Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 1

•	omena of Fluto Hon		•	/ /			C 1
		-			6901 BCE in historical c		1.02.000
opposition	-6900 Jan 07 j 04:03	27° 8 18'34		minimum elong	-6893 Jul 31 j 02:02	15° Ⅱ 33'46	16°36'08
min. Earth dist.	-6900 Jan 09 j 23:02		30.38050 AU	retrograde	-6893 Nov 11 j 06:29	18° Ⅱ 11'45	15045110
direct	-6900 Mar 27 j 22:05	25° 8 54'50	22 21 460 444	opposition	-6892 Jan 27 j 05:06	16° ∏ 49'14	
max. Earth dist.	-6900 Jul 10 j 11:18	28°022'45	32.21469 AU	min. Earth dist.	-6892 Jan 29 j 03:57		29.21888 AU
	(000 X 1 12 : 00 12	2001 120110	15000151	direct	-6892 Apr 16 j 10:54	15° Ⅱ 23'36	21.05502.111
conjunction	-6900 Jul 13 j 08:12	28° 8 29'18	15°20'51	max. Earth dist.	-6892 Jul 30 j 21:15	18°Щ01'58	31.07503 AU
minimum elong	-6900 Jul 13 j 07:48	28° 8 29'15	15°21'13			100 T 0 6145	1.0000151
	-6900 Aug 24 j 20:40	0°II		conjunction	-6892 Aug 01 j 20:52	18° Ⅱ 06'45	16°39'51
retrograde	-6900 Oct 23 j 20:07	0° Ⅱ 59'09		minimum elong	-6892 Aug 01 j 20:44	18° Ⅱ 06'44	16°40'18
	-6900 Dec 26 j 12:36	30° ₹ 8		retrograde	-6892 Nov 13 j 01:29	20° ∏ 45'36	
opposition	-6899 Jan 08 j 19:16	29° 8 38'34		opposition	-6891 Jan 29 j 02:42	19° Ⅲ 22'53	17°49'03
min. Earth dist.	-6899 Jan 11 j 11:27		30.20390 AU	min. Earth dist.	-6891 Jan 31 j 00:01		29.11382 AU
direct	-6899 Mar 30 j 14:03	28° 8 14'28		direct	-6891 Apr 19 j 06:04	17° ∏ 57'08	
	-6899 Jun 23 j 16:36	0°II		max. Earth dist.	-6891 Aug 02 j 19:21	20°∏36′27	30.97397 AU
max. Earth dist.	-6899 Jul 13 j 03:04	0° Ⅱ 43'45	32.03960 AU			_	
				conjunction	-6891 Aug 04 j 15:48	20° Ⅱ 40'57	16°42'12
conjunction	-6899 Jul 15 j 22:33	0° Ⅱ 50'13	15°36'02	minimum elong	-6891 Aug 04 j 15:43	20° Ⅱ 40'57	16°42'39
minimum elong	-6899 Jul 15 j 22:12	0° Ⅱ 50'11	15°36'24	retrograde	-6891 Nov 15 j 22:28	23° Ⅱ 20'35	
retrograde	-6899 Oct 26 j 13:34	3° Ⅲ 21′22		opposition	-6890 Feb 01 j 00:44	21° Ⅱ 57'40	
opposition	-6898 Jan 11 j 11:25	2° Ⅱ 00′24	16°44'57	min. Earth dist.	-6890 Feb 02 j 18:15	21° Ⅱ 54'45	29.01754 AU
min. Earth dist.	-6898 Jan 14 j 02:00	1° Ⅱ 56′08	30.03574 AU	direct	-6890 Apr 22 j 03:51	20° Ⅲ 31'47	
direct	-6898 Apr 02 j 04:26	0° Ⅱ 35'58		max. Earth dist.	-6890 Aug 05 j 17:18	23° Ⅱ 11'55	30.88212 AU
max. Earth dist.	-6898 Jul 15 j 21:51	3° Ⅱ 06'48	31.87352 AU				
				conjunction	-6890 Aug 07 j 11:09	23° Ⅲ 16′10	16°42'44
conjunction	-6898 Jul 18 j 13:41	3° Ⅱ 12'58	15°49'50	minimum elong	-6890 Aug 07 j 11:06	23° Ⅱ 16′09	16°43'12
minimum elong	-6898 Jul 18 j 13:21	3° Ⅱ 12'56	15°50'14	retrograde	-6890 Nov 18 j 19:28	25° Ⅲ 56′28	
retrograde	-6898 Oct 29 j 05:48	5° Ⅱ 45'22		opposition	-6889 Feb 03 j 23:19	24° Ⅱ 33'20	17°50'38
opposition	-6897 Jan 14 j 04:28	4° Ⅱ 24'05	16°59'15	min. Earth dist.	-6889 Feb 05 j 14:53		28.93051 AU
min. Earth dist.	-6897 Jan 16 j 16:13		29.87655 AU	direct	-6889 Apr 24 j 23:17	23° Ⅱ 07'21	
direct	-6897 Apr 04 j 20:45	2° Ⅱ 59'22		max. Earth dist.	-6889 Aug 08 j 16:42		30.80014 AU
max. Earth dist.	-6897 Jul 18 j 15:05		31.71694 AU	man. Bartir dist.	0005 1148 00 1 10.12	20 2 10 10	30.00011110
	,			conjunction	-6889 Aug 10 j 06:39	25° Ⅱ 52'09	16°41'22
conjunction	-6897 Jul 21 j 05:13	5° Ⅱ 37'34	16°02'11	minimum elong	-6889 Aug 10 j 06:39	25° I 52'09	16°41'49
minimum elong	-6897 Jul 21 j 04:55	5° П 37'32	16°02'35	retrograde	-6889 Nov 21 j 16:40	28° I I33'01	10 11 17
retrograde	-6897 Nov 01 j 01:04	8° П 11'11	10 02 33	opposition	-6888 Feb 06 j 22:09	27° ∏ 09'42	17°48'23
opposition	-6896 Jan 16 j 22:12	6° П 49'36	17°11'56	min. Earth dist.	-6888 Feb 08 j 09:50		28.85306 AU
min. Earth dist.	-6896 Jan 19 j 07:30		29.72682 AU	direct	-6888 Apr 26 j 22:48	25° I I43'37	20.03300 AC
direct	-6896 Apr 06 j 12:27	5° П 24'39	2).12002 AO	max. Earth dist.	-6888 Aug 10 j 14:49		30.72837 AU
max. Earth dist.	-6896 Jul 20 j 11:20		31.56995 AU	max. Earm dist.	-0000 Aug 10 J 14.49	28 Щ2307	30.72637 AU
max. Earm dist.	-0090 Jul 20 J 11.20	/ щзо 1 /	31.30993 AU	conjunction	-6888 Aug 12 j 02:17	28° ∏ 28'44	16°38'07
conjunction	-6896 Jul 22 j 21:41	8° Ⅱ 04'00	16°13'00	minimum elong	-6888 Aug 12 j 02:17	28° I I28'44	16°38'35
·	·	8°П04'00 8°П03'58		minimum elong		20 Щ20 44 0°©	10 38 33
minimum elong	-6896 Jul 22 j 21:24		16°13'25		-6888 Sep 20 j 15:23		
retrograde	-6896 Nov 02 j 18:54	10° Ⅱ 38'48	17022157	retrograde	-6888 Nov 23 j 14:54	1°5510'02	
opposition	-6895 Jan 18 j 16:45	9° Ⅱ 16'58	17°22'56	***	-6887 Jan 31 j 20:36	30°RⅡ 200Ⅲ46122	17044102
min. Earth dist.	-6895 Jan 20 j 23:59		29.58630 AU	opposition	-6887 Feb 08 j 21:16	29° Ⅱ 46'33	17°44'02
direct	-6895 Apr 09 j 05:26	7° ∏ 51'48	21 42251 433	min. Earth dist.	-6887 Feb 10 j 06:12		28.78603 AU
max. Earth dist.	-6895 Jul 23 j 06:15	10°Щ26'41	31.43251 AU	direct	-6887 Apr 29 j 20:43	28° Ⅱ 20'23	
aomine-+:	6005 I-1 05:1406	100П22115	16020114		-6887 Jul 18 j 08:27	0	
conjunction	-6895 Jul 25 j 14:36	10° Ⅲ 32'15	16°22'14		600 7 1 11:00 06	10005140	1.000015.4
minimum elong	-6895 Jul 25 j 14:22	10° Ⅲ 32'13	16°22'39	conjunction	-6887 Aug 14 j 22:06	1°905'42	16°32'54
retrograde	-6895 Nov 05 j 14:42	13° Ⅱ 08'11		minimum elong	-6887 Aug 14 j 22:10	1°905'42	16°33'21
opposition	-6894 Jan 21 j 12:08	11° ∐ 46′06		max. Earth dist.	-6887 Aug 13 j 15:18		30.66772 AU
min. Earth dist.	-6894 Jan 23 j 16:14		29.45503 AU	retrograde	-6887 Nov 26 j 11:27	3° 5 47'21	
direct	-6894 Apr 11 j 22:49	10° Ⅱ 20'46		opposition	-6886 Feb 11 j 20:48	2° © 23'42	17°37'35
max. Earth dist.	-6894 Jul 26 j 03:15	12° Ⅱ 56'57	31.30427 AU	min. Earth dist.	-6886 Feb 13 j 01:53		28.73000 AU
				direct	-6886 May 02 j 20:11	0° © 57'32	
conjunction	-6894 Jul 28 j 08:08	13° Ⅲ 02'13	16°29'49				
minimum elong	-6894 Jul 28 j 07:55	13° Ⅱ 02'12	16°30'15	conjunction	-6886 Aug 17 j 17:43	3° 5 42'53	16°25'43
retrograde	-6894 Nov 08 j 08:57	15° Ⅲ 39'13		minimum elong	-6886 Aug 17 j 17:50	3°542'54	16°26'11
opposition	-6893 Jan 24 j 08:27	14° Ⅱ 16′55	17°39'41	max. Earth dist.	-6886 Aug 16 j 13:44	3°5540'02	30.61883 AU
min. Earth dist.	-6893 Jan 26 j 10:50	14° Ⅱ 13'25	29.33257 AU	retrograde	-6886 Nov 29 j 10:23	6° 5 24'48	
direct	-6893 Apr 14 j 16:27	12° Ⅲ 51′26		opposition	-6885 Feb 14 j 20:26	5° © 01'03	17°28'59
max. Earth dist.	-6893 Jul 28 j 23:43	15° Ⅲ 28'43	31.18521 AU	min. Earth dist.	-6885 Feb 15 j 21:47	4° © 59'16	28.68583 AU
				direct	-6885 May 05 j 18:28	3° © 34'53	
conjunction	-6893 Jul 31 j 02:12	15° Ⅲ 33'47	16°35'42				

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•	omena of Pluto fron		•	* *			e 2
	nical year style is used: Th	-					
conjunction	-6885 Aug 20 j 13:37		16°16'34	evening set	-6877 Sep 04 j 07:02	26° © 55'18	
minimum elong	-6885 Aug 20 j 13:46	6° 5 20'14	16°17'01				
max. Earth dist.	-6885 Aug 19 j 14:37	6° ॐ 17'52	30.58224 AU	conjunction	-6877 Sep 09 j 22:08	27° © 08'55	13°57'02
retrograde	-6885 Dec 02 j 07:29	9° 5 02'16		minimum elong	-6877 Sep 09 j 22:31	27° © 08'58	13°57'27
opposition	-6884 Feb 17 j 20:03	7° © 38'28	17°18'15	max. Earth dist.	-6877 Sep 10 j 03:19	27° © 09'27	30.70787 AU
min. Earth dist.	-6884 Feb 18 j 17:59	7° 5 36'56	28.65363 AU	morning rise	-6877 Sep 15 j 13:55	27° © 22'37	
direct	-6884 May 07 j 18:38	6°9512'22		retrograde	-6877 Dec 23 j 02:35	29°5548'44	
				opposition	-6876 Mar 10 j 14:32	28° © 25'29	14°41'41
conjunction	-6884 Aug 22 j 09:20	8°\$57'35	16°05'27	min. Earth dist.	-6876 Mar 10 j 07:57	28°\$25'57	28.79916 AU
minimum elong	-6884 Aug 22 j 09:33	8°957'36	16°05'55	direct	-6876 May 29 j 05:35	27° © 01'01	
max. Earth dist.	-6884 Aug 21 j 13:12		30.55814 AU	evening set	-6876 Sep 05 j 01:21	29°525'26	
retrograde	-6884 Dec 04 j 05:51	11°939'42	30.33014710	evening set	0070 Sep 03 j 01.21	2) 32320	
•		11 \$3942 10°\$15'52	17°05'25	conjunction	6076 Cam 11 : 15:40	29° © 41'19	13°32'17
opposition	-6883 Feb 19 j 19:47			-	-6876 Sep 11 j 15:40		
min. Earth dist.	-6883 Feb 20 j 13:18	10°5514'39	28.63358 AU	minimum elong	-6876 Sep 11 j 16:05	29°541'22	13°32'42
direct	-6883 May 10 j 17:09	8° © 49'54		max. Earth dist.	-6876 Sep 12 j 01:02		30.77072 AU
		_		morning rise	-6876 Sep 18 j 06:36	29° © 57'17	
conjunction	-6883 Aug 25 j 04:59	11° © 34'52			-6876 Sep 19 j 09:42	$0^{\circ}\Omega$	
minimum elong	-6883 Aug 25 j 05:13	11° © 34'53	15°52'52	retrograde	-6876 Dec 24 j 20:08	2° Ω 20'24	
max. Earth dist.	-6883 Aug 24 j 13:38	11° 5 33'18	30.54623 AU	opposition	-6875 Mar 13 j 12:18	0° Ω 57'17	14°14'23
retrograde	-6883 Dec 07 j 02:20	14°916'57		min. Earth dist.	-6875 Mar 13 j 02:00	0° Ω 58′00	28.86328 AU
opposition	-6882 Feb 22 j 19:43	12° © 53'09	16°50'31		-6875 Apr 20 j 16:04	30° ₹	
min. Earth dist.	-6882 Feb 23 j 10:14	12°952'08	28.62523 AU	direct	-6875 Jun 01 j 03:41	29°533'04	
direct	-6882 May 13 j 16:17	11° © 27'21			-6875 Jul 11 j 02:21	$0^{\circ}\Omega$	
	, ,			evening set	-6875 Sep 06 j 21:25	1° Ω 54'27	
conjunction	-6882 Aug 28 j 00:27	14° © 11'58	15°37'29	5 · • · · · · · · · · · · · · · · · · ·	***** *** *** *** ***		
minimum elong	-6882 Aug 28 j 00:44	14°9512'00		conjunction	-6875 Sep 14 j 08:19	2° Ω 12'19	13°06'10
max. Earth dist.	-6882 Aug 27 j 12:09		30.54628 AU	minimum elong	-6875 Sep 14 j 08:19	2°Ω12'21	13°06'35
			30.34028 AU				
retrograde	-6882 Dec 10 j 01:12	16°953'55	1.6022127	max. Earth dist.	-6875 Sep 14 j 20:25		30.84387 AU
opposition	-6881 Feb 25 j 19:22	15°530'11	16°33'37	morning rise	-6875 Sep 21 j 19:57	2° Ω 30'15	
min. Earth dist.	-6881 Feb 26 j 05:19		28.62832 AU	retrograde	-6875 Dec 27 j 14:37	4° Ω 50'37	
direct	-6881 May 16 j 15:21	14° © 04'33		opposition	-6874 Mar 16 j 09:34	3° Ω 27'37	
				min. Earth dist.	-6874 Mar 15 j 19:34		28.93805 AU
conjunction	-6881 Aug 30 j 19:48	16°5548'44	15°20'45	direct	-6874 Jun 03 j 23:42	2° Ω 03'41	
minimum elong	-6881 Aug 30 j 20:06	16° © 48'45	15°21'12	evening set	-6874 Sep 08 j 19:02	4° Ω 22'12	
max. Earth dist.	-6881 Aug 30 j 11:43	16°9547'54	30.55761 AU				
retrograde	-6881 Dec 12 j 20:37	19° © 30'27		conjunction	-6874 Sep 17 j 00:38	4° Ω 41'48	12°38'45
opposition	-6880 Feb 28 j 19:03	18° 5 06'48	16°14'46	minimum elong	-6874 Sep 17 j 01:05	4° Ω 41'51	12°39'10
min. Earth dist.	-6880 Feb 29 j 02:32	18° © 06'17	28.64221 AU	max. Earth dist.	-6874 Sep 17 j 17:28	4° Ω 43'29	30.92787 AU
direct	-6880 May 18 j 13:23	16°5541'23		morning rise	-6874 Sep 25 j 06:51	5° Ω 01'30	
	, ,			retrograde	-6874 Dec 30 j 07:27	7° Ω 19'14	
conjunction	-6880 Sep 01 j 14:52	19° 5 24'59	15°02'16	opposition	-6873 Mar 19 j 06:04	5°Ω56'24	13°15'35
minimum elong	-6880 Sep 01 j 15:13	19°525'01	15°02'43	min. Earth dist.	-6873 Mar 18 j 12:45		29.02370 AU
max. Earth dist.	-6880 Sep 01 j 10:05		30.57983 AU	direct	-6873 Jun 06 j 21:46	4° Ω 32'45	27.02370710
retrograde	-6880 Dec 14 j 17:07	22°506'23	30.37703710	evening set	-6873 Sep 10 j 17:34	6° Ω 48'32	
Č	-6879 Mar 02 j 18:21	20°542'49	15°54'05	evening set	-00/3 Sep 10 j 17.34	0 6640 32	
opposition	3				(072 0 10:1(00	70 000143	12010100
min. Earth dist.	-6879 Mar 02 j 21:22		28.66646 AU	conjunction	-6873 Sep 19 j 16:08	7° Ω 09'43	12°10'08
direct	-6879 May 21 j 12:46	19° © 17'38		minimum elong	-6873 Sep 19 j 16:33	7° Ω 09'45	12°10'32
evening set	-6879 Sep 01 j 09:24	21° © 53'13		max. Earth dist.	-6873 Sep 20 j 11:29		31.02301 AU
				morning rise	-6873 Sep 28 j 15:32	7° Ω 30'58	
conjunction	-6879 Sep 04 j 09:44	22° © 00'34		retrograde	-6872 Jan 02 j 00:58	9° Ω 46'14	
minimum elong	-6879 Sep 04 j 10:05	22° © 00'36	14°42'32	min. Earth dist.	-6872 Mar 20 j 04:10		29.12062 AU
max. Earth dist.	-6879 Sep 04 j 08:26	22° © 00'26	30.61238 AU	opposition	-6872 Mar 21 j 01:53	8° Ω 23'35	12°44'15
morning rise	-6879 Sep 07 j 10:44	22°908'00		direct	-6872 Jun 08 j 16:52	7° Ω 00′16	
retrograde	-6879 Dec 17 j 12:51	24° © 41'32		evening set	-6872 Sep 11 j 16:43	9° Ω 13'26	
opposition	-6878 Mar 05 j 17:38	23°9518'05	15°31'37				
min. Earth dist.	-6878 Mar 05 j 18:05	23°518'03	28.70085 AU	conjunction	-6872 Sep 21 j 07:08	9° Ω 36′01	11°40'25
direct	-6878 May 24 j 09:23	21° © 53'07		minimum elong	-6872 Sep 21 j 07:34	9° Ω 36'04	11°40'48
evening set	-6878 Sep 02 j 16:25	24°\$24'21		max. Earth dist.	-6872 Sep 22 j 07:04		31.12930 AU
	5 - p - 02 j 10.25	1		morning rise	-6872 Sep 30 j 22:13	9° Ω 58'40	
conjunction	-6878 Sep 07 j 04:08	24°535'16	14°20'20	retrograde	-6871 Jan 03 j 15:54	12° Ω 11'35	
			14°20'20 14°20'46	•	-	12° Ω 411'35	12°11'47
minimum elong	-6878 Sep 07 j 04:31	24°535'19		opposition	-6871 Mar 23 j 21:09		
max. Earth dist.	-6878 Sep 07 j 06:31		30.65519 AU	min. Earth dist.	-6871 Mar 22 j 20:41		29.22856 AU
morning rise	-6878 Sep 11 j 16:32	24°5546'16		direct	-6871 Jun 11 j 12:33	9° £ 26′13	
retrograde	-6878 Dec 20 j 07:54	27°515'43		evening set	-6871 Sep 13 j 16:35	11° Ω 36′52	
opposition	-6877 Mar 08 j 16:21	25° © 52'22				_	
min. Earth dist.	-6877 Mar 08 j 12:35		28.74503 AU	conjunction	-6871 Sep 23 j 21:24	12° Ω 00'43	11°09'41
direct	-6877 May 27 j 08:53	24° © 27'39		minimum elong	-6871 Sep 23 j 21:49	12° Ω 00'45	11°10'03

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6871 in astronomical counting style is the year 6872 BCE in historical counting style. -6871 Sep 24 j 23:55 12°**Ω**03'18 31.24663 AU opposition -6864 Apr 09 j 15:26 27°Ω01'00 8°02'31 max. Earth dist. -6871 Oct 04 j 03:06 12°Ω24'38 -6864 Jun 28 j 07:39 25°**Ω**40'54 morning rise direct -6870 Jan 06 j 08:55 14°Ω35'17 -6864 Sep 25 j 23:50 27°**Ω**36′28 retrograde evening set -6870 Mar 25 j 10:39 13°**Ω**15'04 29.34736 AU min. Earth dist. 28°**Ω**05'54 7°15'18 -6870 Mar 26 j 15:39 -6864 Oct 09 j 07:16 opposition 13°**Ω**13'07 11°38'18 conjunction 28°**Ω**05'56 7°15'34 -6864 Oct 09 j 07:35 direct -6870 Jun 14 j 08:05 11°**Ω**50'34 minimum elong -6864 Oct 11 j 05:14 evening set -6870 Sep 15 j 16:38 13°**Ω**58'49 max. Earth dist. 28° **Ω**10'10 32.31708 AU -6864 Oct 22 j 16:12 morning rise 28°**Ω**35′27 14°Ω23'48 10°38'03 conjunction -6870 Sep 26 j 11:02 -6864 Dec 07 j 05:03 0° m minimum elong -6870 Sep 26 j 11:28 14°**Ω**23'50 10°38'25 retrograde -6863 Jan 21 j 19:36 0°m/32'35 max. Earth dist. -6870 Sep 27 j 17:41 14°**Ω**26'46 31.37430 AU -6863 Mar 10 j 12:28 30° R Ω -6870 Oct 07 j 06:16 -6863 Apr 10 j 04:24 morning rise 14°**Ω**48'51 min. Earth dist. 29° **Ω**15'36 30.42218 AU -6870 Oct 12 j 03:36 15°€ opposition -6863 Apr 12 j 04:42 29°**Ω**12'28 7°25'04 retrograde -6869 Jan 08 j 22:54 16°**Ω**57'20 direct -6863 Jun 30 j 19:34 27°**Ω**52'45 min. Earth dist. -6869 Mar 28 j 02:22 15°**Ω**37'32 29.47628 AU evening set -6863 Sep 28 j 01:17 29°**Ω**46'28 opposition -6869 Mar 29 j 09:34 15°**Ω**35'27 11°03'54 -6863 Oct 04 j 06:18 -6869 Apr 21 j 04:35 15°R€ direct -6869 Jun 17 j 01:48 14°**Ω**13'18 conjunction -6863 Oct 11 j 16:13 0° Mp 16′19 6°40'14 -6869 Aug 09 j 16:51 15°€ minimum elong -6863 Oct 11 j 16:30 0° Mp 16'21 6°40'30 evening set -6869 Sep 17 j 17:21 16°**Ω**19'15 max. Earth dist. -6863 Oct 13 j 17:38 0° m 20'52 32.49842 AU morning rise -6863 Oct 25 j 08:29 0° Mp 46'18 conjunction -6869 Sep 29 i 00:06 16°Ω45'13 10°05'38 retrograde -6862 Jan 24 i 04:03 2° m 41'46 minimum elong -6869 Sep 29 i 00:30 16°**Ω**45'16 10°05'58 min. Earth dist. -6862 Apr 12 j 15:14 1° m 25'09 30.60426 AU max. Earth dist. -6869 Sep 30 i 09:26 16°**Ω**48'26 31.51170 AU opposition -6862 Apr 14 j 17:09 1° m 21'56 6°47'28 morning rise -6869 Oct 10 j 07:46 17°**Ω**11'17 direct -6862 Jul 03 i 09:16 0° 1002'36 -6868 Jan 11 j 12:00 19°Ω17'41 evening set -6862 Sep 30 j 02:47 1° m 54'34 retrograde -6868 Mar 29 j 15:10 17°**Ω**58'27 29.61452 AU min. Earth dist. -6868 Mar 31 j 02:26 17°Ω56'06 10°28'44 -6862 Oct 14 j 00:14 2° m 24'45 6°05'01 conjunction opposition -6868 Jun 18 j 19:31 -6862 Oct 14 j 00:30 16°**Ω**34'23 2° **M** 24'46 $6^{\circ}05'15$ direct minimum elong -6868 Sep 18 j 18:14 18°**Ω**38'06 -6862 Oct 16 j 03:07 2° 1 29'23 32.68648 AU max. Earth dist. evening set 2° m 55'04 -6862 Oct 27 j 23:19 morning rise -6868 Sep 30 j 12:28 19°**Ω**04'58 9°32'32 4° m 48'58 conjunction retrograde -6861 Jan 26 j 14:14 -6868 Sep 30 j 12:52 19°**Ω**05'00 9°32'51 3° m 32'50 30.79342 AU min. Earth dist. -6861 Apr 14 j 23:14 minimum elong -6868 Oct 02 j 00:50 19°**Ω**08'27 31.65784 AU -6861 Apr 17 j 04:38 3°Mp29'25 6°09'45 max. Earth dist. opposition -6868 Oct 12 j 07:46 19°**Ω**31'56 -6861 Jul 05 j 21:22 2° Mp 10'28morning rise direct 21°**Ω**36′20 -6867 Jan 13 j 00:31 -6861 Oct 02 j 04:14 4° 100'46 retrograde evening set -6867 Apr 01 j 05:33 20°**Ω**17'32 29.76144 AU min. Earth dist. opposition -6867 Apr 02 j 18:56 20°Ω15'03 9°52'54 conjunction -6861 Oct 16 j 07:39 4° m/31'13 5°29'43 direct -6867 Jun 21 j 11:06 18°**Ω**53'45 minimum elong -6861 Oct 16 j 07:53 4° m/31'15 5°29'57 -6867 Sep 20 j 19:20 20°**Ω**55'19 max. Earth dist. -6861 Oct 18 j 13:46 4° TQ 36'07 32.88136 AU evening set morning rise -6861 Oct 30 j 12:41 5° m 01'50 -6867 Oct 03 j 00:12 21° Ω 22'58 8°58'51 retrograde -6860 Jan 28 j 21:15 6° m 54'13 conjunction -6867 Oct 03 j 00:33 21° Ω 23'00 8°59'10 -6860 Apr 16 j 08:31 5° m/38'29 30.98979 AU minimum elong min. Earth dist. -6867 Oct 04 j 15:32 $21^{\circ}\Omega$ 26'43 31.81218 AU -6860 Apr 18 j 15:18 5° m/34'59 5°32'01 max. Earth dist. opposition -6867 Oct 15 j 06:01 21° **Ω** 50'43 -6860 Jul 07 j 08:15 4° m 16'27 morning rise direct -6866 Jan 15 j 12:04 6° m 05'09 retrograde 23°Ω53'12 evening set -6860 Oct 03 i 05:41 min. Earth dist. -6866 Apr 03 i 17:57 22°Ω34'55 29.91614 AU -6860 Oct 17 i 14:19 6°m 35'49 4°54'25 opposition -6866 Apr 05 i 10:35 22°Ω32'14 9°16'31 conjunction direct -6866 Jun 24 j 03:32 21°Ω11'20 minimum elong -6860 Oct 17 j 14:32 6° m 35'50 4°54'38 -6866 Sep 22 j 20:48 23°**Ω**10′50 max. Earth dist. -6860 Oct 19 i 22:26 6° Mp 40'51 33.08343 AU evening set -6860 Nov 01 i 00:39 7° m 06'38 morning rise -6866 Oct 05 j 11:16 23°Ω39'10 8°24'41 -6859 Jan 30 j 03:43 8° m 57'37 conjunction retrograde 23°**Ω**39'12 8°24'59 -6866 Oct 05 j 11:37 -6859 Apr 18 j 14:53 7° Mp 42'24 31.19341 AU minimum elong min. Earth dist. -6859 Apr 21 j 01:10 max. Earth dist. -6866 Oct 07 j 04:36 23°**Ω**43'04 31.97377 AU opposition 7° m/38'42 4°54'19 -6859 Jul 09 j 19:38 morning rise -6866 Oct 18 j 03:02 24°**Ω**07'37 direct 6° m 20'36 retrograde -6865 Jan 17 j 23:14 26°**Ω**08'15 evening set -6859 Oct 05 j 07:00 8° m 07'49 min. Earth dist. -6865 Apr 06 j 06:26 24°**Ω**50'23 30.07817 AU -6865 Apr 08 j 01:24 24°**Ω**47'34 8°39'41 -6859 Oct 19 j 20:09 opposition conjunction 8° m/38'37 4°19'10 23°**Ω**27′05 -6859 Oct 19 j 20:20 direct -6865 Jun 26 j 17:10 minimum elong 8° m/38'38 4°19'22 -6865 Sep 24 j 22:16 25°**Ω**24'34 -6859 Oct 22 j 06:45 8° m 43'49 33.29232 AU evening set max. Earth dist. morning rise -6859 Nov 03 j 11:17 9° m 09'34 conjunction -6865 Oct 07 j 21:46 25°**Ω**53'30 7°50'08 retrograde -6858 Feb 01 j 09:32 10° m 59'14 minimum elong -6865 Oct 07 j 22:06 25°**Ω**53'32 7°50'26 min. Earth dist. -6858 Apr 20 j 22:30 9° Mp 44'28 31.40405 AU

max. Earth dist.

min. Earth dist.

morning rise

retrograde

-6865 Oct 09 j 18:19

-6865 Oct 20 j 22:22

-6864 Jan 20 j 08:41

25°**Ω**57'40 32.14224 AU

26°**£**22'33

28°**Ω**21'23

-6864 Apr 07 j 18:12 27° **Ω**03'57 30.24682 AU

opposition

evening set

direct

-6858 Apr 23 j 10:27

-6858 Jul 12 j 04:52

-6858 Oct 07 j 08:19

9° Mp 40'41

8° m 23'02

10° m 08'49

4°16'45

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6858 in astronomical counting style is the year 6859 BCE in historical counting style. -6858 Oct 22 i 01:34 10° m 39'43 3°44'02 desc. node -6851 May 30 j 09:56 22° m 36'59 conjunction -6858 Oct 22 j 01:44 10° m 39'43 3°44'14 -6851 Jul 25 j 23:19 21° m 54'57 minimum elong direct max. Earth dist. -6858 Oct 24 j 14:37 10° Mp 45'06 33.50777 AU evening set -6851 Oct 19 j 16:34 23° m 32'46 -6858 Nov 05 j 20:38 11° m 10'45 morning rise -6857 Feb 03 j 13:56 12° m 59'10 retrograde conjunction -6851 Nov 03 j 21:51 24° m 02'52 -0°14'05 11° Mp 44'55 31.62094 AU -6851 Nov 03 j 21:51 0°14'00 min. Earth dist. -6857 Apr 23 j 04:17 minimum elong 24° Mp 02'52 11°**m** 40'59 -6851 Nov 03 j 18:30 opposition -6857 Apr 25 j 18:38 3°39'23 behind sun begin 24° Mp 02'36direct -6857 Jul 14 j 14:12 10° m 23'47 behind sun end -6851 Nov 04 j 01:12 24° m 03'08 -6857 Oct 09 j 09:43 evening set 12° m 08'15 max. Earth dist. -6851 Nov 06 j 21:05 24° Mp 08'47 35.13155 AU morning rise -6851 Nov 19 j 05:29 24° Mp 33'10conjunction -6857 Oct 24 j 06:11 12° m/39'10 3°09'05 retrograde -6850 Feb 16 j 12:06 26° Mp 14'30-6857 Oct 24 j 06:19 minimum elong 12° m/39'11 3°09'17 min. Earth dist. -6850 May 06 j 09:05 25° Mg 03'06 33.25181 AU -6857 Oct 26 j 20:33 max. Earth dist. 12° Mp 44'38 33.72886 AU opposition -6850 May 09 j 09:18 24° **m** $58'44 - 0^{\circ}32'25$ morning rise -6857 Nov 08 j 04:51 13° Mp 10'16 direct -6850 Jul 28 j 05:08 23° m/44'25 retrograde -6856 Feb 05 j 18:59 14° m 57'30 evening set -6850 Oct 21 j 17:26 25° m 21'17 min. Earth dist. -6856 Apr 24 j 10:00 13°Mp43'43 31.84350 AU conjunction opposition -6856 Apr 27 j 02:19 13° Mp 39'42 3°02'16 -6850 Nov 05 j 22:20 25° m 51'08 -0°46'29 direct -6856 Jul 15 j 20:22 12° m 22'58 minimum elong -6850 Nov 05 j 22:18 25° m 51'07 0°46'24 14° Mp 06'10 evening set -6856 Oct 10 j 10:50 max. Earth dist. -6850 Nov 08 j 22:13 25° m 57'03 35.37324 AU morning rise -6850 Nov 21 j 05:54 26° m 21'10 conjunction -6856 Oct 25 j 10:12 14° m/ 37'03 2°34'23 retrograde -6849 Feb 18 j 11:27 28° m 01'39 minimum elong -6856 Oct 25 i 10:19 14° m 37'04 2°34'33 min. Earth dist. -6849 May 08 i 10:43 26° m 50'35 33.49507 AU max. Earth dist. -6856 Oct 28 i 03:25 14° m 42'43 33.95490 AU opposition -6849 May 11 i 11:54 26° m 46'11 -1°06'30 morning rise -6856 Nov 09 j 11:33 15° m 08'07 direct -6849 Jul 30 i 08:19 25° m 32'13 retrograde -6855 Feb 06 j 22:24 16° m 54'16 evening set -6849 Oct 23 j 17:58 27° m 08'12 -6855 Apr 26 j 15:43 15° Mp 40'54 32.07066 AU min. Earth dist. -6855 Apr 29 j 09:17 15° m 36'50 2°25'27 -6849 Nov 07 j 22:18 27° mp 37'44 -1°18'23 conjunction opposition -6855 Jul 18 j 03:01 -6849 Nov 07 j 22:15 27° Mp 37'44 1°18'20 14° m 20'33 minimum elong direct -6855 Oct 12 j 12:13 16° m 02'34 -6849 Nov 11 j 00:15 27° Mp 43'48 35.61743 AU max. Earth dist. evening set -6849 Nov 23 j 05:02 28° m 07'29 morning rise -6855 Oct 27 j 13:39 16° m 33'23 1°59'57 -6848 Feb 20 j 09:12 29° m 47'12 conjunction retrograde -6848 May 09 j 11:52 minimum elong -6855 Oct 27 j 13:44 16° m 33'23 2°00'07 min. Earth dist. 28° M 36'27 33.74098 AU -6855 Oct 30 j 07:24 16° Mp 39'02 34.18499 AU max. Earth dist. -6848 May 12 j 13:52 28° m 32'01 -1°40'01 opposition -6855 Nov 11 j 17:26 17° m 04'23 -6848 Jul 31 j 11:44 27° m 18'23 morning rise direct -6854 Feb 09 j 03:41 18° m 49'29 -6848 Oct 24 j 18:22 28° m 53'34 retrograde evening set -6854 Apr 28 j 19:34 17° Mp 36'36 32.30181 AU min. Earth dist. 17° **m** 32'25 -6848 Nov 08 j 21:24 29° m 22'46 -1°49'48 opposition -6854 May 01 j 15:29 1°49'00 conjunction direct -6854 Jul 20 j 07:05 16° Mp 16'34 minimum elong -6848 Nov 08 j 21:20 29° m 22'45 1°49'44 -6854 Oct 14 j 13:25 17° m 57'27 max. Earth dist. -6848 Nov 11 j 23:42 29° m 28'48 35.86430 AU evening set morning rise -6848 Nov 24 j 03:10 29° m 52'11 conjunction -6854 Oct 29 j 16:38 18° m/28'09 1°25'52 -6848 Nov 28 j 06:59 0∘**⊽** -6854 Oct 29 j 16:42 18° Mp 28'10 1°26'00 -6847 Feb 21 j 09:15 1°**₽**31'11 minimum elong retrograde -6854 Nov 01 j 12:43 18° Mp 33'57 34.41828 AU -6847 May 11 j 11:13 0°**2**20'50 33.98999 AU max. Earth dist. min. Earth dist. -6854 Nov 13 j 22:05 18° m 59'03 -6847 May 14 j 15:17 0° **1**6'18 -2°12'57 morning rise opposition -6853 Feb 11 j 06:51 20° M 43'09 -6847 May 26 j 03:27 retrograde 30°R, M) 19° m 30'36 32.53592 AU min. Earth dist. -6853 May 01 i 00:56 direct -6847 Aug 02 j 12:01 29° m 03'02 opposition -6853 May 03 j 21:03 19° m 26'26 1°12'56 -6847 Oct 05 i 15:30 0∘**⊽** direct -6853 Jul 22 j 13:19 18° m 11'00 evening set -6847 Oct 26 j 18:38 0°**£**37'27 evening set -6853 Oct 16 j 14:39 19° m 50'49 conjunction -6847 Nov 10 i 20:15 1°**2**06'18 -2°20'40 -6853 Oct 31 j 19:00 20° m 21'21 0°52'09 minimum elong -6847 Nov 10 i 20:10 1°**2**06'17 2°20'37 conjunction -6853 Oct 31 j 19:02 20° m 21'21 0°52'16 max. Earth dist. -6847 Nov 14 i 00:50 1° 212'28 36.11404 AU minimum elong -6853 Nov 03 j 15:25 20° m) 27'08 34.65407 AU -6847 Nov 26 j 00:24 1°**-**235'21 max. Earth dist. morning rise morning rise -6853 Nov 16 j 01:40 20° m 52'05 retrograde -6846 Feb 23 j 08:02 3°£13'42 22° m 35'13 retrograde -6852 Feb 13 j 11:07 min. Earth dist. -6846 May 13 j 11:45 2°**2**03'39 34.24190 AU min. Earth dist. -6852 May 02 j 03:26 21° m 23'07 32.77241 AU opposition -6846 May 16 j 16:00 1° 259'08 -2° 45'16 -6852 May 05 j 01:42 21° Mp 18'51 0°37'20 direct -6846 Aug 04 j 12:20 0°**£**46'14 opposition -6852 Jul 23 j 18:59 20° m 03'48 -6846 Oct 28 j 18:48 2°**£**19'57 direct evening set -6852 Oct 17 j 15:48 evening set 21° m/42'36 -6846 Nov 12 j 18:30 conjunction 2°**2**48'26 -2°50'58 -6852 Nov 01 j 20:46 conjunction 22° m 12'56 0°18'51 minimum elong -6846 Nov 12 j 18:23 2°**2**48'25 2°50'56 minimum elong -6852 Nov 01 j 20:47 22° Mp 12'56 0°18'58 max. Earth dist. -6846 Nov 15 j 23:19 2°**♀**54'34 36.36648 AU max. Earth dist. -6852 Nov 04 j 18:47 22° m 18'48 34.89180 AU morning rise -6846 Nov 27 j 20:47 3°**£**17'07 retrograde morning rise -6852 Nov 17 j 04:13 22° m 43'29 -6845 Feb 25 j 08:15 4°**£**54'51 retrograde -6851 Feb 14 j 13:15 24° m 25'41 min. Earth dist. -6845 May 15 j 09:45 3°**2**45'13 34.49636 AU -6851 May 04 j 07:25 23° Mp 13'54 33.01108 AU -6845 May 18 j 16:03 3°**2**40'36 -3°16'58 min. Earth dist. opposition -6851 May 07 j 05:57 23° m 09'37 0°02'12 -6845 Aug 06 j 11:15 2°**£**28'04 opposition direct

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 5

2	vicel year style is used: Th		•	//	r 6846 BCE in historical c	, ,	JE 3
evening set	-6845 Oct 30 j 18:51	1e year -0843 4° £ 01'10	in astronomicai co	min. Earth dist.	-6838 May 26 j 16:49		36.29521 AU
evening set	-0045 Oct 30 J 16.51	4 ==01 10				13 = 02 14 14° £ 57'38	
agniumation	6945 Nov. 14 : 16:11	4° £ 29'15	2920142	opposition direct	-6838 May 30 j 01:43 -6838 Aug 17 j 21:40	14 ≗ 3738 13° £ 47'31	-0 40 31
conjunction minimum elong	-6845 Nov 14 j 16:11 -6845 Nov 14 j 16:04	4 ≗ 2913 4° £ 29'14		evening set	-6838 Nov 11 j 16:31	15° £ 4731	
max. Earth dist.	,			evening set	-0636 NOV 11 J 10.31	13 == 1/20	
	-6845 Nov 17 j 22:28		36.62095 AU		(020 NI 25 : 12-26	150 0 42100	(922)25
morning rise	-6845 Nov 29 j 16:13	4° £ 57'32		conjunction	-6838 Nov 25 j 12:26	15° Ω 42'08	
retrograde	-6844 Feb 27 j 05:47	6° £ 34'43	24.75204.411	minimum elong	-6838 Nov 25 j 12:14	15° Ω 42'08	
min. Earth dist.	-6844 May 16 j 09:24		34.75284 AU	max. Earth dist.	-6838 Nov 28 j 21:26		38.40854 AU
opposition	-6844 May 19 j 15:38	5° Ω 20'49	-3°48'02	morning rise	-6838 Dec 09 j 10:52	16° Ω 07'09	
direct	-6844 Aug 07 j 10:59	4° £ 08'40		retrograde	-6837 Mar 10 j 01:16	17° £ 41'27	26.54020.441
evening set	-6844 Oct 31 j 18:45	5° ≏ 41'10		min. Earth dist.	-6837 May 28 j 13:20		36.54930 AU
	(0.443) 15:10.00	60.0.00150	2040152	opposition	-6837 May 31 j 21:38	16° £ 29'40	-/0//23
conjunction	-6844 Nov 15 j 13:32	6° Ω 08'50		direct	-6837 Aug 19 j 18:56	15° Ω 19'50	
minimum elong	-6844 Nov 15 j 13:24	6° Ω 08'49		evening set	-6837 Nov 13 j 15:30	16° ≏ 49'17	
max. Earth dist.	-6844 Nov 18 j 20:46		36.87711 AU			_	
morning rise	-6844 Nov 30 j 10:47	6° Ω 36'42		conjunction	-6837 Nov 27 j 06:41	17° ≏ 13'34	
retrograde	-6843 Feb 28 j 02:04	8° ≏ 13'22		minimum elong	-6837 Nov 27 j 06:28	17° ≏ 13'34	
min. Earth dist.	-6843 May 18 j 07:07		35.01061 AU	max. Earth dist.	-6837 Nov 30 j 16:26		38.66058 AU
opposition	-6843 May 21 j 14:36	6° £ 59'49	-4°18'28	morning rise	-6837 Dec 11 j 00:02	17° £ 38′02	
direct	-6843 Aug 09 j 12:07	5° ≏ 48'02		retrograde	-6836 Mar 10 j 17:03	19° ≏ 12'02	
evening set	-6843 Nov 02 j 18:39	7° £ 20'01		min. Earth dist.	-6836 May 29 j 07:57	18° ≏ 05'05	36.80299 AU
				opposition	-6836 Jun 01 j 16:50	18° ഫ 00'31	-7°33'14
conjunction	-6843 Nov 17 j 10:17	7° ≏ 47'15	-4°18'27	direct	-6836 Aug 20 j 17:05	16° ≏ 50'57	
minimum elong	-6843 Nov 17 j 10:08	7° ≏ 47'14	4°18'28	evening set	-6836 Nov 14 j 14:30	18° ≏ 20'06	
max. Earth dist.	-6843 Nov 20 j 17:41	7° ≙ 53'27	37.13397 AU				
morning rise	-6843 Dec 02 j 04:41	8° ≏ 14'41		conjunction	-6836 Nov 28 j 00:23	18° ≏ 43'51	-7°21'46
retrograde	-6842 Mar 01 j 23:03	9° ჲ 50'54		minimum elong	-6836 Nov 28 j 00:11	18° ≙ 43'50	7°21'52
min. Earth dist.	-6842 May 20 j 05:16	8° £ 42'18	35.26902 AU	max. Earth dist.	-6836 Dec 01 j 09:51	18° ≏ 49'54	38.91245 AU
opposition	-6842 May 23 j 13:10	8° £ 37'40	-4°48'14	morning rise	-6836 Dec 11 j 12:44	19° ≏ 07'46	
direct	-6842 Aug 11 j 10:37	7° Ω 26'16		retrograde	-6835 Mar 12 j 10:44	20° ≏ 41'30	
evening set	-6842 Nov 04 j 18:28	8° Ω 57'44		min. Earth dist.	-6835 May 31 j 02:09	19° ≏ 34'49	37.05699 AU
C	J			opposition	-6835 Jun 03 j 11:42	19° ≏ 30'14	-7°58'25
conjunction	-6842 Nov 19 j 06:55	9° £ 24'32	-4°46'26	direct	-6835 Aug 22 j 11:58	18° ≏ 20'57	
minimum elong	-6842 Nov 19 j 06:45	9° Ω 24'31	4°46'27	evening set	-6835 Nov 16 j 13:09	19° £ 49'49	
max. Earth dist.	-6842 Nov 22 j 15:34	9° Ω 30'47	37.39090 AU	3	.		
morning rise	-6842 Dec 03 j 21:47	9° Ω 51'31		conjunction	-6835 Nov 29 j 17:52	20° ₽ 13'01	-7°45'31
retrograde	-6841 Mar 03 j 17:39	11° ≏ 27'17		minimum elong	-6835 Nov 29 j 17:38	20° £ 13'00	
min. Earth dist.	-6841 May 22 j 03:17		35.52707 AU	max. Earth dist.	-6835 Dec 03 j 04:49		39.16463 AU
opposition	-6841 May 25 j 10:57	10° Ω 14'23		morning rise	-6835 Dec 13 j 00:40	20° £ 36'24	33.10.03.110
direct	-6841 Aug 13 j 09:55	9° £ 03'21	0 1, 22	retrograde	-6834 Mar 14 j 01:29	22° ⊆ 09'54	
evening set	-6841 Nov 06 j 18:18	10° £ 34'22		min. Earth dist.	-6834 Jun 01 j 20:53		37.31121 AU
evening sec	00111101 00 10.10	10 -3122		opposition	-6834 Jun 05 j 06:05	20° £ 58'53	
conjunction	-6841 Nov 21 j 02:57	11° ≏ 00'40	-5°13'//0	direct	-6834 Aug 24 j 08:03	19° Ω 49'54	0 22 30
minimum elong	-6841 Nov 21 j 02:47	11° ⊆ 00'40		evening set	-6834 Nov 18 j 11:56	21° ⊆ 18'32	
max. Earth dist.	-6841 Nov 24 j 10:48		37.64711 AU	evening set	-0054 NOV 10 J 11.50	21 -1032	
morning rise	-6841 Dec 05 j 14:15	11° ⊆ 27'11	37.04/11 AC	conjunction	-6834 Dec 01 j 10:55	21° ≏ 41'10	9°09'20
retrograde	-6840 Mar 04 j 14:50	11 = 2711 13° ⊆ 02'34		minimum elong	-6834 Dec 01 j 10:33	21° ⊆ 41'10	
min. Earth dist.	-6840 May 22 j 23:46		35.78434 AU	max. Earth dist.	-6834 Dec 04 j 21:09		39.41708 AU
opposition	-6840 May 26 j 08:25	11 2 3437 11° 2 49'59		morning rise	-6834 Dec 14 j 12:04	21 ≗ 47 12 22° ₽ 03'59	37.71/00 AU
direct	-6840 Aug 14 j 05:51	11 = 4939 10° £ 39'16	-5 45 51	•	-6833 Mar 15 j 19:58	22 ⊆ 03 39 23° ⊆ 37'17	
	-6840 Nov 07 j 17:46	10 2 39 10 12° 2 09'51		retrograde min. Earth dist.	-6833 Jun 03 j 13:25		37.56572 AU
evening set	-0840 NOV 07 J 17.40	12 == 09 31			3		
	(040 N) 21 : 22 21	120 0 25141	5040127	opposition	-6833 Jun 06 j 23:50	22° £ 26'34	-8°46'46
conjunction	-6840 Nov 21 j 22:31	12° Ω 35'41		direct	-6833 Aug 26 j 00:09	21° £ 17'51	
minimum elong	-6840 Nov 21 j 22:20	12° Ω 35'40		evening set	-6833 Nov 20 j 10:26	22° ≏ 46′18	
max. Earth dist.	-6840 Nov 25 j 07:38		37.90214 AU		(022 B 02:02 25	222 2 222	0021100
morning rise	-6840 Dec 06 j 05:46	13° Ω 01'42		conjunction	-6833 Dec 03 j 03:35	23° Ω 08'23	
retrograde	-6839 Mar 06 j 11:00	14° £ 36'43	26.04227 : ==	minimum elong	-6833 Dec 03 j 03:21	23° Ω 08'22	
min. Earth dist.	-6839 May 24 j 21:41		36.04035 AU	max. Earth dist.	-6833 Dec 06 j 14:59		39.66954 AU
opposition	-6839 May 28 j 05:28	13° Ω 24'24	-6°13'41	morning rise	-6833 Dec 15 j 22:50	23° £ 30'37	
direct	-6839 Aug 16 j 01:58	12° Ω 14'00		retrograde	-6832 Mar 16 j 13:57	25° £ 03'45	
evening set	-6839 Nov 09 j 17:13	13° ≏ 44'11		min. Earth dist.	-6832 Jun 04 j 07:52		37.82014 AU
				opposition	-6832 Jun 07 j 17:27	23° ≙ 53'19	-9°09'57
conjunction	-6839 Nov 23 j 17:45	14° ≏ 09'31		direct	-6832 Aug 26 j 15:47	22° ≏ 44'55	
minimum elong	-6839 Nov 23 j 17:34	14° ≏ 09'30		evening set	-6832 Nov 21 j 08:45	24° £ 13'11	
max. Earth dist.	-6839 Nov 27 j 02:21	14° ≙ 15'37	38.15594 AU				
morning rise	-6839 Dec 07 j 20:40	14° ≏ 35'02		conjunction	-6832 Dec 03 j 19:50	24° ≏ 34'42	
retrograde	-6838 Mar 08 j 07:04	16° ≏ 09'40		minimum elong	-6832 Dec 03 j 19:37	24° ≏ 34'41	8°53'12

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 6 Attention, astronomical year style is used: The year -6832 in astronomical counting style is the year 6833 BCE in historical counting style. -6832 Dec 07 i 07:14 24° \(\Omega\) 40'43 39.92175 AU retrograde -6825 Mar 27 j 00:49 4°M45'39 max. Earth dist. -6832 Dec 16 j 08:47 min. Earth dist. -6825 Jun 15 j 02:22 3°ML41'15 39.55032 AU morning rise 24° **£** 56'21 -6831 Mar 18 j 06:20 26°**£**29'21 opposition -6825 Jun 18 j 09:31 3°MJ36'59 -11°34'50 retrograde -6831 Jun 06 j 00:04 min. Earth dist. 25°**£**23'45 38.07391 AU direct -6825 Sep 06 j 10:03 2°M30'22 -6831 Jun 09 j 10:33 -6825 Dec 03 j 20:34 opposition 25°**£**19'12 -9°32'29 evening set 3°M58'09 direct -6831 Aug 28 j 09:33 24°**£**11'05 evening set -6831 Nov 23 j 07:13 25°**♀**39'14 conjunction -6825 Dec 14 j 06:15 4°M15'24 -11°10'15 minimum elong -6825 Dec 14 j 06:00 4°M15'23 11°10'28 conjunction -6831 Dec 05 j 11:51 26°**£**00'10 -9°14'22 max. Earth dist. -6825 Dec 17 j 15:57 4°M21'04 41.62875 AU minimum elong -6831 Dec 05 j 11:36 26°**₽**00'09 9°14'31 morning rise -6825 Dec 24 j 17:06 4°MJ32'45 max. Earth dist. -6831 Dec 08 j 23:00 26°**2**06'08 40.17289 AU retrograde -6824 Mar 27 j 12:59 6°M05'21 -6831 Dec 17 j 18:32 -6824 Jun 15 j 16:42 morning rise 26°**₽**21'14 min. Earth dist. 5°ML01'10 39.78698 AU -6830 Mar 19 j 22:47 retrograde 27°**♀**54'07 opposition -6824 Jun 18 j 24:00 4° M $_{5}6'54 -11^{\circ}53'09$ min. Earth dist. -6830 Jun 07 j 17:26 26°**♀**48'45 38.32651 AU direct -6824 Sep 07 j 02:59 3°M50'30 opposition -6830 Jun 11 j 03:18 26° **△**44'15 -9°54'23 evening set -6824 Dec 04 j 18:26 5°M18'18 direct -6830 Aug 30 j 02:38 25°**♀**36'26 evening set -6830 Nov 25 j 05:33 27°**♀**04'28 conjunction -6824 Dec 14 j 19:56 5°M34'54 -11°27'38 minimum elong -6824 Dec 14 j 19:43 5°MJ34'53 11°27'52 conjunction -6830 Dec 07 j 03:46 27°**2**24'49 -9°35'05 max. Earth dist. -6824 Dec 18 j 04:43 5°M40'29 41.86243 AU minimum elong -6830 Dec 07 j 03:32 27°**2**24'48 9°35'15 morning rise -6824 Dec 24 j 22:47 5°M51'36 max. Earth dist. -6830 Dec 10 j 15:30 27°**2**30'48 40.42246 AU retrograde -6823 Mar 29 j 01:53 7°M24'14 morning rise -6830 Dec 19 i 03:37 27°**-**45'17 min. Earth dist. -6823 Jun 17 i 07:01 6°M20'14 40.02204 AU retrograde -6829 Mar 21 j 12:13 29°**₽**18'05 opposition -6823 Jun 20 j 14:15 6°M15'59 -12°10'52 min. Earth dist. -6829 Jun 09 j 10:19 28° **2**12'57 38.57698 AU direct -6823 Sep 08 j 18:11 5°**™**09'49 opposition -6829 Jun 12 j 19:37 28° 208'29 -10°15'40 evening set -6823 Dec 06 j 16:17 6°**™**37'40 -6829 Aug 31 j 21:32 27°**£**00'57 direct -6829 Nov 27 j 03:56 28°**≏**28'54 -6823 Dec 16 j 09:41 6°ML53'37 -11°44'27 conjunction evening set -6823 Dec 16 j 09:26 6°M53'36 11°44'40 minimum elong -6829 Dec 08 j 19:08 28°**-**48'38 -9°55'14 -6823 Dec 19 j 19:21 6°M59'13 42.09464 AU conjunction max. Earth dist. -6829 Dec 08 j 18:54 -6823 Dec 26 j 04:05 7°M09'39 minimum elong 28°**△**48'37 9°55'25 morning rise -6829 Dec 12 j 05:34 -6822 Mar 30 j 13:09 max. Earth dist. 28°**♀**54'30 40.66955 AU retrograde 8°M-42'21 -6829 Dec 20 j 12:09 -6822 Jun 18 j 21:42 29°<u>₽</u>08'30 min. Earth dist. 7°MJ38'31 40.25561 AU morning rise -6828 Jan 23 j 04:09 0°M -6822 Jun 22 j 03:59 7°M34'20 -12°28'01 opposition 0° ML41'15-6828 Mar 22 j 03:31 -6822 Sep 10 j 09:55 6°M28'22 retrograde direct -6828 May 22 j 09:41 -6822 Dec 08 j 14:17 evening set 7°M56'19 -6828 Jun 10 j 02:08 min. Earth dist. 29°**△**36'22 38.82487 AU 8° M11'36 -12°00'43 -6822 Dec 17 j 23:01 opposition -6828 Jun 13 j 11:41 29°**£**31'55 -10°36'21 conjunction direct -6828 Sep 01 j 13:22 28°**£**24'38 minimum elong -6822 Dec 17 j 22:48 8°ML11'35 12°00'58 -6828 Nov 28 j 02:10 29°**♀**52'31 max. Earth dist. -6822 Dec 21 j 07:36 8°M17'06 42.32556 AU evening set -6828 Dec 02 j 13:09 0° M morning rise -6822 Dec 27 j 08:47 8° M26'58 retrograde -6821 Apr 01 j 03:13 9°M59'46 -6828 Dec 09 j 10:26 0°ML11'39 -10°14'49 min. Earth dist. -6821 Jun 20 j 10:25 8°M56'11 40.48789 AU conjunction -6828 Dec 09 j 10:12 0°ML11'38 10°15'00 -6821 Jun 23 j 17:27 8°ML51'59 -12°44'34 minimum elong opposition -6828 Dec 12 j 21:28 0°M17'30 40.91379 AU -6821 Sep 11 j 22:32 7°M46'16 max. Earth dist. direct -6828 Dec 20 j 20:17 0°M30'54 -6821 Dec 10 j 11:59 9°M14'19 morning rise evening set retrograde -6827 Mar 23 j 17:30 2°M03'35 -6821 Dec 19 i 11:57 min. Earth dist. -6827 Jun 11 j 19:20 0°ML58'51 39.06968 AU conjunction 9°M28'56 -12°16'26 opposition -6827 Jun 15 i 03:24 0°M54'29 -10°56'25 minimum elong -6821 Dec 19 j 11:44 9°M28'55 12°16'41 -6827 Aug 02 j 17:04 max. Earth dist. -6821 Dec 22 j 21:01 9°M34'26 42.55502 AU direct -6827 Sep 03 j 05:58 29°**£**47'27 morning rise -6821 Dec 28 j 12:53 9°M43'38 -6827 Oct 04 j 02:32 0°M -6820 Apr 01 j 17:55 11°M16'33 retrograde -6827 Nov 30 j 00:25 1°M15'16 -6820 Jun 21 j 00:56 10°ML13'08 40.71863 AU evening set min. Earth dist. -6820 Jun 24 j 06:45 10°ML09'01 -13°00'33 opposition 1°M233'47 -10°33'51 conjunction -6827 Dec 11 j 01:22 direct -6820 Sep 12 j 10:09 9°M03'32 -6820 Dec 11 j 09:59 minimum elong -6827 Dec 11 j 01:07 1°M33'46 10°34'02 evening set 10°M31'45 max. Earth dist. -6827 Dec 14 j 11:06 1°M39'31 41.15498 AU -6827 Dec 22 j 03:46 1°M52'25 conjunction -6820 Dec 20 j 00:52 10°M45'42 -12°31'37 morning rise -6820 Dec 20 j 00:39 retrograde -6826 Mar 25 j 09:56 3°M25'03 minimum elong 10°M45'41 12°31'53 -6826 Jun 13 j 10:09 -6820 Dec 23 j 09:33 min. Earth dist. 2°M20'32 39.31137 AU max. Earth dist. 10°M 51'08 42.78298 AU 2°M16'11 -11°15'55 -6820 Dec 28 j 16:29 opposition -6826 Jun 16 j 18:40 morning rise 10°M59'41 -6819 Apr 03 j 08:03 12°M32'46 direct -6826 Sep 04 j 19:55 1°M09'22 retrograde evening set -6826 Dec 01 j 22:34 2°M37'09 min. Earth dist. -6819 Jun 22 j 13:31 11°M29'36 40.94748 AU opposition -6819 Jun 25 j 19:36 11°M25'29 -13°15'59 conjunction -6826 Dec 12 j 15:57 2°M55'02 -10°52'20 direct -6819 Sep 13 j 21:41 10°M20'15 minimum elong -6826 Dec 12 j 15:43 2°M255'01 10°52'32 evening set -6819 Dec 13 j 08:02 11°M48'39 -6826 Dec 16 j 01:34 3°ML00'44 41.39306 AU max. Earth dist. -6826 Dec 23 j 10:51 -6819 Dec 21 j 13:27 12°M 01'54 -12°46'17 morning rise 3°M13'02 conjunction

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Earth dist. direct 19°M01'18 -6812 Dec 25 j 03:04 -6818 Jun 27 j 08:20 opposition 12°M41'26 -13°30'52 evening set 20°M31'56 direct -6818 Sep 15 j 10:43 11°M36'26 -6812 Dec 30 j 00:27 evening set -6818 Dec 15 j 06:19 13°ML05'04 conjunction 20°M39'34 -14°15'40 minimum elong -6812 Dec 30 j 00:15 20°M39'33 14°15'59 conjunction -6818 Dec 23 j 02:03 13°M17'36 -13°00'27 max. Earth dist. -6811 Jan 02 j 02:28 20°M44'23 44.48746 AU minimum elong -6818 Dec 23 j 01:51 13°M17'35 13°00'45 morning rise -6811 Jan 03 j 21:53 20°M47'12 -6818 Dec 26 j 10:10 -6811 Apr 13 j 01:31 max. Earth dist. 13°M22'57 43.23167 AU retrograde 22° M $_{2}2'35$ -6811 Jul 02 j 18:17 morning rise -6818 Dec 30 j 22:19 13°M30'10 min. Earth dist. 21°M20'34 42.65231 AU -6817 Mar 19 j 17:11 15°M₀ opposition -6811 Jul 05 j 17:38 21°M16'53 -15°01'17 retrograde -6817 Apr 06 j 05:16 15°M03'39 direct -6811 Sep 24 j 01:17 20° ML13'08-6817 Apr 23 j 23:40 15°RM evening set -6811 Dec 27 j 05:10 21°M44'20 min. Earth dist. -6817 Jun 25 j 16:33 14°ML00'51 41.39708 AU opposition -6817 Jun 28 j 20:36 13°M56'51 -13°45'14 conjunction -6811 Dec 31 j 11:26 21°M50'56 -14°26'35 direct -6817 Sep 17 j 02:25 12°M52'05 minimum elong -6811 Dec 31 j 11:16 21°M50'56 14°26'55 evening set -6817 Dec 17 j 04:53 14°M20'59 morning rise -6810 Jan 04 j 17:41 21°M57'33 max. Earth dist. -6810 Jan 03 j 13:58 21°M55'46 44.68464 AU conjunction -6817 Dec 24 i 14:20 14°MJ32'46 -13°14'08 retrograde -6810 Apr 14 i 09:45 23°M33'29 minimum elong -6817 Dec 24 i 14:07 14°M32'46 13°14'25 min. Earth dist. -6810 Jul 04 i 06:20 22°M31'33 42.84989 AU max. Earth dist. -6817 Dec 27 i 20:30 14°M.37'59 43.45115 AU opposition -6810 Jul 07 i 04:15 22°M27'57 -15°12'16 morning rise -6816 Jan 01 j 00:19 14°M44'36 direct -6810 Sep 25 j 14:30 21°M24'21 -6816 Jan 10 j 19:53 15°M evening set -6810 Dec 29 j 09:18 22°M56'14 -6816 Apr 06 j 17:18 retrograde 16°M,18'20 -6816 Jun 26 j 04:50 -6809 Jan 01 j 22:10 23°M01'42 -14°37'04 min. Earth dist. 15°M15'44 41.61654 AU conjunction -6816 Jun 29 j 08:47 -6809 Jan 01 j 21:59 opposition 15°M11'46 -13°59'06 minimum elong 23°ML01'41 14°37'23 -6816 Jul 08 j 18:57 -6809 Jan 05 j 10:54 15°R ML morning rise 23°ML07'10 -6816 Sep 17 j 14:58 -6809 Jan 04 j 23:21 direct 14°M07'13 max. Earth dist. 23°M06'25 44.87950 AU -6816 Nov 24 j 01:49 -6809 Apr 15 j 21:03 15°M 24°M43'47 retrograde -6816 Dec 18 j 03:28 15°M36'23 min. Earth dist. -6809 Jul 05 j 16:05 23°M42'02 43.04515 AU evening set -6809 Jul 08 j 14:25 opposition 23°M38'25 -15°22'47 -6816 Dec 25 j 02:23 -6809 Sep 27 j 00:05 conjunction 15°M47'24 -13°27'21 direct 22°M34'59 -6816 Dec 25 j 02:11 -6809 Dec 31 j 16:59 minimum elong 15°M47'23 13°27'39 evening set 24°M07'51 -6816 Dec 28 j 08:34 max. Earth dist. 15°M52'35 43.66658 AU morning rise -6815 Jan 01 j 01:42 15°M58'29 conjunction -6808 Jan 03 j 08:36 24°M11'56 -14°47'04 retrograde -6815 Apr 08 j 04:53 17°M32'28 minimum elong -6808 Jan 03 j 08:27 24°M11'55 14°47'25 min. Earth dist. -6815 Jun 27 j 18:57 16°M29'58 41.83167 AU morning rise -6808 Jan 06 j 00:04 24°M16'00 -6815 Jun 30 j 20:50 16°M26'06 -14°12'30 max. Earth dist. -6808 Jan 06 j 09:25 24°M16'36 45.07206 AU opposition -6815 Sep 19 j 03:35 15°M21'45 -6808 Apr 16 j 08:32 25°M53'34 direct retrograde -6815 Dec 20 j 02:44 16°M51'12 -6808 Jul 06 j 03:46 24°ML51'55 43.23817 AU evening set min. Earth dist. -6808 Jul 09 j 00:39 24°M48'24 -15°32'49 opposition -6815 Dec 26 j 14:25 17°ML01'27 -13°40'07 -6808 Sep 27 j 08:54 23°ML45'07 conjunction direct -6815 Dec 26 j 14:13 minimum elong 17°M01'26 13°40'24 evening set -6807 Jan 02 j 11:30 25°M19'40 max. Earth dist. -6815 Dec 29 j 19:12 17° ML06'30 43.87774 AU -6807 Jan 03 i 18:55 morning rise -6814 Jan 02 i 02:22 17°M11'43 conjunction 25°M21'40 -14°56'38 -6807 Jan 03 i 18:45 retrograde -6814 Apr 09 i 17:53 18°M45'59 minimum elong 25°M21'39 14°56'58 min. Earth dist. -6814 Jun 29 j 06:31 17°ML43'39 42.04240 AU -6807 Jan 05 i 02:03 25°M23'39 morning rise -6814 Jul 02 j 08:20 17°MJ39'49 -14°25'25 max. Earth dist. -6807 Jan 06 i 19:41 25°M26'19 45.26241 AU opposition -6814 Sep 20 j 14:09 16°MJ35'37 -6807 Apr 17 j 18:13 27°ML02'53 direct retrograde -6814 Dec 22 j 02:12 18°M₀05'24 -6807 Jul 07 j 13:57 26°M01'24 43.42856 AU evening set min. Earth dist. opposition -6807 Jul 10 j 10:32 25°M57'54 -15°42'24 18°M14'50 -13°52'25 conjunction -6814 Dec 28 j 02:02 direct -6807 Sep 28 j 19:29 24°M54'48 minimum elong -6814 Dec 28 j 01:50 18°**ጤ**14'50 13°52'43 -6814 Dec 31 j 05:42 18°M19'48 44.08455 AU conjunction -6806 Jan 05 j 05:04 26°M30'59 -15°05'46 max. Earth dist. -6813 Jan 03 j 02:07 -6806 Jan 05 j 04:56 morning rise 18°ML24'17 minimum elong 26°MJ30'59 15°06'07 -6813 Apr 11 j 07:30 19°M58'52 -6806 Jan 08 j 04:09 retrograde max. Earth dist. 26°M35'31 45.44996 AU -6813 Jun 30 j 19:30 -6806 Apr 19 j 04:16 min. Earth dist. 18°M56'36 42.24907 AU retrograde 28°M11'48 -6813 Jul 03 j 19:47 -6806 Jul 09 j 00:17 opposition 18°M52'51 -14°37'51 min. Earth dist. 27°M10'28 43.61604 AU direct -6813 Sep 21 j 23:50 17°M48'49 opposition -6806 Jul 11 j 20:09 27°M07'01 -15°51'32 evening set -6813 Dec 24 j 02:13 19°M18'59 direct -6806 Sep 30 j 05:22 26°M04'06 conjunction -6813 Dec 29 j 13:23 19°M27'33 -14°04'16 conjunction -6805 Jan 06 j 15:13 27°M39'56 -15°14'29 -6813 Dec 29 j 13:12 19°ML27'32 14°04'35 -6805 Jan 06 j 15:05 27°ML39'55 15°14'50 minimum elong minimum elong

max. Earth dist.

-6812 Jan 01 j 17:02

19°M32'29 44.28762 AU

max. Earth dist.

-6805 Jan 09 j 14:26

27°M44'26 45.63427 AU

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Earth dist. -6804 Jan 10 j 22:26 28°M52'53 45.81472 AU conjunction -6796 Jan 17 j 02:30 -6804 Feb 29 j 14:54 0°**∡**¹ minimum elong 7°**∡**1'54 16°16'04 -6796 Jan 19 j 15:54 retrograde -6804 Apr 20 j 21:39 0°**х** 28'34 max. Earth dist. 7° ₹ 45'40 47.10778 AU -6804 Jun 12 j 07:38 30° RML retrograde -6796 Apr 29 j 21:52 9°×19'01 -6796 Jul 20 j 01:01 min. Earth dist. -6804 Jul 10 j 21:03 29°M27'31 43.97940 AU min. Earth dist. 8°**≯**18'39 45.26660 AU -6796 Jul 22 j 10:37 opposition -6804 Jul 13 j 14:59 29°M24'10 -16°08'32 opposition 8°**∡**15'47 -17°00'52 direct -6804 Oct 02 j 02:30 28°M21'35 direct -6796 Oct 10 j 22:32 7°**х** 14′11 conjunction -6803 Jan 08 j 10:51 29°M56'43 -15°30'43 conjunction -6795 Jan 17 j 11:10 8° ₹ 46'44 -16°20'34 minimum elong -6803 Jan 08 j 10:43 29°M56'43 15°31'05 minimum elong -6795 Jan 17 j 11:07 8°**∡**¹46'44 16°20'58 -6803 Jan 10 j 14:58 0°×7 max. Earth dist. -6795 Jan 20 j 00:44 8° ₹ 50'30 47.25560 AU max. Earth dist. -6803 Jan 11 j 07:22 0°**尽**01'02 45.99066 AU retrograde -6795 May 01 j 03:53 10°**∡**23'31 retrograde -6803 Apr 22 j 09:25 1°**х** 36′25 min. Earth dist. -6795 Jul 21 j 09:48 9° **₹**23'15 45.41377 AU min. Earth dist. -6803 Jul 12 j 08:23 0°**х** 35′24 44.15431 AU opposition -6795 Jul 23 j 18:13 9°**∡**120'27 -17°05'38 opposition -6803 Jul 15 i 00:11 0°**х** 32′11 -16°16′27 direct -6795 Oct 12 i 08:13 8°**х** 18′58 -6803 Aug 11 j 20:28 30°RM direct -6803 Oct 03 i 10:00 29°M29'45 conjunction -6794 Jan 18 j 19:33 9°**х** 51'15 -16°25'05 -6803 Nov 23 j 18:28 0°×7 -6794 Jan 18 i 19:29 9° ₹ 51'15 16°25'30 minimum elong max. Earth dist. -6794 Jan 21 j 07:12 9° ₹ 54'53 47.40060 AU -6802 Jan 09 j 20:40 1°**∡**04'33 -15°38'16 -6794 May 02 j 09:50 11°**₹**27'45 conjunction retrograde -6802 Jan 09 j 20:33 1°**х** 04'32 15°38'39 -6794 Jul 22 j 17:35 10° ₹27'36 45.55789 AU min. Earth dist. minimum elong -6802 Jan 12 j 16:09 -6794 Jul 25 j 01:45 10°**₹**24'49 -17°10'01 max. Earth dist. 1° ₹08'46 46 16196 AU opposition -6802 Apr 23 j 19:07 2°×43'51 -6794 Oct 13 j 17:39 9°×23'29 retrograde direct 1°**₹**'42'58 44.32429 AU min. Earth dist. -6802 Jul 13 j 17:57 10°**₹**55'30 -16°29'16 conjunction -6793 Jan 20 j 03:50 -6802 Jul 16 j 09:06 1°**∡**39'47 -16°23'58 opposition -6802 Oct 04 j 18:26 -6793 Jan 20 j 03:48 0°**х** 37′28 10° ₹ 55'30 16°29'41 direct minimum elong -6793 Jan 22 j 15:08 10°**₹**59'07 47.54214 AU max. Earth dist. -6801 Jan 11 j 06:05 2° ₹11'55 -15°45'27 -6793 May 03 j 17:24 conjunction retrograde 12°**₹**31'43 -6801 Jan 11 j 05:59 -6793 Jul 24 j 03:06 minimum elong 2°**∡**11'55 15°45'50 min. Earth dist. 11°**✗**31'38 45.69823 AU -6801 Jan 13 j 23:33 -6793 Jul 26 j 09:09 max. Earth dist. 2°**х** 16'01 46.32842 AU opposition 11°**∡**′28'57 -17°14'03 retrograde -6801 Apr 25 j 03:49 3°**х** 50′50 direct -6793 Oct 15 j 02:18 10°**х** 27'45 min. Earth dist. -6801 Jul 15 j 03:57 2°**≯**50'01 44.48976 AU -6801 Jul 17 j 17:50 2° ₹ 46'55 -16°31'07 conjunction -6792 Jan 21 j 12:08 11°**∡**759'31 -16°33'06 opposition direct -6801 Oct 06 j 03:55 1°**х** 44'44 minimum elong -6792 Jan 21 j 12:05 11° 27 59'31 16°33'31 12°**✗**03'02 47.67981 AU max. Earth dist. -6792 Jan 23 j 22:04 -6800 Jan 12 j 15:25 3°**∡**18'50 -15°52'16 -6792 May 04 j 02:45 13°**∡**³35′26 conjunction retrograde -6800 Jan 12 j 15:19 3°**х** 18'49 15°52'40 -6792 Jul 24 j 10:41 12°**✗**35′28 45.83424 AU minimum elong min. Earth dist. -6800 Jan 15 j 08:58 3°**₹**22'54 46.49066 AU -6792 Jul 26 j 16:22 12°**₹**32'49 -17°17'45 max. Earth dist. opposition -6792 Oct 15 i 08:22 retrograde -6800 Apr 25 i 08:45 4° x 57'21 direct 11°**₹**31'44 min. Earth dist. -6800 Jul 15 i 13:57 3° ₹ 56'36 44.65113 AU -6791 Jan 21 j 20:12 opposition -6800 Jul 18 j 02:22 3°**₹**53'34 -16°37'52 conjunction 13°**₹**'03'16 -16°36'37 direct -6800 Oct 06 j 16:17 2° 2 51'29 minimum elong -6791 Jan 21 i 20:10 13°**₹**03'15 16°37'02 max. Earth dist. -6791 Jan 24 i 04:14 13°**₹**06'38 47.81278 AU -6799 Jan 13 i 00:24 4°**₹**25'15 -15°58'42 retrograde -6791 May 05 i 12:01 14°**∡** 38′53 conjunction minimum elong -6799 Jan 13 j 00:19 4°**∡**°25'15 15°59'05 min. Earth dist. -6791 Jul 25 j 19:56 13° ₹38'57 45.96537 AU 4°**₹**29'12 46.64927 AU max. Earth dist. -6799 Jan 15 j 16:05 -6791 Jul 27 j 23:40 13°**∡**36'24 -17°21'07 opposition -6791 Oct 16 j 14:28 retrograde -6799 Apr 26 j 16:50 6° 203'25 direct 12°**х** 35′25 min. Earth dist. -6799 Jul 16 j 22:15 5°**х** 02'47 44.80916 AU -6799 Jul 19 j 10:41 4°**₹**59'45 -16°44'13 conjunction -6790 Jan 23 j 04:28 14°**₹**06'42 -16°39'49 opposition direct -6799 Oct 08 j 01:36 3°×757'47 -6790 Jan 23 j 04:27 14° ₹ 06'42 16°40'14 minimum elong -6790 Jan 25 j 11:59 14°**✗**10'02 47.94075 AU max. Earth dist. -6798 Jan 14 j 09:23 5°**∡**31'13 -16°04'45 -6790 May 06 j 17:46 15°**х** 42′01 conjunction retrograde -6798 Jan 14 j 09:17 -6790 Jul 27 j 04:19 14°**∡**°42'08 46.09121 AU minimum elong 5° \$\brace{7}31'13 \quad 16\circ 05'08 min. Earth dist. -6798 Jan 17 j 00:43 -6790 Jul 29 j 06:37 max. Earth dist. 5°**х** 35'08 46.80469 AU opposition 14°**∡**′39'39 -17°24'11 retrograde -6798 Apr 28 j 01:47 7°**₹**09'01 direct -6790 Oct 17 j 23:29 13°**∡** 38'45 min. Earth dist. -6798 Jul 18 j 08:16 6°**✗**08'25 44.96422 AU opposition -6798 Jul 20 j 18:47 6°**₹**05'29 -16°50'10 conjunction -6789 Jan 24 j 12:24 15°**∡**09'47 -16°42'43 direct -6798 Oct 09 j 09:57 5°**х** 03′38 minimum elong -6789 Jan 24 j 12:22 15°**尽**09'47 16°43'09 -6789 Jan 26 j 17:22 15° ₹ 12'58 48.06364 AU max. Earth dist. -6797 Jan 15 j 18:14 6°**∡**36'45 -16°10'24 -6789 May 08 j 00:21 16°**∡**¹44'48 conjunction retrograde

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•	nical year style is used: Th		•			, , ,	,C <i>9</i>
min. Earth dist.	-6789 Jul 28 j 11:55	-	46.21215 AU	conjunction	-6780 Feb 03 j 06:37	24° ½ 24'05	1605/13/
opposition	-6789 Jul 30 j 13:30	15° х ⁴44′39 15° х ⁴42′33		minimum elong	-6780 Feb 03 j 06:40	24°×724'05	
direct	-6789 Oct 19 j 07:34	13 x 42 33 14° x 41'43	-17 20 30	max. Earth dist.	-6780 Feb 05 j 02:44		49.00345 AU
direct	-0789 Oct 19 j 07.54	14 🗡 41 43		retrograde	-6780 May 16 j 14:35	25° 🖈 56'57	49.00343 AU
conjunction	-6788 Jan 25 j 20:03	16° ⊀ 12'30	16°45'10	min. Earth dist.	-6780 Aug 06 j 06:29		47.13753 AU
minimum elong	-6788 Jan 25 j 20:03	16° ₹ 12'30		opposition	-6780 Aug 07 j 21:42	24° x 57' 36' 24° x 55' 45	
max. Earth dist.	-6788 Jan 28 j 00:32		48.18175 AU	direct	-6780 Oct 27 j 18:20	23° × 55'43	-17 30 30
retrograde	-6788 May 08 j 05:50	17° 🗷 47'14	40.10173 AC	direct	-0700 Oct 27 j 10.20	23 🗡 33 43	
min. Earth dist.	-6788 Jul 28 j 20:53		46.32854 AU	conjunction	-6779 Feb 03 j 13:41	25° ∡ ¹24'50	-16°54'22
opposition	-6788 Jul 30 j 20:19	16° × 4724		minimum elong	-6779 Feb 03 j 13:43	25° × 24'50	
direct	-6788 Oct 19 j 16:28	15° х 43'04	-1 / 29 22	max. Earth dist.	-6779 Feb 05 j 07:04		49.08930 AU
direct	-0788 Oct 19 j 10.28	13 🗡 🕶 19		retrograde	-6779 May 17 j 20:54	26° x 27 13	49.08930 AU
conjunction	-6787 Jan 26 j 03:47	17° ∡ 14'50	-16°47'36	min. Earth dist.	-6779 Aug 07 j 13:21		47.22075 AU
minimum elong	-6787 Jan 26 j 03:46	17° 🖈 14'50		opposition	-6779 Aug 09 j 03:27	25° 🖈 56'24	
max. Earth dist.	-6787 Jan 28 j 07:01		48.29580 AU	direct	-6779 Oct 29 j 00:53	24° × 56'26	-17 30 31
retrograde	-6787 May 09 j 13:24	18° × ⁷ 49'17	40.29300 AU	direct	-0779 Oct 29 j 00.33	24 🗴 30 20	
min. Earth dist.	-6787 Jul 30 j 03:32		46.44103 AU	conjunction	-6778 Feb 04 j 20:51	26° ₹ '25'24	-16°53'55
opposition	-6787 Aug 01 j 02:44	17° 🗷 47'32		minimum elong	-6778 Feb 04 j 20:54	26° × 25'24	
direct	-6787 Oct 20 j 23:06	16° ∡ 746'32	-1/ 3128	max. Earth dist.	-6778 Feb 06 j 13:25		49.16979 AU
direct	-0787 Oct 20 j 25.00	10 🗴 40 32		retrograde	-6778 May 19 j 00:46	20 × 27 47 27° × 57'52	49.10979 AU
conjunction	-6786 Jan 27 j 11:19	18° ∡ 16'50	160/0/37	min. Earth dist.	-6778 Aug 08 j 21:35		47.29839 AU
minimum elong	-6786 Jan 27 j 11:19	18° ₹ 16'50		opposition	-6778 Aug 10 j 09:17	26° ₹ 56'52	
max. Earth dist.	-6786 Jan 29 j 12:56		48.40617 AU	direct	-6778 Oct 30 j 09:13	26 x ·3632 25° x ∕36'57	-1/ 33 30
	,	18 x ·1947 19° x ⁷ 51'00	48.4001 / AU	direct	-0//8 Oct 30 J 09.13	23 X ·3037	
retrograde min. Earth dist.	-6786 May 10 j 23:11 -6786 Jul 31 j 11:36		46.55016 AU	conjunction	-6777 Feb 06 j 03:44	27° ∡ ¹25'45	16052112
		18° 🗷 49'02		minimum elong	-6777 Feb 06 j 03:48	27° x 25'45	
opposition	-6786 Aug 02 j 09:16	18 x ·49 02 17° x 48′25	-1/ 33 14	max. Earth dist.	-6777 Feb 00 j 03.48		49.24495 AU
direct	-6786 Oct 22 j 03:11	1/ X ·48 23			3	28° × 58'00	49.24493 AU
aaniumatian	6705 Ion 20: 10:47	19° ∡ 18'31	16051!11	retrograde min. Earth dist.	-6777 May 20 j 06:12		47.37073 AU
conjunction	-6785 Jan 28 j 18:47 -6785 Jan 28 j 18:47				-6777 Aug 10 j 03:33	27 × 3847 27° × 57'05	
minimum elong	-	19° 🖈 18'31		opposition	-6777 Aug 11 j 14:49		-1/-3433
max. Earth dist.	-6785 Jan 30 j 20:21	19° × °21′27 20° × ⁷ 52′25	48.51342 AU	direct	-6777 Oct 31 j 16:32	26° ≯ 57'12	
retrograde min. Earth dist.	-6785 May 12 j 04:55 -6785 Aug 01 j 18:44		46.65614 AU	conjunction	-6776 Feb 07 j 10:29	28° ∡ ¹25'50	16052!12
	-6785 Aug 03 j 15:31	19° x 50'35		minimum elong	-6776 Feb 07 j 10:23	28° × 25'50	
opposition direct	-6785 Oct 23 j 10:39	19 x ·30/33 18° x ⁷ 50′03	-1/ 34 39	max. Earth dist.	-6776 Feb 07 j 10.33		49.31497 AU
direct	-0765 Oct 25 J 10.59	10 × 30 03		retrograde	-6776 May 20 j 15:13	20 x 27 30 29° x 57'52	49.3149/ AU
conjunction	-6784 Jan 30 j 02:01	20° х 19′56	16052130	min. Earth dist.	-6776 Aug 10 j 11:13		47.43830 AU
minimum elong	-6784 Jan 30 j 02:03	20° х 19′57		opposition	-6776 Aug 10 j 11:13	28° 🖈 57'00	
max. Earth dist.	-6784 Feb 01 j 01:40		48.61783 AU	direct	-6776 Oct 31 j 20:12		-1/ 33 39
retrograde	-6784 May 12 j 10:25	20 x ·22 40 21° x ⁷ 53'37	46.01/65 AU	direct	-0//0 Oct 31 J 20.12	27 X ·3709	
min. Earth dist.	-6784 Aug 02 j 01:20		46.75938 AU	conjunction	-6775 Feb 07 j 17:15	29° ∡ ¹25'37	16050157
opposition	-6784 Aug 03 j 21:44	20° ₹ 51'53		minimum elong	-6775 Feb 07 j 17:13	29° х 25'37	
direct	-6784 Oct 23 j 17:55	19° 🖈 51'27	-17 33 43	max. Earth dist.	-6775 Feb 09 j 05:38		49.38060 AU
direct	-0784 Oct 23 j 17.33	19 🗡 31 27		max. Earth dist.	-6775 Mar 04 j 23:23	0°る	49.38000 AU
conjunction	-6783 Jan 30 j 09:14	21° ₹ '21'10	-16°53'20	retrograde	-6775 May 21 j 21:37	0° ろ 57'26	
minimum elong	-6783 Jan 30 j 09:14	21°×21'10		renograde	-6775 Aug 10 j 03:20	30°R.✓	
max. Earth dist.	-6783 Feb 01 j 08:41		48.71937 AU	min. Earth dist.	-6775 Aug 11 j 17:28		47.50153 AU
retrograde	-6783 May 13 j 15:12	21 × 23 38 22° × 54'37	10.71757 AU	opposition	-6775 Aug 13 j 01:42	29° 🖈 56'37	
min. Earth dist.	-6783 Aug 03 j 09:23		46.85953 AU	direct	-6775 Nov 02 j 01:18	28° × 56'47	1, 320)
opposition	-6783 Aug 05 j 03:57	21° х 53'01			-6774 Jan 21 j 17:16	0°궁	
direct	-6783 Oct 25 j 02:49	20° ₹ 52'42	17 30 30		0// 13th 21 j 1/.10	° C	
ancet	0703 00t 23 j 02.19	20 7 32 12		conjunction	-6774 Feb 08 j 23:50	0° る 25'06	-16°49'25
conjunction	-6782 Jan 31 j 16:30	22° ₹ 22'15	-16°54'08	minimum elong	-6774 Feb 08 j 23:54	0° 3 25'06	
minimum elong	-6782 Jan 31 j 16:32	22° × 22'15		max. Earth dist.	-6774 Feb 10 j 09:57		49.44226 AU
max. Earth dist.	-6782 Feb 02 j 14:35		48.81789 AU	retrograde	-6774 May 23 j 03:18	1°る56'42	17.11220 AU
retrograde	-6782 May 14 j 23:12	23° х 55'30	40.01707710	min. Earth dist.	-6774 Aug 12 j 23:32		47.56122 AU
min. Earth dist.	-6782 Aug 04 j 15:25		46.95632 AU	opposition	-6774 Aug 14 j 06:52	0° ろ 55'56	
opposition	-6782 Aug 06 j 09:48	22° 🖈 50'00 22° 🖈 54'02		SPROSITION	-6774 Oct 15 j 17:29	30°R.∡7	1, 3021
direct	-6782 Oct 26 j 08:13	21° x 53'49	1, 505,	direct	-6774 Nov 03 j 06:57	29° ₹ 156'08	
anoct	0,02 000 20 1 00.13	21 A JJ 47		anost	-6774 Nov 21 j 23:08	29 メ ・30 08	
			1.605.412.0		0117 NOV 21 J 23.00	υ Ο	
conjunction	-6781 Feb 01 i 23:34	23° √ 23'13	-16°54'30				
conjunction	-6781 Feb 01 j 23:34	23° ₹ 23'13		conjunction	-6773 Feb. 10 i 06:23	1° 天 2/1'1º	-16°47'36
minimum elong	-6781 Feb 01 j 23:36	23° ₹ 23'13	16°54'56	conjunction	-6773 Feb 10 j 06:23		-16°47'36
minimum elong max. Earth dist.	-6781 Feb 01 j 23:36 -6781 Feb 03 j 20:04	23° 尽 23'13 23° 尽 25'50		minimum elong	-6773 Feb 10 j 06:29	1° る 24'18	16°48'03
minimum elong max. Earth dist. retrograde	-6781 Feb 01 j 23:36 -6781 Feb 03 j 20:04 -6781 May 16 j 08:02	23° ₹23'13 23° ₹25'50 24° ₹56'16	16°54'56 48.91273 AU	minimum elong max. Earth dist.	-6773 Feb 10 j 06:29 -6773 Feb 11 j 16:17	1°る24'18 1°る26'15	
minimum elong max. Earth dist. retrograde min. Earth dist.	-6781 Feb 01 j 23:36 -6781 Feb 03 j 20:04 -6781 May 16 j 08:02 -6781 Aug 05 j 23:27	23° 🗷 23'13 23° 🗷 25'50 24° 🗷 56'16 23° 🗷 56'54	16°54'56 48.91273 AU 47.04926 AU	minimum elong max. Earth dist. retrograde	-6773 Feb 10 j 06:29 -6773 Feb 11 j 16:17 -6773 May 24 j 05:25	1° ට 24'18 1°ට26'15 2°ට55'42	16°48'03 49.50055 AU
minimum elong max. Earth dist. retrograde	-6781 Feb 01 j 23:36 -6781 Feb 03 j 20:04 -6781 May 16 j 08:02	23° ₹23'13 23° ₹25'50 24° ₹56'16	16°54'56 48.91273 AU 47.04926 AU	minimum elong max. Earth dist.	-6773 Feb 10 j 06:29 -6773 Feb 11 j 16:17	1° ට 24'18 1°ට26'15 2°ට55'42	16°48'03 49.50055 AU 47.61764 AU

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 10 Attention, astronomical year style is used: The year -6773 in astronomical counting style is the year 6774 BCE in historical counting style.

minimum clows	Attention, astronomi	ical year style is used: Th	e year -6773 i	in astronomical cou	inting style is the year	6774 BCE in historical co	ounting style.	
onimination of M-772 Feb 11 J 12 9 CF2508 I 1962 19 (2014) CF2	direct	-6773 Nov 04 j 15:57	0° る 55'13		minimum elong	-6764 Feb 19 j 15:18	10°る11'22	16°19'16
minimandenger 4772 Febr 1 1244 252915 674596 1674519 1675419 1675418 1675249 1675419					max. Earth dist.	-6764 Feb 20 j 11:57	10° ප 12'32	49.86612 AU
max Farth discognes 6772 May 41 [102] 2525 NB y 855 97 AI N 10 (100 mm. Earth dat. 4072 Aug 14] 1129 2525 17 45718 AI N 10 (100 mm. Earth dat. 4072 Aug 14] 1129 255 517 45718 AI N 10 (100 mm. Earth dat. 4072 Aug 14] 1129 255 517 45718 AI N 10 (100 mm. Earth dat. 4072 Aug 14] 1129 255 517 45718 AI N 10 (100 mm. Earth dat. 4072 Aug 14] 1129 255 517 45718 AI N 10 (100 mm. Earth dat. 4072 Aug 14] 1129 255 517 45718 AI N 10 (100 mm. Earth dat. 4072 Aug 14] 1129 255 517 45718 AI N 10 (100 mm. Earth dat. 4071 Aug 14] 1129 255 517 45718 AI N 10 (100 mm. Earth dat. 4071 Aug 14] 1129 255 220 1 (164 905 mm. Earth dat. 4071 Aug 14] 1129 255 220 1 (164 905 mm. Earth dat. 4071 Aug 14] 1129 255 220 1 (164 905 mm. Earth dat. 4071 Aug 14] 1129 255 220 1 (164 905 mm. Earth dat. 4071 Aug 14] 1129 255 220 1 (164 905 mm. Earth dat. 4071 Aug 14] 1129 255 220 1 (164 905 mm. Earth dat. 4071 Aug 14] 1129 255 220 1 (164 905 mm. Earth dat. 4071 Aug 14] 1129 255 220 1 (164 905 mm. Earth dat. 4071 Aug 14] 1129 255 220 1 (164 905 mm. Earth dat. 4071 Aug 14] 1129 255 220 1 (164 905 mm. Earth dat. 4071 Aug 14] 1129 255 220 1 (164 905 mm. Earth dat. 4071 Aug 14] 1129 255 220 1 (164 905 mm. Earth dat. 4071 Aug 14] 1129 255 220 1 (164 905 mm. Earth dat. 4071 Aug 14] 1129 255 220 1 (164 905 mm. Earth dat. 4071 Aug 14] 1129 255 220 1 (164 905 mm. Earth dat. 4071 Aug 14] 1129 255 220 1 (164 905 mm. Earth dat. 4071 Aug 14] 1129 255 220 1 (164 905 mm. Earth dat. 4071 Aug 14] 1129 255 220 1 (164 905 mm. Earth dat. 4071 Aug 14] 1129 255 220 1 (16	conjunction	-6772 Feb 11 j 12:39	2° ප 23'15	-16°45'29	retrograde	-6764 Jun 01 j 12:38	11° ප් 41'34	
cittogradies -6772 May 14 j 1025 555-159 office -6764 Nov 12 j 1232 9°52 t 10 opposition -6772 Aug 15 j 1732 2°55573 1725251 commitment -6768 Feb 19 j 1123 11°50977 16°1123 organization -6771 Feb 11 j 1907 5°52201 - 10°41905 commitment -6768 Feb 19 j 1123 11°50977 16°1123 organization -6771 Feb 11 j 1907 5°52200 - 10°41905 commitment -6768 Feb 19 j 1123 11°50977 16°1123 organization -6771 Feb 11 j 1907 5°52300 - 10°41905 commitment -6771 May 51 j 15°5 7°52303 17°21000 organization -6771 May 51 j 10°30 7°52533 17°21000 10°622 May 10°000 10°622 May 10°000 10°622 May 10°000 10°622 May 10°000 10°0	minimum elong	-6772 Feb 11 j 12:44	2° る 23'15	16°45'56	opposition	-6764 Aug 23 j 08:16	10° ප් 41'31	-16°56'48
min ballosis 6772 Aug 15 1279 265817 476118 AU proposition 67672 Aug 15 1279 16 1430 1758	max. Earth dist.			49.55597 AU	min. Earth dist.			47.95918 AU
opposition of cert -6772 Nov 04 j 2225 1°55591 1°7259° conjunction miniman colong of -676 Feb 19 j 21.24 1°61973 1°1900 1°1931 conjunction of certification of cer	retrograde				direct	-6764 Nov 12 j 12:32	9° ප 42'06	
direct 6,727 No. 94 j 22.55 1°5 80°F. minimum elong max Earth dist criognacion 6,771 Feb 11 j 1900 3°5 22.901 16-14 50 minimum elong criognacion 6,771 Feb 11 j 1900 3°522.901 16-14 50 certognacio criognacion 6,771 Feb 11 j 1901 3°522.901 16-14 30 certognacio criognacion 6,771 Feb 11 j 1901 3°522.901 16-18 30 certognacio criognacion 6,771 Aug 16 j 22.16 3°523.93 1,972.900 composition 4,671 Aug 16 j 22.16 3°5523.31 1,772.900 composition 4,671 Aug 16 j 20.10 2 1,972.900 composition 4,671 Aug 16 j 20.10 2 1,972.900 4,672 Feb 21 j 10.33 2 2 1,970.900 4,770 Feb 14 j 19.10 4,700 Feb 13 j 10.10 4,700 Feb 13 j 10.10 <td>min. Earth dist.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	min. Earth dist.							
Conjunction	opposition			-17°25'51		3		
conjunction 6771 Feb 11 jal 907 3°62201 - 16*4302 refrequence proposition -6763 Aug 24 j. 125 16*3032 j. 12*202 16*3032 j. 12*203 4°78 Avg 31 j. 16*202 4°79 Avg 37 j. 16*10*20 4°78 Avg 31 j. 16*20 4°93 Avg 37 j. 16*10*20 16*3032 j. 12*20*2 16	direct	-6772 Nov 04 j 22:25	1°₹54'07		•			
minimar long -677 Feb 1 j 1907 3°5220 20°4325 20°4315 20°40 1°5393			_			,		49.88376 AU
max End dist. -6771 [Feb 13] 0,21-14 ***Ö37350 9908048 AU min Earth dist. -6761 Aug 25] 1956 1**Ö3700 47973 AU 47973 AU 47973 AU 47973 AU 1**Ö3703 AU 6767 Aug 25] 1956 1**Ö3703 AU 47973 AU 6767 Aug 25] 1956 1**Ö3703 AU 47973 AU 6767 AU 6767 AU 1**Ö4700 47973 AU 6767 AU 6767 AU 5767 AU 5770 Feb 13 J01-30 4**Ö2741 16*40024 minimum clong -6767 Feb 13 J01-30 4**Ö2741 16*40024 crospante -6762 Aug 25] 1722 12**Ö3723 16*10700 18**Ö373 AU 16*40024 recogante -6762 Aug 25] 1722 12**Ö3723 16*10700 18**Ö3710 18**Ö3710 -6762 Aug 25] 1722 12**Ö3723 16**O700 18**Ö3710 4**Ö3700 -6762 Aug 25] 1722 12**Ö3723 16**O700 18**Ö3710 4**Ö3700 -6762 Aug 25] 1722 12**Ö3723 16**O700 18**Ö3711 4**Ö3700 -6763 Aug 25] 1722 12**Ö3723 16**O700 18**Ö3723 16**Ö3700 -6763 Aug 25] 1722 12**Ö3723 16**Ö3700 18**Ö3733 16**Ö3700 -6763 Aug 25] 12**Ö373 16**Ö3700<		-			C	-		
retrograde -971 May 25 j 17-55 a **26330 a **17-2390 are possition 4771 Aug 15 j 1826 b **37-533 a **47-2183 AU conjunction -676 2 feb 2 j 1 j 0332 b **27-2073 a **16*1008 are possition are p	_					• •		
opoposition in Earth dist. -6771 Ang 16 j 2216 b 3752373 - J722390 minim Earth dist. -6771 Nov 06 j 0215 b 275252 minim minim and max. Earth dist. -6762 Feb 2 j j 03-22 b 2760723 - 16*0941 minim minim and max. Earth dist. -6760 Feb 1 j 01-20 b 2763252 minim minim and max. Earth dist. -6762 Feb 2 j j 03-22 b 2760723 - 16*0941 minim minim and max. Earth dist. -6762 Feb 2 j j 03-22 b 2760723 - 16*0941 minim minim and max. Earth dist. -6762 Feb 2 j j 03-22 b 2760723 - 16*0941 minim minim and max. Earth dist. -6762 Max 0 j j j 17-22 b 2760723 - 16*0941 minim				49.60846 AU				47.97397 AU
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copinetion 479 Feb 13 j0130 4"520740 164024 retrograde minimal commitment and max. Earth dist. 4760 Feb 13 j0130 4"52074 164050 retrograde max. Earth dist. 4760 Aug 12 j0121 12*63773 16*371 14*78511 AU 798511 AU 798511 AU 798511 AU 798511 AU 798511 AU 798510 opposition 4707 Aug 18 j0314 4"55108 17*2010 conjunction -6761 Feb 22 j0024 13*50511 16*0443 direct -6700 Aug 18 j0314 4"55108 17*2010 conjunction -6761 Feb 22 j0024 13*50511 16*0443 direct -6700 Feb 14 j0773 5"51915 16*3725 retrograde -6761 Feb 22 j0024 13*50511 16*0443 minimum clong -6769 Feb 14 j0774 5"51916 16*3735 opposition -6761 Lun 05 j0039 14"53504 min. Earth dist -6769 Feb 15 j1217 5"52074 4781302 AU max. Earth dist -6761 Aug 16 j07:51 12*353507 16*1411 opposition -6769 Feb 15 j1409 5"55975 4781302 AU minimum clong -6769 Feb 23 j1421 14*30533 15*5989 opposition -6768 Nov 08 j1120 5"53974 178*16*3412 retrograde -6760 Feb 23 j0221 14*30533 15*5990 opposition -6768 Feb 15 j1403	direct	-6//1 Nov 06 J 02:15	2°052'52		C	-		
minimum clong 4.70 Feb 1 3 j 0.15 d 4°E 2274 1 (6.470 min. Earth dist. 6.707 Eb 1 4 j 0.82 d 4°E 2272 4 96.5807 AU min. Earth dist. 6.707 Aug 2 j 0.01 d 12°E 38°I1 4 7.9851 AU 4°E 328°I 4 7.9851 AU min. Earth dist. 6.707 Aug 2 j 0.00 d 4°E 328°I 4 7.9851 AU direct 6.762 Aug 2 5 j 0.03 g 12°E 38°I 1 4 7.9851 AU 4°F 328°I AU <td>. ,.</td> <td>(770 F.1. 12:01.20</td> <td>40=20140</td> <td>1.6040124</td> <td></td> <td>•</td> <td></td> <td>49.89/53 AU</td>	. ,.	(770 F.1. 12:01.20	40=20140	1.6040124		•		49.89/53 AU
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retorgade -6770 May 17 joo 14 5°55137 defice -6762 Nov 15 jo3:99 1°53757 min. Earth dist -6770 Nay 17 joo 13 4°55128 -17.00 10 conjunction 6761 Feb 22 jo 9:22 13°50511 16°0413 direct -670 Nov 07 jo 7:12 3°55131 conjunction -6761 Feb 22 jo 9:23 13°50511 16°0410 conjunction -6709 Feb 14 jo 7:30 5°51915 16°3753 retograde -6761 Jun 05 jo 3:03 14°51804 minimum clong -6709 Feb 15 jo 12:17 5°52054 49°7046 AU min. Earth dist -6760 May 18 jo 6:06 6°55003 direct -6761 Nov 16;051 12°53594 179030 AU min. Earth dist -6769 Aug 19 jo 800 5°54941 17°1654 conjunction -6760 Feb 23 jo 15:26 4°55087 4°7930 AU direct -6769 Nov 0 81 jo 14 6°51747 16°3412 min. Earth dist -6760 Feb 23 jo 15:26 4°50320 15°9352 conjunction -6768 Feb 15 j 14:03 6°51748 16°3412 min. Earth dist -6760 Feb 23 jo 12:2 14°53328 19°3024 co	_	-						
min Earl dist 4770 Aug I 17 joo0.0 4°55227 47 76921 AU conjunction -6761 Feb 22 jo9.24 18°56171 1-6°0430 opposition -6770 Nov 07 jo7.12 3°56191 1-6°3725 minimum elong -6761 Feb 22 jo9.23 13°5071 1-6°010 09 90776 AU conjunction -6769 Feb 14 jo7.37 5°51915 1-6°3725 retrogade -6761 Nay 26 jo1.38 13°50510 1-6°3104 09 90776 AU minimum elong -6769 Feb 14 jo7.37 5°51915 1-6°3725 retrogade -6761 Nay 26 jo1.38 13°51559 1-6°4114 16°4174 16°3753 opposition -6761 Nay 16 jo1.55 12°35595 1-6°414 17°414		-		49.6580/ AU				47.98511 AU
opposition 4.770 Now 18 j 0.31.4 4.95 S 13 1 - 172 0.10 conjunction 4.761 Ne 2.2 j 0.92.3 1.95 0.01 1.670 Ne 0.7 0.7 1.2 2.95 5.13 1.760 Ne 0.7 0.7 1.2 2.95 0.13 1.95 0.01 1.900 Ne 0.1 1.900 Ne 0.1 </td <td>-</td> <td></td> <td></td> <td>47.76021 ATT</td> <td>direct</td> <td>-6/62 NOV 15 J 03:59</td> <td>11,03/2/</td> <td></td>	-			47.76021 ATT	direct	-6/62 NOV 15 J 03:59	11,03/2/	
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min. Earth dist.	retrograde	-6767 May 29 j 15:35	8° る 46'52		direct	-6759 Nov 17 j 14:41	14° る 30'59	
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max. Earth dist.	min. Earth dist.	-6767 Aug 19 j 18:27	7° る 47'47	47.88695 AU	conjunction	-6758 Feb 25 j 03:21	15° ප 58'08	-15°48'12
conjunction	direct	-6767 Nov 10 j 00:51	6° ප 47'12		minimum elong	-6758 Feb 25 j 03:32	15° ප 58'09	15°48'39
minimum elong					max. Earth dist.	-6758 Feb 25 j 17:51	15° ප 58'57	49.92117 AU
max. Earth dist.	conjunction	-6766 Feb 17 j 02:47	8° る 14'45	-16°26'59	retrograde		17° ට 27'46	
retrograde	minimum elong	-6766 Feb 17 j 02:55	8° る 14'45	16°27'25	opposition	-6758 Aug 29 j 11:18	16° පි 27'59	-16°24'05
opposition	max. Earth dist.	-6766 Feb 18 j 02:53	8° ਰ 16'07	49.81665 AU	min. Earth dist.	-6758 Aug 28 j 23:36	16° පි 28'32	47.99911 AU
min. Earth dist.	retrograde	-6766 May 30 j 23:13			direct	-6758 Nov 18 j 20:58	15° පි 28'37	
minimum elong -6766 Nov 11 j 04:45 7°号45'38 minimum elong -6757 Feb 26 j 09:26 16°号5'46 15°42'36 max. Earth dist. -6757 Feb 26 j 22:06 16°号5'46 49.91953 AU conjunction -6765 Feb 18 j 09:10 9°号13'07 -16°23'02 retrograde -6757 Jun 08 j 21:09 18°号25'21 minimum elong -6765 Feb 18 j 09:18 9°号13'07 16°23'29 opposition -6757 Aug 30 j 15:40 17°号25'37 -16°17'40 max. Earth dist. -6765 Feb 19 j 08:30 9°号14'27 49.84391 AU min. Earth dist. -6757 Aug 30 j 04:13 17°号26'10 47.99456 AU retrograde -6765 Jun 01 j 06:08 10°号43'27 direct -6757 Nov 20 j 03:19 16°号26'16 47.99456 AU opposition -6765 Aug 22 j 07:27 9°号44'20 47.94002 AU opposition -6765 Aug 23 j 03:32 9°号43'22 -17°01'19 conjunction -6756 Feb 27 j 15:07 17°号53'25 15°35'53 direct -6765 Nov 12 j 08:21 8°号43'56 minimum elong -6756 Feb 27 j 15:18 17°号53'26 15°36'19 max. Earth dist. -6756 Feb 28 j 02:16 17°号54'03 49.91391 AU direct -6756 Feb 28 j 02:16 17°号54'03 49.91391 AU direct -6756 Feb 28 j 02:16 17°号54'03 49.91391 AU direct -6756 Feb 28 j 02:16 17°号54'03 49.91391 AU direct -6756 Feb 28 j 02:16 17°号54'03 49.91391 AU direct -6756 Feb 28 j 02:16 17°号54'03 49.91391 AU direct -6756 Feb 28 j 02:16 17°号54'03 49.91391 AU direct -6756 Feb 28 j 02:16 17°号54'03 49.91391 AU direct -6756 Feb 28 j 02:16 17°号54'03 49.91391 AU direct -6756 Feb 28 j 02:16 17°号54'03 49.91391 AU direct -6756 Feb 28 j 02:16 17°号54'03 49.91391 AU direct -6756 Feb 28 j 02:16 17°号54'03 49.91391 AU direct -6756 Feb 28 j 02:16 17°号54'03 49.91391 AU direct -6756 Feb 28 j 02:16 17°号54'03 49.91391 AU direct -6756 Feb 28 j 02:16 17°号54'03 49.91391 AU direct -6756 Feb 28 j 02:16 17°号54'03 49.91391 AU direct -6756 Feb 28 j 02:16 17°号54'03 49.91391 AU direct -6756 Feb 28 j 02:16 17°号55'03 49.91391 AU direct -6756 Feb 28 j 02:16 17°号54'03 49.91391 AU	opposition	-6766 Aug 21 j 22:46	8°₹45'04	-17°05'34				
max. Earth dist.	min. Earth dist.			47.91613 AU	-	•		
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retrograde	•							
min. Earth dist6765 Aug 22 j 07:27 9°る44'20 47.94002 AU opposition -6765 Aug 23 j 03:32 9°る43'22 -17°01'19 conjunction -6756 Feb 27 j 15:07 17°る53'25 -15°35'53 direct -6765 Nov 12 j 08:21 8°る43'56 minimum elong -6756 Feb 27 j 15:18 17°る53'26 15°36'19 max. Earth dist6756 Feb 28 j 02:16 17°る54'03 49.91391 AU		·		49.84391 AU				47.99456 AU
opposition -6765 Aug 23 j 03:32 9°る43'22 -17°01'19 conjunction -6756 Feb 27 j 15:07 17°る53'25 -15°35'53 direct -6765 Nov 12 j 08:21 8°る43'56 minimum elong max. Earth dist6756 Feb 27 j 15:18 17°る53'26 15°36'19 max. Earth dist6756 Feb 28 j 02:16 17°る54'03 49.91391 AU	-	-			direct	-6757 Nov 20 j 03:19	16° පි 26'16	
direct -6765 Nov 12 j 08:21 8°る43'56 minimum elong -6756 Feb 27 j 15:18 17°る53'26 15°36'19 max. Earth dist6756 Feb 28 j 02:16 17°る54'03 49.91391 AU							. = . = -	
max. Earth dist6756 Feb 28 j 02:16 17°る54'03 49.91391 AU				-17°01'19		-		
·	direct	-6765 Nov 12 j 08:21	8° ర 43'56		•			
conjunction -6/64 Feb 19 J 15:10 10°O11'21 -16°18'50 retrograde -6756 Jun 09 J 02:57 19°O22'59		CREATE LANGE	100-71	1.001.0150		-		49.91391 AU
	conjunction	-6/64 Feb 19j15:10	10°011'21	-10~18'50	retrograde	-6/36 Jun 09 J 02:57	19~ 5 22'59	

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6756 in astronomical counting style is the year 6757 BCE in historical counting style. -6756 Aug 30 j 20:12 18°る23'18 -16°11'01 max. Earth dist. -6748 Mar 06 i 15:14 25°る33'47 49.69471 AU opposition min. Earth dist. -6756 Aug 30 j 11:05 18°る23'44 47.98573 AU -6748 Mar 10 j 06:39 25°る38'44 morning rise -6756 Nov 20 j 08:26 17°る23'58 -6748 Jun 16 j 22:18 27°る03'02 direct retrograde -6748 Sep 07 j 07:21 26° ති03'24 -15°09'10 opposition -6755 Feb 27 j 21:20 18°る51'08 -15°29'21 -6748 Sep 07 j 08:58 26°る03'20 47.73929 AU conjunction min. Earth dist. minimum elong -6755 Feb 27 j 21:30 -6748 Nov 27 j 22:54 18°る51'09 15°29'47 direct 25°る03'50 -6755 Feb 28 j 07:42 -6747 Mar 03 j 16:09 max. Earth dist. 18°る51'43 49.90377 AU evening set 26°る25'25 retrograde -6755 Jun 10 j 10:05 20°る20'39 opposition -6755 Sep 01 j 00:32 19°る21'01 -16°04'07 conjunction -6747 Mar 07 j 21:33 26°る31'11 -14°28'45 26°**ප**31'11 14°29'10 min. Earth dist. -6755 Aug 31 j 16:25 19°る21'24 47.97189 AU minimum elong -6747 Mar 07 j 21:46 26°る31'04 49.64968 AU direct -6755 Nov 21 j 11:44 18°**る**21'40 max. Earth dist. -6747 Mar 07 j 19:37 -6747 Mar 12 j 03:30 26°**る**36'57 morning rise -6754 Mar 01 j 03:26 -6747 Jun 18 j 02:06 28°る00'25 conjunction 19°る48'51 -15°22'36 retrograde minimum elong -6754 Mar 01 j 03:37 19°る48'52 15°23'02 opposition -6747 Sep 08 j 11:34 27°る00'49 -15°00'17 max. Earth dist. -6754 Mar 01 j 10:57 19°る49'17 49.88839 AU min. Earth dist. -6747 Sep 08 j 13:20 27°る00'44 47.69143 AU retrograde -6754 Jun 11 j 17:46 21°る18'19 direct -6747 Nov 29 j 04:41 26°**ප**01'13 opposition -6754 Sep 02 j 05:03 20°る18'42 -15°57'00 evening set -6746 Mar 04 j 08:57 27°る22'08 min. Earth dist. -6754 Sep 01 j 22:33 20°る19'01 47.95275 AU direct -6754 Nov 22 j 14:24 19°る19'21 conjunction -6746 Mar 09 j 03:36 27°る28'38 -14°20'03 minimum elong -6746 Mar 09 j 03:47 27°る28'39 14°20'28 conjunction -6753 Mar 02 j 09:31 20°る46'32 -15°15'37 max. Earth dist. -6746 Mar 09 j 00:09 27°る28'26 49.60154 AU minimum elong -6753 Mar 02 j 09:42 20°る46'33 15°16'03 morning rise -6746 Mar 13 i 22:47 27°る35'10 max. Earth dist. -6753 Mar 02 j 16:09 20°る46'55 49.86756 AU retrograde -6746 Jun 19 i 07:10 28°る57'56 retrograde -6753 Jun 12 j 20:42 22°る15'57 opposition -6746 Sep 09 i 16:04 27°る58'20 -14°51'08 opposition -6753 Sep 03 j 09:34 21°る16'20 -15°49'39 min. Earth dist. -6746 Sep 09 j 19:53 27°る58'09 47.64042 AU -6753 Sep 03 j 05:01 21°る16'33 47.92808 AU -6746 Nov 30 j 10:04 26°る58'44 min. Earth dist. direct -6753 Nov 23 j 21:38 20°る16'57 -6745 Mar 05 j 02:57 28°る19'04 direct evening set -6752 Mar 02 j 15:34 21°844'08 -15°08'25 -6745 Mar 10 j 09:35 28°**ට**26'14 -14°11'05 conjunction conjunction -6752 Mar 02 j 15:45 21°る44'09 15°08'52 -6745 Mar 10 j 09:48 28°る26'15 14°11'31 minimum elong minimum elong 28°る26'02 49.55020 AU -6752 Mar 02 j 20:12 21°정44'24 49.84160 AU -6745 Mar 10 j 05:49 max. Earth dist. max. Earth dist. retrograde -6752 Jun 12 j 23:53 23°る13'29 -6745 Mar 15 j 16:45 28°**る**33'28 morning rise -6745 Jun 20 j 14:14 -6752 Sep 03 j 13:50 22°♂13'53 -15°42'03 retrograde 29°**る**55'35 opposition -6752 Sep 03 j 09:57 22°る14'04 47.89844 AU -6745 Sep 10 j 20:26 28°る56'01 -14°41'43 min. Earth dist. opposition -6752 Nov 24 j 04:35 21°**る**14'28 -6745 Sep 11 j 00:48 28°る55'48 47.58581 AU direct min. Earth dist. -6745 Dec 01 j 13:19 27°**る**56'24 direct -6751 Mar 03 j 21:38 22°**ප්**41'39 -15°00'59 -6744 Mar 04 j 21:52 29°**る**16'12 conjunction evening set minimum elong -6751 Mar 03 j 21:50 22°る41'40 15°01'25 max. Earth dist. -6751 Mar 04 j 00:27 22°る41'49 49.81073 AU conjunction -6744 Mar 10 j 15:38 29°る24'01 -14°01'52 retrograde -6751 Jun 14 j 05:27 24°る10'58 minimum elong -6744 Mar 10 j 15:49 29°る24'02 14°02'17 opposition -6751 Sep 04 j 18:18 23°♂11'21 -15°34'13 max. Earth dist. -6744 Mar 10 j 09:19 29°る23'40 49.49502 AU min. Earth dist. -6751 Sep 04 j 16:41 23°る11'25 47.86419 AU -6744 Mar 16 j 10:01 29°る31'53 morning rise -6751 Nov 25 j 09:31 22°る11'53 -6744 Apr 06 j 18:31 direct 0°≈ -6750 Mar 03 j 05:50 23°**る**36'29 -6744 Jun 20 j 23:07 0°≈53'25 evening set retrograde -6744 Sep 05 j 16:04 30°Ŗる -6750 Mar 05 i 03:45 23°**ප**39'05 -14°53'19 -6744 Sep 11 i 00:48 conjunction opposition 29°る53'52 -14°32'02 -6750 Mar 05 i 03:56 29°る53'35 47.52715 AU minimum elong 23°る39'05 14°53'45 min. Earth dist. -6744 Sep 11 i 06:43 -6750 Mar 05 i 05:56 max. Earth dist. 23°る39'12 49.77562 AU direct -6744 Dec 01 i 14:30 28°る54'14 morning rise -6750 Mar 07 i 02:03 23°る41'42 -6743 Feb 23 i 15:23 0°≈ retrograde -6750 Jun 15 i 10:35 25°**පි**08'21 -6743 Mar 05 j 17:42 0°≈13'33 evening set -6750 Sep 05 j 22:32 24°₹08'44 -15°26'08 opposition min. Earth dist. -6750 Sep 05 j 21:29 24°る08'47 47.82588 AU -6743 Mar 11 j 21:59 0°≈21'58 -13°52'25 conjunction -6750 Nov 26 j 14:19 23°**る**09'13 -6743 Mar 11 j 22:12 0°≈21'59 13°52'50 direct minimum elong 24°**る**32'32 -6749 Mar 03 j 12:34 evening set max. Earth dist. -6743 Mar 11 j 14:55 0°≈21'34 49.43531 AU morning rise -6743 Mar 18 j 02:51 0°≈30'25 conjunction -6749 Mar 06 j 09:38 24°る36'27 -14°45'23 retrograde -6743 Jun 22 j 03:23 1°≈51'25 24°る36'27 14°45'48 minimum elong -6749 Mar 06 j 09:50 opposition -6743 Sep 12 j 05:22 0°≈51'53 -14°22'08 -6749 Mar 06 j 09:32 24°る36'26 49.73679 AU min. Earth dist. -6743 Sep 12 j 13:13 0°≈51'30 47.46352 AU max. Earth dist. -6749 Mar 09 j 07:12 24°る40'23 -6743 Nov 06 j 00:10 30°R₹ morning rise -6749 Jun 16 j 18:14 26°**ප**05'41 -6743 Dec 02 j 20:51 29°る52'13 retrograde direct 25°**る**06'04 -15°17'47 opposition -6749 Sep 07 j 02:55 -6743 Dec 29 j 19:05 0°≈ min. Earth dist. -6749 Sep 07 j 03:00 25°る06'04 47.78421 AU evening set -6742 Mar 06 j 14:10 1°≈11'04 direct -6749 Nov 27 j 16:42 24°**る**06'31 evening set -6748 Mar 03 j 00:53 25°る28'53 conjunction -6742 Mar 13 j 04:15 1°≈20'04 -13°42'44

minimum elong

max. Earth dist.

morning rise

-6748 Mar 06 j 15:33

conjunction

minimum elong

25°る33'48 -14°37'12

-6748 Mar 06 j 15:44 25° ₹33'48 14°37'37

-6742 Mar 13 j 04:27

-6742 Mar 12 j 19:02

-6742 Mar 19 j 18:58

1°≈20'05 13°43'08

1°≈29'05

1°≈19'32 49.37055 AU

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6742 in astronomical counting style is the year 6743 BCE in historical counting style. -6742 Jun 23 j 06:27 2°≈49'33 conjunction -6735 Mar 20 i 00:41 8°≈07'46 -12°28'16 retrograde -6742 Sep 13 i 09:48 1°≈50'01 -14°11'59 -6735 Mar 20 j 00:53 8°≈07'47 12°28'39 opposition minimum elong min. Earth dist. -6742 Sep 13 j 18:23 1°≈49'36 47.39467 AU -6735 Mar 29 j 02:17 8°≈20'11 morning rise -6735 Jun 29 j 19:48 -6742 Dec 04 j 04:30 9°≈37'39 0°≈50'17 direct retrograde 8°≈37'46 -12°53'58 -6741 Mar 07 j 10:59 -6735 Sep 19 j 18:02 evening set 2°≈08'44 opposition -6735 Sep 20 j 11:17 min. Earth dist. 8°≈36'56 46.78863 AU -6741 Mar 14 j 10:33 conjunction 2°≈18'15 -13°32'50 direct -6735 Dec 10 j 18:02 7°≈37'26 -6741 Mar 14 j 10:46 minimum elong 2°≈18'16 13°33'15 evening set -6734 Mar 11 j 22:42 8°≈53'25 max. Earth dist. -6741 Mar 13 j 23:18 2°≈17'37 49.30039 AU max. Earth dist. -6734 Mar 20 j 10:20 9°≈05'02 48.69194 AU morning rise -6741 Mar 21 j 10:47 2°≈27'49 retrograde -6741 Jun 24 j 11:12 3°≈47'47 conjunction -6734 Mar 21 j 07:05 9°≈06'14 -12°16'36 -6741 Sep 14 j 14:28 -6734 Mar 21 j 07:19 opposition 2°≈48'13 -14°01'36 minimum elong 9°≈06'14 12°16'59 -6734 Mar 30 j 16:14 min. Earth dist. -6741 Sep 15 j 01:30 2°≈47'41 47.32051 AU morning rise 9°≈19'06 direct -6741 Dec 05 j 10:29 1°≈48'26 retrograde -6734 Jul 01 j 04:51 10°≈36'13 evening set -6740 Mar 07 j 08:16 3°≈06'27 opposition -6734 Sep 20 j 22:47 9°≈36'18 -12°41'43 min. Earth dist. -6734 Sep 21 j 17:19 9°≈35'25 46.68934 AU conjunction -6740 Mar 14 j 16:50 3°≈16'29 -13°22'41 direct -6734 Dec 11 j 19:37 8°≈35'55 minimum elong -6740 Mar 14 j 17:03 3°≈16'29 13°23'05 evening set -6733 Mar 12 j 22:00 9°≈51'38 max. Earth dist. -6740 Mar 14 j 04:44 3°≈15'47 49.22517 AU morning rise -6740 Mar 22 j 01:58 3°≈26'34 conjunction -6733 Mar 22 j 13:44 10°≈04'53 -12°04'40 retrograde -6740 Jun 24 j 16:30 4°≈46'03 minimum elong -6733 Mar 22 j 13:57 10°≈04'54 12°05'02 opposition -6740 Sep 14 i 18:59 3°≈46'27 -13°50'59 max. Earth dist. -6733 Mar 21 j 16:42 10°≈03'41 48.59264 AU min. Earth dist. -6740 Sep 15 i 06:40 3°≈45'53 47.24127 AU morning rise -6733 Apr 01 i 05:58 10°≈18'11 direct -6740 Dec 05 i 15:41 2°≈46'35 retrograde -6733 Jul 02 j 10:49 11°≈35'01 evening set -6739 Mar 08 j 05:59 4°≈04'11 opposition -6733 Sep 22 j 03:39 10°≈35'04 -12°29'13 min. Earth dist. -6733 Sep 22 j 23:35 10°≈34'06 46.58685 AU -6739 Mar 15 j 23:09 4°≈14'43 -13°12'19 -6733 Dec 13 j 00:50 9°≈34'37 conjunction direct -6739 Mar 15 j 23:21 4°≈14'43 13°12'43 evening set -6732 Mar 12 j 21:40 10°≈50'07 minimum elong -6739 Mar 15 j 08:26 max. Earth dist. 4°≈13'52 49.14510 AU -6739 Mar 23 j 17:02 4°≈25'18 -6732 Mar 22 j 20:18 11°≈03'48 -11°52'27 morning rise conjunction -6739 Jun 26 j 00:59 -6732 Mar 22 j 20:32 5°≈44'20 minimum elong 11°≈03'48 11°52'50 retrograde -6739 Sep 15 j 23:27 -6732 Mar 21 j 21:33 4°≈44'40 -13°40'07 max. Earth dist. 11°≈02'29 48.49001 AU opposition -6732 Apr 01 j 19:35 4°≈44'02 47.15760 AU min. Earth dist. -6739 Sep 16 j 12:49 11°≈17'30 morning rise -6739 Dec 06 j 18:00 3°≈44'42 -6732 Jul 02 j 16:03 direct retrograde 12°≈34'03 5°**≈**01'56 -6738 Mar 09 j 04:01 -6732 Sep 22 j 08:30 evening set opposition 11°≈34'05 -12°16'26 -6732 Sep 23 j 05:04 min. Earth dist. 11°≈33'05 46.48066 AU 5°≈12'57 -13°01'42 -6738 Mar 17 j 05:37 -6732 Dec 13 j 07:23 conjunction direct 10°≈33'34 minimum elong -6738 Mar 17 j 05:51 5°≈12'58 13°02'05 evening set -6731 Mar 13 j 21:40 11°≈48'53 max. Earth dist. -6738 Mar 16 j 14:29 5°≈12'05 49.06081 AU max. Earth dist. -6731 Mar 23 j 02:37 12°≈01'33 48.38310 AU morning rise -6738 Mar 25 j 07:48 5°≈24'01 retrograde -6738 Jun 27 j 06:26 6°≈42'36 conjunction -6731 Mar 24 j 03:13 12°≈02'58 -11°40'00 -6738 Sep 17 j 04:07 5°≈42'53 -13°28'59 -6731 Mar 24 j 03:26 12°**≈**02'59 opposition minimum elong 11°40'21 min. Earth dist. -6738 Sep 17 j 18:59 5°≈42'10 47.06994 AU -6731 Apr 03 j 09:22 12°≈17'06 morning rise -6738 Dec 07 j 23:38 4°≈42'49 -6731 Jul 03 j 21:05 13°≈33'23 direct retrograde -6737 Mar 10 j 02:13 5°≈59'41 -6731 Sep 23 j 13:32 12°≈33'23 -12°03'24 evening set opposition min. Earth dist. -6731 Sep 24 i 12:31 12°≈32'16 46.36994 AU 6°≈11'11 -12°50'49 conjunction -6737 Mar 18 j 11:46 direct -6731 Dec 14 i 13:57 11°≈32'48 minimum elong -6737 Mar 18 j 11:58 6°≈11'12 12°51'13 evening set -6730 Mar 14 j 22:03 12°≈47'56 max. Earth dist. -6737 Mar 17 j 18:56 6°≈10'13 48.97299 AU max. Earth dist. -6730 Mar 24 i 08:44 13°≈00'56 48.27151 AU -6737 Mar 26 i 21:59 6°≈22'42 morning rise -6737 Jun 28 j 11:11 7°≈40'53 conjunction -6730 Mar 25 i 10:16 13°≈02'25 -11°27'18 retrograde -6737 Sep 18 j 08:40 6°≈41'06 -13°17'35 minimum elong -6730 Mar 25 i 10:30 13°≈02'26 11°27'40 opposition -6737 Sep 18 j 23:44 6°≈40'23 46.97904 AU -6730 Apr 04 j 22:56 13°≈16'56 min. Earth dist. morning rise -6730 Jul 05 j 02:54 direct -6737 Dec 09 j 05:25 5°240'57 retrograde 14°2233'00 evening set -6736 Mar 10 j 00:41 6°≈57'30 opposition -6730 Sep 24 j 18:41 13°≈32'57 -11°50'07 -6730 Sep 25 j 18:17 min. Earth dist. 13°≈31'48 46.25421 AU conjunction -6736 Mar 18 j 18:09 7°≈09'26 -12°39'41 -6730 Dec 15 j 19:42 12°≈32'16 direct -6736 Mar 18 j 18:22 -6729 Mar 15 j 22:29 minimum elong 7°≈09'27 12°40'04 evening set 13°**≈**47'13 -6736 Mar 17 j 23:58 7°≈08'24 48.88199 AU max. Earth dist. -6736 Mar 27 j 12:17 -6729 Mar 26 j 17:05 14°≈02'06 -11°14'22 morning rise 7°≈21'25 conjunction retrograde -6736 Jun 28 j 14:28 8°≈39'13 minimum elong -6729 Mar 26 j 17:18 14°≈02'07 11°14'42 opposition -6736 Sep 18 j 13:20 7°≈39'23 -13°05'55 max. Earth dist. -6729 Mar 25 j 12:53 14°≈00'28 48.15480 AU min. Earth dist. -6736 Sep 19 j 06:22 7°≈38'34 46.88521 AU morning rise -6729 Apr 06 j 12:21 14°≈17'02 direct -6736 Dec 09 j 12:25 6°≈39'08 -6729 May 10 j 19:38 15°≈ evening set -6735 Mar 10 j 23:36 7°≈55'23 retrograde -6729 Jul 06 j 11:47 15°≈32'51 max. Earth dist. -6735 Mar 19 j 06:10 8°≈06'42 48.78835 AU -6729 Sep 01 j 17:03 15°R≈

-6729 Sep 25 j 23:57

14°≈32'45 -11°36'35

opposition

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6729 in astronomical counting style is the year 6730 BCE in historical counting style. -6729 Sep 27 i 01:25 14°≈31'30 46.13345 AU conjunction -6722 Apr 02 j 20:24 21°≈05'38 -9°36'33 min. Earth dist. -6729 Dec 16 j 22:50 -6722 Apr 02 j 20:36 direct 13°≈31'58 minimum elong 21°≈05'39 9°36'52 -6728 Mar 15 j 23:13 -6722 Apr 15 j 08:25 14°≈46'44 21° 23'10 evening set morning rise -6722 Jul 13 j 11:19 -6728 Mar 25 j 13:37 15°≈≈ 22°≈37'42 retrograde max. Earth dist. -6722 Oct 02 j 14:23 -6728 Mar 25 j 19:23 15°≈00'20 48.03305 AU opposition 21°≈36'59 -9°54'09 min. Earth dist. -6722 Oct 03 j 23:18 21°≈35'22 45.17793 AU conjunction -6728 Mar 27 j 00:19 15°≈02'00 -11°01'10 direct -6722 Dec 23 j 15:28 20°≈35'19 -6728 Mar 27 j 00:32 11°01'32 21°≈49'21 minimum elong 15°**≈**02'01 evening set -6721 Mar 22 j 10:55 -6728 Apr 07 j 01:45 morning rise 15°≈17'20 max. Earth dist. -6721 Apr 02 j 13:43 22°≈04'57 47.07677 AU retrograde -6728 Jul 06 j 18:44 16°≈32'55 opposition -6728 Sep 26 j 05:10 15°≈32'43 -11°22'47 conjunction -6721 Apr 04 j 04:01 22°≈07'13 -9°21'28 -6728 Sep 27 j 08:17 -6721 Apr 04 j 04:14 min. Earth dist. 15°≈31'24 46.00770 AU minimum elong 22°≈07'13 9°21'47 -6728 Oct 25 j 18:05 -6721 Apr 16 j 21:16 15°R≈ morning rise 22°≈25'05 -6721 Jul 14 j 16:44 direct -6728 Dec 17 j 04:26 14°≈31'49 retrograde 23°≈39'32 -6727 Feb 07 j 05:49 15°≈ opposition -6721 Oct 03 j 20:26 22°≈38'44 -9°38'22 evening set -6727 Mar 17 j 00:23 15°≈46'26 min. Earth dist. -6721 Oct 05 j 07:20 22°≈37'00 45.02956 AU max. Earth dist. -6727 Mar 27 j 00:26 16°≈00'18 47.90668 AU direct -6721 Dec 24 j 23:51 21°≈36'57 evening set -6720 Mar 22 j 13:42 22°≈50'58 conjunction -6727 Mar 28 j 07:30 16°≈02'06 -10°47'44 max. Earth dist. -6720 Apr 02 j 21:02 23°≈06'52 46.92828 AU minimum elong -6727 Mar 28 j 07:43 16°≈02'07 10°48'05 morning rise -6727 Apr 08 j 15:08 16°≈17'48 conjunction -6720 Apr 04 j 11:58 23°≈09'10 -9°06'08 retrograde -6727 Jul 08 i 01:50 17°≈33'09 minimum elong -6720 Apr 04 i 12:10 23°**≈**09'11 9°06'26 opposition -6727 Sep 27 i 10:26 16°≈32'53 -11°08'43 morning rise -6720 Apr 17 i 10:15 23°≈27'23 min. Earth dist. -6727 Sep 28 i 14:09 16°≈31'32 45.87758 AU retrograde -6720 Jul 14 i 22:16 24°≈41'45 direct -6727 Dec 18 j 10:31 15°≈31'52 opposition -6720 Oct 04 j 02:21 23°≈40'53 -9°22'17 -6726 Mar 18 j 01:31 -6720 Oct 05 j 13:39 23°≈39'08 44.87762 AU 16°≈46'20 min. Earth dist. evening set -6726 Mar 28 j 06:09 17°≈00'29 47.77599 AU -6720 Dec 25 j 07:45 max. Earth dist. direct 22° 238' 59 -6719 Mar 23 j 16:56 23°8852'59 evening set 17°≈02'23 -10°34'02 -6719 Apr 04 j 02:38 conjunction -6726 Mar 29 j 14:42 max. Earth dist. 24°≈09'04 46.77575 AU -6726 Mar 29 j 14:55 minimum elong 17°≈02'23 10°34'23 -6726 Apr 10 j 04:19 -6719 Apr 05 j 20:07 17°≈18'27 conjunction 24°≈11'32 -8°50'30 morning rise -6726 Jul 09 j 05:35 minimum elong -6719 Apr 05 j 20:19 18°≈33'36 24°≈11'33 8°50'49 retrograde 17°≈33'15 -10°54'23 -6726 Sep 28 j 15:54 -6719 Apr 18 j 23:29 24°≈30'06 opposition morning rise -6726 Sep 29 j 21:47 -6719 Jul 16 j 07:23 min. Earth dist. 17°≈31'47 45.74354 AU retrograde 25°≈44'24 -6726 Dec 19 j 18:20 -6719 Oct 05 j 08:40 direct 16°**≈**32'05 opposition 24°≈43'27 -9°05'55 -6725 Mar 19 j 02:56 -6719 Oct 06 j 22:03 evening set 17°**≈**46′26 min. Earth dist. 24°≈41'35 44.72143 AU direct -6719 Dec 26 j 12:22 23°**≈**41'24 conjunction -6725 Mar 30 j 22:00 18°≈02'50 -10°20'05 evening set -6718 Mar 24 j 20:18 24°≈55'24 -6725 Mar 30 j 22:13 18°≈02'51 10°20'25 max. Earth dist. -6718 Apr 05 j 10:21 25°≈11'47 46.61855 AU minimum elong max. Earth dist. -6725 Mar 29 j 12:59 18°≈00'54 47.64184 AU morning rise -6725 Apr 11 j 17:19 18°≈19'16 conjunction -6718 Apr 07 j 04:28 25°≈14'18 -8°34'37 -6725 Jul 10 j 10:29 19°≈34'15 -6718 Apr 07 j 04:40 25°≈14'18 8°34'54 retrograde minimum elong -6725 Sep 29 j 21:16 18°≈33'48 -10°39'46 -6718 Apr 20 j 12:27 25°≈33'12 opposition morning rise -6725 Oct 01 j 03:21 18°≈32'19 45.60624 AU -6718 Jul 17 j 16:18 26°≈47'27 min. Earth dist. retrograde -6725 Dec 21 j 01:33 17°≈32'30 -6718 Oct 06 j 15:08 25°≈46'22 -8°49'17 direct opposition evening set -6724 Mar 19 j 04:31 18°≈46'43 min. Earth dist. -6718 Oct 08 i 05:54 25°≈44'27 44.56028 AU max. Earth dist. -6724 Mar 29 j 17:55 19°≈01'26 47.50460 AU direct -6718 Dec 27 j 18:00 24°≈44'11 evening set -6717 Mar 26 i 00:07 25°≈58'12 conjunction -6724 Mar 31 i 05:13 19°≈03'30 -10°05'51 max. Earth dist. -6717 Apr 06 i 16:19 26°≈14'46 46.45644 AU -6724 Mar 31 i 05:25 19°≈03'31 10°06'11 minimum elong -6724 Apr 12 j 06:23 19°≈20'18 -6717 Apr 08 j 12:51 26°≈17'25 -8°18'28 morning rise conjunction -6717 Apr 08 j 13:03 -6724 Jul 10 j 20:22 20°≈35'07 retrograde minimum elong 26°≈17'26 8°18'46 -6724 Sep 30 j 02:54 19°≈34'34 -10°24'51 -6717 Apr 22 j 01:37 opposition morning rise 26°≈36'39 -6724 Oct 01 j 10:24 -6717 Jul 19 j 02:44 27°≈50'50 min. Earth dist. 19°≈33'01 45.46612 AU retrograde direct -6724 Dec 21 j 03:48 18°≈33'09 opposition -6717 Oct 07 j 21:37 26°≈49'38 -8°32'21 -6717 Oct 09 j 13:19 evening set -6723 Mar 20 j 06:24 19°≈47'17 min. Earth dist. 26°≈47'40 44.39423 AU max. Earth dist. -6723 Mar 31 j 01:25 20°≈02'21 47.36460 AU direct -6717 Dec 28 j 23:28 25°≈47'17 evening set -6716 Mar 26 j 04:02 27°≈01'19 -6723 Apr 01 j 12:50 -6716 Apr 06 j 23:21 conjunction 20°≈04'25 -9°51'20 max. Earth dist. 27°≈18'07 46.28926 AU -6723 Apr 01 j 13:03 minimum elong 20°**≈**04'26 9°51'39 -6716 Apr 08 j 21:29 morning rise -6723 Apr 13 j 19:22 20°≈21'35 conjunction 27°≈20'52 -8°02'03 retrograde -6723 Jul 12 j 03:46 21°≈36'15 minimum elong -6716 Apr 08 j 21:40 27°**≈**20'53 8°02'19 opposition -6723 Oct 01 j 08:34 20°≈35'37 -10°09'39 morning rise -6716 Apr 22 j 14:42 27°≈40'26 min. Earth dist. -6723 Oct 02 j 17:07 20°≈34'01 45.32328 AU retrograde -6716 Jul 19 j 09:15 28°≈54'34 direct -6723 Dec 22 j 08:59 19°≈34'04 opposition -6716 Oct 08 j 04:25 27°≈53'13 -8°15'09 -6722 Mar 21 j 08:41 min. Earth dist. -6716 Oct 09 j 22:27 27°≈51'07 44.22321 AU evening set 20°≈48'08

-6722 Apr 01 j 07:19

max. Earth dist.

21°≈03'28 47.22211 AU

direct

-6716 Dec 29 j 07:52

26°≈50'40

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6715 in astronomical counting style is the year 6716 BCE in historical counting style. minimum elong -6715 Mar 27 j 08:24 28°≈04'44 -6709 Apr 17 j 13:27 4°**) (**54'24 5°59'30 evening set -6715 Apr 08 j 07:08 28°≈21'46 46.11743 AU -6709 May 02 j 09:48 5°¥16'06 max. Earth dist. morning rise -6709 Jul 27 j 18:48 6°¥30'29 retrograde -6709 Oct 16 j 07:22 5°**)** 28'04 -6°06'18 -6715 Apr 10 j 06:17 28°≈24'36 -7°45'22 conjunction opposition -6715 Apr 10 j 06:28 -6709 Oct 18 j 08:31 5°**升**25'34 42.93183 AU minimum elong 28°**≈**24'37 7°45'39 min. Earth dist. -6715 Apr 24 j 03:49 -6708 Jan 06 j 14:27 morning rise 28°≈44'29 direct 4°**)**€24'10 -6715 Jul 20 j 14:26 retrograde 29°≈58'35 evening set -6708 Apr 02 j 22:31 5°****39'03 opposition -6715 Oct 09 j 11:06 28°≈57'05 -7°57'40 max. Earth dist. -6708 Apr 15 j 16:13 5°**升**57'42 44.82504 AU min. Earth dist. -6715 Oct 11 j 05:35 28°≈54'57 44.04775 AU direct -6715 Dec 30 j 17:44 27°≈54'20 conjunction -6708 Apr 17 j 23:14 6°**₭**01'05 -5°40'33 evening set -6714 Mar 28 j 13:02 29°≈08'26 minimum elong -6708 Apr 17 j 23:24 6°**₭**01'06 5°40'46 -6708 May 02 j 22:53 max. Earth dist. -6714 Apr 09 j 13:30 29°≈25'39 45.94134 AU morning rise 6°**¥**23′06 -6708 Jul 28 j 04:29 retrograde 7°**)** €37'38 conjunction -6714 Apr 11 j 15:06 29°≈28'38 -7°28'24 opposition -6708 Oct 16 j 15:25 6°\;\;35'05 -5°46'38 minimum elong -6714 Apr 11 j 15:17 29°**≈**28'39 7°28'40 min. Earth dist. -6708 Oct 18 j 17:20 6°**升**32'32 42.73692 AU morning rise -6714 Apr 25 j 16:57 29°≈48'50 direct -6707 Jan 06 j 21:53 5°\ 31'00 -6714 May 03 j 17:34 0°**)**€ evening set -6707 Apr 04 j 05:38 6°¥46'07 retrograde -6714 Jul 21 j 23:15 1°**)**€02'55 max. Earth dist. -6707 Apr 17 j 00:02 7°**¥**04'54 44.62961 AU 0°**)**€01'15 -7°39'53 opposition -6714 Oct 10 j 18:07 -6714 Oct 11 j 19:02 30°R≈ conjunction -6707 Apr 19 j 09:21 7°**¥**08'27 -5°21'32 min. Earth dist. -6714 Oct 12 j 14:26 29°≈59'01 43.86852 AU minimum elong -6707 Apr 19 j 09:29 7°**)**€08'28 5°21'45 direct -6714 Dec 31 i 23:39 28°≈58'18 morning rise -6707 May 04 j 12:14 7°**)** 30'45 -6713 Mar 20 j 18:30 0°**)**€ retrograde -6707 Jul 29 i 17:48 8° **\(**45'27 evening set -6713 Mar 29 i 17:37 0°**)** 12'27 opposition -6707 Oct 17 j 23:37 7°\(\)\(42'45\)\(-5^26'40\) max. Earth dist. -6713 Apr 10 j 22:18 0°**)** €29'58 45.76172 AU min. Earth dist. -6707 Oct 20 j 02:38 7°**)** 40′08 42.53854 AU -6706 Jan 08 j 03:07 6°¥38'28 direct -6713 Apr 12 j 23:58 0°**)** 32'58 -7°11'10 -6706 Apr 05 j 13:03 7° ¥ 53'51 conjunction evening set -6713 Apr 13 j 00:09 -6706 Apr 18 j 09:32 8°**升**12'50 44.43019 AU 0° **★**32'59 7°11'26 max. Earth dist. minimum elong -6713 Apr 27 j 05:43 0°**)** 53′28 morning rise -6713 Jul 23 j 07:23 2°**)**(07'34 -6706 Apr 20 j 19:53 8°¥16'28 -5°02'14 conjunction retrograde 1°**¥**05'44 -7°21'47 -6706 Apr 20 j 20:02 -6713 Oct 12 j 01:16 minimum elong 8°**¥**16'29 5°02'27 opposition -6713 Oct 13 j 22:25 -6706 May 06 j 01:31 8° ¥ 39'03 min. Earth dist. 1°**₭**03'28 43.68598 AU morning rise -6706 Jul 31 j 04:28 -6712 Jan 02 j 06:31 0°**₩**02'35 9°**¥**53′56 direct retrograde -6712 Mar 29 j 22:49 1°**)** 16'49 -6706 Oct 19 j 08:20 8°****51'04 -5°06'23 evening set opposition 1°**)** 34'31 45.57917 AU -6706 Oct 21 j 13:20 8°**¥**48'20 42.33600 AU max. Earth dist. -6712 Apr 11 j 05:28 min. Earth dist. -6705 Jan 09 j 11:20 7°**)** 46'34 direct -6712 Apr 13 j 09:00 9°**₩**02'12 conjunction 1°**₭**37'39 -6°53'38 evening set -6705 Apr 06 j 20:45 minimum elong -6712 Apr 13 j 09:10 1°**升**37'39 6°53'52 max. Earth dist. -6705 Apr 19 j 18:47 9°**升**21'23 44.22660 AU morning rise -6712 Apr 27 j 18:48 1°**¥**58′27 retrograde -6712 Jul 23 j 18:00 3°**¥**12'35 conjunction -6705 Apr 22 j 06:23 9°\ 25'06 -4°42'39 -6712 Oct 12 j 08:22 2°**升**10'36 -7°03'23 -6705 Apr 22 j 06:31 9°\ 25'07 4°42'51 opposition minimum elong min. Earth dist. -6712 Oct 14 j 06:11 2°¥08'17 43.50088 AU -6705 May 07 j 14:51 9°**)**(47'57 morning rise -6711 Jan 02 j 12:36 1°**)**€07'14 -6705 Aug 01 j 13:01 11°**)** 03'01 direct retrograde -6711 Mar 31 j 04:15 2°\ 21'36 -6705 Oct 20 j 17:05 9°****59'59 -4°45'48 evening set opposition -6711 Apr 12 j 13:54 2°**)** 39'32 45.39402 AU -6705 Oct 22 j 22:30 9°¥57'13 42.12918 AU max. Earth dist. min. Earth dist. 8°**¥**55'15 direct -6704 Jan 10 j 23:22 -6711 Apr 14 j 18:22 conjunction 2°\(\)42'44 -6°35'48 evening set -6704 Apr 07 i 05:04 10°¥11'09 minimum elong -6711 Apr 14 j 18:32 2°\(\)42'44 6°36'03 max. Earth dist. -6704 Apr 20 i 03:19 10°**)** € 30'26 44.01856 AU -6711 Apr 29 i 07:49 morning rise 3°\circ 03'51 -6711 Jul 25 i 02:13 4° ¥ 18'01 -6704 Apr 22 j 17:20 10° **★** 34'20 -4°22'47 retrograde conjunction -6711 Oct 13 j 15:58 3°\dagger15'53 -6°44'41 -6704 Apr 22 i 17:28 10°**¥**34'20 4°22'59 opposition minimum elong min. Earth dist. -6711 Oct 15 j 15:24 3°**)** 13′28 43.31338 AU -6704 May 08 j 04:22 10°**¥**57'27 morning rise -6710 Jan 03 j 21:54 2°**)** 12'20 -6704 Aug 01 j 21:54 12°**₩** 12'42 direct retrograde -6704 Oct 21 j 02:03 evening set -6710 Apr 01 j 09:58 3°\ 26'51 opposition 11°\(\)09'27 -4°24'54 11°**¥**06'34 41.91814 AU max. Earth dist. -6710 Apr 13 j 22:43 3°**)** 45.20675 AU min. Earth dist. -6704 Oct 23 j 09:44 direct -6703 Jan 11 j 09:33 10°**)**€04'28 conjunction -6710 Apr 16 j 03:43 3°\(\)48'17 -6°17'41 evening set -6703 Apr 08 j 13:44 11°**)** 20'39 -6710 Apr 16 j 03:53 3°**)** 48'18 6°17'55 max. Earth dist. -6703 Apr 21 j 14:15 11°**光**40′09 43.80645 AU minimum elong -6710 Apr 30 j 20:43 4°**)**€09'42 morning rise -6710 Jul 26 j 09:32 -6703 Apr 24 j 04:36 11°**)** 44'06 -4°02'37 retrograde 5°**)**€23'58 conjunction -6710 Oct 14 j 23:32 -6703 Apr 24 j 04:43 opposition 4°**★**21'41 -6°25'39 minimum elong 11°**)** 44'06 4°02'48 min. Earth dist. -6710 Oct 16 j 22:50 4°**光**19'17 43.12375 AU morning rise -6703 May 09 j 17:54 12°**米**07'29 direct -6709 Jan 05 j 07:37 3°**升**17'57 retrograde -6703 Aug 03 j 06:59 13°**∺**22'57 opposition evening set -6709 Apr 02 j 16:06 4°**)** 32'39 -6703 Oct 22 j 11:19 12°**米**19'29 -4°03'41 max. Earth dist. -6709 Apr 15 j 06:22 4°**₭**51'01 45.01718 AU min. Earth dist. -6703 Oct 24 j 19:36 12° **★**16'33 41.70320 AU -6702 Jan 12 j 19:31 11°**)** 14'14 direct -6709 Apr 17 j 13:17 4°**¥**54'23 -5°59'16 -6702 Apr 09 j 22:48 12°\ 30'41 conjunction evening set

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 15 Attention, astronomical year style is used: The year -6702 in astronomical counting style is the year 6703 BCE in historical counting style.

Attention, astronomic	cal year style is used: Th	e year -6702 i	n astronomical cou	nting style is the year	6703 BCE in historical co	ounting style.	
max. Earth dist.	-6702 Apr 22 j 23:13	12° ¥ 50′18	43.59071 AU	min. Earth dist.	-6696 Nov 02 j 02:05	20°) 43′15	40.13607 AU
				direct	-6695 Jan 20 j 16:49	19°) 39′25	
conjunction	-6702 Apr 25 j 15:47	12°) 54′23	-3°42'10	evening set	-6695 Apr 18 j 03:07	20°) 58′50	
minimum elong	-6702 Apr 25 j 15:53	12°) ₹ 54′24	3°42'21	max. Earth dist.	-6695 May 01 j 07:39	21°) 19′29	42.02084 AU
morning rise	-6702 May 11 j 07:24	13°) 18′02					
retrograde	-6702 Aug 04 j 19:35	14°) €33'44		conjunction	-6695 May 04 j 06:25	21° ¥ 24′10	-1°10'42
opposition	-6702 Oct 23 j 20:45	13°) € 30′02	-3°42'09	minimum elong	-6695 May 04 j 06:27	21° ¥ 24′10	1°10'48
min. Earth dist.	-6702 Oct 26 j 06:15		41.48513 AU	morning rise	-6695 May 20 j 07:33	21° ¥ 49′23	
direct	-6701 Jan 14 j 02:56	12°) 24′30		retrograde	-6695 Aug 13 j 10:21	23°) €07'34	
evening set	-6701 Apr 11 j 08:09	13° ∺ 41'16		opposition	-6695 Oct 31 j 22:54	22° ₩ 02'15	
max. Earth dist.	-6701 Apr 24 j 10:19	14° ₩ 01'05	43.37193 AU	min. Earth dist.	-6695 Nov 03 j 14:06		39.90484 AU
				direct	-6694 Jan 22 j 03:48	20°) 54'47	
conjunction	-6701 Apr 27 j 03:23	14°) €05'14	-3°21'25	evening set	-6694 Apr 19 j 16:13	22°) 14'45	
minimum elong	-6701 Apr 27 j 03:29	14°) €05'14	3°21'34	max. Earth dist.	-6694 May 02 j 19:52	22° ∺ 35'30	41.78826 AU
morning rise	-6701 May 12 j 20:51	14° ∺ 29'07					
retrograde	-6701 Aug 06 j 07:50	15°) 45′04		conjunction	-6694 May 05 j 20:06	22°) 40′17	-0°47'54
opposition	-6701 Oct 25 j 06:27	14°) (41′07	-3°20'18	minimum elong	-6694 May 05 j 20:07	22°) 40′17	0°48'00
min. Earth dist.	-6701 Oct 27 j 17:20	14°) 38′01	41.26438 AU	morning rise	-6694 May 21 j 21:34	23°) €05'42	
direct	-6700 Jan 15 j 12:16	13°) 35′18		retrograde	-6694 Aug 15 j 00:43	24°) €24'23	
evening set	-6700 Apr 11 j 18:02	14° ¥ 52′25		opposition	-6694 Nov 02 j 11:01	23° ∺ 18'49	-0°38'23
max. Earth dist.	-6700 Apr 24 j 21:00	15° ∺ 12'23	43.15090 AU	min. Earth dist.	-6694 Nov 05 j 04:15	23° ¥ 15′17	39.67052 AU
				direct	-6693 Jan 23 j 16:30	22°) 11′04	
conjunction	-6700 Apr 27 j 15:06	15°) 16′37	-3°00'22	evening set	-6693 Apr 21 j 05:59	23°) €31'39	
minimum elong	-6700 Apr 27 j 15:11	15°) 16′38	3°00'31	max. Earth dist.	-6693 May 04 j 09:28	23° ¥ 52'30	41.55249 AU
morning rise	-6700 May 13 j 10:30	15°) 40′44					
retrograde	-6700 Aug 06 j 21:02	16° ¥ 56'58		conjunction	-6693 May 07 j 10:13	23° ¥ 57′22	-0°24'49
opposition	-6700 Oct 25 j 16:22	15° ¥ 52'47	-2°58'08	minimum elong	-6693 May 07 j 10:14	23° ¥ 57′22	0°24'54
min. Earth dist.	-6700 Oct 28 j 03:11		41.04167 AU	morning rise	-6693 May 23 j 11:55	24°) €22'58	
direct	-6699 Jan 15 j 22:46	14°) 46′40		retrograde	-6693 Aug 16 j 13:29	25°) 42′09	
evening set	-6699 Apr 13 j 04:26	16°) 04'11		opposition	-6693 Nov 03 j 23:15	24° ¥ 36′21	-0°14'00
max. Earth dist.	-6699 Apr 26 j 07:39		42.92789 AU	min. Earth dist.	-6693 Nov 06 j 16:41		39.43290 AU
	**************************************	,		direct	-6692 Jan 25 j 06:41	23° ¥ 28'17	
conjunction	-6699 Apr 29 j 03:10	16°) €28'37	-2°39'01	evening set	-6692 Apr 21 j 20:30	24°) 49'29	
minimum elong	-6699 Apr 29 j 03:15	16°) 28'37		max. Earth dist.	-6692 May 04 j 21:34		41.31324 AU
morning rise	-6699 May 15 j 00:04	16° ¥ 52'58	2 37 07	man. Bartir dist.	00,2 1,14, 0 1, 21.5 1	20 /(101)	
retrograde	-6699 Aug 08 j 07:09	18° ¥ 09'31		conjunction	-6692 May 08 j 00:43	25° ¥ 15′23	-0°01'29
opposition	-6699 Oct 27 j 02:41	17° ₩ 05'05	-2°35'38	minimum elong	-6692 May 08 j 00:42	25° H 15'23	
min. Earth dist.	-6699 Oct 29 j 15:16		40.81738 AU	behind sun begin	-6692 May 07 j 18:10	25° H 14'59	0 015.
direct	-6698 Jan 17 j 09:58	15° ¥ 58'41	10.01750110	behind sun end	-6692 May 08 j 07:13	25°) 15'48	
evening set	-6698 Apr 14 j 15:15	17° ¥ 16'37		morning rise	-6692 May 24 j 02:26	25°) (41'10	
max. Earth dist.	-6698 Apr 27 j 20:12		42.70354 AU	asc. node	-6692 May 30 j 07:08	25°) 50'47	
man. Darm dige.	005011p1 27 j 20.12	1, ,(3000	.2., 030 . 110	retrograde	-6692 Aug 17 j 03:20	27°) 00'53	
conjunction	-6698 Apr 30 j 15:33	17°) 41'17	-2°17'23	opposition	-6692 Nov 04 j 12:02	25° H 54'48	0°10'42
minimum elong	-6698 Apr 30 j 15:37	17°) (41'18		min. Earth dist.	-6692 Nov 07 j 07:22		39.19198 AU
morning rise	-6698 May 16 j 13:46	18° ¥ 05'52	2 17 32	direct	-6691 Jan 25 j 18:19	24°) 46'26	37.17170710
retrograde	-6698 Aug 09 j 16:34	19° ¥ 22'45		evening set	-6691 Apr 23 j 11:32	26°\(\frac{1}{10}\)26	
opposition	-6698 Oct 28 j 13:17	18° X 18'06	-2°12'50	max. Earth dist.	-6691 May 06 j 12:21		41.07065 AU
min. Earth dist.	-6698 Oct 31 j 01:43		40.59180 AU	max. Larm dist.	-00)1 Way 00 j 12.21	20 /(2)13	41.07003 AC
direct	-6697 Jan 18 j 22:27	17° X 11'26	40.57100710	conjunction	-6691 May 09 j 15:40	26° ∺ 34'20	0°22'15
evening set	-6697 Apr 16 j 02:32	18° \(\) 29'49		minimum elong	-6691 May 09 j 15:39	26°\(\frac{1}{34}\)20	0°22'10
max. Earth dist.	-6697 Apr 29 j 06:41		42.47784 AU	morning rise	-6691 May 25 j 16:57	20 X 34 20 27° X 00'16	0 22 10
max. Earth dist.	-009/ Apr 29 J 00.41	10 /(3012	42.47764 AU	retrograde	-6691 Aug 18 j 16:56	28°\(\frac{1}{2}\)20'34	
conjunction	-6697 May 02 j 03:58	18° ¥ 54'43	1055127	opposition	-6691 Nov 06 j 01:10	28 X 20 34 27° X 14'12	0°35'42
minimum elong	• •	18° X 54'43		min. Earth dist.			38.94795 AU
Č	-6697 May 02 j 04:01	18 X 34 43	1 33 34		-6691 Nov 08 j 21:21 -6690 Jan 27 j 06:54	26°\circ\tau\05'29	38.94793 AU
morning rise	-6697 May 18 j 03:29	20°\(\frac{1931}{36'48}\)		direct	-	20 H 03 29 27° H 27'59	
retrograde	-6697 Aug 11 j 06:03		1940!41	evening set max. Earth dist.	-6690 Apr 25 j 03:19		40 92520 ATT
opposition	-6697 Oct 30 j 00:10	19° ₩ 31'55		max. Earth dist.	-6690 May 08 j 01:38	21 X 4830	40.82529 AU
min. Earth dist.	-6697 Nov 01 j 13:44		40.36492 AU	aoniumatic	6600 May 11:07 40	2701 5 4112	0016100
direct	-6696 Jan 20 j 06:48	18° ¥ 24'59		conjunction	-6690 May 11 j 06:49	27°\ 54'12 27°\ 54'12	0°46'09
evening set	-6696 Apr 16 j 14:26	19°) 43'51	42 25042 ATT	minimum elong	-6690 May 11 j 06:47		0°46'05
max. Earth dist.	-6696 Apr 29 j 19:45	20° π 04′26	42.25043 AU	morning rise	-6690 May 27 j 07:41	28° ¥ 20'17	
	((0())) 02:17.01	2001/00/50	1022112	retrograde	-6690 Aug 20 j 10:10	29°) 41'11	1001100
conjunction	-6696 May 02 j 17:04	20° ₩ 08'59		opposition	-6690 Nov 07 j 14:36	28° ¥ 34'30	1°01'00
minimum elong	-6696 May 02 j 17:07	20° ₩ 08'59	1*35'21	min. Earth dist.	-6690 Nov 10 j 11:21		38.70162 AU
morning rise	-6696 May 18 j 17:22	20°) ₹34'00		direct	-6689 Jan 28 j 17:32	27°\£25'26	
retrograde	-6696 Aug 11 j 18:49	21°) 51'43	1007114	evening set	-6689 Apr 26 j 19:27	28°\(\)48'40	40 50050 117
opposition	-6696 Oct 30 j 11:21	20° ∺ 46'37	-1~26.14	max. Earth dist.	-6689 May 09 j 16:30	29° 大 09'40	40.57759 AU

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6689 in astronomical counting style is the year 6690 BCE in historical counting style. opposition -6689 May 12 j 22:19 29°**升**15'01 1°10'20 -6683 Nov 17 i 01:16 8°**Υ**26'26 4°05'41 conjunction -6689 May 12 j 22:17 29°**¥**15′01 min. Earth dist. -6683 Nov 20 j 02:18 8°Υ22'15 36.95123 AU minimum elong 1°10'17 -6689 May 28 j 22:13 29°**)**41'13 -6682 Feb 07 j 00:48 7°**Y**14'49 direct morning rise -6689 Jun 09 j 22:34 $0^{\circ}\Upsilon$ 8°Y44'24 -6682 May 07 j 10:43 evening set 1°Y02'46 -6689 Aug 22 j 02:00 -6682 May 19 j 12:39 9°Υ05'15 38.81969 AU retrograde max. Earth dist. -6689 Nov 06 j 00:13 30°**₹** -6689 Nov 09 j 04:33 29°\\$55'46 1°26'35 9°Υ11'15 4°06'14 opposition conjunction -6682 May 22 j 23:13 9°**Ƴ**11'14 -6682 May 22 j 23:04 min. Earth dist. -6689 Nov 12 j 02:53 29°**X**51'52 38.45336 AU minimum elong 4°06'17 -6682 Jun 07 j 08:21 9°Y37'54 direct -6688 Jan 30 j 07:03 28°**)** 46'20 morning rise $0^{\circ}\Upsilon$ 11°**Y**05'13 -6688 Apr 21 j 01:02 retrograde -6682 Sep 01 j 05:12 evening set -6688 Apr 27 j 12:30 0°**Y**10′19 opposition -6682 Nov 18 j 18:41 9°**Ƴ**56'01 4°33'02 -6682 Nov 21 j 21:29 max. Earth dist. -6688 May 10 j 08:04 0°**Υ**31'22 40.32835 AU min. Earth dist. 9°**Υ**51'43 36.69829 AU direct -6681 Feb 08 j 18:23 8°**Y**'44'02 conjunction -6688 May 13 j 14:15 0°**Υ**36'47 1°34'46 evening set -6681 May 09 j 09:24 10°**Y**14'43 minimum elong -6688 May 13 j 14:12 0° **Y**36'47 1°34'44 max. Earth dist. -6681 May 21 j 07:55 10°**Y**35'29 38.56476 AU morning rise -6688 May 29 j 13:05 1°Y03'06 retrograde -6688 Aug 22 j 18:14 2°Y25'19 conjunction -6681 May 24 j 18:27 10°Υ41'33 4°32'12 opposition -6688 Nov 09 j 18:41 1°**Y**18'01 1°52'27 minimum elong -6681 May 24 j 18:17 10° Y41'324°32'14 min. Earth dist. -6688 Nov 12 j 16:48 1°Υ14'06 38.20395 AU morning rise -6681 Jun 09 j 00:07 11°Y08'10 direct -6687 Jan 30 j 23:51 0°Y08'12 retrograde -6681 Sep 03 j 01:00 12° Y 36'30 evening set -6687 Apr 29 j 06:17 1°Y32'59 opposition -6681 Nov 20 j 12:33 11°**Υ**26'57 5°00'36 max. Earth dist. -6687 May 11 j 22:53 1°**Y**54'01 40.07803 AU min. Earth dist. -6681 Nov 23 i 15:15 11°Υ22'37 36.44367 AU direct -6680 Feb 10 i 14:29 10°**Y**14'34 conjunction -6687 May 15 i 06:37 1°**Y**59'35 1°59'27 evening set -6680 May 10 j 09:14 11° **Y**46'24 -6687 May 15 j 06:33 1°Y59'34 1°59'25 max. Earth dist. -6680 May 22 j 01:46 12°Υ06'56 38.30794 AU minimum elong -6687 May 31 j 03:59 2°Y26'00 morning rise -6687 Aug 24 j 10:34 3°**Y**48'55 -6680 May 25 j 14:20 12°Υ13'11 4°58'20 retrograde conjunction -6687 Nov 11 j 09:33 2°**Y**41'18 2°18'36 -6680 May 25 j 14:09 12°**Y**13′11 minimum elong 4°58'23 opposition 2°Υ37'17 37.95398 AU -6680 Jun 09 j 16:10 12° \bar{\gamma} 39'46 min. Earth dist. -6687 Nov 14 j 09:06 morning rise -6686 Feb 01 j 15:01 1°Y31'07 -6680 Sep 03 j 21:19 14°**Y**′09′10 direct retrograde 12°**Υ**59'14 5°28'21 2°Y56'45 opposition -6680 Nov 21 j 06:56 -6686 May 01 j 00:33 evening set -6686 May 13 j 16:10 3°Υ17'52 39.82730 AU -6680 Nov 24 j 11:13 12°**Y**54'48 36.18747 AU max. Earth dist. min. Earth dist. -6679 Feb 11 j 08:01 11°**Υ**46'25 direct 3°**Y**'23'26 2°24'23 -6686 May 16 j 23:17 -6679 May 12 j 09:55 13°**Y**19′28 conjunction evening set -6686 May 16 j 23:12 3°Y23'26 2°24'22 -6679 May 23 j 22:35 13°**Y**39'53 38.04951 AU minimum elong max. Earth dist. -6686 Jun 01 j 18:48 3°**Y**49'56 morning rise 5°**Y**13'38 -6679 May 27 j 10:53 13°**Υ**46'10 5°24'37 retrograde -6686 Aug 26 j 01:17 conjunction -6686 Nov 13 j 00:48 4°Υ05'42 2°45'00 minimum elong -6679 May 27 j 10:41 13°**Y**46′09 5°24'40 opposition min. Earth dist. -6686 Nov 16 j 00:06 4°Υ01'41 37.70376 AU morning rise -6679 Jun 11 j 08:16 14°Υ12'41 -6685 Feb 03 j 07:04 2° Y55'10 retrograde -6679 Sep 05 j 15:33 15°**Y**43′10 direct -6685 May 02 j 19:51 4°Υ21'42 -6679 Nov 23 j 02:05 14°**Υ**32'52 5°56'17 evening set opposition -6685 May 15 j 07:47 4°**Υ**'42'44 39.57639 AU min. Earth dist. -6679 Nov 26 j 06:42 14°**Υ**28'22 35.92988 AU max. Earth dist. -6678 Feb 13 j 03:27 13°Y19'37 direct -6685 May 18 j 16:25 4°Υ48'27 2°49'32 -6678 May 14 j 11:30 14°Y53'53 conjunction evening set -6685 May 18 j 16:19 4°Υ48'27 2°49'30 max. Earth dist. -6678 May 25 j 17:54 15°**Υ**14'02 37.78996 AU minimum elong -6685 Jun 03 j 10:00 5°Υ15'02 morning rise -6678 May 29 i 07:36 15°**Y**20′29 retrograde -6685 Aug 27 j 18:45 6°Y39'33 conjunction 5°51'01 -6678 May 29 i 07:22 opposition -6685 Nov 14 j 16:20 5°**Υ**31'19 3°11'39 minimum elong 15°**Y**20′28 5°51'06 15°**Y**46′53 min. Earth dist. -6685 Nov 17 j 16:24 5°**Y**27'13 37.45355 AU morning rise -6678 Jun 13 i 00:26 direct -6684 Feb 04 i 20:03 4°**Y**20′25 retrograde -6678 Sep 07 j 13:14 17°**Y**18'32 -6684 May 03 j 15:51 5°**Y**47'55 -6678 Nov 24 j 21:37 16°**Y**′07'49 6°24'22 evening set opposition max. Earth dist. -6684 May 16 j 01:44 6°Υ08'58 39.32509 AU min. Earth dist. -6678 Nov 28 j 02:36 16°**Y**03'17 35.67167 AU direct -6677 Feb 14 j 20:41 14°Y54'06 6°Υ14'43 3°14'54 16°**Y**29'41 conjunction -6684 May 19 j 10:15 evening set -6677 May 16 j 14:00 16°**Y**49'39 37.52979 AU minimum elong -6684 May 19 j 10:08 6°Υ14'43 3°14'54 max. Earth dist. -6677 May 27 j 15:25 morning rise -6684 Jun 04 j 01:15 6°**Y**41'21 -6684 Aug 28 j 12:54 8°Y06'46 conjunction -6677 May 31 j 05:07 16°Υ56'09 6°17'33 retrograde -6684 Nov 15 j 08:37 6°Y58'12 3°38'33 -6677 May 31 j 04:53 16°**Y**56′08 6°17'37 opposition minimum elong 6°**Y**54'02 37.20280 AU -6677 Jun 14 j 16:39 17°**Y**22'24 min. Earth dist. -6684 Nov 18 j 09:41 morning rise 5°**Y**46'58 -6677 Sep 09 j 10:39 18°Y55'17 direct -6683 Feb 05 j 10:06 retrograde 7°**Υ**15'28 17°**Ƴ**44'09 evening set -6683 May 05 j 12:52 opposition -6677 Nov 26 j 17:47 6°52'33 max. Earth dist. -6683 May 17 j 18:57 7°**Y**36'26 39.07307 AU min. Earth dist. -6677 Nov 29 j 23:54 17°**Y**39'31 35.41334 AU direct -6676 Feb 16 j 14:52 16°**Y**29'58 conjunction -6683 May 21 j 04:24 7°**Υ**42'18 3°40'28 evening set -6676 May 17 j 17:43 18°**Y**06′56 minimum elong -6683 May 21 j 04:16 7°**Υ**42'18 3°40'29 max. Earth dist. -6676 May 28 j 13:12 18°**Y**26'38 37.26992 AU -6683 Jun 05 j 16:46 8°Y08'57 morning rise -6683 Aug 30 j 09:23 9°Y35'18 -6676 Jun 01 j 03:05 18°**Y**'33'13 6°44'08 retrograde conjunction

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6676 in astronomical counting style is the year 6677 BCE in historical counting style. 18°**Ƴ**33'12 6°44'14 28°**Y**26'16 -6676 Jun 01 i 02:49 direct -6669 Feb 27 i 23:12 minimum elong -6676 Jun 15 i 09:08 18°**℃**59'17 -6669 May 25 j 04:57 0°8 morning rise -6676 Sep 10 j 10:19 20°**Y**33′27 -6669 Jun 02 j 03:24 0°815'10 evening set retrograde 0°**8**31'58 35.49910 AU -6676 Nov 27 j 14:33 19°**Y**21'54 7°20'50 -6669 Jun 10 j 17:36 max. Earth dist. opposition -6676 Nov 30 j 19:57 19°**Y**17'16 35.15579 AU min. Earth dist. -6675 Feb 17 j 11:54 18°**Y**07'15 -6669 Jun 14 j 06:35 9°49'32 direct conjunction 0°**8**38'57 19° **Y**45'40 -6669 Jun 14 j 06:13 0°**8**38'55 9°49'43 evening set -6675 May 19 j 22:18 minimum elong -6669 Jun 26 j 06:52 20°**Υ**'05'02 37.01089 AU 1°802'33 max. Earth dist. -6675 May 30 j 11:03 morning rise 2°847'59 retrograde -6669 Sep 23 j 20:42 conjunction -6675 Jun 03 j 01:36 20°**Y**11'44 7°10'46 opposition -6669 Dec 10 j 12:12 1°**8**33'42 10°38'06 minimum elong -6675 Jun 03 j 01:20 20°**Y**11'43 7°10'53 min. Earth dist. -6669 Dec 13 j 17:35 1°**8**28'52 33.40859 AU -6675 Jun 17 j 01:30 20°**Ƴ**37'35 -6668 Mar 01 j 01:37 0°816'02 morning rise direct 22°Y13'07 2°**8**06'58 retrograde -6675 Sep 12 j 10:20 evening set -6668 Jun 03 j 16:58 opposition -6675 Nov 29 j 12:07 21°**Υ**01'08 7°49'10 max. Earth dist. -6668 Jun 11 j 20:26 2°823'04 35.25298 AU min. Earth dist. -6675 Dec 02 j 18:30 20°Υ 56'26 34.89970 AU direct -6674 Feb 19 j 09:16 19°**Y**46′02 conjunction -6668 Jun 15 j 10:05 2°830'11 10°15'30 evening set -6674 May 22 j 04:04 21°Y25'59 minimum elong -6668 Jun 15 j 09:42 2°830'09 10°15'41 max. Earth dist. -6674 Jun 01 j 11:20 21°**Υ**45'08 36.75367 AU morning rise -6668 Jun 27 j 00:18 2°**8**53'11 retrograde -6668 Sep 25 j 03:04 4°840'34 conjunction -6674 Jun 05 j 00:45 21°**Y**51'48 7°37'25 opposition -6668 Dec 11 j 15:08 3°**8**25'51 11°05'44 minimum elong -6674 Jun 05 j 00:27 21°**Y**51'47 7°37'32 min. Earth dist. -6668 Dec 14 j 21:34 3°**8**20'56 33.16611 AU morning rise -6674 Jun 18 i 18:02 22° Y 17'24 direct -6667 Mar 03 i 03:24 2°807'43 retrograde -6674 Sep 14 i 09:55 23°Y54'21 evening set -6667 Jun 06 j 08:02 4°800'47 opposition -6674 Dec 01 i 10:16 22°**Y**41'59 8°17'30 max. Earth dist. -6667 Jun 14 j 01:39 4°816'15 35.00841 AU min. Earth dist. -6674 Dec 04 j 15:41 22°Υ37'18 34.64573 AU -6673 Feb 21 j 08:40 21°Y26'27 -6667 Jun 17 j 14:12 4°**8**23'20 10°41'12 direct conjunction -6673 May 24 j 10:55 23°Y08'00 -6667 Jun 17 j 13:49 4°**8**23'18 10°41'25 minimum elong evening set -6673 Jun 03 j 10:07 23°Υ26'43 36.49865 AU -6667 Jun 28 j 17:34 4°845'41 max. Earth dist. morning rise -6667 Sep 27 j 07:39 6°835'04 retrograde 23°**Y**33'31 -6673 Jun 07 j 00:25 -6667 Dec 13 j 18:50 5°**8**19'55 11°33'07 conjunction 8°04'02 opposition -6673 Jun 07 j 00:07 23°**Y**'33'30 -6667 Dec 17 j 00:13 5°815'02 32.92532 AU 8°04'09 min. Earth dist. minimum elong -6673 Jun 20 j 10:45 23°**Y**58'49 -6666 Mar 05 j 07:49 4°801'20 direct morning rise 25°**Ƴ**37'19 -6673 Sep 16 j 10:31 -6666 Jun 09 j 00:31 5°**8**56'35 retrograde evening set -6673 Dec 03 j 09:07 24°**Y**24'33 8°45'49 -6666 Jun 16 j 05:43 6°811'10 34.76572 AU opposition max. Earth dist. -6673 Dec 06 j 15:00 24°Υ19'48 34.39423 AU min. Earth dist. -6672 Feb 23 j 05:27 23°**Y**08'35 -6666 Jun 19 j 19:02 6°**8**18'23 11°06'37 direct conjunction 24°**Y**51'51 -6666 Jun 19 j 18:37 6°**8**18'21 11°06'50 evening set -6672 May 25 j 19:02 minimum elong max. Earth dist. -6672 Jun 04 j 11:51 25°Υ10'14 36.24589 AU morning rise -6666 Jun 30 j 11:01 6°**8**40'00 retrograde -6666 Sep 29 j 14:04 8°831'29 25°**Y**17'01 8°30'35 conjunction -6672 Jun 08 j 00:59 opposition -6666 Dec 15 j 23:15 7°**8**15'54 12°00'09 -6672 Jun 08 j 00:40 25°**Y**17′00 8°30'44 min. Earth dist. -6666 Dec 19 j 05:02 7°810'57 32.68692 AU minimum elong -6672 Jun 21 j 03:32 25°**Y**41'58 -6665 Mar 07 j 10:52 5°**8**56'49 morning rise direct -6672 Sep 17 j 09:36 27°**Y**22'04 -6665 Jun 11 j 18:30 7°854'21 retrograde evening set -6672 Dec 04 j 08:42 26°Υ08'56 9°14'04 max. Earth dist. -6665 Jun 18 j 12:57 8°808'10 34.52558 AU opposition -6672 Dec 07 j 14:28 26°**Υ**'04'10 34.14497 AU min. Earth dist. 24°Y52'33 -6665 Jun 22 i 00:38 8°815'20 11°31'40 direct -6671 Feb 24 i 04:02 conjunction evening set -6671 May 28 i 04:36 26°**Y**37'37 minimum elong -6665 Jun 22 j 00:14 8°815'18 11°31'54 26°Υ55'29 35.99532 AU max. Earth dist. -6671 Jun 06 i 12:23 morning rise -6665 Jul 02 i 04:09 8°836'07 retrograde -6665 Oct 01 i 19:18 10°829'48 -6671 Jun 10 i 02:07 27°Y02'23 8°57'02 opposition -6665 Dec 18 i 04:36 9°**8**13'45 12°26'48 conjunction -6671 Jun 10 i 01:47 27°Υ02'22 8°57'11 min. Earth dist. -6665 Dec 21 j 09:49 9°808'48 32.45133 AU minimum elong -6671 Jun 22 j 20:37 27°Y26'57 direct -6664 Mar 08 j 16:12 7°**8**54'11 morning rise -6671 Sep 19 j 12:48 29°**Y**′08'45 -6664 Jun 13 j 14:11 9°854'06 retrograde evening set 27°**Y**'55'14 9°42'13 -6664 Jun 19 j 18:56 opposition -6671 Dec 06 j 09:05 max. Earth dist. 10°806'54 34.28870 AU min. Earth dist. -6671 Dec 09 j 14:25 27°Υ50'28 33.89793 AU -6670 Feb 26 j 00:59 26°**Y**38'26 conjunction -6664 Jun 23 j 06:50 10°**8**14'09 11°56'17 direct 28°Y25'23 -6670 May 30 j 15:09 minimum elong -6664 Jun 23 j 06:24 10°**8**14'07 11°56'32 evening set 28°**Ƴ**42'46 35.74643 AU -6670 Jun 08 j 14:44 -6664 Jul 02 j 21:16 10°834'01 max. Earth dist. morning rise -6664 Oct 03 j 03:17 12°830'00 retrograde -6670 Jun 12 j 03:57 28°**Y**49'41 9°23'22 -6664 Dec 19 j 10:39 11°**8**13'29 12°52'58 conjunction opposition -6670 Jun 12 j 03:36 28°**Y**49'40 9°23'33 11°**8**08'33 32.21961 AU minimum elong min. Earth dist. -6664 Dec 22 j 15:01 29°**Υ**13'48 morning rise -6670 Jun 24 j 13:34 direct -6663 Mar 10 j 20:14 9°**8**53'25 -6670 Jul 20 j 03:04 0°8 evening set -6663 Jun 16 j 11:29 11°**8**55'52 retrograde -6670 Sep 21 j 15:17 0°**8**57'23 max. Earth dist. -6663 Jun 22 j 03:36 12°**8**07'41 34.05590 AU -6670 Nov 27 j 05:56 30°**₹**Υ -6670 Dec 08 j 10:23 29°Y43'29 10°10'15 -6663 Jun 25 j 13:54 12°814'52 12°20'23 opposition conjunction

min. Earth dist.

-6670 Dec 11 j 16:35

29°**Υ**38'38 33.65250 AU

-6663 Jun 25 j 13:29

minimum elong

12°**8**14'50 12°20'39

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Earth dist. -6662 Jun 24 j 12:10 14°**8**10'21 33.82827 AU morning rise 27°**8**23'24 -6656 Oct 20 j 22:27 29°845'13 retrograde -6655 Jan 05 j 21:03 15°55'26 conjunction -6662 Jun 27 j 21:23 14°**8**17'31 12°43'55 opposition 28°**8**25'31 minimum elong -6662 Jun 27 j 20:56 14°**8**17'29 12°44'11 min. Earth dist. -6655 Jan 08 j 16:29 28°**8**20'59 30.56552 AU morning rise -6662 Jul 06 j 06:18 14°**8**35'12 direct -6655 Mar 27 j 18:16 27°**8**02'17 -6662 Jul 18 j 06:03 -6655 Jul 10 j 02:37 29°**8**28'52 32.40021 AU 15°8 max. Earth dist. -6662 Oct 07 j 18:52 16°**8**36'11 retrograde opposition -6662 Dec 24 j 01:44 15°**8**18'45 13°43'32 conjunction -6655 Jul 13 j 01:43 29°835'34 15°06'10 min. Earth dist. -6662 Dec 27 j 03:45 15°**8**13'55 31.77081 AU minimum elong -6655 Jul 13 j 01:21 29°**8**35'32 15°06'32 -6661 Jan 05 j 03:32 15°R₩ -6655 Jul 23 j 21:39 $0^{\circ}\Pi$ direct -6661 Mar 15 j 07:26 13°**8**57'46 retrograde -6655 Oct 23 j 14:35 2°**Ⅱ**04'16 -6661 May 20 j 05:54 15°8 opposition -6654 Jan 08 j 11:36 0°**Ⅱ**44'12 16°13'45 evening set -6661 Jun 22 j 11:42 16°**8**05'38 min. Earth dist. -6654 Jan 11 j 05:07 0°**Д**39'46 30.38462 AU max. Earth dist. -6661 Jun 26 j 21:54 16°815'03 33.60625 AU -6654 Feb 06 j 03:23 30°R₩ direct -6654 Mar 30 j 06:34 29°820'37 conjunction -6661 Jun 30 i 05:56 16°**8**22'10 13°06'46 -6654 May 19 j 11:01 $\Pi^{\circ}0$ -6661 Jun 30 i 05:31 16°**8**22'08 13°07'03 max. Earth dist. -6654 Jul 12 j 18:58 1°**Д**48'43 32.21949 AU minimum elong -6661 Jul 07 j 22:20 16°**8**38'34 morning rise retrograde -6661 Oct 10 j 04:34 18°**8**42'16 conjunction -6654 Jul 15 i 15:45 1°II55'16 15°22'28 -6661 Dec 26 j 10:30 17°**8**24'26 14°07'46 -6654 Jul 15 j 15:22 1°**I**I55'14 opposition minimum elong 15°22'50 -6661 Dec 29 j 12:26 17°**8**19'34 31.55508 AU -6654 Oct 26 j 04:19 4°**I**125'17 min. Earth dist. retrograde -6660 Mar 16 j 13:02 16°803'01 -6653 Jan 11 j 03:07 3°**I**104'52 16°30'48 direct opposition -6660 Jun 24 j 15:21 18°**8**13'51 -6653 Jan 13 j 19:48 3°**Д**00'28 30.20964 AU min. Earth dist. evening set -6660 Jun 28 j 09:13 18°**8**21'54 33.39047 AU -6653 Apr 01 j 20:01 1°**Ⅱ**40′56 max. Earth dist. direct -6653 Jul 15 j 11:15 4°**I**10'25 32.04530 AU max. Earth dist. -6660 Jul 01 j 15:14 18°**8**28'55 13°28'54 conjunction -6660 Jul 01 j 14:48 18°**8**28'53 -6653 Jul 18 j 06:26 4°**I**16'53 15°37'31 13°29'12 minimum elong conjunction -6660 Jul 08 j 13:29 18°**8**43'53 -6653 Jul 18 j 06:06 4°П16'51 15°37'53 morning rise minimum elong -6660 Oct 11 j 16:27 20°**8**50'28 -6653 Oct 28 j 21:21 6°**Ⅱ**48'11 retrograde retrograde -6660 Dec 27 j 20:16 19°**8**32'14 14°31'12 -6652 Jan 13 j 19:10 5°**I**27'24 16°46'28 opposition opposition 19°**8**27'30 31.34549 AU -6652 Jan 16 j 09:14 5°**Ⅲ**23'09 30.04128 AU min. Earth dist. -6660 Dec 30 j 19:57 min. Earth dist. direct -6659 Mar 18 j 23:08 18°**8**10'25 direct -6652 Apr 03 j 10:23 4°**Ⅲ**03′06 -6659 Jun 27 j 21:31 20°**8**24'28 max. Earth dist. -6652 Jul 17 j 04:50 6°**Д**34'01 31.87811 AU evening set max. Earth dist. -6659 Jun 30 j 19:53 20°830'50 33.18077 AU conjunction -6652 Jul 19 j 21:52 6°**耳**40'18 15°51'14 -6659 Jul 04 j 01:14 20°**8**37'51 13°50'14 -6652 Jul 19 j 21:32 6°**耳**40'16 15°51'37 conjunction minimum elong -6659 Jul 04 j 00:49 20°**8**37'49 13°50'32 -6652 Oct 30 j 13:31 9°**Ⅱ**12'51 minimum elong retrograde -6659 Jul 10 j 03:32 20°**8**51'08 -6651 Jan 15 j 12:24 7°II51'42 17°00'41 morning rise opposition -6659 Oct 14 j 06:00 23°**8**00'52 -6651 Jan 18 j 01:32 7°**Ц**47'30 29.88024 AU retrograde min. Earth dist. -6659 Dec 30 i 07:04 21°**8**42'14 14°53'45 opposition direct -6651 Apr 06 j 00:13 6°**Ⅱ**27'05 -6658 Jan 02 i 06:21 21°**8**37'31 31.14203 AU min. Earth dist. max. Earth dist. -6651 Jul 19 j 23:33 8°**Д**59'23 31.71900 AU -6658 Mar 21 i 08:00 20°820'03 direct -6651 Jul 22 i 13:39 9°**I**05'26 16°03'31 evening set -6658 Jul 01 i 07:29 22°837'34 conjunction minimum elong max. Earth dist. -6658 Jul 03 j 09:22 22°**8**42'08 32.97713 AU -6651 Jul 22 i 13:22 9°**I**105'24 16°03'55 retrograde -6651 Nov 02 j 07:31 11°**Ⅲ**39'11 -6658 Jul 06 j 12:11 22°849'00 14°10'41 -6650 Jan 18 j 06:16 10°**Ⅲ**17'40 17°13'20 conjunction opposition -6658 Jul 06 j 11:45 22°848'57 14°11'00 min. Earth dist. -6650 Jan 20 j 16:04 10°**耳**13'41 29.72741 AU minimum elong -6658 Jul 11 j 15:35 23°**8**00'19 morning rise direct -6650 Apr 08 j 18:36 8°**I**52'45 11°**Ⅱ**26'18 31.56867 AU retrograde -6658 Oct 16 j 18:09 25°**8**13'27 max. Earth dist. -6650 Jul 22 j 18:04 -6657 Jan 01 j 18:42 23°**8**54'28 15°15'21 opposition min. Earth dist. -6657 Jan 04 j 16:11 23°849'50 30.94432 AU conjunction -6650 Jul 25 j 06:07 11°**II**32'12 16°14'18 -6657 Mar 23 j 19:19 22°831'56 -6650 Jul 25 j 05:49 11°**Ⅱ**32'10 16°14'42 direct minimum elong -6657 Jul 04 j 22:38 24°**8**53'22 -6650 Nov 05 j 02:08 14°**Ⅱ**07'04 evening set retrograde -6657 Jul 05 j 21:27 24°**8**55'29 32.77922 AU -6649 Jan 21 j 00:50 12°**Ⅱ**45'14 17°24'18 max. Earth dist. opposition -6649 Jan 23 j 09:03 12°**Ⅱ**41'21 29.58372 AU min. Earth dist. conjunction -6657 Jul 08 j 23:50 25°**8**02'22 14°30'12 direct -6649 Apr 11 j 10:49 11°**Ⅲ**20′02 minimum elong -6657 Jul 08 j 23:26 25°**8**02'19 14°30'33 max. Earth dist. -6649 Jul 25 j 14:51 13°**I**54'57 31.42817 AU morning rise -6657 Jul 13 j 00:00 25°**8**11'16 retrograde -6657 Oct 19 j 08:54 27°**8**28'15 conjunction -6649 Jul 27 j 23:09 14°**耳**00'31 16°23'28 -6656 Jan 04 j 07:21 26°**8**08'55 15°35'56 -6649 Jul 27 j 22:56 14°**耳**00′30 16°23'53 opposition minimum elong -6656 Jan 07 j 03:56 26°**8**04'19 30.75224 AU -6649 Nov 07 j 20:54 16°**Ⅲ**36′28 min. Earth dist. retrograde

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6648 in astronomical counting style is the year 6649 BCE in historical counting style. -6648 Jan 23 j 20:12 15°**Ⅱ**14'20 17°33'30 opposition -6640 Feb 14 i 04:36 5°951'27 17°37'06 opposition 5°549'21 28.73601 AU -6648 Jan 26 j 00:52 15°**Ⅱ**10'41 29.44970 AU min. Earth dist. -6640 Feb 15 j 10:35 min. Earth dist. -6648 Apr 13 j 05:37 13°**Ⅱ**48'54 -6640 May 04 j 03:00 direct direct 4°9625'21 -6648 Jul 27 j 10:20 16°**I**24'58 31.29790 AU -6640 Aug 17 j 22:36 max. Earth dist. max. Earth dist. 7°507'57 30.62454 AU -6648 Jul 29 j 16:35 16°**Ⅲ**30′21 -6640 Aug 19 j 02:29 16°25'13 conjunction 16°30'58 conjunction 7°**©**10'48 -6648 Jul 29 j 16:22 16°25'40 minimum elong 16°**Ⅲ**30′20 16°31'23 minimum elong -6640 Aug 19 j 02:37 7°9510'49 -6640 Nov 30 j 18:26 retrograde -6648 Nov 09 j 18:03 19°**Ⅲ**07′20 retrograde 9°952'42 opposition -6647 Jan 25 j 16:18 17°**Ⅱ**44'56 17°40'52 opposition -6639 Feb 16 j 04:18 8°929'04 17°28'22 min. Earth dist. -6647 Jan 27 j 18:35 17°**耳**41'26 29.32596 AU min. Earth dist. -6639 Feb 17 j 05:54 8°527'16 28.69056 AU direct -6647 Apr 16 j 00:01 16°**Ⅱ**19'19 direct -6639 May 07 j 03:14 7°902'57 -6647 Jul 30 j 08:45 max. Earth dist. 18°**耳**56'40 31.17827 AU conjunction -6639 Aug 21 j 22:26 9°5548'21 16°15'57 conjunction -6647 Aug 01 j 10:42 19°**Ⅲ**01'39 16°36'43 minimum elong -6639 Aug 21 j 22:36 9°5548'22 16°16'23 minimum elong -6647 Aug 01 j 10:32 19°**Ⅲ**01'39 16°37'08 max. Earth dist. -6639 Aug 20 j 21:49 9°**9**545'50 30.58597 AU retrograde -6647 Nov 12 j 14:01 21°**Ⅲ**39'35 retrograde -6639 Dec 03 j 15:11 12°930'23 opposition -6646 Jan 28 j 13:06 20°**Ⅱ**16′58 17°46'19 opposition -6638 Feb 19 j 04:07 11°**©**06'38 17°17'33 min. Earth dist. -6646 Jan 30 j 12:18 20°**Ⅱ**13'40 29.21241 AU min. Earth dist. -6638 Feb 20 j 03:05 11°505'02 28.65585 AU direct -6646 Apr 18 j 20:48 18°**Ⅲ**51'14 direct -6638 May 10 j 00:46 9°9540'33 max. Earth dist. -6646 Aug 02 j 05:11 21°**Д**29'33 31.06916 AU conjunction -6638 Aug 24 j 18:11 12°9525'46 16°04'45 conjunction -6646 Aug 04 i 04:59 21°**Ⅱ**34'21 16°40'40 minimum elong -6638 Aug 24 i 18:24 12°9525'47 16°05'12 -6646 Aug 04 i 04:51 21°**Ⅱ**34'20 16°41'06 max. Earth dist. -6638 Aug 23 j 21:52 12°523'41 30.55882 AU minimum elong -6646 Nov 15 i 11:27 24°**I**13′09 retrograde -6638 Dec 06 i 12:06 15°907'50 retrograde opposition -6645 Jan 31 j 10:24 22°**I**I50'20 17°49'50 opposition -6637 Feb 22 j 03:50 13°5544'01 17°04'39 -6645 Feb 02 j 06:37 22°II47'15 29.10904 AU -6637 Feb 22 i 22:24 13°542'43 28.63235 AU min. Earth dist. min. Earth dist. 21°**I**I24'29 -6637 May 13 j 00:26 12°917'59 direct -6645 Apr 21 j 15:50 direct -6645 Aug 05 j 04:20 24°**Д**03'55 30.97025 AU max. Earth dist. -6637 Aug 27 j 13:44 conjunction 15°**©**02'55 15°51'39 -6645 Aug 06 j 23:58 24°**I**108'19 16°42'48 -6637 Aug 27 j 13:59 minimum elong 15°902'56 15°52'04 conjunction -6645 Aug 06 j 23:53 -6637 Aug 26 j 20:35 24°∏08'18 16°43'13 max. Earth dist. 15°**©**01'09 30.54346 AU minimum elong -6645 Nov 18 j 07:55 26°**Ⅱ**47'53 retrograde -6637 Dec 09 j 09:23 17°9544'55 retrograde -6644 Feb 03 j 08:20 25°**Ⅲ**24'55 17°51'21 16°49'40 -6636 Feb 25 j 03:31 16°9521'04 opposition opposition 25°**Ⅲ**22'00 29.01531 AU -6644 Feb 05 j 02:07 -6636 Feb 25 j 18:44 16°520'00 28.62085 AU min. Earth dist. min. Earth dist. -6644 Apr 23 j 13:12 23°**Ⅲ**59'00 -6636 May 14 j 22:31 direct direct 14°955'08 -6644 Aug 07 j 01:45 26°**Ⅲ**39'11 30.88138 AU max. Earth dist. -6636 Aug 29 j 09:15 conjunction 17°939'41 15°36'38 conjunction -6644 Aug 08 j 19:11 26°II43'23 16°43'04 minimum elong -6636 Aug 29 j 09:32 17°**©**39'43 15°37'05 -6644 Aug 08 j 19:07 26°**Ⅱ**43'23 16°43'31 max. Earth dist. -6636 Aug 28 j 21:03 17°538'26 30.54066 AU minimum elong retrograde -6644 Nov 20 j 06:48 29°**Ⅲ**23'40 retrograde -6636 Dec 11 j 06:05 20°9521'31 opposition -6643 Feb 05 j 06:50 28°**I**100'32 17°50'52 -6635 Feb 27 j 03:11 18°**©**57'41 16°32'40 opposition min. Earth dist. -6643 Feb 06 j 20:57 27°**П**57'52 28.93128 AU min. Earth dist. -6635 Feb 27 j 14:13 18°556'55 28.62159 AU -6643 Apr 26 j 10:23 26°**Ⅲ**34'32 direct -6635 May 17 j 22:50 17°931'55 direct max. Earth dist. -6643 Aug 10 j 01:14 29°**П**15'35 30.80229 AU -6635 Sep 01 j 04:17 20°9516'00 15°19'47 conjunction conjunction -6643 Aug 11 j 14:44 29°**Ⅱ**19'23 16°41'28 minimum elong -6635 Sep 01 i 04:35 20°9516'02 15°20'12 minimum elong -6643 Aug 11 j 14:45 29°**Ⅱ**19'23 16°41'53 max. Earth dist. -6635 Aug 31 i 19:06 20°515'04 30.55051 AU -6643 Aug 28 i 09:49 retrograde -6635 Dec 14 i 03:32 22°957'36 retrograde -6643 Nov 23 i 02:30 2°9500'15 opposition -6634 Mar 02 i 02:36 21°**©**33'49 16°13'41 -6642 Feb 08 i 05:55 0°936'58 17°48'20 min. Earth dist. -6634 Mar 02 i 09:33 21°533'20 28.63482 AU opposition min. Earth dist. -6642 Feb 09 j 17:56 0°534'27 28.85662 AU direct -6634 May 20 j 20:12 20°908'15 -6642 Mar 02 j 22:59 30°RⅡ direct 29°**Ⅱ**10′56 -6634 Sep 03 j 23:18 -6642 Apr 29 j 07:44 conjunction 22°951'46 15°01'08 -6642 Jun 22 j 15:56 0000 minimum elong -6634 Sep 03 j 23:39 22°951'48 15°01'34 max. Earth dist. -6642 Aug 12 j 23:43 1°952'33 30.73309 AU max. Earth dist. -6634 Sep 03 j 19:06 22°951'20 30.57286 AU retrograde -6634 Dec 16 j 23:41 25°533'01 conjunction -6642 Aug 14 j 10:32 1°956'07 16°37'58 opposition -6633 Mar 05 j 01:39 24°909'22 15°52'48 -6642 Aug 14 j 10:34 24°509'07 28.65999 AU minimum elong 1°956'07 16°38'24 min. Earth dist. -6633 Mar 05 j 05:13 -6642 Nov 26 j 00:37 22°5544'02 retrograde 4°937'25 direct -6633 May 23 j 19:48 -6633 Sep 03 j 14:47 opposition -6641 Feb 11 j 04:58 3°9514'01 17°43'45 evening set 25°**©**19'17 min. Earth dist. -6641 Feb 12 j 13:02 3°**©**11'46 28.79151 AU -6641 May 02 j 06:06 1°9547'56 conjunction -6633 Sep 06 j 17:50 25°**©**26'54 14°40'46 direct max. Earth dist. -6641 Aug 15 j 23:15 4°930'07 30.67367 AU minimum elong -6633 Sep 06 j 18:11 25°926'56 14°41'11 max. Earth dist. -6633 Sep 06 j 16:20 25°526'45 30.60726 AU conjunction -6641 Aug 17 j 06:35 4°**©**33'19 16°32'33 morning rise -6633 Sep 09 j 21:33 25°534'36 -6641 Aug 17 j 06:40 4°533'20 -6633 Dec 19 j 21:45 28°907'44 minimum elong 16°32'59 retrograde -6641 Nov 28 j 21:25 7°9514'59 -6632 Mar 07 j 00:31 26°5944'12 15°30'06 retrograde opposition

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6632 in astronomical counting style is the year 6633 BCE in historical counting style. 26°5044'15 28.69683 AU min. Earth dist. -6632 Mar 06 j 23:41 conjunction -6626 Sep 23 j 15:14 13°**Ω**02'31 minimum elong -6632 May 25 j 18:31 25°919'09 -6626 Sep 23 j 15:40 13°Ω02'34 11°38'11 direct 27°950'08 -6632 Sep 03 j 22:10 -6626 Sep 24 j 13:43 13°**Ω**04'44 31.14134 AU evening set max. Earth dist. morning rise -6626 Oct 03 j 07:46 13°**Ω**25′17 -6632 Sep 08 j 12:04 -6626 Nov 19 j 04:11 conjunction 28°901'16 14°18'47 15°Ω 15°**Ω**37'59 -6632 Sep 08 j 12:27 14°19'12 -6625 Jan 05 j 22:55 minimum elong 28°901'18 retrograde -6625 Feb 25 j 07:07 max. Earth dist. -6632 Sep 08 j 15:18 28°501'36 30.65309 AU 15°RΩ morning rise -6632 Sep 13 j 02:36 28°9512'27 min. Earth dist. -6625 Mar 25 j 04:00 14°**Ω**17'16 29.23939 AU -6632 Nov 02 j 11:42 0 $^{\circ}\Omega$ opposition -6625 Mar 26 j 03:56 14°**Ω**15'39 12°08'59 retrograde -6632 Dec 21 j 16:04 0°**Ω**41'36 direct -6625 Jun 13 j 20:02 12°**Ω**52'43 -6631 Feb 11 j 14:26 30°R55 -6625 Sep 14 j 14:01 15°Ω -6625 Sep 15 j 23:27 opposition -6631 Mar 09 j 23:15 29°518'13 15°05'41 evening set 15°**Ω**03′13 min. Earth dist. -6631 Mar 09 j 19:43 29°518'27 28.74462 AU direct -6631 May 28 j 16:37 27°953'28 conjunction -6625 Sep 26 j 05:38 15°**Ω**27'09 11°07'03 -6631 Aug 27 j 19:16 $0^{\circ}\Omega$ minimum elong -6625 Sep 26 j 06:03 15°**Ω**27'12 11°07'23 evening set -6631 Sep 05 j 12:57 0°Ω20'54 max. Earth dist. -6625 Sep 27 j 08:15 15°**Ω**29'45 31.25667 AU morning rise -6625 Oct 06 j 12:28 15°**Ω**51'10 conjunction -6631 Sep 11 j 05:52 0°Ω34'43 13°55'15 retrograde -6624 Jan 08 j 12:26 18°**Ω**01'34 minimum elong -6631 Sep 11 j 06:15 0°**Ω**34'45 13°55'39 opposition -6624 Mar 27 j 22:27 16°**Ω**39'26 11°35'27 max. Earth dist. -6631 Sep 11 j 11:50 0°**Ω**35'19 30.70987 AU min. Earth dist. -6624 Mar 26 j 18:56 16°**Ω**41'17 29.35591 AU morning rise -6631 Sep 16 j 23:27 0°**Ω**48'35 direct -6624 Jun 15 j 15:26 15°**Ω**16'51 retrograde -6631 Dec 24 j 12:22 3°**Ω**14'26 evening set -6624 Sep 16 i 23:40 17°**Ω**24'54 opposition -6630 Mar 12 j 21:17 1°Ω51'13 14°39'39 min. Earth dist. -6630 Mar 12 j 13:17 1°Ω51'47 28.80296 AU conjunction -6624 Sep 27 j 19:04 17°**Ω**49'57 10°35'23 -6630 May 31 j 14:54 0°**Ω**26'46 -6624 Sep 27 j 19:30 17°**Ω**50′00 10°35'42 direct minimum elong -6630 Sep 07 j 07:11 2°**Ω**51'01 max. Earth dist. -6624 Sep 29 j 00:12 17°**Ω**52'47 31.38212 AU evening set -6624 Oct 08 j 15:27 18°Ω15'06 morning rise -6630 Sep 13 j 23:19 3°Ω07'06 13°30'17 -6623 Jan 10 j 03:34 20°Ω23'18 conjunction retrograde -6630 Sep 13 j 23:45 3°\$\O7'08 13°30'40 -6623 Mar 29 j 08:58 19°**Ω**03'29 29.48292 AU min. Earth dist. minimum elong 3°**Ω**08'06 30.77688 AU -6630 Sep 14 j 09:21 -6623 Mar 30 j 16:17 19°**Ω**01'24 11°01'01 max. Earth dist. opposition 3°**£**23′14 17°**Ω**39′10 -6630 Sep 20 j 16:06 -6623 Jun 18 j 07:31 direct morning rise $5^{\circ}\Omega46'08$ -6630 Dec 27 j 06:47 -6623 Sep 19 j 00:14 19°**Ω**44'53 evening set retrograde 4°Ω23'05 14°12'07 -6629 Mar 15 j 19:05 opposition -6629 Mar 15 j 08:47 4°**Ω**23'47 28.87119 AU -6623 Sep 30 j 08:08 20°**Ω**10'56 10°02'54 min. Earth dist. conjunction -6629 Jun 03 j 12:11 $2^{\circ}\Omega 58'56$ -6623 Sep 30 j 08:31 20°**Ω**10'59 10°03'13 direct minimum elong -6629 Sep 09 j 03:39 5°**Ω**20′12 -6623 Oct 01 j 17:34 20°Ω14'09 31.51793 AU evening set max. Earth dist. -6623 Oct 11 j 16:46 morning rise 20°**Ω**37'04 conjunction -6629 Sep 16 j 16:11 5°**Q**38'14 13°03'57 retrograde -6622 Jan 12 j 16:09 22°**Ω**43'11 minimum elong -6629 Sep 16 j 16:36 5°**Q**38'16 13°04'19 min. Earth dist. -6622 Mar 31 j 23:08 21°**Ω**23'49 29.62016 AU max. Earth dist. -6629 Sep 17 j 05:05 5°**Ω**39'31 30.85377 AU opposition -6622 Apr 02 j 09:11 21°Ω21'33 10°25'48 morning rise -6629 Sep 24 j 05:22 5°**Ω**56′19 direct -6622 Jun 21 j 01:08 19°**Ω**59'43 -6629 Dec 30 j 00:10 8°**Ω**16′29 -6622 Sep 21 j 01:09 22°**Ω**03'12 retrograde evening set -6628 Mar 17 j 16:11 6°**Ω**53'37 13°43'11 opposition min. Earth dist. -6628 Mar 17 j 01:28 6°**Ω**54'37 28.94895 AU -6622 Oct 02 j 20:18 22°**Ω**30'08 9°29'44 conjunction -6628 Jun 05 j 10:03 5°**Ω**29'46 -6622 Oct 02 j 20:42 22° Ω 30'10 9°30'03 direct minimum elong -6622 Oct 04 i 07:52 22° Ω 33'32 31.66379 AU evening set -6628 Sep 10 j 01:25 7°**Ω**48'11 max. Earth dist. morning rise -6622 Oct 14 i 16:33 $22^{\circ}\Omega$ 57'10 8°Ω07'57 12°36'23 conjunction -6628 Sep 18 j 08:33 retrograde -6621 Jan 15 i 07:03 25° Ω 01'17 minimum elong -6628 Sep 18 i 08:59 8°Ω08'00 12°36'45 min. Earth dist. -6621 Apr 03 j 11:16 23°Ω42'27 29.76738 AU max. Earth dist. -6628 Sep 19 i 00:46 8°**Ω**09'34 30.94009 AU -6621 Apr 05 j 01:22 23°Ω39'56 9°49'53 opposition -6628 Sep 26 j 16:24 8°**Ω**27'47 direct -6621 Jun 23 j 17:22 22°Ω18'31 morning rise -6628 Dec 31 j 15:59 10°Ω45'20 evening set -6621 Sep 23 j 02:03 24°**Ω**19'53 retrograde -6627 Mar 20 j 12:56 9°**Ω**22'39 13°12'57 opposition 9°**Ω**23'49 29.03622 AU min. Earth dist. -6627 Mar 19 j 19:49 conjunction -6621 Oct 05 j 07:50 24°Ω47'36 8°55'59 7°**Ω**59'06 direct -6627 Jun 08 j 05:33 minimum elong -6621 Oct 05 j 08:12 24°**Ω**47'38 8°56'16 -6627 Sep 12 j 00:09 -6621 Oct 06 j 23:28 evening set 10°**Ω**14'47 max. Earth dist. 24° **Ω**51'21 31.81906 AU -6621 Oct 17 j 14:34 morning rise 25°**Ω**15′24 -6627 Sep 21 j 00:14 10°**Ω**36'06 12°07'38 -6620 Jan 17 j 18:47 27°Ω17'37 conjunction retrograde -6627 Sep 21 j 00:40 10°**Ω**36'08 12°08'00 -6620 Apr 05 j 00:49 25°**Ω**59'14 29.92381 AU minimum elong min. Earth dist. 25°**Ω**56'35 9°13'25 -6627 Sep 21 j 19:54 10°**Ω**38'02 31.03600 AU -6620 Apr 06 j 16:57 max. Earth dist. opposition 10°**Ω**57'28 -6620 Jun 25 j 09:02 24°**Ω**35'37 morning rise -6627 Sep 30 j 00:57 direct retrograde -6626 Jan 03 j 07:52 13°**£**12'32 evening set -6620 Sep 24 j 03:22 26°**Ω**34'56 min. Earth dist. -6626 Mar 22 j 11:44 11°**Ω**51'27 29.13289 AU opposition -6626 Mar 23 j 08:49 11°**Ω**50′01 12°41'31 conjunction -6620 Oct 06 j 18:41 27°**Ω**03'20 8°21'44 direct -6626 Jun 11 j 01:52 10°**Ω**26'47 minimum elong -6620 Oct 06 j 19:03 27°**Ω**03′22 8°22'01 -6626 Sep 13 j 23:32 12°**Ω**39'50 max. Earth dist. -6620 Oct 08 j 12:30 27°**Ω**07'16 31.98317 AU evening set

-6620 Oct 19 j 11:11

morning rise

27°**Ω**31'49

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 21

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1.00	morning rise		29° Ω 46'27		direct	-6612 Jul 13 j 09:32	11° m) 48'42	
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	retrograde	-6618 Jan 21 j 17:34	1° Mp 45'06			·	•	
1-80 1-80	min. Earth dist.	-6618 Apr 10 j 00:02	0° m/27'44	30.26147 AU	conjunction	-6612 Oct 23 j 09:20	14° Mp 05'21	3°40'43
Part	opposition	-6618 Apr 11 j 21:43	0° m/24'45	7°59'13	minimum elong	-6612 Oct 23 j 09:29	14° Mp 05'22	3°40'53
Personage		-6618 Apr 27 j 23:28	30° R Ω		max. Earth dist.	-6612 Oct 25 j 21:26	14° m 10'39	33.52460 AU
evening set -6618 Sep 28 j 06.17 17 mg/071 17 mg/072 37 mg/073 3	direct	-6618 Jun 30 j 14:32	29° Ω 04'42		morning rise	-6612 Nov 07 j 04:42	14° m 36'25	
Conjunction		-6618 Aug 29 j 03:10	0° m y		retrograde	-6611 Feb 04 j 22:38	16° m 24'45	
	evening set	-6618 Sep 28 j 06:17	1° m)00'11		min. Earth dist.	-6611 Apr 24 j 12:41	15° Mp 10'24	31.63584 AU
	C	1 3	•		opposition		15° Mp 06'37	3°35'52
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Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6606 in astronomical counting style is the year 6607 BCE in historical counting style. -6606 May 04 i 09:55 24° m 46'53 32.78289 AU opposition -6600 May 17 j 22:09 5°**£**22'54 -2°48'40 min. Earth dist. -6606 May 07 j 07:41 24° m 42'38 0°33'52 -6600 Aug 05 j 19:55 4°**£**10'01 opposition direct -6606 Jul 26 j 04:15 -6600 Oct 30 j 02:15 5°**£**43'45 direct 23° m 27'33 evening set -6606 Oct 19 j 22:43 25° m 06'15 evening set -6600 Nov 14 j 01:40 conjunction 6° 212'12 -2° 54'11 -6606 Nov 04 j 03:39 25° Mp 36'34 -6600 Nov 14 j 01:33 conjunction 0°15'35 minimum elong 6°**2**12'11 2°54'11 -6606 Nov 04 j 03:40 -6600 Nov 17 j 06:15 minimum elong 25° Mp 36'35 0°15'40 max. Earth dist. 6°**2**18'19 36.37781 AU behind sun begin -6606 Nov 04 j 01:55 25° m 36'26 morning rise -6600 Nov 29 j 03:29 6°**-**240'51 behind sun end -6606 Nov 04 j 05:25 25° m 36'43 retrograde -6599 Feb 26 j 11:00 8° £ 18'33 max. Earth dist. -6606 Nov 07 j 01:24 25° m 42'25 34.90369 AU min. Earth dist. -6599 May 16 j 17:50 7°**♀**08'49 34.50590 AU morning rise -6606 Nov 19 j 11:06 26° My 07'05opposition -6599 May 19 j 22:14 7°**2**04'19 -3°20'22 retrograde -6605 Feb 16 j 15:57 27° Mp 49'11 direct -6599 Aug 07 j 21:35 5°**£**51'46 -6599 Nov 01 j 02:25 desc. node -6605 Apr 26 j 07:40 26° M 52'07 evening set 7°**£**24'51 min. Earth dist. -6605 May 06 j 11:58 26° M 37'29 33.02429 AU opposition -6605 May 09 j 11:44 26° M 33'08 -0°01'15 conjunction -6599 Nov 15 j 23:20 7°**£**52'53 -3°23'55 direct -6605 Jul 28 j 06:19 25° m 18'28 minimum elong -6599 Nov 15 j 23:13 7°**♀**52'53 3°23'57 evening set -6605 Oct 21 j 23:32 26° m 56'13 max. Earth dist. -6599 Nov 19 j 03:58 7°**♀**58'58 36.62862 AU morning rise -6599 Nov 30 j 22:58 8°**2**21'08 conjunction -6605 Nov 06 j 04:41 27° m/26'18 -0°17'20 retrograde -6598 Feb 28 i 09:28 9°**≏**58'16 minimum elong -6605 Nov 06 j 04:40 27° m/26'18 0°17'17 min. Earth dist. -6598 May 18 j 15:23 8°**2**48'55 34.75894 AU max. Earth dist. -6605 Nov 09 j 04:35 27° m/32'17 35.14614 AU opposition -6598 May 21 j 21:32 8°**£**44'20 -3°51'25 morning rise -6605 Nov 21 j 12:11 27° m 56'35 direct -6598 Aug 09 j 19:53 7°**£**32'07 retrograde -6604 Feb 18 i 16:39 29° m 37'52 evening set -6598 Nov 03 j 02:18 9°**£**04'36 min. Earth dist. -6604 May 07 j 15:28 28° m 26'28 33.26777 AU opposition -6604 May 10 j 15:14 28° m 22'08 -0°35'51 conjunction -6598 Nov 17 j 20:36 9°**£**32'14 -3°53'04 -6604 Jul 29 j 10:00 27° m 07'52 -6598 Nov 17 j 20:28 9°**£**32'13 3°53'05 direct minimum elong -6604 Oct 23 j 00:27 28° m 44'44 max. Earth dist. -6598 Nov 21 j 03:15 9°**2**38'25 36.88157 AU evening set -6598 Dec 02 j 17:25 10°**£**00'03 morning rise -6604 Nov 07 j 05:15 29° m 14'32 -0°49'43 -6597 Mar 02 j 06:40 conjunction retrograde 11°**£**36'40 10°**≏**27'36 35.01418 AU -6604 Nov 07 j 05:13 29° m 14'32 0°49'39 -6597 May 20 j 14:20 minimum elong min. Earth dist. -6604 Nov 10 j 05:18 29° M 20'29 35.39028 AU -6597 May 23 j 20:28 10° 23'03 -4°21'49 max. Earth dist. opposition -6604 Nov 22 j 12:31 29° m 44'33 direct -6597 Aug 11 j 18:28 9°**₽**11'12 morning rise -6604 Nov 30 j 16:31 -6597 Nov 05 j 01:55 0∘**⊽** 10°**£**43′08 evening set -6603 Feb 19 j 18:56 retrograde 1°**2**25′01 -6603 May 09 j 16:12 -6597 Nov 19 j 17:10 11°**2**10'19 -4°21'37 min. Earth dist. 0°**£**14'03 33.51282 AU conjunction -6603 May 12 j 17:53 -6597 Nov 19 j 17:01 opposition 0°**£**09'38 -1°09'55 minimum elong 11°**⊆**10'18 4°21'39 -6603 May 19 j 10:41 -6597 Nov 23 j 00:01 30°₽,₩ max. Earth dist. 11°**⊆**16'28 37.13667 AU direct -6603 Jul 31 j 12:52 28° m 55'43 morning rise -6597 Dec 04 j 10:56 11°**≏**37'42 -6603 Oct 07 j 15:35 0∘**⊽** retrograde -6596 Mar 03 j 05:44 13°**♀**13'50 evening set -6603 Oct 25 j 01:14 0° - 31'44 min. Earth dist. -6596 May 21 j 10:46 12°**♀**05'11 35.27149 AU opposition -6596 May 24 j 18:48 12°**2**00'33 -4°51'34 -6603 Nov 09 j 05:15 1°**2**01'15 -1°21'37 -6596 Aug 12 j 15:32 10°**♀**49'03 conjunction direct -6603 Nov 09 j 05:12 1°**2**01'15 1°21'35 -6596 Nov 06 j 01:36 12°**♀**20'30 minimum elong evening set max. Earth dist. -6603 Nov 12 j 06:39 1°**2**07'15 35.63546 AU -6603 Nov 24 j 11:52 1°**≏**30'58 -6596 Nov 20 j 13:25 12°**2**47'14 -4°49'33 morning rise conjunction -6596 Nov 20 j 13:15 retrograde -6602 Feb 21 i 19:46 3°**£**10'41 minimum elong 12°**-**47'13 4°49'35 min. Earth dist. -6602 May 11 j 18:27 1°**2**59'59 33.75902 AU max. Earth dist. -6596 Nov 23 i 21:33 12°**2**53'26 37.39341 AU opposition -6602 May 14 j 20:04 1°**£**55'35 -1°43'26 morning rise -6596 Dec 05 i 03:52 13°**♀**14'10 direct -6602 Aug 02 j 15:08 0°**-**42′02 retrograde -6595 Mar 05 i 02:36 14°**£**49'53 -6602 Oct 27 j 01:44 2°**♀**17'15 min. Earth dist. -6595 May 23 i 08:46 13°**2**41'31 35.53042 AU evening set opposition -6595 May 26 j 16:39 13°**£**36'55 -5°20'38 -6602 Nov 11 j 04:41 2°<u>₽</u>46'26 -1°53'01 direct -6595 Aug 14 j 12:30 12°**£**25'47 conjunction -6602 Nov 11 j 04:37 -6595 Nov 08 j 01:04 13°**£**56'47 minimum elong 2°**Ω**46'26 1°52'59 evening set max. Earth dist. -6602 Nov 14 j 06:53 2°**£**52'27 35.88165 AU morning rise -6602 Nov 26 j 10:01 3°**2**15'49 conjunction -6595 Nov 22 j 09:20 14°**£**23'03 -5°16'53 4°**£**54'48 retrograde -6601 Feb 23 j 17:21 minimum elong -6595 Nov 22 j 09:10 14°**2**23'02 5°16'58 3°**2**44'28 34.00627 AU min. Earth dist. -6601 May 13 j 18:16 max. Earth dist. -6595 Nov 25 j 18:20 14°**£**29'17 37.65141 AU -6601 May 16 j 21:19 3°**2**40'01 -2°16'21 -6595 Dec 06 j 19:57 14°**£**49'31 opposition morning rise -6601 Aug 04 j 18:35 2°**₽**26'48 16°**£**24'50 direct retrograde -6594 Mar 06 j 20:45 -6601 Oct 29 j 02:11 evening set 4°**£**01'15 min. Earth dist. -6594 May 25 j 05:00 15°**2**16'51 35.79015 AU opposition -6594 May 28 j 13:52 15°**2**12'12 -5°49'03 conjunction -6601 Nov 13 j 03:24 4°£30'04 -2°23'52 direct -6594 Aug 16 j 12:20 14°**£**01'27 minimum elong -6601 Nov 13 j 03:19 4°**£**30'04 2°23'52 evening set -6594 Nov 10 j 00:34 15°**£**32'02 max. Earth dist. -6601 Nov 16 j 06:04 4°**♀**36'05 36.12890 AU morning rise -6601 Nov 28 j 07:20 4°**£**59'06 conjunction -6594 Nov 24 j 04:38 15°**£**57'49 -5°43'37 -6600 Feb 25 j 15:07 minimum elong -6594 Nov 24 j 04:27 15°**♀**57'48 5°43'42 retrograde 6°**£**37'25

-6600 May 14 j 18:22

min. Earth dist.

5°**2**27'23 34.25518 AU

max. Earth dist.

-6594 Nov 27 j 13:31

16°**♀**04'00 37.90969 AU

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Attention, astronomical year style is used: The year -6594 in astronomical counting style is the year 6595 BCE in historical counting style.

morning rise -6594 Dec 08 j 11:20 16° •23'48 conjunction -6587 Dec 04 j 10:05 26° •23'23 -8°33'49

Attention, astronom	ical year style is used: Th	e year -6594	in astronomical cou	inting style is the year	6595 BCE in historical c	ounting style.	
morning rise	-6594 Dec 08 j 11:20	16° ≙ 23'48		conjunction	-6587 Dec 04 j 10:05	26° ჲ 31′23	-8°33'49
retrograde	-6593 Mar 08 j 15:35	17° ≙ 58'46		minimum elong	-6587 Dec 04 j 09:51	26° ₽ 31'22	8°33'59
min. Earth dist.	-6593 May 27 j 01:27	16° ≙ 51'06	36.05013 AU	max. Earth dist.	-6587 Dec 07 j 19:53	26° ₽ 37'21	39.68588 AU
opposition	-6593 May 30 j 10:43	16° ≏ 46′28	-6°16'48	morning rise	-6587 Dec 17 j 04:29	26° ≏ 53'33	
direct	-6593 Aug 18 j 09:47	15° ≏ 36'04		retrograde	-6586 Mar 18 j 18:25	28° ≏ 26'41	
evening set	-6593 Nov 11 j 23:54	17° Ω 06'16		min. Earth dist.	-6586 Jun 06 j 13:36		37.83531 AU
evening see	00,51,0711,125.01	17 —0010		opposition	-6586 Jun 09 j 23:15	27° Ω 16'14	
conjunction	-6593 Nov 25 j 23:49	17° ₽ 31'34	-6°00'44	direct	-6586 Aug 29 j 01:07	26° ♀ 07'49	, 12
minimum elong	-6593 Nov 25 j 23:37	17° ⊆ 31'33		evening set	-6586 Nov 23 j 16:13	20° ⊆ 36'05	
max. Earth dist.	-6593 Nov 29 j 09:58		38.16776 AU	evening set	-0380 NOV 23 J 10.13	27 = 30 03	
	,		38.10770 AU	:	(50(D 0(: 02.22	279 0 57121	0055142
morning rise	-6593 Dec 10 j 02:00	17° £ 57'02		conjunction	-6586 Dec 06 j 02:23	27° Ω 57'31	
retrograde	-6592 Mar 09 j 08:55	19° £ 31'41	26 20045 444	minimum elong	-6586 Dec 06 j 02:10	27° £ 57'30	
min. Earth dist.	-6592 May 27 j 22:16		36.30945 AU	max. Earth dist.	-6586 Dec 09 j 13:31		39.93522 AU
opposition	-6592 May 31 j 07:04	18° ≏ 19'42	-6°43'53	morning rise	-6586 Dec 18 j 14:26	28° ≙ 19'06	
direct	-6592 Aug 19 j 07:37	17° ≏ 09'38		retrograde	-6585 Mar 20 j 08:30	29° ≏ 52'05	
evening set	-6592 Nov 12 j 23:15	18° ≏ 39'30		min. Earth dist.	-6585 Jun 08 j 07:21		38.08655 AU
				opposition	-6585 Jun 11 j 16:21	28° ≏ 41'53	-9°35'16
conjunction	-6592 Nov 26 j 18:28	19° ≏ 04'16	-6°35'15	direct	-6585 Aug 30 j 19:42	27° ≗ 33'44	
minimum elong	-6592 Nov 26 j 18:16	19° ≏ 04'15	6°35'21	evening set	-6585 Nov 25 j 14:38	29° ≏ 01'51	
max. Earth dist.	-6592 Nov 30 j 03:46	19° ≙ 10′24	38.42479 AU				
morning rise	-6592 Dec 10 j 16:08	19° ≙ 29'13		conjunction	-6585 Dec 07 j 18:21	29° £ 22'42	-9°17'00
retrograde	-6591 Mar 11 j 04:27	21° ₽ 03'35		minimum elong	-6585 Dec 07 j 18:06	29° ≏ 22'41	9°17'10
min. Earth dist.	-6591 May 29 j 17:16	19° ≏ 56'31	36.56757 AU	max. Earth dist.	-6585 Dec 11 j 04:47	29° ≏ 28'38	40.18436 AU
opposition	-6591 Jun 02 j 03:00	19° ≏ 51'54		morning rise	-6585 Dec 19 j 23:54	29° Ω 43'42	
direct	-6591 Aug 21 j 02:28	18° ≏ 42'09			-6585 Dec 29 j 18:55	0°M	
evening set	-6591 Nov 14 j 22:31	20° ₽ 11'41		retrograde	-6584 Mar 21 j 01:38	1°M16'33	
evening set	03711101 14 1 22.51	20 =11 41		min. Earth dist.	-6584 Jun 08 j 22:50		38.33759 AU
conjunction	-6591 Nov 28 j 12:56	20° ₽ 35'55	700010	opposition	-6584 Jun 12 j 09:01	0°M06'37	
minimum elong	-6591 Nov 28 j 12:43	20° ⊆ 35'55	7°00'17	opposition	-6584 Jun 17 j 09:21	30°R Ω	-9 37 08
C				4:4	•		
max. Earth dist.	-6591 Dec 01 j 23:08		38.68014 AU	direct	-6584 Aug 31 j 11:03	28° Ω 58'44	
morning rise	-6591 Dec 12 j 05:39	21° ⊆ 00'21			-6584 Nov 10 j 02:02	0°M	
retrograde	-6590 Mar 12 j 23:26	22° ₽ 34'25	2602200 177	evening set	-6584 Nov 26 j 12:50	0°M26'44	
min. Earth dist.	-6590 May 31 j 13:46		36.82389 AU				
opposition	-6590 Jun 03 j 22:21	21° ≏ 23'01	-7°36'06	conjunction	-6584 Dec 08 j 09:56	0° M 47′00	
direct	-6590 Aug 22 j 21:00	20° ≏ 13'33		minimum elong	-6584 Dec 08 j 09:43	0°M46'59	
evening set	-6590 Nov 16 j 21:38	21° ≏ 42'47		max. Earth dist.	-6584 Dec 11 j 21:14		40.43301 AU
				morning rise	-6584 Dec 20 j 08:54	1° ™ 07'24	
conjunction	-6590 Nov 30 j 06:55	22° ჲ 06′29	-7°24'29	retrograde	-6583 Mar 22 j 19:05	2° ™ 40′10	
minimum elong	-6590 Nov 30 j 06:43	22° ჲ 06′28	7°24'36	min. Earth dist.	-6583 Jun 10 j 16:10	1°M34'57	38.58802 AU
max. Earth dist.	-6590 Dec 03 j 16:30	22° ₽ 12'33	38.93373 AU	opposition	-6583 Jun 14 j 01:26	1°M30'31	-10°18'22
morning rise	-6590 Dec 13 j 18:22	22° ₽ 30′22		direct	-6583 Sep 02 j 01:44	0° ™ 22'55	
retrograde	-6589 Mar 14 j 18:52	24° ₽ 04'09		evening set	-6583 Nov 28 j 11:05	1°M50'51	
min. Earth dist.	-6589 Jun 02 j 07:46	22° ₽ 57'34	37.07841 AU				
opposition	-6589 Jun 05 j 17:16	22° ₽ 53'00	-8°01'15	conjunction	-6583 Dec 10 j 01:25	2°M10'30	-9°57'46
direct	-6589 Aug 24 j 14:45	21° ≏ 43'49		minimum elong	-6583 Dec 10 j 01:10	2°M10'29	9°57'57
evening set	-6589 Nov 18 j 20:26	23° ≏ 12'46		max. Earth dist.	-6583 Dec 13 j 12:36		40.68090 AU
evening see	0005110710120.20	25 —12 10		morning rise	-6583 Dec 21 j 17:17	2°M30'17	.0.00070110
conjunction	-6589 Dec 02 j 00:14	23° ₽ 35'55	-7°48'12	retrograde	-6582 Mar 24 j 10:04	4°M03'00	
minimum elong	-6589 Dec 02 j 00:01	23° ⊆ 35'54		min. Earth dist.	-6582 Jun 12 j 07:25		38.83729 AU
max. Earth dist.	-6589 Dec 05 j 09:59		39.18550 AU	opposition	-6582 Jun 15 j 17:10	2°M53'38	
	,		39.18330 AU		-		-10 3637
morning rise	-6589 Dec 15 j 06:22	23° £ 59'14		direct	-6582 Sep 03 j 17:56	1°M46'19	
retrograde	-6588 Mar 15 j 11:45	25° ₽ 32'47	27 22156 444	evening set	-6582 Nov 30 j 09:18	3°M14'13	
min. Earth dist.	-6588 Jun 03 j 03:02		37.33156 AU				
opposition	-6588 Jun 06 j 11:52	24° ≏ 21'52	-8°25'44	conjunction	-6582 Dec 11 j 16:24	3°M33'16	
direct	-6588 Aug 25 j 10:07	23° ≏ 12'56		minimum elong	-6582 Dec 11 j 16:11	3°M33'15	
evening set	-6588 Nov 19 j 19:09	24° ≏ 41'37		max. Earth dist.	-6582 Dec 15 j 03:01		40.92731 AU
				morning rise	-6582 Dec 23 j 01:14	3°M52'26	
conjunction	-6588 Dec 02 j 17:27	25° ≏ 04'12	-8°11'19	retrograde	-6581 Mar 26 j 00:53	5°M25'08	
minimum elong	-6588 Dec 02 j 17:14	25° ♀ 04'11	8°11'27	min. Earth dist.	-6581 Jun 13 j 23:37	4° ™ 20'27	39.08498 AU
max. Earth dist.	-6588 Dec 06 j 03:56	25° ≙ 10'15	39.43612 AU	opposition	-6581 Jun 17 j 08:53	4°M16′02	-10°58'57
morning rise	-6588 Dec 15 j 17:41	25° ≏ 26'57		direct	-6581 Sep 05 j 10:07	3°M09'01	
retrograde	-6587 Mar 17 j 02:11	27° ♀ 00'16		evening set	-6581 Dec 02 j 07:17	4°M36'54	
min. Earth dist.	-6587 Jun 04 j 20:39	25° ≏ 54'06	37.58365 AU	-			
opposition	-6587 Jun 08 j 05:42	25° ≏ 49'35		conjunction	-6581 Dec 13 j 07:13	4°M55'20	-10°36'13
direct	-6587 Aug 27 j 07:05	24° ≏ 40'54		minimum elong	-6581 Dec 13 j 06:58	4° M 55'19	
	• .			max. Earth dist.	-6581 Dec 16 j 18:33		41.17174 AU
evening set	-6587 Nov 21 j 17:52	26° ♀ 09'22		max, raim oisi	יי אווטו טטעונסכט-	نا اللجااا ز	41.1/1/4 AU

-6581 Dec 24 j 08:31

morning rise

5°**M**₊13'53

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•			•	· · ·	6581 BCE in historical c	, ,	C 2-T
retrograde	-6580 Mar 26 j 12:58	6°M46'35		minimum elong	-6574 Dec 22 j 07:18	14° M .09'16	12°34'04
min. Earth dist.	-6580 Jun 14 j 15:47	5°ML42'07	39.33016 AU	max. Earth dist.	-6574 Dec 25 j 15:29		42.79436 AU
opposition	-6580 Jun 18 j 00:11	5°M37'46		morning rise	-6574 Dec 30 j 21:43	14°ML23'11	
direct	-6580 Sep 06 j 04:04	4°MJ31'01		C	-6573 Jan 23 j 21:44	15° M ₊	
evening set	-6580 Dec 03 j 05:36	5°M58'54		retrograde	-6573 Apr 05 j 09:15	15°M56'20	
C	J			C	-6573 Jun 19 j 09:14	15°RM	
conjunction	-6580 Dec 13 j 21:50	6°M16'43	-10°54'36	min. Earth dist.	-6573 Jun 24 j 21:26	14°M53'04	40.95717 AU
minimum elong	-6580 Dec 13 j 21:37	6°M16'42	10°54'49	opposition	-6573 Jun 28 j 01:43	14°ML49'01	-13°18'15
max. Earth dist.	-6580 Dec 17 j 07:39	6°M22'26	41.41338 AU	direct	-6573 Sep 16 j 09:02	13°ML43'46	
morning rise	-6580 Dec 24 j 15:33	6°M34'38			-6573 Dec 07 j 22:40	15° M ₊	
retrograde	-6579 Mar 28 j 04:05	8°ML07'21		evening set	-6573 Dec 15 j 16:08	15°ML12'14	
min. Earth dist.	-6579 Jun 16 j 06:29	7°ML03'09	39.57235 AU		·		
opposition	-6579 Jun 19 j 15:04	6°M58'48	-11°37'08	conjunction	-6573 Dec 23 j 19:59	15°M25'22	-12°48'28
direct	-6579 Sep 07 j 18:31	5°M52'18		minimum elong	-6573 Dec 23 j 19:47	15°M25'21	12°48'44
evening set	-6579 Dec 05 j 03:46	7°ML20'14		max. Earth dist.	-6573 Dec 27 j 02:56	15°M30'40	43.01624 AU
C	J			morning rise	-6572 Jan 01 j 00:30	15°M38'33	
conjunction	-6579 Dec 15 j 12:18	7°M37'24	-11°12'27	retrograde	-6572 Apr 05 j 22:34	17°ML11'51	
minimum elong	-6579 Dec 15 j 12:03	7°M37'23		min. Earth dist.	-6572 Jun 25 j 09:17		41.18015 AU
max. Earth dist.	-6579 Dec 18 j 22:18		41.65162 AU	opposition	-6572 Jun 28 j 14:21	16°ML04'46	
morning rise	-6579 Dec 25 j 22:07	7°M54'41		·FF	-6572 Sep 11 j 23:05	15°RM₁	
retrograde	-6578 Mar 29 j 18:17	9° M 27'27		direct	-6572 Sep 16 j 20:57	14°ML59'42	
min. Earth dist.	-6578 Jun 17 j 22:56		39.81090 AU	4.1.001	-6572 Sep 21 j 16:14	15°M	
opposition	-6578 Jun 21 j 05:47	8°M19'08		evening set	-6572 Dec 16 j 14:18	16°ML28'22	
direct	-6578 Sep 09 j 09:14	7°M12'53	11 33 23	evening set	0372 Dec 10 j 14.10	10 1102022	
evening set	-6578 Dec 07 j 01:53	8°M40'50		conjunction	-6572 Dec 24 j 08:20	16° M 40'47	-13°02'38
evening set	-0376 Dec 07 j 01.33	0 110-10 30		minimum elong	-6572 Dec 24 j 08:07	16°M40'46	
conjunction	-6578 Dec 17 j 02:19	8°M57'22	11020146	max. Earth dist.	-6572 Dec 27 j 15:17		43.23639 AU
minimum elong	-6578 Dec 17 j 02:05	8°M57'21		morning rise	-6571 Jan 01 j 03:01	16°M53'14	43.23039 AU
max. Earth dist.	-		41.88628 AU	=	-	18°M26'45	
	-6578 Dec 20 j 11:13	9°M13'59	41.00020 AU	retrograde	-6571 Apr 07 j 12:24		41 40140 ATT
morning rise	-6578 Dec 27 j 03:51			min. Earth dist.	-6571 Jun 26 j 22:59		41.40140 AU
retrograde	-6577 Mar 31 j 09:59	10°M46'47	40.04576 ATT	opposition direct	-6571 Jun 30 j 02:41	17°M 19'52	-13-4/30
min. Earth dist.	-6577 Jun 19 j 12:57		40.04576 AU		-6571 Sep 18 j 07:49	16°M 15'01	
opposition	-6577 Jun 22 j 20:02	9°M38'42	-12*13*05	evening set	-6571 Dec 18 j 12:47	17° M 43'55	
direct	-6577 Sep 10 j 22:14	8°M32'39		. ,.	(551 D 05 : 00 04	1.70M	1201717
evening set	-6577 Dec 08 j 23:57	10°M00'40		conjunction	-6571 Dec 25 j 20:34	17°M55'35	
	(577 D 10:1(01	100 M 16122	11046124	minimum elong	-6571 Dec 25 j 20:22	17°M55'35	
conjunction	-6577 Dec 18 j 16:01	10°M16'33		max. Earth dist.	-6571 Dec 29 j 03:25		43.45481 AU
minimum elong	-6577 Dec 18 j 15:47	10°M16'32		morning rise	-6570 Jan 02 j 04:46	18°M07'18	
max. Earth dist.	-6577 Dec 22 j 00:20		42.11733 AU	retrograde	-6570 Apr 09 j 01:03	19°M41'02	41 (2051 477
morning rise	-6577 Dec 28 j 09:16	10°M32'30		min. Earth dist.	-6570 Jun 28 j 11:01		41.62051 AU
retrograde	-6576 Apr 01 j 01:14	12°M05'21		opposition	-6570 Jul 01 j 14:43	18°M34'22	-14°01'19
min. Earth dist.	-6576 Jun 20 j 04:11		40.27738 AU	direct	-6570 Sep 19 j 19:29	17°M29'44	
opposition	-6576 Jun 23 j 10:03	10°ML57′28	-12°30'13	evening set	-6570 Dec 20 j 11:17	18°M58'55	
direct	-6576 Sep 11 j 10:42	9°M51'37					
evening set	-6576 Dec 09 j 21:58	11°ML19'42		conjunction	-6570 Dec 27 j 08:15	19° M ₀09'50	
				minimum elong	-6570 Dec 27 j 08:03	19° M ₀09'49	13°29'44
conjunction	-6576 Dec 19 j 05:32	11°MJ34'55		max. Earth dist.	-6570 Dec 30 j 13:57		43.67088 AU
minimum elong	-6576 Dec 19 j 05:19	11°MJ34'54		morning rise	-6569 Jan 03 j 05:41	19° M 20'46	
max. Earth dist.	-6576 Dec 22 j 14:01		42.34542 AU	retrograde	-6569 Apr 10 j 13:17	20°M54'46	
morning rise	-6576 Dec 28 j 13:59	11°ML50'11		min. Earth dist.	-6569 Jun 29 j 23:28		41.83720 AU
retrograde	-6575 Apr 02 j 11:34	13°M23'07		opposition	-6569 Jul 03 j 02:37	19°M48'20	-14°14'37
min. Earth dist.	-6575 Jun 21 j 18:07		40.50606 AU	direct	-6569 Sep 21 j 07:04	18°M43'54	
opposition	-6575 Jun 24 j 23:35	12°M15'25	-12°46'47	evening set	-6569 Dec 22 j 10:17	20°M13'25	
direct	-6575 Sep 13 j 03:16	11°ML09'46					
evening set	-6575 Dec 11 j 20:06	12°M37'58		conjunction	-6569 Dec 28 j 20:05	20°M23'32	-13°42'06
				minimum elong	-6569 Dec 28 j 19:54	20°M23'31	13°42'24
conjunction	-6575 Dec 20 j 18:38	12°M52'29	-12°18'35	max. Earth dist.	-6568 Jan 01 j 02:11	20° M $28'41$	43.88423 AU
minimum elong	-6575 Dec 20 j 18:25	12°M52'28	12°18'50	morning rise	-6568 Jan 04 j 06:09	20°M33'41	
max. Earth dist.	-6575 Dec 24 j 01:43	12°M57'52	42.57087 AU	retrograde	-6568 Apr 10 j 21:16	22°M08'00	
morning rise	-6575 Dec 29 j 18:08	13°ML07'04		min. Earth dist.	-6568 Jun 30 j 12:24	21°ML05'37	42.05068 AU
retrograde	-6574 Apr 03 j 22:36	14°M40'05		opposition	-6568 Jul 03 j 14:09	21°ML01'47	-14°27'25
min. Earth dist.	-6574 Jun 23 j 07:18	13°MJ36'42	40.73257 AU	direct	-6568 Sep 21 j 21:43	19°M57'33	
opposition	-6574 Jun 26 j 12:45	13°MJ32'36	-13°02'48	evening set	-6568 Dec 23 j 09:56	21°M27'26	
direct	-6574 Sep 14 j 18:10	12°M27'08					
evening set	-6574 Dec 13 j 18:04	13°ML55'27		conjunction	-6568 Dec 29 j 07:42	21°M36'43	-13°54'18
				minimum elong	-6568 Dec 29 j 07:30	21°M36'42	13°54'37
conjunction	-6574 Dec 22 j 07:31	14°ML09'17	-12°33'47	max. Earth dist.	-6567 Jan 01 j 11:54	21°M41'44	44.09418 AU

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6567 in astronomical counting style is the year 6568 BCE in historical counting style. conjunction -6567 Jan 04 i 05:40 21°ML46'02 -6560 Jan 07 j 11:04 29°M53'05 -15°07'24 morning rise -6567 Apr 12 j 08:32 23°M20'42 minimum elong -6560 Jan 07 j 10:56 29°ML53'04 15°07'45 retrograde -6567 Jul 01 j 23:50 22°M18'31 42.26043 AU max. Earth dist. -6560 Jan 10 j 10:10 29°ML57'36 45.45457 AU min. Earth dist. -6567 Jul 05 j 01:29 22°M14'42 -14°39'45 -6560 Jan 11 j 23:54 0°×7 opposition -6560 Apr 20 j 09:26 -6567 Sep 23 j 09:37 direct 21°M10'39 retrograde 1°**х**³33'51 -6567 Dec 25 j 10:08 -6560 Jul 10 j 06:19 0°**х** 32′29 43.61995 AU evening set 22°M40'58 min. Earth dist. 0°**∡**129'02 -15°53'14 opposition -6560 Jul 13 j 01:58 -6567 Dec 30 j 19:10 conjunction 22°M49'23 -14°06'03 -6560 Aug 06 j 17:32 30°RML 29°M26'04 minimum elong -6567 Dec 30 j 19:00 22°M49'22 14°06'22 direct -6560 Oct 01 j 12:06 max. Earth dist. -6566 Jan 02 j 23:04 22°M54'20 44.29998 AU -6560 Nov 24 j 18:35 0°×7 morning rise -6566 Jan 05 j 04:21 22°M57'49 -6566 Apr 13 j 20:34 -6559 Jan 07 j 20:59 1°**₹**01'51 -15°16'05 retrograde 24°M32'54 conjunction -6559 Jan 07 j 20:51 min. Earth dist. -6566 Jul 03 j 13:00 23°M30'46 42.46584 AU minimum elong 1°**х** 01′50 15°16′26 opposition -6566 Jul 06 j 12:36 23°M27'04 -14°51'37 max. Earth dist. -6559 Jan 10 j 19:11 1°**х** 06'17 45.63734 AU direct -6566 Sep 24 j 20:08 22°M23'12 retrograde -6559 Apr 21 j 21:01 2°×742'13 evening set -6566 Dec 27 j 11:22 23°M54'00 min. Earth dist. -6559 Jul 11 j 17:03 1°**х** 40′58 43.80301 AU opposition -6559 Jul 14 j 11:32 1°**х** 37'35 -16°01'53 conjunction -6565 Jan 01 j 06:29 24°ML01'28 -14°17'22 direct -6559 Oct 02 j 19:22 0°**х** 34'47 minimum elong -6565 Jan 01 j 06:18 24°M01'28 14°17'41 max. Earth dist. -6565 Jan 04 j 09:16 24°M06'20 44.50156 AU conjunction -6558 Jan 09 j 06:50 2°**∡**10'13 -15°24'21 morning rise -6565 Jan 06 j 01:35 24°MJ08'57 minimum elong -6558 Jan 09 j 06:43 2°**∡**10'13 15°24'43 retrograde -6565 Apr 15 i 07:39 25°M44'30 max. Earth dist. -6558 Jan 12 i 05:13 2° ₹ 14'39 45.81785 AU min. Earth dist. -6565 Jul 05 i 00:01 24°M42'33 42.66683 AU retrograde -6558 Apr 23 j 04:10 3°**х** 50′13 opposition -6565 Jul 07 i 23:26 24°M38'52 -15°03'01 min. Earth dist. -6558 Jul 13 i 02:53 2° ₹ 49'06 43.98345 AU direct -6565 Sep 26 j 06:57 23°MJ35'09 -6558 Jul 15 j 20:40 2°**₹**'45'46 -16°10'07 opposition evening set -6565 Dec 29 j 13:42 25°MJ06'31 -6558 Oct 04 j 07:00 1°**х** 43′09 direct -6564 Jan 02 j 17:19 25°M12'58 -14°28'15 -6557 Jan 10 j 16:24 3°**₹**18'15 -15°32'11 conjunction conjunction -6564 Jan 02 j 17:09 -6557 Jan 10 j 16:17 25°M12'58 14°28'35 3° ₹18'14 15°32'32 minimum elong minimum elong -6564 Jan 06 j 20:56 25°M19'25 -6557 Jan 13 j 12:57 3° ₹22'33 45.99573 AU morning rise max. Earth dist. -6564 Jan 05 j 18:37 -6557 Apr 24 j 12:13 max. Earth dist. 25°M17'43 44.69878 AU retrograde 4° x 57'52 -6557 Jul 14 j 12:17 -6564 Apr 15 j 19:07 26°M55'31 min. Earth dist. 3°**∡**756'56 44.16112 AU retrograde -6564 Jul 05 j 12:04 25°M53'39 42.86373 AU -6557 Jul 17 j 05:47 3°**₹**53'38 -16°17'54 min. Earth dist. opposition -6564 Jul 08 j 10:11 25°M50'03 -15°13'59 -6557 Oct 05 j 17:28 2° 🗷 51'11 opposition direct -6564 Sep 26 j 17:20 direct 24°M46'29 -6564 Dec 30 j 18:25 -6556 Jan 12 j 01:53 4°**∡**125'57 -15°39'37 evening set 26°M₁8'35 conjunction -6556 Jan 12 j 01:45 minimum elong 4°**₹**25'57 15°40'00 conjunction -6563 Jan 03 j 04:13 26°M23'52 -14°38'42 max. Earth dist. -6556 Jan 14 j 22:36 4°**₰**30'16 46.17045 AU -6563 Jan 03 j 04:03 26° M23'5114°39'02 retrograde -6556 Apr 24 j 20:08 6°**х¹**05′15 minimum elong morning rise -6563 Jan 06 j 13:53 26°M29'07 min. Earth dist. -6556 Jul 14 j 23:18 5°**х** 04'23 44.33518 AU max. Earth dist. -6563 Jan 06 j 05:39 26°M28'36 44.89217 AU opposition -6556 Jul 17 j 14:47 5°**∡**01'11 -16°25'18 -6563 Apr 17 j 02:46 28°M05'56 -6556 Oct 06 j 04:12 3°**∡**¹58'55 retrograde direct -6563 Jul 06 j 23:28 27°MJ04'09 43.05688 AU min. Earth dist. -6563 Jul 09 j 20:23 27°ML00'37 -15°24'29 -6555 Jan 12 j 11:26 5°**∡**33'22 -15°46'40 opposition conjunction -6563 Sep 28 j 06:31 -6555 Jan 12 j 11:20 5°**∡**33'21 15°47'02 direct 25°M57'11 minimum elong -6562 Jan 02 i 03:24 evening set 27°M30'20 max. Earth dist. -6555 Jan 15 i 06:31 5° ₹37'33 46.34139 AU retrograde -6555 Apr 26 j 06:14 7°**х¹**12'18 -6562 Jan 04 j 14:44 27°MJ34'09 -14°48'42 conjunction min. Earth dist. -6555 Jul 16 i 08:04 6° **₹**11'37 44.50504 AU minimum elong -6562 Jan 04 i 14:35 27°M34'08 14°49'03 opposition -6555 Jul 18 j 23:23 6° ₹ 08'26 -16°32'17 -6562 Jan 07 i 01:52 27°ML37'56 direct -6555 Oct 07 j 12:28 5°**х** 06'19 morning rise -6562 Jan 07 j 14:27 27°MJ38'45 45.08224 AU max Earth dist -6562 Apr 18 j 12:23 29°ML15'46 -6554 Jan 13 j 20:46 6°**₹**40'27 -15°53'21 retrograde conjunction -6562 Jul 08 j 09:31 28°M14'08 43.24707 AU -6554 Jan 13 j 20:39 6°**х** 40'26 15°53'44 min. Earth dist. minimum elong opposition -6562 Jul 11 j 06:29 28°M10'36 -15°34'32 max. Earth dist. -6554 Jan 16 j 14:24 6° ₹ 44'31 46.50775 AU -6562 Sep 29 j 17:06 direct 27°M07'20 retrograde -6554 Apr 27 j 17:54 8°**х** 19′02 evening set -6561 Jan 05 j 03:37 28°M42'30 min. Earth dist. -6554 Jul 17 j 18:50 7° **₹**18'24 44.67017 AU 7°**∡**15'19 -16°38'55 opposition -6554 Jul 20 j 08:06 -6561 Jan 06 j 00:54 28°M43'52 -14°58'17 direct -6554 Oct 08 j 19:03 6° **₹**13'21 conjunction -6561 Jan 06 j 00:45 minimum elong 28°M43'51 14°58'37 -6561 Jan 06 j 21:55 28° M45'12-6553 Jan 15 j 05:56 7°**₹**47'09 -15°59'41 evening rise conjunction 28°M48'27 45.26951 AU -6553 Jan 15 j 05:51 max. Earth dist. -6561 Jan 09 j 00:50 minimum elong 7°**∡**¹47'09 16°00'03 -6561 Mar 03 j 06:56 0°**∡**¹ max. Earth dist. -6553 Jan 17 j 23:02 7°**≯**51'11 46.66934 AU retrograde -6561 Apr 19 j 21:37 0°**х** 25′04 retrograde -6553 Apr 29 j 02:45 9°×25'22 -6561 Jun 07 j 12:33 30°RM. min. Earth dist. -6553 Jul 19 j 04:17 8°**尽**24'49 44.83020 AU

min. Earth dist.

opposition

direct

-6561 Jul 09 j 21:01

-6561 Jul 12 j 16:26

-6561 Oct 01 j 04:12

29°M23'30 43.43464 AU

29°M20'03 -15°44'06

28°M16'56

opposition

direct

-6553 Jul 21 j 16:34

-6553 Oct 10 j 03:35

8°**₹**21'49 -16°45'11

7°**∡**19'57

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6552 in astronomical counting style is the year 6553 BCE in historical counting style. -6552 Jan 16 j 14:55 8°**₹**53'26 -16°05'40 retrograde -6544 May 07 j 22:34 19°**х** 03′30 conjunction -6552 Jan 16 i 14:49 8° x 53'26 16°06'03 min. Earth dist. -6544 Jul 28 j 09:48 18°**₹**03'38 46.10227 AU minimum elong 8°**尽**57'19 46.82599 AU -6552 Jan 19 j 05:44 opposition -6544 Jul 30 j 12:37 18°**∡**101'08 -17°24'55 max. Earth dist. -6552 Apr 29 j 11:17 10°**∡**'31'16 -6544 Oct 19 j 06:18 17°**₹**00'15 direct retrograde 9°**₰**30'48 44.98554 AU -6552 Jul 19 j 13:27 min. Earth dist. -6543 Jan 25 j 17:48 18°**∡**31'15 -16°43'24 opposition -6552 Jul 22 j 00:47 9°**₹**27'51 -16°51'05 conjunction -6552 Oct 10 j 12:10 -6543 Jan 25 j 17:47 direct 8°**х** 26′05 minimum elong 18°**∡**31'15 16°43'49 -6543 Jan 28 j 00:34 max. Earth dist. 18°**✗**34'32 48.07596 AU conjunction -6551 Jan 16 j 23:53 9°**x** 59'14 -16°11'17 retrograde -6543 May 09 j 07:43 20°**х** 06′17 9°**₰**59'14 16°11'41 19°**∡**06'32 46.22593 AU minimum elong -6551 Jan 16 j 23:49 min. Earth dist. -6543 Jul 29 j 17:29 10°**∡**03'05 46.97807 AU max. Earth dist. -6551 Jan 19 j 14:31 opposition -6543 Jul 31 j 19:28 19°**₹**04'05 -17°27'34 -6551 Apr 30 j 15:28 11°**∡**³36'43 -6543 Oct 20 j 11:49 retrograde direct 18°**₹**03′18 -6551 Jul 20 j 23:25 min. Earth dist. 10°**∡**36'15 45.13640 AU opposition -6551 Jul 23 j 08:51 10° ₹33'24 -16°56'37 conjunction -6542 Jan 27 j 01:34 19° ₹34'07 -16°45'54 direct -6551 Oct 12 j 00:18 9°×31'43 minimum elong -6542 Jan 27 j 01:34 19°**х**³34′07 16°46'18 max. Earth dist. -6542 Jan 29 j 05:58 19°**∡**37'15 48.19669 AU conjunction -6550 Jan 18 j 08:34 11°**₹**04'33 -16°16'34 retrograde -6542 May 10 j 16:30 21°**х** 08′53 minimum elong -6550 Jan 18 j 08:29 11°**₹**04'33 16°16'58 min. Earth dist. -6542 Jul 31 j 01:44 20°**✗**09'11 46.34461 AU max. Earth dist. -6550 Jan 20 j 21:28 11°**₹**08'17 47.12616 AU opposition -6542 Aug 02 j 02:18 20°**∡**06'49 -17°29'54 retrograde -6550 May 01 j 23:17 12°**∡**′41'40 direct -6542 Oct 21 j 17:34 19°**х** 06′09 min. Earth dist. -6550 Jul 22 j 07:11 11°**₹**41'19 45.28354 AU opposition -6550 Jul 24 i 16:34 11° 2 38'28 -17°01'47 conjunction -6541 Jan 28 i 09:26 20°×36'44 -16°48'06 direct -6550 Oct 13 j 09:07 10°**х** 36′53 minimum elong -6541 Jan 28 i 09:25 20° **х** 36'44 16°48'31 max. Earth dist. -6541 Jan 30 i 13:18 20°**х** 39′50 48.31231 AU conjunction -6549 Jan 19 j 17:02 12°**₹**09'24 -16°21'28 retrograde -6541 May 11 j 20:11 22°**х** 11′15 -6549 Jan 19 j 16:59 12°×709'23 16°21'53 -6541 Aug 01 j 10:21 21° 🖍 11'35 46.45791 AU minimum elong min. Earth dist. max. Earth dist. -6549 Jan 22 j 05:11 12°**х** 13'04 47.27075 AU opposition -6541 Aug 03 j 09:00 21° \$\square\$09'18 -17°31'56 -6549 May 03 j 09:11 -6541 Oct 23 j 03:40 20°**х** 08′43 retrograde 13° **₹** 46′10 direct -6549 Jul 23 j 16:43 12°**₹**'45'50 45.42750 AU min. Earth dist. 12°**₹**43'05 -17°06'34 -6549 Jul 26 j 00:20 -6540 Jan 29 j 17:02 21°\$\square\$39'06 -16°50'01 opposition conjunction -6549 Oct 14 j 15:21 -6540 Jan 29 j 17:04 direct 11°**∡**′41′35 minimum elong 21° x 39'06 16° 50'26 -6540 Jan 31 j 18:37 21° 🖍 42'03 48.42277 AU max. Earth dist. -6548 Jan 21 j 01:27 -6540 May 12 j 01:54 conjunction 13°**≯**13'48 -16°26'01 23°**х** 13′21 retrograde -6548 Jan 21 j 01:23 22°**∡**13'45 46.56607 AU -6540 Aug 01 j 17:25 minimum elong 13°**∡**13'48 16°26'24 min. Earth dist. -6548 Jan 23 j 13:17 -6540 Aug 03 j 15:32 22°**҂**11'30 -17°33'40 max. Earth dist. 13°**≯**17'27 47.41250 AU opposition -6548 May 03 j 16:41 -6540 Oct 23 j 12:21 21°×10'59 retrograde 14°**∡**′50′14 direct -6548 Jul 24 j 00:31 min. Earth dist. 13°**≯**50'01 45.56848 AU opposition -6548 Jul 26 j 07:50 13°**∡**¹47'17 -17°10'58 conjunction -6539 Jan 30 j 00:37 22°**∡**¹41'09 -16°51'38 direct -6548 Oct 14 j 23:32 12°**∡**¹45'54 minimum elong -6539 Jan 30 j 00:36 22°**∡**1'09 16°52'03 max. Earth dist. -6539 Feb 01 j 01:04 22°**≯**44'01 48.52816 AU conjunction -6547 Jan 21 j 09:42 14°**∡**17'50 -16°30'11 retrograde -6539 May 13 j 09:48 24°**₹**15'08 -6547 Jan 21 j 09:39 14°**≯**17'50 16°30'36 min. Earth dist. -6539 Aug 03 j 02:06 23°**✗**15'31 46.66950 AU minimum elong max. Earth dist. -6547 Jan 23 j 19:40 14°**⊀**21'21 47.55139 AU -6539 Aug 04 j 21:54 23°**∡**13'22 -17°35'07 opposition -6547 May 05 j 00:53 15°**∡** 53'56 direct -6539 Oct 24 j 18:51 22°**х** 12'55 retrograde -6547 Jul 25 j 08:40 14°**✗**53'49 45.70675 AU min. Earth dist. -6538 Jan 31 i 08:04 23°×42'51 -16°52'57 opposition -6547 Jul 27 i 15:10 14°**∡**751'07 -17°15'00 conjunction -6547 Oct 16 i 06:31 direct 13°**х** 49′51 minimum elong -6538 Jan 31 i 08:06 23° 🗷 42'51 16°53'23 max. Earth dist. -6538 Feb 02 i 07:41 23° 2 45'40 48.62930 AU conjunction -6546 Jan 22 i 17:55 15°**₹**21'33 -16°34'00 retrograde -6538 May 14 i 16:51 25° **₹**16'35 minimum elong -6546 Jan 22 i 17:53 15°**₹**21'32 16°34'24 min. Earth dist. -6538 Aug 04 j 08:37 24° ₹17'01 46.76881 AU max. Earth dist. -6546 Jan 25 j 04:05 15°**₹**25'04 47.68753 AU opposition -6538 Aug 06 j 04:05 24°**₹**14'54 -17°36'14 -6546 May 06 j 06:19 16°**₹**57'21 direct -6538 Oct 26 j 00:51 23°×14'31 retrograde -6546 Jul 26 j 17:30 15°**₹**57'18 45.84200 AU min. Earth dist. opposition -6546 Jul 28 j 22:28 15°**₹**54'41 -17°18'40 conjunction -6537 Feb 01 j 15:03 24°**х** 44'14 -16°53'58 -6546 Oct 17 j 16:12 direct 14°**х** 53'32 minimum elong -6537 Feb 01 j 15:03 24°**х** 44'14 16°54'23 -6537 Feb 03 j 12:43 max. Earth dist. 24°**✗**¹46'56 48.72664 AU conjunction -6545 Jan 24 j 01:46 16°**₹**24'59 -16°37'28 retrograde -6537 May 16 j 01:23 26°**х** 17'42 -6545 Jan 24 j 01:45 16°**∡**′24'59 16°37'53 min. Earth dist. -6537 Aug 05 j 16:01 25°**∡**18′09 46.86473 AU minimum elong -6545 Jan 26 j 10:19 16°**∡**28'24 47.82072 AU -6537 Aug 07 j 10:16 25°**х** 16′06 -17°37′02 max. Earth dist. opposition -6545 May 07 j 13:32 18°**х** 00′32 -6537 Oct 27 j 05:22 24°**₹**15'46 retrograde direct -6545 Jul 28 j 00:39 17°**∡**00'37 45.97404 AU min. Earth dist. opposition -6545 Jul 30 j 05:36 16°**∡** 58′00 -17°21′58 conjunction -6536 Feb 02 j 22:16 25°**х** 45′18 -16°54′40 direct -6545 Oct 18 j 23:58 15°**х** 56′59 minimum elong -6536 Feb 02 j 22:19 25°**х** 45′18 16°55'05 max. Earth dist. -6536 Feb 04 j 20:07 25°**✗**48'00 48.82082 AU conjunction -6544 Jan 25 j 09:44 17°**≯**28'12 -16°40'35 retrograde -6536 May 16 j 05:39 27°**х** 18'30 minimum elong -6544 Jan 25 j 09:43 17°**∡**28'12 16°41'00 -6536 Aug 05 j 23:18 26° ₹18'59 46.95749 AU min. Earth dist. max. Earth dist. -6544 Jan 27 j 17:20 17°**✗**31'33 47.95034 AU -6536 Aug 07 j 16:11 26°**₹**17'00 -17°37'30 opposition

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Attention astronom		e vear -6536 i	in astronomical co	ounting style is the year	6537 BCE in historical c	ounting style.	
direct	-6536 Oct 27 j 13:44	-	an agur on onn car co	min. Earth dist.	-6528 Aug 14 j 05:10		47.57279 AU
	0000 0 00 27 j 15	20 % 10		opposition	-6528 Aug 15 j 12:56	4°る17'26	
conjunction	-6535 Feb 03 j 05:19	26° ∡ 746′05	-16°55'02	direct	-6528 Nov 04 j 15:48	3°る17'41	17 30 10
minimum elong	-6535 Feb 03 j 05:21	26° × 46'05		direct	-0320 NOV 04 J 13.40	3 017 41	
max. Earth dist.	-6535 Feb 05 j 01:15		48.91218 AU	conjunction	6527 Eab 11 : 11.41	4° ප 45'51	16947121
	•		46.91216 AU	3	-6527 Feb 11 j 11:41		
retrograde	-6535 May 17 j 10:45	28° 🗷 19'03	47.04740.411	minimum elong	-6527 Feb 11 j 11:47	4°る45'51	
min. Earth dist.	-6535 Aug 07 j 05:11		47.04748 AU	max. Earth dist.	-6527 Feb 12 j 20:43		49.51211 AU
opposition	-6535 Aug 08 j 22:02	27° ∡ 17'39 −	-17°37'39	retrograde	-6527 May 25 j 14:17	6° ට 17'17	
direct	-6535 Oct 28 j 20:42	26° ∡ 17′27		opposition	-6527 Aug 16 j 18:16	5° ප 16'38	
				min. Earth dist.	-6527 Aug 15 j 12:19		47.62869 AU
conjunction	-6534 Feb 04 j 12:10	27° ∡ ¹46'37	-16°55'06	direct	-6527 Nov 05 j 19:27	4° る 16'54	
minimum elong	-6534 Feb 04 j 12:13	27° ∡ ¹46'37	16°55'32				
max. Earth dist.	-6534 Feb 06 j 07:29	27° ∡ ¹49'10	49.00066 AU	conjunction	-6526 Feb 12 j 18:11	5° ₹ 44'56	-16°45'23
retrograde	-6534 May 18 j 16:11	29° ∡ 19'24		minimum elong	-6526 Feb 12 j 18:16	5° る 44'57	16°45'49
min. Earth dist.	-6534 Aug 08 j 12:56	28° ∡ 19'59	47.13456 AU	max. Earth dist.	-6526 Feb 14 j 03:00	5° ರ 46'50	49.56615 AU
opposition	-6534 Aug 10 j 03:53	28° ∡ 18′06	-17°37'28	retrograde	-6526 May 26 j 18:44	7° ට 16'11	
direct	-6534 Oct 30 j 04:27	27° ∡ 17'58		opposition	-6526 Aug 17 j 23:23	6° ප 15'35	-17°25'44
direct	0331 000 30 1 01.27	27 7 1730		min. Earth dist.	-6526 Aug 16 j 18:48		47.68024 AU
conjunction	-6533 Feb 05 j 19:05	28° ∡ ¹46'58	1605/151	direct	-6526 Nov 07 j 02:08	5°る15'53	47.00024 AC
3	-			direct	-0320 NOV 07 J 02.08	3 01333	
minimum elong	-6533 Feb 05 j 19:09	28° 🗷 46'58			(505 F. 1. 14:00 O.	6074040	1.60.40150
max. Earth dist.	-6533 Feb 07 j 13:43		49.08640 AU	conjunction	-6525 Feb 14 j 00:31	6° る 43'48	
	-6533 Apr 06 j 14:06	0°ಕ		minimum elong	-6525 Feb 14 j 00:38	6° ප 43'48	
retrograde	-6533 May 20 j 00:23	0° る 19'33		max. Earth dist.	-6525 Feb 15 j 07:13		49.61634 AU
	-6533 Jul 02 j 20:19	30°₽ ⋌ 7		retrograde	-6525 May 27 j 23:53	8°る14'52	
min. Earth dist.	-6533 Aug 09 j 18:48	29° ₹ '20'14	47.21855 AU	min. Earth dist.	-6525 Aug 18 j 00:09	7° る 15'41	47.72827 AU
opposition	-6533 Aug 11 j 09:30	29° ∡ 18′22	-17°36'58	opposition	-6525 Aug 19 j 04:21	7° る 14'20	-17°23'02
direct	-6533 Oct 31 j 09:03	28° ∡ 18'19		direct	-6525 Nov 08 j 07:48	6° る 14'39	
	J				3		
conjunction	-6532 Feb 07 j 01:50	29° ∡ '47'11	-16°54'18	conjunction	-6524 Feb 15 j 06:51	7° る 42'27	-16°40'17
minimum elong	-6532 Feb 07 j 01:53	29° × 747'11		minimum elong	-6524 Feb 15 j 06:57	7° る 42'28	
max. Earth dist.	-6532 Feb 08 j 18:31		49.16877 AU	max. Earth dist.	-6524 Feb 16 j 12:49		49.66310 AU
max. Earth dist.	•		49.106// AU		•		49.00310 AU
	-6532 Feb 16 j 05:56	0°る		retrograde	-6524 May 28 j 03:38	9° ろ 13'23	47 77201 411
retrograde	-6532 May 20 j 09:33	1° る 19'33		min. Earth dist.	-6524 Aug 18 j 07:11		47.77301 AU
min. Earth dist.	-6532 Aug 10 j 02:04		47.29898 AU	opposition	-6524 Aug 19 j 09:26	8° ට 12'54	-17°20'03
opposition	-6532 Aug 11 j 15:11	0° る 18'29	-17°36'10	direct	-6524 Nov 08 j 15:27	7° る 13'16	
	-6532 Aug 27 j 19:37	30°₹ ⋌ 7					
direct	-6532 Oct 31 j 11:55	29° ∡ 18'31		conjunction	-6523 Feb 15 j 13:14	8°る40'58	-16°37'19
	-6531 Jan 02 j 20:07	0°ರ		minimum elong	-6523 Feb 15 j 13:21	8° る 40'58	16°37'45
				max. Earth dist.	-6523 Feb 16 j 18:24	8° る 42'39	49.70691 AU
conjunction	-6531 Feb 07 j 08:49	0° る 47'15	-16°53'28	retrograde	-6523 May 29 j 10:11	10° ප 11'45	
minimum elong	-6531 Feb 07 j 08:54	0° る 47'15	16°53'53	opposition	-6523 Aug 20 j 14:12	9° る 11'21	-17°16'47
max. Earth dist.	-6531 Feb 09 j 01:08		49.24724 AU	min. Earth dist.	-6523 Aug 19 j 12:06		47.81476 AU
retrograde	-6531 May 21 j 13:59	2° る 19'26	.,,	direct	-6523 Nov 09 j 20:13	8° ට 11'45	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
min. Earth dist.	-6531 Aug 11 j 09:06		47.37499 AU	ancer	0323 1101 07 1 20:13	0 011 13	
opposition	-6531 Aug 12 j 20:38	1°る18'28					
**		1 01020	-1/ 33 00	agniunation	6522 Fab. 16 ; 10:21	00至20122	16024104
direct		00710125		conjunction	-6522 Feb 16 j 19:21	9° る 39'23	
	-6531 Nov 01 j 19:34	0° る 18'35		minimum elong	-6522 Feb 16 j 19:28	9° る 39'23	16°34'29
	v			minimum elong max. Earth dist.	-6522 Feb 16 j 19:28 -6522 Feb 17 j 22:38	9° る 39'23 9° る 40'57	
conjunction	-6530 Feb 08 j 15:37	1° る 47'11	-16°52'22	minimum elong max. Earth dist. retrograde	-6522 Feb 16 j 19:28 -6522 Feb 17 j 22:38 -6522 May 30 j 19:24	9° ට 39'23 9°ටි40'57 11°ටි10'02	16°34'29 49.74780 AU
minimum elong	-6530 Feb 08 j 15:37 -6530 Feb 08 j 15:41	1°ට 47'11 1°ට 47'11	-16°52'22 16°52'48	minimum elong max. Earth dist. retrograde opposition	-6522 Feb 16 j 19:28 -6522 Feb 17 j 22:38 -6522 May 30 j 19:24 -6522 Aug 21 j 19:10	9° ි 39'23 9° ි 40'57 11° ි 510'02 10° ි 509'43	16°34'29 49.74780 AU -17°13'12
minimum elong max. Earth dist.	-6530 Feb 08 j 15:37 -6530 Feb 08 j 15:41 -6530 Feb 10 j 05:31	1°ප47'11 1°ප47'11 1°ප49'23	-16°52'22	minimum elong max. Earth dist. retrograde	-6522 Feb 16 j 19:28 -6522 Feb 17 j 22:38 -6522 May 30 j 19:24 -6522 Aug 21 j 19:10 -6522 Aug 20 j 18:27	9°539'23 9°540'57 11°510'02 10°509'43 10°510'54	16°34'29 49.74780 AU
minimum elong	-6530 Feb 08 j 15:37 -6530 Feb 08 j 15:41	1°ට 47'11 1°ට 47'11	-16°52'22 16°52'48	minimum elong max. Earth dist. retrograde opposition	-6522 Feb 16 j 19:28 -6522 Feb 17 j 22:38 -6522 May 30 j 19:24 -6522 Aug 21 j 19:10	9° ට 39'23 9° ට 40'57 11° ට 10'02 10° ට 09'43	16°34'29 49.74780 AU -17°13'12
minimum elong max. Earth dist.	-6530 Feb 08 j 15:37 -6530 Feb 08 j 15:41 -6530 Feb 10 j 05:31	1°ට 47'11 1°ට 47'11 1°ට 49'23 3°ට 19'11	-16°52'22 16°52'48	minimum elong max. Earth dist. retrograde opposition min. Earth dist.	-6522 Feb 16 j 19:28 -6522 Feb 17 j 22:38 -6522 May 30 j 19:24 -6522 Aug 21 j 19:10 -6522 Aug 20 j 18:27	9°539'23 9°540'57 11°510'02 10°509'43 10°510'54	16°34'29 49.74780 AU -17°13'12
minimum elong max. Earth dist. retrograde	-6530 Feb 08 j 15:37 -6530 Feb 08 j 15:41 -6530 Feb 10 j 05:31 -6530 May 22 j 18:29	1°ට 47'11 1°ට 47'11 1°ට 49'23 3°ට 19'11	-16°52'22 16°52'48 49.32115 AU 47.44621 AU	minimum elong max. Earth dist. retrograde opposition min. Earth dist.	-6522 Feb 16 j 19:28 -6522 Feb 17 j 22:38 -6522 May 30 j 19:24 -6522 Aug 21 j 19:10 -6522 Aug 20 j 18:27	9°539'23 9°540'57 11°510'02 10°509'43 10°510'54	16°34'29 49.74780 AU -17°13'12 47.85370 AU
minimum elong max. Earth dist. retrograde min. Earth dist.	-6530 Feb 08 j 15:37 -6530 Feb 08 j 15:41 -6530 Feb 10 j 05:31 -6530 May 22 j 18:29 -6530 Aug 12 j 15:22	1° පි47'11 1° පි47'11 1° පි49'23 3° පි19'11 2° පි19'59	-16°52'22 16°52'48 49.32115 AU 47.44621 AU	minimum elong max. Earth dist. retrograde opposition min. Earth dist. direct	-6522 Feb 16 j 19:28 -6522 Feb 17 j 22:38 -6522 May 30 j 19:24 -6522 Aug 21 j 19:10 -6522 Aug 20 j 18:27 -6522 Nov 10 j 21:24 -6521 Feb 18 j 01:28	9° ට 39'23 9° ට 40'57 11° ට 10'02 10° ට 09'43 10° ට 10'54 9° ට 10'11	16°34'29 49.74780 AU -17°13'12 47.85370 AU -16°30'31
minimum elong max. Earth dist. retrograde min. Earth dist. opposition	-6530 Feb 08 j 15:37 -6530 Feb 08 j 15:41 -6530 Feb 10 j 05:31 -6530 May 22 j 18:29 -6530 Aug 12 j 15:22 -6530 Aug 14 j 02:09	1° පි47'11 1° පි47'11 1° පි49'23 3° පි19'11 2° පි19'59 2° පි18'19	-16°52'22 16°52'48 49.32115 AU 47.44621 AU	minimum elong max. Earth dist. retrograde opposition min. Earth dist. direct	-6522 Feb 16 j 19:28 -6522 Feb 17 j 22:38 -6522 May 30 j 19:24 -6522 Aug 21 j 19:10 -6522 Aug 20 j 18:27 -6522 Nov 10 j 21:24 -6521 Feb 18 j 01:28 -6521 Feb 18 j 01:36	9°る39'23 9°る40'57 11°る10'02 10°る09'43 10°る10'54 9°る10'11 10°る37'44 10°る37'45	16°34'29 49.74780 AU -17°13'12 47.85370 AU -16°30'31 16°30'58
minimum elong max. Earth dist. retrograde min. Earth dist. opposition direct	-6530 Feb 08 j 15:37 -6530 Feb 08 j 15:41 -6530 Feb 10 j 05:31 -6530 May 22 j 18:29 -6530 Aug 12 j 15:22 -6530 Aug 14 j 02:09 -6530 Nov 03 j 02:58	1° ට 47'11 1° ට 47'11 1° ට 49'23 3° ට 19'11 2° ට 19'59 2° ට 18'19 1° ට 18'29	-16°52'22 16°52'48 49.32115 AU 47.44621 AU -17°33'44	minimum elong max. Earth dist. retrograde opposition min. Earth dist. direct conjunction minimum elong max. Earth dist.	-6522 Feb 16 j 19:28 -6522 Feb 17 j 22:38 -6522 May 30 j 19:24 -6522 Aug 21 j 19:10 -6522 Aug 20 j 18:27 -6522 Nov 10 j 21:24 -6521 Feb 18 j 01:28 -6521 Feb 18 j 01:36 -6521 Feb 19 j 04:45	9°る39'23 9°る40'57 11°る10'02 10°る09'43 10°る10'54 9°る10'11 10°る37'44 10°る37'45 10°る39'18	16°34'29 49.74780 AU -17°13'12 47.85370 AU -16°30'31
minimum elong max. Earth dist. retrograde min. Earth dist. opposition direct	-6530 Feb 08 j 15:37 -6530 Feb 08 j 15:41 -6530 Feb 10 j 05:31 -6530 May 22 j 18:29 -6530 Aug 12 j 15:22 -6530 Aug 14 j 02:09 -6530 Nov 03 j 02:58 -6529 Feb 09 j 22:16	1° පි47'11 1° පි47'11 1° පි49'23 3° පි19'11 2° පි19'59 2° පි18'19 1° පි18'29	-16°52'22 16°52'48 49.32115 AU 47.44621 AU -17°33'44	minimum elong max. Earth dist. retrograde opposition min. Earth dist. direct conjunction minimum elong max. Earth dist. retrograde	-6522 Feb 16 j 19:28 -6522 Feb 17 j 22:38 -6522 May 30 j 19:24 -6522 Aug 21 j 19:10 -6522 Aug 20 j 18:27 -6522 Nov 10 j 21:24 -6521 Feb 18 j 01:36 -6521 Feb 19 j 04:45 -6521 Jun 01 j 00:09	9° \(39'23 9° \(\) 40'57 11° \(\) 10'02 10° \(\) 509'43 10° \(\) 510'54 9° \(\) 10'11 10° \(\) 337'45 10° \(\) 33'18 12° \(\) 508'17	16°34'29 49.74780 AU -17°13'12 47.85370 AU -16°30'31 16°30'58 49.78582 AU
minimum elong max. Earth dist. retrograde min. Earth dist. opposition direct conjunction minimum elong	-6530 Feb 08 j 15:37 -6530 Feb 08 j 15:41 -6530 Feb 10 j 05:31 -6530 May 22 j 18:29 -6530 Aug 12 j 15:22 -6530 Aug 14 j 02:09 -6530 Nov 03 j 02:58 -6529 Feb 09 j 22:16 -6529 Feb 09 j 22:22	1° පි47'11 1° පි47'11 1° පි49'23 3° පි19'11 2° පි19'59 2° පි18'19 1° පි18'29 2° පි46'57 2° පි46'57	-16°52'22 16°52'48 49.32115 AU 47.44621 AU -17°33'44 -16°51'00 16°51'25	minimum elong max. Earth dist. retrograde opposition min. Earth dist. direct conjunction minimum elong max. Earth dist. retrograde min. Earth dist.	-6522 Feb 16 j 19:28 -6522 Feb 17 j 22:38 -6522 May 30 j 19:24 -6522 Aug 21 j 19:10 -6522 Aug 20 j 18:27 -6522 Nov 10 j 21:24 -6521 Feb 18 j 01:28 -6521 Feb 18 j 01:36 -6521 Feb 19 j 04:45 -6521 Jun 01 j 00:09 -6521 Aug 22 j 00:27	9° \(39'23 9° \(340'57 11° \(510'02 10° \(509'43 10° \(510'54 9° \(510'11 10° \(537'45 10° \(537'45 10° \(539'18 12° \(508'17 11° \(509'11	16°34'29 49.74780 AU -17°13'12 47.85370 AU -16°30'31 16°30'58 49.78582 AU 47.88938 AU
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minimum elong max. Earth dist. retrograde min. Earth dist. opposition direct conjunction minimum elong max. Earth dist. retrograde min. Earth dist. opposition	-6530 Feb 08 j 15:37 -6530 Feb 08 j 15:41 -6530 Feb 10 j 05:31 -6530 May 22 j 18:29 -6530 Aug 12 j 15:22 -6530 Aug 14 j 02:09 -6530 Nov 03 j 02:58 -6529 Feb 09 j 22:22 -6529 Feb 09 j 22:22 -6529 Feb 11 j 11:04 -6529 May 23 j 23:48 -6529 Aug 13 j 23:21 -6529 Aug 15 j 07:44 -6529 Nov 04 j 10:08	1° 547'11 1° 549'23 3° 519'11 2° 519'59 2° 518'19 1° 518'29 2° 546'57 2° 549'05 4° 518'46 3° 519'32 3° 517'59 2° 518'12	-16°52'22 16°52'48 49.32115 AU 47.44621 AU -17°33'44 -16°51'00 16°51'25 49.38993 AU 47.51212 AU -17°32'08	minimum elong max. Earth dist. retrograde opposition min. Earth dist. direct conjunction minimum elong max. Earth dist. retrograde min. Earth dist. opposition direct conjunction minimum elong max. Earth dist.	-6522 Feb 16 j 19:28 -6522 Feb 17 j 22:38 -6522 May 30 j 19:24 -6522 Aug 21 j 19:10 -6522 Aug 20 j 18:27 -6522 Nov 10 j 21:24 -6521 Feb 18 j 01:28 -6521 Feb 18 j 01:36 -6521 Feb 19 j 04:45 -6521 Jun 01 j 00:09 -6521 Aug 22 j 00:27 -6521 Aug 23 j 00:02 -6521 Nov 12 j 03:27 -6520 Feb 19 j 07:38 -6520 Feb 19 j 07:46 -6520 Feb 20 j 08:46	9°る39'23 9°る40'57 11°る10'02 10°る09'43 10°る10'54 9°る10'11 10°る37'44 10°る37'45 10°る39'18 12°る08'17 11°る08'04 10°る08'35 11°る36'05 11°る36'06 11°る37'32	16°34'29 49.74780 AU -17°13'12 47.85370 AU -16°30'31 16°30'58 49.78582 AU 47.88938 AU -17°09'21
minimum elong max. Earth dist. retrograde min. Earth dist. opposition direct conjunction minimum elong max. Earth dist. retrograde min. Earth dist. opposition	-6530 Feb 08 j 15:37 -6530 Feb 08 j 15:41 -6530 Feb 10 j 05:31 -6530 May 22 j 18:29 -6530 Aug 12 j 15:22 -6530 Aug 14 j 02:09 -6530 Nov 03 j 02:58 -6529 Feb 09 j 22:16 -6529 Feb 09 j 22:22 -6529 Feb 11 j 11:04 -6529 May 23 j 23:48 -6529 Aug 13 j 23:21 -6529 Aug 15 j 07:44	1° 547'11 1° 549'23 3° 519'11 2° 519'59 2° 518'19 1° 518'29 2° 546'57 2° 549'05 4° 518'46 3° 519'32 3° 517'59 2° 518'12	-16°52'22 16°52'48 49.32115 AU 47.44621 AU -17°33'44 -16°51'00 16°51'25 49.38993 AU 47.51212 AU	minimum elong max. Earth dist. retrograde opposition min. Earth dist. direct conjunction minimum elong max. Earth dist. retrograde min. Earth dist. opposition direct conjunction minimum elong	-6522 Feb 16 j 19:28 -6522 Feb 17 j 22:38 -6522 May 30 j 19:24 -6522 Aug 21 j 19:10 -6522 Aug 20 j 18:27 -6522 Nov 10 j 21:24 -6521 Feb 18 j 01:28 -6521 Feb 18 j 01:36 -6521 Feb 19 j 04:45 -6521 Jun 01 j 00:09 -6521 Aug 22 j 00:27 -6521 Aug 23 j 00:02 -6521 Nov 12 j 03:27 -6520 Feb 19 j 07:38 -6520 Feb 19 j 07:46	9°る39'23 9°る40'57 11°る10'02 10°る09'43 10°る10'54 9°る10'11 10°る37'44 10°る37'45 10°る39'18 12°る08'17 11°る08'04 10°る08'35 11°る36'05 11°る36'06 11°る37'32 13°る06'32	16°34'29 49.74780 AU -17°13'12 47.85370 AU -16°30'31 16°30'58 49.78582 AU 47.88938 AU -17°09'21 -16°26'43 16°27'08 49.82053 AU
minimum elong max. Earth dist. retrograde min. Earth dist. opposition direct conjunction minimum elong max. Earth dist. retrograde min. Earth dist. opposition direct	-6530 Feb 08 j 15:37 -6530 Feb 08 j 15:41 -6530 Feb 10 j 05:31 -6530 May 22 j 18:29 -6530 Aug 12 j 15:22 -6530 Aug 14 j 02:09 -6530 Nov 03 j 02:58 -6529 Feb 09 j 22:22 -6529 Feb 09 j 22:22 -6529 Feb 11 j 11:04 -6529 May 23 j 23:48 -6529 Aug 13 j 23:21 -6529 Aug 15 j 07:44 -6529 Nov 04 j 10:08	1° 547'11 1° 549'23 3° 519'11 2° 519'59 2° 518'19 1° 518'29 2° 546'57 2° 549'05 4° 518'46 3° 519'32 3° 517'59 2° 518'12	-16°52'22 16°52'48 49.32115 AU 47.44621 AU -17°33'44 -16°51'00 16°51'25 49.38993 AU 47.51212 AU -17°32'08	minimum elong max. Earth dist. retrograde opposition min. Earth dist. direct conjunction minimum elong max. Earth dist. retrograde min. Earth dist. opposition direct conjunction minimum elong max. Earth dist.	-6522 Feb 16 j 19:28 -6522 Feb 17 j 22:38 -6522 May 30 j 19:24 -6522 Aug 21 j 19:10 -6522 Aug 20 j 18:27 -6522 Nov 10 j 21:24 -6521 Feb 18 j 01:28 -6521 Feb 18 j 01:36 -6521 Feb 19 j 04:45 -6521 Jun 01 j 00:09 -6521 Aug 22 j 00:27 -6521 Aug 23 j 00:02 -6521 Nov 12 j 03:27 -6520 Feb 19 j 07:38 -6520 Feb 19 j 07:46 -6520 Feb 20 j 08:46	9°る39'23 9°る40'57 11°る10'02 10°る09'43 10°る10'54 9°る10'11 10°る37'44 10°る37'45 10°る39'18 12°る08'17 11°る08'04 10°る08'35 11°る36'05 11°る36'06 11°る37'32 13°る06'32	16°34'29 49.74780 AU -17°13'12 47.85370 AU -16°30'31 16°30'58 49.78582 AU 47.88938 AU -17°09'21 -16°26'43 16°27'08
minimum elong max. Earth dist. retrograde min. Earth dist. opposition direct conjunction minimum elong max. Earth dist. retrograde min. Earth dist. opposition direct conjunction	-6530 Feb 08 j 15:37 -6530 Feb 08 j 15:41 -6530 Feb 10 j 05:31 -6530 May 22 j 18:29 -6530 Aug 12 j 15:22 -6530 Aug 14 j 02:09 -6530 Nov 03 j 02:58 -6529 Feb 09 j 22:16 -6529 Feb 09 j 22:22 -6529 Feb 11 j 11:04 -6529 May 23 j 23:48 -6529 Aug 13 j 23:21 -6529 Aug 15 j 07:44 -6529 Nov 04 j 10:08	1° 547'11 1° 549'23 3° 519'11 2° 519'59 2° 518'19 1° 518'29 2° 546'57 2° 546'57 2° 549'05 4° 518'46 3° 519'32 3° 517'59 2° 518'12	-16°52'22 16°52'48 49.32115 AU 47.44621 AU -17°33'44 -16°51'00 16°51'25 49.38993 AU 47.51212 AU -17°32'08	minimum elong max. Earth dist. retrograde opposition min. Earth dist. direct conjunction minimum elong max. Earth dist. retrograde min. Earth dist. opposition direct conjunction minimum elong max. Earth dist. retrograde	-6522 Feb 16 j 19:28 -6522 Feb 17 j 22:38 -6522 May 30 j 19:24 -6522 Aug 21 j 19:10 -6522 Aug 20 j 18:27 -6522 Nov 10 j 21:24 -6521 Feb 18 j 01:28 -6521 Feb 18 j 01:36 -6521 Feb 19 j 04:45 -6521 Jun 01 j 00:09 -6521 Aug 22 j 00:27 -6521 Aug 22 j 00:27 -6521 Aug 23 j 00:02 -6521 Nov 12 j 03:27 -6520 Feb 19 j 07:38 -6520 Feb 19 j 07:46 -6520 Feb 20 j 08:46 -6520 Jun 01 j 04:07	9°る39'23 9°る40'57 11°る10'02 10°る09'43 10°る10'54 9°る10'11 10°る37'44 10°る37'45 10°る39'18 12°る08'17 11°る08'04 10°る08'35 11°る36'05 11°る36'06 11°る37'32 13°る06'32	16°34'29 49.74780 AU -17°13'12 47.85370 AU -16°30'31 16°30'58 49.78582 AU 47.88938 AU -17°09'21 -16°26'43 16°27'08 49.82053 AU 47.92152 AU
minimum elong max. Earth dist. retrograde min. Earth dist. opposition direct conjunction minimum elong max. Earth dist. retrograde min. Earth dist. opposition direct conjunction minimum elong	-6530 Feb 08 j 15:37 -6530 Feb 08 j 15:41 -6530 Feb 10 j 05:31 -6530 May 22 j 18:29 -6530 Aug 12 j 15:22 -6530 Aug 14 j 02:09 -6530 Nov 03 j 02:58 -6529 Feb 09 j 22:16 -6529 Feb 09 j 22:22 -6529 Feb 11 j 11:04 -6529 May 23 j 23:48 -6529 Aug 13 j 23:21 -6529 Aug 15 j 07:44 -6529 Nov 04 j 10:08 -6528 Feb 11 j 05:05 -6528 Feb 11 j 05:05	1° 547'11 1° 549'23 3° 519'11 2° 519'59 2° 518'19 1° 518'29 2° 546'57 2° 546'57 2° 549'05 4° 518'46 3° 519'32 3° 517'59 2° 518'12	-16°52'22 16°52'48 49.32115 AU 47.44621 AU -17°33'44 -16°51'00 16°51'25 49.38993 AU 47.51212 AU -17°32'08 -16°49'23 16°49'49	minimum elong max. Earth dist. retrograde opposition min. Earth dist. direct conjunction minimum elong max. Earth dist. retrograde min. Earth dist. opposition direct conjunction minimum elong max. Earth dist. retrograde min. Earth dist.	-6522 Feb 16 j 19:28 -6522 Feb 17 j 22:38 -6522 May 30 j 19:24 -6522 Aug 21 j 19:10 -6522 Aug 20 j 18:27 -6522 Nov 10 j 21:24 -6521 Feb 18 j 01:28 -6521 Feb 18 j 01:36 -6521 Feb 19 j 04:45 -6521 Jun 01 j 00:09 -6521 Aug 22 j 00:27 -6521 Aug 23 j 00:02 -6521 Nov 12 j 03:27 -6520 Feb 19 j 07:38 -6520 Feb 19 j 07:46 -6520 Feb 20 j 08:46 -6520 Jun 01 j 04:07 -6520 Aug 22 j 05:48	9°る39'23 9°る40'57 11°る10'02 10°る09'43 10°る10'54 9°る10'11 10°る37'44 10°る37'45 10°る39'18 12°る08'17 11°る08'04 10°る08'35 11°る36'05 11°る36'06 11°る37'32 13°る06'32 12°る07'30	16°34'29 49.74780 AU -17°13'12 47.85370 AU -16°30'31 16°30'58 49.78582 AU 47.88938 AU -17°09'21 -16°26'43 16°27'08 49.82053 AU 47.92152 AU

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6519 in astronomical counting style is the year 6520 BCE in historical counting style. -6519 Feb 19 i 13:55 12°る34'27 -16°22'39 retrograde -6511 Jun 10 j 05:07 21°る47'53 conjunction -6519 Feb 19 j 14:03 12°る34'28 16°23'05 opposition -6511 Aug 31 j 22:08 20°₹48'04 -16°17'01 minimum elong -6519 Feb 20 j 14:06 12°る35'51 49.85120 AU min. Earth dist. -6511 Aug 31 j 11:52 20°る48'34 47.99432 AU max. Earth dist. -6519 Jun 02 j 08:05 14°る04'49 -6511 Nov 21 j 08:12 19°る48'40 retrograde direct -6519 Aug 24 j 09:31 13°る04'46 -17°00'51 opposition -6510 Feb 28 j 20:39 21°る15'43 -15°35'15 min. Earth dist. -6519 Aug 23 j 13:00 13°る05'45 47.94926 AU conjunction -6519 Nov 13 j 17:04 -6510 Feb 28 j 20:50 21°る15'44 15°35'40 direct 12°**る**05'24 minimum elong -6510 Mar 01 j 07:19 max. Earth dist. 21°る16'19 49.91227 AU -6518 Feb 20 j 20:07 conjunction 13°る32'50 -16°18'20 retrograde -6510 Jun 11 j 10:09 22°る45'11 minimum elong -6518 Feb 20 j 20:16 13°る32'50 16°18'45 opposition -6510 Sep 02 j 02:33 21°る45'25 -16°10'21 max. Earth dist. -6518 Feb 21 j 18:52 13°る34'08 49.87731 AU min. Earth dist. -6510 Sep 01 j 16:49 21°る45'53 47.98283 AU -6518 Jun 03 j 13:54 15°**る**03'06 -6510 Nov 22 j 12:55 retrograde direct 20°**ප්**46'00 14°る03'07 -16°56'13 opposition -6518 Aug 25 j 14:12 min. Earth dist. -6518 Aug 24 j 18:11 14°る04'05 47.97200 AU conjunction -6509 Mar 02 j 02:35 22°る13'04 -15°28'42 direct -6518 Nov 14 j 22:20 13°る03'47 minimum elong -6509 Mar 02 j 02:46 22°る13'04 15°29'07 max. Earth dist. -6509 Mar 02 j 12:34 22°る13'38 49.90026 AU conjunction -6517 Feb 22 j 02:18 14°る31'10 -16°13'48 retrograde -6509 Jun 12 j 13:16 23°る42'29 minimum elong -6517 Feb 22 j 02:26 14°る31'10 16°14'13 opposition -6509 Sep 03 j 06:58 22°る42'45 -16°03'26 max. Earth dist. -6517 Feb 22 j 22:34 14°る32'19 49.89814 AU min. Earth dist. -6509 Sep 02 j 23:09 22°る43'08 47.96817 AU retrograde -6517 Jun 04 j 22:13 16°**ප**01'21 direct -6509 Nov 23 j 19:54 21°る43'22 opposition -6517 Aug 26 j 18:58 15°る01'26 -16°51'21 min. Earth dist. -6517 Aug 26 i 01:09 15°る02'16 47.98940 AU conjunction -6508 Mar 02 i 08:35 23°る10'26 -15°21'54 direct -6517 Nov 16 j 01:02 14°る02'07 minimum elong -6508 Mar 02 i 08:47 23°る10'27 15°22'20 max. Earth dist. -6508 Mar 02 i 17:26 23°る10'56 49.88510 AU conjunction -6516 Feb 23 i 08:39 15°る29'26 -16°09'01 retrograde -6508 Jun 12 j 18:10 24°る39'50 -6516 Feb 23 i 08:49 15°る29'27 16°09'26 -6508 Sep 03 j 11:18 23°₹40'10 -15°56'14 minimum elong opposition max. Earth dist. -6516 Feb 24 j 04:16 15°る30'33 49.91359 AU min. Earth dist. -6508 Sep 03 j 03:47 23°る40'31 47.94995 AU -6516 Jun 05 j 04:09 16°る59'29 direct -6508 Nov 24 j 01:19 22°る40'46 retrograde -6516 Aug 26 j 23:40 15°る59'37 -16°46'16 opposition -6516 Aug 26 j 07:22 16°る00'23 48.00121 AU -6507 Mar 03 j 14:33 24°**ප**07'53 -15°14'51 min. Earth dist. conjunction -6516 Nov 16 j 05:50 15°る00'17 -6507 Mar 03 j 14:44 24°る07'54 15°15'15 direct minimum elong -6507 Mar 03 j 21:14 24°る08'16 49.86597 AU max. Earth dist. 16°**ප්**27'34 -16°04'01 -6515 Feb 23 j 14:48 -6507 Jun 14 j 01:42 25°♂37'17 conjunction retrograde -6515 Feb 23 j 14:57 -6507 Sep 04 j 15:41 16°る27'34 16°04'26 24°る37'39 -15°48'48 minimum elong opposition -6515 Feb 24 j 07:43 16°る28'32 49.92370 AU -6507 Sep 04 j 10:16 24°る37'54 47.92758 AU max. Earth dist. min. Earth dist. -6515 Jun 06 j 09:57 17°**る**57'29 -6507 Nov 25 j 03:58 23°**る**38'16 retrograde direct -6515 Aug 28 j 04:10 16°る57'38 -16°40'56 opposition -6506 Mar 04 j 20:41 min. Earth dist. -6515 Aug 27 j 12:47 16°る58'22 48.00795 AU conjunction 25°**ප්**05'26 -15°07'34 direct -6515 Nov 17 j 10:44 15°る58'18 minimum elong -6506 Mar 04 j 20:52 25°る05'26 15°07'59 max. Earth dist. -6506 Mar 05 j 02:50 25°る05'47 49.84240 AU conjunction -6514 Feb 24 j 20:56 17°る25'31 -15°58'46 retrograde -6506 Jun 15 j 08:00 26° ₹34'49 -6514 Feb 24 j 21:06 17°**ට**25'31 15°59'12 -6506 Sep 05 j 20:07 25°る35'13 -15°41'07 minimum elong opposition max. Earth dist. -6514 Feb 25 j 12:52 17°る26'25 49.92890 AU min. Earth dist. -6506 Sep 05 j 16:01 25°る35'25 47.90033 AU -6514 Jun 07 j 11:45 18°る55'20 direct -6506 Nov 26 j 07:58 24°る35'51 retrograde -6514 Aug 29 j 08:48 17°る55'29 -16°35'21 opposition -6505 Mar 06 i 02:34 26°පි03'03 -15°00'03 min. Earth dist. -6514 Aug 28 j 19:37 17°る56'07 48.01007 AU conjunction -6514 Nov 18 i 18:35 -6505 Mar 06 i 02:46 direct 16°**ප**56'08 minimum elong 26°る03'04 15°00'26 -6505 Mar 06 i 06:03 max. Earth dist. 26°る03'15 49.81383 AU -6513 Feb 26 i 02:52 18°る23'16 -15°53'17 conjunction retrograde -6505 Jun 16 j 14:30 27°る32'25 -6513 Feb 26 i 03:01 opposition minimum elong 18°る23'17 15°53'41 -6505 Sep 07 i 00:32 26°₹32'51 -15°33'12 max. Earth dist. -6513 Feb 26 j 17:43 18°る24'07 49.92997 AU min. Earth dist. -6505 Sep 06 j 21:30 26°る33'00 47.86790 AU retrograde -6513 Jun 08 j 15:48 19°る52'59 direct -6505 Nov 27 j 12:14 25°る33'27 opposition -6513 Aug 30 j 13:14 18°る53'09 -16°29'30 evening set -6504 Mar 04 j 07:10 26°る57'54 min. Earth dist. -6513 Aug 30 j 00:21 18°る53'46 48.00821 AU direct -6513 Nov 20 j 01:10 17°る53'47 conjunction -6504 Mar 06 j 08:46 27°る00'43 -14°52'18 minimum elong -6504 Mar 06 j 08:57 27°る00'43 14°52'42 conjunction -6512 Feb 27 j 08:50 19°る20'52 -15°47'32 max. Earth dist. -6504 Mar 06 j 10:57 27°る00'50 49.77984 AU -6504 Mar 08 j 10:46 -6512 Feb 27 j 09:01 19°る20'53 15°47'57 27°る03'33 minimum elong morning rise -6512 Feb 27 j 21:38 19°る21'36 49.92722 AU -6504 Jun 16 j 17:17 28°る30'04 max. Earth dist. retrograde -6512 Jun 09 j 00:04 20°る50'30 -6504 Sep 07 j 04:58 27°る30'30 -15°25'04 retrograde opposition 19°る50'40 -16°23'24 -6504 Sep 07 j 04:23 27°る30'32 47.83002 AU opposition -6512 Aug 30 j 17:40 min. Earth dist. min. Earth dist. -6512 Aug 30 j 06:31 19°る51'12 48.00289 AU direct -6504 Nov 27 j 19:10 26°る31'05 direct -6512 Nov 20 j 03:14 18°**ප**51'16 evening set -6503 Mar 04 j 15:20 27°る54'18 conjunction -6511 Feb 27 j 14:56 20°る18'20 -15°41'31 conjunction -6503 Mar 07 j 14:55 27°る58'22 -14°44'20 minimum elong -6511 Feb 27 j 15:05 20° 18'21 15°41'55 minimum elong -6503 Mar 07 j 15:08 27°る58'23 14°44'44

max. Earth dist.

-6511 Feb 28 j 03:34

20°る19'03 49.92125 AU

max. Earth dist.

-6503 Mar 07 j 15:39

27°る58'24 49.74073 AU

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6503 in astronomical counting style is the year 6504 BCE in historical counting style. 28°**る**02'28 opposition -6503 Mar 10 j 15:00 -6497 Sep 14 j 11:32 4°≈13'36 -14°20'59 morning rise -6503 Jun 17 j 20:53 29°る27'42 min. Earth dist. -6497 Sep 14 j 18:43 4°≈13'16 47.45253 AU retrograde -6503 Sep 08 j 09:18 28° ප්28'08 -15°16'41 -6497 Dec 05 j 06:05 direct 3°≈13'52 opposition -6503 Sep 08 j 09:13 -6496 Mar 07 j 17:45 4°≈32'34 min. Earth dist. 28°る28'09 47.78713 AU evening set -6503 Nov 29 j 01:59 direct 27°る28'41 -6502 Mar 05 j 04:07 -6496 Mar 14 j 09:03 evening set 28°る50'58 conjunction 4°≈41'36 -13°41'36 -6496 Mar 14 j 09:16 minimum elong 4°≈41'37 13°41'58 -6502 Mar 08 j 20:46 conjunction 28°る56'00 -14°36'08 max. Earth dist. -6496 Mar 14 j 01:20 4°≈41'10 49.36063 AU -6502 Mar 08 j 20:57 minimum elong 28°る56'00 14°36'32 morning rise -6496 Mar 21 j 00:54 4°≈50'42 28°る55'54 49.69675 AU max. Earth dist. -6502 Mar 08 j 19:11 retrograde -6496 Jun 24 j 12:08 6°≈11'02 morning rise -6502 Mar 12 j 13:55 29°る01'03 opposition -6496 Sep 14 j 15:52 5°≈11'25 -14°10'45 -6502 Apr 30 j 02:56 -6496 Sep 14 j 23:56 0°≈ min. Earth dist. 5°≈11'02 47.38595 AU -6502 Jun 19 j 04:57 retrograde 0°≈25'19 direct -6496 Dec 05 j 09:49 4°≈11'38 -6502 Aug 08 j 14:44 30°Rる evening set -6495 Mar 08 j 14:37 5°≈29'55 opposition -6502 Sep 09 j 13:44 29°る25'44 -15°08'04 min. Earth dist. -6502 Sep 09 j 15:37 29°る25'39 47.73977 AU conjunction -6495 Mar 15 j 15:13 5°≈39'30 -13°31'36 direct -6502 Nov 30 j 04:18 28°る26'14 minimum elong -6495 Mar 15 j 15:26 5°≈39'31 13°31'59 evening set -6501 Mar 05 j 19:43 29°る47'44 max. Earth dist. -6495 Mar 15 j 05:07 5°≈38'56 49.29372 AU morning rise -6495 Mar 22 j 16:32 5°≈49'08 conjunction -6501 Mar 10 j 02:52 29°る53'35 -14°27'42 retrograde -6495 Jun 25 j 20:11 7°≈09'00 minimum elong -6501 Mar 10 j 03:05 29°**る**53'36 14°28'05 opposition -6495 Sep 15 j 20:21 6°≈09'22 -14°00'16 max. Earth dist. -6501 Mar 10 j 01:02 29°る53'29 49.64865 AU min. Earth dist. -6495 Sep 16 i 05:26 6°≈08'56 47.31561 AU morning rise -6501 Mar 14 j 10:33 29°**る**59'28 direct -6495 Dec 06 i 12:39 5°≈09'34 -6494 Mar 09 j 11:43 -6501 Mar 14 j 20:00 0°≈ evening set 6°≈27'27 retrograde -6501 Jun 20 j 10:50 1°≈22'53 -6501 Sep 10 j 17:59 0°≈23'18 -14°59'11 -6494 Mar 16 j 21:25 6°≈37'34 -13°21'22 opposition conjunction min. Earth dist. -6501 Sep 10 j 20:52 0°≈23'09 47.68844 AU -6494 Mar 16 j 21:39 minimum elong 6°≈37'34 13°21'43 -6501 Oct 01 j 14:30 30°Rる max. Earth dist. -6494 Mar 16 j 10:24 6°≈36'56 49.22251 AU direct -6501 Dec 01 j 08:05 29°る23'44 -6494 Mar 24 j 07:47 morning rise 6°≈47'42 8°≈07'07 -6500 Jan 30 j 08:14 -6494 Jun 27 j 00:40 0°≈ retrograde -6500 Mar 05 j 12:46 opposition -6494 Sep 17 j 01:01 evening set 0°≈44'33 7°≈07'29 -13°49'32 -6494 Sep 17 j 12:19 min. Earth dist. 7°≈06'57 47.24061 AU -6494 Dec 07 j 18:37 -6500 Mar 10 j 08:51 0°≈51'08 -14°19'00 conjunction 6°≈07'38 direct -6500 Mar 10 j 09:02 0°≈51'09 14°19'23 -6493 Mar 10 j 09:32 7°≈25'09 minimum elong evening set -6500 Mar 10 j 04:49 max. Earth dist. 0°≈50'54 49.59698 AU -6500 Mar 15 j 05:29 -6493 Mar 18 j 03:50 7°≈35'45 -13°10'53 morning rise 0°≈57'45 conjunction -6500 Jun 20 j 16:40 -6493 Mar 18 j 04:02 retrograde 2°≈20'26 minimum elong 7°≈35'46 13°11'15 opposition -6500 Sep 10 j 22:19 1°≈20'49 -14°50'02 max. Earth dist. -6493 Mar 17 j 15:13 7°≈35'02 49.14657 AU min. Earth dist. -6500 Sep 11 j 01:57 1°≈20'39 47.63384 AU morning rise -6493 Mar 25 j 22:45 7°≈46'23 direct -6500 Dec 01 j 12:23 0°≈21'12 retrograde -6493 Jun 28 j 03:38 9°≈05'23 -6499 Mar 06 j 06:54 1°≈41'25 opposition -6493 Sep 18 j 05:30 8°≈05'44 -13°38'34 evening set min. Earth dist. -6493 Sep 18 j 17:25 8°≈05'10 47.16057 AU -6499 Mar 11 j 14:54 1°≈48'41 -14°10'03 -6493 Dec 09 j 02:06 7°≈05'49 conjunction direct -6499 Mar 11 j 15:07 1°≈48'41 14°10'26 -6492 Mar 10 j 07:39 8°≈22'59 minimum elong evening set -6499 Mar 11 j 10:09 1°≈48'24 49.54204 AU max. Earth dist. -6499 Mar 16 j 23:28 8°≈34'04 -13°00'11 morning rise 1°≈55'58 conjunction -6492 Mar 18 j 10:18 -6499 Jun 21 i 18:45 retrograde 3°≈17'59 minimum elong -6492 Mar 18 j 10:31 8°≈34'05 13°00'32 opposition -6499 Sep 12 i 02:42 2°≈18'21 -14°40'38 max. Earth dist. -6492 Mar 17 j 19:07 8°≈33'12 49.06533 AU min. Earth dist. -6499 Sep 12 i 08:05 2°≈18'05 47.57615 AU morning rise -6492 Mar 26 j 13:42 8°≈45'11 direct -6499 Dec 02 j 20:21 1°≈18'41 retrograde -6492 Jun 28 j 10:19 10°≈03'46 -6498 Mar 07 j 01:56 2°≈38'21 opposition -6492 Sep 18 i 10:17 9°≈04'05 -13°27'22 evening set min. Earth dist. -6492 Sep 19 j 00:27 9°≈03'24 47.07527 AU -6498 Mar 12 j 20:54 2°≈46'14 -14°00'49 -6492 Dec 09 j 06:31 8°≈04'05 conjunction direct minimum elong -6498 Mar 12 j 21:06 2°≈46'15 14°01'12 evening set -6491 Mar 11 j 06:05 9°≈20'54 max. Earth dist. -6498 Mar 12 j 15:12 2°≈45'55 49.48443 AU morning rise -6498 Mar 18 j 16:26 2°≈54'09 conjunction -6491 Mar 19 j 16:51 9°≈32'27 -12°49'14 retrograde -6498 Jun 22 j 22:18 4°≈15'34 minimum elong -6491 Mar 19 j 17:04 9°≈32'28 12°49'36 -6498 Sep 13 j 07:02 3°≈15′56 -14°30′56 -6491 Mar 19 j 01:04 9°**≈**31'33 48.97893 AU opposition max. Earth dist. -6498 Sep 13 j 12:21 3°≈15'41 47.51576 AU -6491 Mar 28 j 04:10 min. Earth dist. morning rise 9°≈44'03 -6498 Dec 04 j 02:49 -6491 Jun 29 j 16:40 direct 2°≈16'13 retrograde 11°≈02'13 -6497 Mar 07 j 21:24 -6491 Sep 19 j 14:56 evening set 3°**≈**35′23 opposition 10°≈02'29 -13°15'55 min. Earth dist. -6491 Sep 20 j 06:14 10°≈01'45 46.98482 AU conjunction -6497 Mar 14 j 02:48 3°≈43'52 -13°51'20 direct -6491 Dec 10 j 10:44 9°≈02'24 minimum elong -6497 Mar 14 j 03:01 3°≈43'52 13°51'43 evening set -6490 Mar 12 j 04:49 10°≈18'53 max. Earth dist. -6497 Mar 13 j 19:17 3°≈43'26 49.42402 AU -6497 Mar 20 j 08:52 3°≈52'23 -6490 Mar 20 j 23:15 10°≈30'53 -12°38'04 morning rise conjunction

-6497 Jun 24 j 05:18

retrograde

5°≈13'15

-6490 Mar 20 j 23:29

minimum elong

10°≈30'54 12°38'25

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6490 in astronomical counting style is the year 6491 BCE in historical counting style. -6490 Mar 20 i 04:58 10°≈29'51 48.88774 AU retrograde -6484 Jul 06 i 12:13 17°≈54'29 max. Earth dist. opposition -6490 Mar 29 j 18:26 -6484 Sep 26 j 00:58 16°≈54'25 -11°48'19 10°≈42'56 morning rise -6490 Jul 01 j 00:06 min. Earth dist. -6484 Sep 27 j 00:37 16°≈53'16 46.24918 AU 12° 200'44 retrograde -6490 Sep 20 j 19:35 11°≈00'56 -13°04'12 -6484 Dec 16 j 22:30 15°≈53'45 opposition direct -6490 Sep 21 j 11:59 -6483 Mar 17 j 02:29 min. Earth dist. 11°≈00'09 46.88995 AU evening set 17°≈08'37 direct -6490 Dec 11 j 14:17 10°≈00'45 evening set -6489 Mar 13 j 03:33 11°≈16′56 conjunction -6483 Mar 27 j 21:58 17°≈23'33 -11°12'36 17°≈23'34 11°12'54 max. Earth dist. -6489 Mar 21 j 10:30 11°≈28'17 48.79222 AU minimum elong -6483 Mar 27 j 22:11 max. Earth dist. -6483 Mar 26 j 19:31 17°≈22'02 48.15122 AU conjunction -6489 Mar 22 j 05:43 11°≈29'23 -12°26'38 morning rise -6483 Apr 07 j 17:58 17°≈38'32 minimum elong -6489 Mar 22 j 05:55 11°**≈**29′24 12°26'59 retrograde -6483 Jul 07 j 15:53 18°≈54'19 -6489 Mar 31 j 08:28 -6483 Sep 27 j 06:01 morning rise 11°≈41'52 opposition 17°≈54'13 -11°34'42 -6489 Jul 02 j 03:43 retrograde 12°**≈**59'18 min. Earth dist. -6483 Sep 28 j 06:01 17°≈53'03 46.13101 AU opposition -6489 Sep 22 j 00:24 11°≈59'27 -12°52'15 direct -6483 Dec 18 j 06:15 16°≈53'29 min. Earth dist. -6489 Sep 22 j 18:43 11°≈58'34 46.79096 AU evening set -6482 Mar 18 j 03:14 18°≈08'13 direct -6489 Dec 12 j 21:56 10°≈59'10 max. Earth dist. -6482 Mar 28 j 00:18 18°≈21'53 48.03240 AU evening set -6488 Mar 13 j 02:52 12°≈15'05 conjunction -6482 Mar 29 j 05:02 18°≈23'33 -10°59'20 conjunction -6488 Mar 22 j 12:17 12°≈27'58 -12°14'58 minimum elong -6482 Mar 29 j 05:15 18°**≈**23'33 10°59'39 minimum elong -6488 Mar 22 j 12:32 12°≈27'58 12°15'18 morning rise -6482 Apr 09 j 07:26 18°≈38'55 max. Earth dist. -6488 Mar 21 j 15:56 12°≈26'47 48.69303 AU retrograde -6482 Jul 08 j 22:07 19°≈54'31 morning rise -6488 Mar 31 j 22:20 12°≈40'52 opposition -6482 Sep 28 i 11:21 18°≈54'22 -11°20'49 retrograde -6488 Jul 02 i 07:30 13°≈57'58 min. Earth dist. -6482 Sep 29 i 13:39 18°≈53'05 46.00840 AU opposition -6488 Sep 22 i 05:01 12°≈58'03 -12°40'01 direct -6482 Dec 19 i 11:55 17°≈53'32 min. Earth dist. -6488 Sep 22 j 23:32 12°≈57'10 46.68851 AU evening set -6481 Mar 19 j 04:14 19°≈08'08 -6488 Dec 13 j 05:03 max. Earth dist. -6481 Mar 29 j 06:59 19°≈22'08 47.90885 AU direct 11°≈57'41 -6487 Mar 14 j 02:16 13°≈13'20 evening set -6481 Mar 30 j 12:18 19°≈23'51 -10°45'49 conjunction -6481 Mar 30 j 12:31 conjunction -6487 Mar 23 j 18:51 13°≈26'38 -12°03'01 19°**≈**23'51 10°46'07 minimum elong -6487 Mar 23 j 19:04 -6481 Apr 10 j 20:41 minimum elong 13°≈26'39 12°03'21 morning rise 19°≈39'36 -6487 Mar 22 j 20:35 -6481 Jul 10 j 05:49 max. Earth dist. 13°≈25'22 48.59048 AU retrograde 20°≈55'00 -6487 Apr 02 j 12:10 13°≈39'59 -6481 Sep 29 j 16:47 19°≈54'48 -11°06'41 morning rise opposition -6487 Jul 03 j 14:14 min. Earth dist. -6481 Sep 30 j 20:07 19°≈53'28 45.88063 AU retrograde 14°≈56'46 -6487 Sep 23 j 09:58 -6481 Dec 20 j 16:13 opposition 13°≈56'48 -12°27'31 direct 18°≈53'52 -6487 Sep 24 j 06:21 -6480 Mar 19 j 05:44 min. Earth dist. 13°≈55'49 46.58304 AU evening set 20°≈08'19 direct -6487 Dec 14 j 09:13 12°≈56'21 max. Earth dist. -6480 Mar 29 j 11:29 20°≈22'32 47.78006 AU evening set -6486 Mar 15 j 01:47 14°≈11'46 max. Earth dist. -6486 Mar 24 j 03:05 14°≈24'12 48.48510 AU conjunction -6480 Mar 30 j 19:39 20°≈24'25 -10°32'04 -6480 Mar 30 j 19:52 20°≈24'25 10°32'22 minimum elong conjunction -6486 Mar 25 j 01:25 14°≈25'29 -11°50'49 morning rise -6480 Apr 11 j 10:09 20°≈40'33 -6486 Mar 25 j 01:39 14°≈25'30 retrograde -6480 Jul 10 j 15:02 21°≈55'45 minimum elong 11°51'09 -6486 Apr 04 j 01:32 14°≈39'15 -6480 Sep 29 j 22:12 20°≈55'28 -10°52'17 morning rise opposition -6486 Apr 19 j 16:40 min. Earth dist. -6480 Oct 01 j 03:03 20°≈54'03 45.74768 AU 15°≈ -6486 Jul 04 j 20:49 15°≈55'45 -6480 Dec 20 j 19:28 19°≈54'24 retrograde direct -6486 Sep 20 j 22:57 -6479 Mar 20 j 07:19 15°R≈ evening set 21°≈08'44 opposition -6486 Sep 24 i 14:55 14°≈55'45 -12°14'43 max. Earth dist. -6479 Mar 30 i 17:55 21°≈23'16 47.64599 AU min. Earth dist. -6486 Sep 25 i 11:46 14°≈54'44 46.47468 AU direct -6486 Dec 15 i 13:59 13°≈55'13 conjunction -6479 Apr 01 i 03:13 21°≈25'12 -10°18'03 -6485 Mar 08 i 08:14 15°**≈** minimum elong -6479 Apr 01 i 03:26 21°≈25'13 10°18'21 -6485 Mar 16 j 01:45 15°≈10'25 -6479 Apr 12 j 23:24 21°≈41'42 evening set morning rise -6485 Mar 25 j 07:34 15°≈23'08 48.37697 AU -6479 Jul 11 j 21:00 22°≈56'43 max. Earth dist. retrograde -6479 Oct 01 j 03:54 21°≈56'20 -10°37'37 opposition -6485 Mar 26 j 08:04 min. Earth dist. conjunction 15°≈24'33 -11°38'21 -6479 Oct 02 j 10:43 21°≈54'49 45.60956 AU minimum elong -6485 Mar 26 j 08:17 15°≈24'34 11°38'40 direct -6479 Dec 22 j 03:06 20°≈55'08 -6485 Apr 05 j 15:06 15°≈38'44 evening set -6478 Mar 21 j 09:03 22°≈09'21 morning rise -6485 Jul 06 j 05:52 16°≈54'58 max. Earth dist. -6478 Mar 31 j 23:46 22°≈24'08 47.50717 AU retrograde -6485 Sep 25 j 19:47 15°≈54'56 -12°01'39 opposition -6485 Sep 26 j 17:32 -6478 Apr 02 j 10:33 22°≈26′10 -10°03′48 min. Earth dist. 15°≈53'52 46.36359 AU conjunction -6478 Apr 02 j 10:45 -6485 Nov 23 j 22:45 15°R≈ minimum elong 22°≈26'11 10°04'06 -6478 Apr 14 j 12:25 direct -6485 Dec 16 j 16:37 14°≈54'19 morning rise 22°≈43'02 -6478 Jul 13 j 01:52 -6484 Jan 08 j 13:49 15°≈ retrograde 23°≈57'51 evening set -6484 Mar 16 j 01:55 16°≈09'21 -6478 Oct 02 j 09:28 22°≈57'21 -10°22'42 opposition min. Earth dist. -6478 Oct 03 j 16:45 22°≈55'49 45.46691 AU conjunction -6484 Mar 26 j 15:03 16°≈23'54 -11°25'36 direct -6478 Dec 23 j 11:42 21°≈56'00 minimum elong -6484 Mar 26 j 15:16 16°≈23'55 11°25'56 evening set -6477 Mar 22 j 11:04 23°≈10'06 -6484 Mar 25 j 13:53 16°≈22'27 48.26581 AU max. Earth dist. -6477 Apr 02 j 05:17 23°≈25'08 47.36391 AU max. Earth dist. morning rise -6484 Apr 06 j 04:39 16°≈38'29

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6477 in astronomical counting style is the year 6478 BCE in historical counting style. opposition -6477 Apr 03 j 18:08 23°≈27'17 -9°49'17 -6471 Oct 09 i 03:54 0°\(\mathbf{1}\)10'49 -8°30'07 conjunction minimum elong -6477 Apr 03 j 18:21 min. Earth dist. -6471 Oct 10 j 18:51 0°**)** 68'52 44.37896 AU 23°≈27'18 9°49'34 -6477 Apr 16 j 01:35 -6471 Oct 18 j 05:45 23° 244'30 30°R≈ morning rise 29°≈08'25 -6477 Jul 14 j 07:35 24°≈59'10 direct -6471 Dec 30 j 08:41 retrograde -6477 Oct 03 j 15:09 -6470 Mar 11 j 19:01 0°**)**€ opposition 23°≈58'32 -10°07'30 -6477 Oct 05 j 00:40 min. Earth dist. 23°≈56'53 45.32025 AU evening set -6470 Mar 28 j 08:09 0°**¥**22'21 direct -6477 Dec 24 j 18:32 22°≈57'01 max. Earth dist. -6470 Apr 09 j 04:48 0° **★**39'13 46.27583 AU 24°≈11'02 evening set -6476 Mar 22 j 13:21 max. Earth dist. -6476 Apr 02 j 12:43 24°≈26'22 47.21697 AU conjunction -6470 Apr 11 j 02:03 0° **★**41'56 -7°59'52 minimum elong -6470 Apr 11 j 02:15 0°**)**41'56 8°00'06 conjunction -6476 Apr 04 j 01:55 24°≈28'34 -9°34'29 morning rise -6470 Apr 24 j 20:00 1°**米**01'31 -6476 Apr 04 j 02:07 -6470 Jul 21 j 13:48 minimum elong 24°≈28'34 9°34'46 retrograde 2°**)** 15'39 -6476 Apr 16 j 14:35 -6470 Oct 10 j 10:33 morning rise 24°≈46′07 opposition 1°**光**14'15 -8°12'50 retrograde -6476 Jul 14 j 13:32 26°≈00'38 min. Earth dist. -6470 Oct 12 j 03:01 1°**升**12'14 44.21125 AU opposition -6476 Oct 03 j 20:58 24°≈59'53 -9°52'01 direct -6470 Dec 31 j 12:28 0°\ 11'42 min. Earth dist. -6476 Oct 05 j 06:56 24°≈58'13 45.17009 AU evening set -6469 Mar 29 j 12:24 1° #25'43 direct -6476 Dec 25 j 01:31 23°≈58'12 max. Earth dist. -6469 Apr 10 j 12:47 1°**¥**42'52 46.10722 AU evening set -6475 Mar 23 j 15:50 25°≈12'08 max. Earth dist. -6475 Apr 03 j 18:08 25°≈27'42 47.06683 AU conjunction -6469 Apr 12 j 10:53 1°**)**(45'37 -7°43'07 minimum elong -6469 Apr 12 j 11:05 1°\(\dagger45'38\) 7°43'21 conjunction -6475 Apr 05 j 09:30 25°≈30'01 -9°19'26 morning rise -6469 Apr 26 j 09:01 2°\cdot\05'33 minimum elong -6475 Apr 05 i 09:43 25°≈30'01 9°19'42 retrograde -6469 Jul 22 i 22:34 3°**)** 19'40 -6475 Apr 18 i 03:32 25°≈47'55 opposition -6469 Oct 11 i 17:22 2°\;\;\\18'10 -7°55'17 morning rise retrograde -6475 Jul 15 i 23:32 27°≈02'18 min. Earth dist. -6469 Oct 13 j 11:38 2°¥16'03 44.03894 AU -6475 Oct 05 j 02:52 26°≈01'26 -9°36'14 -6468 Jan 01 j 19:39 1°¥15'28 opposition direct -6475 Oct 06 j 13:51 25°≈59'42 45.01712 AU -6468 Mar 29 j 17:12 2°\ 29'33 min. Earth dist. evening set -6475 Dec 26 j 04:45 24°≈59'35 -6468 Apr 10 j 19:53 2°\;\;46'54 45.93402 AU max. Earth dist. direct -6474 Mar 24 j 18:26 evening set 26°≈13'28 -6474 Apr 05 j 01:40 26°≈29'21 46.91396 AU -6468 Apr 12 j 19:50 2°**)** 49'47 -7°26'05 max. Earth dist. conjunction 2°**)**49'48 7°26'19 -6468 Apr 12 j 20:02 minimum elong 26°≈31'42 -9°04'05 -6468 Apr 26 j 22:14 -6474 Apr 06 j 17:23 3°¥10'01 conjunction morning rise -6474 Apr 06 j 17:35 -6468 Jul 23 j 07:10 26°≈31'42 9°04'21 4° # 24'09 minimum elong retrograde -6468 Oct 12 j 00:21 -6474 Apr 19 j 16:21 26°≈49'57 3°****22'31 -7°37'26 morning rise opposition -6474 Jul 17 j 07:44 28°≈04'13 -6468 Oct 13 j 19:16 3°**₭**20'22 43.86196 AU retrograde min. Earth dist. -6474 Oct 06 j 08:59 -6467 Jan 02 j 04:20 2°¥19'38 opposition 27°≈03'14 -9°20'09 direct -6474 Oct 07 j 21:22 3°**)** 33'49 min. Earth dist. 27°≈01'25 44.86156 AU evening set -6467 Mar 30 j 22:06 direct -6474 Dec 27 j 10:37 26°≈01'14 max. Earth dist. -6467 Apr 12 j 02:52 3°**₭**51'21 45.75594 AU -6473 Mar 25 j 21:23 27°≈15'05 evening set max. Earth dist. -6473 Apr 06 j 08:20 27°≈31'14 46.75877 AU conjunction -6467 Apr 14 j 04:52 3°\ 54'23 -7°08'48 minimum elong -6467 Apr 14 j 05:03 3°**¥**54'23 7°09'02 conjunction -6473 Apr 08 j 01:15 27°≈33'39 -8°48'27 morning rise -6467 Apr 28 j 11:17 4°**)** 14′56 -6473 Apr 08 j 01:27 27°≈33'40 -6467 Jul 24 j 14:22 5°**¥**29'05 minimum elong 8°48'43 retrograde -6473 Apr 21 j 05:13 27°≈52'15 -6467 Oct 13 j 07:36 4°**¥**27'18 -7°19'17 morning rise opposition -6473 Jul 18 j 14:12 29°≈06'26 -6467 Oct 15 j 04:52 4°¥25'01 43.68032 AU retrograde min. Earth dist. -6473 Oct 07 j 15:05 28°≈05'21 -9°03'46 -6466 Jan 03 j 13:00 3°**¥**24'14 opposition direct min. Earth dist. -6473 Oct 09 i 03:31 28°≈03'32 44.70359 AU evening set -6466 Apr 01 i 03:18 4° **)** 38'31 direct -6473 Dec 28 i 18:09 27°≈03'12 max. Earth dist. -6466 Apr 13 j 11:31 4°¥56'18 45.57352 AU evening set -6472 Mar 26 i 00:40 28°≈17'04 max. Earth dist. -6472 Apr 06 j 14:45 28°≈33'27 46.60090 AU conjunction -6466 Apr 15 j 14:07 4°\f59'22 -6°51'13 -6466 Apr 15 i 14:18 4°¥59'23 6°51'26 minimum elong -6472 Apr 08 i 09:24 28°≈35'59 -8°32'32 -6466 Apr 30 j 00:19 5°¥20'14 conjunction morning rise -6472 Apr 08 j 09:36 28°**≈**35'59 8°32'47 -6466 Jul 25 j 20:57 6°¥34'25 minimum elong retrograde -6472 Apr 21 j 18:11 28°≈54'55 -6466 Oct 14 j 14:48 5°**)** 32'29 -7°00'51 morning rise opposition 5°**¥**30'11 43.49449 AU -6472 Jun 20 j 09:37 0°**∀** min. Earth dist. -6466 Oct 16 j 12:30 retrograde -6472 Jul 18 j 20:10 0°\mathcal{H}09'03 direct -6465 Jan 04 j 21:53 4°\ 29'12 5°**)**43'35 -6472 Aug 16 j 09:54 30°R≈ evening set -6465 Apr 02 j 08:52 opposition -6472 Oct 07 j 21:25 29°≈07'51 -8°47'05 max. Earth dist. -6465 Apr 14 j 18:19 6°**₭**01'32 45.38710 AU -6472 Oct 09 j 11:50 29°≈05'57 44.54290 AU min. Earth dist. -6465 Apr 16 j 23:23 6°**)** €04'46 -6°33'22 direct -6472 Dec 29 j 01:56 28°≈05'35 conjunction -6465 Apr 16 j 23:32 evening set -6471 Mar 27 j 04:16 29°≈19′28 minimum elong 6°**★**04'46 6°33'35 -6465 May 01 j 13:29 max. Earth dist. -6471 Apr 07 j 22:58 29°≈36'10 46.44015 AU morning rise 6°**∺**25'55 -6465 Jul 27 j 07:43 retrograde 7°**)**40'10 conjunction -6471 Apr 09 j 17:47 29°≈38'43 -8°16'21 opposition -6465 Oct 15 j 22:15 6°**\()**38'04 -6°42'07 minimum elong -6471 Apr 09 j 17:59 29°≈38'44 8°16'36 min. Earth dist. -6465 Oct 17 j 21:31 6°**¥**35'40 43.30506 AU morning rise -6471 Apr 23 j 07:05 29°≈57'59 direct -6464 Jan 06 j 02:58 5°**)** 34'34 -6471 Apr 24 j 17:40 0°**)**€ -6464 Apr 02 j 14:41 6°**)**49'04 evening set -6471 Jul 20 j 03:22 1°**¥**12'06 -6464 Apr 15 j 03:38 7°**₭**07'17 45.19718 AU retrograde max. Earth dist.

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6464 in astronomical counting style is the year 6465 BCE in historical counting style. -6464 Apr 17 j 09:00 7°\(\)\(\)\(10'33\)\(-6^\circ\)15'14 evening set -6457 Apr 10 j 18:00 14° **)** 41'57 conjunction -6464 Apr 17 i 09:10 7°**升**10'33 6°15'25 max. Earth dist. -6457 Apr 23 j 19:30 15°**)**€01'32 43.80044 AU minimum elong -6464 May 02 j 02:29 7°**¥**32′00 morning rise 8°**)** 46′19 -6464 Jul 27 j 18:01 -6457 Apr 26 j 09:10 15°**)**€05'25 -3°59'57 conjunction retrograde -6464 Oct 16 j 05:53 7°**)** 44′02 -6°23′04 -6457 Apr 26 j 09:16 15°₩05'25 4°00'06 opposition minimum elong -6457 May 11 j 22:54 min. Earth dist. -6464 Oct 18 j 06:26 7°**₭**41'34 43.11244 AU morning rise 15°**)** 28'49 direct -6463 Jan 06 j 09:30 6°**)**40′19 retrograde -6457 Aug 05 j 17:46 16°**)** 44'19 -6457 Oct 24 j 17:27 15°**)** 40′50 -4°00′52 evening set -6463 Apr 03 j 20:56 7°**)** 54'59 opposition -6457 Oct 27 j 01:20 max. Earth dist. -6463 Apr 16 j 11:44 8° **★**13'23 45.00455 AU min. Earth dist. 15°**₭**37'56 41.69920 AU direct -6456 Jan 14 j 21:35 14°**)** 35'37 conjunction -6463 Apr 18 j 18:36 8°¥16'45 -5°56'48 evening set -6456 Apr 11 j 03:12 15°**¥** 52′05 -6463 Apr 18 j 18:45 -6456 Apr 24 j 06:01 minimum elong 8°**H**16'45 5°56'59 max. Earth dist. 16°**光**11'50 43.58855 AU -6463 May 03 j 15:37 morning rise 8°**¥**38′30 -6463 Jul 29 j 04:37 retrograde 9°**¥**52'54 conjunction -6456 Apr 26 j 20:38 16°¥15'49 -3°39'27 opposition -6463 Oct 17 j 13:40 8°\\$50'26 -6°03'43 minimum elong -6456 Apr 26 j 20:44 16°**)** 15′49 3°39'36 min. Earth dist. -6463 Oct 19 j 14:21 8°**)** 47'57 42.91746 AU morning rise -6456 May 12 j 12:31 16°**¥**39'28 direct -6462 Jan 07 j 16:44 7°**)** 46′30 retrograde -6456 Aug 06 j 02:36 17° **\(**55'13 evening set -6462 Apr 05 j 03:14 9°**₭**01'20 opposition -6456 Oct 25 j 02:56 16°**¥**51'32 -3°39'17 max. Earth dist. -6462 Apr 17 j 20:13 9°**升**19'57 44.80953 AU min. Earth dist. -6456 Oct 27 j 11:09 16°**)** 48'36 41.48431 AU direct -6455 Jan 15 j 09:32 15°**)** 46′04 conjunction -6462 Apr 20 j 04:18 9°\(\)23'24 -5°38'04 evening set -6455 Apr 12 j 12:55 17°**)**€02'52 minimum elong -6462 Apr 20 j 04:27 9°\ 23'25 5°38'15 max. Earth dist. -6455 Apr 25 j 15:11 17°**)** €22'41 43.37232 AU morning rise -6462 May 05 i 04:30 9°**)**(45'26 retrograde -6462 Jul 30 j 11:53 10°**¥**59'57 conjunction -6455 Apr 28 i 08:18 17°\(\)26'51 -3°18'40 opposition -6462 Oct 18 j 21:49 9°**)** 57'19 -5°44'02 minimum elong -6455 Apr 28 i 08:24 17°**¥**26'51 3°18'47 -6462 Oct 21 j 00:14 9°**)** 54'44 42.72035 AU -6455 May 14 j 02:13 17°**¥** 50'46 min. Earth dist. morning rise -6461 Jan 09 j 03:30 8°¥53'10 -6455 Aug 07 j 12:57 19°**₩**06'46 direct retrograde 10°₩08'12 -6455 Oct 26 j 12:51 18°**)** €02'52 -3°17'24 -6461 Apr 06 j 10:07 opposition evening set 10°**)** 27'05 44.61262 AU -6455 Oct 28 j 23:04 17°**¥**59'49 41.26533 AU max. Earth dist. -6461 Apr 19 j 06:13 min. Earth dist. -6454 Jan 16 j 19:18 16°**¥**57′08 direct -6461 Apr 21 j 14:24 10°**)** 30'34 -5°19'02 -6454 Apr 13 j 22:46 conjunction evening set 18°**)** 14'17 -6461 Apr 21 j 14:32 -6454 Apr 27 j 02:50 18° **€** 34'19 43.15205 AU 10° **★** 30'34 5°19'13 max. Earth dist. minimum elong -6461 May 06 j 17:38 10°**¥**52'53 morning rise 18°**¥**38'31 -2°57'35 -6461 Jul 31 j 18:51 12°**)**€07'32 -6454 Apr 29 j 20:12 retrograde conjunction 11°**H**04'44 -5°24'02 18°**¥**38'31 2°57'43 -6461 Oct 20 j 05:56 -6454 Apr 29 j 20:18 opposition minimum elong -6461 Oct 22 j 08:21 11°**米**02'08 42.52133 AU -6454 May 15 j 15:46 19°**)** 02'40 min. Earth dist. morning rise -6454 Aug 08 j 23:35 direct -6460 Jan 10 j 14:10 10°**)**€00'22 retrograde 20° **★** 18'58 evening set -6460 Apr 06 j 17:33 11°**)** 15'39 opposition -6454 Oct 27 j 22:58 19°**)** 14′50 -2°55′12 max. Earth dist. -6460 Apr 19 j 14:22 11°**)** 34'40 44.41368 AU min. Earth dist. -6454 Oct 30 j 10:10 19°**)** 11'42 41.04241 AU direct -6453 Jan 18 j 05:12 18°**)**€08'48 conjunction -6460 Apr 22 j 00:41 11°\dagger38'18 -4°59'43 evening set -6453 Apr 15 j 09:25 19°**¥**26′20 -6460 Apr 22 j 00:50 11°\(\dagger)38'18 4°59'54 max. Earth dist. -6453 Apr 28 j 12:51 19°**)** 46′26 42.92813 AU minimum elong -6460 May 07 j 06:56 12°**)** 00'54 morning rise -6460 Aug 01 j 05:47 13°**)**€ 15'43 -6453 May 01 j 08:22 19°\\$50'47 -2°36'12 retrograde conjunction -6460 Oct 20 j 14:27 12°**升** 12'46 -5°03'43 -6453 May 01 j 08:27 19°¥50'48 2°36'19 opposition minimum elong -6460 Oct 22 i 18:22 min. Earth dist. 12°**)** 10′05 42.32031 AU morning rise -6453 May 17 j 05:41 20°**)** 15′11 -6459 Jan 10 i 20:37 direct 11°**)**(08'12 retrograde -6453 Aug 10 j 13:14 21°**)** 31'47 evening set -6459 Apr 08 i 01:08 12°\(\frac{1}{23}\)'44 opposition -6453 Oct 29 i 09:08 20°\(\frac{1}{2}27'24\) -2°32'40 max. Earth dist. -6459 Apr 21 i 00:50 12°**)** 43′00 44.21239 AU min. Earth dist. -6453 Oct 31 i 21:15 20°**)** €24'13 40.81626 AU direct -6452 Jan 19 j 13:20 19°**₩**21'05 -6459 Apr 23 i 11:14 12°\ 46'39 -4°40'05 -6452 Apr 15 j 20:27 20° ¥ 39'01 conjunction evening set -6459 Apr 23 j 11:22 12°**¥**46'39 4°40'15 max. Earth dist. -6452 Apr 29 j 00:30 20°**升**59'16 42.70098 AU minimum elong -6459 May 08 j 20:01 13°**)**€09'32 morning rise retrograde -6459 Aug 02 j 16:12 14°**)** 24'34 conjunction -6452 May 01 j 20:58 21°\columbf{03'42} -2°14'32 opposition -6459 Oct 21 j 23:13 13°**¥**21'26 -4°43'05 minimum elong -6452 May 01 j 21:03 21°\(\mathbf{H}\)03'43 2°14'39 min. Earth dist. -6459 Oct 24 j 04:06 13°**)** 18'42 42.11664 AU morning rise -6452 May 17 j 19:28 21°**)** 28'19 -6458 Jan 12 j 04:49 12°**)** 16'41 retrograde -6452 Aug 11 j 01:43 22°\ 45'16 direct -6458 Apr 09 j 09:22 13°**)** € 32'30 -6452 Oct 29 j 19:53 21°**)** 40'37 -2°09'50 evening set opposition -6458 Apr 22 j 09:48 13°**₭**51'54 44.00827 AU -6452 Nov 01 j 09:41 21°**₭**37'20 40.58731 AU max. Earth dist. min. Earth dist. -6451 Jan 20 j 00:52 20°**)** 34'00 direct conjunction -6458 Apr 24 j 21:58 13°**¥**55'41 -4°20'10 evening set -6451 Apr 17 j 07:51 21°**X**52'23 minimum elong -6458 Apr 24 j 22:06 13°**¥**55'42 4°20'20 max. Earth dist. -6451 Apr 30 j 12:34 22°\(\mathbf{H}\) 12'48 42.47146 AU morning rise -6458 May 10 j 09:27 14°**)** 18'50 retrograde -6458 Aug 04 j 05:42 15°**)** 34'05 conjunction -6451 May 03 j 09:33 22°**H**17'18 -1°52'35 opposition -6458 Oct 23 j 08:03 14°**)** 30'48 -4°22'08 minimum elong -6451 May 03 j 09:37 22°**升**17'18 1°52'40 -6458 Oct 25 j 13:41 14°**)** €28'01 41.90990 AU -6451 May 19 j 09:14 22° **)** 42'07 min. Earth dist. morning rise

-6457 Jan 13 j 12:02

direct

13°**)**€25'49

-6451 Aug 12 j 14:01

retrograde

23°**¥**59′26

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6451 in astronomical counting style is the year 6452 BCE in historical counting style. -6451 Oct 31 j 06:46 22° ¥ 54'32 -1°46'40 min. Earth dist. -6445 Nov 11 i 03:27 0°**Υ**32'57 38.93840 AU opposition -6451 Nov 02 j 20:25 22°\f51'15 40.35633 AU -6445 Dec 07 j 16:05 min. Earth dist. 30°R ¥ -6450 Jan 21 j 13:54 21°**)** 47'37 -6444 Jan 29 j 11:33 29°¥28'00 direct direct $0^{\circ}\Upsilon$ evening set -6450 Apr 18 j 19:52 23°**)**€06′28 -6444 Mar 21 j 12:26 max. Earth dist. 0°Y50'35 -6450 May 01 j 23:48 23°**₭**26'58 42.23998 AU evening set -6444 Apr 26 j 08:34 max. Earth dist. -6444 May 09 j 08:40 1°Υ11'39 40.81674 AU conjunction -6450 May 04 j 22:31 23°**X**31'36 -1°30'20 -6450 May 04 j 22:34 1° Υ 16'49 minimum elong 23°\(\frac{1}{3}\)31'37 1°30'26 conjunction -6444 May 12 j 12:12 0°49'09 1°Y16'49 morning rise -6450 May 20 j 23:07 23°**)** 56'38 minimum elong -6444 May 12 j 12:10 0°49'07 1°**Y**42'54 retrograde -6450 Aug 14 j 02:13 25°**升** 14′22 morning rise -6444 May 28 j 13:00 3°**Y**03'54 opposition -6450 Nov 01 j 17:58 24°**₭**09'13 -1°23'12 retrograde -6444 Aug 21 j 15:52 1°**Y**57'16 min. Earth dist. -6450 Nov 04 j 09:19 24°**₭**05'49 40.12386 AU opposition -6444 Nov 08 j 21:12 1°04'10 direct -6449 Jan 23 j 01:06 23°**₭**02'00 min. Earth dist. -6444 Nov 11 j 17:20 1°Υ53'30 38.69395 AU evening set -6449 Apr 20 j 08:20 24°**₩**21'22 direct -6443 Jan 30 j 03:18 0°Y48'16 max. Earth dist. -6449 May 03 j 13:23 24°**₭**42'03 42.00714 AU evening set -6443 Apr 28 j 01:03 2°Y11'34 max. Earth dist. -6443 May 10 j 21:53 2°Υ32'34 40.57052 AU conjunction -6449 May 06 j 11:55 24°\(\)46'43 -1°07'48 minimum elong -6449 May 06 j 11:57 24°\ 46'43 1°07'53 conjunction -6443 May 14 j 03:43 2°**Y**37'56 1°13'21 morning rise -6449 May 22 j 13:06 25°¥11'57 minimum elong -6443 May 14 j 03:40 2°**Y**37'56 1°13'19 retrograde -6449 Aug 15 j 13:18 26°**)** € 30'08 morning rise -6443 May 30 j 03:43 3°Y04'10 opposition -6449 Nov 03 j 05:35 25°\(\frac{1}{24}\)'45 -0°59'25 retrograde -6443 Aug 23 j 07:38 4°Y25'49 min. Earth dist. -6449 Nov 05 j 21:00 25°\(\frac{1}{21}'19\) 39.89004 AU opposition -6443 Nov 10 j 11:11 3°**Y**18′52 1°29'47 direct -6448 Jan 24 i 13:30 24°**)** 17'14 min. Earth dist. -6443 Nov 13 i 08:53 3°Υ15'00 38.44659 AU evening set -6448 Apr 20 j 21:34 25°**)**(37'10 direct -6442 Jan 31 i 15:44 2°Y09'30 max. Earth dist. -6448 May 04 j 01:11 25°**)** 57'54 41.77300 AU -6442 Apr 29 j 18:08 3°Y33'34 evening set -6442 May 12 j 13:48 3°Υ54'38 40.32132 AU max. Earth dist. -6448 May 07 j 01:30 26° \(\mathbf{H}\) 02'43 -0°44'58 conjunction -6448 May 07 j 01:32 -6442 May 15 j 19:53 4°Υ00'03 1°37'49 26°\(\mathbf{1}\)02'43 0°45'03 conjunction minimum elong -6448 May 23 j 03:16 -6442 May 15 j 19:50 4°**Υ**00'03 26°**)**€28'08 1°37'48 morning rise minimum elong -6448 Aug 16 j 04:41 27°**)** 46'49 -6442 May 31 j 18:34 4°Υ26'24 morning rise retrograde -6448 Nov 03 j 17:27 -6442 Aug 24 j 22:09 5°**Y**48'44 26°**∺**41'11 -0°35'18 opposition retrograde -6448 Nov 06 j 09:42 4°**Υ**41'27 1°55'41 -6442 Nov 12 j 01:31 min. Earth dist. 26°**升**37'43 39.65507 AU opposition 4°Υ37'30 38.19647 AU -6447 Jan 24 j 22:12 25°**∺**33'24 min. Earth dist. -6442 Nov 15 j 00:14 direct -6447 Apr 22 j 11:16 -6441 Feb 02 j 05:31 3°**Y**31'43 evening set 26°\ 53'56 direct -6447 May 05 j 15:07 4°Y56'33 max. Earth dist. 27°**光**14'49 41.53736 AU evening set -6441 May 01 j 12:05 5°**Y**17'35 40.06967 AU max. Earth dist. -6441 May 14 j 04:40 -6447 May 08 j 15:38 conjunction 27°**¥**19'40 -0°21'52 -6447 May 08 j 15:39 27°**升**19'40 0°21'56 conjunction -6441 May 17 j 12:18 5°**Υ**23'09 2°02'32 minimum elong morning rise -6447 May 24 j 17:25 27°**)** 45'17 minimum elong -6441 May 17 j 12:14 5°**Y**23′09 2°02'31 retrograde -6447 Aug 17 j 19:49 29°**)**€04'31 morning rise -6441 Jun 02 j 09:41 5°**Y**49'35 -6447 Nov 05 j 05:51 27°\£58'38 -0°10'54 retrograde -6441 Aug 26 j 16:48 7°Υ12'38 opposition min. Earth dist. -6447 Nov 07 j 23:27 27°**)** 55'04 39.41847 AU -6441 Nov 13 j 16:13 6°Υ05'01 2°21'51 opposition -6446 Jan 26 j 08:22 min. Earth dist. -6441 Nov 16 j 15:18 6°Υ01'02 37.94427 AU direct 26°\ 50'34 -6446 Apr 16 j 05:50 27°**)** 59'41 -6440 Feb 03 j 18:18 4°Υ54'52 asc. node direct -6446 Apr 24 j 01:34 6°Y20'33 evening set 28°**)** 11'45 evening set -6440 May 02 j 06:37 max. Earth dist. -6446 May 07 i 04:21 28°**)** 32'43 41.29992 AU max. Earth dist. -6440 May 14 j 20:42 6°**Υ**41'34 39.81590 AU 6°**Y**47'14 2°27'29 conjunction -6446 May 10 i 05:54 28°\(\mathbf{3}7'40\) 0°01'35 conjunction -6440 May 18 i 05:13 -6446 May 10 j 05:53 28°**)** 37'40 0°01'33 minimum elong -6440 May 18 i 05:07 6°Υ47'13 2°27'30 minimum elong -6446 May 09 i 23:22 28°**H**37'15 -6440 Jun 03 i 00:39 7°**Y**13'45 behind sun begin morning rise -6446 May 10 j 12:24 28°\ 38'04 -6440 Aug 27 j 10:21 8°Y37'33 behind sun end retrograde -6446 May 26 j 07:45 29°\ 03'27 -6440 Nov 14 j 07:31 7°**Υ**29'34 2°48'18 morning rise opposition min. Earth dist. -6446 Jul 07 j 04:49 $0^{\circ}\Upsilon$ -6440 Nov 17 j 08:17 7°**Υ**25'28 37.69050 AU 0°**Υ**23'14 retrograde -6446 Aug 19 j 11:44 direct -6439 Feb 04 j 08:25 6°**Y**19′01 7°**Y**45'35 -6446 Oct 02 j 04:12 30°R **₩** evening set -6439 May 04 j 01:56 opposition -6446 Nov 06 j 18:28 29°\ 17'08 0°13'49 max. Earth dist. -6439 May 16 j 13:54 8°**Y**06'36 39.56101 AU min. Earth dist. -6446 Nov 09 j 12:14 29°**₭**13'32 39.17981 AU -6445 Jan 27 j 21:03 -6439 May 19 j 22:26 8°Υ12'19 2°52'40 direct 28°**)** (08'46 conjunction 29°**)** 30'38 -6439 May 19 j 22:20 8°Υ12'19 2°52'41 evening set -6445 Apr 25 j 16:43 minimum elong -6439 Jun 04 j 15:49 8°**Y**38'53 max. Earth dist. -6445 May 08 j 17:30 29°**₭**51'37 41.05979 AU morning rise 10°**Y**′03′28 retrograde -6439 Aug 29 j 03:15 -6445 May 11 j 20:49 29°**X**56'43 0°25'13 -6439 Nov 15 j 23:09 8°**Υ**55'08 3°14'59 conjunction opposition minimum elong -6445 May 11 j 20:48 29°**X**56'43 0°25'11 min. Earth dist. -6439 Nov 18 j 23:27 8°**Y**51'02 37.43606 AU -6445 May 13 j 21:19 0° γ direct -6438 Feb 06 j 02:26 7°**Y**44'11 morning rise -6445 May 27 j 22:16 0°**Υ**22'39 evening set -6438 May 05 j 21:54 9°**Y**11'40 1°Y43'03 max. Earth dist. -6438 May 18 j 05:55 9°Υ32'35 39.30553 AU retrograde -6445 Aug 21 j 02:28

-6445 Nov 08 j 07:35

opposition

0°**Υ**36'41 0°38'51

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6438 in astronomical counting style is the year 6439 BCE in historical counting style. 9°**Υ**38'27 3°18'04 -6438 May 21 j 15:58 evening set -6431 May 17 j 20:09 19°Y51'55 conjunction max. Earth dist. 20°**Υ**11'52 37.51873 AU -6438 May 21 j 15:51 9°Y38'27 3°18'07 -6431 May 28 j 21:07 minimum elong -6438 Jun 06 j 06:56 10°**℃**05'04 morning rise -6438 Aug 30 j 20:50 11°Y30'30 -6431 Jun 01 j 10:35 20°**Y**18′22 conjunction 6°20'38 retrograde -6438 Nov 17 j 15:22 10°**Υ**21'48 3°41'55 -6431 Jun 01 j 10:21 20°**Y**18′21 opposition minimum elong 6°20'43 -6431 Jun 15 j 21:46 20°**Y**44'36 -6438 Nov 20 j 16:54 min. Earth dist. 10°**Y**17'36 37.18153 AU morning rise 22°Y17'38 direct -6437 Feb 07 j 18:55 9°**Y**10′26 retrograde -6431 Sep 10 j 19:10 10°**Y**38'54 21°**Y**06'32 6°55'48 evening set -6437 May 07 j 18:47 opposition -6431 Nov 28 j 00:17 10°**Y**′59′52 39.05010 AU 21°**Y**′01'57 max. Earth dist. -6437 May 20 j 00:54 min. Earth dist. -6431 Dec 01 j 05:21 35.40393 AU 19°**Y**52'25 direct -6430 Feb 17 j 22:35 21°**Y**29'32 conjunction -6437 May 23 j 10:13 11°**Υ**05'43 3°43'40 evening set -6430 May 19 j 23:48 -6437 May 23 j 10:05 11°**Υ**05'43 -6430 May 30 j 19:44 21°**Υ**49'16 37.26121 AU minimum elong 3°43'42 max. Earth dist. -6437 Jun 07 j 22:15 11°Y32'21 morning rise retrograde -6437 Sep 01 j 13:16 12°Y58'41 conjunction -6430 Jun 03 j 08:45 21°**Y**55'48 6°47'11 opposition -6437 Nov 19 j 08:01 11°**Υ**49'39 4°09'05 minimum elong -6430 Jun 03 j 08:29 21°**Y**55'47 6°47'19 min. Earth dist. -6437 Nov 22 j 09:27 11°**Υ**45'25 36.92728 AU morning rise -6430 Jun 17 j 14:09 22°Y21'51 direct -6436 Feb 09 j 12:12 10°Y37'53 retrograde -6430 Sep 12 j 15:59 23°Y56'13 evening set -6436 May 08 j 16:42 12° \bar{\gamma} 07'24 opposition -6430 Nov 29 j 21:15 22°**Ƴ**44'43 7°24'04 max. Earth dist. -6436 May 20 j 18:14 12°**Y**28'12 38.79511 AU min. Earth dist. -6430 Dec 03 j 02:41 22°**Y**40'05 35.14798 AU direct -6429 Feb 19 j 19:22 21° Y 30'10 conjunction -6436 May 24 j 04:50 12° Y 34'13 4° 09'27 evening set -6429 May 22 j 04:51 23°Y08'45 minimum elong -6436 May 24 j 04:41 12°**Ƴ**34'12 4°09'30 max. Earth dist. -6429 Jun 01 i 17:15 23°Υ28'06 37.00322 AU morning rise -6436 Jun 08 j 13:51 13°Y00'51 retrograde -6436 Sep 02 i 08:41 14°\bar{\gamma}28'09 conjunction -6429 Jun 05 i 07:28 23°**Y**34'48 7°13'49 opposition -6436 Nov 20 j 01:14 13°Υ18'46 4°36'26 minimum elong -6429 Jun 05 i 07:12 23°**Y**34'46 7°13'56 -6436 Nov 23 i 03:03 13°**Y**14'31 36.67373 AU -6429 Jun 19 j 06:54 24°Y00'38 min. Earth dist. morning rise -6435 Feb 10 j 03:05 12° Y 06'38 -6429 Sep 14 j 15:35 25°Y36'21 direct retrograde -6435 May 10 j 15:11 13°**Y**37′15 -6429 Dec 01 j 18:40 24°**Y**°24'27 7°52'23 opposition evening set -6435 May 22 j 13:36 13°**Y**58'01 38.54048 AU -6429 Dec 05 j 00:18 24°Υ19'47 34.89204 AU max. Earth dist. min. Earth dist. -6428 Feb 21 j 14:32 23°Y09'26 direct 14°Υ04'03 4°35'24 -6428 May 23 j 10:49 24° Y 49'33 conjunction -6435 May 25 j 23:58 evening set -6435 May 25 j 23:48 -6428 Jun 02 j 16:44 25°Υ08'36 36.74522 AU 14°**℃**04'03 4°35'27 max. Earth dist. minimum elong -6435 Jun 10 j 05:17 14°**Y**30'40 morning rise 25°**Y**15'21 7°40'27 -6435 Sep 04 j 04:10 15°**Y**59′00 -6428 Jun 06 j 06:55 retrograde conjunction 14°**Υ**49'17 5°03'59 $25^{\circ}\Upsilon 15'20 \quad 7^{\circ}40'36$ -6435 Nov 21 j 19:07 -6428 Jun 06 j 06:37 opposition minimum elong -6435 Nov 24 j 21:48 -6428 Jun 19 j 23:34 25°**Y**40′55 min. Earth dist. 14°**Y**44′57 36.42051 AU morning rise 13°**Y**36'47 -6428 Sep 15 j 15:25 27°**Y**18′05 direct -6434 Feb 11 j 19:11 retrograde -6434 May 12 j 14:54 15°**Y**08'35 opposition -6428 Dec 02 j 17:02 26°**Y**05'45 8°20'44 evening set max. Earth dist. -6434 May 24 j 08:47 15°**Y**29'12 38.28606 AU min. Earth dist. -6428 Dec 05 j 23:38 26°Υ01'00 34.63661 AU direct -6427 Feb 22 j 10:39 24°Y50'17 evening set conjunction -6434 May 27 j 19:39 15°**Υ**35'20 5°01'31 -6427 May 25 j 17:51 26°Y32'00 -6434 May 27 j 19:28 15°**Y**35'19 5°01'35 max. Earth dist. -6427 Jun 04 j 16:38 26°Υ50'41 36.48818 AU minimum elong -6434 Jun 11 j 21:11 16°**Y**01'54 morning rise -6434 Sep 06 j 02:26 17°**Y**31'20 -6427 Jun 08 j 06:38 26°**Y**'57'28 8°07'05 retrograde conjunction -6434 Nov 23 j 13:16 16°**Y**21'17 5°31'43 -6427 Jun 08 j 06:20 26°**Y**57′27 opposition minimum elong 8°07'14 27°**Y**22'44 min. Earth dist. -6434 Nov 26 j 15:42 16°Υ16'56 36.16738 AU morning rise -6427 Jun 21 i 16:14 29°**Y**01′25 direct -6433 Feb 13 j 12:12 15°**Y**′08′23 retrograde -6427 Sep 17 i 17:07 27°**Y**'48'39 8°49'04 evening set -6433 May 14 j 15:36 16°**Y**41′26 opposition -6427 Dec 04 i 15:54 27°**Υ**43'56 34.38260 AU max. Earth dist. -6433 May 26 j 04:09 17°**Υ**01'52 38.03113 AU min. Earth dist. -6427 Dec 07 i 21:32 direct -6426 Feb 24 j 08:50 26°**Y**32'42 evening set -6433 May 29 i 16:06 17°Υ08'08 5°27'46 -6426 May 28 j 02:03 28°Y16'06 conjunction -6433 May 29 i 15:54 17°**Y**08′07 5°27′51 max. Earth dist. -6426 Jun 06 j 16:38 28°Υ34'19 36.23264 AU minimum elong -6433 Jun 13 j 13:12 17°**Y**34'37 morning rise 19°**Y**05′12 28°**Y**41'13 8°33'39 retrograde -6433 Sep 07 j 23:46 conjunction -6426 Jun 10 j 07:09 opposition -6433 Nov 25 j 08:21 17°**Υ**54'49 5°59'36 minimum elong -6426 Jun 10 j 06:49 28°**Ƴ**41'11 8°33'49 29°**Y**06′07 min. Earth dist. -6433 Nov 28 j 12:29 17°**Υ**50'21 35.91369 AU morning rise -6426 Jun 23 j 09:03 -6432 Feb 15 j 06:18 16°**Y**41'32 -6426 Jul 24 j 13:32 0°8 direct -6432 May 15 j 17:19 18°Y15'53 -6426 Sep 19 j 19:11 0°**8**46'23 evening set retrograde -6432 May 27 j 01:23 18°**Y**36'10 37.77543 AU -6426 Nov 18 j 00:14 30°**Ŗ**♈ max. Earth dist. 29°**Y**33'12 9°17'20 opposition -6426 Dec 06 j 15:26 -6432 May 30 j 13:03 18°**Y**42'28 5°54'08 conjunction min. Earth dist. -6426 Dec 09 j 22:01 29°**Y**28'23 34.13072 AU minimum elong -6432 May 30 j 12:49 18°**Y**42'27 5°54'15 direct -6425 Feb 26 j 08:05 28°**Y**16'46 0°8 morning rise -6432 Jun 14 j 05:21 19°**Y**08′50 -6425 May 29 j 11:03 retrograde -6432 Sep 08 j 20:46 20°**Y**40′37 evening set -6425 May 30 j 11:36 0°**8**01'56 opposition -6432 Nov 26 j 04:00 19°**Y**29'54 6°27'39 max. Earth dist. -6425 Jun 08 j 19:10 0°**႘**19'47 35.97953 AU min. Earth dist. -6432 Nov 29 j 07:53 19°**Υ**25'24 35.65916 AU -6431 Feb 16 j 03:44 18°**Y**16′12 -6425 Jun 12 j 08:22 0°**8**26'39 9°00'07 direct conjunction

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 35 Attention, astronomical year style is used: The year -6425 in astronomical counting style is the year 6426 BCE in historical counting style.

Attention, astronomi	ical year style is used: Th	e year -6425 i	n astronomical cou	inting style is the year	6426 BCE in historical	counting style.	
minimum elong	-6425 Jun 12 j 08:02	0° 8 26'37	9°00'17	max. Earth dist.	-6418 Jun 22 j 02:45	13° 8 31'20	34.28675 AU
morning rise	-6425 Jun 25 j 01:56	0° 8 51'09					
retrograde	-6425 Sep 21 j 21:47	2° 8 33'04		conjunction	-6418 Jun 25 j 13:16	13° 8 38'28	11°58'49
opposition	-6425 Dec 08 j 15:52	1° 8 19'28	9°45'29	minimum elong	-6418 Jun 25 j 12:50	13° 8 38'26	11°59'04
min. Earth dist.	-6425 Dec 11 j 21:21	1° 8 14'41	33.88153 AU	morning rise	-6418 Jul 05 j 02:17	13° 8 58'14	
direct	-6424 Feb 28 j 10:13	0° 8 02'35			-6418 Aug 06 j 11:13	15° 8	
evening set	-6424 May 31 j 22:22	1° 8 49'36		retrograde	-6418 Oct 05 j 10:41	15° 8 54'29	
max. Earth dist.	-6424 Jun 09 j 20:13	2° 8 06'52	35.72927 AU		-6418 Dec 07 j 07:52	15° ₹ ႘	
				opposition	-6418 Dec 21 j 17:44	14° 8 38'01	
conjunction	-6424 Jun 13 j 10:07	2° 8 13'51	9°26'26	min. Earth dist.	-6418 Dec 24 j 21:27		32.21867 AU
minimum elong	-6424 Jun 13 j 09:46	2° 8 13'49	9°26'37	direct	-6417 Mar 13 j 01:45	13° 8 18'03	
morning rise	-6424 Jun 25 j 18:57	2° 8 37'53			-6417 Jun 08 j 16:11	15° 8	
retrograde	-6424 Sep 23 j 01:00	4° 8 21'34		evening set	-6417 Jun 18 j 19:40	15° 8 20'45	
opposition	-6424 Dec 09 j 17:02	3° 8 07'33		max. Earth dist.	-6417 Jun 24 j 09:34	15° 8 32'24	34.05498 AU
min. Earth dist.	-6424 Dec 12 j 22:43		33.63560 AU			. = 1	
direct	-6423 Mar 01 j 09:35	1° 8 50'14		conjunction	-6417 Jun 27 j 20:34	15° 8 39'39	
evening set	-6423 Jun 03 j 10:28	3° 8 39'12		minimum elong	-6417 Jun 27 j 20:09	15° 8 39'37	12°23'07
max. Earth dist.	-6423 Jun 12 j 00:21	3° 8 55'59	35.48218 AU	morning rise	-6417 Jul 06 j 19:25	15° 8 58'23	
	(100 X 15:10 16	101 100155	0050100	retrograde	-6417 Oct 07 j 19:56	17° 8 57'04	12021110
conjunction	-6423 Jun 15 j 12:46	4° 8 02'55		opposition	-6417 Dec 24 j 00:58	16° 8 40'10	
minimum elong	-6423 Jun 15 j 12:25	4° 8 02'54	9°52'45	min. Earth dist.	-6417 Dec 27 j 05:00		31.99167 AU
morning rise	-6423 Jun 27 j 11:59	4° 8 26'26		direct	-6416 Mar 14 j 07:11	15° 8 19'43	
retrograde	-6423 Sep 25 j 02:14	6° 8 11'59	10041117	evening set	-6416 Jun 20 j 19:14	17° 8 25'05	22.02645.444
opposition	-6423 Dec 11 j 19:00	4° 8 57'34		max. Earth dist.	-6416 Jun 25 j 19:30	1/°035'39	33.82645 AU
min. Earth dist.	-6423 Dec 15 j 00:14		33.39284 AU		C41C I 20:04.24	170 4 4 3140	12046120
direct	-6422 Mar 03 j 10:53	3° 8 39'49		conjunction	-6416 Jun 29 j 04:34	17° 8 42'48	12°46'20
evening set	-6422 Jun 06 j 00:01	5° 8 30'50	25 22022 ATT	minimum elong	-6416 Jun 29 j 04:08	17° 8 42'46	12°46'37
max. Earth dist.	-6422 Jun 14 j 03:11	5°O46'55	35.23823 AU	morning rise	-6416 Jul 07 j 11:50	18° 8 00'22	
	(422 I 17:15.50	50052150	10010126	retrograde	-6416 Oct 09 j 04:28	20° 8 01'38 18° 8 44'17	12946106
conjunction	-6422 Jun 17 j 15:59	5° 8 53'58		opposition	-6416 Dec 25 j 09:07	_	13°46'06 31.76820 AU
minimum elong	-6422 Jun 17 j 15:35 -6422 Jun 29 j 05:14	5° 8 53'56	10-18-40	min. Earth dist.	-6416 Dec 28 j 12:08	18° 8 23'22	31.70820 AU
morning rise retrograde	-6422 Sep 27 j 07:05	8° 8 04'23		direct evening set	-6415 Mar 16 j 15:54 -6415 Jun 23 j 20:52	17 8 23 22	
opposition	-6422 Dec 13 j 21:42	6° 8 49'35	1100050	max. Earth dist.	-6415 Jun 28 j 04:08		33.60197 AU
min. Earth dist.	-6422 Dec 13 j 21.42		33.15315 AU	max. Earth dist.	-0413 Juli 26 J 04.06	19 04042	33.00197 AU
direct	-6421 Mar 05 j 10:41	5° 8 31'24	33.13313 AU	conjunction	-6415 Jul 01 j 13:13	10° ⊁ ⊿7'55	13°00'12
evening set	-6421 Jun 08 j 15:03	7° 8 24'34		minimum elong	-6415 Jul 01 j 12:48		13°09'29
max. Earth dist.	-6421 Jun 16 j 08:14		34.99682 AU	morning rise	-6415 Jul 09 j 03:52		15 07 27
max. Darm dist.	01213411 10 3 00.11	7 03737	31.55002710	retrograde	-6415 Oct 11 j 15:27		
conjunction	-6421 Jun 19 j 20:12	7° 8 47'01	10°44'04	opposition	-6415 Dec 27 j 17:56	20° 8 50'21	14°10'21
minimum elong	-6421 Jun 19 j 19:49	7° 8 46'59	10°44'18	min. Earth dist.	-6415 Dec 30 j 20:02	_	31.54933 AU
morning rise	-6421 Jun 30 j 22:30	8° 8 09'17		direct	-6414 Mar 18 j 22:45	19° 8 28'58	
retrograde	-6421 Sep 29 j 11:29	9° 8 58'50		evening set	-6414 Jun 27 j 00:48	21° 8 40'06	
opposition	-6421 Dec 16 j 01:26	8° 8 43'38	11°36'06	max. Earth dist.	-6414 Jun 30 j 15:39		33.38234 AU
min. Earth dist.	-6421 Dec 19 j 06:46		32.91594 AU		,		
direct	-6420 Mar 06 j 11:02	7° 8 25'01		conjunction	-6414 Jul 03 j 22:43	21° 8 55'01	13°31'20
evening set	-6420 Jun 10 j 07:49	9° 8 20'26		minimum elong	-6414 Jul 03 j 22:16	21° 8 54'58	13°31'38
max. Earth dist.	-6420 Jun 17 j 13:31	9° 8 35'03	34.75791 AU	morning rise	-6414 Jul 10 j 18:55	22° 8 09'46	
				retrograde	-6414 Oct 14 j 00:03	24° 8 16'40	
conjunction	-6420 Jun 21 j 01:06	9° 8 42'08	11°09'22	opposition	-6414 Dec 30 j 03:51	22° 8 58'25	14°33'48
minimum elong	-6420 Jun 21 j 00:42	9° 8 42'06	11°09'36	min. Earth dist.	-6413 Jan 02 j 05:13	22° 8 53'34	31.33565 AU
morning rise	-6420 Jul 01 j 15:52	10° 8 03'39		direct	-6413 Mar 21 j 07:13	21° 8 36'35	
retrograde	-6420 Sep 30 j 18:43	11° 8 55'20		evening set	-6413 Jun 30 j 07:36	23° 8 50'54	
opposition	-6420 Dec 17 j 06:01	10° 8 39'44	12°03'01	max. Earth dist.	-6413 Jul 03 j 02:47	23° 8 57'00	33.16854 AU
min. Earth dist.	-6420 Dec 20 j 10:11	10° 8 34'54	32.68118 AU				
direct	-6419 Mar 08 j 15:08	9° 8 20'41		conjunction	-6413 Jul 06 j 08:47	24° 8 04'06	13°52'40
evening set	-6419 Jun 13 j 01:52	11° 8 18'25		minimum elong	-6413 Jul 06 j 08:22	24° 8 04'03	13°53'00
max. Earth dist.	-6419 Jun 19 j 19:01	11° 8 32'07	34.52112 AU	morning rise	-6413 Jul 12 j 08:37	24° 8 17'09	
				retrograde	-6413 Oct 16 j 12:01	26° 8 27'10	
conjunction	-6419 Jun 23 j 06:44	11° 8 39'17	11°34'18	opposition	-6412 Jan 01 j 14:32	25° 8 08'29	14°56'22
minimum elong	-6419 Jun 23 j 06:20	11° 8 39'15	11°34'33	min. Earth dist.	-6412 Jan 04 j 13:49	25° 8 03'45	31.12821 AU
morning rise	-6419 Jul 03 j 09:07	11° 8 59'59		direct	-6412 Mar 22 j 15:52	23° 8 46'13	
retrograde	-6419 Oct 03 j 02:42	13° 8 53'54		evening set	-6412 Jul 02 j 18:03	26° 8 04'03	
opposition	-6419 Dec 19 j 11:33	12° 8 37'52	12°29'33	max. Earth dist.	-6412 Jul 04 j 15:40	26° 8 08'14	32.96127 AU
min. Earth dist.	-6419 Dec 22 j 16:30		32.44869 AU				
direct	-6418 Mar 10 j 18:54	11° 8 18'22		conjunction	-6412 Jul 07 j 19:48	26° 8 15'13	14°13'08
evening set	-6418 Jun 15 j 21:55	13° 8 18'32		minimum elong	-6412 Jul 07 j 19:22	26° 8 15'11	14°13'27

Planetary Phenomena of Pluto from -6900 through -6398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -6412 in astronomical counting style is the year 6413 BCE in historical counting style. -6412 Jul 12 j 20:16 26°826'16 direct -6404 Apr 10 j 03:13 12°**Ⅱ**19'44 morning rise 28°**8**39'44 -6412 Oct 17 j 23:45 -6404 Jul 24 j 01:41 14°**Д**53'27 31.56203 AU max. Earth dist. retrograde -6411 Jan 03 j 02:21 27°**8**20'39 15°17'58 opposition -6404 Jul 26 j 13:57 min. Earth dist. -6411 Jan 06 j 01:01 27°**8**15'56 30.92764 AU 14°**Д**59'22 16°15'34 conjunction -6411 Mar 24 j 23:46 -6404 Jul 26 j 13:40 25°**8**57'59 14°**Ⅲ**59'21 direct minimum elong 16°15'58 -6411 Jul 06 j 10:03 -6404 Nov 06 j 13:13 17°**Ⅲ**34'23 evening set 28°**8**19'48 retrograde -6403 Jan 22 j 08:29 17°25'35 max. Earth dist. -6411 Jul 07 j 05:20 28°**8**21'35 32.76133 AU opposition 16°**Ⅱ**12'36 -6403 Jan 24 j 16:03 min. Earth dist. 16°**Ⅱ**08'45 29.57691 AU -6403 Apr 12 j 20:19 conjunction -6411 Jul 10 j 07:18 28°**8**28'27 14°32'36 direct 14°**Ⅲ**47'27 minimum elong -6411 Jul 10 j 06:54 28°**8**28'24 14°32'56 max. Earth dist. -6403 Jul 26 j 22:03 17°**Ⅲ**22'27 31.42043 AU morning rise -6411 Jul 14 j 03:32 28°**8**37'00 -6411 Aug 23 j 14:43 -6403 Jul 29 j 07:09 $0^{\circ}\Pi$ conjunction 17°**I**I28′06 16°24′38 -6411 Oct 20 j 13:53 -6403 Jul 29 j 06:56 retrograde 0°**I**I54'23 minimum elong 17°**Ⅲ**28′05 16°25'02 -6411 Dec 20 j 18:55 30°R₩ retrograde -6403 Nov 09 j 06:39 20°**Ⅲ**04'10 opposition -6410 Jan 05 j 14:52 29°834'56 15°38'29 opposition -6402 Jan 25 j 04:01 18°**Ⅱ**42'03 17°34'42 min. Earth dist. -6410 Jan 08 j 10:52 29°**8**30'22 30.73429 AU min. Earth dist. -6402 Jan 27 j 10:09 18°**Д**38'18 29.44112 AU direct -6410 Mar 27 j 11:56 28°**8**11'54 direct -6402 Apr 15 j 13:24 17°**Ⅱ**16'38 -6410 Jun 22 j 23:43 $\mathbb{I}^{\circ 0}$ max. Earth dist. -6402 Jul 29 j 18:13 19°**Д**52'46 31.28783 AU evening set -6410 Jul 10 j 14:42 0°**I**I38′52 max. Earth dist. -6410 Jul 09 j 19:04 0°**Д**37'02 32.56864 AU conjunction -6402 Aug 01 j 00:46 19°**耳**58'12 16°32'03 minimum elong -6402 Aug 01 j 00:33 19°**Ⅲ**58'10 16°32'27 conjunction -6410 Jul 12 i 19:47 0°**Д**43'50 14°51'02 retrograde -6402 Nov 12 i 01:33 22°**Ⅲ**35'13 -6410 Jul 12 j 19:22 0°Ⅱ43'48 14°51'22 opposition -6401 Jan 27 i 23:56 21°**Ⅱ**12'48 17°42'00 minimum elong -6410 Jul 14 i 23:59 0°**Ⅱ**48'43 min. Earth dist. -6401 Jan 30 i 02:29 21°**I**09'17 29.31442 AU morning rise retrograde -6410 Oct 23 j 05:06 3°**Ⅱ**11'12 direct -6401 Apr 18 j 09:08 19°**Ⅱ**47'08 -6409 Jan 08 j 04:18 1°**I**I51'23 15°57'51 max. Earth dist. -6401 Aug 01 j 15:25 22°**Ⅲ**24'23 31.16489 AU opposition -6409 Jan 10 j 23:42 1°**II**46'51 30.54817 AU min Earth dist -6409 Mar 29 j 23:07 0°**Ⅲ**28′02 -6401 Aug 03 j 18:53 22°II29'32 16°37'44 direct conjunction -6409 Jul 12 j 11:09 2°**Д**54'48 32.38329 AU -6401 Aug 03 j 18:45 max Earth dist 22°**Ⅲ**29'31 16°38'08 minimum elong -6401 Nov 14 j 20:34 25°**Ⅲ**07'27 retrograde 3°**II**01'24 15°08'20 -6409 Jul 15 j 09:03 -6400 Jan 30 j 20:50 23°**II**44'45 17°47'24 opposition conjunction -6400 Feb 01 j 21:27 -6409 Jul 15 j 08:41 3°**I**101'22 15°08'41 min. Earth dist. 23°**Ⅱ**41'21 29.19765 AU minimum elong -6409 Oct 25 j 20:27 5°**Ⅲ**30′09 -6400 Apr 20 j 02:55 22°**Ⅲ**18'52 retrograde direct 4°**Ⅱ**10'01 16°15'59 -6408 Jan 10 j 18:47 -6400 Aug 03 j 13:24 24°**I**57'11 31.05273 AU opposition max. Earth dist. -6408 Jan 13 j 11:43 4°**I**05'37 30.36903 AU min. Earth dist. -6408 Mar 31 j 13:17 -6400 Aug 05 j 13:13 25°**I**01'59 16°41'37 direct 2°**∏**46′21 conjunction -6408 Jul 14 j 01:59 5°**Ⅲ**14'33 32.20493 AU -6400 Aug 05 j 13:05 max. Earth dist. minimum elong 25°**Ⅱ**01'58 16°42'02 retrograde -6400 Nov 16 j 16:53 27°**Ⅱ**40'44 conjunction -6408 Jul 16 j 22:54 5°**Ⅱ**21'06 15°24'26 opposition -6399 Feb 01 j 18:08 26°**Ⅲ**17'47 17°50'50 minimum elong -6408 Jul 16 j 22:31 5°**I**21'04 15°24'48 min. Earth dist. -6399 Feb 03 j 14:33 26°**I**14'41 29.09156 AU retrograde -6408 Oct 27 j 13:41 7°**I**51'14 direct -6399 Apr 22 j 23:34 24°**Ⅲ**51'45 -6407 Jan 12 j 10:16 6°**耳**30'46 16°32'49 max. Earth dist. -6399 Aug 06 j 11:07 27°**Д**30'59 30.95180 AU opposition min. Earth dist. -6407 Jan 15 j 02:08 6°**Д**26'25 30.19681 AU -6407 Apr 03 j 02:08 5°**Ⅱ**06'47 -6399 Aug 08 j 08:03 27°**II**35'31 16°43'39 direct conjunction max. Earth dist. -6407 Jul 16 j 19:56 7°**Ц**36'34 32.03353 AU -6399 Aug 08 j 07:59 27°**Ⅲ**35'31 minimum elong 16°44'03 -6399 Oct 21 i 16:14 0ಂತಾ -6407 Jul 19 i 13:43 conjunction 7°**II**42'52 15°39'18 retrograde -6399 Nov 19 j 13:27 0°9515'02 -6407 Jul 19 i 13:23 minimum elong 7°**Ⅱ**42'51 15°39'40 -6399 Dec 19 i 07:15 30°RⅡ -6407 Oct 30 i 06:49 retrograde 10°**Ⅱ**14'19 -6406 Jan 15 i 02:31 8°II53'31 16°48'17 opposition min. Earth dist. -6406 Jan 17 j 16:28 8°**Д**49'17 30.03125 AU -6406 Apr 05 j 18:49 7°**Ⅲ**29'15 direct max. Earth dist. -6406 Jul 19 j 12:12 10°**Д**00'20 31.86909 AU conjunction -6406 Jul 22 j 05:07 10°**I**06'36 15°52'49 minimum elong -6406 Jul 22 j 04:46 10°**I**106'34 15°53'12 -6406 Nov 02 j 01:00 12°**Ⅲ**39'19 retrograde -6405 Jan 17 j 19:40 11°**II**18'11 17°02'17 opposition -6405 Jan 20 j 07:42 11°**I**14′04 29.87258 AU min. Earth dist. -6405 Apr 08 j 10:11 direct 9°**Ⅲ**53'36 -6405 Jul 22 j 07:30 max. Earth dist. 12°**Ⅲ**26'08 31.71173 AU conjunction -6405 Jul 24 j 21:18 12°**Ⅲ**32'09 16°04'56 minimum elong -6405 Jul 24 j 21:01 12°**Ⅲ**32′07 16°05'19 retrograde -6405 Nov 04 j 17:29 15°**Ⅱ**06'03 -6404 Jan 20 j 13:46 13°**耳**44'36 17°14'45 opposition

min. Earth dist.

-6404 Jan 23 j 00:13

13°**Ⅱ**40'34 29.72087 AU