 j 21:34 12°**8**08'00 1°47'16 -10243 Mar 21 j 21:35 26°**Y**34'26 direct minimum elong -10237 Jul 18 j 05:13 12°**8**06'27 31.31733 AU -10243 Jun 20 j 04:09 28°**Y**30′22 max. Earth dist. evening set morning rise -10237 Aug 03 j 01:16 12°**8**42'01 conjunction -10243 Jul 05 j 14:00 29°**Y**04'49 1°17'33 retrograde -10237 Oct 29 j 02:30 14°\(\begin{align*} \delta 35'02 \end{align*} -10243 Jul 05 j 13:59 29°**Υ**'04'49 1°17'47 minimum elong opposition -10236 Jan 15 j 22:56 13°**8**13'06 1°56'34 -10243 Jul 04 j 18:07 29° $\Upsilon 02$ '57 31.29515 AU max. Earth dist. min. Earth dist. -10236 Jan 16 j 14:24 13°**8**12'04 29.31928 AU morning rise -10243 Jul 20 j 20:39 29°**Y**39'02 direct -10236 Apr 06 j 06:11 11°**8**49'00 -10243 Jul 30 j 14:37 0°8 -10236 Jul 05 j 01:29 13°**8**44'36 evening set retrograde -10243 Oct 15 j 07:56 1°**8**31'20 -10242 Jan 01 j 20:49 0°**8**09'27 1°25'36 conjunction -10236 Jul 20 j 06:56 14°**8**18'45 1°51'19 opposition -10242 Jan 02 j 16:34 0°808'07 29.29749 AU -10236 Jul 20 j 06:55 14°8 18'45 1°51'40 min. Earth dist. minimum elong -10242 Jan 07 j 16:21 30° R**Y** -10236 Jul 19 j 16:04 14°8 17'21 31.31835 AU max. Earth dist. -10242 Mar 24 j 09:48 28° Υ 44'53 -10236 Aug 04 i 10:01 14°852'44 direct morning rise -10236 Aug 07 j 17:38 15°8 -10242 Jun 03 i 01:21 0°8 retrograde -10236 Oct 30 i 11:51 16°845'52 -10242 Jun 22 j 14:15 0°**8**40'45 evening set opposition -10242 Jul 07 j 23:18 1°815'09 1°22'45 min. Earth dist. -10235 Jan 18 j 02:31 15°822'53 29.31957 AU conjunction -10242 Jul 07 j 23:17 1°815'09 1°22'59 -10235 Feb 01 j 10:54 15°R8 minimum elong -10242 Jul 07 j 03:20 1°**8**13'16 31.29847 AU -10235 Apr 08 j 20:21 13°859'50 max. Earth dist. direct -10242 Jul 23 j 05:33 morning rise 1°**8**49'20 -10235 Jun 10 j 05:38 15°**8** -10242 Oct 17 j 18:55 3°**8**41'43 -10235 Jul 07 j 11:17 15°**8**55'20 retrograde evening set opposition -10241 Jan 04 j 08:47 2°**8**19'50 1°31'06 min. Earth dist. -10241 Jan 05 j 02:49 2°**8**18'37 29.30127 AU conjunction -10235 Jul 22 j 16:01 16°**8**29'27 1°55'33 -10241 Mar 26 j 20:18 0°**8**55'20 minimum elong -10235 Jul 22 j 16:00 16°**8**29'27 1°55'57 direct -10241 Jun 25 j 00:10 2°**8**51'09 -10235 Jul 22 j 00:37 16°**8**28'00 31.31787 AU evening set max. Earth dist. -10235 Aug 06 j 18:51 17°**8**03'24 morning rise -10241 Jul 10 j 08:42 3°825'32 1°27'51 -10235 Nov 01 j 23:32 18°**8**56'38 conjunction retrograde -10234 Jan 20 j 00:11 17°**8**34'36 2°05'38 minimum elong -10241 Jul 10 j 08:41 3°**8**25'31 1°28'07 opposition max. Earth dist. -10241 Jul 09 j 14:21 3°**8**23'48 31.30250 AU min. Earth dist. -10234 Jan 20 j 14:08 17°**8**33'39 29.31850 AU morning rise -10241 Jul 25 j 14:17 3°**8**59'40 direct -10234 Apr 11 j 07:50 16°**8**10'33 -10241 Oct 20 j 05:01 5°**8**52'11 -10234 Jul 09 j 20:53 18°**8**05'58 retrograde evening set -10240 Jan 06 j 21:10 4°**8**30'17 1°36'29 max. Earth dist. -10234 Jul 24 j 11:24 18°**8**38'44 31.31601 AU opposition

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Earth dist. conjunction -10233 Apr 13 j 20:29 18°**8**21'09 -10227 Aug 08 j 15:00 3°II51'38 2°23'34 direct minimum elong 3°**П**51'02 31.30454 AU -10233 Jul 12 j 06:32 20°**8**16'27 -10227 Aug 08 j 08:39 evening set max. Earth dist. morning rise -10227 Aug 23 j 14:58 4°**Ⅱ**25'25 6°**Ⅱ**19'40 -10233 Jul 27 j 10:12 20°**8**50'29 2°03'32 -10227 Nov 19 j 12:12 conjunction retrograde 4°**П**57'10 2°34'14 -10233 Jul 27 j 10:11 20°**8**50'29 2°03'57 minimum elong opposition -10226 Feb 07 j 05:41 -10233 Jul 26 j 20:20 20°**8**49'11 31.31330 AU min. Earth dist. -10226 Feb 07 j 12:01 4°**Д**56'44 29.30648 AU max. Earth dist. -10233 Aug 11 j 12:10 21°**8**24'23 -10226 Apr 29 j 04:40 morning rise direct 3°**Ⅲ**33'31 -10226 Jul 26 j 23:10 retrograde -10233 Nov 06 j 18:21 23°**8**17'48 evening set 5°**Ⅲ**28'21 opposition -10232 Jan 25 j 01:26 21°**8**55'35 2°13'59 min. Earth dist. -10232 Jan 25 j 13:43 21°**8**54'46 29.31326 AU conjunction -10226 Aug 10 j 23:43 6°**Ⅲ**02'11 2°25'37 direct -10232 Apr 15 j 07:37 20°\begin{align*} 20°\begin{align*} 231'34 \end{align*} minimum elong -10226 Aug 10 j 23:43 6°**II**02'11 2°26'07 evening set -10232 Jul 13 j 15:49 22°**8**26'46 max. Earth dist. -10226 Aug 10 j 17:12 6°**Ⅱ**01'34 31.30454 AU morning rise -10226 Aug 25 j 23:36 6°**I**I35'57 conjunction -10232 Jul 28 j 19:05 23°800'46 2°07'16 retrograde -10226 Nov 22 j 00:56 8°**Ⅲ**30′22 minimum elong -10232 Jul 28 j 19:04 23°800'46 2°07'41 opposition -10225 Feb 09 j 18:30 7°**I**107'51 2°36'52 max. Earth dist. -10232 Jul 28 j 06:49 22°859'36 31.31019 AU min. Earth dist. -10225 Feb 09 i 23:35 7°**Д**07'31 29.30631 AU morning rise -10232 Aug 12 j 20:34 23°**8**34'38 direct -10225 May 01 i 15:37 5°**Ⅱ**44'17 retrograde -10232 Nov 08 i 04:08 25°**8**28'10 evening set -10225 Jul 29 i 08:21 7°**Ⅲ**39'05 opposition -10231 Jan 26 j 14:12 24°\(\begin{align*} \delta 05'51 & 2°17'52 \end{align*} min. Earth dist. -10231 Jan 27 j 02:32 24°**8**05'01 29.31036 AU -10225 Aug 13 j 08:43 8°II12'53 2°27'59 conjunction -10231 Apr 17 j 18:07 22°**8**41'51 -10225 Aug 13 j 08:42 8°II12'53 2°28'30 direct minimum elong -10231 Jul 16 j 01:12 24°**8**36'57 max. Earth dist. -10225 Aug 13 j 03:56 8°Д12'26 31.30385 AU evening set -10225 Aug 28 j 08:13 8°**Д**46'40 morning rise -10231 Jul 31 j 03:55 25°**8**10'54 2°10'48 -10225 Nov 24 j 10:09 10°**Д**41'14 retrograde conjunction -10231 Jul 31 j 03:54 25°**8**10'54 2°11'15 -10224 Feb 12 j 07:37 9°**Д**18'42 2°39'17 minimum elong opposition -10231 Jul 30 j 16:31 25°**8**09'50 31.30750 AU -10224 Feb 12 j 12:35 9°**Д**18'22 29.30519 AU min. Earth dist. max. Earth dist. -10231 Aug 15 j 05:06 25°**8**44'45 -10224 May 03 j 03:46 7°**Ц**55'13 morning rise direct -10231 Nov 10 j 15:10 27°**8**38'23 -10224 Jul 30 j 17:35 9°**Д**49'56 retrograde evening set -10230 Jan 29 j 02:37 26°**8**16'01 2°21'33 opposition -10224 Aug 14 j 17:32 10°**Ⅲ**23'44 2°30'08 -10230 Jan 29 j 12:47 26°**8**15'20 29.30804 AU min. Earth dist. conjunction -10230 Apr 20 j 06:05 24°**8**52'02 -10224 Aug 14 j 17:31 10°**I**I23'44 2°30'38 direct minimum elong evening set -10230 Jul 18 j 10:31 26°847'04 max. Earth dist. -10224 Aug 14 j 12:48 10°**Д**23'17 31.30217 AU morning rise -10224 Aug 29 j 17:01 10°**Д**57'30 -10230 Aug 02 j 12:45 27°**8**20'59 2°14'09 conjunction retrograde -10224 Nov 25 j 21:26 12°**Д**52'14 minimum elong -10230 Aug 02 j 12:44 27°**8**20'59 2°14'36 opposition -10223 Feb 13 j 20:37 11°**Д**29'39 2°41'28 max. Earth dist. -10230 Aug 02 j 02:13 27°**8**20'00 31.30547 AU min. Earth dist. -10223 Feb 13 j 23:57 11°**Д**29'26 29.30290 AU morning rise -10230 Aug 17 j 13:36 27°**8**54'49 direct -10223 May 05 j 14:50 10°**Д**06'14 retrograde -10230 Nov 13 j 03:00 29°**8**48'35 -10223 Aug 02 j 02:51 12°**Д**00'53 evening set -10229 Jan 31 j 15:21 28°**8**26'09 2°25'02 opposition -10229 Feb 01 j 01:12 28° \(\frac{1}{2}25'29 \) 29.30665 AU -10223 Aug 17 j 02:36 12°**II**34'40 2°32'04 min. Earth dist. conjunction -10229 Apr 22 j 16:37 27°**8**02'14 -10223 Aug 17 j 02:35 12°**II**34'40 2°32'36 direct minimum elong -10229 Jul 20 j 19:36 28°**8**57'11 -10223 Aug 16 j 22:57 12°**Д**34'19 31.29905 AU evening set max. Earth dist. -10223 Sep 01 j 01:53 13°**Д**08'26 morning rise -10223 Nov 28 i 07:54 15°**Ⅲ**03'18 conjunction -10229 Aug 04 j 21:27 29°\begin{align*} 331'05 2°17'19 \end{align*} retrograde -10222 Feb 16 i 09:37 13° II 40'40 2° 43'25 minimum elong -10229 Aug 04 j 21:26 29°\(\mathbf{2}31'05\) 2°17'48 opposition max. Earth dist. -10229 Aug 04 j 12:41 29°\(230'15\) 31.30452 AU min. Earth dist. -10222 Feb 16 i 13:20 13° II 40'25 29.29918 AU -10229 Aug 17 j 17:02 0°**Ⅱ** direct -10222 May 08 j 01:06 12°**Д**17'17 -10229 Aug 19 j 21:56 0°**Д**04'53 -10222 Aug 04 j 12:04 14°**Ⅲ**11'51 morning rise evening set -10229 Nov 15 j 14:08 retrograde 1°**Ⅱ**58'48 opposition -10228 Feb 03 j 04:05 0°Д36'20 2°28'19 conjunction -10222 Aug 19 j 11:35 14°**II**45'37 2°33'47 min. Earth dist. -10228 Feb 03 j 12:04 0°**Д**35'48 29.30610 AU minimum elong -10222 Aug 19 j 11:35 14°II45'37 2°34'19 -10228 Feb 26 j 10:08 30°R8 max. Earth dist. -10222 Aug 19 j 08:36 14°**Д**45'20 31.29469 AU -10228 Apr 24 j 04:56 29°**8**12'30 -10222 Sep 03 j 10:47 15°**Д**19'23 direct morning rise -10228 Jun 18 j 01:04 -10222 Nov 30 j 19:21 17°**I**I14'23 $0^{\circ}\Pi$ retrograde -10228 Jul 22 j 04:51 1°**Ⅱ**07'25 -10221 Feb 18 j 22:37 15°**I**51'40 2°45'08 evening set opposition min. Earth dist. -10221 Feb 19 j 00:28 15°**I**51'33 29.29416 AU conjunction -10228 Aug 06 j 06:11 1°**I**I41'17 2°20'17 direct -10221 May 10 j 13:10 14°**Ⅲ**28'19 minimum elong -10228 Aug 06 j 06:10 1°**I**I41'17 2°20'46 evening set -10221 Aug 06 j 21:06 16°**Ⅲ**22'46 max. Earth dist. -10228 Aug 05 j 21:45 1°**I**40′29 31.30431 AU -10228 Aug 21 j 06:31 2°**I**15′05 -10221 Aug 21 j 20:22 16°**Д**56'31 2°35'16 morning rise conjunction retrograde -10228 Nov 17 j 01:56 4°**Ⅱ**09'09 -10221 Aug 21 j 20:21 16°**Д**56'31 2°35'50 minimum elong

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Earth dist. evening set 1°937'56 -10220 May 11 j 23:16 16°**Д**39'15 direct 2°511'40 2°39'28 -10220 Aug 08 j 06:05 18°**Д**33'36 -10214 Sep 05 j 10:27 evening set conjunction -10214 Sep 05 j 10:27 2°511'40 2°40'03 minimum elong -10220 Aug 23 j 05:18 19°**耳**07′20 2°36′33 -10214 Sep 05 j 16:08 conjunction max. Earth dist. 2°512'13 31.25615 AU -10220 Aug 23 j 05:18 19°**Д**07'20 2°37'06 minimum elong morning rise -10214 Sep 20 j 10:13 2°545'31 -10220 Aug 23 j 04:29 19°**Д**07'15 31.28294 AU max. Earth dist. retrograde -10214 Dec 18 j 15:55 4°5641'33 -10220 Sep 07 j 04:24 19°**Д**41'06 -10213 Mar 09 j 06:52 morning rise opposition 3°518'17 2°50'16 -10220 Dec 04 j 18:41 21°**Д**36'20 retrograde min. Earth dist. -10213 Mar 09 j 01:00 3°518'40 29.25689 AU opposition -10219 Feb 23 j 00:43 20° II 13'25 2°47'52 direct -10213 May 28 j 07:32 1°955'15 min. Earth dist. -10219 Feb 23 j 00:52 20°П13'25 29.28200 AU evening set -10213 Aug 23 j 20:28 3°5549'01 direct -10219 May 14 j 10:58 18°**Ц**50'04 evening set -10219 Aug 10 j 15:05 20°**II**44'19 conjunction -10213 Sep 07 j 19:28 4°522'46 2°39'09 minimum elong -10213 Sep 07 j 19:28 4°9522'46 2°39'45 conjunction -10219 Aug 25 j 14:02 21°**II**18'03 2°37'36 max. Earth dist. -10213 Sep 08 j 02:13 4°523'25 31.25284 AU minimum elong -10219 Aug 25 j 14:02 21°**II**18'03 2°38'11 morning rise -10213 Sep 22 j 19:26 4°956'38 6°952'50 max. Earth dist. -10219 Aug 25 j 13:26 21°**Д**17'59 31.27670 AU retrograde -10213 Dec 21 j 03:39 morning rise -10219 Sep 09 i 13:19 21°**Д**51'49 opposition -10212 Mar 10 j 20:01 5°529'32 2°49'48 retrograde -10219 Dec 07 i 06:57 23°**II**47'10 min. Earth dist. -10212 Mar 10 j 12:15 5°530'03 29.25315 AU opposition -10218 Feb 25 i 13:45 22° II 24'09 2° 48'53 direct -10212 May 29 i 18:58 4°9506'34 min. Earth dist. -10218 Feb 25 j 13:07 22°**П**24'11 29.27608 AU evening set -10212 Aug 25 j 05:38 6°9500'17 -10218 May 16 j 21:42 21°**Д**00'49 direct -10218 Aug 12 j 23:54 22° **II** 54'58 -10212 Sep 09 i 04:39 6°934'03 2°38'36 evening set conjunction -10212 Sep 09 j 04:40 6°934'03 2°39'11 minimum elong -10218 Aug 27 j 22:53 23°**II**28'41 2°38'26 max. Earth dist. -10212 Sep 09 j 11:37 6°534'42 31.24857 AU conjunction -10218 Aug 27 j 22:52 23°**II**28'41 2°39'00 7°907'56 -10212 Sep 24 j 04:59 minimum elong morning rise -10218 Aug 28 j 00:32 23°**II**28'50 31.27100 AU max. Earth dist. retrograde -10212 Dec 22 j 16:09 9°9504'17 -10218 Sep 11 j 22:00 24°**Д**02'27 -10211 Mar 13 j 09:11 7°5540'56 2°49'05 morning rise opposition -10218 Dec 09 j 18:03 25°**II**57'55 -10211 Mar 13 j 01:38 7°\$41'27 29.24840 AU retrograde min. Earth dist. -10217 Feb 28 j 02:44 24°**П**34'49 2°49'39 -10211 Jun 01 j 04:17 6°9518'01 opposition direct -10217 Feb 28 j 00:49 24°**П**34'57 29.27078 AU -10211 Aug 27 j 14:43 8°9511'40 min. Earth dist. evening set -10217 May 19 j 11:03 23°**Ⅲ**11'31 direct -10217 Aug 15 j 08:54 25°**耳**05'35 -10211 Sep 11 j 14:03 8°545'27 2°37'49 evening set conjunction minimum elong -10211 Sep 11 j 14:03 8°545'27 2°38'25 conjunction -10217 Aug 30 j 07:39 25°**II**39'18 2°39'02 max. Earth dist. -10211 Sep 11 j 22:26 8°\$46'15 31.24317 AU minimum elong -10217 Aug 30 j 07:39 25°**Ⅲ**39'18 2°39'37 morning rise -10211 Sep 26 j 14:33 9°519'23 max. Earth dist. -10217 Aug 30 j 09:29 25°**Д**39'28 31.26625 AU retrograde -10211 Dec 25 j 03:59 11°515'52 morning rise -10217 Sep 14 j 07:01 26° Д 13'04 opposition -10210 Mar 15 j 22:21 9°552'28 2°48'08 retrograde -10217 Dec 12 j 07:07 28°**Д**08'40 min. Earth dist. -10210 Mar 15 j 13:26 9°553'04 29.24217 AU -10216 Mar 01 j 15:45 26°**Ⅲ**45'30 2°50'10 direct -10210 Jun 03 j 15:37 8°529'35 opposition min. Earth dist. -10216 Mar 01 j 12:07 26°**Д**45'45 29.26659 AU -10210 Aug 29 j 23:55 10°523'09 evening set direct -10216 May 20 j 21:42 25° **Ⅲ**22'15 -10210 Sep 13 j 23:16 10°\$56'57 2°36'49 evening set -10216 Aug 16 j 17:38 27°**Ⅲ**16'14 conjunction -10210 Sep 13 j 23:16 10°\$56'57 2°37'23 minimum elong -10216 Aug 31 j 16:32 27°**II**49'57 2°39'25 conjunction max. Earth dist. -10210 Sep 14 i 07:20 10°557'43 31.23623 AU minimum elong -10216 Aug 31 i 16:31 27° II 49'57 2°39'59 morning rise -10210 Sep 29 i 00:14 11°530'55 max. Earth dist. -10216 Aug 31 j 20:26 27°**Д**50'20 31.26241 AU retrograde -10210 Dec 27 j 17:23 13°527'31 -10216 Sep 15 j 15:54 28°**Д**23'45 opposition -10209 Mar 18 j 11:38 12°504'02 2°46'57 morning rise -10216 Nov 09 j 03:30 0°5 min. Earth dist. -10209 Mar 18 j 02:27 12°504'40 29.23455 AU -10216 Dec 13 j 16:51 0°519'30 retrograde direct -10209 Jun 06 j 02:03 10°541'11 -10215 Jan 18 j 07:19 30°R II evening set -10209 Sep 01 j 08:59 12°534'40 opposition -10215 Mar 04 j 04:51 28° II 56'17 2°50'27 min. Earth dist. -10215 Mar 04 j 00:43 28°**Д**56'34 29.26308 AU conjunction -10209 Sep 16 j 08:44 13°508'30 2°35'35 -10215 May 23 j 09:47 27°**Д**33'06 minimum elong -10209 Sep 16 j 08:45 13°508'30 2°36'11 direct -10215 Aug 19 j 02:38 29°**Ⅲ**27'01 -10209 Sep 16 j 18:34 13°509'25 31.22795 AU evening set max. Earth dist. -10215 Sep 02 j 17:42 0°5 -10209 Oct 01 j 09:56 13°542'29 morning rise retrograde -10209 Dec 30 j 05:35 15°539'12 conjunction -10215 Sep 03 j 01:27 0°9500'44 2°39'33 opposition -10208 Mar 20 j 00:50 14°515'37 2°45'31 minimum elong -10215 Sep 03 j 01:27 0°500'44 2°40'09 min. Earth dist. -10208 Mar 19 j 14:54 14°516'18 29.22560 AU max. Earth dist. -10215 Sep 03 j 05:51 0°ഇ01'09 31.25925 AU direct -10208 Jun 07 j 14:57 12°552'47 morning rise -10215 Sep 18 j 01:04 0°934'33 evening set -10208 Sep 02 j 18:06 14°546'10 retrograde -10215 Dec 16 j 04:42 2°930'26 -10214 Mar 06 j 17:40 1°507'12 2°50'29 conjunction -10208 Sep 17 j 18:01 15°\$20'00 2°34'08 opposition

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10208 in astronomical counting style is the year 10209 BCE in historical counting style. -10208 Sep 17 j 18:01 15°\$20'00 2°34'42 min. Earth dist. -10201 Apr 05 j 02:39 29°537'55 29.16742 AU minimum elong -10208 Sep 18 j 03:37 15°520'55 31.21868 AU direct -10201 Jun 23 j 19:41 28°514'04 max Earth dist -10208 Oct 02 j 19:47 15°\$54'02 -10201 Sep 15 j 06:22 morning rise $0^{\circ}\Omega$ -10208 Dec 31 j 19:11 17°550'50 -10201 Sep 18 j 09:48 0°Ω06'55 retrograde evening set -10207 Mar 22 j 13:56 16°\$27'10 2°43'51 opposition -10207 Mar 22 j 02:51 16°\$27'55 29.21599 AU -10201 Oct 03 j 12:24 0°Ω40'59 2°17'52 min. Earth dist. conjunction 0°**Ω**40'59 2°18'25 -10201 Oct 03 j 12:25 direct -10207 Jun 10 j 01:37 15°504'19 minimum elong evening set -10207 Sep 05 j 03:08 16°957'36 max. Earth dist. -10201 Oct 04 j 04:53 0°**Ω**42'33 31.16234 AU morning rise -10201 Oct 18 j 17:50 1°Ω15′20 conjunction -10207 Sep 20 j 03:26 17°531'28 2°32'28 retrograde -10200 Jan 17 j 06:32 3°**£**12′55 minimum elong -10207 Sep 20 j 03:27 17°531'28 2°33'02 opposition -10200 Apr 07 j 08:45 1°**Ω**48'48 2°25'39 -10207 Sep 20 j 14:41 17°532'32 31.20882 AU max. Earth dist. min. Earth dist. -10200 Apr 06 j 15:28 1°**Ω**49'58 29.16091 AU -10207 Oct 05 j 05:31 18°505'32 -10200 Jun 25 j 05:24 morning rise direct 0°**Ω**26′09 retrograde -10206 Jan 03 j 05:29 20°502'26 evening set -10200 Sep 19 j 19:06 2°**Ω**18'56 opposition -10206 Mar 25 j 02:54 18°538'39 2°41'56 min. Earth dist. -10206 Mar 24 j 15:33 18°\$39'25 29.20611 AU conjunction -10200 Oct 04 j 22:23 2°**Ω**53'04 2°14'41 direct -10206 Jun 12 j 13:58 17°515'48 minimum elong -10200 Oct 04 j 22:24 2°**Ω**53'04 2°15'12 evening set -10206 Sep 07 j 12:13 19°509'00 max. Earth dist. -10200 Oct 05 j 16:35 2°**Q**54'47 31.15557 AU morning rise -10200 Oct 20 j 04:17 3°**Ω**27'27 conjunction -10206 Sep 22 j 12:47 19°542'53 2°30'34 retrograde -10199 Jan 18 j 19:18 5°**Ω**25'09 minimum elong -10206 Sep 22 j 12:47 19°542'53 2°31'07 opposition $-10199 \text{ Apr } 09 \text{ j } 21:42 \quad 4^{\circ}\Omega 01'00 \quad 2^{\circ}22'09$ max. Earth dist. -10206 Sep 23 j 00:38 19°5044'01 31.19926 AU min. Earth dist. -10199 Apr 09 i 03:50 $4^{\circ}\Omega$ 02'13 29.15365 AU morning rise -10206 Oct 07 j 15:22 20°\$16'59 direct -10199 Jun 27 i 17:00 2°**Ω**38′23 retrograde -10205 Jan 05 i 18:05 22°513'59 evening set -10199 Sep 22 j 04:42 4° **Ω**31'07 opposition -10205 Mar 27 j 15:53 20°550'07 2°39'48 -10205 Mar 27 j 02:34 20°551'01 29.19681 AU -10199 Oct 07 j 08:22 $5^{\circ}\Omega$ 05'17 $2^{\circ}11'19$ min. Earth dist. conjunction -10205 Jun 15 j 01:55 19°527'16 minimum elong -10199 Oct 07 j 08:22 $5^{\circ}\Omega$ 05'17 $2^{\circ}11'50$ direct evening set -10205 Sep 09 j 21:11 21°520'22 max. Earth dist. -10199 Oct 08 j 02:04 $5^{\circ}\Omega$ 06'58 31.14796 AU -10199 Oct 22 j 15:00 5°**Ω**39'43 morning rise -10205 Sep 24 j 22:06 21°554'18 2°28'28 -10198 Jan 21 j 09:16 7°**Ω**37'31 conjunction retrograde -10205 Sep 24 j 22:06 21°554'18 2°29'01 -10198 Apr 12 j 10:33 6°Ω13'18 2°18'26 opposition minimum elong -10205 Sep 25 j 11:12 21°\$55'33 31.19031 AU -10198 Apr 11 j 15:56 6° **Ω**14'34 29.14546 AU max. Earth dist. min. Earth dist. -10205 Oct 10 j 01:11 22°528'26 -10198 Jun 30 j 02:51 4°**Ω**50'42 morning rise direct -10204 Jan 08 j 05:35 24°525'33 -10198 Sep 24 j 14:17 6° **Ω**43'23 retrograde evening set -10204 Mar 29 j 05:01 23°501'36 2°37'26 opposition -10204 Mar 28 j 15:39 23°502'31 29.18833 AU -10198 Oct 09 j 18:35 $7^{\circ}\Omega$ 17'35 $2^{\circ}07'45$ min. Earth dist. conjunction -10198 Oct 09 j 18:36 $7^{\circ}\Omega$ 17'35 2° 08'14 direct -10204 Jun 16 j 12:46 21°538'47 minimum elong evening set -10204 Sep 11 j 06:15 23°531'48 max. Earth dist. -10198 Oct 10 j 13:23 $7^{\circ}\Omega$ 19'22 31.13915 AU morning rise -10198 Oct 25 j 01:47 7°**Ω**52'05 conjunction -10204 Sep 26 j 07:39 24°505'46 2°26'08 retrograde -10197 Jan 23 j 21:23 9°**Ω**49'58 -10204 Sep 26 j 07:40 24°505'46 2°26'41 opposition -10197 Apr 14 j 23:34 8°**Ω**25'40 2°14'32 minimum elong max. Earth dist. -10204 Sep 26 j 22:05 24°507'08 31.18242 AU min. Earth dist. -10197 Apr 14 j 05:07 8° **Ω**26'56 29.13593 AU -10204 Oct 11 j 11:13 24°539'57 -10197 Jul 02 j 15:10 7°**Ω**03'04 morning rise direct -10203 Jan 09 j 16:42 26°537'10 -10197 Sep 26 j 23:51 8° **Ω**55'39 retrograde evening set -10203 Mar 31 j 17:46 25°5513'11 2°34'50 opposition -10203 Mar 31 j 02:19 25°5014'13 29.18078 AU -10197 Oct 12 i 04:44 9° Ω 29'55 2°04'00 min. Earth dist. conjunction -10197 Oct 12 i 04:44 9° Ω 29'55 2°04'30 direct -10203 Jun 19 i 00:00 23°\$50'23 minimum elong -10197 Oct 12 j 23:38 9° Ω 31'42 31.12920 AU evening set -10203 Sep 13 j 15:26 25°543'21 max. Earth dist. -10197 Oct 27 j 12:41 $10^{\circ}\Omega$ 04'28 morning rise -10203 Sep 28 j 17:09 26°517'21 2°23'35 retrograde -10196 Jan 26 j 11:36 $12^{\circ}\Omega$ 02'24 conjunction -10203 Sep 28 i 17:09 26°\$17'21 2°24'09 opposition -10196 Apr 16 j 12:27 10°Ω38'01 2°10'25 minimum elong -10203 Sep 29 j 07:54 26°518'45 31.17528 AU min. Earth dist. -10196 Apr 15 j 16:45 $10^{\circ}\Omega$ 39'22 29.12527 AU max. Earth dist. -10203 Oct 13 j 21:23 26°551'35 direct -10196 Jul 04 j 03:28 9° **Ω**15'23 morning rise evening set retrograde -10202 Jan 12 j 04:45 28°548'55 -10196 Sep 28 j 09:35 11°**Ω**07'54 opposition -10202 Apr 03 j 06:48 27°524'53 2°32'00 -10202 Apr 02 j 15:19 27°\$25'56 29.17397 AU min. Earth dist. conjunction -10196 Oct 13 j 15:03 11° Ω 42'12 2°00'04 -10202 Jun 21 j 08:56 26°502'09 minimum elong -10196 Oct 13 j 15:04 11° Ω 42'12 2°00'32 direct -10202 Sep 16 j 00:25 27°555'02 -10196 Oct 14 j 10:25 11° Ω 44'02 31.11803 AU evening set max. Earth dist. -10196 Oct 28 j 23:46 $12^{\circ}\Omega$ 16'49 morning rise -10202 Oct 01 j 02:43 28°\$29'05 2°20'50 -10195 Jan 27 j 23:19 14° **Ω**14'47 conjunction retrograde -10202 Oct 01 j 02:44 28°529'05 2°21'22 -10195 Apr 18 j 06:10 12° **Ω** 51'36 29.11368 AU minimum elong min. Earth dist. max. Earth dist. -10202 Oct 01 j 19:21 28°530'39 31.16876 AU opposition -10195 Apr 19 j 01:13 12° Ω 50'18 2°06'08 morning rise -10202 Oct 16 j 07:22 29°503'22 direct -10195 Jul 06 j 14:37 11°**Ω**27'39 -10202 Nov 13 j 00:17 0° Ω evening set -10195 Sep 30 j 19:12 13°**Ω**20'03 retrograde -10201 Jan 14 j 16:39 1°**Ω**00′50 -10201 Mar 22 j 08:24 30°RS -10195 Oct 16 j 01:23 13° Ω 54'24 1°55'58 conjunction -10201 Apr 05 j 19:44 29°536'45 2°28'56 -10195 Oct 16 j 01:24 13° Ω 54'24 1°56'26 opposition minimum elong

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10195 in astronomical counting style is the year 10196 BCE in historical counting style. max. Earth dist. -10195 Oct 16 j 21:42 13° Ω 56'20 31.10637 AU min. Earth dist. -10188 May 03 j 17:19 $28^{\circ}\Omega$ 17'50 29.04862 AU -10195 Oct 31 j 10:44 $14^{\circ}\Omega$ 29'04 direct -10188 Jul 21 j 16:25 $26^{\circ}\Omega$ 53'33 morning rise -10195 Nov 14 j 22:02 $15^{\circ}\Omega$ -10188 Oct 15 j 16:20 28° **Ω**45'40 evening set -10194 Jan 30 j 10:50 16° Ω 27'05 retrograde opposition -10194 Apr 21 j 13:51 15° Ω 02'30 2°01'39 -10188 Oct 31 j 03:09 29° Ω 20'23 1°22'48 conjunction -10194 Apr 20 j 17:11 15° Ω 03'54 29.10182 AU -10188 Oct 31 j 03:10 29° Ω 20'24 1°23'08 min. Earth dist. minimum elong -10194 Apr 23 j 02:22 15°R**Ω** -10188 Nov 01 j 04:04 29° Ω 22'45 31.04448 AU max. Earth dist. direct -10194 Jul 09 j 02:36 13°**Ω**39'47 -10188 Nov 15 j 17:49 29° **Ω**55'29 morning rise -10194 Sep 18 j 02:44 15°**Ω** -10188 Nov 17 j 19:14 0° M evening set -10194 Oct 03 j 04:49 15° Ω 32'07 retrograde -10187 Feb 15 j 06:17 1°m/53'59 min. Earth dist. -10187 May 06 j 04:32 0° M 30'48 29.04205 AU -10194 Oct 18 j 11:28 16° Ω 06'31 1°51'42 conjunction opposition -10187 May 07 j 05:22 0° m/29'05 1°25'38 -10194 Oct 18 j 11:29 16° Ω 06'31 1°52'08 minimum elong -10187 May 25 j 05:20 30°RΩ max. Earth dist. -10194 Oct 19 j 07:50 16° Ω 08'26 31.09465 AU direct -10187 Jul 24 j 04:06 29° Ω 06'28 morning rise -10194 Nov 02 j 21:41 16°**Ω**41'14 -10187 Sep 19 j 01:41 retrograde -10193 Feb 01 j 22:43 18°**Ω**39'18 evening set -10187 Oct 18 j 02:48 0° m 58'36 min. Earth dist. -10193 Apr 23 j 06:08 17° Ω 16'01 29.09039 AU opposition -10193 Apr 24 j 02:38 17°Ω14'36 1°57'00 conjunction -10187 Nov 02 j 14:15 1° Mp 33'23 1°17'30 direct -10193 Jul 11 j 12:22 15° Ω 51'53 minimum elong -10187 Nov 02 j 14:16 1°m/33'23 1°17'50 evening set -10193 Oct 05 j 14:28 17° Ω 44'07 max. Earth dist. -10187 Nov 03 j 15:23 1° m/35'45 31.03771 AU morning rise -10187 Nov 18 j 05:42 2° m 08'32 conjunction -10193 Oct 20 j 21:57 18° Ω 18'34 1°47'16 retrograde -10186 Feb 17 i 18:54 4° m 07'07 minimum elong -10193 Oct 20 j 21:58 $18^{\circ}\Omega$ 18'34 $1^{\circ}47'42$ opposition -10186 May 09 j 17:53 2°m/42'12 1°19'53 max. Earth dist. -10193 Oct 21 j 20:05 $18^{\circ}\Omega$ 20'40 31.08372 AU min. Earth dist. -10186 May 08 j 17:59 2° m 43'51 29.03497 AU morning rise -10193 Nov 05 j 08:44 18° **Ω**53'21 direct -10186 Jul 26 j 14:45 1° m 19'36 retrograde -10192 Feb 04 j 10:21 $20^{\circ}\Omega51'28$ -10186 Oct 20 j 13:11 3° m 11'43 evening set -10192 Apr 25 j 15:06 19° Ω 26'42 1°52'11 opposition -10192 Apr 24 j 17:06 19° Ω 28'12 29.07988 AU -10186 Nov 05 j 01:27 3° m 46'33 1°12'04 min. Earth dist. conjunction -10192 Jul 12 j 23:32 18° Ω 03'57 -10186 Nov 05 j 01:28 3° mp 46'33 1°12'22 direct minimum elong -10192 Oct 07 j 00:20 19° Ω56'08 evening set max. Earth dist. -10186 Nov 06 j 03:11 3° Mp 48'59 31.03035 AU -10186 Nov 20 j 17:33 4° m 21'46 morning rise -10192 Oct 22 j 08:19 20° Ω 30'38 1° 42'40 -10185 Feb 20 j 07:58 6° Mp 20'25 conjunction retrograde -10192 Oct 22 j 08:20 20° Ω 30'38 1° 43'05 -10185 May 11 j 05:19 4° m/57'12 29.02701 AU min. Earth dist. minimum elong -10192 Oct 23 j 06:14 20° Ω 32'42 31.07387 AU -10185 May 12 j 06:19 4° m 55'29 1°14'02 max. Earth dist. opposition -10192 Nov 06 j 20:02 21° Ω 05'28 -10185 Jul 29 j 02:51 3° m 32'53 morning rise direct -10191 Feb 05 j 23:33 23° Ω 03'40 -10185 Oct 23 j 00:00 5° Mp 24'59 retrograde evening set -10191 Apr 27 j 05:24 21° **Ω** 40'21 29.07062 AU min. Earth dist. opposition -10191 Apr 28 j 03:41 21° Ω 38'50 1°47'11 conjunction -10185 Nov 07 j 12:50 5° m 59'52 1°06'32 direct -10191 Jul $15 \text{ j } 08:53 \ 20^{\circ} \Omega 16'05$ minimum elong -10185 Nov 07 j 12:50 5° m 59'52 1°06'50 evening set -10191 Oct 09 j 10:05 22°**Ω**08'15 max. Earth dist. -10185 Nov 08 j 13:47 6° Mp 02'14 31.02187 AU morning rise -10185 Nov 23 j 05:50 6° m 35'09 -10191 Oct 24 j 18:53 22° Ω 42'48 1°37'55 retrograde -10184 Feb 22 j 21:17 8° m 33'51 conjunction -10191 Oct 24 j 18:54 22° Ω 42'48 1°38'20 -10184 May 13 j 18:44 7° m 08'51 1°08'03 minimum elong opposition -10191 Oct 25 j 18:38 22° Ω 45'02 31.06519 AU min. Earth dist. -10184 May 12 j 18:42 7° Mp 10'30 29.01797 AU max. Earth dist. -10191 Nov 09 j 07:10 23° Ω 17'41 -10184 Jul 30 j 13:01 5° m 46'14 morning rise direct -10190 Feb 08 i 11:40 $25^{\circ}\Omega$ 15'57 -10184 Oct 24 j 10:44 retrograde evening set 7°m/38'18 -10190 Apr 30 i 16:06 $23^{\circ}\Omega$ 51'05 $1^{\circ}42'01$ opposition -10190 Apr 29 j 17:03 23° Ω 52'40 29.06240 AU -10184 Nov 09 i 00:27 min. Earth dist. conjunction 8° m 13'15 1°00'54 direct -10190 Jul 17 j 19:42 $22^{\circ}\Omega 28'22$ minimum elong -10184 Nov 09 i 00:28 8° m 13'15 1°01'10 evening set -10190 Oct 11 j 20:04 $24^{\circ}\Omega$ 20'30 max. Earth dist. -10184 Nov 10 i 02:22 8° m 15'42 31.01237 AU morning rise -10184 Nov 24 j 18:04 8° m 48'35 -10190 Oct 27 j 05:25 24° Ω55'07 1°33'01 retrograde -10183 Feb 24 i 09:07 10° mp 47'17 conjunction -10190 Oct 27 j 05:26 24° Ω55'07 1°33'24 min. Earth dist. -10183 May 15 j 06:13 9° m 23'57 29.00783 AU minimum elong -10190 Oct 28 j 04:58 24° Ω 57'20 31.05769 AU max. Earth dist. opposition -10183 May 16 j 07:00 9° m 22'14 1°01'59 morning rise -10190 Nov 11 j 18:36 25° Ω30'04 direct -10183 Aug 02 j 00:55 7° m 59'34 retrograde -10189 Feb 11 j 01:59 27°**Ω**28'25 evening set -10183 Oct 26 j 21:36 9° m 51'36 min. Earth dist. -10189 May 02 j 04:38 $26^{\circ}\Omega$ 05'11 29.05529 AU -10189 May 03 j 04:36 $26^{\circ}\Omega$ 03'32 $1^{\circ}36'42$ -10183 Nov 11 j 11:50 10° m 26'36 0°55'10 opposition conjunction -10189 Jul 20 j 04:47 24°**Ω**40'50 -10183 Nov 11 j 11:51 10° m 26'36 0°55'26 direct minimum elong -10189 Oct 14 j 06:02 $26^{\circ}\Omega$ 32'58 -10183 Nov 12 j 12:50 10° m 28'57 31.00196 AU evening set max. Earth dist. morning rise -10183 Nov 27 j 06:21 11° m 01'59 conjunction -10189 Oct 29 j 16:10 27° **\Oldot**07'38 1°27'59 retrograde -10182 Feb 26 j 21:18 13° Mp 00'42 minimum elong -10189 Oct 29 j 16:11 27° Ω 07'38 1°28'22 opposition -10182 May 18 j 19:14 11° m 35'34 0°55'49 max. Earth dist. -10189 Oct 30 j 16:58 27° **Ω**09'58 31.05090 AU min. Earth dist. -10182 May 17 j 18:53 11° m 37'15 28.99721 AU morning rise -10189 Nov 14 j 06:03 27°**Ω**42'39 direct -10182 Aug 04 j 10:40 10° Mp 12'51 -10188 Feb 13 j 14:56 29° **Q**41'06 -10182 Oct 29 j 08:24 12° m 04'50 retrograde evening set

-10188 May 04 j 17:07 $28^{\circ}\Omega$ 16'12 $1^{\circ}31'14$

opposition

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Earth dist. conjunction -10181 May 21 j 07:18 13° m/48'49 0°49'34 -10175 Nov 29 j 11:15 28° m 13'20 0°07'13 opposition minimum elong -10175 Nov 29 j 05:16 28° Mp 12'48 direct -10181 Aug 06 j 21:29 12° M 26'02 behind sun begin -10181 Oct 31 j 19:23 14° Mp 18'00 evening set behind sun end -10175 Nov 29 j 17:15 28° Mp 13'52 max. Earth dist. -10175 Nov 30 j 15:00 28° m 15'56 30.94108 AU conjunction -10181 Nov 16 j 11:03 14° m 53'05 0°43'29 morning rise -10175 Dec 15 j 10:58 28° m/49'06 -10181 Nov 16 j 11:04 14° m 53'05 0°43'42 -10174 Jan 20 j 15:23 minimum elong 0∘**⊽** -10181 Nov 17 j 12:45 14° m 55'30 30.98115 AU -10174 Mar 17 j 06:40 max. Earth dist. retrograde 0°**ჲ**47'58 morning rise -10181 Dec 02 j 07:00 15° m 28'34 -10174 May 13 j 15:00 30°R M retrograde -10180 Mar 02 j 22:28 17° mp 27'18 opposition -10174 Jun 05 j 18:32 29° m 22'36 0°04'11 opposition -10180 May 22 j 19:21 16° Mp 02'00 0°43'15 min. Earth dist. -10174 Jun 04 j 16:57 29° Mp 24'23 28.93885 AU min. Earth dist. -10180 May 21 j 18:15 16° Mp 03'44 28.97684 AU direct -10174 Aug 22 j 02:44 27° m 59'43 direct -10180 Aug 08 j 06:59 14° Mp 39'10 evening set -10174 Nov 16 j 03:39 29° m 51'53 evening set -10180 Nov 02 j 06:29 16° m 31'07 -10174 Nov 19 j 19:55 conjunction -10180 Nov 17 j 22:53 17° m 06'15 0°37'33 conjunction -10174 Dec 01 j 23:46 0°**£**27'18 0°00'56 minimum elong -10180 Nov 17 j 22:53 17° m 06'15 0°37'44 minimum elong -10174 Dec 01 i 23:47 0°**£**27'18 0°00'59 max. Earth dist. -10180 Nov 19 j 01:29 17° m 08'45 30.97176 AU behind sun begin -10174 Dec 01 i 17:16 0°**£**26'43 morning rise -10180 Dec 03 j 19:25 17° m 41'47 behind sun end -10174 Dec 02 i 06:18 0°**£**27'53 retrograde -10179 Mar 05 i 10:25 19° m 40'30 max. Earth dist. -10174 Dec 03 j 02:10 0°**£**29'46 30.93584 AU -10179 May 24 j 06:24 18° Mp 16'53 28.96800 AU morning rise -10174 Dec 18 i 00:15 1° **2**03'07 min. Earth dist. -10179 May 25 j 07:13 18° mp 15'10 0°36'52 desc. node -10173 Jan 25 j 02:26 2°**2**17'05 opposition -10179 Aug 10 j 18:31 16° m 52'17 -10173 Mar 19 j 19:54 3°**2**02'00 direct retrograde -10179 Nov 04 j 17:38 18° m 44'15 -10173 Jun 07 j 05:44 1°**2**38'23 28.93333 AU evening set min. Earth dist. -10173 Jun 08 j 06:24 1°**2**36'39 -0°02'26 opposition -10179 Nov 20 j 10:43 19° mg 19'25 0°31'33 -10173 Aug 24 j 12:20 conjunction direct 0°**£**13'46 -10179 Nov 20 j 10:43 19° mg 19'25 0°31'44 evening set -10173 Nov 18 j 15:47 2°**₽**05'59 minimum elong -10179 Nov 21 j 13:22 19° **m** 21'56 30.96370 AU max. Earth dist. -10179 Dec 06 j 07:57 19° m 55'00 -10173 Dec 04 j 12:40 2°**2**41'27 -0°05'22 morning rise conjunction -10178 Mar 08 j 01:09 21° m 53'44 -10173 Dec 04 j 12:40 2°**2**41'27 0°05'19 retrograde minimum elong -10178 May 27 j 19:06 20° m/28'21 0°30'25 -10173 Dec 04 j 06:21 2°**△**40'53 opposition behind sun begin -10178 May 26 j 17:11 20° m 30'09 28.96053 AU -10173 Dec 04 j 18:58 2°**2**42'01 min. Earth dist. behind sun end direct -10178 Aug 13 j 05:54 19° Mp 05'27 max. Earth dist. -10173 Dec 05 j 15:41 2°**2**43'59 30.92978 AU evening set -10178 Nov 07 j 04:48 20° m 57'26 morning rise -10173 Dec 20 j 13:33 3°**♀**17'19 retrograde -10172 Mar 21 j 07:50 5°**♀**16'13 -10178 Nov 22 j 22:29 21° mg 32'40 0°25'30 conjunction opposition -10172 Jun 09 j 18:13 3°**⊆**50'52 -0°09'03 -10178 Nov 22 j 22:29 21° m 32'40 0°25'38 min. Earth dist. -10172 Jun 08 j 17:58 3°**2**52'33 28.92665 AU minimum elong max. Earth dist. -10178 Nov 24 j 01:27 21° m/35'12 30.95679 AU direct -10172 Aug 25 j 23:19 2°**♀**27'57 -10178 Dec 08 j 20:27 22° m 08'17 -10172 Nov 20 j 04:12 4°**£**20'13 morning rise evening set -10177 Mar 10 j 13:43 24° m 07'03 retrograde -10177 May 29 j 06:02 22° m 43'24 28.95421 AU -10172 Dec 06 i 01:33 4° **2**55'43 -0°11'31 min. Earth dist. conjunction -10177 May 30 i 07:08 22° m 41'39 0°23'55 -10172 Dec 06 j 01:32 4° \(\Omega\)55'43 0°11'30 opposition minimum elong -10172 Dec 05 i 20:52 4°**2**55'18 direct -10177 Aug 15 j 16:17 21° m 18'45 behind sun begin -10177 Nov 09 j 16:12 23° m 10'45 evening set behind sun end -10172 Dec 06 i 06:13 4° \overline{\Omega}56'08 max. Earth dist. -10172 Dec 07 i 03:02 4° \(\Delta \) 58'06 30.92260 AU conjunction -10177 Nov 25 i 10:39 23° m 46'02 0°19'24 morning rise -10172 Dec 22 j 03:05 5°**2**31'37 minimum elong -10177 Nov 25 i 10:39 23° mo 46'02 0°19'33 retrograde -10171 Mar 23 j 21:49 7°**£**30'31 max. Earth dist. -10177 Nov 26 j 14:16 23° Mp 48'37 30.95108 AU min. Earth dist. -10171 Jun 11 j 05:57 6°**2**06'49 28.91893 AU -10177 Dec 11 i 09:12 24° m 21'43 6°**£**05'08 -0°15'39 morning rise opposition -10171 Jun 12 j 05:54 -10176 Mar 12 j 04:04 26° m 20'29 retrograde direct -10171 Aug 28 j 09:06 4°**£**42'10 opposition -10176 May 31 j 18:50 24° m 55'06 0°17'22 evening set -10171 Nov 22 j 16:35 6°**£**34'29 min. Earth dist. -10176 May 30 j 16:43 24° m 56'55 28.94882 AU -10176 Aug 17 j 04:31 23° **m** 32'12 -10171 Dec 08 j 14:32 7°**Ω**10'02 -0°17'40 direct conjunction -10176 Nov 11 j 03:55 25° m 24'15 -10171 Dec 08 j 14:32 7°**2**10'01 0°17'40 evening set minimum elong -10171 Dec 09 j 16:11 7°**2**12'26 30.91432 AU max. Earth dist. -10176 Nov 26 j 22:52 25° m 59'35 0°13'16 -10171 Dec 24 j 16:29 7°**£**45'58 conjunction morning rise minimum elong -10176 Nov 26 j 22:52 25° m 59'35 0°13'22 retrograde -10170 Mar 26 j 09:21 9°**£**44'50 behind sun begin -10176 Nov 26 j 19:11 25° m 59'15 opposition -10170 Jun 14 j 17:38 8°**2**19'26 -0°22'13 behind sun end -10176 Nov 27 j 02:33 25° m 59'55 min. Earth dist. -10170 Jun 13 j 18:39 8°**£**21'03 28.91027 AU max. Earth dist. -10176 Nov 28 j 01:42 26° M 02'06 30.94596 AU direct -10170 Aug 30 j 20:47 6°**£**56'24 -10176 Dec 12 j 22:10 26° m 35'19 -10170 Nov 25 j 04:54 8°**£**48'45 morning rise evening set

retrograde

-10175 Mar 14 j 18:14 28° m/34'08

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10170 in astronomical counting style is the year 10171 BCE in historical counting style. -10170 Dec 11 i 03:24 9° **2**24'19 -0°23'47 direct -10163 Sep 15 j 05:05 22° **2**35'47 conjunction -10170 Dec 11 j 03:24 9° **2**24'19 0°23'50 evening set -10163 Dec 10 j 22:47 24°**♀**28'40 minimum elong -10170 Dec 12 j 04:22 9° **2**26'39 30.90555 AU max. Earth dist. -10170 Dec 27 j 05:55 10°**♀**00'17 -10163 Dec 27 j 00:19 25° \(\Omega\) 04'27 -1°05'13 conjunction morning rise -10169 Mar 28 j 23:32 11°**♀**59'08 -10163 Dec 27 j 00:18 25° **2**04'27 1°05'24 retrograde minimum elong -10169 Jun 16 j 05:47 10° **△**35'20 28.90139 AU -10163 Dec 27 j 23:06 25°**⊆**06'35 30.86451 AU min. Earth dist. max. Earth dist. -10169 Jun 17 j 05:11 10°**-**33'41 -0°28'45 -10162 Jan 12 j 05:28 25°**♀**40'35 opposition morning rise -10169 Sep 02 j 08:31 9°**£**10'33 direct retrograde -10162 Apr 13 j 20:00 27°**♀**39'15 -10169 Nov 27 j 17:32 11°**♀**02'58 evening set opposition -10162 Jul 02 j 12:11 26°**△**13'49 -1°12'49 min. Earth dist. -10162 Jul 01 j 15:16 26°**⊆**15'17 28.86399 AU conjunction -10169 Dec 13 j 16:29 11°**△**38'34 -0°29'53 direct -10162 Sep 17 j 15:06 24°**♀**50'22 -10169 Dec 13 j 16:29 11°**2**38'34 0°29'56 -10162 Dec 13 j 12:06 26° **2**43'22 minimum elong evening set -10169 Dec 14 j 17:10 11°**2**40'53 30.89662 AU max. Earth dist. morning rise -10169 Dec 29 j 19:29 12° **△**14'34 conjunction -10162 Dec 29 j 14:04 27° **2**19'10 -1°10'49 retrograde -10168 Mar 30 j 11:44 14° **△**13'23 minimum elong -10162 Dec 29 j 14:04 27° **2**19'10 1°11'03 opposition -10168 Jun 18 j 16:38 12° **2**47'53 -0°35'15 max. Earth dist. -10162 Dec 30 j 12:58 27°**£**21'19 30.86210 AU min. Earth dist. -10168 Jun 17 j 18:35 12°**•**49'26 28.89276 AU morning rise -10161 Jan 14 j 19:23 27°**♀**55'19 direct -10168 Sep 03 j 19:05 11° **2**24'41 retrograde -10161 Apr 16 j 06:58 29° **♀**53'58 evening set -10168 Nov 29 j 06:07 13°**£**17'08 opposition -10161 Jul 04 j 23:27 28° **2**28'34 -1°18'45 min. Earth dist. -10161 Jul 04 j 03:47 28°**2**29'58 28.86154 AU conjunction -10168 Dec 15 j 05:41 13° **2**52'47 -0°35'56 direct -10161 Sep 20 j 02:12 27° **2**05'06 minimum elong -10168 Dec 15 i 05:40 13° \(\Omega\) 52'47 0°36'01 evening set -10161 Dec 16 j 01:48 28° **2**58'12 max. Earth dist. -10168 Dec 16 j 06:32 13° \overline{\Omega}55'06 30.88838 AU morning rise -10168 Dec 31 i 09:01 14° \alpha 28'48 conjunction -10160 Jan 01 i 04:05 29° **△**34'02 -1°16'19 retrograde -10167 Apr 02 j 02:13 16° **2**27'34 minimum elong -10160 Jan 01 i 04:04 29° **△**34'02 1°16'33 -10167 Jun 20 j 05:07 15° **2**03'39 28.88499 AU max. Earth dist. -10160 Jan 02 j 01:38 29°**2**36'03 30.85945 AU min. Earth dist. -10167 Jun 21 j 03:57 15° **2**02'03 -0°41'42 -10160 Jan 12 j 18:35 0°M opposition -10167 Sep 06 j 08:11 13°**△**38'47 -10160 Jan 17 j 09:41 0°M10'11 direct morning rise -10167 Dec 01 j 18:46 15° **△**31'17 -10160 Apr 17 j 21:10 2°ML08'48 evening set retrograde -10160 Jul 06 j 10:30 0°ML43'26 -1°24'34 opposition -10167 Dec 17 j 18:36 16° **2**06'58 -0°41'55 min. Earth dist. -10160 Jul 05 j 14:54 0°M 44'49 28.85861 AU conjunction -10167 Dec 17 j 18:36 16° **2**06'58 0° 42'01 -10160 Aug 02 j 08:01 30°R € minimum elong -10167 Dec 18 j 18:35 16°**2**09'13 30.88106 AU -10160 Sep 21 j 13:15 29° **2**19'54 max. Earth dist. direct -10166 Jan 02 j 22:27 16° **2**43'01 -10160 Nov 09 j 14:21 0°M morning rise -10166 Apr 04 j 16:06 18°**♀**41'46 -10160 Dec 17 j 15:39 retrograde evening set 1°M13'08 -10166 Jun 23 j 15:23 17°**2**16'13 -0°48'05 opposition -10166 Jun 22 j 17:36 17°**2**17'45 28.87843 AU -10159 Jan 02 j 18:11 1°ML48'59 -1°21'43 min. Earth dist. conjunction direct -10166 Sep 08 j 19:23 15°**♀**52'53 minimum elong -10159 Jan 02 j 18:11 1°ML48'58 1°21'58 evening set -10166 Dec 04 j 07:28 17°**2**45'28 max. Earth dist. -10159 Jan 03 j 14:53 1°ML50'55 30.85594 AU morning rise -10159 Jan 18 j 23:58 2°M25'08 conjunction -10166 Dec 20 j 07:56 18° **2**21'11 -0°47'51 retrograde -10159 Apr 20 j 08:59 4°M23'42 -10166 Dec 20 j 07:56 18°**2**21'11 0°47'59 -10159 Jul 08 j 21:49 2°M 58'21 -1°30'16 minimum elong opposition max. Earth dist. -10166 Dec 21 j 08:42 18°**2**23'30 30.87517 AU min. Earth dist. -10159 Jul 08 j 04:03 2°M 59'37 28.85476 AU -10165 Jan 05 j 12:00 18°**♀**57'15 -10159 Sep 23 j 23:47 1°MJ34'45 morning rise direct -10165 Apr 07 j 04:31 20°**♀**55'58 -10159 Dec 20 j 05:16 retrograde evening set 3°M28'04 -10165 Jun 25 j 04:12 19°**2**32'00 28.87321 AU min. Earth dist. -10165 Jun 26 j 02:33 19° **2**30'26 -0°54'23 -10158 Jan 05 j 08:12 4°ML03'55 -1°26'59 opposition conjunction -10165 Sep 11 j 07:44 18° **2**07'04 -10158 Jan 05 j 08:11 4°ML03'55 1°27'14 direct minimum elong evening set -10165 Dec 06 j 20:29 19° **2**59'44 max. Earth dist. -10158 Jan 06 j 04:18 4° ML05'48 30.85169 AU morning rise -10158 Jan 21 i 14:07 4° ML40'05 conjunction -10165 Dec 22 i 21:14 20° \(\Omega\) 35'28 -0°53'43 retrograde -10158 Apr 22 j 22:51 6°M38'35 minimum elong -10165 Dec 22 i 21:13 20° \(\Omega\) 35'28 0°53'51 opposition -10158 Jul 11 j 08:53 5°M13'14 -1°35'50 max. Earth dist. -10165 Dec 23 j 20:40 20°**2**37'40 30.87060 AU min. Earth dist. -10158 Jul 10 j 14:59 5°M14'30 28.85014 AU morning rise -10164 Jan 08 j 01:50 21° **△**11'34 direct -10158 Sep 26 j 13:26 3°M49'32 retrograde -10164 Apr 08 j 18:15 23° **2**10'16 evening set -10158 Dec 22 j 19:13 5°M42'56 opposition -10164 Jun 27 j 13:52 21° **2**44'45 -1°00'37 6°ML18'49 -1°32'06 min. Earth dist. -10164 Jun 26 j 16:18 21°**2**46'16 28.86933 AU conjunction -10157 Jan 07 j 22:19 -10157 Jan 07 j 22:18 -10164 Sep 12 j 17:53 20°**2**21'21 minimum elong 6°M18'49 1°32'24 direct -10164 Dec 08 j 09:31 22°**△**14'07 -10157 Jan 08 j 16:51 6°M20'33 30.84670 AU evening set max. Earth dist. -10157 Jan 24 j 04:30 morning rise 6°**™**54'59 -10164 Dec 24 j 10:48 22°**2**49'53 -0°59'31 -10157 Apr 25 j 11:47 conjunction retrograde 8°M53'24 -10164 Dec 24 j 10:47 22° **2**49'53 0°59'41 -10157 Jul 13 j 19:55 minimum elong opposition 7°M28'01 -1°41'14 max. Earth dist. -10164 Dec 25 j 11:02 22°**2**52'09 30.86713 AU min. Earth dist. -10157 Jul 13 j 03:45 7°M29'10 28.84514 AU morning rise -10163 Jan 09 j 15:31 23°**≏**26'00 direct -10157 Sep 29 j 01:01 6°MJ04'14 retrograde -10163 Apr 11 j 06:35 25°**£**24'41 evening set -10157 Dec 25 j 09:06 7°**IL**57'43 -10163 Jun 29 j 03:46 24°**♀**00'42 28.86631 AU min. Earth dist.

conjunction

-10156 Jan 10 j 12:38 8°M 33'37 -1°37'06

-10163 Jun 30 j 00:59 23°**♀**59'12 -1°06'46

opposition

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10156 in astronomical counting style is the year 10157 BCE in historical counting style. -10156 Jan 10 j 12:37 8°M 33'36 1°37'24 opposition minimum elong -10150 Jul 28 j 23:25 23°ML10'38 -2°14'21 max. Earth dist. -10156 Jan 11 j 07:12 8°M 35'21 30.84165 AU min. Earth dist. -10150 Jul 28 j 11:26 23°ML11'29 28.83517 AU -10156 Jan 26 j 18:49 9°M09'46 -10150 Oct 14 j 07:56 21°ML46'27 morning rise direct -10156 Apr 27 j 00:43 11°ML08'06 -10149 Jan 10 j 11:55 23°M 40'48 retrograde evening set -10156 Jul 15 j 06:48 9°M42'43 -1°46'30 opposition -10156 Jul 14 j 14:34 9°ጤ43'52 28.84019 AU -10149 Jan 26 j 16:36 24°ML16'44 -2°07'28 min. Earth dist. conjunction -10156 Sep 30 j 14:12 8°ML18'49 -10149 Jan 26 j 16:35 24°ML16'44 2°07'54 direct minimum elong -10156 Dec 26 j 23:08 10°ML12'24 -10149 Jan 27 j 06:17 24°ML18'01 30.83509 AU evening set max. Earth dist. -10149 Feb 11 j 23:03 24°ML52'53 morning rise -10155 Jan 12 j 02:41 10°M48'18 -1°41'56 -10149 May 13 j 16:47 26° \$\mathbb{N}\$L50'44 conjunction retrograde -10155 Jan 12 j 02:40 10°M 48'18 1°42'17 minimum elong opposition -10149 Jul 31 j 09:57 25°M25'42 -2°18'18 -10155 Jan 12 j 19:32 10°M 49'52 30.83689 AU min. Earth dist. -10149 Jul 30 j 21:58 25°M26'33 28.83806 AU max. Earth dist. -10155 Jan 28 j 09:06 11°ML24'28 -10149 Oct 16 j 21:13 24°M01'30 morning rise direct -10155 Apr 29 j 14:28 13°M22'42 retrograde evening set -10148 Jan 13 j 02:40 25° M 56'01 opposition -10155 Jul 17 j 17:40 11°M 57'18 -1°51'35 min. Earth dist. -10155 Jul 17 j 02:29 11°ML58'23 28.83603 AU conjunction -10148 Jan 29 j 07:19 26°ML31'58 -2°11'05 direct -10155 Oct 03 j 01:20 10°M33'20 minimum elong -10148 Jan 29 j 07:18 26°ML31'58 2°11'32 evening set -10155 Dec 29 j 13:01 12°M27'00 max. Earth dist. -10148 Jan 29 j 19:23 26°M 33'05 30.83784 AU morning rise -10148 Feb 14 j 13:48 27° ML08'06 conjunction -10154 Jan 14 j 16:56 13°ML02'55 -1°46'37 retrograde -10148 May 15 j 05:26 29° ML05'53 minimum elong -10154 Jan 14 j 16:55 13°ML02'55 1°46'58 opposition -10148 Aug 01 j 20:47 27° ML40'57 -2°22'04 max. Earth dist. -10154 Jan 15 j 10:22 13°ML04'33 30.83314 AU min. Earth dist. -10148 Aug 01 j 10:45 27° ML41'39 28.84082 AU morning rise -10154 Jan 30 j 23:15 13°M 39'04 direct -10148 Oct 18 j 08:28 26° ML16'42 -10154 Mar 14 j 19:23 15°M evening set -10147 Jan 14 j 17:15 28° ML11'22 retrograde -10154 May 02 j 02:42 15° M 37'13 -10154 Jun 20 i 03:39 15°RML conjunction -10147 Jan 30 j 22:06 28° ML47'19 -2°14'30 -10154 Jul 20 j 04:25 14°ML11'51 -1°56'30 minimum elong -10147 Jan 30 j 22:05 28°ML47'19 2°14'58 opposition min. Earth dist. -10154 Jul 19 j 13:40 14°ML12'54 28.83297 AU max. Earth dist. -10147 Jan 31 j 09:43 28°M 48'24 30.84023 AU -10154 Oct 05 j 13:31 12°ML47'48 morning rise -10147 Feb 16 j 04:21 29°M23'26 direct -10153 Jan 01 j 03:02 14°ML41'35 -10147 Mar 05 j 15:39 0° ₹ evening set -10153 Jan 09 j 11:22 15°M -10147 May 17 j 18:43 1° ₹21'09 retrograde -10147 Aug 02 j 03:07 30°RM -10153 Jan 17 j 07:02 15°ML17'30 -1°51'08 -10147 Aug 04 j 07:29 29°M 56'17 -2°25'36 conjunction opposition -10147 Aug 03 j 21:45 29°ML56'58 28.84286 AU -10153 Jan 17 j 07:01 15°ML17'30 1°51'30 min. Earth dist. minimum elong -10153 Jan 17 j 22:51 15°ML18'59 30.83079 AU -10147 Oct 20 j 21:33 28°M31'59 max. Earth dist. direct -10153 Feb 02 j 13:36 15°M 53'40 -10146 Jan 04 j 16:18 0° ₹ morning rise -10153 May 04 j 15:42 17° ML51'44 -10146 Jan 17 j 08:05 retrograde evening set 0°**х** 26'47 opposition -10153 Jul 22 j 15:13 16°M26'23 -2°01'15 min. Earth dist. -10153 Jul 22 j 00:44 16°M27'25 28.83148 AU conjunction -10146 Feb 02 j 12:51 1° ₹02'44 -2°17'42 direct -10153 Oct 08 j 00:19 15°ML02'17 minimum elong -10146 Feb 02 j 12:50 1°**尽**02'44 2°18'11 evening set -10152 Jan 03 j 17:09 16°M 56'12 max. Earth dist. -10146 Feb 02 j 22:07 1°**尽**03'36 30.84181 AU morning rise -10146 Feb 18 j 19:11 1° ₹38'50 conjunction -10152 Jan 19 j 21:25 17°M32'07 -1°55'29 retrograde -10146 May 20 j 08:59 3°**尽** 36'27 -10152 Jan 19 j 21:24 17°M32'07 1°55'52 opposition -10146 Aug 06 j 18:14 2°**尽** 11'37 -2°28'55 minimum elong max. Earth dist. -10152 Jan 20 j 13:28 17°M 33'37 30.82987 AU min. Earth dist. -10146 Aug 06 j 10:03 2° ₹ 12'12 28.84419 AU -10152 Feb 05 i 03:52 18° ML08'17 -10146 Oct 23 j 09:40 0° ₹ 47'15 morning rise direct -10152 May 06 j 02:26 20° ML06'17 -10145 Jan 19 j 22:45 retrograde evening set 2°**х** 42′10 -10152 Jul 24 i 01:55 18°M-41'00 -2°05'48 opposition -10145 Feb 05 i 03:48 3° ₹18'08 -2°20'42 min. Earth dist. -10152 Jul 23 j 12:29 18°M 41'57 28.83138 AU conjunction direct -10152 Oct 09 j 11:21 17° ML16'52 minimum elong -10145 Feb 05 i 03:47 3° ₹18'07 2°21'12 evening set -10151 Jan 05 j 07:22 19°ML10'54 max. Earth dist. -10145 Feb 05 i 12:56 3° ₹ 18'59 30.84267 AU morning rise -10145 Feb 21 j 09:53 3° ₹ 54'12 conjunction -10151 Jan 21 j 11:44 19°M 46'50 -1°59'40 retrograde -10145 May 22 j 21:15 5° ₹ 51'41 -10151 Jan 21 j 11:43 19°M 46'50 2°00'04 4°**х** 26′54 -2°32′01 minimum elong opposition -10145 Aug 09 j 04:56 4°**∡**27′24 28.84469 AU max. Earth dist. -10151 Jan 22 j 02:32 19°M 48'13 30.83055 AU min. Earth dist. -10145 Aug 08 j 21:46 morning rise -10151 Feb 06 j 18:17 20°M22'59 direct -10145 Oct 25 j 23:21 3°**х** 02′27 retrograde -10151 May 08 j 16:28 22°M20'56 evening set -10144 Jan 22 j 13:40 4°**₹**57'28 -10151 Jul 26 j 12:37 20°M 55'44 -2°10'10 opposition min. Earth dist. -10151 Jul 25 j 22:56 20°M 56'42 28.83278 AU conjunction -10144 Feb 07 j 18:36 5°**₹**33'25 -2°23'29 -10151 Oct 11 j 21:56 19°M31'34 -10144 Feb 07 j 18:35 5°**х** 33′24 2°24′00 direct minimum elong -10150 Jan 07 j 21:31 21°M25'46 5°**∡**34'03 30.84298 AU evening set max. Earth dist. -10144 Feb 08 j 01:26 morning rise -10144 Feb 24 j 00:45 6°**х** 09′29 conjunction -10150 Jan 24 j 02:00 22°ML01'42 -2°03'39 retrograde -10144 May 24 j 10:14 8°**х** 06'49 minimum elong -10150 Jan 24 j 01:59 22°ML01'42 2°04'04 opposition -10144 Aug 10 j 15:28 6°**х** 42′03 -2°34′52 max. Earth dist. -10150 Jan 24 j 16:25 22°ML03'02 30.83237 AU min. Earth dist. -10144 Aug 10 j 09:05 6°**∡**′42'30 28.84502 AU -10150 Feb 09 j 08:30 22°M37'51 -10144 Oct 27 j 11:15 5°**х** 17′30 morning rise direct

-10143 Jan 24 j 04:23

evening set

7°**х** 12′36

retrograde

-10150 May 11 j 03:25 24° M 35'45

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10143 in astronomical counting style is the year 10144 BCE in historical counting style. -10143 Feb 09 i 09:29 7° ₹ 48'33 -2°26'03 direct -10137 Nov 12 j 22:11 21° × 00'25 conjunction minimum elong -10143 Feb 09 j 09:28 7° ₹ 48'33 2°26'34 evening set -10136 Feb 10 j 11:18 22° ₹ 56'20 7°**∡**49'11 30.84322 AU max. Earth dist. -10143 Feb 09 j 16:14 -10143 Feb 25 j 15:20 8° ₹24'36 -10136 Feb 26 j 16:28 23° ₹32'14 -2°37'35 conjunction morning rise -10143 May 26 j 21:30 10° ₹21'47 -10136 Feb 26 j 16:27 23° ₹32'14 2°38'10 retrograde minimum elong -10143 Aug 13 j 02:05 8°**∡**157'03 -2°37'30 -10136 Feb 26 j 16:57 23° ₹32'17 30.87288 AU opposition max. Earth dist. 8°**∡**57′24 28.84551 AU -10143 Aug 12 j 21:06 -10136 Mar 13 j 21:12 24° ₹ 08'08 min. Earth dist. morning rise -10143 Oct 29 j 23:17 7°**∡**³32'25 -10136 Jun 11 j 09:57 26° ₹ 04'28 direct retrograde -10142 Jan 26 j 18:57 9° **₹**27'36 evening set opposition -10136 Aug 28 j 03:18 24° ₹ 40'16 -2°48'56 min. Earth dist. -10136 Aug 28 j 03:45 24° ₹ 40'14 28.87860 AU conjunction -10142 Feb 12 j 00:01 10° ₹03'32 -2°28'24 direct -10136 Nov 14 j 11:44 23° ₹ 15'19 -10142 Feb 11 j 24:00 10° **₹** 03'32 2°28'55 -10135 Feb 12 j 02:16 25° ₹ 11'21 minimum elong evening set -10142 Feb 12 j 05:07 10°**х** 04'00 30.84407 AU max. Earth dist. -10135 Feb 28 j 07:13 25° ₹ 47'15 -2°38'17 morning rise -10142 Feb 28 j 05:53 10° ₹39'33 conjunction retrograde -10142 May 29 j 10:52 12° ₹36'36 minimum elong -10135 Feb 28 j 07:13 25° ₹ 47'15 2°38'51 opposition -10142 Aug 15 j 12:32 11°**尽** 11'53 -2°39'53 max. Earth dist. -10135 Feb 28 j 05:20 25°**₹**'47'05 30.87971 AU min. Earth dist. -10142 Aug 15 j 07:30 11°**₹**12'15 28.84684 AU morning rise -10135 Mar 16 j 11:55 26° ₹ 23'09 direct -10142 Nov 01 j 10:51 9° ₹ 47'09 retrograde -10135 Jun 13 j 23:34 28° ₹ 19'22 evening set -10141 Jan 29 j 09:41 11° ₹ 42'26 opposition -10135 Aug 30 j 13:51 26° ₹ 55'16 -2°49'33 min. Earth dist. -10135 Aug 30 j 15:08 26° ₹755'10 28.88521 AU conjunction -10141 Feb 14 j 14:47 12° ₹ 18'22 -2°30'31 direct -10135 Nov 16 j 23:36 25° ₹30'17 minimum elong -10141 Feb 14 j 14:47 12° ₹ 18'22 2°31'02 evening set -10134 Feb 14 i 16:56 27° ₹26'27 max. Earth dist. -10141 Feb 14 j 19:26 12° ₹ 18'48 30.84577 AU morning rise -10141 Mar 02 j 20:27 12° ₹ 54'23 conjunction -10134 Mar 02 j 22:02 28° ₹ 02'21 -2°38'44 retrograde -10141 May 31 j 20:36 14° ₹ 51'17 minimum elong -10134 Mar 02 j 22:01 28°**✗**02'21 2°39'19 opposition -10141 Aug 17 j 23:00 13° ₹26'37 -2°42'01 max. Earth dist. -10134 Mar 02 j 19:50 28° ₹ 02'08 30.88577 AU min. Earth dist. -10141 Aug 17 j 19:42 13° ₹26'51 28.84924 AU morning rise -10134 Mar 19 j 02:24 28° ₹38'13 -10141 Nov 03 j 21:40 12° ₹ 01'48 -10134 May 01 j 18:38 0°る direct -10140 Feb 01 j 00:24 13° ₹ 57'11 -10134 Jun 16 j 11:28 0° ₹34'19 evening set retrograde -10134 Aug 01 j 20:26 30°R ✓ -10140 Feb 17 j 05:33 14° ₹33'06 -2°32'24 -10134 Sep 02 j 00:30 29° ₹ 10'17 -2°49'54 conjunction opposition -10140 Feb 17 j 05:33 14° ₹33'06 2°32'56 -10134 Sep 02 j 03:32 29° ₹ 10'04 28.89075 AU min. Earth dist. minimum elong -10140 Feb $17\,\mathrm{j}\,09:20\,$ $14^\circ\mbox{\ensuremath{\mbox{$\cal P$}$}}33'28\,$ $30.84885~\mathrm{AU}$ -10134 Nov 19 j 12:20 27°**х** 45'17 max. Earth dist. direct -10140 Mar 04 j 11:05 15° ₹ 09'05 -10133 Feb 17 j 07:54 29° ₹41'32 morning rise evening set -10140 Jun 02 j 08:46 17°**√**05'51 -10133 Feb 25 j 17:28 0°る retrograde -10140 Aug 19 j 09:26 15°**х** 41'15 -2°43'55 opposition -10140 Aug 19 j 05:51 15° ₹ 41'31 28.85301 AU -10133 Mar 05 j 12:52 0°♂17'26 -2°38'57 min. Earth dist. conjunction direct -10140 Nov 05 j 10:41 14° ₹ 16'23 minimum elong -10133 Mar 05 j 12:52 0°쥥17'26 2°39'31 evening set -10139 Feb 02 j 15:03 16° **₹**11'53 max. Earth dist. -10133 Mar 05 j 08:19 0°**궁**17'00 30.89086 AU morning rise -10133 Mar 21 j 17:10 0°**궁**53'17 -10139 Feb 18 j 20:06 16° ₹ 47'48 -2°34'03 conjunction retrograde -10133 Jun 19 j 00:47 2°**3**49'14 -10139 Feb 18 j 20:06 16° **₹** 47'48 2°34'36 opposition -10133 Sep 04 j 10:54 1°₹25'17 -2°50'00 minimum elong max. Earth dist. -10139 Feb 18 j 22:47 16°**х** 48'03 30.85322 AU min. Earth dist. -10133 Sep 04 j 14:17 1°る25'02 28.89534 AU -10139 Mar 07 j 01:28 17° ₹23'46 direct -10133 Nov 22 j 00:37 0°る00'12 morning rise -10139 Jun 04 j 20:12 19° ₹ 20'25 -10132 Feb 19 j 22:46 1° ₹56'32 retrograde evening set -10139 Aug 21 j 19:59 17° ₹ 55'54 -2°45'33 opposition -10139 Aug 21 j 17:56 17° ₹ 56'02 28.85820 AU -10132 Mar 07 j 03:45 2°る32'26 -2°38'56 min. Earth dist. conjunction -10139 Nov 07 j 21:15 16° ₹30'59 -10132 Mar 07 j 03:45 2°る32'26 2°39'31 direct minimum elong -10138 Feb 05 i 05:40 18° ₹26'37 -10132 Mar 06 j 22:25 2°る31'56 30.89496 AU evening set max. Earth dist. morning rise -10132 Mar 23 i 07:44 3°**⋜**08'16 -10138 Feb 21 i 10:51 19° ₹02'31 -2°35'28 conjunction retrograde -10132 Jun 20 j 10:33 5°る04'03 minimum elong -10138 Feb 21 i 10:50 19° ₹02'31 2°36'02 opposition -10132 Sep 05 j 21:31 3°₹40'10 -2°49'51 max. Earth dist. -10138 Feb 21 j 13:19 19° ₹02'45 30.85905 AU min. Earth dist. -10132 Sep 06 j 02:59 3°339'46 28.89914 AU -10138 Mar 09 j 15:59 19°**尽** 38'28 morning rise direct -10132 Nov 23 j 12:08 2°る15'01 -10138 Jun 07 j 08:32 21° ₹35'00 retrograde evening set -10131 Feb 21 j 13:22 4°정11'25 opposition -10138 Aug 24 j 06:18 20° ₹ 10'35 -2°46'56 min. Earth dist. -10138 Aug 24 j 04:21 20°**尽** 10'43 28.86452 AU conjunction -10131 Mar 09 j 18:16 4°₹47'18 -2°38'40 -10138 Nov 10 j 10:15 18° **₹** 45'39 minimum elong -10131 Mar 09 j 18:17 4°る47'18 2°39'15 direct -10137 Feb 07 j 20:30 20° ₹ 41'25 max. Earth dist. -10131 Mar 09 j 11:38 4°る46'41 30.89863 AU evening set -10131 Mar 25 j 22:07 5°**る**23'06 morning rise -10137 Feb 24 j 01:33 21° ₹ 17'19 -2°36'39 -10131 Jun 22 j 22:15 7°**る**18'43 conjunction retrograde minimum elong -10137 Feb 24 j 01:33 21° ₹ 17'19 2°37'13 opposition -10131 Sep 08 j 07:54 5°る54'53 -2°49'27 max. Earth dist. -10137 Feb 24 j 02:03 21° ₹ 17'22 30.86578 AU min. Earth dist. -10131 Sep 08 j 13:23 5°る54'29 28.90267 AU morning rise -10137 Mar 12 j 06:39 21° ₹ 53'15 direct -10131 Nov 26 j 01:13 4°る29'39 retrograde -10137 Jun 09 j 21:55 23° ₹ 49'41 evening set -10130 Feb 24 j 04:00 6°**る**26'07 -10137 Aug 26 j 16:49 22°**₹** 25'22 -2°48'04 opposition

conjunction

-10130 Mar 12 j 08:50 7°**⋜**01'59 -2°38'10

min. Earth dist.

-10137 Aug 26 j 16:12 22°**₹**'25'24 28.87160 AU

 $Planetary\ Phenomena\ of\ Neptune\ from\ -10400\ through\ -9898\ (UT),\ Astrodienst\ AG\ 18-Feb-2025\ 14:23,\qquad page\ 22$

•	nical year style is used: The		_	` //			page 22
minimum elong	-10130 Mar 12 j 08:50	•		evening set	-10123 Mar 12 j 08:05		ie.
max. Earth dist.	-10130 Mar 12 j 01:01		30.90219 AU	evening set	-10123 Mai 12 J 06.03	22 003 44	
	,		30.90219 AU	:	10122 M 20 : 12-27	220741122	2020104
morning rise	-10130 Mar 28 j 12:28			conjunction	-10123 Mar 28 j 12:27		
retrograde	-10130 Jun 25 j 08:49		2040147	minimum elong	-10123 Mar 28 j 12:27		
opposition	-10130 Sep 10 j 18:15			max. Earth dist.	-10123 Mar 27 j 23:19		30.95411 AU
min. Earth dist.	-10130 Sep 11 j 01:31		28.90649 AU	morning rise	-10123 Apr 13 j 14:27		
direct	-10130 Nov 28 j 11:25			retrograde	-10123 Jul 10 j 17:54		2027107
evening set	-10129 Feb 26 j 18:30	8° る 40'38		opposition	-10123 Sep 25 j 19:02		
	10120 14 14 22 22	0071600	2027126	min. Earth dist.	-10123 Sep 26 j 07:30		28.96104 AU
conjunction	-10129 Mar 14 j 23:22			direct	-10123 Dec 14 j 04:35		
minimum elong	-10129 Mar 14 j 23:23			evening set	-10122 Mar 14 j 22:19		20.06260 ATT
max. Earth dist.	-10129 Mar 14 j 15:08		30.90635 AU	max. Earth dist.	-10122 Mar 30 j 11:56	24°054'20	30.96368 AU
morning rise	-10129 Mar 31 j 02:46				1012234 21:02.21	240755141	2025142
retrograde	-10129 Jun 27 j 19:35		2047152	conjunction	-10122 Mar 31 j 02:31		
opposition	-10129 Sep 13 j 04:36			minimum elong	-10122 Mar 31 j 02:32		2°26'15
min. Earth dist.	-10129 Sep 13 j 11:55		28.91095 AU	morning rise	-10122 Apr 16 j 04:23		
direct	-10129 Dec 01 j 01:07			retrograde	-10122 Jul 13 j 06:06		
evening set	-10128 Feb 29 j 09:00	10° 6 54'59		opposition	-10122 Sep 28 j 05:23		
		🚤		min. Earth dist.	-10122 Sep 28 j 17:58		28.97010 AU
conjunction	-10128 Mar 16 j 13:39			direct	-10122 Dec 16 j 17:27		
minimum elong	-10128 Mar 16 j 13:39			evening set	-10121 Mar 17 j 12:34	26° 七 33'59	
max. Earth dist.	-10128 Mar 16 j 03:44		30.91131 AU			_	
morning rise	-10128 Apr 01 j 16:54			conjunction	-10121 Apr 02 j 16:40		
retrograde	-10128 Jun 29 j 07:16			minimum elong	-10121 Apr 02 j 16:41		
opposition	-10128 Sep 14 j 14:59			max. Earth dist.	-10121 Apr 02 j 00:52		30.97226 AU
min. Earth dist.	-10128 Sep 14 j 23:18		28.91662 AU	morning rise	-10121 Apr 18 j 18:14		
direct	-10128 Dec 02 j 13:14			retrograde	-10121 Jul 15 j 16:32		
evening set	-10127 Mar 02 j 23:14	13° る 09'12		opposition	-10121 Sep 30 j 16:03		
				min. Earth dist.	-10121 Oct 01 j 06:30		28.97822 AU
conjunction	-10127 Mar 19 j 03:59			direct	-10121 Dec 19 j 03:52		
minimum elong	-10127 Mar 19 j 03:59			evening set	-10120 Mar 19 j 02:35	28° る 47'58	
max. Earth dist.	-10127 Mar 18 j 18:24		30.91766 AU				
morning rise	-10127 Apr 04 j 06:51			conjunction	-10120 Apr 04 j 06:36		
retrograde	-10127 Jul 01 j 18:08			minimum elong	-10120 Apr 04 j 06:36		
opposition	-10127 Sep 17 j 01:21			max. Earth dist.	-10120 Apr 03 j 14:05		30.97995 AU
min. Earth dist.	-10127 Sep 17 j 10:15		28.92359 AU	morning rise	-10120 Apr 20 j 07:53		
direct	-10127 Dec 05 j 02:42				-10120 Apr 20 j 15:32	0° ≈	
evening set	-10126 Mar 05 j 13:28	15° る 23'21		retrograde	-10120 Jul 17 j 02:31	1° ≈ 53'17	
				opposition	-10120 Oct 02 j 02:33	0° ≈ 30'16	-2°28'29
conjunction	-10126 Mar 21 j 18:00	15° る 59'10	-2°33'48	min. Earth dist.	-10120 Oct 02 j 17:17		28.98531 AU
minimum elong	-10126 Mar 21 j 18:00				-10120 Oct 20 j 08:14		
max. Earth dist.	-10126 Mar 21 j 06:38	15° る 58'07	30.92543 AU	direct	-10120 Dec 20 j 17:49	29° る 04'40	
morning rise	-10126 Apr 06 j 20:51	16° පි 34'51			-10119 Feb 18 j 12:25	0° ≈	
retrograde	-10126 Jul 04 j 07:07			evening set	-10119 Mar 21 j 16:35	1° ≈ 01'47	
opposition	-10126 Sep 19 j 11:41						
min. Earth dist.	-10126 Sep 19 j 20:54		28.93200 AU	conjunction	-10119 Apr 06 j 20:22		
direct	-10126 Dec 07 j 14:35			minimum elong	-10119 Apr 06 j 20:22		
evening set	-10125 Mar 08 j 03:41	17° る 37'27		max. Earth dist.	-10119 Apr 06 j 02:04		30.98678 AU
				morning rise	-10119 Apr 22 j 21:28		
conjunction	-10125 Mar 24 j 08:18			retrograde	-10119 Jul 19 j 13:21		
minimum elong	-10125 Mar 24 j 08:18	18° る 13'16	2°32'41	opposition	-10119 Oct 04 j 13:03	2° ≈ 43'55	-2°25'11
max. Earth dist.	-10125 Mar 23 j 21:16		30.93440 AU	min. Earth dist.	-10119 Oct 05 j 04:57	2° ≈ 42'48	28.99194 AU
morning rise	-10125 Apr 09 j 10:45	18° る 48'56		direct	-10119 Dec 23 j 05:11	1° ≈ 18'16	
retrograde	-10125 Jul 06 j 18:45	20° る 43'38		evening set	-10118 Mar 24 j 06:12	3° ≈ 15′23	
opposition	-10125 Sep 21 j 22:03						
min. Earth dist.	-10125 Sep 22 j 08:38	19° る 19'26	28.94134 AU	conjunction	-10118 Apr 09 j 10:02	3° ≈ 51′08	-2°14'08
direct	-10125 Dec 10 j 04:09			minimum elong	-10118 Apr 09 j 10:03	3° ≈ 51′08	2°14'40
evening set	-10124 Mar 09 j 18:02	19° る 51'35		max. Earth dist.	-10118 Apr 08 j 15:52		30.99330 AU
				morning rise	-10118 Apr 25 j 10:48		
conjunction	-10124 Mar 25 j 22:24			retrograde	-10118 Jul 21 j 23:22	6° ≈ 20'18	
minimum elong	-10124 Mar 25 j 22:25			opposition	-10118 Oct 06 j 23:32		-2°21'40
max. Earth dist.	-10124 Mar 25 j 09:33	20° ට 26'12	30.94421 AU	min. Earth dist.	-10118 Oct 07 j 16:15	4° ≈ 56'11	28.99822 AU
morning rise	-10124 Apr 11 j 00:47	21° る 03'02		direct	-10118 Dec 25 j 18:29	3° ≈ 31'39	
retrograde	-10124 Jul 08 j 07:34			evening set	-10117 Mar 26 j 19:59	5° ≈ 28'47	
opposition	-10124 Sep 23 j 08:27						
min. Earth dist.	-10124 Sep 23 j 18:59		28.95127 AU	conjunction	-10117 Apr 11 j 23:29		
direct	-10124 Dec 11 j 16:59	20°る08'46		minimum elong	-10117 Apr 11 j 23:29	6° ≈ 04'31	2°11'14

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10117 in astronomical counting style is the year 10118 BCE in historical counting style. max. Earth dist. -10117 Apr 11 i 03:31 6°≈02'39 30.99977 AU retrograde -10111 Aug 06 j 03:42 21°≈50'31 opposition -10117 Apr 28 j 00:07 6°≈40'00 -10111 Oct 22 j 01:09 20°≈28'06 -1°51'32 morning rise -10117 Jul 24 j 11:21 8°≈33'30 min. Earth dist. -10111 Oct 22 j 20:44 20°≈26'44 29.06631 AU retrograde -10117 Oct 09 j 09:55 -10110 Jan 10 j 09:59 19°≈02'28 opposition 7°≈10'35 -2°17'56 direct -10110 Apr 11 j 16:39 20°≈59'45 -10117 Oct 10 j 02:55 7°≈09'24 29.00490 AU min. Earth dist. evening set -10117 Dec 28 j 06:44 direct 5°≈44'50 -10110 Apr 27 j 18:44 21°≈35'23 -1°41'57 -10116 Mar 28 j 09:26 evening set 7°**≈**41'59 conjunction -10110 Apr 27 j 18:45 21°≈35'23 1°42'22 minimum elong -10110 Apr 26 j 19:41 21°≈33'15 31.07107 AU conjunction -10116 Apr 13 j 12:56 8°≈17'42 -2°07'10 max. Earth dist. -10116 Apr 13 j 12:57 8°≈17'42 2°07'40 minimum elong morning rise -10110 May 13 j 17:14 22°≈10'43 -10116 Apr 12 j 17:35 -10110 Aug 08 j 14:19 24°**≈**03'26 max. Earth dist. 8°≈15'54 31.00681 AU retrograde -10116 Apr 29 j 13:07 -10110 Oct 24 j 11:54 22°≈41'07 -1°46'31 morning rise 8°**≈**53'09 opposition -10116 Jul 25 j 22:01 10°≈46'30 -10110 Oct 25 j 08:27 22°≈39'41 29.07803 AU retrograde min. Earth dist. opposition -10116 Oct 10 j 20:32 9°≈23'38 -2°14'01 direct -10109 Jan 12 j 20:12 21°≈15'31 min. Earth dist. -10116 Oct 11 j 14:35 9°≈22'22 29.01231 AU evening set -10109 Apr 14 j 05:41 23°≈12'48 direct -10116 Dec 29 j 20:41 7°≈57'52 max. Earth dist. -10109 Apr 29 j 08:43 23°≈46'18 31.08235 AU evening set -10115 Mar 30 j 22:44 9°≈55'00 max. Earth dist. -10115 Apr 15 j 05:10 10°≈28'47 31.01491 AU conjunction -10109 Apr 30 j 07:36 23°≈48'26 -1°37'11 minimum elong -10109 Apr 30 j 07:37 23°≈48'26 1°37'34 conjunction -10115 Apr 16 j 01:54 10°≈30'42 -2°03'24 morning rise -10109 May 16 j 05:38 24°≈23'44 minimum elong -10115 Apr 16 j 01:55 10°≈30'42 2°03'52 retrograde -10109 Aug 11 j 00:07 26°≈16'21 morning rise -10115 May 02 i 01:59 11°≈06'08 opposition -10109 Oct 26 j 22:45 24°≈54'07 -1°41'20 retrograde -10115 Jul 28 i 09:58 12°≈59'22 min. Earth dist. -10109 Oct 27 j 20:07 24°≈52'37 29.08862 AU opposition -10115 Oct 13 j 06:57 11°≈36'33 -2°09'54 direct -10108 Jan 15 i 08:35 23°≈28'32 min. Earth dist. -10115 Oct 14 j 00:26 11°≈35'19 29.02097 AU evening set -10108 Apr 15 j 18:48 25°≈25'49 -10114 Jan 01 j 09:49 10°≈10'46 direct -10114 Apr 02 j 11:59 12°≈07'56 -10108 May 01 j 20:16 26°≈01'25 -1°32'17 evening set conjunction -10108 May 01 j 20:17 26°≈01'25 1°32'40 minimum elong -10114 Apr 18 j 15:05 12°≈43'37 -1°59'28 max. Earth dist. -10108 Apr 30 j 19:35 25°≈59'07 31.09250 AU conjunction -10114 Apr 18 j 15:06 12°≈43'37 1°59'56 -10108 May 17 j 18:04 26°≈36'42 minimum elong morning rise -10108 Aug 12 j 11:43 28°≈29'13 -10114 Apr 17 j 18:41 12°≈41'43 31.02425 AU max. Earth dist. retrograde -10108 Oct 28 j 09:37 27°**≈**07'02 -1°36'01 -10114 May 04 j 14:44 13°≈19'01 morning rise opposition -10114 Jul 04 j 07:06 15°≈ -10108 Oct 29 j 07:13 27°≈05'31 29.09820 AU min. Earth dist. -10114 Jul 30 j 19:55 15°≈12'07 -10107 Jan 16 j 20:43 25°≈41'27 retrograde direct -10114 Aug 26 j 14:42 15°R≈ -10107 Apr 18 j 07:27 27°≈38'42 evening set -10114 Oct 15 j 17:25 13°≈49'24 -2°05'35 max. Earth dist. -10107 May 03 j 08:38 28°≈12'02 31.10152 AU opposition -10114 Oct 16 j 12:17 13°≈48'04 29.03094 AU min. Earth dist. direct -10113 Jan 03 j 21:39 12°≈23'37 conjunction -10107 May 04 j 08:49 28°≈14'17 -1°27'14 evening set -10113 Apr 05 j 01:18 14°≈20'49 minimum elong -10107 May 04 j 08:50 28°≈14'17 1°27'35 max. Earth dist. -10113 Apr 20 j 06:54 14°≈54'31 31.03503 AU morning rise -10107 May 20 j 06:07 28°≈49'32 -10107 Jun 25 j 18:08 0°**光** -10113 Apr 21 j 04:08 14°≈56'30 -1°55'20 retrograde -10107 Aug 14 j 21:45 0°**)** 41'57 conjunction -10113 Apr 21 j 04:08 14°≈56'30 1°55'47 -10107 Oct 05 j 18:01 30°R≈ minimum elong -10113 Apr 22 j 17:50 15°≈ opposition -10107 Oct 30 j 20:33 29°≈19'47 -1°30'34 morning rise -10113 May 07 j 03:35 15°≈31'53 min. Earth dist. -10107 Oct 31 j 19:28 29°≈18'11 29.10658 AU -10113 Aug 02 i 08:00 17°≈24'52 -10106 Jan 19 i 10:37 27°≈54'11 retrograde direct -10113 Oct 18 i 03:55 16°≈02'14 -2°01'05 -10106 Apr 20 j 20:19 29°≈51'25 opposition evening set -10106 Apr 24 j 18:27 0°**光** min. Earth dist. -10113 Oct 18 j 22:14 16°≈00'57 29.04212 AU -10113 Nov 28 j 12:41 15°R≈ direct -10112 Jan 06 i 10:36 14°≈36'30 conjunction -10106 May 06 j 21:13 0° \(\frac{1}{2} 26'58 - 1^2 22'04 \) -10112 Feb 13 j 16:38 15°≈ minimum elong -10106 May 06 i 21:13 0°¥26'58 1°22'26 -10112 Apr 06 j 14:26 16°≈33'44 max. Earth dist. -10106 May 05 j 19:24 0°**)** €24'34 31.10959 AU evening set -10106 May 22 j 18:19 1° **★**02'11 morning rise conjunction -10112 Apr 22 j 17:02 17°≈09'24 -1°51'02 retrograde -10106 Aug 17 j 09:12 2° **\(\)** 54'29 minimum elong -10112 Apr 22 j 17:03 17°≈09'24 1°51'30 opposition -10106 Nov 02 j 07:11 1°**¥**32'20 -1°24'59 1°**)** 30'45 29.11420 AU max. Earth dist. -10112 Apr 21 j 19:32 17°≈07'24 31.04672 AU min. Earth dist. -10106 Nov 03 j 05:45 -10105 Jan 21 j 23:36 morning rise -10112 May 08 j 16:06 17°≈44'46 direct 0°**)**€06'42 retrograde -10112 Aug 03 j 18:09 19°≈37'40 evening set -10105 Apr 23 j 08:54 2°**)** 03'54 -10112 Oct 19 j 14:36 18°≈15'08 -1°56'24 max. Earth dist. -10105 May 08 j 08:06 2°**₭**37'03 31.11696 AU opposition min. Earth dist. -10112 Oct 20 j 10:12 18°≈13'46 29.05415 AU -10111 Jan 07 j 20:41 16°≈49'27 -10105 May 09 j 09:36 2°**∺**39'25 -1°16'48 direct conjunction evening set -10111 Apr 09 j 03:31 18°≈46'43 minimum elong -10105 May 09 j 09:37 2°****39'25 1°17'07 max. Earth dist. -10111 Apr 24 j 08:16 19°≈20'21 31.05904 AU morning rise -10105 May 25 j 06:10 3°**升**14'36 retrograde -10105 Aug 19 j 19:16 5°**)** 06'47 conjunction -10111 Apr 25 j 05:55 19°≈22'22 -1°46'35 opposition -10105 Nov 04 j 18:11 3°**¥**44'38 -1°19'18 -10111 Apr 25 j 05:56 19°≈22'22 1°47'00 min. Earth dist. -10105 Nov 05 j 18:09 3°**)** 42′58 29.12141 AU minimum elong

direct

-10104 Jan 24 j 12:30

2°**)** 19'00

-10111 May 11 j 04:41 19°≈57'43

morning rise

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10104 in astronomical counting style is the year 10105 BCE in historical counting style. evening set -10104 Apr 24 j 21:17 4° **∺** 16'08 opposition -10098 Nov 19 j 23:01 19° \(\) 06'49 -0°36'46 min. Earth dist. -10098 Nov 20 j 23:39 19°\\$05'07 29.18789 AU conjunction -10104 May 10 j 21:31 4°\f\frac{1}{51'37} -1°11'25 -10097 Feb 09 j 01:14 17° **\(\)**41'26 direct -10104 May 10 j 21:32 4°\f51'37 1°11'44 -10097 May 11 j 09:26 19° ¥ 38'23 minimum elong evening set -10104 May 09 j 19:23 4°**)** 49'11 31.12429 AU -10097 May 26 j 03:58 20° **∺** 11'11 31.19249 AU max. Earth dist. max. Earth dist. -10104 May 26 j 17:48 morning rise 5°**升**26'45 -10104 Aug 21 j 06:50 -10097 May 27 j 06:37 20° **∺** 13'40 -0°31'22 retrograde 7°**₩**18'50 conjunction -10104 Nov 06 j 05:01 -10097 May 27 j 06:37 20° **H** 13'40 0°31'31 opposition 5°**¥**56'42 -1°13'29 minimum elong -10104 Nov 07 j 04:15 -10097 Jun 11 j 23:48 20° **∺**48'36 min. Earth dist. 5°**¥**55'05 29.12874 AU morning rise -10097 Sep 06 j 05:23 22° **ਮ** 40'21 direct -10103 Jan 26 j 02:44 4°**)**€31'02 retrograde evening set -10103 Apr 27 j 09:32 6°**)** €28'07 opposition -10097 Nov 22 j 10:18 21° **X** 18'35 -0°30'25 -10103 May 12 j 07:20 -10097 Nov 23 j 10:12 21°**光** 16'56 29.19758 AU max. Earth dist. 7°**₭**01'09 31.13189 AU min. Earth dist. -10096 Feb 11 j 13:12 19° **∺**53'15 direct conjunction -10103 May 13 j 09:26 7°**₭**03'35 -1°05'57 evening set -10096 May 12 j 21:05 21° **€** 50'12 minimum elong -10103 May 13 j 09:27 7°**¥**03'35 1°06'13 morning rise -10103 May 29 j 05:15 7°**)** 38'41 conjunction -10096 May 28 j 17:53 22° **∺**25'27 -0°25'24 retrograde -10103 Aug 23 j 16:19 9°**)** 30′40 minimum elong -10096 May 28 j 17:54 22° **€**25'27 0°25'33 opposition -10103 Nov 08 j 15:51 8°**¥**08'32 -1°07'35 max. Earth dist. -10096 May 27 j 15:44 22°**米**23'01 31.20152 AU min. Earth dist. -10103 Nov 09 j 16:01 8°**¥**06'52 29.13677 AU morning rise -10096 Jun 13 j 10:25 23° ¥ 00'20 direct -10102 Jan 28 j 14:05 6°)(42'53 retrograde -10096 Sep 07 j 15:46 24° \(\frac{1}{52} \)'06 evening set -10102 Apr 29 j 21:39 8°**)** 39'55 opposition -10096 Nov 23 j 21:47 23°\ 30'22 -0°24'01 min. Earth dist. -10096 Nov 24 j 22:59 23°\(\frac{1}{2}238\) 29.20599 AU conjunction -10102 May 15 j 21:12 9° \(\) 15'20 -1°00'22 direct -10095 Feb 13 i 02:01 22° ₩ 05'05 minimum elong -10102 May 15 j 21:13 9°\ 15'21 1°00'39 evening set -10095 May 15 j 08:52 24° + 02'00 max. Earth dist. -10102 May 14 j 19:25 9° ¥ 12'56 31.14043 AU max. Earth dist. -10095 May 30 j 02:14 24° **X** 34'42 31.20932 AU -10102 May 31 j 16:37 9° **\(\)** 50'25 morning rise -10102 Aug 26 j 01:20 11°\ 42'18 -10095 May 31 j 05:04 24° + 37'12 -0°19'24 retrograde conjunction opposition -10102 Nov 11 j 02:46 10°\\$20'14 -1°01'35 -10095 May 31 j 05:04 24° \(\mathbf{H}\) 37'12 0°19'32 minimum elong -10102 Nov 12 j 02:19 10° **€** 18'35 29.14562 AU -10095 Jun 15 j 21:13 25° **∺** 12'03 min. Earth dist. morning rise -10095 Sep 10 j 03:39 27°**米** 03'47 -10101 Jan 31 j 03:30 8° **¥** 54'35 direct retrograde -10095 Nov 26 j 08:57 25°**米**42'04 -0°17'35 evening set -10101 May 02 j 09:46 10° **₭** 51'35 opposition -10101 May 17 j 06:24 11° \bigstar 24'31 31.14985 AU -10095 Nov 27 j 09:31 25° **€** 40'23 29.21302 AU max. Earth dist. min. Earth dist. -10094 Feb 15 j 16:16 24° **∺** 16'49 direct -10101 May 18 j 08:49 11° **€** 26'59 -0°54'43 -10094 May 17 j 20:31 26° **米** 13'41 conjunction evening set -10101 May 18 j 08:49 11° **€** 26'59 0°54'57 minimum elong -10101 Jun 03 j 03:49 12°**米**02'02 -10094 Jun 02 j 16:14 26° ¥48'51 -0°13'24 morning rise conjunction -10101 Aug 28 j 11:29 13°**米** 53'52 -10094 Jun 02 j 16:14 26° ¥48'51 0°13'30 retrograde minimum elong opposition -10101 Nov 13 j 13:45 12° ¥ 31'50 -0°55'30 behind sun begin -10094 Jun 02 j 12:37 26° **∺**48'32 min. Earth dist. -10101 Nov 14 j 13:28 12° **★** 30'11 29.15559 AU behind sun end -10094 Jun 02 j 19:52 26°**米**49'11 direct -10100 Feb 02 j 13:42 11°**米**06'14 max. Earth dist. -10094 Jun 01 j 13:14 26° ¥ 46'21 31.21569 AU -10100 May 03 j 21:42 13°**米**03'13 morning rise -10094 Jun 18 j 07:48 27° **∺**23'41 evening set retrograde -10094 Sep 12 j 13:27 29° **光** 15'23 -10100 May 19 j 20:26 13° **€** 38'35 -0°48'59 -10094 Nov 28 j 20:24 27° ¥ 53'40 -0°11'08 conjunction opposition -10100 May 19 j 20:27 13°**米** 38'35 0°49'13 min. Earth dist. -10094 Nov 29 j 21:59 27° **€** 51'55 29.21887 AU minimum elong max. Earth dist. -10100 May 18 j 19:01 13° **€** 36'13 31.16034 AU -10093 Feb 18 j 04:09 26° **∺**28'26 direct -10100 Jun 04 j 14:54 14°¥ 13'36 -10093 May 20 j 07:57 28° \(\frac{1}{2}\)25'15 morning rise evening set -10100 Aug 29 j 20:42 16°\ 05'24 -10093 Jun 04 j 00:30 28° ¥ 57'53 31.22107 AU retrograde max. Earth dist. -10100 Nov 15 j 00:50 14°\day 43'26 -0°49'19 opposition -10100 Nov 16 j 00:43 14° \(\frac{1}{4} \) 41'47 29.16629 AU -10093 Jun 05 i 03:09 29° ₩ 00'22 -0°07'23 min. Earth dist. conjunction direct -10099 Feb 04 i 01:41 13° \times 17'54 minimum elong -10093 Jun 05 i 03:08 29° \times 00'22 0°07'27 -10099 May 06 i 09:35 15° ¥ 14'52 behind sun begin -10093 Jun 04 j 21:14 28° ¥ 59'50 evening set max. Earth dist. -10099 May 21 j 05:18 15° \(\frac{4}{4}7'45 \) 31.17136 AU -10093 Jun 05 j 09:03 29° ₩ 00'54 behind sun end morning rise -10093 Jun 20 j 18:11 29° **€** 35'09 -10099 May 22 j 07:44 15°**)** € 50'13 -0°43'10 -10093 Jul 02 j 10:22 0°**Υ** conjunction -10099 May 22 j 07:45 15°**¥** 50'13 0°43'22 1°**Y**26'49 minimum elong retrograde -10093 Sep 14 j 22:16 -10099 Jun 07 j 01:55 16° **★**25'12 0°Υ05'06 -0°04'41 morning rise opposition -10093 Dec 01 j 07:49 retrograde -10099 Sep 01 j 07:51 18° **∺** 16'59 min. Earth dist. -10093 Dec 02 j 08:51 0°**Υ**03'23 29.22374 AU -10099 Nov 17 j 11:51 16°**米**55'05 -0°43'05 -10093 Dec 04 j 10:05 30°R € opposition -10099 Nov 18 j 11:26 16° **€** 53'27 29.17734 AU -10092 Feb 20 j 18:00 28° ₩ 39'52 min. Earth dist. direct -10098 Feb 06 j 12:48 15°**米**29'38 -10092 May 04 j 06:42 $0^{\circ}\Upsilon$ direct -10098 May 08 j 21:25 17° **★**26'36 0°Y36'36 evening set evening set -10092 May 21 j 19:19 1°**Y**09'09 31.22573 AU max. Earth dist. -10092 Jun 05 j 10:39 -10098 May 24 j 19:16 18°**米**01'55 -0°37'18 conjunction 1°Y11'42 -0°01'20 minimum elong -10098 May 24 j 19:17 18° **★** 01'55 0°37'29 conjunction -10092 Jun 06 j 13:52

minimum elong

behind sun end

behind sun begin

-10092 Jun 06 j 13:52

-10092 Jun 06 j 07:23

-10092 Jun 06 j 20:20

1°Υ11'42 0°01'23

1°Y11'07

1°Y12'16

max. Earth dist.

morning rise

retrograde

-10098 May 23 j 17:49 17° **★** 59'32 31.18226 AU

-10098 Jun 09 j 12:48 18°**)** 36'52

-10098 Sep 03 j 17:37 20° **∺**28'38

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10092 in astronomical counting style is the year 10093 BCE in historical counting style. 1°**Y**46'26 opposition -10092 Jun 22 j 04:26 -10086 Dec 16 j 16:21 15° Υ 21'09 0° 40'02 morning rise -10092 Aug 24 j 20:39 3°**Y**29′23 min. Earth dist. -10086 Dec 17 j 14:38 15°**Υ**19'38 29.26828 AU asc. node -10092 Sep 16 j 08:17 3°Y38'05 -10085 Mar 08 j 04:26 13° Υ 56'13 retrograde direct $-10092 \text{ Dec } 02 \text{ j } 19:13 \quad 2^{\circ} \Upsilon 16'20 \quad 0^{\circ} 01'46$ -10085 Jun 06 j 23:12 15°**Υ**'52'35 opposition evening set -10092 Dec 03 j 20:18 2°Υ14'37 29.22842 AU min. Earth dist. -10091 Feb 22 j 04:54 0°Υ51'06 -10085 Jun 22 j 13:29 16°**Υ**27'21 0°40'28 direct conjunction 2°**Y**47'46 -10085 Jun 22 j 13:29 16° **Y** 27'21 0°40'35 evening set -10091 May 24 j 06:18 minimum elong -10091 Jun 07 j 22:26 3°**Y**20′23 31.23038 AU -10085 Jun 21 j 13:50 16°**Υ**25'08 31.27166 AU max. Earth dist. max. Earth dist. -10085 Jul $08 \text{ j } 00:07 17^{\circ} \Upsilon 01'49$ morning rise -10091 Jun 09 j 00:25 3°**Y**22'48 conjunction 0°04'49 retrograde -10085 Oct 02 j 07:05 18°**Υ**53'40 minimum elong -10091 Jun 09 j 00:25 3°**Y**22'48 0°04'48 opposition -10085 Dec 19 j 04:17 17° **Y** 31'58 0°46'16 -10091 Jun 08 j 18:06 3°Y22'15 -10085 Dec 20 j 03:07 17°**Υ**'30'24 29.27574 AU behind sun begin min. Earth dist. -10091 Jun 09 j 06:44 3°**Y**23′22 behind sun end direct -10084 Mar 09 j 15:43 16°**Υ**'07'06 morning rise -10091 Jun 24 j 14:23 3°Y57'31 evening set -10084 Jun 08 j 09:52 18° Υ 03'25 retrograde -10091 Sep 18 j 16:41 5°Y49'08 opposition -10091 Dec 05 j 06:40 4°**Υ**27'22 0°08'13 conjunction -10084 Jun 23 j 23:32 18°**Y**38'09 0°46'16 min. Earth dist. -10091 Dec 06 j 07:40 4°**Υ**25'39 29.23312 AU minimum elong -10084 Jun 23 j 23:32 18°**Y**38'09 0°46'23 direct -10090 Feb 24 j 17:44 3°Y02'09 max. Earth dist. -10084 Jun 23 j 00:37 18°**Y**'36'00 31.27864 AU evening set -10090 May 26 j 17:25 4°Υ58'44 morning rise -10084 Jul 09 j 09:34 19°**Υ**12'35 max. Earth dist. -10090 Jun 10 j 08:09 5°**Υ**31'14 31.23538 AU retrograde -10084 Oct 03 j 16:47 21° Υ 04'29 opposition $-10084 \text{ Dec } 20 \text{ j } 16:08 \text{ } 19^{\circ} \Upsilon 42'47 \text{ } 0^{\circ} 52'25$ conjunction -10090 Jun 11 j 10:46 5°**Υ**33'43 0°10'49 min. Earth dist. -10084 Dec 21 j 14:13 19° Υ 41'17 29.28215 AU minimum elong -10090 Jun 11 j 10:45 5°**Y**33'43 0°10'48 direct $-10083 \text{ Mar } 12 \text{ j } 05:27 \quad 18^{\circ} \Upsilon 17'59$ behind sun begin -10090 Jun 11 i 05:48 5°**Y**33'17 evening set $-10083 \text{ Jun } 10 \text{ j } 20:29 \ 20^{\circ} \Upsilon 14'15$ behind sun end -10090 Jun 11 i 15:43 5°Y34'10 max. Earth dist. -10083 Jun 25 j 09:55 20°Υ 46'44 31.28436 AU -10090 Jun 27 j 00:18 6°**Y**08'24 morning rise -10090 Sep 21 j 02:34 8°Y00'01 -10083 Jun 26 j 09:26 20° \begin{pmatrix} \quad 48'56 & 0\circ 51'59 \end{pmatrix} retrograde conjunction opposition -10090 Dec 07 j 18:01 6°**Υ**38'14 0°14'38 -10083 Jun 26 j 09:25 20° \cdot \cdot 48'56 minimum elong 0°52'08 -10090 Dec 08 j 18:07 6°**Υ**36'35 29.23857 AU -10083 Jul 11 j 18:59 21°**Υ**23'20 min. Earth dist. morning rise 5°Υ13'01 -10089 Feb 27 j 04:41 -10083 Oct 06 j 03:41 23° № 15'17 direct retrograde -10089 May 29 j 04:18 7°**Υ**09'33 opposition -10083 Dec 23 j 04:05 21°**Υ**'53'35 0°58'30 evening set -10083 Dec 24 j 02:07 21°**Υ**'52'05 29.28734 AU min. Earth dist. -10089 Jun 13 j 21:12 7°**Υ**44'30 0°16'48 -10082 Mar 14 j 16:57 20°**Υ**28'50 conjunction direct -10089 Jun 13 j 21:12 7°**Υ**'44'30 0°16'49 -10082 Jun 13 j 06:59 22°**Y**25'03 minimum elong evening set -10089 Jun 12 j 20:14 7°**Υ**42'10 31.24126 AU max. Earth dist. -10082 Jun 28 j 19:24 22° Υ 59'41 0°57'38 -10089 Jun 29 j 10:00 8°**Υ**19'07 morning rise conjunction -10089 Sep 23 j 11:26 10°**Υ**10'46 -10082 Jun 28 j 19:23 22°**Y**59'41 0°57'48 retrograde minimum elong -10089 Dec 10 j 05:40 8° \begin{pmatrix} \gamma \text{48'58} & 0^{\circ} \text{21'03} \end{pmatrix} max. Earth dist. -10082 Jun 27 j 21:03 22°**Υ**'57'35 31.28878 AU opposition min. Earth dist. -10089 Dec 11 j 05:59 8° **Y** 47'19 29.24495 AU morning rise -10082 Jul 14 j 04:13 23°**Y**34'02 direct -10088 Feb 29 j 16:04 7°**Y**23'49 retrograde -10082 Oct 08 j 12:16 25°**Υ**26'03 -10088 May 30 j 15:05 9°**Y**20'17 -10082 Dec 25 j 16:06 24°**Υ**'04'20 1°04'30 evening set opposition max. Earth dist. -10088 Jun 14 j 05:56 9°**Υ**'52'50 31.24821 AU min. Earth dist. -10082 Dec 26 j 14:08 24°**Υ**'02'50 29.29105 AU -10081 Mar 17 j 06:09 22°**Y**39'37 direct -10088 Jun 15 j 07:13 9°**Υ**'55'11 0°22'46 -10081 Jun 15 j 17:33 24°**Y**35'45 conjunction evening set -10088 Jun 15 j 07:13 9°**Υ**'55'11 0°22'48 max. Earth dist. -10081 Jun 30 j 06:06 25°**Y**′08'10 31.29194 AU minimum elong $-10088 \text{ Jun } 30 \text{ j } 19:38 \ 10^{\circ} \Upsilon 29'47$ morning rise $-10088 \text{ Sep } 24 \text{ j } 22:36 \quad 12^{\circ} \Upsilon 21'27$ -10081 Jul 01 j 05:09 25° Υ 10'20 1°03'12 retrograde conjunction -10088 Dec 11 j 17:08 10° **Y** 59'41 0° 27'25 -10081 Jul 01 j 05:08 25°**Υ**'10'20 opposition minimum elong -10088 Dec 12 j 15:56 10° Y 58'07 29.25234 AU -10081 Jul 16 i 13:34 25°**Y**44'39 min. Earth dist. morning rise direct -10087 Mar 03 j 02:54 9°**°**√34'35 retrograde -10081 Oct 10 j 22:32 27° Υ 36'43 -10081 Dec 28 j 04:08 26°**Υ**14'57 1°10'24 -10087 Jun 02 j 01:47 11° Υ 31'00 opposition evening set min. Earth dist. -10081 Dec 29 j 01:17 26° Y 13'31 29.29380 AU -10087 Jun 17 j 17:26 12° \(\gamma 05'52 \) 0° 28'43 -10080 Mar 18 j 17:07 24°**Υ**50'16 conjunction direct $-10087 \text{ Jun } 17 \text{ j } 17:26 \ 12^{\circ} \Upsilon 05'52 \ 0^{\circ} 28'46$ -10080 Jun 17 j 03:41 26°**Υ**46'19 minimum elong evening set -10087 Jun 16 j 17:20 12°**Υ**'03'37 31.25590 AU max. Earth dist. -10087 Jul 03 j 05:10 12°**Υ**40'25 morning rise conjunction -10080 Jul 02 j 14:48 27°**Υ**20'52 1°08'40 -10087 Sep 27 j 08:54 14°**Y**32'09 minimum elong -10080 Jul 02 j 14:47 27°**Υ**20'52 1°08'52 retrograde -10087 Dec 14 j 04:41 13° Υ 10'23 0°33'45 -10080 Jul 01 j 17:19 27°**Υ** 18'51 31.29415 AU opposition max. Earth dist. -10087 Dec 15 j 04:11 13° \mathbf{Y} '08'47 29.26032 AU -10080 Jul 17 j 22:30 27°**Υ**55'08 min. Earth dist. morning rise -10086 Mar 05 j 15:09 11°**Y**45'22 -10080 Oct 12 j 07:15 29° Υ 47'16 direct retrograde -10086 Jun 04 j 12:34 13°**Υ**41'46 $-10080 \,\mathrm{Dec}\ 29\,\mathrm{j}\ 16:16\ 28^{\circ}\Upsilon 25'27\ 1^{\circ}16'11$ evening set opposition -10086 Jun 19 j 03:28 14° Υ 14'20 31.26400 AU max. Earth dist. min. Earth dist. $-10080 \,\mathrm{Dec}\ 30\,\mathrm{j}\ 13:46\ 28^{\circ}\Upsilon^24'00\ 29.29572 \,\mathrm{AU}$ direct -10079 Mar 21 j 04:37 27°**Υ**'00'47 conjunction -10086 Jun 20 j 03:30 14°**Υ**16'35 0°34'37 evening set -10079 Jun 19 j 13:56 28°**Y**56'45 minimum elong $-10086 \text{ Jun } 20 \text{ j } 03:30 \ 14^{\circ} \Upsilon 16'35 \ 0^{\circ} 34'41$ max. Earth dist. -10079 Jul 04 j 02:32 29°**Υ**29'12 31.29591 AU -10086 Jul 05 j 14:46 14°**Y**51'06 morning rise -10086 Sep 29 j 20:44 16°**Y**42'52 -10079 Jul 05 j 00:16 29°**Y**'31'15 1°14'02 retrograde conjunction

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10079 in astronomical counting style is the year 10080 BCE in historical counting style. -10079 Jul 05 j 00:15 29° Υ 31'15 1°14'16 minimum elong min. Earth dist. -10072 Jan 15 j 21:11 13°**8**36'40 29.32077 AU -10079 Jul 17 j 19:57 0°8 direct -10072 Apr 05 j 16:18 12°**8**13'33 -10079 Jul 20 j 07:35 0°**ප**05'29 -10072 Jul 04 j 10:53 14°**8**09'10 morning rise evening set -10079 Oct 14 j 18:07 retrograde 1°**8**57'40 -10078 Jan 01 j 04:05 0°**8**35'49 1°21'52 -10072 Jul 19 j 16:45 14°843'21 1°48'12 opposition conjunction -10072 Jul 19 j 16:44 14°**8**43'21 1°48'34 -10078 Jan 01 j 23:59 0°834'28 29.29749 AU min. Earth dist. minimum elong -10078 Jan 23 j 21:05 30°R**Y** max. Earth dist. -10072 Jul 19 j 00:45 14°**8**41'51 31.32169 AU -10078 Mar 23 j 15:33 29°**Υ**11'10 -10072 Jul 27 j 01:41 15°**8** direct -10072 Aug 03 j 20:27 15°**8**17'22 -10078 May 18 j 20:51 0° 8 morning rise -10072 Oct 29 j 19:59 17°**8**10'20 evening set -10078 Jun 21 j 23:58 1°**8**07'04 retrograde opposition -10071 Jan 16 j 17:58 15°**8**48'25 1°57'54 -10078 Jul 07 j 09:44 1°**8**41'30 1°19'17 -10071 Jan 17 j 08:32 15°**8**47'26 29.32469 AU conjunction min. Earth dist. -10078 Jul 07 j 09:44 1°841'30 1°19'32 -10071 Feb 17 j 14:51 15°R8 minimum elong -10078 Jul 06 j 13:18 max. Earth dist. 1°**8**39'35 31.29764 AU direct -10071 Apr 08 j 03:11 14°**8**24'19 morning rise -10078 Jul 22 j 16:22 2°**8**15'42 -10071 May 25 j 14:17 15°**8** retrograde -10078 Oct 17 j 04:18 4°**8**07'58 evening set -10071 Jul 06 j 20:37 16°**8**19'53 opposition -10077 Jan 03 j 16:18 2°**8**46'04 1°27'25 max. Earth dist. -10071 Jul 21 j 11:33 16°**8**52'40 31.32483 AU min. Earth dist. -10077 Jan 04 j 12:27 2°**8**44'42 29.29959 AU direct -10077 Mar 26 j 03:33 1°**8**21'27 conjunction evening set -10077 Jun 24 j 09:53 3°**8**17'17 minimum elong -10071 Jul 22 j 02:02 16°**8**54'02 morning rise -10071 Aug 06 j 05:05 17°**8**28'00 conjunction -10077 Jul 09 j 18:56 3°\(\mathbf{8}\)51'40 1°24'26 retrograde -10071 Nov 01 j 05:08 19°**8**21'07 minimum elong -10077 Jul 09 i 18:55 3°**8**51'40 1°24'42 opposition -10070 Jan 19 i 06:28 17°\(\begin{aligned}
 59'10 2°02'26 \end{aligned} max. Earth dist. min. Earth dist. -10070 Jan 19 j 21:24 17° 858'10 29.32722 AU morning rise -10077 Jul 25 i 01:04 4°**8**25'50 direct -10070 Apr 10 j 14:33 16°**8**35'09 retrograde -10077 Oct 19 j 15:55 6°818'11 -10070 Jul 09 j 06:29 18°\begin{align*} 30'39 \end{align*} evening set -10076 Jan 06 j 04:25 4°\(\alpha 56'15 \) 1°32'51 opposition -10070 Jul 24 j 11:11 19°**8**04'45 1°56'41 min. Earth dist. conjunction -10076 Mar 27 j 16:07 3°**8**31'42 -10070 Jul 24 j 11:10 19°**8**04'45 1°57'04 direct minimum elong -10076 Jun 25 j 19:48 5°**8**27'28 -10070 Jul 23 j 20:29 19°**8**03'22 31.32663 AU evening set max. Earth dist. -10076 Jul 10 j 09:18 6°**8**00'02 31.30341 AU -10070 Aug 08 j 13:55 19°**8**38'42 max. Earth dist. morning rise -10070 Nov 03 j 16:31 21°**8**31'55 retrograde -10076 Jul 11 j 04:12 6°801'49 1°29'27 -10069 Jan 21 j 19:06 20°**8**09'57 2°06'47 conjunction opposition -10076 Jul 11 j 04:11 6°**8**01'49 1°29'44 -10069 Jan 22 j 08:25 20°**8**09'03 29.32832 AU min. Earth dist. minimum elong -10076 Jul 26 j 09:48 6°\begin{align*} 6°\begin{align*} 35'56 \end{align*} -10069 Apr 13 j 01:46 18°**8**45'58 morning rise direct -10076 Oct 21 j 02:28 8°**8**28'24 -10069 Jul 11 j 16:04 20°**8**41'23 retrograde evening set -10075 Jan 07 j 16:33 7°**8**06'27 1°38'09 opposition min. Earth dist. -10075 Jan 08 j 10:41 7°**8**05'13 29.30648 AU conjunction -10069 Jul 26 j 20:18 21°**8**15'27 2°00'41 direct -10075 Mar 30 j 02:35 5°**8**41'59 minimum elong -10069 Jul 26 j 20:18 21°**8**15'27 2°01'05 evening set -10075 Jun 28 j 05:33 7°**8**37'43 max. Earth dist. -10069 Jul 26 j 06:33 21°**8**14'09 31.32682 AU morning rise -10069 Aug 10 j 22:31 21°**8**49'22 -10075 Jul 13 j 13:25 8°**8**12'01 1°34'21 retrograde -10069 Nov 06 j 02:54 23°**8**42'43 conjunction -10075 Jul 13 j 13:24 8°**8**12'01 1°34'40 opposition -10068 Jan 24 j 07:56 22°**8**20'40 2°10'58 minimum elong max. Earth dist. -10075 Jul 12 j 20:00 8°**8**10'23 31.30777 AU min. Earth dist. -10068 Jan 24 j 21:42 22°**8**19'45 29.32791 AU -10075 Jul 28 j 18:28 8°846'06 -10068 Apr 14 j 13:07 20°856'44 morning rise direct -10075 Oct 23 j 12:31 10°838'41 -10068 Jul 13 j 01:43 22°852'03 retrograde evening set -10074 Jan 10 j 04:43 9°**8**16'44 1°43'19 opposition -10074 Jan 10 j 21:29 9°815'36 29.31110 AU -10068 Jul 28 j 05:25 23°\(\delta 26'05 \) 2°04'30 min. Earth dist. conjunction -10068 Jul 28 j 05:24 23°\(\delta 26'05 \) 2°04'55 direct -10074 Apr 01 j 16:12 7°**8**52'22 minimum elong evening set -10074 Jun 30 j 15:24 9°848'04 max. Earth dist. -10068 Jul 27 j 16:15 23°824'50 31.32575 AU morning rise -10068 Aug 12 j 07:16 23°859'58 -10074 Jul 15 j 22:29 10°\begin{align*} 22'19 1°39'06 \end{align*} retrograde -10068 Nov 07 j 14:18 25°853'24 conjunction -10074 Jul 15 j 22:28 10°\begin{align*} 22'19 1°39'26 \end{align*} minimum elong opposition -10074 Jul 15 j 05:04 10°\begin{align*} 20'41 31.31255 AU \end{align*} max. Earth dist. min. Earth dist. -10074 Jul 31 j 03:07 10°856'23 morning rise direct -10067 Apr 17 j 00:51 23°807'21 -10074 Oct 26 j 00:17 12°849'05 -10067 Jul 15 j 11:13 25°**8**02'35 retrograde evening set -10073 Jan 12 j 17:01 11°**8**27'09 1°48'20 opposition min. Earth dist. -10073 Jan 13 j 09:07 11°**8**26'04 29.31611 AU -10067 Jul 30 j 14:23 25°**8**36'34 2°08'09 conjunction -10067 Jul 30 j 14:23 25°**8**36'34 2°08'36 -10073 Apr 04 j 03:38 10°**8**02'53 minimum elong direct -10073 Jul 03 j 01:06 11°**8**58'33 -10067 Jul 30 j 01:38 25°**8**35'22 31.32351 AU evening set max. Earth dist. -10067 Aug 14 j 15:56 26°**8**10'26 morning rise -10073 Jul 18 j 07:44 12°\begin{align*} 32'47 1°43'44 \end{align*} -10067 Nov 10 j 01:19 28°803'58 conjunction retrograde -10073 Jul 18 j 07:43 12°**8**32'46 1°44'05 minimum elong opposition max. Earth dist. -10073 Jul 17 j 16:05 12°**8**31'18 31.31741 AU min. Earth dist. -10066 Jan 28 j 21:24 26°**8**40'56 29.32382 AU morning rise -10073 Aug 02 j 11:43 13°**8**06'48 direct -10066 Apr 19 j 11:32 25°**8**17'50 -10073 Oct 28 j 09:29 14°859'39 -10066 Jul 17 j 20:30 27°**8**12'58 retrograde evening set

-10072 Jan 15 j 05:31 13°**8**37'44 1°53'12

opposition

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10066 in astronomical counting style is the year 10067 BCE in historical counting style. -10066 Aug 01 j 23:15 27°**8**46'54 2°11'36 max. Earth dist. -10060 Aug 13 j 22:49 10°**Д**47'59 31.31393 AU conjunction -10066 Aug 01 j 23:14 27°846'54 2°12'03 -10060 Aug 29 j 03:31 11°**Д**22'14 minimum elong morning rise -10066 Aug 01 j 12:09 27° 845'52 31.32082 AU -10060 Nov 25 j 04:28 13°**Ⅲ**16'45 max. Earth dist. retrograde -10066 Aug 17 j 00:19 28°**8**20'45 -10059 Feb 13 j 02:38 11°**Д**54'13 2°39'32 morning rise opposition -10066 Oct 14 j 04:03 0°**Ⅱ** -10059 Feb 13 j 07:40 11°**Д**53'53 29.31553 AU min. Earth dist. -10066 Nov 12 j 11:44 0°**Д**14'23 -10059 May 04 j 21:14 10°**Д**30'45 retrograde direct -10066 Dec 12 j 13:41 30°R8 -10059 Aug 01 j 12:50 12°**Ц**25'25 evening set -10065 Jan 30 j 21:52 28°\(\begin{aligned}
 52'05 2°22'22 \end{aligned} opposition -10059 Aug 16 j 12:51 12°**Д**59'11 2°30'19 min. Earth dist. -10065 Jan 31 j 08:34 28°**8**51'21 29.32109 AU conjunction direct -10065 Apr 22 j 01:30 27°**8**28'10 minimum elong -10059 Aug 16 j 12:51 12°**I**59'11 2°30'52 -10059 Aug 16 j 08:39 12°**Д**58'48 31.31277 AU evening set -10065 Jul 20 j 05:53 29°**8**23'12 max. Earth dist. -10059 Aug 31 j 12:16 13°**Д**32'57 morning rise -10065 Aug 04 j 08:01 29°**8**57'07 2°14'52 -10059 Nov 27 j 16:27 15°**Ц**27'37 conjunction retrograde minimum elong -10065 Aug 04 j 08:00 29°**8**57'07 2°15'21 opposition -10058 Feb 15 j 15:33 14°**I**I05'04 2°41'37 max. Earth dist. -10065 Aug 03 j 21:02 29°**8**56'05 31.31818 AU min. Earth dist. -10058 Feb 15 j 18:54 14°**Д**04'51 29.31379 AU -10065 Aug 05 j 14:36 $0^{\circ}\Pi$ direct -10058 May 07 j 08:00 12°**Ц**41'40 morning rise -10065 Aug 19 j 08:54 0°**Ⅲ**30′55 evening set -10058 Aug 03 j 22:02 14°**Д**36'17 retrograde -10065 Nov 14 j 23:56 2°**Ⅲ**24'40 opposition -10064 Feb 02 j 10:36 1°**II**02'17 2°25'45 conjunction -10058 Aug 18 j 21:41 15° II 10'03 2°32'10 min. Earth dist. -10064 Feb 02 j 20:16 1°**Д**01'38 29.31891 AU minimum elong -10058 Aug 18 j 21:40 15° II 10'03 2°32'42 -10064 Mar 16 j 20:16 30°R8 max. Earth dist. -10058 Aug 18 j 17:44 15°**Д**09'41 31.31029 AU direct -10064 Apr 23 j 12:54 29°838'25 morning rise -10058 Sep 02 j 21:01 15°**Ц**43'48 -10064 May 30 i 02:07 $\Pi^{\circ}0$ retrograde -10058 Nov 30 i 04:30 17°**Д**38'39 evening set -10064 Jul 21 j 14:58 1°**Ⅱ**33'21 opposition -10057 Feb 18 i 04:44 16° II 16'03 2°43'28 min. Earth dist. -10057 Feb 18 j 08:09 16°**Ц**15'50 29.31075 AU -10064 Aug 05 j 16:50 2°**I**I07'14 2°17'57 -10057 May 09 j 18:03 14°**Д**52'43 conjunction direct -10064 Aug 05 j 16:49 2°**I**107'14 2°18'26 evening set -10057 Aug 06 j 07:14 16°**Д**47'16 minimum elong max. Earth dist. -10064 Aug 05 j 08:01 2°**Д**06'24 31.31623 AU -10064 Aug 20 j 17:16 2°**Ⅲ**41'02 -10057 Aug 21 j 06:47 17°**Ⅲ**21'00 2°33'47 morning rise conjunction -10064 Nov 16 j 09:06 4°**Д**34'54 -10057 Aug 21 j 06:46 17°**Д**21'00 2°34'21 retrograde minimum elong -10057 Aug 21 j 04:19 17° Π 20'47 31.30647 AU -10063 Feb 03 j 23:21 3°**II**12'28 2°28'57 opposition max. Earth dist. -10057 Sep 05 j 05:54 17°**Д**54'46 -10063 Feb 04 j 08:04 3°**П**11'52 29.31735 AU min. Earth dist. morning rise -10063 Apr 26 j 01:33 1°**II**48'38 -10057 Dec 02 j 16:16 19°**II**49'45 retrograde direct -10063 Jul 24 j 00:15 3°**Ⅲ**43'31 -10056 Feb 20 j 17:46 18°**Д**27'05 2°45'06 evening set opposition -10056 Feb 20 j 19:56 18°**Д**26'57 29.30614 AU min. Earth dist. -10063 Aug 08 j 01:32 4°**Д**17'22 2°20'50 -10056 May 11 j 07:21 17°**Ⅲ**03'47 conjunction direct -10063 Aug 08 j 01:32 4°**I**17'22 2°21'20 -10056 Aug 07 j 16:25 18°**Ⅲ**58'15 minimum elong evening set max. Earth dist. -10063 Aug 07 j 16:50 4° **II** 16'32 31.31507 AU -10056 Aug 22 j 15:39 19°**II**32'00 2°35'12 morning rise -10063 Aug 23 j 01:51 4°**Д**51'09 conjunction retrograde -10063 Nov 18 j 20:04 6°**Ц**45'09 minimum elong -10056 Aug 22 j 15:38 19°**Ⅲ**32'00 2°35'45 opposition -10062 Feb 06 j 11:56 5°**Д**22'41 2°31'55 max. Earth dist. -10056 Aug 22 j 12:50 19°**Д**31'44 31.30112 AU min. Earth dist. -10062 Feb 06 j 19:00 5°**П**22'12 29.31664 AU morning rise -10056 Sep 06 j 14:55 20°**Д**05'45 -10062 Apr 28 j 12:38 3°**Д**58'56 retrograde -10056 Dec 04 j 05:41 22°**Д**00'52 direct -10062 Jul 26 j 09:21 5°**Д**53'45 -10055 Feb 22 j 06:50 20°**Д**38'07 2°46'29 evening set opposition min. Earth dist. -10055 Feb 22 j 08:24 20°Д38'01 29.30019 AU -10062 Aug 10 j 10:24 6°**II**27'35 2°23'31 conjunction direct -10055 May 13 j 18:29 19°**Ⅲ**14'50 -10055 Aug 10 j 01:26 21°**Д**09'13 -10062 Aug 10 j 10:23 6°**II**27'35 2°24'01 minimum elong evening set -10062 Aug 10 j 03:42 6°Щ26'57 31.31456 AU max. Earth dist. -10062 Aug 25 j 10:19 7°**II**01'21 -10055 Aug 25 j 00:40 21°II42'57 2°36'23 morning rise conjunction retrograde -10062 Nov 21 i 05:51 8° II 55'31 minimum elong -10055 Aug 25 i 00:40 21° II 42'57 2°36'57 opposition -10061 Feb 09 i 00:53 7° **II** 33'01 2°34'41 max. Earth dist. -10055 Aug 24 j 23:38 21°**II**42'51 31.29446 AU min. Earth dist. -10061 Feb 09 j 07:41 7°**Д**32'34 29.31639 AU morning rise -10055 Sep 08 j 23:44 22° **I** 16'42 direct -10061 May 01 j 00:06 6°**Ⅱ**09'22 retrograde -10055 Dec 06 j 15:17 24° II 11'56 -10061 Jul 28 j 18:27 8°**Д**04'07 -10054 Feb 24 j 19:49 22°**Д**49'05 2°47'38 evening set opposition -10054 Feb 24 j 20:47 22°**Д**49'01 29.29298 AU min. Earth dist. conjunction -10061 Aug 12 j 19:02 8°**Д**37'56 2°26'00 direct -10054 May 16 j 07:02 21°**Ⅲ**25'49 minimum elong -10061 Aug 12 j 19:02 8°**II**37'56 2°26'31 evening set -10054 Aug 12 j 10:31 23°**Ⅲ**20'05 -10061 Aug 12 j 12:49 8°**Д**37'21 31.31442 AU max. Earth dist. -10061 Aug 27 j 18:51 9°**Ⅱ**11'42 -10054 Aug 27 j 09:28 23°**Д**53'48 2°37'21 morning rise conjunction -10061 Nov 23 j 17:35 11°**耳**06'02 -10054 Aug 27 j 09:27 23°**Д**53'48 2°37'55 retrograde minimum elong -10060 Feb 11 j 13:44 9°**II**43'32 2°37'13 -10054 Aug 27 j 08:27 23°**I**53'42 31.28702 AU opposition max. Earth dist. -10054 Sep 11 j 08:43 24°**I**I27'34 min. Earth dist. -10060 Feb 11 j 18:31 9°**Д**43'13 29.31622 AU morning rise direct -10060 May 02 j 10:58 8°**Ⅱ**19'58 retrograde -10054 Dec 09 j 02:54 26°**Ⅱ**22'54 evening set -10060 Jul 30 j 03:38 10°**Ⅱ**14'41 opposition -10053 Feb 27 j 08:52 24°**I**59'57 2°48'33 min. Earth dist. -10053 Feb 27 j 08:16 24°**Ц**59'59 29.28544 AU -10060 Aug 14 j 03:56 10°**II**48'28 2°28'16 -10053 May 18 j 19:11 23°**Д**36'40 conjunction direct

evening set

-10053 Aug 14 j 19:16 25°**Ⅲ**30'49

-10060 Aug 14 j 03:55 10°**II**48'28 2°28'47

minimum elong

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10053 in astronomical counting style is the year 10054 BCE in historical counting style. -10053 Aug 29 j 18:16 26° **I**I 04'33 2°38'05 retrograde -10047 Dec 24 i 12:19 11°539'14 conjunction -10053 Aug 29 j 18:16 26°**I**I04'33 2°38'40 opposition -10046 Mar 15 j 03:54 10°515'50 2°48'07 minimum elong -10053 Aug 29 j 19:11 26°Д04'38 31.27936 AU min. Earth dist. -10046 Mar 14 j 19:50 10°5016'23 29.24792 AU max. Earth dist. -10053 Sep 13 j 17:28 26° ДЗ8'19 direct -10046 Jun 02 j 22:57 8°552'52 morning rise -10053 Dec 11 j 13:07 28° **II** 33'46 -10046 Aug 29 j 09:28 10°5046'29 retrograde evening set -10052 Feb 29 j 21:59 27°**Ⅲ**10'42 2°49'13 opposition -10052 Feb 29 j 21:04 27°**Ⅲ**10'46 29.27799 AU -10046 Sep 13 j 08:50 11°520'15 2°36'53 min. Earth dist. conjunction -10046 Sep 13 j 08:50 11°\$20'15 2°37'27 direct -10052 May 20 j 07:35 25°**Ⅲ**47'26 minimum elong evening set -10052 Aug 16 j 04:14 27°**Ⅲ**41'29 max. Earth dist. -10046 Sep 13 j 17:27 11°521'04 31.24305 AU morning rise -10046 Sep 28 j 09:22 11°554'10 conjunction -10052 Aug 31 j 03:06 28°**I**I15'12 2°38'36 retrograde -10046 Dec 26 j 23:21 13°550'35 -10052 Aug 31 j 03:05 28°**Ⅲ**15'12 2°39'10 minimum elong opposition -10045 Mar 17 j 17:06 12°527'09 2°47'05 -10052 Aug 31 j 04:43 28°**Д**15'21 31.27226 AU max. Earth dist. min. Earth dist. -10045 Mar 17 j 08:26 12°527'44 29.24252 AU morning rise -10052 Sep 15 j 02:28 28° **1**48'59 direct -10045 Jun 05 j 10:55 11°504'14 -10052 Oct 21 j 05:47 0ಂತಾ evening set -10045 Aug 31 j 18:34 12°557'46 retrograde -10052 Dec 13 j 00:13 0°9544'32 -10051 Feb 06 j 14:02 30°RⅡ conjunction -10045 Sep 15 j 18:01 13°531'34 2°35'47 opposition -10051 Mar 03 j 10:43 29°**Ⅲ**21'23 2°49'39 minimum elong -10045 Sep 15 j 18:01 13°531'34 2°36'22 min. Earth dist. -10051 Mar 03 j 07:34 29°**Ⅲ**21'36 29.27130 AU max. Earth dist. -10045 Sep 16 j 02:29 13°532'22 31.23720 AU direct -10051 May 22 j 18:51 27°**Д**58'08 morning rise -10045 Sep 30 j 19:02 14°505'31 evening set -10051 Aug 18 j 13:05 29°**Ⅲ**52'05 retrograde -10045 Dec 29 j 12:51 16°502'04 -10051 Aug 22 j 02:16 0°5 opposition -10044 Mar 19 i 06:15 14°538'34 2°45'48 min. Earth dist. -10044 Mar 18 j 20:25 14°539'13 29.23603 AU conjunction -10051 Sep 02 j 11:56 0°525'48 2°38'53 direct -10044 Jun 06 i 22:36 13°515'41 minimum elong -10051 Sep 02 j 11:57 0°9525'48 2°39'28 evening set -10044 Sep 02 j 03:43 15°509'08 max. Earth dist. -10051 Sep 02 j 14:48 0°\$26'05 31.26595 AU -10051 Sep 17 j 11:25 0°959'36 -10044 Sep 17 j 03:29 15°542'58 2°34'29 morning rise conjunction -10051 Dec 15 j 10:21 2°555'17 -10044 Sep 17 j 03:29 15°542'58 2°35'03 retrograde minimum elong -10050 Mar 05 j 23:48 1°532'04 2°49'50 max. Earth dist. -10044 Sep 17 j 13:12 15°5543'53 31.22996 AU opposition -10044 Oct 02 j 04:47 16°516'57 -10050 Mar 05 j 20:23 min. Earth dist. 1°532'18 29.26556 AU morning rise -10050 May 25 j 05:09 -10044 Dec 31 j 00:17 18°513'37 0°908'52 retrograde direct -10043 Mar 21 j 19:18 16°\$50'02 2°44'17 -10050 Aug 20 j 21:48 2°**©**02'43 opposition evening set -10043 Mar 21 j 09:42 16°\$50'41 29.22809 AU min. Earth dist. -10050 Sep 04 j 20:43 2°536'27 2°38'57 -10043 Jun 09 j 10:41 15°527'11 conjunction direct -10050 Sep 04 j 20:43 2°536'27 2°39'31 -10043 Sep 04 j 12:51 17°520'33 minimum elong evening set -10050 Sep 05 j 01:09 2°536'52 31.26075 AU max. Earth dist. -10050 Sep 19 j 20:18 3°510'15 -10043 Sep 19 j 12:52 17°554'24 2°32'57 morning rise conjunction retrograde -10050 Dec 17 j 21:46 5°506'05 minimum elong -10043 Sep 19 j 12:52 17°554'24 2°33'31 opposition -10049 Mar 08 j 12:47 3°542'49 2°49'47 max. Earth dist. -10043 Sep 19 j 22:55 17°\$55'21 31.22154 AU min. Earth dist. -10049 Mar 08 j 07:08 3°\$43'12 29.26071 AU morning rise -10043 Oct 04 j 14:36 18°528'25 direct -10049 May 27 j 15:44 2°**©**19'39 retrograde -10042 Jan 02 j 12:14 20°525'11 -10049 Aug 23 j 06:43 4°9513'27 -10042 Mar 24 j 08:22 19°501'31 2°42'32 evening set opposition min. Earth dist. -10042 Mar 23 j 21:01 19°502'17 29.21903 AU -10049 Sep 07 j 05:35 4°547'11 2°38'46 -10042 Jun 11 j 22:18 17°538'40 conjunction direct -10049 Sep 07 j 05:35 4°547'11 2°39'22 -10042 Sep 06 j 21:49 19°531'56 minimum elong evening set -10049 Sep 07 i 10:35 max. Earth dist. 4°5647'39 31.25625 AU -10049 Sep 22 i 05:29 -10042 Sep 21 j 22:07 20°505'48 2°31'12 morning rise 5°5€21'01 conjunction -10049 Dec 20 j 10:18 retrograde 7°9517'00 minimum elong -10042 Sep 21 j 22:07 20°505'48 2°31'46 -10042 Sep 22 j 08:52 20°506'50 31.21202 AU opposition -10048 Mar 10 j 01:50 5°553'41 2°49'28 max. Earth dist. min. Earth dist. -10048 Mar 09 i 19:57 5°954'04 29.25655 AU morning rise -10042 Oct 07 j 00:20 20°539'52 direct -10048 May 29 j 01:11 4°930'35 retrograde -10041 Jan 04 j 22:45 22°536'44 -10048 Aug 24 j 15:29 6°524'18 opposition -10041 Mar 26 j 21:34 21°512'59 2°40'33 evening set min. Earth dist. -10041 Mar 26 j 10:25 21°5513'44 29.20922 AU conjunction -10048 Sep 08 j 14:37 6°958'03 2°38'22 direct -10041 Jun 14 j 09:04 19°550'08 minimum elong -10048 Sep 08 j 14:37 6°\$58'03 2°38'57 evening set -10041 Sep 09 j 06:49 21°543'17 max. Earth dist. -10048 Sep 08 j 21:34 6°558'42 31.25221 AU -10048 Sep 23 j 14:38 morning rise 7°931'54 conjunction -10041 Sep 24 j 07:33 22°\$17'11 2°29'14 -10048 Dec 21 j 22:22 9°528'02 minimum elong -10041 Sep 24 j 07:33 22°517'11 2°29'48 retrograde -10047 Mar 12 j 14:50 -10041 Sep 24 j 19:42 22°518'20 31.20219 AU opposition 8°904'41 2°48'55 max. Earth dist. 8°505'11 29.25239 AU -10041 Oct 09 j 10:09 22°551'17 min. Earth dist. -10047 Mar 12 j 07:27 morning rise -10040 Jan 07 j 10:10 24°548'14 direct -10047 May 31 j 13:10 6°9541'39 retrograde evening set -10047 Aug 27 j 00:30 8°935'19 opposition -10040 Mar 28 j 10:23 23°524'23 2°38'20 min. Earth dist. -10040 Mar 27 j 21:21 23°525'16 29.19932 AU conjunction -10047 Sep 10 j 23:34 9°509'04 2°37'44 direct -10040 Jun 15 j 20:00 22°501'31 minimum elong -10047 Sep 10 j 23:34 9°**©**09'04 2°38'19 evening set -10040 Sep 10 j 15:56 23°554'35 max. Earth dist. -10047 Sep 11 j 06:21 9°509'43 31.24793 AU -10047 Sep 25 j 23:58 9°5642'58 -10040 Sep 25 j 16:54 24°528'31 2°27'03 morning rise conjunction

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10040 in astronomical counting style is the year 10041 BCE in historical counting style. -10040 Sep 25 j 16:54 24°\$28'31 2°27'36 minimum elong min. Earth dist. -10033 Apr 13 j 09:29 8°Ω47'51 29.14886 AU -10040 Sep 26 j 05:19 24°529'42 31.19247 AU -10033 Apr 14 j 04:45 8°Ω46'33 2°16'32 max Earth dist opposition -10040 Oct 10 j 20:09 25°502'40 -10033 Jul 01 j 23:33 7°Ω23'58 morning rise direct -10039 Jan 08 j 22:31 26°559'43 -10033 Sep 26 j 08:28 9°**Ω**16'37 retrograde evening set -10039 Mar 30 j 23:23 25°535'46 2°35'53 opposition -10039 Mar 30 j 10:11 25°536'40 29.18996 AU -10033 Oct 11 j 12:48 9° Ω50'50 2°05'56 min. Earth dist. conjunction -10033 Oct 11 j 12:49 9° Ω 50'50 2°06'26 -10039 Jun 18 j 05:38 24°512'55 direct minimum elong -10039 Sep 13 j 00:50 26°505'54 -10033 Oct 12 j 07:36 9° Ω 52'37 31.14361 AU evening set max. Earth dist. morning rise -10033 Oct 26 j 20:12 10°**\O2**5'21 conjunction -10039 Sep 28 j 02:20 26°539'51 2°24'39 retrograde -10032 Jan 25 j 16:01 12° Ω 23'12 -10039 Sep 28 j 02:20 26°539'52 2°25'12 minimum elong opposition -10032 Apr 15 j 17:41 $10^{\circ}\Omega$ 58'57 $2^{\circ}12'33$ -10039 Sep 28 j 16:48 26°5541'14 31.18353 AU -10032 Apr 14 j 23:03 11° Ω 00'13 29.14140 AU max. Earth dist. min. Earth dist. -10039 Oct 13 j 05:54 27°514'02 -10032 Jul 03 j 10:29 9° Ω 36'23 morning rise direct retrograde -10038 Jan 11 j 10:21 29°511'13 evening set -10032 Sep 27 j 18:06 11° **Ω**28'59 opposition -10038 Apr 02 j 12:13 27°547'11 2°33'13 min. Earth dist. -10038 Apr 01 j 21:21 27°548'12 29.18141 AU conjunction -10032 Oct 12 j 23:08 12° Ω 03'15 2°02'08 direct -10038 Jun 20 j 17:07 26°\$24'22 minimum elong -10032 Oct 12 j 23:09 12° Ω 03'15 2°02'36 evening set -10038 Sep 15 j 10:00 28°517'17 max. Earth dist. -10032 Oct 13 j 18:52 12° Ω 05'08 31.13564 AU morning rise -10032 Oct 28 j 07:07 $12^{\circ}\Omega$ 37'49 conjunction -10038 Sep 30 j 11:45 28°551'16 2°22'03 retrograde -10031 Jan 27 j 04:38 $14^{\circ}\Omega$ 35'45 minimum elong -10038 Sep 30 j 11:45 28°551'16 2°22'35 min. Earth dist. -10031 Apr 17 j 10:32 13° Ω 12'48 29.13261 AU max. Earth dist. -10038 Oct 01 j 02:13 28°\$52'38 31.17564 AU opposition -10031 Apr 18 j 06:32 13° Ω 11'26 2°08'24 morning rise -10038 Oct 15 j 16:03 29°\$25'30 direct -10031 Jul 05 j 22:11 11° Ω 48'53 -10038 Oct 31 i 20:43 $0^{\circ}\Omega$ evening set -10031 Sep 30 j 03:50 $13^{\circ}\Omega41'25$ retrograde -10037 Jan 14 j 00:27 $1^{\circ}\Omega$ 22'47 min. Earth dist. -10037 Apr 04 j 09:23 29°559'47 29.17406 AU -10031 Oct 15 j 09:18 14° Ω 15'43 1°58'09 conjunction -10037 Apr 04 j 06:07 30°RS -10031 Oct 15 j 09:19 14° Ω 15'44 1°58'37 minimum elong opposition -10037 Apr 05 j 01:11 29°558'43 2°30'19 max. Earth dist. -10031 Oct 16 j 04:36 14° Ω 17'33 31.12623 AU -10037 Jun 23 j 02:01 28°535'55 -10031 Oct 30 j 18:06 14° Ω50'21 direct morning rise -10037 Sep 04 j 08:55 0°**Ω** -10031 Nov 04 j 03:39 15°**Ω** -10037 Sep 17 j 18:59 $0^{\circ}\Omega$ 28'46 -10030 Jan 29 j 16:40 16° **Ω**48'21 evening set retrograde -10030 Apr 20 j 19:32 15°**Ω**23'57 2°04'02 opposition -10037 Oct 02 j 21:22 1° Ω 02'49 2°19'14 min. Earth dist. -10030 Apr 20 j 00:03 $15^{\circ}\Omega 25'17$ 29.12253 AU conjunction -10037 Oct 02 j 21:23 1° Ω 02'49 2°19'46 -10030 May 05 j 15:48 15°R**Ω** minimum elong -10037 Oct 03 j 13:53 1° Ω 04'22 31.16876 AU -10030 Jul 08 j 08:07 14° **Ω**01'23 max. Earth dist. direct -10037 Oct 18 j 02:07 1° **Ω**37'05 -10030 Sep 06 j 05:45 15°**Ω** morning rise -10036 Jan 16 j 12:04 3°**Ω**34'30 -10030 Oct 02 j 13:30 15° Ω53'50 retrograde evening set opposition -10036 Apr 06 j 14:05 2°**Ω**10'23 2°27'12 min. Earth dist. -10036 Apr 05 j 21:30 $2^{\circ}\Omega$ 11'30 29.16745 AU conjunction -10030 Oct 17 j 19:46 16° Ω 28'11 1°53'59 direct -10036 Jun 24 j 13:22 0°**Ω**47'38 minimum elong -10030 Oct 17 j 19:47 16° Ω 28'11 1°54'26 evening set -10036 Sep 19 j 04:15 2°**Ω**40'27 max. Earth dist. -10030 Oct 18 j 16:31 16° Ω 30'09 31.11568 AU morning rise -10030 Nov 02 j 05:08 17°**Ω**02'51 -10036 Oct 04 j 07:01 $3^{\circ}\Omega$ 14'31 2° 16'13 retrograde -10029 Feb 01 j 03:56 19° **Ω**00'55 conjunction -10036 Oct 04 j 07:02 3°Ω14'31 2°16'43 min. Earth dist. -10029 Apr 22 j 11:51 $17^{\circ}\Omega 37'49$ 29.11138 AU minimum elong max. Earth dist. -10036 Oct 04 j 23:38 $3^{\circ}\Omega$ 16'06 31.16260 AU -10029 Apr 23 j 08:18 17° Ω 36'25 1°59'31 opposition -10036 Oct 19 j 12:29 $3^{\circ}\Omega 48'52$ -10029 Jul 10 j 19:41 $16^{\circ}\Omega$ 13'49 morning rise direct -10035 Jan 18 j 02:47 $5^{\circ}\Omega 46'22$ -10029 Oct 04 j 23:19 18° **Ω**06'10 retrograde evening set -10035 Apr 08 j 08:58 $4^{\circ}\Omega$ 23'27 29.16143 AU min. Earth dist. -10029 Oct 20 j 06:05 $18^{\circ}\Omega$ 40'34 $1^{\circ}49'40$ opposition -10035 Apr 09 i 02:49 $4^{\circ}\Omega$ 22'14 $2^{\circ}23'51$ conjunction direct -10035 Jun 27 j 00:40 $2^{\circ}\Omega$ 59'33 minimum elong -10029 Oct 20 i 06:06 $18^{\circ}\Omega$ 40'35 1° 50'06 -10035 Sep 21 j 13:32 $4^{\circ}\Omega$ 52'19 max. Earth dist. -10029 Oct 21 j 02:15 $18^{\circ}\Omega$ 42'29 31.10434 AU evening set -10029 Nov 04 j 16:23 19° Ω 15'18 morning rise -10035 Oct 06 j 16:50 $5^{\circ}\Omega$ 26'26 2° 12'59 -10028 Feb 03 j 17:32 21° Ω13'24 conjunction retrograde -10035 Oct 06 j 16:51 -10028 Apr 24 j 21:05 19° Ω 48'48 1°54'48 minimum elong 5°Ω26'27 2°13'30 opposition -10035 Oct 07 j 10:51 -10028 Apr 24 j 00:22 19° Ω50'13 29.09982 AU max. Earth dist. 5°**Ω**28'09 31.15663 AU min. Earth dist. 6°**Ω**00'50 -10028 Jul 12 j 04:53 18° **Ω**26'09 morning rise -10035 Oct 21 j 22:52 direct retrograde -10034 Jan 20 j 15:26 7°**Ω**58'28 evening set -10028 Oct 06 j 09:04 20° Ω 18'26 -10034 Apr 11 j 15:50 6°Ω34'18 2°20'18 opposition -10034 Apr 10 j 22:06 6°**Ω**35'30 29.15535 AU -10028 Oct 21 j 16:36 20° Ω 52'53 1°45'11 min. Earth dist. conjunction -10034 Jun 29 j 12:08 5°**Ω**11'40 -10028 Oct 21 j 16:37 20° Ω 52'53 1°45'36 direct minimum elong -10034 Sep 23 j 22:50 7°**Ω**04'23 -10028 Oct 22 j 14:21 20° **Ω** 54'56 31.09273 AU evening set max. Earth dist. morning rise -10028 Nov 06 j 03:28 21° Ω 27'39 -10034 Oct 09 j 02:40 7° Ω 38'33 2° 09'33 conjunction retrograde -10027 Feb 05 j 05:04 23°**\O2**5'48 minimum elong -10034 Oct 09 j 02:41 7°**Ω**38'33 2°10'03 opposition -10027 Apr 27 j 09:36 22°**Ω**01'06 1°49'56 max. Earth dist. -10034 Oct 09 j 21:12 7°**Ω**40'18 31.15054 AU min. Earth dist. -10027 Apr 26 j 12:24 22°**Ω**02'33 29.08826 AU -10034 Oct 24 j 09:21 8°£13′00 -10027 Jul 14 j 16:35 20° **Q**38'25 morning rise direct -10033 Jan 23 j 04:19 10° **Ω**10'45 -10027 Oct 08 j 18:57 22° Ω 30'37 retrograde evening set

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10027 in astronomical counting style is the year 10028 BCE in historical counting style. -10027 Oct 24 j 03:01 23° Ω 05'07 1°40'33 max. Earth dist. -10021 Nov 07 j 22:06 6° m 23'03 31.03198 AU conjunction $-10027 \text{ Oct } 24 \text{ j } 03:02 \ 23^{\circ} \Omega 05'07 \ 1^{\circ} 40'57$ -10021 Nov 22 j 12:16 6° m 55'49 minimum elong morning rise 8° Mp 54'26 -10027 Oct 25 j 00:46 23° Ω 07'10 31.08165 AU -10020 Feb 21 j 23:51 max. Earth dist. retrograde -10027 Nov 08 j 14:44 23° **Ω**39'57 min. Earth dist. -10020 May 12 j 00:07 7° mp 31'12 29.02871 AU morning rise -10026 Feb 07 j 19:44 25°**Ω**38'08 -10020 May 13 j 00:49 7° **m** 29'30 retrograde opposition 1°11'35 -10020 Jul 29 j 20:46 -10026 Apr 29 j 22:10 24° € 13'21 1°44'54 opposition direct 6° Mp 06'54 -10026 Apr 28 j 23:48 24° Ω 14'53 29.07756 AU -10020 Oct 23 j 18:35 min. Earth dist. evening set 7° m 58'59 direct -10026 Jul 17 j 03:28 22°**Ω**50'38 -10026 Oct 11 j 04:43 24°**Ω**42'47 evening set conjunction -10020 Nov 08 j 07:26 8° m 33'52 1°04'14 minimum elong -10020 Nov 08 j 07:26 8° m 33'52 1°04'30 conjunction -10026 Oct 26 j 13:31 25° Ω 17'21 1°35'46 max. Earth dist. -10020 Nov 09 j 08:22 8° Mg 36'13 31.02380 AU -10026 Oct 26 j 13:31 25° Ω 17'21 1°36'09 -10020 Nov 24 j 00:28 9°109'09 minimum elong morning rise -10026 Oct 27 j 12:33 25° Ω 19'31 31.07140 AU max. Earth dist. retrograde -10019 Feb 23 j 13:50 11° m 07'50 morning rise -10026 Nov 11 j 01:56 25° **Ω**52'14 opposition -10019 May 15 j 13:10 9° Mp 42'52 1°05'36 retrograde -10025 Feb 10 j 08:01 27°**Ω**50'29 min. Earth dist. -10019 May 14 j 12:44 9° Mp 44'33 29.02004 AU opposition -10025 May 02 j 10:47 $26^{\circ}\Omega$ 25'38 $1^{\circ}39'42$ direct -10019 Aug 01 j 05:25 8° Mp 20'16 min. Earth dist. -10025 May 01 j 12:31 $26^{\circ}\Omega$ 27'10 29.06777 AU evening set -10019 Oct 26 j 05:21 10° m 12'20 direct -10025 Jul 19 j 14:35 25° Ω 02'56 evening set -10025 Oct 13 j 14:43 $26^{\circ}\Omega$ 55'02 conjunction -10019 Nov 10 j 19:02 10° mp 47'17 0°58'35 minimum elong -10019 Nov 10 j 19:02 10° Mp 47'17 conjunction -10025 Oct 29 j 00:14 27° Ω 29'38 1°30'51 max. Earth dist. -10019 Nov 11 j 20:55 10° Mp 49'43 31.01458 AU minimum elong -10025 Oct 29 i 00:15 $27^{\circ}\Omega$ 29'39 1°31'13 morning rise -10019 Nov 26 j 12:39 11° m 22'37 max. Earth dist. -10025 Oct 29 j 23:50 $27^{\circ}\Omega$ 31'52 31.06231 AU retrograde -10018 Feb 26 i 01:43 13° m 21'21 -10025 Nov 13 j 13:25 28°**Ω**04'36 morning rise min. Earth dist. -10018 May 17 j 01:13 11° m 58'00 29.01017 AU -10024 Jan 30 j 10:40 0° Mp opposition -10018 May 18 j 01:33 11° Mp 56'20 0°59'30 -10024 Feb 12 j 21:45 0° m 02'54 -10018 Aug 03 j 16:56 10° m 33'42 retrograde direct -10024 Feb 26 j 08:53 30°RΩ evening set -10018 Oct 28 j 16:13 12° m 25'46 $-10024 \text{ May } 03 \text{ j } 23:04 \quad 28^{\circ} \Omega 38'01 \quad 1^{\circ} 34'21$ opposition -10024 May 02 j 23:15 $28^{\circ}\Omega 39'39$ 29.05910 AU -10018 Nov 13 j 06:33 13° m 00'45 0°52'51 min. Earth dist. conjunction -10024 Jul 21 j 01:53 27°**Ω**15'19 -10018 Nov 13 j 06:34 13° m 00'45 0°53'05 minimum elong direct -10024 Oct 15 j 00:50 29°**Ω**07'24 -10018 Nov 14 j 07:42 13° m 03'07 31.00435 AU evening set max. Earth dist. -10018 Nov 29 j 01:03 13° Mp 36'09 morning rise -10024 Oct 30 j 10:58 29° Ω42'04 1°25'46 -10017 Feb 28 j 16:29 15° Mp 34'54 conjunction retrograde -10024 Oct 30 j 10:58 29° Ω42'04 1°26'07 -10017 May 20 j 13:53 14° m 09'49 0°53'19 minimum elong opposition -10024 Oct 31 j 10:52 29° Ω 44'20 31.05408 AU -10017 May 19 j 13:11 14° Mp11'31 28.99938 AU max. Earth dist. min. Earth dist. -10024 Nov 07 j 09:13 0° Mp -10017 Aug 06 j 03:55 12° m/47'08 direct -10024 Nov 15 j 00:58 0° Mp 17'06 -10017 Oct 31 j 03:15 14° m 39'10 morning rise evening set retrograde -10023 Feb 14 j 10:26 2° mp 15'28 -10017 Nov 15 j 18:18 15° Mp 14'13 0°47'02 opposition -10023 May 06 j 11:36 0° m 50'34 1°28'52 conjunction min. Earth dist. -10023 May 05 j 12:15 0° m 52'10 29.05122 AU minimum elong -10017 Nov 15 j 18:19 15° Mp 14'13 0°47'15 -10023 Jun 08 j 09:29 30°R**Ω** max. Earth dist. -10017 Nov 16 j 19:57 15° Mp 16'38 30.99315 AU -10023 Jul 23 j 12:37 29° Ω 27'54 morning rise -10017 Dec 01 j 13:29 15° m 49'39 direct -10023 Sep 05 j 00:32 0° Mp retrograde -10016 Mar 02 j 04:20 17° m 48'25 -10023 Oct 17 j 10:51 min. Earth dist. -10016 May 21 j 02:06 16° m 24'54 28.98789 AU evening set 1° Mp 19'58 -10016 May 22 j 01:59 16° m 23'15 0°47'04 opposition -10023 Nov 01 j 21:47 1° m 54'42 1° 20'34 -10016 Aug 07 j 14:42 15° m 00'30 conjunction direct -10023 Nov 01 j 21:48 1° m 54'42 1° 20'55 -10016 Nov 01 j 14:15 16° m 52'31 minimum elong evening set -10023 Nov 02 j 22:56 max. Earth dist. 1° m 57'04 31.04664 AU -10016 Nov 17 j 06:02 17° m 27'37 0°41'09 morning rise -10023 Nov 17 j 12:25 2° m 29'47 conjunction retrograde -10022 Feb 16 i 23:52 4° m 28'14 minimum elong -10016 Nov 17 i 06:03 17° m 27'37 0°41'20 opposition -10022 May 08 i 24:00 3°m03'19 1°23'14 max. Earth dist. -10016 Nov 18 j 07:44 17° m 30'02 30.98173 AU min. Earth dist. -10022 May 07 j 23:14 3° m 05'01 29.04383 AU morning rise -10016 Dec 03 j 01:55 18° Mp 03'06 direct -10022 Jul 26 j 00:15 1° mp 40'41 retrograde -10015 Mar 04 j 18:42 20° m 01'51 -10022 Oct 19 j 21:18 evening set 3° Mp 32'45 opposition -10015 May 24 j 14:00 18° m 36'36 0°40'45 min. Earth dist. -10015 May 23 j 13:05 18° m 38'20 28.97649 AU conjunction -10022 Nov 04 j 08:46 4° mg 07'32 1°15'14 direct -10015 Aug 10 j 02:44 17° **m** 13'48 minimum elong -10022 Nov 04 j 08:46 4° m 07'32 1°15'33 evening set -10015 Nov 04 j 01:15 19° m 05'47 -10022 Nov 05 j 09:29 4° Mg 09'52 31.03939 AU max. Earth dist. -10022 Nov 20 j 00:19 4° m/42'41 -10015 Nov 19 j 17:35 19° m 40'55 0°35'13 morning rise conjunction -10021 Feb 19 j 12:08 6° 10 41'14 -10015 Nov 19 j 17:36 19° **m** 40'55 retrograde minimum elong 0°35'23 -10021 May 11 j 12:28 -10015 Nov 20 j 19:17 19° m 43'20 30.97053 AU opposition 5° mp 16'18 1°17'28 max. Earth dist. min. Earth dist. -10021 May 10 j 12:23 5° Mp 17'57 29.03656 AU morning rise -10015 Dec 05 j 14:14 20° m 16'28 direct -10021 Jul 28 j 09:39 3° m 53'42 retrograde -10014 Mar 07 j 07:59 22° m 15'13 evening set -10021 Oct 22 j 07:46 5° Mp 45'46 min. Earth dist. -10014 May 26 j 01:55 20° m 51'33 28.96573 AU opposition -10014 May 27 j 02:08 20° m 49'53 0°34'22 -10021 Nov 06 j 20:07 6° m 20'36 1°09'48 -10014 Aug 12 j 14:22 19° m 27'01 conjunction direct -10021 Nov 06 j 20:07 6° m 20'36 -10014 Nov 06 j 12:22 21° m/18'59 minimum elong 1°10'05 evening set

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10014 in astronomical counting style is the year 10015 BCE in historical counting style. -10014 Nov 22 i 05:31 21° m 54'11 0°29'13 direct -10008 Aug 25 j 06:19 2°**-**47'41 conjunction -10014 Nov 22 j 05:31 21° m 54'11 0°29'22 evening set -10008 Nov 19 j 10:15 4°**£**39'53 minimum elong -10014 Nov 23 j 08:11 21° m 56'41 30.96037 AU max. Earth dist. -10014 Dec 08 j 02:43 22° m 29'46 -10008 Dec 05 j 07:00 5°**£**15'20 -0°07'32 conjunction morning rise -10013 Mar 09 j 21:28 24° m 28'31 -10008 Dec 05 j 06:59 5°**≙**15'20 0°07'31 retrograde minimum elong -10008 Dec 05 j 01:03 -10013 May 29 j 13:54 23° m 03'07 0°27'55 5°**£**14'48 opposition behind sun begin -10013 May 28 j 12:27 23° Mp 04'53 28.95611 AUmin. Earth dist. behind sun end -10008 Dec 05 j 12:56 5°**£**15'52 direct -10013 Aug 15 j 02:51 21° Mp 40'12 max. Earth dist. -10008 Dec 06 j 09:55 5°**£**17'52 30.92175 AU -10013 Nov 08 j 23:45 23° m 32'11 5°**£**51'12 evening set morning rise -10008 Dec 21 j 07:53 7°**£**50'05 retrograde -10007 Mar 23 j 01:04 6°**£**24'40 -0°11'22 conjunction -10013 Nov 24 j 17:24 24° m 07'25 0°23'11 opposition -10007 Jun 11 j 12:33 -10013 Nov 24 j 17:24 24° m 07'25 minimum elong 0°23'18 min. Earth dist. -10007 Jun 10 j 12:23 6°**2**26'21 28.91932 AU -10013 Nov 25 j 19:30 24° m 09'52 30.95140 AU max. Earth dist. direct -10007 Aug 27 j 16:25 5°**2**01'41 morning rise -10013 Dec 10 j 15:25 24° m 43'03 evening set -10007 Nov 21 j 22:20 6°**£**53'57 retrograde -10012 Mar 11 j 09:37 26° m 41'49 min. Earth dist. -10012 May 30 j 01:03 25° Mp 18'06 28.94786 AU conjunction -10007 Dec 07 j 19:41 7°**2**29'27 -0°13'40 opposition -10012 May 31 j 01:51 25° m 16'22 0°21'26 minimum elong -10007 Dec 07 j 19:42 7°**₽**29'27 0°13'40 direct -10012 Aug 16 j 12:35 23° m 53'26 behind sun begin -10007 Dec 07 j 16:13 7°**2**29'08 evening set -10012 Nov 10 j 11:00 25° m 45'25 behind sun end -10007 Dec 07 j 23:10 7°**₽**29'45 max. Earth dist. -10007 Dec 08 j 22:06 7°**೨**31'55 30.91602 AU conjunction -10012 Nov 26 j 05:26 26° m 20'42 0°17'06 morning rise -10007 Dec 23 j 21:06 8°**£**05'20 minimum elong -10012 Nov 26 j 05:26 26° m 20'42 0°17'12 retrograde -10006 Mar 25 j 15:54 10° **2**04'15 max. Earth dist. -10012 Nov 27 j 08:53 26° m 23'17 30.94379 AU min. Earth dist. -10006 Jun 12 j 23:40 8°**£**40'33 28.91313 AU morning rise -10012 Dec 12 j 03:54 26° m 56'23 opposition -10006 Jun 14 i 00:17 8°**-**38'49 -0°17'56 retrograde -10011 Mar 13 j 21:39 28° m 55'09 direct -10006 Aug 30 j 04:28 7°**£**15'49 -10011 Jun 01 j 12:00 27° mp 31'29 28.94081 AU -10006 Nov 24 j 10:51 9°₽08'08 min. Earth dist. evening set opposition -10011 Jun 02 j 13:34 27° m 29'42 0°14'55 -10011 Aug 19 j 00:12 26° Mp 06'46 -10006 Dec 10 j 08:41 9° **2**43'41 -0°19'47 direct conjunction -10011 Nov 12 j 22:33 27° m 58'46 -10006 Dec 10 j 08:41 9° **2**43'41 0°19'48 evening set minimum elong -10006 Dec 11 j 10:14 9° **△**46'04 30.90926 AU max. Earth dist. -10011 Nov 28 j 17:28 28° m 34'06 0°11'00 -10006 Dec 26 j 10:40 10° **2**19'37 conjunction morning rise -10011 Nov 28 j 17:28 28° m 34'06 0°11'05 -10005 Mar 28 j 05:28 12° **2**18'30 minimum elong retrograde -10005 Jun 16 j 11:59 10°**£**53'04 -0°24'28 -10011 Nov 28 j 12:37 28° Mp 33'40 opposition behind sun begin -10011 Nov 28 j 22:19 28° m 34'32 -10005 Jun 15 j 12:55 10°**2**54'41 28.90593 AU behind sun end min. Earth dist. -10011 Nov 29 j 20:01 28° Mp 36'36 30.93743 AU -10005 Sep 01 j 15:59 9°**△**30'00 max. Earth dist. direct -10011 Dec 14 j 16:44 29° m 09'50 -10005 Nov 26 j 23:21 11°**△**22'22 morning rise evening set -10010 Jan 08 j 02:00 0°**♀** retrograde -10010 Mar 16 j 11:27 1°**△**08'38 conjunction -10005 Dec 12 j 21:51 11°**⊆**57'58 -0°25'52 -10010 May 25 j 22:27 30°R M minimum elong -10005 Dec 12 j 21:51 11°**⊆**57'58 0°25'56 min. Earth dist. -10010 Jun 04 j 00:00 29° m 44'57 28.93501 AU max. Earth dist. -10005 Dec 13 j 23:27 12°**2**00'22 30.90168 AU opposition -10010 Jun 05 j 01:24 29° m/43'10 0°08'22 morning rise -10005 Dec 29 j 00:14 12°**♀**33'55 direct -10010 Aug 21 j 09:11 28° Mp 20'13 retrograde -10004 Mar 29 j 19:21 14° **△**32'47 -10010 Nov 09 j 18:17 0°**♀** -10004 Jun 17 j 23:31 13°**2**07'20 -0°30'58 opposition -10010 Nov 15 j 10:07 0°**♀**12'17 min. Earth dist. -10004 Jun 16 j 23:58 13°**2**08'59 28.89794 AU evening set -10004 Sep 03 j 05:00 11°**2**44'12 direct -10010 Dec 01 i 05:48 0° **2**47'39 0° 04'54 -10004 Nov 28 j 11:57 13°**2**36'37 conjunction evening set -10010 Dec 01 i 05:47 minimum elong 0°**₽**47'39 0°04'57 -10010 Nov 30 j 23:26 -10004 Dec 14 j 10:47 14° \(\Omega\) 12'14 -0°31'56 behind sun begin 0°**£**47'05 conjunction -10004 Dec 14 i 10:46 14° \(\Omega\) 12'14 0°32'01 behind sun end -10010 Dec 01 i 12:08 0° **2**48'13 minimum elong max. Earth dist. -10010 Dec 02 i 09:24 0° \(\Omega \) 50'15 30.93198 AU max. Earth dist. -10004 Dec 15 i 11:08 14° \(\Omega\) 14'31 30.89342 AU morning rise -10010 Dec 17 i 05:32 1°**£**23′26 morning rise -10004 Dec 30 i 13:44 14° **2**48'14 -10009 Mar 18 j 22:44 3°**£**22'16 retrograde -10003 Apr 01 j 08:12 16° **△**47'04 retrograde -10009 Jun 06 j 11:56 1° **2**58'35 28.92976 AU -10003 Jun 20 j 11:06 15° **2**21'34 -0°37'25 min. Earth dist. opposition -10009 Jun 07 j 13:09 1°**£**56'49 0°01'48 -10003 Jun 19 j 12:48 15° **2**23'08 28.88971 AU opposition min. Earth dist. direct -10009 Aug 23 j 20:20 0°**£**33'52 direct -10003 Sep 05 j 15:25 13°**♀**58'22 desc. node -10009 Sep 14 j 15:46 0°**ჲ**42'10 evening set -10003 Dec 01 j 00:30 15°**♀**50'50 evening set -10009 Nov 17 j 22:06 2°**£**25'59 -10003 Dec 16 j 23:59 16° **2**26'29 -0°37'56 conjunction -10003 Dec 16 j 23:58 16°**£**26'29 0°38'03 -10009 Dec 03 j 18:16 3°**2**01'24 -0°01'22 conjunction minimum elong -10009 Dec 03 j 18:17 3°**△**01'24 0°01'20 -10003 Dec 18 j 01:08 16° **2**28'50 30.88528 AU minimum elong max. Earth dist. -10009 Dec 03 j 11:46 -10002 Jan 02 j 03:12 17°**♀**02'30 behind sun begin 3°**₤**00'49 morning rise behind sun end -10009 Dec 04 j 00:48 3°**₽**01'59 retrograde -10002 Apr 03 j 21:14 19°**⊆**01'17 max. Earth dist. -10009 Dec 04 j 20:58 3°**೨**03'54 30.92698 AU opposition -10002 Jun 22 j 22:25 17°**△**35'46 -0°43'49 morning rise -10009 Dec 19 j 18:41 3°**₽**37'13 min. Earth dist. -10002 Jun 21 j 23:53 17°**△**37'21 28.88180 AU retrograde -10008 Mar 20 j 12:50 5°**£**36'04 direct -10002 Sep 08 j 03:53 16°**♀**12'30 -10008 Jun 07 j 23:27 4°**2**12'25 28.92477 AU -10002 Dec 03 j 13:17 18° **2**05'01 min. Earth dist. evening set

-10008 Jun 09 j 00:45 4°**2**10'39 -0°04'47

opposition

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -10002 in astronomical counting style is the year 10003 BCE in historical counting style. -10002 Dec 19 i 13:05 18° \(\Omega\) 40'41 -0°43'53 max. Earth dist. -9995 Jan 02 i 20:46 2°ML09'42 30.85706 AU conjunction -10002 Dec 19 j 13:05 18° **2**40'41 0°44'01 -9995 Jan 18 j 03:42 2°M43'45 minimum elong morning rise -10002 Dec 20 j 12:52 18° \(\Omega\)42'55 30.87777 AU -9995 Apr 19 j 15:16 4°M42'24 max. Earth dist. retrograde -10001 Jan 04 j 16:54 19°**2**16'44 -9995 Jul 07 j 08:57 min. Earth dist. 3°M18'28 28.85707 AU morning rise -10001 Apr 06 j 10:33 21° **△**15'30 -9995 Jul 08 j 05:02 3°M17'03 -1°26'17 retrograde opposition -10001 Jun 24 j 11:48 19° **2**51'30 28.87488 AU min. Earth dist. direct -9995 Sep 23 j 08:36 1°M53'32 -10001 Jun 25 j 09:49 19°**-**49'57 -0°50'09 -9995 Dec 19 j 09:50 opposition evening set 3°M46'47 -10001 Sep 10 j 13:46 18°**♀**26'37 direct -10001 Dec 06 j 02:07 20°**♀**19'12 evening set conjunction -9994 Jan 04 j 12:14 4°M22'38 -1°23'17 -9994 Jan 04 j 12:13 minimum elong 4°M22'38 1°23'33 conjunction -10001 Dec 22 j 02:29 20°**2**54'54 -0°49'46 max. Earth dist. -9994 Jan 05 j 09:05 4°M24'35 30.85535 AU -10001 Dec 22 j 02:28 20° **2**54'54 0°49'55 -9994 Jan 20 j 17:59 minimum elong morning rise 4°ML58'48 -10001 Dec 23 j 03:01 20° **2**57'12 30.87127 AU -9994 Apr 22 j 05:12 max. Earth dist. retrograde $6^{\circ}\text{ML}57'26$ -9994 Jul 10 j 16:15 morning rise -10000 Jan 07 j 06:28 21° **2**30'59 opposition 5°M32'06 -1°31'55 retrograde -10000 Apr 07 j 21:14 23°**△**29'42 min. Earth dist. -9994 Jul 09 j 21:54 5°M33'24 28.85518 AU opposition -10000 Jun 26 j 20:59 22°**♀**04'09 -0°56'24 direct -9994 Sep 25 j 19:18 4°ML08'33 min. Earth dist. -10000 Jun 25 j 23:15 22°**♀**05'41 28.86906 AU evening set -9994 Dec 21 j 23:39 6°ML01'55 direct -10000 Sep 12 j 01:17 20° **2**40'46 evening set -10000 Dec 07 j 15:04 22° **△**33'27 conjunction -9993 Jan 07 j 02:32 6°M37'47 -1°28'29 minimum elong -9993 Jan 07 j 02:32 6°MJ37'47 1°28'46 conjunction -10000 Dec 23 j 15:46 23° \(\Omega\)09'10 -0°55'35 max. Earth dist. -9993 Jan 07 j 23:25 6°M39'44 30.85292 AU minimum elong -10000 Dec 23 j 15:45 23° \(\Omega\)09'10 0°55'45 morning rise -9993 Jan 23 i 08:20 7°**IL**13'57 max. Earth dist. -10000 Dec 24 j 15:15 23° **2**11'22 30.86621 AU retrograde -9993 Apr 24 i 19:23 9°M12'31 morning rise -9999 Jan 08 i 20:13 23°**£**45'16 min. Earth dist. -9993 Jul 12 i 09:28 7°ML48'29 28.85221 AU -9999 Apr 10 i 10:40 25°**2**43'58 -9993 Jul 13 i 03:26 7°ML47'13 -1°37'24 retrograde opposition -9999 Jun 28 j 10:16 24° **2**19'59 28.86480 AU -9993 Sep 28 j 08:59 6°M23'36 min. Earth dist. direct -9999 Jun 29 j 08:15 24°**£**18'26 -1°02'35 -9993 Dec 24 j 13:47 8°M17'04 evening set opposition -9999 Sep 14 j 11:08 22°**£**55'00 direct -9999 Dec 10 j 03:57 24°**£**47'47 -9992 Jan 09 j 16:45 8°M52'57 -1°33'33 conjunction evening set -9992 Jan 09 j 16:44 minimum elong 8°ML52'57 1°33'52 -9999 Dec 26 j 05:05 25°**£**23'32 -1°01'19 -9992 Jan 10 j 11:23 conjunction max. Earth dist. 8° ጤ54'42 30.84939 AU -9999 Dec 26 j 05:04 -9992 Jan 25 j 22:50 25°**2**23'32 1°01'30 9°**™**29'07 minimum elong morning rise -9999 Dec 27 j 05:00 25°**£**25'46 30.86250 AU -9992 Apr 26 j 08:29 max. Earth dist. 11°M27'37 retrograde -9998 Jan 11 j 09:48 25°**♀**59'38 -9992 Jul 14 j 14:32 10°M02'19 -1°42'45 morning rise opposition -9998 Apr 12 j 22:28 27°**♀**58'20 -9992 Jul 13 j 21:46 retrograde min. Earth dist. 10°ML03'30 28.84833 AU -9998 Jul 01 j 19:34 -9992 Sep 29 j 20:05 opposition 26°**£**32'50 -1°08'40 direct 8°MJ38'37 -9998 Jun 30 j 22:37 -9992 Dec 26 j 03:44 min. Earth dist. 26°**2**34'18 28.86177 AU evening set 10°MJ32'10 direct -9998 Sep 16 j 20:41 25°**♀**09'23 -9998 Dec 12 j 17:09 27°**2**02'16 conjunction -9991 Jan 11 j 07:06 11°ML08'04 -1°38'28 evening set minimum elong -9991 Jan 11 j 07:05 11°ML08'04 1°38'48 conjunction -9998 Dec 28 j 18:43 27°**△**38'02 -1°06'58 max. Earth dist. -9991 Jan 12 j 01:49 11°ML09'49 30.84502 AU -9998 Dec 28 j 18:42 27°**♀**38'02 1°07'10 -9991 Jan 27 j 13:09 11°**M**44'14 minimum elong morning rise -9998 Dec 29 j 18:03 27°**£**40'13 30.86010 AU -9991 Apr 28 j 20:06 13°M42'38 max. Earth dist. retrograde -9997 Jan 13 j 23:45 28°**♀**14'10 -9991 Jul 16 j 09:42 12°M18'28 28.84373 AU morning rise min. Earth dist. -9997 Mar 18 j 11:30 -9991 Jul 17 j 01:35 12°M17'20 -1°47'56 0°M opposition retrograde -9997 Apr 15 j 12:20 0°M12'51 direct -9991 Oct 02 i 08:26 10°M53'33 -9997 May 13 i 20:46 30°R<u>Ω</u> evening set -9991 Dec 28 i 17:44 12°M47'11 -9997 Jul 03 i 09:15 min. Earth dist. 28° **△**48'54 28.85986 AU opposition -9997 Jul 04 i 06:37 28°**-**47'23 -1°14'39 conjunction -9990 Jan 13 j 21:15 13°ML23'05 -1°43'15 direct -9997 Sep 19 i 08:45 27°**£**23'55 minimum elong -9990 Jan 13 i 21:14 13°ML23'04 1°43'36 -9997 Dec 15 j 06:37 29°**£**16'55 max. Earth dist. -9990 Jan 14 j 14:10 13°M-24'40 30.84034 AU evening set -9990 Jan 30 j 03:34 13°ML59'15 morning rise -9997 Dec 31 j 08:27 29°**£**52'44 -1°12'31 -9990 Mar 01 j 11:46 15°M conjunction -9990 May 01 j 09:41 minimum elong -9997 Dec 31 j 08:26 29°**♀**52'44 1°12'45 retrograde 15°M57'33 -9990 Jul 02 j 22:12 max. Earth dist. -9996 Jan 01 j 07:04 29°**♀**54'51 30.85840 AU 15°RM -9996 Jan 03 j 14:10 0°M opposition -9990 Jul 19 j 12:32 14°M32'14 -1°52'57 morning rise -9996 Jan 16 j 13:46 0°M28'52 min. Earth dist. -9990 Jul 18 j 21:01 14°M33'20 28.83912 AU -9990 Oct 04 j 19:25 -9996 Apr 17 j 01:13 13°M08'21 retrograde 2°M27'33 direct -9996 Jul 05 j 17:54 15°M opposition 1°ML02'08 -1°20'31 -9990 Dec 30 j 09:07 -9996 Jul 04 j 22:06 1°ML03'32 28.85847 AU -9990 Dec 31 j 07:53 15°M02'04 min. Earth dist. evening set -9996 Aug 16 j 00:19 direct -9996 Sep 20 j 19:51 29°**£**38'39 conjunction -9989 Jan 16 j 11:40 15°M37'58 -1°47'51 -9996 Oct 26 j 04:17 0°M minimum elong -9989 Jan 16 j 11:39 15°**M**₃37'58 1°48'13 evening set -9996 Dec 16 j 20:01 1°M31'46 max. Earth dist. -9989 Jan 17 j 04:32 15°M39'33 30.83571 AU morning rise -9989 Feb 01 j 17:59 16°M14'09 -9995 Jan 01 j 22:16 2°M07'36 -1°17'57 -9989 May 03 j 20:32 18°M12'21 conjunction retrograde

-9995 Jan 01 j 22:15

minimum elong

2°ML07'36 1°18'12

opposition

-9989 Jul 21 j 23:22

16°M47'02 -1°57'48

DI (DI	CNI	104004 1 4	2000 (LIT) A 1'	4 A C 10 F 1 2025	. 14.22	22
•	-	rom -10400 through -9 e year -9989 in astronomica				page 33
min. Earth dist.	-9989 Jul 21 j 09:19	16°M48'02 28.83488 AU		-9982 Feb 01 j 16:59	ounting style. 1° ₹ 22'22	2015/10
direct	-9989 Oct 07 j 05:55	15°M23'02	minimum elong	-9982 Feb 01 j 16:58	1° × 22'22	
evening set	-9988 Jan 02 j 22:04	17°M16'52	max. Earth dist.	-9982 Feb 02 j 04:49	-	30.83397 AU
evening set	-))00 Jan 02 J 22:04	17 1101032	morning rise	-9982 Feb 17 j 23:12	1° x 232)	30.03377 AO
conjunction	-9988 Jan 19 j 02:02	17°ML52'46 -1°52'18	retrograde	-9982 May 19 j 15:08	3° ∡ 56′12	
minimum elong	-9988 Jan 19 j 02:01	17°M52'46 1°52'42	opposition	-9982 Aug 06 j 02:36	2° × 31'18	-2°26'17
max. Earth dist.	-9988 Jan 19 j 17:52	17°M.54'15 30.83190 AU		-9982 Aug 05 j 17:12		28.83680 AU
morning rise	-9988 Feb 04 j 08:27	18°M28'56	direct	-9982 Oct 22 j 18:03	1° ∡ °07′00	
retrograde	-9988 May 05 j 09:12	20°M27'03	evening set	-9981 Jan 19 j 03:03	3° ∡ '01'49	
opposition	-9988 Jul 23 j 10:10	19°M01'44 -2°02'27		·		
min. Earth dist.	-9988 Jul 22 j 19:48	19°ML02'46 28.83166 AU	conjunction	-9981 Feb 04 j 07:49	3° ∡ ³37'47	-2°18'18
direct	-9988 Oct 08 j 18:20	17° M 37'39	minimum elong	-9981 Feb 04 j 07:49	3° ∡ ³37'47	2°18'46
evening set	-9987 Jan 04 j 12:09	19°M31'36	max. Earth dist.	-9981 Feb 04 j 17:19	3° ∡ ³38'40	30.83602 AU
			morning rise	-9981 Feb 20 j 14:07	4° ∡ 13'53	
conjunction	-9987 Jan 20 j 16:13	20°M07'31 -1°56'35	retrograde	-9981 May 22 j 05:34	6° ⊀ 11'31	
minimum elong	-9987 Jan 20 j 16:12	20°M07'30 1°56'58	opposition	-9981 Aug 08 j 13:16	4° ≯ ¹46'41	-2°29'30
max. Earth dist.	-9987 Jan 21 j 07:26	20°M08'56 30.82911 AU	min. Earth dist.	-9981 Aug 08 j 04:34	4° ∡ °47'18	28.83860 AU
morning rise	-9987 Feb 05 j 22:39	20°M43'40	direct	-9981 Oct 25 j 05:22	3° ҂ 22′20	
retrograde	-9987 May 07 j 20:41	22°M41'43	evening set	-9980 Jan 21 j 17:54	5° √ 17'17	
opposition	-9987 Jul 25 j 21:04	21°M16'25 -2°06'56				
min. Earth dist.	-9987 Jul 25 j 08:09	21°M17'21 28.82973 AU	conjunction	-9980 Feb 06 j 22:49	5° ₹ '53'15	-2°21'12
direct	-9987 Oct 11 j 05:14	19°M52'16	minimum elong	-9980 Feb 06 j 22:48	5° ₹ 53'15	2°21'42
evening set	-9986 Jan 07 j 02:18	21°M46'20	max. Earth dist.	-9980 Feb 07 j 07:50	5° ₹ 54'05	30.83723 AU
			morning rise	-9980 Feb 23 j 04:53	6° ∡ 129′21	
conjunction	-9986 Jan 23 j 06:39	22°M22'15 -2°00'41	retrograde	-9980 May 23 j 16:25	8° ∡ ¹26'52	
minimum elong	-9986 Jan 23 j 06:38	22°M22'15 2°01'06	opposition	-9980 Aug 10 j 00:08	7° ∡ ¹02'06	-2°32'30
max. Earth dist.	-9986 Jan 23 j 21:35	22°M23'39 30.82789 AU	min. Earth dist.	-9980 Aug 09 j 17:16	7° ∡ ¹02'35	28.83946 AU
morning rise	-9986 Feb 08 j 13:02	22°M58'24	direct	-9980 Oct 26 j 16:21	5° ∡ ³37'40	
retrograde	-9986 May 10 j 10:01	24°M56'22	evening set	-9979 Jan 23 j 08:34	7° ∡ ³32'44	
opposition	-9986 Jul 28 j 07:40	23°M31'08 -2°11'13				
min. Earth dist.	-9986 Jul 27 j 18:21	23°M32'05 28.82924 AU	conjunction	-9979 Feb 08 j 13:31	8° ₰ 08'41	-2°23'54
direct	-9986 Oct 13 j 17:50	22°M06'56	minimum elong	-9979 Feb 08 j 13:30	8° ≯ 08'41	2°24'24
evening set	-9985 Jan 09 j 16:44	24°M01'08	max. Earth dist.	-9979 Feb 08 j 20:48	8° ∡ 09'22	30.83775 AU
			morning rise	-9979 Feb 24 j 19:34	8° ≯ 44'46	
conjunction	-9985 Jan 25 j 21:05	24°M37'04 -2°04'35	retrograde	-9979 May 26 j 04:37	10° х 42′10	
minimum elong	-9985 Jan 25 j 21:05	24°M37'04 2°05'01	opposition	-9979 Aug 12 j 10:46	9° ∡ 17'26	
max. Earth dist.		24°M38'20 30.82801 AU	min. Earth dist.	-9979 Aug 12 j 04:05		28.83967 AU
morning rise	-9985 Feb 11 j 03:36	25°M13'12	direct	-9979 Oct 29 j 05:07	7° ∡ ¹52'55 _	
retrograde	-9985 May 12 j 23:18	27°M11'07	evening set	-9978 Jan 25 j 23:23	9° ∡ ¹48'05	
opposition	-9985 Jul 30 j 18:30	25°M45'57 -2°15'18				
min. Earth dist.	-9985 Jul 30 j 06:38	25°M46'47 28.83014 AU	·	-9978 Feb 11 j 04:23	10° ₹ 24'02	
direct	-9985 Oct 16 j 04:47	24°M21'43	minimum elong	-9978 Feb 11 j 04:23	10° ₹ 24'02	
evening set	-9984 Jan 12 j 07:04	26°M16'04	max. Earth dist.	-9978 Feb 11 j 10:37		30.83762 AU
	00047 20:11.41	2 (0 M	morning rise	-9978 Feb 27 j 10:19	11°×700'06	
conjunction	-9984 Jan 28 j 11:41	26°M52'00 -2°08'19	retrograde	-9978 May 28 j 15:39	12° ₹ 57'22	2027147
minimum elong	-9984 Jan 28 j 11:40	26°M52'00 2°08'47 26°M53'17 30.82939 AU	opposition	-9978 Aug 14 j 21:23 -9978 Aug 14 j 16:42	11° 🗷 32'39	
max. Earth dist.	-9984 Jan 29 j 01:28 -9984 Feb 13 j 18:00	20 11633 17 30.82939 AU 27° 11628'08	min. Earth dist. direct	-9978 Oct 31 j 15:47	11 x · 32 39 10° x 08'02	28.83954 AU
morning rise	-9984 May 14 j 13:03	29°M25'59	evening set	-9977 Jan 28 j 14:10	10 x · 08 02 12° x ¹ 03'17	
retrograde opposition	-9984 Aug 01 j 05:07	28°M00'54 -2°19'10	evening set	-99// Jan 20 j 14.10	12 × 03 17	
min. Earth dist.	-9984 Jul 31 j 17:29	28°M01'43 28.83197 AU	conjunction	-9977 Feb 13 j 19:17	12° ∡ ³39'14	2028127
direct	-9984 Oct 17 j 18:27	26°M36'39	minimum elong	-9977 Feb 13 j 19:16	12° x 39'14	
evening set	-9983 Jan 13 j 21:40	28°M31'09	max. Earth dist.	-9977 Feb 14 j 00:35		30.83752 AU
evening set	-7703 Jan 13 J 21.40	20 11031 07	morning rise	-9977 Mar 02 j 01:04	13°×715'16	30.03732 AO
conjunction	-9983 Jan 30 j 02:13	29°ML07'06 -2°11'51	retrograde	-9977 May 31 j 03:48	15° ₹ 12'23	
minimum elong	-9983 Jan 30 j 02:12	29°ML07'06 2°12'18	opposition	-9977 Aug 17 j 07:50	13°× 12'23	-2°40'04
max. Earth dist.	-9983 Jan 30 j 14:01	29°ML08'12 30.83155 AU		-9977 Aug 17 j 03:06		28.83958 AU
morning rise	-9983 Feb 15 j 08:39	29°M43'14	direct	-9977 Nov 03 j 04:31	12°× 22'58	20.03730710
morning 115¢	-9983 Feb 23 j 03:58	0° ₹	evening set	-9976 Jan 31 j 04:55	12 x 22 38 14° x 18'19	
retrograde	-9983 May 17 j 02:24	1° ⋌ 141'01		51j 01.55		
opposition	-9983 Aug 03 j 15:51	0° ₹ 16'01 -2°22'50	conjunction	-9976 Feb 16 j 09:55	14° ∡ 754'15	-2°30'39
min. Earth dist.	-9983 Aug 03 j 05:20	0° ₹ 16'46 28.83449 AU	•	-9976 Feb 16 j 09:54	14° ⋌ ′54'15	
	-9983 Aug 13 j 02:12	30°RM	max. Earth dist.	-9976 Feb 16 j 13:42		30.83774 AU
direct	-9983 Oct 20 j 05:29	28°M51'45	morning rise	-9976 Mar 03 j 15:37	15° ∡ 730′16	
	-9983 Dec 24 j 21:14	0° ₹	retrograde	-9976 Jun 01 j 15:12	17° ∡ 727′15	
evening set	-9982 Jan 16 j 12:09	0° ∡ 746'25	opposition	-9976 Aug 18 j 18:23	16° ∡ 02'35	-2°42'07
S			min. Earth dist.	-9976 Aug 18 j 15:13		28.84038 AU
				- •		

Planetary Pheno	omena of Neptune f	from -1040	0 through -989	98 (UT) Astrodie	nst AG 18-Feb-2025	5 14:23	page 34
•	nical year style is used: Th		-				P. 84 2 .
direct	-9976 Nov 04 j 16:22	14° × ⁷ 37'45	an astronomicar co	minimum elong	-9969 Mar 04 j 16:55	0° る 37'35	2°38'48
evening set	-9975 Feb 01 j 19:30	16° ₹ 33'12		max. Earth dist.	-9969 Mar 04 j 14:46		30.87342 AU
evening set	7773 1 c 0 01 j 17.30	10 × 33 12		morning rise	-9969 Mar 20 j 21:23	1°る13'28	30.07342710
conjunction	-9975 Feb 18 j 00:40	17° ₹ 09'07	-2°32'26	retrograde	-9969 Jun 18 j 05:29	3°る09'33	
minimum elong	-9975 Feb 18 j 00:40	17° ₹ 09'07		opposition	-9969 Sep 03 j 19:29	1°る45'28	20/10/10
max. Earth dist.	-9975 Feb 18 j 00:40		30.83905 AU	min. Earth dist.	-9969 Sep 03 j 22:16		28.87933 AU
	3		30.83903 AU		1 2	0°る20'23	20.07933 AU
morning rise	-9975 Mar 06 j 06:06	17° 🗷 45'07		direct	-9969 Nov 21 j 05:27		
retrograde	-9975 Jun 04 j 03:20	19° √ 41'57	2042154	evening set	-9968 Feb 19 j 02:37	2° る 16'38	
opposition	-9975 Aug 21 j 04:45	18° √ 17'18			000000	20752122	2020121
min. Earth dist.	-9975 Aug 21 j 01:46		28.84232 AU	conjunction	-9968 Mar 06 j 07:39	2°る52'33	
direct	-9975 Nov 07 j 06:24	16° ₹ 52'24		minimum elong	-9968 Mar 06 j 07:39	2° る 52'33	
evening set	-9974 Feb 04 j 10:11	18° ∡ 47'56		max. Earth dist.	-9968 Mar 06 j 04:13		30.88043 AU
				morning rise	-9968 Mar 22 j 11:56	3° る 28′24	
conjunction	-9974 Feb 20 j 15:13	19° ∡ 23'52	-2°34'00	retrograde	-9968 Jun 19 j 17:20	5° る 24'22	
minimum elong	-9974 Feb 20 j 15:13	19° ∡ ¹23'52	2°34'34	opposition	-9968 Sep 05 j 05:59	4° る 00'23	-2°49'19
max. Earth dist.	-9974 Feb 20 j 17:15	19° ∡ ¹24'03	30.84168 AU	min. Earth dist.	-9968 Sep 05 j 08:55	4° る 00'10	28.88588 AU
morning rise	-9974 Mar 08 j 20:41	19° ∡ ¹59'50		direct	-9968 Nov 22 j 18:07	2° る 35'15	
retrograde	-9974 Jun 06 j 16:07	21° х 756′32		evening set	-9967 Feb 20 j 17:29	4° ⋜ 31'37	
opposition	-9974 Aug 23 j 15:14	20° ∡ ³31'56	-2°45'27				
min. Earth dist.	-9974 Aug 23 j 13:08	20° ∡ ³32′05	28.84581 AU	conjunction	-9967 Mar 08 j 22:25	5° る 07'30	-2°38'14
direct	-9974 Nov 09 j 17:51	19° ∡ ¹06'57		minimum elong	-9967 Mar 08 j 22:25	5° る 07'30	2°38'49
evening set	-9973 Feb 07 j 00:50	21° х 02'37		max. Earth dist.	-9967 Mar 08 j 17:09	5° ರ 07'01	30.88653 AU
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			morning rise	-9967 Mar 25 j 02:32	5° ರ 43'21	
conjunction	-9973 Feb 23 j 06:03	21° х 38'32	-2°35'19	retrograde	-9967 Jun 22 j 04:20	7° る 39'10	
minimum elong	-9973 Feb 23 j 06:02	21°×38'32		opposition	-9967 Sep 07 j 16:31	6° る 15'15	-2°49'04
max. Earth dist.	-9973 Feb 23 j 08:21		30.84583 AU	min. Earth dist.	-9967 Sep 07 j 21:23		28.89167 AU
	-9973 Mar 11 j 11:09		30.64363 AU		-9967 Nov 25 j 05:43	4°る50'05	20.09107 AU
morning rise		22° 🖈 14'29		direct	•	4 3 3003 6° る 46'31	
retrograde	-9973 Jun 09 j 04:23	24° ₹ 11'02	2046144	evening set	-9966 Feb 23 j 08:10	0.04031	
opposition	-9973 Aug 26 j 01:37	22° ∡ 46'31					
min. Earth dist.	-9973 Aug 26 j 00:17		28.85068 AU	conjunction	-9966 Mar 11 j 13:14	7° る 22'25	
direct	-9973 Nov 12 j 07:11	21° ≯ 21'30		minimum elong	-9966 Mar 11 j 13:14	7° る 22'25	
evening set	-9972 Feb 09 j 15:37	23° х 17′16		max. Earth dist.	-9966 Mar 11 j 07:25		30.89196 AU
				morning rise	-9966 Mar 27 j 17:05	7° る 58'14	
conjunction	-9972 Feb 25 j 20:39	23° ₹ ′53'11	-2°36'24	retrograde	-9966 Jun 24 j 15:53	9° る 53'54	
minimum elong	-9972 Feb 25 j 20:39	23° 尽 53'11	2°36'59	opposition	-9966 Sep 10 j 03:00	8° ⋜ 30'03	-2°48'34
max. Earth dist.	-9972 Feb 25 j 21:01	23° х 53'13	30.85151 AU	min. Earth dist.	-9966 Sep 10 j 08:29	8° そ 29'39	28.89665 AU
morning rise	-9972 Mar 13 j 01:46	24° ∡ ¹29'07		direct	-9966 Nov 27 j 19:45	7° る 04'48	
retrograde	-9972 Jun 10 j 18:18	26° ₹ ¹25'33		evening set	-9965 Feb 25 j 23:00	9° ට 01'19	
opposition	-9972 Aug 27 j 12:03	25° ∡ *01'07	-2°47'46	Č	,		
min. Earth dist.	-9972 Aug 27 j 10:56		28.85708 AU	conjunction	-9965 Mar 14 j 03:51	9° ට 37'12	-2°37'17
direct	-9972 Nov 13 j 19:15	23° ∡ ³36′05		minimum elong	-9965 Mar 14 j 03:51	9° ට 37'12	2°37'52
evening set	-9971 Feb 11 j 06:07	25° ∡ ³31'58		max. Earth dist.	-9965 Mar 13 j 19:52		30.89676 AU
e venning see	>>/11 0 0 11 j 00.0/	20 7. 3100		morning rise	-9965 Mar 30 j 07:37	10°る13'00	30.07070110
conjunction	-9971 Feb 27 j 11:16	26° ₹ 07'53	-2°37'15	retrograde	-9965 Jun 27 j 04:05	12°る08'30	
minimum elong	-9971 Feb 27 j 11:16	26° ₹ 07'53		opposition	-9965 Sep 12 j 13:25	12 3 00 30	2017118
max. Earth dist.			30.85836 AU	**			28.90143 AU
	-9971 Feb 27 j 11:44		30.83830 AU	min. Earth dist.	-9965 Sep 12 j 20:07		28.90143 AU
morning rise	-9971 Mar 15 j 16:04	26° ₹ 43'48 28° ₹ 40'07		direct	-9965 Nov 30 j 07:14 -9964 Feb 28 j 13:30	9°る19'23 11°る15'59	
retrograde	-9971 Jun 13 j 05:07		2040122	evening set	-9904 Feb 28 J 13:30	11-015-59	
opposition	-9971 Aug 29 j 22:33	27° 🖈 15'49			006434 15:10.00		202 (120
min. Earth dist.	-9971 Aug 29 j 23:04		28.86434 AU	conjunction	-9964 Mar 15 j 18:28	11° ろ 51'51	
direct	-9971 Nov 16 j 06:51	25° ₹ 50'46		minimum elong	-9964 Mar 15 j 18:29	11° ろ 51'51	
evening set	-9970 Feb 13 j 20:56	27° ∡ ¹46'46		max. Earth dist.	-9964 Mar 15 j 10:36		30.90156 AU
				morning rise	-9964 Mar 31 j 21:53	12° る 27'37	
conjunction	-9970 Mar 02 j 02:00	28° ≯ 22'41		retrograde	-9964 Jun 28 j 15:53	14° る 22'57	
minimum elong	-9970 Mar 02 j 02:00	28° ₹ ¹22'41	2°38'27	opposition	-9964 Sep 13 j 23:53	12° る 59'12	-2°46'48
max. Earth dist.	-9970 Mar 02 j 00:46	28° ≯ 22'34	30.86595 AU	min. Earth dist.	-9964 Sep 14 j 07:31	12° る 58'39	28.90632 AU
morning rise	-9970 Mar 18 j 06:45	28° ⋠ 58'35		direct	-9964 Dec 01 j 21:26	11° る 33'50	
	-9970 Apr 18 j 03:18	8°0		evening set	-9963 Mar 02 j 03:54	13° る 30'28	
retrograde	-9970 Jun 15 j 18:03	0° る 54'47		-	•		
J	-9970 Aug 14 j 19:17	30°R. ✓		conjunction	-9963 Mar 18 j 08:39	14° る 06'20	-2°35'24
opposition	-9970 Sep 01 j 08:50	29° ₹ 30'36	-2°49'03	minimum elong	-9963 Mar 18 j 08:39	14°る06'20	
min. Earth dist.	-9970 Sep 01 j 08:30		28.87200 AU	max. Earth dist.	-9963 Mar 17 j 22:46		30.90683 AU
direct	-9970 Nov 18 j 19:04	28° 🗷 05'32	20.07200710	morning rise	-9963 Apr 03 j 12:03	14°る42'04	20., 3003 710
anoci	-9969 Feb 15 j 17:24	26 x 03 32 0°る		retrograde	-9963 Jul 01 j 04:59	14 842 04 16°る37'15	
evening set	-9969 Feb 15 j 17.24 -9969 Feb 16 j 11:51	0 3 0° る 01'40		opposition	-9963 Sep 16 j 10:14	16 3 3713	_20/15/22
evening set	-2202 LCO 10 J 11.31	0 00140					
aami	0060 M=- 04:16.55	00=227125	2020114	min. Earth dist.	-9963 Sep 16 j 18:07		28.91200 AU
conjunction	-9969 Mar 04 j 16:55	0° る 37'35	-2 30 14	direct	-9963 Dec 04 j 10:35	13° る 48'06	

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -9962 in astronomical counting style is the year 9963 BCE in historical counting style. -9962 Mar 04 j 18:13 15°**⋜**44'48 -9956 Apr 09 i 20:56 0°≈ evening set -9956 Apr 19 j 13:28 0°≈21'22 morning rise -9962 Mar 20 j 23:04 16°**ප්**20'40 -2°34'07 -9956 Jul 16 j 10:59 retrograde 2°≈15'33 conjunction -9962 Mar 20 j 23:04 16°る20'40 2°34'41 -9956 Oct 01 j 11:25 0°≈52'30 -2°29'51 minimum elong opposition -9962 Mar 20 j 13:22 -9956 Oct 02 j 01:02 max. Earth dist. 16°る19'45 30.91292 AU min. Earth dist. 0°≈51'32 28.97723 AU -9962 Apr 06 j 02:05 morning rise 16°**る**56'23 -9956 Nov 03 j 19:32 30°Rਠ 29°**る**26'59 -9962 Jul 03 j 15:15 retrograde 18°**る**51'23 direct -9956 Dec 19 j 21:45 opposition -9962 Sep 18 j 20:36 17°る27'45 -2°44'01 -9955 Feb 03 j 11:04 0°≈ 17°る27'05 28.91861 AU min. Earth dist. -9962 Sep 19 j 05:57 evening set -9955 Mar 20 j 21:31 1°≈24'07 direct -9962 Dec 06 j 23:06 16°**පි**02'16 max. Earth dist. -9955 Apr 05 j 09:58 1°≈58'27 30.97982 AU evening set -9961 Mar 07 j 08:37 17°る59'02 -9955 Apr 06 j 01:43 conjunction 1°≈59'55 -2°18'41 -9955 Apr 06 j 01:43 conjunction -9961 Mar 23 j 13:16 18°る34'53 -2°32'35 minimum elong 1°**≈**59'55 2°19'11 -9955 Apr 22 j 03:06 minimum elong -9961 Mar 23 j 13:17 18°る34'53 2°33'09 morning rise 2°≈35'30 -9955 Jul 18 j 21:46 max. Earth dist. -9961 Mar 23 j 02:04 18°**る**33'50 30.92027 AU retrograde 4°≈29'33 morning rise -9961 Apr 08 j 16:12 19°る10'35 opposition -9955 Oct 03 j 22:04 3°≈06'34 -2°26'41 retrograde -9961 Jul 06 j 04:03 21°る05'26 min. Earth dist. -9955 Oct 04 j 12:53 3°≈05'32 28.98589 AU opposition -9961 Sep 21 j 07:00 19°る41'52 -2°42'16 direct -9955 Dec 22 j 12:07 1°≈41'02 min. Earth dist. -9961 Sep 21 j 16:01 19°る41'14 28.92658 AU evening set -9954 Mar 23 j 11:43 3°≈38'12 direct -9961 Dec 09 j 11:51 18°る16'22 evening set -9960 Mar 08 j 22:43 20°る13'11 conjunction -9954 Apr 08 j 15:37 4°≈13'59 -2°15'36 minimum elong -9954 Apr 08 i 15:38 4°≈13'59 2°16'07 conjunction -9960 Mar 25 i 03:21 20°る49'02 -2°30'50 max. Earth dist. -9954 Apr 07 j 21:31 4°≈12'18 30.98803 AU minimum elong -9960 Mar 25 i 03:22 20°る49'02 2°31'24 -9954 Apr 24 i 16:54 4°≈49'32 morning rise max. Earth dist. -9960 Mar 24 i 16:00 20°る47'58 30.92886 AU retrograde -9954 Jul 21 j 10:12 6°≈43'25 -9960 Apr 10 j 05:56 21°る24'42 -9954 Oct 06 j 08:33 5°≈20'30 -2°23'18 morning rise opposition retrograde -9960 Jul 07 j 15:07 23°る19'25 -9954 Oct 06 j 23:50 5°≈19'25 28.99354 AU min. Earth dist. -9960 Sep 22 j 17:30 21°る55'57 -2°40'16 -9954 Dec 25 j 01:22 direct 3°≈54'54 opposition -9960 Sep 23 j 04:05 21°る55'12 28.93582 AU -9953 Mar 26 j 01:39 min. Earth dist. 5°≈52'06 evening set -9960 Dec 10 j 22:28 -9953 Apr 10 j 11:27 20°**る**30'27 max. Earth dist. 6°≈26'11 30.99523 AU direct -9959 Mar 11 j 12:53 22°**る**27'20 evening set 6°≈27'52 -2°12'20 -9953 Apr 11 j 05:34 conjunction -9959 Mar 27 j 17:26 23°**る**03'10 -2°28'51 -9953 Apr 11 j 05:35 6°≈27'52 2°12'51 conjunction minimum elong -9959 Mar 27 j 17:26 23°る03'10 2°29'24 -9953 Apr 27 j 06:25 7°≈03'23 minimum elong morning rise -9959 Mar 27 j 05:14 23°중02'02 30.93880 AU -9953 Jul 23 j 20:28 max. Earth dist. retrograde 8°≈57'07 -9959 Apr 12 j 19:52 23°₹38'50 -9953 Oct 08 j 19:17 morning rise opposition 7°≈34'13 -2°19'42 -9959 Jul 10 j 01:57 25°♂33'24 -9953 Oct 09 j 12:14 retrograde min. Earth dist. 7°≈33'02 29.00029 AU -9959 Sep 25 j 03:45 24°♂10'03 -2°38'01 direct -9953 Dec 27 j 14:24 6°≈08'36 opposition min. Earth dist. -9959 Sep 25 j 14:06 24°る09'19 28.94608 AU -9952 Mar 27 j 15:23 8°≈05'46 evening set -9959 Dec 13 j 11:03 22°る44'32 direct -9958 Mar 14 j 03:08 24°る41'30 conjunction -9952 Apr 12 j 19:00 8°≈41'31 -2°08'53 evening set -9952 Apr 12 j 19:01 8°≈41'31 2°09'23 minimum elong -9958 Mar 30 j 07:34 25°る17'20 -2°26'38 -9952 Apr 11 j 23:14 8°≈39'41 31.00188 AU conjunction max. Earth dist. -9958 Mar 30 j 07:35 25°る17'20 2°27'11 -9952 Apr 28 j 19:45 9°≈17'01 minimum elong morning rise -9958 Mar 29 j 18:10 25°る16'05 30.94941 AU -9952 Jul 25 j 08:58 11°≈10'34 max. Earth dist. retrograde -9958 Apr 15 i 09:47 morning rise 25°**る**52'59 opposition -9952 Oct 10 i 05:46 9°≈47'43 -2°15'54 retrograde -9958 Jul 12 j 12:18 27°る47'25 min. Earth dist. -9952 Oct 10 j 22:33 9°≈46'32 29.00671 AU opposition -9958 Sep 27 j 14:17 26°る24'11 -2°35'32 direct -9952 Dec 29 i 04:11 8°≈22'02 min. Earth dist. -9958 Sep 28 i 02:16 26°る23'20 28.95686 AU evening set -9951 Mar 30 j 04:58 10°≈19'13 -9958 Dec 15 j 21:59 24°₹58'41 direct -9957 Mar 16 j 17:18 26°る55'43 -9951 Apr 15 i 08:33 10°≈54'57 -2°05'14 evening set conjunction -9951 Apr 15 i 08:33 10°≈54'57 2°05'43 minimum elong -9957 Apr 01 j 21:42 27°る31'32 -2°24'12 -9951 Apr 14 j 12:40 10°≈53'06 31.00829 AU conjunction max. Earth dist. minimum elong -9957 Apr 01 j 21:42 27°る31'32 2°24'44 morning rise -9951 May 01 j 08:54 11°≈30'25 -9951 Jul 27 j 19:17 max. Earth dist. -9957 Apr 01 j 07:58 27°る30'15 30.96021 AU retrograde 13°≈23'49 -9951 Oct 12 j 16:15 -9957 Apr 17 j 23:36 28°る07'09 opposition 12°≈00'59 -2°11'55 morning rise -9957 Jul 05 j 18:45 0°≈ min. Earth dist. -9951 Oct 13 j 10:42 11°≈59'41 29.01324 AU -9957 Jul 14 j 23:14 0°≈01'28 -9951 Dec 31 j 16:05 10°≈35'15 retrograde direct -9957 Jul 24 j 07:02 30°R₹ -9950 Apr 01 j 18:31 evening set 12°≈32'26 28°る38'21 -2°32'49 opposition -9957 Sep 30 j 00:47 28°る37'28 28.96734 AU -9950 Apr 17 j 21:53 min. Earth dist. -9957 Sep 30 j 13:16 conjunction 13°≈08'09 -2°01'25 direct -9957 Dec 18 j 10:41 27°る12'51 minimum elong -9950 Apr 17 j 21:54 13°**≈**08′09 2°01'53 evening set -9956 Mar 18 j 07:35 29°**る**09'57 max. Earth dist. -9950 Apr 17 j 01:11 13°≈06′13 31.01517 AU morning rise -9950 May 03 j 22:03 13°≈43'36 conjunction -9956 Apr 03 j 11:43 29°る45'45 -2°21'32 -9950 Jun 13 j 05:43 15°≈ -9956 Apr 03 j 11:44 29°る45'45 2°22'05 -9950 Jul 30 j 05:40 15°≈36'49 minimum elong retrograde max. Earth dist. -9956 Apr 02 j 20:02 29°정44'17 30.97044 AU -9950 Sep 16 j 06:50 15°R≈

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -9950 in astronomical counting style is the year 9951 BCE in historical counting style. -9950 Oct 15 j 02:45 14°≈14'03 -2°07'44 minimum elong -9943 May 03 j 15:50 28°≈38'24 1°30'20 opposition -9950 Oct 15 j 20:44 14°≈12'47 29.02031 AU -9943 May 02 j 15:33 28°≈36'08 31.08656 AU min. Earth dist. max Earth dist -9949 Jan 03 j 05:33 -9943 May 19 j 13:47 29°≈13'41 direct 12°≈48'17 morning rise -9943 Jun 11 j 04:01 0°**₩** -9949 Apr 04 j 07:52 14°≈45'27 evening set -9949 Apr 10 j 23:01 1°**)**(06'14 15°≈ retrograde -9943 Aug 14 j 09:24 -9943 Oct 20 j 14:57 30°R≈ 29°≈44'00 -1°33'33 conjunction -9949 Apr 20 j 11:00 15°≈21'09 -1°57'25 opposition -9943 Oct 30 j 05:18 minimum elong -9949 Apr 20 j 11:01 15°≈21'09 1°57'52 min. Earth dist. -9943 Oct 31 j 02:35 29°≈42'31 29.09250 AU max. Earth dist. -9949 Apr 19 j 13:40 15°≈19'10 31.02272 AU direct -9942 Jan 18 j 18:54 28°≈18'25 morning rise -9949 May 06 j 10:50 15°≈56'35 -9942 Apr 12 j 19:17 0°\ retrograde -9949 Aug 01 j 15:22 17°≈49'41 evening set -9942 Apr 20 j 03:07 0°**)** 15'42 -9949 Oct 17 j 13:23 opposition 16°≈26'57 -2°03'22 max. Earth dist. -9942 May 05 j 04:11 0°**¥**49'01 31.09619 AU min. Earth dist. -9949 Oct 18 j 08:26 16°≈25'36 29.02845 AU direct -9948 Jan 05 j 16:23 15°≈01'10 conjunction -9942 May 06 j 04:33 0°\f51'17 -1°24'54 evening set -9948 Apr 05 j 21:04 16°≈58'20 minimum elong -9942 May 06 j 04:34 0°**¥**51'18 1°25'14 max. Earth dist. -9948 Apr 21 j 02:56 17°≈32'04 31.03158 AU morning rise -9942 May 22 j 01:59 1°\ 26'33 retrograde -9942 Aug 16 j 20:00 3°**¥**19′00 conjunction -9948 Apr 22 j 00:04 17°≈34'02 -1°53'14 opposition -9942 Nov 01 j 16:19 1° 7 56'49 -1°28'03 minimum elong -9948 Apr 22 j 00:05 17°≈34'02 1°53'41 min. Earth dist. -9942 Nov 02 j 15:14 1°**)** 55′13 29.10155 AU morning rise -9948 May 07 j 23:34 18°≈09'26 direct -9941 Jan 21 j 07:35 0°**)** 31'14 retrograde -9948 Aug 03 j 01:21 20°≈02'24 evening set -9941 Apr 22 j 15:54 2°\ 28'30 opposition -9948 Oct 18 i 23:55 18°≈39'45 -1°58'48 min. Earth dist. -9948 Oct 19 i 18:50 18°≈38'25 29.03779 AU conjunction -9941 May 08 i 16:56 3°\(\)404'04 -1°19'43 direct -9947 Jan 07 i 04:30 17°≈13'59 minimum elong -9941 May 08 i 16:57 3°\cdot\04'04 1°20'02 -9947 Apr 08 j 10:11 19°≈11'10 max. Earth dist. -9941 May 07 j 15:42 3°**₭**01'43 31.10478 AU evening set -9941 May 24 j 14:04 3°¥39'17 morning rise -9947 Apr 24 j 12:52 19°≈46'50 -1°48'54 -9941 Aug 19 j 06:13 retrograde 5° # 31'37 conjunction -9947 Apr 24 j 12:53 opposition -9941 Nov 04 j 03:11 4°¥09'29 -1°22'27 19°≈46'50 1°49'19 minimum elong -9941 Nov 05 j 01:42 4°**升**07'55 29.10948 AU max. Earth dist. -9947 Apr 23 j 14:36 19°≈44'46 31.04164 AU min. Earth dist. -9947 May 10 j 12:10 -9940 Jan 23 j 21:26 2° \(\)43'53 20°≈22'14 direct morning rise -9940 Apr 24 j 04:34 -9947 Aug 05 j 12:11 22°≈15'06 4°\ 41'07 retrograde evening set -9947 Oct 21 j 10:28 -9940 May 09 j 03:21 20°≈52'31 -1°54'05 max. Earth dist. 5°**光**14'14 31.11234 AU opposition -9947 Oct 22 j 05:52 20°≈51'10 29.04839 AU min. Earth dist. 5°**升**16'39 -1°14'24 -9946 Jan 09 j 15:05 -9940 May 10 j 05:16 direct 19°**≈**26'47 conjunction -9940 May 10 j 05:17 evening set -9946 Apr 10 j 23:13 21°≈24'00 minimum elong 5°**X**16'39 1°14'43 -9940 May 26 j 01:59 max. Earth dist. -9946 Apr 26 j 04:13 21°≈57'39 31.05275 AU morning rise 5°**X**51'50 -9940 Aug 20 j 16:08 retrograde 7°**)** 44′04 conjunction -9946 Apr 27 j 01:50 21°≈59'40 -1°44'24 -9940 Nov 05 j 14:03 6°\cdot\cdot21'56 -1°16'43 opposition -9946 Apr 27 j 01:51 21°≈59'40 1°44'48 min. Earth dist. -9940 Nov 06 j 13:45 6°**升**20'17 29.11677 AU minimum elong -9946 May 13 j 00:40 22°≈35'01 -9939 Jan 25 j 08:46 4° **)** 56'19 morning rise direct retrograde -9946 Aug 07 j 22:11 24°**≈**27'48 -9939 Apr 26 j 16:56 6° ¥ 53'29 evening set -9946 Oct 23 j 21:05 23°≈05'20 -1°49'11 opposition -9946 Oct 24 j 17:11 23°≈03'55 29.05964 AU -9939 May 12 j 17:23 7°**¥**29'00 -1°09'00 min. Earth dist. conjunction -9945 Jan 12 j 04:27 -9939 May 12 j 17:23 7°**¥**29'00 1°09'17 direct 21°≈39'38 minimum elong -9945 Apr 13 j 12:23 -9939 May 11 j 15:35 7°¥26'36 31.11948 AU evening set 23°≈36'53 max. Earth dist. morning rise -9939 May 28 j 13:43 8° **\(**04'09 conjunction -9945 Apr 29 j 14:33 24°≈12'32 -1°39'44 retrograde -9939 Aug 23 i 01:30 9°**)**56'16 minimum elong -9945 Apr 29 i 14:34 24°≈12'32 1°40'07 opposition -9939 Nov 08 i 00:54 8° \(\frac{1}{34}\)'09 -1°10'54 max. Earth dist. -9945 Apr 28 i 15:21 24°≈10′22 31.06434 AU min. Earth dist. -9939 Nov 09 i 00:35 8°¥32'30 29.12358 AU -9945 May 15 i 13:13 24°≈47'52 direct -9938 Jan 27 j 21:40 7°¥08'30 morning rise -9945 Aug 10 j 10:21 26°≈40'35 -9938 Apr 29 j 05:21 9° **X** 05'37 retrograde evening set -9945 Oct 26 j 07:47 25°≈18'12 -1°44'07 max. Earth dist. -9938 May 14 j 02:30 9°**升**38'35 31.12637 AU opposition -9945 Oct 27 j 03:47 25°≈16'48 29.07123 AU min. Earth dist. -9938 May 15 j 05:17 9°\(\pm\)41'05 -1°03'31 direct -9944 Jan 14 j 16:26 23°≈52'33 conjunction -9944 Apr 15 j 01:09 25°≈49'50 minimum elong -9938 May 15 j 05:18 9°\(\)41'05 1°03'46 evening set 10°**)** 16′13 max. Earth dist. -9944 Apr 30 j 04:31 26°≈23'21 31.07578 AU morning rise -9938 May 31 j 01:16 -9938 Aug 25 j 11:05 12°\ 08'13 retrograde -9944 May 01 j 03:13 -9938 Nov 10 j 11:44 10°\(\)46'06 -1°04'59 conjunction 26°≈25'27 -1°34'55 opposition -9944 May 01 j 03:14 -9938 Nov 11 j 11:42 10°¥44'26 29.13067 AU minimum elong 26°≈25'27 1°35'18 min. Earth dist. 9°**升**20′26 morning rise -9944 May 17 j 01:22 27°≈00'46 direct -9937 Jan 30 j 08:58 -9937 May 01 j 17:28 retrograde -9944 Aug 11 j 20:38 28°≈53'24 evening set 11°**)** 17'29 -9944 Oct 27 j 18:40 27°≈31'07 -1°38'54 opposition min. Earth dist. -9944 Oct 28 j 16:10 27°≈29'37 29.08230 AU conjunction -9937 May 17 j 17:08 11°**¥**52′56 -0°57′56 direct -9943 Jan 16 j 04:47 26°≈05'30 minimum elong -9937 May 17 j 17:09 11°**X**52'56 0°58'10 evening set -9943 Apr 17 j 14:12 28°≈02'47 max. Earth dist. -9937 May 16 j 15:24 11°**米**50′32 31.13377 AU -9937 Jun 02 j 12:34 12°\ 28'01 morning rise -9943 May 03 j 15:50 28°≈38'24 -1°29'59 -9937 Aug 27 j 19:30 14°**¥** 19'55 conjunction retrograde

Planetary Phen	omena of Neptune f	from -1040	0 through -98	98 (UT), Astrodiei	nst AG 18-Feb-2025	5 14:23,	page 37
•	nical year style is used: Th		•				1 0
opposition	-9937 Nov 12 j 22:45	12°) 57'49	-0°58'58	minimum elong	-9930 Jun 02 j 00:32	27°) 13′33	0°17'06
min. Earth dist.	-9937 Nov 13 j 22:58	12° ¥ 56′08	29.13836 AU	morning rise	-9930 Jun 17 j 16:39	27°) 48′25	
direct	-9936 Feb 01 j 21:39	11°) 32'09		retrograde	-9930 Sep 11 j 21:24	29°) 40′07	
evening set	-9936 May 03 j 05:27	13° ¥ 29′08		opposition	-9930 Nov 28 j 04:27	28°) 18′23	-0°15'02
max. Earth dist.	-9936 May 18 j 01:50	14°) €02'04	31.14207 AU	min. Earth dist.	-9930 Nov 29 j 04:51	28°) 16'42	29.21127 AU
	, ,			direct	-9929 Feb 17 j 11:53	26°) 53′07	
conjunction	-9936 May 19 j 04:33	14°)(04'33	-0°52'16	evening set	-9929 May 19 j 15:56	28°) (49'59	
minimum elong	-9936 May 19 j 04:33	14°)(04'33		max. Earth dist.	-9929 Jun 03 j 08:45		31.21516 AU
morning rise	-9936 Jun 03 j 23:41	14°) (39'36			,,_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	_,,,,	
retrograde	-9936 Aug 29 j 06:38	16° ¥ 31'27		conjunction	-9929 Jun 04 j 11:35	29° ¥ 25′09	-0°11'01
opposition	-9936 Nov 14 j 09:37	15°) 09'21	-0°52'53	minimum elong	-9929 Jun 04 j 11:35	29° H 25'09	
min. Earth dist.	-9936 Nov 15 j 09:05		29.14724 AU	behind sun begin	-9929 Jun 04 j 06:45	29°) 24'43	0 11 00
direct	-9935 Feb 03 j 08:43	13°) (43'42	29.11721710	behind sun end	-9929 Jun 04 j 16:26	29° H 25'35	
evening set	-9935 May 05 j 17:20	15°) (40'39		morning rise	-9929 Jun 20 j 03:15	29° H 59'58	
evening set	-7755 Way 05 j 17.20	13 7(403)		morning risc	-9929 Jun 20 j 03:33	0° Υ	
conjunction	-9935 May 21 j 16:10	16°) 16′02	0°46'32	retrograde	-9929 Sep 14 j 07:30	1° Υ 51'40	
minimum elong	-9935 May 21 j 16:10	16° X 16'02		opposition	-9929 Nov 30 j 15:55	0° Υ 29'58	0.08136
max. Earth dist.	-9935 May 20 j 14:34		31.15154 AU	min. Earth dist.	-9929 Nov 30 j 15:35 -9929 Dec 01 j 16:30		29.21948 AU
morning rise	-9935 Jun 06 j 10:41	16° X 51'03	31.13134 AU	min. Earm dist.	,	0 1 28 1 7 30°R) €	29.21946 AU
-	3	18° X 31'03		J:4	-9929 Dec 19 j 05:11	30° ξ π 29°) €04'45	
retrograde	-9935 Aug 31 j 15:58		0946142	direct	-9928 Feb 19 j 22:58	29° π 0443	
opposition	-9935 Nov 16 j 20:32	17°) €20'47			-9928 Apr 20 j 03:42		
min. Earth dist.	-9935 Nov 17 j 20:50		29.15723 AU	evening set	-9928 May 21 j 03:15	1° Y 01'32	
direct	-9934 Feb 05 j 20:48	15° ¥ 55′10				10000 5111	
evening set	-9934 May 08 j 05:20	17°) € 52'07		conjunction	-9928 Jun 05 j 22:31	1° Υ 36'41	
max. Earth dist.	-9934 May 23 j 01:14	18° ∺ 25'00	31.16223 AU	minimum elong	-9928 Jun 05 j 22:31	1° Y 36'41	0°05'04
				behind sun begin	-9928 Jun 05 j 16:14	1° Y 36′07	
conjunction	-9934 May 24 j 03:34	18°) 27′27		behind sun end	-9928 Jun 06 j 04:49	1° Ƴ 37'14	
minimum elong	-9934 May 24 j 03:34	18°) 27′27	0°40'55	max. Earth dist.	-9928 Jun 04 j 20:38		31.22270 AU
morning rise	-9934 Jun 08 j 21:47	19° ∺ 02'26		morning rise	-9928 Jun 21 j 13:33	2° Υ 11'28	
retrograde	-9934 Sep 03 j 04:07	20° ∺ 54'11		retrograde	-9928 Sep 15 j 15:48	4° Ƴ 03'09	
opposition	-9934 Nov 19 j 07:31	19° ∺ 32'12		opposition	-9928 Dec 02 j 03:24	2° Y 41'27	
min. Earth dist.	-9934 Nov 20 j 06:48		29.16827 AU	min. Earth dist.	-9928 Dec 03 j 04:27		29.22632 AU
direct	-9933 Feb 08 j 10:12	18° ∺ 06'39		direct	-9927 Feb 21 j 11:20	1° Y 16'15	
evening set	-9933 May 10 j 17:02	20°) €03'35		asc. node	-9927 Apr 03 j 13:50	1° Y 42'51	
				evening set	-9927 May 23 j 14:44	3° Y 13′00	
conjunction	-9933 May 26 j 14:54	20° ℋ 38'53	-0°34'52	max. Earth dist.	-9927 Jun 07 j 06:14	3° Ƴ 45'34	31.22906 AU
minimum elong	-9933 May 26 j 14:54	20°) 38′53	0°35'02				
max. Earth dist.	-9933 May 25 j 13:20	20°) 36′30	31.17358 AU	conjunction	-9927 Jun 08 j 09:18	3° Y 48'05	0°01'06
morning rise	-9933 Jun 11 j 08:29	21° ℋ 13'51		minimum elong	-9927 Jun 08 j 09:17	3° Ƴ 48′05	0°01'04
retrograde	-9933 Sep 05 j 14:32	23°) €05'35		behind sun begin	-9927 Jun 08 j 02:49	3° Ƴ 47'31	
opposition	-9933 Nov 21 j 18:44	21°) (43'39	-0°34'11	behind sun end	-9927 Jun 08 j 15:45	3° Y 48'40	
min. Earth dist.	-9933 Nov 22 j 19:03	21°) 41'59	29.17982 AU	morning rise	-9927 Jun 23 j 23:56	4° Y 22'50	
direct	-9932 Feb 10 j 22:08	20° ℋ 18'12		retrograde	-9927 Sep 18 j 02:45	6° Ƴ 14'30	
evening set	-9932 May 12 j 04:49	22°) 15′07		opposition	-9927 Dec 04 j 14:40	4° Υ 52'48	0°04'16
max. Earth dist.	-9932 May 27 j 00:20		31.18523 AU	min. Earth dist.	-9927 Dec 05 j 15:06		29.23226 AU
	, ,			direct	-9926 Feb 23 j 21:56	3° Y 27'37	
conjunction	-9932 May 28 j 02:08	22°) 50′23	-0°28'57	evening set	-9926 May 26 j 01:57	5° Y 24'18	
minimum elong	-9932 May 28 j 02:08	22°) 50′23		<i>5</i>			
morning rise	-9932 Jun 12 j 19:20	23° H 25'19		conjunction	-9926 Jun 10 j 20:04	5° Y 59'20	0°07'08
retrograde	-9932 Sep 07 j 01:10	25° ¥ 17'02		minimum elong	-9926 Jun 10 j 20:05	5° Y 59'20	0°07'08
opposition	-9932 Nov 23 j 05:46	23° H 55'11	-0°27'50	behind sun begin	-9926 Jun 10 j 14:06	5°Υ58'48	0 0, 00
min. Earth dist.	-9932 Nov 24 j 05:20		29.19122 AU	behind sun end	-9926 Jun 11 j 02:03	5° Υ 59'52	
direct	-9931 Feb 12 j 11:22	22° H 29'48	27.17122 110	max. Earth dist.	-9926 Jun 09 j 18:09		31.23464 AU
evening set	-9931 May 14 j 16:33	24°)(26'42		morning rise	-9926 Jun 26 j 10:01	6° Υ 34'03	31.23404710
•			31.19629 AU	-	-	8° Υ 25'43	
max. Earth dist.	-9931 May 29 j 11:13	∠ + 八3931	31.17027 AU	retrograde opposition	-9926 Sep 20 j 11:51 -9926 Dec 07 j 02:17	8° 1 25 45 7° Υ 03'59	0°10'41
	0021 M 20 : 12 22	250 1 01157	0022100				
conjunction	-9931 May 30 j 13:22	25° ₩ 01'57		min. Earth dist.	-9926 Dec 08 j 03:31		29.23764 AU
minimum elong	-9931 May 30 j 13:22	25°) €01'57	0~23'0/	direct	-9925 Feb 26 j 10:16	5° Υ 38'49	
morning rise	-9931 Jun 15 j 06:03	25°) (36′51		evening set	-9925 May 28 j 13:01	7° Υ 35'25	21 24224 : **
retrograde	-9931 Sep 09 j 11:48	27°) (28'34	0021127	max. Earth dist.	-9925 Jun 12 j 04:00	8°17'07'57	31.24004 AU
opposition	-9931 Nov 25 j 17:05	26° ₩ 06'47				2422	
min. Earth dist.	-9931 Nov 26 j 17:35		29.20190 AU	conjunction	-9925 Jun 13 j 06:23	8° Y 10′24	
direct	-9930 Feb 14 j 22:47	24°) (41'27		minimum elong	-9925 Jun 13 j 06:23	8° Y 10′24	0°13'07
evening set	-9930 May 17 j 04:13	26°) 38′21		behind sun begin	-9925 Jun 13 j 02:31	8° Y 10′04	
max. Earth dist.	-9930 May 31 j 22:41	27° ∺ 11'09	31.20640 AU	behind sun end	-9925 Jun 13 j 10:15	8° Ƴ 10'45	
				morning rise	-9925 Jun 28 j 19:56	8° Ƴ 45'04	
conjunction	-9930 Jun 02 j 00:32	27° ∺ 13'33	-0°17'01	retrograde	-9925 Sep 22 j 23:28	10° Ƴ 36'44	

Planetary Pheno	omena of Neptune f	from -1040	0 through -989	98 (UT). Astrodie	nst AG 18	-Feb-2025	5 14:23.	page 38
•	nical year style is used: Th		-					P. 20
opposition	-9925 Dec 09 j 13:46	9° Υ 14'59		minimum elong		28 j 05:05	23° Y 25'54	0°54'10
min. Earth dist.	-9925 Dec 10 j 13:41		29.24312 AU	morning rise		13 j 14:38	24° Υ ′00'17	
direct	-9924 Feb 28 j 23:34	7° Υ '49'49	27.2 10 12 110	retrograde		07 j 22:14	25°Υ′52'15	
evening set	-9924 May 29 j 23:56	9° Υ 46'22		opposition		24 j 23:43	24° Υ '30'36	1°00'37
evening sec))21 May 2) j 25.50	7 1 10 22		min. Earth dist.		25 j 21:02	24° Υ 29'09	
conjunction	-9924 Jun 14 j 16:48	10° Y 21'19	0°19'04	direct		16 j 11:34	23°Υ05'54	2).2)430 AO
minimum elong	-9924 Jun 14 j 16:48	10 γ 21 19	0°19'07	evening set		15 j 02:39	25° Υ '02'07	
max. Earth dist.	-9924 Jun 13 j 15:27		31.24565 AU	evening set	-991 / Juli	13 J 02.39	23 1 02 07	
	·	10 γ 18 3 / 10° γ 55'56	31.24303 AU	agniumation	0017 Jun	30 j 15:01	25° Ƴ 36'45	0°59'36
morning rise	-9924 Jun 30 j 05:39			conjunction		3		
retrograde	-9924 Sep 24 j 09:31	12° Υ 47'36 11° Υ 25'50	0000107	minimum elong		30 j 15:00	25° Y 36'45	0°59'47
opposition	-9924 Dec 11 j 01:15			max. Earth dist.		29 j 16:57		31.29670 AU
min. Earth dist.	-9924 Dec 12 j 01:47		29.24917 AU	morning rise		15 j 23:47	26° Y 11'06	
direct	-9923 Mar 02 j 11:00	10° Y ′00'42		retrograde		10 j 07:13	28° Y ′03′08	
evening set	-9923 Jun 01 j 10:49	11° Y ′57'11		opposition		27 j 11:54	26° Y 41′28	1°06'34
max. Earth dist.	-9923 Jun 16 j 02:02	12° 'Y' 29'45	31.25213 AU	min. Earth dist.		28 j 09:56		29.29968 AU
				direct		17 j 23:34	25° Y 16'49	
conjunction	-9923 Jun 17 j 03:01	12° Y 32′05	0°25'00	evening set	-9916 Jun	16 j 13:16	27° Y 12′58	
minimum elong	-9923 Jun 17 j 03:01	12° Y ′32'05	0°25'03	max. Earth dist.	-9916 Jul	01 j 02:15	27° Ƴ 45′26	31.30108 AU
morning rise	-9923 Jul 02 j 15:23	13° Y ′06'40						
retrograde	-9923 Sep 26 j 19:46	14° Y 58'20		conjunction	-9916 Jul	02 j 00:51	27° Y '47'33	1°05'07
opposition	-9923 Dec 13 j 12:46	13° Y 36'35	0°29'47	minimum elong	-9916 Jul	02 j 00:50	27° Y 47'33	1°05'19
min. Earth dist.	-9923 Dec 14 j 11:51	13° Y 35'00	29.25601 AU	morning rise	-9916 Jul	17 i 09:12	28° Y ′21'51	
direct	-9922 Mar 05 j 00:31	12° Y 11'30		Č	-9916 Sep	13 j 04:19	0° ႘	
evening set	-9922 Jun 03 j 21:35	14° Y °07'56		retrograde		11 j 18:32	0° 8 13'57	
	,, ,					10 j 01:39	30°RƳ	
conjunction	-9922 Jun 19 j 13:08	14° Ƴ 42'47	0°30'54	opposition		28 j 23:44	28° Υ '52'15	1°12'24
minimum elong	-9922 Jun 19 j 13:07	14° Y '42'47	0°31'00	min. Earth dist.		29 j 20:36		29.30334 AU
max. Earth dist.	·	-	31.25937 AU	direct		3	27° Υ 27'38	29.30334 AU
	-9922 Jun 18 j 12:27	14 γ 40 29 15° γ 17'20	31.23937 AU			20 j 11:33	27 1 27 38 29° Υ 23'43	
morning rise	-9922 Jul 05 j 00:53			evening set	-9915 Jun	18 j 23:40	29 1 23 43	
retrograde	-9922 Sep 29 j 06:51	17° Υ ′09'03						
opposition	-9922 Dec 16 j 00:28	15° Y 47'18	0°36'04	conjunction		04 j 10:41	29° Y 58'15	1°10'31
min. Earth dist.	-9922 Dec 16 j 23:39		29.26378 AU	minimum elong	-9915 Jul	04 j 10:40	29° Y ′58′15	
direct	-9921 Mar 07 j 12:33	14° Y ′22'18		max. Earth dist.	-9915 Jul	03 j 12:48		31.30391 AU
evening set	-9921 Jun 06 j 08:16	16° Ƴ 18'41				05 j 05:19	$0^{\circ}S$	
				morning rise	-9915 Jul	19 j 18:22	0° 8 32'31	
conjunction	-9921 Jun 21 j 23:15	16° Ƴ 53'30	0°36'46	retrograde	-9915 Oct	14 j 04:49	2° 8 24'41	
minimum elong	-9921 Jun 21 j 23:14	16° Ƴ 53'30	0°36'52	opposition	-9915 Dec	31 j 11:54	1° 8 02'56	1°18'08
max. Earth dist.	-9921 Jun 20 j 23:44	16° Ƴ 51'18	31.26750 AU	min. Earth dist.	-9914 Jan	01 j 09:31	1° 8 01'28	29.30564 AU
morning rise	-9921 Jul 07 j 10:24	17° Y ′28′00			-9914 Feb	13 j 02:26	30° ŖƳ	
retrograde	-9921 Oct 01 j 16:27	19° Ƴ 19'46		direct	-9914 Mar	22 j 22:29	29° Y ′38′20	
opposition	-9921 Dec 18 j 12:10	17° Y ′58′03	0°42'18			28 j 22:44	0°8	
min. Earth dist.	-9921 Dec 19 j 10:35		29.27205 AU	evening set	_	21 j 09:55	1° 8 34'20	
direct	-9920 Mar 09 j 01:58	16° Ƴ 33'07		8		J		
evening set	-9920 Jun 07 j 18:53	18° Y ′29′29		conjunction	-9914 Jul	06 j 20:14	2° 8 08'49	1°15'50
max. Earth dist.	-9920 Jun 22 j 09:15		31.27583 AU	minimum elong		06 j 20:13	2° 8 08'49	
max. Earth dist.	7720 Juli 22 j 07.13	17 1 02 01	31.27303710	max. Earth dist.		05 j 20:13		31.30565 AU
agniumation	0020 Jun 22 i 00:07	19° Ƴ 04'15	0°42'34			22 j 03:25	2° 8 43'03	31.30303 AU
conjunction minimum elong	-9920 Jun 23 j 09:07 -9920 Jun 23 j 09:07	19° Υ 04'15	0°42′34 0°42′42	morning rise retrograde		16 j 15:15	4° 8 35'15	
Č	,	19 γ 04 13	0 42 42	-		-		1022145
morning rise	-9920 Jul 08 j 19:49			opposition		03 j 00:01	3° 8 13'28	
retrograde	-9920 Oct 03 j 02:33	21° Υ 30'32	0040120	min. Earth dist.		03 j 20:14		29.30692 AU
opposition	-9920 Dec 19 j 23:54	20° ℃ 08'51	0°48'29	direct		25 j 12:18	1° 8 48'53	
min. Earth dist.	-9920 Dec 20 j 22:00		29.28039 AU	evening set		23 j 20:04	3° 8 44'48	
direct	-9919 Mar 11 j 12:36	18° Ƴ 44'01		max. Earth dist.	-9913 Jul	08 j 08:30	4° 8 17'14	31.30658 AU
evening set	-9919 Jun 10 j 05:28	20° Y ′40′20						
				conjunction		09 j 05:42	4° 8 19'14	
conjunction	-9919 Jun 25 j 19:11	21° Y 15'03	0°48'19	minimum elong	-9913 Jul	09 j 05:41	4° 8 19'14	1°21'18
minimum elong	-9919 Jun 25 j 19:11	21° Y 15'03		morning rise	-9913 Jul	24 j 12:21	4° 8 53'25	
max. Earth dist.	-9919 Jun 24 j 20:44	21° Y °12'57	31.28383 AU	retrograde	-9913 Oct	19 j 02:33	6° 8 45'41	
morning rise	-9919 Jul 11 j 05:09	21° Y '49'29		opposition	-9912 Jan	05 j 12:09	5° 8 23'49	1°29'15
retrograde	-9919 Oct 05 j 10:46	23° Y ′41′22		min. Earth dist.		06 j 08:23	5° 8 22'27	29.30790 AU
opposition	-9919 Dec 22 j 11:45	22° Y 19'43	0°54'36	direct		27 j 00:16	3° 8 59'16	
min. Earth dist.	-9919 Dec 23 j 10:02		29.28797 AU	evening set		25 j 05:54	5° 8 55'06	
direct	-9918 Mar 14 j 01:00	20° Υ '54'57		5 *		<i>J</i>		
evening set	-9918 Jun 12 j 16:14	22° Υ 51'13		conjunction	-9912 Jul	10 j 15:01	6° 8 29'29	1°26'07
max. Earth dist.	-9918 Jun 27 j 05:51		31.29092 AU	minimum elong		10 j 15:00	6° 8 29'29	
diot.	21 Jun 21 J 00.01			max. Earth dist.		09 j 19:16		31.30749 AU
conjunction	-9918 Jun 28 j 05:06	23° Y °25'54	0°54'00	morning rise		25 j 21:05	7° 8 03'38	51.55/7/AU
2011,011011	>>10 Juli 20 J 05.00		0.00		, , 1 2 3 HI	J 1.0J	, 300 00	

	omena of Neptune f						page 39
	nical year style is used: Th	-	n astronomical cou				
retrograde	-9912 Oct 20 j 11:52	8° 8 55'58		min. Earth dist.	-9905 Jan 21 j 17:02		29.32709 AU
opposition	-9911 Jan 07 j 00:17	7° 8 34'03		direct	-9905 Apr 12 j 07:18	19° 8 11'49	
min. Earth dist.	-9911 Jan 07 j 19:26	_	29.30890 AU	evening set	-9905 Jul 11 j 02:06	21° 8 07'17	
direct	-9911 Mar 29 j 14:00	6° 8 09'31					
evening set	-9911 Jun 27 j 15:53	8° 8 05'17		conjunction	-9905 Jul 26 j 06:50	21° 8 41'23	1°57'49
max. Earth dist.	-9911 Jul 12 j 04:24	8° 8 37'45	31.30870 AU	minimum elong	-9905 Jul 26 j 06:49	21° 8 41'23	1°58'13
. ,.	0011 7 1 12 00 11	00120127	1021104	max. Earth dist.	-9905 Jul 25 j 16:48	_	31.32683 AU
conjunction	-9911 Jul 13 j 00:11	8° 8 39'37		morning rise	-9905 Aug 10 j 09:27	22° 8 15'19	
minimum elong	-9911 Jul 13 j 00:10	8° 8 39'37	1°31'22	retrograde	-9905 Nov 05 j 12:34	24° 8 08'31	2007157
morning rise	-9911 Jul 28 j 05:48	9° 8 13'44		opposition	-9904 Jan 23 j 14:42	22° 8 46'31	
retrograde	-9911 Oct 22 j 22:02	11° 8 06'09	1920/50	min. Earth dist.	-9904 Jan 24 j 03:59 -9904 Apr 13 j 20:36		29.32895 AU
opposition min. Earth dist.	-9910 Jan 09 j 12:23 -9910 Jan 10 j 06:37		1°39'50 29.31065 AU	direct evening set	-9904 Apr 13 j 20.36 -9904 Jul 12 j 11:45	21° 8 22'32 23° 8 17'57	
direct	-9910 Jan 10 J 00:57	8° 8 19'43	29.31003 AU	evening set	-9904 Jul 12 j 11.43	23 01/3/	
evening set	-9910 Apr 01 j 00:32 -9910 Jun 30 j 01:39	10° 8 15'25		conjunction	-9904 Jul 27 j 15:54	23° 8 52'00	2°01'43
evening set	-9910 Juli 30 J 01.39	10 013 23		minimum elong	-9904 Jul 27 j 15:53	23° 8 52'00	
conjunction	-9910 Jul 15 j 09:28	10° 8 49'42	1°35'53	max. Earth dist.	-9904 Jul 27 j 01:51	_	31.32791 AU
minimum elong	-9910 Jul 15 j 09:27	_	1°36'13	morning rise	-9904 Aug 11 j 18:09	24° 8 25'55	31.32791 AU
max. Earth dist.	-9910 Jul 13 j 09:27	_	31.31079 AU	retrograde	-9904 Nov 07 j 01:16	24° 8 19'15	
morning rise	-9910 Jul 30 j 14:24	11° 8 23'47	31.31077 AO	opposition	-9903 Jan 25 j 03:22	24° 8 57'12	2°12'02
retrograde	-9910 Oct 25 j 06:19	13° 8 16'18		min. Earth dist.	-9903 Jan 25 j 16:42		29.32950 AU
opposition	-9909 Jan 12 j 00:44		1°44'55	direct	-9903 Apr 16 j 07:58	23° 8 33'15	27.32730710
min. Earth dist.	-9909 Jan 12 j 18:20	_	29.31322 AU	evening set	-9903 Jul 14 j 21:18	25° 8 28'36	
direct	-9909 Apr 03 j 13:29	10° 8 29'55	27.51522110	evening sec))05 Jul 11 J 21:10	23 02030	
evening set	-9909 Jul 02 j 11:23	12° 8 25'34		conjunction	-9903 Jul 30 j 01:00	26° 8 02'37	2°05'27
e venning see	>>0> 041 02 j 11.25	12 0200.		minimum elong	-9903 Jul 30 j 00:59	26° 8 02'37	
conjunction	-9909 Jul 17 j 18:25	12° 8 59'49	1°40'34	max. Earth dist.	-9903 Jul 29 j 12:19	_	31.32764 AU
minimum elong	-9909 Jul 17 j 18:24		1°40'54	morning rise	-9903 Aug 14 j 02:43	26° 8 36'30	31.32701110
max. Earth dist.	-9909 Jul 17 j 00:39	_	31.31382 AU	retrograde	-9903 Nov 09 j 11:08	28° 8 29'56	
morning rise	-9909 Aug 01 j 23:02	13° 8 33'52		opposition	-9902 Jan 27 j 16:00	27° 8 07'50	2°15'56
5 5	-9909 Sep 17 j 22:37	15° 8		min. Earth dist.	-9902 Jan 28 j 04:25		29.32851 AU
retrograde	-9909 Oct 27 j 17:51	15° 8 26'31		direct	-9902 Apr 18 j 21:21	25° 8 43'55	
Č	-9909 Dec 08 j 00:39	15° ₹ 8		evening set	-9902 Jul 17 j 06:55	27° 8 39'11	
opposition	-9908 Jan 14 j 12:57	14° 8 04'32	1°49'51	C	J		
min. Earth dist.	-9908 Jan 15 j 04:52	14° 8 03'28	29.31669 AU	conjunction	-9902 Aug 01 j 09:58	28° 8 13'10	2°09'00
direct	-9908 Apr 04 j 23:53	12° 8 40'12		minimum elong	-9902 Aug 01 j 09:57	28° 8 13'10	2°09'28
evening set	-9908 Jul 03 j 21:02	14° 8 35'48		max. Earth dist.	-9902 Jul 31 j 21:00	28° 8 11'56	31.32605 AU
	-9908 Jul 14 j 17:13	15° 8		morning rise	-9902 Aug 16 j 11:28	28° 8 47'01	
max. Earth dist.	-9908 Jul 18 j 11:34	15° 8 08'30	31.31741 AU		-9902 Sep 23 j 01:44	$\Pi^{\circ}0$	
				retrograde	-9902 Nov 11 j 22:14	0° Ⅱ 40′34	
conjunction	-9908 Jul 19 j 03:37	15° 8 10'01	1°45'06		-9901 Jan 03 j 04:23	30° ₹ 8	
minimum elong	-9908 Jul 19 j 03:36	15° 8 10'01	1°45'28	opposition	-9901 Jan 30 j 04:43	29° 8 18'23	2°19'38
morning rise	-9908 Aug 03 j 07:35	15° 8 44'03		min. Earth dist.	-9901 Jan 30 j 16:23	29° 8 17'36	29.32654 AU
retrograde	-9908 Oct 29 j 02:51	17° 8 36'49		direct	-9901 Apr 21 j 08:41	27° 8 54'29	
opposition	-9907 Jan 16 j 01:12		1°54'38	evening set	-9901 Jul 19 j 16:09	29° 8 49'38	
min. Earth dist.	-9907 Jan 16 j 17:20		29.32047 AU		-9901 Jul 24 j 08:08	Π $^{\circ}0$	
	-9907 Mar 13 j 21:17	15° ₹ 8				_	
direct	-9907 Apr 07 j 11:04	14° 8 50'37		conjunction	-9901 Aug 03 j 18:54	0° Ⅲ 23'35	
	-9907 May 01 j 13:39	15° 8		minimum elong	-9901 Aug 03 j 18:53	0° Ⅱ 23'35	
evening set	-9907 Jul 06 j 06:48	16° 8 46'11		max. Earth dist.	-9901 Aug 03 j 07:50		31.32353 AU
		1		morning rise	-9901 Aug 18 j 19:55	0° ∏ 57'25	
conjunction	-9907 Jul 21 j 12:40		1°49'30	retrograde	-9901 Nov 14 j 07:05	2° ∏ 51′03	
minimum elong	-9907 Jul 21 j 12:39		1°49'52	opposition	-9900 Feb 01 j 17:27	1° Ⅱ 28'47	
max. Earth dist.	-9907 Jul 20 j 20:48		31.32119 AU	min. Earth dist.	-9900 Feb 02 j 04:42		29.32372 AU
morning rise	-9907 Aug 05 j 16:16	17° 8 54'21		direct	-9900 Apr 22 j 22:27	0° Ⅱ 04'54	
retrograde	-9907 Oct 31 j 14:25	19° 8 47'16	1050114	evening set	-9900 Jul 21 j 01:32	1° Ⅱ 59'57	
opposition	-9906 Jan 18 j 13:34		1°59'14		0000 4 05:02 40	20Д22151	2015124
min. Earth dist.	-9906 Jan 19 j 03:59	18° 8 24'20	29.32412 AU	conjunction	-9900 Aug 05 j 03:40	2° П 33'51 2° П 33'51	2°15'34
direct	-9906 Apr 09 j 21:48			minimum elong	-9900 Aug 05 j 03:39		2°16'03 31.32056 AU
evening set	-9906 Jul 08 j 16:24	18° 8 56'40		max. Earth dist.	-9900 Aug 04 j 16:31	2° П 32'48 3° П 07'40	31.32030 AU
aoniumatiam	0006 Jul 02:01:40	100-20140	1052144	morning rise	-9900 Aug 20 j 04:31 -9900 Nov 15 j 18:33		
conjunction	-9906 Jul 23 j 21:42 -9906 Jul 23 j 21:41		1°53'44 1°54'09	retrograde	-	5° Ⅲ 01'24 3° Ⅲ 39'02	2026127
minimum elong max. Earth dist.	-9906 Jul 23 j 21:41 -9906 Jul 23 j 06:54		31.32440 AU	opposition min. Earth dist.	-9899 Feb 03 j 05:53 -9899 Feb 03 j 15:26		29.32084 AU
morning rise	-9906 Jul 23 j 00:34 -9906 Aug 08 j 00:46	20° 8 04'47	31.32 11 0 AU	direct	-9899 Apr 25 j 09:44	2° П 15'10	27.32004 AU
retrograde	-9906 Nov 03 j 01:20	20 8 0447 21° 8 57'51		evening set	-9899 Jul 23 j 10:42	2 Ⅱ 1310 4° Ⅱ 10'07	
opposition	-9905 Jan 21 j 02:14	20° 8 35'52	2°03'41	ovening set	7077 Jui 23 j 10.42	¬ Д 100/	
Sprosition	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-0 00002	_ 00 11				

Planetary Phenomena of Neptune from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 40

Attention, astronomical year style is used: The year -9899 in astronomical counting style is the year 9900 BCE in historical counting style.

morning rise -9899 Aug 22 j 12:55 5° 117'47 retrograde -9899 Nov 18 j 02:59 7° 111'37