Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6400 in astronomical counting style is the year 6401 BCE in historical counting style. -6400 Jan 30 j 20:50 23°**I**I44'45 17°47'24 -6393 Aug 24 j 06:14 13°9514'09 16°15'41 opposition minimum elong -6400 Feb 01 j 21:27 23°**Ⅱ**41'21 29.19765 AU -6393 Dec 06 j 01:58 min. Earth dist. retrograde 15°956'15 22°II18'52 -6392 Feb 21 j 11:05 -6400 Apr 20 j 02:55 14°932'36 17°16'42 direct opposition max. Earth dist. -6400 Aug 03 j 13:24 24°**I**57'11 31.05273 AU -6392 Feb 22 j 08:39 14°931'05 28.65550 AU min. Earth dist. direct -6392 May 11 j 09:21 13°9506'36 max. Earth dist. conjunction -6400 Aug 05 j 13:13 25°**Ⅲ**01'59 16°41'37 -6392 Aug 25 j 06:12 15°9549'58 30.56001 AU minimum elong -6400 Aug 05 j 13:05 25°**Ⅲ**01'58 16°42'02 retrograde -6400 Nov 16 j 16:53 27°**Ⅱ**40'44 conjunction -6392 Aug 26 j 02:03 15°952'00 16°03'50 26° **II** 17'47 $17^{\circ}50'50$ opposition -6399 Feb 01 j 18:08 minimum elong -6392 Aug 26 j 02:16 15°952'01 16°04'15 min. Earth dist. -6399 Feb 03 j 14:33 26°**Ⅱ**14'41 29.09156 AU retrograde -6392 Dec 07 j 22:49 18°934'10 direct -6399 Apr 22 j 23:34 24°**Ⅲ**51'45 opposition -6391 Feb 23 j 11:05 17°5510'29 17°03'32 max. Earth dist. -6399 Aug 06 j 11:07 27°**Ц**30'59 30.95180 AU min. Earth dist. -6391 Feb 24 j 06:16 17°509'08 28.63452 AU direct -6391 May 14 j 08:26 15°9544'35 conjunction -6399 Aug 08 j 08:03 27°**Ⅲ**35'31 16°43'39 minimum elong -6399 Aug 08 j 07:59 27°**Ⅲ**35'31 16°44'03 conjunction -6391 Aug 28 j 21:53 18°9529'42 15°50'31 -6399 Oct 21 j 16:14 0ಂತಾ minimum elong -6391 Aug 28 j 22:07 18°9529'43 15°50'55 retrograde -6399 Nov 19 j 13:27 0°9515'02 max. Earth dist. -6391 Aug 28 j 04:53 18°9527'57 30.54651 AU -6399 Dec 19 j 07:15 30°RⅡ retrograde -6391 Dec 10 j 20:08 21°9511'47 opposition -6398 Feb 04 j 15:53 28°**耳**51'52 17°52'13 opposition -6390 Feb 26 j 10:40 19°9548'05 16°48'22 min. Earth dist. -6398 Feb 06 j 09:55 28°**Д**48'56 28.99669 AU min. Earth dist. -6390 Feb 27 j 01:25 19°547'03 28.62381 AU direct -6398 Apr 25 j 19:12 27°**Ⅲ**25'43 direct -6390 May 17 j 08:08 18°9522'17 -6398 Aug 06 j 23:55 0ಂತಾ max. Earth dist. -6398 Aug 09 j 10:36 0°905'56 30.86259 AU -6390 Aug 31 i 17:34 21°9507'01 15°35'21 conjunction -6390 Aug 31 i 17:51 21°9507'03 15°35'46 minimum elong -6398 Aug 11 j 03:16 0°9510'04 16°43'45 max. Earth dist. -6390 Aug 31 j 04:31 21°**©**05'41 30.54360 AU conjunction -6398 Aug 11 j 03:13 0°910'04 -6390 Dec 13 j 15:58 23°9548'54 minimum elong 16°44'11 retrograde -6398 Nov 22 j 10:30 opposition -6389 Mar 01 j 10:28 22°\$25'12 16°31'13 2°950'15 retrograde -6397 Feb 07 j 14:11 1°926'56 17°51'32 min. Earth dist. -6389 Mar 01 j 22:43 22°524'21 28 62372 AU opposition -6397 Feb 09 j 04:18 -6389 May 20 j 06:24 1°524'16 28 91301 AU direct 20°959'32 min. Earth dist. -6397 Apr 28 j 17:26 0°9600'44 direct 23°5643'44 15°18'23 max. Earth dist. -6397 Aug 12 j 08:37 2°541'41 30.78486 AU -6389 Sep 03 j 12:45 conjunction 23°**©**43'46 15°18'46 -6389 Sep 03 j 13:04 minimum elong -6397 Aug 13 j 22:35 2°545'33 16°41'56 -6389 Sep 03 j 03:20 23°542'46 30.55195 AU conjunction max. Earth dist. -6397 Aug 13 j 22:36 -6389 Dec 16 j 12:58 minimum elong 2°9545'33 16°42'21 retrograde 26°925'20 -6397 Nov 25 j 08:42 -6388 Mar 03 j 09:57 retrograde 5°926'20 opposition 25°901'39 16°12'07 -6396 Feb 10 j 12:59 opposition 4°902'54 17°48'45 min. Earth dist. -6388 Mar 03 j 17:22 25°501'07 28.63480 AU min. Earth dist. -6396 Feb 12 j 00:11 4°900'26 28.84053 AU direct -6388 May 22 j 05:39 23°936'07 -6396 Apr 30 j 13:29 2°936'41 direct max. Earth dist. -6396 Aug 14 j 08:55 5°5018'27 30.71850 AU conjunction -6388 Sep 05 j 07:43 26°5519'41 14°59'38 -6388 Sep 05 j 08:03 26°9519'43 15°00'02 minimum elong -6396 Aug 15 j 18:19 5°**©**21'51 16°38'11 max. Earth dist. -6388 Sep 05 j 02:04 26°519'06 30.57189 AU conjunction -6396 Aug 15 j 18:22 -6388 Dec 18 j 07:28 29°9500'54 minimum elong 5°921'51 16°38'37 retrograde -6396 Nov 27 j 06:32 8°903'08 -6387 Mar 06 j 09:10 27°537'15 15°51'08 retrograde opposition -6395 Feb 12 j 12:09 6°539'37 17°43'52 -6387 Mar 06 j 13:41 27°536'56 28.65771 AU opposition min. Earth dist. 6°537'23 28.77880 AU 26°9511'54 min. Earth dist. -6395 Feb 13 j 19:59 direct -6387 May 25 j 03:32 direct -6395 May 03 j 12:54 5°9513'26 evening set -6387 Sep 04 i 20:04 28°5946'48 max. Earth dist. -6395 Aug 17 j 07:02 7°555'41 30.66312 AU conjunction -6387 Sep 08 i 02:17 28°554'45 14°39'10 conjunction -6395 Aug 18 j 14:02 7°558'51 16°32'29 minimum elong -6387 Sep 08 i 02:39 28°954'47 14°39'33 minimum elong -6395 Aug 18 j 14:08 7°**9**58'51 max. Earth dist. -6387 Sep 08 i 00:58 28°954'37 30.60413 AU 16°32'53 -6395 Nov 30 i 05:49 10°9540'31 -6387 Sep 11 j 09:11 29°902'47 retrograde morning rise -6394 Feb 15 i 11:33 9°916'57 17°36'53 -6387 Oct 05 j 15:00 opposition $0^{\circ}\Omega$ 9°5014'57 28.72761 AU -6387 Dec 21 j 02:26 min. Earth dist. -6394 Feb 16 j 15:52 retrograde 1°**Ω**35'30 direct -6394 May 06 j 11:06 70050'48 opposition -6386 Mar 09 j 07:57 0°Ω11'56 15°28'20 max. Earth dist. -6394 Aug 20 j 07:28 10°533'37 30.61832 AU min. Earth dist. -6386 Mar 09 j 07:50 0°**Ω**11'56 28.69260 AU -6386 Mar 16 j 12:15 30°R95 -6394 Aug 21 j 10:05 10°936'20 16°24'51 direct -6386 May 28 j 02:20 28°9546'48 conjunction -6394 Aug 21 j 10:13 $0^{\circ}\Omega$ minimum elong 10°936'21 16°25'16 -6386 Aug 03 j 02:40 -6394 Dec 03 j 02:31 retrograde 13°9518'18 evening set -6386 Sep 06 j 04:11 1°**Ω**17'30 opposition -6393 Feb 18 j 11:14 11°**©**54'41 17°27'50 min. Earth dist. -6393 Feb 19 j 12:51 11°**©**52'53 28.68647 AU conjunction -6386 Sep 10 j 20:23 1°**Ω**28'51 14°17'04 -6393 May 09 j 10:05 10°528'36 minimum elong -6386 Sep 10 j 20:46 1°**Ω**28'54 14°17'27 direct max. Earth dist. 13°511'39 30.58402 AU -6393 Aug 23 j 05:55 max. Earth dist. -6386 Sep 10 j 22:22 1°**Ω**29'04 30.64857 AU morning rise -6386 Sep 15 j 13:16 1°**Ω**40′17 conjunction -6393 Aug 24 j 06:04 13°5514'08 16°15'17 retrograde -6386 Dec 23 j 22:01 4°**Ω**09'04

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 2

•	nical year style is used: Th		•	/ ·		, ,	e 2
opposition	-6385 Mar 12 j 06:27	-	15°03'47	conjunction	-6379 Sep 27 j 13:49	$18^{\circ}\Omega$ 53'44	11°04'06
min. Earth dist.	-6385 Mar 12 j 00:27		28.73969 AU	minimum elong	-6379 Sep 27 j 13:49	18° Ω 53'46	11°04'04
direct	-6385 May 30 j 22:17	1° Ω 20'45	26.73909 AU	max. Earth dist.	-6379 Sep 27 j 14:14 -6379 Sep 28 j 16:05		31.26786 AU
evening set	-6385 Sep 07 j 19:16	3°Ω47'56		morning rise	-6379 Oct 07 j 22:04	19° Ω 17'52	31.20780 AU
evening set	-0303 Sep 07 J 19.10	3 6 6 4 7 3 0		retrograde	-6378 Jan 09 j 23:03	21°Ω28'08	
conjunction	-6385 Sep 13 j 14:12	4° 0 01!56	13°53'23	min. Earth dist.	-6378 Mar 29 j 02:51		29.36702 AU
minimum elong	-6385 Sep 13 j 14:12	4°Ω01'58	13°53'45	opposition	-6378 Mar 30 j 05:37	20° Ω 06'09	11°32'13
max. Earth dist.	-6385 Sep 13 j 20:51		30.70531 AU	direct	-6378 Jun 17 j 22:22	18° Ω 43'41	11 32 13
morning rise	-6385 Sep 19 j 09:43	4°Ω16'01	30.70331 AO	evening set	-6378 Sep 19 j 06:52	20°Ω51'42	
retrograde	-6385 Dec 26 j 16:11	6° Ω 41'31		evening set	-0376 Sep 17 J 00.32	20 8631 42	
opposition	-6384 Mar 14 j 04:33	5° Ω 18'14	14°37'35	conjunction	-6378 Sep 30 j 03:35	21° Ω 16'53	10°32'19
min. Earth dist.	-6384 Mar 13 j 20:55		28.79856 AU	minimum elong	-6378 Sep 30 j 04:00	21° Ω 16'55	10°32'36
direct	-6384 Jun 01 j 21:25	3° Ω 53'41	20.77030 AC	max. Earth dist.	-6378 Oct 01 j 08:27		31.39326 AU
evening set	-6384 Sep 08 j 13:28	6° Ω 17'41		morning rise	-6378 Oct 11 j 01:05	21°Ω42'08	31.37320 AO
evening set	-0304 Sep 00 j 13.20	0 6617 41		retrograde	-6377 Jan 12 j 13:52	23°Ω50'13	
conjunction	-6384 Sep 15 j 07:17	6° Ω 33'54	13°28'14	opposition	-6377 Apr 01 j 23:24	23° Ω 28'27	10°57'42
minimum elong	-6384 Sep 15 j 07:43	6°Ω33'57	13°28'36	min. Earth dist.	-6377 Mar 31 j 16:43		29.49279 AU
max. Earth dist.	-6384 Sep 15 j 16:44		30.77372 AU	direct	-6377 Jun 20 j 17:33	21°Ω06'20	2).4)21) AO
morning rise	-6384 Sep 22 j 01:51	6° Ω 50'13	30.77372 AO	evening set	-6377 Sep 21 j 07:39	23°Ω12'01	
retrograde	-6384 Dec 28 j 11:56	9° Ω 12'48		evening set	-03// Sep 21 j 07.37	23 8612 01	
opposition	-6383 Mar 17 j 02:09	7° Ω 49'42	14°09'51	conjunction	-6377 Oct 02 j 16:37	23° Ω 38'11	9°59'46
min. Earth dist.	-6383 Mar 16 j 14:43		28.86885 AU	minimum elong	-6377 Oct 02 j 17:01	23°Ω38'13	10°00'03
direct	-6383 Jun 04 j 17:36	6°Ω25'28	26.60665 AU	max. Earth dist.	-6377 Oct 02 j 17:01		31.52693 AU
evening set	-6383 Sep 10 j 09:53	8° Ω 46'31		morning rise	-6377 Oct 14 j 02:32	24° Ω 04'25	31.32073 AO
evening set	-0303 Sep 10 J 07.33	0 00-031		retrograde	-6376 Jan 15 j 02:11	26°Ω10'25	
conjunction	-6383 Sep 18 j 00:11	9° Ω 04'41	13°01'43	min. Earth dist.	-6376 Apr 02 j 07:37		29.62727 AU
minimum elong	-6383 Sep 18 j 00:11	9° Ω 04'44	13°02'04	opposition	-6376 Apr 02 j 07:37	24°Ω48'53	10°22'25
max. Earth dist.	-6383 Sep 18 j 14:10		30.85318 AU	direct	-6376 Jun 22 j 09:51	$23^{\circ}\Omega 27'07$	10 22 23
morning rise	-6383 Sep 18 j 14:10	9° Ω 22'56	30.83318 AU	evening set	-6376 Sep 22 j 08:34	25°Ω30'33	
retrograde	-6383 Dec 31 j 04:39	11° Ω 42'49		evening set	-0370 Sep 22 j 00.54	23 8630 33	
opposition	-6382 Mar 19 j 23:08	10° Ω 19'56	13°40'42	conjunction	-6376 Oct 04 j 04:55	25° Ω 57'34	9°26'34
min. Earth dist.	-6382 Mar 19 j 08:47		28.94964 AU	minimum elong	-6376 Oct 04 j 05:18	$25^{\circ}\Omega 57'34$ $25^{\circ}\Omega 57'36$	
direct	-6382 Jun 07 j 14:29	8°Ω56'02	20.74704 AC	max. Earth dist.	-6376 Oct 05 j 16:11		31.66935 AU
evening set	-6382 Sep 12 j 07:45	11° Ω 14'16		morning rise	-6376 Oct 16 j 02:05	26° Ω 24'41	31.00/33/10
evening set	-0302 Sep 12 j 07.43	11 061410		retrograde	-6375 Jan 16 j 13:18	28° Ω 28'39	
conjunction	-6382 Sep 20 j 16:24	11° Ω 34'10	12°33'57	min. Earth dist.	-6375 Apr 04 j 20:16		29.77055 AU
minimum elong	-6382 Sep 20 j 16:50	11°Ω34'13	12°34'17	opposition	-6375 Apr 06 j 08:46	27° Ω 07'22	9°46'29
max. Earth dist.	-6382 Sep 21 j 08:44		30.94296 AU	direct	-6375 Jun 25 j 03:17	25° Ω 45'59	7 10 27
morning rise	-6382 Sep 29 j 01:48	11° Ω 54'09	30.91290710	evening set	-6375 Sep 24 j 09:47	27° Ω 47'14	
retrograde	-6381 Jan 02 j 23:51	14° Ω 11'28		evening sec	0375 Sep 211 05.17	27 001711	
opposition	-6381 Mar 22 j 19:41	12° Ω 48'48	13°10'14	conjunction	-6375 Oct 06 j 16:25	28° Ω 15'02	8°52'47
min. Earth dist.	-6381 Mar 22 j 01:18		29.04048 AU	minimum elong	-6375 Oct 06 j 16:46	28° Ω 15'04	
direct	-6381 Jun 10 j 11:06	11° Ω 25'16	27.01010110	max. Earth dist.	-6375 Oct 08 j 06:01		31.82053 AU
evening set	-6381 Sep 14 j 06:27	13° Ω 40'48		morning rise	-6375 Oct 19 j 00:12	28° Ω 42'55	
8	, , , , , , , , , , , , , , , , , , ,				-6375 Nov 26 j 20:26	0° m)	
conjunction	-6381 Sep 23 j 08:07	14° Ω 02'15	12°05'01	retrograde	-6374 Jan 19 j 01:18	0° m 44'59	
minimum elong	-6381 Sep 23 j 08:32	14° Ω 02'18	12°05'20		-6374 Mar 16 j 09:41	30°R Ω	
max. Earth dist.	-6381 Sep 24 j 04:41	14° Ω 04'17	31.04236 AU	min. Earth dist.	-6374 Apr 07 j 08:36	29° Ω 26'33	29.92309 AU
morning rise	-6381 Oct 02 j 10:22	14° Ω 23'47		opposition	-6374 Apr 09 j 00:07	29° £ 23'57	
C	-6381 Oct 18 j 06:11	15° Ω		direct	-6374 Jun 27 j 16:34	28° Ω 02'57	
retrograde	-6380 Jan 05 j 16:08	16° Ω 38'40			-6374 Sep 25 j 11:41	o° mp	
opposition	-6380 Mar 24 j 15:49	15° Ω 16'13	12°38'36	evening set	-6374 Sep 26 j 11:00	0° m 02'09	
min. Earth dist.	-6380 Mar 23 j 19:07	15° Ω 17'37	29.14060 AU				
	-6380 Apr 03 j 16:13	15°RΩ		conjunction	-6374 Oct 09 j 03:20	0° m/30'37	8°18'30
direct	-6380 Jun 12 j 07:56	13° Ω 53′02		minimum elong	-6374 Oct 09 j 03:41	0° m 30'39	8°18'44
	-6380 Aug 15 j 20:54	15° Ω		max. Earth dist.	-6374 Oct 10 j 20:47	0° m 34'31	31.98088 AU
evening set	-6380 Sep 15 j 06:12	16° Ω 05'59		morning rise	-6374 Oct 21 j 20:36	0° m 59'11	
				retrograde	-6373 Jan 21 j 11:21	2° m 59'24	
conjunction	-6380 Sep 24 j 23:16	16° Ω 28'49	11°35'01	min. Earth dist.	-6373 Apr 09 j 20:27	1° m /41'27	30.08474 AU
minimum elong	-6380 Sep 24 j 23:42	16° Ω 28'51	11°35'21	opposition	-6373 Apr 11 j 14:48	1° m 38'40	8°33'01
max. Earth dist.	-6380 Sep 25 j 22:05	16° Ω 31′03	31.15086 AU	direct	-6373 Jun 30 j 08:07	0° m/ 18'05	
morning rise	-6380 Oct 04 j 17:07	16° Ω 51'43		evening set	-6373 Sep 28 j 12:21	2° m 15'19	
retrograde	-6379 Jan 07 j 08:57	19° Ω 04'15			-		
min. Earth dist.	-6379 Mar 26 j 10:08	17° Ω 43'42	29.24960 AU	conjunction	-6373 Oct 11 j 13:16	2° Mp 44'21	7°43'49
opposition	-6379 Mar 27 j 10:57	17° Ω 42'02	12°05'53	minimum elong	-6373 Oct 11 j 13:35	2° Mp 44'23	7°44'02
direct	-6379 Jun 15 j 03:28	16° Ω 19'12		max. Earth dist.	-6373 Oct 13 j 08:39	2° Mp 48'24	32.15015 AU
evening set	-6379 Sep 17 j 06:17	18° Ω 29'39		morning rise	-6373 Oct 24 j 15:32	3° m 13'30	

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6372 in astronomical counting style is the year 6373 BCE in historical counting style. -6372 Jan 23 j 23:36 5° m 11'59 minimum elong -6366 Oct 25 i 17:19 17° m 31'27 3°37'06 retrograde -6372 Apr 11 j 06:48 3° m 54'34 30.25544 AU -6366 Oct 28 j 04:04 17° m/36'38 33.52956 AU min. Earth dist. max. Earth dist. 18° m 02'32 -6372 Apr 13 j 04:43 7°55'41 -6366 Nov 09 j 12:55 3° m 51'34 opposition morning rise -6372 Jul 01 j 20:49 19° m 50'49 direct 2° m/31'25 -6365 Feb 07 j 04:42 retrograde -6372 Sep 29 j 13:43 -6365 Apr 26 j 19:02 evening set 4° Mp 26'46min. Earth dist. 18° Mp 36'35 31.64048 AU -6365 Apr 29 j 07:56 opposition 18° Mp 32'46 3°31'51 -6365 Jul 18 j 02:47 7°08'49 conjunction -6372 Oct 12 j 22:46 4° Mp 56'19 direct 17° m 15'38 minimum elong -6372 Oct 12 j 23:05 4° Mp 56'21 7°09'02 evening set -6365 Oct 13 j 00:45 19° Mp 00'02 5° M 00'41 32.32790 AU max. Earth dist. -6372 Oct 14 j 22:02 morning rise -6372 Oct 26 j 08:59 5° m 25'58 conjunction -6365 Oct 27 j 21:54 19° m/30'59 3°02'00 retrograde -6371 Jan 25 j 09:04 7° m 22'47 minimum elong -6365 Oct 27 j 22:01 19° My 31'00 3°02'06 -6365 Oct 30 j 11:27 min. Earth dist. -6371 Apr 13 j 17:58 6° Mp 05'47 30.43442 AU max. Earth dist. 19° M 36'22 33.74621 AU -6365 Nov 11 j 20:50 opposition -6371 Apr 15 j 17:42 6° Mg 02'42 7°18'06 morning rise 20° M 02'06direct -6371 Jul 04 j 09:46 4° m 43'00 retrograde -6364 Feb 09 j 07:45 21° m/49'10 evening set -6371 Oct 01 j 15:17 6° m 36'35 min. Earth dist. -6364 Apr 28 j 01:31 20° m 35'17 31.85793 AU opposition -6364 Apr 30 j 15:35 20° Mp 31'24 2°54'43 conjunction -6371 Oct 15 j 07:26 7° m 06'32 6°33'36 direct -6364 Jul 19 j 11:53 19° m 14'39 minimum elong -6371 Oct 15 j 07:43 7° m 06'33 6°33'48 evening set -6364 Oct 14 j 02:12 20° m 57'45 max. Earth dist. -6371 Oct 17 j 08:18 7° mp 11'01 32.51347 AU morning rise -6371 Oct 29 j 01:03 7° m/36'36 conjunction -6364 Oct 29 j 01:52 21° m/28'39 2°27'16 retrograde -6370 Jan 27 j 19:40 9° m 31'49 minimum elong -6364 Oct 29 j 01:58 21°M 28'39 2°27'23 min. Earth dist. -6370 Apr 16 j 02:34 8° m 15'24 30.62103 AU max. Earth dist. -6364 Oct 31 j 16:08 21° m 34'02 33.96693 AU opposition -6370 Apr 18 j 05:55 8° m 12'066°40'20 morning rise -6364 Nov 13 i 03:43 21° m 59'43 direct -6370 Jul 06 j 21:27 6° m 52'51 retrograde -6363 Feb 10 i 12:55 23°m/45'38 -6370 Oct 03 j 16:44 8° m 44'44 min. Earth dist. -6363 Apr 30 j 05:39 22° m 32'10 32.07995 AU evening set opposition -6363 May 02 j 22:15 22° m 28'10 2°17'53 -6370 Oct 17 j 15:24 9° m 15'01 5°58'15 -6363 Jul 21 j 17:27 conjunction 21° m 11'46 direct -6370 Oct 17 j 15:40 9° m 15'02 5° 58'27 evening set -6363 Oct 16 j 03:24 22° m 53'38 minimum elong -6370 Oct 19 j 19:27 9° m 19'45 32.70589 AU max. Earth dist. -6370 Oct 31 j 15:33 morning rise 9° m 45'25 -6363 Oct 31 j 05:15 23° m/24'27 1°52'50 conjunction -6369 Jan 30 j 04:08 11° m/39'09 -6363 Oct 31 j 05:20 23° m/24'27 1°52'55 retrograde minimum elong 10° My 23'08 $30.81438~{\rm AU}$ -6369 Apr 18 j 12:56 max. Earth dist. -6363 Nov 02 j 22:21 23° Mg 30'02 34.19203 AU min. Earth dist. -6369 Apr 20 j 17:34 10° Mp 19'46 6°02'29 -6363 Nov 15 j 09:10 23° m 55'26 opposition morning rise -6369 Jul 09 j 10:28 9° m 00'58 -6362 Feb 12 j 16:01 25° m 40'16 direct retrograde 24° m/27'07 32.30672 AU -6369 Oct 05 j 18:23 -6362 May 02 j 10:56 evening set 10° m 51'14 min. Earth dist. 24° m/23'05 1°41'26 opposition -6362 May 05 j 04:20 -6369 Oct 19 j 22:50 11° mg 21'47 5°22'51 conjunction direct -6362 Jul 23 j 23:21 23°m07'03 minimum elong -6369 Oct 19 j 23:04 11° Mp 21'48 5°23'01 evening set -6362 Oct 18 j 04:24 24° Mp 47'46 max. Earth dist. -6369 Oct 22 j 04:35 11° m/26'38 32.90455 AU -6369 Nov 03 j 04:49 11° m 52'27 conjunction -6362 Nov 02 j 07:46 25° mp 18'27 1°18'45 morning rise retrograde -6368 Feb 01 j 13:17 13° Mp 44'43 minimum elong -6362 Nov 02 j 07:49 25° m 18'27 1°18'49 -6368 Apr 19 j 20:36 12° m/29'15 31.01369 AU max. Earth dist. -6362 Nov 05 j 01:57 25° m 24'05 34.42189 AU min. Earth dist. -6368 Apr 22 j 04:15 12° m/25'42 5°24'38 -6362 Nov 17 j 13:19 25° m 49'19 opposition morning rise -6368 Jul 10 j 22:42 11°m/07'21 -6361 Feb 14 j 19:35 27° m 33'07 direct retrograde -6368 Oct 06 j 20:04 12° m 56'03 -6361 May 04 j 13:14 26° m 20'27 32.53848 AU evening set min. Earth dist. opposition -6361 May 07 i 09:37 26° m 16'15 1°05'23 13° m 26'48 4°47'27 conjunction -6368 Oct 21 i 05:33 direct -6361 Jul 26 i 04:44 25° m 00'37 minimum elong -6368 Oct 21 i 05:46 13° m 26'49 4°47'36 evening set -6361 Oct 20 j 05:26 26° m 40'15 max. Earth dist. -6368 Oct 23 j 13:21 13° m 31'47 33.10843 AU -6368 Nov 04 i 16:51 13° m 57'40 -6361 Nov 04 j 09:48 27° m 10'46 0°45'02 morning rise conjunction -6367 Feb 02 j 19:02 15° m 48'34 -6361 Nov 04 i 09:50 27° m 10'46 0°45'05 retrograde minimum elong -6367 Apr 22 j 05:29 14° Mp 33'29 31.21822 AU -6361 Nov 07 j 06:10 27° m 16'32 34.65647 AU min. Earth dist. max. Earth dist. -6367 Apr 24 j 14:20 14° m 29'53 4°46'52 -6361 Nov 19 j 16:31 27° Mp 41'28 opposition morning rise 13° m 11'57 direct -6367 Jul 13 j 08:24 retrograde -6360 Feb 16 j 21:34 29° m 24'19 evening set -6367 Oct 08 j 21:43 14° m 59'10 min. Earth dist. -6360 May 05 j 17:03 28° m 12'00 32.77522 AU opposition -6360 May 08 j 14:16 28° Mp 07'47 0°29'47 -6360 Jul 27 j 10:19 conjunction -6367 Oct 23 j 11:46 15° Mp 30'02 4°12'08 26° m 52'33 direct -6367 Oct 23 j 11:57 15° m 30'03 4°12'16 -6360 Oct 21 j 06:13 28°My31'11 minimum elong evening set -6367 Oct 25 j 21:40 15° m 35'11 33.31697 AU max. Earth dist. -6367 Nov 07 j 03:26 -6360 Nov 05 j 11:17 29°**m**01'29 0°11'45 morning rise 16° m 01'03 conjunction retrograde -6366 Feb 04 j 23:08 17° m 50'36 minimum elong -6360 Nov 05 j 11:17 29°M 01'29 0°11'48 min. Earth dist. -6366 Apr 24 j 12:24 16° Mp 35'58 31.42716 AU behind sun begin -6360 Nov 05 j 06:46 29° M 01'08 opposition -6366 Apr 26 j 23:23 16° Mp 32'15 4°09'16 behind sun end -6360 Nov 05 j 15:49 29° m 01'51 direct -6366 Jul 15 j 19:26 15° m 14'43 max. Earth dist. -6360 Nov 08 j 09:18 29° m 07'21 34.89570 AU evening set -6366 Oct 10 j 23:25 17° m 00'30 morning rise -6360 Nov 20 j 18:32 29° m 31'59 -6360 Dec 05 j 15:08 0∘**ত**

-6359 Feb 17 j 22:33

1°**£**13'57

retrograde

-6366 Oct 25 j 17:09 17° m 31'26 3°36'58

conjunction

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6359 in astronomical counting style is the year 6360 BCE in historical counting style. desc. node -6359 Mar 15 i 17:37 1°**♀**04'41 conjunction -6353 Nov 18 i 06:44 11°**2**17'48 -3°27'39 min. Earth dist. -6359 May 07 j 18:46 0°**2**02'06 33.01632 AU -6353 Nov 18 j 06:37 11°**2**17'47 3°27'41 minimum elong -6359 May 09 j 05:15 -6353 Nov 21 j 11:42 11°**2**23'54 36.63996 AU 30°R M max. Earth dist. -6359 May 10 j 18:06 29° m 57'46 -0°05'20 -6353 Dec 03 j 05:45 11°**♀**46'02 opposition morning rise -6359 Jul 29 j 16:05 28° m/42'57 -6352 Mar 01 j 19:34 direct retrograde 13°**£**23'15 0∘∙თ 12°**2**14'00 34.77009 AU -6359 Oct 12 j 08:54 min. Earth dist. -6352 May 19 j 22:33 evening set -6359 Oct 23 j 07:04 0°**£**20'39 opposition -6352 May 23 j 04:01 12° 209'28 -3°55'21 direct -6352 Aug 11 j 01:39 10°**£**57'23 conjunction -6359 Nov 07 j 12:02 0°**2**50'43 -0°21'11 evening set -6352 Nov 04 j 10:15 12°**△**30'00 minimum elong -6359 Nov 07 j 12:01 0°£50'43 0°21'09 max. Earth dist. -6359 Nov 10 j 11:09 0°**≏**56'37 35.13876 AU conjunction -6352 Nov 19 j 03:59 12°**£**57'36 -3°56'47 -6352 Nov 19 j 03:51 morning rise -6359 Nov 22 j 19:33 1°**£**20'59 minimum elong 12°**2**57'35 3°56'49 -6352 Nov 22 j 09:06 retrograde -6358 Feb 19 j 23:30 3°**₽**02'08 max. Earth dist. 13°**2**03'40 36.89194 AU min. Earth dist. -6358 May 09 j 20:43 1°**£**50'41 33.26136 AU morning rise -6352 Dec 04 j 00:25 13°**2**25'25 opposition -6358 May 12 j 21:21 1°**≏**46'18 -0°39'56 retrograde -6351 Mar 03 j 15:29 15°**2**02'06 direct -6358 Jul 31 j 18:38 0°**£**31'55 min. Earth dist. -6351 May 21 j 21:09 13°**♀**53'07 35.02360 AU evening set -6358 Oct 25 j 07:42 2°**£**08'45 opposition -6351 May 25 j 03:05 13°**≗**48'35 -4°25'45 -6351 Aug 13 j 01:25 12°**2**36'49 conjunction -6358 Nov 09 j 12:27 2°**2**38'32 -0°53'33 evening set -6351 Nov 06 j 10:01 14°**♀**08'51 minimum elong -6358 Nov 09 j 12:25 2°**₽**38'32 0°53'31 max. Earth dist. -6358 Nov 12 j 13:46 2°**2**44'35 35.38523 AU conjunction -6351 Nov 21 j 00:48 14°**△**36'01 -4°25'20 morning rise -6358 Nov 24 j 19:27 3°**₽**08'32 minimum elong -6351 Nov 21 i 00:39 14°**2**36'00 4°25'25 retrograde -6357 Feb 21 i 21:55 4°**2**48'56 max. Earth dist. -6351 Nov 24 i 07:35 14°**2**42'10 37.14445 AU min. Earth dist. -6357 May 11 j 22:26 3°**2**37'54 33.50944 AU morning rise -6351 Dec 05 i 17:55 15°**♀**03'22 -6357 May 14 j 23:59 3°**2**33'28 -1°13'59 retrograde -6350 Mar 05 j 09:04 16°**♀**39'34 opposition -6357 Aug 02 j 22:22 2°**₽**19'31 -6350 May 23 j 19:11 15°**△**30'52 35.27784 AU direct min. Earth dist. -6357 Oct 27 j 08:21 3°**£**55'31 -6350 May 27 j 01:25 15°**2**26'20 -4°55'30 opposition evening set direct -6350 Aug 15 j 02:13 14° £ 14'52 -6357 Nov 11 j 12:08 4°**2**25'01 -1°25'26 -6350 Nov 08 j 09:49 15°**£**46'23 conjunction evening set -6357 Nov 11 j 12:05 minimum elong 4°**2**25'01 1°25'27 -6350 Nov 22 j 21:00 16°**2**13'05 -4°53'17 max. Earth dist. -6357 Nov 14 j 13:35 4°**♀**31'02 35.63417 AU conjunction -6350 Nov 22 j 20:51 -6357 Nov 26 j 18:32 4°**£**54'43 minimum elong 16°**2**13'04 4°53'21 morning rise -6350 Nov 26 j 03:33 -6356 Feb 23 j 23:19 6°**£**34'25 max. Earth dist. 16°**£**19'10 37.39792 AU retrograde 5°**2**3'49 33.75988 AU -6356 May 12 j 22:47 -6350 Dec 07 j 10:48 min. Earth dist. morning rise 16°**♀**39'58 -6356 May 16 j 02:03 5° 219'19 -1°47'28 -6349 Mar 07 j 05:58 opposition retrograde 18°**♀**15'43 -6356 Aug 03 j 22:17 -6349 May 25 j 15:24 direct 4°**2**05'46 min. Earth dist. 17°**♀**07'22 35.53346 AU -6349 May 28 j 23:16 evening set -6356 Oct 28 j 08:58 5°**£**41′02 opposition 17°**£**02'45 -5°24'34 direct -6349 Aug 16 j 23:02 15°**£**51'37 conjunction -6356 Nov 12 j 11:37 6° 210'12 -1°56'49 evening set -6349 Nov 10 j 09:18 17°**£**22'39 minimum elong -6356 Nov 12 j 11:33 6° 210'11 1°56'48 max. Earth dist. -6356 Nov 15 j 14:59 6°**£**16'18 35.88476 AU conjunction -6349 Nov 24 j 16:50 17°**△**48'52 -5°20'37 -6356 Nov 27 j 16:42 6°**£**39'34 -6349 Nov 24 j 16:39 17°**2**48'51 5°20'43 morning rise minimum elong -6355 Feb 24 j 22:16 8°**₽**18'36 max. Earth dist. -6349 Nov 28 j 01:11 17°**♀**55'02 37.65265 AU retrograde -6355 May 15 j 00:25 7°**2**08'19 34.01169 AU -6349 Dec 09 j 02:47 18°**♀**15'16 min. Earth dist. morning rise -6355 May 18 j 03:21 7°**2**03'52 -2°20'21 -6348 Mar 08 j 01:24 19°**♀**50'36 opposition retrograde direct -6355 Aug 05 j 23:12 5°**£**50'43 min. Earth dist. -6348 May 26 i 13:08 18° **△**42'30 35.79039 AU evening set -6355 Oct 30 j 09:33 7°**£**25'15 opposition -6348 May 29 j 20:38 18°**♀**37'56 -5°52'58 direct -6348 Aug 17 j 20:23 17°**£**27'07 7°**Ω**54'04 -2°27'38 conjunction -6355 Nov 14 j 10:31 evening set -6348 Nov 11 i 08:49 18°**♀**57'43 -6355 Nov 14 i 10:26 7°**£**54'03 2°27'40 minimum elong -6355 Nov 17 i 13:47 8°**2**00'07 36.13627 AU conjunction -6348 Nov 25 i 12:17 19°**£**23'26 -5°47'20 max. Earth dist. -6355 Nov 29 j 14:00 8°**£**23'05 minimum elong -6348 Nov 25 i 12:06 19°**£**23'25 5°47'25 morning rise max. Earth dist. -6354 Feb 26 j 22:59 10°**£**01'29 -6348 Nov 28 j 20:35 19°**2**29'34 37.90865 AU retrograde 8°**2**51'36 34.26424 AU min. Earth dist. -6354 May 16 j 23:28 morning rise -6348 Dec 09 j 18:07 19°**-**49′21 8°**≏**47'05 -2°52'38 -6354 May 20 j 04:08 retrograde -6347 Mar 09 j 22:41 21°**≏**24'18 opposition direct -6354 Aug 07 j 23:52 7°**-**34'18 min. Earth dist. -6347 May 28 j 08:06 20°**2**16'34 36.04851 AU -6354 Nov 01 j 09:53 9°**₽**08'11 opposition -6347 May 31 j 17:11 20° **△**11'56 -6°20'42 evening set -6347 Aug 19 j 15:52 19°**2**01'26 direct -6354 Nov 16 j 08:46 9°**2**36'37 -2°57'55 -6347 Nov 13 j 08:09 20°**£**31'40 conjunction evening set minimum elong -6354 Nov 16 j 08:40 9°**2**36'36 2°57'56 -6347 Nov 27 j 07:11 max. Earth dist. -6354 Nov 19 j 13:12 9°**£**42'42 36.38802 AU conjunction 20°**£**56'53 -6°13'25 morning rise -6354 Dec 01 j 10:17 10°**2**05′15 minimum elong -6347 Nov 27 j 06:59 20°**♀**56'52 6°13'32 retrograde -6353 Feb 28 j 22:41 11°**£**43′03 max. Earth dist. -6347 Nov 30 j 16:29 21°**£**03'02 38.16552 AU min. Earth dist. -6353 May 19 j 00:07 10°**£**33'27 34.51709 AU morning rise -6347 Dec 11 j 08:44 21°**2**22'17 opposition -6353 May 22 j 04:32 10° 28'58 -3°24'18 retrograde -6346 Mar 11 j 19:19 22°**£**56'54 -6353 Aug 10 j 00:18 -6346 May 30 j 04:43 21°**△**49'26 36.30751 AU direct 9°**£**16'33 min. Earth dist. -6353 Nov 03 j 10:06 10°**£**49'46 -6346 Jun 02 j 13:34 21°**2**44'51 -6°47'45 evening set opposition

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6346 in astronomical counting style is the year 6347 BCE in historical counting style. direct -6346 Aug 21 j 10:47 20°**♀**34'41 conjunction -6340 Dec 07 i 09:59 1°M22'54 -8°59'04 -6346 Nov 15 j 07:11 22°**₽**04'33 -6340 Dec 07 j 09:45 1°M22'53 8°59'15 evening set minimum elong -6340 Dec 10 j 19:29 1°ML28'48 39.94119 AU max. Earth dist. 22°**2**29'16 -6°38'54 -6346 Nov 29 j 01:43 -6340 Dec 19 j 21:00 1°M,44'25 conjunction morning rise -6346 Nov 29 j 01:31 22°**2**29'15 6°39'00 -6339 Mar 21 j 19:57 minimum elong retrograde 3°ML17'31 -6346 Dec 02 j 11:48 -6339 Jun 09 j 14:49 max. Earth dist. 22°**೨**35'26 38.42299 AU min. Earth dist. 2°M11'50 38.09128 AU 2° **M** $07'24 - 9^{\circ}38'47$ morning rise -6346 Dec 12 j 22:25 22°**£**54'09 opposition -6339 Jun 12 j 23:12 retrograde -6345 Mar 13 j 12:00 24°**₽**28'28 direct -6339 Aug 31 j 23:08 0°M59'17 23°**£**21'20 36.56668 AU min. Earth dist. -6345 May 31 j 23:48 evening set -6339 Nov 26 j 23:28 2°M27'34 opposition -6345 Jun 04 j 09:23 23°**♀**16'43 -7°14'08 direct -6345 Aug 23 j 08:46 22°**2**06'53 conjunction -6339 Dec 09 j 02:07 2°M48'21 -9°20'22 -6345 Nov 17 j 06:25 -6339 Dec 09 j 01:53 evening set 23°**₽**36'27 minimum elong 2° M48'20 9° 20'33 -6339 Dec 12 j 12:16 max. Earth dist. 2°M54'15 40.18677 AU conjunction -6345 Nov 30 j 19:52 24°**2**00'38 -7°03'45 morning rise -6339 Dec 21 j 06:26 3°ML09'16 minimum elong -6345 Nov 30 j 19:40 24°**♀**00'37 7°03'53 retrograde -6338 Mar 23 j 08:44 4°M42'14 max. Earth dist. -6345 Dec 04 j 05:35 24°**£**06'44 38.68019 AU min. Earth dist. -6338 Jun 11 j 07:38 3°M36'46 38.33808 AU morning rise -6345 Dec 14 j 11:47 24°**£**24'59 opposition -6338 Jun 14 j 15:56 3°MJ32'21 -10°00'40 retrograde -6344 Mar 14 j 05:37 25°**♀**59'03 direct -6338 Sep 02 j 19:01 2°M24'29 min. Earth dist. -6344 Jun 01 j 18:56 24°**£**52'12 36.82552 AU evening set -6338 Nov 28 j 21:49 3°M52'38 opposition -6344 Jun 05 j 04:44 24°**₽**47'36 -7°39'51 direct -6344 Aug 24 j 04:47 23°**£**38'06 conjunction -6338 Dec 10 j 17:36 4°M12'48 -9°41'03 evening set -6344 Nov 18 i 05:27 25°**₽**07'23 minimum elong -6338 Dec 10 i 17:23 4°ML12'47 9°41'16 max. Earth dist. -6338 Dec 14 i 02:52 4°ML18'37 40.43087 AU conjunction -6344 Dec 01 i 13:53 25°**△**31'02 -7°28'00 morning rise -6338 Dec 22 j 15:16 4°M33'07 -6344 Dec 01 i 13:40 25°**△**31'01 7°28'09 retrograde -6337 Mar 24 j 23:37 6°ML06'00 minimum elong -6344 Dec 05 j 00:44 25°**♀**37'11 38.93656 AU -6337 Jun 12 j 23:29 5°ML00'46 38.58385 AU max. Earth dist. min. Earth dist. -6344 Dec 15 j 00:24 -6337 Jun 16 j 08:21 4°ML56'20 -10°21'55 morning rise 25° £ 54'50 opposition -6337 Sep 04 j 12:02 3°M48'42 retrograde -6343 Mar 15 j 21:29 27°**£**28'40 direct -6337 Nov 30 j 20:03 5°M16'45 min. Earth dist. -6343 Jun 03 j 14:37 26°**♀**22'04 37.08302 AU evening set -6343 Jun 06 j 23:41 26°**£**17'31 -8°04'55 opposition -6337 Dec 12 j 09:02 5°M36'20 -10°01'10 -6343 Aug 26 j 01:26 25°**₽**08'20 conjunction direct -6343 Nov 20 j 04:31 26°**♀**37'23 -6337 Dec 12 j 08:48 5°M36'19 10°01'22 minimum elong evening set max. Earth dist. -6337 Dec 15 j 19:28 5°M42'11 40.67402 AU -6343 Dec 03 j 07:21 27°**2**00'28 -7°51'39 -6337 Dec 23 j 23:37 5°M56'02 conjunction morning rise -6343 Dec 03 j 07:07 -6336 Mar 25 j 13:32 minimum elong 27°**♀**00'27 7°51'49 retrograde 7°M28'50 -6343 Dec 06 j 17:09 -6336 Jun 13 j 16:20 max. Earth dist. 27°**♀**06'30 39.19122 AU min. Earth dist. 6°M23'47 38.82875 AU morning rise -6343 Dec 16 j 12:23 27°**2**23'43 opposition -6336 Jun 17 j 00:14 6°M19'25 -10°42'32 retrograde -6342 Mar 17 j 15:49 28°**♀**57'21 direct -6336 Sep 05 j 04:56 5°M12'02 min. Earth dist. -6342 Jun 05 j 08:17 27°**£**51'03 37.33866 AU evening set -6336 Dec 01 j 18:19 6°ML40'02 -6342 Jun 08 j 18:11 27°**△**46'29 -8°29'20 opposition -6342 Aug 27 j 19:06 26°**♀**37'36 conjunction -6336 Dec 13 j 00:05 6°M58'59 -10°20'40 direct -6342 Nov 22 j 03:27 28°**♀**06'25 -6336 Dec 12 j 23:51 6°ML58'58 10°20'53 evening set minimum elong max. Earth dist. -6336 Dec 16 j 09:50 7°ML04'46 40.91651 AU -6342 Dec 05 j 00:37 28° **2**8′56 -8°14′43 -6336 Dec 24 j 07:22 7°M18'04 conjunction morning rise -6342 Dec 05 j 00:24 28°**2**28'55 8°14'52 -6335 Mar 27 j 05:54 8°M50'50 minimum elong retrograde max. Earth dist. -6342 Dec 08 j 11:03 28°**2**34'59 39.44366 AU min. Earth dist. -6335 Jun 15 i 06:45 7°ML46'04 39.07295 AU morning rise -6342 Dec 17 j 23:53 28°**£**51'37 opposition -6335 Jun 18 j 15:45 7°M41'40 -11°02'31 -6341 Feb 02 i 15:24 0°M direct -6335 Sep 06 j 19:04 6°M34'33 retrograde -6341 Mar 19 i 09:31 0°M25'04 evening set -6335 Dec 03 j 16:16 8°ML02'31 -6341 May 04 i 10:05 30°R**≏** min. Earth dist. -6341 Jun 07 j 03:47 29°**2**18'57 37.59195 AU conjunction -6335 Dec 14 i 14:37 8°M20'51 -10°39'36 -6341 Jun 10 j 12:24 29° **1**4'28 -8°53'07 minimum elong -6335 Dec 14 i 14:22 8°M20'50 10°39'48 opposition direct 28°**£**05'52 -6335 Dec 18 j 00:48 8°M26'37 41.15812 AU -6341 Aug 29 j 12:43 max. Earth dist. evening set -6341 Nov 24 j 02:15 29°**₽**34'28 morning rise -6335 Dec 25 j 14:31 8°M39'19 retrograde -6334 Mar 28 j 22:35 10°M12'04 conjunction -6341 Dec 06 j 17:31 29°**£**56'26 -8°37'11 min. Earth dist. -6334 Jun 16 j 22:54 9° 11.07'29 39.31630 AU minimum elong -6341 Dec 06 j 17:17 29°**♀**56'25 8°37'21 opposition -6334 Jun 20 j 07:03 9°ML03'09 -11°21'52 -6341 Dec 08 j 18:35 0°M -6334 Sep 08 j 08:37 7°M56'18 direct max. Earth dist. 0°M02'23 39.69372 AU -6334 Dec 05 j 14:17 -6341 Dec 10 j 03:19 evening set 9°M24'16 morning rise -6341 Dec 19 j 10:41 0°M18'32 -6334 Dec 16 j 05:05 retrograde -6340 Mar 20 j 03:39 1°M51'48 conjunction 9°M41'59 -10°57'56 min. Earth dist. -6340 Jun 07 j 20:54 0°M45'56 37.84269 AU minimum elong -6334 Dec 16 j 04:52 9°M41'59 10°58'10 opposition -6340 Jun 11 j 06:02 0°M41'27 -9°16'16 max. Earth dist. -6334 Dec 19 j 15:29 9°**ጤ**47'44 41.39888 AU -6340 Jul 14 j 15:41 30°R<u>₽</u> morning rise -6334 Dec 26 j 21:08 9°M59'48 direct -6340 Aug 30 j 05:57 29°**£**33'05 retrograde -6333 Mar 30 j 13:04 11°M32'35 -6340 Oct 14 j 10:49 0°M -6333 Jun 18 j 13:28 10°M28'16 39.55839 AU min. Earth dist.

-6333 Jun 21 j 21:52

opposition

10°M23'56 -11°40'37

-6340 Nov 25 j 01:01

1°M01'31

evening set

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 6 Attention, astronomical year style is used: The year -6333 in astronomical counting style is the year 6334 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -6333 i	n astronomical cou	nting style is the year	6334 BCE in historical c	ounting style.
direct	-6333 Sep 09 j 23:38	9° M ₁7′20		conjunction	-6327 Dec 25 j 03:15	18°M50'50 -12°51'16
evening set	-6333 Dec 07 j 12:20	10°M45'22		minimum elong	-6327 Dec 25 j 03:03	18°ML50'49 12°51'32
				max. Earth dist.	-6327 Dec 28 j 10:19	18°ML56'09 43.01160 AU
conjunction	-6333 Dec 17 j 19:09	11°ML02'26	-11°15'42	morning rise	-6326 Jan 02 j 05:46	19°M03'53
minimum elong	-6333 Dec 17 j 18:55	11°ML02'25	11°15'56	retrograde	-6326 Apr 08 j 06:56	20°M37'21
max. Earth dist.	-6333 Dec 21 j 04:43		41.63808 AU	min. Earth dist.	-6326 Jun 27 j 17:35	19°M34'14 41.17462 AU
morning rise	-6333 Dec 28 j 03:22	11°ML19'36		opposition	-6326 Jun 30 j 21:11	19°M30'15 -13°36'04
retrograde	-6332 Mar 31 j 02:42	12°M52'26		direct	-6326 Sep 19 j 03:07	18°M25'10
min. Earth dist.	-6332 Jun 19 j 04:23		39.79880 AU	evening set	-6326 Dec 18 j 23:44	19° M .54'00
opposition	-6332 Jun 22 j 12:29	11°ML44'03	-11°58'46			
direct	-6332 Sep 10 j 14:38	10°M37'43		conjunction	-6326 Dec 26 j 15:34	20°M06'16 -13°05'24
evening set	-6332 Dec 08 j 10:22	12°M05'48		minimum elong	-6326 Dec 26 j 15:21	20°M.06'15 13°05'42
				max. Earth dist.	-6326 Dec 29 j 21:12	20°M11'28 43.22914 AU
conjunction	-6332 Dec 18 j 09:12	12°M22'13		morning rise	-6325 Jan 03 j 08:00	20°M18'35
minimum elong	-6332 Dec 18 j 08:58	12°M22'13		retrograde	-6325 Apr 09 j 17:29	21°M.52'13
max. Earth dist.	-6332 Dec 21 j 19:27		41.87518 AU	min. Earth dist.	-6325 Jun 29 j 05:47	20°ML49'17 41.39301 AU
morning rise	-6332 Dec 28 j 09:07	12°M38'44		opposition	-6325 Jul 02 j 09:32	20°ML45'18 -13°50'24
retrograde	-6331 Apr 01 j 12:57	14°M11'39	40.02 <i>(</i> (2.41)	direct	-6325 Sep 20 j 16:42	19°M40'23
min. Earth dist.	-6331 Jun 20 j 19:38		40.03663 AU	evening set	-6325 Dec 20 j 22:13	21°ML09'27
opposition	-6331 Jun 24 j 02:34	13°M03'31	-12*16*21		(225 Dec 20 : 02:44	219M 20150 12010102
direct	-6331 Sep 12 j 08:03 -6331 Dec 10 j 08:35	11°M57'26		conjunction	-6325 Dec 28 j 03:44	21°M20'58 -13°19'03
evening set	-6331 Dec 10 J 08:35	13°M25'36		minimum elong	-6325 Dec 28 j 03:33	21°M20'57 13°19'20
agniumation	6221 Day 10 : 22:54	120 m 41122	11940!27	max. Earth dist.	-6325 Dec 31 j 10:02 -6324 Jan 04 j 09:44	21°M26'11 43.44448 AU 21°M32'32
conjunction minimum elong	-6331 Dec 19 j 22:54	13°M41'22 13°M41'21		morning rise	•	23°M06'23
max. Earth dist.	-6331 Dec 19 j 22:41 -6331 Dec 23 j 07:32		42.10953 AU	retrograde min. Earth dist.	-6324 Apr 10 j 04:06 -6324 Jun 29 j 19:16	22°M03'33 41.60927 AU
	-	13°M57'13	42.10933 AU		-	21°M59'39 -14°04'13
morning rise	-6331 Dec 29 j 14:19 -6330 Feb 11 j 07:49	15 IIL3/13		opposition direct	-6324 Jul 02 j 21:40 -6324 Sep 21 j 06:20	20°M54'55
retrograde	-6330 Apr 03 j 03:00	15°M30'13		evening set	-6324 Dec 21 j 21:06	20 M24'14
renograde	-6330 May 25 j 11:14	15°RM		evening set	-0324 DCC 21 J 21.00	22 11624 14
min. Earth dist.	-6330 Jun 22 j 09:15		40.27147 AU	conjunction	-6324 Dec 28 j 15:40	22°M34'59 -13°32'10
opposition	-6330 Jun 25 j 16:30	14°M22'19		minimum elong	-6324 Dec 28 j 15:27	22°M34'58 13°32'29
direct	-6330 Sep 13 j 21:41	13°M16'29	-12 33 22	max. Earth dist.	-6324 Dec 31 j 20:58	22°M40'06 43.65799 AU
evening set	-6330 Dec 12 j 06:33	14°M44'45		morning rise	-6323 Jan 04 j 10:33	22°M45'46
evening set	-0330 Dec 12 J 00.33	נדדדטוו דו		retrograde	-6323 Apr 11 j 16:55	24°M19'53
conjunction	-6330 Dec 21 j 12:18	14°M.59'50	-12°05'47	min. Earth dist.	-6323 Jul 01 j 06:19	23°M17'16 41.82368 AU
minimum elong	-6330 Dec 21 j 12:05	14°ML59'50		opposition	-6323 Jul 04 j 09:18	23°M13'21 -14°17'29
minimum ciong	·	15°M	12 00 03	direct	-6323 Sep 22 j 16:55	22°M08'48
max. Earth dist.	-6330 Dec 24 j 21:05		42.34048 AU	evening set	-6323 Dec 23 j 20:08	23°M38'27
morning rise	-6330 Dec 30 j 19:04	15°ML15'01			,	
retrograde	-6329 Apr 04 j 16:48	16°ML48'07		conjunction	-6323 Dec 30 j 03:14	23°M48'24 -13°44'48
min. Earth dist.	-6329 Jun 24 j 00:52		40.50267 AU	minimum elong	-6323 Dec 30 j 03:04	23°M48'23 13°45'06
opposition	-6329 Jun 27 j 06:16	15°M40'27	-12°49'50	max. Earth dist.	-6322 Jan 02 j 08:13	23°M53'28 43.86967 AU
11	-6329 Jul 31 j 07:51	15°RM₊		morning rise	-6322 Jan 05 j 10:42	23°M58'22
direct	-6329 Sep 15 j 11:05	14°ML34'49		retrograde	-6322 Apr 13 j 05:28	25°M32'48
	-6329 Oct 30 j 07:01	15° M ₊		min. Earth dist.	-6322 Jul 02 j 19:08	24°ML30'19 42.03633 AU
evening set	-6329 Dec 14 j 04:53	16°ML03'11		opposition	-6322 Jul 05 j 20:59	24°M26'29 -14°30'14
				direct	-6322 Sep 24 j 03:20	23°M22'08
conjunction	-6329 Dec 23 j 01:42	16°M17'36	-12°21'27	evening set	-6322 Dec 25 j 19:38	24°M52'09
minimum elong	-6329 Dec 23 j 01:29	16°M17'36	12°21'42			
max. Earth dist.	-6329 Dec 26 j 09:32	16°M23'02	42.56781 AU	conjunction	-6322 Dec 31 j 14:40	25°M01'16 -13°56'56
morning rise	-6329 Dec 31 j 23:16	16°MJ32'06		minimum elong	-6322 Dec 31 j 14:28	25°M01'16 13°57'14
retrograde	-6328 Apr 05 j 06:49	18°ML05'17		max. Earth dist.	-6321 Jan 03 j 19:55	25°ML06'20 44.07958 AU
min. Earth dist.	-6328 Jun 24 j 13:59	17°ML01'56	40.73004 AU	morning rise	-6321 Jan 06 j 09:50	25°M10'23
opposition	-6328 Jun 27 j 19:26	16°M57'50	-13°05'47	retrograde	-6321 Apr 14 j 15:40	26°M45'12
direct	-6328 Sep 15 j 23:53	15°M52'23		min. Earth dist.	-6321 Jul 04 j 06:44	25°M42'55 42.24678 AU
evening set	-6328 Dec 15 j 03:08	17°M20'53		opposition	-6321 Jul 07 j 08:17	25°M39'06 -14°42'28
				direct	-6321 Sep 25 j 15:55	24°M34'58
conjunction	-6328 Dec 23 j 14:37	17°M34'37	-12°36'36	evening set	-6321 Dec 27 j 19:59	26°M05'27
minimum elong	-6328 Dec 23 j 14:24	17°M34'36	12°36'53			
max. Earth dist.	-6328 Dec 26 j 21:22		42.79132 AU	conjunction	-6320 Jan 02 j 01:55	26°M13'41 -14°08'35
morning rise	-6327 Jan 01 j 02:58	17°M48'23		minimum elong	-6320 Jan 02 j 01:45	26°M13'40 14°08'54
retrograde	-6327 Apr 06 j 21:02	19°M21'42		max. Earth dist.	-6320 Jan 05 j 05:39	26°M18'38 44.28712 AU
min. Earth dist.	-6327 Jun 26 j 04:11		40.95392 AU	morning rise	-6320 Jan 07 j 08:03	26°M21'55
opposition	-6327 Jun 29 j 08:32	18°M14'26	-13°21'11	retrograde	-6320 Apr 15 j 02:49	27° M .57'10
direct	-6327 Sep 17 j 11:57	17°M09'10		min. Earth dist.	-6320 Jul 04 j 18:06	26°M55'04 42.45473 AU
evening set	-6327 Dec 17 j 01:18	18°M37'49		opposition	-6320 Jul 07 j 19:17	26°ML51'17 -14°54'13

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6320 in astronomical counting style is the year 6321 BCE in historical counting style. direct -6320 Sep 26 i 03:18 25°M47'22 min. Earth dist. -6313 Jul 14 i 00:27 5° **₹**07'28 43.79768 AU -6320 Dec 28 j 21:15 -6313 Jul 16 j 18:48 5°**₹**'04'05 -16°03'56 evening set 27°M18'24 opposition -6313 Oct 05 j 07:22 4°**₹**01'19 direct -6319 Jan 02 j 13:08 27°M25'40 -14°19'47 conjunction -6319 Jan 02 j 12:57 27°M25'39 14°20'06 -6312 Jan 11 j 14:12 5°**∡**36'48 -15°26'18 minimum elong conjunction -6312 Jan 11 j 14:05 5°**∡**36'48 15°26'40 -6319 Jan 05 j 17:09 27°M30'37 44.49181 AU max. Earth dist. minimum elong -6312 Jan 14 j 11:11 -6319 Jan 07 j 05:01 morning rise 27°M32'56 max. Earth dist. 5° ₹ 41'10 45.81021 AU -6319 Apr 16 j 11:43 -6312 Apr 24 j 09:50 7°**х** 16′52 retrograde 29°M08'43 retrograde -6319 Jul 06 j 06:43 -6312 Jul 14 j 11:34 min. Earth dist. 28°M06'45 42.65937 AU min. Earth dist. 6° ₹ 15'41 43.97420 AU opposition -6319 Jul 09 j 06:10 28°ML03'04 -15°05'29 opposition -6312 Jul 17 j 04:03 6°**∡**12'25 -16°12'10 -6312 Oct 05 j 16:48 direct -6319 Sep 27 j 16:00 26°M59'22 direct 5°**х** 09'46 -6319 Dec 31 j 00:03 28°M31'02 evening set -6311 Jan 11 j 23:58 6°**∡**¹44'53 -15°34'09 conjunction -6311 Jan 11 j 23:52 conjunction -6318 Jan 03 j 24:00 28°MJ37'15 -14°30'32 minimum elong 6°**х** 44′52 15°34′30 minimum elong -6318 Jan 03 j 23:50 28°M37'14 14°30'52 max. Earth dist. -6311 Jan 14 j 20:25 6°**≯**49'11 45.98415 AU morning rise -6318 Jan 07 j 23:53 28°M43'28 retrograde -6311 Apr 25 j 20:31 8°**х** 24'32 max. Earth dist. -6318 Jan 07 j 02:27 28°M42'04 44.69301 AU min. Earth dist. -6311 Jul 15 j 20:33 7°**҂**23'30 44.14801 AU -6318 Mar 06 j 23:17 0°×7 opposition -6311 Jul 18 j 13:05 7°**∡**120'14 -16°19'58 retrograde -6318 Apr 17 j 23:19 0° **₹**19'53 direct -6311 Oct 07 j 00:48 6° **₹**17'43 -6318 May 30 j 18:45 30°RM min. Earth dist. -6318 Jul 07 j 17:22 29°M18'07 42.86016 AU conjunction -6310 Jan 13 j 09:14 7°**∡**152'29 -15°41'34 opposition -6318 Jul 10 j 16:50 29°M14'27 -15°16'18 minimum elong -6310 Jan 13 i 09:06 7°**₹**52'28 15°41'56 direct -6318 Sep 29 i 02:17 28°M10'56 max. Earth dist. -6310 Jan 16 j 04:20 7°**∡**756'41 46.15546 AU evening set -6317 Jan 02 j 05:20 29°M43'26 retrograde -6310 Apr 27 i 07:45 9°**х** 31'45 min. Earth dist. -6310 Jul 17 j 06:27 8° ₹30'49 44.31934 AU -6317 Jan 05 j 10:50 29°M48'26 -14°40'51 -6310 Jul 19 i 22:07 8°**₹**27'36 -16°27'20 conjunction opposition -6317 Jan 05 j 10:40 29°M48'25 14°41'10 -6310 Oct 08 j 07:44 7°**х** 25′14 direct minimum elong -6317 Jan 08 j 16:14 29°M53'25 morning rise -6317 Jan 08 j 12:31 29°M53'10 44.88999 AU -6309 Jan 14 j 18:39 8°**₹**59'40 -15°48'36 max. Earth dist. conjunction -6317 Jan 12 j 22:34 -6309 Jan 14 j 18:34 8°**₹**59'39 15°48'57 0°×7 minimum elong 1°**х**³30′38 -6317 Apr 19 j 12:46 -6309 Jan 17 j 14:04 9°**х** 03'52 46.32431 AU retrograde max. Earth dist. -6317 Jul 09 j 05:52 -6309 Apr 28 j 14:26 10°**∡**38'33 min. Earth dist. 0°**∡**28'58 43.05655 AU retrograde -6317 Jul 12 j 03:21 -6309 Jul 18 j 16:17 9°**₰**37'43 44.48788 AU 0° ₹25'24 -15°26'40 min. Earth dist. opposition -6317 Aug 02 j 08:26 -6309 Jul 21 j 06:48 9°**∡**34'35 -16°34'17 30°R,ML opposition -6317 Sep 30 j 10:27 29°M22'04 -6309 Oct 09 j 18:37 8°×32'21 direct direct -6317 Nov 26 j 17:11 0° **₹** 0°**х** 55'44 -6316 Jan 04 j 16:09 -6308 Jan 16 j 03:52 10°**х** 06'27 -15°55'13 evening set conjunction minimum elong -6308 Jan 16 j 03:46 10°**₹**06'27 15°55'35 conjunction -6316 Jan 06 j 21:39 0°**∡**759'10 -14°50'45 max. Earth dist. -6308 Jan 18 j 21:27 10° ₹ 10'32 46.49037 AU minimum elong -6316 Jan 06 j 21:31 0° ₹ 59'09 14°51'06 retrograde -6308 Apr 28 j 21:28 11°**∡**′44′59 morning rise -6316 Jan 09 j 02:59 1°**х¹**02'35 min. Earth dist. -6308 Jul 19 j 01:01 10°**∡**′44'19 44.65340 AU -6316 Jan 09 j 22:30 1°**₹**03'50 45.08252 AU -6308 Jul 21 j 15:23 10°**∡**′41'11 -16°40'50 max. Earth dist. opposition -6316 Apr 19 j 23:08 2°**х** 40′56 direct -6308 Oct 10 j 05:00 9°**х** 39′07 retrograde -6316 Jul 09 j 16:43 1°**₹**39'24 43.24812 AU min. Earth dist. -6316 Jul 12 j 13:34 1°**∡**35'53 -15°36'38 -6307 Jan 16 j 12:57 11°**∡**12'54 -16°01'27 opposition conjunction -6316 Sep 30 i 20:35 0°**∡**³32'42 -6307 Jan 16 i 12:53 11°**х** 12'54 16°01'50 direct minimum elong -6307 Jan 19 i 06:18 11°**尽** 16'57 46.65301 AU max. Earth dist. -6315 Jan 07 i 08:04 2°**₹**09'24 -15°00'16 conjunction retrograde -6307 Apr 30 i 05:56 12°**₹**51'06 minimum elong -6315 Jan 07 i 07:56 2°**₹**09'23 15°00'36 min. Earth dist. -6307 Jul 20 i 11:28 11°**₹**50'29 44.81523 AU max. Earth dist. -6315 Jan 10 i 06:56 2° ₹13'55 45.27028 AU -6307 Jul 22 j 23:48 11° -47'28 -16° 46'59 opposition retrograde -6315 Apr 21 j 08:44 3°×750'43 direct -6307 Oct 11 j 14:26 10°**х** 45'33 min. Earth dist. -6315 Jul 11 j 03:47 2° ₹ 49'17 43.43520 AU -6315 Jul 13 j 23:32 2°\$\square\$45'50 -15°46'09 -6306 Jan 17 j 22:01 12°**₹**19'02 -16°07'19 opposition conjunction -6315 Oct 02 j 07:26 -6306 Jan 17 j 21:55 direct 1°**х** 42'48 minimum elong 12°**₹**19'01 16°07'42 12°**尽**23′00 46.81189 AU max. Earth dist. -6306 Jan 20 j 14:05 conjunction -6314 Jan 08 j 18:22 3°**х** 19'05 -15°09'21 retrograde -6306 May 01 j 15:43 13°**х** 56′54 -6306 Jul 21 j 19:59 -6314 Jan 08 j 18:14 3°**х** 19′04 15°09′43 min. Earth dist. 12°**₹**56'26 44.97283 AU minimum elong -6314 Jan 11 j 17:25 3°**尽**23'37 45.45380 AU -6306 Jul 24 j 07:59 12°**₹**53'26 -16°52'45 max. Earth dist. opposition -6314 Apr 22 j 14:46 4° 🖈 59'59 -6306 Oct 12 j 21:45 11°**₹**51'39 retrograde direct -6314 Jul 12 j 15:04 3°**≯**58'37 43.61815 AU min. Earth dist. -6305 Jan 19 j 06:50 13°**∡**124'50 -16°12'50 opposition -6314 Jul 15 j 09:18 3°**∡** 55'14 -15°55'16 conjunction -6314 Oct 03 j 20:59 direct 2°**х** 52′20 minimum elong -6305 Jan 19 j 06:46 13°**х** 24′50 16°13'13 max. Earth dist. -6305 Jan 21 j 21:08 13°**✗**28'40 46.96619 AU conjunction -6313 Jan 10 j 04:19 4°**₹**28'13 -15°18'02 retrograde -6305 May 03 j 01:53 15°**₹**02'22 minimum elong -6313 Jan 10 j 04:11 4°**₹**28'12 15°18'23 min. Earth dist. -6305 Jul 23 j 06:04 14°**✗**01'57 45.12567 AU -6313 Jan 13 j 01:34 4°**₹**32'37 45.63364 AU -6305 Jul 25 j 16:15 13°**≯**59'03 -16°58'11 max. Earth dist. opposition

-6313 Apr 23 j 23:54

retrograde

6°**х** 08'41

direct

-6305 Oct 14 j 04:48

12°**₹**57'23

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6304 in astronomical counting style is the year 6305 BCE in historical counting style. conjunction -6304 Jan 20 j 15:50 14° 🗷 30'17 -16°18'01 retrograde -6296 May 11 j 18:36 24° 🗷 34'54

conjunction	-6304 Jan 20 j 15:50	14° ∡ ³30′17	-16°18'01	retrograde	-6296 May 11 j 18:36	24° ∡ ³34'54	
minimum elong	-6304 Jan 20 j 15:45	14° ∡ ³30′17	16°18'23	min. Earth dist.	-6296 Aug 01 j 08:07	23° х 35'09	46.31562 AU
max. Earth dist.	-6304 Jan 23 j 05:41	14° ∡ ³34′05	47.11558 AU	opposition	-6296 Aug 03 j 09:38	23° ∡ ³32'44	-17°31'08
retrograde	-6304 May 03 j 08:27	16° ∡ 07'28		direct	-6296 Oct 23 j 05:56	22° ₹ 31'58	
min. Earth dist.	-6304 Jul 23 j 15:23	15° ∡ 707'07	45.27328 AU		J		
opposition	-6304 Jul 26 j 00:06	15° √ 04'18		conjunction	-6295 Jan 29 j 16:15	24° х 02'34	-16°49'12
direct	-6304 Oct 14 j 14:39	14°×7'02'44	17 03 10	minimum elong	-6295 Jan 29 j 16:14	24° ₹ 02'34	
direct	-0304 Oct 14 j 14.37	14 × 02 44		max. Earth dist.	-6295 Jan 31 j 20:07		48.28442 AU
aamiumatiam	6202 Ion 21:00:20	150.725121	16022151		-	25° × 37'07	46.26442 AU
conjunction	-6303 Jan 21 j 00:28	15° 🗷 35'21		retrograde	-6295 May 13 j 04:00		46 42102 411
minimum elong	-6303 Jan 21 j 00:25		16°23'15	min. Earth dist.	-6295 Aug 02 j 16:44		46.43182 AU
max. Earth dist.	-6303 Jan 23 j 11:53		47.25993 AU	opposition	-6295 Aug 04 j 16:20	24° ₹ 35'06	-17°33'02
retrograde	-6303 May 04 j 16:06	17° ∡ 12'12		direct	-6295 Oct 24 j 10:36	23° ∡ ³34′28	
min. Earth dist.	-6303 Jul 24 j 23:48	16° ∡ 11'56	45.41602 AU				
opposition	-6303 Jul 27 j 07:55	16° ₰ 09'09	-17°08'00	conjunction	-6294 Jan 30 j 23:46	25° х 04′52	-16°50'58
direct	-6303 Oct 15 j 23:21	15° ₮ 07'41		minimum elong	-6294 Jan 30 j 23:47	25° х 04'52	16°51'22
				max. Earth dist.	-6294 Feb 02 j 03:22	25° ₹ 07'56	48.39831 AU
conjunction	-6302 Jan 22 j 08:49	16° х 40′00	-16°27'22	retrograde	-6294 May 14 j 11:43	26° ∡ ³39′10	
minimum elong	-6302 Jan 22 j 08:46	16° ∡ ³39'59	16°27'45	min. Earth dist.	-6294 Aug 04 j 00:15	25° ∡ ³39'34	46.54375 AU
max. Earth dist.	-6302 Jan 24 j 19:49		47.39951 AU	opposition	-6294 Aug 05 j 22:51	25° ∡ ³37'17	
retrograde	-6302 May 05 j 22:12	18°× 16'31	17.57751110	direct	-6294 Oct 25 j 16:47	24° ∡ 36'45	17 3 137
min. Earth dist.	-6302 Jul 26 j 09:37		45.55420 AU	direct	-02)4 Oct 25 j 10.47	24 × 30 43	
	-				(202 E 1 01 : 07 17	260 70650	1.605010.6
opposition	-6302 Jul 28 j 15:37	17° ∡ 13'34	-1/*12/24	conjunction	-6293 Feb 01 j 07:17	26° ₹ 06'59	
direct	-6302 Oct 17 j 09:14	16° ∡ 12'12		minimum elong	-6293 Feb 01 j 07:17	26° ₹ 06'59	
				max. Earth dist.	-6293 Feb 03 j 08:19		48.50770 AU
conjunction	-6301 Jan 23 j 17:11	17° ∡ ⁴44'13	-16°31'32	retrograde	-6293 May 15 j 19:26	27° ∡ °41′02	
minimum elong	-6301 Jan 23 j 17:09	17° ∡ ⁴44'13	16°31'56	min. Earth dist.	-6293 Aug 05 j 07:41	26° х 41′30	46.65099 AU
max. Earth dist.	-6301 Jan 26 j 02:59	17° ×7 47'44	47.53507 AU	opposition	-6293 Aug 07 j 05:13	26° ∡ ³39'17	-17°35'53
retrograde	-6301 May 07 j 06:40	19° ∡ ¹20'24		direct	-6293 Oct 26 j 23:06	25° ∡ ³38'50	
min. Earth dist.	-6301 Jul 27 j 17:03	18° ∡ °20′15	45.68854 AU				
opposition	-6301 Jul 29 j 22:53	18° ∡ 17'35	-17°16'26	conjunction	-6292 Feb 02 j 14:54	27° ₹ '08'52	-16°53'37
direct	-6301 Oct 18 j 16:33	17° ∡ 16'17		minimum elong	-6292 Feb 02 j 14:56	27° х 08′52	
	0501 000 10 10.55	1, 7, 10 1,		max. Earth dist.	-6292 Feb 04 j 15:18		48.61208 AU
conjunction	-6300 Jan 25 j 01:19	18° ∡ ¹48'02	16°35'21	retrograde	-6292 May 15 j 23:25	28° х 42'41	40.01200710
	-			•			46 75201 ATT
minimum elong	-6300 Jan 25 j 01:17	18° ∡ 48′02		min. Earth dist.	-6292 Aug 05 j 16:24		46.75291 AU
max. Earth dist.	-6300 Jan 27 j 09:41		47.66699 AU	opposition	-6292 Aug 07 j 11:38	27° ∡ ′41′02	-1/*3653
retrograde	-6300 May 07 j 17:22	20° ∡ ¹23'54		opposition direct	-6292 Aug 07 j 11:38 -6292 Oct 27 j 08:08	27° × ′41′02 26° × ′40′40	-1/*36'53
	-6300 May 07 j 17:22 -6300 Jul 28 j 01:51	20° ₹ 23'54 19° ₹ 23'47	45.81962 AU				-1/~30.53
retrograde	-6300 May 07 j 17:22	20° ∡ ¹23'54	45.81962 AU				
retrograde min. Earth dist.	-6300 May 07 j 17:22 -6300 Jul 28 j 01:51	20° ₹ 23'54 19° ₹ 23'47	45.81962 AU	direct	-6292 Oct 27 j 08:08	26° ⊀ ¹40'40	-16°54'32
retrograde min. Earth dist. opposition	-6300 May 07 j 17:22 -6300 Jul 28 j 01:51 -6300 Jul 30 j 06:12	20° ₹ 23'54 19° ₹ 23'47 19° ₹ 21'12	45.81962 AU	direct	-6292 Oct 27 j 08:08 -6291 Feb 02 j 22:14	26° ₹ 40'40 28° ₹ 10'29 28° ₹ 10'29	-16°54'32
retrograde min. Earth dist. opposition	-6300 May 07 j 17:22 -6300 Jul 28 j 01:51 -6300 Jul 30 j 06:12 -6300 Oct 18 j 21:03	20° ₹ 23'54 19° ₹ 23'47 19° ₹ 21'12	45.81962 AU -17°20'06	direct conjunction minimum elong	-6292 Oct 27 j 08:08 -6291 Feb 02 j 22:14 -6291 Feb 02 j 22:16	26° ₹ 40'40 28° ₹ 10'29 28° ₹ 10'29	-16°54'32 16°54'55
retrograde min. Earth dist. opposition direct conjunction	-6300 May 07 j 17:22 -6300 Jul 28 j 01:51 -6300 Jul 30 j 06:12 -6300 Oct 18 j 21:03 -6299 Jan 25 j 09:21	20° \$\times^2 23'54 19° \$\times^2 23'47 19° \$\times^2 21'12 18° \$\times^2 20'00 19° \$\times^5 51'29	45.81962 AU -17°20'06 -16°38'50	conjunction minimum elong max. Earth dist. retrograde	-6292 Oct 27 j 08:08 -6291 Feb 02 j 22:14 -6291 Feb 02 j 22:16 -6291 Feb 04 j 20:43 -6291 May 17 j 04:49	26° 🗷 40'40 28° 🗷 10'29 28° 🗷 10'29 28° 🗷 13'14 29° 🗷 44'03	-16°54'32 16°54'55
retrograde min. Earth dist. opposition direct conjunction minimum elong	-6300 May 07 j 17:22 -6300 Jul 28 j 01:51 -6300 Jul 30 j 06:12 -6300 Oct 18 j 21:03 -6299 Jan 25 j 09:21 -6299 Jan 25 j 09:19	20° ₹23'54 19° ₹23'47 19° ₹21'12 18° ₹20'00 19° ₹51'29 19° ₹51'29	45.81962 AU -17°20'06 -16°38'50 16°39'14	conjunction minimum elong max. Earth dist. retrograde min. Earth dist.	-6292 Oct 27 j 08:08 -6291 Feb 02 j 22:14 -6291 Feb 02 j 22:16 -6291 Feb 04 j 20:43 -6291 May 17 j 04:49 -6291 Aug 06 j 22:56	26° 🗷 40'40 28° 🗷 10'29 28° 🗷 10'29 28° 🗷 13'14 29° 🗷 44'03 28° 🗷 44'35	-16°54'32 16°54'55 48.71132 AU 46.84969 AU
retrograde min. Earth dist. opposition direct conjunction minimum elong max. Earth dist.	-6300 May 07 j 17:22 -6300 Jul 28 j 01:51 -6300 Jul 30 j 06:12 -6300 Oct 18 j 21:03 -6299 Jan 25 j 09:21 -6299 Jan 25 j 09:19 -6299 Jan 27 j 17:44	20° \$\times^2 23'54 19° \$\times^2 23'47 19° \$\times^2 21'12 18° \$\times^2 20'00 19° \$\times^5 51'29 19° \$\times^5 54'53	45.81962 AU -17°20'06 -16°38'50	conjunction minimum elong max. Earth dist. retrograde min. Earth dist. opposition	-6292 Oct 27 j 08:08 -6291 Feb 02 j 22:14 -6291 Feb 02 j 22:16 -6291 Feb 04 j 20:43 -6291 May 17 j 04:49 -6291 Aug 06 j 22:56 -6291 Aug 08 j 17:47	26° 🗷 40'40 28° 🗷 10'29 28° 🗷 10'29 28° 🗷 13'14 29° 🗷 44'03 28° 🗷 44'35 28° 🗷 42'29	-16°54'32 16°54'55 48.71132 AU 46.84969 AU
retrograde min. Earth dist. opposition direct conjunction minimum elong max. Earth dist. retrograde	-6300 May 07 j 17:22 -6300 Jul 28 j 01:51 -6300 Jul 30 j 06:12 -6300 Oct 18 j 21:03 -6299 Jan 25 j 09:21 -6299 Jan 25 j 09:19 -6299 Jan 27 j 17:44 -6299 May 08 j 23:37	20° \$\times 23'54\\ 19° \$\times 23'47\\ 19° \$\times 21'12\\ 18° \$\times 20'00\\ 19° \$\times 51'29\\ 19° \$\times 54'53\\ 21° \$\times 27'03\\	45.81962 AU -17°20'06 -16°38'50 16°39'14 47.79594 AU	conjunction minimum elong max. Earth dist. retrograde min. Earth dist.	-6292 Oct 27 j 08:08 -6291 Feb 02 j 22:14 -6291 Feb 02 j 22:16 -6291 Feb 04 j 20:43 -6291 May 17 j 04:49 -6291 Aug 06 j 22:56	26° 🗷 40'40 28° 🗷 10'29 28° 🗷 10'29 28° 🗷 13'14 29° 🗷 44'03 28° 🗷 44'35	-16°54'32 16°54'55 48.71132 AU 46.84969 AU
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retrograde min. Earth dist. opposition direct conjunction minimum elong max. Earth dist. retrograde min. Earth dist.	-6300 May 07 j 17:22 -6300 Jul 28 j 01:51 -6300 Jul 30 j 06:12 -6300 Oct 18 j 21:03 -6299 Jan 25 j 09:21 -6299 Jan 25 j 09:19 -6299 Jan 27 j 17:44 -6299 May 08 j 23:37 -6299 Jul 29 j 09:38	20° \$\times^2 23'54 19° \$\times^2 21'12 18° \$\times^2 20'00 19° \$\times^5 51'29 19° \$\times^5 54'53 21° \$\times^2 27'03 20° \$\times^2 27'01	45.81962 AU -17°20'06 -16°38'50 16°39'14 47.79594 AU 45.94768 AU	conjunction minimum elong max. Earth dist. retrograde min. Earth dist. opposition direct conjunction minimum elong	-6292 Oct 27 j 08:08 -6291 Feb 02 j 22:14 -6291 Feb 02 j 22:16 -6291 Feb 04 j 20:43 -6291 May 17 j 04:49 -6291 Aug 06 j 22:56 -6291 Aug 08 j 17:47 -6291 Oct 28 j 16:30 -6290 Feb 04 j 05:26 -6290 Feb 04 j 05:29	26° 🗷 40'40 28° 🗷 10'29 28° 🗷 10'29 28° 🗷 13'14 29° 🗷 44'03 28° 🗷 44'35 28° 🗷 42'29 27° 🗷 42'11 29° 🗷 11'47 29° 🗷 11'47	-16°54'32 16°54'55 48.71132 AU 46.84969 AU -17°37'35 -16°55'09 16°55'34
retrograde min. Earth dist. opposition direct conjunction minimum elong max. Earth dist. retrograde min. Earth dist. opposition direct	-6300 May 07 j 17:22 -6300 Jul 28 j 01:51 -6300 Jul 30 j 06:12 -6300 Oct 18 j 21:03 -6299 Jan 25 j 09:21 -6299 Jan 27 j 17:44 -6299 May 08 j 23:37 -6299 Jul 29 j 09:38 -6299 Jul 31 j 13:13 -6299 Oct 20 j 05:20	20° \$\times 23'54\\ 19° \$\times 23'47\\ 19° \$\times 21'12\\ 18° \$\times 20'00\\ 19° \$\times 51'29\\ 19° \$\times 51'29\\ 19° \$\times 54'53\\ 21° \$\times 27'03\\ 20° \$\times 24'28\\ 19° \$\times 23'22\\	45.81962 AU -17°20'06 -16°38'50 16°39'14 47.79594 AU 45.94768 AU -17°23'24	conjunction minimum elong max. Earth dist. retrograde min. Earth dist. opposition direct conjunction	-6292 Oct 27 j 08:08 -6291 Feb 02 j 22:14 -6291 Feb 02 j 22:16 -6291 Feb 04 j 20:43 -6291 May 17 j 04:49 -6291 Aug 06 j 22:56 -6291 Aug 08 j 17:47 -6291 Oct 28 j 16:30 -6290 Feb 04 j 05:26 -6290 Feb 04 j 05:29 -6290 Feb 06 j 02:17	26° \$\times^440'40 28° \$\times^110'29 28° \$\times^13'14 29° \$\times^44'03 28° \$\times^44'35 28° \$\times^42'29 27° \$\times^42'11 29° \$\times^11'47 29° \$\times^11'47	-16°54'32 16°54'55 48.71132 AU 46.84969 AU -17°37'35 -16°55'09
retrograde min. Earth dist. opposition direct conjunction minimum elong max. Earth dist. retrograde min. Earth dist. opposition	-6300 May 07 j 17:22 -6300 Jul 28 j 01:51 -6300 Jul 30 j 06:12 -6300 Oct 18 j 21:03 -6299 Jan 25 j 09:21 -6299 Jan 25 j 09:19 -6299 Jan 27 j 17:44 -6299 May 08 j 23:37 -6299 Jul 29 j 09:38 -6299 Jul 31 j 13:13 -6299 Oct 20 j 05:20 -6298 Jan 26 j 17:09	20° \$\times 23'54 19° \$\times 23'47 19° \$\times 21'12 18° \$\times 20'00 19° \$\times 51'29 19° \$\times 51'29 19° \$\times 54'53 21° \$\times 27'03 20° \$\times 27'01 20° \$\times 24'28	45.81962 AU -17°20'06 -16°38'50 16°39'14 47.79594 AU 45.94768 AU -17°23'24	direct conjunction minimum elong max. Earth dist. retrograde min. Earth dist. opposition direct conjunction minimum elong max. Earth dist.	-6292 Oct 27 j 08:08 -6291 Feb 02 j 22:14 -6291 Feb 02 j 22:16 -6291 Feb 04 j 20:43 -6291 May 17 j 04:49 -6291 Aug 06 j 22:56 -6291 Aug 08 j 17:47 -6291 Oct 28 j 16:30 -6290 Feb 04 j 05:26 -6290 Feb 04 j 05:29	26° ₹40'40 28° ₹10'29 28° ₹10'29 28° ₹13'14 29° ₹44'03 28° ₹42'29 27° ₹42'11 29° ₹11'47 29° ₹11'47 29° ₹14'26 0° ₹	-16°54'32 16°54'55 48.71132 AU 46.84969 AU -17°37'35 -16°55'09 16°55'34
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retrograde min. Earth dist. opposition direct conjunction minimum elong max. Earth dist. retrograde min. Earth dist. opposition direct conjunction minimum elong max. Earth dist. retrograde min. Earth dist.	-6300 May 07 j 17:22 -6300 Jul 28 j 01:51 -6300 Jul 30 j 06:12 -6300 Oct 18 j 21:03 -6299 Jan 25 j 09:21 -6299 Jan 25 j 09:19 -6299 Jan 27 j 17:44 -6299 May 08 j 23:37 -6299 Jul 29 j 09:38 -6299 Jul 31 j 13:13 -6299 Oct 20 j 05:20 -6298 Jan 26 j 17:09 -6298 Jan 26 j 17:09 -6298 Jan 28 j 23:41 -6298 May 10 j 05:31 -6298 Jul 30 j 16:54	20° \$\times 23'54\\ 19° \$\times 23'47\\ 19° \$\times 21'12\\ 18° \$\times 20'00\\ 19° \$\times 51'29\\ 19° \$\times 51'29\\ 19° \$\times 54'53\\ 21° \$\times 27'01\\ 20° \$\times 24'28\\ 19° \$\times 23'22\\ 20° \$\times 54'37\\ 20° \$\times 55'54\\ 22° \$\times 29'54\\ 21° \$\times 29'58\\	45.81962 AU -17°20'06 -16°38'50 16°39'14 47.79594 AU 45.94768 AU -17°23'24 -16°41'56 16°42'19 47.92222 AU 46.07322 AU	direct conjunction minimum elong max. Earth dist. retrograde min. Earth dist. opposition direct conjunction minimum elong max. Earth dist. retrograde min. Earth dist.	-6292 Oct 27 j 08:08 -6291 Feb 02 j 22:14 -6291 Feb 02 j 22:16 -6291 Feb 04 j 20:43 -6291 May 17 j 04:49 -6291 Aug 06 j 22:56 -6291 Aug 08 j 17:47 -6291 Oct 28 j 16:30 -6290 Feb 04 j 05:26 -6290 Feb 04 j 05:29 -6290 Feb 06 j 02:17 -6290 Mar 11 j 23:32 -6290 May 18 j 13:55 -6290 Jul 26 j 18:19 -6290 Aug 08 j 07:11 -6290 Aug 09 j 23:55	28° ₹ 40'40 28° ₹ 10'29 28° ₹ 10'29 28° ₹ 13'14 29° ₹ 44'03 28° ₹ 42'29 27° ₹ 42'11 29° ₹ 11'47 29° ₹ 11'47 29° ₹ 14'26 0° ₹ 0° ₹ 45'06 30° ₹ ₹ 29° ₹ 45'36 29° ₹ 43'37	-16°54'32 16°54'55 48.71132 AU 46.84969 AU -17°37'35 -16°55'09 16°55'34 48.80554 AU
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Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 9

•	omena of Pluto from		•	/ /		, ,	e 9
	nical year style is used: Th	-					.=
minimum elong	-6288 Feb 06 j 19:40	1°る13'22		min. Earth dist.	-6280 Aug 18 j 02:25		47.66499 AU
max. Earth dist.	-6288 Feb 08 j 13:47		48.98137 AU	opposition	-6280 Aug 19 j 07:18	9° る 42'13	-17°25'26
retrograde	-6288 May 20 j 03:09	2° ප් 46'10		direct	-6280 Nov 08 j 09:56	8° る 42'36	
min. Earth dist.	-6288 Aug 09 j 20:35		47.11380 AU			_	
opposition	-6288 Aug 11 j 11:34	1° る 44'50	-17°37'54	conjunction	-6279 Feb 15 j 07:58	10° る 10'39	
direct	-6288 Oct 31 j 08:55	0° ප 44'40		minimum elong	-6279 Feb 15 j 08:06	10° る 10'39	
				max. Earth dist.	-6279 Feb 16 j 15:38	10° る 12'29	49.60138 AU
conjunction	-6287 Feb 07 j 02:34	2° る 13'41	-16°55'15	retrograde	-6279 May 29 j 09:59	11° る 41'54	
minimum elong	-6287 Feb 07 j 02:38	2° る 13'41	16°55'39	min. Earth dist.	-6279 Aug 19 j 08:32	10° る 42'47	47.71303 AU
max. Earth dist.	-6287 Feb 08 j 20:39	2° ප 16'09	49.06395 AU	opposition	-6279 Aug 20 j 12:28	10° ප් 41'27	-17°22'39
retrograde	-6287 May 21 j 06:15	3° ⋜ 46'15		direct	-6279 Nov 09 j 13:42	9° ප් 41'52	
min. Earth dist.	-6287 Aug 11 j 03:55	2° ₹ 46'48	47.19479 AU				
opposition	-6287 Aug 12 j 17:21	2° る 44'59	-17°37'24	conjunction	-6278 Feb 16 j 14:15	11° る 09'48	-16°39'53
direct	-6287 Nov 01 j 17:52	1° る 44'52		minimum elong	-6278 Feb 16 j 14:21	11° る 09'48	16°40'17
	·			max. Earth dist.	-6278 Feb 17 j 19:22	11° る 11'29	49.64736 AU
conjunction	-6286 Feb 08 j 09:13	3° ට 13'43	-16°54'41	retrograde	-6278 May 30 j 17:02	12° る 40'53	
minimum elong	-6286 Feb 08 j 09:16	3° ට 13'43		opposition	-6278 Aug 21 j 17:38	11° る 40'29	-17°19'38
max. Earth dist.	-6286 Feb 10 j 01:50		49.14366 AU	min. Earth dist.	-6278 Aug 20 j 15:08		47.75605 AU
retrograde	-6286 May 22 j 11:39	4° පි 46'05	19.1 1500 110	direct	-6278 Nov 10 j 18:09	10°る40'55	17.75005 110
min. Earth dist.	-6286 Aug 12 j 09:30		47.27289 AU	direct	-02/6 NOV 10 J 16.07	10 04033	
	-6286 Aug 13 j 22:59	3°る4045		conjunction	-6277 Feb 17 j 20:46	12° る 08'45	16026152
opposition	-6286 Nov 03 j 00:43	2°る44'51	-1/ 30 34	-		12 3 0845	
direct	-6286 NOV 03 J 00:43	2°644'31		minimum elong	-6277 Feb 17 j 20:54		
	(205 F. L. 00: 15 5 6	40-71000	1.0050110	max. Earth dist.	-6277 Feb 19 j 01:25		49.68848 AU
conjunction	-6285 Feb 09 j 15:56		-16°53'48	retrograde	-6277 May 31 j 19:21	13°る39'39	
minimum elong	-6285 Feb 09 j 16:01		16°54'12	opposition	-6277 Aug 22 j 22:33	12° る 39'18	
max. Earth dist.	-6285 Feb 11 j 07:26		49.22044 AU	min. Earth dist.	-6277 Aug 21 j 21:57		47.79439 AU
retrograde	-6285 May 23 j 19:14	5°₹45'44		direct	-6277 Nov 12 j 02:37	11° る 39'45	
min. Earth dist.	-6285 Aug 13 j 16:57	4° る 46'23	47.34809 AU				
opposition	-6285 Aug 15 j 04:32	4° る 44'40	-17°35'25	conjunction	-6276 Feb 19 j 03:08	13° る 07'29	-16°33'38
direct	-6285 Nov 04 j 05:33	3° ⋜ 44'41		minimum elong	-6276 Feb 19 j 03:16	13° る 07'29	16°34'02
				max. Earth dist.	-6276 Feb 20 j 05:51	13° ろ 09'01	49.72544 AU
conjunction	-6284 Feb 10 j 22:45	5° る 13'14	-16°52'37	retrograde	-6276 May 31 j 23:01	14° る 38'13	
minimum elong	-6284 Feb 10 j 22:49	5° る 13'15	16°53'02	min. Earth dist.	-6276 Aug 22 j 03:03	13° る 39'05	47.82883 AU
max. Earth dist.	-6284 Feb 12 j 13:55	5° る 15'31	49.29434 AU	opposition	-6276 Aug 23 j 03:25	13° る 37'55	-17°12'47
retrograde	-6284 May 24 j 02:21	6°₹45'14		direct	-6276 Nov 12 j 09:50	12° る 38'22	
min. Earth dist.	-6284 Aug 13 j 23:00	5°₹45'59	47.42002 AU		J		
opposition	-6284 Aug 15 j 09:59	5° ਰ 44'17		conjunction	-6275 Feb 19 i 09:15	14° る 05'59	-16°30'06
direct	-6284 Nov 04 i 10:29	4°₹44'24		minimum elong	-6275 Feb 19 j 09:22	14° る 06'00	
direct	02011101 01j 10:29	. 02.		max. Earth dist.	-6275 Feb 20 j 10:47		49.75861 AU
conjunction	-6283 Feb 11 j 05:14	6° ප 12'51	-16°51'09	retrograde	-6275 Jun 02 j 04:49	15° る 36'36	47.73001 710
minimum elong	-6283 Feb 11 j 05:20	6°る12'51		min. Earth dist.	-6275 Aug 23 j 10:00		47.85980 AU
max. Earth dist.			49.36482 AU		-6275 Aug 24 j 08:21		
	-6283 Feb 12 j 18:10		49.30482 AU	opposition	C 3	14° ろ 36'20	-1/-085/
retrograde	-6283 May 25 j 10:04	7°る44'41	47 40020 411	direct	-6275 Nov 13 j 15:28	13° る 36'48	
min. Earth dist.	-6283 Aug 15 j 05:26		47.48838 AU				
opposition	-6283 Aug 16 j 15:24	6° පි 43'51	-17°32'14	conjunction	-6274 Feb 20 j 15:28	15° පි 04'19	
direct	-6283 Nov 05 j 14:33	5° ⋜ 44'02		minimum elong	-6274 Feb 20 j 15:37	15° る 04'20	
				max. Earth dist.	-6274 Feb 21 j 16:37		49.78871 AU
conjunction	-6282 Feb 12 j 11:56	7° る 12'24	-16°49'24	retrograde	-6274 Jun 03 j 11:09	16° る 34'48	
minimum elong	-6282 Feb 12 j 12:00	7° る 12'24		opposition	-6274 Aug 25 j 13:02	15° る 34'34	-17°04'50
max. Earth dist.	-6282 Feb 14 j 00:30	7° る 14'31	49.43138 AU	min. Earth dist.	-6274 Aug 24 j 14:59	15° る 35'38	47.88766 AU
retrograde	-6282 May 26 j 14:24	8° ⋜ 44'05		direct	-6274 Nov 14 j 20:00	14° ₹ 35'04	
opposition	-6282 Aug 17 j 20:44	7° る 43'22	-17°30'14				
min. Earth dist.	-6282 Aug 16 j 12:52	7° る 44'54	47.55237 AU	conjunction	-6273 Feb 21 j 21:32	16° පි 02'30	-16°22'13
direct	-6282 Nov 06 j 21:39	6° る 43'38		minimum elong	-6273 Feb 21 j 21:39	16° ප 02'31	16°22'38
	,			max. Earth dist.	-6273 Feb 22 j 20:28	16° 云 03'49	49.81584 AU
conjunction	-6281 Feb 13 j 18:36	8°중11'54	-16°47'24	retrograde	-6273 Jun 04 j 19:39	17° ප 32'51	
minimum elong	-6281 Feb 13 j 18:43	8° ਰ 11'54		opposition	-6273 Aug 26 j 17:50	16°පි32'41	-17°00'25
C	0=0110.73		49.49341 AU	min. Earth dist.	-6273 Aug 25 j 20:53		47.91263 AU
max Farth diet	-6281 Feb 15 i 05:00	8° ₹ 13'5/		mm. Lam uist.	0413 MUK 43 40.33	10 000 01	11.71203 AU
max. Earth dist.	-6281 Feb 15 j 05:09		.555.1110	direct			
retrograde	-6281 May 27 j 18:57	9° ප 43'27		direct	-6273 Nov 15 j 22:02	15° පි 33'12	
retrograde min. Earth dist.	-6281 May 27 j 18:57 -6281 Aug 17 j 18:42	9° ප් 43'27 8° ප් 44'21	47.61141 AU		-6273 Nov 15 j 22:02	15° පි 33'12	16017152
retrograde min. Earth dist. opposition	-6281 May 27 j 18:57 -6281 Aug 17 j 18:42 -6281 Aug 19 j 02:01	9°ප්43'27 8°ප්44'21 8°ප්42'50	47.61141 AU	conjunction	-6273 Nov 15 j 22:02 -6272 Feb 23 j 03:44	15° පි 33'12 17° පි 00'36	
retrograde min. Earth dist.	-6281 May 27 j 18:57 -6281 Aug 17 j 18:42	9° ප් 43'27 8° ප් 44'21	47.61141 AU	conjunction minimum elong	-6273 Nov 15 j 22:02 -6272 Feb 23 j 03:44 -6272 Feb 23 j 03:54	15° ට 33'12 17° ට 00'36 17° ට 00'36	16°18'15
retrograde min. Earth dist. opposition direct	-6281 May 27 j 18:57 -6281 Aug 17 j 18:42 -6281 Aug 19 j 02:01 -6281 Nov 08 j 05:06	9°る43'27 8°る44'21 8°る42'50 7°る43'10	47.61141 AU -17°27'57	conjunction minimum elong max. Earth dist.	-6273 Nov 15 j 22:02 -6272 Feb 23 j 03:44 -6272 Feb 23 j 03:54 -6272 Feb 24 j 02:35	15° ට 33'12 17° ට 00'36 17° ට 00'36 17° ට 01'54	
retrograde min. Earth dist. opposition direct conjunction	-6281 May 27 j 18:57 -6281 Aug 17 j 18:42 -6281 Aug 19 j 02:01 -6281 Nov 08 j 05:06 -6280 Feb 15 j 01:17	9°る43'27 8°る44'21 8°る42'50 7°る43'10 9°る11'20	47.61141 AU -17°27'57 -16°45'08	conjunction minimum elong max. Earth dist. retrograde	-6273 Nov 15 j 22:02 -6272 Feb 23 j 03:44 -6272 Feb 23 j 03:54 -6272 Feb 24 j 02:35 -6272 Jun 05 j 00:18	15° ට 33'12 17° ට 00'36 17° ට 00'36 17° ට 01'54 18° ට 30'49	16°18'15 49.83995 AU
retrograde min. Earth dist. opposition direct conjunction minimum elong	-6281 May 27 j 18:57 -6281 Aug 17 j 18:42 -6281 Aug 19 j 02:01 -6281 Nov 08 j 05:06 -6280 Feb 15 j 01:17 -6280 Feb 15 j 01:22	9°る43'27 8°る44'21 8°る42'50 7°る43'10 9°る11'20 9°る11'20	47.61141 AU -17°27'57 -16°45'08 16°45'32	conjunction minimum elong max. Earth dist. retrograde opposition	-6273 Nov 15 j 22:02 -6272 Feb 23 j 03:44 -6272 Feb 23 j 03:54 -6272 Feb 24 j 02:35 -6272 Jun 05 j 00:18 -6272 Aug 26 j 22:29	15° ට 33'12 17° ට 00'36 17° ට 00'36 17° ට 01'54 18° ට 30'49 17° ට 30'43	16°18'15 49.83995 AU -16°55'43
retrograde min. Earth dist. opposition direct conjunction	-6281 May 27 j 18:57 -6281 Aug 17 j 18:42 -6281 Aug 19 j 02:01 -6281 Nov 08 j 05:06 -6280 Feb 15 j 01:17 -6280 Feb 15 j 01:22 -6280 Feb 16 j 09:54	9°정43'27 8°정44'21 8°정42'50 7°정43'10 9°정11'20 9°정11'20 9°정13'13	47.61141 AU -17°27'57 -16°45'08	conjunction minimum elong max. Earth dist. retrograde	-6273 Nov 15 j 22:02 -6272 Feb 23 j 03:44 -6272 Feb 23 j 03:54 -6272 Feb 24 j 02:35 -6272 Jun 05 j 00:18 -6272 Aug 26 j 22:29 -6272 Aug 26 j 03:07	15° ට33'12 17° ට00'36 17° ට00'36 17° ට01'54 18° ට30'49 17° ට30'43 17° ට31'39	16°18'15 49.83995 AU
retrograde min. Earth dist. opposition direct conjunction minimum elong	-6281 May 27 j 18:57 -6281 Aug 17 j 18:42 -6281 Aug 19 j 02:01 -6281 Nov 08 j 05:06 -6280 Feb 15 j 01:17 -6280 Feb 15 j 01:22	9°る43'27 8°る44'21 8°る42'50 7°る43'10 9°る11'20 9°る11'20	47.61141 AU -17°27'57 -16°45'08 16°45'32	conjunction minimum elong max. Earth dist. retrograde opposition	-6273 Nov 15 j 22:02 -6272 Feb 23 j 03:44 -6272 Feb 23 j 03:54 -6272 Feb 24 j 02:35 -6272 Jun 05 j 00:18 -6272 Aug 26 j 22:29	15° ට 33'12 17° ට 00'36 17° ට 00'36 17° ට 01'54 18° ට 30'49 17° ට 30'43	16°18'15 49.83995 AU -16°55'43

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6271 in astronomical counting style is the year 6272 BCE in historical counting style. 17°**ප**58'37 -16°13'14 -6271 Feb 23 i 09:47 retrograde -6263 Jun 14 i 00:25 27°る10'12 conjunction -6271 Feb 23 j 09:55 17°る58'37 16°13'38 opposition -6263 Sep 04 j 15:17 26°중10'26 -16°02'11 minimum elong -6271 Feb 24 j 06:52 17°る59'49 49.86092 AU min. Earth dist. -6263 Sep 04 j 07:30 26°る10'48 47.92948 AU max. Earth dist. -6271 Jun 06 j 03:21 19°る28'44 -6263 Nov 25 j 01:16 25°る10'59 direct retrograde -6271 Aug 27 j 08:02 18°る29'37 47.95268 AU min. Earth dist. 18°る28'43 -16°50'45 -6262 Mar 04 j 16:08 26°る38'05 -15°20'40 opposition -6271 Aug 28 j 03:07 conjunction -6271 Nov 17 j 10:36 -6262 Mar 04 j 16:19 direct 17°**る**29'17 minimum elong 26°る38'06 15°21'03 -6262 Mar 05 j 00:46 26°る38'34 49.84498 AU max. Earth dist. -6270 Feb 24 j 15:44 -6262 Jun 15 j 05:15 conjunction 18°る56'35 -16°08'21 retrograde 28°る07'32 -6270 Feb 24 j 15:54 minimum elong 18°る56'36 16°08'45 opposition -6262 Sep 05 j 19:43 27°**る**07'46 -15°54'58 max. Earth dist. -6270 Feb 25 j 11:24 18°る57'43 49.87805 AU min. Earth dist. -6262 Sep 05 j 13:20 27°る08'04 47.90838 AU -6270 Jun 07 j 08:23 20°る26'39 -6262 Nov 26 j 06:38 26°**る**08'19 retrograde direct 19°る26'41 -16°45'32 opposition -6270 Aug 29 j 07:51 min. Earth dist. -6270 Aug 28 j 15:01 19°る27'29 47.96687 AU conjunction -6261 Mar 05 j 22:03 27°る35'27 -15°13'34 direct -6270 Nov 18 j 16:43 18°る27'18 minimum elong -6261 Mar 05 j 22:15 27°る35'27 15°13'56 max. Earth dist. -6261 Mar 06 j 04:57 27°る35'50 49.82370 AU conjunction -6269 Feb 25 j 22:00 19°る54'34 -16°03'13 retrograde -6261 Jun 16 j 08:43 29°る04'51 minimum elong -6269 Feb 25 j 22:08 19°る54'34 16°03'36 opposition -6261 Sep 06 j 23:57 28°る05'08 -15°47'28 max. Earth dist. -6269 Feb 26 j 16:47 19°**る**55'38 49.89083 AU min. Earth dist. -6261 Sep 06 j 17:42 28°る05'25 47.88452 AU retrograde -6269 Jun 08 j 15:05 21°る24'32 direct -6261 Nov 27 j 12:22 27°る05'40 opposition -6269 Aug 30 j 12:20 20°る24'38 -16°40'04 min. Earth dist. -6269 Aug 29 j 20:24 20°る25'23 47.97623 AU conjunction -6260 Mar 06 i 04:00 28°る32'50 -15°06'13 direct -6269 Nov 19 j 20:43 19°る25'15 minimum elong -6260 Mar 06 i 04:11 28°る32'50 15°06'36 max. Earth dist. -6260 Mar 06 i 09:38 28°る33'09 49.79950 AU conjunction -6268 Feb 27 i 04:08 20°る52'30 -15°57'51 -6260 Jun 02 j 01:56 0°≈ -6268 Feb 27 i 04:19 20°る52'30 15°58'14 -6260 Jun 16 i 12:34 0°≈02'14 minimum elong retrograde max. Earth dist. -6268 Feb 27 j 20:14 20°る53'25 49.89851 AU -6260 Jul 01 j 03:03 30°Rる -6268 Jun 08 j 22:44 22°る22'23 -6260 Sep 07 j 04:26 29°る02'33 -15°39'42 retrograde opposition -6268 Aug 30 j 17:01 21°る22'31 -16°34'21 min. Earth dist. -6260 Sep 07 j 00:10 29°る02'45 47.85769 AU opposition -6268 Aug 30 j 02:47 21°る23'12 47.98041 AU direct -6260 Nov 27 j 19:00 28°る03'06 min. Earth dist. 29°**る**29'15 -6268 Nov 19 j 23:37 -6259 Mar 06 j 15:21 direct 20°**る**23'09 evening set -6267 Feb 27 j 10:13 21°る50'22 -15°52'15 29°**る**30'18 -14°58'36 -6259 Mar 07 j 09:51 conjunction conjunction -6267 Feb 27 j 10:23 21°る50'22 15°52'38 -6259 Mar 07 j 10:04 29°る30'19 14°58'58 minimum elong minimum elong -6267 Feb 28 j 01:34 21° 중51'14 49.90087 AU -6259 Mar 08 j 04:50 29°**る**31'23 max. Earth dist. morning rise -6267 Jun 10 j 02:25 23°중20'10 -6259 Mar 07 j 15:06 retrograde max. Earth dist. 29°る30'36 49.77234 AU 22°**ට**20'19 -16°28'25 -6259 Mar 29 j 14:31 opposition -6267 Aug 31 j 21:39 0°≈ min. Earth dist. -6267 Aug 31 j 09:14 22°る20'55 47.97914 AU retrograde -6259 Jun 17 j 19:11 0°≈59'43 direct -6267 Nov 21 j 06:19 21°**る**20'57 opposition -6259 Sep 08 j 08:46 0°≈00'05 -15°31'39 min. Earth dist. -6259 Sep 08 j 04:53 0°≈00'16 47.82752 AU conjunction -6266 Feb 28 j 16:17 22°る48'07 -15°46'26 -6259 Sep 08 j 10:20 30°Rる -6266 Feb 28 j 16:28 22°る48'08 15°46'50 -6259 Nov 28 j 22:44 29°る00'38 minimum elong direct max. Earth dist. -6266 Mar 01 j 05:28 22°る48'52 49.89814 AU -6258 Feb 15 j 19:45 0°≈ -6266 Jun 11 j 06:06 24°る17'50 -6258 Mar 06 j 09:03 0°≈24'48 retrograde evening set -6266 Sep 02 j 02:03 23°る18'00 -16°22'14 opposition -6258 Mar 08 i 15:46 0°≈27'54 -14°50'44 min. Earth dist. -6266 Sep 01 i 14:17 23°る18'34 47.97295 AU conjunction -6258 Mar 08 i 15:57 direct -6266 Nov 22 i 12:53 22°**る**18'37 minimum elong 0°≈27'55 14°51'06 -6258 Mar 08 i 18:37 max. Earth dist. 0°≈28'04 49.74157 AU -6265 Mar 01 j 22:21 23°る45'46 -15°40'22 conjunction morning rise -6258 Mar 10 j 22:55 0°≈31'02 minimum elong -6265 Mar 01 i 22:31 23°₹45'46 15°40'45 retrograde -6258 Jun 19 i 03:39 1°≈57'19 max. Earth dist. -6265 Mar 02 j 09:57 23°る46'25 49.89056 AU opposition -6258 Sep 09 j 13:06 0°≈57'43 -15°23'22 -6265 Jun 12 j 10:58 25°る15'24 min. Earth dist. -6258 Sep 09 j 10:53 0°≈57'50 47.79354 AU retrograde opposition -6265 Sep 03 j 06:36 24°**ට**15'35 -16°15'49 -6258 Nov 17 j 13:32 30°Rる 29°る58'17 min. Earth dist. -6265 Sep 02 j 21:08 24°る16'02 47.96220 AU direct -6258 Nov 29 j 23:54 -6265 Nov 23 j 18:41 -6258 Dec 12 j 14:34 direct 23°る16'10 0°22 evening set -6257 Mar 06 j 18:24 1°≈21'20 24°る43'17 -15°34'03 conjunction -6264 Mar 02 j 04:26 -6264 Mar 02 j 04:37 24°る43'18 15°34'27 -6257 Mar 09 j 21:59 1°≈25'37 -14°42'37 minimum elong conjunction -6264 Mar 02 j 15:21 24°る43'54 49.87884 AU -6257 Mar 09 j 22:12 max. Earth dist. minimum elong 1°≈25'38 14°42'59 -6264 Jun 12 j 16:12 26°る12'50 -6257 Mar 10 j 00:13 retrograde max. Earth dist. 1°≈25'45 49.70654 AU 25°る13'03 -16°09'08 -6257 Mar 13 j 02:03 opposition -6264 Sep 03 j 10:52 morning rise 1°≈29'56 min. Earth dist. -6264 Sep 03 j 01:51 25°る13'29 47.94747 AU retrograde -6257 Jun 20 j 08:38 2°≈55'03 direct -6264 Nov 23 j 23:34 24°る13'37 opposition -6257 Sep 10 j 17:34 1°≈55'29 -15°14'50 min. Earth dist. -6257 Sep 10 j 17:05 1°≈55'30 47.75480 AU conjunction -6263 Mar 03 j 10:17 25°る40'43 -15°27'30 direct -6257 Dec 01 j 05:33 0°≈56'02 minimum elong -6263 Mar 03 j 10:28 25°る40'43 15°27'52 -6256 Mar 06 j 08:02 2°≈18'12 evening set

max. Earth dist.

-6263 Mar 03 j 18:55 25°₹41'12 49.86347 AU

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6256 in astronomical counting style is the year 6257 BCE in historical counting style. conjunction -6256 Mar 10 j 04:06 2°**≈**23'26 -14°34'16 direct -6250 Dec 07 j 19:40 7°**≈**40'05 evening set minimum elong -6256 Mar 10 j 04:17 2°≈23'27 14°34'37 -6249 Mar 10 j 20:18 8°**≈**58'13

minimum elong	-6256 Mar 10 j 04:17	2°≈23'27 14°34'37	evening set	-6249 Mar 10 j 20:18	8°≈58'13
max. Earth dist.	-6256 Mar 10 j 04:00	2°≈23'26 49.66661 AU	J		
morning rise	-6256 Mar 14 j 00:39	2° ≈ 28'41	conjunction	-6249 Mar 17 j 23:03	9°≈07'55 -13°29'18
retrograde	-6256 Jun 20 j 12:30	3°≈52'51	minimum elong	-6249 Mar 17 j 23:16	9°≈07'56 13°29'39
opposition	-6256 Sep 10 j 21:56	2°≈53'18 -15°06'04	max. Earth dist.	-6249 Mar 17 j 13:31	9°≈07'23 49.25472 AU
min. Earth dist.	-6256 Sep 10 j 22:15	2°≈53'17 47.71093 AU		-6249 Mar 25 i 02:22	9°≈17'40
direct	-6256 Dec 01 j 12:10	1°≈53'50	retrograde	-6249 Jun 27 j 23:44	10°≈37'25
			-		
evening set	-6255 Mar 06 j 23:56	3°≈15′16	opposition	-6249 Sep 18 j 05:09	9°≈37'41 -13°57'53
			min. Earth dist.	-6249 Sep 18 j 14:23	9°≈37'15 47.27512 AU
conjunction	-6255 Mar 11 j 10:15	3°≈21'18 -14°25'42	direct	-6249 Dec 09 j 01:24	8° ≈ 37'47
minimum elong	-6255 Mar 11 j 10:28	3°≈21'19 14°26'04	evening set	-6248 Mar 10 j 17:35	9°≈55'32
max. Earth dist.	-6255 Mar 11 j 08:24	3°≈21'12 49.62131 AU	J		
morning rise	-6255 Mar 15 j 21:07	3°≈27'22	conjunction	-6248 Mar 18 j 05:11	10°≈05'45 -13°19'00
retrograde	-6255 Jun 21 j 16:19	4°≈50'44	minimum elong	-6248 Mar 18 j 05:24	10°≈05'46 13°19'20
-	3		Č	,	
opposition	-6255 Sep 12 j 02:30	3°≈51'10 -14°57'04	max. Earth dist.	-6248 Mar 17 j 17:25	10°≈05'05 49.18167 AU
min. Earth dist.	-6255 Sep 12 j 05:18	3°≈51'02 47.66171 AU	U	-6248 Mar 25 j 17:33	10°≈16′00
direct	-6255 Dec 02 j 18:41	2° ≈ 51'39	retrograde	-6248 Jun 28 j 08:08	11° ≈ 35'19
evening set	-6254 Mar 07 j 17:21	4°≈12'24	opposition	-6248 Sep 18 j 09:42	10°≈35'35 -13°47'05
			min. Earth dist.	-6248 Sep 18 j 20:21	10°≈35'04 47.19915 AU
conjunction	-6254 Mar 12 j 16:22	4°≈19'09 -14°16'54	direct	-6248 Dec 09 j 02:59	9°≈35'38
minimum elong	-6254 Mar 12 j 16:33	4°≈19'10 14°17'15	evening set	-6247 Mar 11 j 15:13	10°≈53'01
max. Earth dist.	3	4°≈19'00 49.57088 AU	=	0247 Mai 11 j 13.13	10 203 01
	-6254 Mar 12 j 13:28			(0.17.) (10.11.01	110 00111 10000107
morning rise	-6254 Mar 17 j 15:54	4°≈25'57	conjunction	-6247 Mar 19 j 11:31	11°≈03'44 -13°08'27
retrograde	-6254 Jun 22 j 20:59	5° ≈ 48'35	minimum elong	-6247 Mar 19 j 11:44	11°≈03'44 13°08'47
opposition	-6254 Sep 13 j 06:56	4°≈49'00 -14°47'50	max. Earth dist.	-6247 Mar 18 j 23:30	11°≈03'03 49.10554 AU
min. Earth dist.	-6254 Sep 13 j 10:20	4°≈48'51 47.60730 AU	J morning rise	-6247 Mar 27 j 08:25	11° ≈ 14'29
direct	-6254 Dec 04 j 00:32	3°≈49'26	retrograde	-6247 Jun 29 j 13:57	12° ≈ 33'23
evening set	-6253 Mar 08 j 11:52	5°≈09'34	opposition	-6247 Sep 19 j 14:18	11°≈33'38 -13°36'01
evening set	-0233 Widi 00 j 11.32	3 ~ 07 3 1	11		
			min. Earth dist.	-6247 Sep 20 j 02:15	11°≈33'04 47.11980 AU
conjunction	-6253 Mar 13 j 22:29	5°≈16'59 -14°07'53	direct	-6247 Dec 10 j 07:56	10° ≈ 33'40
minimum elong	-6253 Mar 13 j 22:42	5°≈17'00 14°08'14	evening set	-6246 Mar 12 j 13:16	11°≈50'43
max. Earth dist.	-6253 Mar 13 j 16:58	5°≈16'40 49.51543 AU	J		
morning rise	-6253 Mar 19 j 09:45	5°≈24'26	conjunction	-6246 Mar 20 j 17:45	12°≈01'55 -12°57'39
retrograde	-6253 Jun 24 j 05:19	6°≈46'24	minimum elong	-6246 Mar 20 j 17:59	12°≈01'56 12°57'58
opposition	-6253 Sep 14 j 11:18	5°≈46'48 -14°38'22	max. Earth dist.	-6246 Mar 20 j 03:51	12°≈01'07 49.02595 AU
min. Earth dist.	-6253 Sep 14 j 16:31			-6246 Mar 28 j 22:59	12°≈13'09
	1 3	5°≈46'33 47.54825 AU	Č	,	
direct	-6253 Dec 05 j 02:43	4° ≈ 47'09	retrograde	-6246 Jun 30 j 19:25	13° ≈ 31'40
evening set	-6252 Mar 08 j 07:11	6°≈06'44	opposition	-6246 Sep 20 j 18:54	12°≈31'55 -13°24'41
			min. Earth dist.	-6246 Sep 21 j 07:33	12°≈31'19 47.03664 AU
conjunction	-6252 Mar 14 j 04:44	6°≈14'45 -13°58'37	direct	-6246 Dec 11 j 13:37	11° ≈ 31'54
minimum elong	-6252 Mar 14 j 04:56	6°≈14'46 13°58'57	evening set	-6245 Mar 13 j 11:42	12° ≈ 48'40
max. Earth dist.	-6252 Mar 13 j 22:50	6°≈14'25 49.45555 AU	•	-6245 Mar 21 j 08:45	12°≈59'27 48.94196 AU
morning rise	-6252 Mar 20 j 02:50	6°≈22'50	mux. Eurin dist.	02 13 Mar 21 j 00:13	12 (0.5) 27 (0.5) 1150 116
	·			(245.14 22:00.10	12000120 12046125
retrograde	-6252 Jun 24 j 11:13	7°≈44'10	conjunction	-6245 Mar 22 j 00:19	13°≈00'20 -12°46'35
opposition	-6252 Sep 14 j 15:48	6°≈44'31 -14°28'39	minimum elong	-6245 Mar 22 j 00:32	13°≈00'21 12°46'54
min. Earth dist.	-6252 Sep 14 j 22:29	6°≈44'12 47.48495 AU	J morning rise	-6245 Mar 30 j 13:38	13° ≈ 12'02
direct	-6252 Dec 05 j 07:22	5° ≈ 44'49	retrograde	-6245 Jul 01 j 23:52	14° ≈ 30'12
evening set	-6251 Mar 09 j 02:59	7°≈03'52	opposition	-6245 Sep 21 j 23:37	13°≈30'27 -13°13'07
•	·		min. Earth dist.	-6245 Sep 22 j 14:45	13° ≈ 29'43 46.94881 AU
conjunction	-6251 Mar 15 j 10:38	7°≈12'29 -13°49'06	direct	-6245 Dec 12 j 20:11	12°≈30′23
minimum elong	-6251 Mar 15 j 10:51		evening set	-6244 Mar 13 j 10:39	13°≈46'52
•	•		•	-0244 Mai 13 j 10.39	13 ≈40 32
max. Earth dist.	-6251 Mar 15 j 02:53	7°≈12'02 49.39187 AU			
morning rise	-6251 Mar 21 j 18:58	7° ≈ 21'08	conjunction	-6244 Mar 22 j 07:00	13°≈58'59 -12°35'18
retrograde	-6251 Jun 25 j 16:16	8° ≈ 41'54	minimum elong	-6244 Mar 22 j 07:14	13°≈59'00 12°35'36
opposition	-6251 Sep 15 j 20:12	7°≈42'13 -14°18'39	max. Earth dist.	-6244 Mar 21 j 14:20	13°≈58'01 48.85316 AU
min. Earth dist.	-6251 Sep 16 j 03:13	7°≈41'53 47.41815 AU	J morning rise	-6244 Mar 31 j 03:58	14° ≈ 11'08
direct	-6251 Dec 06 j 12:18	6°≈42'26	5	-6244 May 09 j 22:57	15° ≈
evening set	-6250 Mar 09 j 23:18	8°≈01'01	retrograde	-6244 Jul 02 j 04:58	15°≈28'57
evening set	0230 IVIAI 03 J 23.10	0 ~01 01	ionograde	•	
	(0.50.)	00 1011 1011		-6244 Aug 25 j 02:54	15°R≈
conjunction	-6250 Mar 16 j 16:46	8°≈10'11 -13°39'20	opposition	-6244 Sep 22 j 04:25	14° ≈ 29'11 -13°01'17
minimum elong	-6250 Mar 16 j 16:59	8°≈10'12 13°39'40	min. Earth dist.	-6244 Sep 22 j 20:08	14° ≈ 28′26 46.85582 AU
max. Earth dist.	-6250 Mar 16 j 07:45	8°≈09'40 49.32475 AU	J direct	-6244 Dec 13 j 02:11	13° ≈ 29'04
morning rise	-6250 Mar 23 j 10:55	8°≈19'23	evening set	-6243 Mar 14 j 09:36	14° ≈ 45'16
retrograde	-6250 Jun 26 j 18:55	9° ≈ 39'38	2	J	
opposition	-6250 Sep 17 j 00:40	8°≈39'55 -14°08'24	conjunction	-6243 Mar 23 j 13:26	14°≈57'49 -12°23'46
			-	•	
min. Earth dist.	-6250 Sep 17 j 09:40	8°≈39'30 47.34814 AU	J minimum elong	-6243 Mar 23 j 13:39	14°≈57'50 12°24'04

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 12 Attention, astronomical year style is used: The year -6243 in astronomical counting style is the year 6244 BCE in historical counting style.

Attention, astronomi	cal year style is used: Th	e year -6243 i	in astronomical cou	nting style is the year	6244 BCE in historical c	ounting style.	
max. Earth dist.	-6243 Mar 22 j 18:02	14° ≈ 56'42	48.75903 AU	min. Earth dist.	-6237 Sep 30 j 16:06	21° ≈ 22'44	46.07725 AU
	-6243 Mar 25 j 03:31	15° ≈		direct	-6237 Dec 20 j 13:33	20° ≈ 23′05	
morning rise	-6243 Apr 01 j 18:03	15° ≈ 10′26		evening set	-6236 Mar 19 j 09:54	21° ≈ 37'42	
retrograde	-6243 Jul 03 j 13:31	16° ≈ 27'55		max. Earth dist.	-6236 Mar 29 j 08:35	21° ≈ 51'27	47.97805 AU
opposition	-6243 Sep 23 j 09:21	15° ≈ 28′06	-12°49'14				
min. Earth dist.	-6243 Sep 24 j 03:04	15° ≈ 27'15	46.75755 AU	conjunction	-6236 Mar 30 j 13:08	21° ≈ 53′07	-10°56'08
	-6243 Oct 18 j 15:14	15°R ≈		minimum elong	-6236 Mar 30 j 13:21	21° ≈ 53′07	10°56'25
direct	-6243 Dec 14 j 04:55	14° ≈ 27'54		morning rise	-6236 Apr 10 j 17:00	22° ≈ 08'34	
	-6242 Feb 08 j 04:07	15° ≈		retrograde	-6236 Jul 10 j 08:57	23° ≈ 24′04	
evening set	-6242 Mar 15 j 08:57	15° ≈ 43'49		opposition	-6236 Sep 29 j 20:25	22° ≈ 23'46	-11°17'28
				min. Earth dist.	-6236 Sep 30 j 21:46	22° ≈ 22'32	45.95311 AU
conjunction	-6242 Mar 24 j 20:14	15° ≈ 56'49	-12°12'00	direct	-6236 Dec 20 j 18:25	21° ≈ 22'48	
minimum elong	-6242 Mar 24 j 20:28	15° ≈ 56'50	12°12'19	evening set	-6235 Mar 20 j 10:36	22° ≈ 37'17	
max. Earth dist.	-6242 Mar 24 j 00:11	15° ≈ 55'40	48.65962 AU				
morning rise	-6242 Apr 03 j 08:04	16° ≈ 09'52		conjunction	-6235 Mar 31 j 20:04	22° ≈ 53′05	-10°42'32
retrograde	-6242 Jul 04 j 20:39	17° ≈ 27'01		minimum elong	-6235 Mar 31 j 20:17	22° ≈ 53′06	
opposition	-6242 Sep 24 j 14:11	16° ≈ 27'09		max. Earth dist.	-6235 Mar 30 j 14:29	22° ≈ 51'22	47.85399 AU
min. Earth dist.	-6242 Sep 25 j 09:32	16° ≈ 26′13	46.65402 AU	morning rise	-6235 Apr 12 j 06:01	23° ≈ 08'55	
direct	-6242 Dec 15 j 09:22	15° ≈ 26'51		retrograde	-6235 Jul 11 j 14:07	24° ≈ 24'14	
evening set	-6241 Mar 16 j 08:43	16° ≈ 42'31		opposition	-6235 Oct 01 j 01:51	23° ≈ 23'52	-11°03'14
max. Earth dist.	-6241 Mar 25 j 04:34	16° ≈ 54'39	48.55532 AU	min. Earth dist.	-6235 Oct 02 j 05:06	23° ≈ 22'32	45.82604 AU
				direct	-6235 Dec 22 j 01:48	22° ≈ 22'48	
conjunction	-6241 Mar 26 j 02:59	16° ≈ 55'56	-12°00'00	evening set	-6234 Mar 21 j 11:53	23° ≈ 37'10	
minimum elong	-6241 Mar 26 j 03:12	16° ≈ 55'57	12°00'18	max. Earth dist.	-6234 Mar 31 j 21:00	23° ≈ 51'34	47.72694 AU
morning rise	-6241 Apr 04 j 21:57	17°≈09'24					
retrograde	-6241 Jul 06 j 03:58	18° ≈ 26′13		conjunction	-6234 Apr 02 j 03:19	23° ≈ 53′20	-10°28'41
opposition	-6241 Sep 25 j 19:03	17° ≈ 26′17	-12°24'22	minimum elong	-6234 Apr 02 j 03:32	23° ≈ 53′21	10°28'57
min. Earth dist.	-6241 Sep 26 j 15:07	17° ≈ 25′19	46.54585 AU	morning rise	-6234 Apr 13 j 19:08	24° ≈ 09'33	
direct	-6241 Dec 16 j 14:05	16° ≈ 25'53		retrograde	-6234 Jul 12 j 18:42	25° ≈ 24'41	
evening set	-6240 Mar 16 j 08:27	17° ≈ 41'18		opposition	-6234 Oct 02 j 07:06	24° ≈ 24'16	-10°48'43
max. Earth dist.	-6240 Mar 25 j 09:54	17° ≈ 53'46	48.44644 AU	min. Earth dist.	-6234 Oct 03 j 10:41	24° ≈ 22'55	45.69558 AU
				direct	-6234 Dec 23 j 09:21	23° ≈ 23'06	
conjunction	-6240 Mar 26 j 09:44	17° ≈ 55′08	-11°47'45	evening set	-6233 Mar 22 j 13:32	24° ≈ 37′21	
minimum elong	-6240 Mar 26 j 09:57	17° ≈ 55′09	11°48'04	max. Earth dist.	-6233 Apr 02 j 01:58	24° ≈ 51'59	47.59605 AU
morning rise	-6240 Apr 05 j 11:40	18° ≈ 09'01					
retrograde	-6240 Jul 06 j 06:23	19° ≈ 25'32		conjunction	-6233 Apr 03 j 10:43	24° ≈ 53'54	-10°14'33
opposition	-6240 Sep 26 j 00:03	18° ≈ 25'32	-12°11'32	minimum elong	-6233 Apr 03 j 10:56	24° ≈ 53'55	10°14'49
min. Earth dist.	-6240 Sep 26 j 22:18	18° ≈ 24'27	46.43349 AU	morning rise	-6233 Apr 15 j 08:28	25° ≈ 10′29	
direct	-6240 Dec 16 j 22:24	17° ≈ 25′00		retrograde	-6233 Jul 14 j 02:38	26° ≈ 25′28	
evening set	-6239 Mar 17 j 08:31	18° ≈ 40′12		opposition	-6233 Oct 03 j 12:43	25° ≈ 24'59	-10°33'56
				min. Earth dist.	-6233 Oct 04 j 18:22	25° ≈ 23'31	45.56106 AU
conjunction	-6239 Mar 27 j 16:31	18° ≈ 54'26	-11°35'15	direct	-6233 Dec 24 j 13:48	24° ≈ 23'43	
minimum elong	-6239 Mar 27 j 16:45	18° ≈ 54'27	11°35'32	evening set	-6232 Mar 22 j 15:20	25° ≈ 37'52	
max. Earth dist.	-6239 Mar 26 j 16:05	18° ≈ 53′01	48.33387 AU	max. Earth dist.	-6232 Apr 02 j 09:00	25° ≈ 52'50	47.46069 AU
morning rise	-6239 Apr 07 j 01:03	19° ≈ 08'43					
retrograde	-6239 Jul 07 j 10:09	20° ≈ 24'57		conjunction	-6232 Apr 03 j 18:19	25° ≈ 54'47	-10°00'10
opposition	-6239 Sep 27 j 04:58	19° ≈ 24'52	-11°58'27	minimum elong	-6232 Apr 03 j 18:31	25° ≈ 54'48	10°00'26
min. Earth dist.	-6239 Sep 28 j 03:24	19° ≈ 23'46	46.31767 AU	morning rise	-6232 Apr 15 j 21:30	26° ≈ 11'44	
direct	-6239 Dec 18 j 05:57	18° ≈ 24'13		retrograde	-6232 Jul 14 j 10:40	27° ≈ 26′34	
evening set	-6238 Mar 18 j 08:38	19° ≈ 39'12		opposition	-6232 Oct 03 j 18:26	26° ≈ 26′00	-10°18'53
				min. Earth dist.	-6232 Oct 05 j 01:25	26° ≈ 24'29	45.42173 AU
conjunction	-6238 Mar 28 j 23:11	19° ≈ 53'50	-11°22'29	direct	-6232 Dec 24 j 18:45	25° ≈ 24'37	
minimum elong	-6238 Mar 28 j 23:25	19° ≈ 53'51	11°22'47	evening set	-6231 Mar 23 j 17:33	26° ≈ 38'41	
max. Earth dist.	-6238 Mar 27 j 20:30	19° ≈ 52'18	48.21802 AU	max. Earth dist.	-6231 Apr 03 j 14:09	26° ≈ 53'52	47.32053 AU
morning rise	-6238 Apr 08 j 14:28	20° ≈ 08'31					
retrograde	-6238 Jul 08 j 18:47	21° ≈ 24'30		conjunction	-6231 Apr 05 j 01:54	26° ≈ 55'58	-9°45'32
opposition	-6238 Sep 28 j 10:04	20° ≈ 24′20	-11°45'04	minimum elong	-6231 Apr 05 j 02:08	26° ≈ 55'58	9°45'47
min. Earth dist.	-6238 Sep 29 j 10:04	20° ≈ 23′10	46.19887 AU	morning rise	-6231 Apr 17 j 10:43	27° ≈ 13'16	
direct	-6238 Dec 19 j 08:25	19° ≈ 23'34		retrograde	-6231 Jul 15 j 20:19	28° ≈ 27'57	
evening set	-6237 Mar 19 j 09:06	20° ≈ 38′21		opposition	-6231 Oct 05 j 00:10	27° ≈ 27'17	-10°03'33
max. Earth dist.	-6237 Mar 29 j 03:25	20° ≈ 51′50	48.09932 AU	min. Earth dist.	-6231 Oct 06 j 08:06	27° ≈ 25'43	45.27757 AU
				direct	-6231 Dec 25 j 22:59	26° ≈ 25'46	
conjunction	-6237 Mar 30 j 06:13	20° ≈ 53′23	-11°09'27	evening set	-6230 Mar 24 j 19:50	27° ≈ 39'46	
minimum elong	-6237 Mar 30 j 06:26	20° ≈ 53′23	11°09'43	max. Earth dist.	-6230 Apr 04 j 20:25	27° ≈ 55'13	47.17534 AU
morning rise	-6237 Apr 10 j 03:45	21° ≈ 08′27					
retrograde	-6237 Jul 10 j 01:21	22° ≈ 24'11		conjunction	-6230 Apr 06 j 09:43	27° ≈ 57'24	-9°30'39
opposition	-6237 Sep 29 j 15:12	21° ≈ 23'57	-11°31'25	minimum elong	-6230 Apr 06 j 09:55	27° ≈ 57'25	9°30'53

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6230 in astronomical counting style is the year 6231 BCE in historical counting style. -6230 Apr 18 j 23:49 28°≈15'04 opposition -6224 Oct 11 i 19:49 4°\(\)43'49 -8°08'23 morning rise -6230 Jul 17 j 01:49 29°≈29'36 min. Earth dist. -6224 Oct 13 j 11:27 4°**)**41'50 44.15809 AU retrograde -6230 Oct 06 j 06:10 28°≈28'50 -9°47'58 -6223 Jan 02 j 01:02 3°**¥**41′12 direct opposition -6230 Oct 07 j 16:25 4°**)** 55'10 min. Earth dist. 28°≈27'09 45.12843 AU -6223 Mar 30 j 19:33 evening set -6230 Dec 27 j 06:49 5°**升**12'23 46.05489 AU direct 27°≈27'09 max. Earth dist. -6223 Apr 11 j 20:42 evening set -6229 Mar 25 j 22:34 28°≈41'06 5°**¥**15′09 -7°38′47 max. Earth dist. -6229 Apr 06 j 03:19 28°≈56'49 47.02547 AU conjunction -6223 Apr 13 j 19:00 -6223 Apr 13 j 19:11 5°¥15'10 7°39'00 minimum elong -6223 Apr 27 j 18:24 conjunction -6229 Apr 07 j 17:40 28°≈59'05 -9°15'29 morning rise 5°**X**35'10 -6223 Jul 24 j 04:52 minimum elong -6229 Apr 07 j 17:53 28°≈59'05 9°15'44 retrograde 6°**)**49'17 morning rise -6229 Apr 20 j 12:55 29°≈17'05 opposition -6223 Oct 13 j 02:37 5°**)**47'41 -7°50'44 -6229 May 24 j 14:24 -6223 Oct 14 j 20:07 0°**)**€ min. Earth dist. 5°**¥**45'36 43.98720 AU -6229 Jul 18 j 06:21 retrograde 0°**)**€31'30 direct -6222 Jan 03 j 07:15 4°**)**₹44'55 -6229 Sep 11 j 14:31 30°R≈ evening set -6222 Apr 01 j 00:00 5°**¥**58'58 opposition -6229 Oct 07 j 12:02 29°≈30'37 -9°32'06 max. Earth dist. -6222 Apr 13 j 05:28 6°¥16'29 45.88391 AU min. Earth dist. -6229 Oct 08 j 22:44 29°≈28'54 44.97479 AU direct -6229 Dec 28 j 15:51 28°≈28'46 conjunction -6222 Apr 15 j 03:52 6°¥19'17 -7°21'40 evening set -6228 Mar 26 j 01:30 29°≈42'40 minimum elong -6222 Apr 15 j 04:04 6°¥19'18 7°21'52 max. Earth dist. -6228 Apr 06 j 08:49 29°≈58'34 46.87129 AU morning rise -6222 Apr 29 j 07:17 6°**)** 39'36 -6228 Apr 07 j 08:55 0°**∀** retrograde -6222 Jul 25 j 13:39 7°**)** €53'46 opposition -6222 Oct 14 j 09:37 6°\\$52'04 -7°32'46 conjunction -6228 Apr 08 j 01:37 0°\(\frac{1}{2}\)00'59 -9°00'05 min. Earth dist. -6222 Oct 16 i 03:54 6°**¥**49'57 43.81318 AU minimum elong -6228 Apr 08 i 01:49 0°\mathcal{H}01'00 9°00'18 direct -6221 Jan 04 i 13:32 5°**)**49'10 -6228 Apr 21 i 02:01 0°¥19'20 evening set -6221 Apr 02 i 05:06 7°**)**€03'20 morning rise retrograde -6228 Jul 18 j 14:28 1°**)** 33'39 max. Earth dist. -6221 Apr 14 j 12:06 7°**升**21'01 45.70951 AU -6228 Oct 07 j 18:11 0°\ 32'38 -9°15'57 opposition -6228 Oct 09 j 06:46 0°**)** 30'49 44.81730 AU -6221 Apr 16 j 12:52 7°\ 23'58 -7°04'16 min. Earth dist. conjunction -6228 Nov 05 j 15:15 30°R≈ -6221 Apr 16 j 13:02 7°**)** €23'58 7°04'27 minimum elong 29°**≈**30'38 morning rise -6221 Apr 30 j 20:26 7°**¥**44'36 direct -6228 Dec 28 j 20:52 -6227 Feb 19 j 14:20 0°**)**€ -6221 Jul 27 j 01:52 8° **** 58'49 retrograde opposition -6221 Oct 15 j 16:41 7°**¥**57'00 -7°14'31 evening set -6227 Mar 27 j 04:22 0°\ 44'29 -6227 Apr 07 j 16:40 -6221 Oct 17 j 12:05 max. Earth dist. 1°**米**00'43 46.71348 AU min. Earth dist. 7°**₭**54'49 43.63552 AU -6220 Jan 05 j 17:20 6°**¥**53′56 direct -6227 Apr 09 j 09:35 1°**)**€03'09 -8°44'23 -6220 Apr 02 j 10:24 8°**)**68'14 conjunction evening set 1°**¥**03'09 8°44'37 -6227 Apr 09 j 09:47 -6220 Apr 14 j 20:22 8°**¥**26'10 45.53092 AU minimum elong max. Earth dist. -6227 Apr 22 j 14:44 1°**)** 21'50 morning rise -6227 Jul 19 j 21:41 -6220 Apr 16 j 22:14 8°**¥**29'11 -6°46'35 retrograde 2°**)** 36'04 conjunction opposition -6227 Oct 09 j 00:26 1°\(\dagger)34'55 -8°59'31 minimum elong -6220 Apr 16 j 22:24 8°¥29'12 6°46'45 min. Earth dist. -6227 Oct 10 j 13:50 1°**)** 33'04 44.65637 AU morning rise -6220 May 01 j 09:30 8°**¥**50′08 -6227 Dec 30 j 03:03 0°**)** 32′45 retrograde -6220 Jul 27 j 11:08 10°**)**€04'25 direct -6226 Mar 28 j 07:49 1°\ 46'36 -6220 Oct 16 j 00:14 9°\cdot\02'28 -6°55'57 evening set opposition max. Earth dist. -6226 Apr 08 j 22:51 2°**)** €03'03 46.55263 AU min. Earth dist. -6220 Oct 17 j 21:43 9°**₭**00'11 43.45341 AU -6219 Jan 06 j 00:39 7°**¥**59'14 direct -6226 Apr 10 j 17:41 2°\cdot\05'35 -8°28'25 -6219 Apr 03 j 16:00 9°**)** 13'41 conjunction evening set -6226 Apr 10 j 17:53 2°**₭**05'36 8°28'38 max. Earth dist. -6219 Apr 16 j 04:22 9°**)** 31'48 45.34784 AU minimum elong -6226 Apr 24 i 03:43 2°**)** €24'37 morning rise -6226 Jul 21 i 07:31 -6219 Apr 18 j 07:33 9°**)** 34'56 -6°28'37 retrograde 3°**)** 38'47 conjunction opposition -6226 Oct 10 j 06:37 2°\(\)437'31 -8°42'46 minimum elong -6219 Apr 18 i 07:43 9°\;\;34'56 6°28'47 9°**¥**56'10 min. Earth dist. -6226 Oct 11 j 20:43 2°**)** 35'37 44.49274 AU morning rise -6219 May 02 j 22:34 direct -6226 Dec 31 j 07:58 1°#35'11 retrograde -6219 Jul 28 i 18:19 11°\H10'31 -6225 Mar 29 j 11:26 2°\ 49'02 -6219 Oct 17 i 07:47 10°¥08'26 -6°37'06 evening set opposition max. Earth dist. -6225 Apr 10 j 06:21 3°**)**€05'46 46.38904 AU min. Earth dist. -6219 Oct 19 j 05:47 10°**)** 66'06 43.26663 AU -6218 Jan 07 j 11:39 direct 9°\05'00 conjunction -6225 Apr 12 j 02:06 3°\(\)\(\)08'22 -8°12'10 evening set -6218 Apr 04 j 22:07 10°¥19'35 10°**₭**37'51 45.15987 AU minimum elong -6225 Apr 12 j 02:17 3°¥08'23 8°12'23 max. Earth dist. -6218 Apr 17 j 11:32 3°**)**€27'43 morning rise -6225 Apr 25 j 16:39 4°**)**€41'50 -6225 Jul 22 j 14:51 conjunction -6218 Apr 19 j 17:15 10°¥41'09 -6°10'23 retrograde -6225 Oct 11 j 13:15 3°**)** 40′27 -8°25′44 -6218 Apr 19 j 17:25 10°**)** 41′09 6°10′33 opposition minimum elong -6225 Oct 13 j 05:01 3°**¥**38'28 44.32657 AU -6218 May 04 j 11:51 11°**)** 02'41 min. Earth dist. morning rise -6218 Jul 30 j 01:59 12°**)** 17'06 direct -6224 Jan 01 j 16:11 2°**)** 37'58 retrograde -6218 Oct 18 j 15:32 11°**光**14'51 -6°17'58 evening set -6224 Mar 29 j 15:20 3°**米**51′53 opposition max. Earth dist. -6224 Apr 10 j 14:05 4°**₭**08'53 46.22318 AU min. Earth dist. -6218 Oct 20 j 15:51 11°**米**12′23 43.07514 AU direct -6217 Jan 08 j 20:40 10°**₩**11'12 conjunction -6224 Apr 12 j 10:28 4°**₭**11'32 -7°55'37 evening set -6217 Apr 06 j 04:34 11°**X**25'55 minimum elong -6224 Apr 12 j 10:39 4°**₭**11'33 7°55'49 max. Earth dist. -6217 Apr 18 j 21:04 11°**光**44'27 44.96731 AU -6224 Apr 26 j 05:26 4°**)** 31'13 morning rise -6224 Jul 22 j 20:57 5°**)**45'19 -6217 Apr 21 j 03:17 11°**光** 47'47 -5°51'51 retrograde conjunction

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 14

•	omena or Piulo Hon		•	* *			e 14
	nical year style is used: Th	-					42 521 60 ATT
minimum elong	-6217 Apr 21 j 03:26	11°) (47'48	5*52'01	max. Earth dist.	-6210 Apr 26 j 15:20	19° X 43'05	43.53168 AU
morning rise	-6217 May 06 j 01:06	12°) €09'37					
retrograde	-6217 Jul 31 j 09:49	13° ¥ 24′07		conjunction	-6210 Apr 29 j 05:35	19°) 47′02	
opposition	-6217 Oct 19 j 23:32	12° ∺ 21'41		minimum elong	-6210 Apr 29 j 05:41	19°) 47′03	3°34'10
min. Earth dist.	-6217 Oct 22 j 00:37		42.87918 AU	morning rise	-6210 May 14 j 22:04	20° 米 10'46	
direct	-6216 Jan 10 j 05:39	11° ∺ 17'48		retrograde	-6210 Aug 08 j 11:23	21° ∺ 26′33	
evening set	-6216 Apr 06 j 11:20	12° 米 32'41		opposition	-6210 Oct 27 j 13:00	20° 米 22'43	
max. Earth dist.	-6216 Apr 19 j 04:37	12° ¥ 51′20	44.77056 AU	min. Earth dist.	-6210 Oct 29 j 21:21	20°) 19'46	41.42792 AU
				direct	-6209 Jan 17 j 16:34	19° ∺ 17'09	
conjunction	-6216 Apr 21 j 13:10	12° ¥ 54'49	-5°33'03	evening set	-6209 Apr 14 j 21:16	20° ∺ 33'57	
minimum elong	-6216 Apr 21 j 13:19	12° ¥ 54'50	5°33'13	max. Earth dist.	-6209 Apr 28 j 01:38	20°) 53′56	43.31723 AU
morning rise	-6216 May 06 j 14:20	13° ¥ 16′57					
retrograde	-6216 Jul 31 j 21:14	14° ¥ 31'33		conjunction	-6209 Apr 30 j 17:16	20° ¥ 57'59	-3°13'11
opposition	-6216 Oct 20 j 07:37	13° ¥ 28'55	-5°38'46	minimum elong	-6209 Apr 30 j 17:22	20° ¥ 58′00	3°13'16
min. Earth dist.	-6216 Oct 22 j 09:58		42.67947 AU	morning rise	-6209 May 16 j 11:48	21°) 21'58	
direct	-6215 Jan 10 j 11:45	12°) €24'47		retrograde	-6209 Aug 10 j 00:29	22°) (38'03	
evening set	-6215 Apr 07 j 18:20	13°) (39'51		opposition	-6209 Oct 28 j 22:47	21°) (34'03	-3°11'37
max. Earth dist.	-6215 Apr 20 j 14:10		44.57015 AU	min. Earth dist.	-6209 Oct 31 j 07:36		41.21116 AU
max. Lartii dist.	-0213 Apr 20 j 14.10	13 /(30 44	44.37013 AO	direct	-6208 Jan 19 j 02:45	20°\(\frac{1}{2}\)28'15	41.21110 AC
agnismation	6215 Apr. 22: 22:26	14°) €02'17	5012150		-6208 Apr 15 j 07:22	20 X 2813	
conjunction	-6215 Apr 22 j 23:26			evening set	1 3		42 00024 ATT
minimum elong	-6215 Apr 22 j 23:34	14°) €02'17	5*14'06	max. Earth dist.	-6208 Apr 28 j 11:47	22° A 05'33	43.09934 AU
morning rise	-6215 May 08 j 03:28	14°) €24'40				>	
retrograde	-6215 Aug 02 j 08:00	15°) 39′24		conjunction	-6208 May 01 j 05:11	22°) €09'45	
opposition	-6215 Oct 21 j 15:57	14°) ₹36′33		minimum elong	-6208 May 01 j 05:16	22°) €09'45	2°52'06
min. Earth dist.	-6215 Oct 23 j 19:52		42.47646 AU	morning rise	-6208 May 17 j 01:20	22°) 33′57	
direct	-6214 Jan 11 j 19:51	13° ¥ 32′10		retrograde	-6208 Aug 10 j 12:16	23°) € 50′22	
evening set	-6214 Apr 09 j 01:46	14°) (47′27		opposition	-6208 Oct 29 j 09:02	22°) 46′10	-2°49'19
max. Earth dist.	-6214 Apr 21 j 23:24	15°) €06'31	44.36688 AU	min. Earth dist.	-6208 Oct 31 j 20:00	22°) 43′03	40.99085 AU
				direct	-6207 Jan 19 j 14:00	21°) 40′08	
conjunction	-6214 Apr 24 j 09:46	15° ¥ 10′09	-4°54'34	evening set	-6207 Apr 16 j 18:01	22°) (57'46	
minimum elong	-6214 Apr 24 j 09:54	15° ₩ 10'10	4°54'43	max. Earth dist.	-6207 Apr 29 j 23:35	23° 升 18′02	42.87778 AU
morning rise	-6214 May 09 j 16:47	15° ¥ 32'49					
retrograde	-6214 Aug 03 j 18:59	16° ¥ 47'41		conjunction	-6207 May 02 j 17:31	23°) €22'17	-2°30'33
opposition	-6214 Oct 23 j 00:25	15°) 44′38	-4°58'19	minimum elong	-6207 May 02 j 17:36	23°) 22'18	
min. Earth dist.	-6214 Oct 25 j 04:23		42.27085 AU	morning rise	-6207 May 18 j 15:09	23°)(46'44	
direct	-6213 Jan 13 j 05:14	14°) 40'00	12.27003710	retrograde	-6207 Aug 11 j 22:24	25° X 03'30	
evening set	-6213 Apr 10 j 09:39	15° ¥ 55'31		opposition	-6207 Oct 30 j 19:23	23° X 59'05	-2°26'42
max. Earth dist.	-6213 Apr 23 j 08:21		44.16102 AU	min. Earth dist.	-6207 Nov 02 j 06:43		40.76670 AU
max. Earth dist.	-0213 Apr 23 J 06.21	10 /(1443	44.10102 AU		,	23 X 53 30 22° X 52'47	40.70070 AU
	(212 4 25 : 20 22	1.601/10120	402.4152	direct	-6206 Jan 21 j 02:19	24° H 10'51	
conjunction	-6213 Apr 25 j 20:23	16° ¥ 18'30		evening set	-6206 Apr 18 j 05:18		42.65222 AU
minimum elong	-6213 Apr 25 j 20:30	16°) 18'30	4°35'00	max. Earth dist.	-6206 May 01 j 09:36	24° 大 31°10	42.65222 AU
morning rise	-6213 May 11 j 06:02	16°) 41′26					
retrograde	-6213 Aug 05 j 03:23	17° ¥ 56′29		conjunction	-6206 May 04 j 06:05	24°) ₹35'37	
opposition	-6213 Oct 24 j 09:13	16° ¥ 53'13		minimum elong	-6206 May 04 j 06:09	24° ¥ 35'37	2°08'53
min. Earth dist.	-6213 Oct 26 j 15:02		42.06305 AU	morning rise	-6206 May 20 j 05:08	25° ∺ 00′18	
direct	-6212 Jan 14 j 15:05	15° ¥ 48′20		retrograde	-6206 Aug 13 j 10:45	26° 米 17′25	
evening set	-6212 Apr 10 j 17:50	17°) € 04'07		opposition	-6206 Nov 01 j 06:09	25°) 12'47	-2°03'46
max. Earth dist.	-6212 Apr 23 j 19:19	17° ∺ 23'36	43.95322 AU	min. Earth dist.	-6206 Nov 03 j 19:20	25°) €09'31	40.53870 AU
				direct	-6205 Jan 22 j 11:41	24°) €06'11	
conjunction	-6212 Apr 26 j 07:16	17° ¥ 27′22	-4°14'55	evening set	-6205 Apr 19 j 16:58	25°) €24'42	
minimum elong	-6212 Apr 26 j 07:23	17°) €27'23	4°15'03	max. Earth dist.	-6205 May 02 j 22:10	25°) (45'11	42.42276 AU
morning rise	-6212 May 11 j 19:19	17° ¥ 50'34					
retrograde	-6212 Aug 05 j 11:25	19° 米 05'49		conjunction	-6205 May 05 j 19:05	25°) 49'41	-1°46'45
opposition	-6212 Oct 24 j 18:16	18° ¥ 02′22	-4°16'36	minimum elong	-6205 May 05 j 19:09	25°) (49'42	
min. Earth dist.	-6212 Oct 27 j 00:08		41.85336 AU	morning rise	-6205 May 21 j 19:02	26°) 14'35	1 .0 .5
direct	-6211 Jan 15 j 01:47	16° ¥ 57'15	41.03330710	retrograde	-6205 Aug 14 j 23:17	27°) 32'06	
evening set	-6211 Apr 12 j 02:24	18°) 13'20		opposition	-6205 Nov 02 j 17:13	26° H 27'12	1940'31
•			42 74255 ATT				
max. Earth dist.	-6211 Apr 25 j 04:07	10 Д3230	43.74355 AU	min. Earth dist.	-6205 Nov 05 j 07:36		40.30701 AU
	(011 4 05:::00:	1001/2050	205 420	direct	-6204 Jan 23 j 21:44	25°) €20'18	
conjunction	-6211 Apr 27 j 18:06	18°) (36′51		evening set	-6204 Apr 20 j 05:15	26°) ₹39'18	40 10005 :=
minimum elong	-6211 Apr 27 j 18:13	18° ¥ 36′52	3°54'44	max. Earth dist.	-6204 May 03 j 09:28	26° ∺ 59'51	42.18998 AU
morning rise	-6211 May 13 j 08:38	19° ∺ 00′19					
retrograde	-6211 Aug 06 j 23:54	20° 米 15'49		conjunction	-6204 May 06 j 08:11	27°) €04'30	
opposition	-6211 Oct 26 j 03:31	19°) 12′11		minimum elong	-6204 May 06 j 08:14	27°) €04'30	1°24'30
min. Earth dist.	-6211 Oct 28 j 10:28	19° ∺ 09'19	41.64185 AU	morning rise	-6204 May 22 j 09:09	27°) €29'36	
direct	-6210 Jan 16 j 08:13	18° ∺ 06′50		retrograde	-6204 Aug 15 j 14:48	28°) 47′32	
evening set	-6210 Apr 13 j 11:29	19°) 23′15		opposition	-6204 Nov 03 j 04:29	27°) (42'21	-1°16'58

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 15 Attention, astronomical year style is used: The year -6204 in astronomical counting style is the year 6205 BCE in historical counting style. opposition min. Earth dist. -6204 Nov 05 j 19:19 27°**)**(38'59 40.07242 AU -6198 Nov 11 i 07:45 5°**Ƴ**30′28 1°10'49 -6203 Jan 24 j 06:45 min. Earth dist. -6198 Nov 14 j 03:48 5°Υ26'42 38.63221 AU direct 26° ¥ 35'08 -6203 Apr 21 j 17:47 27° **¥** 54'39 -6197 Feb 01 j 09:53 4°Υ21'18 direct evening set max. Earth dist. -6203 May 04 j 21:45 -6197 Apr 30 j 10:43 5°**Y**44'40 28°**¥**15'18 41.95430 AU evening set -6197 May 13 j 09:21 6°Υ05'49 40.51042 AU max. Earth dist. -6203 May 07 j 21:32 28°\\$20'03 -1°01'49 conjunction -6203 May 07 j 21:34 6°Υ11'03 1°19'41 minimum elong 28°**¥**20′03 1°01′52 conjunction -6197 May 16 j 13:19 $6^{\circ}\mathbf{\Upsilon}11'03$ -6203 May 23 j 23:01 1°19'41 morning rise 28°**)** 45'20 minimum elong -6197 May 16 j 13:17 -6197 Jun 01 j 13:11 6°**Y**37'17 $0^{\circ}\Upsilon$ -6203 Jul 31 j 00:17 morning rise 0°Y03'42 7°Υ59'04 retrograde -6203 Aug 17 j 03:54 retrograde -6197 Aug 25 j 19:48 6°**Y**51′57 -6203 Sep 03 j 06:03 30°**₹** opposition -6197 Nov 12 j 21:36 1°36'29 -6203 Nov 04 j 16:12 -6197 Nov 15 j 17:34 opposition 28°**¥**58'15 -0°53'06 min. Earth dist. 6°**Y**48'11 38.38849 AU min. Earth dist. -6203 Nov 07 j 08:53 28°**₭**54'46 39.83534 AU direct -6196 Feb 02 j 23:42 5°**Y**42'28 direct -6202 Jan 25 j 18:58 27° ¥ 50'43 evening set -6196 May 01 j 04:02 7°**Υ**06'38 evening set -6202 Apr 23 j 07:04 29°¥10'46 max. Earth dist. -6196 May 13 j 23:47 7°**Υ**27'45 40.26528 AU max. Earth dist. -6202 May 06 j 11:16 29°**₭**31'33 41.71651 AU conjunction -6196 May 17 j 05:26 7°**Υ**33′08 1°44'12 conjunction -6202 May 09 j 11:19 29°\ 36'21 -0°38'56 minimum elong -6196 May 17 j 05:23 7°**Υ**33'08 1°44'13 minimum elong -6202 May 09 j 11:20 29°**₩**36'21 0°38'58 morning rise -6196 Jun 02 j 04:00 7°Y59'29 -6202 May 24 j 09:04 $0^{\circ}\Upsilon$ retrograde -6196 Aug 26 j 11:40 9°Y21'58 morning rise -6202 May 25 j 13:13 0°Y01'49 opposition -6196 Nov 13 j 12:07 8°Y14'34 2°02'26 retrograde -6202 Aug 18 j 16:07 1°Y20'39 min. Earth dist. -6196 Nov 16 i 10:00 8°Υ10'40 38.14281 AU opposition -6202 Nov 06 i 04:01 0°Υ14'55 -0°28'55 direct -6195 Feb 03 i 14:25 7°**Y**04'45 min. Earth dist. -6202 Nov 08 j 20:35 0°**Υ**11'25 39.59652 AU evening set -6195 May 02 j 21:56 8°Y29'44 -6202 Nov 17 j 17:04 30°R**)**€ max. Earth dist. -6195 May 15 j 16:21 8°**Υ**50'55 40.01791 AU -6201 Jan 27 j 10:09 29°\ 07'02 direct -6201 Apr 06 j 05:56 $0^{\circ}\Upsilon$ -6195 May 18 j 21:57 8°**Y**56′21 conjunction 2°08'57 0°Y27'40 -6195 May 18 j 21:53 8°Y56'21 evening set -6201 Apr 24 j 21:01 minimum elong 2°08'58 -6201 May 07 j 23:28 0°**Υ**48'29 41.47710 AU -6195 Jun 03 j 18:55 9°Y22'48 max. Earth dist. morning rise -6195 Aug 28 j 02:19 10°**Y**46′02 retrograde 0° **Y**53'26 -0° 15'46 9°**Y**38'20 2°28'39 -6201 May 11 j 01:23 opposition -6195 Nov 15 j 03:03 conjunction -6201 May 11 j 01:23 -6195 Nov 18 j 01:14 9°**Ƴ**34'23 37.89467 AU 0°Υ53'26 0°15'48 min. Earth dist. minimum elong -6194 Feb 05 j 07:19 -6201 May 27 j 03:26 1°Υ19'05 8°Y28'09 morning rise direct -6201 Aug 20 j 05:13 2°Y38'25 -6194 May 04 j 16:56 9°Y54'01 retrograde evening set 1°**Y**32'24 -0°04'26 -6201 Nov 07 j 16:26 -6194 May 17 j 07:05 10°**Y**15′04 39.76792 AU opposition max. Earth dist. -6201 Nov 10 j 10:25 min. Earth dist. 1°**Y**28'48 39.35659 AU -6194 May 20 j 15:00 10°**Y**20'42 2°33'56 asc. node -6200 Jan 12 j 09:37 0°**Υ**27'31 conjunction direct -6200 Jan 28 j 22:36 0°Y24'11 minimum elong -6194 May 20 j 14:55 10°Υ20'42 2°33'59 -6200 Apr 25 j 11:17 1°Y45'25 morning rise -6194 Jun 05 j 10:12 10°**Y**47'14 evening set max. Earth dist. -6200 May 08 j 14:17 2°Υ06'25 41.23669 AU retrograde -6194 Aug 29 j 19:55 12°Υ11'15 -6194 Nov 16 j 18:20 11°Υ03'14 2°55'08 opposition -6200 May 11 j 15:44 2° Y 11'22 0° 07'46 min. Earth dist. -6194 Nov 19 j 17:50 10°**Y**59'11 37.64414 AU conjunction -6200 May 11 j 15:44 2°Y11'22 0°07'45 -6193 Feb 06 j 20:47 9°Y52'40 minimum elong direct -6200 May 11 j 09:52 2°Υ11'00 -6193 May 06 j 12:34 11°Y19'26 behind sun begin evening set -6200 May 11 j 21:35 2°Y11'45 max. Earth dist. -6193 May 19 j 00:30 11°Υ40'29 39.51538 AU behind sun end -6200 May 27 j 17:31 2° Y 37'11 morning rise -6193 May 22 j 08:40 11°\bar{46'11} 2°59'10 retrograde -6200 Aug 20 j 17:40 3°Y57'04 conjunction -6193 May 22 i 08:33 opposition -6200 Nov 08 i 05:13 2°Υ50'46 0°20'21 minimum elong 11°**Y**46'11 2°59'12 12°**Y**12'47 min. Earth dist. -6200 Nov 10 j 23:19 2°**Y**47'08 39.11582 AU morning rise -6193 Jun 07 i 01:29 direct -6199 Jan 29 j 11:47 1°Y42'14 retrograde -6193 Aug 31 j 12:16 13°**Y**37'37 -6199 Apr 27 j 02:26 3°Y04'07 -6193 Nov 18 j 10:19 12°Υ29'15 3°21'53 evening set opposition max. Earth dist. -6199 May 10 j 03:30 3°Υ25'08 40.99562 AU min. Earth dist. -6193 Nov 21 j 10:55 12°Υ25'08 37.39128 AU direct -6192 Feb 08 j 12:05 11°**Y**18′19 12°Y46'00 conjunction -6199 May 13 j 06:25 3°**Υ**30'14 0°31'27 evening set -6192 May 07 j 08:57 minimum elong -6199 May 13 j 06:24 3°Y30'13 0°31'26 max. Earth dist. -6192 May 19 j 17:06 13°**Y**06'59 39.26081 AU -6199 May 29 j 07:58 3°Y56'12 morning rise -6192 May 23 j 02:25 -6199 Aug 22 j 09:48 5°**Y**16'40 conjunction 13°Υ12'48 3°24'37 retrograde -6199 Nov 09 j 18:09 4°Υ10'06 0°45'26 -6192 May 23 j 02:18 13°Υ12'48 3°24'40 opposition minimum elong -6199 Nov 12 j 12:47 4°Υ06'25 38.87454 AU -6192 Jun 07 j 16:52 13°Y39'26 min. Earth dist. morning rise 3°**Y**01′15 -6192 Sep 01 j 08:07 15°**Y**05′07 direct -6198 Jan 30 j 22:00 retrograde 4°Υ23'51 evening set -6198 Apr 28 j 18:09 opposition -6192 Nov 19 j 02:35 13°**Υ**56'25 3°48'52 max. Earth dist. -6198 May 11 j 18:24 4°**Υ**44'57 40.75362 AU min. Earth dist. -6192 Nov 22 j 03:21 13°**Y**52'16 37.13677 AU direct -6191 Feb 09 j 03:19 12°\dagger45'03 conjunction -6198 May 14 j 21:44 4°Υ50'06 0°55'26 evening set -6191 May 09 j 06:08 14°**Y**13'45 minimum elong -6198 May 14 j 21:42 4°Υ50'06 0°55'26 max. Earth dist. -6191 May 21 j 10:32 14°**Y**34'38 39.00455 AU -6198 May 30 j 22:28 5°Υ16'13 morning rise -6198 Aug 24 j 02:30 6°**Y**37'19 -6191 May 24 j 20:51 14°**Υ**'40'35 3°50'16 retrograde conjunction

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 16

2			•	//	r 6192 BCE in historical of	, ,	e 10
		14° ° 40'34					37.21301 AU
minimum elong	-6191 May 24 j 20:43		3*50*19	max. Earth dist.	-6184 Jun 01 j 07:02	25 7 26 01	37.21301 AU
morning rise	-6191 Jun 09 j 08:18	15° Υ 07'13					
retrograde	-6191 Sep 03 j 03:57	16° Ƴ 33'49		conjunction	-6184 Jun 04 j 19:48	25° Y 32'31	6°53'55
opposition	-6191 Nov 20 j 19:21	15° Y ′24'44		minimum elong	-6184 Jun 04 j 19:32	25° Y 32'30	6°54'04
min. Earth dist.	-6191 Nov 23 j 21:48	15° Y 20′28	36.88110 AU	morning rise	-6184 Jun 18 j 23:57	25° Y 58'31	
direct	-6190 Feb 10 j 19:20	14° Ƴ 12'58		retrograde	-6184 Sep 14 j 07:04	27° Ƴ 33'14	
evening set	-6190 May 11 j 04:12	15° Ƴ 42'43		opposition	-6184 Dec 01 j 09:14	26° Y 21'39	7°31'11
max. Earth dist.	-6190 May 23 j 05:29	16° Ƴ 03'33	38.74747 AU	min. Earth dist.	-6184 Dec 04 j 14:14	26° Ƴ 17′03	35.10216 AU
				direct	-6183 Feb 21 j 03:05	25° Ƴ 07'04	
conjunction	-6190 May 26 j 15:43	16° Ƴ 09'32	4°16'06	evening set	-6183 May 23 j 17:31	26° Y 46′00	
minimum elong	-6190 May 26 j 15:34	16° Y ′09'31	4°16'11	max. Earth dist.	-6183 Jun 03 j 06:24	27° ℃ 05'26	36.95863 AU
morning rise	-6190 Jun 10 j 23:58	16° Y 36'10		man. Dartin diot.	0100 0411 00 3 00.2	27 , 00 20	30.95003110
retrograde	-6190 Sep 04 j 22:19	18° Υ 03'43		conjunction	-6183 Jun 06 j 18:44	27° Ƴ 11'59	7°20'30
-		16° Υ 54'17	4°43'30	-	-	27°Υ11'58	7°20'39
opposition	-6190 Nov 22 j 12:40			minimum elong	-6183 Jun 06 j 18:28		7-20-39
min. Earth dist.	-6190 Nov 25 j 14:37		36.62496 AU	morning rise	-6183 Jun 20 j 16:36	27° Y 37'45	
direct	-6189 Feb 12 j 14:14	15° Y 42'05		retrograde	-6183 Sep 16 j 06:16	29° Y 13′52	
evening set	-6189 May 13 j 03:08	17° Y 12'57		opposition	-6183 Dec 03 j 06:50	28° Y 01′56	
max. Earth dist.	-6189 May 24 j 23:18	17° Ƴ 33'36	38.49004 AU	min. Earth dist.	-6183 Dec 06 j 11:29		34.84967 AU
				direct	-6182 Feb 23 j 02:18	26° Ƴ 46'55	
conjunction	-6189 May 28 j 10:57	17° Ƴ 39'44	4°42'06	evening set	-6182 May 25 j 23:58	28° Ƴ 27'25	
minimum elong	-6189 May 28 j 10:47	17° Ƴ 39'44	4°42'11	max. Earth dist.	-6182 Jun 05 j 04:18	28° Y 46'24	36.70382 AU
morning rise	-6189 Jun 12 j 15:35	18° Ƴ 06'20			,		
retrograde	-6189 Sep 06 j 17:26	19° Y 34'55		conjunction	-6182 Jun 08 j 18:20	28° Y 53'08	7°47'06
opposition	-6189 Nov 24 j 06:34	18° Y 25'06	5°11'06	minimum elong	-6182 Jun 08 j 18:02	28°Y53'07	7°47'16
min. Earth dist.	-6189 Nov 27 j 09:38		36.36910 AU	morning rise	-6182 Jun 22 j 09:32	29° Υ 18'38	7 47 10
	,		30.30910 AU	morning rise	3		
direct	-6188 Feb 14 j 07:44	17°Υ12'30			-6182 Jul 16 j 03:50	0°8	
evening set	-6188 May 14 j 02:52	18° Y 44'32		retrograde	-6182 Sep 18 j 07:06	0° 8 56'12	
max. Earth dist.	-6188 May 25 j 20:02	19°'Y'05'08	38.23306 AU		-6182 Nov 24 j 01:03	30° ₹ Υ	
				opposition	-6182 Dec 05 j 05:19	29° Y 43'53	8°27'46
conjunction	-6188 May 29 j 06:49	19° Ƴ 11'16	5°08'15	min. Earth dist.	-6182 Dec 08 j 11:03		34.59698 AU
minimum elong	-6188 May 29 j 06:37	19° Ƴ 11'15	5°08'21	direct	-6181 Feb 25 j 00:10	28° Y 28'25	
morning rise	-6188 Jun 13 j 07:16	19° Ƴ 37'48			-6181 May 22 j 13:52	0°B	
retrograde	-6188 Sep 07 j 11:34	21° Y 07'28		evening set	-6181 May 28 j 07:28	0° 8 10'34	
opposition	-6188 Nov 25 j 01:06	19° Ƴ 57'18	5°38'53	max. Earth dist.	-6181 Jun 07 j 05:16	0° 8 29'12	36.44867 AU
min. Earth dist.	-6188 Nov 28 j 04:01		36.11398 AU	man. Dartin diot.	01010411 07 9 00:10	0 023 12	30.11007110
direct	-6187 Feb 15 j 02:05	18° Υ 44'18	30.11370710	conjunction	-6181 Jun 10 j 18:36	0° 8 35'58	8°13'42
	-6187 May 16 j 03:39	20°Υ17'33		minimum elong	-6181 Jun 10 j 18:18	0° \(\begin{array}{c} 0.535.56 \\ 0°\(\beta\)35'56 \end{array}	8°13'52
evening set			27.07701 ATT	U		. •	6 13 32
max. Earth dist.	-6187 May 27 j 15:07	20 4 3 / 56	37.97701 AU	morning rise	-6181 Jun 24 j 02:21	1° 8 01'09	
				retrograde	-6181 Sep 20 j 06:21	2° 8 40'15	
conjunction	-6187 May 31 j 03:01	20° Y 44'13	5°34'32	opposition	-6181 Dec 07 j 04:35	1° 8 27'30	
minimum elong	-6187 May 31 j 02:49	20° Y 44'12	5°34'38	min. Earth dist.	-6181 Dec 10 j 10:32		34.34412 AU
morning rise	-6187 Jun 14 j 23:13	21° Y 10'40		direct	-6180 Feb 26 j 23:16	0° 8 11'35	
retrograde	-6187 Sep 09 j 09:18	22° Y 41'29		evening set	-6180 May 29 j 16:19	1° 8 55'25	
opposition	-6187 Nov 26 j 20:06	21° Y 30'58	6°06'48	max. Earth dist.	-6180 Jun 08 j 05:01	2° 8 13'31	36.19365 AU
min. Earth dist.	-6187 Nov 29 j 23:09	21° Y 26'33	35.86000 AU		,		
direct	-6186 Feb 16 j 18:20	20° Y 17'34		conjunction	-6180 Jun 11 j 19:24	2° 8 20'26	8°40'14
evening set	-6186 May 18 j 05:25	21° Y ′52'08		minimum elong	-6180 Jun 11 j 19:04	2° 8 20'24	8°40'25
max. Earth dist.	-6186 May 29 j 12:22		37.72176 AU	morning rise	-6180 Jun 24 j 19:30	2° 8 45'15	0 4023
muz. Dartii uist.	0100 iviay 29 j 12.22	22 1444 1444	31.121/0 AU	retrograde	-6180 Sep 21 j 07:28	4° 8 25'57	
	(10(1 00:000	2220010141	6000155	-			002420
conjunction	-6186 Jun 02 j 00:06	22° Υ 18'41	6°00'55	opposition	-6180 Dec 08 j 04:20	3° 8 12'46	
minimum elong	-6186 Jun 01 j 23:52	22° Y 18'40	6°01'02	min. Earth dist.	-6180 Dec 11 j 10:19	_	34.09188 AU
morning rise	-6186 Jun 16 j 15:16	22° Y 45'01		direct	-6179 Feb 27 j 21:06	1° 8 56'21	
retrograde	-6186 Sep 11 j 06:34	24° Ƴ 17'04		evening set	-6179 Jun 01 j 02:08	3° 8 41'57	
opposition	-6186 Nov 28 j 15:47	23° Y 06'12	6°34'50	max. Earth dist.	-6179 Jun 10 j 06:48	3° 8 59'36	35.93921 AU
min. Earth dist.	-6186 Dec 01 j 19:44	23° Y 01'43	35.60686 AU				
direct	-6185 Feb 18 j 12:19	21° Y 52'25		conjunction	-6179 Jun 13 j 20:57	4° 8 06'33	9°06'42
evening set	-6185 May 20 j 08:27	23° Y ′28′22		minimum elong	-6179 Jun 13 j 20:37	4° 8 06'32	9°06'53
max. Earth dist.	-6185 May 31 j 09:46		37.46732 AU	morning rise	-6179 Jun 26 j 12:30	4° 8 30'57	
				retrograde	-6179 Sep 23 j 08:34	6° 8 13'19	
conjunction	-6185 Jun 03 j 21:40	23° Y ′54'46	6°27'23	opposition	-6179 Dec 10 j 05:00	4° 8 59'41	9°52'30
·	-				-		
minimum elong	-6185 Jun 03 j 21:26	23°Y54'45	6°27'31	min. Earth dist.	-6179 Dec 13 j 11:49		33.84061 AU
morning rise	-6185 Jun 18 j 07:38	24° Y 20′57		direct	-6178 Mar 01 j 19:45	3° 8 42'46	
retrograde	-6185 Sep 13 j 07:13	25° Y 54'17		evening set	-6178 Jun 03 j 13:30	5° 8 30'13	
opposition	-6185 Nov 30 j 12:07	24° Y 43′05	7°02'58	max. Earth dist.	-6178 Jun 12 j 09:03	5° 8 47'19	35.68619 AU
min. Earth dist.	-6185 Dec 03 j 15:34		35.35443 AU				
direct	-6184 Feb 20 j 07:34	23° Y 28'54		conjunction	-6178 Jun 15 j 23:02	5° 8 54'19	9°33'01
evening set	-6184 May 21 j 12:18	25° Y ′06′19		minimum elong	-6178 Jun 15 j 22:41	5° 8 54'18	9°33'13
				-			

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6178 in astronomical counting style is the year 6179 BCE in historical counting style. 6°818'14 opposition -6178 Jun 28 i 05:40 -6172 Dec 23 i 07:25 18°**8**19'01 13°02'11 morning rise -6178 Sep 25 j 12:17 8°802'21 min. Earth dist. -6172 Dec 26 j 11:06 18°**8**14'07 32.17050 AU retrograde -6178 Dec 12 j 06:12 6°848'15 10°20'31 -6171 Mar 14 j 13:39 16°**8**58'54 direct opposition -6178 Dec 15 j 11:59 6°843'25 33.59127 AU -6171 Jun 20 j 12:39 19°**8**02'10 min. Earth dist. evening set 19°**8**13'38 34.00796 AU -6177 Mar 03 j 19:46 5°**8**30'50 -6171 Jun 26 j 00:23 direct max. Earth dist. 7°**8**20'13 evening set -6177 Jun 06 j 02:00 -6177 Jun 14 j 11:44 -6171 Jun 29 j 09:46 19°**8**20'46 max. Earth dist. 7°**8**36'42 35.43526 AU conjunction 12°28'52 12°29'09 -6171 Jun 29 j 09:21 19°**8**20'44 minimum elong -6171 Jul 08 j 04:54 conjunction -6177 Jun 18 j 01:53 7°**8**43'47 9°59'09 morning rise 19°**8**39'12 minimum elong -6177 Jun 18 j 01:32 7°**8**43'45 9°59'22 retrograde -6171 Oct 09 j 08:04 21°**8**38'29 morning rise -6177 Jun 29 j 22:50 8°**8**07'09 opposition -6171 Dec 25 j 14:41 20°**8**21'29 13°27'30 -6177 Sep 27 j 16:30 9°**8**53'06 -6171 Dec 28 j 17:00 20°816'39 31.94743 AU retrograde min. Earth dist. -6177 Dec 14 j 08:27 8°**8**38'33 -6170 Mar 16 j 19:18 19°800'57 opposition 10°48'20 direct min. Earth dist. -6177 Dec 17 j 14:57 8°**8**33'39 33.34468 AU evening set -6170 Jun 23 j 12:37 21°806'57 direct -6176 Mar 04 j 20:43 7°**8**20'39 max. Earth dist. -6170 Jun 28 j 09:05 21°**8**17'12 33.78334 AU evening set -6176 Jun 07 j 15:48 9°812'03 max. Earth dist. -6176 Jun 15 j 16:36 9°**8**27'58 35.18749 AU conjunction -6170 Jul 01 j 18:00 21°**8**24'21 12°52'08 minimum elong -6170 Jul 01 j 17:33 21°**8**24'19 12°52'25 conjunction -6176 Jun 19 j 05:12 9°**8**35'00 10°25'02 morning rise -6170 Jul 09 j 21:23 21°**8**41'36 minimum elong -6176 Jun 19 j 04:49 9°**8**34'58 10°25'16 retrograde -6170 Oct 11 j 17:46 23°**8**43'32 morning rise -6176 Jun 30 j 15:46 9°857'45 opposition -6170 Dec 27 j 23:01 22°**8**26'07 13°52'12 retrograde -6176 Sep 28 i 21:44 11°**8**45'38 min. Earth dist. -6170 Dec 31 i 01:45 22°**8**21'15 31.72784 AU opposition -6176 Dec 15 j 11:21 10°830'38 11°15'53 direct -6169 Mar 19 i 01:35 21°**8**05'10 min. Earth dist. -6176 Dec 18 j 16:28 10°**8**25'47 33.10158 AU evening set -6169 Jun 26 i 14:59 23°**8**14'04 direct -6175 Mar 07 j 01:02 9°**8**12'15 max. Earth dist. -6169 Jun 30 j 19:30 23°823'00 33.56244 AU -6175 Jun 10 j 07:08 11°**8**05'47 evening set -6175 Jun 17 j 20:19 11°**8**20'55 34.94340 AU -6169 Jul 04 j 02:58 23°**8**30'06 13°14'46 max. Earth dist. conjunction -6169 Jul 04 j 02:33 23°**8**30'04 13°15'04 minimum elong -6175 Jun 21 j 09:22 11°**8**28'03 10°50'38 -6169 Jul 11 j 13:14 23°**8**46'00 conjunction morning rise -6175 Jun 21 j 08:59 -6169 Oct 14 j 05:02 25°850'43 11°**8**28'01 minimum elong 10°50'52 retrograde -6175 Jul 02 j 09:01 11°**8**50'07 -6169 Dec 30 j 08:14 24°\(\delta\)32'54 14°16'13 morning rise opposition 13°**8**40'03 -6175 Oct 01 j 04:00 -6168 Jan 02 j 09:13 24°**8**28'06 31.51199 AU min. Earth dist. retrograde 12°**8**24'37 11°43'05 -6175 Dec 17 j 14:56 direct -6168 Mar 20 j 10:36 23°**8**11'31 opposition -6175 Dec 20 j 20:10 12°**8**19'44 32.86260 AU -6168 Jun 28 j 19:29 25°**8**23'27 min. Earth dist. evening set -6174 Mar 09 j 03:12 11°**8**05'47 -6168 Jul 02 j 05:15 25°**8**30'48 33.34538 AU direct max. Earth dist. -6174 Jun 13 j 00:01 13°**8**01'34 evening set -6174 Jun 20 j 03:09 13°**8**16'00 34.70347 AU -6168 Jul 05 j 12:35 25°**8**37'57 13°36'41 max. Earth dist. conjunction minimum elong -6168 Jul 05 j 12:09 25°**8**37'54 13°36'59 conjunction -6174 Jun 23 j 14:25 13°**8**23'04 11°15'52 morning rise -6168 Jul 12 j 04:08 25°**8**52'20 minimum elong -6174 Jun 23 j 14:00 13°**8**23'02 11°16'05 retrograde -6168 Oct 15 j 16:49 28°**8**00'01 -6174 Jul 04 j 02:07 13°**8**44'22 -6168 Dec 31 j 18:20 26°**8**41'46 14°39'27 morning rise opposition -6174 Aug 15 j 12:40 15°8 min. Earth dist. -6167 Jan 03 j 19:26 26°836'56 31.30030 AU -6174 Oct 03 j 08:28 15°**8**36'27 -6167 Mar 22 j 18:23 25°**8**19'56 retrograde direct -6174 Nov 22 j 19:02 15°R₩ -6167 Jul 02 j 03:21 27°**8**35'09 evening set -6174 Dec 19 j 19:35 14°**8**20'37 12°09'55 max. Earth dist. -6167 Jul 04 j 18:01 27°840'50 33.13280 AU opposition -6174 Dec 22 i 23:55 min. Earth dist. 14°**8**15'45 32.62777 AU -6173 Mar 11 i 07:27 -6167 Jul 07 i 23:09 direct 13°**8**01'21 conjunction 27°**8**47'51 13°57'50 14°**8**59'31 -6167 Jul 07 i 22:45 evening set -6173 Jun 15 j 18:28 minimum elong 27°**8**47'49 13°58'08 28°800'28 -6173 Jun 16 j 00:16 15°8 morning rise -6167 Jul 13 i 17:34 max. Earth dist. -6173 Jun 22 j 08:39 15°**8**13'00 34.46775 AU -6167 Sep 22 j 04:37 $0^{\circ}\Pi$ -6167 Oct 18 j 05:18 0°**Ⅱ**11'19 retrograde -6173 Jun 25 j 19:58 15°**8**20'09 11°40'41 -6167 Nov 13 j 15:29 30°R₩ conjunction minimum elong -6173 Jun 25 j 19:34 15°**8**20'07 11°40'56 -6166 Jan 03 j 05:11 28°**8**52'39 15°01'49 opposition -6173 Jul 05 j 19:12 15°**8**40'36 -6166 Jan 06 j 04:44 morning rise min. Earth dist. 28°847'54 31.09324 AU retrograde -6173 Oct 05 j 15:48 17°**8**34'57 direct -6166 Mar 25 j 06:30 27°830'23 -6173 Dec 22 j 01:02 opposition 16°818'44 12°36'18 evening set -6166 Jul 05 j 15:05 29°849'11 min. Earth dist. -6173 Dec 25 j 04:37 16°**8**13'53 32.39722 AU max. Earth dist. -6166 Jul 07 j 05:26 29°**8**52'42 32.92534 AU -6172 Mar 04 j 08:00 15°**₹**8 -6172 Mar 12 j 10:21 14°**8**59'02 -6166 Jul 10 j 10:21 29°**8**59'46 14°18'06 direct conjunction 15°8 -6166 Jul 10 j 09:55 29°**8**59'44 14°18'25 -6172 Mar 20 j 10:46 minimum elong 16°**8**59'41 -6166 Jul 10 j 12:51 $0^{\circ}\Pi$ evening set -6172 Jun 17 j 14:35 -6166 Jul 15 j 04:26 max. Earth dist. -6172 Jun 23 j 16:41 17°**8**12'16 34.23595 AU morning rise 0°**Ⅲ**10′15 retrograde -6166 Oct 20 j 19:16 2°**Ⅲ**24'38 conjunction -6172 Jun 27 j 02:33 17°**8**19'22 12°05'02 opposition -6165 Jan 05 j 17:02 1°**Ⅱ**05'31 15°23'13 minimum elong -6172 Jun 27 j 02:07 17°**8**19'20 12°05'17 min. Earth dist. -6165 Jan 08 j 15:36 1°**I**00'48 30.89179 AU -6172 Jul 06 j 12:09 17°**8**38'52 -6165 Feb 21 j 20:32 30°R₩ morning rise -6172 Oct 06 j 22:37 19°**8**35'37 direct -6165 Mar 27 j 16:58 29°842'49 retrograde

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 18

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Attention, astronom	nical year style is used: Th	-	n astronomical co				20.55640.444
. ,	-6165 Apr 29 j 19:20	0°П		min. Earth dist.	-6157 Jan 27 j 06:10		29.55649 AU
evening set	-6165 Jul 09 j 09:27	2° Ⅱ 05'46	22 72207 444	direct	-6157 Apr 15 j 09:59	18° Ⅱ 33'00	21 40254 444
max. Earth dist.	-6165 Jul 09 j 20:05	2°Щ06'45	32.72387 AU	max. Earth dist.	-6157 Jul 29 j 13:54	21°Щ08'17	31.40254 AU
agniumation	6165 Jul 12: 22:14	20Π12120	1.492712.4	agnismation	6157 Jul 21 : 22:10	21° Ⅱ 13'51	16926129
conjunction minimum elong	-6165 Jul 12 j 22:14 -6165 Jul 12 j 21:50	2°П13'38 2°П13'36	14°37'24 14°37'44	conjunction minimum elong	-6157 Jul 31 j 22:18 -6157 Jul 31 j 22:06	21° I I 13'51 21° I I 13'50	16°26'38 16°27'01
morning rise	-6165 Jul 16 j 10:02	2° П 21'24	14 3/44	retrograde	-6157 Nov 11 j 22:38	23° I I50'08	10 2/01
retrograde	-6165 Oct 23 j 06:55	4° ∏ 39'52		opposition	-6156 Jan 27 j 19:24		17°36'37
opposition	-6164 Jan 08 j 05:54	3° Ⅱ 20′21	150/3133	min. Earth dist.	-6156 Jan 30 j 00:00		29.42633 AU
min. Earth dist.	-6164 Jan 11 j 03:00		30.69664 AU	direct	-6156 Apr 17 j 03:30	21° I I02'37	27.42033 AO
direct	-6164 Mar 29 j 05:09	1° I I57'13	30.0700 4 AC	max. Earth dist.	-6156 Jul 31 j 11:29		31.27513 AU
max. Earth dist.	-6164 Jul 11 j 09:41		32.52942 AU	max. Lartii dist.	-0130 Jul 31 j 11.27	23 113707	31.27313 AO
evening set	-6164 Jul 12 j 22:19	4° Ⅱ 26'01	32.32)42 110	conjunction	-6156 Aug 02 j 16:19	23° ∏ 44′25	16°33'34
e venning see	0101341 12 3 22.19	. 12001		minimum elong	-6156 Aug 02 j 16:07	23° I I44'24	
conjunction	-6164 Jul 14 j 10:43	4° Ⅱ 29'26	14°55'39	retrograde	-6156 Nov 13 j 18:05	26° I [21'40	10 33 37
minimum elong	-6164 Jul 14 j 10:19	4° Ⅱ 29'23	14°55'59	opposition	-6155 Jan 29 j 15:39		17°43'24
morning rise	-6164 Jul 15 j 22:17	4° Ⅱ 32'45	14 33 37	min. Earth dist.	-6155 Jan 31 j 17:46		29.30417 AU
retrograde	-6164 Oct 24 j 21:33	6° Ⅱ 57'01		direct	-6155 Apr 19 j 23:30	23° II 33'42	2).3041/ AU
opposition	-6163 Jan 09 j 19:22	5° П 37'05	16002143	max. Earth dist.	-6155 Aug 03 j 07:24		31.15625 AU
min. Earth dist.	-6163 Jan 12 j 14:17		30.50892 AU	max. Earth dist.	-0155 Aug 05 j 07.24	20 11113	31.13023 AU
direct	-6163 Mar 31 j 16:43	4° Ⅱ 13'34	30.30892 AU	conjunction	-6155 Aug 05 j 10:40	26° Ⅱ 16'21	16°38'48
max. Earth dist.	-6163 Jul 14 j 01:51		32.34272 AU	minimum elong	-6155 Aug 05 j 10:32	26° I 16'20	16°39'11
max. Earm dist.	-0103 Jul 14 J 01.31	0 Д4031	32.34272 AU	· ·	-6155 Nov 16 j 16:07	28°II54'30	10 39 11
conjunction	6162 Jul 17:00:06	6° Ⅱ 47'09	15°12'44	retrograde	•	28 II 34 30 27° II 31'53	1794920
	-6163 Jul 17 j 00:06			opposition	-6154 Feb 01 j 12:34		29.19050 AU
minimum elong	-6163 Jul 16 j 23:45	6° Ⅱ 47'07	15°13'05	min. Earth dist.	-6154 Feb 03 j 11:59		29.19050 AU
retrograde	-6163 Oct 27 j 11:42	9° Ⅱ 16'05	1.602012.7	direct	-6154 Apr 22 j 19:29	26° I I06'06	21.04/20.411
opposition	-6162 Jan 12 j 10:00	7° Ⅱ 55'46	16°20'37	max. Earth dist.	-6154 Aug 06 j 06:06	28°Щ44'43	31.04628 AU
min. Earth dist.	-6162 Jan 15 j 03:45		30.32911 AU		(154 4 00:05 20	200T 40120	1.60.4011.6
direct	-6162 Apr 03 j 04:22	6° Ⅱ 31'53	22 16156 177	conjunction	-6154 Aug 08 j 05:29	28° Ⅱ 49'29	16°42'16
max. Earth dist.	-6162 Jul 16 j 17:48	9°Щ00'18	32.16456 AU	minimum elong	-6154 Aug 08 j 05:21	28° Ⅱ 49'28	16°42'40
	(1(0 X 1 10 : 14 00	00 T 06140	1.500.010.5		-6154 Sep 07 j 10:26	0°©	
conjunction	-6162 Jul 19 j 14:02	9° Ⅱ 06'48	15°28'35	retrograde	-6154 Nov 19 j 11:19	1°528'26	15051100
minimum elong	-6162 Jul 19 j 13:40	9° Ⅱ 06'46	15°28'56	opposition	-6153 Feb 04 j 10:13	0°505'35	
retrograde	-6162 Oct 30 j 03:16	11° Ⅱ 37'04	4 < 0.0 = 10.0	min. Earth dist.	-6153 Feb 06 j 07:25		29.08565 AU
opposition	-6161 Jan 15 j 01:20	10° Ⅱ 16'25			-6153 Feb 07 j 18:10	30°RⅡ	
min. Earth dist.	-6161 Jan 17 j 16:01		30.15782 AU	direct	-6153 Apr 25 j 16:24	28° Ⅱ 39'39	
direct	-6161 Apr 05 j 18:28	8° ∏ 52'12			-6153 Jul 05 j 18:03	0ං ම	
max. Earth dist.	-6161 Jul 19 j 10:56	11° Ⅲ 22'06	31.99507 AU	max. Earth dist.	-6153 Aug 09 j 03:28	1° © 19'05	30.94598 AU
		🗕					
conjunction	-6161 Jul 22 j 04:50	11° Ⅲ 28′26	15°43'07	conjunction	-6153 Aug 11 j 00:29	1° 5 23'38	16°43'55
minimum elong	-6161 Jul 22 j 04:31	11° Ⅱ 28′25	15°43'28	minimum elong	-6153 Aug 11 j 00:26	1° 5 23'38	16°44'18
retrograde	-6161 Nov 01 j 19:01	14° Ⅱ 00'01					
opposition				retrograde	-6153 Nov 22 j 08:55	4° 5 03'18	
min. Earth dist.	-6160 Jan 17 j 17:45	12° Ⅲ 39′01	16°52'13	opposition	-6152 Feb 07 j 08:10	2°5940'14	17°52'20
iiiii. Lartii dist.	-6160 Jan 20 j 07:19	12° Ⅲ 39'01 12° Ⅲ 34'48	16°52'13 29.99513 AU	opposition min. Earth dist.	-6152 Feb 07 j 08:10 -6152 Feb 09 j 01:41	2°\$40'14 2°\$37'19	17°52'20 28.99058 AU
direct	-6160 Jan 20 j 07:19 -6160 Apr 07 j 07:44	12° Д 39'01 12° Д 34'48 11° Д 14'32	29.99513 AU	opposition min. Earth dist. direct	-6152 Feb 07 j 08:10 -6152 Feb 09 j 01:41 -6152 Apr 27 j 13:22	2°\$40'14 2°\$37'19 1°\$14'09	28.99058 AU
	-6160 Jan 20 j 07:19	12° Д 39'01 12° Д 34'48 11° Д 14'32		opposition min. Earth dist.	-6152 Feb 07 j 08:10 -6152 Feb 09 j 01:41	2°\$40'14 2°\$37'19 1°\$14'09	
direct max. Earth dist.	-6160 Jan 20 j 07:19 -6160 Apr 07 j 07:44 -6160 Jul 21 j 05:04	12°Д39'01 12°Д34'48 11°Д14'32 13°Д45'55	29.99513 AU 31.83444 AU	opposition min. Earth dist. direct max. Earth dist.	-6152 Feb 07 j 08:10 -6152 Feb 09 j 01:41 -6152 Apr 27 j 13:22 -6152 Aug 11 j 02:45	2°\$40'14 2°\$37'19 1°\$14'09 3°\$54'30	28.99058 AU 30.85597 AU
direct max. Earth dist. conjunction	-6160 Jan 20 j 07:19 -6160 Apr 07 j 07:44 -6160 Jul 21 j 05:04 -6160 Jul 23 j 20:08	12°Д39'01 12°Д34'48 11°Д14'32 13°Д45'55	29.99513 AU 31.83444 AU 15°56'14	opposition min. Earth dist. direct max. Earth dist. conjunction	-6152 Feb 07 j 08:10 -6152 Feb 09 j 01:41 -6152 Apr 27 j 13:22 -6152 Aug 11 j 02:45 -6152 Aug 12 j 19:47	2°\$40'14 2°\$37'19 1°\$14'09 3°\$54'30	28.99058 AU 30.85597 AU 16°43'41
direct max. Earth dist. conjunction minimum elong	-6160 Jan 20 j 07:19 -6160 Apr 07 j 07:44 -6160 Jul 21 j 05:04 -6160 Jul 23 j 20:08 -6160 Jul 23 j 19:48	12°Д39'01 12°Д34'48 11°Д14'32 13°Д45'55 13°Д52'01 13°Д52'00	29.99513 AU 31.83444 AU	opposition min. Earth dist. direct max. Earth dist. conjunction minimum elong	-6152 Feb 07 j 08:10 -6152 Feb 09 j 01:41 -6152 Apr 27 j 13:22 -6152 Aug 11 j 02:45 -6152 Aug 12 j 19:47 -6152 Aug 12 j 19:44	2°\$40'14 2°\$37'19 1°\$14'09 3°\$54'30 3°\$58'39 3°\$58'39	28.99058 AU 30.85597 AU
direct max. Earth dist. conjunction minimum elong retrograde	-6160 Jan 20 j 07:19 -6160 Apr 07 j 07:44 -6160 Jul 21 j 05:04 -6160 Jul 23 j 20:08 -6160 Jul 23 j 19:48 -6160 Nov 03 j 12:52	12° П 39'01 12° П 34'48 11° П 14'32 13° П 45'55 13° П 52'01 13° П 52'00 16° П 24'51	29.99513 AU 31.83444 AU 15°56'14 15°56'36	opposition min. Earth dist. direct max. Earth dist. conjunction minimum elong retrograde	-6152 Feb 07 j 08:10 -6152 Feb 09 j 01:41 -6152 Apr 27 j 13:22 -6152 Aug 11 j 02:45 -6152 Aug 12 j 19:47 -6152 Aug 12 j 19:44 -6152 Nov 24 j 05:05	2°\$40'14 2°\$37'19 1°\$14'09 3°\$54'30 3°\$58'39 3°\$58'39 6°\$38'56	28.99058 AU 30.85597 AU 16°43'41 16°44'05
direct max. Earth dist. conjunction minimum elong retrograde opposition	-6160 Jan 20 j 07:19 -6160 Apr 07 j 07:44 -6160 Jul 21 j 05:04 -6160 Jul 23 j 20:08 -6160 Jul 23 j 19:48 -6160 Nov 03 j 12:52 -6159 Jan 19 j 10:51	12° Д39'01 12° Д34'48 11° Д14'32 13° Д45'55 13° Д52'01 13° Д52'00 16° Д24'51 15° Д03'34	29.99513 AU 31.83444 AU 15°56'14 15°56'36 17°05'47	opposition min. Earth dist. direct max. Earth dist. conjunction minimum elong retrograde opposition	-6152 Feb 07 j 08:10 -6152 Feb 09 j 01:41 -6152 Apr 27 j 13:22 -6152 Aug 11 j 02:45 -6152 Aug 12 j 19:47 -6152 Aug 12 j 19:44 -6152 Nov 24 j 05:05 -6151 Feb 09 j 06:41	2°\$40'14 2°\$37'19 1°\$14'09 3°\$54'30 3°\$58'39 3°\$58'39 6°\$38'56 5°\$15'40	28.99058 AU 30.85597 AU 16°43'41 16°44'05 17°51'17
direct max. Earth dist. conjunction minimum elong retrograde	-6160 Jan 20 j 07:19 -6160 Apr 07 j 07:44 -6160 Jul 21 j 05:04 -6160 Jul 23 j 20:08 -6160 Jul 23 j 19:48 -6160 Nov 03 j 12:52 -6159 Jan 19 j 10:51 -6159 Jan 21 j 21:15	12° ДЗ9'01 12° ДЗ4'48 11° Д14'32 13° Д45'55 13° Д52'01 13° Д52'00 16° Д24'51 15° Д03'34 14° Д59'33	29.99513 AU 31.83444 AU 15°56'14 15°56'36	opposition min. Earth dist. direct max. Earth dist. conjunction minimum elong retrograde	-6152 Feb 07 j 08:10 -6152 Feb 09 j 01:41 -6152 Apr 27 j 13:22 -6152 Aug 11 j 02:45 -6152 Aug 12 j 19:47 -6152 Aug 12 j 19:44 -6152 Nov 24 j 05:05 -6151 Feb 09 j 06:41 -6151 Feb 10 j 21:55	2°\$40'14 2°\$37'19 1°\$14'09 3°\$54'30 3°\$58'39 3°\$58'39 6°\$38'56 5°\$15'40 5°\$12'55	28.99058 AU 30.85597 AU 16°43'41 16°44'05
direct max. Earth dist. conjunction minimum elong retrograde opposition	-6160 Jan 20 j 07:19 -6160 Apr 07 j 07:44 -6160 Jul 21 j 05:04 -6160 Jul 23 j 20:08 -6160 Jul 23 j 19:48 -6160 Nov 03 j 12:52 -6159 Jan 19 j 10:51	12° П 39'01 12° П 34'48 11° П 14'32 13° П 45'55 13° П 52'01 13° П 52'00 16° П 24'51 15° П 03'34 14° П 59'33 13° П 38'50	29.99513 AU 31.83444 AU 15°56'14 15°56'36 17°05'47 29.84082 AU	opposition min. Earth dist. direct max. Earth dist. conjunction minimum elong retrograde opposition	-6152 Feb 07 j 08:10 -6152 Feb 09 j 01:41 -6152 Apr 27 j 13:22 -6152 Aug 11 j 02:45 -6152 Aug 12 j 19:47 -6152 Aug 12 j 19:44 -6152 Nov 24 j 05:05 -6151 Feb 09 j 06:41 -6151 Feb 10 j 21:55 -6151 Apr 30 j 10:02	2°\$40'14 2°\$37'19 1°\$14'09 3°\$54'30 3°\$58'39 3°\$58'39 6°\$38'56 5°\$15'40	28.99058 AU 30.85597 AU 16°43'41 16°44'05 17°51'17
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direct max. Earth dist. conjunction minimum elong retrograde opposition min. Earth dist. direct max. Earth dist. conjunction minimum elong retrograde opposition min. Earth dist. direct the conjunction minimum elong retrograde opposition min. Earth dist. direct max. Earth dist.	-6160 Jan 20 j 07:19 -6160 Apr 07 j 07:44 -6160 Jul 21 j 05:04 -6160 Jul 23 j 20:08 -6160 Jul 23 j 19:48 -6160 Nov 03 j 12:52 -6159 Jan 19 j 10:51 -6159 Apr 09 j 23:24 -6159 Jul 23 j 22:58 -6159 Jul 26 j 12:15 -6159 Jul 26 j 11:59 -6158 Jul 26 j 04:48 -6158 Jan 24 j 14:07 -6158 Apr 12 j 14:46 -6158 Jul 26 j 19:09	12° II 39'01 12° II 34'48 11° II 14'32 13° II 45'55 13° II 52'01 13° II 52'00 16° II 24'51 15° II 03'34 14° II 59'33 13° II 38'50 16° II 11'33 16° II 17'31 16° II 17'30 18° II 51'34 17° II 30'00 17° II 26'03 16° II 05'01 18° II 39'09	29.99513 AU 31.83444 AU 15°56'14 15°56'36 17°05'47 29.84082 AU 31.68217 AU 16°07'54 16°08'17 17°17'44 29.69469 AU 31.53828 AU	opposition min. Earth dist. direct max. Earth dist. conjunction minimum elong retrograde opposition min. Earth dist. direct max. Earth dist. conjunction minimum elong retrograde opposition min. Earth dist.	-6152 Feb 07 j 08:10 -6152 Feb 09 j 01:41 -6152 Apr 27 j 13:22 -6152 Aug 11 j 02:45 -6152 Aug 12 j 19:47 -6152 Aug 12 j 19:44 -6152 Nov 24 j 05:05 -6151 Feb 09 j 06:41 -6151 Feb 10 j 21:55 -6151 Apr 30 j 10:02 -6151 Aug 14 j 01:19 -6151 Aug 15 j 15:13 -6151 Aug 15 j 15:14 -6150 Feb 12 j 05:21 -6150 Feb 13 j 16:06 -6150 Aug 17 j 00:51 -6150 Aug 18 j 10:57 -6150 Aug 18 j 11:00	2°\$40'14 2°\$37'19 1°\$14'09 3°\$58'39 3°\$58'39 6°\$38'56 5°\$15'40 5°\$12'55 3°\$49'29 6°\$30'32 6°\$34'23 9°\$15'12 7°\$51'47 7°\$49'20 6°\$25'32 9°\$07'16	28.99058 AU 30.85597 AU 16°43'41 16°44'05 17°51'17 28.90583 AU 30.77716 AU 16°41'32 16°41'55 17°48'09 28.83223 AU 30.71004 AU
direct max. Earth dist. conjunction minimum elong retrograde opposition min. Earth dist. direct max. Earth dist. conjunction minimum elong retrograde opposition min. Earth dist. direct max. Earth dist. conjunction conjunction	-6160 Jan 20 j 07:19 -6160 Apr 07 j 07:44 -6160 Jul 21 j 05:04 -6160 Jul 23 j 20:08 -6160 Jul 23 j 19:48 -6160 Nov 03 j 12:52 -6159 Jan 19 j 10:51 -6159 Apr 09 j 23:24 -6159 Jul 23 j 22:58 -6159 Jul 26 j 12:15 -6159 Jul 26 j 11:59 -6158 Jan 22 j 04:48 -6158 Jan 24 j 14:07 -6158 Apr 12 j 14:46 -6158 Jul 26 j 19:09	12° II 39'01 12° II 34'48 11° II 14'32 13° II 45'55 13° II 52'01 13° II 52'00 16° II 24'51 15° II 03'34 14° II 59'33 13° II 38'50 16° II 11'33 16° II 17'31 16° II 17'30 18° II 51'34 17° II 30'00 17° II 26'03 16° II 05'01 18° II 39'09	29.99513 AU 31.83444 AU 15°56'14 15°56'36 17°05'47 29.84082 AU 31.68217 AU 16°07'54 16°08'17 17°17'44 29.69469 AU 31.53828 AU 16°18'04	opposition min. Earth dist. direct max. Earth dist. conjunction minimum elong retrograde opposition min. Earth dist. direct max. Earth dist. conjunction minimum elong retrograde opposition minimum elong retrograde opposition min. Earth dist. direct max. Earth dist. conjunction	-6152 Feb 07 j 08:10 -6152 Feb 09 j 01:41 -6152 Apr 27 j 13:22 -6152 Aug 11 j 02:45 -6152 Aug 12 j 19:47 -6152 Aug 12 j 19:44 -6152 Nov 24 j 05:05 -6151 Feb 09 j 06:41 -6151 Feb 10 j 21:55 -6151 Apr 30 j 10:02 -6151 Aug 14 j 01:19 -6151 Aug 15 j 15:13 -6151 Aug 15 j 15:14 -6150 Feb 12 j 05:21 -6150 Feb 13 j 16:06 -6150 May 03 j 07:50 -6150 Aug 18 j 10:57	2°\$40'14 2°\$37'19 1°\$14'09 3°\$58'39 3°\$58'39 6°\$38'56 5°\$15'40 5°\$12'55 3°\$49'29 6°\$30'32 6°\$34'23 9°\$15'12 7°\$51'47 7°\$49'20 6°\$25'32 9°\$07'16	28.99058 AU 30.85597 AU 16°43'41 16°44'05 17°51'17 28.90583 AU 30.77716 AU 16°41'32 16°41'55 17°48'09 28.83223 AU 30.71004 AU 16°37'25
direct max. Earth dist. conjunction minimum elong retrograde opposition min. Earth dist. direct max. Earth dist. conjunction minimum elong retrograde opposition min. Earth dist. direct conjunction min. Earth dist. direct max. Earth dist.	-6160 Jan 20 j 07:19 -6160 Apr 07 j 07:44 -6160 Jul 21 j 05:04 -6160 Jul 23 j 20:08 -6160 Jul 23 j 19:48 -6160 Nov 03 j 12:52 -6159 Jan 19 j 10:51 -6159 Apr 09 j 23:24 -6159 Jul 23 j 22:58 -6159 Jul 26 j 12:15 -6159 Jul 26 j 12:15 -6159 Jul 26 j 11:59 -6158 Jul 26 j 14:46 -6158 Jan 22 j 04:48 -6158 Jul 26 j 19:09 -6158 Jul 29 j 05:05 -6158 Jul 29 j 04:49	12° II 39'01 12° II 34'48 11° II 14'32 13° II 45'55 13° II 52'01 13° II 52'00 16° II 24'51 15° II 03'34 14° II 59'33 13° II 38'50 16° II 11'33 16° II 17'30 18° II 51'34 17° II 30'00 17° II 26'03 16° II 05'01 18° II 39'09 18° II 44'51 18° II 44'49	29.99513 AU 31.83444 AU 15°56'14 15°56'36 17°05'47 29.84082 AU 31.68217 AU 16°07'54 16°08'17 17°17'44 29.69469 AU 31.53828 AU 16°18'04	opposition min. Earth dist. direct max. Earth dist. conjunction minimum elong retrograde opposition min. Earth dist. direct max. Earth dist. conjunction minimum elong retrograde opposition minimum elong retrograde opposition min. Earth dist. direct max. Earth dist. conjunction min. Earth dist. direct max. Earth dist.	-6152 Feb 07 j 08:10 -6152 Feb 09 j 01:41 -6152 Apr 27 j 13:22 -6152 Aug 11 j 02:45 -6152 Aug 12 j 19:47 -6152 Aug 12 j 19:44 -6152 Nov 24 j 05:05 -6151 Feb 09 j 06:41 -6151 Feb 10 j 21:55 -6151 Apr 30 j 10:02 -6151 Aug 14 j 01:19 -6151 Aug 15 j 15:13 -6151 Aug 15 j 15:14 -6150 Feb 12 j 05:21 -6150 Feb 13 j 16:06 -6150 Aug 17 j 00:51 -6150 Aug 18 j 10:57 -6150 Aug 18 j 11:00	2°\$40'14 2°\$37'19 1°\$14'09 3°\$58'39 3°\$58'39 6°\$38'56 5°\$15'40 5°\$12'55 3°\$49'29 6°\$30'32 6°\$34'23 6°\$34'23 9°\$15'12 7°\$51'47 7°\$49'20 6°\$25'32 9°\$07'16	28.99058 AU 30.85597 AU 16°43'41 16°44'05 17°51'17 28.90583 AU 30.77716 AU 16°41'32 16°41'55 17°48'09 28.83223 AU 30.71004 AU 16°37'25

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 19 Attention, astronomical year style is used: The year -6149 in astronomical counting style is the year 6150 BCE in historical counting style. min. Earth dist. -6149 Feb 16 j 12:50 10°526'12 28.77030 AU retrograde -6142 Dec 21 j 01:41 2°Ω49'28 opposition -6149 May 06 j 04:59 -6141 Mar 09 j 01:15 1°Ω25'58 15°46'12 direct 9°902'13 max. Earth dist. -6149 Aug 20 j 00:29 11°5544'32 30.65520 AU min. Earth dist. -6141 Mar 09 j 04:53 1°**Ω**25'43 28.67536 AU -6141 May 27 j 18:54 0°Ω00'45 direct -6141 Sep 07 j 04:01 2° € 34'44 conjunction -6149 Aug 21 j 06:37 11°**©**47'37 16°31'19 evening set -6149 Aug 21 j 06:44 minimum elong 11°9547'38 16°31'42 -6149 Dec 02 j 20:25 14°9529'14 -6141 Sep 10 j 18:54 14°34'25 retrograde conjunction 2°**Ω**43'33 -6141 Sep 10 j 19:16 14°34'45 opposition -6148 Feb 18 j 03:59 13°905'37 17°35'26 minimum elong 2°**Ω**43'35 -6141 Sep 10 j 17:36 min. Earth dist. -6148 Feb 19 j 07:35 13°**©**03'41 28.72017 AU max. Earth dist. 2°**Ω**43'25 30.62262 AU direct -6148 May 08 j 03:11 11°939'25 morning rise -6141 Sep 14 j 10:26 2°**Ω**52′26 max. Earth dist. -6148 Aug 21 j 23:46 14°522'10 30.61235 AU retrograde -6141 Dec 23 j 20:56 5°Ω24'11 -6140 Mar 11 j 00:13 opposition 4°**Ω**00'44 15°23'04 conjunction -6148 Aug 23 j 02:31 14°9524'55 16°23'15 min. Earth dist. -6140 Mar 11 j 01:11 4°**Ω**00'40 28.71002 AU minimum elong -6148 Aug 23 j 02:39 14°9524'55 16°23'38 direct -6140 May 29 j 18:49 2° € 35'43 retrograde -6148 Dec 04 j 17:34 17°506'48 evening set -6140 Sep 07 j 14:34 5°**Ω**05'40 opposition -6147 Feb 20 j 03:27 15°5643'09 17°25'53 min. Earth dist. -6147 Feb 21 j 04:29 15°**©**41'23 28.68173 AU conjunction -6140 Sep 12 j 13:03 5°**Ω**17'39 14°12'01 direct -6147 May 10 j 23:40 14°9517'01 minimum elong -6140 Sep 12 j 13:27 5°**Ω**17'42 14°12'22 max. Earth dist. -6140 Sep 12 j 14:32 5°**Ω**17'48 30.66616 AU conjunction -6147 Aug 25 j 22:28 17°9502'30 16°13'13 morning rise -6140 Sep 17 j 12:15 5°**Ω**29'42 minimum elong -6147 Aug 25 j 22:40 17°9502'31 16°13'36 retrograde -6140 Dec 25 j 17:02 7°**Ω**57'41 max. Earth dist. -6147 Aug 25 i 00:03 17°500'12 30.58141 AU opposition -6139 Mar 13 j 22:24 6°**Ω**34'19 14°58'14 retrograde -6147 Dec 07 i 14:50 19°5544'32 min. Earth dist. -6139 Mar 13 j 18:47 6°**Ω**34'34 28.75544 AU opposition -6146 Feb 23 i 03:10 18°9520'53 17°14'14 direct -6139 Jun 01 j 17:48 5°**Ω**09'29 min. Earth dist. -6146 Feb 23 i 23:59 18°519'26 28.65447 AU evening set -6139 Sep 09 j 06:32 7°**Ω**35'59 -6146 May 13 j 23:58 16°954'53 direct -6139 Sep 15 j 06:47 7°Ω50'30 13°48'06 conjunction -6146 Aug 28 j 18:13 19°5040'13 16°01'16 -6139 Sep 15 j 07:11 7°Ω50'33 13°48'25 minimum elong conjunction -6146 Aug 28 j 18:26 -6139 Sep 15 j 12:31 7°**Ω**51'05 30.72071 AU 19°9540'14 16°01'40 max. Earth dist. minimum elong -6146 Aug 27 j 22:38 -6139 Sep 21 j 07:39 8°**Ω**05'05 max. Earth dist. 19°538'12 30.56173 AU morning rise -6146 Dec 10 j 12:59 -6139 Dec 28 j 10:01 10°**Ω**29'51 22°522'19 retrograde retrograde 9°**Ω**06'34 14°31'47 -6145 Feb 26 j 03:04 opposition 20°958'40 17°00'31 -6138 Mar 16 j 20:30 opposition 9°**Ω**07'00 28.81207 AU min. Earth dist. -6145 Feb 26 j 20:49 20°957'26 28.63818 AU min. Earth dist. -6138 Mar 16 j 14:10 -6145 May 16 j 21:29 19°932'48 -6138 Jun 04 j 15:16 7°**Ω**41'59 direct direct -6138 Sep 11 j 01:24 10°**Ω**05'19 evening set -6145 Aug 31 j 14:06 conjunction 22°517'52 15°47'27 -6145 Aug 31 j 14:22 -6138 Sep 17 j 23:48 10°**Ω**21'59 13°22'43 minimum elong 22°917'54 15°47'49 conjunction max. Earth dist. -6145 Aug 30 j 23:00 22°5016'19 30.55310 AU minimum elong -6138 Sep 18 j 00:13 10°**Ω**22'02 13°23'03 retrograde -6145 Dec 13 j 09:49 24°959'54 max. Earth dist. -6138 Sep 18 j 09:05 10°**Ω**22'55 30.78691 AU opposition -6144 Feb 29 j 02:50 23°936'18 16°44'48 morning rise -6138 Sep 24 j 22:50 10°**Ω**38'43 min. Earth dist. -6144 Feb 29 j 17:01 23°535'18 28.63230 AU retrograde -6138 Dec 31 j 04:26 13°**Ω**00'35 -6144 May 18 j 21:00 22°9510'34 -6137 Mar 19 j 17:55 11°**Ω**37'26 14°03'49 direct opposition min. Earth dist. -6137 Mar 19 j 06:45 11°**Ω**38'13 28.88029 AU -6144 Sep 02 j 09:39 24°955'15 15°31'48 -6137 Jun 07 j 13:25 10°**Ω**13'08 conjunction direct -6144 Sep 02 j 09:56 -6137 Sep 12 j 22:01 12°**£**33'31 minimum elong 24°955'17 15°32'10 evening set -6144 Sep 01 i 20:56 max. Earth dist. 24°953'57 30.55503 AU retrograde -6144 Dec 15 i 08:35 27°937'07 conjunction -6137 Sep 20 i 16:24 12°**Ω**52'05 12°55'58 opposition -6143 Mar 03 i 02:30 26°9513'32 16°27'08 minimum elong -6137 Sep 20 i 16:49 12°**Ω**52'07 12°56'17 min. Earth dist. -6143 Mar 03 j 13:13 26°512'47 28.63667 AU max. Earth dist. -6137 Sep 21 j 05:30 12°Ω53'23 30.86480 AU direct -6143 May 21 j 20:16 24°9547'58 -6137 Sep 28 j 11:27 13°Ω10'42 morning rise -6137 Nov 22 j 00:54 15°Ω -6143 Sep 05 j 05:10 27°532'09 15°14'22 -6136 Jan 02 j 21:14 15°**Ω**29'53 conjunction retrograde -6143 Sep 05 j 05:29 -6136 Feb 15 j 13:44 15°RΩ minimum elong 27°932'10 15°14'43 max. Earth dist. -6143 Sep 04 j 20:57 27°531'18 30.56727 AU opposition -6136 Mar 21 j 14:47 14°**Ω**06'55 13°34'25 -6143 Nov 20 j 11:00 $0^{\circ}\Omega$ min. Earth dist. -6136 Mar 21 j 00:41 14°Ω07'52 28.96029 AU -6136 Jun 09 j 08:32 retrograde -6143 Dec 18 j 04:08 $0^{\circ}\Omega 13'42$ direct 12°**Ω**42'56 -6142 Jan 15 j 17:41 30°R95 -6136 Sep 13 j 19:59 15°**Ω**00'31 evening set 28°950'10 16°07'35 -6136 Sep 13 j 14:47 15°**Ω** opposition -6142 Mar 06 j 02:01 28°549'37 28.65092 AU min. Earth dist. -6142 Mar 06 j 09:48 27°5524'46 -6136 Sep 22 j 08:26 15°**Ω**20'45 12°27'57 direct -6142 May 24 j 20:18 conjunction -6136 Sep 22 j 08:53 -6142 Sep 04 j 14:35 0° Ω minimum elong 15°**Ω**20'48 12°28'16 evening set -6142 Sep 06 j 11:51 0°**Ω**04'36 max. Earth dist. -6136 Sep 23 j 01:29 15°**Ω**22'27 30.95447 AU morning rise -6136 Sep 30 j 21:29 15°**Ω**41'04 conjunction -6142 Sep 08 j 00:12 0°Ω08'19 14°55'13 retrograde -6135 Jan 04 j 13:01 17°**Ω**57'42 opposition minimum elong -6142 Sep 08 j 00:33 0°**Ω**08'21 14°55'35 -6135 Mar 24 j 10:58 16°**Ω**34'57 13°03'41 -6142 Sep 07 j 18:25 0°**Ω**07'43 30.58977 AU min. Earth dist. -6135 Mar 23 j 16:31 16° **Ω**36'13 29.05160 AU max. Earth dist. -6142 Sep 09 j 13:16 $0^{\circ}\Omega 12'05$ -6135 Jun 12 j 05:41 15°**Ω**11'20 morning rise direct

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 20 Attention, astronomical year style is used: The year -6135 in astronomical counting style is the year 6136 BCE in historical counting style.

Attention, astronomi	cal year style is used: Th	•	n astronomical cou	inting style is the year	6136 BCE in historical	counting style.	
evening set	-6135 Sep 15 j 18:41	17° Ω 26′15		max. Earth dist.	-6129 Oct 10 j 20:57	2°Mp02'22	31.85638 AU
				morning rise	-6129 Oct 21 j 17:06	2°M 26'51	
conjunction	-6135 Sep 24 j 23:44	17° Ω 48'00	11°58'46	retrograde	-6128 Jan 21 j 19:08	4° ™ 28'33	
minimum elong	-6135 Sep 25 j 00:09	17° Ω 48′03	11°59'03	min. Earth dist.	-6128 Apr 08 j 22:08	3° m 10'19	29.95867 AU
max. Earth dist.	-6135 Sep 25 j 19:45		31.05520 AU	opposition	-6128 Apr 10 j 14:07	3° ™ 07'42	9°01'45
morning rise	-6135 Oct 04 j 05:31	18° Ω 09'50		direct	-6128 Jun 29 j 08:00	1°Mp46'51	
retrograde	-6134 Jan 07 j 05:14	20° Ω 24'04		evening set	-6128 Sep 27 j 23:39	3° Mp 45'45	
min. Earth dist.	-6134 Mar 26 j 09:01		29.15389 AU				
opposition	-6134 Mar 27 j 06:41	19° Ω 01'34	12°31'46	conjunction	-6128 Oct 10 j 18:00	4° Mp 14′22	8°10'46
direct	-6134 Jun 14 j 23:02	17° Ω 38′20		minimum elong	-6128 Oct 10 j 18:21	4° m 14′24	8°10'59
evening set	-6134 Sep 17 j 18:13	19° Ω 50'42		max. Earth dist.	-6128 Oct 12 j 10:53		32.01730 AU
				morning rise	-6128 Oct 23 j 13:26	4° ™ 43'05	
conjunction	-6134 Sep 27 j 14:37	20° Ω 13'48		retrograde	-6127 Jan 23 j 05:07	6° Mp 42'57	
minimum elong	-6134 Sep 27 j 15:03	20° Ω 13'51	11°28'48	min. Earth dist.	-6127 Apr 11 j 11:05	5° Mg 25′05	30.12026 AU
max. Earth dist.	-6134 Sep 28 j 14:50		31.16659 AU	opposition	-6127 Apr 13 j 04:44	5° Mg 22'22	8°24'42
morning rise	-6134 Oct 07 j 11:37	20° Ω 36′59		direct	-6127 Jul 01 j 22:42	4° ™ 01'54	
retrograde	-6133 Jan 09 j 20:07	22° Ω 48'56		evening set	-6127 Sep 30 j 01:02	5° m ,58'49	
min. Earth dist.	-6133 Mar 29 j 00:43		29.26635 AU				
opposition	-6133 Mar 30 j 01:44	21° Ω 26'42	11°58'46	conjunction	-6127 Oct 13 j 03:56		7°36'01
direct	-6133 Jun 17 j 18:04	20° Ω 03'52		minimum elong	-6127 Oct 13 j 04:15	6° Mp 28′01	7°36'12
evening set	-6133 Sep 19 j 18:14	22° Ω 13'47		max. Earth dist.	-6127 Oct 14 j 23:25	~	32.18577 AU
				morning rise	-6127 Oct 26 j 07:55	6° Mp 57′16	
conjunction	-6133 Sep 30 j 04:41	22° Ω 38′06	10°57'18	retrograde	-6126 Jan 25 j 14:04	8° m 55'21	
minimum elong	-6133 Sep 30 j 05:05	22° Ω 38′08	10°57'34	min. Earth dist.	-6126 Apr 13 j 21:07	7° m ,37'59	30.28959 AU
max. Earth dist.	-6133 Oct 01 j 07:10	22° Ω 40'41	31.28774 AU	opposition	-6126 Apr 15 j 18:22	7° m ,35′02	7°47'19
morning rise	-6133 Oct 10 j 16:00	23° Ω 02'30		direct	-6126 Jul 04 j 14:13	6° Mp 14′57	
retrograde	-6132 Jan 12 j 12:16	25° Ω 12'15		evening set	-6126 Oct 02 j 02:33	8° m 09'58	
opposition	-6132 Mar 31 j 20:07	23° Ω 50′18	11°24'49				
min. Earth dist.	-6132 Mar 30 j 15:39	23° £ 52′12	29.38841 AU	conjunction	-6126 Oct 15 j 13:09	8° m 39'36	7°00'59
direct	-6132 Jun 19 j 11:20	22° Ω 27'52		minimum elong	-6126 Oct 15 j 13:27	8° m 39'38	7°01'09
evening set	-6132 Sep 20 j 18:45	24° Ω 35'25		max. Earth dist.	-6126 Oct 17 j 11:10	8° Mp 43'52	32.36189 AU
				morning rise	-6126 Oct 29 j 01:08	9° m 09'21	
conjunction	-6132 Oct 01 j 18:23	25° Ω 00′50	10°25'16	retrograde	-6125 Jan 27 j 23:10	11° m 05'45	
minimum elong	-6132 Oct 01 j 18:48	25° Ω 00′52	10°25'31	min. Earth dist.	-6125 Apr 16 j 07:43	9° ™ 48'48	30.46715 AU
max. Earth dist.	-6132 Oct 03 j 00:56	25° Ω 03'48	31.41791 AU	opposition	-6125 Apr 18 j 07:19	9° m 45'43	7°09'41
morning rise	-6132 Oct 12 j 18:40	25° Ω 26'19		direct	-6125 Jul 07 j 02:34	8° Mp 26'02	
retrograde	-6131 Jan 14 j 02:07	27° Ω 33'57		evening set	-6125 Oct 04 j 03:55	10° m)19'14	
min. Earth dist.	-6131 Apr 02 j 06:54	26° Ω 14′20	29.51910 AU				
opposition	-6131 Apr 03 j 13:40	26° Ω 12'17	10°50'01	conjunction	-6125 Oct 17 j 21:42	10° m 49'16	6°25'44
direct	-6131 Jun 22 j 05:36	24° Ω 50′16		minimum elong	-6125 Oct 17 j 21:58	10° m 49'17	6°25'53
evening set	-6131 Sep 22 j 19:48	26° £ 55'33		max. Earth dist.	-6125 Oct 19 j 22:56	10° m 53'47	32.54609 AU
				morning rise	-6125 Oct 31 j 16:41	11° m 19'25	
conjunction	-6131 Oct 04 j 07:18	27° Ω 21'55	9°52'30	retrograde	-6124 Jan 30 j 06:22	13° Mp 14'12	
minimum elong	-6131 Oct 04 j 07:42	27° Ω 21'57	9°52'44	min. Earth dist.	-6124 Apr 17 j 16:52	11° m 57'44	30.65273 AU
max. Earth dist.	-6131 Oct 05 j 15:37	27° Ω 25'02	31.55641 AU	opposition	-6124 Apr 19 j 19:18	11° m 54'28	6°31'54
morning rise	-6131 Oct 15 j 19:47	27° Ω 48'22		direct	-6124 Jul 08 j 15:52	10° m 35'12	
retrograde	-6130 Jan 16 j 16:54	29° Ω 53'58		evening set	-6124 Oct 05 j 05:30	12° m 26'41	
min. Earth dist.	-6130 Apr 04 j 20:03	28° Ω 34'52	29.65803 AU				
opposition	-6130 Apr 06 j 06:37	28° Ω 32'34	10°14'31	conjunction	-6124 Oct 19 j 05:26	12° m 57'02	5°50'21
direct	-6130 Jun 24 j 21:27	27° Ω 10′57		minimum elong	-6124 Oct 19 j 05:42	12° m 57'03	5°50'30
evening set	-6130 Sep 24 j 20:49	29° Ω 14'02		max. Earth dist.	-6124 Oct 21 j 08:24	13° Mp 01'40	32.73805 AU
				morning rise	-6124 Nov 02 j 06:59	13° m 27'30	
conjunction	-6130 Oct 06 j 19:35	29° Ω 41'16	9°19'06	retrograde	-6123 Jan 31 j 14:25	15° m 20'47	
minimum elong	-6130 Oct 06 j 19:58	29° Ω 41'18	9°19'20	min. Earth dist.	-6123 Apr 20 j 01:09	14° m 04'47	30.84632 AU
max. Earth dist.	-6130 Oct 08 j 07:33	29° Ω 44'42	31.70266 AU	opposition	-6123 Apr 22 j 06:29	14° Mp 01'22	5°54'02
	-6130 Oct 15 j 00:16	0° m)		direct	-6123 Jul 11 j 01:36	12° m 42'31	
morning rise	-6130 Oct 18 j 19:11	0° m 08'35		evening set	-6123 Oct 07 j 06:55	14° m/32'23	
retrograde	-6129 Jan 19 j 05:23	2° m/ 12'12					
min. Earth dist.	-6129 Apr 07 j 10:39	-	29.80460 AU	conjunction	-6123 Oct 21 j 12:38	15° Mp 02'59	5°14'55
opposition	-6129 Apr 08 j 22:57	0° m/51'05		minimum elong	-6123 Oct 21 j 12:52	15° m 03'00	5°15'03
**	-6129 May 13 j 16:31	30° R €		max. Earth dist.	-6123 Oct 23 j 19:08		32.93756 AU
direct	-6129 Jun 27 j 15:10	29° £ 29'51		morning rise	-6123 Nov 04 j 19:45	15° m 33'42	
	-6129 Aug 09 j 17:33	0° m)		retrograde	-6122 Feb 02 j 20:51	17° m/25'32	
evening set	-6129 Sep 26 j 22:16	1° mp 30'49		min. Earth dist.	-6122 Apr 22 j 09:51	-	31.04725 AU
-	. ,	•		opposition	-6122 Apr 24 j 17:02	16° m 06'29	5°16'11
conjunction	-6129 Oct 09 j 07:10	1° m) 58'47	8°45'09	direct	-6122 Jul 13 j 11:48	14° m/ 48'05	
minimum elong	-6129 Oct 09 j 07:32	1° m 58'49	8°45'22	evening set	-6122 Oct 09 j 08:23	16° m 36'24	
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Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6122 in astronomical counting style is the year 6123 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -6122	in astronomical cou	inting style is the year	6123 BCE in historical c	ounting style.	
conjunction	-6122 Oct 23 j 18:56	17° m 07'10	4°39'31	min. Earth dist.	-6115 May 06 j 02:35	29° m 59'06	32.59616 AU
minimum elong	-6122 Oct 23 j 19:08	17° m)07'11	4°39'38	opposition	-6115 May 08 j 21:42	29° m 54'59	0°57'06
max. Earth dist.	-6122 Oct 26 j 02:47	17° m 12'10	33.14391 AU	direct	-6115 Jul 27 j 19:37	28° m 39'33	
morning rise	-6122 Nov 07 j 07:14	17° m 38'04			-6115 Oct 11 j 20:28	0∘ ত	
retrograde	-6121 Feb 05 j 05:07	19° m 28'34		evening set	-6115 Oct 21 j 18:17	0° ჲ 19'04	
min. Earth dist.	-6121 Apr 24 j 16:22	18° m 13'33	31.25496 AU				
opposition	-6121 Apr 27 j 02:47	18° m 09'51	4°38'24	conjunction	-6115 Nov 05 j 22:44	0° ჲ 49'33	0°37'16
direct	-6121 Jul 15 j 20:08	16° m 51'54		minimum elong	-6115 Nov 05 j 22:46	0° ჲ 49'33	0°37'17
evening set	-6121 Oct 11 j 09:53	18° m 38'46		max. Earth dist.	-6115 Nov 08 j 17:47	0° ჲ 55'13	34.71358 AU
				morning rise	-6115 Nov 21 j 05:33	1° ≏ 20'14	
conjunction	-6121 Oct 26 j 00:50	19° m 09'39	4°04'11	retrograde	-6114 Feb 18 j 08:48	3° ჲ 02'56	
minimum elong	-6121 Oct 26 j 01:00	19° m 09'40	4°04'17	min. Earth dist.	-6114 May 08 j 05:04	1° ♀ 50'49	32.83112 AU
max. Earth dist.	-6121 Oct 28 j 11:43	19° m 14'52	33.35625 AU	opposition	-6114 May 11 j 02:20	1° ≏ 46'36	0°21'35
morning rise	-6121 Nov 09 j 17:28	19° m 40'41		direct	-6114 Jul 29 j 23:01	0° ₽ 31'32	
retrograde	-6120 Feb 07 j 11:22	21°m/29'53		evening set	-6114 Oct 23 j 19:07	2° ≙ 10′02	
min. Earth dist.	-6120 Apr 26 j 00:24	20° m 15'17	31.46846 AU				
opposition	-6120 Apr 28 j 11:42	20° m 11'32	4°00'47	conjunction	-6114 Nov 08 j 00:07	2° ≙ 40'18	0°04'05
direct	-6120 Jul 17 j 05:49	18° m 54'02		minimum elong	-6114 Nov 08 j 00:07	2° ≙ 40'18	0°04'07
evening set	-6120 Oct 12 j 11:26	20° m 39'32		behind sun begin	-6114 Nov 07 j 17:50	2° ჲ 39'49	
				behind sun end	-6114 Nov 08 j 06:24	2° ≏ 40'48	
conjunction	-6120 Oct 27 j 06:03	21° Mp 10'28	3°29'01	max. Earth dist.	-6114 Nov 10 j 21:47	2° ≏ 46'08	34.95026 AU
minimum elong	-6120 Oct 27 j 06:12	21° mp 10'29	3°29'07	morning rise	-6114 Nov 23 j 07:21	3° ≙ 10'46	
max. Earth dist.	-6120 Oct 29 j 18:03	21° m 15'45	33.57380 AU	desc. node	-6114 Dec 22 j 18:56	4° ഫ 03'21	
morning rise	-6120 Nov 11 j 02:28	21°Mp41'34		retrograde	-6113 Feb 20 j 10:06	4° ჲ 52'35	
retrograde	-6119 Feb 08 j 18:40	23°m/29'32		min. Earth dist.	-6113 May 10 j 08:31	3° ≏ 40'46	33.06944 AU
min. Earth dist.	-6119 Apr 28 j 05:49	22° m 15'27	31.68689 AU	opposition	-6113 May 13 j 06:16	3° ჲ 36′33	-0°13'27
opposition	-6119 Apr 30 j 19:54	22° m 11'34	3°23'23	direct	-6113 Aug 01 j 02:37	2° ≙ 21'51	
direct	-6119 Jul 19 j 14:43	20° m 54'30		evening set	-6113 Oct 25 j 20:01	3° ჲ 59'25	
evening set	-6119 Oct 14 j 12:55	22°m/38'41					
				conjunction	-6113 Nov 10 j 00:56	4° ≏ 29'26	-0°28'47
conjunction	-6119 Oct 29 j 10:32	23°m/09'38	2°54'03	minimum elong	-6113 Nov 10 j 00:55	4° ჲ 29'26	0°28'48
minimum elong	-6119 Oct 29 j 10:39	23° m 09'39	2°54'08	max. Earth dist.	-6113 Nov 12 j 23:10	4° ≙ 35'15	35.19034 AU
max. Earth dist.	-6119 Nov 01 j 00:37	23° TD 15'03	33.79550 AU	morning rise	-6113 Nov 25 j 08:13	4° ჲ 59'38	
morning rise	-6119 Nov 13 j 10:10	23° TD 40'44		retrograde	-6112 Feb 22 j 12:16	6° ≏ 40'37	
retrograde	-6118 Feb 10 j 23:09	25° m 27'34		min. Earth dist.	-6112 May 11 j 08:56	5° ≏ 29'15	33.31145 AU
min. Earth dist.	-6118 Apr 30 j 12:42	24° Mp 13'51	31.90948 AU	opposition	-6112 May 14 j 09:12	5° ≏ 24'54	-0°47'57
opposition	-6118 May 03 j 03:36	24°M 09'56	2°46'16	direct	-6112 Aug 02 j 04:31	4° ₽ 10'34	
direct	-6118 Jul 21 j 22:14	22° m 53'19		evening set	-6112 Oct 26 j 20:45	5° ≏ 47'16	
evening set	-6118 Oct 16 j 14:23	24°M 36'15					
				conjunction	-6112 Nov 11 j 01:09	6° ≙ 17'00	
conjunction	-6118 Oct 31 j 14:38	25° mg 07'08	2°19'21	minimum elong	-6112 Nov 11 j 01:06	6° ≏ 17'00	1°01'05
minimum elong	-6118 Oct 31 j 14:44	25° Mp 07'09	2°19'26	max. Earth dist.	-6112 Nov 14 j 01:18	6° ≏ 22'56	35.43387 AU
max. Earth dist.	-6118 Nov 03 j 06:20		34.02086 AU	morning rise	-6112 Nov 26 j 07:59	6° ≏ 46'56	
morning rise	-6118 Nov 15 j 16:45	25°m/38'12		retrograde	-6111 Feb 23 j 12:22	8° ≏ 27'08	
retrograde	-6117 Feb 13 j 01:53	27° m 23'55		min. Earth dist.	-6111 May 13 j 11:03		33.55716 AU
min. Earth dist.	-6117 May 02 j 17:26	26° Mp 10'39	32.13544 AU	opposition	-6111 May 16 j 11:46	7° ≙ 11'45	-1°21'54
opposition	-6117 May 05 j 10:19	26°Mp 06'38	2°09'29	direct	-6111 Aug 04 j 08:02	5° ≏ 57'49	
direct	-6117 Jul 24 j 07:03	24° m 50'26		evening set	-6111 Oct 28 j 21:10	7° ≏ 33'41	
evening set	-6117 Oct 18 j 15:52	26° m 32'10					
				conjunction	-6111 Nov 13 j 00:44	8° ₾ 03'06	
conjunction	-6117 Nov 02 j 17:57	27° Mp 02'59	1°44'58	minimum elong	-6111 Nov 13 j 00:40	8° 亞 03'06	
minimum elong	-6117 Nov 02 j 18:02	27° Mp 02'59	1°45'01	max. Earth dist.	-6111 Nov 16 j 02:13		35.68091 AU
max. Earth dist.	-6117 Nov 05 j 10:29		34.24907 AU	morning rise	-6111 Nov 28 j 06:35	8° ≏ 32'43	
morning rise	-6117 Nov 17 j 22:18	27° m 33'57		retrograde	-6110 Feb 25 j 11:56	10° ≏ 12'13	
retrograde	-6116 Feb 15 j 05:03	29° Mp 18'37		min. Earth dist.	-6110 May 15 j 10:53		33.80620 AU
min. Earth dist.	-6116 May 03 j 22:17		32.36445 AU	opposition	-6110 May 18 j 13:34	8° ≏ 57'10	-1°55'16
opposition	-6116 May 06 j 16:28	28° Mp 01'40	1°33'05	direct	-6110 Aug 06 j 11:53	7° Ω 43'38	
direct	-6116 Jul 25 j 12:52	26° m 45'51		evening set	-6110 Oct 30 j 21:41	9° ≏ 18'44	
evening set	-6116 Oct 19 j 17:05	28° Mp 26'27					
	(11(A) 00 100 11	200 - 2=:	1010155	conjunction	-6110 Nov 14 j 23:46	9° Ω 47'50	
conjunction	-6116 Nov 03 j 20:46	28° m 57'07		minimum elong	-6110 Nov 14 j 23:42	9° Ω 47'49	
minimum elong	-6116 Nov 03 j 20:49	28° m 57'07	1°10'58	max. Earth dist.	-6110 Nov 18 j 02:13		35.93086 AU
max. Earth dist.	-6116 Nov 06 j 15:24		34.47997 AU	morning rise	-6110 Nov 30 j 04:29	10° Ω 17'07	
morning rise	-6116 Nov 19 j 02:26	29° m/27'58		retrograde	-6109 Feb 27 j 11:23	11° Ω 55'57	04.05055
	-6116 Dec 05 j 22:21	0° ⊽		min. Earth dist.	-6109 May 17 j 11:10		34.05826 AU
retrograde	-6115 Feb 16 j 05:56	1° Ω 11'37		opposition	-6109 May 20 j 14:48	10° £ 41'14	-2°28'03
	-6115 May 05 j 11:48	30°R, Mp		direct	-6109 Aug 08 j 12:56	9° ≏ 28'06	

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 22 Attention, astronomical year style is used: The year -6109 in astronomical counting style is the year 6110 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ne year -6109 i	in astronomical co	unting style is the year	6110 BCE in historical c	counting style.	
evening set	-6109 Nov 01 j 21:57	11° ≏ 02'31		min. Earth dist.	-6102 May 29 j 00:24	22° ≏ 18'48	35.84436 AU
				opposition	-6102 Jun 01 j 07:35	22° ≏ 14'15	-5°59'47
conjunction	-6109 Nov 16 j 22:30	11° ≏ 31'14	-2°34'52	direct	-6102 Aug 20 j 06:55	21° ഫ 03'31	
minimum elong	-6109 Nov 16 j 22:24	11° ≏ 31'14	2°34'55	evening set	-6102 Nov 13 j 21:38	22° £ 34'05	
max. Earth dist.	-6109 Nov 20 j 02:46	11° ≏ 37'22	36.18328 AU	-	-		
morning rise	-6109 Dec 02 j 01:20	12° ≏ 00'10		conjunction	-6102 Nov 28 j 00:01	22° ≏ 59'42	-5°53'46
retrograde	-6108 Feb 29 j 07:25	13° ≏ 38'24		minimum elong	-6102 Nov 27 j 23:50	22° £ 59'41	5°53'53
min. Earth dist.	-6108 May 18 j 11:06		34.31234 AU	max. Earth dist.	-6102 Dec 01 j 08:08	23° Ω 05'49	37.96034 AU
opposition	-6108 May 21 j 15:23	12° ≏ 24'02	-3°00'13	morning rise	-6102 Dec 12 j 04:37	23° Ω 25'29	
direct	-6108 Aug 09 i 15:11	11° ≏ 11'18		retrograde	-6101 Mar 12 j 07:02	25° ჲ 00'22	
evening set	-6108 Nov 02 j 22:17	12° ≏ 45'03		min. Earth dist.	-6101 May 30 j 21:02		36.09854 AU
				opposition	-6101 Jun 03 j 04:13	23° △ 48'03	
conjunction	-6108 Nov 17 j 20:31	13° ≏ 13'23	-3°05'02	direct	-6101 Aug 22 j 06:26	22° ₽ 37'36	
minimum elong	-6108 Nov 17 j 20:24	13° ≏ 13'22		evening set	-6101 Nov 15 j 21:04	24° ≏ 07'46	
max. Earth dist.	-6108 Nov 21 j 00:38		36.43722 AU	evening sec	0101110110121	2. —07.0	
morning rise	-6108 Dec 02 j 21:22	13° Ω 41'56	30.13722110	conjunction	-6101 Nov 29 j 18:52	24° £ 32'51	-6°19'47
retrograde	-6107 Mar 02 j 06:01	15° ⊆ 19'35		minimum elong	-6101 Nov 29 j 18:40	24° Ω 32'50	
min. Earth dist.	-6107 May 20 j 09:43		34.56789 AU	max. Earth dist.	-6101 Dec 03 j 02:27		38.21301 AU
opposition	-6107 May 23 j 15:24	14° ⊆ 10°08		morning rise	-6101 Dec 13 j 19:07	24° ⊆ 58'08	30.21301 AC
direct	-6107 Aug 11 j 14:02	12° ⊆ 53'13	-5 51 45	retrograde	-6100 Mar 13 j 02:12	26° Ω 32'40	
evening set	-6107 Nov 04 j 22:28	12 ⊆ 33 13		min. Earth dist.	-6100 May 31 j 15:52		36.35326 AU
evening set	-0107 NOV 04 J 22.28	14 == 20 21			-6100 Jun 04 j 00:24	25° £ 20'36	
· · · · · · · · · · · ·	(107 N 10 : 10.10	140054117	2024120	opposition	•	23 ≗ 20 36 24° ≗ 10'26	-0 34 24
conjunction	-6107 Nov 19 j 18:18	14° Ω 54'17 14° Ω 54'17		direct	-6100 Aug 23 j 01:59	24° £ 10′26 25° £ 40′14	
minimum elong	-6107 Nov 19 j 18:10			evening set	-6100 Nov 16 j 20:09	25 = 40 14	
max. Earth dist.	-6107 Nov 23 j 00:12		36.69204 AU		(100.) 20:12.16	260 0 0 4140	60.4511.1
morning rise	-6107 Dec 04 j 16:33	15° Ω 22'25		conjunction	-6100 Nov 30 j 13:16	26° Ω 04'48	
retrograde	-6106 Mar 04 j 03:14	16° Ω 59'34	24.02402.433	minimum elong	-6100 Nov 30 j 13:04	26° Ω 04'47	
min. Earth dist.	-6106 May 22 j 09:47		34.82402 AU	max. Earth dist.	-6100 Dec 03 j 22:27		38.46616 AU
opposition	-6106 May 25 j 15:00	15° Ω 45'53	-4°02'39	morning rise	-6100 Dec 14 j 08:40	26° £ 29'33	
direct	-6106 Aug 13 j 13:06	14° £ 33'54		retrograde	-6099 Mar 14 j 19:57	28° ≙ 03'47	
evening set	-6106 Nov 06 j 22:35	16° ≏ 06′27		min. Earth dist.	-6099 Jun 02 j 12:06		36.60862 AU
				opposition	-6099 Jun 05 j 20:08	26° £ 51'59	-7°20'41
conjunction	-6106 Nov 21 j 15:33	16° ≏ 33'57		direct	-6099 Aug 24 j 21:49	25° ≏ 42'07	
minimum elong	-6106 Nov 21 j 15:24	16° ≏ 33'57		evening set	-6099 Nov 18 j 19:12	27° £ 11'36	
max. Earth dist.	-6106 Nov 24 j 21:09		36.94702 AU				
morning rise	-6106 Dec 06 j 10:59	17° ≏ 01'40		conjunction	-6099 Dec 02 j 07:20	27° ≏ 35'38	
retrograde	-6105 Mar 06 j 02:08	18° ≏ 38'18		minimum elong	-6099 Dec 02 j 07:07	27° ≏ 35'37	
min. Earth dist.	-6105 May 24 j 07:14		35.08004 AU	max. Earth dist.	-6099 Dec 05 j 16:28		38.72014 AU
opposition	-6105 May 27 j 13:58	17° ≏ 24'56	-4°32'54	morning rise	-6099 Dec 15 j 21:37	27° ≏ 59'50	
direct	-6105 Aug 15 j 11:23	16° ≏ 13'17		retrograde	-6098 Mar 16 j 15:18	29° ≏ 33'48	
evening set	-6105 Nov 08 j 22:43	17° ≏ 45'18		min. Earth dist.	-6098 Jun 04 j 05:46	28° ≏ 26'53	36.86475 AU
				opposition	-6098 Jun 07 j 15:18	28° ≏ 22'18	-7°46'17
conjunction	-6105 Nov 23 j 12:27	18° ≏ 12'22	-4°32'04	direct	-6098 Aug 26 j 16:13	27° £ 12'44	
minimum elong	-6105 Nov 23 j 12:17	18° ≏ 12'21	4°32'10	evening set	-6098 Nov 20 j 18:05	28° ≏ 41'56	
max. Earth dist.	-6105 Nov 26 j 18:51	18° ≏ 18'28	37.20136 AU				
morning rise	-6105 Dec 08 j 04:44	18° ჲ 39'37		conjunction	-6098 Dec 04 j 00:53	29° ≏ 05'26	-7°34'05
retrograde	-6104 Mar 07 j 00:04	20° ≙ 15'47		minimum elong	-6098 Dec 04 j 00:41	29° ≙ 05'25	7°34'14
min. Earth dist.	-6104 May 25 j 06:16	19° ≏ 07'12	35.33547 AU	max. Earth dist.	-6098 Dec 07 j 10:47	29° ჲ 11'30	38.97459 AU
opposition	-6104 May 28 j 12:21	19° ≙ 02'41	-5°02'31	morning rise	-6098 Dec 17 j 10:00	29° £ 29'06	
direct	-6104 Aug 16 j 09:44	17° ≙ 51'22			-6097 Jan 04 j 22:17	0° M	
evening set	-6104 Nov 09 j 22:34	19° ≙ 22'53		retrograde	-6097 Mar 18 j 10:37	1°M02'50	
					-6097 Jun 03 j 04:23	30° ₹ ₽	
conjunction	-6104 Nov 24 j 08:54	19° ≏ 49'28	-4°59'54	min. Earth dist.	-6097 Jun 06 j 00:56	29° ≏ 56′10	37.12136 AU
minimum elong	-6104 Nov 24 j 08:44	19° ≏ 49'28	4°59'59	opposition	-6097 Jun 09 j 10:11	29° ≙ 51'37	-8°11'13
max. Earth dist.	-6104 Nov 27 j 15:35	19° ≏ 55'34	37.45500 AU	direct	-6097 Aug 28 j 10:03	28° ≏ 42'22	
morning rise	-6104 Dec 08 j 21:31	20° ≙ 16'15			-6097 Nov 16 j 01:51	0° M	
retrograde	-6103 Mar 08 j 20:11	21° ≏ 51'57		evening set	-6097 Nov 22 j 16:53	0°M11'21	
min. Earth dist.	-6103 May 27 j 03:16	20° ≏ 43'41	35.59009 AU				
opposition	-6103 May 30 j 10:09	20° ჲ 39'08	-5°31'29	conjunction	-6097 Dec 05 j 18:18	0°M34'18	-7°57'36
direct	-6103 Aug 18 j 09:03	19° ≙ 28'07		minimum elong	-6097 Dec 05 j 18:04	0°M34'17	7°57'46
evening set	-6103 Nov 11 j 22:12	20° ჲ 59'08		max. Earth dist.	-6097 Dec 09 j 04:52	0°M40'23	39.22929 AU
				morning rise	-6097 Dec 18 j 21:39	0°M57'24	
conjunction	-6103 Nov 26 j 04:33	21° ≏ 25'15	-5°27'09	retrograde	-6096 Mar 19 j 02:22	2°M30'56	
minimum elong	-6103 Nov 26 j 04:22	21° ≏ 25'14	5°27'15	min. Earth dist.	-6096 Jun 06 j 18:41	1°M24'35	37.37781 AU
max. Earth dist.	-6103 Nov 29 j 11:13	21° ≙ 31'17	37.70779 AU	opposition	-6096 Jun 10 j 04:20	1°M20'02	
morning rise	-6103 Dec 10 j 13:29	21° ≏ 51'33		direct	-6096 Aug 29 j 05:55	0°M11'06	
retrograde	-6102 Mar 10 j 15:04	23° ≏ 26'49		evening set	-6096 Nov 23 j 15:42	1°M39'54	
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Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 23 Attention, astronomical year style is used: The year -6096 in astronomical counting style is the year 6097 BCE in historical counting style.

	nical year style is used: Th	e vear -6096 i	n astronomical co	unting style is the year	6097 BCE in historical c	, , ,
conjunction	-6096 Dec 06 j 11:10	2°M02'16		direct	-6089 Sep 09 j 05:34	10°M08'11
minimum elong	-6096 Dec 06 j 10:57	2°M02'15		evening set	-6089 Dec 06 j 04:53	11°M36'15
max. Earth dist.	-6096 Dec 09 j 21:12		39.48351 AU	evening set	0007 Dec 00 j 04.55	11 11050 15
morning rise	-6096 Dec 19 j 08:49	2°M24'49	37.40331 110	conjunction	-6089 Dec 17 j 01:07	11°ML54'25 -10°44'22
retrograde	-6095 Mar 20 j 18:40	3°M58'12		minimum elong	-6089 Dec 17 j 00:53	11°ML54'24 10°44'36
min. Earth dist.	-6095 Jun 08 j 12:21		37.63370 AU	max. Earth dist.	-6089 Dec 20 j 09:51	12°M00'05 41.20683 AU
opposition	-6095 Jun 11 j 22:19	2°M47'36		morning rise	-6089 Dec 27 j 22:51	12°M12'42
direct	-6095 Aug 31 j 00:13	1°M39'00	-0 3704	retrograde	-6088 Mar 30 j 05:12	13°M45'30
evening set	-6095 Nov 25 j 14:10	3°M07'37		min. Earth dist.	-6088 Jun 18 j 08:39	12°M41'00 39.36404 AU
evening set	-0093 NOV 23 j 14.10	ז וועטרטר		opposition	-6088 Jun 21 j 16:43	12°M36'39 -11°26'48
conjunction	-6095 Dec 08 j 03:45	3°M29'26	0012117	direct	-6088 Sep 09 j 22:02	11°ML29'50
minimum elong	-6095 Dec 08 j 03:31	3°M29'25		evening set	-6088 Dec 07 j 02:53	12°M57'52
max. Earth dist.	-6095 Dec 11 j 15:00		39.73671 AU	evening set	-0088 DCC 07 J 02.33	12 11637 32
morning rise	-6095 Dec 20 j 19:12	3°M51'23	37.73071 AU	conjunction	-6088 Dec 17 j 15:30	13°ML15'25 -11°02'38
retrograde	-6094 Mar 22 j 09:21	5°M24'40		minimum elong	-6088 Dec 17 j 15:17	13°ML15'24 11°02'53
min. Earth dist.	-6094 Jun 10 j 06:47		37.88812 AU	max. Earth dist.	-6088 Dec 21 j 01:19	13°M21'07 41.44455 AU
opposition	-6094 Jun 13 j 15:54	4°M14'21		morning rise	-6088 Dec 28 j 05:26	13°M23'03
direct	-6094 Sep 01 j 19:24	3°M06'04) 22 02	morning rise	-6087 Mar 09 j 23:38	15°M
evening set	-6094 Nov 27 j 12:57	4°M34'33		retrograde	-6087 Mar 31 j 18:30	15°M05'52
evening set	0054 1101 27 j 12.57	T 1105755		retrograde	-6087 Apr 22 j 22:41	15°RM
conjunction	-6094 Dec 09 j 20:10	4° ጤ 55'47	-9°04'29	min. Earth dist.	-6087 Jun 20 j 00:34	14°M01'29 39.60334 AU
minimum elong	-6094 Dec 09 j 19:56	4°M55'46		opposition	-6087 Jun 23 j 07:35	13°ML57'13 -11°45'28
max. Earth dist.	-6094 Dec 13 j 06:16		39.98813 AU	direct	-6087 Sep 11 j 13:37	12°M50'38
morning rise	-6094 Dec 22 j 05:17	5°M17'09	37.76613 AC	evening set	-6087 Dec 09 j 00:50	14°ML18'40
retrograde	-6093 Mar 24 j 02:51	6°M50'19		evening set	0007 Dec 07 J 00.50	14 IIV10 40
min. Earth dist.	-6093 Jun 11 j 23:07		38.14051 AU	conjunction	-6087 Dec 19 j 05:28	14°MJ35'34 -11°20'19
opposition	-6093 Jun 15 j 08:55	5°M40'18		minimum elong	-6087 Dec 19 j 05:14	14°M35'33 11°20'33
direct	-6093 Sep 03 j 11:15	4°M32'18	-) 4421	max. Earth dist.	-6087 Dec 22 j 14:39	14°M41'12 41.68129 AU
evening set	-6093 Nov 29 j 11:33	6°M00'39		morning rise	-6087 Dec 29 j 11:16	14°ML52'33
e venning see	0095 1101 29 j 11.55	0 1100037		morning rise	-6086 Jan 03 j 00:40	15°M
conjunction	-6093 Dec 11 j 12:17	6° ™ 21'18	-9°25'37	retrograde	-6086 Apr 02 j 09:30	16°M25'23
minimum elong	-6093 Dec 11 j 12:03	6°M21'17		min. Earth dist.	-6086 Jun 21 j 14:02	15°M21'17 39.84159 AU
max. Earth dist.	-6093 Dec 14 j 22:43		40.23706 AU	opposition	-6086 Jun 24 j 22:03	15°M16'59 -12°03'30
morning rise	-6093 Dec 23 j 14:53	6°M42'05		·PF	-6086 Jul 08 j 05:20	15°RML
retrograde	-6092 Mar 24 j 19:43	8°M15'09		direct	-6086 Sep 13 j 03:04	14°M10'37
min. Earth dist.	-6092 Jun 12 j 17:24		38.39023 AU		-6086 Nov 15 j 21:43	15° M ₊
opposition	-6092 Jun 16 j 01:45	7°M05'24	-10°06'04	evening set	-6086 Dec 10 j 22:48	15°M38'41
direct	-6092 Sep 04 j 03:15	5° ™ 57'40		-	-	
evening set	-6092 Nov 30 j 10:00	7°M25'55		conjunction	-6086 Dec 20 j 19:14	15°M54'56 -11°37'26
				minimum elong	-6086 Dec 20 j 19:01	15°M54'55 11°37'41
conjunction	-6092 Dec 12 j 04:01	7° M 45'58	-9°46'09	max. Earth dist.	-6086 Dec 24 j 04:28	16°ML00'32 41.91684 AU
minimum elong	-6092 Dec 12 j 03:48	7° M 45'57	9°46'22	morning rise	-6086 Dec 30 j 16:55	16°M11'17
max. Earth dist.	-6092 Dec 15 j 13:57	7° ™ 51'49	40.48328 AU	retrograde	-6085 Apr 04 j 00:46	17°M44'09
morning rise	-6092 Dec 23 j 23:38	8°M06'08		min. Earth dist.	-6085 Jun 23 j 05:10	16°ML40'13 40.07870 AU
retrograde	-6091 Mar 26 j 12:32	9° ™ 39'06			0005 5411 25 5 05.10	
min. Earth dist.				opposition	-6085 Jun 26 j 12:11	16°M35'59 -12°20'57
	-6091 Jun 14 j 09:22	8°M34'01	38.63705 AU	opposition direct		
opposition	-6091 Jun 14 j 09:22 -6091 Jun 17 j 18:05	8°ጤ34'01 8°ጤ29'36			-6085 Jun 26 j 12:11	16°M35'59 -12°20'57
direct	-6091 Jun 17 j 18:05 -6091 Sep 05 j 19:26	8°M29'36 7°M22'07		direct evening set	-6085 Jun 26 j 12:11 -6085 Sep 14 j 15:56 -6085 Dec 12 j 20:48	16°M35'59 -12°20'57 15°M29'52
	-6091 Jun 17 j 18:05	8°M29'36		direct evening set conjunction	-6085 Jun 26 j 12:11 -6085 Sep 14 j 15:56 -6085 Dec 12 j 20:48 -6085 Dec 22 j 08:52	16°M35'59 -12°20'57 15°M29'52 16°M58'01 17°M13'36 -11°53'59
direct evening set	-6091 Jun 17 j 18:05 -6091 Sep 05 j 19:26 -6091 Dec 02 j 08:25	8°M29'36 7°M22'07 8°M50'17	-10°27'10	direct evening set conjunction minimum elong	-6085 Jun 26 j 12:11 -6085 Sep 14 j 15:56 -6085 Dec 12 j 20:48 -6085 Dec 22 j 08:52 -6085 Dec 22 j 08:39	16°M.35'59 -12°20'57 15°M.29'52 16°M.58'01 17°M.13'36 -11°53'59 17°M.13'35 11°54'14
direct evening set conjunction	-6091 Jun 17 j 18:05 -6091 Sep 05 j 19:26 -6091 Dec 02 j 08:25 -6091 Dec 13 j 19:21	8°M29'36 7°M22'07 8°M50'17 9°M09'43	-10°27'10 -10°06'08	direct evening set conjunction minimum elong max. Earth dist.	-6085 Jun 26 j 12:11 -6085 Sep 14 j 15:56 -6085 Dec 12 j 20:48 -6085 Dec 22 j 08:52 -6085 Dec 22 j 08:39 -6085 Dec 25 j 18:24	16°M.35'59 -12°20'57 15°M.29'52 16°M.58'01 17°M.13'36 -11°53'59 17°M.13'35 11°54'14 17°M.19'12 42.15120 AU
direct evening set conjunction minimum elong	-6091 Jun 17 j 18:05 -6091 Sep 05 j 19:26 -6091 Dec 02 j 08:25 -6091 Dec 13 j 19:21 -6091 Dec 13 j 19:07	8°M29'36 7°M22'07 8°M50'17 9°M09'43 9°M09'42	-10°27'10 -10°06'08 10°06'20	direct evening set conjunction minimum elong max. Earth dist. morning rise	-6085 Jun 26 j 12:11 -6085 Sep 14 j 15:56 -6085 Dec 12 j 20:48 -6085 Dec 22 j 08:52 -6085 Dec 22 j 08:39 -6085 Dec 25 j 18:24 -6085 Dec 31 j 21:51	16°M.35'59 -12°20'57 15°M.29'52 16°M.58'01 17°M.13'36 -11°53'59 17°M.13'35 11°54'14 17°M.19'12 42.15120 AU 17°M.29'16
direct evening set conjunction minimum elong max. Earth dist.	-6091 Jun 17 j 18:05 -6091 Sep 05 j 19:26 -6091 Dec 02 j 08:25 -6091 Dec 13 j 19:21 -6091 Dec 13 j 19:07 -6091 Dec 17 j 04:39	8°M29'36 7°M22'07 8°M50'17 9°M09'43 9°M09'42 9°M15'29	-10°27'10 -10°06'08	direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-6085 Jun 26 j 12:11 -6085 Sep 14 j 15:56 -6085 Dec 12 j 20:48 -6085 Dec 22 j 08:52 -6085 Dec 22 j 08:39 -6085 Dec 25 j 18:24 -6085 Dec 31 j 21:51 -6084 Apr 04 j 13:44	16°M35'59 -12°20'57 15°M29'52 16°M58'01 17°M13'36 -11°53'59 17°M13'35 11°54'14 17°M19'12 42.15120 AU 17°M29'16 19°M02'14
direct evening set conjunction minimum elong max. Earth dist. morning rise	-6091 Jun 17 j 18:05 -6091 Sep 05 j 19:26 -6091 Dec 02 j 08:25 -6091 Dec 13 j 19:21 -6091 Dec 13 j 19:07 -6091 Dec 17 j 04:39 -6091 Dec 25 j 08:02	8°M.29'36 7°M.22'07 8°M.50'17 9°M.09'43 9°M.09'42 9°M.15'29 9°M.29'16	-10°27'10 -10°06'08 10°06'20	direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist.	-6085 Jun 26 j 12:11 -6085 Sep 14 j 15:56 -6085 Dec 12 j 20:48 -6085 Dec 22 j 08:52 -6085 Dec 22 j 08:39 -6085 Dec 25 j 18:24 -6085 Dec 31 j 21:51 -6084 Apr 04 j 13:44 -6084 Jun 23 j 18:59	16°M.35'59 -12°20'57 15°M.29'52 16°M.58'01 17°M.13'36 -11°53'59 17°M.13'35 11°54'14 17°M.19'12 42.15120 AU 17°M.29'16 19°M.02'14 17°M.58'31 40.31418 AU
direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-6091 Jun 17 j 18:05 -6091 Sep 05 j 19:26 -6091 Dec 02 j 08:25 -6091 Dec 13 j 19:21 -6091 Dec 13 j 19:07 -6091 Dec 17 j 04:39 -6091 Dec 25 j 08:02 -6090 Mar 28 j 04:44	8°M29'36 7°M22'07 8°M50'17 9°M09'43 9°M09'42 9°M15'29 9°M29'16 11°M02'10	-10°27'10 -10°06'08 10°06'20 40.72664 AU	direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition	-6085 Jun 26 j 12:11 -6085 Sep 14 j 15:56 -6085 Dec 12 j 20:48 -6085 Dec 22 j 08:52 -6085 Dec 22 j 08:39 -6085 Dec 25 j 18:24 -6085 Dec 31 j 21:51 -6084 Apr 04 j 13:44 -6084 Jun 23 j 18:59 -6084 Jun 27 j 01:58	16°M.35'59 -12°20'57 15°M.29'52 16°M.58'01 17°M.13'36 -11°53'59 17°M.13'35 11°54'14 17°M.19'12 42.15120 AU 17°M.29'16 19°M.02'14 17°M.58'31 40.31418 AU 17°M.54'18 -12°37'49
direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist.	-6091 Jun 17 j 18:05 -6091 Sep 05 j 19:26 -6091 Dec 02 j 08:25 -6091 Dec 13 j 19:21 -6091 Dec 13 j 19:07 -6091 Dec 17 j 04:39 -6091 Dec 25 j 08:02 -6090 Mar 28 j 04:44 -6090 Jun 16 j 02:02	8°M29'36 7°M22'07 8°M50'17 9°M09'43 9°M09'42 9°M15'29 9°M29'16 11°M02'10 9°M57'15	-10°27'10 -10°06'08 10°06'20 40.72664 AU 38.88141 AU	direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct	-6085 Jun 26 j 12:11 -6085 Sep 14 j 15:56 -6085 Dec 12 j 20:48 -6085 Dec 22 j 08:52 -6085 Dec 22 j 08:39 -6085 Dec 25 j 18:24 -6085 Dec 31 j 21:51 -6084 Apr 04 j 13:44 -6084 Jun 23 j 18:59 -6084 Jun 27 j 01:58 -6084 Sep 15 j 06:30	16°M.35'59 -12°20'57 15°M.29'52 16°M.58'01 17°M.13'36 -11°53'59 17°M.13'35 11°54'14 17°M.19'12 42.15120 AU 17°M.29'16 19°M.02'14 17°M.58'31 40.31418 AU 17°M.54'18 -12°37'49 16°M.48'25
direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition	-6091 Jun 17 j 18:05 -6091 Sep 05 j 19:26 -6091 Dec 02 j 08:25 -6091 Dec 13 j 19:21 -6091 Dec 13 j 19:07 -6091 Dec 17 j 04:39 -6091 Dec 25 j 08:02 -6090 Mar 28 j 04:44 -6090 Jun 16 j 02:02 -6090 Jun 19 j 10:08	8°M29'36 7°M22'07 8°M50'17 9°M09'43 9°M09'42 9°M15'29 9°M29'16 11°M02'10 9°M57'15	-10°27'10 -10°06'08 10°06'20 40.72664 AU 38.88141 AU	direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition	-6085 Jun 26 j 12:11 -6085 Sep 14 j 15:56 -6085 Dec 12 j 20:48 -6085 Dec 22 j 08:52 -6085 Dec 22 j 08:39 -6085 Dec 25 j 18:24 -6085 Dec 31 j 21:51 -6084 Apr 04 j 13:44 -6084 Jun 23 j 18:59 -6084 Jun 27 j 01:58	16°M.35'59 -12°20'57 15°M.29'52 16°M.58'01 17°M.13'36 -11°53'59 17°M.13'35 11°54'14 17°M.19'12 42.15120 AU 17°M.29'16 19°M.02'14 17°M.58'31 40.31418 AU 17°M.54'18 -12°37'49
direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct	-6091 Jun 17 j 18:05 -6091 Sep 05 j 19:26 -6091 Dec 02 j 08:25 -6091 Dec 13 j 19:21 -6091 Dec 13 j 19:07 -6091 Dec 17 j 04:39 -6091 Dec 25 j 08:02 -6090 Mar 28 j 04:44 -6090 Jun 16 j 02:02 -6090 Jun 19 j 10:08 -6090 Sep 07 j 11:01	8°M29'36 7°M22'07 8°M50'17 9°M09'43 9°M09'42 9°M15'29 9°M29'16 11°M02'10 9°M57'15 9°M52'53	-10°27'10 -10°06'08 10°06'20 40.72664 AU 38.88141 AU	direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set	-6085 Jun 26 j 12:11 -6085 Sep 14 j 15:56 -6085 Dec 12 j 20:48 -6085 Dec 22 j 08:52 -6085 Dec 22 j 08:39 -6085 Dec 25 j 18:24 -6085 Dec 31 j 21:51 -6084 Apr 04 j 13:44 -6084 Jun 23 j 18:59 -6084 Sep 15 j 06:30 -6084 Dec 13 j 18:45	16°M.35'59 -12°20'57 15°M.29'52 16°M.58'01 17°M.13'36 -11°53'59 17°M.13'35 11°54'14 17°M.19'12 42.15120 AU 17°M.29'16 19°M.02'14 17°M.58'31 40.31418 AU 17°M.54'18 -12°37'49 16°M.48'25 18°M.16'41
direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition	-6091 Jun 17 j 18:05 -6091 Sep 05 j 19:26 -6091 Dec 02 j 08:25 -6091 Dec 13 j 19:21 -6091 Dec 13 j 19:07 -6091 Dec 17 j 04:39 -6091 Dec 25 j 08:02 -6090 Mar 28 j 04:44 -6090 Jun 16 j 02:02 -6090 Jun 19 j 10:08	8°M29'36 7°M22'07 8°M50'17 9°M09'43 9°M09'42 9°M15'29 9°M29'16 11°M02'10 9°M57'15	-10°27'10 -10°06'08 10°06'20 40.72664 AU 38.88141 AU	direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set conjunction	-6085 Jun 26 j 12:11 -6085 Sep 14 j 15:56 -6085 Dec 12 j 20:48 -6085 Dec 22 j 08:52 -6085 Dec 22 j 08:39 -6085 Dec 25 j 18:24 -6085 Dec 31 j 21:51 -6084 Apr 04 j 13:44 -6084 Jun 23 j 18:59 -6084 Sep 15 j 06:30 -6084 Dec 13 j 18:45	16°M.35'59 -12°20'57 15°M.29'52 16°M.58'01 17°M.13'36 -11°53'59 17°M.13'35 11°54'14 17°M.19'12 42.15120 AU 17°M.29'16 19°M.02'14 17°M.58'31 40.31418 AU 17°M.54'18 -12°37'49 16°M.48'25 18°M.16'41 18°M.31'37 -12°10'00
direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set	-6091 Jun 17 j 18:05 -6091 Sep 05 j 19:26 -6091 Dec 02 j 08:25 -6091 Dec 13 j 19:21 -6091 Dec 13 j 19:07 -6091 Dec 17 j 04:39 -6091 Dec 25 j 08:02 -6090 Mar 28 j 04:44 -6090 Jun 16 j 02:02 -6090 Jun 19 j 10:08 -6090 Sep 07 j 11:01 -6090 Dec 04 j 06:35	8°M29'36 7°M22'07 8°M50'17 9°M09'43 9°M09'42 9°M15'29 9°M29'16 11°M02'10 9°M57'15 9°M52'53 8°M45'37	-10°27'10 -10°06'08 10°06'20 40.72664 AU 38.88141 AU -10°47'40	direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set conjunction minimum elong	-6085 Jun 26 j 12:11 -6085 Sep 14 j 15:56 -6085 Dec 12 j 20:48 -6085 Dec 22 j 08:52 -6085 Dec 22 j 08:39 -6085 Dec 25 j 18:24 -6085 Dec 31 j 21:51 -6084 Apr 04 j 13:44 -6084 Jun 23 j 18:59 -6084 Jun 27 j 01:58 -6084 Sep 15 j 06:30 -6084 Dec 13 j 18:45 -6084 Dec 22 j 21:57 -6084 Dec 22 j 21:44	16°M.35'59 -12°20'57 15°M.29'52 16°M.58'01 17°M.13'36 -11°53'59 17°M.13'35 11°54'14 17°M.19'12 42.15120 AU 17°M.29'16 19°M.02'14 17°M.58'31 40.31418 AU 17°M.54'18 -12°37'49 16°M.48'25 18°M.16'41 18°M.31'37 -12°10'00 18°M.31'36 12°10'16
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direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set conjunction minimum elong	-6091 Jun 17 j 18:05 -6091 Sep 05 j 19:26 -6091 Dec 02 j 08:25 -6091 Dec 13 j 19:21 -6091 Dec 13 j 19:07 -6091 Dec 17 j 04:39 -6091 Dec 25 j 08:02 -6090 Mar 28 j 04:44 -6090 Jun 16 j 02:02 -6090 Sep 07 j 11:01 -6090 Dec 04 j 06:35 -6090 Dec 15 j 10:27 -6090 Dec 15 j 10:14	8°M.29'36 7°M.22'07 8°M.50'17 9°M.09'43 9°M.09'42 9°M.15'29 9°M.29'16 11°M.02'10 9°M.57'15 9°M.52'53 8°M.45'37 10°M.13'43 10°M.32'32	-10°27'10 -10°06'08 10°06'20 40.72664 AU 38.88141 AU -10°47'40 -10°25'32 10°25'47	direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set conjunction minimum elong max. Earth dist. morning rise	-6085 Jun 26 j 12:11 -6085 Sep 14 j 15:56 -6085 Dec 12 j 20:48 -6085 Dec 22 j 08:52 -6085 Dec 22 j 08:39 -6085 Dec 25 j 18:24 -6085 Dec 31 j 21:51 -6084 Apr 04 j 13:44 -6084 Jun 23 j 18:59 -6084 Jun 27 j 01:58 -6084 Sep 15 j 06:30 -6084 Dec 13 j 18:45 -6084 Dec 22 j 21:57 -6084 Dec 22 j 21:44 -6084 Dec 26 j 06:26 -6083 Jan 01 j 02:11	16°M.35'59 -12°20'57 15°M.29'52 16°M.58'01 17°M.13'36 -11°53'59 17°M.13'35 11°54'14 17°M.19'12 42.15120 AU 17°M.29'16 19°M.02'14 17°M.58'31 40.31418 AU 17°M.54'18 -12°37'49 16°M.48'25 18°M.16'41 18°M.31'37 -12°10'00 18°M.31'36 12°10'16 18°M.37'06 42.38370 AU 18°M.46'35
direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set conjunction minimum elong max. Earth dist.	-6091 Jun 17 j 18:05 -6091 Sep 05 j 19:26 -6091 Dec 02 j 08:25 -6091 Dec 13 j 19:21 -6091 Dec 13 j 19:07 -6091 Dec 17 j 04:39 -6091 Dec 25 j 08:02 -6090 Mar 28 j 04:44 -6090 Jun 16 j 02:02 -6090 Jun 19 j 10:08 -6090 Sep 07 j 11:01 -6090 Dec 04 j 06:35 -6090 Dec 15 j 10:27 -6090 Dec 15 j 10:14 -6090 Dec 18 j 20:24	8°M.29'36 7°M.22'07 8°M.50'17 9°M.09'43 9°M.09'42 9°M.15'29 9°M.29'16 11°M.02'10 9°M.57'15 9°M.52'53 8°M.45'37 10°M.13'43 10°M.32'32 10°M.32'31	-10°27'10 -10°06'08 10°06'20 40.72664 AU 38.88141 AU -10°47'40	direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-6085 Jun 26 j 12:11 -6085 Sep 14 j 15:56 -6085 Dec 12 j 20:48 -6085 Dec 22 j 08:52 -6085 Dec 22 j 08:39 -6085 Dec 25 j 18:24 -6085 Dec 31 j 21:51 -6084 Apr 04 j 13:44 -6084 Jun 23 j 18:59 -6084 Sep 15 j 06:30 -6084 Dec 13 j 18:45 -6084 Dec 22 j 21:57 -6084 Dec 22 j 21:44 -6084 Dec 26 j 06:26 -6083 Jan 01 j 02:11 -6083 Apr 06 j 03:18	16°M.35'59 -12°20'57 15°M.29'52 16°M.58'01 17°M.13'36 -11°53'59 17°M.13'35 11°54'14 17°M.19'12 42.15120 AU 17°M.29'16 19°M.02'14 17°M.58'31 40.31418 AU 17°M.58'31 40.31418 AU 17°M.54'18 -12°37'49 16°M.48'25 18°M.16'41 18°M.31'37 -12°10'00 18°M.31'36 12°10'16 18°M.37'06 42.38370 AU 18°M.46'35 20°M.19'41
direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set conjunction minimum elong max. Earth dist. morning rise	-6091 Jun 17 j 18:05 -6091 Sep 05 j 19:26 -6091 Dec 02 j 08:25 -6091 Dec 13 j 19:21 -6091 Dec 13 j 19:07 -6091 Dec 17 j 04:39 -6091 Dec 25 j 08:02 -6090 Mar 28 j 04:44 -6090 Jun 16 j 02:02 -6090 Jun 19 j 10:08 -6090 Sep 07 j 11:01 -6090 Dec 04 j 06:35 -6090 Dec 15 j 10:27 -6090 Dec 15 j 10:14 -6090 Dec 18 j 20:24 -6090 Dec 26 j 15:43	8°M.29'36 7°M.22'07 8°M.50'17 9°M.09'43 9°M.09'42 9°M.15'29 9°M.29'16 11°M.02'10 9°M.57'15 9°M.52'53 8°M.45'37 10°M.32'32 10°M.32'31 10°M.32'31 10°M.32'31	-10°27'10 -10°06'08 10°06'20 40.72664 AU 38.88141 AU -10°47'40 -10°25'32 10°25'47	direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist.	-6085 Jun 26 j 12:11 -6085 Sep 14 j 15:56 -6085 Dec 12 j 20:48 -6085 Dec 22 j 08:52 -6085 Dec 22 j 08:39 -6085 Dec 25 j 18:24 -6085 Dec 31 j 21:51 -6084 Apr 04 j 13:44 -6084 Jun 23 j 18:59 -6084 Jun 27 j 01:58 -6084 Sep 15 j 06:30 -6084 Dec 13 j 18:45 -6084 Dec 22 j 21:57 -6084 Dec 22 j 21:44 -6084 Dec 26 j 06:26 -6083 Jan 01 j 02:11 -6083 Apr 06 j 03:18 -6083 Jun 25 j 08:42	16°M.35'59 -12°20'57 15°M.29'52 16°M.58'01 17°M.13'36 -11°53'59 17°M.13'35 11°54'14 17°M.19'12 42.15120 AU 17°M.29'16 19°M.02'14 17°M.58'31 40.31418 AU 17°M.54'18 -12°37'49 16°M.48'25 18°M.16'41 18°M.31'37 -12°10'00 18°M.31'36 12°10'16 18°M.37'06 42.38370 AU 18°M.46'35 20°M.19'41 19°M.16'11 40.54771 AU
direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde	-6091 Jun 17 j 18:05 -6091 Sep 05 j 19:26 -6091 Dec 02 j 08:25 -6091 Dec 13 j 19:21 -6091 Dec 13 j 19:07 -6091 Dec 17 j 04:39 -6091 Dec 25 j 08:02 -6090 Mar 28 j 04:44 -6090 Jun 16 j 02:02 -6090 Jun 19 j 10:08 -6090 Sep 07 j 11:01 -6090 Dec 04 j 06:35 -6090 Dec 15 j 10:27 -6090 Dec 18 j 20:24 -6090 Dec 26 j 15:43 -6089 Mar 29 j 16:15	8°M.29'36 7°M.22'07 8°M.50'17 9°M.09'42 9°M.15'29 9°M.29'16 11°M.02'10 9°M.57'15 9°M.52'53 8°M.45'37 10°M.32'32 10°M.32'31 10°M.32'31 10°M.32'31	-10°27'10 -10°06'08 10°06'20 40.72664 AU 38.88141 AU -10°47'40 -10°25'32 10°25'47 40.96772 AU	direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition	-6085 Jun 26 j 12:11 -6085 Sep 14 j 15:56 -6085 Dec 12 j 20:48 -6085 Dec 22 j 08:52 -6085 Dec 22 j 08:39 -6085 Dec 25 j 18:24 -6085 Dec 31 j 21:51 -6084 Apr 04 j 13:44 -6084 Jun 23 j 18:59 -6084 Jun 27 j 01:58 -6084 Dec 13 j 18:45 -6084 Dec 22 j 21:57 -6084 Dec 22 j 21:44 -6084 Dec 26 j 06:26 -6083 Jan 01 j 02:11 -6083 Apr 06 j 03:18 -6083 Jun 25 j 08:42 -6083 Jun 28 j 15:35	16°M.35'59 -12°20'57 15°M.29'52 16°M.58'01 17°M.13'36 -11°53'59 17°M.13'35 11°54'14 17°M.29'16 19°M.02'14 17°M.58'31 40.31418 AU 17°M.54'18 -12°37'49 16°M.48'25 18°M.31'37 -12°10'00 18°M.31'36 12°10'16 18°M.31'36 42.38370 AU 18°M.46'35 20°M.19'41 19°M.16'11 40.54771 AU 19°M.12'00 -12°54'07
direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set conjunction minimum elong max. Earth dist. morning rise	-6091 Jun 17 j 18:05 -6091 Sep 05 j 19:26 -6091 Dec 02 j 08:25 -6091 Dec 13 j 19:21 -6091 Dec 13 j 19:07 -6091 Dec 17 j 04:39 -6091 Dec 25 j 08:02 -6090 Mar 28 j 04:44 -6090 Jun 16 j 02:02 -6090 Jun 19 j 10:08 -6090 Sep 07 j 11:01 -6090 Dec 04 j 06:35 -6090 Dec 15 j 10:27 -6090 Dec 15 j 10:14 -6090 Dec 18 j 20:24 -6090 Dec 26 j 15:43	8°M.29'36 7°M.22'07 8°M.50'17 9°M.09'42 9°M.15'29 9°M.29'16 11°M.02'10 9°M.57'15 9°M.52'53 8°M.45'37 10°M.32'32 10°M.32'31 10°M.32'31 10°M.32'31	-10°27'10 -10°06'08 10°06'20 40.72664 AU 38.88141 AU -10°47'40 -10°25'32 10°25'47 40.96772 AU 39.12349 AU	direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist. opposition direct evening set conjunction minimum elong max. Earth dist. morning rise retrograde min. Earth dist.	-6085 Jun 26 j 12:11 -6085 Sep 14 j 15:56 -6085 Dec 12 j 20:48 -6085 Dec 22 j 08:52 -6085 Dec 22 j 08:39 -6085 Dec 25 j 18:24 -6085 Dec 31 j 21:51 -6084 Apr 04 j 13:44 -6084 Jun 23 j 18:59 -6084 Jun 27 j 01:58 -6084 Sep 15 j 06:30 -6084 Dec 13 j 18:45 -6084 Dec 22 j 21:57 -6084 Dec 22 j 21:44 -6084 Dec 26 j 06:26 -6083 Jan 01 j 02:11 -6083 Apr 06 j 03:18 -6083 Jun 25 j 08:42	16°M.35'59 -12°20'57 15°M.29'52 16°M.58'01 17°M.13'36 -11°53'59 17°M.13'35 11°54'14 17°M.19'12 42.15120 AU 17°M.29'16 19°M.02'14 17°M.58'31 40.31418 AU 17°M.54'18 -12°37'49 16°M.48'25 18°M.16'41 18°M.31'37 -12°10'00 18°M.31'36 12°10'16 18°M.37'06 42.38370 AU 18°M.46'35 20°M.19'41 19°M.16'11 40.54771 AU

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6083 in astronomical counting style is the year 6084 BCE in historical counting style. -6083 Dec 24 i 11:06 19°M49'00 -12°25'29 direct -6076 Sep 25 i 15:43 26°M54'26 conjunction -6083 Dec 24 i 10:54 19°M48'59 12°25'45 evening set -6076 Dec 27 j 09:05 28°M24'39 minimum elong -6083 Dec 27 j 20:13 19°M.54'31 42.61393 AU max. Earth dist. -6082 Jan 02 j 06:13 -6075 Jan 02 j 00:32 20°MJ03'18 conjunction 28°M33'31 -14°00'11 morning rise -6075 Jan 02 j 00:21 -6082 Apr 07 j 13:17 28°M33'30 14°00'30 retrograde 21°M36'32 minimum elong -6082 Jun 26 j 23:21 -6075 Jan 05 j 04:28 min. Earth dist. 20°M33'12 40.77850 AU max. Earth dist. 28°M38'30 44.12432 AU -6075 Jan 07 j 16:11 opposition -6082 Jun 30 j 04:50 20°M29'06 -13°09'52 morning rise 28°M42'25 0°**∡**7 direct -6082 Sep 18 j 11:42 19°M23'42 -6075 Mar 08 j 00:23 -6075 Apr 15 j 23:51 evening set -6082 Dec 17 j 15:08 20°M52'17 retrograde 0°**х** 17′24 -6075 May 25 j 16:54 30°RM 21°M05'49 -12°40'27 29°M15'06 42.28987 AU conjunction -6082 Dec 26 j 00:02 min. Earth dist. -6075 Jul 05 j 17:51 -6082 Dec 25 j 23:49 -6075 Jul 08 j 17:52 minimum elong 21°M05'48 12°40'45 opposition 29°M11'22 -14°45'49 -6082 Dec 29 j 07:33 -6075 Sep 27 j 03:36 max. Earth dist. 21°M11'11 42.84117 AU direct 28°M07'17 morning rise -6081 Jan 03 j 09:40 21°M19'25 evening set -6075 Dec 29 j 09:48 29°M37'57 retrograde -6081 Apr 09 j 02:46 22°M52'48 min. Earth dist. -6081 Jun 28 j 12:11 21°M49'43 41.00594 AU conjunction -6074 Jan 03 j 11:50 29°M45'54 -14°11'48 opposition -6081 Jul 01 j 17:49 21°M45'37 -13°25'05 minimum elong -6074 Jan 03 j 11:40 29°M45'54 14°12'07 direct -6081 Sep 20 j 00:20 20° M40'26max. Earth dist. -6074 Jan 06 j 15:05 29°M50'49 44.32755 AU evening set -6081 Dec 19 j 13:33 22°M09'13 morning rise -6074 Jan 08 j 13:56 29°M53'53 -6074 Jan 12 j 12:04 0°**∡**7 conjunction -6081 Dec 27 j 12:47 22°M22'02 -12°54'56 retrograde -6074 Apr 17 j 13:01 1°**х** 29′18 minimum elong -6081 Dec 27 i 12:35 22°M22'02 12°55'13 min. Earth dist. -6074 Jul 07 i 04:29 0° **₹**27'12 42.49366 AU max. Earth dist. -6081 Dec 30 i 20:02 22°M27'22 43.06460 AU opposition -6074 Jul 10 i 04:48 0°**₹**23'28 -14°57'31 morning rise -6080 Jan 04 i 12:44 22°M34'55 -6074 Jul 29 i 12:49 30°RML retrograde -6080 Apr 09 j 16:46 24°ML08'30 direct -6074 Sep 28 j 12:41 29°M19'33 -6080 Jun 29 j 02:47 23°ML05'31 41.22937 AU -6074 Nov 26 j 11:01 0°×7 min. Earth dist. -6080 Jul 02 j 06:33 23°M01'32 -13°39'47 -6074 Dec 31 j 11:25 0°**х** 50'46 evening set opposition -6080 Sep 20 j 11:35 21°M56'34 direct -6080 Dec 20 j 12:10 -6073 Jan 04 j 22:49 0°**₹**57'45 -14°22'56 23°M25'34 conjunction evening set -6073 Jan 04 j 22:38 0°**х** 57'44 14°23'15 minimum elong 1°**∡**02'35 44.52858 AU -6080 Dec 28 j 01:21 23°M37'39 -13°08'56 -6073 Jan 08 j 01:15 conjunction max. Earth dist. 1°×104'43 -6080 Dec 28 j 01:08 -6073 Jan 09 j 10:14 minimum elong 23°M-37'38 13°09'14 morning rise 2°**∡**¹40'41 -6080 Dec 31 j 07:48 -6073 Apr 19 j 01:18 max. Earth dist. 23°M42'54 43.28406 AU retrograde -6073 Jul 08 j 16:22 1°**∡**38'43 42.69534 AU -6079 Jan 04 j 14:59 23°M49'47 morning rise min. Earth dist. 25°M23'35 -6079 Apr 11 j 04:45 -6073 Jul 11 j 15:42 1°**х** 35′02 -15°08′43 retrograde opposition -6079 Jun 30 j 15:24 24°M20'47 41.44856 AU -6073 Sep 29 j 21:43 0°**х** 31′19 min. Earth dist. direct 2°**х**¹03′13 -6079 Jul 03 j 18:59 -6072 Jan 02 j 14:52 opposition 24°M16'49 -13°53'59 evening set direct -6079 Sep 22 j 00:37 23°M12'03 -6079 Dec 22 j 10:52 24°M41'17 conjunction -6072 Jan 06 j 09:43 2°**∡**09'06 -14°33'37 evening set minimum elong -6072 Jan 06 j 09:34 2°**∡**109'05 14°33'57 conjunction -6079 Dec 29 j 13:25 24°M52'37 -13°22'28 morning rise -6072 Jan 10 j 04:30 2°×14'58 -6079 Dec 29 j 13:14 24°M52'36 13°22'45 max. Earth dist. -6072 Jan 09 j 12:29 2°**х** 13′56 44.72745 AU minimum elong -6078 Jan 01 j 18:24 24°M57'44 43.49930 AU -6072 Apr 19 j 09:19 3°**х** 51'35 max. Earth dist. retrograde -6078 Jan 05 j 16:33 25°M03'59 -6072 Jul 09 j 03:30 2°**х** 49'46 42.89452 AU morning rise min. Earth dist. -6078 Apr 12 j 17:03 26°MJ38'01 -6072 Jul 12 j 02:09 2°**∡**¹46′08 -15°19′26 retrograde opposition -6078 Jul 02 i 04:41 1°**х** 42'36 min. Earth dist. 25°M35'20 41.66377 AU direct -6072 Sep 30 i 10:52 -6078 Jul 05 i 07:15 opposition 25°M31'26 -14°07'42 evening set -6071 Jan 03 j 21:09 3°**х** 15′23 direct -6078 Sep 23 i 12:58 24°M26'51 -6078 Dec 24 j 09:54 -6071 Jan 06 i 20:17 evening set 25°M56'22 conjunction 3°**х** 19'59 -14°43'49 minimum elong -6071 Jan 06 i 20:08 3°**₹**19'58 14°44'08 -6078 Dec 31 j 01:31 26°ML06'55 -13°35'31 -6071 Jan 09 i 19:18 3°×24'34 conjunction morning rise -6078 Dec 31 j 01:19 26°ML06'54 13°35'49 -6071 Jan 09 j 21:21 3°**₹**24'42 44.92386 AU minimum elong max. Earth dist. -6077 Jan 03 j 06:47 26°M12'02 43.71076 AU -6071 Apr 20 j 18:28 5°**х** 02'03 max. Earth dist. retrograde -6071 Jul 10 j 13:59 morning rise -6077 Jan 06 j 17:26 26°M₁7'29 min. Earth dist. 4° ₹ 00'26 43.09111 AU retrograde -6077 Apr 14 j 01:55 27°M51'47 opposition -6071 Jul 13 j 12:33 3°**₹**56'49 -15°29'41 min. Earth dist. -6077 Jul 03 j 17:41 26°M49'13 41.87529 AU direct -6071 Oct 01 j 22:35 2°×753'28 -6077 Jul 06 j 18:57 26°M45'23 -14°20'54 evening set -6070 Jan 06 j 10:29 4°**х** 27'37 opposition -6077 Sep 25 j 03:43 25°M40'58 direct -6077 Dec 26 j 09:25 27°M10'49 -6070 Jan 08 j 06:44 4°**₹**30'27 -14°53'36 evening set conjunction -6070 Jan 08 j 06:36 minimum elong 4°**∡**°30'27 14°53'56 -6076 Jan 01 j 13:13 27°M20'32 -13°48'05 -6070 Jan 10 j 02:47 4°×33'17 conjunction morning rise minimum elong -6076 Jan 01 j 13:03 27°M20'32 13°48'24 max. Earth dist. -6070 Jan 11 j 08:06 4°**≯**35'10 45.11732 AU max. Earth dist. -6076 Jan 04 j 16:53 27°M25'32 43.91893 AU retrograde -6070 Apr 22 j 03:28 6°**х** 12'07 morning rise -6076 Jan 07 j 17:20 27°M30'18 min. Earth dist. -6070 Jul 12 j 02:09 5°**х** 10'35 43.28435 AU

retrograde

opposition

min. Earth dist.

-6076 Apr 14 j 12:48

-6076 Jul 04 j 04:58

-6076 Jul 07 j 06:30

29°M04'54

28°MJ02'31 42.08386 AU

27°M58'41 -14°33'37

opposition

direct

-6070 Jul 14 j 22:47

-6070 Oct 03 j 10:24

5°**∡**07'04 -15°39'28

4°**х**¹03'55

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6069 in astronomical counting style is the year 6070 BCE in historical counting style. -6069 Jan 09 i 17:14 5°**₹**'40'31 -15°02'56 retrograde -6061 May 02 j 15:55 16°**₹**'21'16 conjunction -6069 Jan 09 i 17:06 5°**∡**⁷40'30 15°03'16 min. Earth dist. -6061 Jul 22 j 20:02 15°**₹**20'37 44.83891 AU minimum elong 5°**尽**45'07 45.30726 AU -6069 Jan 12 j 17:09 opposition -6061 Jul 25 j 08:45 15°**х** 17'35 -16°49'03 max. Earth dist. -6069 Apr 23 j 14:27 7°**х** 21′46 -6061 Oct 13 j 22:13 14°**х** 15′35 direct retrograde 6°**₹**'20'25 43.47366 AU -6069 Jul 13 j 12:00 min. Earth dist. -6060 Jan 20 j 06:56 15°**∡**148'56 -16°09'17 opposition -6069 Jul 16 j 08:33 6° ₹16'55 -15°48'50 conjunction -6069 Oct 04 j 19:54 -6060 Jan 20 j 06:51 direct 5°**х** 13′56 minimum elong 15°**∡**¹48'56 16°09'38 -6060 Jan 22 j 23:13 max. Earth dist. 15°**✗**52'55 46.83460 AU conjunction -6068 Jan 11 j 03:29 6°**₹**50'09 -15°11'53 retrograde -6060 May 02 j 22:14 17°**х** 26′39 -6068 Jan 11 j 03:20 -6060 Jul 23 j 05:40 minimum elong 6°**х** 50′09 15°12′13 min. Earth dist. 16°**∡**26'05 44.99581 AU max. Earth dist. -6068 Jan 14 j 02:07 6°**≯**54'39 45.49289 AU opposition -6060 Jul 25 j 16:57 16°**₹**23'07 -16°54'43 -6068 Apr 24 j 03:07 -6060 Oct 14 j 08:34 retrograde 8°×31'00 direct 15°**х** 21′16 -6068 Jul 13 j 23:45 min. Earth dist. 7°**尽**29'43 43.65851 AU opposition -6068 Jul 16 j 18:27 7°**∡**126'20 -15°57'47 conjunction -6059 Jan 20 j 15:28 16°**₹**54'20 -16°14'40 direct -6068 Oct 05 j 03:37 6°**х** 23′30 minimum elong -6059 Jan 20 j 15:25 16°**≯**54'20 16°15'03 max. Earth dist. -6059 Jan 23 j 06:16 16°**₹**58'12 46.98931 AU conjunction -6067 Jan 11 j 13:33 7°**∡**759'20 -15°20'26 retrograde -6059 May 04 j 06:08 18°**∡**31'44 minimum elong -6067 Jan 11 j 13:26 7°**∡**759′20 15°20'46 min. Earth dist. -6059 Jul 24 j 13:32 17°**∡**31'21 45.14989 AU max. Earth dist. -6067 Jan 14 j 11:45 8°**尽**03'47 45.67400 AU opposition -6059 Jul 27 j 00:58 17°**х** 28'23 -17°00'00 retrograde -6067 Apr 25 j 12:44 9°**х** 39′46 direct -6059 Oct 15 j 17:16 16°**х** 26'41 min. Earth dist. -6067 Jul 15 j 10:17 8° ₹38'35 43.83849 AU opposition -6067 Jul 18 j 04:02 8° **₹**35'15 -16°06'20 conjunction -6058 Jan 22 j 00:04 17°**₹**59'29 -16°19'42 direct -6067 Oct 06 j 13:27 7°**х** 32′32 minimum elong -6058 Jan 22 i 00:01 17°**∡** 59'29 16°20'03 max. Earth dist. -6058 Jan 24 j 14:10 18°**✗**03'18 47.14087 AU conjunction -6066 Jan 12 j 23:25 9°**х** 08'00 -15°28'35 retrograde -6058 May 05 j 16:03 19°**х** 36′36 -6066 Jan 12 j 23:17 9°×707'59 15°28'56 -6058 Jul 25 j 23:25 18° ₹36'17 45.30058 AU minimum elong min. Earth dist. max. Earth dist. -6066 Jan 15 j 19:29 9° **₹**12'18 45.85037 AU -6058 Jul 28 j 08:50 18° ₹33'25 -17°04'54 opposition -6066 Apr 26 j 21:59 10°**х** 48′00 -6058 Oct 17 j 00:23 17°**х** 31′53 retrograde direct -6066 Jul 16 j 20:26 min. Earth dist. 9°**х** 46′54 44.01396 AU -6057 Jan 23 j 08:46 -6066 Jul 19 j 13:23 9° 🗷 43'37 -16°14'29 19°**х** 04'25 -16°24'22 opposition conjunction 8°**∡**11'02 -6066 Oct 07 j 23:15 -6057 Jan 23 j 08:43 direct minimum elong 19° ₹04'25 16°24'45 -6057 Jan 25 j 22:07 max. Earth dist. 19°**✗**08'10 47.28885 AU -6065 Jan 14 j 09:13 -6057 May 07 j 02:16 conjunction 10°**∡**16'06 -15°36'22 20°**х** 41′14 retrograde -6065 Jan 14 j 09:07 -6057 Jul 27 j 07:46 19°**∡**′41′03 45.44711 AU minimum elong 10° **₹**16'06 15°36'43 min. Earth dist. 10°**⊀**20'23 46.02236 AU 19°**х** 38′14 -17°09′27 -6065 Jan 17 j 05:14 -6057 Jul 29 j 16:31 max. Earth dist. opposition -6057 Oct 18 j 06:14 -6065 Apr 28 j 03:26 18°**х** 36′50 retrograde 11°×755'41 direct -6065 Jul 18 j 07:23 min. Earth dist. 10°**尽**54'38 44.18512 AU opposition -6065 Jul 20 j 22:32 10°**₹**51'26 -16°22'13 conjunction -6056 Jan 24 j 17:09 20°**∡**109'08 -16°28'42 direct -6065 Oct 09 j 12:13 9°**х**⁴48'58 minimum elong -6056 Jan 24 j 17:07 20°**∡**109'08 16°29'04 max. Earth dist. -6056 Jan 27 j 04:21 20°**х** 12'44 47.43233 AU conjunction -6064 Jan 15 j 18:42 11°**∡**123'39 -15°43'45 retrograde -6056 May 07 j 11:39 21°×745'39 -6064 Jan 15 j 18:35 11°**х** 23'38 15°44'06 min. Earth dist. -6056 Jul 27 j 16:46 20°**х** 45'33 45.58902 AU minimum elong max. Earth dist. -6064 Jan 18 j 13:05 11°**✗**27'49 46.19050 AU -6056 Jul 30 j 00:09 20°**х** 42'49 -17°13'40 opposition -6064 Apr 28 j 12:11 13°**х** 02'49 direct -6056 Oct 18 j 12:47 19°**∡**¹41'32 retrograde -6064 Jul 18 j 16:06 12°**✗**'01'53 44.35273 AU min. Earth dist. -6064 Jul 21 i 07:18 -6055 Jan 25 i 01:37 opposition 11° 🗷 58'42 -16° 29' 33 conjunction 21° 🖈 13'35 -16°32'43 -6064 Oct 09 j 21:51 direct 10°**х** 56′20 minimum elong -6055 Jan 25 i 01:35 21° 🖈 13'35 16°33'06 max. Earth dist. -6055 Jan 27 j 12:29 21° ₹17'10 47.57101 AU conjunction -6063 Jan 16 i 03:56 12°**₹**30'39 -15°50'44 retrograde -6055 May 08 j 16:05 22°**∡**¹49'48 minimum elong -6063 Jan 16 i 03:51 12°**₹**30'39 15°51'05 min. Earth dist. -6055 Jul 29 i 02:04 21° **1**49'45 45.72580 AU max. Earth dist. -6063 Jan 18 i 21:45 12°**₹**34'45 46.35535 AU opposition -6055 Jul 31 i 07:40 21° -17°17'33 -6063 Apr 29 j 22:34 14°**₹**09'26 direct -6055 Oct 19 j 23:37 20°**₹**'45'56 retrograde -6063 Jul 20 j 02:29 13°**₹**08'32 44.51739 AU min. Earth dist. opposition -6063 Jul 22 j 16:03 13°**₹**05'27 -16°36'28 conjunction -6054 Jan 26 j 09:50 22° 🖈 17'43 -16°36'24 12°**₹**'03'11 direct -6063 Oct 11 j 05:18 minimum elong -6054 Jan 26 j 09:49 22°**х** 17'43 16°36'46 max. Earth dist. -6054 Jan 28 j 18:22 22°**尽**21'09 47.70472 AU conjunction -6062 Jan 17 j 13:03 13°**₹**37'10 -15°57'19 retrograde -6054 May 09 j 22:22 23°×753'38 -6062 Jan 17 j 12:57 13°**∡**'37'09 15°57'40 -6054 Jul 30 j 09:52 22° ₹ 53'41 45.85758 AU minimum elong min. Earth dist. -6062 Jan 20 j 06:42 13°**✗**⁴41'14 46.51761 AU -6054 Aug 01 j 15:00 22°\$\square\$51'03 -17°21'06 max. Earth dist. opposition -6062 May 01 j 06:57 15°**∡**15'34 -6054 Oct 21 j 09:03 21°**х** 49'59 retrograde direct -6062 Jul 21 j 11:09 14°**∡**14'48 44.67934 AU min. Earth dist. opposition -6062 Jul 24 j 00:30 14°**∡**11'43 -16°42'58 conjunction -6053 Jan 27 j 18:01 23°**尽**21'30 -16°39'47 direct -6062 Oct 12 j 14:21 13°**х** 09′35 minimum elong -6053 Jan 27 j 17:59 23°**尽**21'30 16°40'10 max. Earth dist. -6053 Jan 30 j 01:39 23°**尽**24'52 47.83344 AU conjunction -6061 Jan 18 j 22:02 14°**∡**′43'14 -16°03'29 retrograde -6053 May 11 j 06:11 24°**х** 57'07 minimum elong -6061 Jan 18 j 21:58 14°**∡**′43'14 16°03'51 -6053 Jul 31 j 19:19 23° 🗷 57'09 45.98464 AU min. Earth dist.

max. Earth dist.

-6061 Jan 21 j 13:58

14°**✗¹**47'12 46.67731 AU

opposition

-6053 Aug 02 j 22:08

23°**∡**754'39 -17°24'19

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 26

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direct	-6053 Oct 22 j 17:02	-	in ustronomical co	min. Earth dist.	-6045 Aug 09 j 07:35		46.87818 AU
uncet	0033 000 22 j 17.02	22 7 33 10		opposition	-6045 Aug 11 j 02:26	2°る11'29	
conjunction	-6052 Jan 29 j 02:02	24° ₹ '24'54	-16°42'50	direct	-6045 Oct 30 j 22:40	1°る11'12	17 37 33
minimum elong	-6052 Jan 29 j 02:02	24° 🖈 24'54		direct	-00+3 Oct 30 j 22.40	1 011 12	
max. Earth dist.	-6052 Jan 31 j 08:46		47.95793 AU	agnismation	-6044 Feb 06 j 13:39	2° ප් 40'45	16055124
	•		47.93793 AU	conjunction	3		
retrograde	-6052 May 11 j 14:06	26° ₹ 00'12	46 10750 411	minimum elong	-6044 Feb 06 j 13:42	2°る40'46	
min. Earth dist.	-6052 Aug 01 j 02:30		46.10759 AU	max. Earth dist.	-6044 Feb 08 j 11:04		48.83537 AU
opposition	-6052 Aug 03 j 05:04	24° ₹ 57'50	-17°27'13	retrograde	-6044 May 19 j 21:13	4° ට 14'01	
direct	-6052 Oct 22 j 23:46	23° ≯ 56'56		min. Earth dist.	-6044 Aug 09 j 14:29		46.97275 AU
				opposition	-6044 Aug 11 j 08:33	3° る 12'36	-17°38'09
conjunction	-6051 Jan 29 j 09:36	25° ₹ 27'55	-16°45'33	direct	-6044 Oct 31 j 06:01	2° る 12'24	
minimum elong	-6051 Jan 29 j 09:35	25° ₹ '27'55	16°45'56				
max. Earth dist.	-6051 Jan 31 j 14:31	25° ∡ ³31′05	48.07859 AU	conjunction	-6043 Feb 06 j 20:45	3° ⋜ 41'47	-16°55'36
retrograde	-6051 May 12 j 23:52	27° ∡ ¹02'54		minimum elong	-6043 Feb 06 j 20:48	3° る 41'48	16°55'58
min. Earth dist.	-6051 Aug 02 j 10:41	26° ₹ '03'04	46.22711 AU	max. Earth dist.	-6043 Feb 08 j 17:14	3° ℧ 44'25	48.92717 AU
opposition	-6051 Aug 04 j 12:01	26° ₹ 00'39	-17°29'46	retrograde	-6043 May 21 j 02:42	5° ರ 14'51	
direct	-6051 Oct 24 i 04:25	24° х 59'48		min. Earth dist.	-6043 Aug 10 j 23:05		47.06189 AU
direct	0031 000 21 j 01:23	21 7 37 10		opposition	-6043 Aug 12 j 14:43	4° ට 13'31	
conjunction	6050 Ion 20: 17:22	26° ₹ 30'33	16047157	direct	-6043 Nov 01 j 13:56	3° ප 13'24	-17 38 08
•	-6050 Jan 30 j 17:23			direct	-0043 NOV 01 J 13:30	3 613 24	
minimum elong	-6050 Jan 30 j 17:24	26° ₹ 30'33					
max. Earth dist.	-6050 Feb 01 j 22:30		48.19607 AU	conjunction	-6042 Feb 08 j 04:00	4° る 42'36	
retrograde	-6050 May 14 j 05:32	28° ₹ 05'15		minimum elong	-6042 Feb 08 j 04:03	4° る 42'37	
min. Earth dist.	-6050 Aug 03 j 18:36	27° ₹ 05′26	46.34344 AU	max. Earth dist.	-6042 Feb 09 j 22:55	4° る 45'08	49.01369 AU
opposition	-6050 Aug 05 j 18:38	27° ∡ °03′05	-17°31'57	retrograde	-6042 May 22 j 09:20	6° ප 15'26	
direct	-6050 Oct 25 j 12:45	26° ₰ 02'20		min. Earth dist.	-6042 Aug 12 j 05:28	5° ප 16'06	47.14559 AU
				opposition	-6042 Aug 13 j 20:30	5° る 14'13	-17°37'52
conjunction	-6049 Feb 01 j 00:57	27° ∡ ³32'50	-16°49'59	direct	-6042 Nov 02 j 20:20	4° る 14'09	
minimum elong	-6049 Feb 01 j 00:57	27° х 32′50			, , , , , , , , , , , , , , , , , , ,		
max. Earth dist.	-6049 Feb 03 j 04:11		48.31066 AU	conjunction	-6041 Feb 09 j 11:01	5° \ 43'10	-16°55'12
retrograde	-6049 May 15 j 11:03	29° х 07'16	40.51000710	minimum elong	-6041 Feb 09 j 11:06		16°55'35
Č			46 45605 ATT	_	•		
min. Earth dist.	-6049 Aug 05 j 01:15		46.45695 AU	max. Earth dist.	-6041 Feb 11 j 03:41		49.09486 AU
opposition	-6049 Aug 07 j 01:14	28° ₹ 05'13	-17°33'48	retrograde	-6041 May 23 j 18:23	7° る 15'47	
direct	-6049 Oct 26 j 20:25	27° ∡ 04'33		min. Earth dist.	-6041 Aug 13 j 13:15		47.22428 AU
				opposition	-6041 Aug 15 j 02:24	6° る 14'38	-17°37'18
conjunction	-6048 Feb 02 j 08:20	28° ⋌ ³34'50	-16°51'42	direct	-6041 Nov 04 j 00:15	5° る 14'37	
minimum elong	-6048 Feb 02 j 08:22	28° 渘 ³34′50	16°52'05				
max. Earth dist.	-6048 Feb 04 j 11:08	28° ∡ ³37'52	48.42235 AU	conjunction	-6040 Feb 10 j 17:56	6° る 43'28	-16°54'36
	-6048 Apr 16 j 17:23	0°రె		minimum elong	-6040 Feb 10 j 17:59	6° る 43'28	16°55'00
retrograde	-6048 May 15 j 16:22	0° ろ 09'01		max. Earth dist.	-6040 Feb 12 j 10:20	6° る 45'50	49.17131 AU
	-6048 Jun 13 j 22:54	30°R. ✓		retrograde	-6040 May 23 j 23:56	8° ਰ 15'51	
min. Earth dist.	-6048 Aug 05 j 09:36		46.56750 AU	min. Earth dist.	-6040 Aug 13 j 20:12		47.29837 AU
opposition	-6048 Aug 07 j 07:45	29° ₹ 07'05		opposition	-6040 Aug 15 j 08:01	7°る14'46	
direct	-6048 Oct 27 j 05:21	28° × ⁷ 06'31	-17 33 17	direct	-6040 Nov 04 j 06:45	6°る14'47	-17 30 20
direct	-0048 Oct 27 J 05.21	28 × 00 31		direct	-0040 NOV 04 J 00.43	0 01447	
	(047 F.1 02:15.44	200 726125	1,0052105		(020 F.1 11:00 20	70742120	16052142
conjunction	-6047 Feb 02 j 15:44	29° ₹ 36'35		conjunction	-6039 Feb 11 j 00:38	7°る43'29	
minimum elong	-6047 Feb 02 j 15:45	29° ∡ 36'36		minimum elong	-6039 Feb 11 j 00:44	7° る 43'30	
max. Earth dist.	-6047 Feb 04 j 17:42		48.53125 AU	max. Earth dist.	-6039 Feb 12 j 14:53		49.24367 AU
	-6047 Feb 19 j 05:46	0°ಕ		retrograde	-6039 May 25 j 05:40	9° る 15'39	
retrograde	-6047 May 17 j 00:41	1° る 10'32		min. Earth dist.	-6039 Aug 15 j 02:09		47.36876 AU
min. Earth dist.	-6047 Aug 06 j 16:05	0° ට 10'58	46.67493 AU	opposition	-6039 Aug 16 j 13:31	8° る 14'39	-17°35'20
opposition	-6047 Aug 08 j 14:03	0° る 08'44	-17°36'29	direct	-6039 Nov 05 j 12:37	7° る 14'42	
	-6047 Aug 16 j 01:33	30°Ŗ ⋌ ¹					
direct	-6047 Oct 28 j 11:03	29° ₹ 08'15		conjunction	-6038 Feb 12 j 07:20	8° る 43'15	-16°52'33
	-6046 Jan 07 j 06:49	0°ප		minimum elong	-6038 Feb 12 j 07:24	8° る 43'15	
	00 10 Jun 07 J 00.15	° O		max. Earth dist.	-6038 Feb 13 j 21:01		49.31246 AU
conjunction	6046 Eab 02: 22:57	00=250100	-16°54'09	retrograde		8 84327 10° る 15'13	77.31240 AU
•	-6046 Feb 03 j 22:57				-6038 May 26 j 08:44		AT A2572 AT
minimum elong	-6046 Feb 03 j 23:00		16°54'33	min. Earth dist.	-6038 Aug 16 j 09:38		47.43572 AU
max. Earth dist.	-6046 Feb 05 j 23:11		48.63676 AU	opposition	-6038 Aug 17 j 19:03		-17°33'53
retrograde	-6046 May 18 j 10:00	2° る 11'51		direct	-6038 Nov 06 j 21:40	8° る 14'24	
min. Earth dist.	-6046 Aug 08 j 00:03		46.77877 AU				
opposition	-6046 Aug 09 j 20:23	1° る 10'11	-17°37'20	conjunction	-6037 Feb 13 j 14:01	9° る 42'48	-16°51'04
direct	-6046 Oct 29 j 14:55	0° る 09'49		minimum elong	-6037 Feb 13 j 14:08	9° る 42'48	16°51'27
				max. Earth dist.	-6037 Feb 15 j 02:43	9° る 44'56	49.37821 AU
conjunction	-6045 Feb 05 j 06:23	1° る 39'32	-16°54'55	retrograde	-6037 May 27 j 15:12	11° る 14'35	
minimum elong	-6045 Feb 05 j 06:25		16°55'17	min. Earth dist.	-6037 Aug 17 j 14:55		47.49964 AU
max. Earth dist.	-6045 Feb 07 j 06:16		48.73836 AU	opposition	-6037 Aug 19 j 00:16	10° ට 13'44	
retrograde	-6045 May 19 j 15:31	3°පි13'01		direct	-6037 Nov 08 j 03:30	9° ප 13'54	1, 52 00
. CH CHIUUC	00 10 11my 17 J 10.51	5 -15 01		anoct	005, 110, 00 1 05.50	, 01554	

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6036 in astronomical counting style is the year 6037 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -6036 in astronomical of	counting style is the year	r 6037 BCE in historical c	ounting style.	
conjunction	-6036 Feb 14 j 20:28	10° ප් 42'11 -16°49'18	retrograde	-6028 Jun 04 j 19:27	20° る 03'56	
minimum elong	-6036 Feb 14 j 20:33	10°る42'11 16°49'41	opposition	-6028 Aug 26 j 21:51	19° る 03'44	-17°03'51
max. Earth dist.	-6036 Feb 16 j 07:30	10°る44'13 49.44099 AU	min. Earth dist.	-6028 Aug 26 j 00:56	19° る 04'44	47.90077 AU
retrograde	-6036 May 28 j 00:21	12° る 13'48	direct	-6028 Nov 16 j 04:04	18° る 04'15	
min. Earth dist.	-6036 Aug 17 j 21:49	11°る14'35 47.56074 AU				
opposition	-6036 Aug 19 j 05:40	11° ට 13'03 -17°30'05	conjunction	-6027 Feb 23 j 05:38	19° る 31'39	-16°21'16
direct	-6036 Nov 08 j 05:31	10° る 13'16	minimum elong	-6027 Feb 23 i 05:46	19° る 31'39	16°21'39
	,		max. Earth dist.	-6027 Feb 24 i 04:46		49.82765 AU
conjunction	-6035 Feb 15 j 02:52	11°る41'26 -16°47'14	retrograde	-6027 Jun 05 j 23:14	21° ප 01'57	
minimum elong	-6035 Feb 15 j 02:59	11° る 41'26 16°47'37	min. Earth dist.	-6027 Aug 27 j 05:52	20°₹02'46	47.92252 AU
max. Earth dist.	-6035 Feb 16 j 13:55	11°る43'27 49.50097 AU	opposition	-6027 Aug 28 j 02:31	20° ප 01'47	
retrograde	-6035 May 29 j 05:50	13°る12'54	direct	-6027 Nov 17 j 11:06	19° පි 02'17	10 37 21
min. Earth dist.	-6035 Aug 19 j 03:58	12°る13'44 47.61869 AU	uncer	00271107 17 11.00	1) 00217	
opposition	-6035 Aug 20 j 10:54	12°る12'14 -17°27'44	conjunction	-6026 Feb 24 j 11:43	20° る 29'36	16016154
direct	-6035 Nov 09 j 11:38	11°る12'32	minimum elong	-6026 Feb 24 j 11:53	20 32930 20° 3 29'37	
direct	-0033 NOV 09 J 11.38	11 01232	_	•		
	(024E1 16:00.17	120740126 16044152	max. Earth dist.	-6026 Feb 25 j 09:05		49.84836 AU
conjunction	-6034 Feb 16 j 09:17	12° 3 40'36 -16°44'53	retrograde	-6026 Jun 07 j 06:57	21°る59'47	
minimum elong	-6034 Feb 16 j 09:22	12° る 40'36 16°45'15	opposition	-6026 Aug 29 j 07:10	20° 云 59'38	
max. Earth dist.	-6034 Feb 17 j 18:09	12°る42'30 49.55777 AU	min. Earth dist.	-6026 Aug 28 j 12:18		47.94092 AU
retrograde	-6034 May 30 j 11:04	14° る 11'55	direct	-6026 Nov 18 j 14:09	20° ろ 00'09	
min. Earth dist.	-6034 Aug 20 j 09:46	13°る12'48 47.67327 AU				
opposition	-6034 Aug 21 j 15:58	13°る11'21 -17°25'06	conjunction	-6025 Feb 25 j 17:54	21° る 27'24	-16°12'14
direct	-6034 Nov 10 j 17:21	12° る 11'43	minimum elong	-6025 Feb 25 j 18:03	21° る 27'24	16°12'36
			max. Earth dist.	-6025 Feb 26 j 15:04	21° る 28'36	49.86599 AU
conjunction	-6033 Feb 17 j 15:48	13° る 39'42 -16°42'16	retrograde	-6025 Jun 08 j 12:10	22° る 57'27	
minimum elong	-6033 Feb 17 j 15:55	13° る 39'42 16°42'39	opposition	-6025 Aug 30 j 11:47	21° る 57'22	-16°49'42
max. Earth dist.	-6033 Feb 19 j 00:03	13°る41'34 49.61077 AU	min. Earth dist.	-6025 Aug 29 j 17:38	21° る 58'14	47.95620 AU
retrograde	-6033 May 31 j 14:49	15° る 10'53	direct	-6025 Nov 19 j 19:18	20° る 57'53	
opposition	-6033 Aug 22 j 21:09	14°る10'25 -17°22'11				
min. Earth dist.	-6033 Aug 21 j 17:12	14°る11'45 47.72368 AU	conjunction	-6024 Feb 26 j 23:42	22° ට 25'05	-16°07'19
direct	-6033 Nov 12 j 00:59	13°る10'50	minimum elong	-6024 Feb 26 j 23:53	22° る 25'05	
unect	-0033 NOV 12 J 00.39	15 01030	max. Earth dist.	•		49.88072 AU
	(022 E-L 10 : 22.10	140=220144 16020122		-6024 Feb 27 j 18:53	22 3 26 10 23° る 55'02	49.88072 AU
conjunction	-6032 Feb 18 j 22:10	14°る38'44 -16°39'22	retrograde	-6024 Jun 08 j 18:10		1.604.412.5
minimum elong	-6032 Feb 18 j 22:17	14° る 38'44 16°39'45	opposition	-6024 Aug 30 j 16:23	22°る55'00	
max. Earth dist.	-6032 Feb 20 j 04:52	14° 石 40'30 49.65945 AU	min. Earth dist.	-6024 Aug 29 j 22:50		47.96871 AU
retrograde	-6032 May 31 j 19:58	16° පි 09'47	direct	-6024 Nov 19 j 23:17	21° る 55'33	
min. Earth dist.	-6032 Aug 21 j 22:36	15°る10'44 47.76936 AU				
opposition	-6032 Aug 23 j 02:10	15° る 09'24 -17°19'01	conjunction	-6023 Feb 27 j 05:43	23° る 22'43	
direct	-6032 Nov 12 j 07:29	14° る 09'53	minimum elong	-6023 Feb 27 j 05:52	23° る 22'44	16°02'28
			max. Earth dist.	-6023 Feb 28 j 00:29	23° る 23'47	49.89260 AU
conjunction	-6031 Feb 19 j 04:31	15° る 37'40 -16°36'15	retrograde	-6023 Jun 09 j 21:32	24° る 52'36	
minimum elong	-6031 Feb 19 j 04:39	15°る37'41 16°36'38	opposition	-6023 Aug 31 j 20:58	23° る 52'37	-16°38'51
max. Earth dist.	-6031 Feb 20 j 08:59	15°る39'19 49.70308 AU	min. Earth dist.	-6023 Aug 31 j 05:15	23° る 53'22	47.97820 AU
retrograde	-6031 Jun 02 j 04:15	17° る 08'36	direct	-6023 Nov 21 j 06:10	22° る 53'13	
min. Earth dist.	-6031 Aug 23 j 05:54	16°る09'30 47.80990 AU		J		
opposition	-6031 Aug 24 j 07:14	16°る08'17 -17°15'35	conjunction	-6022 Feb 28 j 11:44	24° පි 20'22	-15°56'38
direct	-6031 Nov 13 j 11:03	15° る 08'47	minimum elong	-6022 Feb 28 j 11:55	24° ට 20'22	
direct	0051 1107 15 j 11.05	13 000 47	max. Earth dist.	-6022 Mar 01 j 05:13		49.90150 AU
conjunction	-6030 Feb 20 j 11:01	16° ප 36'29 -16°32'52	retrograde	-6022 Jun 11 j 02:07	25° ප් 50'11	4).)0130 AC
minimum elong	-6030 Feb 20 j 11:09	16°る36'29 16°33'14	ě	-6022 Sep 01 j 09:55		47.98432 AU
2			min. Earth dist.			
max. Earth dist.	-6030 Feb 21 j 14:52	16°る38'05 49.74155 AU	opposition	-6022 Sep 02 j 01:27	24°る50'17	-16°33'01
retrograde	-6030 Jun 03 j 11:04	18° る 07'15	direct	-6022 Nov 22 j 12:05	23° る 50'55	
opposition	-6030 Aug 25 j 12:12	17° る 06'59 -17°11'56			_	
min. Earth dist.	-6030 Aug 24 j 12:13	17°る08'08 47.84500 AU	conjunction	-6021 Mar 01 j 17:45	25° る 18'04	
direct	-6030 Nov 14 j 15:23	16° る 07'30	minimum elong	-6021 Mar 01 j 17:54	25° る 18'05	15°51'16
			max. Earth dist.	-6021 Mar 02 j 09:16	25° る 18'57	49.90661 AU
conjunction	-6029 Feb 21 j 17:20	17° ප 35'06 -16°29'15	retrograde	-6021 Jun 12 j 09:30	26° ප් 47'51	
minimum elong	-6029 Feb 21 j 17:27	17° る 35'06 16°29'38	opposition	-6021 Sep 03 j 05:58	25° る 48'02	-16°26'56
max. Earth dist.	-6029 Feb 22 j 18:29	17° る 36'32 49.77478 AU	min. Earth dist.	-6021 Sep 02 j 16:36	25° る 48'40	47.98645 AU
retrograde	-6029 Jun 04 j 17:44	19° る 05'42	direct	-6021 Nov 23 j 15:23	24°₹48'42	
opposition	-6029 Aug 26 j 16:59	18°る05'28 -17°08'01		· J		
min. Earth dist.	-6029 Aug 25 j 18:00	18°る06'34 47.87515 AU	conjunction	-6020 Mar 01 j 23:54	26° ට 15'51	-15°44'56
direct	-6029 Nov 15 j 19:41	17° る 05'59	minimum elong	-6020 Mar 02 j 00:05	26°පි15'52	
	0022 1107 10 J 17.41	- 0000)	max. Earth dist.	-6020 Mar 02 j 14:57		49.90747 AU
conjunction	-6028 Feb 22 j 23:35	18° ට 33'29 -16°25'24	retrograde	-6020 Jun 12 j 16:39	20 01043 27° る 45'36	12.20171 AU
	•		•	-6020 Sep 03 j 10:30		16020126
minimum elong	-6028 Feb 22 j 23:44	18°る33'30 16°25'46	opposition		26° る 45'51	
max. Earth dist.	-6028 Feb 23 j 23:58	18°る34'53 49.80323 AU	min. Earth dist.	-6020 Sep 02 j 22:17	20 040 23	47.98384 AU

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 28 Attention, astronomical year style is used: The year -6020 in astronomical counting style is the year 6021 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	ne year -6020 i	in astronomical co	ounting style is the year	r 6021 BCE in historical c	ounting style.	
direct	-6020 Nov 23 j 18:36	25° る 46'32		minimum elong	-6012 Mar 10 j 00:07	3° ≈ 57'24	14°49'05
				max. Earth dist.	-6012 Mar 10 j 02:45	3° ≈ 57'33	49.74053 AU
conjunction	-6019 Mar 03 j 05:49	27° る 13'43	-15°38'44	morning rise	-6012 Mar 12 j 12:54	4° ≈ 00'51	
minimum elong	-6019 Mar 03 j 05:59	27° る 13'43	15°39'04	retrograde	-6012 Jun 20 j 07:20	5° ≈ 26'44	
max. Earth dist.	-6019 Mar 03 j 18:08	27° る 14'25	49.90339 AU	opposition	-6012 Sep 10 j 21:55	4°≈27'04	-15°21'18
retrograde	-6019 Jun 14 j 00:28	28° る 43'24		min. Earth dist.	-6012 Sep 10 j 19:29	4° ≈ 27'11	47.79062 AU
opposition	-6019 Sep 04 j 15:04	27° る 43'42	-16°14'02	direct	-6012 Dec 01 j 13:12	3° ≈ 27'35	
min. Earth dist.	-6019 Sep 04 j 04:02		47.97609 AU	evening set	-6011 Mar 07 j 21:48	4° ≈ 50'17	
direct	-6019 Nov 24 j 21:39	26° る 44'24		Č	,		
	, , ,			conjunction	-6011 Mar 11 j 05:43	4°≈54'49	-14°40'37
conjunction	-6018 Mar 04 j 12:02	28° る 11'35	-15°32'19	minimum elong	-6011 Mar 11 j 05:56	4°≈54'50	
minimum elong	-6018 Mar 04 j 12:13	28° ට 11'35		max. Earth dist.	-6011 Mar 11 j 06:55		49.70285 AU
max. Earth dist.	-6018 Mar 04 j 23:15		49.89388 AU	morning rise	-6011 Mar 14 j 14:11	4°≈59'24	19.70203 110
retrograde	-6018 Jun 15 j 02:47	29° ප් 41'13	17.07500710	retrograde	-6011 Jun 21 j 13:11	6°≈24'11	
opposition	-6018 Sep 05 j 19:35	28° ප් 41'32	-16°07'15	opposition	-6011 Sep 12 j 02:25	5°≈24'32	-15°12'//3
min. Earth dist.	-6018 Sep 05 j 10:56		47.96278 AU	min. Earth dist.	-6011 Sep 12 j 01:55		47.75016 AU
direct	-6018 Nov 26 j 04:58	28 ප 41 37	47.90278 AU	direct	-6011 Dec 02 j 17:47	3 ≈24 33 4°≈25'02	47.73010 AU
direct	-0016 NOV 20 J 04.36	27 042 14		evening set	-6010 Mar 08 j 12:04	5°≈46'53	
:	(017 M 05 : 10.11	29° ろ 09'25	15925120	evening set	-0010 Mai 08 j 12.04	3 ≈ 40 33	
conjunction	-6017 Mar 05 j 18:11				(010) (10 : 11 51	5052110	1.4022112
minimum elong	-6017 Mar 05 j 18:23	29° る 09'25		conjunction	-6010 Mar 12 j 11:51	5°≈52'19	
max. Earth dist.	-6017 Mar 06 j 03:41		49.87911 AU	minimum elong	-6010 Mar 12 j 12:03	5°≈52'20	
	-6017 Apr 14 j 02:34	0° ≈		max. Earth dist.	-6010 Mar 12 j 12:46		49.66205 AU
retrograde	-6017 Jun 16 j 05:37	0° ≈ 39'00		morning rise	-6010 Mar 16 j 12:08	5° ≈ 57'47	
	-6017 Aug 19 j 12:42	30°₹₹		retrograde	-6010 Jun 22 j 19:42	7° ≈ 21'41	
opposition	-6017 Sep 07 j 00:02	29° る 39'20	-16°00'13	opposition	-6010 Sep 13 j 06:41	6° ≈ 22'03	-15°03'52
min. Earth dist.	-6017 Sep 06 j 15:55	29° る 39'43	47.94428 AU	min. Earth dist.	-6010 Sep 13 j 06:59	6° ≈ 22'02	47.70621 AU
direct	-6017 Nov 27 j 12:40	28° る 40'01		direct	-6010 Dec 03 j 21:40	5° ≈ 22'32	
	-6016 Feb 29 j 17:33	0° ≈		evening set	-6009 Mar 09 j 04:21	6° ≈ 43'41	
conjunction	-6016 Mar 06 j 00:01	0° ≈ 07'10	-15°18'46	conjunction	-6009 Mar 13 j 17:53	6° ≈ 49'54	-14°23'32
minimum elong	-6016 Mar 06 j 00:12	0° ≈ 07'11	15°19'08	minimum elong	-6009 Mar 13 j 18:06	6° ≈ 49'55	14°23'52
max. Earth dist.	-6016 Mar 06 j 07:23	0° ≈ 07'36	49.85923 AU	max. Earth dist.	-6009 Mar 13 j 16:20	6° ≈ 49'49	49.61760 AU
retrograde	-6016 Jun 16 j 12:48	1° ≈ 36'42		morning rise	-6009 Mar 18 j 08:01	6° ≈ 56'09	
opposition	-6016 Sep 07 j 04:33	0° ≈ 37'03	-15°52'57	retrograde	-6009 Jun 24 j 04:15	8° ≈ 19'16	
min. Earth dist.	-6016 Sep 06 j 22:34		47.92104 AU	opposition	-6009 Sep 14 j 11:07	7° ≈ 19'40	-14°54'46
	-6016 Oct 12 j 03:01	30°Rる		min. Earth dist.	-6009 Sep 14 j 12:34		47.65842 AU
direct	-6016 Nov 27 j 16:12	29° る 37'42		direct	-6009 Dec 04 j 23:35	6° ≈ 20'08	
	-6015 Jan 12 j 18:36	0° ≈		evening set	-6008 Mar 08 j 21:50	7° ≈ 40'39	
	, , , , , ,						
conjunction	-6015 Mar 07 j 06:05	1°≈04'51	-15°11'39	conjunction	-6008 Mar 13 j 23:55	7°≈47'35	-14°14'38
minimum elong	-6015 Mar 07 j 06:17	1°≈04'51	15°11'59	minimum elong	-6008 Mar 14 j 00:08	7° ≈ 47'36	14°14'57
max. Earth dist.	-6015 Mar 07 j 13:02		49.83498 AU	max. Earth dist.	-6008 Mar 13 j 21:36		49.56881 AU
retrograde	-6015 Jun 17 j 18:16	2°≈34'19	19.03 190 110	morning rise	-6008 Mar 19 j 02:34	7°≈54'32	17.20001710
opposition	-6015 Sep 08 j 08:51	1°≈34'40	-15°45'26	retrograde	-6008 Jun 24 j 08:37	9°≈16'59	
min. Earth dist.	-6015 Sep 08 j 03:43		47.89355 AU	opposition	-6008 Sep 14 j 15:39		-14°45'25
direct	-6015 Nov 28 j 20:30	0°≈35'16	47.07333 AC	min. Earth dist.	-6008 Sep 14 j 19:14		47.60591 AU
direct	-0013 NOV 28 j 20.30	0 ~33 10		direct	-6008 Dec 05 j 05:15	7°≈17'50	47.00391 AU
conjunction	-6014 Mar 08 j 12:00	2° ≈ 02'25	-15°04'16	evening set	-6008 Dec 03 j 05:13 -6007 Mar 09 j 16:40	8°≈37'47	
	•		15°04'37	evening set	-0007 Mai 09 j 10.40	o ≈3/4/	
minimum elong max. Earth dist.	-6014 Mar 08 j 12:11	2°≈02'26	49.80683 AU	agnium ation	6007 Mar 15:06:00	000015100	1.4905120
	-6014 Mar 08 j 16:39		49.00083 AU	conjunction	-6007 Mar 15 j 06:08		-14°05'30
retrograde	-6014 Jun 19 j 01:16	3°≈31'51	15027140	minimum elong	-6007 Mar 15 j 06:21	8°≈45'23	14°05'50
opposition	-6014 Sep 09 j 13:14	2°≈32'11		max. Earth dist.	-6007 Mar 15 j 02:04		49.51523 AU
min. Earth dist.	-6014 Sep 09 j 09:05		47.86248 AU	morning rise	-6007 Mar 20 j 20:12	8°≈52'59	
direct	-6014 Nov 29 j 23:41	1°≈32'45		retrograde	-6007 Jun 25 j 11:37	10°≈14'48	
evening set	-6013 Mar 08 j 10:10	2° ≈ 58'07		opposition	-6007 Sep 15 j 20:01	9°≈15'12	
				min. Earth dist.	-6007 Sep 16 j 00:16		47.54829 AU
conjunction	-6013 Mar 09 j 18:00	2° ≈ 59'56		direct	-6007 Dec 06 j 12:36	8° ≈ 15'36	
minimum elong	-6013 Mar 09 j 18:13	2°≈59'56		evening set	-6006 Mar 10 j 12:11	9° ≈ 35′02	
max. Earth dist.	-6013 Mar 09 j 22:08		49.77516 AU				
morning rise	-6013 Mar 11 j 02:17	3° ≈ 01'46		conjunction	-6006 Mar 16 j 12:24	9° ≈ 43'13	-13°56'09
retrograde	-6013 Jun 20 j 04:11	4° ≈ 29'18		minimum elong	-6006 Mar 16 j 12:37	9° ≈ 43'14	13°56'27
opposition	-6013 Sep 10 j 17:36	3° ≈ 29'38	-15°29'37	max. Earth dist.	-6006 Mar 16 j 05:53	9° ≈ 42'51	49.45624 AU
min. Earth dist.	-6013 Sep 10 j 15:11	3° ≈ 29'45	47.82802 AU	morning rise	-6006 Mar 22 j 13:19	9° ≈ 51′27	
direct	-6013 Dec 01 j 06:44	2° ≈ 30'11		retrograde	-6006 Jun 26 j 17:37	11° ≈ 12'41	
evening set	-6012 Mar 07 j 11:23	3° ≈ 53'56		opposition	-6006 Sep 17 j 00:39	10° ≈ 13′04	-14°26'02
				min. Earth dist.	-6006 Sep 17 j 07:15	10° ≈ 12'45	47.48526 AU
conjunction	-6012 Mar 09 j 23:56	3°≈57'23	-14°48'46	direct	-6006 Dec 07 j 17:28	9° ≈ 13'25	
-	•				, and the second		

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 29

•	omena of Pluto from		•	· · ·		, ,	e 29
	nical year style is used: Th	10°≈32'21	in astronomical cou	unting style is the year conjunction		ounting style. 16°≈29'11	
evening set	-6005 Mar 11 j 08:25	10 ≈32.21		•	-5999 Mar 23 j 07:58 -5999 Mar 23 j 08:11	16 ≈2911 16°≈29'12	
conjunction	-6005 Mar 17 j 18:44	10° ≈ 41'07	12046'22	minimum elong max. Earth dist.	-5999 Mar 23 j 08:11 -5999 Mar 22 j 16:00		48.92052 AU
minimum elong	-6005 Mar 17 j 18:57	10 ≈41 07 10°≈41'07		morning rise	-5999 Mar 31 j 23:10	16°≈41'00	46.92032 AU
max. Earth dist.	-6005 Mar 17 j 11:30		49.39195 AU	retrograde	-5999 Jul 03 j 11:13	17°≈59'02	
morning rise	-6005 Mar 24 j 05:38	10°≈49'55	4).5)1)5 AO	opposition	-5999 Sep 23 j 08:22	16°≈59'12	-13°10'16
retrograde	-6005 Jun 27 j 23:20	10 ≈ 4733		min. Earth dist.	-5999 Sep 23 j 22:32		46.92653 AU
opposition	-6005 Sep 18 j 05:06	11°≈10'58	-14°15'59	direct	-5999 Dec 14 j 01:28	15°≈59'04	40.72033710
min. Earth dist.	-6005 Sep 18 j 12:44		47.41692 AU	evening set	-5998 Mar 15 j 16:14	17°≈15'22	
direct	-6005 Dec 08 j 21:50	10°≈11'15	.,	evening sec	5990 Mai 10 j 10.11	1, 1010 22	
evening set	-6004 Mar 11 j 05:04	11° ≈ 29'43		conjunction	-5998 Mar 24 j 14:29	17° ≈ 27'36	-12°32'31
evening sec	000111111111111111111111111111111111111	11 (0 2) (3		minimum elong	-5998 Mar 24 j 14:43	17°≈27'37	
conjunction	-6004 Mar 18 j 00:53	11° ≈ 39'01	-13°36'44	max. Earth dist.	-5998 Mar 23 j 22:06		48.83127 AU
minimum elong	-6004 Mar 18 j 01:06	11° ≈ 39'02		morning rise	-5998 Apr 02 j 13:23	17° ≈ 39'52	
max. Earth dist.	-6004 Mar 17 j 15:05		49.32271 AU	retrograde	-5998 Jul 04 j 17:26	18° ≈ 57'33	
morning rise	-6004 Mar 24 j 21:26	11° ≈ 48'22	.,	opposition	-5998 Sep 24 j 13:09	17° ≈ 57'42	-12°58'21
retrograde	-6004 Jun 28 j 06:55	13°≈08'32		min. Earth dist.	-5998 Sep 25 j 05:03		46.83417 AU
opposition	-6004 Sep 18 j 09:36	12°≈08'52	-14°05'41	direct	-5998 Dec 15 i 06:16	16°≈57'32	
min. Earth dist.	-6004 Sep 18 j 18:30		47.34401 AU	evening set	-5997 Mar 16 j 15:18	18°≈13'35	
direct	-6004 Dec 09 j 00:52	11°≈09'05	17.51101710	evening sec	5557 War 10 J 15.10	10 /4/15/55	
evening set	-6003 Mar 12 j 01:58	12°≈27'06		conjunction	-5997 Mar 25 j 20:57	18° ≈ 26'15	-12°20'53
evening sec	0000 11111 12) 01.50	12 . 7 2 , 00		minimum elong	-5997 Mar 25 j 21:09	18°≈26'15	
conjunction	-6003 Mar 19 j 07:05	12° ≈ 36'57	-13°26'41	max. Earth dist.	-5997 Mar 25 j 03:08		48.73884 AU
minimum elong	-6003 Mar 19 j 07:17	12°≈36'57		morning rise	-5997 Apr 04 j 03:16	18°≈38'57	10.75001710
max. Earth dist.	-6003 Mar 18 j 20:31		49.24900 AU	retrograde	-5997 Jul 05 j 20:27	19°≈56'19	
morning rise	-6003 Mar 26 j 12:49	12°≈46'49	19.21900110	opposition	-5997 Sep 25 j 17:48	18°≈56'27	-12°46'11
retrograde	-6003 Jun 29 j 10:45	14°≈06'30		min. Earth dist.	-5997 Sep 26 j 10:02		46.73831 AU
opposition	-6003 Sep 19 j 14:10	13°≈06'47	-13°55'09	direct	-5997 Dec 16 j 13:59	17°≈56'14	40.75051 710
min. Earth dist.	-6003 Sep 20 j 00:55		47.26683 AU	evening set	-5996 Mar 16 j 14:33	17 ≈30 14 19°≈12'02	
direct	-6003 Dec 10 j 07:46	12°≈06'55	47.20005710	max. Earth dist.	-5996 Mar 25 j 07:40		48.64243 AU
evening set	-6002 Mar 12 j 23:33	13°≈24'33		max. Lartii dist.	-5770 Wai 25 j 07.40	17 ~2337	40.04243 AC
evening set	-0002 Wai 12 j 25.55	15 ~2+33		conjunction	-5996 Mar 26 j 03:31	19° ≈ 25'08	-12°09'01
conjunction	-6002 Mar 20 j 13:21	13° ≈ 34'53	-13°16'22	minimum elong	-5996 Mar 26 j 03:44	19°≈25'09	
minimum elong	-6002 Mar 20 j 13:35	13°≈34'54		morning rise	-5996 Apr 04 j 17:15	19° ≈ 38'16	12 07 10
max. Earth dist.	-6002 Mar 20 j 01:23		49.17151 AU	retrograde	-5996 Jul 06 j 01:22	20°≈55'21	
morning rise	-6002 Mar 28 j 03:50	13°≈45'16	4).1/131 AO	opposition	-5996 Sep 25 j 22:42	19°≈55'28	-12°33'45
morning rise	-6002 Jun 10 j 03:41	15° ≈		min. Earth dist.	-5996 Sep 26 j 17:13		46.63827 AU
retrograde	-6002 Jun 30 j 14:15	15° ≈ 04'29		direct	-5996 Dec 16 j 20:16	18°≈55'10	40.03027 710
retrograde	-6002 Jul 21 j 04:23	15 ≈ 04 29		evening set	-5995 Mar 17 j 14:08	20°≈10'45	
opposition	-6002 Sep 20 j 18:32	13 1√∞ 14°≈04'44	-13°44'20	evening set	-5775 Wai 17 j 14.00	20 ~10 43	
min. Earth dist.	-6002 Sep 20 j 18:32		47.18614 AU	conjunction	-5995 Mar 27 j 10:16	20° ≈ 24'16	-11°56'54
direct	-6002 Dec 11 j 14:34	13°≈04'47	47.10014 AC	minimum elong	-5995 Mar 27 j 10:10	20°≈24'16	
evening set	-6001 Mar 13 j 21:15	13 ≈0447 14°≈22'03		max. Earth dist.	-5995 Mar 26 j 13:48		48.54158 AU
evening set	-0001 Wai 15 j 21.15	14 ~22 03		morning rise	-5995 Apr 06 j 06:57	20°≈37'49	40.54150 AO
conjunction	-6001 Mar 21 j 19:35	14° ≈ 32'53	-13°05'48	retrograde	-5995 Jul 07 j 07:42	20 ≈57 4 7 21°≈54'37	
minimum elong	-6001 Mar 21 j 19:47	14°≈32'53	13°06'06	opposition	-5995 Sep 27 j 03:39	21°≈54'41	12021/04
max. Earth dist.	-6001 Mar 21 j 05:53		49.09062 AU	min. Earth dist.	-5995 Sep 27 j 23:03		46.53329 AU
morning rise	-6001 Mar 29 j 18:39	14°≈43'45	47.07002 AC	direct	-5995 Dec 18 j 01:07	19°≈54'19	40.33327 AO
morning 1150	-6001 Apr 10 j 22:13	14 ≈43 43 15°≈		evening set	-5994 Mar 18 j 14:11	21°≈09'39	
retrograde	-6001 Jul 01 j 19:43	15 ≈ 16° ≈ 02'33		oronnig set	577 TIVIUI 10 J 14.11	21 ~0/39	
opposition	-6001 Sep 21 j 23:12	16 ≈02 33 15°≈02'46	-13°33'15	conjunction	-5994 Mar 28 j 17:06	21° ≈ 23'35	-11044'32
min. Earth dist.	-6001 Sep 21 j 23:12 -6001 Sep 22 j 12:05		47.10237 AU	minimum elong	-5994 Mar 28 j 17:19	21°≈23'36	11°44'48
iiiii. Lartii dist.	-6001 Sep 24 j 08:32	15°R≈	47.10237 AO	max. Earth dist.	-5994 Mar 27 j 17:49		48.43562 AU
direct	-6001 Dec 12 j 19:39	13 1√∞ 14°≈02'45		morning rise	-5994 Apr 07 j 20:48	21°≈37'34	40.43302 AC
direct	-6000 Feb 27 j 23:48	14 ≈02 43 15°≈		retrograde	-5994 Apr 07 j 20.48 -5994 Jul 08 j 16:23	21 ≈3734 22°≈54'04	
evening set	-6000 Mar 13 j 19:13	15 ∞ 15° ≈ 19'40		opposition	-5994 Sep 28 j 08:37	22 ≈54'04 21°≈54'05	12008108
max. Earth dist.	-6000 Mar 21 j 12:00		49.00691 AU	min. Earth dist.	-5994 Sep 29 j 05:40		46.42324 AU
max. Darm uist.	-0000 iviai 21 j 12.00	15 ~50 10	77.00071 AU		-5994 Sep 29 j 03:40 -5994 Dec 19 j 04:03	21 ≈33 04 20°≈53'37	70.72324 AU
conjunction	6000 Mar 22:01:45	1500020157	1205/150	direct	3	20°≈53′3 / 22°≈08'44	
conjunction minimum elong	-6000 Mar 22 j 01:45 -6000 Mar 22 j 01:59	15°≈30'57		evening set	-5993 Mar 19 j 14:21		48 22440 ATT
mummum elong	-0000 Mar 22 101:59	15° ≈ 30'58	12°55'16	max. Earth dist.	-5993 Mar 28 j 23:51	∠∠ ≫ ∠1′40	48.32449 AU
•		15000/0110					
morning rise	-6000 Mar 30 j 08:54	15°≈42'19		aamiuu	5002 M 20 : 00 07	22022104	11021157
morning rise retrograde	-6000 Mar 30 j 08:54 -6000 Jul 02 j 01:51	17° ≈ 00'43	12021154	conjunction	-5993 Mar 30 j 00:07	22°≈23'04	
morning rise retrograde opposition	-6000 Mar 30 j 08:54 -6000 Jul 02 j 01:51 -6000 Sep 22 j 03:50	17°≈00'43 16°≈00'54		minimum elong	-5993 Mar 30 j 00:21	22° ≈ 23'05	
morning rise retrograde opposition min. Earth dist.	-6000 Mar 30 j 08:54 -6000 Jul 02 j 01:51 -6000 Sep 22 j 03:50 -6000 Sep 22 j 17:02	17°≈00'43 16°≈00'54 16°≈00'16	-13°21'54 47.01576 AU	minimum elong morning rise	-5993 Mar 30 j 00:21 -5993 Apr 09 j 10:26	22°≈23'05 22°≈37'27	
morning rise retrograde opposition min. Earth dist. direct	-6000 Mar 30 j 08:54 -6000 Jul 02 j 01:51 -6000 Sep 22 j 03:50 -6000 Sep 22 j 17:02 -6000 Dec 13 j 00:12	17°≈00'43 16°≈00'54 16°≈00'16 15°≈00'50		minimum elong morning rise retrograde	-5993 Mar 30 j 00:21 -5993 Apr 09 j 10:26 -5993 Jul 09 j 22:41	22°≈23'05 22°≈37'27 23°≈53'40	11°32'11
morning rise retrograde opposition min. Earth dist.	-6000 Mar 30 j 08:54 -6000 Jul 02 j 01:51 -6000 Sep 22 j 03:50 -6000 Sep 22 j 17:02	17°≈00'43 16°≈00'54 16°≈00'16		minimum elong morning rise	-5993 Mar 30 j 00:21 -5993 Apr 09 j 10:26	22°≈23'05 22°≈37'27 23°≈53'40 22°≈53'36	11°32'11

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5993 in astronomical counting style is the year 5994 BCE in historical counting style. -5993 Dec 20 i 10:04 21°≈53'01 -5986 May 03 j 02:31 0°) direct -5992 Mar 19 j 14:40 -5986 Jul 16 i 17:34 0° ¥ 54'51 23°≈07'55 retrograde evening set -5992 Mar 29 j 04:56 23°≈21'10 48.20859 AU -5986 Oct 01 j 05:06 max. Earth dist. 30°R≈ -5986 Oct 06 j 03:11 29°≈54'12 -10°15'01 opposition 23°≈22'40 -11°19'05 -5986 Oct 07 j 09:52 29°≈52'42 45.39906 AU conjunction -5992 Mar 30 j 06:53 min. Earth dist. -5986 Dec 27 j 04:35 minimum elong -5992 Mar 30 j 07:06 23°**≈**22'41 11°19'21 direct 28°≈52'47 -5992 Apr 09 j 23:43 23°**≈**37′26 morning rise -5985 Mar 21 j 01:39 0°**∀** -5992 Jul 10 j 03:57 retrograde 24°≈53'22 evening set -5985 Mar 25 j 23:43 0°****06'45 23°≈53'14 -11°41'30 opposition -5992 Sep 29 j 18:52 max. Earth dist. -5985 Apr 05 j 23:31 0°**₭**22'06 47.29921 AU min. Earth dist. -5992 Sep 30 j 18:16 23°≈52'06 46.18827 AU direct -5992 Dec 20 j 17:11 22°≈52'31 conjunction -5985 Apr 07 j 09:35 0°**)** 24'06 -9°41'47 -5985 Apr 07 j 09:49 evening set -5991 Mar 20 j 15:15 24°≈07'14 minimum elong 0°**)** 24'07 9°42'00 -5985 Apr 19 j 19:41 max. Earth dist. -5991 Mar 30 j 10:02 24°≈20'44 48.08819 AU morning rise 0°**)**41'29 -5985 Jul 17 j 23:59 retrograde 1° # 56'07 conjunction -5991 Mar 31 j 13:53 24°≈22'21 -11°05'59 opposition -5985 Oct 07 j 08:57 0°**¥**55'25 -9°59'35 minimum elong -5991 Mar 31 j 14:07 24°**≈**22'22 11°06'14 min. Earth dist. -5985 Oct 08 j 16:08 0°**¥**53'52 45.25710 AU morning rise -5991 Apr 11 j 13:11 24°≈37'31 -5985 Dec 04 j 19:33 30°R≈ retrograde -5991 Jul 11 j 08:41 25°≈53'12 direct -5985 Dec 28 j 10:46 29°≈53'53 opposition -5991 Oct 01 j 00:01 24°≈52'57 -11°27'48 -5984 Jan 20 j 21:25 0°) min. Earth dist. -5991 Oct 02 j 01:41 24°≈51'42 46.06441 AU evening set -5984 Mar 26 j 02:00 1°**)**(07'49 direct -5991 Dec 21 j 23:55 23°≈52'06 max. Earth dist. -5984 Apr 06 j 04:33 1°**¥**23'22 47.15687 AU evening set -5990 Mar 21 i 16:08 25°≈06'38 conjunction -5984 Apr 07 i 17:05 1°**)** 25'31 -9°26'47 conjunction -5990 Apr 01 j 21:04 25°≈22'08 -10°52'38 minimum elong -5984 Apr 07 i 17:17 1°**H**25'32 9°26'59 -5990 Apr 01 i 21:17 25°≈22'09 10°52'53 -5984 Apr 20 j 08:38 1°**)**(43'16 minimum elong morning rise -5990 Mar 31 j 16:46 25°≈20'29 47.96405 AU -5984 Jul 18 j 09:36 2° # 57'49 max. Earth dist. retrograde -5990 Apr 13 j 02:25 opposition -5984 Oct 07 j 14:53 1°**)** 57'03 -9°43'53 25°≈37'41 morning rise -5990 Jul 12 j 13:36 -5984 Oct 08 j 23:42 26°≈53'07 min. Earth dist. 1°**¥**55′26 45.11118 AU retrograde -5990 Oct 02 j 05:15 25°≈52'47 -11°13'49 -5984 Dec 28 j 14:00 0° ¥ 55'25 opposition direct -5990 Oct 03 j 07:20 -5983 Mar 27 j 04:38 2°\(\)09'19 min. Earth dist. 25°≈51'31 45.93694 AU evening set -5990 Dec 23 j 06:46 24°≈51'48 max. Earth dist. -5983 Apr 07 j 11:44 2°**∺**25'11 47.01006 AU direct 26°≈06'10 -5989 Mar 22 j 17:12 evening set -5983 Apr 09 j 01:06 -5989 Apr 01 j 21:30 26°≈20'16 47.83657 AU 2°\(\mathbf{2}7'23\) -9°11'32 max. Earth dist. conjunction -5983 Apr 09 j 01:19 minimum elong 2°**H**27'24 9°11'44 26°≈22'02 -10°39'01 -5989 Apr 03 j 04:03 -5983 Apr 21 j 21:41 2°\ 45'29 conjunction morning rise -5989 Apr 03 j 04:17 -5983 Jul 19 j 17:57 3°**¥**59'56 minimum elong 26°≈22'03 10°39'15 retrograde -5989 Apr 14 j 15:35 -5983 Oct 08 j 20:56 morning rise 26°**≈**37'58 opposition 2°**¥**59'05 -9°27'55 retrograde -5989 Jul 13 j 22:52 27°≈53'12 min. Earth dist. -5983 Oct 10 j 07:32 2°**升**57'23 44.96042 AU -5989 Oct 03 j 10:33 26°≈52'46 -10°59'33 direct -5983 Dec 29 j 19:58 1°**¥**57'20 opposition min. Earth dist. -5989 Oct 04 j 13:45 26°≈51'26 45.80652 AU -5982 Mar 28 j 07:50 3°**¥**11'14 evening set -5989 Dec 24 j 09:28 25°≈51'39 max. Earth dist. -5982 Apr 08 j 17:49 3°**升**27'19 46.85838 AU direct -5988 Mar 22 j 18:21 27°≈05'52 evening set -5988 Apr 02 j 04:27 27°≈20'20 47.70624 AU -5982 Apr 10 j 09:14 3°\\\\29'39 -8°56'01 max. Earth dist. conjunction -5982 Apr 10 j 09:26 3°**¥**29'39 8°56'12 minimum elong -5988 Apr 03 j 11:17 27°≈22'08 -10°25'07 -5982 Apr 23 j 10:53 3°**)** 48′05 conjunction morning rise -5988 Apr 03 j 11:30 -5982 Jul 21 i 02:18 minimum elong 27°≈22'08 10°25'21 retrograde 5°**₩**02'27 -5988 Apr 15 i 04:35 morning rise 27°≈38'25 opposition -5982 Oct 10 i 03:07 4°\(\)(01'31 -9°11'40 retrograde -5988 Jul 14 i 06:21 28°≈53'28 min. Earth dist. -5982 Oct 11 j 14:27 3°¥59'46 44.80465 AU -5988 Oct 03 j 16:02 27°≈52'57 -10°45'00 direct -5982 Dec 31 i 03:18 2° **** 59'37 opposition min. Earth dist. -5988 Oct 04 j 20:36 27°≈51'33 45.67336 AU -5981 Mar 29 j 11:04 4°¥13'31 evening set -5988 Dec 24 j 14:24 26°≈51'44 max. Earth dist. -5981 Apr 09 j 23:58 4°**)**€29'48 46.70144 AU direct evening set -5987 Mar 23 j 19:51 28°≈05'50 -5987 Apr 03 j 10:20 28°≈20'35 47.57344 AU -5981 Apr 11 j 17:25 4°\ 32'16 -8°40'14 max. Earth dist. conjunction minimum elong -5981 Apr 11 j 17:37 4°\;\;32'17 8°40'26 conjunction -5987 Apr 04 j 18:29 28°≈22'27 -10°10'57 morning rise -5981 Apr 24 j 23:55 4° ¥ 51'02 -5981 Jul 22 j 08:26 minimum elong -5987 Apr 04 j 18:43 28°≈22'28 10°11'10 6°**₩**05'20 retrograde -5987 Apr 16 j 17:36 28°≈39'07 opposition -5981 Oct 11 j 09:32 5°**\(\)**04'17 -8°55'09 morning rise -5987 Jul 15 j 12:17 29°≈53'59 -5981 Oct 12 j 23:20 5°**₭**02'24 44.64379 AU retrograde min. Earth dist. -5987 Oct 04 j 21:31 28°≈53′24 -10°30′09 -5980 Jan 01 j 11:21 4°**)**€02'14 opposition direct -5987 Oct 06 j 02:12 -5980 Mar 29 j 14:37 min. Earth dist. 28°≈52'00 45.53765 AU evening set 5°**)** 16'07 -5980 Apr 10 j 07:35 direct -5987 Dec 25 j 21:11 27°≈52'04 max. Earth dist. 5°**₭**32'41 46.53971 AU -5986 Mar 24 j 21:38 29°≈06'06 evening set max. Earth dist. -5986 Apr 04 j 16:07 29°≈21'07 47.43782 AU conjunction -5980 Apr 12 j 01:48 5°**H**35'12 -8°24'12 minimum elong -5980 Apr 12 j 02:00 5°**H**35'13 8°24'23 conjunction -5986 Apr 06 j 01:57 29°≈23'05 -9°56'30 morning rise -5980 Apr 25 j 12:55 5°**X**54'19 -5986 Apr 06 j 02:09 29°≈23'06 9°56'43 -5980 Jul 22 j 13:34 7°**)**€08'33 minimum elong retrograde 29°≈40'07 -5980 Oct 11 j 15:53 6°¥07'22 -8°38'21 morning rise -5986 Apr 18 j 06:42 opposition

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5980 in astronomical counting style is the year 5981 BCE in historical counting style. morning rise -5980 Oct 13 j 06:11 6°**)** €05'27 44.47827 AU -5973 May 05 j 07:35 13°**¥**26′01 min. Earth dist. -5979 Jan 01 j 19:58 5°¥05'08 -5973 Jul 31 j 00:42 14°**¥**40'19 direct retrograde -5979 Mar 30 j 18:26 6°¥19'01 -5973 Oct 19 j 17:00 13°¥38'06 -6°32'21 evening set opposition 6°**)** 35'45 46.37352 AU max. Earth dist. -5979 Apr 11 j 13:21 -5973 Oct 21 j 15:01 min. Earth dist. 13°**¥**35'46 43.23021 AU -5972 Jan 09 j 20:52 direct 12°**)** 34'34 -5979 Apr 13 j 10:09 6°**¥**38'26 -8°07'54 conjunction evening set -5972 Apr 06 j 05:15 13°**)** 49'03 -5979 Apr 13 j 10:20 minimum elong 6° **★**38'27 8°08'05 max. Earth dist. -5972 Apr 18 j 20:45 14°**₭**07'27 45.12476 AU -5979 Apr 27 j 02:01 morning rise 6°**升**57'52 retrograde -5979 Jul 23 j 23:14 8°**升**12′03 conjunction -5972 Apr 21 j 01:14 14°**升** 10'40 -6°05'47 opposition -5979 Oct 12 j 22:26 7°**¥**10'43 -8°21'15 minimum elong -5972 Apr 21 j 01:24 14°**升**10'41 6°05'55 min. Earth dist. -5979 Oct 14 j 14:26 7°**₭**08'44 44.30865 AU morning rise -5972 May 05 j 20:45 14°**)** 32′16 -5972 Jul 31 j 12:46 direct -5978 Jan 03 j 00:28 6°**¥**08'19 retrograde 15°**)** 46'39 -5972 Oct 20 j 00:36 evening set -5978 Mar 31 j 22:29 7°**¥**22'12 opposition 14°\(\dagger44'18\) -6°13'07 max. Earth dist. -5978 Apr 12 j 21:40 7°**)** 39'15 46.20336 AU min. Earth dist. -5972 Oct 21 j 23:22 14°**)** 41′56 43.04082 AU direct -5971 Jan 10 j 02:49 13°**)** 40′35 conjunction -5978 Apr 14 j 18:51 7°**)**41'57 -7°51'19 evening set -5971 Apr 07 j 11:39 14°**¥**55′16 minimum elong -5978 Apr 14 j 19:03 7°**)** 41′58 7°51′28 max. Earth dist. -5971 Apr 20 j 05:08 15°**光**13'52 44.93446 AU morning rise -5978 Apr 28 j 14:57 8°**₩**01'42 retrograde -5978 Jul 25 j 08:22 9°**升**15'51 conjunction -5971 Apr 22 j 11:09 15°**升**17'11 -5°47'10 opposition -5978 Oct 14 j 05:07 8°**升**14'22 -8°03'52 minimum elong -5971 Apr 22 j 11:18 15°**¥**17'11 5°47'18 min. Earth dist. -5978 Oct 15 j 22:27 8°**升**12'18 44.13537 AU morning rise -5971 May 07 j 09:55 15°**)** 39'04 direct -5977 Jan 04 i 05:54 7°**)** 11'46 retrograde -5971 Aug 01 j 23:03 16°**)** ₹53'35 -5977 Apr 02 i 02:55 8°**)** 25'42 opposition -5971 Oct 21 i 08:41 15°**)** 51'04 -5°53'35 evening set max. Earth dist. -5977 Apr 14 j 04:39 8°¥42'57 46.03001 AU min. Earth dist. -5971 Oct 23 j 09:45 15°**)** 48'34 42.84728 AU -5970 Jan 11 j 11:04 14°**)**(47'09 direct -5977 Apr 16 j 03:28 8° \ 45'45 -7°34'27 -5970 Apr 08 j 18:33 16°₩02'02 conjunction evening set -5977 Apr 16 j 03:39 -5970 Apr 21 j 14:19 16°**¥**20′50 44.73991 AU 8°\dagger45'46 7°34'37 max. Earth dist. minimum elong -5977 Apr 30 j 03:56 9°****05'50 morning rise -5977 Jul 26 j 17:45 -5970 Apr 23 j 21:18 16°**)** 24'14 -5°28'17 10°**¥**19'57 conjunction retrograde -5977 Oct 15 j 11:55 -5970 Apr 23 j 21:27 9°**H**18'19 -7°46'11 minimum elong 16°**¥**24'15 5°28'24 opposition -5970 May 08 j 23:12 min. Earth dist. -5977 Oct 17 j 05:31 9°**₭**16'13 43.95925 AU 16°**)** 46′25 morning rise -5970 Aug 03 j 06:16 -5976 Jan 05 j 12:14 8°**升**15'30 18°**₩**01'03 direct retrograde -5976 Apr 02 j 07:20 9°**∺**29'30 -5970 Oct 22 j 16:49 16°**)** 58'23 -5°33'44 evening set opposition 9°**)** 46'59 45.85383 AU -5976 Apr 14 j 12:02 -5970 Oct 24 j 18:17 16°**¥**55'51 42.64931 AU max. Earth dist. min. Earth dist. -5969 Jan 12 j 21:50 direct 15°**)** 54'15 -5976 Apr 16 j 12:08 9°**)**49'53 -7°17'18 conjunction evening set -5969 Apr 10 j 01:52 17°**₩**09'20 9°**)**49'54 7°17'27 minimum elong -5976 Apr 16 j 12:19 max. Earth dist. -5969 Apr 22 j 21:59 17°**∺**28'15 44.54080 AU -5976 Apr 30 j 16:41 10°**¥**10′16 morning rise -5976 Jul 27 j 00:09 11°**)** 24'24 conjunction -5969 Apr 25 j 07:35 17°**)** 31′50 -5°09′07 retrograde -5976 Oct 15 j 19:01 10°**升**22'36 -7°28'12 minimum elong -5969 Apr 25 j 07:43 17°**¥**31′50 5°09′13 opposition min. Earth dist. -5976 Oct 17 j 14:24 10°**升**20′25 43.78058 AU morning rise -5969 May 10 j 12:33 17°**¥**54'17 -5975 Jan 05 j 22:04 9°**)** 19′36 -5969 Aug 04 j 15:32 19°**)**€09'04 direct retrograde -5975 Apr 03 j 12:16 10°**)** 33'41 -5969 Oct 24 j 01:18 18°**)** € 06'13 -5°13'36 evening set opposition -5975 Apr 15 j 20:50 10°**₭**51'27 45.67538 AU -5969 Oct 26 j 04:45 18°**₭**03'34 42.44699 AU max. Earth dist. min. Earth dist. -5968 Jan 14 j 06:04 17°**₩**01'51 direct 10°**)** 54′23 -6°59′52 conjunction -5975 Apr 17 j 21:10 evening set -5968 Apr 10 i 09:13 18°**)** 17'09 minimum elong -5975 Apr 17 j 21:20 10°**)** 54′24 7°00′01 max. Earth dist. -5968 Apr 23 i 08:07 18°**)** (36'19 44.33737 AU morning rise -5975 May 02 i 05:37 11°**¥**15′05 18°**)** 39'55 -4°49'39 retrograde -5975 Jul 28 i 05:52 12°**)** 29'13 conjunction -5968 Apr 25 i 18:02 -5975 Oct 17 j 02:03 11°\ 27'17 -7°09'54 -5968 Apr 25 i 18:10 18°**¥**39'56 4°49'46 opposition minimum elong -5975 Oct 18 j 21:30 11°**¥**25'05 43.59961 AU -5968 May 11 j 01:41 19°**₩**02'39 min. Earth dist. morning rise -5974 Jan 07 j 07:55 10°**)**€24'06 -5968 Aug 05 j 01:07 20°**₩**17'36 direct retrograde 11°**)** 38'18 -5968 Oct 24 j 09:58 19°**)** 14'33 -4°53'09 evening set -5974 Apr 04 j 17:40 opposition 19°**升**11'50 42.24045 AU max. Earth dist. -5974 Apr 17 j 03:50 11°**)** 56'14 45.49457 AU min. Earth dist. -5968 Oct 26 j 14:31 direct -5967 Jan 14 j 14:15 18°**¥**09'56 conjunction -5974 Apr 19 j 06:20 11°**¥**59'18 -6°42'07 evening set -5967 Apr 11 j 17:18 19° **X** 25'29 -5974 Apr 19 j 06:31 11°**X**59'19 6°42'17 max. Earth dist. -5967 Apr 24 j 16:37 19°**)** 44'46 44.13005 AU minimum elong -5974 May 03 j 18:44 12°**¥**20′18 morning rise -5974 Jul 29 j 15:31 13°**)** 34'31 -5967 Apr 27 j 04:42 19°**)** 48'31 -4°29'55 retrograde conjunction -5967 Apr 27 j 04:50 19°**¥**48'32 4°30'00 opposition -5974 Oct 18 j 09:26 12°**)** 32′26 -6°51′17 minimum elong -5967 May 12 j 15:09 min. Earth dist. -5974 Oct 20 j 06:25 12°**₭**30'09 43.41635 AU morning rise 20°**)** 11′32 -5973 Jan 08 j 13:46 11°**∺**29'05 retrograde -5967 Aug 06 j 13:22 21°**)** 26'39 direct evening set -5973 Apr 05 j 23:09 12°**)** 43'24 opposition -5967 Oct 25 j 18:36 20°**)** €23'23 -4°32'23 max. Earth dist. -5973 Apr 18 j 13:03 13°**₭**01'37 45.31118 AU min. Earth dist. -5967 Oct 28 j 00:02 20°**¥**20'37 42.03041 AU direct -5966 Jan 15 j 21:00 19°**米**18'31 -5973 Apr 20 j 15:43 13°**)** €04'43 -6°24'06 -5966 Apr 13 j 01:40 20° **)** 34'20 conjunction evening set -5973 Apr 20 j 15:52 13°**)** €04'43 6°24'14 -5966 Apr 26 j 02:32 20°**升**53'48 43.91924 AU minimum elong max. Earth dist.

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5966 in astronomical counting style is the year 5967 BCE in historical counting style. -5966 Apr 28 i 15:44 20°\f57'38 -4°09'52 evening set -5959 Apr 21 i 00:47 28° ¥ 54'53 conjunction max. Earth dist. -5966 Apr 28 j 15:51 20°\ 57'39 4°09'59 -5959 May 04 j 06:34 29°¥15'26 42.38517 AU minimum elong -5966 May 14 j 04:30 21°\ 20'54 morning rise -5966 Aug 07 j 23:57 22°**)** 36'14 -5959 May 07 j 03:06 29°**)** 19'55 -1°41'21 conjunction retrograde -5966 Oct 27 j 03:45 -5959 May 07 j 03:10 29°\ 19'55 1°41'23 opposition 21°\(\dagger)32'45 -4°11'18 minimum elong -5966 Oct 29 j 10:57 -5959 May 23 j 03:31 29° ¥44'51 min. Earth dist. 21°**∺**29'52 41.81729 AU morning rise $0^{\circ}\Upsilon$ -5959 Jun 02 j 06:59 direct -5965 Jan 17 j 07:26 20°**∺**27'37 1°Y02'27 evening set -5965 Apr 14 j 10:20 21°**)** 43'44 retrograde -5959 Aug 16 j 10:25 max. Earth dist. -5965 Apr 27 j 13:03 22°**₭**03'24 43.70577 AU -5959 Nov 02 j 04:01 30°**₹** opposition -5959 Nov 04 j 02:29 29°\ 57'31 -1°34'48 29°**)** 54'13 40.27139 AU conjunction -5965 Apr 30 j 02:43 22°\(\overline{4}\)07'18 -3°49'33 min. Earth dist. -5959 Nov 06 j 16:04 -5965 Apr 30 j 02:50 -5958 Jan 25 j 06:31 minimum elong 22°**米**07'19 3°49'37 direct 28°\ 50'37 $0^{\circ}\Upsilon$ -5965 May 15 j 17:47 morning rise 22°**)** 30'49 -5958 Apr 16 j 03:16 retrograde -5965 Aug 09 j 09:44 23°\ 46'22 evening set -5958 Apr 22 j 13:11 0°Y09'42 opposition -5965 Oct 28 j 12:58 22°\dagger42'40 -3°49'54 max. Earth dist. -5958 May 05 j 19:42 0°Υ30'25 42.15626 AU min. Earth dist. -5965 Oct 30 j 20:05 22°\dagger39'47 41.60184 AU direct -5964 Jan 18 j 19:13 21°**)** 37'17 conjunction -5958 May 08 j 16:30 0°Y34'56 -1°18'57 evening set -5964 Apr 14 j 19:31 22°\ 53'43 minimum elong -5958 May 08 j 16:32 0°Υ34'57 1°18'59 max. Earth dist. -5964 Apr 27 j 22:27 23°¥13'31 43.49010 AU morning rise -5958 May 24 j 17:37 1° **Y**00'05 retrograde -5958 Aug 17 j 21:06 2°Y18'07 conjunction -5964 Apr 30 j 14:00 23°¥17'33 -3°28'55 opposition -5958 Nov 05 j 13:59 1°Y12'57 -1°11'11 minimum elong -5964 Apr 30 i 14:06 23°**)** 17'34 3°29'00 min. Earth dist. -5958 Nov 08 i 04:05 1°Υ09'36 40.04030 AU morning rise -5964 May 16 j 07:11 23°\(\)41'19 direct -5957 Jan 26 j 19:52 0°Υ05'46 retrograde -5964 Aug 09 j 20:05 24°**)** 57'08 evening set -5957 Apr 24 i 02:08 1°Y25'22 opposition -5964 Oct 28 i 22:27 23°**)** 53'13 -3°28'12 max. Earth dist. -5957 May 07 j 06:44 1°Υ 46'05 41.92368 AU -5964 Oct 31 i 07:16 23°**)** 50'14 41.38462 AU min. Earth dist. -5963 Jan 19 j 04:42 22°\ 47'34 -5957 May 10 j 05:57 1°Y50'49 -0°56'17 direct conjunction -5963 Apr 16 j 05:03 24°**₩**04'22 -5957 May 10 j 05:58 1°**Y**50'49 0°56'19 minimum elong evening set -5963 Apr 29 j 10:17 24°**)** €24'23 43.27280 AU -5957 May 26 j 07:45 2°Y16'09 max. Earth dist. morning rise -5957 Aug 19 j 11:08 3°Y34'39 retrograde -5963 May 02 j 01:41 24°**¥**28′27 -3°08′00 opposition -5957 Nov 07 j 01:46 2°Y29'13 -0°47'15 conjunction minimum elong -5963 May 02 j 01:47 -5957 Nov 09 j 17:19 2°Υ25'47 39.80575 AU 24°\(\dagger)28'27 3°08'03 min. Earth dist. -5956 Jan 28 j 05:55 -5963 May 17 j 20:37 1°Y21'43 24°**)** 52′28 morning rise direct -5963 Aug 11 j 05:33 26°**₭**08'35 -5956 Apr 24 j 15:35 2°\partition 41'52 retrograde evening set -5963 Oct 30 j 08:18 25° **★** 04'27 -3°06'09 -5956 May 07 j 20:10 3°**Y**02'43 41.68752 AU opposition max. Earth dist. -5963 Nov 01 j 17:19 25°**₭**01'27 41.16578 AU min. Earth dist. -5962 Jan 20 j 15:13 23° **∺** 58'34 -5956 May 10 j 19:59 3°Y07'30 -0°33'20 direct conjunction evening set -5962 Apr 17 j 15:17 25°**)** 15'44 minimum elong -5956 May 10 j 20:00 3°Y07'30 0°33'21 max. Earth dist. -5962 Apr 30 j 20:18 25°**)** 35'52 43.05396 AU morning rise -5956 May 26 j 21:56 3°Y33'02 retrograde -5956 Aug 20 j 00:34 4° Y 52'00 conjunction -5962 May 03 j 13:30 25°\dot\dot40'04 -2°46'46 -5956 Nov 07 j 13:51 3°Y46'17 -0°23'00 opposition -5962 May 03 j 13:35 25°\ 40'04 2°46'50 min. Earth dist. -5956 Nov 10 j 06:49 3°Υ42'46 39.56778 AU minimum elong -5962 May 19 j 10:15 26°**)**€04'19 -5955 Jan 28 j 17:09 2°Y38'28 morning rise direct -5962 Aug 12 j 19:43 27°**)** € 20'46 -5955 Apr 26 j 05:46 3°Y59'11 retrograde evening set -5962 Oct 31 j 18:18 26°**升**16'26 -2°43'48 max. Earth dist. -5955 May 09 j 08:58 4°Υ20'05 41.44825 AU opposition -5962 Nov 03 i 04:03 min. Earth dist. 26°**)** 13'23 40.94554 AU -5955 May 12 j 10:15 4°Υ25'00 -0°10'08 direct -5961 Jan 21 i 21:56 25°**¥**10′18 conjunction evening set -5961 Apr 19 i 01:52 26°**)**€27'55 minimum elong -5955 May 12 j 10:15 4°**Υ**25'00 0°10'09 4°Υ24'40 max. Earth dist. -5961 May 02 j 08:10 26°**)** 48'15 42.83337 AU behind sun begin -5955 May 12 i 05:05 4°Υ25'19 behind sun end -5955 May 12 i 15:25 morning rise -5961 May 05 i 01:47 26°\ 52'29 -2°25'15 -5955 May 28 j 12:26 4°Y50'41 conjunction -5961 May 05 i 01:52 26°\ 52'29 2°25'18 retrograde -5955 Aug 21 j 17:08 6°**Y**10′10 minimum elong -5961 May 20 j 23:50 27°**¥**16′58 -5955 Oct 17 j 05:34 5°Y33'02 morning rise asc. node 5°**Υ**04'09 0°01'33 retrograde -5961 Aug 14 j 09:26 28°**)** 33'47 opposition -5955 Nov 09 j 02:13 opposition -5961 Nov 02 j 04:48 27°**¥**29'15 -2°21'07 min. Earth dist. -5955 Nov 11 j 19:32 5°Υ00'36 39.32698 AU min. Earth dist. -5961 Nov 04 j 16:04 27°**)** €26'07 40.72342 AU direct -5954 Jan 30 j 04:39 3°Y55'58 26°**¥**22'53 -5960 Jan 23 j 06:15 evening set -5954 Apr 27 j 20:28 5°**Y**17'19 direct -5960 Apr 19 j 12:55 27°**)**(40'57 max. Earth dist. -5954 May 10 j 22:11 5°**Y**38'15 41.20609 AU evening set -5960 May 02 j 19:38 28°**₭**01'26 42.61075 AU max. Earth dist. -5954 May 14 j 00:53 5°**Υ**43'17 0°13'28 conjunction -5960 May 05 j 14:09 28°**₭**05'45 -2°03'27 5°**Υ**43'17 0°13'28 conjunction minimum elong -5954 May 14 j 00:52 minimum elong 5°Y43'04 -5960 May 05 j 14:13 28°**H**05'45 2°03'29 behind sun begin -5954 May 13 j 21:22 morning rise -5960 May 21 j 13:34 28°**H**30'28 behind sun end -5954 May 14 j 04:23 5°**Y**43'31 morning rise retrograde -5960 Aug 14 j 22:23 29°**)** 47'40 -5954 May 30 j 02:46 6°**Y**09'08 opposition -5960 Nov 02 j 15:26 28°**)** 42'57 -1°58'07 retrograde -5954 Aug 23 j 08:08 7°**Y**29′09 min. Earth dist. -5960 Nov 05 j 02:51 28°**升**39'47 40.49894 AU -5954 Nov 10 j 15:05 6°Υ22'49 0°26'24 opposition

min. Earth dist.

-5954 Nov 13 j 10:20

6°Υ19'09 39.08382 AU

-5959 Jan 23 j 17:58

direct

27°**¥**36′19

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5953 in astronomical counting style is the year 5954 BCE in historical counting style. 5°**Υ**14'17 -5953 Jan 31 i 17:18 retrograde -5947 Sep 02 i 01:44 17°Y09'58 direct opposition -5953 Apr 29 j 11:43 6°**Y**36'17 -5947 Nov 19 j 20:30 16°**Y**′01'34 3°28'14 evening set max. Earth dist. -5953 May 12 j 13:05 6°Υ57'19 40.96195 AU min. Earth dist. -5947 Nov 22 j 20:35 15°**Y**57'29 37.35399 AU 14°Y50'37 -5946 Feb 09 j 21:20 direct 7°Υ02'24 0°37'13 16°**Y**18'31 conjunction -5953 May 15 j 15:49 evening set -5946 May 09 j 18:50 -5953 May 15 j 15:47 7°**Υ**02'24 16°**Y**39'35 39.22448 AU minimum elong 0°37'14 max. Earth dist. -5946 May 22 j 03:57 7°Υ28'24 morning rise -5953 May 31 j 17:15 8°Y48'58 16°**Y**45′19 retrograde -5953 Aug 24 j 21:02 conjunction -5946 May 25 j 11:53 3°30'38 -5953 Nov 12 j 04:15 7°**Υ**42'21 16°**Y**45′19 opposition 0°51'32 minimum elong -5946 May 25 j 11:46 3°30'43 7°**Υ**38'39 38.83905 AU min. Earth dist. -5953 Nov 14 j 23:16 morning rise -5946 Jun 10 j 01:42 17°**Y**11'57 direct -5952 Feb 02 j 08:59 6°**Y**33'27 retrograde -5946 Sep 03 j 17:39 18°**Ƴ**37'52 7°**Y**56'07 -5946 Nov 21 j 13:00 17°**Y**′29′10 evening set -5952 Apr 30 j 03:33 opposition 3°55'14 max. Earth dist. -5952 May 13 j 02:19 8°**Y**17'09 40.71636 AU min. Earth dist. -5946 Nov 24 j 13:23 17°**Y**25'01 37.10182 AU direct -5945 Feb 11 j 15:10 16°**Y**17'51 conjunction -5952 May 16 j 06:53 8°**Y**22'23 1°01'16 evening set -5945 May 11 j 16:26 17°**Y**46'47 minimum elong -5952 May 16 j 06:51 8° Y22'23 1°01'18 max. Earth dist. -5945 May 23 j 20:25 18°**Y**07'40 38.97031 AU morning rise -5952 Jun 01 j 07:42 8°Y48'31 retrograde -5952 Aug 25 j 11:30 10°**Y**09'42 conjunction -5945 May 27 j 06:25 18°Υ13'36 3°56'18 opposition -5952 Nov 12 j 17:50 9°**Υ**02'46 1°16'59 minimum elong -5945 May 27 j 06:16 18°**Y**13′36 3°56'23 min. Earth dist. -5952 Nov 15 j 14:06 8°**Y**58'59 38.59329 AU morning rise -5945 Jun 11 j 17:23 18°**Y**40'14 direct -5951 Feb 02 j 22:12 7°**Υ**53'30 retrograde -5945 Sep 05 j 12:48 20°**℃**07'07 evening set -5951 May 01 j 20:06 9°Y16'54 opposition -5945 Nov 23 i 05:58 18°**Y**'58'04 4°22'29 max. Earth dist. -5951 May 14 j 18:29 9°**Υ**38'03 40.46983 AU min. Earth dist. -5945 Nov 26 i 07:20 18°**Y**53'51 36.84773 AU direct -5944 Feb 13 i 05:33 17°**Y**46′22 -5951 May 17 j 22:39 9°Υ43'19 1°25'34 evening set -5944 May 12 j 14:38 19°**Y**16′22 conjunction -5951 May 17 j 22:37 9°**Υ**43'18 1°25'35 max. Earth dist. -5944 May 24 j 15:17 19°**Ƴ**37'11 38.71397 AU minimum elong -5951 Jun 02 j 22:17 10°**Y**′09'34 morning rise -5951 Aug 27 j 01:36 11°**Y**31'25 -5944 May 28 j 01:30 19°**Y**'43'11 4°22'10 conjunction retrograde -5951 Nov 14 j 07:51 10°**Υ**24'10 1°42'42 -5944 May 28 j 01:21 19°**Y**43′10 minimum elong 4°22'16 opposition -5951 Nov 17 j 04:35 10°**Y**′20′20 38.34680 AU -5944 Jun 12 j 08:59 20°Y09'49 min. Earth dist. morning rise -5950 Feb 04 j 11:46 9°Υ14'34 -5944 Sep 06 j 07:05 21°**Y**37'41 retrograde direct -5944 Nov 23 j 23:35 10°**Y**38'46 -5950 May 03 j 13:34 20°**Y**28'16 4°49'56 evening set opposition 10°**Y**59'53 40.22279 AU 20°Υ23'58 36.59162 AU -5950 May 16 j 09:15 min. Earth dist. -5944 Nov 27 j 02:11 max. Earth dist. -5943 Feb 13 j 21:22 19°**Y**16′09 direct -5950 May 19 j 14:43 11°**Υ**05'16 1°50'07 20°**Y**47′16 conjunction evening set -5943 May 14 j 14:03 11°**Υ**05'16 1°50'09 -5950 May 19 j 14:39 -5943 May 26 j 09:49 21°**Υ**07'55 38.45591 AU minimum elong max. Earth dist. 11°**Y**31'38 -5950 Jun 04 j 13:11 morning rise retrograde -5950 Aug 28 j 19:21 12°Υ54'12 conjunction -5943 May 29 j 21:05 21°**Y**14'03 4°48'13 -5950 Nov 15 j 22:18 11°**Y**46'40 2°08'41 minimum elong -5943 May 29 j 20:54 21°**Y**14'02 4°48'19 opposition min. Earth dist. -5950 Nov 18 j 19:14 11°**Υ**42'48 38.10001 AU morning rise -5943 Jun 14 j 00:58 21°**Y**40'39 -5949 Feb 05 j 23:55 10°**Y**36'44 retrograde -5943 Sep 08 j 04:39 23°**Y**′09'32 direct -5949 May 05 j 07:29 12° Y 01'46 -5943 Nov 25 j 17:28 21°Υ59'46 5°17'35 evening set opposition -5949 May 18 j 01:13 12°**Υ**22'55 39.97507 AU min. Earth dist. -5943 Nov 28 j 20:08 21°Υ55'25 36.33419 AU max. Earth dist. -5942 Feb 15 j 14:59 20°**℃**47'12 direct -5949 May 21 j 07:11 12°Υ28'22 2°14'54 22°Y19'30 conjunction evening set -5942 May 16 j 14:14 -5949 May 21 i 07:07 22°Υ39'58 38.19649 AU minimum elong 12°**Υ**28'22 2°14'56 max. Earth dist. -5942 May 28 i 04:54 -5949 Jun 06 i 03:52 morning rise 12°Y54'50 22°**Y**'46'13 5°14'24 retrograde -5949 Aug 30 j 13:12 14°**Y**18′10 conjunction -5942 May 31 i 17:15 opposition -5949 Nov 17 i 13:18 13°Υ10'21 2°34'57 minimum elong -5942 May 31 i 17:03 22°Υ46'12 5°14'31 min. Earth dist. -5949 Nov 20 i 11:38 13°Υ06'24 37.85254 AU -5942 Jun 15 i 16:55 23°**Y**12'44 morning rise direct -5948 Feb 07 j 14:02 12°Y00'05 -5942 Sep 10 j 02:51 24°**Y**'42'43 retrograde -5948 May 06 j 02:24 13°**Y**26′01 -5942 Nov 27 j 12:11 23°Y32'32 5°45'25 evening set opposition -5948 May 18 j 17:57 13°**Υ**47'12 39.72657 AU min. Earth dist. -5942 Nov 30 j 16:24 23°Υ28'05 36.07596 AU max. Earth dist. 22°Υ19'32 direct -5941 Feb 17 j 09:08 23°Y53'03 conjunction -5948 May 22 j 00:11 13°**Υ**52'43 2°39'55 evening set -5941 May 18 j 15:11 -5948 May 22 j 00:06 minimum elong 13°Υ52'42 2°39'59 max. Earth dist. -5941 May 30 j 01:45 24°Υ13'24 37.93665 AU -5948 Jun 06 j 19:01 14°Υ19'15 morning rise 15°**Y**43'24 -5941 Jun 02 j 13:40 24°**Y**19'41 5°40'44 retrograde -5948 Aug 31 j 08:11 conjunction -5948 Nov 18 j 04:31 14°**Υ**35'18 3°01'28 -5941 Jun 02 j 13:27 24° \bolday 19'40 5° 40' 51 opposition minimum elong 14°**Y**31'20 37.60407 AU -5941 Jun 17 j 08:48 24°Y46'06 min. Earth dist. -5948 Nov 21 j 02:42 morning rise 13°**Y**24'42 26°**Y**17'12 direct -5947 Feb 08 j 06:07 retrograde -5941 Sep 11 j 23:34 -5947 May 07 j 22:14 14°**Y**51'36 opposition -5941 Nov 29 j 07:19 25°Υ06'37 6°13'23 evening set max. Earth dist. -5947 May 20 j 09:45 15°**Y**12'40 39.47650 AU min. Earth dist. -5941 Dec 02 j 10:55 25°Υ02'10 35.81774 AU direct -5940 Feb 19 j 05:57 23°Y53'10 conjunction -5947 May 23 j 17:46 15°**Y**18′21 3°05′10 evening set -5940 May 19 j 17:15 25°**Y**27′59 -5947 May 23 j 17:40 15°**Y**18′21 3°05'14 max. Earth dist. -5940 May 30 j 21:28 25°Υ48'02 37.67699 AU minimum elong

-5947 Jun 08 j 10:19

morning rise

15°**℃**44'57

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5940 in astronomical counting style is the year 5941 BCE in historical counting style. 25°**Υ**54'28 6°07'10 opposition -5940 Jun 03 i 10:42 -5934 Dec 10 j 15:44 6°848'09 9°30'50 conjunction -5940 Jun 03 j 10:28 25°**Y**54'27 6°07'18 min. Earth dist. -5934 Dec 13 j 20:36 6°**8**43'26 34.04856 AU minimum elong -5940 Jun 18 j 00:57 26°**Y**′20′46 -5933 Mar 02 j 07:41 5°831'39 direct morning rise -5940 Sep 12 j 20:28 27°Y53'03 -5933 Jun 03 j 14:45 7°817'34 retrograde evening set 26°**Y**42'04 6°41'29 -5940 Nov 30 j 02:57 -5933 Jun 12 j 17:40 opposition max. Earth dist. 7°**と**35'07 35.89707 AU -5940 Dec 03 j 07:36 26°Υ37'32 35.56034 AU min. Earth dist. 25°**Y**28'10 -5933 Jun 16 j 07:30 direct -5939 Feb 20 j 00:56 conjunction 7°**8**42'04 9°12'45 27°\bar{Y}04'20 -5933 Jun 16 j 07:10 evening set -5939 May 21 j 20:16 minimum elong 7°**8**42'02 9°12'57 27°**Υ**24'14 37.41830 AU 8°806'21 max. Earth dist. -5939 Jun 01 j 20:10 morning rise -5933 Jun 28 j 21:20 9°849'04 retrograde -5933 Sep 25 j 23:14 27°**Y**30'40 conjunction -5939 Jun 05 j 08:26 6°33'41 opposition -5933 Dec 12 j 16:30 8°**8**35'21 9°58'54 -5939 Jun 05 j 08:12 27°**Ƴ**30'39 -5933 Dec 15 j 22:14 minimum elong 6°33'49 min. Earth dist. 8°**8**30'33 33.80069 AU -5939 Jun 19 j 17:08 27°**Y**56'48 -5932 Mar 03 j 07:34 morning rise direct 7°**8**18'24 retrograde -5939 Sep 14 j 16:06 29°**Y**30'20 evening set -5932 Jun 05 j 02:19 9°806'13 opposition -5939 Dec 01 j 23:25 28°**Y**18′58 7°09'40 max. Earth dist. -5932 Jun 13 j 21:05 9°**8**23'17 35.64689 AU min. Earth dist. -5939 Dec 05 j 03:52 28°**Y**14'24 35.30421 AU direct -5938 Feb 21 j 22:05 27° **Y** 04'36 conjunction -5932 Jun 17 j 09:57 9°**8**30'13 9°38'59 evening set -5938 May 24 j 00:28 28° **Y**42'12 minimum elong -5932 Jun 17 j 09:36 9°**8**30'11 9°39'11 max. Earth dist. -5938 Jun 03 j 17:20 29°**Υ**01'46 37.16115 AU morning rise -5932 Jun 29 j 14:29 9°854'00 retrograde -5932 Sep 27 j 01:04 11°**8**38'31 conjunction -5938 Jun 07 j 06:32 29° Y 08'20 7° 00'14 opposition -5932 Dec 13 j 17:56 10°26'50 minimum elong -5938 Jun 07 i 06:16 29°**Y**08′19 7°00'23 min. Earth dist. -5932 Dec 16 i 23:42 10°819'32 33.55365 AU morning rise -5938 Jun 21 i 09:29 29° Y 34'16 direct -5931 Mar 05 i 09:02 9°**8**06'57 -5938 Jul 06 i 01:31 0°8 evening set -5931 Jun 07 i 15:25 10°856'45 -5938 Sep 16 j 15:39 1°809'09 max. Earth dist. -5931 Jun 15 j 23:13 11°**8**13'06 35.39777 AU retrograde -5938 Dec 02 j 00:45 30°RY opposition -5938 Dec 03 j 20:25 29°Y57'23 7°37'54 -5931 Jun 19 j 13:01 11°**8**20'11 10°05'02 conjunction -5938 Dec 07 j 00:41 29°**Υ**52'48 35.05000 AU -5931 Jun 19 j 12:39 11°**8**20'09 10°05'16 min. Earth dist. minimum elong -5937 Feb 23 j 16:30 28°Y42'35 morning rise -5931 Jul 01 j 07:54 11°**8**43'25 direct -5937 May 14 j 00:48 0°8 -5931 Sep 29 j 05:10 13°**8**29'48 retrograde -5937 May 26 j 05:35 -5931 Dec 15 j 20:11 12°**8**15'14 10°54'35 evening set 0°**8**21'41 opposition 12°**8**10'22 33.30809 AU -5937 Jun 05 j 16:44 -5931 Dec 19 j 01:50 max. Earth dist. 0°**8**41'00 36.90572 AU min. Earth dist. -5930 Mar 07 j 09:27 10°**8**57'19 direct -5937 Jun 09 j 05:27 0°**8**47'35 7°26'49 -5930 Jun 10 j 05:38 12°**8**49'10 conjunction evening set -5937 Jun 09 j 05:11 0°**8**47'34 7°26'58 -5930 Jun 18 j 03:39 13°**8**04'53 35.15012 AU minimum elong max. Earth dist. -5937 Jun 23 j 01:53 1°**8**13'17 morning rise -5937 Sep 18 j 13:57 2°**8**49'35 -5930 Jun 21 j 16:47 13°**8**11'59 10°30'52 retrograde conjunction opposition -5937 Dec 05 j 18:10 1°**8**37'26 8°06'10 minimum elong -5930 Jun 21 j 16:24 13°**8**11'57 10°31'05 min. Earth dist. -5937 Dec 08 j 23:06 1°**8**32'47 34.79762 AU morning rise -5930 Jul 03 j 01:02 13°**8**34'35 -5936 Feb 25 j 12:13 0°822'13 -5930 Aug 23 j 17:17 15°8 direct -5936 May 27 j 11:58 2°802'54 retrograde -5930 Oct 01 j 08:08 15°**8**22'56 evening set -5936 Jun 06 j 16:11 2°**8**21'53 36.65208 AU -5930 Nov 09 j 23:02 15°R\ max. Earth dist. -5930 Dec 17 j 23:23 14°**8**07'55 11°22'04 opposition -5936 Jun 10 j 04:49 2°**8**28'31 7°53'23 min. Earth dist. -5930 Dec 21 j 05:27 14°**8**02'59 33.06443 AU conjunction -5936 Jun 10 j 04:31 2°**8**28'30 7°53'33 direct -5929 Mar 09 j 10:48 12°**8**49'31 minimum elong -5936 Jun 23 j 18:32 2°**8**53'56 morning rise evening set -5929 Jun 12 j 21:28 14°**8**43'31 retrograde -5936 Sep 19 i 15:51 4°831'44 max. Earth dist. -5929 Jun 20 i 08:22 14°858'28 34.90491 AU 3°819'13 8°34'26 -5929 Jun 21 j 02:35 opposition -5936 Dec 06 i 16:31 15°8 min. Earth dist. -5936 Dec 09 i 20:46 3°814'35 34.54688 AU direct -5935 Feb 26 i 09:38 2°803'34 -5929 Jun 23 j 21:08 15°805'36 10°56'24 conjunction -5935 May 29 j 19:37 3°845'55 -5929 Jun 23 i 20:45 15°**と**05'34 10°56'39 evening set minimum elong max. Earth dist. -5935 Jun 08 j 15:46 4°**8**04'28 36.39954 AU -5929 Jul 04 j 18:16 15°**8**27'30 morning rise -5929 Oct 03 j 14:15 17°**8**17'54 retrograde conjunction -5935 Jun 12 j 05:05 4°811'14 8°19'55 opposition -5929 Dec 20 j 03:07 16°**8**02'26 11°49'14 minimum elong -5935 Jun 12 j 04:47 4°811'12 8°20'06 min. Earth dist. -5929 Dec 23 j 07:58 15°**8**57'34 32.82370 AU -5928 Feb 05 j 10:18 morning rise -5935 Jun 25 j 11:20 4°836'19 15°R8 -5928 Mar 10 j 12:54 -5935 Sep 21 j 18:09 6°815'41 direct 14°**8**43'32 retrograde -5928 Apr 13 j 05:24 -5935 Dec 08 j 15:42 5°**8**02'46 9°02'39 15°8 opposition -5935 Dec 11 j 21:18 4°**8**58'02 34.29729 AU -5928 Jun 14 j 14:35 16°**8**39'49 min. Earth dist. evening set 3°**8**46'42 -5928 Jun 21 j 13:44 16°**8**53'56 34.66275 AU direct -5934 Feb 28 j 06:54 max. Earth dist. 5°**8**30'49 evening set -5934 Jun 01 j 04:37 max. Earth dist. -5934 Jun 10 j 17:26 5°**8**48'58 36.14799 AU conjunction -5928 Jun 25 j 02:15 17°**8**01'06 11°21'36 minimum elong -5928 Jun 25 j 01:50 17°**8**01'04 11°21'50 morning rise conjunction -5934 Jun 14 j 06:02 5°**8**55'44 8°46'23 -5928 Jul 05 j 11:23 17°**8**22'13 minimum elong -5934 Jun 14 j 05:42 5°**8**55'42 8°46'34 retrograde -5928 Oct 04 j 20:36 19°**8**14'47 -5934 Jun 27 j 04:17 6°820'27 -5928 Dec 21 j 07:53 17°**8**58'52 12°16'01 morning rise opposition -5934 Sep 23 j 19:48 8°**8**01'28 -5928 Dec 24 j 13:15 17°**8**53'55 32.58656 AU retrograde min. Earth dist.

Planetary Phenomena of Pluto from -6400 through -5898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5927 in astronomical counting style is the year 5928 BCE in historical counting style. 16°**8**39'29 -5927 Mar 12 j 15:26 conjunction -5921 Jul 10 j 11:32 1°**Ⅱ**27'30 14°02'22 direct -5927 Jun 17 j 09:30 18°838'07 -5921 Jul 10 j 11:08 1°**Ⅲ**27′28 14°02'41 minimum elong evening set max. Earth dist. -5927 Jun 23 j 21:13 18°**8**51'25 34.42463 AU -5921 Jul 16 j 01:03 1°**I**I39'40 morning rise -5921 Oct 20 j 16:26 3°**I**I51'15 retrograde -5927 Jun 27 j 08:05 18°**8**58'31 -5920 Jan 05 j 18:02 2°**Ⅲ**32'34 conjunction 11°46'21 opposition 15°06'32 -5927 Jun 27 j 07:40 18°**8**58'29 -5920 Jan 08 j 17:12 minimum elong 11°46'37 min. Earth dist. 2°**Д**27'50 31.06629 AU -5927 Jul 07 j 04:17 19°**8**18'46 -5920 Mar 26 j 16:01 morning rise direct 1°**Ⅲ**10′18 3°**Ⅲ**29'55 -5927 Oct 07 j 04:38 21°**8**13'35 retrograde evening set -5920 Jul 07 j 09:35 -5920 Jul 08 j 19:49 opposition -5927 Dec 23 j 13:24 19°**8**57'14 12°42'21 max. Earth dist. 3°**Д**33'04 32.89983 AU min. Earth dist. -5927 Dec 26 j 17:05 19°**8**52'22 32.35383 AU 3°**Ⅱ**40'00 14°22'21 direct -5926 Mar 14 j 22:07 18°**8**37'23 conjunction -5920 Jul 11 j 22:57 20°838'31 -5920 Jul 11 j 22:31 3°Ⅱ39'58 evening set -5926 Jun 20 j 05:58 minimum elong 14°22'39 20°**8**50'46 34.19122 AU -5920 Jul 16 j 11:11 3°**Ⅱ**49'58 max. Earth dist. -5926 Jun 26 j 03:46 morning rise -5920 Oct 22 j 05:59 retrograde 6°**Ⅲ**05′10 conjunction -5926 Jun 29 j 14:39 20°857'57 12°10'38 opposition -5919 Jan 07 j 06:04 4°**Ⅱ**46′06 15°27'38 minimum elong -5926 Jun 29 j 14:14 20°**8**57'54 12°10'53 min. Earth dist. -5919 Jan 10 j 03:10 4°**Д**41'28 30.86880 AU morning rise -5926 Jul 08 j 21:11 21°**8**17'12 direct -5919 Mar 29 j 02:34 3°**Ⅲ**23'26 retrograde -5926 Oct 09 j 14:24 23°**8**14'26 evening set -5919 Jul 11 j 06:11 5°**Ⅱ**47'25 opposition -5926 Dec 25 j 19:56 21°**8**57'39 13°08'08 max. Earth dist. -5919 Jul 11 j 08:52 5°**I**47'40 32.70175 AU min. Earth dist. -5926 Dec 28 j 23:23 21°**8**52'46 32.12629 AU direct -5925 Mar 17 j 03:17 20°837'22 conjunction -5919 Jul 14 j 11:12 5°**I**I54'34 14°41'22 evening set -5925 Jun 23 i 04:12 22°841'07 minimum elong -5919 Jul 14 i 10:48 5°**Ⅱ**54'32 14°41'42 max. Earth dist. -5925 Jun 28 j 13:20 22°852'23 33.96315 AU morning rise -5919 Jul 17 i 15:18 6°**Ⅱ**01'39 retrograde -5919 Oct 24 i 19:49 8°**Ⅱ**21'09 conjunction -5925 Jul 01 i 21:56 22°**8**59'26 12°34'21 opposition -5918 Jan 09 j 19:10 7°**Ⅱ**01'40 15°47'41 -5925 Jul 01 i 21:32 22°**8**59'24 min. Earth dist. -5918 Jan 12 j 16:12 6°П57'02 30.67636 AU minimum elong 12°34'37 -5925 Jul 10 j 13:34 23°**8**17'37 direct -5918 Mar 31 j 12:54 5°**Ⅲ**38'36 morning rise -5925 Oct 11 j 21:53 25°**8**17'22 -5918 Jul 14 j 00:15 8°**Д**04'23 32.50921 AU retrograde max. Earth dist. -5925 Dec 28 j 03:18 24°**8**00'12 13°33'18 evening set -5918 Jul 16 j 13:52 8°**Ⅱ**10'10 opposition -5925 Dec 31 j 05:22 23°**8**55'22 31.90405 AU min. Earth dist. -5924 Mar 18 j 10:18 -5918 Jul 17 j 00:13 8°**I**11'08 14°59'22 22°**8**39'30 direct conjunction 14°59'41 -5924 Jun 25 j 04:30 minimum elong -5918 Jul 16 j 23:49 24°**8**46'01 8°**Ⅱ**11′06 evening set 8°**Ⅱ**12′02 24°**8**55'59 33.74049 AU -5918 Jul 17 j 09:48 max. Earth dist. -5924 Jun 29 j 21:34 evening rise -5918 Oct 27 j 10:57 10°**Ⅲ**39'04 retrograde 9°**耳**19'11 16°06'36 -5924 Jul 03 j 06:03 25°**8**03'07 12°57'26 -5917 Jan 12 j 09:06 conjunction opposition -5924 Jul 03 j 05:37 25°**8**03'04 12°57'43 -5917 Jan 15 j 03:53 9°**I**14'40 30.48953 AU minimum elong min. Earth dist. -5924 Jul 11 j 05:48 25°**8**20'04 -5917 Apr 03 j 03:41 7°**I**55'43 morning rise direct retrograde -5924 Oct 13 j 08:12 27°**8**22'29 max. Earth dist. -5917 Jul 16 j 14:30 10°**Д**22'52 32.32270 AU opposition -5924 Dec 29 j 11:22 26°**8**04'56 13°57'47 -5917 Jul 19 j 13:44 min. Earth dist. -5923 Jan 01 j 12:37 26°800'09 31.68726 AU conjunction 10°**II**29'36 15°16'14 direct -5923 Mar 20 j 16:26 24°**8**43'51 minimum elong -5917 Jul 19 j 13:22 10°**I**29'34 15°16'35 -5923 Jun 28 j 07:09 26°**8**53'18 -5917 Oct 30 j 03:23 12°**Ⅲ**58'51 evening set retrograde -5923 Jul 02 j 08:45 27°**8**02'00 33.52299 AU -5916 Jan 14 j 23:52 11°**耳**38'33 16°24'17 max. Earth dist. opposition min. Earth dist. -5916 Jan 17 j 17:44 11°**Д**34'05 30.30908 AU -5923 Jul 05 j 15:10 27°809'01 13°19'51 -5916 Apr 04 j 17:05 10°**Ⅲ**14'41 conjunction direct -5923 Jul 05 i 14:46 27°**8**08'59 -5916 Jul 18 i 07:56 12°**Д**43'24 32.14305 AU minimum elong 13°20'09 max. Earth dist. -5923 Jul 12 j 21:26 27°**8**24'35 morning rise -5923 Oct 15 i 17:54 29°829'51 -5916 Jul 21 i 04:07 12°**Ⅱ**49'54 15°31'53 retrograde conjunction -5923 Dec 31 i 20:42 -5916 Jul 21 i 03:45 12°**Ⅱ**49'52 opposition 28°**8**11'56 14°21'32 minimum elong 15°32'14 min. Earth dist. -5922 Jan 03 j 21:31 28°807'08 31.47544 AU retrograde -5916 Oct 31 i 18:19 15°**Ⅲ**20′25 direct -5922 Mar 22 j 23:32 26°850'27 opposition -5915 Jan 16 i 15:25 13°**I**I59'44 16°40'37 13°**Ц**55'23 30.13566 AU -5922 Jul 01 j 12:15 29°803'01 min. Earth dist. -5915 Jan 19 j 07:08 evening set -5922 Jul 04 j 19:00 29°810'07 33.31052 AU direct -5915 Apr 07 j 08:27 12°**Ⅱ**35'29 max. Earth dist. -5915 Jul 21 j 00:04 15°**Д**05'31 31.97117 AU max. Earth dist. -5922 Jul 08 j 00:49 conjunction 29°**8**17'09 13°41'31 13°41'48 minimum elong -5922 Jul 08 j 00:23 29°**8**17'06 conjunction -5915 Jul 23 j 19:00 15°**耳**11'57 15°46'14 15°46'35 morning rise -5922 Jul 14 j 11:55 29°**8**31'08 minimum elong -5915 Jul 23 j 18:41 15°**Ⅱ**11'55 -5922 Jul 28 j 01:46 $0^{\circ}\Pi$ -5915 Nov 03 j 12:29 17°**Ⅱ**43'43 retrograde -5922 Oct 18 j 05:44 1°**Ⅱ**39'27 -5914 Jan 19 j 07:54 16°**Ⅲ**22'39 retrograde opposition 16°55'30 16°**Ⅱ**18′26 29.97041 AU -5921 Jan 03 j 06:51 0°**I**21'10 14°44'28 -5914 Jan 21 j 21:31 opposition min. Earth dist. -5921 Jan 06 j 06:01 0°**I**16'27 31.26854 AU -5914 Apr 09 j 23:42 14°**Ⅲ**58′04 min. Earth dist. direct -5914 Jul 23 j 19:12 -5921 Jan 16 j 18:10 30°R₩ max. Earth dist. 17°**Ⅲ**29'36 31.80794 AU direct -5921 Mar 25 j 07:24 28°**8**59'17 -5921 May 28 j 14:43 Π °0 conjunction -5914 Jul 26 j 10:32 17°**Ⅲ**35'44 15°59'10 evening set -5921 Jul 04 j 20:40 1°**Ⅱ**15'12 minimum elong -5914 Jul 26 j 10:13 17°**Ⅲ**35'42 15°59'30 max. Earth dist. -5921 Jul 07 j 07:02 1°**Ⅲ**20'31 33.10273 AU -5914 Nov 06 j 04:57 20°II08'43 retrograde -5913 Jan 22 j 01:20 18°**耳**47'18 17°08'50 opposition

Planetary Pheno	omena of Pluto fron	n -6400 thr	ough -5898 (U	JT), Astrodienst A	AG 18-Feb-2025 14::	23, pag	e 36
					r 5914 BCE in historical c		
min. Earth dist.	-5913 Jan 24 j 12:56	-	29.81391 AU	retrograde	-5906 Nov 26 j 20:49	10°524'27	
direct	-5913 Apr 12 j 15:59	17° Ⅲ 22′26		opposition	-5905 Feb 11 j 21:36	9° 5 01'17	17°50'59
max. Earth dist.	-5913 Jul 26 j 13:15	19° Ⅱ 55'15	31.65420 AU	min. Earth dist.	-5905 Feb 13 j 12:09	8° © 58'35	28.89689 AU
				direct	-5905 May 02 j 22:25	7° © 35'11	
conjunction	-5913 Jul 29 j 02:38	20° Ⅲ 01′15	16°10'36	max. Earth dist.	-5905 Aug 16 j 17:19	10° © 16'32	30.76862 AU
minimum elong	-5913 Jul 29 j 02:22	20° Ⅲ 01'14	16°10'57				
retrograde	-5913 Nov 08 j 23:32	22° Ⅲ 35′24		conjunction	-5905 Aug 18 j 06:34	10° © 20'20	16°41'01
opposition	-5912 Jan 24 j 19:13	21° Ⅱ 13'42		minimum elong	-5905 Aug 18 j 06:37	10° © 20'20	16°41'23
min. Earth dist.	-5912 Jan 27 j 03:43	21° Ⅱ 09'47	29.66692 AU	retrograde	-5905 Nov 29 j 17:04	13° © 01'20	
direct	-5912 Apr 14 j 08:19	19° Ⅱ 48′33		opposition	-5904 Feb 14 j 20:25	11° © 38'01	17°47'26
max. Earth dist.	-5912 Jul 28 j 09:23	22° Ⅲ 22'47	31.51017 AU	min. Earth dist.	-5904 Feb 16 j 07:55	11° © 35'31	28.82353 AU
				direct	-5904 May 04 j 21:18	10° © 11'50	
conjunction	-5912 Jul 30 j 19:32	22° Ⅱ 28'30	16°20'27	max. Earth dist.	-5904 Aug 18 j 15:22	12° © 53'40	30.70113 AU
minimum elong	-5912 Jul 30 j 19:16	22° Ⅱ 28'28	16°20'49				
retrograde	-5912 Nov 10 j 16:49	25° Ⅲ 03'47		conjunction	-5904 Aug 20 j 02:24	12° © 57'14	16°36'34
opposition	-5911 Jan 26 j 14:10	23° Ⅱ 41'48	17°30'28	minimum elong	-5904 Aug 20 j 02:27	12° © 57'15	16°36'56
min. Earth dist.	-5911 Jan 28 j 20:59		29.52938 AU	retrograde	-5904 Dec 01 j 15:59	15° © 38'39	
direct	-5911 Apr 17 j 00:42	22° Ⅱ 16′28		opposition	-5903 Feb 16 j 19:37	14° © 15'09	17°41'49
max. Earth dist.	-5911 Jul 31 j 05:16	24° Ⅲ 51'57	31.37600 AU	min. Earth dist.	-5903 Feb 18 j 03:46	14° © 12'54	28.76040 AU
		_		direct	-5903 May 07 j 19:23	12° © 48'55	
conjunction	-5911 Aug 02 j 12:47	24° ∏ 57'27	16°28'41				
minimum elong	-5911 Aug 02 j 12:35	24° Ⅱ 57'26	16°29'03	conjunction	-5903 Aug 22 j 22:18	15°934'28	16°30'10
retrograde	-5911 Nov 13 j 13:17	27° Ⅱ 33'48	1.502.012.0	minimum elong	-5903 Aug 22 j 22:25	15°534'28	16°30'31
opposition	-5910 Jan 29 j 09:45	26° Ⅱ 11'36	17°38'39	max. Earth dist.	-5903 Aug 21 j 15:59		30.64440 AU
min. Earth dist.	-5910 Jan 31 j 13:00		29.40132 AU	retrograde	-5903 Dec 04 j 13:03	18°5516'09	1502405
direct	-5910 Apr 19 j 18:14	24° Ⅱ 46'05	21 25120 444	opposition	-5902 Feb 19 j 19:11	16°952'31	17°34'05
max. Earth dist.	-5910 Aug 03 j 02:03	27° H 22'47	31.25138 AU	min. Earth dist.	-5902 Feb 21 j 00:19	16°950'28	28.70800 AU
:	5010 A 05 : 06-44	270 T 20102	1.692.511.2	direct	-5902 May 10 j 19:39	15° © 26'16	
conjunction minimum elong	-5910 Aug 05 j 06:44 -5910 Aug 05 j 06:33	27° Ⅲ 28'02 27° Ⅲ 28'01	16°35'13 16°35'35	aaniumatian	5002 Aug 25 : 19:06	100@11!40	16021140
minimum elong	-5910 Aug 03 j 06.53	27 ш 2801	10 33 33	conjunction minimum elong	-5902 Aug 25 j 18:06 -5902 Aug 25 j 18:14	18° © 11'49 18° © 11'50	16°21'48 16°22'10
retrograde	-5910 Oct 29 j 23.39 -5910 Nov 16 j 07:59	0°905'25		max. Earth dist.	-5902 Aug 23 j 18.14 -5902 Aug 24 j 14:34	18°909'00	
retrograde	-5910 Nov 10 j 07.39	0 3 03 23		retrograde	-5902 Aug 24 j 14.34 -5902 Dec 07 j 11:10	20°953'42	30.39929 AU
opposition	-5909 Feb 01 j 06:12	28° Ⅱ 43'00	17°44'59	opposition	-5901 Feb 22 j 18:40	19° © 29'57	17°24'13
min. Earth dist.	-5909 Feb 03 j 07:57		29.28252 AU	min. Earth dist.	-5901 Feb 23 j 19:22		28.66732 AU
direct	-5909 Apr 22 j 11:40	27° Ⅱ 17'20	2).20232 AU	direct	-5901 May 13 j 18:31	18°903'43	20.00732 AC
max. Earth dist.	-5909 Aug 05 j 23:38		31.13629 AU	uncet	5701 Way 15 J 10.51	10 305 45	
max. Earth dist.	-5909 Aug 07 j 23:34	0°95	31.13027110	conjunction	-5901 Aug 28 j 13:57	20°549'10	16°11'28
	5707 Hug 07 J 25.5 I	۰٠		minimum elong	-5901 Aug 28 j 14:10	20°549'11	16°11'49
conjunction	-5909 Aug 08 j 01:04	0°500'09	16°40'00	max. Earth dist.	-5901 Aug 27 j 15:06		30.56634 AU
minimum elong	-5909 Aug 08 j 00:57	0.200,08	16°40'22	retrograde	-5901 Dec 10 j 07:24	23°531'08	30.00031110
retrograde	-5909 Nov 19 j 04:27	2° © 38'27		opposition	-5900 Feb 25 j 18:22	22°507'20	17°12'14
opposition	-5908 Feb 04 i 03:09	1°9515'51	17°49'25	min. Earth dist.	-5900 Feb 26 j 16:09		28.63861 AU
min. Earth dist.	-5908 Feb 06 j 01:24		29.17268 AU	direct	-5900 May 15 j 17:25	20°5541'10	
	-5908 Mar 30 j 15:10	30°R Ⅱ			, ,		
direct	-5908 Apr 24 j 08:15	29° Ⅱ 50'03		conjunction	-5900 Aug 30 j 09:37	23° © 26'25	15°59'11
	-5908 May 18 j 15:18	0ಂತಾ		minimum elong	-5900 Aug 30 j 09:51	23°526'26	15°59'32
max. Earth dist.	-5908 Aug 07 j 20:44	2° © 28'53	31.03030 AU	max. Earth dist.	-5900 Aug 29 j 14:01	23° © 24'24	30.54599 AU
				retrograde	-5900 Dec 12 j 06:08	26°508'22	
conjunction	-5908 Aug 09 j 19:58	2° 5 33'38	16°43'01	opposition	-5899 Feb 27 j 17:52	24°5544'33	16°58'09
minimum elong	-5908 Aug 09 j 19:51	2° 5 33'38	16°43'23	min. Earth dist.	-5899 Feb 28 j 10:50	24°9543'22	28.62220 AU
retrograde	-5908 Nov 21 j 01:13	5° © 12'47		direct	-5899 May 18 j 16:49	23°5518'30	
opposition	-5907 Feb 06 j 00:45	3° 5 49'59	17°51'56				
min. Earth dist.	-5907 Feb 07 j 21:15	3° 5 46'53	29.07175 AU	conjunction	-5899 Sep 02 j 05:18	26° © 03'27	15°44'59
direct	-5907 Apr 27 j 02:44	2° 5 24'04		minimum elong	-5899 Sep 02 j 05:34	26° © 03'29	15°45'19
max. Earth dist.	-5907 Aug 10 j 19:48	5° 5 03'54	30.93362 AU	max. Earth dist. retrograde	-5899 Sep 01 j 14:03 -5899 Dec 15 j 01:46	26°501'54 28°545'19	30.53812 AU
conjunction	-5907 Aug 12 j 15:17	5° © 08'18	16°44'13	S	. ,		
minimum elong	-5907 Aug 12 j 15:15	5° ॐ 08'18	16°44'35				
retrograde	-5907 Nov 23 j 22:15	7° 5 348'11					
opposition	-5906 Feb 08 j 22:58	6°\$25'12	17°52'28				
min. Earth dist.	-5906 Feb 10 j 16:01		28.97969 AU				
direct	-5906 Apr 30 j 00:58	4°959'12					
max. Earth dist.	-5906 Aug 13 j 17:15		30.84626 AU				
	- "						

-5906 Aug 15 j 10:43 7°543'56 16°43'34

-5906 Aug 15 j 10:42 7°\$43'56 16°43'56

conjunction minimum elong