Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. conjunction -3400 Feb 11 j 19:02 11°≈10'59 -3394 Mar 13 i 04:39 25°≈17'39 -2°04'05 evening set -3394 Mar 13 j 04:39 25°≈17'39 2°04'09 minimum elong -3400 Feb 27 j 17:09 -3394 Mar 14 j 00:19 11°≈46'34 -1°51'26 max. Earth dist. 25°≈19'29 30 82758 AU conjunction -3400 Feb 27 j 17:09 -3394 Mar 29 j 08:00 11°≈46'34 1°51'32 25°≈53'38 minimum elong morning rise max. Earth dist. -3400 Feb 28 j 16:17 -3394 Jun 28 j 18:21 11°≈48'44 30.83935 AU retrograde 27°≈52'18 -3400 Mar 14 j 18:54 morning rise 12°≈22'29 min. Earth dist. -3394 Sep 15 j 08:16 26°≈28'14 28.82767 AU retrograde -3400 Jun 14 j 09:14 14°≈21'28 opposition -3394 Sep 16 j 01:46 26°≈27'00 -2°13'31 min. Earth dist. -3400 Sep 01 j 07:55 12°≈57'34 28.84066 AU direct -3394 Dec 02 j 09:42 25°≈03'08 opposition -3400 Sep 02 j 05:17 12°≈56'04 -2°00'35 evening set -3393 Feb 27 j 17:54 26°≈57'00 direct -3400 Nov 18 j 10:14 11°≈32'31 evening set -3399 Feb 13 j 08:16 13°≈25'56 conjunction -3393 Mar 15 j 18:40 27°≈32'44 -2°05'33 -3393 Mar 15 j 18:40 minimum elong 27°≈32'44 2°05'37 -3393 Mar 16 j 12:51 conjunction -3399 Mar 01 j 06:51 14°≈01'33 -1°54'00 max. Earth dist. 27°≈34'26 30.82487 AU minimum elong -3399 Mar 01 j 06:50 14°≈01'33 1°54'05 morning rise -3393 Mar 31 j 22:26 28°**≈**08'45 max. Earth dist. -3399 Mar 02 j 06:21 14°≈03'45 30.83902 AU -3393 Jun 10 j 04:51 0°**)**€ morning rise -3399 Mar 17 j 08:43 14°≈37'29 retrograde -3393 Jul 01 j 05:47 0°\(\mathbf{t}\) 07'19 -3399 Mar 27 j 20:36 15°≈ -3393 Jul 22 j 09:35 30°R≈ retrograde -3399 Jun 16 j 22:06 16°≈36'27 opposition -3393 Sep 18 j 12:52 28°≈42'00 -2°14'59 opposition -3399 Sep 04 j 16:51 15°≈11'06 -2°03'13 min. Earth dist. -3393 Sep 17 j 20:39 28°≈43'09 28.82548 AU min. Earth dist. -3399 Sep 03 j 20:26 15°≈12'32 28.84016 AU direct -3393 Dec 04 j 20:06 27°≈18'04 -3399 Sep 11 j 06:30 15°R≈ evening set -3392 Mar 01 j 07:36 29°≈12'00 direct -3399 Nov 20 j 22:00 13°≈47'32 -3398 Jan 27 i 05:06 15°≈ conjunction -3392 Mar 17 j 08:54 29°≈47'46 -2°06'50 evening set -3398 Feb 15 j 21:46 15°≈41'04 minimum elong -3392 Mar 17 i 08:55 29°≈47'46 2°06'53 max. Earth dist. -3392 Mar 18 i 03:39 29°≈49'31 30.82311 AU -3398 Mar 03 j 20:40 16°≈16'42 -1°56'22 -3392 Mar 22 j 19:35 0°**₩** conjunction -3398 Mar 03 j 20:40 -3392 Apr 02 j 12:45 0° # 23'47 16°≈16'42 1°56'28 morning rise minimum elong -3398 Mar 04 j 18:43 -3392 Jul 02 j 17:11 2°\ 22'15 max. Earth dist. 16°≈18'46 30.83826 AU retrograde -3398 Mar 19 j 22:56 -3392 Sep 19 j 23:57 0°\\$56'58 -2°16'14 16°≈52'39 morning rise opposition -3398 Jun 19 j 13:50 -3392 Sep 19 j 07:48 0°**升**58'07 28.82428 AU 18°≈51'35 min. Earth dist. retrograde -3398 Sep 06 j 08:05 -3392 Oct 26 j 17:15 17°≈27'42 28.83902 AU 30°R≈ min. Earth dist. -3398 Sep 07 j 04:20 -3392 Dec 06 j 08:05 29°≈32'57 17°≈26'16 -2°05'40 direct opposition -3398 Nov 23 j 10:37 16°≈02'40 -3391 Jan 15 j 07:20 0°)(direct -3397 Feb 18 j 11:20 -3391 Mar 03 j 21:19 1°\ 26'59 evening set 17°≈56'17 evening set -3397 Mar 06 j 10:40 -3391 Mar 19 j 22:48 2°\cdot\02'45 -2°07'54 conjunction 18°≈31'57 -1°58'35 conjunction -3391 Mar 19 j 22:48 minimum elong -3397 Mar 06 j 10:40 18°≈31'57 1°58'40 minimum elong 2°**H**02'45 2°07'58 max. Earth dist. -3397 Mar 07 j 08:15 18°≈33'59 30.83651 AU max. Earth dist. -3391 Mar 20 j 15:56 2°**升**04'21 30.82257 AU morning rise -3397 Mar 22 j 13:13 19°≈07'55 morning rise -3391 Apr 05 j 03:02 2°**)** 38'46 retrograde -3397 Jun 22 j 02:33 21°≈06'49 retrograde -3391 Jul 05 j 06:44 4°**)** 37'10 -3397 Sep 09 j 15:57 19°≈41'31 -2°07'55 -3391 Sep 22 j 11:02 3°**升**11'54 -2°17'17 opposition opposition -3397 Sep 08 j 21:22 19°≈42'49 28.83682 AU -3391 Sep 21 j 19:17 3°¥13'02 28.82451 AU min. Earth dist. min. Earth dist. -3397 Nov 25 j 22:36 18°≈17'52 -3391 Dec 08 j 18:11 1°**)**(47'50 direct direct -3396 Feb 21 j 00:58 -3390 Mar 06 j 11:03 3°**)**(41'57 evening set 20°≈11'33 evening set 20°≈47'14 -2°00'36 4°**)** 17'45 -2°08'47 conjunction -3396 Mar 08 j 00:44 conjunction -3390 Mar 22 j 13:03 -3390 Mar 22 j 13:03 minimum elong -3396 Mar 08 i 00:44 20°≈47'14 2°00'40 minimum elong 4°\(\)17'45 2°08'50 max. Earth dist. -3396 Mar 08 j 21:24 20°≈49'10 30.83393 AU max. Earth dist. -3390 Mar 23 i 06:41 4°¥19'23 30.82342 AU morning rise -3396 Mar 24 i 03:32 21°≈23'13 morning rise -3390 Apr 07 i 17:23 4° **)** 53'46 -3396 Jun 23 j 16:31 23°≈22'02 retrograde -3390 Jul 07 i 18:26 6°¥52'05 retrograde -3396 Sep 10 j 08:24 21°≈58'04 28.83388 AU -3390 Sep 24 j 22:01 5°\ 26'52 -2°18'07 min. Earth dist. opposition -3396 Sep 11 j 03:11 21°≈56'44 -2°09'59 min. Earth dist. -3390 Sep 24 j 07:03 5°¥27'56 28.82600 AU opposition -3396 Nov 27 j 11:13 -3390 Dec 11 j 05:53 4° ¥ 02'47 direct 20°≈33'01 direct -3395 Feb 22 j 14:39 evening set 22°≈26'46 evening set -3389 Mar 09 j 00:59 5°\ 56'59 conjunction -3395 Mar 10 j 14:41 23°≈02'28 -2°02'26 conjunction -3389 Mar 25 j 03:17 6°\;\;32'47 -2°09'28 -3395 Mar 10 j 14:41 23°≈02'28 2°02'31 minimum elong -3389 Mar 25 j 03:17 6°\dagger32'47 2°09'32 minimum elong -3395 Mar 11 j 10:13 -3389 Mar 25 j 19:29 6°**升**34'18 30.82563 AU max. Earth dist. 23°≈04'18 30.83071 AU max. Earth dist. -3389 Apr 10 j 08:00 7°**₩**08'50

morning rise

retrograde

opposition

evening set

direct

min. Earth dist.

-3389 Jul 10 j 09:10

-3389 Sep 27 j 08:59

-3389 Sep 26 j 18:02

-3389 Dec 13 j 18:43

-3388 Mar 10 j 15:01

9°**H**07'03

6°**)** 17'47

8°**)** 12'06

7°**)** 41′54 -2°18′44

7°**¥**42'58 28.82870 AU

23°≈38'28

25°≈37'12

22°≈48'07

24°≈41'55

24°≈11'54 -2°11'51

24°≈13'07 28.83066 AU

-3395 Mar 26 j 17:50

-3395 Jun 26 j 05:13

-3395 Sep 13 j 14:36

-3395 Sep 12 j 21:24

-3395 Nov 29 j 21:53

-3394 Feb 25 j 04:06

morning rise

retrograde

opposition

evening set

direct

min. Earth dist.

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3388 in astronomical counting style is the year 3389 BCE in historical counting style. -3388 Mar 26 j 17:39 8°**)**(47'56 -2°09'57 direct -3382 Dec 29 i 05:20 22°\(\mathbf{H}\) 03'32 conjunction -3388 Mar 26 j 17:40 8°\ 47'56 2°10'00 evening set -3381 Mar 27 j 18:39 23°¥58'20 minimum elong max. Earth dist. -3388 Mar 27 j 09:43 8°**)** 49′26 30.82862 AU -3388 Apr 11 j 22:30 9°**)**€23'58 -3381 Apr 12 j 23:43 conjunction 24°\ 34'17 -2°07'47 morning rise -3388 Jul 11 j 21:08 11°**)** 22'07 -3381 Apr 12 j 23:43 24°\ 34'17 2°07'48 retrograde minimum elong 9°\ 57'03 -2°19'09 -3381 Apr 13 j 08:37 opposition -3388 Sep 28 j 19:57 max. Earth dist. 24°**₭**35'07 30.84125 AU -3381 Apr 29 j 05:52 min. Earth dist. -3388 Sep 28 j 06:38 9°**₭**57'59 28.83198 AU morning rise 25°**₩**10'22 -3381 Jul 28 j 13:04 direct -3388 Dec 15 j 06:24 8°**)** 32'54 retrograde 27°**)**€07'36 evening set -3387 Mar 13 j 05:05 10°**¥**27′19 opposition -3381 Oct 14 j 23:52 25°**)** 42'47 -2°16'04 min. Earth dist. -3381 Oct 14 j 16:54 25°**¥**43'17 28.84326 AU conjunction -3387 Mar 29 j 08:06 11°**米**03′10 -2°10′14 direct -3381 Dec 31 j 17:37 24°**)** 18'12 -3387 Mar 29 j 08:06 -3380 Mar 29 j 08:53 minimum elong 11°**H**03'10 2°10'17 evening set 26°**)** 13'04 -3387 Mar 29 j 23:07 max. Earth dist. 11°**₭**04'34 30.83214 AU morning rise -3387 Apr 14 j 13:10 11°**)**39'13 conjunction -3380 Apr 14 j 14:07 26°\(\)49'01 -2°06'41 retrograde -3387 Jul 14 j 11:57 13°**¥**37'17 minimum elong -3380 Apr 14 j 14:07 26°\ 49'01 2°06'41 opposition -3387 Oct 01 j 06:50 12°¥12'17 -2°19'20 max. Earth dist. -3380 Apr 14 j 21:16 26°**)** 49'41 30.84256 AU morning rise min. Earth dist. -3387 Sep 30 j 17:25 12°**升**13'14 28.83544 AU -3380 Apr 30 j 20:32 27°¥25′05 direct -3387 Dec 17 j 19:08 10°**)** 48′07 retrograde -3380 Jul 30 j 02:06 29°**)** 22'11 evening set -3386 Mar 15 j 19:15 12°**)**(42'37 opposition -3380 Oct 16 j 10:22 27°\f\ 57'23 -2°14'48 min. Earth dist. -3380 Oct 16 j 03:28 27°**H**57'52 28.84508 AU conjunction -3386 Mar 31 j 22:32 13°¥18'30 -2°10'19 direct -3379 Jan 02 j 06:11 26°**)** € 32'43 minimum elong -3386 Mar 31 j 22:32 13°**¥**18'30 2°10'21 evening set -3379 Mar 31 j 23:00 28°**)** 27'39 max. Earth dist. -3386 Apr 01 j 12:16 13°**)** 19'47 30.83532 AU morning rise -3386 Apr 17 j 03:52 13° **)** 54'34 conjunction -3379 Apr 17 i 04:35 29°\(\)\(\)03'38 -2°05'24 retrograde -3386 Jul 17 j 01:22 15°**)** € 52'32 -3379 Apr 17 i 04:35 29°\(\mathbf{t}\) 03'38 2°05'25 minimum elong opposition -3386 Oct 03 j 17:55 14°\ 27'34 -2°19'19 max. Earth dist. -3379 Apr 17 j 11:44 29°\d'18 30.84494 AU -3386 Oct 03 j 06:28 14°**H**28'23 28.83834 AU -3379 May 03 j 11:01 29° ¥ 39'42 min. Earth dist. morning rise -3386 Dec 20 j 06:38 13°**₩**03'22 -3379 May 12 j 23:12 $0^{\circ}\Upsilon$ direct -3385 Mar 18 j 09:33 14°**)** 57'58 -3379 Aug 01 j 13:05 1°Y36'39 retrograde evening set opposition -3379 Oct 18 j 20:57 0°Υ11'54 -2°13'20 -3385 Apr 03 j 13:18 15°**¥**33'51 -2°10'12 -3379 Oct 18 j 15:30 0°**Υ**12'17 28.84817 AU conjunction min. Earth dist. -3379 Oct 25 j 20:07 -3385 Apr 03 j 13:18 15°**★**33'51 2°10'14 30°**₹** minimum elong -3385 Apr 04 j 02:20 28°\ 47'11 max. Earth dist. 15°**₭**35'05 30.83784 AU -3378 Jan 04 j 17:42 direct -3385 Apr 19 j 18:45 16°**)**€09'56 -3378 Mar 14 j 02:37 $0^{\circ}\Upsilon$ morning rise -3385 Jul 19 j 14:36 18°**)**€07'46 -3378 Apr 03 j 13:03 0°Y42'11 retrograde evening set 16°**)** 42′51 -2°19′05 -3385 Oct 06 j 04:44 opposition -3385 Oct 05 j 17:29 -3378 Apr 19 j 18:55 1°Y18'10 -2°03'56 min. Earth dist. 16°**¥**43'39 28.84029 AU conjunction direct -3385 Dec 22 j 19:37 15°**¥**18'36 minimum elong -3378 Apr 19 j 18:55 1°Y18'10 2°03'55 -3384 Mar 20 j 00:01 17°**₩**13'16 max. Earth dist. -3378 Apr 20 j 01:04 1°Υ18'45 30.84889 AU evening set morning rise -3378 May 06 j 01:34 1°Y54'15 conjunction -3384 Apr 05 j 03:57 17°**)** 49'10 -2°09'53 retrograde -3378 Aug 04 j 02:59 3°Y51'04 -3384 Apr 05 j 03:57 17°\(\dagger49'10\) 2°09'54 -3378 Oct 21 j 07:23 2°Y26'22 -2°11'39 minimum elong opposition -3384 Apr 05 j 14:55 17°**¥**50'11 30.83934 AU min. Earth dist. -3378 Oct 21 j 01:34 2°Υ26'47 28.85276 AU max. Earth dist. -3384 Apr 21 j 09:42 18°**¥**25'15 -3377 Jan 07 j 06:47 1°Y01'37 morning rise direct -3384 Jul 21 j 02:31 20°**¥**22'57 -3377 Apr 06 j 03:19 2°Y56'43 retrograde evening set -3384 Oct 07 i 15:44 18°**¥**58'04 -2°18'39 opposition -3377 Apr 22 i 09:25 3°Y32'43 -2°02'16 min. Earth dist. -3384 Oct 07 i 06:12 18°**)** € 58'45 28.84142 AU conjunction direct -3384 Dec 24 i 06:28 17°**)** 33'44 minimum elong -3377 Apr 22 i 09:25 3°Y32'43 2°02'16 3°**Y**33'13 30.85419 AU evening set -3383 Mar 22 j 14:05 19°**)** 28'27 max. Earth dist. -3377 Apr 22 j 14:42 -3377 May 08 i 16:10 4°Υ08'48 morning rise -3383 Apr 07 j 18:31 20°\ 04'22 -2°09'23 -3377 Aug 06 j 15:39 6°**Y**05′29 conjunction retrograde -3383 Apr 07 i 18:31 20°\ 04'22 2°09'25 -3377 Oct 23 j 17:53 4°Υ40'52 -2°09'46 minimum elong opposition -3383 Apr 08 j 05:30 20°¥05'23 30.84014 AU min. Earth dist. -3377 Oct 23 j 13:40 4°**Υ**41'10 28.85878 AU max. Earth dist. 3°Y16'07 morning rise -3383 Apr 24 j 00:18 20°**)** 40′26 direct -3376 Jan 09 j 18:31 -3383 Jul 23 j 14:04 retrograde 22°\ 38'00 evening set -3376 Apr 07 j 17:30 5°Υ11'18 opposition -3383 Oct 10 j 02:33 21°\dagger 13'08 -2°18'00 min. Earth dist. -3383 Oct 09 j 17:35 21°\columbf 13'46 28.84189 AU conjunction -3376 Apr 23 j 23:56 5°Υ47'19 -2°00'25 19°**)** 48'43 -3376 Apr 23 j 23:57 5°**Υ**47'19 2°00'24 direct -3383 Dec 26 j 18:54 minimum elong 21°**)** 43'29 -3376 Apr 24 j 04:51 5°**Υ**47'47 30.86096 AU evening set -3382 Mar 25 j 04:26 max. Earth dist. -3376 May 10 j 06:44 6°Y23'24 morning rise -3382 Apr 10 j 09:02 8°Y19'58 conjunction 22°**H** 19'25 -2°08'40 retrograde -3376 Aug 08 j 04:37 minimum elong -3382 Apr 10 j 09:02 22°**H**19'25 2°08'41 opposition -3376 Oct 25 j 04:19 6°**Y**55'28 -2°07'42 max. Earth dist. -3382 Apr 10 j 17:51 22°**₭**20'14 30.84061 AU min. Earth dist. -3376 Oct 24 j 23:57 6°**Y**55'46 28.86593 AU morning rise -3382 Apr 26 j 15:11 22°****55'29 direct -3375 Jan 11 j 07:39 5°**Y**30'43 retrograde -3382 Jul 26 j 02:40 24°\ 52'53 evening set -3375 Apr 10 j 07:43 7°**Y**25′59 -3382 Oct 12 j 13:12 23°¥28'02 -2°17'08 opposition -3382 Oct 12 j 05:09 23°**升**28'37 28.84243 AU -3375 Apr 26 j 14:14 8°Y02'02 -1°58'23 min. Earth dist. conjunction

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 3

Attention astronom	ucal voar etulo ie neod. Th	a vaar 3375 i	in actronomical co	unting ctula ic tha year	· 3376 BCE in historical c	ounting etyla	
minimum elong	nical year style is used: Th -3375 Apr 26 j 14:15	8° Y 02'02		evening set	-3368 Apr 26 j 12:09	23° Y 08'43	
max. Earth dist.			30.86853 AU	evening set	-3308 Apr 20 J 12.09	23 1 06 43	
	-3375 Apr 26 j 17:34	8° Υ 38'07	30.80833 AU	:	2260 M 12 : 10.50	23° Y '44'48	1920121
morning rise	-3375 May 12 j 21:13	8° γ 3807 10° Υ 34'34		conjunction minimum elong	-3368 May 12 j 19:59 -3368 May 12 j 19:59	23° Y 44'48	
retrograde	-3375 Aug 10 j 16:52	9° Υ 10'10	2005125	_			
opposition	-3375 Oct 27 j 14:53			max. Earth dist.	-3368 May 12 j 15:28	23°°\44°23 24°\720'50	30.91141 AU
min. Earth dist.	-3375 Oct 27 j 12:05		28.87374 AU	morning rise	-3368 May 29 j 03:00		
direct	-3374 Jan 13 j 18:16	7° Υ 45'25 9° Υ 40'48		retrograde	-3368 Aug 26 j 01:13 -3368 Nov 11 j 15:53	26°Υ16'09 24°Υ52'09	1944120
evening set	-3374 Apr 12 j 22:00	9 1 40 48		opposition	,		
	2274 4 20:04.56	1000016151	1056110	min. Earth dist.	-3368 Nov 11 j 20:19		28.91513 AU
conjunction	-3374 Apr 29 j 04:56	10° ℃ 16'51 10° ℃ 16'51		direct	-3367 Jan 29 j 06:51	23° Y '27'02 25° Y '22'44	
minimum elong	-3374 Apr 29 j 04:56		1°56'08	evening set	-3367 Apr 29 j 02:02	25 1 22 44	
max. Earth dist.	-3374 Apr 29 j 08:10		30.87641 AU		22/71/ 15:10.02	2500050140	102/101
morning rise	-3374 May 15 j 11:50	10° Y 52'56		conjunction	-3367 May 15 j 10:02	25°Υ′58'49	
retrograde	-3374 Aug 13 j 05:15	12° Υ 49'15	2002157	minimum elong	-3367 May 15 j 10:03	25° Y 58'49	
opposition	-3374 Oct 30 j 01:16	11° Υ 24'58		max. Earth dist.	-3367 May 15 j 05:01		30.91731 AU
min. Earth dist.	-3374 Oct 29 j 23:15		28.88138 AU	morning rise	-3367 May 31 j 17:01	26° Y 34'50	
direct	-3373 Jan 16 j 06:29	10° Y ′00′13		retrograde	-3367 Aug 28 j 13:14	28° Y ′29'58	
evening set	-3373 Apr 15 j 12:35	11° Y 55'40		opposition	-3367 Nov 14 j 02:07	27° Y ′06′01	
				min. Earth dist.	-3367 Nov 14 j 06:22		28.92140 AU
conjunction	-3373 May 01 j 19:33	12° Y 31'45		direct	-3366 Jan 31 j 20:49	25° Y 40′50	
minimum elong	-3373 May 01 j 19:34	12° Y 31'45		evening set	-3366 May 01 j 16:10	27° Ƴ 36'35	
max. Earth dist.	-3373 May 01 j 20:22		30.88384 AU				
morning rise	-3373 May 18 j 02:40	13° Y ′07′50		conjunction	-3366 May 18 j 00:08	28° Y 12'39	
retrograde	-3373 Aug 15 j 17:33	15° Y ′04'01		minimum elong	-3366 May 18 j 00:09	28° Y 12'39	
opposition	-3373 Nov 01 j 11:50	13° Ƴ 39'49	-2°00'18	max. Earth dist.	-3366 May 17 j 17:44		30.92420 AU
min. Earth dist.	-3373 Nov 01 j 10:54		28.88846 AU	morning rise	-3366 Jun 03 j 07:06	28° Ƴ 48'40	
direct	-3372 Jan 18 j 16:51	12° Y 15'01			-3366 Jul 10 j 06:24	$0^{\circ}S$	
evening set	-3372 Apr 17 j 02:55	14° Y 10'33		retrograde	-3366 Aug 31 j 01:08	0° ප් 43'37	
					-3366 Oct 22 j 20:54	30° ŖƳ	
conjunction	-3372 May 03 j 10:12	14° Y 46'38	-1°51'13	opposition	-3366 Nov 16 j 12:20	29° Y 19'43	-1°37'01
minimum elong	-3372 May 03 j 10:13	14° Y 46'38	1°51'10	min. Earth dist.	-3366 Nov 16 j 17:51	29° Y 19'20	28.92900 AU
max. Earth dist.	-3372 May 03 j 10:48	14° Ƴ 46'41	30.89044 AU	direct	-3365 Feb 03 j 08:01	27° Y ′54'31	
morning rise	-3372 May 19 j 17:09	15° Y ′22'43		evening set	-3365 May 04 j 06:09	29° Y ′50′17	
retrograde	-3372 Aug 17 j 03:14	17° Y 18'45			-3365 May 08 j 17:00	9° 8	
opposition	-3372 Nov 02 j 22:23	15° Ƴ 54'37	-1°57'28				
min. Earth dist.	-3372 Nov 02 j 22:51	15° Y ′54'35	28.89453 AU	conjunction	-3365 May 20 j 14:20	0° 8 26'23	-1°28'55
direct	-3371 Jan 20 j 05:17	14° Y ′29'47		minimum elong	-3365 May 20 j 14:21	0° 8 26'23	1°28'52
evening set	-3371 Apr 19 j 17:21	16° Ƴ 25'22		max. Earth dist.	-3365 May 20 j 08:09	0° 8 25'48	30.93254 AU
				morning rise	-3365 Jun 05 j 21:04	1° 8 02'22	
conjunction	-3371 May 06 j 00:41	17° Ƴ 01'27	-1°48'29		-		
minimum elong	22,11:14,00,00.11		1 10 2	retrograde	-3365 Sep 02 j 12:59	2° 8 57'10	
	-3371 May 06 j 00:42	17° Y ′01′27		opposition	-3365 Sep 02 j 12:59 -3365 Nov 18 j 22:39	2° 8 57'10 1° 8 33'21	-1°33'05
max. Earth dist.		17° Y ′01'27		-		1° 8 33'21	-1°33'05 28.93789 AU
max. Earth dist.	-3371 May 06 j 00:42 -3371 May 05 j 22:57	17° Y ′01'27	1°48'28	opposition	-3365 Nov 18 j 22:39	1° 8 33'21	
•	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49	17° Ƴ 01'27 17° Ƴ 01'17	1°48'28	opposition min. Earth dist. direct	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18	1° 8 33'21 1° 8 32'56	
max. Earth dist. morning rise retrograde	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30	17° Υ 01'27 17° Υ 01'17 17° Υ 37'31	1°48'28 30.89626 AU	opposition min. Earth dist.	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28	1°833'21 1°832'56 0°808'08	
max. Earth dist. morning rise	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30 -3371 Nov 05 j 08:45	17° Υ 01'27 17° Υ 01'17 17° Υ 37'31 19° Υ 33'23 18° Υ 09'18	1°48'28 30.89626 AU -1°54'28	opposition min. Earth dist. direct evening set	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18 -3364 May 05 j 20:08	1°833'21 1°832'56 0°808'08	28.93789 AU
max. Earth dist. morning rise retrograde opposition	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30 -3371 Nov 05 j 08:45 -3371 Nov 05 j 09:40	17° Υ 01'27 17° Υ 01'17 17° Υ 37'31 19° Υ 33'23 18° Υ 09'18	1°48'28 30.89626 AU	opposition min. Earth dist. direct	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18 -3364 May 05 j 20:08 -3364 May 22 j 04:09	1°\dagger33'21 1°\dagger32'56 0°\dagger808'08 2°\dagger803'57	28.93789 AU -1°25'10
max. Earth dist. morning rise retrograde opposition min. Earth dist.	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30 -3371 Nov 05 j 08:45 -3371 Nov 05 j 09:40 -3370 Jan 22 j 17:17	17° Y 01'27 17° Y 01'17 17° Y 37'31 19° Y 33'23 18° Y 09'18 18° Y 09'14	1°48'28 30.89626 AU -1°54'28	opposition min. Earth dist. direct evening set conjunction	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18 -3364 May 05 j 20:08 -3364 May 22 j 04:09 -3364 May 22 j 04:10	1°\delta33'21 1°\delta32'56 0°\delta08'08 2°\delta03'57 2°\delta40'02 2°\delta40'02	28.93789 AU -1°25'10
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30 -3371 Nov 05 j 08:45 -3371 Nov 05 j 09:40	17°Y01'27 17°Y01'17 17°Y37'31 19°Y33'23 18°Y09'18 18°Y09'14	1°48'28 30.89626 AU -1°54'28	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18 -3364 May 05 j 20:08 -3364 May 22 j 04:09 -3364 May 22 j 04:10 -3364 May 21 j 20:14	1°\das32'56 0°\das2'56 0°\das9'08 2°\das9'03'57 2°\das9'02 2°\das9'18	28.93789 AU -1°25'10 1°25'06
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30 -3371 Nov 05 j 08:45 -3371 Nov 05 j 09:40 -3370 Jan 22 j 17:17 -3370 Apr 22 j 07:36	17°Y01'27 17°Y01'17 17°Y37'31 19°Y33'23 18°Y09'18 18°Y09'14 16°Y44'24 18°Y40'01	1°48'28 30.89626 AU -1°54'28 28.89997 AU	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18 -3364 May 05 j 20:08 -3364 May 22 j 04:09 -3364 May 22 j 04:10 -3364 May 21 j 20:14 -3364 Jun 07 j 10:55	1°\delta33'21 1°\delta33'56 0°\delta08'08 2°\delta03'57 2°\delta40'02 2°\delta40'02 2°\delta39'18 3°\delta16'01	28.93789 AU -1°25'10 1°25'06
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30 -3371 Nov 05 j 08:45 -3371 Nov 05 j 09:40 -3370 Jan 22 j 17:17 -3370 Apr 22 j 07:36	17°Y01'27 17°Y01'17 17°Y37'31 19°Y33'23 18°Y09'18 18°Y09'14	1°48'28 30.89626 AU -1°54'28 28.89997 AU	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18 -3364 May 05 j 20:08 -3364 May 22 j 04:09 -3364 May 22 j 04:10 -3364 May 21 j 20:14 -3364 Jun 07 j 10:55 -3364 Sep 04 j 00:32	1°\dash33'21 1°\dash33'56 0°\dash308'08 2°\dash303'57 2°\dash40'02 2°\dash40'02 2°\dash30'18 3°\dash16'01 5°\dash10'41	28.93789 AU -1°25'10 1°25'06 30.94220 AU
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30 -3371 Nov 05 j 08:45 -3371 Nov 05 j 09:40 -3370 Jan 22 j 17:17 -3370 Apr 22 j 07:36 -3370 May 08 j 15:14 -3370 May 08 j 15:15	17°Y01'27 17°Y01'17 17°Y37'31 19°Y33'23 18°Y09'18 18°Y09'14 16°Y44'24 18°Y40'01 19°Y16'06 19°Y16'06	1°48'28 30.89626 AU -1°54'28 28.89997 AU -1°45'36 1°45'33	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18 -3364 May 05 j 20:08 -3364 May 22 j 04:09 -3364 May 22 j 04:10 -3364 May 21 j 20:14 -3364 Jun 07 j 10:55 -3364 Sep 04 j 00:32 -3364 Nov 20 j 08:55	1°833'21 1°832'56 0°808'08 2°803'57 2°840'02 2°840'02 2°839'18 3°816'01 5°810'41 3°846'58	28.93789 AU -1°25'10 1°25'06 30.94220 AU -1°28'59
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30 -3371 Nov 05 j 08:45 -3371 Nov 05 j 09:40 -3370 Jan 22 j 17:17 -3370 Apr 22 j 07:36 -3370 May 08 j 15:14 -3370 May 08 j 15:15 -3370 May 08 j 15:15	17°Y01'27 17°Y01'17 17°Y37'31 19°Y33'23 18°Y09'18 18°Y09'14 16°Y44'24 18°Y40'01 19°Y16'06 19°Y16'06 19°Y15'54	1°48'28 30.89626 AU -1°54'28 28.89997 AU	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18 -3364 May 05 j 20:08 -3364 May 22 j 04:09 -3364 May 22 j 04:10 -3364 May 21 j 20:14 -3364 Jun 07 j 10:55 -3364 Sep 04 j 00:32 -3364 Nov 20 j 08:55 -3364 Nov 20 j 15:15	1°\dash33'21 1°\dash33'256 0°\dash308'08 2°\dash30'57 2°\dash40'02 2°\dash40'02 2°\dash39'18 3°\dash46'51 3°\dash46'58 3°\dash46'31	28.93789 AU -1°25'10 1°25'06 30.94220 AU
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30 -3371 Nov 05 j 08:45 -3371 Nov 05 j 09:40 -3370 Jan 22 j 17:17 -3370 Apr 22 j 07:36 -3370 May 08 j 15:14 -3370 May 08 j 15:15 -3370 May 08 j 13:07 -3370 May 24 j 22:16	17°Y01'27 17°Y01'17 17°Y37'31 19°Y33'23 18°Y09'18 18°Y09'14 16°Y44'24 18°Y40'01 19°Y16'06 19°Y16'06 19°Y15'54 19°Y52'10	1°48'28 30.89626 AU -1°54'28 28.89997 AU -1°45'36 1°45'33	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18 -3364 May 05 j 20:08 -3364 May 22 j 04:09 -3364 May 22 j 04:10 -3364 May 21 j 20:14 -3364 Jun 07 j 10:55 -3364 Sep 04 j 00:32 -3364 Nov 20 j 08:55 -3364 Nov 20 j 15:15 -3363 Feb 07 j 08:07	1°833'21 1°832'56 0°808'08 2°803'57 2°840'02 2°840'02 2°839'18 3°816'01 5°810'41 3°846'58 3°846'31 2°821'45	28.93789 AU -1°25'10 1°25'06 30.94220 AU -1°28'59
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30 -3371 Nov 05 j 08:45 -3371 Nov 05 j 09:40 -3370 Jan 22 j 17:17 -3370 Apr 22 j 07:36 -3370 May 08 j 15:14 -3370 May 08 j 15:15 -3370 May 08 j 13:07 -3370 May 24 j 22:16 -3370 Aug 22 j 01:45	17°Y01'27 17°Y01'17 17°Y37'31 19°Y33'23 18°Y09'18 18°Y09'14 16°Y44'24 18°Y40'01 19°Y16'06 19°Y16'06 19°Y15'54 19°Y52'10 21°Y47'51	1°48'28 30.89626 AU -1°54'28 28.89997 AU -1°45'36 1°45'33 30.90141 AU	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18 -3364 May 05 j 20:08 -3364 May 22 j 04:09 -3364 May 22 j 04:10 -3364 May 21 j 20:14 -3364 Jun 07 j 10:55 -3364 Sep 04 j 00:32 -3364 Nov 20 j 08:55 -3364 Nov 20 j 15:15	1°\dash33'21 1°\dash33'256 0°\dash308'08 2°\dash30'57 2°\dash40'02 2°\dash40'02 2°\dash39'18 3°\dash46'51 3°\dash46'58 3°\dash46'31	28.93789 AU -1°25'10 1°25'06 30.94220 AU -1°28'59
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30 -3371 Nov 05 j 08:45 -3371 Nov 05 j 09:40 -3370 Jan 22 j 17:17 -3370 Apr 22 j 07:36 -3370 May 08 j 15:15 -3370 May 08 j 13:07 -3370 May 24 j 22:16 -3370 Aug 22 j 01:45 -3370 Nov 07 j 19:15	17°Y01'27 17°Y01'17 17°Y37'31 19°Y33'23 18°Y09'18 18°Y09'14 16°Y44'24 18°Y40'01 19°Y16'06 19°Y16'06 19°Y15'54 19°Y52'10 21°Y47'51 20°Y23'48	1°48'28 30.89626 AU -1°54'28 28.89997 AU -1°45'36 1°45'33 30.90141 AU	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18 -3364 May 05 j 20:08 -3364 May 22 j 04:09 -3364 May 22 j 04:10 -3364 May 21 j 20:14 -3364 Jun 07 j 10:55 -3364 Sep 04 j 00:32 -3364 Nov 20 j 08:55 -3364 Nov 20 j 15:15 -3363 Feb 07 j 08:07 -3363 May 08 j 10:00	1°833'21 1°832'56 0°808'08 2°803'57 2°840'02 2°840'02 2°839'18 3°816'01 5°810'41 3°846'58 3°846'31 2°821'45 4°817'39	28.93789 AU -1°25'10 1°25'06 30.94220 AU -1°28'59 28.94816 AU
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30 -3371 Nov 05 j 08:45 -3371 Nov 05 j 09:40 -3370 Jan 22 j 17:17 -3370 Apr 22 j 07:36 -3370 May 08 j 15:15 -3370 May 08 j 15:15 -3370 May 24 j 22:16 -3370 Aug 22 j 01:45 -3370 Nov 07 j 19:15 -3370 Nov 07 j 22:04	17°Y01'27 17°Y01'17 17°Y37'31 19°Y33'23 18°Y09'18 18°Y09'14 16°Y44'24 18°Y40'01 19°Y16'06 19°Y16'06 19°Y15'54 19°Y52'10 21°Y47'51 20°Y23'48 20°Y23'36	1°48'28 30.89626 AU -1°54'28 28.89997 AU -1°45'36 1°45'33 30.90141 AU	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18 -3364 May 05 j 20:08 -3364 May 22 j 04:09 -3364 May 22 j 04:10 -3364 May 21 j 20:14 -3364 Jun 07 j 10:55 -3364 Sep 04 j 00:32 -3364 Nov 20 j 08:55 -3364 Nov 20 j 15:15 -3363 Feb 07 j 08:07 -3363 May 08 j 10:00	1°833'21 1°832'56 0°808'08 2°803'57 2°840'02 2°840'02 2°839'18 3°816'01 5°810'41 3°846'58 3°846'31 2°821'45 4°817'39	28.93789 AU -1°25'10 1°25'06 30.94220 AU -1°28'59 28.94816 AU
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30 -3371 Nov 05 j 08:45 -3371 Nov 05 j 09:40 -3370 Jan 22 j 17:17 -3370 Apr 22 j 07:36 -3370 May 08 j 15:15 -3370 May 08 j 15:15 -3370 May 08 j 13:07 -3370 May 22 j 01:45 -3370 Aug 22 j 01:45 -3370 Nov 07 j 19:15 -3370 Nov 07 j 22:04 -3369 Jan 25 j 04:29	17°Y01'27 17°Y01'17 17°Y37'31 19°Y33'23 18°Y09'18 18°Y09'14 16°Y44'24 18°Y40'01 19°Y16'06 19°Y16'06 19°Y15'54 19°Y52'10 21°Y47'51 20°Y23'48 20°Y23'36 18°Y58'49	1°48'28 30.89626 AU -1°54'28 28.89997 AU -1°45'36 1°45'33 30.90141 AU	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18 -3364 May 05 j 20:08 -3364 May 22 j 04:09 -3364 May 22 j 04:10 -3364 May 21 j 20:14 -3364 Jun 07 j 10:55 -3364 Sep 04 j 00:32 -3364 Nov 20 j 08:55 -3364 Nov 20 j 15:15 -3363 Feb 07 j 08:07 -3363 May 08 j 10:00 -3363 May 24 j 18:13 -3363 May 24 j 18:13	1°833'21 1°832'56 0°808'08 2°803'57 2°840'02 2°840'02 2°839'18 3°816'01 5°810'41 3°846'58 3°846'31 2°821'45 4°817'39	28.93789 AU -1°25'10 1°25'06 30.94220 AU -1°28'59 28.94816 AU -1°21'16 1°21'13
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30 -3371 Nov 05 j 08:45 -3371 Nov 05 j 09:40 -3370 Jan 22 j 17:17 -3370 Apr 22 j 07:36 -3370 May 08 j 15:15 -3370 May 08 j 15:15 -3370 May 24 j 22:16 -3370 Aug 22 j 01:45 -3370 Nov 07 j 19:15 -3370 Nov 07 j 22:04	17°Y01'27 17°Y01'17 17°Y37'31 19°Y33'23 18°Y09'18 18°Y09'14 16°Y44'24 18°Y40'01 19°Y16'06 19°Y16'06 19°Y15'54 19°Y52'10 21°Y47'51 20°Y23'48 20°Y23'36	1°48'28 30.89626 AU -1°54'28 28.89997 AU -1°45'36 1°45'33 30.90141 AU	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist.	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18 -3364 May 05 j 20:08 -3364 May 22 j 04:09 -3364 May 22 j 04:10 -3364 May 21 j 20:14 -3364 Jun 07 j 10:55 -3364 Sep 04 j 00:32 -3364 Nov 20 j 08:55 -3364 Nov 20 j 08:55 -3363 Feb 07 j 08:07 -3363 May 08 j 10:00 -3363 May 24 j 18:13 -3363 May 24 j 18:13	1°833'21 1°832'56 0°808'08 2°803'57 2°840'02 2°840'02 2°839'18 3°816'01 5°810'41 3°846'58 3°846'31 2°821'45 4°817'39 4°853'44 4°853'44 4°853'44	28.93789 AU -1°25'10 1°25'06 30.94220 AU -1°28'59 28.94816 AU
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30 -3371 Nov 05 j 08:45 -3371 Nov 05 j 09:40 -3370 Jan 22 j 17:17 -3370 Apr 22 j 07:36 -3370 May 08 j 15:14 -3370 May 08 j 15:15 -3370 May 08 j 13:07 -3370 May 24 j 22:16 -3370 Nov 07 j 19:15 -3370 Nov 07 j 19:15 -3370 Nov 07 j 22:04 -3369 Jan 25 j 04:29 -3369 Apr 24 j 21:56	17°Y01'27 17°Y01'17 17°Y37'31 19°Y33'23 18°Y09'14 16°Y44'24 18°Y40'01 19°Y16'06 19°Y16'06 19°Y15'54 19°Y52'10 21°Y47'51 20°Y23'48 20°Y23'36 18°Y58'49 20°Y54'29	1°48'28 30.89626 AU -1°54'28 28.89997 AU -1°45'36 1°45'33 30.90141 AU -1°51'17 28.90485 AU	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18 -3364 May 05 j 20:08 -3364 May 22 j 04:09 -3364 May 22 j 04:10 -3364 May 21 j 20:14 -3364 Jun 07 j 10:55 -3364 Sep 04 j 00:32 -3364 Nov 20 j 08:55 -3364 Nov 20 j 15:15 -3363 Feb 07 j 08:07 -3363 May 08 j 10:00 -3363 May 24 j 18:13 -3363 May 24 j 18:13 -3363 May 24 j 10:38 -3363 Jun 10 j 00:40	1°833'21 1°832'56 0°808'08 2°803'57 2°840'02 2°840'02 2°840'02 2°839'18 3°816'01 5°810'41 3°846'58 3°846'31 2°821'45 4°817'39 4°853'44 4°853'44 4°853'44	28.93789 AU -1°25'10 1°25'06 30.94220 AU -1°28'59 28.94816 AU -1°21'16 1°21'13
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30 -3371 Nov 05 j 08:45 -3371 Nov 05 j 09:40 -3370 Jan 22 j 17:17 -3370 Apr 22 j 07:36 -3370 May 08 j 15:14 -3370 May 08 j 15:15 -3370 May 08 j 13:07 -3370 May 24 j 22:16 -3370 Nov 07 j 19:15 -3370 Nov 07 j 19:15 -3370 Nov 07 j 22:04 -3369 Jan 25 j 04:29 -3369 May 11 j 05:39	17°Y01'27 17°Y01'17 17°Y37'31 19°Y33'23 18°Y09'18 18°Y09'14 16°Y44'24 18°Y40'01 19°Y16'06 19°Y16'06 19°Y15'54 19°Y52'10 21°Y47'51 20°Y23'48 20°Y23'36 18°Y58'49 20°Y54'29	1°48'28 30.89626 AU -1°54'28 28.89997 AU -1°45'36 1°45'33 30.90141 AU -1°51'17 28.90485 AU	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. direct evening set	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18 -3364 May 05 j 20:08 -3364 May 22 j 04:09 -3364 May 22 j 04:10 -3364 May 21 j 20:14 -3364 Jun 07 j 10:55 -3364 Sep 04 j 00:32 -3364 Nov 20 j 08:55 -3364 Nov 20 j 15:15 -3363 Feb 07 j 08:07 -3363 May 08 j 10:00 -3363 May 24 j 18:13 -3363 May 24 j 18:13 -3363 May 24 j 10:38 -3363 Jun 10 j 00:40 -3363 Sep 06 j 10:22	1°833'21 1°832'56 0°808'08 2°803'57 2°840'02 2°840'02 2°839'18 3°816'01 5°810'41 3°846'58 3°846'31 2°821'45 4°853'44 4°853'44 4°853'44 4°853'02 5°829'42 7°824'14	28.93789 AU -1°25'10 1°25'06 30.94220 AU -1°28'59 28.94816 AU -1°21'16 1°21'13 30.95297 AU
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30 -3371 Nov 05 j 08:45 -3371 Nov 05 j 09:40 -3370 Jan 22 j 17:17 -3370 Apr 22 j 07:36 -3370 May 08 j 15:14 -3370 May 08 j 15:15 -3370 May 08 j 15:15 -3370 May 24 j 22:16 -3370 Nov 07 j 19:15 -3370 Nov 07 j 19:15 -3370 Nov 07 j 22:04 -3369 Jan 25 j 04:29 -3369 May 11 j 05:39 -3369 May 11 j 05:40	17°Y01'27 17°Y01'17 17°Y37'31 19°Y33'23 18°Y09'18 18°Y09'14 16°Y44'24 18°Y40'01 19°Y16'06 19°Y16'06 19°Y15'54 19°Y52'10 21°Y47'51 20°Y23'48 20°Y23'36 18°Y58'49 20°Y54'29 21°Y30'33 21°Y30'33	1°48'28 30.89626 AU -1°54'28 28.89997 AU -1°45'36 1°45'33 30.90141 AU -1°51'17 28.90485 AU	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. direct evening set	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18 -3364 May 05 j 20:08 -3364 May 22 j 04:09 -3364 May 22 j 04:10 -3364 May 21 j 20:14 -3364 Jun 07 j 10:55 -3364 Nov 20 j 08:55 -3364 Nov 20 j 08:55 -3364 Nov 20 j 15:15 -3363 Feb 07 j 08:07 -3363 May 08 j 10:00 -3363 May 24 j 18:13 -3363 May 24 j 18:13 -3363 May 24 j 10:38 -3363 Jun 10 j 00:40 -3363 Sep 06 j 10:22 -3363 Nov 22 j 19:10	1°833'21 1°832'56 0°808'08 2°803'57 2°840'02 2°840'02 2°840'02 2°839'18 3°816'01 5°810'41 3°846'58 3°846'31 2°821'45 4°853'44 4°853'44 4°853'44 4°853'44 4°853'44 4°853'44	28.93789 AU -1°25'10 1°25'06 30.94220 AU -1°28'59 28.94816 AU -1°21'16 1°21'13 30.95297 AU -1°24'46
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30 -3371 Nov 05 j 08:45 -3371 Nov 05 j 09:40 -3370 Jan 22 j 17:17 -3370 Apr 22 j 07:36 -3370 May 08 j 15:14 -3370 May 08 j 15:15 -3370 May 08 j 15:15 -3370 May 24 j 22:16 -3370 Nov 07 j 19:15 -3370 Nov 07 j 19:15 -3370 Nov 07 j 22:04 -3369 Jan 25 j 04:29 -3369 May 11 j 05:39 -3369 May 11 j 05:40 -3369 May 11 j 05:59	17°Y01'27 17°Y01'17 17°Y37'31 19°Y33'23 18°Y09'18 18°Y09'14 16°Y44'24 18°Y40'01 19°Y16'06 19°Y16'06 19°Y15'54 19°Y52'10 21°Y47'51 20°Y23'48 20°Y23'36 18°Y58'49 20°Y54'29 21°Y30'33 21°Y30'33 21°Y30'13	1°48'28 30.89626 AU -1°54'28 28.89997 AU -1°45'36 1°45'33 30.90141 AU -1°51'17 28.90485 AU	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18 -3364 May 05 j 20:08 -3364 May 22 j 04:09 -3364 May 22 j 04:10 -3364 May 21 j 20:14 -3364 Jun 07 j 10:55 -3364 Sep 04 j 00:32 -3364 Nov 20 j 08:55 -3364 Nov 20 j 08:55 -3364 Nov 20 j 15:15 -3363 Feb 07 j 08:07 -3363 May 08 j 10:00 -3363 May 24 j 18:13 -3363 May 24 j 18:13 -3363 May 24 j 10:38 -3363 Jun 10 j 00:40 -3363 Sep 06 j 10:22 -3363 Nov 22 j 19:10 -3363 Nov 23 j 02:41	1°833'21 1°832'56 0°808'08 2°803'57 2°840'02 2°840'02 2°840'02 2°839'18 3°816'01 5°810'41 3°846'58 3°846'31 2°821'45 4°817'39 4°853'44 4°853'44 4°853'02 5°829'42 7°824'14 6°800'38 6°800'06	28.93789 AU -1°25'10 1°25'06 30.94220 AU -1°28'59 28.94816 AU -1°21'16 1°21'13 30.95297 AU
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30 -3371 Nov 05 j 08:45 -3371 Nov 05 j 09:40 -3370 Jan 22 j 17:17 -3370 Apr 22 j 07:36 -3370 May 08 j 15:14 -3370 May 08 j 15:15 -3370 May 08 j 13:07 -3370 May 24 j 22:16 -3370 May 24 j 22:16 -3370 Nov 07 j 19:15 -3370 Nov 07 j 19:15 -3370 Nov 07 j 22:04 -3369 Jan 25 j 04:29 -3369 May 11 j 05:39 -3369 May 11 j 05:40 -3369 May 11 j 01:59 -3369 May 27 j 12:45	17°Y01'27 17°Y01'17 17°Y37'31 19°Y33'23 18°Y09'18 18°Y09'14 16°Y44'24 18°Y40'01 19°Y16'06 19°Y16'06 19°Y15'54 19°Y52'10 21°Y47'51 20°Y23'48 20°Y23'36 18°Y58'49 20°Y54'29 21°Y30'33 21°Y30'33 21°Y30'13 22°Y06'37	1°48'28 30.89626 AU -1°54'28 28.89997 AU -1°45'36 1°45'33 30.90141 AU -1°51'17 28.90485 AU	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. direct evening set	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18 -3364 May 05 j 20:08 -3364 May 22 j 04:09 -3364 May 22 j 04:10 -3364 May 21 j 20:14 -3364 Jun 07 j 10:55 -3364 Sep 04 j 00:32 -3364 Nov 20 j 08:55 -3364 Nov 20 j 08:55 -3364 Nov 20 j 15:15 -3363 Feb 07 j 08:07 -3363 May 08 j 10:00 -3363 May 24 j 18:13 -3363 May 24 j 18:13 -3363 May 24 j 10:38 -3363 Jun 10 j 00:40 -3363 Sep 06 j 10:22 -3363 Nov 22 j 19:10 -3363 Nov 23 j 02:41 -3362 Feb 09 j 20:03	1°833'21 1°832'56 0°808'08 2°803'57 2°840'02 2°840'02 2°840'02 2°839'18 3°816'01 5°810'41 3°846'58 3°846'31 2°821'45 4°853'44 4°853'44 4°853'44 4°853'02 5°829'42 7°824'14 6°800'38 6°800'06 4°835'27	28.93789 AU -1°25'10 1°25'06 30.94220 AU -1°28'59 28.94816 AU -1°21'16 1°21'13 30.95297 AU -1°24'46
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30 -3371 Nov 05 j 08:45 -3371 Nov 05 j 09:40 -3370 Jan 22 j 17:17 -3370 Apr 22 j 07:36 -3370 May 08 j 15:14 -3370 May 08 j 15:15 -3370 May 08 j 13:07 -3370 May 24 j 22:16 -3370 May 24 j 22:16 -3370 Nov 07 j 19:15 -3370 Nov 07 j 19:15 -3370 Nov 07 j 22:04 -3369 Jan 25 j 04:29 -3369 May 11 j 05:39 -3369 May 11 j 05:40 -3369 May 11 j 01:59 -3369 May 27 j 12:45 -3369 Aug 24 j 14:03	17°Y01'27 17°Y01'17 17°Y37'31 19°Y33'23 18°Y09'18 18°Y09'14 16°Y44'24 18°Y40'01 19°Y16'06 19°Y16'06 19°Y15'54 19°Y52'10 21°Y47'51 20°Y23'48 20°Y23'36 18°Y58'49 20°Y54'29 21°Y30'33 21°Y30'33 21°Y30'13 22°Y06'37 24°Y02'06	1°48'28 30.89626 AU -1°54'28 28.89997 AU -1°45'36 1°45'33 30.90141 AU -1°51'17 28.90485 AU -1°42'31 30.90635 AU	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist.	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18 -3364 May 05 j 20:08 -3364 May 22 j 04:09 -3364 May 22 j 04:10 -3364 May 21 j 20:14 -3364 Jun 07 j 10:55 -3364 Sep 04 j 00:32 -3364 Nov 20 j 08:55 -3364 Nov 20 j 08:55 -3364 Nov 20 j 15:15 -3363 Feb 07 j 08:07 -3363 May 08 j 10:00 -3363 May 24 j 18:13 -3363 May 24 j 18:13 -3363 May 24 j 10:38 -3363 Jun 10 j 00:40 -3363 Sep 06 j 10:22 -3363 Nov 22 j 19:10 -3363 Nov 23 j 02:41	1°833'21 1°832'56 0°808'08 2°803'57 2°840'02 2°840'02 2°840'02 2°839'18 3°816'01 5°810'41 3°846'58 3°846'31 2°821'45 4°817'39 4°853'44 4°853'44 4°853'02 5°829'42 7°824'14 6°800'38 6°800'06	28.93789 AU -1°25'10 1°25'06 30.94220 AU -1°28'59 28.94816 AU -1°21'16 1°21'13 30.95297 AU -1°24'46
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30 -3371 Nov 05 j 08:45 -3371 Nov 05 j 09:40 -3370 Jan 22 j 17:17 -3370 Apr 22 j 07:36 -3370 May 08 j 15:14 -3370 May 08 j 15:15 -3370 May 08 j 13:07 -3370 May 24 j 22:16 -3370 Aug 22 j 01:45 -3370 Nov 07 j 19:15 -3370 Nov 07 j 19:15 -3370 Nov 07 j 22:04 -3369 Jan 25 j 04:29 -3369 Apr 24 j 21:56 -3369 May 11 j 05:39 -3369 May 11 j 05:40 -3369 May 27 j 12:45 -3369 Aug 24 j 14:03 -3369 Nov 10 j 05:27	17°Y01'27 17°Y01'17 17°Y37'31 19°Y33'23 18°Y09'18 18°Y09'14 16°Y44'24 18°Y40'01 19°Y16'06 19°Y16'06 19°Y15'54 19°Y52'10 21°Y47'51 20°Y23'48 20°Y23'36 18°Y58'49 20°Y54'29 21°Y30'33 21°Y30'33 21°Y30'13 22°Y06'37 24°Y02'06 22°Y38'05	1°48'28 30.89626 AU -1°54'28 28.89997 AU -1°45'36 1°45'33 30.90141 AU -1°51'17 28.90485 AU -1°42'31 30.90635 AU -1°47'57	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18 -3364 May 05 j 20:08 -3364 May 22 j 04:09 -3364 May 22 j 04:10 -3364 May 21 j 20:14 -3364 Jun 07 j 10:55 -3364 Sep 04 j 00:32 -3364 Nov 20 j 08:55 -3364 Nov 20 j 15:15 -3363 Feb 07 j 08:07 -3363 May 08 j 10:00 -3363 May 24 j 18:13 -3363 May 24 j 18:13 -3363 May 24 j 10:38 -3363 Jun 10 j 00:40 -3363 Sep 06 j 10:22 -3363 Nov 22 j 19:10 -3363 Nov 23 j 02:41 -3362 Feb 09 j 20:03 -3362 May 11 j 00:06	1°833'21 1°832'56 0°808'08 2°803'57 2°840'02 2°840'02 2°840'02 2°839'18 3°816'01 5°810'41 3°846'58 3°846'31 2°821'45 4°817'39 4°853'44 4°853'44 4°853'02 5°829'42 7°824'14 6°800'08 4°835'27 6°831'25	28.93789 AU -1°25'10 1°25'06 30.94220 AU -1°28'59 28.94816 AU -1°21'16 1°21'13 30.95297 AU -1°24'46 28.95916 AU
max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-3371 May 06 j 00:42 -3371 May 05 j 22:57 -3371 May 22 j 07:49 -3371 Aug 19 j 15:30 -3371 Nov 05 j 08:45 -3371 Nov 05 j 09:40 -3370 Jan 22 j 17:17 -3370 Apr 22 j 07:36 -3370 May 08 j 15:14 -3370 May 08 j 15:15 -3370 May 08 j 13:07 -3370 May 24 j 22:16 -3370 May 24 j 22:16 -3370 Nov 07 j 19:15 -3370 Nov 07 j 19:15 -3370 Nov 07 j 22:04 -3369 Jan 25 j 04:29 -3369 May 11 j 05:39 -3369 May 11 j 05:40 -3369 May 11 j 01:59 -3369 May 27 j 12:45 -3369 Aug 24 j 14:03	17°Y01'27 17°Y01'17 17°Y37'31 19°Y33'23 18°Y09'18 18°Y09'14 16°Y44'24 18°Y40'01 19°Y16'06 19°Y16'06 19°Y15'54 19°Y52'10 21°Y47'51 20°Y23'48 20°Y23'36 18°Y58'49 20°Y54'29 21°Y30'33 21°Y30'33 21°Y30'13 22°Y06'37 24°Y02'06 22°Y38'05	1°48'28 30.89626 AU -1°54'28 28.89997 AU -1°45'36 1°45'33 30.90141 AU -1°51'17 28.90485 AU -1°42'31 30.90635 AU	opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde opposition min. Earth dist. direct evening set conjunction minimum elong max. Earth dist. direct evening set	-3365 Nov 18 j 22:39 -3365 Nov 19 j 04:28 -3364 Feb 05 j 21:18 -3364 May 05 j 20:08 -3364 May 22 j 04:09 -3364 May 22 j 04:10 -3364 May 21 j 20:14 -3364 Jun 07 j 10:55 -3364 Sep 04 j 00:32 -3364 Nov 20 j 08:55 -3364 Nov 20 j 08:55 -3364 Nov 20 j 15:15 -3363 Feb 07 j 08:07 -3363 May 08 j 10:00 -3363 May 24 j 18:13 -3363 May 24 j 18:13 -3363 May 24 j 10:38 -3363 Jun 10 j 00:40 -3363 Sep 06 j 10:22 -3363 Nov 22 j 19:10 -3363 Nov 23 j 02:41 -3362 Feb 09 j 20:03	1°833'21 1°832'56 0°808'08 2°803'57 2°840'02 2°840'02 2°840'02 2°839'18 3°816'01 5°810'41 3°846'58 3°846'31 2°821'45 4°853'44 4°853'44 4°853'44 4°853'02 5°829'42 7°824'14 6°800'38 6°800'06 4°835'27	28.93789 AU -1°25'10 1°25'06 30.94220 AU -1°28'59 28.94816 AU -1°21'16 1°21'13 30.95297 AU -1°24'46 28.95916 AU -1°17'16

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3362 in astronomical counting style is the year 3363 BCE in historical counting style. -3362 May 26 j 22:31 7°**と**06'37 30.96425 AU min. Earth dist. -3356 Dec 08 i 09:48 21°835'29 29.01980 AU max. Earth dist. -3362 Jun 12 i 14:38 7°843'28 -3355 Feb 25 j 11:56 20°811'08 morning rise direct -3362 Sep 08 j 22:39 9°**8**37'52 -3355 May 27 j 01:26 22°**8**07'25 retrograde evening set -3362 Nov 25 j 05:26 8°814'24 -1°20'25 opposition -3362 Nov 25 j 13:14 8°813'51 28.97035 AU -3355 Jun 12 j 08:36 22°843'25 -0°46'24 min. Earth dist. conjunction 6°849'13 -3355 Jun 12 j 08:37 22°843'25 0°46'19 direct -3361 Feb 12 j 07:13 minimum elong -3355 Jun 11 j 15:42 22°841'51 31.02288 AU evening set -3361 May 13 j 14:09 8°**8**45'16 max. Earth dist. -3355 Jun 28 j 13:17 23°819'13 morning rise 25°**8**12'37 conjunction -3361 May 29 j 22:16 9°**8**21'22 -1°13'08 retrograde -3355 Sep 24 j 05:04 -3361 May 29 j 22:16 -3355 Dec 10 j 06:06 minimum elong 9°**8**21'22 1°13'04 opposition 23°**8**49'36 -0°47'06 -3361 May 29 j 12:24 max. Earth dist. 9°**8**20'27 30.97516 AU min. Earth dist. -3355 Dec 10 j 20:32 23°**8**48'35 29.02673 AU -3361 Jun 15 j 04:22 9°857'19 -3354 Feb 27 j 23:40 22°824'13 morning rise direct -3361 Sep 11 j 08:36 11°**8**51'36 -3354 May 29 j 14:53 24°**8**20'31 retrograde evening set opposition -3361 Nov 27 j 15:53 10°828'14 -1°15'57 min. Earth dist. -3361 Nov 28 j 01:38 10°**8**27'33 28.98089 AU conjunction -3354 Jun 14 j 22:01 24°856'30 -0°41'41 direct -3360 Feb 14 j 17:47 9°803'04 minimum elong -3354 Jun 14 j 22:01 24°856'30 0°41'35 evening set -3360 May 15 j 04:17 10°**8**59'11 max. Earth dist. -3354 Jun 14 j 05:35 24°854'59 31.03008 AU morning rise -3354 Jul 01 j 02:12 25°**8**32'16 conjunction -3360 May 31 j 12:14 11°835'16 -1°08'54 retrograde -3354 Sep 26 j 14:24 27°**8**25'31 minimum elong -3360 May 31 j 12:14 11°835'16 1°08'49 opposition -3354 Dec 12 j 16:30 26°802'33 -0°42'02 max. Earth dist. -3360 May 31 j 00:38 11°**8**34'11 30.98537 AU min. Earth dist. -3354 Dec 13 j 07:51 26°801'28 29.03427 AU morning rise -3360 Jun 16 j 18:14 12°**8**11'12 direct -3353 Mar 02 j 12:28 24°837'09 retrograde -3360 Sep 12 j 20:32 14°805'21 evening set -3353 Jun 01 j 04:24 26°**8**33'27 opposition -3360 Nov 29 i 02:17 12°**8**42'05 -1°11'22 min. Earth dist. -3360 Nov 29 j 12:03 12°841'24 28.99052 AU conjunction -3353 Jun 17 j 11:05 27°809'25 -0°36'54 -3359 Feb 16 j 07:22 11°**8**16'54 -3353 Jun 17 j 11:06 27°**8**09'25 0°36'48 direct minimum elong -3359 May 17 j 18:10 13°813'05 max. Earth dist. -3353 Jun 16 j 17:03 27°807'45 31.03820 AU evening set -3353 Jul 03 j 15:03 27°**8**45'09 morning rise -3359 Jun 03 j 02:04 13°849'09 -1°04'34 -3353 Sep 29 j 02:01 29°**8**38'16 conjunction retrograde -3359 Jun 03 j 02:05 -3353 Dec 15 j 02:47 13°849'09 1°04'29 28°815'22 -0°36'54 minimum elong opposition -3359 Jun 02 j 13:32 13°**8**47'59 30.99441 AU -3353 Dec 15 j 17:48 28°**8**14'18 29.04298 AU max. Earth dist. min. Earth dist. 26°**8**49'56 -3359 Jun 19 j 07:48 14°**8**25'03 -3352 Mar 03 j 23:45 direct morning rise -3359 Jul 06 j 01:50 15°8 evening set -3352 Jun 02 j 17:42 28°**8**46'16 -3359 Sep 15 j 07:16 -3352 Jun 18 j 06:42 29°820'35 31.04750 AU 16°**8**19'05 max. Earth dist. retrograde -3359 Nov 29 j 02:29 15°**₹**8 -3352 Jun 19 j 00:15 -3359 Dec 01 j 12:50 14°**8**55'53 -1°06'41 29°**8**22'13 -0°32'05 opposition conjunction -3359 Dec 02 j 00:33 14°**8**55'04 28.99902 AU -3352 Jun 19 j 00:15 29°**8**22'13 0°31'59 min. Earth dist. minimum elong direct -3358 Feb 18 j 19:32 13°**8**30'41 morning rise -3352 Jul 05 j 03:40 29°**8**57'55 -3358 May 07 j 13:27 15°8 -3352 Jul 06 j 02:47 $0^{\circ}II$ evening set -3358 May 20 j 08:09 15°**8**26'54 retrograde -3352 Sep 30 j 10:51 1°**I**I50′55 opposition -3352 Dec 16 j 13:14 0°П28'05 -0°31'43 -3358 Jun 05 j 15:59 16°802'58 -1°00'09 min. Earth dist. -3352 Dec 17 j 05:34 0°**Д**26'56 29.05288 AU conjunction -3358 Jun 05 j 15:59 16°802'58 1°00'03 -3351 Jan 02 j 12:12 30°R₩ minimum elong -3358 Jun 05 j 02:22 16°**8**01'42 31.00247 AU -3351 Mar 06 j 10:14 29°802'40 max. Earth dist. direct -3358 Jun 21 j 21:29 16°**8**38'51 -3351 May 06 j 13:48 $0^{\circ}\Pi$ morning rise -3358 Sep 17 j 18:56 18°**8**32'43 0°**I**59′02 retrograde evening set -3351 Jun 05 i 06:56 -3358 Dec 03 i 23:05 17°809'35 -1°01'55 opposition 17°**8**08'44 29.00645 AU -3351 Jun 21 j 13:06 1°**I**34'57 -0°27'12 min. Earth dist. -3358 Dec 04 j 11:00 conjunction 15°**8**44'20 direct -3357 Feb 21 i 09:31 minimum elong -3351 Jun 21 j 13:06 1°**Д**34'57 0°27'06 evening set -3357 May 22 j 22:09 17°**8**40'36 max. Earth dist. -3351 Jun 20 i 18:30 1°**I**I33'14 31.05804 AU morning rise -3351 Jul 07 j 16:16 2°**Ⅱ**10'38 -3357 Jun 08 j 05:45 18°816'38 -0°55'38 retrograde -3351 Oct 02 j 21:19 4°**Ⅱ**03'32 conjunction -3357 Jun 08 j 05:45 18°**8**16'38 0°55'33 -3351 Dec 18 j 23:32 2°II40'47 -0°26'28 minimum elong opposition -3357 Jun 07 j 14:32 2°**Ц**39'41 29.06372 AU max. Earth dist. 18°**8**15'13 31.00953 AU min. Earth dist. -3351 Dec 19 j 15:23 1°**I**15′23 morning rise -3357 Jun 24 j 11:00 18°**8**52'29 direct -3350 Mar 08 j 23:10 retrograde -3357 Sep 20 j 06:47 20°**8**46'13 evening set -3350 Jun 07 j 20:15 3°**Ⅱ**11'48 opposition -3357 Dec 06 j 09:33 19°**8**23'07 -0°57'03 max. Earth dist. -3350 Jun 23 j 07:16 3°**Д**45'57 31.06911 AU 19°**8**22'10 29.01329 AU -3357 Dec 06 j 22:57 min. Earth dist. -3356 Feb 23 j 21:25 17°**8**57'50 -3350 Jun 24 j 02:09 3°II47'42 -0°22'17 direct conjunction -3356 May 24 j 11:44 19°854'06 -3350 Jun 24 j 02:09 3°**II**47'42 0°22'11 evening set minimum elong -3350 Jul 10 j 04:47 4°**Ⅲ**23'20 morning rise conjunction -3356 Jun 09 j 19:16 20°**8**30'07 -0°51'03 retrograde -3350 Oct 05 j 07:17 6°**Ⅱ**16′09 minimum elong -3356 Jun 09 j 19:16 20°**8**30'08 0°50'57 opposition -3350 Dec 21 j 09:58 4°**I**53'30 -0°21'12 max. Earth dist. -3356 Jun 09 j 04:05 20°**8**28'43 31.01622 AU min. Earth dist. -3350 Dec 22 j 03:23 4°**Д**52'17 29.07494 AU morning rise -3356 Jun 26 j 00:07 21°**8**05'57 direct -3349 Mar 11 j 09:48 3°**Ⅲ**28′07 -3356 Sep 21 j 18:17 22°859'31 -3349 Jun 10 j 09:34 5°**Ⅲ**24'35 retrograde evening set -3356 Dec 07 j 19:55 21°**8**36'27 -0°52'07 opposition

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3349 in astronomical counting style is the year 3350 BCE in historical counting style. -3349 Jun 26 i 15:05 6°**Ⅱ**00'27 -0°17'21 min. Earth dist. -3343 Jan 03 j 22:07 18°**Ⅲ**07'12 29.12585 AU conjunction -3349 Jun 26 j 15:05 6°II00'27 0°17'14 direct -3343 Mar 24 j 14:49 16°**Ⅱ**43'11 minimum elong -3349 Jun 25 j 19:36 5°**Д**58'39 31.08031 AU -3343 Jun 23 j 15:42 18°**Ⅲ**39'45 max. Earth dist. evening set -3349 Jul 12 j 17:18 6°**I**I36′04 morning rise -3349 Oct 07 j 18:29 8°**Ⅲ**28'48 -3343 Jul 09 j 18:35 19°**I**15'24 0°12'37 retrograde conjunction -3349 Dec 23 j 20:29 7°II06'14 -0°15'54 -3343 Jul 09 j 18:35 19°**Ⅱ**15′24 0°12'44 opposition minimum elong 7°**Д**05'01 29.08583 AU -3343 Jul 09 j 14:32 min. Earth dist. -3349 Dec 24 j 13:47 behind sun begin 19°**Ⅱ**15′03 5°**Ⅱ**40'52 -3343 Jul 09 j 22:38 19°**Ⅲ**15'46 direct -3348 Mar 12 j 22:52 behind sun end -3343 Jul 08 j 19:13 evening set -3348 Jun 11 j 22:44 7°**Ⅲ**37′23 max. Earth dist. 19°**Ⅱ**13'14 31.12857 AU -3343 Jul 25 j 17:37 19°**Ⅱ**50'46 max. Earth dist. -3348 Jun 27 j 07:05 8°**Д**11'18 31.09081 AU morning rise retrograde -3343 Oct 20 j 09:35 21°**∏**42'55 -3348 Jun 28 j 03:47 8°II13'13 -0°12'23 -3342 Jan 05 j 12:12 conjunction opposition 20°**Ⅱ**20'36 0°16'02 -3348 Jun 28 j 03:47 -3342 Jan 06 j 10:13 minimum elong 8°**I**13'13 0°12'16 min. Earth dist. 20°**Ⅲ**19'04 29.13189 AU behind sun begin -3348 Jun 27 j 23:29 8°**Ⅱ**12'50 direct -3342 Mar 27 j 02:24 18°**Ⅲ**55'07 behind sun end -3348 Jun 28 j 08:05 8°**Ⅱ**13'36 evening set -3342 Jun 26 j 04:24 20°**Ⅲ**51'41 morning rise -3348 Jul 14 j 05:32 8°**Ⅱ**48'47 max. Earth dist. -3342 Jul 11 j 06:23 21°**Д**25'03 31.13476 AU retrograde -3348 Oct 09 j 06:01 10°**Ⅲ**41'27 opposition -3348 Dec 25 j 07:08 9°II18'57 -0°10'34 conjunction -3342 Jul 12 j 06:39 21°**Ⅲ**27′18 0°17'33 min. Earth dist. -3348 Dec 26 j 01:43 9°**Д**17'39 29.09600 AU minimum elong -3342 Jul 12 j 06:39 21°**II**27'18 0°17'40 direct -3347 Mar 15 j 10:48 7°**I**53'35 morning rise -3342 Jul 28 j 05:14 22°II02'36 evening set -3347 Jun 14 j 11:53 9°**Ⅲ**50′08 retrograde -3342 Oct 22 j 19:18 23°II54'40 opposition -3341 Jan 07 i 22:42 22°**I**I32'23 0°21'18 conjunction -3347 Jun 30 j 16:37 10°**II**25'56 -0°07'25 min. Earth dist. -3341 Jan 08 i 19:58 22°П30'54 29.13830 AU minimum elong -3347 Jun 30 j 16:37 10°**I**25'56 0°07'18 direct -3341 Mar 29 j 15:08 21°**I**I06′52 behind sun begin -3347 Jun 30 j 10:37 10°**I**I25′24 evening set -3341 Jun 28 j 16:55 23°II03'26 -3347 Jun 30 j 22:37 10°**Ⅲ**26′28 behind sun end -3347 Jun 29 j 19:54 10°**Ⅲ**24'01 31.10041 AU -3341 Jul 14 j 18:40 23°**Ⅲ**39'01 0°22'27 max Earth dist conjunction -3347 Jul 16 j 17:49 11°**II**01'28 -3341 Jul 14 j 18:39 23°II39'01 0°22'34 minimum elong morning rise -3347 Oct 11 j 16:57 12°**Ⅲ**54′01 -3341 Jul 13 j 18:38 23°**Д**36'47 31.14148 AU max. Earth dist. retrograde -3347 Dec 27 j 17:38 11°**耳**31'35 -0°05'14 -3341 Jul 30 j 16:32 24°**Ⅱ**14'17 morning rise opposition -3341 Oct 25 j 04:37 -3347 Dec 28 j 12:51 11°**耳**30'14 29.10494 AU 26°**Ⅱ**06'17 min. Earth dist. retrograde -3346 Mar 18 j 01:14 10°**Ⅱ**06'13 opposition -3340 Jan 10 j 09:31 24°**Ⅱ**44'01 0°26'32 direct 12°**Ⅱ**02'47 -3340 Jan 11 j 07:43 24°**Д**42'29 29.14565 AU -3346 Jun 17 j 01:09 min. Earth dist. evening set -3346 Jul 02 j 06:45 12°**耳**36′28 31.10878 AU -3340 Mar 31 j 01:15 23°**Ⅲ**18'31 max. Earth dist. direct -3340 Jun 30 j 05:10 25°**I**15′05 evening set -3346 Jul 03 j 05:20 12°**Ⅲ**38'33 -0°02'25 -3340 Jul 15 j 06:24 25°**Ⅲ**48'23 31.14941 AU conjunction max. Earth dist. -3346 Jul 03 j 05:19 12°**Ⅲ**38'33 0°02'19 minimum elong -3346 Jul 02 j 22:46 behind sun begin 12°**Ⅲ**37'58 conjunction -3340 Jul 16 j 06:20 25°II50'37 0°27'19 behind sun end -3346 Jul 03 j 11:52 12°**Ⅲ**39'08 minimum elong -3340 Jul 16 j 06:19 25°**Ⅲ**50'37 0°27'26 morning rise -3346 Jul 19 j 06:06 13°**Ⅲ**14′02 morning rise -3340 Aug 01 j 03:39 26°**Ⅲ**25'50 retrograde -3346 Oct 14 j 04:10 15°**Ⅱ**06'30 retrograde -3340 Oct 26 j 14:49 28°**Ⅲ**17'48 asc. node -3346 Dec 23 j 04:16 13°**I**55'48 -3339 Jan 11 j 20:10 26°II55'35 0°31'43 opposition -3346 Dec 30 j 04:17 13°**II**44'06 0°00'06 min. Earth dist. -3339 Jan 12 j 17:35 26°**Ⅲ**54'06 29.15411 AU opposition min. Earth dist. -3346 Dec 31 j 00:02 13°**Ⅱ**42'44 29.11281 AU -3339 Apr 02 j 13:47 25°**Ⅲ**30′06 direct -3345 Mar 20 j 13:11 12°**Ⅱ**18'43 -3339 Jul 02 j 17:31 27°**Ⅲ**26'42 direct evening set -3345 Jun 19 j 14:06 14°**Ⅱ**15′18 evening set -3339 Jul 18 j 18:03 conjunction 28° II 02'11 0°32'09 -3345 Jul 05 i 17:57 14°**I**51'02 0°02'42 -3339 Jul 18 j 18:03 conjunction minimum elong 28°**II**02'11 0°32'16 -3345 Jul 05 i 17:57 27°**Д**59'55 31.15843 AU minimum elong 14°**I**151′02 0°02'49 max. Earth dist. -3339 Jul 17 i 17:37 behind sun begin -3345 Jul 05 i 11:25 14°**I**I50′27 morning rise -3339 Aug 03 i 14:47 28°**Ⅲ**37'22 behind sun end -3345 Jul 06 j 00:29 14°**I**I51'36 -3339 Sep 17 i 11:07 0ಂತಾ max. Earth dist. -3345 Jul 04 j 19:47 14°**Д**48'58 31.11604 AU -3339 Oct 29 j 01:58 0°929'18 retrograde -3345 Jul 21 j 18:02 15°**Ⅲ**26′28 -3339 Dec 10 j 19:46 30°RⅡ morning rise 17°**Ⅱ**18'49 -3338 Jan 14 j 06:47 29°**I**07'09 0°36'51 retrograde -3345 Oct 16 j 13:42 opposition opposition -3344 Jan 01 j 14:59 15°**Д**56'28 0°05'26 min. Earth dist. -3338 Jan 15 j 04:47 29°**П**05'37 29.16377 AU -3338 Apr 05 j 01:04 min. Earth dist. -3344 Jan 02 j 11:51 15°**Д**55'01 29.11957 AU direct 27°**Ⅱ**41'42 -3344 Mar 22 j 02:44 29°II38'20 direct 14°**Ⅲ**31'03 evening set -3338 Jul 05 j 05:45 -3344 Jun 21 j 03:05 16°**Ⅲ**27'37 -3338 Jul 15 j 01:33 0ംഉ evening set -3344 Jul 06 j 06:27 17°**耳**01'06 31.12252 AU max. Earth dist. -3338 Jul 20 j 06:06 0°911'35 31.16849 AU max. Earth dist. -3344 Jul 07 j 06:18 17°**Ⅱ**03'19 0°07'40 -3338 Jul 21 j 05:49 conjunction conjunction 0°513'48 0°36'56 minimum elong -3344 Jul 07 j 06:18 17°**Ⅲ**03'19 0°07'47 minimum elong -3338 Jul 21 j 05:48 0°9513'48 0°37'03 behind sun begin -3344 Jul 07 j 00:25 17°**Ⅲ**02'48 morning rise -3338 Aug 06 j 01:51 0°9548'55 behind sun end -3344 Jul 07 j 12:11 17°**Ⅲ**03'51 retrograde -3338 Oct 31 j 12:45 2°9540'50 morning rise -3344 Jul 23 j 06:01 17°**Ⅲ**38'43 opposition -3337 Jan 16 j 17:36 1°518'46 0°41'56 -3344 Oct 18 j 01:13 19°**Ⅲ**30'58 min. Earth dist. -3337 Jan 17 j 15:41 1°517'15 29.17402 AU retrograde -3343 Jan 03 j 01:30 18°**Ⅲ**08'38 0°10'45 -3337 Mar 18 j 04:32 30°R∏ opposition

•	-		-		st AG 18-Feb-2025 3338 BCE in historical c		page 6
direct	-3337 Apr 07 j 14:47	29° II 53'23		morning rise	-3331 Aug 21 j 04:54	16° © 10'22	
uncet	-3337 Apr 27 j 20:21	0°95		retrograde	-3331 Nov 15 j 11:23	18°902'08	
evening set	-3337 Apr 27 j 20:21 -3337 Jul 07 j 18:00	1°950'04		opposition	-3330 Jan 31 j 22:59	16°\$40'20	1°15'23
evening set	-3337 Jul 07 J 18.00	1 3930 04			-		
	2225 7 1 22 1 5 1 5 1 5	20025120	0044440	min. Earth dist.	-3330 Feb 01 j 22:37		29.22785 AU
conjunction	-3337 Jul 23 j 17:16	2°525'29	0°41'40	direct	-3330 Apr 23 j 04:02	15°5515'04	
minimum elong	-3337 Jul 23 j 17:16	2° © 25'29	0°41'47	evening set	-3330 Jul 23 j 05:36	17° © 11'42	
max. Earth dist.	-3337 Jul 22 j 16:31		31.17885 AU	max. Earth dist.	-3330 Aug 06 j 22:13	17° © 44'20	31.22938 AU
morning rise	-3337 Aug 08 j 12:46	3° © 00'34					
retrograde	-3337 Nov 03 j 00:06	4° © 52'29		conjunction	-3330 Aug 08 j 00:18	17° © 46'46	1°12'40
opposition	-3336 Jan 19 j 04:28	3° 5 30'29	0°46'58	minimum elong	-3330 Aug 08 j 00:18	17° © 46'46	1°12'47
min. Earth dist.	-3336 Jan 20 j 02:32	3° 5 28'58	29.18448 AU	morning rise	-3330 Aug 23 j 15:12	18° © 21'31	
direct	-3336 Apr 09 j 01:45	2° © 05'10		retrograde	-3330 Nov 17 j 21:41	20° © 13'16	
evening set	-3336 Jul 09 j 06:06	4° ॐ 01'53		opposition	-3329 Feb 03 j 10:15	18° 9 51'26	1°19'46
max. Earth dist.	-3336 Jul 24 j 05:01	4° © 35'01	31.18904 AU	min. Earth dist.	-3329 Feb 04 j 10:17	18° © 49'47	29.23254 AU
	3			direct	-3329 Apr 25 j 15:08	17°526'10	
conjunction	-3336 Jul 25 j 04:54	4° © 37'15	0°46'20	evening set	-3329 Jul 25 j 16:53	19° © 22'45	
minimum elong	-3336 Jul 25 j 04:54	4°937'15	0°46'27	max. Earth dist.	-3329 Aug 09 j 10:03		31.23412 AU
morning rise	-3336 Aug 09 j 23:36	5°9512'17	0 1027	max. Earth dist.	552) Hug 0) j 10.05	17 - 033 20	31.23112110
retrograde	-3336 Nov 04 j 10:20	7°904'11		conjunction	-3329 Aug 10 j 11:00	19° © 57'46	1°16'43
-	•		0051155				
opposition	-3335 Jan 20 j 15:27	5°9542'16	0°51'55	minimum elong	-3329 Aug 10 j 11:00	19°957'46	1°16'50
min. Earth dist.	-3335 Jan 21 j 14:23		29.19438 AU	morning rise	-3329 Aug 26 j 01:08	20°S32'27	
direct	-3335 Apr 11 j 15:25	4° © 17'00		retrograde	-3329 Nov 20 j 07:16	22° © 24'12	
evening set	-3335 Jul 11 j 18:19	6° © 13'44		opposition	-3328 Feb 05 j 21:35	21° © 02'20	
				min. Earth dist.	-3328 Feb 06 j 21:16		29.23752 AU
conjunction	-3335 Jul 27 j 16:19	6° ≤ 49'03	0°50'56	direct	-3328 Apr 27 j 04:12	19° © 37'04	
minimum elong	-3335 Jul 27 j 16:19	6° 5 49'03	0°51'04	evening set	-3328 Jul 27 j 04:18	21° © 33'38	
max. Earth dist.	-3335 Jul 26 j 14:59	6°9546'42	31.19849 AU				
morning rise	-3335 Aug 12 j 10:33	7° 5 24'02		conjunction	-3328 Aug 11 j 21:34	22° © 08'35	1°20'39
retrograde	-3335 Nov 06 j 22:33	9° © 15'56		minimum elong	-3328 Aug 11 j 21:34	22° © 08'35	1°20'45
opposition	-3334 Jan 23 j 02:25	7° 9 54'04	0°56'48	max. Earth dist.	-3328 Aug 10 j 20:04	22°506'12	31.23945 AU
min. Earth dist.	-3334 Jan 24 j 00:54	7° 9 52'31	29.20336 AU	morning rise	-3328 Aug 27 j 11:11	22°5643'14	
direct	-3334 Apr 14 j 04:04	6°9528'49		retrograde	-3328 Nov 21 j 18:30	24°934'59	
evening set	-3334 Jul 14 j 06:22	8°925'35		opposition	-3327 Feb 07 j 08:44	23° © 13'07	1°28'10
max. Earth dist.	-3334 Jul 29 j 03:02		31.20673 AU	min. Earth dist.	-3327 Feb 08 j 07:47		29.24348 AU
max. Latin dist.	-5554 Jul 27 j 05.02	0 30 32	31.200/3 AO	direct	-3327 Apr 29 j 14:59	21°9547'52	27.24340 AO
agniumation	2224 Iul 20:02:51	9° © 00'51	0°55'28	evening set		21 94/32 23°944'25	
conjunction	-3334 Jul 30 j 03:51			C	-3327 Jul 29 j 15:27		21 24570 ATT
minimum elong	-3334 Jul 30 j 03:51	9°500'51	0°55'35	max. Earth dist.	-3327 Aug 13 j 08:11	24-901/03	31.24579 AU
morning rise	-3334 Aug 14 j 21:14	9° © 35'47			2227 4 14:00.14		100.4100
retrograde	-3334 Nov 09 j 07:02	11° © 27'40		conjunction	-3327 Aug 14 j 08:14	24°9519'20	
opposition	-3333 Jan 25 j 13:36	10° © 05'50	1°01'35	minimum elong	-3327 Aug 14 j 08:13	24° © 19'20	1°24'34
min. Earth dist.	-3333 Jan 26 j 13:29		29.21105 AU	morning rise	-3327 Aug 29 j 21:03	24° © 53'55	
direct	-3333 Apr 16 j 16:10	8° ॐ 40'37		retrograde	-3327 Nov 24 j 04:29	26° © 45'42	
evening set	-3333 Jul 16 j 18:29	10° © 37'21		opposition	-3326 Feb 09 j 20:09	25° © 23'52	1°32'11
				min. Earth dist.	-3326 Feb 10 j 19:24	25° 5 22'16	29.25025 AU
conjunction	-3333 Aug 01 j 15:10	11° © 12'34	0°59'54	direct	-3326 May 02 j 04:38	23° © 58'40	
minimum elong	-3333 Aug 01 j 15:10	11° © 12'34	1°00'01	evening set	-3326 Aug 01 j 02:42	25° © 55'13	
max. Earth dist.	-3333 Jul 31 j 13:27	11° © 10'10	31.21385 AU				
morning rise	-3333 Aug 17 j 08:02	11°5547'28		conjunction	-3326 Aug 16 j 18:37	26°530'04	1°28'09
retrograde	-3333 Nov 11 j 16:46	13° © 39'18		minimum elong	-3326 Aug 16 j 18:37	26°930'04	1°28'16
opposition	-3332 Jan 28 j 00:45	12° © 17'30	1°06'17	max. Earth dist.	-3326 Aug 15 j 17:56	26° © 27'46	31.25300 AU
min. Earth dist.	-3332 Jan 28 j 23:52		29.21758 AU	morning rise	-3326 Sep 01 j 06:56	27° 5 04'36	
direct	-3332 Apr 18 j 04:44	10°952'17	29.21,00110	retrograde	-3326 Nov 26 j 16:34	28°956'26	
evening set	-3332 Jul 18 j 06:11	12°548'59		opposition	-3325 Feb 12 j 07:29	27°534'38	1°36'04
max. Earth dist.	-3332 Aug 02 j 00:42		31.21973 AU	min. Earth dist.	-3325 Feb 13 j 05:33		29.25781 AU
max. Earm dist.	-3332 Aug 02 J 00.42	13 39/214/	31.219/3 AU		-	26°909'31	29.23781 AU
	2222 4 02:02:10	120624110	1004115	direct	-3325 May 04 j 16:57		
conjunction	-3332 Aug 03 j 02:18	13°524'10		evening set	-3325 Aug 03 j 13:46	28°506'04	21.26066.444
minimum elong	-3332 Aug 03 j 02:18	13°524'10	1°04'22	max. Earth dist.	-3325 Aug 18 j 05:39	41'8 <i>5</i> 0°41	31.26066 AU
morning rise	-3332 Aug 18 j 18:26	13° © 59'00					
retrograde	-3332 Nov 13 j 02:03	15° © 50'49		conjunction	-3325 Aug 19 j 05:08	28° © 40'53	1°31'43
opposition	-3331 Jan 29 j 11:57	14° © 29'01	1°10'53	minimum elong	-3325 Aug 19 j 05:08	28° © 40'53	1°31'50
min. Earth dist.	-3331 Jan 30 j 12:13	14° © 27'21	29.22310 AU	morning rise	-3325 Sep 03 j 16:41	29° © 15'23	
direct	-3331 Apr 20 j 15:00	13° © 03'47			-3325 Sep 25 j 07:31	$0^{\circ}\Omega$	
evening set	-3331 Jul 20 j 17:55	15° © 00'27		retrograde	-3325 Nov 29 j 01:43	1° Ω 07'16	
max. Earth dist.	-3331 Aug 04 j 11:45	15° © 33'11	31.22484 AU		-3324 Feb 05 j 22:16	30° ℝ ∽	
				opposition	-3324 Feb 14 j 19:07	29° © 45'32	1°39'48
conjunction	-3331 Aug 05 j 13:23	15° © 35'34	1°08'31	min. Earth dist.	-3324 Feb 15 j 17:59		29.26560 AU
minimum elong	-3331 Aug 05 j 13:22	15° © 35'34		direct	-3324 May 06 j 04:41	28°\$20'29	-

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3324 in astronomical counting style is the year 3325 BCE in historical counting style. -3324 Jul 28 i 02:29 $0^{\circ}\Omega$ -3318 Oct 01 i 09:02 15°Ω -3324 Aug 05 j 00:46 0°Ω17'03 -3318 Dec 14 j 01:58 16°Ω24'54 retrograde evening set -3317 Mar 02 j 05:39 15°**Ω**03'09 2°01'41 opposition min. Earth dist. -3324 Aug 20 j 15:22 0°Ω51'49 1°35'09 -3317 Mar 03 j 03:31 15°**Ω**01'40 29.29144 AU conjunction 0°**Ω**51'49 1°35'16 -3324 Aug 20 j 15:21 -3317 Mar 04 j 04:02 minimum elong 15°RΩ -3324 Aug 19 j 15:39 direct -3317 May 22 j 15:24 13°**Ω**38'24 max. Earth dist. 0°**Ω**49'35 31.26834 AU -3324 Sep 05 j 02:25 morning rise 1°**Ω**26′16 -3317 Aug 04 j 16:28 15°Ω retrograde -3324 Nov 30 j 11:59 3°**Ω**18′13 evening set -3317 Aug 21 j 04:22 15°**Ω**34'43 opposition -3323 Feb 16 j 06:37 1°**Ω**56'32 1°43'24 min. Earth dist. -3323 Feb 17 j 04:24 1°**Ω**55'02 29.27299 AU conjunction -3317 Sep 05 j 14:26 16°**Ω**09'10 1°55'06 16°**Ω**09'10 1°55'12 direct -3323 May 08 j 17:03 0°**Ω**31'34 minimum elong -3317 Sep 05 j 14:26 -3317 Sep 04 j 15:57 evening set -3323 Aug 07 j 11:49 $2^{\circ}\Omega 28'07$ max. Earth dist. 16°**Ω**07'03 31.29005 AU -3317 Sep 20 j 21:31 max. Earth dist. -3323 Aug 22 j 02:23 3°**Ω**00'40 31.27519 AU morning rise 16°**Ω**43'21 retrograde -3317 Dec 16 j 14:04 18°**Ω**35'42 conjunction -3323 Aug 23 j 01:47 3°Ω02'51 1°38'27 opposition -3316 Mar 03 j 17:31 17°Ω13'54 2°04'08 minimum elong -3323 Aug 23 j 01:47 3°**Ω**02'51 1°38'33 min. Earth dist. -3316 Mar 04 j 13:55 17°**Ω**12'31 29.29154 AU morning rise -3323 Sep 07 j 12:08 3°**Ω**37'16 direct -3316 May 24 j 03:49 15°**Ω**49'09 5°**Ω**29'17 retrograde -3323 Dec 02 j 21:55 evening set -3316 Aug 22 j 14:29 17°**Ω**45'24 opposition -3322 Feb 18 j 18:17 4°Ω07'39 1°46'51 max. Earth dist. -3316 Sep 06 j 03:05 18° **Ω**17'50 31.29018 AU min. Earth dist. -3322 Feb 19 j 16:57 4°**Ω**06'06 29.27946 AU direct -3322 May 11 j 03:10 2°**Ω**42'45 conjunction -3316 Sep 07 j 00:07 18°**Ω**19'49 1°57'19 evening set -3322 Aug 09 j 22:52 4°**Ω**39'18 minimum elong -3316 Sep 07 i 00:07 18°**Ω**19'49 1°57'23 morning rise -3316 Sep 22 i 06:34 18°**Ω**53'58 conjunction -3322 Aug 25 j 12:10 5°Ω13'59 1°41'37 retrograde -3316 Dec 17 i 23:02 20°**Ω**46′22 -3322 Aug 25 j 12:09 5°Ω13'59 1°41'42 opposition -3315 Mar 06 j 05:35 19°Ω24'31 2°06'25 minimum elong -3322 Aug 24 j 13:01 5°**Ω**11'49 31.28100 AU -3315 Mar 07 j 02:20 19°**Ω**23'07 29.29203 AU max. Earth dist. min. Earth dist. -3322 Sep 09 j 21:54 5°**Ω**48'22 -3315 May 26 j 15:54 morning rise direct 17°**Ω** 59'47 -3322 Dec 05 j 07:41 7°Ω40'27 evening set -3315 Aug 25 j 00:43 19°**Ω**55'59 retrograde -3321 Feb 21 j 06:05 6°Ω18'50 1°50'08 opposition -3321 Feb 22 j 03:58 6°**Ω**17'20 29.28454 AU -3315 Sep 09 j 09:41 20°Ω30'21 1°59'22 min. Earth dist. conjunction -3321 May 13 j 15:58 -3315 Sep 09 j 09:40 4°**Ω**53'59 minimum elong 20°**Ω**30'21 1°59'26 direct -3315 Sep 08 j 13:00 20°**Ω**28'24 31.29106 AU -3321 Aug 12 j 09:46 6°**£**50′31 max. Earth dist. evening set -3315 Sep 24 j 15:44 21°**Ω**04'28 morning rise -3321 Aug 27 j 22:20 7°Ω25'09 1°44'37 -3315 Dec 20 j 09:11 22°Ω56'56 conjunction retrograde -3321 Aug 27 j 22:19 7°Ω25'09 1°44'43 -3314 Mar 08 j 17:25 21°**Ω**35'03 2°08'31 minimum elong opposition -3321 Aug 26 j 22:42 7°**Ω**22'56 31.28528 AU -3314 Mar 09 j 12:23 21°**Ω**33'46 29.29329 AU max. Earth dist. min. Earth dist. -3321 Sep 12 j 07:31 7°**£**59'30 morning rise direct -3314 May 29 j 05:08 20°**£**10′22 retrograde -3321 Dec 07 j 18:27 9°**Ω**51'39 evening set -3314 Aug 27 j 10:50 22°**Ω**06'30 -3320 Feb 23 j 18:01 8°Ω30'02 1°53'17 opposition min. Earth dist. -3320 Feb 24 j 16:14 8°**Ω**28'31 29.28824 AU conjunction -3314 Sep 11 j 19:17 22°Ω40'50 2°01'14 direct -3320 May 15 j 02:22 7°**Ω**05'14 minimum elong -3314 Sep 11 j 19:16 22°Ω40'50 2°01'18 -3320 Aug 13 j 20:35 9°Ω01'44 -3314 Sep 10 j 23:30 22° **Ω**38'59 31.29271 AU evening set max. Earth dist. -3320 Aug 28 j 09:58 9°**Ω**34'12 31.28816 AU -3314 Sep 27 j 00:50 23°**Ω**14'56 max. Earth dist. morning rise -3314 Dec 22 j 19:35 $25^{\circ}\Omega07'29$ retrograde -3320 Aug 29 j 08:37 9°**Ω**36'19 1°47'29 -3313 Mar 11 j 05:37 23°**Ω**45'35 2°10'26 conjunction opposition -3320 Aug 29 j 08:37 9°**Ω**36'19 1°47'34 23°**Ω**44'18 29.29546 AU minimum elong min. Earth dist. -3313 Mar 12 i 00:41 morning rise -3320 Sep 13 j 17:09 10°Ω10'37 direct -3313 May 31 i 16:09 22°Ω20'58 retrograde -3320 Dec 09 i 04:10 12°**Ω**02'50 evening set -3313 Aug 29 j 20:45 24°Ω17'03 opposition -3319 Feb 25 i 05:46 10°Ω41'11 1°56'15 max. Earth dist. -3313 Sep 13 j 10:04 24°**Ω**49'36 31.29522 AU min. Earth dist. -3319 Feb 26 i 03:55 10° Ω39'40 29.29036 AU -3319 May 17 j 14:34 9°Ω16'24 -3313 Sep 14 j 04:41 24°Ω51'21 2°02'56 direct conjunction -3319 Aug 16 j 07:24 11°**Ω**12'52 -3313 Sep 14 j 04:41 24°Ω51'21 2°03'01 evening set minimum elong -3313 Sep 29 j 09:49 25°**Ω**25'25 morning rise -3313 Dec 25 j 04:46 conjunction -3319 Aug 31 j 18:41 11°**Ω**47'24 1°50'11 retrograde 27°Ω18'03 minimum elong -3319 Aug 31 j 18:41 11°**Ω**47'24 1°50'16 opposition -3312 Mar 12 j 17:44 25°Ω56'10 2°12'09 -3319 Aug 30 j 19:12 -3312 Mar 13 j 11:22 max. Earth dist. 11°**Ω**45'12 31.28962 AU min. Earth dist. 25°**Ω**54'59 29.29807 AU -3319 Sep 16 j 02:49 24°**Ω**31'37 12°**Ω**21'40 direct -3312 Jun 02 j 04:44 morning rise -3319 Dec 11 j 15:43 14°**Ω**13'56 -3312 Aug 31 j 06:47 26°**Ω**27'39 retrograde evening set -3318 Feb 27 j 17:38 12°**Ω**52'14 1°59'03 opposition 12°**Ω**50'46 29.29134 AU -3312 Sep 15 j 14:08 27°**Ω**01'55 2°04'28 min. Earth dist. -3318 Feb 28 j 15:16 conjunction -3312 Sep 15 j 14:08 direct -3318 May 20 j 01:22 11°**Ω**27'28 minimum elong 27°**Ω**01'55 2°04'31 -3318 Aug 18 j 17:53 13°**£**23′52 max. Earth dist. -3312 Sep 14 j 19:31 27°**Ω**00'10 31.29789 AU evening set max. Earth dist. -3318 Sep 02 j 06:40 13°**Ω**56'18 31.29004 AU morning rise -3312 Sep 30 j 18:57 27°**Ω**35'58 retrograde -3312 Dec 26 j 15:14 29°**Ω**28'43 conjunction -3318 Sep 03 j 04:42 13°**Ω**58'22 1°52'43 opposition -3311 Mar 15 j 05:50 28°Ω06'50 2°13'41 -3318 Sep 03 j 04:42 13°**Ω**58′22 1°52'49 min. Earth dist. -3311 Mar 15 j 23:19 28° Ω05'39 29.30078 AU minimum elong -3318 Sep 18 j 12:08 14°**Ω**32'35 -3311 Jun 04 j 14:26 26°**Ω**42'21 morning rise direct

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3311 in astronomical counting style is the year 3312 BCE in historical counting style. -3311 Sep 02 j 16:43 28° **Ω**38'21 max. Earth dist. -3305 Sep 30 i 17:30 12° m 15'37 31.29134 AU evening set -3305 Oct 16 j 10:32 12° m 50'55 morning rise -3311 Sep 17 j 23:43 29°Ω12'35 2°05'48 -3304 Jan 11 j 19:42 14° m 44'21 conjunction retrograde -3311 Sep 17 j 23:43 29°Ω12'35 2°05'53 -3304 Mar 30 j 21:19 13° m 22'08 2°18'59 minimum elong opposition 13°M/21'11 29.29079 AU max. Earth dist. -3311 Sep 17 j 06:36 -3304 Mar 31 j 11:19 29°**Ω**10'59 31.30034 AU min. Earth dist. -3311 Oct 03 j 04:01 morning rise 29°**Ω**46'37 direct -3304 Jun 20 j 02:04 11° m 57'57 -3311 Oct 09 j 07:56 -3304 Sep 17 j 12:50 0° M evening set 13° m 53'24 retrograde -3311 Dec 29 j 00:56 1° Mp 39'28 -3304 Oct 02 j 17:03 opposition -3310 Mar 17 j 18:11 0° m 17'35 2° 15'01 conjunction 14° m 27'27 2°10'07 14° m/27'28 2°10'08 min. Earth dist. -3310 Mar 18 j 11:12 0° Mp 16'25 29.30283 AU minimum elong -3304 Oct 02 j 17:03 -3310 Mar 28 j 15:36 30°R€ max. Earth dist. -3304 Oct 02 j 04:01 14° Mp 26'14 31.28704 AU 28°**Ω**53'10 -3304 Oct 17 j 19:27 direct -3310 Jun 07 j 02:03 morning rise 15° Mp 01'23 -3303 Jan 13 j 04:40 -3310 Aug 12 j 05:47 0° M retrograde 16° My 54'54 evening set -3310 Sep 05 j 02:43 0° m 49'07 opposition -3303 Apr 02 j 09:40 15° m/32'37 2°18'57 min. Earth dist. -3303 Apr 02 j 22:00 15° Mp 31'47 29.28660 AU conjunction -3310 Sep 20 j 09:03 1° Tp 23'19 2°06'58 direct -3303 Jun 22 j 14:56 14° Mp 08'27 minimum elong -3310 Sep 20 j 09:03 1° m/23'19 2°07'01 evening set -3303 Sep 19 j 22:17 16° Mp 03'49 max. Earth dist. -3310 Sep 19 j 15:30 1° Mp 21'40 31.30195 AU morning rise -3310 Oct 05 j 13:07 1° m 57'20 conjunction -3303 Oct 05 j 02:05 16° m/ 37'52 2°10'00 3°m 50'18 retrograde -3310 Dec 31 j 13:02 minimum elong -3303 Oct 05 j 02:05 16° № 37'52 2°10'01 opposition -3309 Mar 20 j 06:38 2° m 28'23 2°16'10 max. Earth dist. -3303 Oct 04 j 13:16 16° Mp 36'39 31.28318 AU min. Earth dist. -3309 Mar 20 j 22:48 2° m 27'18 29.30399 AU morning rise -3303 Oct 20 i 04:25 17° m 11'47 direct -3309 Jun 09 j 12:34 1° m 04'03 retrograde -3302 Jan 15 i 15:06 19° m 05'25 evening set -3309 Sep 07 j 12:35 2° m 59'56 opposition -3302 Apr 04 j 22:17 17° m 43'04 2°18'44 min. Earth dist. -3302 Apr 05 j 09:54 17° m 42'17 29.28329 AU -3309 Sep 22 j 18:39 3° mp 34'07 2°07'57 -3302 Jun 25 j 00:58 16° No 18'56 conjunction direct -3309 Sep 22 j 18:39 3° m 34'07 2°08'01 -3302 Sep 22 j 07:24 18° m 14'13 evening set minimum elong -3309 Sep 22 j 02:36 max. Earth dist. 3°My32'36 31.30241 AU -3309 Oct 07 j 22:12 4° M) 08'06 -3302 Oct 07 j 11:05 18° mp 48'15 2°09'41 conjunction morning rise -3308 Jan 02 j 23:39 6° m 01'11 -3302 Oct 07 j 11:05 18° m 48'15 2°09'42 minimum elong retrograde 4° Mp 39'14 2°17'07 -3308 Mar 21 j 19:09 -3302 Oct 07 j 00:25 18° Mp 47'15 31.28036 AU max. Earth dist. opposition -3302 Oct 22 j 13:07 min. Earth dist. -3308 Mar 22 j 11:31 4°№38'08 29.30380 AU 19° m 22'10 morning rise -3301 Jan 18 j 00:37 -3308 Jun 11 j 01:08 3° m 14'57 21° m 15'56 direct retrograde -3308 Sep 08 j 22:29 5° Tp 10'46 -3301 Apr 07 j 10:58 19° m 53'32 2°18'18 evening set opposition 5° Mp 43'22 31.30155 AU -3301 Apr 07 j 21:25 19° m 52'50 29.28088 AU max. Earth dist. -3308 Sep 23 j 11:26 min. Earth dist. 18° Mp 29'29 direct -3301 Jun 27 j 12:21 -3308 Sep 24 j 04:00 5° m 44'55 2°08'45 -3301 Sep 24 j 16:44 conjunction evening set 20° m 24'41 minimum elong -3308 Sep 24 j 04:00 5° m 44'55 2°08'48 morning rise -3308 Oct 09 j 07:26 6° m 18'53 conjunction -3301 Oct 09 j 20:02 20° m 58'43 2°09'12 retrograde -3307 Jan 04 j 12:07 8° Mp 12'04 minimum elong -3301 Oct 09 j 20:02 20° m 58'43 2°09'14 -3307 Mar 24 j 07:34 6° m 50'04 2°17'53 max. Earth dist. -3301 Oct 09 j 09:27 20° m 57'43 31.27853 AU opposition -3307 Mar 24 j 22:34 6° Mp 49'04 29.30219 AU -3301 Oct 24 j 22:09 21°M 32'39 min. Earth dist. morning rise -3307 Jun 13 j 12:47 5° m 25'49 -3300 Jan 20 j 12:49 23° M 26'32 direct retrograde -3307 Sep 11 j 08:15 7° m 21'34 -3300 Apr 08 j 23:30 22° m 04'07 2°17'41 evening set opposition -3300 Apr 09 j 08:33 22° m 03'30 29.27950 AU min. Earth dist. 7° m 55'42 2°09'22 conjunction -3307 Sep 26 i 13:28 direct -3300 Jun 28 j 22:14 20° m 40'09 -3307 Sep 26 i 13:28 minimum elong 7° m 55'42 2°09'25 evening set -3300 Sep 26 j 01:47 22° m 35'17 -3307 Sep 25 i 21:59 max. Earth dist. 7° m 54'14 31.29914 AU -3300 Oct 11 i 05:05 morning rise -3307 Oct 11 i 16:29 8° m 29'39 conjunction 23° m 09'18 2°08'31 -3306 Jan 06 j 22:00 10° m 22'55 minimum elong -3300 Oct 11 i 05:05 23°m09'18 2°08'32 retrograde -3306 Mar 26 j 20:09 9° m 00'52 2°18'27 max. Earth dist. -3300 Oct 10 j 20:30 23° m 08'30 31.27740 AU opposition min. Earth dist. -3306 Mar 27 j 11:43 8° m 59'49 29.29915 AU -3300 Oct 26 j 06:58 23°m43'14 morning rise 7° m 36'38 -3299 Jan 21 j 23:44 25° m 37'17 direct -3306 Jun 16 j 00:54 retrograde evening set -3306 Sep 13 j 17:59 9°m/32'18 opposition -3299 Apr 11 j 12:14 24° m 14'50 2°16'51 min. Earth dist. -3299 Apr 11 j 20:58 24° m/ 14'15 29.27847 AU -3299 Jul 01 j 09:34 10° Mp 06'24 2°09'48 conjunction -3306 Sep 28 j 22:47 direct 22° m 50'58 minimum elong -3306 Sep 28 j 22:47 10° m 06'24 2°09'50 evening set -3299 Sep 28 j 11:01 24° Mp 46'02 -3306 Sep 28 j 07:39 10° Mp 04'58 31.29565 AU max. Earth dist. -3306 Oct 14 j 01:38 10° Mp 40'20-3299 Oct 13 j 13:58 25° m 20'03 2°07'39 morning rise conjunction -3305 Jan 09 j 08:59 -3299 Oct 13 j 13:58 25° To 20'03 $2^{\circ}07'40$ retrograde 12° m 33'41 minimum elong -3299 Oct 13 j 05:30 opposition -3305 Mar 29 j 08:41 11° m 11'33 2°18'49 max. Earth dist. 25° To 19'15 31.27652 AU min. Earth dist. -3305 Mar 29 j 22:34 11° Mp 10'37 29.29515 AU morning rise -3299 Oct 28 j 15:57 25° m 53'59 direct -3305 Jun 18 j 14:28 9° Mp 47'20 retrograde -3298 Jan 24 j 12:34 27° Mp 48'11 opposition evening set -3305 Sep 16 j 03:25 11° m/42'54 -3298 Apr 14 j 00:56 26° m 25'43 2°15'50 min. Earth dist. -3298 Apr 14 j 07:52 26° m 25'15 29.27746 AU -3305 Oct 01 j 07:54 12° m 16'59 2°10'03 -3298 Jul 03 j 19:46 25° m 01'56 conjunction direct -3305 Oct 01 j 07:54 12°Mp 16'59 -3298 Sep 30 j 20:13 minimum elong 2°10'05 evening set 26° m 56'57

Planetary Phen	omena of Neptune	from -3400	through -2898	3 (UT), Astrodien	st AG 18-Feb-2025	14:23,	page 9
•	nical year style is used: Th		-				
conjunction	-3298 Oct 15 j 23:05	27° mp 30'58		retrograde	-3291 Feb 08 j 18:24	13° ഫ 06'33	
minimum elong	-3298 Oct 15 j 23:06	27° m 30'58		opposition	-3291 Apr 29 j 19:50	11° ≏ 43'36	2°03'20
max. Earth dist.	-3298 Oct 15 j 15:58		31.27528 AU	min. Earth dist.	-3291 Apr 29 j 21:45		29.24270 AU
morning rise	-3298 Oct 31 j 00:56	28° m 04'55	0 11270 20 1 1 0	direct	-3291 Jul 19 j 07:18	10° £ 20'05	
retrograde	-3297 Jan 26 j 23:40	29° m 59'15		evening set	-3291 Oct 15 j 12:14	12° £ 14'21	
opposition	-3297 Apr 16 j 13:57	28° Mp 36'46	2°14'37	evening set	32)1 Oct 13 j 12.14	12 -1721	
min. Earth dist.	-3297 Apr 16 j 21:10		29.27593 AU	conjunction	-3291 Oct 30 j 14:52	12° ≏ 48'23	1°54'17
direct			29.21393 AU	minimum elong	•	12° ⊆ 48'23	1°54'16
	-3297 Jul 06 j 07:10	27° mp 13'04		max. Earth dist.	-3291 Oct 30 j 14:52		
evening set	-3297 Oct 03 j 05:23	29° Mp 08'01			-3291 Oct 30 j 13:33		31.23777 AU
				morning rise	-3291 Nov 14 j 17:22	13° Ω 22'26	
conjunction	-3297 Oct 18 j 08:07	29° Mp 42'01	2°05'22	retrograde	-3290 Feb 11 j 04:28	15° Ω 17'30	
minimum elong	-3297 Oct 18 j 08:07	29° m 42'01	2°05'22	opposition	-3290 May 02 j 08:54	13° ≏ 54'28	
max. Earth dist.	-3297 Oct 18 j 01:39	29° Mp 41'25	31.27340 AU	min. Earth dist.	-3290 May 02 j 10:16		29.23545 AU
	-3297 Oct 26 j 06:24	0∘ ⊽		direct	-3290 Jul 21 j 18:38	12° ≏ 30'58	
morning rise	-3297 Nov 02 j 10:02	0° ≏ 15'59		evening set	-3290 Oct 17 j 21:16	14° ≙ 25'07	
retrograde	-3296 Jan 29 j 12:10	2° ₽ 10'27					
opposition	-3296 Apr 18 j 02:50	0° £ 47'56	2°13'12	conjunction	-3290 Nov 01 j 23:51	14° ≙ 59'09	1°51'51
min. Earth dist.	-3296 Apr 18 j 08:21	0° ـ 47'33	29.27341 AU	minimum elong	-3290 Nov 01 j 23:51	14° ≏ 59'09	1°51'49
	-3296 May 19 j 15:41	30°₽.₩		max. Earth dist.	-3290 Nov 01 j 22:59	14° £ 59'04	31.23106 AU
direct	-3296 Jul 07 j 20:32	29° m 24'18		morning rise	-3290 Nov 17 j 02:39	15° Ω 33'14	
	-3296 Aug 23 j 23:05	0∘ ⊽		retrograde	-3289 Feb 13 j 17:04	17° ≏ 28'25	
evening set	-3296 Oct 04 j 14:43	° - 1° - 219'10		opposition	-3289 May 04 j 21:51	16° £ 05'18	1058108
evening set	-3290 Oct 04 j 14.43	1 = 1910		min. Earth dist.	-3289 May 04 j 21:01		29.22916 AU
	2206.0 + 10:17.10	10 0 52111	2002157		, ,		29.22910 AU
conjunction	-3296 Oct 19 j 17:19	1° £ 53'11	2°03'57	direct	-3289 Jul 24 j 04:38	14° £ 41'50	
minimum elong	-3296 Oct 19 j 17:20	1° Ω 53'11	2°03'56	evening set	-3289 Oct 20 j 06:08	16° ≏ 35'54	
max. Earth dist.	-3296 Oct 19 j 11:13		31.27022 AU			_	
morning rise	-3296 Nov 03 j 19:17	2° ≏ 27'09		conjunction	-3289 Nov 04 j 08:52	17° ≏ 09'57	
retrograde	-3295 Jan 31 j 00:14	4° ≏ 21'44		minimum elong	-3289 Nov 04 j 08:52	17° ≏ 09'57	1°49'14
opposition	-3295 Apr 20 j 15:46	2° ჲ 59'10	2°11'36	max. Earth dist.	-3289 Nov 04 j 09:32	17° ≙ 10'01	31.22520 AU
min. Earth dist.	-3295 Apr 20 j 21:36	2° ≏ 58'46	29.26958 AU	morning rise	-3289 Nov 19 j 11:51	17° ≏ 44'03	
direct	-3295 Jul 10 j 07:59	1° ≏ 35'35		retrograde	-3288 Feb 16 j 04:31	19° ≙ 39'23	
evening set	-3295 Oct 06 j 23:59	3° ₽ 30'21		opposition	-3288 May 06 j 10:56	18° ≏ 16′12	1°55'16
· ·	v			min. Earth dist.	-3288 May 06 j 10:00	18° £ 16'16	29.22370 AU
conjunction	-3295 Oct 22 j 02:36	4° £ 04'22	2°02'22	direct	-3288 Jul 25 j 15:39	16° £ 52'49	
minimum elong	-3295 Oct 22 j 02:37	4° £ 04'22	2°02'22	evening set	-3288 Oct 21 j 15:07	18° Ω 46'47	
max. Earth dist.	-3295 Oct 21 j 21:40		31.26574 AU	evening sec	3200 Oct 21 j 13.07	10 - 10 17	
	-3295 Nov 06 j 04:33	4° £ 38'21	31.20374 AU	conjunction	-3288 Nov 05 j 17:58	19° ჲ 20'51	1946!20
morning rise	•			,	3		
retrograde	-3294 Feb 02 j 09:54	6° £ 33'03	2000140	minimum elong	-3288 Nov 05 j 17:58	19° £ 20'51	
opposition	-3294 Apr 23 j 04:48	5° Ω 10'24		max. Earth dist.	-3288 Nov 05 j 19:46		31.22023 AU
min. Earth dist.	-3294 Apr 23 j 09:12		29.26424 AU	morning rise	-3288 Nov 20 j 21:11	19° ≙ 54'59	
direct	-3294 Jul 12 j 21:04	3° ≏ 46'52		retrograde	-3287 Feb 17 j 17:25	21° ≏ 50′26	
evening set	-3294 Oct 09 j 09:11	5° ≏ 41'31		opposition	-3287 May 08 j 23:45	20° £ 27'13	1°52'14
				min. Earth dist.	-3287 May 08 j 20:44	20° £ 27′26	29.21889 AU
conjunction	-3294 Oct 24 j 11:38	6° £ 15'32	2°00'36	direct	-3287 Jul 28 j 03:56	19° ≙ 03'55	
minimum elong	-3294 Oct 24 j 11:39	6° ₽ 15'32	2°00'35	evening set	-3287 Oct 24 j 00:09	20° ♀ 57'50	
max. Earth dist.	-3294 Oct 24 j 06:31	6° £ 15′03	31.25979 AU				
morning rise	-3294 Nov 08 j 13:49	6° £ 49'32		conjunction	-3287 Nov 08 j 03:04	21° ≏ 31'55	1°43'35
retrograde	-3293 Feb 04 j 20:58	8° ≏ 44'19		minimum elong	-3287 Nov 08 j 03:04	21° ≏ 31'55	1°43'33
opposition	-3293 Apr 25 j 17:57	7° £ 21'35	2°07'49	max. Earth dist.	-3287 Nov 08 j 05:32	21° ≏ 32'09	31.21565 AU
min. Earth dist.	-3293 Apr 25 j 22:00		29.25772 AU	morning rise	-3287 Nov 23 j 06:37	22° ≏ 06'05	
direct	-3293 Jul 15 j 08:18	5° Ω 58'04	27.20772110	retrograde	-3286 Feb 20 j 06:16	24° ♀ 01'41	
evening set	-3293 Oct 11 j 18:16	7° £ 52'35		opposition	-3286 May 11 j 12:58	22° △ 38'27	1°49'02
evening set	-32/3 Oct 11 j 10.10	7 —32 33			• •		29.21442 AU
aaminus sti sa	2202 0-4 26 : 20 52	00 0 0000	1050140	min. Earth dist.	-3286 May 11 j 09:53		29.21 44 2 AU
conjunction	-3293 Oct 26 j 20:53	8° £ 26'36	1°58'40	direct	-3286 Jul 30 j 14:34	21° £ 15'13	
minimum elong	-3293 Oct 26 j 20:53	8° £ 26'36		evening set	-3286 Oct 26 j 09:03	23° ≏ 09'04	
max. Earth dist.	-3293 Oct 26 j 17:36		31.25280 AU				
morning rise	-3293 Nov 10 j 23:02	9° ഫ 00'37		conjunction	-3286 Nov 10 j 12:14	23° ≏ 43'11	1°40'30
retrograde	-3292 Feb 07 j 06:39	10° ჲ 55'30		minimum elong	-3286 Nov 10 j 12:15	23° ≏ 43'11	1°40'27
opposition	-3292 Apr 27 j 06:53	9° ≏ 32'40	2°05'40	max. Earth dist.	-3286 Nov 10 j 16:23	23° ≏ 43'35	31.21123 AU
min. Earth dist.	-3292 Apr 27 j 10:07	9° ჲ 32'26	29.25027 AU	morning rise	-3286 Nov 25 j 15:58	24° ≏ 17'24	
direct	-3292 Jul 16 j 20:49	8° ഫ 09'08		retrograde	-3285 Feb 22 j 17:07	26° ≙ 13'09	
evening set	-3292 Oct 13 j 03:22	10° ჲ 03'31		opposition	-3285 May 14 j 02:05	24° Ω 49'53	1°45'40
-							
	·			min. Earth dist.	-3285 May 13 j 21:21	24° ≏ 50'12	29.20970 AU
conjunction	-	10° ჲ 37'33	1°56'33	min. Earth dist. direct		24° £ 50'12 23° £ 26'44	29.20970 AU
conjunction minimum elong	-3292 Oct 28 j 05:51			direct	-3285 Aug 02 j 03:09	23° ≏ 26'44	29.20970 AU
minimum elong	-3292 Oct 28 j 05:51 -3292 Oct 28 j 05:51	10° ≏ 37'33	1°56'32				29.20970 AU
	-3292 Oct 28 j 05:51	10° ≏ 37'33		direct	-3285 Aug 02 j 03:09	23° ≏ 26'44	

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3285 in astronomical counting style is the year 3286 BCE in historical counting style. opposition -3285 Nov 12 j 21:29 25°**£**54'40 1°37'15 -3278 May 29 j 22:16 10°M12'51 1°18'07 minimum elong -3285 Nov 13 j 01:28 25°**♀**55'03 31.20630 AU min. Earth dist. -3278 May 29 j 12:09 10°M13'32 29.14817 AU max. Earth dist. -3285 Nov 28 j 01:41 -3278 Aug 17 j 09:34 26° **2**28'55 direct 8°M,49'52 morning rise -3278 Nov 12 j 10:49 10°M43'00 -3284 Feb 25 j 05:31 28°<u>₽</u>24'48 retrograde evening set -3284 May 15 j 15:09 opposition 27°**₽**01'31 1°42'09 -3278 Nov 27 j 15:50 min. Earth dist. -3284 May 15 j 10:09 27°**♀**01'51 29.20442 AU conjunction 11°ML17'19 1°11'04 -3278 Nov 27 j 15:50 1°10'59 direct -3284 Aug 03 j 13:59 25°**£**38'27 minimum elong 11°ML17'19 evening set -3284 Oct 30 j 03:26 27°**₽**32'10 max. Earth dist. -3278 Nov 28 j 01:27 11°M18'14 31.14245 AU morning rise -3278 Dec 12 j 22:44 11°M51'50 conjunction -3284 Nov 14 j 07:00 28°**≏**06'21 1°33'55 retrograde -3277 Mar 12 j 17:24 13°M48'30 minimum elong -3284 Nov 14 j 07:00 28°**ഫ**06'21 1°33'52 opposition -3277 Jun 01 j 11:27 12°M24'34 1°13'41 -3284 Nov 14 j 12:42 max. Earth dist. 28°**♀**06'53 31.20048 AU min. Earth dist. -3277 Jun 01 j 01:13 12°M25'16 29.13802 AU morning rise -3284 Nov 29 j 11:22 28°<u>₽40'38</u> direct -3277 Aug 19 j 19:42 11°M01'35 -3283 Jan 09 j 22:49 0°M evening set -3277 Nov 14 j 20:02 12°M54'38 retrograde -3283 Feb 26 j 16:26 0°M36'40 -3283 Apr 17 j 14:21 30°**₹**Ω conjunction -3277 Nov 30 j 01:31 13°M28'59 1°06'52 opposition -3283 May 18 j 04:21 29°**-**13′20 1°38'29 minimum elong -3277 Nov 30 j 01:31 13°M28'59 1°06'48 min. Earth dist. -3283 May 17 j 22:40 29°**♀**13'43 29.19787 AU max. Earth dist. -3277 Nov 30 j 12:57 13°M-30'04 31.13281 AU direct -3283 Aug 06 j 02:25 27°**£**50'20 morning rise -3277 Dec 15 j 08:43 14°ML03'32 evening set -3283 Nov 01 j 12:42 29°**£**43'58 -3276 Jan 11 j 23:17 15°M -3283 Nov 08 j 16:26 0°M retrograde -3276 Mar 14 j 04:51 16°M00'17 -3276 May 19 j 05:54 15°RM conjunction -3283 Nov 16 j 16:19 0°M18'10 1°30'25 opposition -3276 Jun 03 i 00:15 14°ML36'18 1°09'08 minimum elong -3283 Nov 16 j 16:19 0°ML18'10 1°30'22 min. Earth dist. -3276 Jun 02 j 12:12 14°M37'07 29.12877 AU max. Earth dist. -3283 Nov 16 j 21:41 0°M18'40 31.19335 AU direct -3276 Aug 21 j 08:33 13°M13'20 -3283 Dec 01 j 21:10 0°M52'30 -3276 Nov 13 j 08:41 morning rise 15°M. -3282 Mar 01 j 04:45 2°M48'40 evening set -3276 Nov 16 j 05:24 retrograde 15°M,06'18 -3282 May 20 j 17:38 1°M25'16 1°34'40 opposition -3282 May 20 j 11:00 -3276 Dec 01 j 11:03 15°M40'41 1°02'34 min. Earth dist. 1°M25'43 29.19000 AU conjunction -3282 Aug 08 j 12:54 0°ML02'18 -3276 Dec 01 j 11:03 minimum elong 15°M-40'41 1°02'29 direct -3282 Nov 03 j 21:57 -3276 Dec 01 j 22:30 1°M55'51 max. Earth dist. 15°M41'46 31.12412 AU evening set -3276 Dec 16 j 18:53 16°M15'17 morning rise 2°M30'04 1°26'47 -3282 Nov 19 j 01:56 -3275 Mar 16 j 18:29 18°M12'08 conjunction retrograde -3282 Nov 19 j 01:57 -3275 Jun 05 j 13:20 16°M48'05 1°04'29 minimum elong 2°M30'04 1°26'43 opposition 16°ML48'56 29.12058 AU -3282 Nov 19 j 08:45 -3275 Jun 05 j 00:39 max. Earth dist. 2°M30'43 31.18474 AU min. Earth dist. -3282 Dec 04 j 07:03 morning rise 3°M04'26 direct -3275 Aug 23 j 19:43 15°M25'09 -3281 Mar 03 j 15:07 -3275 Nov 18 j 14:32 retrograde 5°M00'44 evening set 17°M18'03 opposition -3281 May 23 j 06:56 3°M37'15 1°30'43 min. Earth dist. -3281 May 23 j 00:15 3°M37'42 29.18063 AU conjunction -3275 Dec 03 j 20:41 17°ML52'28 0°58'10 -3281 Aug 11 j 00:05 2° ML14'18 minimum elong -3275 Dec 03 j 20:41 17°ML52'28 0°58'06 direct -3281 Nov 06 j 07:13 4°ML07'45 max. Earth dist. -3275 Dec 04 j 10:17 17°M53'46 31.11634 AU evening set -3275 Dec 19 j 04:48 18°ML27'07 morning rise -3281 Nov 21 j 11:25 4°M41'59 1°23'02 -3274 Mar 19 j 05:42 20°M24'05 conjunction retrograde -3281 Nov 21 j 11:25 4° / 1'59 1°22'58 -3274 Jun 08 j 02:24 18°M59'59 0°59'44 minimum elong opposition -3281 Nov 21 j 18:16 4°M42'38 31.17491 AU min. Earth dist. -3274 Jun 07 j 12:39 19° ML00'55 29.11304 AU max. Earth dist. morning rise -3281 Dec 06 i 17:02 5°M16'23 direct -3274 Aug 26 i 08:13 17°MJ37'06 retrograde -3280 Mar 05 i 03:56 7°**IL**12'47 evening set -3274 Nov 21 j 00:01 19°M29'56 opposition -3280 May 24 j 20:03 5°M49'12 1°26'38 -3274 Dec 06 i 06:23 min. Earth dist. -3280 May 24 j 11:46 5°M49'45 29.17017 AU conjunction 20°M04'23 0°53'41 direct -3280 Aug 12 j 10:12 4°M26'14 minimum elong -3274 Dec 06 i 06:23 20°ML04'23 0°53'36 -3280 Nov 07 j 16:27 6°M19'35 max. Earth dist. -3274 Dec 06 j 19:59 20°ML05'40 31.10919 AU evening set -3274 Dec 21 j 15:09 20°M39'05 morning rise -3280 Nov 22 j 20:55 6°ML53'51 1°19'09 -3273 Mar 21 j 18:21 22°MJ36'11 conjunction retrograde minimum elong -3280 Nov 22 j 20:56 6°M53'51 1°19'04 opposition -3273 Jun 10 j 15:24 21°ML12'01 0°54'53 max. Earth dist. -3280 Nov 23 j 04:47 6°M54'35 31.16402 AU min. Earth dist. -3273 Jun 10 j 00:37 21°M13'02 29.10606 AU -3280 Dec 08 j 02:55 7°M-28'17 direct -3273 Aug 28 j 18:27 19°M49'11 morning rise -3279 Mar 07 j 15:23 9°M24'46 evening set -3273 Nov 23 j 09:29 21°M41'59 retrograde -3279 May 27 j 09:11 8°ML01'04 1°22'26 opposition 8°M01'37 29.15907 AU -3273 Dec 08 j 16:19 $22^{\circ}\text{ML}16'28 \quad 0^{\circ}49'07$ min. Earth dist. -3279 May 27 j 01:08 conjunction direct -3279 Aug 14 j 21:29 6°M38'06 minimum elong -3273 Dec 08 j 16:19 22°M16'28 0°49'01 evening set -3279 Nov 10 j 01:39 8°M31'20 max. Earth dist. -3273 Dec 09 j 07:30 22°M17'54 31.10217 AU morning rise -3273 Dec 24 j 01:28 22°M51'12 conjunction -3279 Nov 25 j 06:27 9°ML05'37 1°15'10 retrograde -3272 Mar 23 j 05:03 24°M48'26 minimum elong -3279 Nov 25 j 06:27 9°**™**05'37 1°15'06 opposition -3272 Jun 12 j 04:29 23°M24'14 0°49'57 max. Earth dist. -3279 Nov 25 j 15:29 9°Mപ06'28 31.15306 AU min. Earth dist. -3272 Jun 11 j 13:37 23°M25'15 29.09889 AU -3279 Dec 10 j 12:49 9°M40'05 -3272 Aug 30 j 05:47 22°M01'27 morning rise direct -3278 Mar 10 j 04:39 -3272 Nov 24 j 19:09 23°M54'11 retrograde 11°M36'39 evening set

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3272 in astronomical counting style is the year 3273 BCE in historical counting style. -3272 Dec 10 j 02:17 24°M28'43 0°44'28 max. Earth dist. -3266 Dec 24 j 11:42 7°**х** 45'46 31.03338 AU conjunction -3272 Dec 10 j 02:18 24°ML28'43 0°44'21 -3265 Jan 08 j 04:54 8°**∡**18'58 minimum elong morning rise -3272 Dec 10 j 17:35 24°M30'10 31.09489 AU -3265 Apr 08 j 23:19 10°**х** 16'51 max. Earth dist. retrograde -3265 Jun 28 j 23:09 0°13'46 -3272 Dec 25 j 11:57 25°M03'29 8°**х** 52′09 morning rise opposition -3271 Mar 25 j 18:33 -3265 Jun 28 j 04:06 8°**≯**53'27 29.02828 AU retrograde 27°M00'51 min. Earth dist. 7°×29'19 opposition -3271 Jun 14 j 17:26 25°M36'37 0°44'57 direct -3265 Sep 15 j 12:48 -3265 Dec 10 j 16:44 9°×21'43 min. Earth dist. -3271 Jun 14 j 01:08 25°M37'43 29.09124 AU evening set direct -3271 Sep 01 j 16:03 24°M13'51 evening set -3271 Nov 27 j 04:59 26°M06'34 conjunction -3265 Dec 26 j 02:43 9°**х** 56′29 0°10'30 minimum elong -3265 Dec 26 j 02:42 9°**х** 56′29 0°10'24 26°ML41'07 0°39'45 conjunction -3271 Dec 12 j 12:28 behind sun begin -3265 Dec 25 j 21:37 9° 🗷 56'01 -3271 Dec 12 j 12:29 -3265 Dec 26 j 07:48 9°**∡**¹56'57 minimum elong 26° ML41'070°39'39 behind sun end -3271 Dec 13 j 04:25 max. Earth dist. 26°M42'38 31.08676 AU max. Earth dist. -3265 Dec 26 j 22:00 9°**≯**58'18 31.02311 AU morning rise -3271 Dec 27 j 22:37 27°M15'57 morning rise -3264 Jan 10 j 15:59 10°**∡**31'34 retrograde -3270 Mar 28 j 06:18 29°M13'25 retrograde -3264 Apr 10 j 12:27 12°**х** 29'32 opposition -3270 Jun 17 j 06:38 27°M49'08 0°39'52 opposition -3264 Jun 30 j 11:54 11°**х**⁴04'45 0°08'27 min. Earth dist. -3270 Jun 16 j 14:50 27°M50'13 29.08265 AU min. Earth dist. -3264 Jun 29 j 15:52 11°**∡**′06′08 29.01862 AU direct -3270 Sep 04 j 02:40 26°M26'24 direct -3264 Sep 16 j 23:26 9°**∡**¹41'55 evening set -3270 Nov 29 j 14:46 28°M19'03 evening set -3264 Dec 12 j 02:47 11°**∡**34'18 conjunction -3270 Dec 14 j 22:45 28°M53'39 0°34'58 conjunction -3264 Dec 27 j 13:14 12°**₹**'09'06 0°05'33 minimum elong -3270 Dec 14 j 22:45 28°M53'39 0°34'52 minimum elong -3264 Dec 27 i 13:14 12°**₹**'09'06 0°05'26 max. Earth dist. -3270 Dec 15 i 15:28 28°M55'14 31.07769 AU behind sun begin -3264 Dec 27 i 07:01 12°**х** 08'32 morning rise -3270 Dec 30 i 09:21 29°M28'31 behind sun end -3264 Dec 27 i 19:27 12°**х** 09′39 -3269 Jan 14 j 02:20 0°×7 max. Earth dist. -3264 Dec 28 j 10:07 12°**≯**11'04 31.01390 AU -3269 Mar 30 j 19:47 1°**х** 26′05 -3263 Jan 12 j 02:54 12°**х** 44′13 retrograde morning rise -3269 Jun 19 j 19:39 0°**х**¹01'45 0°34'44 -3263 Apr 12 j 23:29 14°**₹**'42'16 retrograde opposition -3269 Jun 19 j 02:26 0°**х** 02'55 29.07288 AU -3263 Jul 02 j 04:21 13°**✗**18'51 29.01004 AU min. Earth dist. min. Earth dist. -3269 Jun 20 j 21:14 -3263 Jul 03 j 00:38 13°**∡**17'27 0°03'07 30°RM opposition -3269 Sep 06 j 14:09 28°M39'00 -3263 Sep 19 j 11:06 11°**х** 54'38 direct direct -3269 Nov 17 j 05:11 -3263 Dec 14 j 13:00 13°**х** 46′59 0°×7 evening set -3269 Dec 02 j 00:52 0°**х**³31'37 evening set 0°00'30 -3263 Dec 29 j 23:51 14°**∡**°21′50 conjunction -3269 Dec 17 j 09:08 1°**х** 06′14 0°30′08 -3263 Dec 29 j 23:52 14°**₹**21'50 0°00'24 conjunction minimum elong -3269 Dec 17 j 09:08 -3263 Dec 29 j 17:27 14°**∡**°21'15 minimum elong 1°**尽**06'14 0°30'03 behind sun begin 14°**∡**¹22'24 -3269 Dec 18 j 01:37 -3263 Dec 30 j 06:16 max. Earth dist. 1°**✗**07'48 31.06732 AU behind sun end -3268 Jan 01 j 20:21 -3263 Sep 19 j 11:06 morning rise 1°×741'09 retrograde 11°**∡**754'38 retrograde -3268 Apr 01 j 08:49 3°**х¹**38'49 direct -3262 Sep 21 j 21:30 14°**₹**07'30 opposition -3268 Jun 21 j 08:36 2°**х** 14'23 0°29'33 max. Earth dist. -3263 Dec 30 j 21:05 14°**✗**23'50 31.00607 AU min. Earth dist. -3268 Jun 20 j 15:59 2°**҂**15'31 29.06204 AU morning rise -3262 Jan 14 j 14:05 14°**₹**56'59 -3268 Sep 07 j 23:57 0°**х** 51'37 desc. node -3262 Feb 03 j 11:43 15°**∡** 38'52 direct -3268 Dec 03 j 10:44 2°**∡**¹44'11 retrograde -3262 Apr 15 j 13:30 16°**₹**55'09 evening set -3262 Jul 05 j 13:19 15°**∡**¹30'18 -0°02'13 opposition -3268 Dec 18 j 19:35 3°**∡**18'50 0°25'16 min. Earth dist. -3262 Jul 04 j 15:25 15°**✗**31'48 29.00278 AU conjunction -3268 Dec 18 j 19:35 3°**∡**18'50 0°25'10 -3262 Sep 21 j 21:30 14°**х** 07′30 minimum elong direct -3268 Dec 19 j 13:26 max. Earth dist. 3° ₹20'31 31.05613 AU evening set -3262 Dec 16 j 23:18 15°**₹**59'51 morning rise -3267 Jan 03 i 07:10 3°**х** 53'47 -3261 Jan 01 i 10:35 16°**х** 34'43 -0°04'35 retrograde -3267 Apr 03 j 21:21 5°**х** 51'31 conjunction opposition -3267 Jun 23 j 21:29 4°**₹**27'00 0°24'19 minimum elong -3261 Jan 01 i 10:35 16°**х** 34'43 0°04'42 min. Earth dist. -3267 Jun 23 i 03:31 4° ₹ 28'13 29.05050 AU behind sun begin -3261 Jan 01 i 04:16 16°**х** 34′09 direct -3267 Sep 10 j 12:59 3°**х** 04′13 behind sun end -3261 Jan 01 i 16:53 16°**₹**35'18 -3267 Dec 05 j 20:40 4°**х** 56'42 max. Earth dist. -3261 Jan 02 j 08:36 16° ₹36'48 30.99921 AU evening set -3261 Jan 17 j 01:21 17°**₹**09'56 morning rise -3261 Apr 18 j 00:31 19°**х** 08′12 conjunction -3267 Dec 21 j 05:45 5°**х** 31'24 0°20'22 retrograde 17°**∡**′44'49 28.99635 AU minimum elong -3267 Dec 21 j 05:45 5°**х** 31'24 0°20'17 min. Earth dist. -3261 Jul 07 j 04:38 max. Earth dist. -3267 Dec 21 j 23:17 5°**х** 33′03 31.04458 AU opposition -3261 Jul 08 j 02:06 17°**∡**¹43'20 -0°07'34 -3266 Jan 05 j 18:01 6°**х** 06′24 direct -3261 Sep 24 j 07:41 16°**х** 20'34 morning rise -3266 Apr 06 j 11:48 8°**х** 04′12 -3261 Dec 19 j 09:47 18°**х¹**12'56 retrograde evening set -3266 Jun 26 j 10:28 6° ₹39'35 0°19'04 opposition -3266 Jun 25 j 16:16 6°**х** 40′49 29.03911 AU -3260 Jan 03 j 21:35 18°**∡**¹47'50 -0°09'34 min. Earth dist. conjunction 5°**х** 16′46 -3260 Jan 03 j 21:35 18°**∡**¹47'50 0°09'40 direct -3266 Sep 13 j 00:18 minimum elong evening set -3266 Dec 08 j 06:36 7°**х** 09′12 behind sun begin -3260 Jan 03 j 16:15 18°**∡**47'21 behind sun end -3260 Jan 04 j 02:55 18°**х** 48′19 conjunction -3266 Dec 23 j 16:16 7°**х** 43′56 0°15′27 max. Earth dist. -3260 Jan 04 j 20:31 18°**✗**′50′00 30.99314 AU minimum elong -3266 Dec 23 j 16:16 7°**х** 43′56 0°15'20 morning rise -3260 Jan 19 j 12:46 19°**х** 23′05 behind sun begin -3266 Dec 23 j 14:09 7°**∡**¹43'45 -3260 Apr 19 j 13:42 21°×721'26 retrograde -3266 Dec 23 j 18:24 7°**∡**¹44'08 -3260 Jul 09 j 14:35 19°**∡** 56'34 -0°12'54 behind sun end opposition

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3260 in astronomical counting style is the year 3261 BCE in historical counting style. 19°**₹**58'09 28.99042 AU min. Earth dist. -3260 Jul 08 j 15:43 min. Earth dist. -3254 Jul 22 i 19:49 3°る20'14 28.94258 AU -3260 Sep 25 j 18:08 18°**х** 33′50 -3254 Oct 09 j 15:03 1°る55'47 direct direct -3260 Dec 20 j 20:31 20°**х** 26′13 -3253 Jan 03 j 14:55 3°る48'09 evening set evening set -3259 Jan 05 j 08:36 21°\$\square\$01'09 -0°14'32 -3253 Jan 19 j 05:42 4°る23'16 -0°43'47 conjunction conjunction -3259 Jan 05 j 08:35 21°**х** 01′09 -3253 Jan 19 j 05:42 4°る23'16 0°43'55 minimum elong 0°14'39 minimum elong behind sun begin -3259 Jan 05 j 05:48 21°× 00'54 -3253 Jan 20 j 05:45 max. Earth dist. 4°る25'32 30.93735 AU 21°**х** 01'24 -3259 Jan 05 j 11:22 behind sun end morning rise -3253 Feb 04 j 00:21 4°る58'46 -3259 Jan 06 j 07:20 21°**✗**'03'18 30.98720 AU max. Earth dist. retrograde -3253 May 06 j 12:36 6°**る**57'31 -3253 Jul 25 j 07:07 morning rise -3259 Jan 21 j 00:23 21°**х¹**36′26 min. Earth dist. 5°る33'56 28.93307 AU retrograde -3259 Apr 22 j 03:03 23°**х** 34'55 opposition -3253 Jul 26 j 06:51 5°る32'17 -0°49'23 -3259 Jul 11 j 05:14 22°**✗**11'33 28.98450 AU -3253 Oct 12 j 02:35 4°る09'21 min. Earth dist. direct -3259 Jul 12 j 03:23 22°**∡**10′01 -0°18′14 -3252 Jan 06 j 02:20 6°る01'42 opposition evening set direct -3259 Sep 28 j 02:57 20°**х** 47′18 evening set -3259 Dec 23 j 07:09 22°**∡**³39'42 conjunction -3252 Jan 21 j 17:28 6°る36'51 -0°48'29 minimum elong -3252 Jan 21 j 17:28 6°**ප**36'51 0°48'35 conjunction -3258 Jan 07 j 19:49 23°**∡**14'40 -0°19'30 max. Earth dist. -3252 Jan 22 j 17:54 6°る39'10 30.92800 AU minimum elong -3258 Jan 07 j 19:49 23°**х** 14′40 0°19'36 morning rise -3252 Feb 06 j 12:33 7°る12'23 max. Earth dist. -3258 Jan 08 j 19:46 23°**х** 16′56 30.98106 AU retrograde -3252 May 07 j 23:25 9°**ට**11'10 morning rise -3258 Jan 23 j 11:57 23°**х** 50′00 opposition -3252 Jul 27 j 19:06 7°る45'52 -0°54'22 retrograde -3258 Apr 24 j 16:35 25°**х** 48'34 min. Earth dist. -3252 Jul 26 j 20:02 7°る47'28 28.92428 AU opposition -3258 Jul 14 j 16:04 24°**x**¹23'39 -0°23'32 direct -3252 Oct 13 i 13:11 6°る22'53 min. Earth dist. -3258 Jul 13 i 16:57 24°**₹**25'15 28.97799 AU evening set -3251 Jan 07 j 13:42 8°**ප**15'16 direct -3258 Sep 30 i 15:48 23°**х** 00′57 evening set -3258 Dec 25 j 18:16 24° 🗷 53'21 conjunction -3251 Jan 23 j 05:22 8° ප් 50'26 -0°53'06 -3251 Jan 23 j 05:22 8°る50'26 0°53'13 minimum elong -3257 Jan 10 j 07:12 25° **2**28'21 -0°24'27 max. Earth dist. -3251 Jan 24 j 06:34 8°る52'49 30.91979 AU conjunction -3257 Jan 10 j 07:12 25°**₹**28'21 0°24'33 -3251 Feb 08 j 00:49 9°る25'59 minimum elong morning rise -3257 Jan 11 j 06:11 25°**✗**30'31 30.97409 AU -3251 May 10 j 12:34 11°**る**24'48 max. Earth dist. retrograde -3251 Jul 29 j 06:52 10°る01'10 28.91669 AU -3257 Jan 25 j 24:00 26°**х** 03′43 morning rise min. Earth dist. -3257 Apr 27 j 07:50 28°**₹**02'21 -3251 Jul 30 j 07:18 9°る59'29 -0°59'16 retrograde opposition -3257 Jul 16 j 06:06 26°**✗**38'58 28.97059 AU -3251 Oct 16 j 00:08 min. Earth dist. direct 8°**る**36'27 -3257 Jul 17 j 04:44 -3250 Jan 10 j 01:10 26°**₹**37'24 -0°28'48 10°る28'52 opposition evening set -3257 Oct 03 j 02:29 25° **₹**14'40 direct 11°る04'04 -0°57'39 -3257 Dec 28 j 05:21 27°**₹**07'05 -3250 Jan 25 j 17:07 evening set conjunction -3250 Jan 25 j 17:07 11°る04'04 0°57'45 minimum elong -3256 Jan 12 j 18:53 27°**∡**142′08 -0°29′21 -3250 Jan 26 j 18:06 11°る06'25 30.91273 AU conjunction max. Earth dist. minimum elong -3256 Jan 12 j 18:53 27°**∡**¹42'08 0°29'27 morning rise -3250 Feb 10 j 13:09 11°**る**39'39 max. Earth dist. -3256 Jan 13 j 18:58 27°**✗¹**44'24 30.96602 AU retrograde -3250 May 13 j 01:16 13°**る**38'32 morning rise -3256 Jan 28 j 12:00 28°**х** 17′32 opposition -3250 Aug 01 j 19:39 12°る13'11 -1°04'05 -3256 Mar 28 j 02:30 0°궁 min. Earth dist. -3250 Jul 31 j 19:55 12°る14'50 28.91036 AU -3256 Apr 28 j 19:58 0°る16'12 -3250 Oct 18 j 09:09 10°る50'08 retrograde direct -3256 May 31 j 04:01 30°R.**✓** -3249 Jan 12 j 12:44 12°る42'36 evening set -3256 Jul 18 j 17:23 28°**∡**151'12 -0°34'02 opposition -3256 Jul 17 j 18:33 28°**✗**52'47 28.96191 AU -3249 Jan 28 j 05:19 13°る17'50 -1°02'06 min. Earth dist. conjunction -3256 Oct 04 j 14:54 -3249 Jan 28 i 05:18 direct 27°×728'26 minimum elong 13°る17'50 1°02'13 -3256 Dec 29 j 16:29 -3249 Jan 29 i 07:30 13°る20'18 30.90696 AU evening set 29°×20'50 max. Earth dist. morning rise -3249 Feb 13 i 01:38 13°る53'26 29°**x** 55'54 -0°34'13 conjunction -3255 Jan 14 j 06:20 retrograde -3249 May 15 j 14:17 15°**る**52'22 minimum elong -3255 Jan 14 i 06:19 29° **2** 55'54 0°34'20 min. Earth dist. -3249 Aug 03 i 06:56 14°る28'44 28.90512 AU max. Earth dist. -3255 Jan 15 i 05:35 29° ₹ 58'06 30.95690 AU opposition -3249 Aug 04 i 07:40 14°**ප**27'01 -1°08'48 -3255 Jan 16 j 01:40 0°궁 direct -3249 Oct 20 j 21:21 13°る03'59 morning rise -3255 Jan 30 j 00:03 0°**云**31'20 -3248 Jan 15 j 00:37 14°る56'30 evening set retrograde -3255 May 01 j 10:30 2°る30'03 min. Earth dist. -3255 Jul 20 j 06:56 1°る06'34 28.95244 AU conjunction -3248 Jan 30 j 17:26 15°る31'46 -1°06'29 opposition -3255 Jul 21 j 06:00 1°る04'58 -0°39'13 minimum elong -3248 Jan 30 j 17:26 15°る31'46 1°06'35 -3255 Sep 04 j 04:06 30°R **✓** max. Earth dist. -3248 Jan 31 j 18:43 15°る34'09 30.90216 AU 29°**∡**⁴42'09 -3255 Oct 07 j 02:25 -3248 Feb 15 j 14:22 16°る07'25 direct morning rise 0°る -3248 May 17 j 05:03 18°**る**06'24 -3255 Nov 08 j 06:44 retrograde 16°ප්41'04 -1°13'26 -3254 Jan 01 j 03:40 1°る34'32 -3248 Aug 05 j 19:54 evening set opposition -3248 Aug 04 j 19:37 16°る42'45 28.90080 AU min. Earth dist. conjunction -3254 Jan 16 j 18:01 2°る09'38 -0°39'02 direct -3248 Oct 22 j 07:14 15°る18'02 minimum elong -3254 Jan 16 j 18:01 2°**る**09'37 0°39'08 evening set -3247 Jan 16 j 12:21 17°る10'38 max. Earth dist. -3254 Jan 17 j 18:13 2°る11'55 30.94708 AU morning rise -3254 Feb 01 j 12:08 2°る45'05 conjunction -3247 Feb 01 j 05:43 17°**ප්**45'56 -1°10'45 -3254 May 03 j 22:46 4°る43'50 minimum elong -3247 Feb 01 i 05:43 17°る45'56 1°10'52 retrograde -3254 Jul 23 j 18:30 3°る18'40 -0°44'20 max. Earth dist. -3247 Feb 02 j 08:16 17°る48'26 30.89799 AU opposition

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3247 in astronomical counting style is the year 3248 BCE in historical counting style. -3247 Feb 17 j 02:53 18°**る**21'36 direct -3241 Nov 07 j 15:32 1°≈00'24 morning rise -3247 May 19 j 17:47 20°る20'40 -3240 Feb 02 j 03:37 2°≈53'22 retrograde evening set -3247 Aug 07 j 07:36 18°る57'03 28.89676 AU min. Earth dist. -3247 Aug 08 j 08:04 18°る55'21 -1°17'57 -3240 Feb 17 j 23:54 conjunction 3°≈28'51 -1°37'22 opposition -3247 Oct 24 j 18:53 -3240 Feb 17 j 23:54 direct 17°る32'20 minimum elong 3°≈28'51 1°37'27 -3240 Feb 19 j 00:25 -3246 Jan 19 j 00:32 max. Earth dist. evening set 19°る25'00 3°≈31'09 30.85510 AU morning rise -3240 Mar 04 j 23:46 4°≈04'41 -3246 Feb 03 j 18:12 20°る00'20 -1°14'55 conjunction retrograde -3240 Jun 04 j 15:04 6°≈03'45 minimum elong -3246 Feb 03 j 18:12 20°**ට**00'20 1°15'01 opposition -3240 Aug 23 j 19:57 4°≈38'18 -1°45'55 max. Earth dist. -3246 Feb 04 j 19:44 20°る02'44 30.89400 AU min. Earth dist. -3240 Aug 22 j 21:33 4°≈39'52 28.85278 AU morning rise -3246 Feb 19 j 15:54 20°る36'02 direct -3240 Nov 09 j 04:06 3°≈14'55 22°る35'09 -3239 Feb 03 j 16:16 retrograde -3246 May 22 j 09:34 evening set 5°≈07'55 opposition -3246 Aug 10 j 20:12 21°**ろ**09'52 -1°22'21 min. Earth dist. -3246 Aug 09 j 19:54 21°る11'33 28.89272 AU conjunction -3239 Feb 19 j 12:45 5°≈43'25 -1°40'38 direct -3246 Oct 27 j 06:07 19°る46'50 minimum elong -3239 Feb 19 j 12:45 5°**≈**43'25 1°40'44 evening set -3245 Jan 21 j 12:50 21°る39'36 max. Earth dist. -3239 Feb 20 j 12:08 5°≈45'37 30.84846 AU morning rise -3239 Mar 07 j 13:08 6°≈19'16 conjunction -3245 Feb 06 j 07:00 22°る14'58 -1°18'59 retrograde -3239 Jun 07 j 04:10 8°≈18'19 minimum elong -3245 Feb 06 j 06:59 22°る14'58 1°19'06 min. Earth dist. -3239 Aug 25 j 09:56 6°≈54'21 28.84686 AU max. Earth dist. -3245 Feb 07 j 09:01 22°る17'25 30.88949 AU opposition -3239 Aug 26 j 07:43 6°≈52'49 -1°49'19 morning rise -3245 Feb 22 j 05:01 22°る50'41 direct -3239 Nov 11 j 13:42 5°≈29'21 retrograde -3245 May 24 j 23:10 24°る49'51 evening set -3238 Feb 06 i 04:57 7°≈22'25 min. Earth dist. -3245 Aug 12 j 08:59 23°る26'12 28.88783 AU opposition -3245 Aug 13 j 08:24 23°る24'34 -1°26'37 conjunction -3238 Feb 22 i 02:01 7°≈57'56 -1°43'44 direct -3245 Oct 29 j 18:49 22°る01'32 -3238 Feb 22 j 02:00 7°≈57'56 1°43'48 minimum elong -3244 Jan 24 j 01:19 23°**る**54'21 max. Earth dist. -3238 Feb 23 i 02:27 8°≈00'13 30.84309 AU evening set -3238 Mar 10 j 02:34 morning rise 8°≈33'47 -3244 Feb 08 j 19:51 24°る29'44 -1°22'55 -3238 Jun 09 j 16:25 conjunction retrograde 10°≈32'48 -3244 Feb 08 j 19:51 -3238 Aug 28 j 19:13 24°る29'44 1°23'01 opposition 9°≈07'17 -1°52'33 minimum elong -3238 Aug 27 j 21:17 -3244 Feb 09 j 20:55 24°る32'06 30.88409 AU max. Earth dist. min. Earth dist. 9°≈08'49 28.84220 AU -3244 Feb 24 j 18:17 -3238 Nov 14 j 01:17 25°る05'30 direct 7°≈43'45 morning rise -3244 May 26 j 13:39 -3237 Feb 08 j 17:52 27°る04'40 9°≈36'53 retrograde evening set -3244 Aug 14 j 20:25 25°**ට**39'23 -1°30'46 opposition -3244 Aug 13 j 20:39 25°る41'02 28.88192 AU -3237 Feb 24 j 15:13 10°≈12'25 -1°46'40 min. Earth dist. conjunction -3244 Oct 31 j 06:42 -3237 Feb 24 j 15:13 direct 24°**る**16'18 minimum elong 10°≈12'25 1°46'46 -3243 Jan 25 j 13:52 26°**ප**09'11 -3237 Feb 25 j 14:32 evening set max. Earth dist. 10°≈14'37 30.83917 AU morning rise -3237 Mar 12 j 16:17 10°≈48'18 conjunction -3243 Feb 10 j 08:47 26°る44'35 -1°26'44 retrograde -3237 Jun 12 j 07:07 12°≈47'17 minimum elong -3243 Feb 10 j 08:46 26°る44'35 1°26'51 min. Earth dist. -3237 Aug 30 j 08:55 11°≈23'18 28.83908 AU max. Earth dist. -3243 Feb 11 j 09:29 26°る46'55 30.87753 AU opposition -3237 Aug 31 j 06:48 11°≈21'46 -1°55'37 morning rise -3243 Feb 26 j 07:36 27°る20'23 direct -3237 Nov 16 j 12:42 9°≈58'11 -3243 May 29 j 01:34 29°る19'33 -3236 Feb 11 j 06:47 11°≈51'24 retrograde evening set -3243 Aug 16 j 10:07 27°る55'48 28.87497 AU min. Earth dist. -3243 Aug 17 j 08:34 27°る54'13 -1°34'47 -3236 Feb 27 j 04:34 12°≈26'57 -1°49'28 opposition conjunction -3243 Nov 02 j 17:54 26°る31'05 -3236 Feb 27 j 04:34 direct minimum elong 12°≈26'57 1°49'32 evening set -3242 Jan 28 i 02:17 28°る23'59 max. Earth dist. -3236 Feb 28 i 04:37 12°≈29'13 30.83657 AU morning rise -3236 Mar 14 i 05:49 13°≈02'51 conjunction -3242 Feb 12 j 21:44 28°る59'26 -1°30'25 -3236 Jun 03 i 09:07 15°**≈** minimum elong -3242 Feb 12 j 21:43 28°る59'26 1°30'31 retrograde -3236 Jun 13 j 19:43 15°≈01'48 max. Earth dist. -3242 Feb 13 i 22:24 29°る01'45 30.87026 AU -3236 Jun 24 j 08:32 15°R≈ -3242 Feb 28 j 20:54 29°る35'14 -3236 Sep 01 j 18:17 13°≈36'18 -1°58'30 morning rise opposition -3242 Mar 12 j 09:55 min. Earth dist. -3236 Aug 31 j 21:05 13°≈37'48 28.83715 AU 0°≈≈ -3236 Nov 18 j 00:58 12°≈12'43 retrograde -3242 May 31 j 15:48 1°2634'23 direct opposition -3242 Aug 19 j 20:28 0°≈09'01 -1°38'39 evening set -3235 Feb 12 j 19:49 14°≈06'00 min. Earth dist. -3242 Aug 18 j 21:24 0°≈10'38 28.86741 AU -3242 Aug 25 j 05:32 30°Rる conjunction -3235 Feb 28 j 17:58 14°≈41'35 -1°52'05 -3235 Feb 28 j 17:58 direct -3242 Nov 05 j 05:47 28°る45'48 minimum elong 14°≈41'35 1°52'10 -3241 Jan 12 j 03:46 -3235 Mar 01 j 17:13 14°≈43'46 30.83532 AU 0°≈ max. Earth dist. evening set -3241 Jan 30 j 15:01 0°≈38'44 -3235 Mar 08 j 22:23 15°≈ -3235 Mar 16 j 19:36 morning rise 15°≈17'30 -3241 Feb 15 j 10:45 conjunction 1°≈14'12 -1°33'58 retrograde -3235 Jun 16 j 10:32 17°≈16'26 minimum elong -3241 Feb 15 j 10:45 1°≈14'11 1°34'04 min. Earth dist. -3235 Sep 03 j 08:05 15°≈52'30 28.83641 AU max. Earth dist. -3241 Feb 16 j 10:32 1°≈16′26 30.86251 AU opposition -3235 Sep 04 j 05:43 15°≈50'58 -2°01'12 morning rise -3241 Mar 03 j 10:25 1°≈50'01 -3235 Oct 06 j 13:47 15°R≈ retrograde -3241 Jun 03 j 03:20 3°≈49'08 direct -3235 Nov 20 j 12:34 14°≈27'21 -3241 Aug 21 j 10:33 2°≈25'14 28.85983 AU -3234 Jan 03 j 09:25 15°**≈** min. Earth dist. -3241 Aug 22 j 08:17 2°≈23'42 -1°42'21 -3234 Feb 15 j 09:00 opposition evening set 16°≈20'45

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3234 in astronomical counting style is the year 3235 BCE in historical counting style. -3234 Mar 03 i 07:32 16°≈56'22 -1°54'31 retrograde -3228 Jul 02 i 05:30 3°**)**€01'28 conjunction -3234 Mar 03 j 07:31 16°≈56'22 1°54'36 -3228 Sep 19 j 13:12 1°\ 36'10 -2°14'48 minimum elong opposition max. Earth dist. -3234 Mar 04 j 06:34 min. Earth dist. -3228 Sep 18 j 20:43 1°**升**37'20 28.82446 AU 16°≈58'31 30.83477 AU -3234 Mar 19 j 09:29 -3228 Dec 05 j 20:02 0°\ 12'11 17°≈32'18 morning rise direct -3234 Jun 18 j 23:42 -3227 Mar 03 j 08:14 2°\cdot\06'08 retrograde 19°≈31'13 evening set -3234 Sep 06 j 17:16 opposition 18°≈05'48 -2°03'44 -3227 Mar 19 j 09:30 min. Earth dist. -3234 Sep 05 j 21:04 18°≈07'13 28.83608 AU conjunction 2°\dagger41'53 -2°06'36 -3227 Mar 19 j 09:30 direct -3234 Nov 22 j 23:56 16°≈42'11 minimum elong 2°**H**41'53 2°06'40 evening set -3233 Feb 17 j 22:25 18°≈35'40 max. Earth dist. -3227 Mar 20 j 03:53 2°**₭**43'36 30.82179 AU morning rise -3227 Apr 04 j 13:22 3°**)** 17′54 conjunction -3233 Mar 05 j 21:24 19°≈11'18 -1°56'48 retrograde -3227 Jul 04 j 17:15 5°**)** 16'21 -3233 Mar 05 j 21:24 -3227 Sep 21 j 08:45 minimum elong 19°≈11'18 1°56'52 min. Earth dist. 3°**¥**52'09 28.82264 AU -3233 Mar 06 j 19:59 -3227 Sep 22 j 00:15 max. Earth dist. 19°≈13'25 30.83448 AU opposition 3°**¥**51'03 -2°15'57 morning rise -3233 Mar 21 j 23:36 19°≈47'15 direct -3227 Dec 08 j 08:23 2°\ 27'00 retrograde -3233 Jun 21 j 14:40 21°≈46'08 evening set -3226 Mar 05 j 21:56 4°¥21'02 min. Earth dist. -3233 Sep 08 j 08:05 20°≈22'13 28.83563 AU opposition -3233 Sep 09 j 04:32 20°≈20'46 -2°06'04 conjunction -3226 Mar 21 j 23:32 4°\\$56'48 -2°07'35 direct -3233 Nov 25 j 12:07 18°≈57'07 minimum elong -3226 Mar 21 j 23:32 4°**¥**56'48 2°07'37 evening set -3232 Feb 20 j 12:03 20°≈50'43 max. Earth dist. -3226 Mar 22 j 16:42 4°**)** 58'24 30.82062 AU morning rise -3226 Apr 07 j 03:47 5° **)** 32'49 conjunction -3232 Mar 07 j 11:17 21°≈26'23 -1°58'54 retrograde -3226 Jul 07 j 07:34 7°**)**€31'11 minimum elong -3232 Mar 07 j 11:17 21°≈26′23 1°58'57 opposition -3226 Sep 24 j 11:13 max. Earth dist. -3232 Mar 08 j 08:35 21°≈28'23 30.83366 AU min. Earth dist. -3226 Sep 23 i 19:27 6°¥07'00 28.82210 AU morning rise -3232 Mar 23 j 13:52 22°≈02'21 direct -3226 Dec 10 j 20:17 4° **)** 41'46 retrograde -3232 Jun 23 j 02:46 24°≈01'12 evening set -3225 Mar 08 j 11:45 6°\ 35'53 -3232 Sep 10 j 16:07 22°≈35'52 -2°08'12 opposition -3232 Sep 09 j 21:24 22°≈37'11 28.83456 AU -3225 Mar 24 j 13:43 7°**)** 11'40 -2°08'22 min. Earth dist. conjunction -3232 Nov 26 j 22:13 -3225 Mar 24 j 13:43 7°**H**11'40 2°08'24 direct 21°212'11 minimum elong -3231 Feb 22 j 01:27 23°≈05'52 -3225 Mar 25 j 06:39 7°**升**13'15 30.82063 AU max. Earth dist. evening set -3225 Apr 09 j 18:08 7°**)**(47'42 morning rise -3225 Jul 09 j 20:27 23°≈41'32 -2°00'48 -3231 Mar 10 j 01:14 9° \(\)45'58 conjunction retrograde opposition -3225 Sep 26 j 22:10 8°\;\;20'42 -2°17'36 -3231 Mar 10 j 01:14 23°≈41'32 2°00'53 minimum elong -3225 Sep 26 j 07:43 8°**升**21'44 28.82291 AU max. Earth dist. -3231 Mar 10 j 22:32 23°≈43'32 30.83216 AU min. Earth dist. -3231 Mar 26 j 03:58 -3225 Dec 13 j 08:22 6°\£56'33 morning rise 24°≈17'31 direct -3231 Jun 25 j 15:16 -3224 Mar 10 j 01:31 8°**)** 50'44 retrograde 26°≈16'19 evening set -3231 Sep 12 j 08:46 min. Earth dist. 24°≈52'20 28.83258 AU -3224 Mar 26 j 03:53 9°**¥**26'33 -2°08'57 opposition -3231 Sep 13 j 03:31 24°≈51'00 -2°10'09 conjunction direct -3231 Nov 29 j 10:46 23°≈27'16 minimum elong -3224 Mar 26 j 03:53 9°\ 26'33 2°08'59 -3230 Feb 24 j 15:14 25°≈21'01 max. Earth dist. -3224 Mar 26 j 20:22 9°**升**28'06 30.82230 AU evening set morning rise -3224 Apr 11 j 08:31 10°**₭**02'35 conjunction -3230 Mar 12 j 15:15 25°≈56'43 -2°02'32 retrograde -3224 Jul 11 j 11:02 12°**)**€00'46 -3230 Mar 12 j 15:14 25°≈56'43 2°02'35 -3224 Sep 28 j 09:03 10°**)** 35'33 -2°18'07 minimum elong opposition -3230 Mar 13 j 10:36 25°≈58'32 30.82979 AU min. Earth dist. -3224 Sep 27 j 18:01 10°**升**36'37 28.82528 AU max. Earth dist. -3230 Mar 28 j 18:27 26°≈32'42 -3224 Dec 14 j 21:20 9°**¥**11'23 morning rise direct -3230 Jun 28 j 04:17 28°≈31'26 -3223 Mar 12 j 15:16 11°**)**€05'39 retrograde evening set opposition -3230 Sep 15 j 14:51 27°≈06'08 -2°11'54 -3223 Mar 28 i 17:55 11°\(\dagger41'29\) -2°09'20 min. Earth dist. -3230 Sep 14 j 21:26 27°≈07'22 28.82999 AU conjunction direct -3230 Dec 01 j 20:28 25°≈42'19 minimum elong -3223 Mar 28 i 17:55 11°**)**(41'29 2°09'22 11°**)** 42'57 30.82534 AU evening set -3229 Feb 27 j 04:53 27°≈36'08 max. Earth dist. -3223 Mar 29 i 09:32 morning rise -3223 Apr 13 i 22:52 12°**₩** 17'32 -3229 Mar 15 j 05:28 28°≈11'51 -2°04'05 -3223 Jul 13 i 23:02 14° ¥ 15'38 conjunction retrograde -3229 Mar 15 j 05:28 28°≈11'51 2°04'09 -3223 Sep 30 j 20:04 12°\ 50'30 -2°18'25 minimum elong opposition max. Earth dist. -3229 Mar 16 j 01:07 28°≈13'42 30.82696 AU min. Earth dist. -3223 Sep 30 j 06:35 12°**升**51′27 28.82899 AU morning rise -3229 Mar 31 j 08:47 28°≈47'51 direct -3223 Dec 17 j 07:47 11°**)** 26'19 -3229 May 07 j 09:09 0°**∀** evening set -3222 Mar 15 j 05:12 13°**¥**20'40 -3229 Jun 30 j 16:02 retrograde 0°\ 46'29 -3229 Aug 25 j 08:24 30°R≈ conjunction -3222 Mar 31 j 08:20 13°**¥**56'32 -2°09'31 min. Earth dist. -3229 Sep 17 j 09:05 29°≈22'24 28.82702 AU -3222 Mar 31 j 08:20 13°**¥**56'32 2°09'33 minimum elong -3229 Sep 18 j 02:04 29°≈21'11 -2°13'27 -3222 Apr 01 j 00:01 13°**¥**58′00 30.82962 AU opposition max. Earth dist. -3229 Dec 04 j 08:24 -3222 Apr 16 j 13:25 14°**)** 32'35 direct 27°≈57'18 morning rise 29°≈51'11 -3222 Jul 16 j 12:20 16°**₩**30'35 evening set -3228 Feb 29 j 18:36 retrograde -3228 Mar 04 j 18:48 0°**∀** opposition -3222 Oct 03 j 06:48 15°**★**05'32 -2°18'31 min. Earth dist. -3222 Oct 02 j 17:18 15°**₭**06'30 28.83353 AU conjunction -3228 Mar 16 j 19:23 0°****26'55 -2°05'26 direct -3222 Dec 19 j 20:11 13°**)**41'21 minimum elong -3228 Mar 16 j 19:23 0°**¥**26'55 2°05'30 evening set -3221 Mar 17 j 19:27 15°**)** 35'49 -3228 Mar 17 j 13:21 0°**)** 28'36 30.82410 AU max. Earth dist. -3228 Apr 01 j 23:07 1°**)** 02'55 -3221 Apr 02 j 22:46 16°**光**11'42 -2°09'30 morning rise conjunction

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3221 in astronomical counting style is the year 3222 BCE in historical counting style. opposition -3221 Apr 02 j 22:46 16°**)** 11'42 2°09'32 -3215 Oct 18 j 10:24 0°Υ51'12 -2°13'16 minimum elong -3221 Apr 03 j 12:33 16°**升**12'59 30.83438 AU min. Earth dist. -3215 Oct 18 j 03:27 0°**Υ**51'42 28.85483 AU max. Earth dist. -3221 Apr 19 j 04:11 16°**¥**47'46 -3215 Nov 19 j 14:25 30°**₹** morning rise -3221 Jul 19 j 01:41 18°**)**(45'41 29°\ 26'36 direct -3214 Jan 04 j 07:44 retrograde $0^{\circ}\Upsilon$ -3221 Oct 05 j 17:45 17°**¥**20'43 -2°18'23 -3214 Feb 18 j 05:46 opposition -3221 Oct 05 j 05:40 1°Y21'32 min. Earth dist. 17°**₭**21'34 28.83841 AU evening set -3214 Apr 02 j 23:20 direct -3221 Dec 22 j 05:43 15°**¥**56'30 -3214 Apr 19 j 04:56 1°Y'57'31 -2°03'56 evening set -3220 Mar 19 j 09:30 17°**)** 51'04 conjunction minimum elong -3214 Apr 19 j 04:57 1°**Υ**57'31 2°03'55 conjunction -3220 Apr 04 j 13:17 18°**升**26'58 -2°09'17 max. Earth dist. -3214 Apr 19 j 11:25 1°Υ58'07 30.85465 AU 2°**Y**33'35 minimum elong -3220 Apr 04 j 13:17 18°**升**26'58 2°09'18 morning rise -3214 May 05 j 11:32 -3220 Apr 05 j 03:07 -3214 Aug 03 j 15:10 4° Y 30'31 max. Earth dist. 18°**¥**28'16 30.83906 AU retrograde -3220 Apr 20 j 18:43 -3214 Oct 20 j 20:58 3° **Y**05'48 -2°11'42 morning rise 19°**)**€03'03 opposition retrograde -3220 Jul 20 j 12:44 21°**₭**00'52 min. Earth dist. -3214 Oct 20 j 15:46 3°**Y**06'11 28.85755 AU opposition -3220 Oct 07 j 04:38 19°**升**35'58 -2°18'03 direct -3213 Jan 06 j 18:57 1°Y41'08 min. Earth dist. -3220 Oct 06 j 17:16 19°**)** 36'47 28.84276 AU evening set -3213 Apr 05 j 13:33 3°Y36'08 direct -3220 Dec 23 j 17:55 18°**¥**11'45 evening set -3219 Mar 21 j 23:53 20°**)**€06′24 conjunction -3213 Apr 21 j 19:32 4°Υ12'07 -2°02'22 minimum elong -3213 Apr 21 j 19:33 4°Υ12'07 2°02'22 conjunction -3219 Apr 07 j 03:51 20°\(\frac{1}{42}'18 -2°08'53 max. Earth dist. -3213 Apr 22 j 01:50 4°Υ12'42 30.85791 AU minimum elong -3219 Apr 07 j 03:52 20°\dagger42'18 2°08'54 morning rise -3213 May 08 j 02:10 4°Y48'11 max. Earth dist. -3219 Apr 07 j 15:23 20°\(\pm\)43'22 30.84314 AU retrograde -3213 Aug 06 i 04:17 6°**Y**44'57 morning rise -3219 Apr 23 i 09:39 21°¥18'23 opposition -3213 Oct 23 i 07:28 5°Y20'18 -2°09'56 retrograde -3219 Jul 23 i 01:25 23°**¥**16′05 min. Earth dist. -3213 Oct 23 i 02:09 5°Υ20'40 28.86128 AU opposition -3219 Oct 09 i 15:29 21°**)** 51'15 -2°17'30 direct -3212 Jan 09 i 08:14 3°Y55'35 -3219 Oct 09 j 05:05 21°**)** 51'59 28.84644 AU -3212 Apr 07 j 03:42 5°Y50'38 min. Earth dist. evening set -3219 Dec 26 j 05:00 20°¥26'57 direct -3218 Mar 24 j 14:10 22°**)** 21'41 -3212 Apr 23 j 09:47 6°Y26'38 -2°00'37 conjunction evening set -3212 Apr 23 j 09:47 6°Y26'38 2°00'37 minimum elong -3212 Apr 23 j 14:28 6°**Υ**27'04 30.86230 AU -3218 Apr 09 j 18:38 22°\f\ 57'37 -2°08'16 conjunction max. Earth dist. -3218 Apr 09 j 18:38 morning rise -3212 May 09 j 16:38 7°**℃**02'43 22°**H**57'37 2°08'17 minimum elong -3218 Apr 10 j 05:57 -3212 Aug 07 j 16:47 8°Y59'21 max. Earth dist. 22°\\$58'40 30.84629 AU retrograde -3212 Oct 24 j 18:04 7° Y 34'44 - 2° 07'58 -3218 Apr 26 j 00:28 23°**)** 33'41 morning rise opposition -3218 Jul 25 j 12:46 25°**₩**31'15 -3212 Oct 24 j 13:49 7°**Υ**35'02 28.86641 AU retrograde min. Earth dist. -3218 Oct 12 j 02:24 24°\(\overline{\pi}\) 06'27 -2°16'45 -3211 Jan 10 j 18:30 6°**Y**10′00 opposition direct -3218 Oct 11 j 17:33 24°**₭**07'05 28.84906 AU -3211 Apr 09 j 17:47 8°**Y**05′07 min. Earth dist. evening set direct -3218 Dec 28 j 16:58 22°**)** 42′06 evening set -3217 Mar 27 j 04:36 24°\ 36'53 conjunction -3211 Apr 26 j 00:19 8°Y41'08 -1°58'42 minimum elong -3211 Apr 26 j 00:20 8°Y41'08 1°58'41 conjunction -3217 Apr 12 j 09:17 25°\ 12'49 -2°07'28 max. Earth dist. -3211 Apr 26 j 05:17 8°**Υ**41'36 30.86814 AU -3217 Apr 12 j 09:17 25°\ 12'49 2°07'29 morning rise -3211 May 12 j 07:07 9°**Υ**17'13 minimum elong 25°**)** 13'41 30.84863 AU -3217 Apr 12 j 18:34 retrograde -3211 Aug 10 j 03:28 11° Y 13'42 max. Earth dist. -3217 Apr 28 j 15:24 25° **)** 48'54 -3211 Oct 27 j 04:27 9°**Y**49'12 -2°05'48 morning rise opposition -3217 Jul 28 j 02:08 27°**)**(46'19 min. Earth dist. -3211 Oct 27 j 00:39 9°Υ49'28 28.87277 AU retrograde -3217 Oct 14 j 13:04 26°**¥**21'32 -2°15'47 -3210 Jan 13 j 06:52 8°Y24'27 opposition direct 10°**Y**19'39 min. Earth dist. -3217 Oct 14 i 04:30 26°\(\frac{1}{22}\)'09 28.85107 AU evening set -3210 Apr 12 j 08:08 direct -3217 Dec 31 i 05:12 24° **)** 57'06 -3210 Apr 28 j 14:45 10°**Y**55'41 -1°56'35 evening set -3216 Mar 28 j 18:53 26°**)** 51'56 conjunction -3210 Apr 28 j 14:45 minimum elong 10°Υ55'41 1°56'34 -3216 Apr 13 j 23:55 27°\H27'53 -2°06'29 max. Earth dist. -3210 Apr 28 i 17:43 10°**Y**55'57 30.87520 AU conjunction -3216 Apr 13 j 23:55 27°\H27'53 2°06'29 morning rise -3210 May 14 j 21:50 11°**Y**31'46 minimum elong max. Earth dist. -3216 Apr 14 j 08:36 27°**)** 28'42 30.85043 AU -3210 Aug 12 j 15:47 13°Y28'08 retrograde -3216 Apr 30 j 06:08 28°**)** 03'58 -3210 Oct 29 j 14:56 12°Y03'44 -2°03'27 morning rise opposition -3216 Jul 21 j 03:24 $0^{\circ}\Upsilon$ 12°**Υ**03'57 28.88027 AU min. Earth dist. -3210 Oct 29 j 11:48 0°**Υ**01'13 10°**Y**38'58 retrograde -3216 Jul 29 j 13:52 direct -3209 Jan 15 j 17:23 12°Υ34'17 -3216 Aug 07 j 02:23 30°R**)**€ evening set -3209 Apr 14 j 22:22 -3216 Oct 15 j 23:51 opposition 28°\ 36'27 -2°14'38 13°**Υ**10'20 -1°54'18 -3216 Oct 15 j 17:02 28°**₭**36'56 28.85282 AU -3209 May 01 j 05:20 min. Earth dist. conjunction 27°**升**11'57 -3209 May 01 j 05:21 13°Υ10'20 1°54'16 direct -3215 Jan 01 j 17:56 minimum elong -3215 Mar 31 j 09:00 29°**)** 06'49 -3209 May 01 j 08:29 13°**Y**10'37 30.88299 AU evening set max. Earth dist. 13°**Υ**46'25 -3209 May 17 j 12:17 morning rise conjunction -3215 Apr 16 j 14:22 29°\(\)42'47 -2°05'18 retrograde -3209 Aug 15 j 02:46 15°**Y**42'40 minimum elong -3215 Apr 16 j 14:23 29°\(\)42'47 2°05'18 opposition -3209 Nov 01 j 01:24 14°**Y**18'23 -2°00'54 max. Earth dist. -3215 Apr 16 j 21:59 29°**₭**43'29 30.85237 AU min. Earth dist. -3209 Oct 31 j 23:43 14°Υ18'30 28.88815 AU -3215 Apr 24 j 07:23 0° γ direct -3208 Jan 18 j 04:19 12°**Y**53'37 -3215 May 02 j 20:48 0°Y18'51 -3208 Apr 16 j 12:45 14°**Y**49′02 morning rise evening set -3215 Aug 01 j 03:19 2°Y15'57 retrograde

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3208 in astronomical counting style is the year 3209 BCE in historical counting style. 15°Υ25'05 -1°51'50 29°**Υ**59'45 28.92820 AU -3208 May 02 j 19:48 min. Earth dist. -3202 Nov 16 i 07:28 conjunction -3208 May 02 j 19:48 15°Υ25'05 1°51'48 -3202 Nov 16 i 03:55 30°RY minimum elong -3208 May 02 j 20:57 15°Υ25'12 30.89104 AU -3201 Feb 02 j 21:39 28°Y35'00 max. Earth dist. direct -3201 Apr 19 j 00:28 -3208 May 19 j 02:57 16°**Y**01'11 0°8 morning rise 17°**Y**57′19 -3208 Aug 16 j 15:30 -3201 May 03 j 16:38 0°**8**30'44 retrograde evening set -3208 Nov 02 j 11:49 16°**Y**33'08 -1°58'10 opposition 16°**Ƴ**33'14 28.89603 AU -3201 May 20 j 00:37 1°806'49 -1°30'09 min. Earth dist. -3208 Nov 02 j 10:24 conjunction 15°**Y**08′21 1°**8**06'50 1°30'05 -3201 May 20 j 00:37 direct -3207 Jan 19 j 15:53 minimum elong -3207 Apr 19 j 03:01 17°Y03'51 -3201 May 19 j 17:29 evening set max. Earth dist. 1°806'10 30.93012 AU -3201 Jun 05 j 07:38 morning rise 1°842'50 conjunction -3207 May 05 j 10:21 17°**Y**39'56 -1°49'11 retrograde -3201 Sep 02 j 02:18 3°**8**37'46 -3207 May 05 j 10:22 17°**Y**39'56 1°49'09 -3201 Nov 18 j 12:35 2°813'55 -1°34'26 minimum elong opposition -3207 May 05 j 10:53 -3201 Nov 18 j 18:11 2°813'31 28.93382 AU max. Earth dist. 17°**Y**39'59 30.89857 AU min. Earth dist. morning rise -3207 May 21 j 17:27 18°**Y**16′01 direct -3200 Feb 05 j 08:46 0°**8**48'44 retrograde -3207 Aug 19 j 02:37 20°Y12'01 evening set -3200 May 05 j 06:31 2°844'30 opposition -3207 Nov 04 j 22:28 18°**Y**47'55 -1°55'16 min. Earth dist. -3207 Nov 04 j 23:03 18°**Y**47'53 28.90313 AU conjunction -3200 May 21 j 14:43 3°**8**20'35 -1°26'29 direct -3206 Jan 22 j 04:39 17°Y23'08 minimum elong -3200 May 21 j 14:44 3°820'36 1°26'26 3°819'58 30.93628 AU evening set -3206 Apr 21 j 17:28 19°**Y**18'42 max. Earth dist. -3200 May 21 j 08:01 morning rise -3200 Jun 06 j 21:28 3°**8**56'35 5°**8**51'21 conjunction -3206 May 08 j 00:59 19°**Y**54'47 -1°46'23 retrograde -3200 Sep 03 j 12:06 minimum elong -3206 May 08 i 00:59 19°**Y**54'47 1°46'21 opposition -3200 Nov 19 j 22:50 4°827'33 -1°30'27 max. Earth dist. -3206 May 07 j 23:47 19°**Υ**54'40 30.90530 AU min. Earth dist. -3200 Nov 20 i 05:34 4°827'04 28.94057 AU morning rise -3206 May 24 j 08:08 20°Y30'52 direct -3199 Feb 06 i 20:02 3°**8**02'19 retrograde -3206 Aug 21 j 15:32 22°Y26'43 evening set -3199 May 07 j 20:26 4°858'06 opposition -3206 Nov 07 j 08:49 21°Υ02'41 -1°52'11 -3206 Nov 07 j 09:35 21°Υ02'38 28.90923 AU -3199 May 24 j 04:34 5°834'11 -1°22'42 min. Earth dist. conjunction -3205 Jan 24 j 18:25 19°**Y**37′51 -3199 May 24 j 04:34 5°**8**34'11 1°22'37 minimum elong direct -3205 Apr 24 j 07:56 21° Y 33'29 -3199 May 23 j 20:14 5°**8**33'25 30.94386 AU max. Earth dist. evening set -3199 Jun 09 j 11:23 6°810'11 morning rise -3205 May 10 j 15:33 22°Y09'34 -1°43'26 -3199 Sep 05 j 23:16 8°804'47 conjunction retrograde -3205 May 10 j 15:34 opposition -3199 Nov 22 j 09:02 6°841'03 -1°26'20 22°**Υ**09'34 1°43'24 minimum elong -3205 May 10 j 12:57 22°Υ09'20 30.91092 AU -3199 Nov 22 j 15:32 6°840'35 28.94878 AU max. Earth dist. min. Earth dist. -3205 May 26 j 22:41 22°**Y**45'38 -3198 Feb 09 j 07:51 5°**8**15'47 morning rise direct -3205 Aug 24 j 03:19 24°**Y**41′20 -3198 May 10 j 10:22 retrograde evening set 7°**8**11'37 23°**Y**17′20 -1°48′57 -3205 Nov 09 j 19:26 opposition -3205 Nov 09 j 22:13 23°**Y**17'08 28.91444 AU -3198 May 26 j 18:36 7°**8**47'43 -1°18'47 min. Earth dist. conjunction direct -3204 Jan 27 j 06:00 21°**Y**'52'27 minimum elong -3198 May 26 j 18:36 7°**8**47'43 1°18'43 -3204 Apr 25 j 22:03 23°Y48'07 max. Earth dist. -3198 May 26 j 10:17 7°**8**46'56 30.95273 AU evening set morning rise -3198 Jun 12 j 01:07 8°**8**23'41 conjunction -3204 May 12 j 05:54 24°\bar{\gamma}24'\bar{1}2 -1°\bar{4}0'\bar{1}9 retrograde -3198 Sep 08 j 08:55 10°818'08 -3204 May 12 j 05:54 24°**Y**'24'12 1°40'17 -3198 Nov 24 j 19:18 8°854'29 -1°22'05 minimum elong opposition -3204 May 12 j 02:39 24°Υ23'54 30.91588 AU min. Earth dist. -3198 Nov 25 j 03:20 8°**と**53'55 28.95823 AU max. Earth dist. -3204 May 28 j 12:58 25°**Y**′00′15 -3197 Feb 11 j 19:28 7°**8**29'14 morning rise direct -3204 Aug 25 j 16:20 26°**Y**55'46 -3197 May 13 j 00:19 9°825'08 retrograde evening set -3204 Nov 11 i 05:47 25° Y 31'49 -1°45'33 opposition -3197 May 29 i 08:28 10°801'13 -1°14'44 min. Earth dist. -3204 Nov 11 j 08:50 25°Υ31'36 28.91900 AU conjunction -3197 May 29 i 08:29 direct -3203 Jan 28 j 20:31 24°\bar{0}6'52 minimum elong 10°801'13 1°14'40 evening set -3203 Apr 28 j 12:22 26°**Y**02'33 max. Earth dist. -3197 May 28 j 22:59 10°800'20 30.96287 AU morning rise -3197 Jun 14 i 14:55 10°837'10 -3203 May 14 i 20:12 26°Y38'38 -1°37'04 retrograde -3197 Sep 10 j 21:09 12°**8**31'30 conjunction -3203 May 14 i 20:13 26°Y38'39 1°37'02 -3197 Nov 27 j 05:31 11°807'57 -1°17'43 minimum elong opposition max. Earth dist. -3203 May 14 j 15:05 26°Υ38'10 30.92037 AU min. Earth dist. -3197 Nov 27 j 13:15 11°**8**07'24 28.96865 AU -3203 May 31 j 03:21 27°**Y**14'41 morning rise direct -3196 Feb 14 j 08:01 9°**8**42'42 29°Y10'00 -3196 May 14 j 14:07 retrograde -3203 Aug 28 j 04:07 evening set 11°**8**38'41 27°**Y**46'05 -1°41'59 opposition -3203 Nov 13 j 16:03 min. Earth dist. -3203 Nov 13 j 20:33 27°**Υ**45'45 28.92350 AU conjunction -3196 May 30 j 22:12 12°814'45 -1°10'36 -3202 Jan 31 j 08:16 26°Y21'02 -3196 May 30 j 22:12 12°**8**14'45 1°10'31 direct minimum elong -3202 May 01 j 02:30 28°Y16'45 -3196 May 30 j 11:56 12°**8**13'48 30.97352 AU evening set max. Earth dist. -3196 Jun 16 j 04:26 12°**8**50'42 morning rise -3202 May 17 j 10:37 28°**Y**′52'51 -1°33'41 -3196 Sep 12 j 08:16 14°**8**44'55 conjunction retrograde minimum elong -3202 May 17 j 10:37 28°**Y**52'51 1°33'38 opposition -3196 Nov 28 j 15:53 13°**8**21'29 -1°13'13 max. Earth dist. -3202 May 17 j 05:27 28°**Y**52'22 30.92500 AU min. Earth dist. -3196 Nov 29 j 01:26 13°**8**20'48 28.97940 AU morning rise -3202 Jun 02 j 17:35 29°**Y**28′53 direct -3195 Feb 15 j 19:14 11°**8**56'14 -3202 Jun 17 j 13:29 0°8 evening set -3195 May 17 j 04:03 13°**8**52'17 -3202 Aug 30 j 14:28 1°824'00 retrograde -3202 Nov 16 j 02:21 0°800'07 -1°38'17 -3195 Jun 02 j 12:07 14°**8**28'22 -1°06'20 opposition conjunction

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3195 in astronomical counting style is the year 3196 BCE in historical counting style. -3195 Jun 02 j 12:08 14°**8**28'22 1°06'15 minimum elong retrograde -3189 Sep 28 i 12:13 0°**I**17'49 max. Earth dist. -3195 Jun 02 j 01:12 14°**8**27'21 30.98422 AU -3189 Oct 31 j 07:41 30°R8 -3195 Jun 16 j 18:56 15°8 opposition -3189 Dec 14 j 16:15 28°854'51 -0°39'14 -3195 Jun 18 j 18:08 15°**8**04'17 -3189 Dec 15 j 07:53 28°853'45 29.03659 AU min. Earth dist. morning rise -3195 Sep 14 j 20:44 16°**8**58'22 -3188 Mar 03 j 09:52 27°829'26 retrograde direct -3195 Dec 01 j 02:05 29°825'43 opposition 15°**8**35'02 -1°08'37 evening set -3188 Jun 02 j 03:55 -3195 Dec 01 j 11:57 -3188 Jun 17 j 16:36 min. Earth dist. 15°**8**34'20 28.98971 AU Π $^{\circ}0$ -3195 Dec 22 j 08:58 15°R₩ 14°**8**09'49 -3188 Jun 18 j 10:41 0°П01'41 -0°34'17 direct -3194 Feb 18 j 09:28 conjunction -3188 Jun 18 j 10:41 -3194 Apr 15 j 23:57 15°8 minimum elong 0°**I**01'41 0°34'12 -3188 Jun 17 j 16:57 evening set -3194 May 19 j 18:09 16°**8**05'56 max. Earth dist. 0°**Д**00'02 31.04027 AU -3188 Jul 04 j 14:39 0°**Ⅲ**37'25 morning rise -3194 Jun 05 j 02:01 16°842'00 -1°01'59 -3188 Sep 29 j 23:17 conjunction retrograde 2°**Ⅲ**30'31 -3194 Jun 05 j 02:01 minimum elong 16°842'00 1°01'55 opposition -3188 Dec 16 j 02:30 1°**I**107'36 -0°34'06 max. Earth dist. -3194 Jun 04 j 13:15 16°**8**40'49 30.99416 AU min. Earth dist. -3188 Dec 16 j 17:34 1°**П**06'32 29.04464 AU morning rise -3194 Jun 21 j 07:50 17°**8**17'54 -3187 Jan 31 j 09:08 30°R₩ retrograde -3194 Sep 17 j 08:38 19°**8**11'51 direct -3187 Mar 05 j 21:46 29°842'09 opposition -3194 Dec 03 j 12:32 17°848'37 -1°03'55 -3187 Apr 08 j 05:00 $0^{\circ}\Pi$ min. Earth dist. -3194 Dec 03 j 23:49 17°**8**47'49 28.99926 AU evening set -3187 Jun 04 j 17:15 1°**Ⅲ**38'27 direct -3193 Feb 20 j 21:19 16°**8**23'23 evening set -3193 May 22 j 07:56 18°**8**19'33 conjunction -3187 Jun 20 j 23:45 2°II14'23 -0°29'28 minimum elong -3187 Jun 20 j 23:46 2°**I**14'23 0°29'22 conjunction -3193 Jun 07 j 15:48 18°**8**55'36 -0°57'33 max. Earth dist. -3187 Jun 20 i 05:39 2°**Ⅱ**12'43 31.04883 AU minimum elong -3193 Jun 07 j 15:48 18°**8**55'36 0°57'28 morning rise -3187 Jul 07 i 03:15 2°II50'06 max. Earth dist. -3193 Jun 07 j 02:50 18°**8**54'24 31.00321 AU retrograde -3187 Oct 02 j 09:08 4°**Ⅱ**43'04 -3193 Jun 23 i 21:13 19°**8**31'29 -3187 Dec 18 j 12:48 3°II20'13 -0°28'56 morning rise opposition -3193 Sep 19 j 19:16 21°825'18 -3187 Dec 19 j 05:12 3°**Ⅱ**19'04 29.05388 AU retrograde min. Earth dist. opposition -3193 Dec 05 j 22:57 20°802'08 -0°59'07 -3186 Mar 08 j 09:13 1°**I**I54'45 direct -3193 Dec 06 j 11:02 20°**8**01'17 29.00770 AU -3186 Jun 07 j 06:33 3°**I**151′06 min. Earth dist. evening set -3192 Feb 23 j 10:50 18°**8**36'53 direct -3192 May 23 j 21:51 20°833'06 -3186 Jun 23 j 12:45 4°II27'00 -0°24'37 conjunction evening set -3186 Jun 23 j 12:46 4°**II**27'00 0°24'32 minimum elong -3192 Jun 09 j 05:24 21°809'08 -0°53'01 -3186 Jun 22 j 18:32 4°**Д**25'19 31.05876 AU conjunction max. Earth dist. -3192 Jun 09 j 05:24 5°**Ⅱ**02'40 21°**8**09'08 0°52'57 -3186 Jul 09 j 15:50 minimum elong morning rise -3192 Jun 08 j 14:13 21°**8**07'44 31.01129 AU -3186 Oct 04 j 20:33 6°∏55'32 max. Earth dist. retrograde -3192 Jun 25 j 10:42 21°**8**44'59 -3186 Dec 20 j 23:09 5°**П**32'46 -0°23'43 morning rise opposition -3192 Sep 21 j 07:25 23°**8**38'40 -3186 Dec 21 j 15:14 5°**Ⅲ**31'38 29.06431 AU retrograde min. Earth dist. opposition -3192 Dec 07 j 09:13 22°**8**15'34 -0°54'15 direct -3185 Mar 10 j 23:20 4°**Ⅲ**07'19 min. Earth dist. -3192 Dec 07 j 22:01 22°814'39 29.01543 AU evening set -3185 Jun 09 j 19:43 6°**Ⅲ**03'42 direct -3191 Feb 24 j 22:24 20°850'16 max. Earth dist. -3185 Jun 25 j 06:19 6°**Д**37'49 31.06979 AU evening set -3191 May 26 j 11:28 22°846'30 -3185 Jun 26 j 01:29 6°П39'35 -0°19'43 conjunction -3191 Jun 11 j 19:03 23°**8**22'32 -0°48'26 -3185 Jun 26 j 01:29 6°П39'35 0°19'37 conjunction minimum elong -3191 Jun 11 j 19:03 23°**8**22'32 0°48'20 -3185 Jul 12 j 04:09 7°**I**I15′13 minimum elong morning rise -3191 Jun 11 j 04:00 23°**8**21'08 31.01866 AU -3185 Oct 07 j 07:51 9°**Ⅱ**08'01 max. Earth dist. retrograde -3191 Jun 27 i 23:54 23°**8**58'21 -3185 Dec 23 i 09:35 7°**Ⅱ**45'19 -0°18'28 morning rise opposition -3191 Sep 23 i 16:59 25°**8**51'53 7°**Ц**44'08 29.07590 AU retrograde min. Earth dist. -3185 Dec 24 i 02:25 -3191 Dec 09 i 19:37 24°**8**28'50 -0°49'18 opposition direct -3184 Mar 12 j 10:47 6°**Ⅱ**19'54 -3191 Dec 10 i 09:52 24°**8**27'50 29.02244 AU 8°II16'20 min. Earth dist. evening set -3184 Jun 11 j 08:49 direct -3190 Feb 27 i 10:22 23°803'31 -3190 May 29 j 01:12 24°**8**59'46 conjunction -3184 Jun 27 j 14:21 8°II52'12 -0°14'48 evening set minimum elong -3184 Jun 27 i 14:21 8°II52'12 0°14'43 -3190 Jun 14 j 08:25 25°**8**35'46 -0°43'46 -3184 Jun 27 j 11:51 8°**Ⅲ**51'58 conjunction behind sun begin 8°**Ⅲ**52'25 -3190 Jun 14 j 08:25 -3184 Jun 27 j 16:52 minimum elong 25°**8**35'46 0°43'41 behind sun end -3184 Jun 26 j 19:36 max. Earth dist. -3190 Jun 13 j 15:32 25°**8**34'12 31.02562 AU max. Earth dist. 8°**Д**50'28 31.08171 AU -3184 Jul 13 j 16:29 morning rise -3190 Jun 30 j 13:06 26°811'34 morning rise 9°**Ⅲ**27'47 retrograde -3190 Sep 26 j 03:25 28°**8**04'56 retrograde -3184 Oct 08 j 18:36 11°**Ⅲ**20'30 -3190 Dec 12 j 05:50 26°841'56 -0°44'18 -3184 Dec 24 j 19:55 9°**I**57'55 -0°13'11 opposition opposition 26°**8**40'56 29.02935 AU -3190 Dec 12 j 20:00 min. Earth dist. -3184 Dec 25 j 13:17 9°**Д**56'42 29.08788 AU min. Earth dist. -3189 Mar 01 j 22:32 25°**8**16'34 direct -3183 Mar 14 j 23:55 8°**Ⅲ**32'32 direct -3189 May 31 j 14:40 27°**8**12'49 -3183 Jun 13 j 22:05 10°**Ⅲ**29'01 evening set evening set -3183 Jun 29 j 06:33 11°**II**02'57 31.09371 AU max. Earth dist. conjunction -3189 Jun 16 j 21:46 27°**8**48'49 -0°39'03 minimum elong -3189 Jun 16 j 21:46 27°**8**48'49 0°38'57 conjunction -3183 Jun 30 j 03:06 11°**I**04'51 -0°09'52 max. Earth dist. -3189 Jun 16 j 05:02 27°**8**47'16 31.03260 AU minimum elong -3183 Jun 30 j 03:05 11°**Ⅱ**04'51 0°09'45 -3189 Jul 03 j 01:57 28°**8**24'35 behind sun begin -3183 Jun 29 j 21:44 11°**II**04'23 morning rise

behind sun end

-3183 Jun 30 j 08:26

11°**Ⅱ**05'20

-3189 Aug 27 j 05:35

 $0^{\circ}\Pi$

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3183 in astronomical counting style is the year 3184 BCE in historical counting style. -3183 Jul 16 i 04:53 11°**Ⅱ**40′25 max. Earth dist. -3177 Jul 13 j 06:20 24°**I**17'19 31.14589 AU morning rise -3183 Oct 11 j 07:22 13°**Ⅲ**33′02 retrograde -3183 Dec 27 j 06:24 12°**Ⅱ**10'33 -0°07'53 conjunction -3177 Jul 14 j 06:08 24°II19'32 0°19'53 opposition -3183 Dec 28 j 00:10 0°20'00 12°**Д**09'18 29.09975 AU -3177 Jul 14 j 06:07 24°**Ⅱ**19'32 min. Earth dist. minimum elong -3182 Mar 17 j 12:20 -3177 Jul 30 j 04:34 24°**I**54'50 direct 10°**Ⅱ**45'12 morning rise -3182 Jun 16 j 11:13 12°**Ⅲ**41'44 -3177 Oct 24 j 18:48 26°**Ⅱ**46'55 evening set retrograde -3176 Jan 09 j 22:27 25°**Ⅲ**24'42 0°23'47 opposition -3182 Jul 02 j 15:55 conjunction 13°**Ⅱ**17'32 -0°04'56 min. Earth dist. -3176 Jan 10 j 20:01 25°**Ⅲ**23'12 29.14921 AU -3182 Jul 02 j 15:56 minimum elong 13°**Ⅱ**17'32 0°04'50 direct -3176 Mar 30 j 13:58 23°**Ⅲ**59'15 -3182 Jul 02 j 09:32 -3176 Jun 29 j 16:29 behind sun begin 13°**Ⅱ**16'58 evening set 25°**I**55'49 behind sun end -3182 Jul 02 j 22:20 13°**Ⅱ**18'06 -3182 Jul 01 j 19:46 13°**Д**15'40 31.10513 AU -3176 Jul 15 j 18:05 26°**Ⅲ**31'23 0°24'45 max. Earth dist. conjunction -3182 Jul 18 j 17:02 -3176 Jul 15 j 18:05 morning rise 13°**Ⅲ**53′03 minimum elong 26°**Ⅲ**31'23 0°24'51 retrograde -3182 Oct 13 j 16:48 15°**Ⅱ**45'36 max. Earth dist. -3176 Jul 14 j 17:28 26°**Ⅱ**29'06 31.15202 AU opposition -3182 Dec 29 j 17:05 14°**Ⅲ**23'12 -0°02'35 morning rise -3176 Jul 31 j 16:00 27°**Ⅱ**06'38 min. Earth dist. -3182 Dec 30 j 12:15 14°**Д**21'51 29.11068 AU retrograde -3176 Oct 26 j 05:30 28°**Ⅱ**58'39 direct -3181 Mar 20 j 01:02 12°**Ⅲ**57'52 opposition -3175 Jan 11 j 09:02 27°**Ⅲ**36′26 0°28'58 evening set -3181 Jun 19 j 00:27 14°**I**I54'26 min. Earth dist. -3175 Jan 12 j 07:12 27°**Д**34'54 29.15563 AU asc. node -3181 Jun 26 j 18:30 15°**Ⅱ**11'26 direct -3175 Apr 02 j 01:07 26°**Ⅱ**10'58 max. Earth dist. -3181 Jul 04 j 06:37 15°**Д**28'10 31.11556 AU evening set -3175 Jul 02 j 04:52 28°**Ⅲ**07'32 max. Earth dist. -3175 Jul 17 j 06:09 28°**Д**40'50 31.15864 AU conjunction -3181 Jul 05 i 04:34 15°**II**30'12 0°00'07 -3181 Jul 05 i 04:33 15°**Ⅲ**30′12 0°00'14 conjunction -3175 Jul 18 i 06:03 28°II43'04 0°29'35 minimum elong behind sun begin -3181 Jul 04 j 22:04 15°**Ⅲ**29'37 minimum elong -3175 Jul 18 i 06:03 28°**Ⅱ**43'04 0°29'42 behind sun end -3181 Jul 05 j 11:03 15°**Ⅲ**30'46 morning rise -3175 Aug 03 j 03:15 29°**Ⅱ**18'16 -3181 Jul 21 j 05:18 16°**Ⅱ**05'40 -3175 Aug 23 j 08:27 0ಂತಾ morning rise -3181 Oct 16 j 03:43 17°**Ⅲ**58′07 -3175 Oct 28 j 15:35 1°9510'12 retrograde retrograde -3180 Jan 01 j 03:42 16°**Ⅱ**35'47 -3174 Jan 06 j 14:54 0°02'44 30°R ∏ opposition -3180 Jan 01 j 22:42 16°**Ⅲ**34'28 29.12056 AU -3174 Jan 13 j 19:48 29°II48'02 0°34'06 min. Earth dist. opposition -3180 Mar 21 j 13:11 15°**Ⅱ**10'27 -3174 Jan 14 j 18:03 29°**Д**46'29 29.16258 AU min. Earth dist. direct -3180 Jun 20 j 13:20 17°**Ⅲ**07′02 -3174 Apr 04 j 14:47 direct 28°**Ⅲ**22'34 evening set -3174 Jun 25 j 17:39 000 -3180 Jul 06 j 17:08 17°**I**I42'46 0°05'09 -3174 Jul 04 j 17:15 evening set 0°9519'08 conjunction -3180 Jul 06 j 17:08 17°**Ⅱ**42'46 0°05'15 minimum elong -3180 Jul 06 j 10:47 17°**Ⅲ**42'12 -3174 Jul 20 j 17:40 0°954'37 0°34'21 behind sun begin conjunction -3180 Jul 06 j 23:29 17°**Ⅲ**43'20 -3174 Jul 20 j 17:39 behind sun end minimum elong 0°954'37 0°34'27 0°552'17 31.16605 AU -3180 Jul 05 j 19:17 17°**Ⅱ**40'45 31.12472 AU -3174 Jul 19 j 16:40 max. Earth dist. max. Earth dist. morning rise -3180 Jul 22 j 17:13 18°**Ⅲ**18'12 morning rise -3174 Aug 05 j 14:22 1°529'46 retrograde -3180 Oct 17 j 12:44 20°**Ⅱ**10'34 retrograde -3174 Oct 31 j 03:47 3°521'40 -3179 Jan 02 j 14:29 18°**耳**48'17 0°08'02 opposition -3173 Jan 16 j 06:32 1°959'32 0°39'11 opposition min. Earth dist. -3179 Jan 03 j 11:09 18°**Ⅱ**46'50 29.12911 AU min. Earth dist. -3173 Jan 17 j 04:24 1°958'01 29.17062 AU -3179 Mar 24 j 00:33 17°**Ⅲ**22'56 -3173 Apr 07 j 03:18 0°934'05 direct direct -3179 Jun 23 j 02:24 19°**Ⅱ**19'31 -3173 Jul 07 j 05:24 2°530'42 evening set evening set max. Earth dist. -3179 Jul 08 j 06:26 19°**Д**53'03 31.13270 AU max. Earth dist. -3173 Jul 22 j 05:31 3°503'55 31.17457 AU -3179 Jul 09 i 05:38 19°II55'13 0°10'04 -3173 Jul 23 i 05:23 conjunction conjunction 3°506'08 0°39'05 minimum elong -3179 Jul 09 i 05:37 19°**Ⅱ**55'13 0°10'11 minimum elong -3173 Jul 23 i 05:22 3°906'08 0°39'12 -3179 Jul 09 i 00:26 19°**∏**54'45 behind sun begin morning rise -3173 Aug 08 i 01:17 3°9541'14 behind sun end -3179 Jul 09 i 10:49 19°**Ⅲ**55'40 retrograde -3173 Nov 02 j 13:03 5°933'07 morning rise -3179 Jul 25 i 05:16 20°**Ⅲ**30'36 opposition -3172 Jan 18 i 17:25 4°511'02 0°44'12 -3179 Oct 19 j 23:22 22°II22'52 min. Earth dist. -3172 Jan 19 j 15:59 4°909'29 29.17963 AU retrograde -3178 Jan 05 j 00:59 21°II00'37 0°13'18 direct -3172 Apr 08 j 15:54 2°945'39 opposition -3178 Jan 05 j 21:22 20°**Д**59'12 29.13648 AU -3172 Jul 08 j 17:33 4°9542'17 min. Earth dist. evening set direct -3178 Mar 26 j 12:42 19°**Ⅱ**35'14 evening set -3178 Jun 25 j 15:19 21°**Ⅲ**31'49 conjunction -3172 Jul 24 j 16:46 5°517'40 0°43'45 minimum elong -3172 Jul 24 j 16:46 5°9517'40 0°43'51 conjunction -3178 Jul 11 j 18:03 22°**I**107'28 0°15'00 max. Earth dist. -3172 Jul 23 j 15:57 5°515'22 31.18401 AU -3178 Jul 11 j 18:03 22°**Ⅱ**07'28 0°15'05 -3172 Aug 09 j 12:15 5°952'44 minimum elong morning rise -3178 Jul 11 j 15:56 22°**Ⅲ**07'17 -3172 Nov 03 j 23:54 7°5544'36 behind sun begin retrograde -3178 Jul 11 j 20:11 22°**Ⅲ**07'40 -3171 Jan 20 j 04:11 0°49'10 behind sun end opposition 6°9522'37 22°**Д**05'16 31.13955 AU -3171 Jan 21 j 01:59 max. Earth dist. -3178 Jul 10 j 18:23 min. Earth dist. 6°521'06 29.18931 AU morning rise -3178 Jul 27 j 17:03 22°**Ⅱ**42'49 direct -3171 Apr 11 j 03:50 4°957'16 retrograde -3178 Oct 22 j 08:36 24°**Ⅲ**35′00 evening set -3171 Jul 11 j 05:39 6°953'57 opposition -3177 Jan 07 j 11:48 23°**I**12'46 0°18'34 max. Earth dist. -3171 Jul 26 j 04:15 7°527'04 31.19368 AU min. Earth dist. -3177 Jan 08 j 09:37 23°**Ⅱ**11'14 29.14306 AU -3177 Mar 29 j 00:20 21°**II**47'21 -3171 Jul 27 j 04:22 7°529'18 0°48'22 direct conjunction -3177 Jun 28 j 03:54 23°**Ⅱ**43'55 -3171 Jul 27 j 04:22 7°**©**29'18 0°48'29 evening set minimum elong

Planetary Pheno	omena of Neptune f	from -3400	through -2898	B (UT), Astrodien	st AG 18-Feb-2025	14:23,	page 19
Attention, astronom	nical year style is used: Th	e year -3171	in astronomical co	unting style is the year	r 3172 BCE in historical c	ounting style.	
morning rise	-3171 Aug 11 j 23:02	8° 5 04'19		conjunction	-3164 Aug 11 j 10:43	22° © 50'28	1°18'14
retrograde	-3171 Nov 06 j 09:11	9° © 56'11		minimum elong	-3164 Aug 11 j 10:42	22° © 50'28	1°18'20
opposition	-3170 Jan 22 j 15:08	8° © 34'17	0°54'03	morning rise	-3164 Aug 27 j 00:46	23° © 25'08	
min. Earth dist.	-3170 Jan 23 j 14:12	8°532'41	29.19898 AU	retrograde	-3164 Nov 21 j 08:37	25°516'56	
direct	-3170 Apr 13 j 14:55	7° 5 09'00		opposition	-3163 Feb 06 j 21:25	23°955'07	1°25'37
evening set	-3170 Jul 13 j 17:51	9° © 05'42		min. Earth dist.	-3163 Feb 07 j 21:53	23°553'26	29.23975 AU
				direct	-3163 Apr 29 j 04:15	22°529'53	
conjunction	-3170 Jul 29 j 15:49	9° 5 341'01	0°52'54	evening set	-3163 Jul 29 j 04:04	24°526'29	
minimum elong	-3170 Jul 29 j 15:48	9° 5 341'01	0°53'00				
max. Earth dist.	-3170 Jul 28 j 14:58	9° © 38'42	31.20315 AU	conjunction	-3163 Aug 13 j 21:17	25° © 01'25	1°22'05
morning rise	-3170 Aug 14 j 09:56	10°9516'00		minimum elong	-3163 Aug 13 j 21:17	25° © 01'25	1°22'12
retrograde	-3170 Nov 08 j 19:55	12° © 07'52		max. Earth dist.	-3163 Aug 12 j 19:22	24°959'00	31.24059 AU
opposition	-3169 Jan 25 j 02:11	10°9546'02	0°58'52	morning rise	-3163 Aug 29 j 10:50	25°536'03	
min. Earth dist.	-3169 Jan 26 j 00:30	10°5544'29	29.20810 AU	retrograde	-3163 Nov 23 j 19:26	27°527'50	
direct	-3169 Apr 16 j 02:34	9° 5 20'48		opposition	-3162 Feb 09 j 08:35	26°505'59	1°29'40
evening set	-3169 Jul 16 j 05:47	11° © 17'31		min. Earth dist.	-3162 Feb 10 j 07:53	26°9504'23	29.24340 AU
max. Earth dist.	-3169 Jul 31 j 02:08		31.21169 AU	direct	-3162 May 01 j 17:10	24°9540'44	
				evening set	-3162 Jul 31 j 15:16	26°937'18	
conjunction	-3169 Aug 01 j 03:07	11° © 52'47	0°57'22	max. Earth dist.	-3162 Aug 15 j 07:11		31.24450 AU
minimum elong	-3169 Aug 01 j 03:07	11°952'47		max. Earth dist.	5102 Hug 15 j 07.11	2, 00,00	31.21130710
morning rise	-3169 Aug 16 j 20:30	12°927'43	0 37 20	conjunction	-3162 Aug 16 j 07:55	27°©12'12	1°25'49
retrograde	-3169 Nov 11 j 05:00	14°9519'36		minimum elong	-3162 Aug 16 j 07:54	27°512'12	
-	3	14 \$1930 12°\$57'48	1°03'35	Č		27°5946'46	1 23 34
opposition min. Earth dist.	-3168 Jan 27 j 13:23			morning rise	-3162 Aug 31 j 20:39	27 \$340 40 29°\$38'33	
	-3168 Jan 28 j 12:56		29.21625 AU	retrograde	-3162 Nov 26 j 04:49		1022125
direct	-3168 Apr 17 j 13:40	11°532'37		opposition	-3161 Feb 11 j 20:04	28°516'42	
evening set	-3168 Jul 17 j 17:47	13° © 29'20		min. Earth dist.	-3161 Feb 12 j 19:53		29.24790 AU
	2160 4 02:1420	1 40 00 410 4	1001111	direct	-3161 May 04 j 05:22	26°951'29	
conjunction	-3168 Aug 02 j 14:29	14°904'34		evening set	-3161 Aug 03 j 02:17	28°5548'00	
minimum elong	-3168 Aug 02 j 14:29	14° © 04'34				_	
max. Earth dist.	-3168 Aug 01 j 13:27		31.21917 AU	conjunction	-3161 Aug 18 j 18:10	29° © 22'50	
morning rise	-3168 Aug 18 j 07:14	14° © 39'27		minimum elong	-3161 Aug 18 j 18:09	29° © 22'50	
retrograde	-3168 Nov 12 j 14:50	16° © 31'19		max. Earth dist.	-3161 Aug 17 j 17:31		31.24954 AU
opposition	-3167 Jan 29 j 00:24	15° © 09'33		morning rise	-3161 Sep 03 j 06:23	29° © 57'22	
min. Earth dist.	-3167 Jan 29 j 23:44	15° © 07'57	29.22302 AU		-3161 Sep 04 j 11:19	0 ° Ω	
direct	-3167 Apr 20 j 02:08	13° © 44'22		retrograde	-3161 Nov 28 j 14:49	1° Ω 49'10	
evening set	-3167 Jul 20 j 05:50	15° © 41'06		opposition	-3160 Feb 14 j 07:22	0° Ω 27'20	1°37'22
max. Earth dist.	-3167 Aug 03 j 23:48	16° © 13'51	31.22521 AU	min. Earth dist.	-3160 Feb 15 j 05:42	0° Ω 25'48	29.25344 AU
					-3160 Mar 02 j 05:13	30° ₹ 🥯	
conjunction	-3167 Aug 05 j 01:47	16° © 16'16	1°06'01	direct	-3160 May 05 j 17:46	29° © 02'08	
minimum elong	-3167 Aug 05 j 01:47	16° © 16'16	1°06'07		-3160 Jul 06 j 06:29	$\mathfrak{O}^{\circ} \mathfrak{O}$	
morning rise	-3167 Aug 20 j 17:54	16° © 51'07		evening set	-3160 Aug 04 j 13:18	0° Ω 58'39	
retrograde	-3167 Nov 15 j 01:45	18°9542'58		max. Earth dist.	-3160 Aug 19 j 04:23	1° Ω 31'11	31.25550 AU
opposition	-3166 Jan 31 j 11:39	17° © 21'13	1°12'44		• •		
min. Earth dist.	-3166 Feb 01 j 11:34	17° © 19'34	29.22856 AU	conjunction	-3160 Aug 20 j 04:34	1° Ω 33'27	1°32'54
direct	-3166 Apr 22 j 12:35	15° © 56'02		minimum elong	-3160 Aug 20 j 04:34	1° Ω 33'27	1°32'58
evening set	-3166 Jul 22 j 17:33	17° © 52'45		morning rise	-3160 Sep 04 j 16:07	2° Ω 07'56	
max. Earth dist.	-3166 Aug 06 j 11:39		31.23006 AU	retrograde	-3160 Nov 29 j 23:46	3° Ω 59'47	
				opposition	-3159 Feb 15 j 18:41	2° Ω 37'58	1°41'00
conjunction	-3166 Aug 07 j 12:56	18° © 27'51	1°10'12	min. Earth dist.	-3159 Feb 16 j 17:34		29.25993 AU
minimum elong	-3166 Aug 07 j 12:55	18° © 27'51	1°10'17	direct	-3159 May 08 j 04:06	1° Ω 12'50	
morning rise	-3166 Aug 23 j 04:16	19° 5 02'39	1 10 17	evening set	-3159 Aug 07 j 00:17	3° Ω 09'20	
retrograde	-3166 Nov 17 j 11:41	20°954'29		evening set	-5157 Aug 07 J 00.17	3 860720	
opposition	-3165 Feb 02 j 22:57	19° © 32'43	1°17'08	conjunction	-3159 Aug 22 j 14:54	3° Ω 44'06	1°36'14
min. Earth dist.	-3165 Feb 03 j 23:04		29.23283 AU	minimum elong	-3159 Aug 22 j 14:53	3° Ω 44'06	
	-	18°907'32	29.23263 AU	max. Earth dist.			31.26226 AU
direct	-3165 Apr 25 j 02:41				-3159 Aug 21 j 15:30		31.20220 AU
evening set	-3165 Jul 25 j 05:18	20° © 04'13		morning rise	-3159 Sep 07 j 01:49	4° Ω 18'33	
	2165 1 00:22 51	200	101.41.6	retrograde	-3159 Dec 02 j 09:21	6° Ω 10'27	1044120
conjunction	-3165 Aug 09 j 23:51	20°539'16		opposition	-3158 Feb 18 j 06:11	4° Ω 48'40	
minimum elong	-3165 Aug 09 j 23:51	20°539'16		min. Earth dist.	-3158 Feb 19 j 04:13		29.26675 AU
max. Earth dist.	-3165 Aug 08 j 21:25		31.23390 AU	direct	-3158 May 10 j 15:51	3° Ω 23'37	
morning rise	-3165 Aug 25 j 14:42	21° © 14'00		evening set	-3158 Aug 09 j 11:11	5° Ω 20'07	
retrograde	-3165 Nov 19 j 23:51	23° © 05'49		max. Earth dist.	-3158 Aug 24 j 01:22	5° Ω 52'37	31.26903 AU
opposition	-3164 Feb 05 j 10:05	21° © 44'02					
min. Earth dist.	-3164 Feb 06 j 09:53		29.23649 AU	conjunction	-3158 Aug 25 j 01:01	5° Ω 54'50	
direct	-3164 Apr 26 j 15:20	20°5518'49		minimum elong	-3158 Aug 25 j 01:01	5° Ω 54'50	1°39'31
evening set	-3164 Jul 26 j 16:38	22° © 15'27		morning rise	-3158 Sep 09 j 11:23	6° Ω 29'15	
max. Earth dist.	-3164 Aug 10 j 09:27	22°5548'06	31.23725 AU	retrograde	-3158 Dec 04 j 20:34	8° Ω 21'14	

Planetary Pheno	omena of Neptune f	from -3400	through -2898	3 (UT), Astrodien	st AG 18-Feb-2025	14:23,	page 20
	nical year style is used: Th						
opposition	-3157 Feb 20 j 17:51	6° Ω 59'29		conjunction	-3151 Sep 08 j 23:17	21° Ω 11'07	1°57'38
min. Earth dist.	-3157 Feb 21 j 15:54		29.27354 AU	minimum elong	-3151 Sep 08 j 23:17	21° Ω 11'07	
direct	-3157 May 13 j 01:31	5° Ω 34'31		max. Earth dist.	-3151 Sep 08 j 01:47		31.29065 AU
evening set	-3157 Aug 11 j 22:00	7° Ω 31'00		morning rise	-3151 Sep 24 j 05:47	21° Ω 45'16	
		, 000		retrograde	-3151 Dec 19 j 21:19	23° Ω 37'42	
conjunction	-3157 Aug 27 j 11:18	8° Ω 05'40	1°42'30	opposition	-3150 Mar 08 j 04:58	22°Ω15'52	2°06'42
minimum elong	-3157 Aug 27 j 11:18	8°Ω05'40		min. Earth dist.	-3150 Mar 09 j 01:37		29.29232 AU
max. Earth dist.	-3157 Aug 26 j 12:51		31.27546 AU	direct	-3150 May 28 j 16:01	20° Ω 51′09	27.27232 110
morning rise	-3157 Aug 20 j 12:51	8° Ω 40′03	31.27340 AU	evening set	-3150 Aug 26 j 23:49	20° € 3107	
retrograde	-3157 Dec 07 j 06:40	10°Ω32'06		evening set	-5150 Aug 20 j 25.47	22 00-721	
-	-	9° Ω 10'24		:	2150 0 11:00.40	23° Ω 21'43	1050125
opposition	-3156 Feb 23 j 05:30			conjunction	-3150 Sep 11 j 08:49		1°59'35
min. Earth dist.	-3156 Feb 24 j 03:31		29.27957 AU	minimum elong	-3150 Sep 11 j 08:49	23° Ω 21'43	1°59'38
direct	-3156 May 14 j 14:26	7° Ω 45'30		max. Earth dist.	-3150 Sep 10 j 12:36		31.29108 AU
evening set	-3156 Aug 13 j 08:54	9° Ω 41'59		morning rise	-3150 Sep 26 j 14:49	23° Ω 55'50	
				retrograde	-3150 Dec 22 j 06:12	25° Ω 48'19	
conjunction	-3156 Aug 28 j 21:25	10° Ω 16'36		opposition	-3149 Mar 10 j 17:01	24° Ω 26'27	
minimum elong	-3156 Aug 28 j 21:24	10° Ω 16′36		min. Earth dist.	-3149 Mar 11 j 12:20		29.29299 AU
max. Earth dist.	-3156 Aug 27 j 22:00	10° Ω 14'25	31.28096 AU	direct	-3149 May 31 j 04:06	23° Ω 01'46	
morning rise	-3156 Sep 13 j 06:39	10° Ω 50'56		evening set	-3149 Aug 29 j 09:59	24° Ω 57'53	
retrograde	-3156 Dec 08 j 19:18	12° Ω 43′05					
opposition	-3155 Feb 24 j 17:16	11° Ω 21′23	1°54'04	conjunction	-3149 Sep 13 j 18:20	25° Ω 32'13	2°01'21
min. Earth dist.	-3155 Feb 25 j 14:42	11° Ω 19'55	29.28458 AU	minimum elong	-3149 Sep 13 j 18:20	25° Ω 32'13	2°01'25
direct	-3155 May 17 j 02:00	9° £ 56'32		max. Earth dist.	-3149 Sep 12 j 22:12		31.29212 AU
evening set	-3155 Aug 15 j 19:38	11° Ω 53'01		morning rise	-3149 Sep 28 j 23:58	26° Ω 06'19	31.2,212110
max. Earth dist.	-3155 Aug 30 j 09:25		31.28518 AU	retrograde	-3149 Dec 24 j 17:12	27° Ω 58'52	
max. Earth dist.	5155 Aug 50 j 07.25	12 062331	31.20310710	opposition	-3148 Mar 12 j 04:58	26°Ω36'58	2°10'30
agniumation	2155 Aug 21: 07:20	12° Ω 27'36	1°48'10		-3148 Mar 12 j 23:43		29.29462 AU
conjunction	-3155 Aug 31 j 07:39			min. Earth dist.			29.29402 AU
minimum elong	-3155 Aug 31 j 07:39	12° Ω 27'36	1°48'16	direct	-3148 Jun 01 j 13:46	25° Ω 12'20	
morning rise	-3155 Sep 15 j 16:07	13° Ω 01'53		evening set	-3148 Aug 30 j 19:56	27° Ω 08'24	
retrograde	-3155 Dec 11 j 04:49	14° Ω 54'06		max. Earth dist.	-3148 Sep 14 j 09:34	27° & l 40'58	31.29414 AU
opposition	-3154 Feb 27 j 05:13	13° Ω 32′24					
min. Earth dist.	-3154 Feb 28 j 03:19		29.28815 AU	conjunction	-3148 Sep 15 j 03:56	27° Ω 42'42	
direct	-3154 May 19 j 14:15	12° Ω 07'37		minimum elong	-3148 Sep 15 j 03:55	27° Ω 42'42	2°03'01
evening set	-3154 Aug 18 j 06:28	14° Ω 04'04		morning rise	-3148 Sep 30 j 09:00	28° Ω 16'46	
					-3148 Dec 02 j 15:58	0° m⊅	
conjunction	-3154 Sep 02 j 17:42	14° Ω 38'35	1°50'47	retrograde	-3148 Dec 26 j 02:46	0° m/09'25	
minimum elong	-3154 Sep 02 j 17:41	14° Ω 38'35	1°50'51		-3147 Jan 19 j 04:18	30° ₽ Ω	
max. Earth dist.	-3154 Sep 01 j 18:46		31.28812 AU	opposition	-3147 Mar 14 j 17:06	28° Ω 47'30	2°12'08
	-3154 Sep 12 j 06:23	15° Ω		min. Earth dist.	-3147 Mar 15 j 11:08		29.29695 AU
morning rise	-3154 Sep 18 j 01:47	15° Ω 12'51		direct	-3147 Jun 04 j 02:13	27° Ω 22'56	
retrograde	-3154 Dec 13 j 16:26	17° Ω 05'07		evening set	-3147 Sep 02 j 05:56	29° Ω 18'57	
opposition	-3153 Mar 01 j 17:06	15° Ω 43'25	1°59'39	evening sec	51.7 5 c p	2) 001007	
min. Earth dist.	-3153 Mar 02 j 14:03		29.29048 AU	conjunction	-3147 Sep 17 j 13:15	29° Ω 53'13	2004:23
iiiii. Eartii tiist.	-3153 Mar 29 j 14:43	15°RΩ	29.29048 AU	minimum elong	-3147 Sep 17 j 13:15	29° Ω 53'13	
Ji	-	13 ₹87 14° Ω 18'39		_	-3147 Sep 17 j 13:13		31.29683 AU
direct	-3153 May 22 j 03:16			max. Earth dist.			31.29083 AU
	-3153 Jul 12 j 14:28	15° Ω			-3147 Sep 20 j 13:19	0° m/y	
evening set	-3153 Aug 20 j 16:54	16° Ω 15'03	21 200 7 7 1 7 7	morning rise	-3147 Oct 02 j 18:05	0° m/27'15	
max. Earth dist.	-3153 Sep 04 j 05:42	16° 3′ 47′29	31.28975 AU	retrograde	-3147 Dec 28 j 15:11	2° m/20'01	
		_		opposition	-3146 Mar 17 j 05:15	0° m ,58′06	
conjunction	-3153 Sep 05 j 03:40	16° Ω 49'33		min. Earth dist.	-3146 Mar 17 j 22:03		29.29992 AU
minimum elong	-3153 Sep 05 j 03:40	16° Ω 49'33	1°53'18		-3146 Apr 25 j 14:17	30°R ℳ	
morning rise	-3153 Sep 20 j 11:07	17° Ω 23'46		direct	-3146 Jun 06 j 12:20	29° £ 33′36	
retrograde	-3153 Dec 16 j 02:37	19° Ω 16′05			-3146 Jul 17 j 06:35	0° m)	
opposition	-3152 Mar 03 j 05:07	17° Ω 54'21	2°02'10	evening set	-3146 Sep 04 j 15:47	1° m 29'35	
min. Earth dist.	-3152 Mar 04 j 02:51		29.29164 AU				
direct	-3152 May 23 j 16:00	16° Ω 29'37		conjunction	-3146 Sep 19 j 22:47	2° m 03'49	2°05'38
evening set	-3152 Aug 22 j 03:24	18° Ω 25'57		minimum elong	-3146 Sep 19 j 22:47	2° m 03'49	
				max. Earth dist.	-3146 Sep 19 j 05:55		31.29986 AU
conjunction	-3152 Sep 06 j 13:31	19° Ω 00'24	1°55'31	morning rise	-3146 Oct 05 j 03:04	2° Mp 37'51	51.27700 AU
minimum elong	-3152 Sep 06 j 13:31	19° Ω 00′24		retrograde	-3146 Dec 31 j 01:07	4° Mp 30'43	
_				-	-		2014140
max. Earth dist.	-3152 Sep 05 j 15:34		31.29049 AU	opposition	-3145 Mar 19 j 17:37	3° Mp 08'48	
morning rise	-3152 Sep 21 j 20:33	19° Ω 34'35		min. Earth dist.	-3145 Mar 20 j 10:35		29.30291 AU
retrograde	-3152 Dec 17 j 12:32	21° Ω 26'57		direct	-3145 Jun 08 j 23:32	1° Mp 44'24	
opposition	-3151 Mar 05 j 16:52	20° Ω 05′10		evening set	-3145 Sep 07 j 01:39	3° Mp 40'20	
min. Earth dist.	-3151 Mar 06 j 13:13		29.29202 AU				
direct	-3151 May 26 j 05:03	18° Ω 40′26		conjunction	-3145 Sep 22 j 08:04	4° Mp 14'32	
evening set	-3151 Aug 24 j 13:45	20° Ω 36'43		minimum elong	-3145 Sep 22 j 08:04	4° Mp 14'32	2°06'46

Planetary Phen	omena of Neptune f	From -3400	through -2898	3 (UT), Astrodien	st AG 18-Feb-2025	14:23,	page 21
	nical year style is used: Th						
max. Earth dist.	-3145 Sep 21 j 15:04	4° Mp 12'56	31.30272 AU	conjunction	-3138 Oct 07 j 01:26	19° m 30'02	2°09'04
morning rise	-3145 Oct 07 j 12:10	4° Mp 48'32		minimum elong	-3138 Oct 07 j 01:26	19° m 30'02	2°09'05
retrograde	-3144 Jan 02 j 13:35	6° Mp 41'31		max. Earth dist.	-3138 Oct 06 j 12:21	19° m 28'48	31.28977 AU
opposition	-3144 Mar 21 j 05:53	5° m 19'36	2°15'50	morning rise	-3138 Oct 22 j 03:52	20° m 03'58	
min. Earth dist.	-3144 Mar 21 j 21:23	5° m 18'33	29.30544 AU	retrograde	-3137 Jan 17 j 15:33	21° m 57'38	
direct	-3144 Jun 10 j 12:14	3°m/55'17		opposition	-3137 Apr 06 j 21:58	20° m 35'19	2°17'41
evening set	-3144 Sep 08 j 11:30	5° mp 51'10		min. Earth dist.	-3137 Apr 07 j 09:25		29.28905 AU
8.11				direct	-3137 Jun 26 j 22:34	19° m)11'14	
conjunction	-3144 Sep 23 j 17:34	6° m) 25'21	2°07'36	evening set	-3137 Sep 24 j 06:44	21° m) 06'29	
minimum elong	-3144 Sep 23 j 17:34	6° m) 25'21	2°07'37	<i>8</i>	5 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	•	
max. Earth dist.	-3144 Sep 23 j 01:37	•	31.30467 AU	conjunction	-3137 Oct 09 j 10:31	21° mp 40'32	2°08'40
morning rise	-3144 Oct 08 j 21:13	6° Mp 59'20	31.30107710	minimum elong	-3137 Oct 09 j 10:31	21° m/40'32	
retrograde	-3143 Jan 04 j 00:46	8° My 52'26		max. Earth dist.	-3137 Oct 08 j 23:25	-•	31.28523 AU
opposition	-3143 Mar 23 j 18:19	7° m ₂ 30'29	2°16'41	morning rise	-3137 Oct 24 j 12:41	22° m) 14'27	31.20323 710
min. Earth dist.	-3143 Mar 24 j 10:24		29.30690 AU	retrograde	-3136 Jan 20 j 01:27	24° Mp 08'14	
direct	-3143 Jun 13 j 00:28	6° M) 06'14	29.30090 AU	opposition	-3136 Apr 08 j 10:40	24° my 08°14 22° my 45'51	2°17'10
	•			**		-	
evening set	-3143 Sep 10 j 21:26	8° Mp 02'04	21 20555 444	min. Earth dist.	-3136 Apr 08 j 21:53		29.28481 AU
max. Earth dist.	-3143 Sep 25 j 11:21	8° II y 34'44	31.30555 AU	direct	-3136 Jun 28 j 09:44	21° Mp 21'48	
	21.42.0	00 7 2 611 2	******	evening set	-3136 Sep 25 j 16:04	23° Mp 16'59	
conjunction	-3143 Sep 26 j 03:02	8° Mp 36'13	2°08'18		21260 . 10:10.20	220m 51100	2000105
minimum elong	-3143 Sep 26 j 03:02	8° Mp 36'13	2°08'20	conjunction	-3136 Oct 10 j 19:29	23° m 51'00	2°08'05
morning rise	-3143 Oct 11 j 06:25	9° m) 10'11		minimum elong	-3136 Oct 10 j 19:29	23° m 51'00	
retrograde	-3142 Jan 06 j 11:30	11° Mp 03'23		max. Earth dist.	-3136 Oct 10 j 08:45		31.28148 AU
opposition	-3142 Mar 26 j 06:50	9° M y41'26	2°17'21	morning rise	-3136 Oct 25 j 21:39	24° Mp 24'56	
min. Earth dist.	-3142 Mar 26 j 21:25	9° ™ 40′26	29.30702 AU	retrograde	-3135 Jan 21 j 13:58	26° Mp 18'49	
direct	-3142 Jun 15 j 13:25	8° m) 17'13		opposition	-3135 Apr 10 j 23:12	24° m 56'23	2°16'27
evening set	-3142 Sep 13 j 07:11	10° m 12'59		min. Earth dist.	-3135 Apr 11 j 08:21		29.28144 AU
				direct	-3135 Jun 30 j 21:56	23° m 32'25	
conjunction	-3142 Sep 28 j 12:22	10° m 47'07	2°08'49	evening set	-3135 Sep 28 j 01:16	25° m 27'32	
minimum elong	-3142 Sep 28 j 12:22	10° m 47'07	2°08'50				
max. Earth dist.	-3142 Sep 27 j 20:55	10° m 45'39	31.30486 AU	conjunction	-3135 Oct 13 j 04:34	26° Mp 01'33	2°07'19
morning rise	-3142 Oct 13 j 15:30	11° m) 21'04		minimum elong	-3135 Oct 13 j 04:34	26° Mp 01'33	2°07'20
retrograde	-3141 Jan 08 j 21:30	13° m) 14'22		max. Earth dist.	-3135 Oct 12 j 19:19	26° m 00'41	31.27850 AU
opposition	-3141 Mar 28 j 19:33	11° m/52'22	2°17'48	morning rise	-3135 Oct 28 j 06:34	26° m 35'29	
min. Earth dist.	-3141 Mar 29 j 10:31	11° m 51'21		retrograde	-3134 Jan 24 j 01:56	28° m 29'30	
direct	-3141 Jun 18 j 00:46	10° m/28'13		opposition	-3134 Apr 13 j 12:04	27° m) 07'02	2°15'32
evening set	-3141 Sep 15 j 16:55	12° m/ 23'52		min. Earth dist.	-3134 Apr 13 j 21:08	-•	29.27884 AU
evening see	5111 5 6 p 10 j 10.00	12 .42562		direct	-3134 Jul 03 j 09:26	25° m 43'09	27.27.00.110
conjunction	-3141 Sep 30 j 21:50	12° m 57'59	2°09'09	evening set	-3134 Sep 30 j 10:21	27° m) 38'12	
minimum elong	-3141 Sep 30 j 21:50	12° m 57'59	2°09'11	evening sec	5151 5 c p 50 j 10.21	27 110 30 12	
max. Earth dist.	-3141 Sep 30 j 27:28		31.30274 AU	conjunction	-3134 Oct 15 j 13:28	28° m 12'13	2°06'22
morning rise	-3141 Oct 16 j 00:41	13° M 31'56	31.30274 AO	minimum elong	-3134 Oct 15 j 13:28	28° m 12'13	2°06'22
-	-3140 Jan 11 j 06:56	15° My 25'19		max. Earth dist.	-3134 Oct 15 j 05:16	~	31.27629 AU
retrograde	•		2°18'04		3	-•	31.27029 AU
opposition	-3140 Mar 30 j 08:00	14° Mp 03'15		morning rise	-3134 Oct 30 j 15:29	28° Mp 46'09	
min. Earth dist.	-3140 Mar 30 j 21:59		29.30269 AU		-3134 Dec 07 j 17:33	0° 亞	
direct	-3140 Jun 19 j 13:38	12° Mp 39'07		retrograde	-3133 Jan 26 j 13:01	0° ჲ 40'19	
evening set	-3140 Sep 17 j 02:40	14° m 34'41			-3133 Mar 19 j 16:27	30°R, Mp	
	2140.0	1 #0 *** 0 *** **	200017	opposition	-3133 Apr 16 j 00:48	29° m 17'50	
conjunction	-3140 Oct 02 j 07:09	15° m) 08'47	2°09'18	min. Earth dist.	-3133 Apr 16 j 07:51	-	29.27665 AU
minimum elong	-3140 Oct 02 j 07:09	15° m 08'47	2°09'20	direct	-3133 Jul 05 j 21:45	27° m 54'02	
max. Earth dist.	-3140 Oct 01 j 16:27		31.29915 AU	evening set	-3133 Oct 02 j 19:35	29° m 49'01	
morning rise	-3140 Oct 17 j 09:54	15° Mp 42'43			-3133 Oct 07 j 18:05	0∘ ರ	
retrograde	-3139 Jan 12 j 18:11	17° Mp 36'12					
opposition	-3139 Apr 01 j 20:38	16° Mp 14'03	2°18'08	conjunction	-3133 Oct 17 j 22:31	0° ჲ 23'02	2°05'14
min. Earth dist.	-3139 Apr 02 j 10:17	16° Mp 13'08	29.29860 AU	minimum elong	-3133 Oct 17 j 22:31	0° ჲ 23'02	2°05'14
direct	-3139 Jun 22 j 00:05	14° M)49'56		max. Earth dist.	-3133 Oct 17 j 14:50	0° ჲ 22'18	31.27414 AU
evening set	-3139 Sep 19 j 12:03	16° Mp 45'24		morning rise	-3133 Nov 02 j 00:34	0° ჲ 56'59	
				retrograde	-3132 Jan 28 j 23:51	2° ≏ 51'17	
conjunction	-3139 Oct 04 j 16:23	17° m 19'28	2°09'16	opposition	-3132 Apr 17 j 13:34	1° ≏ 28'47	2°13'06
minimum elong	-3139 Oct 04 j 16:23	17° m 19'28	2°09'19	min. Earth dist.	-3132 Apr 17 j 20:40	1° ≏ 28'18	29.27447 AU
max. Earth dist.	-3139 Oct 04 j 03:28		31.29462 AU	direct	-3132 Jul 07 j 08:56	0° ≏ 05'04	
morning rise	-3139 Oct 19 j 18:47	17° m) 53'24		evening set	-3132 Oct 04 j 04:46	2° ♀ 00'00	
retrograde	-3138 Jan 15 j 03:24	19° m 46'58		<i>5 ,</i>	· · · · · · · · · · · · · · · · · ·		
opposition	-3138 Apr 04 j 09:22	18° m) 24'44	2°18'00	conjunction	-3132 Oct 19 j 07:40	2° ₽ 34'01	2°03'55
min. Earth dist.	-3138 Apr 04 j 22:18		29.29373 AU	minimum elong	-3132 Oct 19 j 07:40	2° 2 34'01	
direct	-3138 Jun 24 j 12:40	17° m) 00'38		max. Earth dist.	-3132 Oct 19 j 01:32		31.27177 AU
evening set	-3138 Sep 21 j 21:34	17 mg 00 38 18° mg 55'59		morning rise	-3132 Nov 03 j 09:38	3° ₽ 07'59	31.2/1// AU
v. viiiig set	5.55 5 5 p 21 j 21.54	10 mg 33 37			5152 1107 05 J 07.50	J — 0139	

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3131 in astronomical counting style is the year 3132 BCE in historical counting style. -3131 Jan 30 j 10:13 5°**♀**02'25 minimum elong -3125 Nov 03 j 23:30 17°**£**51'56 1°49'50 retrograde opposition max. Earth dist. -3131 Apr 20 j 02:28 3°**2**39'54 2°11'36 -3125 Nov 03 j 22:40 17°**2**51'51 31.22599 AU -3131 Apr 20 j 08:15 3°**△**39'30 29.27163 AU -3125 Nov 19 j 02:23 18°**£**26′01 min. Earth dist. morning rise -3131 Jul 09 j 21:59 -3124 Feb 15 j 17:35 2° 16'16 20°**£**21'13 direct retrograde -3131 Oct 06 j 14:00 -3124 May 05 j 21:25 18°**♀**58'05 evening set 4°**£**11'07 opposition 1°55'58 min. Earth dist. -3124 May 05 j 21:07 18° **2**58'06 29.22300 AU -3131 Oct 21 j 16:39 -3124 Jul 25 j 04:57 conjunction 4°**£**45'08 2°02'25 direct 17°**2**34'36 -3131 Oct 21 j 16:39 minimum elong 4°**£**45′08 2°02'25 evening set -3124 Oct 21 j 05:43 19°**£**28'40 -3131 Oct 21 j 10:24 max. Earth dist. 4°**♀**44'33 31.26854 AU morning rise -3131 Nov 05 j 18:47 5° 219'08 conjunction -3124 Nov 05 j 08:30 20°**≏**02'44 1°47'12 1°47'09 retrograde -3130 Feb 01 j 22:07 7°**£**13'43 minimum elong -3124 Nov 05 j 08:30 20°**₽**02'44 -3124 Nov 05 j 08:17 opposition -3130 Apr 22 j 15:32 5°**£**51′09 2°09'54 max. Earth dist. 20°**2**02'42 31.21813 AU min. Earth dist. -3130 Apr 22 j 20:50 5°**♀**50'47 29.26794 AU morning rise -3124 Nov 20 j 11:41 20°**2**36'51 direct -3130 Jul 12 j 08:20 4°**£**27'35 retrograde -3123 Feb 17 j 05:24 22°**£**32'09 evening set -3130 Oct 08 j 23:13 6°**£**22'20 opposition -3123 May 08 j 10:31 21°**≏**08'55 1°53'03 min. Earth dist. -3123 May 08 j 09:49 21°**≙**08'58 29.21569 AU conjunction -3130 Oct 24 j 01:57 6°**£**56'22 2°00'44 direct -3123 Jul 27 j 16:26 19°**£**45'29 minimum elong -3130 Oct 24 j 01:58 6°**£**56'22 2°00'43 evening set -3123 Oct 23 j 14:29 21°**♀**39'26 max. Earth dist. -3130 Oct 23 j 21:23 6°**2**55'56 31.26422 AU morning rise -3130 Nov 08 j 03:59 7°**≏**30'22 conjunction -3123 Nov 07 j 17:31 22°**♀**13'31 1°44'23 retrograde -3129 Feb 04 j 07:22 9°**£**25'05 minimum elong -3123 Nov 07 j 17:31 22°**₽**13'31 1°44'21 opposition -3129 Apr 25 i 04:32 8°**-2**02′28 2°08'01 max. Earth dist. -3123 Nov 07 j 19:23 22° **2**13'42 31.21142 AU min. Earth dist. -3129 Apr 25 j 09:16 8°**₽**02'09 29.26287 AU morning rise -3123 Nov 22 j 20:49 22°**₽**47'40 direct -3129 Jul 14 j 20:31 6°**£**38'57 retrograde -3122 Feb 19 i 16:22 24°**-**43′05 evening set -3129 Oct 11 j 08:30 8°**£**33'36 opposition -3122 May 10 j 23:32 23°**₽**19'48 1°49'57 -3122 May 10 j 21:00 23°**2**19'58 29.20936 AU min. Earth dist. -3129 Oct 26 j 11:04 9°**£**07'38 1°58'54 -3122 Jul 30 j 05:33 conjunction direct 21° € 56'25 evening set -3122 Oct 25 j 23:31 23°**♀**50'16 -3129 Oct 26 j 11:05 9°<u>₽</u>07'38 1°58'53 minimum elong max. Earth dist. -3129 Oct 26 j 06:03 9°**2**07'10 31.25855 AU -3129 Nov 10 j 13:23 -3122 Nov 10 j 02:32 24°**£**24'23 1°41'25 morning rise 9°**£**41'40 conjunction -3128 Feb 06 j 19:41 11°**£**36'29 -3122 Nov 10 j 02:32 24°**£**24'23 1°41'23 retrograde minimum elong -3122 Nov 10 j 04:37 -3128 Apr 26 j 17:32 10°**2**13'47 2°05'58 max. Earth dist. 24°**£**24'35 31.20567 AU opposition min. Earth dist. -3128 Apr 26 j 21:06 10°**2**13'33 29.25646 AU -3122 Nov 25 j 06:17 24°**£**58'34 morning rise -3128 Jul 16 j 06:19 -3121 Feb 22 j 04:28 direct 8°**♀**50'18 retrograde 26°**£**54'07 -3128 Oct 12 j 17:38 -3121 May 13 j 12:30 evening set 10°**£**44′50 opposition 25°**2**30'47 1°46'42 25°**≙**31'01 29.20406 AU -3121 May 13 j 09:07 min. Earth dist. -3128 Oct 27 j 20:20 conjunction 11°**£**18'53 1°56'53 direct -3121 Aug 01 j 15:31 24°**₽**07'28 minimum elong -3128 Oct 27 j 20:20 11°**≏**18'53 1°56'51 evening set -3121 Oct 28 j 08:22 26°**2**01'15 max. Earth dist. -3128 Oct 27 j 16:48 11°**♀**18'33 31.25140 AU morning rise -3128 Nov 11 j 22:36 11°**≙**52'55 conjunction -3121 Nov 12 j 11:44 26°**△**35'23 1°38'18 retrograde -3127 Feb 08 j 05:51 13°**-**47′51 minimum elong -3121 Nov 12 j 11:45 26°**2**35'23 1°38'16 -3127 Apr 29 j 06:35 12°**♀**25'03 2°03'43 max. Earth dist. -3121 Nov 12 j 15:55 26°**♀**35'47 31.20068 AU opposition -3127 Apr 29 j 10:14 12°**♀**24'48 29.24862 AU -3121 Nov 27 j 15:38 27°**♀**09'37 min. Earth dist. morning rise -3127 Jul 18 j 17:52 11°**≏**01'34 -3120 Feb 24 j 14:13 29°**≏**05'18 direct retrograde -3127 Oct 15 j 02:48 12°**♀**56'00 -3120 May 15 j 01:32 27°**£**41'56 1°43'17 evening set opposition min. Earth dist. -3120 May 14 j 21:13 27°**2**42'14 29.19912 AU -3127 Oct 30 i 05:25 conjunction 13°**△**30'02 1°54'42 direct -3120 Aug 03 i 03:34 26° **△**18'43 minimum elong -3127 Oct 30 i 05:25 13°**△**30'02 1°54'41 evening set -3120 Oct 29 j 17:26 28° **2**12'26 max. Earth dist. -3127 Oct 30 i 02:09 13°**2**29'43 31.24326 AU -3127 Nov 14 i 07:58 14°**£**04'05 -3120 Nov 13 j 20:47 28°**£**46'35 1°35'02 morning rise conjunction -3126 Feb 10 i 18:36 15°**♀**59'07 -3120 Nov 13 i 20:47 28°**£**46'35 1°34'59 retrograde minimum elong -3126 May 01 j 19:35 14°**△**36'12 2°01'19 max. Earth dist. -3120 Nov 14 j 00:57 28°**2**46'59 31.19593 AU opposition 14°**2**36'04 29.24006 AU -3126 May 01 j 21:25 -3120 Nov 29 j 01:07 29°**₽**20'50 min. Earth dist. morning rise 0°M direct -3126 Jul 21 j 05:38 13°**♀**12'42 -3120 Dec 17 j 13:30 -3126 Oct 17 j 11:43 15°**♀**07'00 retrograde -3119 Feb 26 j 03:03 1°M16'42 evening set -3119 May 13 j 11:17 30°R <u>Ω</u> 15°**-**41′03 1°52′22 conjunction -3126 Nov 01 j 14:26 opposition -3119 May 17 j 14:36 29°**2**53'18 1°39'43 -3126 Nov 01 j 14:26 15°**2**41'03 1°52'19 min. Earth dist. -3119 May 17 j 08:52 29° **2**53'41 29.19431 AU minimum elong -3126 Nov 01 j 12:24 direct -3119 Aug 05 j 13:09 28°**♀**30'09 max. Earth dist. 15°**△**40'51 31.23450 AU -3119 Oct 21 j 01:42 morning rise -3126 Nov 16 j 17:08 16°**£**15′07 0°M -3119 Nov 01 j 02:30 retrograde -3125 Feb 13 j 06:22 18°**♀**10'14 evening set 0°M23'49 -3125 May 04 j 08:41 16°**₽**47'12 1°58'43 opposition min. Earth dist. -3125 May 04 j 10:34 16°**£**47'04 29.23130 AU conjunction -3119 Nov 16 j 06:09 0°M58′00 1°31'37 direct -3125 Jul 23 j 16:35 15°**£**23'43 minimum elong -3119 Nov 16 j 06:09 0°M58′00 1°31'35 evening set -3125 Oct 19 j 20:42 17°**£**17'52 max. Earth dist. -3119 Nov 16 j 11:59 0°M 58'33 31.19095 AU -3119 Dec 01 j 10:41 1°M32'18 morning rise -3125 Nov 03 j 23:30 17°**£**51'56 1°49'52 -3118 Feb 28 j 14:02 3°M28'18 conjunction retrograde

Planetary Pheno	omena of Neptune f	From -3400	through -2898	3 (UT), Astrodien	st AG 18-Feb-2025	14:23,	page 23
•	nical year style is used: Th		•				
opposition	-3118 May 20 j 03:51	2°M04'53		conjunction	-3112 Dec 01 j 00:52	16°M20'51	1°04'20
min. Earth dist.	-3118 May 19 j 22:05	2°M05'16	29.18901 AU	minimum elong	-3112 Dec 01 j 00:52	16°M20'51	1°04'14
direct	-3118 Aug 08 j 00:05	0° ™ 41'49		max. Earth dist.	-3112 Dec 01 j 12:18	16°M21'56	31.13056 AU
evening set	-3118 Nov 03 j 11:40	2°M35'24		morning rise	-3112 Dec 16 j 08:10	16°M55'25	
Č	J			retrograde	-3111 Mar 16 j 03:39	18°M52'11	
conjunction	-3118 Nov 18 j 15:29	3°M09'36	1°28'05	opposition	-3111 Jun 04 j 23:49	17°M28'13	1°06'24
minimum elong	-3118 Nov 18 j 15:30	3°M09'36	1°28'01	min. Earth dist.	-3111 Jun 04 j 12:16	17°M29'00	
max. Earth dist.	-3118 Nov 18 j 21:39		31.18539 AU	direct	-3111 Aug 23 j 09:47	16°ML05'16	27.12027 110
morning rise	-3118 Dec 03 j 20:28	3°M43'57	31.10337110	evening set	-3111 Nov 18 j 04:42	17°ML58'15	
retrograde	-3117 Mar 03 j 03:31	5°M40'06		evening set	3111 NOV 10 J 04.42	17 1103013	
opposition	-3117 May 22 j 17:00	4°M16'39	1°32'09	conjunction	-3111 Dec 03 j 10:27	18°M32'39	1°00'00
min. Earth dist.	-3117 May 22 j 17:00		29.18286 AU	minimum elong	-3111 Dec 03 j 10:28	18°M32'39	0°59'56
direct	-3117 Aug 10 j 10:58	2°M53'38	2).10200 AO	max. Earth dist.	-3111 Dec 03 j 22:00		31.12148 AU
evening set	-3117 Nov 05 j 21:00	4°M47'10		morning rise	-3111 Dec 18 j 18:21	19°ML07'16	31.12140 AU
evening set	-3117 NOV 03 J 21.00	4 1164/10		retrograde	-3111 Dec 18 j 18:21	21°ML04'09	
conjunction	-3117 Nov 21 j 01:03	5° ™ 21'24	1°24'24	opposition	-3110 Jun 07 j 12:48	19°M40'05	1°01'44
minimum elong	-3117 Nov 21 j 01:03	5°M21'24		min. Earth dist.	-3110 Jun 06 j 23:43		29.11775 AU
_	•				,		29.11//3 AU
max. Earth dist.	-3117 Nov 21 j 07:53		31.17857 AU	direct	-3110 Aug 25 j 20:08	18°M 17'10	
morning rise	-3117 Dec 06 j 06:22	5°M55'47		evening set	-3110 Nov 20 j 13:57	20°M10'04	
retrograde	-3116 Mar 04 j 16:02	7°M52'04	1000100		2110 5 05:20 10	2007 4420	0055106
opposition	-3116 May 24 j 06:10	6°M28'33	1°28'09	conjunction	-3110 Dec 05 j 20:10	20°M44'30	0°55'36
min. Earth dist.	-3116 May 23 j 23:15		29.17539 AU	minimum elong	-3110 Dec 05 j 20:10	20°M44'30	0°55'30
direct	-3116 Aug 11 j 20:56	5° ™ 05'35		max. Earth dist.	-3110 Dec 06 j 09:27		31.11339 AU
evening set	-3116 Nov 07 j 06:20	6° ™ 59'03		morning rise	-3110 Dec 21 j 04:27	21°M19'10	
				retrograde	-3109 Mar 21 j 03:19	23°M16'09	
conjunction	-3116 Nov 22 j 10:41	7° ™ 33'19	1°20'37	opposition	-3109 Jun 10 j 01:51	21°M52'03	0°56'58
minimum elong	-3116 Nov 22 j 10:42	7° ™ 33'19	1°20'32	min. Earth dist.	-3109 Jun 09 j 12:30	21°M52'57	29.11008 AU
max. Earth dist.	-3116 Nov 22 j 18:22	7° ™ 34'02	31.17056 AU	direct	-3109 Aug 28 j 07:19	20°M29'10	
morning rise	-3116 Dec 07 j 16:20	8°M07'43		evening set	-3109 Nov 22 j 23:24	22°M22'00	
retrograde	-3115 Mar 07 j 04:30	10°M04'08					
opposition	-3115 May 26 j 19:22	8°M40'33	1°24'02	conjunction	-3109 Dec 08 j 05:56	22°M56'28	0°51'06
min. Earth dist.	-3115 May 26 j 10:43	8° M 41'08	29.16658 AU	minimum elong	-3109 Dec 08 j 05:57	22°M56'28	0°51'01
direct	-3115 Aug 14 j 09:10	7°M17'36		max. Earth dist.	-3109 Dec 08 j 19:51	22°M57'47	31.10628 AU
evening set	-3115 Nov 09 j 15:36	9° ™ 10'58		morning rise	-3109 Dec 23 j 14:44	23°MJ31'10	
	·			retrograde	-3108 Mar 22 j 15:57	25°M28'16	
conjunction	-3115 Nov 24 j 20:08	9° ™ 45'15	1°16'42	opposition	-3108 Jun 11 j 14:42	24°ML04'07	0°52'07
minimum elong	-3115 Nov 24 i 20:08	9° ™ 45'15	1°16'39	min. Earth dist.	-3108 Jun 10 j 23:33	24°M05'09	29.10324 AU
max. Earth dist.	-3115 Nov 25 j 03:52		31.16119 AU	direct	-3108 Aug 29 j 17:33	22° M 41'17	
morning rise	-3115 Dec 10 j 02:18	10° ™ 19'43		evening set	-3108 Nov 24 j 08:57	24°M34'05	
retrograde	-3114 Mar 09 j 17:41	12°M16'13		- · · · · · · · · · · · · · · · · · · ·			
opposition	-3114 May 29 j 08:42	10°M52'32	1°19'47	conjunction	-3108 Dec 09 j 15:48	25°M08'34	0°46'31
min. Earth dist.	-3114 May 29 j 00:12		29.15672 AU	minimum elong	-3108 Dec 09 j 15:48	25°ML08'34	
direct	-3114 Aug 16 j 20:54	9°M29'36	2).130/2 AO	max. Earth dist.	-3108 Dec 10 j 06:37		31.09967 AU
evening set	-3114 Nov 12 j 00:50	11°M22'52		morning rise	-3108 Dec 25 j 01:05	25°M43'19	31.07707 AC
evening set	-3114 NOV 12 J 00.30	11 11622 32		•	-3107 Mar 25 j 04:13	27°M40'33	
	2114 N 27 : 05.40	110 M 57!11	1010141	retrograde	•		0047!11
conjunction	-3114 Nov 27 j 05:49	11°M.57'11		opposition	-3107 Jun 14 j 03:53	26°M16'22	
minimum elong	-3114 Nov 27 j 05:49	11°M.57'11		min. Earth dist.	-3107 Jun 13 j 12:57		29.09682 AU
max. Earth dist.	-3114 Nov 27 j 15:16		31.15104 AU	direct	-3107 Sep 01 j 02:43	24°M53'34	
morning rise	-3114 Dec 12 j 12:17	12°M31'40		evening set	-3107 Nov 26 j 18:26	26°M46'19	
retrograde	-3113 Mar 12 j 05:47	14°M28'16					
opposition	-3113 May 31 j 21:40	13°M04'29		conjunction	-3107 Dec 12 j 01:45	27°M20'51	0°41'52
min. Earth dist.	-3113 May 31 j 11:48		29.14625 AU	minimum elong	-3107 Dec 12 j 01:45	27°M20'51	0°41'47
direct	-3113 Aug 19 j 10:22	11°M41'32		max. Earth dist.	-3107 Dec 12 j 17:46		31.09339 AU
evening set	-3113 Nov 14 j 10:11	13°M34'42		morning rise	-3107 Dec 27 j 11:27	27°M55'38	
				retrograde	-3106 Mar 27 j 17:32	29°M53'00	
conjunction	-3113 Nov 29 j 15:19	14°M09'02	1°08'33	opposition	-3106 Jun 16 j 16:56	28°M28'47	0°42'10
minimum elong	-3113 Nov 29 j 15:19	14°M09'02	1°08'29	min. Earth dist.	-3106 Jun 16 j 00:17	28°M29'55	29.09035 AU
max. Earth dist.	-3113 Nov 30 j 00:40	14°M09'55	31.14060 AU	direct	-3106 Sep 03 j 14:32	27°ML06'02	
morning rise	-3113 Dec 14 j 22:22	14°M43'34		evening set	-3106 Nov 29 j 04:20	28°M58'45	
	-3113 Dec 22 j 10:58	15° ™					
retrograde	-3112 Mar 13 j 17:49	16°M40'15		conjunction	-3106 Dec 14 j 11:53	29°M33'19	0°37'08
opposition	-3112 Jun 02 j 10:45	15° M 16′22	1°10'58	minimum elong	-3106 Dec 14 j 11:54	29°M33'19	0°37'03
min. Earth dist.	-3112 Jun 02 j 00:17		29.13599 AU	max. Earth dist.	-3106 Dec 15 j 03:47		31.08669 AU
	-3112 Jun 12 j 13:45	15°RM	-		-3106 Dec 26 j 06:32	0° ∡ 7	-
direct	-3112 Aug 20 j 20:43	13°M 53'25		morning rise	-3106 Dec 29 j 22:13	0° ≯ ¹08'09	
**	-3112 Oct 24 j 10:54	15°M		retrograde	-3105 Mar 30 j 07:36	2° ₹ 105'38	
evening set	-3112 Oct 24 j 10:34	15°M46'29		opposition	-3105 Jun 19 j 05:58	0° ₹ 41'22	0°37'05
	25 j 17.110			· r r	2 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		·

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3105 in astronomical counting style is the year 3106 BCE in historical counting style. 0° ₹42'28 29.08337 AU min. Earth dist. -3105 Jun 18 j 13:44 direct -3099 Sep 18 i 23:15 12°**₹**35'19 -3105 Jul 15 j 17:40 -3099 Dec 14 j 02:50 14°**∡**27'42 30°RM. evening set -3105 Sep 06 j 01:04 29°M18'39 direct -3105 Oct 26 j 01:05 0°**∡**¹ -3099 Dec 29 j 13:17 conjunction 15°**х** 02′30 0°02'59 -3105 Dec 01 j 14:12 -3099 Dec 29 j 13:17 15°**х** 02'30 evening set 1°**₹**11′20 minimum elong 0°02'53 -3099 Dec 29 j 06:52 15°**∡**01'55 behind sun begin -3105 Dec 16 j 22:18 -3099 Dec 29 j 19:42 15°**х** 03′05 conjunction 1°**х** 45′56 0°32'22 behind sun end -3105 Dec 16 j 22:18 minimum elong 1°**х** 45′56 0°32'17 max. Earth dist. -3099 Dec 30 j 09:18 15°**尽**04'23 31.01518 AU 1°**х** 47'34 31.07923 AU max. Earth dist. -3105 Dec 17 j 15:37 morning rise -3098 Jan 14 j 03:05 15°**х** 37'37 morning rise -3104 Jan 01 j 08:57 2°×20'49 retrograde -3098 Apr 14 j 22:35 17°×35'42 retrograde -3104 Mar 31 j 20:37 4°**∡**18'24 min. Earth dist. -3098 Jul 04 j 05:06 16°**≯**12'15 29.01037 AU -3104 Jun 20 j 19:01 -3098 Jul 05 j 00:46 opposition 2°**х¹**54′06 0°31'57 opposition 16°**∡**10′54 0°00'24 -3104 Jun 20 j 01:44 -3098 Aug 01 j 16:46 min. Earth dist. 2°**尽**55'16 29.07525 AU desc. node 15°**х** 27'34 direct -3104 Sep 07 j 13:48 1°×31'24 direct -3098 Sep 21 j 08:30 14°**∡**°48′05 evening set -3104 Dec 03 j 00:13 3°×24'03 evening set -3098 Dec 16 j 13:06 16°**∡**¹40'26 conjunction -3104 Dec 18 j 08:32 3°**∡**¹58'41 0°27'32 conjunction -3097 Jan 01 j 00:06 17°**∡**15'16 -0°02'07 minimum elong -3104 Dec 18 j 08:32 3°**х** 58′41 0°27'26 minimum elong -3097 Jan 01 j 00:06 17°**∡**15′16 0°02'13 max. Earth dist. -3104 Dec 19 j 01:15 4°**尽**00'15 31.07052 AU behind sun begin -3098 Dec 31 j 17:40 17°**∡**14'41 morning rise -3103 Jan 02 j 19:50 4°**∡**³33'36 behind sun end -3097 Jan 01 j 06:32 17°**х** 15′51 retrograde -3103 Apr 03 j 10:06 6°**х** 31′18 max. Earth dist. -3097 Jan 01 j 21:17 17°**∡**17'16 31.00540 AU opposition -3103 Jun 23 j 08:13 5°**х** 06'55 0°26'45 morning rise -3097 Jan 16 i 14:18 17°**х** 50′26 min. Earth dist. -3103 Jun 22 j 14:55 5° ₹ 08'06 29.06592 AU retrograde -3097 Apr 17 j 11:36 19°**х** 48′35 direct -3103 Sep 10 j 00:18 3°**х** 44'13 opposition -3097 Jul 07 i 13:14 18° **₹** 23'44 -0°04'54 evening set -3103 Dec 05 j 10:15 5°**х** 36′49 min. Earth dist. -3097 Jul 06 j 15:51 18°**₹**'25'13 29.00112 AU -3097 Sep 23 j 20:07 17°**₹**00'55 direct -3103 Dec 20 j 19:08 6°**х** 11′29 0°22′40 -3097 Dec 18 j 23:33 18°**х** 53′17 conjunction evening set -3103 Dec 20 j 19:09 minimum elong 6° x 11'29 0°22'35 -3103 Dec 21 j 13:15 -3096 Jan 03 j 10:49 19°**∡** 28'09 -0°07'04 max. Earth dist. 6° ₹13'12 31.06050 AU conjunction -3102 Jan 05 j 06:48 -3096 Jan 03 j 10:49 0°07'10 morning rise 6°×746'27 minimum elong 19°×728'09 -3096 Jan 03 j 04:52 retrograde -3102 Apr 05 j 21:46 8°×744'13 behind sun begin 19°**х** 27'36 7°**∡**19'46 0°21'32 -3102 Jun 25 j 21:15 -3096 Jan 03 j 16:45 behind sun end 19°**х** 28'41 opposition -3102 Jun 25 j 03:35 min. Earth dist. -3096 Jan 04 j 07:56 7°**∡**20'58 29.05524 AU max. Earth dist. 19°**✗**30'08 30.99667 AU -3102 Sep 12 j 13:37 5°**х** 57′03 -3096 Jan 19 j 01:39 20°**₹**03'21 direct morning rise -3102 Dec 07 j 20:24 -3096 Apr 19 j 01:29 22°×701'36 evening set 7°**х** 49'35 retrograde 20°**∡**38'10 28.99302 AU -3096 Jul 08 j 04:49 min. Earth dist. -3102 Dec 23 j 05:37 -3096 Jul 09 j 02:01 conjunction 8°**₹**24'17 0°17'46 opposition 20°**х** 36′43 -0°10′13 minimum elong -3102 Dec 23 j 05:37 8°**∡**124'17 0°17'40 direct -3096 Sep 25 j 06:01 19°**х** 13′54 max. Earth dist. -3102 Dec 23 j 23:14 8°**≯**25'57 31.04943 AU evening set -3096 Dec 20 j 09:49 21°×706'16 morning rise -3101 Jan 07 j 17:56 8°**₹**'59'18 retrograde -3101 Apr 08 j 11:49 10°**х** 57′08 conjunction -3095 Jan 04 j 21:39 21°**₹**'41'11 -0°12'01 -3101 Jun 28 j 10:13 9°**х** 32'35 0°16'17 -3095 Jan 04 j 21:39 21°**х** 41'11 0°12'07 opposition minimum elong min. Earth dist. -3101 Jun 27 j 15:42 9°**尽**33'51 29.04378 AU behind sun begin -3095 Jan 04 j 17:15 21°**х** 40'47 -3101 Sep 15 j 00:48 8°**х**¹09'51 behind sun end -3095 Jan 05 j 02:04 21°**∡**′41′34 direct -3101 Dec 10 j 06:30 10°**∡***02'19 max. Earth dist. -3095 Jan 05 j 20:32 21°**尽**43′20 30.98906 AU evening set morning rise -3095 Jan 20 i 12:50 22°**҂**16′25 -3101 Dec 25 i 16:10 10°**х** 37′03 0°12′51 conjunction retrograde -3095 Apr 21 i 14:38 24° **₹**14'46 minimum elong -3101 Dec 25 j 16:11 10°**х** 37′03 0°12′45 opposition -3095 Jul 11 i 14:39 22°**₹**49'52 -0°15'31 behind sun begin -3101 Dec 25 i 12:05 10°**х** 36'41 min. Earth dist. -3095 Jul 10 i 16:12 22° 2 51'25 28.98578 AU behind sun end -3101 Dec 25 j 20:16 10°**х** 37′25 direct -3095 Sep 27 j 17:53 21°×727'04 max. Earth dist. -3101 Dec 26 j 11:00 10° **₹** 38'50 31.03765 AU -3095 Dec 22 j 20:29 23°×19'27 evening set -3100 Jan 10 j 04:54 11°**х** 12′06 morning rise -3100 Apr 09 j 22:08 13°**∡** 10′01 conjunction -3094 Jan 07 j 08:36 23°**x** 54'24 -0°16'57 retrograde -3100 Jun 29 j 23:05 11°**х** 45'22 0°11'00 -3094 Jan 07 i 08:36 opposition minimum elong 23°**₹**54'24 0°17'02 11°**∡**¹46'38 29.03197 AU min. Earth dist. -3100 Jun 29 j 04:42 max. Earth dist. -3094 Jan 08 j 07:03 23°**尽** 56'31 30.98219 AU -3100 Sep 16 j 12:30 10°**х** 22'36 morning rise -3094 Jan 23 j 00:27 24°**×**129'41 direct -3100 Dec 11 j 16:40 12°**₹**15'01 -3094 Apr 24 j 04:56 26°**₹**'28'08 evening set retrograde -3094 Jul 13 j 04:51 25°**✗**04'45 28.97924 AU min. Earth dist. -3100 Dec 27 j 02:45 12°**∡**¹49'47 0°07'56 -3094 Jul 14 j 03:17 25°**₹**03'13 -0°20'47 conjunction opposition -3100 Dec 27 j 02:44 12°**₹**49'47 -3094 Sep 30 j 03:44 23°**х** 40′26 minimum elong 0°07'49 direct 12°**х** 49′15 -3094 Dec 25 j 07:12 25°**х** 32′51 behind sun begin -3100 Dec 26 j 20:56 evening set behind sun end -3100 Dec 27 j 08:32 12°**х** 50′18 max. Earth dist. -3100 Dec 27 j 22:03 12°**尽**51'36 31.02611 AU conjunction -3093 Jan 09 j 19:54 26°**₹**07'49 -0°21'52 morning rise -3099 Jan 11 j 15:59 13°**х** 24′52 minimum elong -3093 Jan 09 j 19:54 26°**х** 07'49 0°21'59 retrograde -3099 Apr 12 j 10:42 15°**₹**22'51 max. Earth dist. -3093 Jan 10 j 19:47 26° ₹ 10'05 30.97565 AU -3099 Jul 02 j 11:52 13°**∡**¹58'07 -3093 Jan 25 j 12:05 26°**х** 43′09 opposition 0°05'42 morning rise min. Earth dist. -3099 Jul 01 j 15:54 13°**₹**'59'29 29.02074 AU -3093 Apr 26 j 18:22 28°**х** 41′42 retrograde

Planetary Pheno	omena of Neptune 1	from -3400	through -2898	3 (UT), Astrodien	st AG 18-Feb-2025	14:23,	page 25
•	nical year style is used: Th		-				
opposition	-3093 Jul 16 j 15:55	27° ∡ 16'46	-0°26'03	conjunction	-3086 Jan 25 j 05:32	11° る 44'12	-0°55'04
min. Earth dist.	-3093 Jul 15 j 17:13	27° ∡ 18'19	28.97264 AU	minimum elong	-3086 Jan 25 j 05:31	11° る 44'12	0°55'09
direct	-3093 Oct 02 j 17:00	25° ₹ 54'00		max. Earth dist.	-3086 Jan 26 j 06:41	11° る 46'34	30.91450 AU
evening set	-3093 Dec 27 j 18:11	27° ∡ ¹46′26		morning rise	-3086 Feb 10 j 00:58	12° る 19'45	
				retrograde	-3086 May 12 j 11:42	14° る 18'35	
conjunction	-3092 Jan 12 j 07:10	28° ₹ 21'27	-0°26'46	min. Earth dist.	-3086 Jul 31 j 07:22	12° る 54'54	28.91077 AU
minimum elong	-3092 Jan 12 j 07:09	28° ∡ °21′27	0°26'52	opposition	-3086 Aug 01 j 07:14	12° る 53'14	-1°01'19
max. Earth dist.	-3092 Jan 13 j 06:23	28° х ⁴23'39	30.96893 AU	direct	-3086 Oct 17 j 23:15	11° පි 30'10	
morning rise	-3092 Jan 27 j 23:55	28° ₹ 56'49		evening set	-3085 Jan 12 j 01:26	13° る 22'36	
	-3092 Feb 28 j 09:28	ರ°0					
retrograde	-3092 Apr 28 j 09:17	0° る 55'27		conjunction	-3085 Jan 27 j 17:25	13° る 57'49	-0°59'32
	-3092 Jun 29 j 22:50	30°₹ ⋌ ¹		minimum elong	-3085 Jan 27 j 17:25	13° る 57'49	0°59'38
min. Earth dist.	-3092 Jul 17 j 05:19	29° х 32′05	28.96571 AU	max. Earth dist.	-3085 Jan 28 j 17:52	14° る 00'07	30.90621 AU
opposition	-3092 Jul 18 j 04:30	29° х 30′29	-0°31'16	morning rise	-3085 Feb 12 j 13:28	14° る 33'24	
direct	-3092 Oct 04 j 04:12	28° ₰ 07'44		retrograde	-3085 May 15 j 01:53	16° る 32'16	
evening set	-3092 Dec 29 j 05:18	0° る 00'11		opposition	-3085 Aug 03 j 19:28	15° る 06'52	-1°06'03
	-3092 Dec 29 j 03:19	0°ප		min. Earth dist.	-3085 Aug 02 j 19:45	15° る 08'31	28.90325 AU
				direct	-3085 Oct 20 j 09:26	13° る 43'45	
conjunction	-3091 Jan 13 j 18:45	0° る 35'14	-0°31'37	evening set	-3084 Jan 14 j 12:54	15° පි 36'13	
minimum elong	-3091 Jan 13 j 18:44	0° る 35'14					
max. Earth dist.	-3091 Jan 14 j 18:42	0° る 37'30	30.96149 AU	conjunction	-3084 Jan 30 j 05:25	16° る 11'27	-1°03'55
morning rise	-3091 Jan 29 j 11:53	1° る 10'39		minimum elong	-3084 Jan 30 j 05:24	16° る 11'27	1°04'00
retrograde	-3091 Apr 30 j 20:42	3° る 09'21		max. Earth dist.	-3084 Jan 31 j 07:19	16° る 13'54	30.89921 AU
opposition	-3091 Jul 20 j 17:14	1° る 44'21	-0°36'26	morning rise	-3084 Feb 15 j 01:42	16° る 47'03	
min. Earth dist.	-3091 Jul 19 j 18:38	1° る 45'55	28.95786 AU	retrograde	-3084 May 16 j 15:05	18° る 45'58	
direct	-3091 Oct 06 j 15:54	0° る 21'35		min. Earth dist.	-3084 Aug 04 j 07:29	17° る 22'13	28.89696 AU
evening set	-3091 Dec 31 j 16:28	2° る 14'02		opposition	-3084 Aug 05 j 07:36	17° る 20'32	-1°10'42
				direct	-3084 Oct 21 j 22:12	15° る 57'25	
conjunction	-3090 Jan 16 j 06:23	2° る 49'06	-0°36'26	evening set	-3083 Jan 16 j 00:39	17° る 49'55	
minimum elong	-3090 Jan 16 j 06:23	2° る 49'06					
max. Earth dist.	-3090 Jan 17 j 06:09		30.95320 AU	conjunction	-3083 Jan 31 j 17:29	18° る 25'11	
morning rise	-3090 Feb 01 j 00:03	3° る 24'33		minimum elong	-3083 Jan 31 j 17:28	18° る 25'11	
retrograde	-3090 May 03 j 10:17	5° る 23'18		max. Earth dist.	-3083 Feb 01 j 18:47		30.89368 AU
min. Earth dist.	-3090 Jul 22 j 06:23		28.94903 AU	morning rise	-3083 Feb 16 j 14:19	19° る 00'49	
opposition	-3090 Jul 23 j 05:49	3° る 58'15	-0°41'33	retrograde	-3083 May 19 j 05:55	20° る 59'46	
direct	-3090 Oct 09 j 03:31	2° る 35'27		opposition	-3083 Aug 07 j 19:43	19° る 34'21	
evening set	-3089 Jan 03 j 03:52	4° る 27'53		min. Earth dist.	-3083 Aug 06 j 19:02		28.89218 AU
		_		direct	-3083 Oct 24 j 09:04	18° ろ 11'13	
conjunction	-3089 Jan 18 j 18:10	5° ろ 03'00		evening set	-3082 Jan 18 j 12:26	20° る 03'47	
minimum elong	-3089 Jan 18 j 18:09	5° ろ 03'00					
max. Earth dist.	-3089 Jan 19 j 17:48		30.94377 AU	conjunction	-3082 Feb 03 j 05:45	20°る39'04	
morning rise	-3089 Feb 03 j 12:20	5° る 38'28		minimum elong	-3082 Feb 03 j 05:44	20° ට 39'04	
retrograde	-3089 May 05 j 22:27	7° る 37'15	0046126	max. Earth dist.	-3082 Feb 04 j 07:56		30.88933 AU
opposition	-3089 Jul 25 j 18:18	6°る12'08		morning rise	-3082 Feb 19 j 02:57	21°る14'45	
min. Earth dist.	-3089 Jul 24 j 19:56		28.93928 AU	retrograde	-3082 May 21 j 18:26	23°る13'44	20 00022 444
direct	-3089 Oct 11 j 13:38	4° る 49'16		min. Earth dist.	-3082 Aug 09 j 07:42	21°る30'01 21°る48'20	28.88833 AU
evening set	-3088 Jan 05 j 15:08	6° ⋜ 41'41		opposition	-3082 Aug 10 j 07:52		-1-19/39
conjunction	2000 Inn 21:05.50	7° る 16'49	0045152	direct	-3082 Oct 26 j 20:36	20°る25'13 22°る17'51	
conjunction	-3088 Jan 21 j 05:59 -3088 Jan 21 j 05:58	7° る 16'49		evening set	-3081 Jan 21 j 00:28	22 O 1/31	
minimum elong	3		0°45′59 30.93385 AU	conjunction	2001 Eab 05 : 10:12	220752110	1016120
max. Earth dist.	-3088 Jan 22 j 06:13 -3088 Feb 06 j 00:31	7°る19'06 7°る52'19	30.73363 AU	conjunction minimum elong	-3081 Feb 05 j 18:12 -3081 Feb 05 j 18:12	22°る53'10 22°る53'10	
morning rise	·	7 332 19 9° る 51'07		max. Earth dist.	-		30.88590 AU
retrograde	-3088 May 07 j 10:37		20 02025 ATT		-3081 Feb 06 j 20:12		30.88390 AU
min. Earth dist. opposition	-3088 Jul 26 j 07:07 -3088 Jul 27 j 06:40	8°る2/'33 8°る25'55	28.92925 AU	morning rise retrograde	-3081 Feb 21 j 15:50 -3081 May 24 j 09:17	23°る28'52 25°る27'55	
direct		8 02333 7° る 02'59	-0 3133	•		23 3 2733 24° る 02'33	1022150
	-3088 Oct 13 j 01:48	8°る55'23		opposition min. Earth dist.	-3081 Aug 12 j 19:46		28.88517 AU
evening set	-3087 Jan 07 j 02:26	o O 33 23		direct	-3081 Aug 11 j 18:54 -3081 Oct 29 j 08:04	24°80417 22°839'26	20.0031/AU
conjunction	-3087 Jan 22 j 17:33	9° ට 30'33	-0°50'21	evening set	-3081 Oct 29 j 08:04 -3080 Jan 23 j 12:42	22° る 3926 24° る 32'10	
minimum elong	-3087 Jan 22 j 17:33	9° る 30'33		evening set	5000 Jan 25 J 12.42	∠¬ ∪ 3∠ 10	
max. Earth dist.	-3087 Jan 22 j 17:33		30.92383 AU	conjunction	-3080 Feb 08 j 06:45	25° ප 07'31	-1°20'27
morning rise	-3087 Jan 23 j 17.20 -3087 Feb 07 j 12:42	9 83247 10° 8 06'04	50.72303 AU	minimum elong	-3080 Feb 08 j 06:45	25°る07'31	
retrograde	-3087 Feb 07 j 12:42 -3087 May 09 j 23:09	10°00'04 12° る 04'54		max. Earth dist.	-3080 Feb 08 j 08:45 -3080 Feb 09 j 08:38		30.88271 AU
opposition	-3087 May 09 j 23.09 -3087 Jul 29 j 19:08	12 30434 10° る 39'37	-0°56'30	morning rise	-3080 Feb 09 j 08.38 -3080 Feb 24 j 04:48	25° る 43'15	50.002/1 AU
min. Earth dist.	-3087 Jul 28 j 20:14		28.91960 AU	retrograde	-3080 Neb 24 j 04.48	23 3 43 13	
direct	-3087 Oct 15 j 11:35	9° ප 16'36	20.7.700710	min. Earth dist.	-3080 Aug 13 j 08:17		28.88206 AU
evening set	-3086 Jan 09 j 13:49	11° そ 09'01		opposition	-3080 Aug 14 j 07:55	26°පි17'00	
-0				· r r		1, 00	2 42

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3080 in astronomical counting style is the year 3081 BCE in historical counting style. 1°44'39 -3080 Oct 30 i 17:59 24°る53'55 minimum elong -3073 Feb 24 i 02:06 10°≈50'54 direct -3079 Jan 25 j 00:53 26°**る**46'42 -3073 Feb 25 j 02:06 10°≈53'09 30.84671 AU max Earth dist evening set -3073 Mar 12 j 02:40 11°≈26'46 morning rise -3079 Feb 09 j 19:27 27°る22'05 -1°24'18 -3073 Jun 11 j 18:00 13°≈25'48 conjunction retrograde -3073 Aug 30 j 18:53 -3079 Feb 09 j 19:27 27°る22'05 1°24'24 12°≈00'20 -1°53'24 minimum elong opposition -3079 Feb 10 j 21:32 max. Earth dist. 27°る24'33 30.87943 AU min. Earth dist. -3073 Aug 29 j 21:31 12°≈01'50 28.84575 AU morning rise -3079 Feb 25 j 17:48 27°**る**57'51 direct -3073 Nov 16 j 01:49 10°≈36'50 retrograde -3079 May 28 j 11:02 29°**る**56'59 evening set -3072 Feb 10 j 18:00 12°≈30'01 -3079 Aug 16 j 19:56 opposition 28°る31'40 -1°32'12 min. Earth dist. -3079 Aug 15 j 19:39 28°る33'22 28.87846 AU conjunction -3072 Feb 26 j 15:22 13°≈05'33 -1°47'25 direct -3079 Nov 02 j 05:59 27°る08'34 minimum elong -3072 Feb 26 j 15:22 13°≈05'33 1°47'29 -3078 Jan 27 j 13:34 29°る01'26 -3072 Feb 27 j 14:52 evening set max. Earth dist. 13°≈07'46 30.84258 AU -3072 Mar 13 j 16:18 morning rise 13°≈41'26 conjunction -3078 Feb 12 j 08:24 29°る36'51 -1°28'02 -3072 Apr 23 j 16:13 15°**≈** minimum elong -3078 Feb 12 j 08:24 29°る36'51 1°28'07 retrograde -3072 Jun 13 j 09:17 15°≈40'25 max. Earth dist. -3078 Feb 13 j 09:14 29°る39'11 30.87530 AU -3072 Aug 04 j 03:12 15°R≈ -3078 Feb 22 j 14:49 min. Earth dist. -3072 Aug 31 j 08:21 14°≈16'30 28.84233 AU morning rise -3078 Feb 28 j 07:16 0°≈12'38 opposition -3072 Sep 01 j 06:25 14°≈14'56 -1°56'21 retrograde -3078 May 30 j 23:47 2°≈11'48 direct -3072 Nov 17 j 14:27 12°≈51'24 min. Earth dist. -3078 Aug 18 j 09:04 0°≈48'05 28.87398 AU evening set -3071 Feb 12 j 06:53 14°≈44'38 opposition -3078 Aug 19 j 07:58 0°≈46'29 -1°36'07 -3071 Feb 19 j 05:07 15°≈ -3078 Sep 17 i 16:03 30°Rる direct -3078 Nov 04 i 15:23 29°る23'20 conjunction -3071 Feb 28 i 04:36 15°≈20'12 -1°50'06 -3078 Dec 21 i 05:40 0°≈ -3071 Feb 28 i 04:36 15°≈20'12 1°50'10 minimum elong evening set -3077 Jan 30 j 02:08 1°≈16'17 max. Earth dist. -3071 Mar 01 i 04:03 15°≈22'24 30.83971 AU -3071 Mar 16 j 05:54 15°≈56'06 morning rise -3077 Feb 14 j 21:35 1°≈51'43 -1°31'38 -3071 Jun 15 j 21:36 conjunction retrograde 17°≈55'04 -3077 Feb 14 j 21:34 -3071 Sep 03 j 18:04 16°≈29'35 -1°59'08 1°≈51'43 1°31'43 minimum elong opposition -3077 Feb 15 j 22:54 -3071 Sep 02 j 21:11 max. Earth dist. 1°≈54'06 30.87027 AU min. Earth dist. 16°≈31'03 28.84022 AU -3077 Mar 02 j 20:39 -3071 Nov 20 j 01:28 2°≈27'30 direct 15°≈06'00 morning rise -3077 Jun 02 j 12:38 -3070 Feb 14 j 19:55 4°≈26'41 16°≈59'18 retrograde evening set -3077 Aug 21 j 19:54 3°≈01'21 -1°39'53 opposition -3070 Mar 02 j 18:10 -3077 Aug 20 j 20:43 3°≈02'58 28.86844 AU conjunction 17°≈34'53 -1°52'37 min. Earth dist. -3077 Nov 07 j 02:52 -3070 Mar 02 j 18:10 direct 1°≈38'09 minimum elong 17°≈34'53 1°52'41 -3076 Feb 01 j 14:49 -3070 Mar 03 j 17:44 evening set 3°≈31'09 max. Earth dist. 17°≈37'06 30.83827 AU -3070 Mar 18 j 19:44 morning rise 18°**≈**10'48 -3076 Feb 17 j 10:28 -3070 Jun 18 j 10:54 conjunction 4°≈06'36 -1°35'05 retrograde 20°≈09'43 -3076 Feb 17 j 10:28 4°≈06'36 1°35'10 min. Earth dist. -3070 Sep 05 j 07:48 18°≈45'48 28.83935 AU minimum elong max. Earth dist. -3076 Feb 18 j 10:22 4°≈08'51 30.86435 AU opposition -3070 Sep 06 j 05:23 18°≈44'17 -2°01'44 -3076 Mar 04 j 10:05 4°≈42'25 direct -3070 Nov 22 j 13:31 17°≈20'41 morning rise retrograde -3076 Jun 04 j 02:14 6°≈41'34 -3069 Feb 17 j 09:13 19°≈14'04 evening set -3076 Aug 22 j 09:33 5°≈17'46 28.86237 AU min. Earth dist. -3076 Aug 23 j 07:53 5°≈16'12 -1°43'30 -3069 Mar 05 j 07:42 19°≈49'40 -1°54'58 opposition conjunction -3076 Nov 08 j 13:32 3°≈52'56 -3069 Mar 05 j 07:42 19°≈49'40 1°55'02 direct minimum elong -3075 Feb 03 j 03:28 5°≈45'58 -3069 Mar 06 j 06:13 19°≈51'47 30.83785 AU evening set max. Earth dist. morning rise -3069 Mar 21 i 09:42 20°≈25'36 -3075 Feb 18 i 23:41 conjunction 6°≈21'26 -1°38'24 retrograde -3069 Jun 21 i 00:07 22°≈24'30 minimum elong -3075 Feb 18 i 23:41 6°≈21'26 1°38'29 opposition -3069 Sep 08 i 16:57 20°≈59'06 -2°04'09 max. Earth dist. -3075 Feb 20 i 00:23 6°≈23'46 30.85809 AU min. Earth dist. -3069 Sep 07 i 20:38 21°≈00'32 28.83944 AU -3075 Mar 06 i 23:30 6°≈57'16 direct -3069 Nov 24 j 23:08 19°≈35'29 morning rise -3075 Jun 06 j 15:02 8°≈56'23 -3068 Feb 19 j 22:19 21°≈28'58 retrograde evening set -3075 Aug 25 j 19:37 7°≈30'59 -1°46'58 opposition -3075 Aug 24 j 21:32 7°≈32'32 28.85616 AU -3068 Mar 06 j 21:20 min. Earth dist. conjunction 22°≈04'36 -1°57'09 direct -3075 Nov 11 j 02:30 6°≈07'38 minimum elong -3068 Mar 06 j 21:20 22°≈04'36 1°57'13 -3074 Feb 05 j 16:17 8°≈00'43 max. Earth dist. -3068 Mar 07 j 20:25 22°≈06'46 30.83820 AU evening set -3068 Mar 22 j 23:29 22°≈40'32 morning rise conjunction -3074 Feb 21 j 12:49 8°≈36'12 -1°41'33 -3068 Jun 22 j 12:45 24°≈39'24 retrograde -3074 Feb 21 j 12:49 -3068 Sep 09 j 07:52 23°≈15'30 28.83989 AU minimum elong 8°≈36'12 1°41'39 min. Earth dist. -3074 Feb 22 j 12:18 -3068 Sep 10 j 04:23 23°≈14'03 -2°06'23 max. Earth dist. 8°≈38'25 30.85210 AU opposition -3074 Mar 09 j 13:10 -3068 Nov 26 j 10:40 morning rise 9°≈12'03 direct 21°≈50′26 -3067 Feb 21 j 11:55 retrograde -3074 Jun 09 j 05:17 11°≈11'08 evening set 23°≈44'01 min. Earth dist. -3074 Aug 27 j 09:13 9°≈47'14 28.85055 AU opposition -3074 Aug 28 j 07:20 9°≈45'41 -1°50'16 conjunction -3067 Mar 09 j 11:09 24°≈19'39 -1°59'08 direct -3074 Nov 13 j 13:38 8°≈22'15 minimum elong -3067 Mar 09 j 11:09 24°≈19'39 1°59'12 evening set -3073 Feb 08 j 05:08 10°≈15'23 max. Earth dist. -3067 Mar 10 j 08:33 24°≈21'40 30.83864 AU -3067 Mar 25 j 13:45 24°≈55'37 morning rise -3073 Feb 24 j 02:07 10°≈50'54 -1°44'34 -3067 Jun 25 j 01:44 conjunction retrograde 26°≈54'28

Nemination Semination Sem	Planetary Pheno	omena of Neptune 1	from -3400	through -2898	(UT), Astrodien	st AG 18-Feb-2025	14:23,	page 27
m. Earth dist	•	-		•				
	opposition	-3067 Sep 12 j 15:50	25° ≈ 29'10	-2°08'25	conjunction	-3060 Mar 25 j 14:00	10°) €05'37	-2°07'53
Compane	min. Earth dist.	-3067 Sep 11 j 20:32	25°≈30'31	28.84027 AU	minimum elong	-3060 Mar 25 j 14:00	10°) 05′37	2°07'55
Compunetion	direct	-3067 Nov 28 j 20:55	24°≈05'30		max. Earth dist.	-3060 Mar 26 j 06:02	10°) €07'07	30.82608 AU
composition 3996 Mar 12 jol.19 69-8814S 1 201010 offeed 12 jol.19 69-8814S 1 201010 intend date (a) 6006 Mar 12 jol.25 1194 1879 287-22 AU max Earth dist. -3966 Mar 23 jol.10 279-81090 centered. -3060 Dec. 11 jol.20 279-81090 centered. -3060 Dec. 11 jol.20 279-81090 centered. -3060 Page 1 jol.20 179-84020 28-874 AU centered. -3090 Page 1 jol.20 279-81090 centered. -3090 Page 1 jol.20 279-82020 centered. -3090 Page 1 jol.20 279-82020 279-82020 centered. -3099 Mar 2 jol.20 127-82072 270-922	evening set	-3066 Feb 24 j 01:32	25° ≈ 59'11		morning rise	-3060 Apr 10 j 18:30	10°) 41′39	
minimeding minimed mini					retrograde	-3060 Jul 10 j 22:24	12°) 39′53	
max Earth dist. 9006 Mar 2 jg.228 20%2893 90.8588 AU direct -3090 Mar 12 jg.150 1794604 2794010 2794010 1794010	conjunction	-3066 Mar 12 j 01:19	26° ≈ 34'51	-2°00'57	opposition	-3060 Sep 27 j 22:18	11°) 14'39	-2°17'02
morning mere 306.0km 28j.043 278-81049 vering set 309.9 km 12j.015 179-4707 vering retire grade 306.6 km 27j.043 278-8450 28.8378 AU vering set 309.9 km 28j.0417 279-2707 270-270	minimum elong	-3066 Mar 12 j 01:19	26° ≈ 34'51	2°01'01	min. Earth dist.	-3060 Sep 27 j 08:15	11°) 15′38	28.82742 AU
Immuniarha data 3006 Spt 160345 279e4507 288374 AU	max. Earth dist.	-3066 Mar 12 j 22:58	26° ≈ 36'53	30.83858 AU	direct	-3060 Dec 14 j 08:44	9°) 50'31	
min Earl disk 3065 Sep 1 joly 317 278-842 vol. 28.893 AU conjunction 3099 Mar 28 jol 17 728-207 vol. 297023 2009 Sep 1 joly 301 279-842 vol. 29703 3099 Mar 28 jol 30 279-207 vol. 297023 3099 Mar 28 jol 30 279-207 vol. 297023 3099 Mar 28 jol 30 279-207 vol. 297027 3009 Mar 28 jol 30 279-207 vol. 29702 270-207 vol. 29702 270-2	morning rise	-3066 Mar 28 j 04:03	27° ≈ 10'49		evening set	-3059 Mar 12 j 01:50	11°) 44'40	
opposition -3066 See 19 (3) 631-71 27%-84472 (2) 2010 to max Farth dist. 3059 Mar 28) (2014) (2) 80.8258 AU ceruing set 3066 Nea 19 (152) 20 88-28146 (2014) (2) 400 max Farth dist. 3059 Mar 18) (3) 68 Feb 26 (152) 20 88-28140 (2014) (2) 400 max Farth dist. 3066 Mar 14) (152) 20 88-28140 (2014) (2) 400 max Farth dist. 3065 Mar 15) (10-5) 20 88-8070 (2) 2020 (2) 400 min. Earth dist. 3059 Mar 18) (10-5) 20 88-28130 (2) 200 min. Earth dist. 3059 Mar 18) (10-5) 20 88-28130 (2) 200 min. Earth dist. 3059 Mar 18) (10-5) 20 88-28130 (2) 20 400 min. Earth dist. 3050 Mar 18) (10-5) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 18) (10-5) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 18) (10-5) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 18) (10-5) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 19) (10-5) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 19) (10-5) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 19) (10-5) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 19) (10-5) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 19) (10-5) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 19) (10-5) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 19) (10-5) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 19) (10-5) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 19) (10-5) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 19) (10-5) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 19) (10-5) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 19) (10-5) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 19) (10-5) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 19) (10-5) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 19) (10-5) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 19) (10-5) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 19) (2) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 19) (2) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 19) (2) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 19) (2) 20 88-28130 (2) 40 min. Earth dist. 3050 Mar 19) (2) 20 88-28130 (2) 20 88-28130 (2) 20 88-28130 (2) 20 90 90 00 00 00 00 00 00 00 00	retrograde	-3066 Jun 27 j 14:01	29° ≈ 09'37					
direct -366 Feb 26 j 1502 26%-2070 of 26%-20	min. Earth dist.	-3066 Sep 14 j 08:45	27° ≈ 45'40	28.83974 AU	conjunction	-3059 Mar 28 j 04:17	12° ∺ 20′29	-2°08'22
evening set -9.065 Feb 26 j 15.20 28*8e1426 morning me -0.095 Apr 13 j 06.54 12*165631 -2*1726 conjunction -3.065 Mar 14 j 15.21 28*sac907 20*215 oppsition -3.095 Apr 13 j 10.16 12*726 -17*26 mornium clong -3.065 Mar 15 j 10.59 28*sac907 20*227 nin. Farth dist -3.095 Sep 29 j 18*47 13*8027 28*28*24 morning fee -3.065 Mar 15 j 10.59 28*sac908 20*33*28 18*28*28 </td <td>opposition</td> <td>-3066 Sep 15 j 03:17</td> <td>27°≈44'22</td> <td>-2°10'15</td> <td>minimum elong</td> <td>-3059 Mar 28 j 04:17</td> <td>12°∺20′29</td> <td>2°08'23</td>	opposition	-3066 Sep 15 j 03:17	27° ≈ 44'22	-2°10'15	minimum elong	-3059 Mar 28 j 04:17	12° ∺ 20′29	2°08'23
conjunction	direct	-3066 Dec 01 j 09:08	26° ≈ 20'40		max. Earth dist.	-3059 Mar 28 j 20:38	12°) 22′01	30.82584 AU
cospination -306 Mar 14 15.21 28%-80707 -20055 opposition -305 Sep 2 pg 1847 13*M3027 28.82782 AU minimum clong -3065 Mar 16 15.21 28%-85188 30.83788 AU min. Farth dist. -3059 Pec 16 20-43 12*M3072 28.82782 AU morning read -3065 Mar 15 15.90 28%-85188 30.83758 AU receit -3058 Mar 14 15.50 13*M5075 13*M5075 13*M5075 13*M5075 13*M5075 13*M5075 13*M5075 13*M5075 14*M5187 2-00578 13*M5075 14*M5187 2-00578 14*M5187 2-00578 14*M5187 2-00579 2-00579 14*M5187 2-00580 14*M5187 2-00579 2-00579 14*M5187 2-00590 14*M51	evening set	-3065 Feb 26 j 15:20	28° ≈ 14′26		morning rise	-3059 Apr 13 j 08:54	12° ¥ 56'31	
minimum clong -306S Mar 14 j 15-21 28%-8507 29/0374 min Earth dist -306S Mar 15 j 19-39 28%-8508 308.78 s Al J -306S Mar 30 j 18-30 29%-2006 ceruing set -306S Mar 10 j 18-10 29%-2006 ceruing set -306S Mar 10 j 18-20 29%-2006 ceruing set -3058 Mar 10 j 18-20 32%-8593 -211153 minimum clong -306S Mar 10 j 18-20 14*3519 -208314 opposition -306S Sep 17 j 18-38 30%-88 -3078 Mar 10 j 18-20 14*3519 -208319 direct -306S Sep 17 j 08-55 30%-88 max. Earth dist -3088 Mar 10 j 18-20 14*3519 -208310 minimum clong -306S Feb 15 j 04-56 0°R cromoning rise -3088 Mar 15 j 23-30 15*11122 18*174002 18*18412 28*2879 AU conjunction -3064 Mar 16 j 05-22 1*160522 1*160522 2*0404 -3083 Mar 17 j 05-20 15*14415 2*178002 minimum clong -3064 Mar 16 j 05-21 1*160522 2*0404 -3064 Mar 16 j 05-22 1*160523 2*0404 -3064 Mar 16 j 05-22 1*160523 1*160523 2*0404					retrograde	-3059 Jul 13 j 10:16	14°) 54'39	
max Earth dist -3065 Mar 15 j 10-50 28%-851% 30.8378 AU evening set -3058 Mar 14 j 15-50 37%-970 morning rise -3065 Apr 15 j 19-58 0°K conjunction -3058 Mar 14 j 15-50 178-291 opposition -3065 Sap 15 j 19-48 0°K005 conjunction -3058 Mar 30 j 18-29 14*H3519 2-0873 min Earth dist -3065 Sap 16 j 20-40 0°M0052 28.83828 AU minimum clong -3058 Mar 30 j 18-29 14*H3519 2-08410 direct -3065 Sap 16 j 20-40 0°M0052 28.83828 AU morning rise -3058 Mar 15 j 23-31 15*H3512 22000 AU evening set -3064 Feb 15 j 10-44 0°M2941 conjunction -3058 Dec 19 j 20-61 15*H4512 28.82979 AU evening set -3064 Mar 16 j 05-32 1°H0524 -2'0401 evening set -3058 Dec 19 j 20-61 15*H4512 2-882979 AU exeming set -3064 Mar 16 j 05-32 1°H0524 -2'0401 evening set -3057 Apr 10 j 08*46 16*H3212 2-88297 AU exertorgade -3064 Apr 0 j 08-31 1°H0523 2'040	conjunction	-3065 Mar 14 j 15:21	28° ≈ 50'07	-2°02'35	opposition	-3059 Sep 30 j 09:05	13° ¥ 29′26	-2°17'26
morning rise .3065 Mar 30 j 18.20 29%=2006 evening set .3068 Mar 14 j 15.50 13% 5970 evening set .3065 Mar 10 j 10.81 evening set .3065 Mar 30 j 18.20 14% 3571 2-08739 eposition .3065 Mar 30 j 18.20 14% 3571 2-08739 eposition .3065 Mar 10 j 18.20 24% 1571 2	minimum elong	-3065 Mar 14 j 15:21	28° ≈ 50'07	2°02'37	min. Earth dist.	-3059 Sep 29 j 18:47	13°) 30′27	28.82782 AU
Categories	max. Earth dist.	-3065 Mar 15 j 10:59	28° ≈ 51'58	30.83758 AU	direct	-3059 Dec 16 j 20:43	12° ∺ 05'16	
Proposition 3,06 Jun 3,0 jul 10 11 12 11 13 13 14 13 14 13 14 13 14 14	morning rise	-3065 Mar 30 j 18:30	29° ≈ 26′06		evening set	-3058 Mar 14 j 15:50	13° ¥ 59'30	
opposition 3.065 Sey 1 7 j 14.38 29°se939 2°11 S3 minimal mellong -3.065 Natr 3 j 18.29 14°3542 30.82700 AU mine Farth dist. -3.065 Sey 1 7 j 08.55 30°8se 50°8se morning color 18°5 Mar 3 j 19.21 14°3402 18°4 M122 18°4 M1		-3065 Apr 15 j 19:58	0° ∀					
min. Earth dist. -3065 Sep 1 f.j 20.40 0°Y0752 28.8328 AU max. Earth dist. -3085 Mar Ji j.j 91.13 4°Y43642 3082 VIII 15 (21) direct -3065 Dec 03 j.j 2006 28°9-83'50 recognage -3088 Au Ji j.j 22:16 1°Y+092'5 -2°1738 evening set -3064 Feb 15 j.04:48 0°Y4 -9 poposition -3058 Dec 19 j.07:01 18°Y44'12 -2°1738 evening set -3064 Mar 16 j.05:32 1°M523 2°0404 -3058 Dec 19 j.07:01 14°Y2002 eonjunction -3064 Mar 16 j.05:32 1°M523 2°0404 -3057 Mar 17 j.05:30 16°Y45'22 minimum elong -3064 Mar 17 j.01:01 1°Y6713 3083556 AU conjunction -3057 Apr 0.21,08:47 16°Y5503 2°08'44 minimar elong -3064 Jul 10 j.16:45 3°44002 max. Earth dist. -3057 Apr 0.21,08:47 16°Y5503 2°08'34 evening set -3064 Jul 10 j.16:48 3°44002 minimar dist. -3057 Apr 0.21,08:47 16°Y5503 2°08'34 evening set -3064 Jul 10 j.16:48 3°Y4002 minimar dist. -3057 Apr 0.21,08:47 <td>retrograde</td> <td>-3065 Jun 30 j 04:16</td> <td>1°) 24′51</td> <td></td> <td>conjunction</td> <td>-3058 Mar 30 j 18:29</td> <td>14°) 35'19</td> <td>-2°08'39</td>	retrograde	-3065 Jun 30 j 04:16	1°) 24′51		conjunction	-3058 Mar 30 j 18:29	14°) 35'19	-2°08'39
direct .3065 Sep 17 j 0.65 07%se moming rise .3058 Jul 15 j 23:0 15 y 23:0 15 y 24:1 27 y 17%sep 2-1 27 y	opposition	-3065 Sep 17 j 14:38	29° ≈ 59'36	-2°11'53	minimum elong	-3058 Mar 30 j 18:29	14° ∺ 35'19	2°08'41
direct .3065 Dec 03 j 20.06 28%-8355 Urb retrograde .3064 Feb 15 j 04.45 0°H opposition .3058 Oct 01 j 20.05 15°H4415 2*17388 evening set .3064 Feb 15 j 04.45 0°H549*1 min Earth dist. .3058 Oct 01 j 06.04 15°H4412 2*2820°) AU conjunction .3064 Mar 16 j 05.32 1°H50524 2*0401 evening set .3057 Mar 17 j 05.03 16°H1420 minimum clong .3064 Mar 16 j 05.32 1°H50734 2*0401 conjunction .3057 Apr 02 j 08.46 16°H5013 2*08*44 morning rise .3064 Apr 01 j 01.645 1°H50713 3*083556 AU conjunction .3057 Apr 03 j 00.07 16°H5132 2*08*44 retrograde .3064 Sep 19 j 02.01 2°H54128 2*11919 retrograde .3057 Apr 03 j 00.07 16°H5133 3*08*296 AU min. Earth dist. .3064 Sep 19 j 02.01 2°H5418 2*11919 retrograde .3057 Apr 18 j 13.49 16°H5013 3*08*291 AU direct .3063 Mar 18 j 13.34 3°H5036 evening set .3057 Apr 18 j 13.49 16°H5013 3*08*291 AU minimum clong .3063 Mar 18 j 13.43 3°H2016 2*18*18 2°P516 2*18*18 2°P516 2*18*18 2°P516 2*18*18<	min. Earth dist.	-3065 Sep 16 j 20:40	0°) 00′52	28.83828 AU	max. Earth dist.	-3058 Mar 31 j 09:13	14°) 36′42	30.82700 AU
Second S		-3065 Sep 17 j 08:55	30° ₹ ≈		morning rise	-3058 Apr 15 j 23:30	15° ∺ 11'22	
evening set .3064 Feb. 29 j 05:03 0°*£294 I min. Earth dist. aired .3088 Oct 0°2 j 06:41 15°44512 28.82979 AU conjunction .3064 Mar 16 j 05:32 1°40523 2°20404 son57 Mar 17 j 05:37 1°F6122 1°80524 2°0404 minimum elong .3064 Mar 16 j 05:32 1°H6073 2°0404 son57 Apr 0; 08:47 16°H503 2°0844 morning rise .3064 Apr 0 j 10:85 1°H413 conjunction .3057 Apr 0; 08:46 16°H503 2°0844 minimum elong .3064 Apr 0 j 10:85 1°H413 conjunction .3057 Apr 0; 03:60 16°H503 2°0844 opposition .3064 Sep 19 j 02:01 2°H1484 2°1319 retrograde .3067 Apr 18 j 13:07 1°H243 2°1319 retrograde .3067 Apr 18 j 13:07 1°H243 2°1182 2°18182 1°H243 2°1182 2°18183 1°H243 2°1182 2°18183 1°H243 2°1182 2°18183 1°H243 2°1182 2°18183 1°H243 2°1182 2°18184 2°1737 2°1743 1°H2433 2°1737 2°1743 1°	direct	-3065 Dec 03 j 20:06	28° ≈ 35'50		retrograde	-3058 Jul 15 j 22:16	17° ₩ 09'25	
Conjunction -3064 Mar 6 05.32 1°M65°24 2°0401 2°04074 2°04074 30.87 Mar 17 10.537 16°M41'22 2°04044 30.664 Mar 17 10.10 1°M67'13 30.83556 AU 2°010 minimum elong 3064 Mar 17 10.10 1°M67'13 30.83556 AU 2°010 minimum elong 3064 Mar 17 10.10 1°M67'13 30.83556 AU 2°010 minimum elong 3064 Mar 17 10.10 1°M67'13 30.83556 AU 2°010 minimum elong 3064 Mar 17 10.10 1°M67'13 30.83556 AU 2°010 minimum elong 3064 Mar 18 16°M50'13 2°08'44 2°010 minimum elong 3064 Mar 18 19 20.20 2°M15'8 28.8388 AU 2°M67'8 30.873 Mar 30.873 Mar 18 19.20 2°M15'8 2°M19'8		-3064 Feb 15 j 04:45	0° ∀		opposition	-3058 Oct 02 j 20:02	15°) 4 44′15	-2°17'38
conjunction -3064 Mar 1 6 j 05:32 1°M05°24 -2°04'01 evening set -3057 Mar 1 7 j 05:37 16°H2*2 -2°08'44 minimum elong -3064 Mar 1 6 j 05:32 1°M05°23 2°04'04 -306'4 Mar 1 7 j 01:01 1°M05°23 2°08'44 -306'4 Mar 1 7 j 01:01 1°M07'13 308356 AU conjunction -3057 Apr 02 j 08:46 16°M5'013 2°08'45 -2°08'44 minimum elong -3057 Apr 03 j 00:07 16°M5'139 3082961 AU -306'4 Mar 1 6 j 05:32 2°M1'818 2°81'8158 288 8388 AU morning rise -306'4 Apr 1 j 01:04 1°M5'81'39 3082961 AU -306'3 Apr 1 g 1;349 1°M5'80'13 2°96'14 -306'3 Apr 1 g 1;349 1°M5'80'8 2°97'10 -306'3 Apr 1 g 1;349 1°M5'80'8 2°97'10 -306'3 Apr 1 g 1;349 1°M5'80'8 2°97'10 -306'3 Apr 0 g 1;849 2°97'10 -306'3 Apr 0 g 1;349 1°M5'45'12 2°98'10 -306'3 Apr 0 g 1;349 1°M5'45'12 2°98'16 -306'3 Apr 0 g 1;349 1°M5'45'12 2°98'37'12 3°87'20'13 3°84'20'13	evening set	-3064 Feb 29 j 05:03	0° ∺ 29'41		min. Earth dist.	-3058 Oct 02 j 06:41	15°) 45′12	28.82979 AU
minimum elong -3064 Mar 16 j 05:32 1°H0523 2°04'04 recognance -3064 Mar 17 j 10:10 1°H2573 30.83556 AU conjunction -3057 Apr 02 j 08:46 16°H5013 2°08'44 morning rise -3064 Apr 01 j 08:51 1°H4123 minimum elong -3057 Apr 02 j 08:47 16°H5013 2°08'45 retorgade -3064 Sep 18 j 09:20 2°H1448 2°13'19 retorgande -3057 Apr 18 j 13:49 1°PK26'16 direct -3064 Sep 19 j 02:01 2°H1448 2°13'19 retorgande -3057 Oct 05 j 06:51 1°PK26'18 direct -3064 Dec 05 j 08:38 0°H50'58 evening set -3057 Oct 05 j 06:51 1°PK26'18 2°17'37 evening set -3063 Mar 18 j 19:37 3°H20'36 2°205'16 evening set -305 Apr 19:39:30 1°8'H29'19 minimum elong -3063 Mar 18 j 19:37 3°H20'36 2°205'16 evening set -305 Apr 19:39:30 1°8'H51'1 2°08'37 minimum elong -3063 Mar 18 j 19:37 3°H22'18 3'842'18 0'91.39 1°8'H51'1 2°08'37 1°9'H51'1 2'908'31 2					direct	-3058 Dec 19 j 07:01	14°) €20'02	
max. Earth dist. -3064 Mar 17, 01:01 1° Morila 308355 AU conjunction -3057 Apr 02 j 08:46 16° Morila 2°0844 morning rise -3064 Apr 01 j 16:45 3° M4002 minimum elong -3067 Apr 02 j 08:47 16° Morila 2°0845 10° Morila 2°0845 2°0846 2°0961 2°0877 18 j 03:35 19° Morila 2°0847 2°0847 2°0871 18 j 03:35 19° Morila 2°1848 2°1848 2°1873 2	conjunction	-3064 Mar 16 j 05:32	1°) €05'24	-2°04'01	evening set	-3057 Mar 17 j 05:37	16°) 1 4′22	
moming rise -3064 Apr 01 0.0 5.5 1° 44123 minimum elong -3057 Apr 02 0.0 4.0 16° 85013 20°845 old 30° 30° 80° 10° 30° 80° 10° 16° 85° 13° 30° 80° 80° 80° 80° 80° 80° 80° 80° 80° 8	minimum elong	-3064 Mar 16 j 05:32						
retrograde	max. Earth dist.	-3064 Mar 17 j 01:01	1°) €07'13	30.83556 AU	conjunction	-3057 Apr 02 j 08:46	16° ⊁ 50′13	-2°08'44
min. Earth dist. -3064 Sep 18 j 0.92.3 2° ¥15′8 28.83588 AU morning rise -3057 Apr 18 j 13.49 17° ¥26′16 -9005160 20 3064 Sep 19 j 0.201 2° ¥14′48 2°13′19 retrograde -3057 Jul 18 j 0.93 19° ¥26′17 -97° ¥7	morning rise	-3064 Apr 01 j 08:51	1°) 41′23		minimum elong	-3057 Apr 02 j 08:47	16° ¥ 50′13	2°08'45
opposition -3064 Sep 19 j 0.201 2°H1448 2°13'19 retrograde -3057 Jul 18 j 09:35 0°PK24'13 -2°1737 driced -3064 Dec 05 j 08:38 0°PK50'8 opposition -3057 Oct 0°J 0; 50:51 17°PK5908 -2°1737 evening set -3063 Mar 18 j 19:37 3°PK20'36 -2°05'16 evening set -305'7 Dec 2 j 18:23 16°PK34'54 -2°08'17 conjunction -3063 Mar 18 j 19:37 3°PK20'36 2°05'19 evening set -3056 Mar 18 j 19:39 18°H29'19 -2°08'37 max. Earth dist. -3063 Mar 19 j 13:47 3°PK20'36 2°05'19 minimum elong -3056 Apr 03 j 23:00 19°H05'11 2°08'37 morning rise -3063 Mar 19 j 13:47 3°PK56'36 minimum elong -3056 Apr 03 j 23:00 19°H05'11 2°08'37 retrograde -3063 Mar 19 j 13:10 4°PK55'50 minimum elong -3056 Apr 03 j 23:00 19°H05'11 2°08'39 retrograde -3063 Mar 19 j 13:10 4°PK55'51 minimum elong -3056 Oct 06 j 17:33 19°H05'11 2°08'39 direct -3063 Mar 19 j 13:45 <t< td=""><td>retrograde</td><td>-3064 Jul 01 j 16:45</td><td></td><td></td><td>max. Earth dist.</td><td></td><td></td><td>30.82961 AU</td></t<>	retrograde	-3064 Jul 01 j 16:45			max. Earth dist.			30.82961 AU
direct -3064 Dec 05 j 08:38 0°#5058 opposition -3057 Oct 05 j 06:51 1°* 8508 2° 1737 evening set -3063 Mar 02 j 18:44 2° 44452 min. Earth dist. -3057 Dec 21 j 18:23 18° 3000 28.83297 AU conjunction -3063 Mar 18 j 19:37 3° #2036 2° 05'16 evening set -3056 Mar 18 j 19:39 18° #20'19 -2° 08'31 max. Earth dist. -3063 Mar 18 j 19:37 3° #20'36 2° 05'16 evening set -3056 Apr 03 j 23:00 19° #05'11 -2°08'37 morning rise -3063 Apr 03 j 23:19 3° #20'36 minimum elong -3056 Apr 03 j 23:00 19° #05'11 2°08'39 retrograde -3063 Apr 03 j 23:10 4° #45'95 -2° 14'33 max. Earth dist. -3056 Apr 03 j 23:00 19° #05'11 2°08'39 direct -3063 Sep 20 j 20:31 4° #35'55 max. Earth dist. -3056 Apr 04 j 12:36 19° #41'15 19° #41'15 2° 98'39 direct -3062 Mar 05 j 08:30 4° #35'35 2° 14'33 morning rise -3056 Apr 06 j 13:20 2° #14'10' 2° 17'24' direct	min. Earth dist.	-3064 Sep 18 j 09:23	2° 升 15′58	28.83588 AU	morning rise		17° ∺ 26'16	
evening set	opposition	-3064 Sep 19 j 02:01		-2°13'19	retrograde	-3057 Jul 18 j 09:35		
conjunction 3063 Mar 18 j 19:37 3°#20°36 2°05'16 evening set -3056 Mar 18 j 19:39 18°#29′19 *** minimum clong -3063 Mar 18 j 19:37 3°#20°36 2°05'19 *** **	direct	-3064 Dec 05 j 08:38			opposition	-3057 Oct 05 j 06:51		
conjunction -3063 Mar 8 j 19:37 3° ±2036 -2°05′16 evening set -3056 Mar 8 j 19:39 18° ±29′19	evening set	-3063 Mar 02 j 18:44	2°) 44′52		min. Earth dist.	-3057 Oct 04 j 17:58		28.83297 AU
minimum elong -3063 Mar 8 19:37 3° ±2018 2°05′19 conjunction -3056 Apr 03 23:00 19° ±05′11 2°08′37 moming rise -3063 Mar 19 13:47 3° ±22′18 30.83299 AU conjunction -3056 Apr 03 23:00 19° ±05′11 2°08′37 retrograde -3063 Jul 04 j07.37 5° ±55′09 max. Earth dist. -3056 Apr 04 j 12:36 19° ±06′27 30.83349 AU opposition -3063 Sep 21 j 13:10 4° ±2°14′33 morning rise -3056 Apr 04 j 12:36 19° ±01′15 2° 83349 AU direct -3063 Dec 07 j 21:33 3° ±05′59 opposition -3056 Oct 06 j 17:37 20° ±10′0 2° 1724 evening set -3062 Mar 05 j 08:36 4° ±59′57 min. Earth dist. -3056 Oct 06 j 17:37 20° ±10′0 2° 1724 evening set -3062 Mar 21 j 09:50 5° ±35′42 2° 06′20 evening set -305′5 Mar 21 j 09:30 2° ±61′00 8° ±35′12 2° 06′20 evening set -305′5 Mar 21 j 09:30 2° ±61′00 2° 06′20 evening set -305′5 Mar 21 j 09:30 2° ±61′00 2° ±8′10°1 2° 08′19					direct			
max. Earth dist. -3063 Mar 19 j 13:47 3°K22'18 30.83299 AU conjunction -3056 Apr 03 j 23:00 19°K05'11 2°08'37 morning rise -3063 Apr 03 j 23:19 3°K56'36 minimum elong -3056 Apr 03 j 23:00 19°K05'11 2°08'37 retrograde -3063 Apr 03 j 23:00 19°K05'12 2°08'39 minimum elong -3056 Apr 03 j 23:00 19°K05'11 2°08'39 opposition -3063 Sep 2 j 13:10 4°K29'54 -2°14'33 morning rise -3056 Opt 0 j 13:25 19°K41'15 -10°K4'11 -2°17'24 evening set -3062 Mar 0 j 08:36 4°K59'57 -8312 V retrograde -3056 Opt 0 j 05:10 0°K15'00 28.83732 AU conjunction -3062 Mar 2 j j 09:50 5°K35'42 2°06'20 wening set -3055 Apr 0 j j 3:28 20°K24'23 20°K20* max. Earth dist. -3062 Mar 2 j j 09:50 5°K35'42 2°06'20 wening set -3055 Apr 0 j j 3:28 20°K24'23 20°K1'50 28'84'95'1 2°06'20 wening set -3055 Apr 0 j j 3:28 20°K20'1 2°08'19 2°06'20 wening set -3055	3	3			evening set	-3056 Mar 18 j 19:39	18° ∺ 29'19	
moming rise -3063 Apr 03 j 23:19 3°X56'36 minimum elong -3056 Apr 03 j 23:00 19°X05'11 208'39 retrograde -3063 Jul 04 j 07:37 5°X55'09 max. Earth dist. -3056 Apr 04 j 12:36 19°X06'27 30.83349 AU opposition -3063 Sep 20 j 20:31 4°X29'54 -2°14'33 morning rise -3056 Jul 19 j 23:15 19°X41'15 2°18'39'07 direct -3063 Dec 07 j 21:53 3°X60'59 opposition -3056 Oct 06 j 05:10 20°X15'00 2°17'24 evening set -3062 Mar 05 j 08:36 4°X59'57 min. Earth dist. -3056 Oct 06 j 05:10 20°X15'00 28.83732 AU conjunction -3062 Mar 21 j 09:50 5°X35'42 2°06'20 evening set -3056 Dec 23 j 04:20 18°X49'51 max. Earth dist. -3062 Mar 21 j 09:50 5°X35'42 2°06'23 "William Land Hold Hold Hold Hold Hold Hold Hold Hol								
retrograde				30.83299 AU	·			
opposition -3063 Sep 21 j 13:10 4° ±29'54 -2° 14'33 morning rise -3056 Apr 20 j 04:26 19° ±41'15 -4° ±39'07 direct -3063 Sep 20 j 20:31 4° ±31'05 28.83312 AU retrograde -3056 Jul 19 j 23:15 21° ±39'07 -2°17'24 evening set -3062 Mar 05 j 08:36 4° ±59'57 min. Earth dist. -3056 Oct 06 j 05:10 20° ±14'07 -2°17'24 conjunction -3062 Mar 21 j 09:50 5° ±35'42 -2°06'20 evening set -3055 Mar 21 j 09:38 20° ±44'23 -2°08'19 minimum elong -3062 Mar 21 j 09:50 5° ±35'24 2°06'20 evening set -3055 Mar 21 j 09:38 20° ±44'23 -2°08'19 max. Earth dist. -3062 Mar 21 j 09:50 5° ±35'24 2°06'20 evening set -3055 Mar 21 j 09:38 21° ±20'17 -2°08'19 max. Earth dist. -3062 Mar 21 j 09:50 5° ±35'24 2°06'23 evening set -3055 Apr 06 j 13:28 21° ±20'17 -2°08'19 morning rise -3062 Mar 06 j 13:47 6° ±11'43 minimum elong -3055 Apr 06 j 13:28 21° ±21'33 30.83804 AU </td <td>-</td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td></td> <td></td>	-				_			
min. Earth dist. -3063 Sep 20 j 20:31 4°%31'05 28.83312 AU retrograde -3056 Jul 19 j 23:15 21°%39'07 -2°17'24 evening set -3062 Mar 05 j 08:36 4°%59'57 min. Earth dist. -3056 Oct 06 j 05:10 20°%1'500 28.83732 AU conjunction -3062 Mar 21 j 09:50 5°%35'42 2°06'20 evening set -3055 Mar 21 j 09:30 20°%44'23 -80'81'90 max. Earth dist. -3062 Mar 21 j 09:50 5°%35'42 2°06'20 evening set -3055 Mar 0j 13:28 20°%44'23 -80'91'91 morning rise -3062 Mar 21 j 09:50 5°%35'42 2°06'23 minimum elong -3055 Apr 0j 13:28 21°%20'17 2°08'19 morning rise -3062 Apr 0j 13:14 6°%11'43 minimum elong -3055 Apr 0j 13:28 21°%20'17 2°08'19 retrograde -3062 Jul 0j 19:31 8°%10'10 max. Earth dist. -3055 Apr 0j 13:28 21°%20'17 2°08'19 opposition -3062 Sep		·						30.83349 AU
direct -3063 Dec 07 j 21:53 3°\to555 opposition -3056 Oct 06 j 17:37 20°\to1407 -2°17'24 evening set -3062 Mar 05 j 08:36 4°\to59'57 min. Earth dist. -3056 Oct 06 j 05:10 20°\to1500 28.83732 AU conjunction -3062 Mar 21 j 09:50 5°\to35'42 -2°06'20 evening set -3055 Mar 21 j 09:38 20°\to44'23 20°\to44'23 max. Earth dist. -3062 Mar 21 j 09:50 5°\to35'42 2°06'23 evening set -3055 Mar 21 j 09:38 20°\to44'23 2°06'23 max. Earth dist. -3062 Mar 22 j 03:24 5°\to37'21 30.83010 AU conjunction -3055 Apr 06 j 13:28 21°\to2017 -2°08'19 retrograde -3062 Jul 06 j 19:31 6°\to41'143 minimum elong -3055 Apr 06 j 13:29 21°\to2017 2°08'19 retrograde -3062 Jul 06 j 19:31 8°\to40'10 max. Earth dist. -3055 Apr 07 j 03:06 21°\to42'133 30.8304 AU min. Earth dist. -3062 Sep 24 j 00:15 6°\to45'58 28.83039 AU morning rise -3055 Apr 07 j 03:06 21°\to45'21 23°\to45'22 d					-			
evening set				28.83312 AU	-			
conjunction		·				3		
conjunction -3062 Mar 21 j 09:50 5°\\\35'42 -2°06'20 evening set -3055 Mar 21 j 09:38 20°\\44'23 -3062 Mar 21 j 09:50 5°\\\35'42 2°06'23 max. Earth dist. -3062 Mar 22 j 03:24 5°\\\35'721 30.83010 AU conjunction -3055 Apr 06 j 13:28 21°\\\20'17 -2°08'19 morning rise -3062 Apr 06 j 13:47 6°\\\11'43 minimum elong -3055 Apr 06 j 13:28 21°\\\20'17 2°08'19 retrograde -3062 Jul 06 j 19:31 8°\\\\10'10 max. Earth dist. -3055 Apr 06 j 13:29 21°\\\\20'17 2°08'19 min. Earth dist. -3062 Sep 23 j 09:18 6°\\\45'58 28.83039 AU morning rise -3055 Apr 07 j 03:06 21°\\\\20'15'35 30.83804 AU opposition -3062 Sep 24 j 00:15 6°\\\44'54' -2°15'35 retrograde -3055 Jul 22 j 10:45 23°\\\\45'40'8 23°\\\45'40'8 direct -3061 Mar 07 j 22:23 7°\\\\41'15'6 min. Earth dist. -3055 Oct 08 j 17:28 22°\\\\42'9'19 28.84192 AU conjunction -3061 Mar 24 j 00:04 7°\\\\\55'042 2°07'12 evening set -30	evening set	-3062 Mar 05 J 08:36	4° 大 59'57			,		28.83732 AU
minimum elong		20/23/4 21:00 70	501/25142	2007/20				
max. Earth dist. -3062 Mar 22 j 03:24 5°\\\\37'21 30.83010 AU conjunction -3055 Apr 06 j 13:28 21°\\\\20'17 -2°08'19 morning rise -3062 Apr 06 j 13:47 6°\\\\11'43 minimum elong -3055 Apr 06 j 13:29 21°\\\\20'17 2°08'19 retrograde -3062 Jul 06 j 19:31 8°\\\\10'10 max. Earth dist. -3055 Apr 07 j 03:06 21°\\\\20'17 30.83804 AU min. Earth dist. -3062 Sep 23 j 09:18 6°\\\\44'54' 2°\\\$1'35 retrograde -3055 Apr 07 j 03:06 21°\\\\20'17 2°08'19 opposition -3062 Sep 24 j 00:15 6°\\\\44'54' -2°\\\$1'35 retrograde -3055 Jul 22 j 10:45 22°\\\\22'j 10:45 23°\\\54'08 direct -3061 Mar 07 j 22:23 7°\\\\41'456' poposition -3055 Oct 09 j 04:29 22°\\\22'\\92'19 22°\\\42'912 -2°16'57 evening set -3061 Mar 07 j 22:23 7°\\\\\$5'0'42 -2°07'12 evening set -3054 Mar 23 j 23:57 22°\\\52'\\59'34 2°\\\50'45'6 conjunction -3061 Mar 24 j 00:04 7°\\\50'50'42 2°07'14 30'54 Apr 09 j 04:03 23°\\\53'52'9					evening set	-3033 Mar 21 J 09:38	20° 大 44'23	
morning rise	_	3			ooming-ti	2055 A 06:12:20	2101/20117	2000110
retrograde				50.85010 AU	-			
min. Earth dist.					_			
opposition -3062 Sep 24 j 00:15 6° χ 44′54 -2°15′35 retrograde -3055 Jul 22 j 10:45 23° χ 54′08 direct direct -3062 Dec 10 j 09:32 5° χ 20′55 opposition -3055 Oct 09 j 04:29 22° χ 29′12 -2°16′57 evening set -3061 Mar 07 j 22:23 7° χ 14′56 min. Earth dist. -3055 Dec 25 j 16:44 21° χ 04′56 22° χ 29′59 28.84192 AU conjunction minimum elong -3061 Mar 24 j 00:04 7° χ 50′42 -2°07′12 evening set -3054 Mar 23 j 23:57 22° χ 59′34 -2°07′14 max. Earth dist. -3061 Mar 24 j 17:13 7° χ 50′42 2°07′14 <td>•</td> <td></td> <td></td> <td>20 02020 411</td> <td></td> <td></td> <td></td> <td>30.63804 AU</td>	•			20 02020 411				30.63804 AU
direct					-			
evening set -3061 Mar 07 j 22:23 7°\tau1'56 min. Earth dist. direct -3055 Oct 08 j 17:28 22°\tau2'59 22°\tau2'59 28.84192 AU direct -3055 Dec 25 j 16:44 21°\tau4'56 conjunction -3061 Mar 24 j 00:04 7°\tau50'42 2°07'12 evening set -3054 Mar 23 j 23:57 22°\tau59'34 22°\tau59'34 22°\tau59'34 22°\tau5'934 minimum elong -3061 Mar 24 j 17:13 7°\tau50'42 2°07'14 max. Earth dist. -3061 Mar 24 j 17:13 7°\tau52'19 30.82770 AU conjunction -3054 Apr 09 j 04:03 23°\tau53'29 -2°07'48 morning rise -3061 Apr 09 j 04:13 8°\tau52'04 max. Earth dist. -3054 Apr 09 j 04:03 23°\tau53'29 22°\tau5'39 -2°07'49 retrograde -3061 Jul 09 j 09:15 10°\tau52'04 max. Earth dist. -3054 Apr 09 j 15:55 23°\tau53'35 30.84266 AU opposition -3061 Sep 25 j 19:50 9°\tau60'54 28.82834 AU retrograde -3054 Oct 11 j 15:10 24°\tau61'35 22°\tau62'59 28.84192 AU 20°\tau61'45 22°\tau61'8				-2 13 33	•			2016157
direct -3055 Dec 25 j 16:44 21°\text{\texi{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tex{								
conjunction	evening set	-3001 Mar 0/J 22:23	/ π 14'36			-		20.04192 AU
minimum elong	aaniunatian	2061 Mar 24: 00:04	70¥ 50142	2007!12				
max. Earth dist.		_			evening set	-3034 Mar 23 J 23:3/	22 π39 ³ 4	
morning rise	_				ooming-ti	2054 4 00:04:02	2201/25/20	2007140
retrograde -3061 Jul 09 j 09:15 10° ★25′04 max. Earth dist3054 Apr 09 j 15:55 23° ★36′35 30.84266 AU opposition -3061 Sep 26 j 11:13 8° ★59′49 -2°16′25 morning rise -3054 Apr 25 j 09:51 24° ★11′33 min. Earth dist3061 Sep 25 j 19:50 9° ★00′54 28.82834 AU retrograde -3054 Jul 25 j 00:55 26° ★09′14 direct -3061 Dec 12 j 22:21 7° ★35′45 opposition -3054 Oct 11 j 15:10 24° ★44′23 -2°16′18				30.82770 AU	·			
opposition -3061 Sep 26 j 11:13 8° ★59'49 -2°16'25 morning rise -3054 Apr 25 j 09:51 24° ★11'33 min. Earth dist3061 Sep 25 j 19:50 9° ★00'54 28.82834 AU retrograde -3054 Jul 25 j 00:55 26° ★09'14 direct -3061 Dec 12 j 22:21 7° ★35'45 opposition -3054 Oct 11 j 15:10 24° ★44'23 -2°16'18	•							
min. Earth dist3061 Sep 25 j 19:50 9° ★00′54 28.82834 AU retrograde -3054 Jul 25 j 00:55 26° ★09′14 direct -3061 Dec 12 j 22:21 7° ★35′45 opposition -3054 Oct 11 j 15:10 24° ★44′23 -2°16′18	-			2016/25				30.84266 AU
direct -3061 Dec 12 j 22:21 7°\dagger35'45 opposition -3054 Oct 11 j 15:10 24°\dagger44'23 -2°16'18					•			
J J				20.02834 AU	-			2017/10
-5000 Iviai 07 J 12.05 7 Λ27 50 IIIII, Eaith dist5054 Oct 11 J 04:25 24 π45 09 28.84630 AU		·				3		
	evening set	-3000 Mai 09 J 12:03	э Т 2930		mm. carm dist.	-5054 Oct 11 J 04:23	2 4 π43 υ9	20.04030 AU

Planetary Pheno	omena of Neptune 1	from -3400	through -2898	B (UT), Astrodien	st AG 18-Feb-2025	14:23,	page 28
•	-		-		3055 BCE in historical c		
direct	-3054 Dec 28 j 05:44	23°) €20'04		minimum elong	-3047 Apr 25 j 09:43	9° Υ 19'46	1°58'55
evening set	-3053 Mar 26 j 14:17	25°) 14'48		max. Earth dist.	-3047 Apr 25 j 14:04	9° Y ′20′10	30.86265 AU
-	·			morning rise	-3047 May 11 j 16:40	9° Y 55'51	
conjunction	-3053 Apr 11 j 18:42	25°) 50'44	-2°07'06	retrograde	-3047 Aug 09 j 14:52	11° Y ′52'25	
minimum elong	-3053 Apr 11 j 18:42	25°) 50'44	2°07'06	opposition	-3047 Oct 26 j 17:35	10° Y ′27'47	-2°06'08
max. Earth dist.	-3053 Apr 12 j 05:43	25°) € 51'45	30.84664 AU	min. Earth dist.	-3047 Oct 26 j 13:13		28.86622 AU
morning rise	-3053 Apr 28 j 00:37	26°) €26'48		direct	-3046 Jan 12 j 17:23	9° Y '02'59	
retrograde	-3053 Jul 27 j 12:53	28°) 24'22		evening set	-3046 Apr 11 j 17:38	10° Y 58′03	
opposition	-3053 Oct 14 j 02:07	26°) 59'34	-2°15'27	C	1 ,		
min. Earth dist.	-3053 Oct 13 j 17:19	27°) €00'12	28.84990 AU	conjunction	-3046 Apr 28 j 00:12	11° Y ′34'04	-1°56'57
direct	-3053 Dec 30 j 17:20	25°) 35'13		minimum elong	-3046 Apr 28 j 00:13	11° Y ′34'04	1°56'56
evening set	-3052 Mar 28 j 04:23	27°) € 30'01		max. Earth dist.	-3046 Apr 28 j 04:46		30.86751 AU
8				morning rise	-3046 May 14 j 07:04	12° Y 10'09	
conjunction	-3052 Apr 13 j 09:12	28°) €05'57	-2°06'13	retrograde	-3046 Aug 12 j 00:52	14° Y ′06'34	
minimum elong	-3052 Apr 13 j 09:13	28°) 05'57		opposition	-3046 Oct 29 j 04:00	12° Υ '42'00	-2°03'54
max. Earth dist.	-3052 Apr 13 j 19:08		30.84992 AU	min. Earth dist.	-3046 Oct 29 j 00:48		28.87177 AU
morning rise	-3052 Apr 29 j 15:19	28°) 42'02		direct	-3045 Jan 15 j 05:29	11° Y 17'11	
morning rise	-3052 Jun 09 j 13:59	0°Υ		evening set	-3045 Apr 14 j 07:48	13° Υ 12'19	
retrograde	-3052 Jul 29 j 03:05	0° Υ 39'27		evening sec	30 13 71pr 11 j 07.10	15 (121)	
retrograde	-3052 Sep 17 j 11:55	30°R) €		conjunction	-3045 Apr 30 j 14:30	13° Y ′48′20	-1°54'46
opposition	-3052 Oct 15 j 12:52	29°) 14'41	-2°14'24	minimum elong	-3045 Apr 30 j 14:31	13° Υ 48'20	
min. Earth dist.	-3052 Oct 15 j 04:08		28.85267 AU	max. Earth dist.	-3045 Apr 30 j 17:33		30.87397 AU
direct	-3051 Jan 01 j 07:00	27° H 50'16	20.03207 AU	morning rise	-3045 May 16 j 21:35	13 γ 48 3 / 14° Υ 24'24	30.87397 AU
evening set	-3051 Mar 30 j 18:47	27 \(\) 30 10 29° \(\) 45'06		retrograde	-3045 Aug 14 j 13:56	14 γ 24 24 16° Υ 20'42	
evening set	-3051 Mar 30 j 18:47	29 Λ 4300		opposition	-3045 Oct 31 j 14:22	16 \ \ 2042	2001120
	-3031 Apr 00 J 13.22	0 1		min. Earth dist.	-3045 Oct 31 j 10:54		28.87891 AU
:	2051 A 15: 22.50	0° Υ 21'04	2005100		•	13° Y 31'22	20.07091 AU
conjunction	-3051 Apr 15 j 23:50	0° Y 21'04 0° Y 21'04		direct	-3044 Jan 17 j 17:42	15° Y 26'36	
minimum elong	-3051 Apr 15 j 23:50		30.85233 AU	evening set	-3044 Apr 15 j 21:48	15 1 20 30	
max. Earth dist.	-3051 Apr 16 j 08:05		30.85233 AU		204434 02:0440	1.600000120	1050105
morning rise	-3051 May 02 j 06:11	0°Υ57'09		conjunction	-3044 May 02 j 04:48	16° Υ ′02'38	
retrograde	-3051 Jul 31 j 15:59	2°Υ54'24	2012100	minimum elong	-3044 May 02 j 04:48	16° Y ′02'38	
opposition	-3051 Oct 17 j 23:34	1° Υ 29'39		max. Earth dist.	-3044 May 02 j 07:37		30.88179 AU
min. Earth dist.	-3051 Oct 17 j 16:45		28.85484 AU	morning rise	-3044 May 18 j 11:52	16° Ƴ 38'42	
direct	-3050 Jan 03 j 18:46	0° Υ 05'10		retrograde	-3044 Aug 16 j 01:09	18° Ƴ 34'53	
evening set	-3050 Apr 02 j 09:03	2° Y 00′03		opposition	-3044 Nov 02 j 00:52	17°Υ10'30	
				min. Earth dist.	-3044 Nov 01 j 23:08		28.88725 AU
conjunction	-3050 Apr 18 j 14:33	2° Y 36'01		direct	-3043 Jan 19 j 04:44	15° Y 45'40	
minimum elong	-3050 Apr 18 j 14:33	2° Υ 36'01		evening set	-3043 Apr 18 j 12:02	17° Ƴ 40'59	
max. Earth dist.	-3050 Apr 18 j 22:24		30.85441 AU				
morning rise	-3050 May 04 j 20:57	3° Y 12′06		conjunction	-3043 May 04 j 19:16	18° Y 17′02	
retrograde	-3050 Aug 03 j 03:46	5° Y 09′10		minimum elong	-3043 May 04 j 19:17	18° Y 17′02	
opposition	-3050 Oct 20 j 10:09	3° Y 44'27		max. Earth dist.	-3043 May 04 j 21:07		30.89071 AU
min. Earth dist.	-3050 Oct 20 j 03:32		28.85673 AU	morning rise	-3043 May 21 j 02:27	18° ℃ 53'07	
direct	-3049 Jan 06 j 08:04	2° Y 19′53		retrograde	-3043 Aug 18 j 14:55	20° Y 49′09	
evening set	-3049 Apr 04 j 23:17	4° Ƴ 14'48		opposition	-3043 Nov 04 j 11:05	19° Y 24'54	
				min. Earth dist.	-3043 Nov 04 j 09:20		28.89631 AU
conjunction	-3049 Apr 21 j 04:53	4° Y 50'46		direct	-3042 Jan 21 j 18:13	18° Y ′00′04	
minimum elong	-3049 Apr 21 j 04:54	4° Y 50'47		evening set	-3042 Apr 21 j 02:28	19° Ƴ 55'30	
max. Earth dist.	-3049 Apr 21 j 10:50		30.85641 AU				
morning rise	-3049 May 07 j 11:33	5° Y 26'52		conjunction	-3042 May 07 j 09:48	20° Y 31'34	
retrograde	-3049 Aug 05 j 15:45	7° Y 23'46		minimum elong	-3042 May 07 j 09:48	20° Y 31'34	
opposition	-3049 Oct 22 j 20:45	5° Ƴ 59'04		max. Earth dist.	-3042 May 07 j 10:15		30.89985 AU
min. Earth dist.	-3049 Oct 22 j 15:21	5° Ƴ 59'27	28.85900 AU	morning rise	-3042 May 23 j 17:01	21° Y 07'38	
direct	-3048 Jan 08 j 18:56	4° Ƴ 34'24		retrograde	-3042 Aug 21 j 03:43	23° Y 03'34	
evening set	-3048 Apr 06 j 13:20	6° Y 29'21		opposition	-3042 Nov 06 j 21:38	21° Y 39'25	-1°53'05
				min. Earth dist.	-3042 Nov 06 j 21:45	21° Y ′39'25	28.90542 AU
conjunction	-3048 Apr 22 j 19:24	7° Y 05′21	-2°00'46	direct	-3041 Jan 24 j 06:00	20° Y 14'36	
minimum elong	-3048 Apr 22 j 19:24	7° Ƴ 05'21	2°00'46	evening set	-3041 Apr 23 j 16:38	22° Y 10'07	
max. Earth dist.	-3048 Apr 23 j 01:40	7° Y 05'56	30.85902 AU				
morning rise	-3048 May 09 j 02:02	7° Ƴ 41'26		conjunction	-3041 May 10 j 00:15	22° Y ′46′12	-1°44'20
retrograde	-3048 Aug 07 j 02:40	9° Ƴ 38'10		minimum elong	-3041 May 10 j 00:15	22° Y ′46′12	1°44'17
opposition	-3048 Oct 24 j 07:09	8° Υ 13'29	-2°08'10	max. Earth dist.	-3041 May 10 j 00:07		30.90876 AU
min. Earth dist.	-3048 Oct 24 j 02:26		28.86198 AU	morning rise	-3041 May 26 j 07:22	23° Y ′22'16	
direct	-3047 Jan 10 j 06:46	6° Ƴ 48'46		retrograde	-3041 Aug 23 j 15:48	25° Y °18′04	
evening set	-3047 Apr 09 j 03:31	8° Y 43'46		opposition	-3041 Nov 09 j 08:05	23° Y ′54'01	-1°49'57
-	. *			min. Earth dist.	-3041 Nov 09 j 08:34		28.91385 AU
conjunction	-3047 Apr 25 j 09:43	9° Ƴ 19'46	-1°58'57	direct	-3040 Jan 26 j 19:24	22° Y ′29'12	
•	1 3				<i>y</i>	_	

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3040 in astronomical counting style is the year 3041 BCE in historical counting style. -3040 Apr 25 j 07:05 24°**Υ**′24'48 evening set max. Earth dist. -3034 May 25 j 20:05 8°**8**25'35 30.95432 AU -3034 Jun 11 j 11:04 9°**8**02'20 morning rise -3040 May 11 j 14:41 25°**Y**00'53 -1°41'19 conjunction retrograde -3034 Sep 07 j 22:00 10°**8**56'56

conjunction	-3040 May 11 j 14:41	25° Y ′00′53	-1°41'19	retrograde	-3034 Sep 07 j 22:00	10° 8 56'56	
minimum elong	-3040 May 11 j 14:42	25° Y ′00′53	1°41'17	opposition	-3034 Nov 24 j 08:26	9° 8 33'15	-1°23'44
max. Earth dist.	-3040 May 11 j 12:19	25° Y ′00'40	30.91682 AU	min. Earth dist.	-3034 Nov 24 j 15:12	9° 8 32'47	28.95868 AU
morning rise	-3040 May 27 j 21:56	25° Ƴ 36'57		direct	-3033 Feb 11 j 07:34	8° 8 08'03	
retrograde	-3040 Aug 25 j 04:32	27° Υ '32'36		evening set	-3033 May 12 j 09:49	10° 8 03'53	
		26° Υ '08'38	1946120	evening set	-3033 Way 12 j 07.47	10 003 33	
opposition	-3040 Nov 10 j 18:31				2022 14 20 : 10 00	100 420157	1017110
min. Earth dist.	-3040 Nov 10 j 20:32		28.92148 AU	conjunction	-3033 May 28 j 18:00	10° 8 39'57	
direct	-3039 Jan 28 j 06:31	24° Ƴ 43'47		minimum elong	-3033 May 28 j 18:00	10° 8 39'57	
evening set	-3039 Apr 27 j 21:21	26° Ƴ 39'26		max. Earth dist.	-3033 May 28 j 09:01	10° 8 39'07	30.96217 AU
				morning rise	-3033 Jun 14 j 00:38	11° 8 15'55	
conjunction	-3039 May 14 j 05:18	27° Ƴ 15'32	-1°38'09	retrograde	-3033 Sep 10 j 09:07	13° 8 10'22	
minimum elong	-3039 May 14 j 05:19	27° Y °15′32	1°38'06	opposition	-3033 Nov 26 j 18:47	11° 8 46'45	-1°19'27
max. Earth dist.	-3039 May 14 j 02:41	27° ℃ 15'17	30.92397 AU	min. Earth dist.	-3033 Nov 27 j 02:53	11° 8 46'10	28.96722 AU
morning rise	-3039 May 30 j 12:24	27° Y '51'35	30.,23,,110	direct	-3032 Feb 13 j 19:30	10° 8 21'31	20.50722110
•		29° Υ '47'04			•	12° 8 17'23	
retrograde	-3039 Aug 27 j 15:56		1042111	evening set	-3032 May 13 j 23:37	12 01/23	
opposition	-3039 Nov 13 j 04:59	28° Y 23′11					
min. Earth dist.	-3039 Nov 13 j 08:07		28.92800 AU	conjunction	-3032 May 30 j 07:52	12° 8 53'28	
direct	-3038 Jan 30 j 18:58	26° Ƴ 58'17		minimum elong	-3032 May 30 j 07:53	12° 8 53'28	1°12'13
evening set	-3038 Apr 30 j 11:46	28° Y 53'58		max. Earth dist.	-3032 May 29 j 22:42	12° 8 52'37	30.97143 AU
				morning rise	-3032 Jun 15 j 14:18	13° 8 29'25	
conjunction	-3038 May 16 j 19:38	29° Ƴ 30'04	-1°34'50	C	-3032 Aug 05 j 07:29	15°₩	
minimum elong	-3038 May 16 j 19:39	29° Y ′30'04		retrograde	-3032 Sep 11 j 20:46	15° 8 23'42	
max. Earth dist.	-3038 May 16 j 14:39		30.93019 AU	renograde	-3032 Oct 19 j 22:27	15°RB	
max. Earm dist.			30.93019 AU	.,.	-		1015102
	-3038 May 30 j 07:29	0°8		opposition	-3032 Nov 28 j 04:54	14° 8 00'11	
morning rise	-3038 Jun 02 j 02:51	0° 8 06'07		min. Earth dist.	-3032 Nov 28 j 13:00		28.97689 AU
retrograde	-3038 Aug 30 j 03:18	2° 8 01'26		direct	-3031 Feb 15 j 08:50	12° 8 34'57	
opposition	-3038 Nov 15 j 15:18	0° ႘ 37'35	-1°39'34	evening set	-3031 May 16 j 13:35	14° 8 30'53	
min. Earth dist.	-3038 Nov 15 j 19:10	0° ප 37'19	28.93389 AU		-3031 May 29 j 18:51	15° 8	
	-3038 Dec 08 j 11:50	30° ₹Ƴ					
direct	-3037 Feb 02 j 06:12	29° Υ 12'38		conjunction	-3031 Jun 01 j 21:41	15° 8 06'57	-1°08'05
	-3037 Mar 28 j 21:08	0°8		minimum elong	-3031 Jun 01 j 21:41	15° 8 06'57	
evening set	-3037 May 03 j 01:54	1° 8 08'21		max. Earth dist.	-3031 Jun 01 j 10:52	_	30.98164 AU
evening set	-303 / May 03 J 01.34	1 00821			,	_	30.98104 AU
				morning rise	-3031 Jun 18 j 04:01	15° 8 42'52	
conjunction	-3037 May 19 j 10:02	1° 8 44'27		retrograde	-3031 Sep 14 j 09:25	17° 8 37'02	
minimum elong	-3037 May 19 j 10:02	1° 8 44'27		opposition	-3031 Nov 30 j 15:12	16° 8 13'36	
max. Earth dist.	-3037 May 19 j 04:58	1° 8 43'59	30.93588 AU	min. Earth dist.	-3031 Dec 01 j 00:22	16° 8 12'57	28.98747 AU
morning rise	-3037 Jun 04 j 17:00	2° 8 20'29			-3030 Jan 22 j 02:16	15° ₹႘	
retrograde	-3037 Sep 01 j 12:20	4° 8 15'36		direct	-3030 Feb 17 j 20:24	14° 8 48'23	
opposition	-3037 Nov 18 j 01:42	2° 8 51'49	-1°35'49		-3030 Mar 16 j 09:40	15° 8	
min. Earth dist.	-3037 Nov 18 j 07:04	2° K 51'26	28.93942 AU	evening set	-3030 May 19 j 03:22	16° 8 44'23	
direct	-3036 Feb 04 j 18:24	1° 8 26'48	20.939 12 110	evening set	5050 May 17 J 05.22	10 0 1123	
evening set		3° 8 22'31		aaniumatian	2020 Jun 04: 11:21	17° 8 20'27	1902!40
evening set	-3036 May 04 j 15:56	3 02231		conjunction	-3030 Jun 04 j 11:31	_	
				minimum elong	-3030 Jun 04 j 11:31	17° 8 20'27	
conjunction	-3036 May 21 j 00:03	3° 8 58'37		max. Earth dist.	-3030 Jun 04 j 00:56		30.99241 AU
minimum elong	-3036 May 21 j 00:04	3° 8 58'37	1°27'45	morning rise	-3030 Jun 20 j 17:29	17° 8 56'21	
max. Earth dist.	-3036 May 20 j 17:08	3° 8 57'59	30.94157 AU	retrograde	-3030 Sep 16 j 20:26	19° 8 50'23	
morning rise	-3036 Jun 06 j 07:09	4° 8 34'39		opposition	-3030 Dec 03 j 01:30	18° 8 27'04	-1°05'54
retrograde	-3036 Sep 03 j 00:30	6° 8 29'35		min. Earth dist.	-3030 Dec 03 j 11:36	18° 8 26'22	28.99813 AU
opposition	-3036 Nov 19 j 11:56	5° 8 05'50	-1°31'55	direct	-3029 Feb 20 j 09:26	17° 8 01'52	
min. Earth dist.	-3036 Nov 19 j 17:17		28.94515 AU	evening set	-3029 May 21 j 17:22	18° 8 57'56	
direct	-3035 Feb 06 j 06:19	3° 8 40'44	20.5 10 10 110	evening sec	5025 may 21 j 17:22	10 00,00	
					2020 I 07:01.12	100 422150	0050127
evening set	-3035 May 07 j 06:01	5° 8 36'29		conjunction	-3029 Jun 07 j 01:13	19° 8 33'59	
				minimum elong	-3029 Jun 07 j 01:13	19° 8 33'59	
conjunction	-3035 May 23 j 14:15	6° 8 12'35		max. Earth dist.	-3029 Jun 06 j 12:33		31.00303 AU
minimum elong	-3035 May 23 j 14:15	6° 8 12'35	1°24'02	morning rise	-3029 Jun 23 j 07:06	20° 8 09'53	
max. Earth dist.	-3035 May 23 j 07:00	6° 8 11'55	30.94749 AU	retrograde	-3029 Sep 19 j 08:06	22° 8 03'47	
morning rise	-3035 Jun 08 j 21:07	6° 8 48'36		opposition	-3029 Dec 05 j 11:49	20° 8 40'35	-1°01'11
retrograde	-3035 Sep 05 j 10:02	8° 8 43'21		min. Earth dist.	-3029 Dec 05 j 22:28	20° 8 39'49	29.00853 AU
opposition	-3035 Nov 21 j 22:12	7° 8 19'38	-1°27'53	direct	-3028 Feb 22 j 20:47	19° 8 15'22	
min. Earth dist.	-3035 Nov 22 j 05:19		28.95142 AU	evening set	-3028 May 23 j 07:06	21° 8 11'30	
	-3034 Feb 08 j 17:19	5° 8 54'29	20.75172 AU	John Sot	3020 May 23 J 07.00	21 011 30	
direct				aamiuu -t:	2020 J 00:15.01	210 47122	0054150
evening set	-3034 May 09 j 20:02	7° 8 50'16		conjunction	-3028 Jun 08 j 15:01	21° 8 47'33	
_				minimum elong	-3028 Jun 08 j 15:01		
conjunction	-3034 May 26 j 04:16	8° 8 26'21		max. Earth dist.	-3028 Jun 08 j 02:19		31.01296 AU
minimum elong	-3034 May 26 j 04:16	8° 8 26'21	1°20'13	morning rise	-3028 Jun 24 j 20:29	22° 8 23'25	

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3028 in astronomical counting style is the year 3029 BCE in historical counting style. -3028 Sep 20 j 17:33 24°**8**17'12 evening set -3021 Jun 09 j 06:05 6°**Ⅱ**43'14 retrograde -3028 Dec 06 i 22:18 22°854'04 -0°56'22 opposition min. Earth dist. -3028 Dec 07 j 10:36 22°853'12 29.01788 AU -3021 Jun 25 j 12:18 7°II19'08 -0°22'02 conjunction -3027 Feb 24 j 08:47 21°**8**28'52 -3021 Jun 25 j 12:18 7°II19'08 0°21'56 minimum elong direct -3021 Jun 24 j 17:52 -3027 May 25 j 21:07 23°**8**25'01 7°**I**17'26 31.06315 AU evening set max. Earth dist. -3021 Jul 11 j 15:17 7°**I**I54'47 morning rise 24°801'04 -0°50'26 -3021 Oct 06 j 21:25 9°**Ⅱ**47'38 conjunction -3027 Jun 11 j 04:43 retrograde -3027 Jun 11 j 04:43 24°801'04 0°50'21 8°П24'50 -0°20'58 minimum elong opposition -3021 Dec 22 j 22:40 -3027 Jun 10 j 13:51 max. Earth dist. 23°**8**59'41 31.02184 AU min. Earth dist. -3021 Dec 23 j 15:39 8°**Ц**23'39 29.06758 AU morning rise -3027 Jun 27 j 10:02 24°**8**36'55 direct -3020 Mar 12 j 00:53 6°**I**59'23 retrograde -3027 Sep 23 j 05:35 26°**8**30'33 evening set -3020 Jun 10 j 19:15 8°**I**55'44 -3027 Dec 09 j 08:35 25°**8**07'30 -0°51'29 -3020 Jun 26 j 05:07 9°**Ц**29'46 31.07195 AU opposition max. Earth dist. 25°**8**06'38 29.02615 AU min. Earth dist. -3027 Dec 09 j 21:01 direct -3026 Feb 26 j 20:26 23°**8**42'16 conjunction -3020 Jun 27 j 01:00 9°**耳**31'36 -0°17'10 evening set -3026 May 28 j 10:57 25°**8**38'28 minimum elong -3020 Jun 27 j 01:00 9°**Ⅲ**31'36 0°17'04 morning rise -3020 Jul 13 j 03:43 10°**Ⅲ**07'13 conjunction -3026 Jun 13 j 18:27 26°814'30 -0°45'50 retrograde -3020 Oct 08 j 08:33 11°**Ⅲ**59'57 minimum elong -3026 Jun 13 j 18:28 26°814'30 0°45'46 opposition -3020 Dec 24 j 08:59 10°**耳**37'14 -0°15'44 max. Earth dist. -3026 Jun 13 j 03:08 26°813'04 31.02954 AU min. Earth dist. -3020 Dec 25 j 01:50 10°**Д**36'03 29.07703 AU morning rise -3026 Jun 29 j 23:19 26°850'19 direct -3019 Mar 14 j 12:30 9°**Ⅱ**11'47 retrograde -3026 Sep 25 j 14:42 28°843'49 evening set -3019 Jun 13 j 08:19 11°**II**08'10 opposition -3026 Dec 11 j 19:08 27°**8**20'50 -0°46'32 min. Earth dist. -3026 Dec 12 j 09:29 27°**8**19'49 29.03338 AU conjunction -3019 Jun 29 i 13:51 11°**II**44'01 -0°12'16 direct -3025 Mar 01 i 07:28 25°**8**55'34 minimum elong -3019 Jun 29 i 13:51 11°**Ⅱ**44′01 0°12'10 evening set -3025 May 31 j 00:31 27°**8**51'47 behind sun begin -3019 Jun 29 j 09:30 11°**Ⅱ**43'38 -3019 Jun 29 j 18:12 11°**Ⅱ**44'24 behind sun end -3025 Jun 16 j 07:46 28°**8**27'47 -0°41'10 -3019 Jun 28 j 18:41 11°**Д**42'15 31.08193 AU conjunction max Earth dist -3025 Jun 16 j 07:46 28°**8**27'47 0°41'05 -3019 Jul 15 j 15:55 12°**Ⅱ**19'36 minimum elong morning rise -3025 Jun 15 j 15:15 28°**8**26'15 31.03646 AU -3019 Oct 10 j 17:46 14°**Ⅱ**12'14 max. Earth dist. retrograde -3025 Jul 02 j 12:25 29°**8**03'35 -3019 Dec 26 j 19:23 12°**Ⅱ**49'37 -0°10'30 morning rise opposition -3025 Jul 30 j 17:06 -3019 Dec 27 j 13:20 12°**П**48'22 29.08746 AU $0^{\circ}\Pi$ min. Earth dist. 11°**Ⅱ**24'12 -3025 Sep 28 j 01:47 0°II56'56 -3018 Mar 17 j 00:33 direct retrograde -3025 Nov 28 j 13:43 13°**Ⅱ**20'38 30°**₹**8 -3018 Jun 15 j 21:28 evening set -3018 Jul 01 j 05:53 -3025 Dec 14 j 05:26 29°**8**34'00 -0°41'30 max. Earth dist. 13°**耳**54'33 31.09284 AU opposition -3025 Dec 14 j 19:41 29°**8**33'00 29.03988 AU min. Earth dist. -3018 Jul 02 j 02:27 13°**I**I56'27 -0°07'22 -3024 Mar 02 j 21:31 28°**8**08'40 direct conjunction -3018 Jul 02 j 02:26 -3024 May 30 j 07:19 13°**I**I56′27 0°07′17 Π °0 minimum elong evening set -3024 Jun 01 j 14:07 $0^{\circ}\Pi 04'55$ behind sun begin -3018 Jul 01 j 20:26 13°**Ⅲ**55'55 behind sun end -3018 Jul 02 j 08:27 13°**Ⅲ**56′59 conjunction -3024 Jun 17 j 21:09 0°**Д**40'54 -0°36'27 morning rise -3018 Jul 18 j 04:12 14°**Ⅲ**32′00 -3024 Jun 17 j 21:09 0°**Д**40'54 0°36'22 retrograde -3018 Oct 13 j 05:50 16°**Ⅲ**24'34 minimum elong max. Earth dist. -3024 Jun 17 j 03:43 0°**Д**39'17 31.04273 AU -3018 Dec 29 j 05:47 15°**耳**02'03 -0°05'14 opposition -3024 Jul 04 j 01:25 1°**Ⅱ**16'40 min. Earth dist. -3018 Dec 29 j 23:15 15°**Д**00'49 29.09859 AU morning rise -3024 Sep 29 j 12:11 3°**Ⅱ**09'53 -3017 Mar 19 j 11:42 13°**Ⅱ**36′39 retrograde direct -3024 Dec 15 j 15:42 1°**II**46'58 -0°36'26 -3017 Jun 18 j 10:18 15°**Ⅲ**33′07 opposition evening set -3024 Dec 16 i 07:33 1°**Ц**45'52 29.04610 AU min. Earth dist. -3017 Jul 04 i 14:58 16°**I**08'55 -0°02'27 direct -3023 Mar 05 j 09:13 0°**I**I21'36 conjunction -3023 Jun 04 j 03:35 -3017 Jul 04 i 14:58 16°**I**08'55 0°02'21 evening set 2°**Ⅱ**17'53 minimum elong -3017 Jul 04 i 08:25 16°**Ⅱ**08'20 behind sun begin -3023 Jun 20 j 10:26 2°II53'50 -0°31'41 behind sun end -3017 Jul 04 i 21:32 16°**Ⅱ**09'30 conjunction -3023 Jun 20 i 10:26 2°II53'50 0°31'35 max. Earth dist. -3017 Jul 03 j 18:37 16°**Д**07'02 31.10396 AU minimum elong max. Earth dist. -3023 Jun 19 j 16:41 2°**Д**52'11 31.04900 AU morning rise -3017 Jul 20 j 16:06 16°**Ⅱ**44'26 -3023 Jul 06 j 14:18 3°**Ⅲ**29'33 retrograde -3017 Oct 15 j 14:12 18°**Ⅲ**36'56 morning rise 5°**Ⅲ**22'38 17°**Ⅱ**19'02 retrograde -3023 Oct 01 j 23:03 asc. node -3017 Dec 28 j 23:29 17°**I**14'30 0°00'02 opposition -3023 Dec 18 j 02:00 3°II59'46 -0°31'19 opposition -3017 Dec 31 j 16:23 min. Earth dist. -3023 Dec 18 j 17:50 3°**Д**58'39 29.05240 AU min. Earth dist. -3016 Jan 01 j 11:30 17°**Ⅱ**13'10 29.10965 AU 15°**Ⅱ**49'08 2°**Ⅲ**34′21 -3022 Mar 07 j 22:49 direct -3016 Mar 20 j 22:26 direct -3022 Jun 06 j 16:57 4°**I**I30'38 -3016 Jun 19 j 23:22 17°**Ⅱ**45'39 evening set evening set max. Earth dist. -3016 Jul 05 j 06:09 18°**耳**19′26 31.11479 AU -3022 Jun 22 j 23:21 5°**I**106'34 -0°26'52 conjunction -3022 Jun 22 j 23:21 -3016 Jul 06 j 03:32 18°**Ⅲ**21'25 0°02'37 minimum elong 5°**I**106'34 0°26'47 conjunction max. Earth dist. -3022 Jun 22 j 04:17 5°**耳**04'48 31.05557 AU minimum elong -3016 Jul 06 j 03:31 18°**Ⅲ**21'25 0°02'42 morning rise -3022 Jul 09 j 02:52 5°**Ⅱ**42'15 behind sun begin -3016 Jul 05 j 20:59 18°**Ⅲ**20′50 retrograde -3022 Oct 04 j 11:09 7°**Ⅲ**35′13 behind sun end -3016 Jul 06 j 10:03 18°**Ⅲ**22′00 opposition -3022 Dec 20 j 12:22 6°**I**12'22 -0°26'09 morning rise -3016 Jul 22 j 04:13 18°**Ⅲ**56′54 min. Earth dist. -3022 Dec 21 j 04:53 6°**Д**11'13 29.05948 AU retrograde -3016 Oct 17 j 00:32 20°**Ⅱ**49'19

-3021 Mar 10 j 11:10

direct

4°**Ⅱ**46'55

-3015 Jan 02 j 02:45

opposition

19°**Ⅲ**26'58 0°05'18

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3015 in astronomical counting style is the year 3016 BCE in historical counting style. 19°**Ⅲ**25'39 29.12005 AU min. Earth dist. -3015 Jan 02 j 21:40 min. Earth dist. -3009 Jan 16 i 17:36 2°537'31 29.16404 AU -3015 Mar 23 j 11:19 18°**耳**01'36 -3009 Apr 06 j 14:58 1°9513'37 direct direct -3015 Jun 22 j 12:26 19°**Ⅱ**58'09 -3009 Jul 06 j 16:04 3°910'09 evening set evening set 20°II33'53 0°07'32 -3009 Jul 22 j 16:26 conjunction -3015 Jul 08 j 16:06 conjunction 3°**©**45'37 0°36'27 08 j 16:06 20°**Ⅲ**33'53 -3009 Jul 22 j 16:26 minimum elong -3015 Jul 0°07'37 minimum elong 3°9645'37 0°36'33 08 j 10:10 -3009 Jul 21 j 15:30 behind sun begin -3015 Jul 20°**Ⅲ**33'22 max. Earth dist. 3°**5**43'18 31.16713 AU -3015 Jul 08 j 22:02 20°**Ⅲ**34′25 behind sun end morning rise -3009 Aug 07 j 13:06 4°9520'46 -3015 Jul 07 j 17:59 20°**耳**31′50 31.12463 AU max. Earth dist. retrograde -3009 Nov 02 j 02:13 6°9512'38 morning rise -3015 Jul 24 j 16:12 21°**I**09′20 opposition -3008 Jan 18 j 05:35 4°950'28 0°41'24 retrograde -3015 Oct 19 j 10:45 23°**Ⅲ**01'41 min. Earth dist. -3008 Jan 19 j 03:20 4°9548'58 29.17123 AU -3014 Jan 04 j 13:31 -3008 Apr 08 j 03:05 opposition 21°**Ⅲ**39′23 0°10'34 direct 3°525'00 -3008 Jul 08 j 04:14 min. Earth dist. -3014 Jan 05 j 09:52 21°**Д**37'58 29.12947 AU evening set 5°521'33 direct -3014 Mar 25 j 21:47 20°**Ⅲ**14'01 max. Earth dist. -3008 Jul 23 j 03:51 5°554'43 31.17472 AU evening set -3014 Jun 25 j 01:15 22°**Ⅲ**10'36 max. Earth dist. -3014 Jul 10 j 06:04 22°**Д**44'12 31.13346 AU conjunction -3008 Jul 24 j 04:07 5°956'58 0°41'07 minimum elong -3008 Jul 24 j 04:07 5°956'58 0°41'13 conjunction -3014 Jul 11 j 04:28 22°II46'17 0°12'25 morning rise -3008 Aug 09 j 00:00 6°532'04 minimum elong -3014 Jul 11 j 04:28 22°**II**46'17 0°12'30 retrograde -3008 Nov 03 j 10:17 8°923'53 behind sun begin -3014 Jul 11 j 00:17 22°**II**45'55 opposition -3007 Jan 19 j 16:20 7°9501'46 0°46'21 behind sun end -3014 Jul 11 j 08:39 22°II46'39 min. Earth dist. -3007 Jan 20 j 15:07 7°500'12 29.17945 AU morning rise -3014 Jul 27 i 03:59 23°**II**21'41 direct -3007 Apr 10 j 14:07 5°936'19 retrograde -3014 Oct 21 i 21:09 25°**Ⅲ**13'57 evening set -3007 Jul 10 j 16:27 7°532'53 opposition -3013 Jan 07 i 00:11 23°II51'41 0°15'48 min. Earth dist. -3013 Jan 07 j 20:35 23°II50'16 29.13767 AU conjunction -3007 Jul 26 i 15:38 8°508'16 0°45'44 -3013 Mar 28 j 11:26 22°**Ⅲ**26'19 -3007 Jul 26 j 15:37 8°908'16 0°45'49 direct minimum elong -3013 Jun 27 j 14:08 24°**Ⅲ**22'54 max. Earth dist. -3007 Jul 25 j 15:07 8°505'59 31.18355 AU evening set -3007 Aug 11 j 10:58 morning rise 8°9543'19 -3013 Jul 13 j 16:45 24°II58'32 0°17'18 -3007 Nov 05 j 20:14 conjunction retrograde 10°935'07 -3013 Jul 13 j 16:45 24°II58'32 0°17'23 -3006 Jan 22 j 03:07 minimum elong opposition 9°9513'04 0°51'14 -3013 Jul 12 j 16:54 24°**Д**56'20 31.14112 AU -3006 Jan 23 j 00:57 max. Earth dist. min. Earth dist. 9°511'34 29.18876 AU -3013 Jul 29 j 15:46 -3006 Apr 13 j 02:14 25°**Ⅲ**33'53 direct 7°9547'40 morning rise -3013 Oct 24 j 08:51 27°**Ⅲ**26′04 -3006 Jul 13 j 04:24 9°9544'16 retrograde evening set -3012 Jan 09 j 10:47 26°**I**03'50 0°21'00 -3006 Jul 28 j 02:33 10°517'20 31.19324 AU opposition max. Earth dist. -3012 Jan 10 j 08:01 26°**I**02'22 29.14499 AU min. Earth dist. -3012 Mar 29 j 23:42 24°**Ⅲ**38′26 -3006 Jul 29 j 02:58 10°50'16 0°50'16 direct conjunction -3006 Jul 29 j 02:58 evening set -3012 Jun 29 j 02:46 26°**Ⅲ**35′01 minimum elong 10°9519'36 0°50'22 max. Earth dist. -3012 Jul 14 j 05:36 27°**П**08'27 31.14799 AU morning rise -3006 Aug 13 j 21:37 10°954'37 retrograde -3006 Nov 08 j 06:19 12°9546'25 conjunction -3012 Jul 15 j 05:01 27°**I**10'37 0°22'09 opposition -3005 Jan 24 j 14:04 11°**©**24'27 0°56'03 -3012 Jul 15 j 05:01 27°**I**10'37 0°22'15 min. Earth dist. -3005 Jan 25 j 12:40 11°522'53 29.19891 AU minimum elong -3012 Jul 31 j 03:22 27°**II**45'55 -3005 Apr 15 j 11:33 9°959'06 morning rise direct -3012 Oct 25 j 18:36 29°**Ⅲ**38′01 -3005 Jul 15 j 16:23 11°955'45 retrograde evening set -3011 Jan 10 j 21:30 28°**I**15'48 0°26'10 opposition -3011 Jan 11 j 19:26 28°**Ⅱ**14'16 29.15142 AU -3005 Jul 31 j 14:21 12°931'02 0°54'45 min. Earth dist. conjunction -3011 Apr 01 i 13:49 26°II50'22 -3005 Jul 31 j 14:21 direct minimum elong 12°531'02 0°54'50 -3011 Jul 01 j 15:28 -3005 Jul 30 i 14:19 evening set 28°**Ⅱ**46'56 max. Earth dist. 12°528'48 31.20353 AU morning rise -3005 Aug 16 j 08:21 13°906'00 conjunction -3011 Jul 17 i 16:59 29°II22'30 0°26'58 retrograde -3005 Nov 10 i 16:33 14°957'50 -3011 Jul 17 i 16:58 29°II22'30 0°27'04 opposition -3004 Jan 27 j 00:53 13°935'56 1°00'47 minimum elong max. Earth dist. -3011 Jul 16 j 16:07 29°**Ⅲ**20'11 31.15421 AU min. Earth dist. -3004 Jan 27 j 23:11 13°534'24 29.20913 AU -3011 Aug 02 j 14:52 29°**I**57'44 direct -3004 Apr 17 j 00:23 12°9510'40 morning rise -3011 Aug 03 j 15:51 0ಂತಾ -3004 Jul 17 j 04:27 14°907'21 evening set -3011 Oct 28 j 05:45 -3004 Aug 01 j 00:40 retrograde 1°9549'45 max. Earth dist. 14°5540'16 31.21353 AU opposition -3010 Jan 13 j 08:07 0°527'32 0°31'18 min. Earth dist. -3010 Jan 14 j 05:54 0°526'02 29.15764 AU conjunction -3004 Aug 02 j 01:41 14°9542'36 0°59'08 -3010 Jan 30 j 03:30 30°R∏ minimum elong -3004 Aug 02 j 01:41 14°9542'36 0°59'14 -3010 Apr 04 j 01:52 29°**Ⅲ**02'05 -3004 Aug 17 j 19:06 15°9517'31 direct morning rise -3010 Jun 04 j 17:14 000 -3004 Nov 12 j 04:43 17°9509'22 retrograde -3010 Jul 04 j 03:50 -3003 Jan 28 j 11:57 15°9547'32 evening set 0°958'39 opposition 1°05'26 -3010 Jul 19 j 04:59 -3003 Jan 29 j 10:42 max. Earth dist. 1°931'56 31.16039 AU min. Earth dist. 15°9545'58 29.21895 AU direct -3003 Apr 19 j 11:44 14°522'19 conjunction -3010 Jul 20 j 04:56 1°534'09 0°31'44 evening set -3003 Jul 19 j 16:21 16°9519'03 minimum elong -3010 Jul 20 j 04:56 1°**©**34'09 0°31'50 morning rise -3010 Aug 05 j 02:03 2°909'21 conjunction -3003 Aug 04 j 13:01 16°954'15 1°03'26 -3010 Oct 30 j 14:54 4°9501'16 -3003 Aug 04 j 13:01 16°954'15 retrograde minimum elong 1°03'32 -3009 Jan 15 j 18:56 2°539'05 0°36'23 max. Earth dist. -3003 Aug 03 j 12:45 16°951'59 31.22277 AU opposition

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3003 in astronomical counting style is the year 3004 BCE in historical counting style. -3003 Aug 20 j 05:37 17°9529'07 -2996 Apr 01 i 05:36 30°R55 morning rise -3003 Nov 14 j 14:40 19°920'59 -2996 May 05 j 02:03 29°542'24 direct retrograde -3002 Jan 30 j 23:12 17°959'13 1°09'59 -2996 Jun 07 j 08:56 $0^{\circ}\Omega$ opposition min. Earth dist. -3002 Jan 31 j 22:30 17°557'37 29.22761 AU -2996 Aug 04 j 01:09 1°**Ω**38'57 evening set 16°934'03 direct -3002 Apr 22 j 01:03 evening set -3002 Jul 22 j 04:23 18°930'47 conjunction -2996 Aug 19 j 17:04 2°Ω13'48 1°30'36 1°30'40 max. Earth dist. -3002 Aug 05 j 22:37 19°503'33 31.23081 AU minimum elong -2996 Aug 19 j 17:03 2°**Ω**13'48 max. Earth dist. -2996 Aug 18 j 16:34 2°**Ω**11'30 31.25717 AU 1°07'39 conjunction -3002 Aug 07 j 00:12 19°**©**05'56 morning rise -2996 Sep 04 j 05:11 2°**Ω**48'19 minimum elong -3002 Aug 07 j 00:12 19°**©**05'56 1°07'44 retrograde -2996 Nov 29 j 11:59 4°Ω40'09 morning rise -3002 Aug 22 j 16:17 19°5540'46 opposition -2995 Feb 15 j 06:22 3°**£**18′22 1°38'34 -3002 Nov 17 j 02:33 retrograde 21°932'38 min. Earth dist. -2995 Feb 16 j 05:24 3°**Ω**16'47 29.26030 AU opposition -3001 Feb 02 j 10:24 20°9510'54 1°14'26 direct -2995 May 07 j 15:25 1°**£**53′13 min. Earth dist. -3001 Feb 03 j 09:24 20°509'20 29.23512 AU evening set -2995 Aug 06 j 12:15 3°**Ω**49'43 direct -3001 Apr 24 j 12:40 18°9545'46 max. Earth dist. -2995 Aug 21 j 02:32 4°**Ω**22'11 31.26156 AU evening set -3001 Jul 24 j 16:00 20°9542'30 max. Earth dist. -3001 Aug 08 j 10:34 21°5015'18 31.23748 AU conjunction -2995 Aug 22 j 03:21 4°Ω24'31 1°33'59 minimum elong -2995 Aug 22 j 03:20 4°**Ω**24'31 1°34'04 21°**©**17'37 conjunction -3001 Aug 09 j 11:21 1°11'45 morning rise -2995 Sep 06 j 14:53 4°Ω59'00 minimum elong -3001 Aug 09 j 11:20 21°9517'37 1°11'51 retrograde -2995 Dec 01 j 23:06 6°Ω50'52 morning rise -3001 Aug 25 j 02:38 21°952'23 opposition -2994 Feb 17 j 17:52 5°**Ω**29'04 1°42'07 retrograde -3001 Nov 19 i 12:28 23°9544'15 min. Earth dist. -2994 Feb 18 i 16:32 5°**Ω**27'31 29.26531 AU opposition -3000 Feb 04 i 21:44 22°9522'33 1°18'46 -2994 May 10 j 01:42 4°Ω03'57 direct min. Earth dist. -3000 Feb 05 i 21:49 22°520'54 29.24110 AU evening set -2994 Aug 08 j 23:09 6°Ω00'26 -3000 Apr 26 j 02:37 20°957'26 direct -3000 Jul 26 j 03:49 22°954'09 -2994 Aug 24 j 13:44 6°**Ω**35'11 1°37'14 conjunction evening set -2994 Aug 24 j 13:43 6°Ω35'11 1°37'19 minimum elong -3000 Aug 10 j 22:20 23°529'12 1°15'46 -2994 Aug 23 j 14:26 6°**Ω**33'00 31.26697 AU max. Earth dist. conjunction -3000 Aug 10 j 22:20 -2994 Sep 09 j 00:32 23°929'12 1°15'51 7°**Ω**09'37 minimum elong morning rise -3000 Aug 09 j 20:23 -2994 Dec 04 j 08:36 9°**Ω**01'32 max. Earth dist. 23°526'47 31.24279 AU retrograde -3000 Aug 26 j 13:07 -2993 Feb 20 j 05:24 7°**Ω**39'45 1°45'32 24°903'56 morning rise opposition -3000 Nov 21 j 00:06 25°955'47 -2993 Feb 21 j 03:56 7°**Ω**38'13 29.27106 AU retrograde min. Earth dist. -2999 Feb 06 j 08:53 24°534'05 1°22'59 -2993 May 12 j 13:50 6°**Ω**14'43 opposition direct -2999 Feb 07 j 08:12 -2993 Aug 11 j 10:02 8°Ω11'11 min. Earth dist. 24°532'28 29.24581 AU evening set -2999 Apr 28 j 15:40 direct 23°908'57 -2993 Aug 26 j 23:49 8°**Ω**45'53 1°40'21 evening set -2999 Jul 28 j 15:24 25°905'39 conjunction max. Earth dist. -2999 Aug 12 j 07:55 25°538'16 31.24687 AU minimum elong -2993 Aug 26 j 23:49 8°**Ω**45'53 1°40'26 max. Earth dist. -2993 Aug 25 j 23:57 8°**Ω**43'39 31.27298 AU conjunction -2999 Aug 13 j 09:21 25°5540'39 1°19'39 morning rise -2993 Sep 11 j 10:13 9°**Ω**20'17 -2999 Aug 13 j 09:21 25°9540'39 1°19'44 -2993 Dec 06 j 20:40 11°Ω12'15 minimum elong retrograde -2999 Aug 28 j 23:20 26°9515'19 -2992 Feb 22 j 16:55 9°**Ω**50'30 1°48'47 morning rise opposition -2999 Nov 23 j 08:04 -2992 Feb 23 j 14:33 9°**Ω**49'02 29.27724 AU retrograde 28°907'10 min. Earth dist. -2998 Feb 08 j 20:21 26°9545'27 1°27'05 -2992 May 14 j 01:03 8°**£**25'31 opposition direct -2998 Feb 09 j 20:47 10°**£**22′00 min. Earth dist. 26°5943'46 29.24956 AU evening set -2992 Aug 12 j 20:50 -2998 May 01 j 03:29 max. Earth dist. 10°**Ω**54'33 31.27900 AU direct 25°520'19 -2992 Aug 27 j 11:37 evening set -2998 Jul 31 i 02:44 27°9516'57 conjunction -2992 Aug 28 j 10:06 10°Ω56'39 1°43'19 conjunction -2998 Aug 15 i 19:56 27°951'54 1°23'25 minimum elong -2992 Aug 28 i 10:06 10°**Ω**56'39 1°43'24 minimum elong -2998 Aug 15 i 19:55 27°951'54 1°23'31 morning rise -2992 Sep 12 j 19:43 11°**Ω**31′01 max. Earth dist. -2998 Aug 14 j 18:24 27°549'31 31.25033 AU retrograde -2992 Dec 08 i 06:57 13°Ω23'04 -2998 Aug 31 j 09:23 28°926'31 -2991 Feb 24 j 04:38 12°Ω01'20 1°51'52 morning rise opposition -2998 Oct 23 j 22:23 $0^{\circ}\Omega$ -2991 Feb 25 j 02:53 11°**Ω**59'49 29.28309 AU min. Earth dist. 0°Ω18'21 10°**Ω**36′26 retrograde -2998 Nov 25 j 17:23 direct -2991 May 16 j 14:18 -2998 Dec 29 j 07:31 30°R55 evening set -2991 Aug 15 j 07:45 12°**Ω**32'54 opposition -2997 Feb 11 j 07:39 28°\$56'36 1°31'03 min. Earth dist. -2997 Feb 12 j 07:04 28°955'00 29.25283 AU conjunction -2991 Aug 30 j 20:13 13°**Ω**07'31 1°46'09 -2997 May 03 j 16:15 27°531'28 minimum elong -2991 Aug 30 j 20:13 13°**Ω**07'31 1°46'13 direct -2997 Aug 02 j 14:00 29°9528'02 -2991 Aug 29 j 21:09 13°**Ω**05'21 31.28456 AU evening set max. Earth dist. $0^{\circ}\Omega$ -2991 Sep 15 j 05:24 13°**Ω**41′50 -2997 Aug 16 j 23:03 morning rise 0°**Ω**00'35 31.25349 AU -2991 Oct 26 j 15:12 15°Ω max. Earth dist. -2997 Aug 17 j 05:12 -2991 Dec 10 j 18:59 15°**Ω**33'57 retrograde conjunction -2997 Aug 18 j 06:32 0°**Ω**02'57 1°27'04 -2990 Jan 26 j 12:47 15°RΩ minimum elong -2997 Aug 18 j 06:32 0°Ω02'57 1°27'09 opposition -2990 Feb 26 j 16:24 14°Ω12'16 1°54'48 morning rise -2997 Sep 02 j 19:19 0°**£**37'31 min. Earth dist. -2990 Feb 27 j 13:27 14°Ω10'50 29.28827 AU retrograde -2997 Nov 28 j 02:55 2°**Ω**29′20 direct -2990 May 19 j 02:49 12°**Ω**47'25 -2996 Feb 13 j 18:56 1°**Ω**07'34 1°34'53 -2990 Aug 17 j 18:23 14°**Ω**43'53 opposition evening set -2996 Feb 14 j 18:53 -2990 Aug 25 j 01:09 min. Earth dist. 1°**Ω**05'55 29.25631 AU 15°€

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 33 Attention, astronomical year style is used: The year -2990 in astronomical counting style is the year 2991 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	e year -2990	in astronomical co	unting style is the year	r 2991 BCE in historical c	ounting style.	
max. Earth dist.	-2990 Sep 01 j 07:59	15° Ω 16′22	31.28908 AU		-2984 Oct 31 j 08:22	0° ™	
				retrograde	-2984 Dec 25 j 17:26	0° m 50'04	
conjunction	-2990 Sep 02 j 06:19	15° Ω 18'27	1°48'49	_	-2983 Feb 22 j 02:15	30° ₽ Ω	
minimum elong	-2990 Sep 02 j 06:18	15° Ω 18'27	1°48'53	opposition	-2983 Mar 14 j 04:10	29° Ω 28'09	2°10'31
morning rise	-2990 Sep 17 j 14:48	15° Ω 52'44		min. Earth dist.	-2983 Mar 14 j 23:02	29° Ω 26'52	29.29300 AU
retrograde	-2990 Dec 13 j 04:03	17° Ω 44'56		direct	-2983 Jun 03 j 11:59	28°Ω03'29	
opposition	-2989 Mar 01 j 04:23	16° Ω 23'15	1°57'34	evening set	-2983 Sep 01 j 18:56	29° £ 59'33	
min. Earth dist.	-2989 Mar 02 j 02:22		29.29229 AU		-2983 Sep 01 j 23:52	0° m)	
min. Burtir dist.	-2989 May 11 j 18:10	15° ₽ Ω	27.27227110	max. Earth dist.	-2983 Sep 16 j 08:04		31.29131 AU
direct	-2989 May 21 j 14:31	14° £ 58′29		max. Earth dist.	2505 5 c p 10 j 00.01	0 110 22 01	31.27131710
direct	-2989 May 31 j 07:17	15° Ω		conjunction	-2983 Sep 17 j 02:55	0°m/33'51	2°02'55
evening set	-2989 Aug 20 j 05:09	16° Ω 54'54		minimum elong	-2983 Sep 17 j 02:55	0° m 33'51	
evening set	-2707 Aug 20 j 05.07	10 665757		morning rise	-2983 Oct 02 j 08:00	1° Mg 07'54	2 02 36
agniumation	2000 Can 04: 16:25	17° Ω 29'26	1°51'19	-	-2983 Dec 28 j 04:01	3° Mg 00'34	
conjunction minimum elong	-2989 Sep 04 j 16:25 -2989 Sep 04 j 16:25	17° Ω 29'26		retrograde	·	1°M)38'36	2012/02
_				opposition	-2982 Mar 16 j 16:26		
max. Earth dist.	-2989 Sep 03 j 18:04		31.29240 AU	min. Earth dist.	-2982 Mar 17 j 11:12		29.29306 AU
morning rise	-2989 Sep 20 j 00:26	18° Ω 03'41		direct	-2982 Jun 06 j 01:01	0° Mp 14'00	
retrograde	-2989 Dec 15 j 13:59	19° £ 55'56	2000110	evening set	-2982 Sep 04 j 04:47	2° Mp 10'00	
opposition	-2988 Mar 02 j 16:06	18° Ω 34'16					
min. Earth dist.	-2988 Mar 03 j 13:06		29.29485 AU	conjunction	-2982 Sep 19 j 12:10	2° m/44'15	
direct	-2988 May 23 j 03:20	17° Ω 09'31		minimum elong	-2982 Sep 19 j 12:09	2° Mp 44'15	
evening set	-2988 Aug 21 j 15:53	19° Ω 05'55		max. Earth dist.	-2982 Sep 18 j 17:28		31.29194 AU
max. Earth dist.	-2988 Sep 05 j 04:07	19° Ω 38'18	31.29416 AU	morning rise	-2982 Oct 04 j 17:00	3° m)18'18	
				retrograde	-2982 Dec 30 j 15:57	5° Mp 11'03	
conjunction	-2988 Sep 06 j 02:32	19° Ω 40′25		opposition	-2981 Mar 19 j 04:29	3° Mp 49'04	2°13'22
minimum elong	-2988 Sep 06 j 02:31	19° Ω 40′24	1°53'44	min. Earth dist.	-2981 Mar 19 j 21:19	3° ™ 47'56	29.29414 AU
morning rise	-2988 Sep 21 j 10:00	20° Ω 14'38		direct	-2981 Jun 08 j 12:52	2° m 24'31	
retrograde	-2988 Dec 17 j 00:13	22° Ω 06′57		evening set	-2981 Sep 06 j 14:36	4° ™ 20′29	
opposition	-2987 Mar 05 j 04:10	20° Ω 45'15	2°02'36				
min. Earth dist.	-2987 Mar 06 j 01:44	20° Ω 43'47	29.29603 AU	conjunction	-2981 Sep 21 j 21:35	4° m 54'43	2°05'24
direct	-2987 May 25 j 13:33	19° Ω 20'33		minimum elong	-2981 Sep 21 j 21:35	4° m 54'43	2°05'26
evening set	-2987 Aug 24 j 02:20	21° Ω 16'53		max. Earth dist.	-2981 Sep 21 j 04:08	4° m 53'04	31.29335 AU
-				morning rise	-2981 Oct 07 j 01:58	5° m/28'44	
conjunction	-2987 Sep 08 j 12:28	21° Ω 51'20	1°55'51	retrograde	-2980 Jan 02 j 01:21	7° m) 21'35	
minimum elong	-2987 Sep 08 j 12:27	21° Ω 51'20		opposition	-2980 Mar 20 j 16:37	5° m 59'36	2°14'30
max. Earth dist.	-2987 Sep 07 j 14:54		31.29464 AU	min. Earth dist.	-2980 Mar 21 j 09:47		29.29591 AU
morning rise	-2987 Sep 23 j 19:22	22° Ω 25'31	31.23 .0 .110	direct	-2980 Jun 10 j 00:32	4° mp 35'08	27.27071110
retrograde	-2987 Dec 19 j 09:18	24° Ω 17'54		evening set	-2980 Sep 08 i 00:26	6° mp 31'03	
opposition	-2986 Mar 07 j 16:13		2°04'51	evening set	2700 Sep 00 j 00.20	0 110 51 05	
min. Earth dist.	-2986 Mar 08 j 12:59		29.29585 AU	conjunction	-2980 Sep 23 j 06:57	7° m)05'15	2°06'23
direct	-2986 May 28 j 02:56	21° Ω 31'29	27.27363 AU	minimum elong	-2980 Sep 23 j 06:57	7° mg 05'15	2°06'25
evening set	-2986 Aug 26 j 12:47	23° Ω 27'45		max. Earth dist.	-2980 Sep 22 j 14:17		31.29538 AU
evening set	-2980 Aug 20 J 12.47	23 66 2/43			-2980 Sep 22 j 14.17 -2980 Oct 08 j 11:01	7° m) 39'15	31.29338 AU
:	2006 9 10:22:14	249 002100	1057152	morning rise		-	
conjunction	-2986 Sep 10 j 22:14	24° Ω 02'09		retrograde	-2979 Jan 03 j 12:02	9° Mp 32'13	2015127
minimum elong	-2986 Sep 10 j 22:13	24° Ω 02'09		opposition	-2979 Mar 23 j 04:52	8° To 10'14	
max. Earth dist.	-2986 Sep 10 j 00:11		31.29400 AU	min. Earth dist.	-2979 Mar 23 j 20:25		29.29791 AU
morning rise	-2986 Sep 26 j 04:47	24° Ω 36'19		direct	-2979 Jun 12 j 13:45	6° m 45'51	
retrograde	-2986 Dec 21 j 20:24	26° Ω 28'46	2006155	evening set	-2979 Sep 10 j 10:09	8° Mp 41'42	
opposition	-2985 Mar 10 j 04:08	25° Ω 06'58					
min. Earth dist.	-2985 Mar 11 j 00:38		29.29500 AU	conjunction	-2979 Sep 25 j 16:11	9° m 15'53	2°07'10
direct	-2985 May 30 j 12:47	23° Ω 42′16		minimum elong	-2979 Sep 25 j 16:11	9° m 15'53	
evening set	-2985 Aug 28 j 22:52	25° Ω 38′28		max. Earth dist.	-2979 Sep 24 j 23:58		31.29727 AU
max. Earth dist.	-2985 Sep 12 j 11:30	26° Ω 10'55	31.29287 AU	morning rise	-2979 Oct 10 j 19:57	9° m 49'53	
				retrograde	-2978 Jan 05 j 22:53	11° m) 42'58	
conjunction	-2985 Sep 13 j 07:57	26° Ω 12'51	1°59'44	opposition	-2978 Mar 25 j 17:22	10° m 20'58	2°16'11
minimum elong	-2985 Sep 13 j 07:57	26° Ω 12'51	1°59'47	min. Earth dist.	-2978 Mar 26 j 09:00	-	29.29972 AU
morning rise	-2985 Sep 28 j 13:55	26° Ω 46'58		direct	-2978 Jun 15 j 00:23	8° m 56'40	
retrograde	-2985 Dec 24 j 05:34	28° Ω 39'29		evening set	-2978 Sep 12 j 19:54	10° m 52'28	
opposition	-2984 Mar 11 j 16:12	27° Ω 17'37	2°08'48	max. Earth dist.	-2978 Sep 27 j 10:41	11° m 25'13	31.29876 AU
min. Earth dist.	-2984 Mar 12 j 12:27	27° Ω 16′14	29.29377 AU				
direct	-2984 Jun 01 j 00:40	25° Ω 52'56		conjunction	-2978 Sep 28 j 01:36	11°M)26'37	2°07'47
evening set	-2984 Aug 30 j 09:01	27° Ω 49'04		minimum elong	-2978 Sep 28 j 01:36	11° m)26'37	2°07'49
	-			morning rise	-2978 Oct 13 j 05:00	12° m 00'36	
conjunction	-2984 Sep 14 j 17:22	28° Ω 23′23	2°01'25	retrograde	-2977 Jan 08 j 07:55	13° m 53'48	
minimum elong	-2984 Sep 14 j 17:22	28° Ω 23′23	2°01'28	opposition	-2977 Mar 28 j 05:43	12° mp 31'47	2°16'45
max. Earth dist.	-2984 Sep 13 j 20:40	28° Ω 21'27	31.29176 AU	min. Earth dist.	-2977 Mar 28 j 20:22	12° m 30'48	29.30071 AU
morning rise	-2984 Sep 29 j 23:03	28° Ω 57'29		direct	-2977 Jun 17 j 13:00	11° m) 07'34	
<i>5</i>	1 3 - 100						

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -2977 in astronomical counting style is the year 2978 BCE in historical counting style. opposition -2977 Sep 15 j 05:43 13° m 03'18 -2970 Apr 12 j 22:10 27° m 46'49 2°15'10 evening set min. Earth dist. -2970 Apr 13 j 07:30 27° Mp 46'11 29.27879 AU -2977 Sep 30 j 10:55 13° m 37'26 2°08'12 -2970 Jul 02 j 23:04 direct 26° m 22'49 conjunction -2977 Sep 30 j 10:55 -2970 Sep 29 j 23:51 13° m 37'26 2°08'14 28° m 17'53 minimum elong evening set -2977 Sep 29 j 19:32 max. Earth dist. 13°M 35'59 31.29921 AU -2977 Oct 15 j 14:11 -2970 Oct 15 j 03:10 morning rise 14° m 11'24 conjunction 28° m 51'55 2°06'05 -2976 Jan 10 j 19:06 -2970 Oct 15 j 03:10 retrograde 16° Mp 04'42 minimum elong 28° m 51'55 2°06'05 14° Mp 42'40 -2970 Oct 14 j 17:28 opposition -2976 Mar 29 j 18:15 2°17'06 max. Earth dist. 28° Mp 51'00 31.27560 AU min. Earth dist. -2976 Mar 30 j 08:28 14° Mp 41'42 29.30063 AU morning rise -2970 Oct 30 j 05:22 29° m 25'51 direct -2976 Jun 18 j 22:46 13° m 18'30 -2970 Nov 15 j 07:20 0∘**ত** evening set -2976 Sep 16 j 15:21 15° m 14'09 retrograde -2969 Jan 25 j 23:51 1°**2**19'50 -2969 Apr 13 j 19:08 30°R, M) -2976 Oct 01 j 20:20 -2969 Apr 15 j 10:46 conjunction 15° Mp 48'16 2°08'27 opposition 29° m 57'19 2°14'10 minimum elong -2976 Oct 01 j 20:20 15° Mp 48'16 2°08'28 min. Earth dist. -2969 Apr 15 j 19:45 29° m 56'43 29.27570 AU max. Earth dist. -2976 Oct 01 j 06:30 15° Mp 46'58 31.29839 AU direct -2969 Jul 05 j 09:41 28° m 33'23 morning rise -2976 Oct 16 j 23:11 16° Mp 22'14 -2969 Sep 19 j 02:23 0∘**⊽** retrograde -2975 Jan 12 j 04:43 18° m 15'39 evening set -2969 Oct 02 j 08:57 0°**£**28'23 opposition -2975 Apr 01 j 06:55 16° m 53'33 2°17'16 min. Earth dist. -2975 Apr 01 j 20:57 16° m 52'37 29.29904 AU conjunction -2969 Oct 17 j 12:14 1°**♀**02'25 2°05'03 direct -2975 Jun 21 j 10:40 15° m 29'26 minimum elong -2969 Oct 17 j 12:14 1°**≏**02'25 2°05'03 evening set -2975 Sep 19 j 01:08 17° m 25'00 max. Earth dist. -2969 Oct 17 j 04:21 1°**2**01'40 31.27297 AU morning rise -2969 Nov 01 j 14:17 1°**♀**36'22 conjunction -2975 Oct 04 i 05:38 17° **m** 59'05 2°08'30 retrograde -2968 Jan 28 i 09:06 3°**₽**30'29 minimum elong -2975 Oct 04 i 05:38 17° m 59'05 2°08'31 opposition -2968 Apr 16 j 23:27 2°**2**07'56 2°12'58 max. Earth dist. -2975 Oct 03 j 15:19 17° m 57'44 31.29620 AU min. Earth dist. -2968 Apr 17 j 06:52 2°**2**07'26 29.27330 AU -2975 Oct 19 j 08:26 18° m 33'03 -2968 Jul 06 j 22:10 0°**£**44'06 morning rise direct -2974 Jan 14 j 17:00 20° m 26'33 -2968 Oct 03 j 18:06 2°**₽**39'01 retrograde evening set -2974 Apr 03 j 19:33 19° m 04'24 2°17'14 opposition -2974 Apr 04 j 08:23 19° Mp 03'32 29.29622 AU -2968 Oct 18 j 21:05 3°**2**13'03 2°03'50 min. Earth dist. conjunction -2974 Jun 23 j 21:40 17° m 40'18 -2968 Oct 18 j 21:05 minimum elong 3°**2**13'03 2°03'51 direct -2974 Sep 21 j 10:32 19° m 35'46 max. Earth dist. -2968 Oct 18 j 13:16 3°**2**12'18 31.27094 AU evening set -2968 Nov 02 j 23:16 3°**£**47'00 morning rise 20° m 09'51 2°08'23 -2967 Jan 29 j 20:36 -2974 Oct 06 j 14:55 5°**2**41'16 conjunction retrograde 4°**£**18'43 2°11'35 -2974 Oct 06 j 14:55 20° m 09'51 2°08'24 -2967 Apr 19 j 12:19 minimum elong opposition 4°**2**18'17 29.27149 AU -2974 Oct 06 j 02:07 20° Mp 08'38 31.29271 AU -2967 Apr 19 j 18:45 max. Earth dist. min. Earth dist. 2°**£**54'58 -2974 Oct 21 j 17:25 20° m/43'47 -2967 Jul 09 j 07:44 morning rise direct -2973 Jan 17 j 03:40 -2967 Oct 06 j 03:10 retrograde 22° m 37'24 evening set 4°**₽**49'49 -2973 Apr 06 j 08:15 21° m 15'09 2°17'00 opposition min. Earth dist. -2973 Apr 06 j 21:20 21° Mp 14'16 29.29216 AU conjunction -2967 Oct 21 j 06:12 5°**£**23'51 2°02'27 -2973 Jun 26 j 09:54 19° m 51'05 minimum elong -2967 Oct 21 j 06:12 5°**£**23'51 2°02'26 direct -2973 Sep 23 j 20:03 21° Mp 46'26 max. Earth dist. -2967 Oct 21 j 00:26 5°**£**23'19 31.26922 AU evening set max. Earth dist. -2973 Oct 08 j 11:19 22° m/19'18 31.28835 AU -2967 Nov 05 j 08:15 5°**£**57'50 morning rise -2966 Feb 01 j 06:48 7°**£**52'15 retrograde -2973 Oct 09 j 00:03 22° m/20'30 2°08'05 -2966 Apr 22 j 01:14 6° **2**9'41 2°10'00 conjunction opposition -2973 Oct 09 j 00:04 22° m/20'30 min. Earth dist. -2966 Apr 22 j 07:06 6°**2**29'17 29.26964 AU minimum elong 2°08'05 -2973 Oct 24 i 02:32 morning rise 22° m 54'26 direct -2966 Jul 11 j 19:02 5°**£**06'02 -2972 Jan 19 i 15:32 retrograde 24° m 48'07 evening set -2966 Oct 08 j 12:20 7°**£**00'50 opposition -2972 Apr 07 j 20:41 23° m 25'48 2°16'35 min. Earth dist. -2972 Apr 08 i 07:59 23° m 25'02 29.28749 AU conjunction -2966 Oct 23 i 15:08 7°**♀**34'51 2°00'52 -2972 Jun 27 j 21:36 22° m 01'43 minimum elong -2966 Oct 23 i 15:08 7°**♀**34'51 2°00'52 direct -2972 Sep 25 j 05:24 23° m 56'59 max. Earth dist. -2966 Oct 23 j 09:18 7°**2**34'18 31.26730 AU evening set -2966 Nov 07 j 17:25 8°**£**08'51 morning rise -2972 Oct 10 j 09:12 24° m 31'02 2°07'36 -2965 Feb 03 j 19:32 10°**£**03'26 conjunction retrograde minimum elong -2972 Oct 10 j 09:12 24° m 31'02 2°07'36 opposition -2965 Apr 24 j 14:08 8°**2**40'50 2°08'13 8°**2**40'32 29.26739 AU max. Earth dist. -2972 Oct 09 j 21:37 24° m/29'56 31.28356 AU min. Earth dist. -2965 Apr 24 j 18:36 25° Mp 04'58 -2965 Jul 14 j 05:17 -2972 Oct 25 j 11:29 direct 7°**£**17'16 morning rise -2971 Jan 21 j 01:45 26° m 58'44 evening set -2965 Oct 10 j 21:30 9°**₽**12'00 retrograde -2971 Apr 10 j 09:30 25° m 36'20 2°15'59 opposition -2971 Apr 10 j 20:52 25° m 35'34 29.28285 AU -2965 Oct 26 j 00:21 9°**2**46'02 1°59'07 min. Earth dist. conjunction -2965 Oct 26 j 00:22 1°59'06 direct -2971 Jun 30 j 09:40 24° Mp 12'18minimum elong 9°**£**46′02 -2971 Sep 27 j 14:34 -2965 Oct 25 j 20:02 evening set 26° Mp 07'27 max. Earth dist. 9°**£**45'38 31.26453 AU morning rise -2965 Nov 10 j 02:33 10°**£**20′03 conjunction -2971 Oct 12 j 18:08 26° m 41'29 2°06'56 retrograde -2964 Feb 06 j 06:56 12°**£**14'47 minimum elong -2971 Oct 12 j 18:08 26° Mp 41'29 2°06'56 opposition -2964 Apr 26 j 03:08 10°**♀**52'09 2°06'15 max. Earth dist. -2971 Oct 12 j 07:49 26° Mp 40'30 31.27923 AU min. Earth dist. -2964 Apr 26 j 07:48 10° **2**51'50 29.26405 AU -2971 Oct 27 j 20:20 27° m 15'25 -2964 Jul 15 j 16:17 9°**£**28'40 morning rise direct -2970 Jan 23 j 12:44 29°m/09'17 -2964 Oct 12 j 06:49 retrograde evening set 11°**2**23′19

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -2964 in astronomical counting style is the year 2965 BCE in historical counting style. -2964 Oct 27 i 09:32 11°**⊆**57'22 1°57'12 direct -2957 Aug 01 i 04:28 24°**-**47'57 conjunction -2964 Oct 27 j 09:33 11°**£**57'22 1°57'11 evening set -2957 Oct 27 j 22:27 26°**♀**41'48 minimum elong -2964 Oct 27 j 05:21 11°**♀**56'58 31.26071 AU max. Earth dist. -2964 Nov 11 j 11:55 -2957 Nov 12 j 01:36 12°**♀**31'24 conjunction 27°**2**15'55 1°39'16 morning rise -2963 Feb 07 j 19:41 -2957 Nov 12 j 01:37 1°39'12 retrograde 14°**£**26'15 minimum elong 27°**£**15'55 -2957 Nov 12 j 03:26 opposition -2963 Apr 28 j 16:13 13°**♀**03'35 2°04'07 max. Earth dist. 27°**£**16'05 31.20688 AU min. Earth dist. -2963 Apr 28 j 19:07 13°**♀**03'23 29.25948 AU morning rise -2957 Nov 27 j 05:27 27°**£**50'07 direct -2963 Jul 18 j 02:59 11°**£**40′09 retrograde -2956 Feb 24 j 02:14 29°**£**45'41 evening set -2963 Oct 14 j 16:00 13°**£**34'43 opposition -2956 May 14 j 11:38 28°**₽**22'22 1°44'22 min. Earth dist. -2956 May 14 j 08:11 28°**2**22'36 29.20435 AU conjunction -2963 Oct 29 j 18:44 14°**≙**08'46 1°55'07 direct -2956 Aug 02 j 14:35 26° 259'03 -2963 Oct 29 j 18:44 -2956 Oct 29 j 07:24 minimum elong 14°**£**08'46 1°55'05 evening set 28° - 52'50 -2963 Oct 29 j 15:17 max. Earth dist. 14°**♀**08'27 31.25537 AU morning rise -2963 Nov 13 j 21:13 14°**£**42'49 conjunction -2956 Nov 13 j 10:49 29°**≏**26'58 1°36'05 retrograde -2962 Feb 10 j 07:20 16°**△**37'49 minimum elong -2956 Nov 13 j 10:49 29°**≏**26'58 1°36'03 opposition -2962 May 01 j 05:29 15°**2**15'04 2°01'48 max. Earth dist. -2956 Nov 13 j 14:28 29°**2**27'19 31.20021 AU min. Earth dist. -2962 May 01 j 08:47 15°**♀**14'51 29.25339 AU morning rise -2956 Nov 28 j 14:51 0°ML01'12 direct -2962 Jul 20 j 15:15 13°**♀**51'40 -2956 Nov 28 j 01:53 0°M evening set -2962 Oct 17 j 01:15 15°**£**46'08 retrograde -2955 Feb 25 j 13:14 1°M56'54 opposition -2955 May 17 j 00:49 0°MJ33'31 1°40'54 conjunction -2962 Nov 01 j 04:04 16°**♀**20'12 1°52'52 min. Earth dist. -2955 May 16 j 21:04 0°MJ33'46 29.19799 AU minimum elong -2962 Nov 01 i 04:04 16°**♀**20'12 1°52'51 -2955 Jun 07 i 07:09 max. Earth dist. -2962 Nov 01 i 01:32 16° **2**19'57 31.24864 AU direct -2955 Aug 05 i 01:01 29°**♀**10'17 morning rise -2962 Nov 16 i 06:41 16°**£**54'16 -2955 Sep 29 i 14:53 0°M retrograde -2961 Feb 12 i 19:48 18°**♀**49'20 evening set -2955 Oct 31 j 16:22 1°ML03'58 -2961 May 03 j 18:22 17°**£**26'31 1°59'18 opposition -2961 May 03 j 20:08 17°**£**26'23 29.24582 AU -2955 Nov 15 j 19:55 1°ML38'08 1°32'47 min. Earth dist. conjunction -2961 Jul 23 j 04:46 16°**♀**03'08 -2955 Nov 15 j 19:56 1°32'43 minimum elong 1°M,38'08 direct -2961 Oct 19 j 10:29 -2955 Nov 16 j 00:18 1°ML38'33 31.19429 AU 17°**£**57'29 max. Earth dist. evening set -2955 Dec 01 j 00:20 morning rise 2°M-12'24 -2961 Nov 03 j 13:15 -2954 Feb 28 j 02:10 conjunction 18°**♀**31'33 1°50'27 retrograde 4°ML08'14 opposition -2954 May 19 j 13:51 -2961 Nov 03 j 13:16 18°**≏**31'33 2°M44'49 1°37'17 minimum elong 1°50'25 -2961 Nov 03 j 10:50 18°**≙**31'19 31.24052 AU -2954 May 19 j 08:01 max. Earth dist. min. Earth dist. 2°M45'13 29.19214 AU -2961 Nov 18 j 16:09 -2954 Aug 07 j 11:18 1°M21'38 morning rise 19°**♀**05'39 direct -2960 Feb 15 j 07:23 21°**♀**00'49 -2954 Nov 03 j 01:29 retrograde evening set 3°M15'16 -2960 May 05 j 07:32 opposition 19°**♀**37'52 1°56'39 3°ML49'27 1°29'19 -2960 May 05 j 09:17 -2954 Nov 18 j 05:13 min. Earth dist. 19°**△**37'45 29.23725 AU conjunction direct -2960 Jul 24 j 15:58 18°**£**14'30 minimum elong -2954 Nov 18 j 05:14 3°M49'27 1°29'17 -2960 Oct 20 j 19:24 20°**£**08'43 max. Earth dist. -2954 Nov 18 j 10:29 3°M49'57 31.18849 AU evening set morning rise -2954 Dec 03 j 09:59 4°M23'46 conjunction -2960 Nov 04 j 22:23 20°**2**42'47 1°47'53 retrograde -2953 Mar 02 j 14:31 6°M19'45 -2960 Nov 04 j 22:23 20°**-**42'47 -2953 May 22 j 02:53 4°M56'17 1°33'31 minimum elong 1°47'51 opposition -2960 Nov 04 j 21:45 20°**£**42'44 31.23169 AU min. Earth dist. -2953 May 21 j 21:18 4°M.56'40 29.18629 AU max. Earth dist. -2960 Nov 20 j 01:20 21°**♀**16'54 -2953 Aug 09 j 22:19 3°M33'11 morning rise direct -2959 Feb 16 j 16:48 -2953 Nov 05 j 10:39 5°M26'45 retrograde 23°**♀**12'09 evening set -2959 May 07 j 20:38 opposition 21°**-**49′06 1°53'49 -2953 Nov 20 j 14:40 min. Earth dist. -2959 May 07 j 20:52 21°**2**49'05 29.22817 AU conjunction 6°ML00'58 1°25'44 -2953 Nov 20 j 14:40 direct -2959 Jul 27 i 05:22 20°**£**25'44 minimum elong 6°ML00'58 1°25'41 evening set -2959 Oct 23 j 04:31 22°**₽**19'49 max. Earth dist. -2953 Nov 20 j 21:12 6°ML01'35 31.18257 AU morning rise -2953 Dec 05 i 19:42 6°MJ35'19 -2959 Nov 07 i 07:25 22°**£**53'54 1°45'09 -2952 Mar 04 j 03:52 8°M31'26 conjunction retrograde -2959 Nov 07 i 07:25 22°**£**53'54 1°45'07 -2952 May 23 j 16:00 7°ML07'57 1°29'37 minimum elong opposition max. Earth dist. -2959 Nov 07 j 06:48 22°**♀**53'51 31.22277 AU min. Earth dist. -2952 May 23 j 08:42 7°ML08'26 29.17995 AU morning rise -2959 Nov 22 i 10:46 23°**£**28'03 direct -2952 Aug 11 j 10:44 5°M44'54 -2952 Nov 06 j 19:52 retrograde -2958 Feb 19 j 04:21 25°**₽**23'23 evening set 7°M38'25 -2958 May 10 j 09:40 opposition 24°**£**00'13 1°50'50 -2958 May 10 j 08:53 8°M12'40 1°22'01 min. Earth dist. 24°**£**00'17 29.21951 AU conjunction -2952 Nov 21 j 23:58 -2958 Jul 29 j 16:17 22°**2**36'51 -2952 Nov 21 j 23:59 1°21'58 direct minimum elong 8°ML12'40 -2958 Oct 25 j 13:24 24°**△**30'49 -2952 Nov 22 j 06:35 evening set max. Earth dist. 8°**ጤ**13'17 31.17585 AU morning rise -2952 Dec 07 j 05:29 8°M47'03 -2958 Nov 09 j 16:35 conjunction 25°**£**04'56 1°42'17 retrograde -2951 Mar 06 j 16:37 10°M43'19 minimum elong -2958 Nov 09 j 16:35 25°**♀**04'56 1°42'15 opposition -2951 May 26 j 05:20 9°M19'47 1°25'35 max. Earth dist. -2958 Nov 09 j 18:08 25°**£**05'04 31.21440 AU min. Earth dist. -2951 May 25 j 22:07 9°M20'16 29.17280 AU morning rise -2958 Nov 24 j 20:02 25°**♀**39'06 direct -2951 Aug 13 j 21:14 7°**IL**56'48 retrograde -2957 Feb 21 j 14:22 27°**♀**34'32 evening set -2951 Nov 09 j 05:09 9°M50'15 -2957 May 12 j 22:42 26°**♀**11'17 1°47'41 opposition -2957 May 12 j 21:02 26°**£**11'24 29.21144 AU -2951 Nov 24 j 09:40 10°M24'31 1°18'11 min. Earth dist. conjunction

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -2951 in astronomical counting style is the year 2952 BCE in historical counting style. morning rise -2951 Nov 24 i 09:41 10°M24'31 1°18'08 -2945 Dec 23 j 03:57 24°ML10'43 minimum elong -2951 Nov 24 j 17:50 -2944 Mar 22 j 02:41 26°M07'43 max. Earth dist. 10°M25'17 31.16815 AU retrograde -2951 Dec 09 j 15:24 -2944 Jun 11 j 01:05 10°M58'56 24°M43'34 0°54'14 morning rise opposition -2950 Mar 09 j 03:44 12°M55'20 min. Earth dist. -2944 Jun 10 j 12:13 24°M44'26 29.10117 AU retrograde opposition -2950 May 28 j 18:28 11°M31'44 1°21'25 direct -2944 Aug 29 j 04:28 23°M20'38 min. Earth dist. -2950 May 28 j 10:07 11°M32'18 29.16436 AU evening set -2944 Nov 23 j 22:30 25°M13'28 direct -2950 Aug 16 j 10:21 10°MJ08'48 -2944 Dec 09 j 05:12 evening set -2950 Nov 11 j 14:36 12°ML02'10 conjunction 25°M47'57 0°48'31 minimum elong -2944 Dec 09 j 05:12 25°M47'57 0°48'27 conjunction -2950 Nov 26 j 19:15 12°M36'28 1°14'14 max. Earth dist. -2944 Dec 09 j 19:17 25°M49'17 31.09661 AU minimum elong -2950 Nov 26 j 19:15 12°M36'28 1°14'11 morning rise -2944 Dec 24 j 14:01 26°M22'39 -2943 Mar 24 j 16:10 max. Earth dist. -2950 Nov 27 j 02:53 12°M37'12 31.15914 AU retrograde 28° ML19'46-2943 Jun 13 j 14:03 morning rise -2950 Dec 12 j 01:34 13°M10'57 opposition 26°M55'33 0°49'22 -2949 Feb 18 j 07:27 15°M₀ min. Earth dist. -2943 Jun 12 j 23:10 26°M56'34 29.09291 AU retrograde -2949 Mar 11 j 16:40 15°**M**₀07'27 direct -2943 Aug 31 j 15:58 25°M32'39 -2949 Apr 02 j 08:01 15°RM evening set -2943 Nov 26 j 08:04 27°M25'27 opposition -2949 May 31 j 07:42 13°M43'47 1°17'09 min. Earth dist. -2949 May 30 j 22:51 13°M44'23 29.15467 AU conjunction -2943 Dec 11 j 14:59 27°M59'57 0°43'57 direct -2949 Aug 18 j 21:34 12°M20'51 minimum elong -2943 Dec 11 j 14:59 27°M59'57 0°43'52 evening set -2949 Nov 13 j 23:52 14°M14'08 max. Earth dist. -2943 Dec 12 j 05:18 28°MJ01'18 31.08891 AU morning rise -2943 Dec 27 j 00:26 28°M34'42 conjunction -2949 Nov 29 i 04:57 14°M48'28 1°10'11 -2942 Feb 10 j 12:11 0°×7 minimum elong -2949 Nov 29 i 04:57 14°M48'28 1°10'07 -2942 Mar 27 i 05:10 0°**∡**31'56 retrograde max. Earth dist. -2949 Nov 29 j 14:14 14°M-49'21 31.14880 AU -2942 May 12 j 12:22 30°RML -2949 Dec 04 i 06:32 15°M opposition -2942 Jun 16 j 03:01 29° 11.07'41 0°44'26 -2949 Dec 14 j 11:30 -2942 Jun 15 j 12:02 29°ML08'42 29.08573 AU morning rise 15°M-22'59 min. Earth dist. -2942 Sep 03 j 01:37 -2948 Mar 13 j 03:15 17°M.19'35 direct 27°M.44'48 retrograde -2942 Nov 28 j 17:32 -2948 Jun 01 j 20:53 15°M,55'49 1°12'45 29°M-37'34 opposition evening set -2942 Dec 08 j 17:21 min. Earth dist. -2948 Jun 01 j 11:36 15°M56'27 29.14371 AU 0°×7 -2948 Jul 09 j 11:26 15°R ML -2942 Dec 14 j 01:00 0°**≯**12'06 0°39'18 direct -2948 Aug 20 j 10:08 14°M32'54 conjunction -2948 Sep 29 j 16:44 15°M minimum elong -2942 Dec 14 j 01:00 0°x12'06 0°39'14 -2948 Nov 15 j 09:16 max. Earth dist. -2942 Dec 14 j 17:10 0° ₹13'38 31.08209 AU evening set 16°M26′05 -2942 Dec 29 j 10:46 morning rise 0°×746'54 -2948 Nov 30 j 14:32 -2941 Mar 29 j 17:39 conjunction 17°M00'26 1°06'02 retrograde 2°×744'15 -2948 Nov 30 j 14:32 -2941 Jun 18 j 15:56 1° ₹ 19'57 0°39'26 minimum elong 17°M00'26 1°05'58 opposition -2941 Jun 17 j 23:36 max. Earth dist. -2948 Nov 30 j 23:48 17°ML01'19 31.13767 AU min. Earth dist. 1°**尽**21'04 29.07905 AU morning rise -2948 Dec 15 j 21:40 17°M34'59 -2941 Aug 23 j 11:51 30°RML retrograde -2947 Mar 15 j 15:07 19°M31'41 direct -2941 Sep 05 j 14:38 29°M57'08 -2947 Jun 04 j 10:02 18°ML07'49 1°08'16 -2941 Sep 18 j 13:58 0°**⊼** opposition min. Earth dist. -2947 Jun 03 j 23:23 18°ML08'32 29.13237 AU evening set -2941 Dec 01 j 03:14 1°×749'51 -2947 Aug 22 j 20:46 16° ML44'53direct -2947 Nov 17 j 18:29 -2941 Dec 16 j 10:52 2°**₹**'24'26 0°34'35 evening set 18°M37'57 conjunction -2941 Dec 16 j 10:52 minimum elong 2° x 24'26 0°34'30 -2947 Dec 03 j 00:09 19°**™**12'21 1°01'47 -2941 Dec 17 j 02:47 2°**₹**25'56 31.07563 AU conjunction max. Earth dist. minimum elong -2947 Dec 03 i 00:09 19°**M**₊12'21 1°01'42 morning rise -2941 Dec 31 i 21:16 2°×759'16 max. Earth dist. -2947 Dec 03 i 10:57 19°M13'22 31.12626 AU retrograde -2940 Mar 31 i 08:07 4°**х** 56'44 morning rise -2947 Dec 18 i 07:39 19°M46'56 opposition -2940 Jun 20 i 04:59 3°**х** 32′25 0°34′22 retrograde -2946 Mar 18 j 01:42 21°ML43'44 min. Earth dist. -2940 Jun 19 j 12:05 3° ₹ 33'34 29.07266 AU -2946 Jun 06 j 23:11 20°ML19'45 1°03'41 direct -2940 Sep 07 j 01:47 2°×09'38 opposition min. Earth dist. -2946 Jun 06 j 12:26 20°M20'29 29.12108 AU -2940 Dec 02 j 13:00 4°×702'19 evening set 18°M 56'48 direct -2946 Aug 25 j 07:22 -2946 Nov 20 j 03:52 20°M49'47 -2940 Dec 17 j 21:09 4°**∡**°36'56 0°29'49 evening set conjunction 4°**х** 36′56 minimum elong -2940 Dec 17 j 21:09 0°29'44 4°**₮**38'36 31.06910 AU conjunction -2946 Dec 05 j 09:50 21°M24'12 0°57'27 max. Earth dist. -2940 Dec 18 j 14:45 -2946 Dec 05 j 09:50 21°M24'12 0°57'23 -2939 Jan 02 j 07:53 5° x 11'50 minimum elong morning rise -2946 Dec 05 j 21:21 21°M25'17 31.11537 AU -2939 Apr 02 j 19:23 7°**х**¹09'25 max. Earth dist. retrograde -2939 Jun 22 j 18:01 5°**∡**¹45′03 0°29'14 morning rise -2946 Dec 20 j 17:48 21°M58'50 opposition -2939 Jun 22 j 00:48 retrograde -2945 Mar 20 j 14:21 23°M55'43 min. Earth dist. 5° ₹ 46'13 29.06588 AU opposition -2945 Jun 09 j 11:59 22°M31'39 0°59'00 direct -2939 Sep 09 j 13:48 4°×22'19 min. Earth dist. -2945 Jun 08 j 23:11 22°M32'31 29.11058 AU evening set -2939 Dec 04 j 22:59 6°**х** 14′58 -2945 Aug 27 j 17:40 21°M 08'41 direct evening set -2945 Nov 22 j 13:17 23°M01'36 conjunction -2939 Dec 20 j 07:26 6°**х** 49'36 0°25'00 minimum elong -2939 Dec 20 j 07:27 6°**х** 49'36 0°24'55 conjunction -2945 Dec 07 j 19:30 23°M36'03 0°53'02 max. Earth dist. -2939 Dec 21 j 00:48 6° ₹51'15 31.06207 AU -2945 Dec 07 j 19:31 -2938 Jan 04 j 18:48 7°**∡**¹24'33 minimum elong 23°MJ36'03 0°52'57 morning rise max. Earth dist. -2945 Dec 08 j 07:55 9°**₹**22'14 23°M37'13 31.10534 AU retrograde -2938 Apr 05 j 08:24

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -2938 in astronomical counting style is the year 2939 BCE in historical counting style. -2938 Jun 25 i 07:03 7°**₹**57'50 0°24'04 behind sun end -2932 Jan 03 i 05:30 20°**х** 07′09 opposition 7°**₹**'59'04 29.05839 AU 20°**∡**08'36 31.00265 AU -2938 Jun 24 j 12:56 -2932 Jan 03 j 20:33 min. Earth dist. max Earth dist -2938 Sep 12 j 00:47 6°**х** 35′07 -2932 Jan 18 j 13:23 20°**х** 41'45 direct morning rise -2938 Dec 07 j 09:09 8°**х** 27'44 -2932 Apr 18 j 11:57 22°×39'54 evening set retrograde -2932 Jul 08 j 12:18 21°**∡**15′02 -0°07′28 opposition -2938 Dec 22 j 18:01 9°**∡**¹02'25 conjunction 0°20'09 min. Earth dist. -2932 Jul 07 j 15:19 21° ₹ 16'29 28.99823 AU -2938 Dec 22 j 18:02 minimum elong 9°×702'25 0°20'04 direct -2932 Sep 24 j 19:46 19°**₹**52'11 9°**✗**04'08 31.05390 AU -2932 Dec 19 j 22:39 21°×744'33 max. Earth dist. -2938 Dec 23 j 12:13 evening set morning rise -2937 Jan 07 j 05:47 9°**х** 37′23 retrograde -2937 Apr 07 j 19:46 11°**∡**35′11 conjunction -2931 Jan 04 j 09:56 22°**х** 19'26 -0°09'26 opposition -2937 Jun 27 j 20:01 10°**∡**10'43 0°18'51 minimum elong -2931 Jan 04 j 09:56 22°**х¹**19′26 0°09'31 -2931 Jan 04 j 04:34 22°**х** 18'57 min. Earth dist. -2937 Jun 27 j 02:24 10°**∡**11'55 29.04962 AU behind sun begin -2931 Jan 04 j 15:18 22°**₹**19'55 direct -2937 Sep 14 j 11:50 8°**₰**¹48'00 behind sun end evening set -2937 Dec 09 j 19:19 10°**∡**°40'34 max. Earth dist. -2931 Jan 05 j 06:58 22°**∡**°21'25 30.99370 AU morning rise -2931 Jan 20 j 00:48 22° 🖍 54'38 conjunction -2937 Dec 25 j 04:37 11°**≯**15'17 0°15'16 retrograde -2931 Apr 21 j 02:58 24°**х** 52′52 minimum elong -2937 Dec 25 j 04:37 11°**∡**15′17 0°15'11 min. Earth dist. -2931 Jul 10 j 03:31 23°**✗**29'26 28.98998 AU behind sun begin -2937 Dec 25 j 02:19 11°**∡**15′04 opposition -2931 Jul 11 j 01:01 23°**渘**¹27'57 -0°12'44 behind sun end -2937 Dec 25 j 06:55 11°**∡**15'30 direct -2931 Sep 27 j 06:41 22°×705'06 max. Earth dist. -2937 Dec 25 j 22:59 11°**∡**17'01 31.04466 AU evening set -2931 Dec 22 j 09:04 23°**х** 57′28 morning rise -2936 Jan 09 j 16:52 11°**₹**50'18 retrograde -2936 Apr 09 i 08:55 13°**∡**'48'10 conjunction -2930 Jan 06 j 20:55 24°**₹**32'23 -0°14'21 opposition -2936 Jun 29 i 09:00 12°**∡**¹23'38 0°13'37 -2930 Jan 06 i 20:56 24°×32'23 0°14'26 minimum elong min. Earth dist. -2936 Jun 28 i 13:57 12°**₹**24'56 29.03977 AU behind sun begin -2930 Jan 06 i 17:57 24°**х** 32′07 -2936 Sep 15 j 22:55 11°**∡**00'54 behind sun end -2930 Jan 06 j 23:54 24°**₹**32'40 direct -2936 Dec 11 j 05:27 12°**х** 53′25 max. Earth dist. -2930 Jan 07 j 19:40 24° 🗷 34'32 30.98593 AU evening set -2930 Jan 22 j 12:10 morning rise 25° × 07'38 -2936 Dec 26 j 15:07 13°**∡** 28′09 -2930 Apr 23 j 14:39 0°10'22 retrograde 27° × 05'58 conjunction -2930 Jul 13 j 13:41 -2936 Dec 26 j 15:07 13°**₹**28'09 0°10'18 25°**х** 41′01 -0°17′59 minimum elong opposition -2936 Dec 26 j 09:59 -2930 Jul 12 j 15:42 25°**х** 42'32 28.98273 AU 13°**₹**27'41 min. Earth dist. behind sun begin -2930 Sep 29 j 18:29 -2936 Dec 26 j 20:14 13°**∡** 28'37 24°**х** 18′12 behind sun end direct -2930 Dec 24 j 19:43 26°**х** 10′34 max. Earth dist. -2936 Dec 27 j 09:42 13°**∡**29'55 31.03430 AU evening set -2935 Jan 11 j 03:57 14°**х** 03′13 morning rise -2935 Apr 11 j 20:50 -2929 Jan 09 j 07:55 26° ₹45'31 -0°19'14 retrograde 16°**₹**'01'10 conjunction -2935 Jul 01 j 22:05 -2929 Jan 09 j 07:54 opposition 14°**∡**°36'32 0°08'21 minimum elong 26° × 45'31 0°19'19 -2935 Jul 01 j 03:39 -2929 Jan 10 j 06:32 min. Earth dist. 14°**✗**37'48 29.02909 AU max. Earth dist. 26°**х** 47′39 30.97925 AU -2929 Jan 24 j 23:43 direct -2935 Sep 18 j 09:33 13°**∡**13'46 morning rise 27°**х** 20′49 -2935 Dec 13 j 15:39 15°**х** 06′13 retrograde -2929 Apr 26 j 04:33 29°**х** 19′13 evening set min. Earth dist. -2929 Jul 15 j 03:17 27°**₹**55'51 28.97652 AU conjunction -2935 Dec 29 j 01:52 15°**∡**¹41'00 0°05'28 opposition -2929 Jul 16 j 02:13 27°**∡**154'17 -0°23'13 -2935 Dec 29 j 01:52 15°**∡**¹41'00 0°05'23 direct -2929 Oct 02 j 05:34 26°**₹**31'28 minimum elong -2935 Dec 28 j 19:39 15°**∡**¹40'26 -2929 Dec 27 j 06:27 28°**₹**¹23'52 behind sun begin evening set behind sun end -2935 Dec 29 j 08:04 15°**х** 41′33 -2935 Dec 29 j 21:38 15°**х** 42'52 31.02349 AU -2928 Jan 11 j 19:04 28°**₹**58'51 -0°24'07 max. Earth dist. conjunction -2934 Jan 13 j 15:07 16°**∡**16′05 -2928 Jan 11 j 19:04 morning rise minimum elong 28°**х** 58'51 0°24'13 retrograde -2934 Apr 14 i 09:47 18°**∡**14'05 max. Earth dist. -2928 Jan 12 i 18:45 29° ₹01'06 30.97328 AU opposition -2934 Jul 04 i 10:44 16° **₹** 49'23 0°03'05 morning rise -2928 Jan 27 j 11:18 29°**х** 34'11 min. Earth dist. -2934 Jul 03 i 14:51 16°**₹** 50'44 29.01820 AU -2928 Feb 08 i 10:56 0°정 direct -2934 Sep 20 i 20:58 15°**х** 26′34 retrograde -2928 Apr 27 j 17:05 1°る32'43 -2934 Dec 16 j 02:01 17°**∡**18'59 -2928 Jul 17 j 14:58 0°る07'45 -0°28'25 evening set opposition min. Earth dist. -2928 Jul 16 j 16:23 0°る09'19 28.97084 AU -2934 Dec 31 j 12:29 17°**₹**53'48 0°00'29 -2928 Jul 22 j 07:52 30°R*X* conjunction -2934 Dec 31 j 12:29 17°**₹**53'48 0°00'24 -2928 Oct 03 j 16:33 28°**х** 45′00 minimum elong direct behind sun begin -2934 Dec 31 j 06:05 17°**х** 53′13 -2928 Dec 11 j 00:00 0°궁 behind sun end -2934 Dec 31 j 18:53 17°**∡** 54'22 evening set -2928 Dec 28 j 17:13 0°る37'25 max. Earth dist. -2933 Jan 01 j 08:04 17°**∡**755'38 31.01270 AU -2933 Jan 16 j 02:23 18°**х** 28'55 conjunction -2927 Jan 13 j 06:19 1°る12'26 -0°28'58 morning rise -2933 Feb 04 j 16:45 19°**х** 10′12 -2927 Jan 13 j 06:19 1°る12'26 0°29'03 desc. node minimum elong -2933 Apr 16 j 23:00 20°**х** 27′00 -2927 Jan 14 j 06:18 1°る14'42 30.96780 AU retrograde max. Earth dist. -2933 Jul 06 j 23:35 19°**х** 02'12 -0°02'12 -2927 Jan 28 j 23:03 1°る47'48 opposition morning rise 3°₹46'26 min. Earth dist. -2933 Jul 06 j 03:56 19°**✗**03'33 29.00780 AU retrograde -2927 Apr 30 j 06:36 -2933 Sep 23 j 06:47 17°**₹**39'21 min. Earth dist. -2927 Jul 19 j 03:48 2°る23'07 28.96533 AU direct evening set -2933 Dec 18 j 12:10 19°**х** 31'45 opposition -2927 Jul 20 j 03:35 2°**ට**21'28 -0°33'35 direct -2927 Oct 06 j 03:34 0°る58'44 conjunction -2932 Jan 02 j 23:11 20°**х** 06'35 -0°04'32 evening set -2927 Dec 31 j 04:26 2°る51'11 -2932 Jan 02 j 23:11 20°**∡**¹06'35 0°04'38 minimum elong -2932 Jan 02 j 16:53 20°**₹**06'01 -2926 Jan 15 j 17:51 3°**ට**26'14 -0°33'46 behind sun begin conjunction

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 38

•	nical year style is used: Th		•				page 38
minimum elong	-2926 Jan 15 j 17:51	ie yeai -2926 1 3° る 26'14		evening set	-2919 Jan 15 j 12:44		
max. Earth dist.	-2926 Jan 16 j 17:44		30.96200 AU	evening set	-2919 Jan 13 j 12.44	16 02909	
	3	4° る 01'39	30.96200 AU	:	2010 I 21:05:10	19° る 04'23	1905120
morning rise	-2926 Jan 31 j 11:06	4°る01'39 6°る00'22		conjunction	-2919 Jan 31 j 05:10	19°る04'23	
retrograde	-2926 May 02 j 18:18		0020142	minimum elong	-2919 Jan 31 j 05:10		30.90180 AU
opposition	-2926 Jul 22 j 16:11	4° る 35'24		max. Earth dist.	-2919 Feb 01 j 06:18		30.90180 AU
min. Earth dist.	-2926 Jul 21 j 17:24		28.95933 AU	morning rise	-2919 Feb 16 j 01:31	19°る40'00	
direct	-2926 Oct 08 j 13:30	3°る12'40		retrograde min. Earth dist.	-2919 May 18 j 16:12	21° る 38'55	28.89870 AU
evening set	-2925 Jan 02 j 15:40	5° る 05'09			-2919 Aug 06 j 07:55		
	2025 1 10:05 20	50 7 40114	0020122	opposition	-2919 Aug 07 j 07:10	20°る13'32	-1°12′31
conjunction	-2925 Jan 18 j 05:38	5°る40'14		direct	-2919 Oct 23 j 22:19	18°る50'26	
minimum elong	-2925 Jan 18 j 05:38	5° る 40'14		evening set	-2918 Jan 18 j 00:32	20° る 42'57	
max. Earth dist.	-2925 Jan 19 j 06:12		30.95557 AU		2010 F.L. 02:17.26	210710112	1000153
morning rise	-2925 Feb 02 j 23:13	6°る15'40		conjunction	-2918 Feb 02 j 17:26	21°る18'13	
retrograde	-2925 May 05 j 07:33	8°る14'28	20.05225.433	minimum elong	-2918 Feb 02 j 17:26	21°る18'13	
min. Earth dist.	-2925 Jul 24 j 05:03		28.95235 AU	max. Earth dist.	-2918 Feb 03 j 18:39		30.89451 AU
opposition	-2925 Jul 25 j 04:45	6° る 49'29	-0°43'46	morning rise	-2918 Feb 18 j 14:11	21°る53'52	
direct	-2925 Oct 11 j 00:17	5° る 26'44		retrograde	-2918 May 21 j 05:38	23° る 52'48	
evening set	-2924 Jan 05 j 03:01	7° る 19'15		opposition	-2918 Aug 09 j 19:06	22° ろ 27'23	
				min. Earth dist.	-2918 Aug 08 j 18:43		28.89209 AU
conjunction	-2924 Jan 20 j 17:15	7° る 54'21		direct	-2918 Oct 26 j 09:51	21° る 04'14	
minimum elong	-2924 Jan 20 j 17:14	7° る 54'21		evening set	-2917 Jan 20 j 12:27	22° る 56'49	
max. Earth dist.	-2924 Jan 21 j 16:56		30.94794 AU				
morning rise	-2924 Feb 05 j 11:26	8° る 29'49		conjunction	-2917 Feb 05 j 05:40	23° る 32'06	-1°13'59
retrograde	-2924 May 06 j 21:04	10° る 28'41		minimum elong	-2917 Feb 05 j 05:40	23° る 32'06	
opposition	-2924 Jul 26 j 17:31	9° る 03'39	-0°48'46	max. Earth dist.	-2917 Feb 06 j 06:52	23° る 34'29	30.88840 AU
min. Earth dist.	-2924 Jul 25 j 18:42	9° る 05'14	28.94422 AU	morning rise	-2917 Feb 21 j 02:54	24° る 07'47	
direct	-2924 Oct 12 j 10:11	7° る 40'52		retrograde	-2917 May 23 j 17:29	26° る 06'45	
evening set	-2923 Jan 06 j 14:25	9° る 33'22		min. Earth dist.	-2917 Aug 11 j 07:41	24° る 42'58	28.88671 AU
				opposition	-2917 Aug 12 j 07:17	24° る 41'19	-1°21'18
conjunction	-2923 Jan 22 j 05:15	10° る 08'30	-0°47'53	direct	-2917 Oct 28 j 19:55	23° る 18'10	
minimum elong	-2923 Jan 22 j 05:15	10° る 08'30	0°47'58	evening set	-2916 Jan 23 j 00:12	25° る 10'47	
max. Earth dist.	-2923 Jan 23 j 05:57	10°る10'50	30.93923 AU				
morning rise	-2923 Feb 06 j 23:45	10° る 44'00		conjunction	-2916 Feb 07 j 17:58	25° る 46'07	-1°17'59
retrograde	-2923 May 09 j 10:14	12° る 42'53		minimum elong	-2916 Feb 07 j 17:58	25° る 46'06	1°18'04
min. Earth dist.	-2923 Jul 28 j 06:39	11° る 19'24	28.93500 AU	max. Earth dist.	-2916 Feb 08 j 20:04	25° ⋜ 48'34	30.88362 AU
opposition	-2923 Jul 29 j 05:58	11° る 17'47	-0°53'42	morning rise	-2916 Feb 23 j 15:30	26° る 21'48	
direct	-2923 Oct 14 j 23:14	9° る 54'57		retrograde	-2916 May 25 j 06:56	28° る 20'49	
evening set	-2922 Jan 09 j 02:01	11° る 47'27		opposition	-2916 Aug 13 j 19:19	26° る 55'24	-1°25'31
				min. Earth dist.	-2916 Aug 12 j 18:38	26° る 57'07	28.88241 AU
conjunction	-2922 Jan 24 j 17:08	12° る 22'37	-0°52'27	direct	-2916 Oct 30 j 06:51	25° る 32'14	
minimum elong	-2922 Jan 24 j 17:08	12° る 22'37	0°52'33	evening set	-2915 Jan 24 j 12:26	27° る 24'56	
max. Earth dist.	-2922 Jan 25 j 16:44	12° る 24'50	30.92968 AU				
morning rise	-2922 Feb 09 j 12:17	12° る 58'08		conjunction	-2915 Feb 09 j 06:27	28° පි 00'17	-1°21'52
retrograde	-2922 May 12 j 00:53	14° る 57'02		minimum elong	-2915 Feb 09 j 06:27	28° පි 00'17	1°21'56
opposition	-2922 Jul 31 j 18:26	13° る 31'52	-0°58'32	max. Earth dist.	-2915 Feb 10 j 07:49	28° る 02'40	30.87967 AU
min. Earth dist.	-2922 Jul 30 j 19:21	13° る 33'27	28.92531 AU	morning rise	-2915 Feb 25 j 04:32	28° る 36'00	
direct	-2922 Oct 17 j 10:15	12° る 08'56		C	-2915 Apr 10 j 18:21	0° ≈	
evening set	-2921 Jan 11 j 13:29	14° る 01'26		retrograde	-2915 May 27 j 19:55	0° ≈ 35'04	
-	-			-	-2915 Jul 15 j 03:05	30°Rる	
conjunction	-2921 Jan 27 j 05:08	14° る 36'37	-0°56'56	min. Earth dist.	-2915 Aug 15 j 07:41	29° ට 11'19	28.87889 AU
minimum elong	-2921 Jan 27 j 05:08	14° る 36'37	0°57'02	opposition	-2915 Aug 16 j 07:22	29° る 09'40	
max. Earth dist.	-2921 Jan 28 j 05:54	14° る 38'58	30.91978 AU	direct	-2915 Nov 01 j 16:15	27° る 46'30	
morning rise	-2921 Feb 12 j 00:33	15° ප 12'11		evening set	-2914 Jan 27 j 00:41	29° る 39'17	
retrograde	-2921 May 14 j 12:45	17° る 11'05		C	-2914 Feb 05 j 07:34	0°≈	
min. Earth dist.	-2921 Aug 02 j 07:33	15° る 47'26	28.91555 AU		ý		
opposition	-2921 Aug 03 j 06:40	15° る 45'49		conjunction	-2914 Feb 11 j 19:18	0° ≈ 14'39	-1°25'38
direct	-2921 Oct 19 j 22:21	14° る 22'50		minimum elong	-2914 Feb 11 j 19:17	0° ≈ 14'39	
evening set	-2920 Jan 14 j 01:09	16° ප 15'20		max. Earth dist.	-2914 Feb 12 j 21:35		30.87622 AU
	J			morning rise	-2914 Feb 27 j 17:36	0°≈50'24	
e venning see				-			
-	-2920 Jan 29 i 17:07	16° ප 50'32	-1°01'21	retrograde	-2914 May 30 1 08:54	2° ≈ 49'30	
conjunction	-2920 Jan 29 j 17:07 -2920 Jan 29 j 17:07	16°පි50'32 16°පි50'32		retrograde opposition	-2914 May 30 j 08:54 -2914 Aug 18 j 19:19	2°≈49'30 1°≈24'08	-1°33'34
-	-2920 Jan 29 j 17:07	16° ප් 50'32	1°01'27	opposition min. Earth dist.	-2914 Aug 18 j 19:19	1° ≈ 24'08	
conjunction minimum elong max. Earth dist.	-2920 Jan 29 j 17:07 -2920 Jan 30 j 17:25	16° ප් 50'32		opposition		1° ≈ 24'08	-1°33'34 28.87543 AU
conjunction minimum elong max. Earth dist. morning rise	-2920 Jan 29 j 17:07 -2920 Jan 30 j 17:25 -2920 Feb 14 j 13:04	16°ප50'32 16°ප52'50 17°ප26'07	1°01'27	opposition min. Earth dist. direct	-2914 Aug 18 j 19:19 -2914 Aug 17 j 19:20 -2914 Nov 04 j 04:21	1°≈24'08 1°≈25'49 0°≈00'59	
conjunction minimum elong max. Earth dist. morning rise retrograde	-2920 Jan 29 j 17:07 -2920 Jan 30 j 17:25 -2920 Feb 14 j 13:04 -2920 May 16 j 03:42	16°පි50'32 16°පි52'50	1°01'27 30.91038 AU	opposition min. Earth dist.	-2914 Aug 18 j 19:19 -2914 Aug 17 j 19:20	1°≈24'08 1°≈25'49	
conjunction minimum elong max. Earth dist. morning rise	-2920 Jan 29 j 17:07 -2920 Jan 30 j 17:25 -2920 Feb 14 j 13:04 -2920 May 16 j 03:42 -2920 Aug 04 j 18:55	16° ප්50'32 16° ප්52'50 17° ප්26'07 19° ප්25'02 17° ප්59'42	1°01'27 30.91038 AU -1°07'57	opposition min. Earth dist. direct evening set	-2914 Aug 18 j 19:19 -2914 Aug 17 j 19:20 -2914 Nov 04 j 04:21 -2913 Jan 29 j 13:14	1°≈24'08 1°≈25'49 0°≈00'59 1°≈53'51	28.87543 AU
conjunction minimum elong max. Earth dist. morning rise retrograde opposition	-2920 Jan 29 j 17:07 -2920 Jan 30 j 17:25 -2920 Feb 14 j 13:04 -2920 May 16 j 03:42	16° ප්50'32 16° ප්52'50 17° ප්26'07 19° ප්25'02 17° ප්59'42	1°01'27 30.91038 AU	opposition min. Earth dist. direct	-2914 Aug 18 j 19:19 -2914 Aug 17 j 19:20 -2914 Nov 04 j 04:21	1°≈24'08 1°≈25'49 0°≈00'59	28.87543 AU -1°29'16

Planetary Pheno	omena of Neptune f	from -3400	through -2898	(UT), Astrodien	st AG 18-Feb-2025	14:23,	page 39
•	nical year style is used: Th		-				
max. Earth dist.	-2913 Feb 15 j 08:54	-	30.87258 AU	opposition	-2907 Sep 03 j 05:51	17° ≈ 07'25	-1°57'00
morning rise	-2913 Mar 02 j 06:51	3°≈05'01		direct	-2907 Nov 19 j 14:03	15° ≈ 43'51	
retrograde	-2913 Jun 01 j 23:30	5° ≈ 04'10		evening set	-2906 Feb 14 j 06:47	17° ≈ 37'06	
min. Earth dist.	-2913 Aug 20 j 07:59		28.87165 AU		_,		
opposition	-2913 Aug 21 j 07:21	3°≈38'49		conjunction	-2906 Mar 02 j 04:27	18° ≈ 12'40	-1°50'40
direct	-2913 Nov 06 j 14:36	2°≈15'37	1 3 / 23	minimum elong	-2906 Mar 02 j 04:27	18°≈12'40	
evening set	-2912 Feb 01 j 01:48	4°≈08'35		max. Earth dist.	-2906 Mar 03 j 03:06		30.83547 AU
evening set	-27121 CO 01 j 01.40	4 ~00 33		morning rise	-2906 Mar 18 j 05:47	18°≈48'34	30.03347 AO
conjunction	-2912 Feb 16 j 21:09	4° ≈ 44'00	1022146	retrograde	-2906 Jun 17 j 20:15	20°≈47'31	
3				•			1950141
minimum elong	-2912 Feb 16 j 21:09	4°≈44'00	1°32'52	opposition	-2906 Sep 05 j 17:26	19°≈22'01	
max. Earth dist.	-2912 Feb 17 j 22:36		30.86832 AU	min. Earth dist.	-2906 Sep 04 j 20:48		28.83537 AU
morning rise	-2912 Mar 03 j 20:11	5°≈19'48		direct	-2906 Nov 22 j 00:04	17°≈58'24	
retrograde	-2912 Jun 03 j 12:23	7°≈18'58		evening set	-2905 Feb 16 j 19:38	19° ≈ 51'43	
opposition	-2912 Aug 22 j 19:21	5° ≈ 53'37					
min. Earth dist.	-2912 Aug 21 j 20:29	5° ≈ 55'13	28.86698 AU	conjunction	-2905 Mar 04 j 17:50	20° ≈ 27'17	-1°53'05
direct	-2912 Nov 08 j 02:20	4° ≈ 30′24		minimum elong	-2905 Mar 04 j 17:50	20° ≈ 27'17	1°53'08
evening set	-2911 Feb 02 j 14:32	6° ≈ 23′25		max. Earth dist.	-2905 Mar 05 j 17:24	20° ≈ 29'30	30.83278 AU
				morning rise	-2905 Mar 20 j 19:18	21° ≈ 03'12	
conjunction	-2911 Feb 18 j 10:14	6° ≈ 58'52	-1°36'08	retrograde	-2905 Jun 20 j 07:54	23° ≈ 02'07	
minimum elong	-2911 Feb 18 j 10:14	6° ≈ 58'52	1°36'12	min. Earth dist.	-2905 Sep 07 j 07:42	21° ≈ 38′07	28.83343 AU
max. Earth dist.	-2911 Feb 19 j 10:22	7° ≈ 01'08	30.86324 AU	opposition	-2905 Sep 08 j 04:48	21° ≈ 36'37	-2°02'11
morning rise	-2911 Mar 06 j 09:47	7° ≈ 34'41		direct	-2905 Nov 24 j 11:50	20°≈12'58	
retrograde	-2911 Jun 06 j 04:10	9° ≈ 33'50		evening set	-2904 Feb 19 j 08:46	22°≈06'21	
min. Earth dist.	-2911 Aug 24 j 08:33		28.86149 AU	evening sec	25011 00 15 1 00:10	22 70.0021	
opposition	-2911 Aug 25 j 07:18	8°≈08'28		conjunction	-2904 Mar 06 j 07:13	22°≈41'57	-1°55'20
	-2911 Nov 10 j 14:54		-1 44 54	minimum elong	-2904 Mar 06 j 07:13	22°≈41'57	
direct	3	6°≈45'12			•		
evening set	-2910 Feb 05 j 03:22	8° ≈ 38'16		max. Earth dist.	-2904 Mar 07 j 05:28		30.83162 AU
				morning rise	-2904 Mar 22 j 09:11	23°≈17'52	
conjunction	-2910 Feb 20 j 23:31	9° ≈ 13'45		retrograde	-2904 Jun 21 j 21:39	25° ≈ 16'45	
minimum elong	-2910 Feb 20 j 23:30	9° ≈ 13'45	1°39'26	opposition	-2904 Sep 09 j 16:12	23° ≈ 51'18	-2°04'29
max. Earth dist.	-2910 Feb 21 j 23:44	9° ≈ 16′02	30.85723 AU	min. Earth dist.	-2904 Sep 08 j 19:37	23° ≈ 52'45	28.83308 AU
morning rise	-2910 Mar 08 j 23:21	9° ≈ 49'35		direct	-2904 Nov 25 j 21:14	22° ≈ 27'36	
retrograde	-2910 Jun 08 j 16:44	11° ≈ 48'43		evening set	-2903 Feb 20 j 21:55	24° ≈ 21′05	
opposition	-2910 Aug 27 j 19:04	10° ≈ 23'19	-1°47'56				
min. Earth dist.	-2910 Aug 26 j 21:32	10° ≈ 24'49	28.85527 AU	conjunction	-2903 Mar 08 j 20:56	24°≈56'42	-1°57'25
direct	-2910 Nov 13 j 03:11	8° ≈ 59'58		minimum elong	-2903 Mar 08 j 20:55	24°≈56'42	1°57'27
evening set	-2909 Feb 07 j 16:08	10° ≈ 53'05		max. Earth dist.	-2903 Mar 09 j 19:55	24°≈58'51	30.83181 AU
Ç	,			morning rise	-2903 Mar 24 j 23:04	25° ≈ 32'38	
conjunction	-2909 Feb 23 j 12:43	11° ≈ 28'35	-1°42'25	retrograde	-2903 Jun 24 j 09:50	27°≈31'29	
minimum elong	-2909 Feb 23 j 12:43	11°≈28'35		min. Earth dist.	-2903 Sep 11 j 07:25		28.83374 AU
max. Earth dist.	-2909 Feb 24 j 12:22		30.85098 AU	opposition	-2903 Sep 11 j 07:25	26°≈06'04	
	-2909 Mar 11 j 12:55	11 ≈30 47 12°≈04'26	30.03070 AO	direct	-2903 Nov 28 j 08:50	24°≈42'22	-2 00 30
morning rise	•				•		
retrograde	-2909 Jun 11 j 06:45	14°≈03'31	20.04000 ATT	evening set	-2902 Feb 23 j 11:22	26° ≈ 35'56	
min. Earth dist.	-2909 Aug 29 j 08:36		28.84908 AU		200237 11:10.20	270 11124	1050110
opposition	-2909 Aug 30 j 06:45	12° ≈ 38′05	-1°51'08	conjunction	-2902 Mar 11 j 10:39	27°≈11'34	
direct	-2909 Nov 15 j 15:28	11° ≈ 14'40		minimum elong	-2902 Mar 11 j 10:39	27°≈11'34	
evening set	-2908 Feb 10 j 04:52	13° ≈ 07'49		max. Earth dist.	-2902 Mar 12 j 08:17		30.83293 AU
				morning rise	-2902 Mar 27 j 13:12	27° ≈ 47'31	
conjunction	-2908 Feb 26 j 01:46	13° ≈ 43′20	-1°45'20	retrograde	-2902 Jun 27 j 00:43	29° ≈ 46′20	
minimum elong	-2908 Feb 26 j 01:46	13° ≈ 43′20	1°45'24	opposition	-2902 Sep 14 j 14:49	28° ≈ 20'58	-2°08'32
max. Earth dist.	-2908 Feb 27 j 01:01	13° ≈ 45'32	30.84486 AU	min. Earth dist.	-2902 Sep 13 j 18:51	28° ≈ 22'23	28.83516 AU
morning rise	-2908 Mar 13 j 02:24	14° ≈ 19′13		direct	-2902 Nov 30 j 20:46	26° ≈ 57'15	
	-2908 Apr 01 j 14:04	15° ≈		evening set	-2901 Feb 26 j 00:52	28° ≈ 50'55	
retrograde	-2908 Jun 12 j 19:07	16° ≈ 18'15		-	-		
Č	-2908 Aug 27 j 11:54	15°R ≈		conjunction	-2901 Mar 14 j 00:34	29° ≈ 26'35	-2°01'01
opposition	-2908 Aug 31 j 18:30	14°≈52'47	-1°54'09	minimum elong	-2901 Mar 14 j 00:34	29° ≈ 26'35	
min. Earth dist.	-2908 Aug 30 j 21:34		28.84339 AU	max. Earth dist.	-2901 Mar 14 j 22:18		30.83434 AU
direct	-2908 Nov 17 j 02:25	13°≈29'18	20.0 1007 110	Durtii dist.	-2901 Mar 14 j 22:18	29 ≈ 2837 0° ∺	50.05 157 AU
ancei	3			morning rise		0° ₩ 02'33	
ovenist	-2907 Feb 01 j 06:06	15°≈ 15°≈ 22'20		morning rise	-2901 Mar 30 j 03:20		
evening set	-2907 Feb 11 j 17:43	15° ≈ 22′29		retrograde	-2901 Jun 29 j 13:07	2° 米 01'19	20.02555
	****			min. Earth dist.	-2901 Sep 16 j 07:40		28.83657 AU
conjunction	-2907 Feb 27 j 15:09	15°≈58'02		opposition	-2901 Sep 17 j 02:14	0°) 36′01	-2°10'15
minimum elong	-2907 Feb 27 j 15:08	15° ≈ 58′02			-2901 Oct 09 j 00:05	30° R ≈	
max. Earth dist.	-2907 Feb 28 j 14:47		30.83962 AU	direct	-2901 Dec 03 j 08:29	29° ≈ 12'17	
morning rise	-2907 Mar 15 j 16:01	16° ≈ 33'55			-2900 Jan 26 j 02:08	0° ∀	
retrograde	-2907 Jun 15 j 08:52	18° ≈ 32'54		evening set	-2900 Feb 28 j 14:24	1°) €06'02	
min. Earth dist.	-2907 Sep 02 j 08:10	17° ≈ 08'57	28.83870 AU				

Planetary Phenomena of Neptune from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 40

Attention, astronomical year style is used: The year -2900 in astronomical counting style is the year 2901 BCE in historical counting style.

conjunction	-2900 Mar 15 j 14:30	1°) 41′44 -2°02′32
minimum elong	-2900 Mar 15 j 14:30	1° 米 41'44 2°02'35
max. Earth dist.	-2900 Mar 16 j 11:07	1° 米 43′39 30.83561 AU
morning rise	-2900 Mar 31 j 17:36	2° 升 17'42
retrograde	-2900 Jul 01 j 04:12	4° 光 16′25
opposition	-2900 Sep 18 j 13:34	2° 升 51′09 -2°11′47
min. Earth dist.	-2900 Sep 17 j 18:54	2° ∺ 52′28 28.83750 AU
direct	-2900 Dec 04 j 20:59	1° ∺ 27′23
evening set	-2899 Mar 02 j 04:16	3° ∺ 21'14
conjunction	-2899 Mar 18 j 04:42	3° ¥ 56'56 -2°03'53
conjunction minimum elong	-2899 Mar 18 j 04:42 -2899 Mar 18 j 04:42	3°¥56'56 -2°03'53 3°¥56'56 2°03'54
3	,	
minimum elong	-2899 Mar 18 j 04:42	3° ¥ 56′56 2°03′54
minimum elong max. Earth dist.	-2899 Mar 18 j 04:42 -2899 Mar 19 j 00:14	3°¥56'56 2°03'54 3°¥58'46 30.83599 AU
minimum elong max. Earth dist. morning rise	-2899 Mar 18 j 04:42 -2899 Mar 19 j 00:14 -2899 Apr 03 j 08:07	3°\;\;\\$56'56 2°03'54 3°\;\;\\$58'46 30.83599 AU 4°\;\;\\$32'56
minimum elong max. Earth dist. morning rise retrograde	-2899 Mar 18 j 04:42 -2899 Mar 19 j 00:14 -2899 Apr 03 j 08:07 -2899 Jul 03 j 17:28	3°¥56'56 2°03'54 3°¥58'46 30.83599 AU 4°¥32'56 6°¥31'34
minimum elong max. Earth dist. morning rise retrograde min. Earth dist.	-2899 Mar 18 j 04:42 -2899 Mar 19 j 00:14 -2899 Apr 03 j 08:07 -2899 Jul 03 j 17:28 -2899 Sep 20 j 08:05	3°\times 56'56 2°03'54 3°\times 58'46 30.83599 AU 4°\times 32'56 6°\times 31'34 5°\times 07'31 28.83749 AU