Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 1 Attention, astronomical year style is used: The year -1900 in astronomical counting style is the year 1901 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	e year -1900 in astronomi	ical counting style is the yea	r 1901 BCE in historical c	ounting style.	, -
evening set	-1900 Jan 17 j 14:03	18° る 58'07	max. Earth dist.	-1894 Feb 03 j 18:03	26° る 38'08	44.38075 AU
			retrograde	-1894 May 15 j 09:06	28° る 16'34	
conjunction	-1900 Jan 24 j 19:38	19°る09'48 -13°17'05	min. Earth dist.	-1894 Aug 04 j 03:29	27° る 14'38	42.55085 AU
minimum elong	-1900 Jan 24 j 19:28	19° ප් 09'47 13°17'07	opposition	-1894 Aug 07 j 02:54	27° る 10'58	-15°16'18
max. Earth dist.	-1900 Jan 27 j 23:31	19° ප 14'56 43.09882 A	AU direct	-1894 Oct 26 j 19:11	26° る 07'00	
morning rise	-1900 Feb 01 j 01:35	19° පි 21'32	evening set	-1893 Jan 29 j 22:13	27° る 40'23	
retrograde	-1900 May 07 j 10:30	20° る 55'58				
min. Earth dist.	-1900 Jul 27 j 00:49	19° ප් 53'02 41.26573 A	AU conjunction	-1893 Feb 02 j 03:51	27° る 45'27	-14°40'41
opposition	-1900 Jul 30 j 03:12	19° ප් 49'08 -14°02'38	minimum elong	-1893 Feb 02 j 03:42	27° る 45'26	14°40'43
direct	-1900 Oct 18 j 20:39	18° ප් 43'56	morning rise	-1893 Feb 05 j 09:22	27° る 50'30	
evening set	-1899 Jan 18 j 13:00	20°る14'20	max. Earth dist.	-1893 Feb 05 j 05:07	27° る 50'13	44.58399 AU
			retrograde	-1893 May 16 j 20:03	29° る 28'14	
conjunction	-1899 Jan 25 j 07:36	20° ප් 25'13 -13°30'32	min. Earth dist.	-1893 Aug 05 j 15:56	28° る 26'25	42.75345 AU
minimum elong	-1899 Jan 25 j 07:25	20° ප් 25'13 13°30'35	opposition	-1893 Aug 08 j 14:02	28° る 22'50	-15°26'52
max. Earth dist.	-1899 Jan 28 j 10:36	20° ප 30'15 43.31763 A	AU direct	-1893 Oct 28 j 06:17	27° る 19'04	
morning rise	-1899 Feb 01 j 02:37	20° る 36'09	evening set	-1892 Feb 01 j 08:51	28° る 53'34	
retrograde	-1899 May 09 j 00:22	22° る 10'52				
min. Earth dist.	-1899 Jul 28 j 13:38	21° පි 08'05 41.48564 A	AU conjunction	-1892 Feb 03 j 14:38	28° る 57'04	-14°50'46
opposition	-1899 Jul 31 j 15:53	21° පි 04'12 -14°16'13	minimum elong	-1892 Feb 03 j 14:31	28° る 57'03	14°50'48
direct	-1899 Oct 20 j 07:34	19° る 59'13	morning rise	-1892 Feb 05 j 20:18	29° る 00'33	
evening set	-1898 Jan 20 j 12:21	21° る 29'53	max. Earth dist.	-1892 Feb 06 j 13:58	29° る 01'42	44.78280 AU
				-1892 Mar 18 j 02:52	0°≈	
conjunction	-1898 Jan 26 j 19:35	21° ප 39'59 -13°43'27	retrograde	-1892 May 17 j 06:59	0° ≈ 39'24	
minimum elong	-1898 Jan 26 j 19:25	21° ප 39'58 13°43'28		-1892 Jul 18 j 09:19	30°Rる	
max. Earth dist.	-1898 Jan 29 j 23:25	21°る45'02 43.53472 A	AU min. Earth dist.	-1892 Aug 06 j 03:04	29° る 37'45	42.95151 AU
morning rise	-1898 Feb 02 j 03:03	21° ප 50'05	opposition	-1892 Aug 09 j 01:00	29° る 34'11	-15°37'00
retrograde	-1898 May 10 j 11:15	23° ප් 25'05	direct	-1892 Oct 28 j 16:43	28° る 30'35	
min. Earth dist.	-1898 Jul 30 j 02:44	22° ට 22'27 41.70360 A	AU	-1891 Jan 29 j 19:19	0° ≈	
opposition	-1898 Aug 02 j 04:04	22° ප 18'38 -14°29'15				
direct	-1898 Oct 21 j 20:20	21° ප 13'51	conjunction	-1891 Feb 04 j 01:15	0° ≈ 08'09	-15°00'27
evening set	-1897 Jan 22 j 12:11	22° る 44'52	minimum elong	-1891 Feb 04 j 01:07	0° ≈ 08'08	15°00'28
_	-		max. Earth dist.	-1891 Feb 07 j 00:26	0°≈12'45	44.97692 AU
conjunction	-1897 Jan 28 j 07:10	22°る54'07 -13°55'51	retrograde	-1891 May 18 j 14:59	1°≈50'02	
minimum elong	-1897 Jan 28 j 07:00	22° ප 54'06 13°55'54	min. Earth dist.	-1891 Aug 07 j 15:50	0°≈48'27	43.14485 AU
max. Earth dist.	-1897 Jan 31 j 09:43	22° ට 59'04 43.74998 A	AU opposition	-1891 Aug 10 j 11:47	0° ≈ 44'59	-15°46'42
morning rise	-1897 Feb 03 j 02:21	23° る 03'22	••	-1891 Sep 20 j 04:39	30°Rる	
retrograde	-1897 May 11 j 22:36	24° ප 38'43	direct	-1891 Oct 30 j 06:02	29° る 41'32	
min. Earth dist.	-1897 Jul 31 j 14:09	23° ට 36'19 41.91962 A	AU	-1891 Dec 08 j 09:15	0° ≈	
opposition	-1897 Aug 03 j 16:07	23° ප 32'29 -14°41'46		v		
direct	-1897 Oct 23 j 08:22	22° ප් 27'54	conjunction	-1890 Feb 05 j 11:43	1°≈18'40	-15°09'42
evening set	-1896 Jan 24 j 12:24	23° る 59'21	minimum elong	-1890 Feb 05 j 11:37	1°≈18'40	15°09'44
_	-		max. Earth dist.	-1890 Feb 08 j 09:39	1°≈23'11	45.16665 AU
conjunction	-1896 Jan 29 j 18:26	24° ප 07'41 -14°07'46	retrograde	-1890 May 19 j 23:45	3° ≈ 00'07	
minimum elong	-1896 Jan 29 j 18:17	24° ප 07'41 14°07'48	min. Earth dist.	-1890 Aug 09 j 02:04	1°≈58'40	43.33391 AU
max. Earth dist.	-1896 Feb 01 j 21:22	24° ප 12'39 43.96305 A	AU opposition	-1890 Aug 11 j 22:00	1° ≈ 55'12	-15°55'58
morning rise	-1896 Feb 04 j 00:38	24° ප 16'02	direct	-1890 Oct 31 j 17:59	0°≈51'55	
retrograde	-1896 May 12 j 08:30	25° ප් 51'50		· ·		
min. Earth dist.	-1896 Aug 01 j 03:37	24° ප් 49'33 42.13323 A	AU conjunction	-1889 Feb 06 j 21:46	2° ≈ 28'37	-15°18'32
opposition	-1896 Aug 04 j 04:04	24° පි 45'48 -14°53'46	minimum elong	-1889 Feb 06 j 21:39	2°≈28'36	15°18'33
direct	-1896 Oct 23 j 21:36	23° ප් 41'26	max. Earth dist.	-1889 Feb 09 j 18:41	2° ≈ 33'02	45.35239 AU
evening set	-1895 Jan 25 j 13:55	25° る 13'23	retrograde	-1889 May 21 j 10:55	4° ≈ 09'38	
C	J		min. Earth dist.	-1889 Aug 10 j 13:38	3°≈08'15	43.51944 AU
conjunction	-1895 Jan 30 j 05:47	25° ට 20'45 -14°19'12	opposition	-1889 Aug 13 j 08:17	3°≈04'52	-16°04'47
minimum elong	-1895 Jan 30 j 05:38	25° る 20'44 14°19'14	direct	-1889 Nov 02 j 03:39	2°≈01'44	
max. Earth dist.	-1895 Feb 02 j 08:14	25°る25'40 44.17359 A		,		
morning rise	-1895 Feb 03 j 21:40	25° る 28'07	conjunction	-1888 Feb 08 j 07:37	3° ≈ 38'00	-15°26'56
retrograde	-1895 May 13 j 19:03	27°る04'26	minimum elong	-1888 Feb 08 j 07:32		15°26'59
min. Earth dist.	-1895 Aug 02 j 15:00	26°る02'22 42.34383 A	_	-1888 Feb 11 j 04:54		45.53498 AU
opposition	-1895 Aug 05 j 15:29	25°ප්58'37 -15°05'16	retrograde	-1888 May 21 j 21:25	5°≈18'36	
direct	-1895 Oct 25 j 10:11	24°る54'28	min. Earth dist.	-1888 Aug 11 j 00:08		43.70185 AU
evening set	-1894 Jan 27 j 16:49	26° ろ 27'02	opposition	-1888 Aug 13 j 18:12	4°≈13'59	
	-0 Juni 2/ j 10. 17	v=	direct	-1888 Nov 02 j 13:04	3°≈10'59	>
conjunction	-1894 Jan 31 j 16:51	26° ප 33'20 -14°30'10	211001	1000 1107 02 j 15.04	5.4.1037	
minimum elong	-1894 Jan 31 j 16:43	26° ප 33'19 14°30'12	conjunction	-1887 Feb 08 j 17:18	4°≈46'52	-15°34'55
morning rise	-1894 Feb 04 j 16:56	26° ප 39'38	minimum elong	-1887 Feb 08 j 17:12		15°34'56
				100, 100 00 j 17.12		

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•	nical year style is used: Th		`	/ /		, ,	
max. Earth dist.	-1887 Feb 11 j 12:56	-	45.71479 AU	unting style is the year	-1879 Jul 15 j 20:48	ounting style. 15°R≈	
	-1887 May 23 j 09:11	6°≈27'02	43./14/9 AU	min. Earth dist.			45.20729 AU
retrograde			42 00175 ATT		-1879 Aug 21 j 16:50		
min. Earth dist.	-1887 Aug 12 j 09:45		43.88175 AU	opposition	-1879 Aug 24 j 02:52	14°≈17'33	-1/-0931
opposition	-1887 Aug 15 j 03:49		-16°21'05	direct	-1879 Nov 12 j 23:41	13°≈15'53	
direct	-1887 Nov 03 j 20:15	4° ≈ 19'44		:	1070 F-L 10:02.16	1 400 0 40142	1.6920120
	1006 E 1 10:02 54	5055115	1.50.42(2.0	conjunction	-1878 Feb 19 j 02:16	14°≈48'42	
conjunction	-1886 Feb 10 j 02:54		-15°42'28	minimum elong	-1878 Feb 19 j 02:13	14°≈48'42	
minimum elong	-1886 Feb 10 j 02:49		15°42'30	max. Earth dist.	-1878 Feb 21 j 15:13		47.19465 AU
max. Earth dist.	-1886 Feb 12 j 22:57		45.89213 AU		-1878 Feb 26 j 18:07	15° ≈	
retrograde	-1886 May 24 j 16:56	7°≈35'02	44.05010.411	retrograde	-1878 Jun 02 j 11:25	16°≈25'41	45.25244.411
min. Earth dist.	-1886 Aug 13 j 20:50		44.05910 AU	min. Earth dist.	-1878 Aug 23 j 01:26		45.35344 AU
opposition	-1886 Aug 16 j 13:22	6°≈30'45	-10-2833	opposition	-1878 Aug 25 j 10:53	15°≈22'37	-1/-13/33
direct	-1886 Nov 05 j 06:37	5° ≈ 28'03		T' 4	-1878 Sep 13 j 22:16	15°R≈	
	1005 E-L 11: 12:00	7002111	15940125	direct	-1878 Nov 14 j 09:33	14°≈21'03	
conjunction	-1885 Feb 11 j 12:09		-15°49'35		-1877 Jan 12 j 17:32	15° ≈	
minimum elong	-1885 Feb 11 j 12:05	7°≈03'11	15°49'37		1977 E-L 20 : 10:20	1500 052122	1.6922150
max. Earth dist.	-1885 Feb 14 j 07:14		46.06714 AU	conjunction	-1877 Feb 20 j 10:20	15°≈53'32	
retrograde	-1885 May 25 j 23:12	8°≈42'36	44.22206.444	minimum elong	-1877 Feb 20 j 10:19	15°≈53'32	
min. Earth dist.	-1885 Aug 15 j 05:36		44.23396 AU	max. Earth dist.	-1877 Feb 22 j 21:24		47.33803 AU
opposition	-1885 Aug 17 j 22:37		-16°35'36	retrograde	-1877 Jun 03 j 22:19	17°≈30'10	45 40550 433
direct	-1885 Nov 06 j 18:33	6° ≈ 35'58		min. Earth dist.	-1877 Aug 24 j 10:11		45.49570 AU
				opposition	-1877 Aug 26 j 18:50	16°≈27'12	-17°17'57
conjunction	-1884 Feb 12 j 21:17		-15°56'18	direct	-1877 Nov 15 j 15:01	15° ≈ 25'44	
minimum elong	-1884 Feb 12 j 21:12		15°56'20				
max. Earth dist.	-1884 Feb 15 j 15:42		46.23955 AU	conjunction	-1876 Feb 21 j 18:31	16°≈57'54	
retrograde	-1884 May 26 j 08:56	9° ≈ 49'49		minimum elong	-1876 Feb 21 j 18:30	16°≈57'54	
min. Earth dist.	-1884 Aug 15 j 16:15		44.40616 AU	max. Earth dist.	-1876 Feb 24 j 05:48		47.47784 AU
opposition	-1884 Aug 18 j 07:50	8°≈45'52	-16°42'13	retrograde	-1876 Jun 04 j 06:05	18°≈34'11	
direct	-1884 Nov 07 j 04:20	7° ≈ 43'31		min. Earth dist.	-1876 Aug 24 j 19:23		45.63452 AU
				opposition	-1876 Aug 27 j 02:33	17° ≈ 31'20	-17°21'36
conjunction	-1883 Feb 13 j 06:26		-16°02'36	direct	-1876 Nov 15 j 22:56	16° ≈ 29'57	
minimum elong	-1883 Feb 13 j 06:23	9° ≈ 17'58					
max. Earth dist.	-1883 Feb 16 j 00:49		46.40918 AU	conjunction	-1875 Feb 22 j 02:29	18° ≈ 01'49	
retrograde	-1883 May 27 j 18:31	10° ≈ 56'42		minimum elong	-1875 Feb 22 j 02:29	18° ≈ 01'49	
min. Earth dist.	-1883 Aug 17 j 01:46		44.57503 AU	max. Earth dist.	-1875 Feb 24 j 12:20		47.61463 AU
opposition	-1883 Aug 19 j 16:45	9° ≈ 52'55	-16°48'26	retrograde	-1875 Jun 05 j 12:17	19° ≈ 37'47	
direct	-1883 Nov 08 j 13:02	8° ≈ 50'44		min. Earth dist.	-1875 Aug 26 j 02:42		45.77044 AU
				opposition	-1875 Aug 28 j 10:04	18° ≈ 35′02	-17°24'54
conjunction	-1882 Feb 14 j 15:22	10° ≈ 24'51		direct	-1875 Nov 17 j 07:02	17° ≈ 33'46	
minimum elong	-1882 Feb 14 j 15:19	10° ≈ 24'51	16°08'34				
max. Earth dist.	-1882 Feb 17 j 07:53		46.57524 AU	conjunction	-1874 Feb 23 j 10:18	19° ≈ 05'21	
retrograde	-1882 May 29 j 05:54	12° ≈ 03'14		minimum elong	-1874 Feb 23 j 10:18	19° ≈ 05'21	16°43'14
min. Earth dist.	-1882 Aug 18 j 11:14		44.74015 AU	max. Earth dist.	-1874 Feb 25 j 19:34		47.74853 AU
opposition	-1882 Aug 21 j 01:26	10° ≈ 59'39	-16°54'15	retrograde	-1874 Jun 06 j 18:08	20°≈41'01	
direct	-1882 Nov 09 j 19:24	9° ≈ 57'37		min. Earth dist.	-1874 Aug 27 j 11:43		45.90361 AU
				opposition	-1874 Aug 29 j 17:28	19° ≈ 38'24	-17°27'49
conjunction	-1881 Feb 16 j 00:19	11°≈31'25		direct	-1874 Nov 18 j 16:20	18° ≈ 37'14	
minimum elong	-1881 Feb 16 j 00:17	11° ≈ 31'25					
max. Earth dist.	-1881 Feb 18 j 16:50		46.73719 AU	conjunction	-1873 Feb 24 j 18:03	20°≈08'33	
retrograde	-1881 May 30 j 13:52	13°≈09'27		minimum elong	-1873 Feb 24 j 18:04	20°≈08'33	16°46'00
min. Earth dist.	-1881 Aug 19 j 21:46		44.90074 AU	max. Earth dist.	-1873 Feb 27 j 03:03		47.87996 AU
opposition	-1881 Aug 22 j 10:07	12°≈06'01	-16°59'42	retrograde	-1873 Jun 08 j 01:00	21° ≈ 43'57	
direct	-1881 Nov 11 j 04:18	11° ≈ 04'07		min. Earth dist.	-1873 Aug 28 j 19:02		46.03406 AU
				opposition	-1873 Aug 31 j 00:41	20° ≈ 41′28	-17°30'22
conjunction	-1880 Feb 17 j 09:00	12°≈37'36		direct	-1873 Nov 20 j 00:47	19° ≈ 40′26	
minimum elong	-1880 Feb 17 j 08:57	12°≈37'36					
max. Earth dist.	-1880 Feb 19 j 23:39		46.89456 AU	conjunction	-1872 Feb 26 j 01:27	21°≈11'30	
retrograde	-1880 May 30 j 21:13	14°≈15'17	45.05.40 :==	minimum elong	-1872 Feb 26 j 01:28	21°≈11'30	
min. Earth dist.	-1880 Aug 20 j 06:24		45.05648 AU	max. Earth dist.	-1872 Feb 28 j 08:53		48.00863 AU
opposition	-1880 Aug 22 j 18:35	13°≈12'00	-17°04'47	retrograde	-1872 Jun 08 j 10:53	22°≈46'38	42424-1
direct	-1880 Nov 11 j 13:21	12°≈10′13		min. Earth dist.	-1872 Aug 29 j 03:11		46.16171 AU
	40=0 = -			opposition	-1872 Aug 31 j 07:56	21°≈44'18	-17°32'33
conjunction	-1879 Feb 17 j 17:39	13°≈43'23		direct	-1872 Nov 20 j 06:02	20° ≈ 43'25	
minimum elong	-1879 Feb 17 j 17:38	13°≈43'23					
max. Earth dist.	-1879 Feb 20 j 07:13		47.04693 AU	conjunction	-1871 Feb 26 j 09:05	22°≈14'15	
	-1879 Apr 18 j 07:35	15° ≈		minimum elong	-1871 Feb 26 j 09:06	22°≈14'16	
retrograde	-1879 Jun 01 j 04:10	15° ≈ 20'43		max. Earth dist.	-1871 Feb 28 j 16:43	22° ≈ 17'36	48.13427 AU

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1871 in astronomical counting style is the year 1872 BCE in historical counting style. -1871 Jun 09 j 18:58 23°≈49'08 minimum elong -1863 Mar 06 j 18:34 0°**¥**28'37 16°56'06 retrograde -1871 Aug 30 j 11:37 22°≈49'28 46.28590 AU max. Earth dist. -1863 Mar 08 j 16:17 0°¥31'19 48.97870 AU min. Earth dist. 22°≈46′58 -17°34′24 -1871 Sep 01 j 14:51 -1863 Jun 17 j 21:34 2°\dagger01'32 retrograde opposition -1871 Nov 21 j 12:00 direct 21°≈46'13 min. Earth dist. -1863 Sep 08 j 00:18 1°**升**02'16 47.11331 AU 1°**¥**00'13 -17°38'18 -1863 Sep 09 j 18:48 opposition -1870 Feb 27 j 16:34 -1863 Nov 29 j 21:05 conjunction 23°≈16'51 -16°52'09 direct 0°**₩**00′10 -1870 Feb 27 j 16:37 minimum elong 23°≈16'51 16°52'10 -1862 Mar 08 j 01:08 1°¥29'05 -16°55'29 max. Earth dist. -1870 Mar 01 j 22:15 23°≈20'04 48.25635 AU conjunction -1862 Mar 08 j 01:13 retrograde -1870 Jun 11 j 03:02 24°≈51'29 minimum elong 1°**¥**29'05 16°55'30 min. Earth dist. -1870 Aug 31 j 18:44 23°≈51'57 46.40618 AU max. Earth dist. -1862 Mar 09 j 21:15 1°**升**31'40 49.06558 AU opposition -1870 Sep 02 j 21:44 23°≈49'28 -17°35'56 retrograde -1862 Jun 19 j 05:10 3°¥01'47 -1862 Sep 09 j 07:37 direct -1870 Nov 22 j 17:41 22°≈48'51 min. Earth dist. 2°**₭**02'32 47.19863 AU -1862 Sep 11 j 00:49 opposition 2°**₭**00'33 -17°37'25 conjunction -1869 Feb 28 j 23:52 24°≈19'17 -16°53'35 direct -1862 Dec 01 j 02:50 1°**)**€00'34 minimum elong -1869 Feb 28 j 23:53 24°≈19'17 16°53'36 -1861 Mar 09 j 07:41 max. Earth dist. -1869 Mar 03 j 04:44 24°≈22'27 48.37404 AU conjunction 2°\dagger29'17 -16°54'33 retrograde -1869 Jun 12 j 08:22 25°≈53'41 minimum elong -1861 Mar 09 j 07:46 2°**¥**29'17 16°54'34 min. Earth dist. -1869 Sep 02 j 03:59 24°≈54'11 46.52179 AU max. Earth dist. -1861 Mar 11 j 03:58 2°**升**31'53 49.14952 AU opposition -1869 Sep 04 j 04:41 24°≈51'49 -17°37'09 retrograde -1861 Jun 20 j 12:27 4°**)**(01'47 direct -1869 Nov 24 j 02:07 23°≈51'19 min. Earth dist. -1861 Sep 10 j 14:27 3°**升**02'34 47.28084 AU opposition -1861 Sep 12 j 06:43 3°¥00'38 -17°36'14 conjunction -1868 Mar 01 i 07:21 25°≈21'32 -16°54'42 direct -1861 Dec 02 i 08:27 2°\ 00'43 minimum elong -1868 Mar 01 i 07:24 25°≈21'32 16°54'43 max. Earth dist. -1868 Mar 03 j 11:13 25°≈24'38 48.48698 AU conjunction -1860 Mar 09 j 14:11 3°**¥**29'16 -16°53'20 retrograde -1868 Jun 12 i 13:33 26°≈55'43 minimum elong -1860 Mar 09 j 14:16 3°**¥**29'17 16°53'21 -1868 Sep 02 j 11:11 25°≈56'18 46.63223 AU max. Earth dist. -1860 Mar 11 j 08:37 3°¥31'45 49.23055 AU min. Earth dist. -1868 Sep 04 j 11:20 -1860 Jun 20 j 21:13 5°**₩**01'34 25°≈53'57 -17°38'04 retrograde opposition -1868 Nov 24 j 11:32 24°≈53'34 -1860 Sep 10 j 20:25 4°¥02'26 47.36005 AU direct min. Earth dist. -1860 Sep 12 j 12:25 4°¥00'31 -17°34'44 opposition -1867 Mar 02 j 14:36 26°≈23'33 -16°55'33 -1860 Dec 02 j 11:27 3°\;\;00'41 conjunction direct -1867 Mar 02 j 14:38 26°≈23'34 16°55'35 minimum elong max. Earth dist. -1867 Mar 04 j 16:06 -1859 Mar 10 j 20:43 4°¥29'05 -16°51'49 26°≈26'31 48.59463 AU conjunction 4°**¥**29′06 16°51′49 -1859 Mar 10 j 20:49 -1867 Jun 13 j 23:32 27°≈57'30 minimum elong retrograde -1867 Sep 03 j 19:29 -1859 Mar 12 j 14:36 4°**₭**31'32 49.30827 AU min. Earth dist. 26°≈58'06 46.73743 AU max. Earth dist. -1867 Sep 05 j 18:02 -1859 Jun 22 j 02:47 6°**₩**01'12 opposition 26°≈55'51 -17°38'43 retrograde -1867 Nov 25 j 16:36 -1859 Sep 12 j 04:17 5°**₭**02'04 47.43567 AU direct 25°≈55'32 min. Earth dist. -1859 Sep 13 j 18:13 5°**¥**00'15 -17°32'56 opposition conjunction -1866 Mar 03 j 21:52 27°≈25'19 -16°56'08 direct -1859 Dec 03 j 17:17 4°**)**€00'30 minimum elong -1866 Mar 03 j 21:56 27°≈25'19 16°56'09 -1858 Mar 12 j 03:14 max. Earth dist. -1866 Mar 05 j 23:06 27°≈28'14 48.69711 AU conjunction 5°\ 28'46 -16°50'01 retrograde -1866 Jun 15 j 07:11 28°≈59'00 minimum elong -1858 Mar 12 j 03:19 5°**¥**28'46 16°50'02 -1866 Sep 05 j 03:30 27°≈59'37 46.83747 AU max. Earth dist. -1858 Mar 13 j 20:10 5°¥31'09 49.38230 AU min. Earth dist. -1866 Sep 07 j 00:25 27°≈57'26 -17°39'04 -1858 Jun 23 j 05:52 7°**)**€00'42 opposition retrograde direct -1866 Nov 26 j 22:32 26°**≈**57'12 -1858 Sep 13 j 10:07 6°¥01'39 47.50717 AU min. Earth dist. -1858 Sep 14 j 23:41 5°**¥**59'51 -17°30'51 opposition -1865 Mar 05 i 04:49 conjunction 28°≈26'45 -16°56'25 direct -1858 Dec 05 i 01:45 5°**₩**00'12 -1865 Mar 05 i 04:52 minimum elong 28°≈26'45 16°56'26 -1865 Mar 07 i 04:00 -1857 Mar 13 i 09:36 6°¥28'19 -16°47'57 max. Earth dist. 28°≈29'32 48.79492 AU conjunction -1865 Jun 12 j 13:55 0°**∀** minimum elong -1857 Mar 13 i 09:43 6°**¥**28'19 16°47'57 -1865 Jun 16 i 14:06 0°\00'10 max. Earth dist. -1857 Mar 15 i 00:23 6°¥30'34 49.45189 AU retrograde -1865 Jun 20 j 12:42 30°R≈ retrograde -1857 Jun 24 j 12:54 8°\00'06 min. Earth dist. -1865 Sep 06 j 10:05 29°≈00'51 46.93318 AU min. Earth dist. -1857 Sep 14 j 17:32 7°**₩**01'03 47.57404 AU -1865 Sep 08 j 06:41 28°≈58'42 -17°39'07 -1857 Sep 16 j 05:19 6°¥59'21 -17°28'30 opposition opposition direct -1865 Nov 28 j 03:44 27°≈58'31 direct -1857 Dec 06 j 07:34 5°**¥**59'46 conjunction -1864 Mar 05 j 11:36 29°≈27'51 -16°56'24 conjunction -1856 Mar 13 j 16:04 7°**)** 27'45 -16°45'37 minimum elong -1864 Mar 05 j 11:41 29°≈27'51 16°56'25 minimum elong -1856 Mar 13 j 16:10 7°**)** 27'45 16°45'38 -1864 Mar 07 j 10:09 29°≈30'36 48.88856 AU -1856 Mar 15 j 06:27 7°**∺**29'58 49.51654 AU max. Earth dist. max. Earth dist. -1864 Mar 28 j 15:14 0°**∀** -1856 Jun 24 j 19:43 8° **\ 59'22** retrograde -1864 Jun 16 j 17:56 -1856 Sep 15 j 00:40 8°**₩**00'20 47.63551 AU retrograde 1°**)**01'01 min. Earth dist. 0°**₭**01'40 47.02496 AU 7°**¥**58'42 -17°25'54 min. Earth dist. -1864 Sep 06 j 18:19 opposition -1856 Sep 16 j 10:51 opposition -1864 Sep 08 j 12:57 29°≈59'36 -17°38'52 direct -1856 Dec 06 j 12:58 6°**¥**59′10 -1864 Sep 08 j 04:50 30°R≈ direct -1864 Nov 28 j 12:22 28°≈59'30 conjunction -1855 Mar 14 j 22:29 8°**¥**27'01 -16°43'03 -1863 Feb 14 j 04:38 0°**)**€ minimum elong -1855 Mar 14 j 22:37 8°**¥**27'01 16°43'03 -1855 Mar 16 j 10:23 8°¥29'06 49.57581 AU max. Earth dist. -1863 Mar 06 j 18:31 0°\\$28'37 -16°56'05 -1855 Jun 26 j 03:34 9°\ 58'27 conjunction retrograde

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1855 in astronomical counting style is the year 1856 BCE in historical counting style. min. Earth dist. -1855 Sep 16 j 06:48 8°**¥**59'27 47.69159 AU conjunction -1846 Mar 24 i 04:21 17°**)** 12'17 -16°08'16 minimum elong -1855 Sep 17 j 16:10 8°¥57'52 -17°23'03 -1846 Mar 24 j 04:31 17°**¥**12'18 16°08'16 opposition direct -1855 Dec 07 j 16:30 7°**¥**58'23 max. Earth dist. -1846 Mar 25 j 07:04 17°**¥**13'49 49.92430 AU -1846 Jul 05 j 02:20 18°**)**(42'32 retrograde -1854 Mar 16 j 04:50 9°\\$26'05 -16°40'15 -1846 Sep 26 j 13:00 17°**升**42'28 -16°45'20 conjunction opposition -1846 Sep 25 j 13:44 -1854 Mar 16 j 04:56 9°**¥**26′06 16°40′16 17°**)** 43'35 48.01746 AU minimum elong min. Earth dist. 9°**¥**28'06 49.62968 AU -1854 Mar 17 j 15:37 -1846 Dec 16 j 19:05 16°**)** 43′22 max. Earth dist. direct -1854 Jun 27 j 07:51 retrograde 10°\ 57'21 -1845 Mar 25 j 10:00 18°**升**10'14 -16°03'04 opposition -1854 Sep 18 j 21:35 9°**X**56'49 -17°19'58 conjunction -1845 Mar 25 j 10:08 min. Earth dist. -1854 Sep 17 j 14:28 9°**¥**58'18 47.74243 AU minimum elong 18°**升**10'14 16°03'05 -1845 Mar 26 j 10:28 direct -1854 Dec 08 j 23:15 8°**¥**57′22 max. Earth dist. 18°**光**11'38 49.94588 AU -1845 Jul 06 j 10:46 19°**)** 40′24 retrograde -1853 Mar 17 j 10:55 -1845 Sep 27 j 17:46 conjunction 10°**¥**24'57 -16°37'11 opposition 18°**¥**40'24 -16°39'48 minimum elong -1853 Mar 17 j 11:03 10° **★**24'57 16°37'12 min. Earth dist. -1845 Sep 26 j 19:21 18°**升**41'28 48.03586 AU max. Earth dist. -1853 Mar 18 j 20:40 10°**)** €26'54 49.67875 AU direct -1845 Dec 17 j 21:15 17°**)** 41'20 retrograde -1853 Jun 28 j 10:46 11°**)** 56'02 min. Earth dist. -1853 Sep 18 j 19:56 10°**¥**57'01 47.78864 AU conjunction -1844 Mar 25 j 15:58 19°¥08'10 -15°57'39 opposition -1853 Sep 20 j 02:45 10°**¥**55'32 -17°16'37 minimum elong -1844 Mar 25 j 16:08 19°**¥**08'10 15°57'38 direct -1853 Dec 10 j 06:59 9°**)** 56'07 max. Earth dist. -1844 Mar 26 j 15:23 19°**)** 69'30 49.96262 AU retrograde -1844 Jul 06 j 16:06 20°**)**€38'14 conjunction -1852 Mar 17 j 16:57 11°\(\dagger)23'34 -16°33'52 opposition -1844 Sep 27 j 22:30 19°\ 38'18 -16°34'01 minimum elong -1852 Mar 17 j 17:04 11°**)** 23'34 16°33'53 min. Earth dist. -1844 Sep 27 i 02:24 19°**)** 39'15 48.04910 AU max. Earth dist. -1852 Mar 19 i 00:47 11° **)** 25'24 49.72347 AU direct -1844 Dec 18 i 01:53 18° **X** 39'15 retrograde -1852 Jun 28 i 16:57 12°\ 54'30 min. Earth dist. -1852 Sep 19 i 02:46 11°**)** 55'27 47.83093 AU conjunction -1843 Mar 26 j 21:59 20°\(\)406'01 -15°51'59 opposition -1852 Sep 20 j 07:52 11°\ 54'03 -17°12'59 minimum elong -1843 Mar 26 j 22:07 20°¥06'02 15°52'00 -1852 Dec 10 j 12:38 10°**)** 54'40 max. Earth dist. -1843 Mar 27 j 19:54 20°\mathbf{H}07'16 49.97422 AU direct retrograde -1843 Jul 07 j 19:13 21°\ 35'59 -1851 Mar 18 j 23:06 12°**¥**21'59 -16°30'18 min. Earth dist. -1843 Sep 28 j 07:38 20°\(\frac{1}{37}\)'00 48.05698 AU conjunction -1843 Sep 29 j 03:10 -1851 Mar 18 j 23:15 12°**¥**22'00 16°30'19 20°\(\frac{1}{36}\)'05 -16°28'01 minimum elong opposition -1843 Dec 19 j 08:32 -1851 Mar 20 j 06:52 12°**)** 23'49 49.76455 AU 19°**)** 37′02 max. Earth dist. direct 13°**)** 52'47 -1851 Jun 29 j 22:52 retrograde -1842 Mar 28 j 03:43 -1851 Sep 20 j 08:41 12°**)** 53'43 47.86964 AU 21°\cdot\03'45 -15°46'06 min. Earth dist. conjunction -1842 Mar 28 j 03:54 -1851 Sep 21 j 12:53 12°**¥**52′23 -17°09′05 minimum elong 21°**H**03'46 15°46'07 opposition -1842 Mar 28 j 23:22 -1851 Dec 11 j 18:18 11°**)** 53'02 max. Earth dist. 21°**₭**04'52 49.98041 AU direct -1842 Jul 08 j 23:41 22°**₩**33'37 retrograde -1850 Mar 20 j 04:57 13°**¥**20′14 -16°26′26 -1842 Sep 30 j 07:51 21°**)** 33'44 -16°21'47 conjunction opposition minimum elong -1850 Mar 20 j 05:04 13°**¥**20'14 16°26'26 min. Earth dist. -1842 Sep 29 j 14:23 21°**升**34'33 48.05969 AU max. Earth dist. -1850 Mar 21 j 10:44 13°**)** €21'57 49.80240 AU direct -1842 Dec 20 j 14:42 20°**)** 34'41 retrograde -1850 Jul 01 j 07:16 14°**)** 50'53 -1841 Mar 29 j 09:34 opposition -1850 Sep 22 j 17:45 13°**)** € 50'32 -17°04'54 conjunction 22°\dagger01'19 -15°40'00 min. Earth dist. -1850 Sep 21 j 13:53 13°**₭**51'52 47.90535 AU minimum elong -1841 Mar 29 j 09:43 22°\circ 01'20 15°40'00 direct -1850 Dec 12 j 20:03 12°**¥**51'13 max. Earth dist. -1841 Mar 30 j 04:47 22°**₭**02'25 49.98174 AU retrograde -1841 Jul 10 j 03:39 23°**)**€31'06 -1849 Mar 21 j 10:48 14°**¥**18′21 -16°22′18 -1841 Oct 01 j 12:22 22°\dagger31'13 -16°15'18 conjunction opposition -1849 Mar 21 i 10:57 22°\(\frac{1}{31}\)'59 48.05767 AU minimum elong 14°**)** 18'21 16°22'19 min. Earth dist. -1841 Sep 30 i 19:57 -1849 Mar 22 j 16:14 14°**)** € 20'02 49.83731 AU max. Earth dist. direct -1841 Dec 21 j 21:17 21°**)** 32'09 -1849 Jul 02 j 13:14 retrograde 15°**)**(48'52 -1840 Mar 29 i 15:11 22°**)** 58'43 -15°33'39 opposition -1849 Sep 23 i 22:43 14°**)**(48'36 -17°00'25 conjunction min. Earth dist. -1849 Sep 22 i 20:40 14°**¥**49′50 47.93815 AU minimum elong -1840 Mar 29 i 15:22 22° ¥ 58'44 15°33'39 direct -1849 Dec 14 j 00:02 13°**)**(49'19 max. Earth dist. -1840 Mar 30 j 08:13 22°**)** 59'41 49.97872 AU retrograde -1840 Jul 10 i 11:39 24°**₩**28'24 -1848 Mar 21 j 16:37 15°**)** 16'22 -16°17'54 -1840 Oct 01 j 16:52 23° \(28'31 \) -16°08'35 conjunction opposition minimum elong -1848 Mar 21 j 16:45 15°**升** 16'22 16°17'53 min. Earth dist. -1840 Oct 01 j 01:14 23°\(\frac{1}{29}'16\) 48.05160 AU max. Earth dist. -1848 Mar 22 j 21:14 15°**光**18′00 49.86953 AU direct -1840 Dec 21 j 23:37 22°**₩**29'26 retrograde -1848 Jul 02 j 15:17 16°**)**(46'47 min. Earth dist. -1848 Sep 23 j 01:22 15°**)** 47'49 47.96803 AU conjunction -1839 Mar 30 j 20:57 23°**¥**55'58 -15°27'03 -1848 Sep 24 j 03:30 15°**¥**46'34 -16°55'40 minimum elong -1839 Mar 30 j 21:06 23°**升**55'58 15°27'03 opposition -1848 Dec 14 j 07:47 14°**)** 47'21 max. Earth dist. -1839 Mar 31 j 13:17 23°¥56'53 49.97177 AU direct -1839 Jul 11 j 18:06 25°**∺**25'33 retrograde -1847 Mar 22 j 22:24 16°**升**14′20 -16°13′13 -1839 Oct 02 j 21:18 24°**¥**25'41 -16°01'36 conjunction opposition minimum elong -1847 Mar 22 j 22:33 16°**¥**14'20 16°13'13 min. Earth dist. -1839 Oct 02 j 07:36 24°**¥**26′20 48.04185 AU max. Earth dist. -1847 Mar 24 j 01:11 16°**¥**15'52 49.89863 AU direct -1839 Dec 23 j 03:01 23°****26'35 retrograde -1847 Jul 03 j 20:04 17°**)** 44'39 min. Earth dist. -1847 Sep 24 j 07:52 16°**¥**45'41 47.99468 AU conjunction -1838 Apr 01 j 02:37 24°**H**53'05 -15°20'13 -1847 Sep 25 j 08:15 16°\(\dagger44'31\) -16°50'38 minimum elong -1838 Apr 01 j 02:48 24°**)** 53'05 15°20'13 opposition

-1847 Dec 15 j 14:10

direct

15°**)** 45′22

max. Earth dist.

-1838 Apr 01 j 18:01

24°**升**53'57 49.96158 AU

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1838 in astronomical counting style is the year 1839 BCE in historical counting style. -1838 Jul 12 j 21:07 26°**)** €22'35 conjunction -1831 Apr 07 j 18:30 1° Y 33'32 -14° 25'13 retrograde 25°**)** €23'23 48.02895 AU -1838 Oct 03 j 11:53 -1831 Apr 07 j 18:43 1°**Y**'33'33 14°25'12 min. Earth dist. minimum elong opposition -1838 Oct 04 j 01:42 25°\(\frac{15}{22'44}\) -15°54'21 -1831 Apr 08 j 01:09 1°**Y**33'55 49.79522 AU max. Earth dist. -1831 Apr 12 j 05:54 -1838 Dec 24 j 08:53 24°\ 23'38 1°Y39'38 direct morning rise 3°**Y**03'00 -1831 Jul 19 j 08:15 retrograde -1837 Apr 02 j 08:00 25°¥50'06 -15°13'06 -1831 Oct 10 j 08:43 2°Y03'23 -14°56'24 conjunction opposition -1837 Apr 02 j 08:11 25°¥50'07 15°13'05 -1831 Oct 10 j 03:57 2°**Y**03'37 47.83954 AU minimum elong min. Earth dist. 1° **Y**04'21 -1837 Apr 02 j 21:41 max. Earth dist. 25°**₭**50'53 49.94830 AU direct -1831 Dec 30 j 20:04 -1837 Jul 14 j 00:57 2°Y24'19 retrograde 27°**)** 19'34 evening set -1830 Apr 04 j 01:04 opposition -1837 Oct 05 j 06:15 26°**升**19'44 -15°46'50 min. Earth dist. -1837 Oct 04 j 18:03 26°**∺**20'19 48.01315 AU conjunction -1830 Apr 09 j 00:18 2° \bar{\gamma} 31'05 -14° 16' 27 -1837 Dec 25 j 15:05 25°**¥**20′39 -1830 Apr 09 j 00:29 $2^{\circ}\Upsilon$ 31'05 14°16'26 direct minimum elong -1830 Apr 09 j 04:20 max. Earth dist. 2°**Y**31'18 49.75285 AU -1830 Apr 14 j 00:08 conjunction -1836 Apr 02 j 13:44 26°\(\pm\)47'07 -15°05'44 morning rise 2°Y37'53 -1830 Jul 20 j 16:30 minimum elong -1836 Apr 02 j 13:55 26°\dagger47'08 15°05'45 retrograde 4°Y00'33 max. Earth dist. -1836 Apr 03 j 03:30 26°**)** 47′54 49.93220 AU opposition -1830 Oct 11 j 13:11 3°**Y**00'55 -14°47'12 retrograde -1836 Jul 14 j 05:45 28°**¥**16'34 min. Earth dist. -1830 Oct 11 j 09:37 3°**Y**01'05 47.79318 AU opposition -1836 Oct 05 j 10:35 27°¥16'46 -15°39'03 -1830 Dec 31 j 22:17 2°Y01'51 min. Earth dist. -1836 Oct 04 j 23:12 27°**)** 17'18 47.99430 AU evening set -1829 Apr 04 j 19:19 3°Y21'13 direct -1836 Dec 25 j 20:36 26°**)** 17'41 evening set -1835 Apr 02 j 18:22 27°**)**(42'46 conjunction -1829 Apr 10 j 06:02 3°Y28'37 -14°07'27 minimum elong -1829 Apr 10 j 06:15 3°**Y**28'37 14°07'27 conjunction -1835 Apr 03 i 19:22 27°**)**(44'11 -14°58'06 max. Earth dist. -1829 Apr 10 j 09:07 3°**Y**28'47 49.70522 AU minimum elong -1835 Apr 03 j 19:33 27°**) (**44'11 14°58'06 morning rise -1829 Apr 15 j 17:26 3°Y36'03 -1835 Apr 04 i 20:46 27° **) (**45'37 retrograde -1829 Jul 21 j 23:58 4°Υ58'04 morning rise -1835 Apr 04 j 07:00 27°**)**(44'50 49.91309 AU -1829 Oct 12 j 17:44 3°Y58'25 -14°37'45 max. Earth dist. opposition -1835 Jul 15 j 14:01 29°¥13'37 -1829 Oct 12 j 16:16 3°**Υ**58'30 47.74177 AU retrograde min. Earth dist. opposition -1835 Oct 06 j 15:00 28°¥13'52 -15°31'00 -1828 Jan 02 j 01:07 2°Y59'19 direct -1835 Oct 06 j 04:16 28°**)** 14'22 47.97230 AU -1828 Apr 04 j 14:35 4°Υ18'06 min. Earth dist. evening set -1835 Dec 26 j 22:17 27° **)** 14'49 direct -1834 Apr 02 j 16:07 -1828 Apr 10 j 11:55 4°**Υ**26'06 -13°58'13 28°**)** 38'07 conjunction evening set -1828 Apr 10 j 12:06 minimum elong 4°Υ26'07 13°58'13 4°**Υ**26'12 49.65302 AU -1834 Apr 05 j 01:00 28°**)** 41'20 -14°50'14 -1828 Apr 10 j 13:40 conjunction max. Earth dist. 4°Υ34'09 -1834 Apr 05 j 01:11 28°**)**41'21 14°50'15 -1828 Apr 16 j 09:54 minimum elong morning rise 5°Y55'33 -1834 Apr 05 j 11:56 28°**₭**41'57 49.89040 AU -1828 Jul 22 j 04:20 max. Earth dist. retrograde 4°**Υ**55'53 -14°28'04 -1834 Apr 07 j 10:20 -1828 Oct 12 j 21:58 morning rise 28°**)** 44'35 opposition -1834 Jun 14 j 11:03 $0^{\circ}\Upsilon$ -1828 Oct 12 j 20:47 4°**Υ**55'56 47.68601 AU min. Earth dist. retrograde -1834 Jul 16 j 19:46 0°Υ10'47 direct -1827 Jan 02 j 05:58 3°Y56'42 -1834 Aug 18 j 04:42 30°**₹**₩ evening set -1827 Apr 05 j 10:22 5°Y14'58 opposition -1834 Oct 07 j 19:28 29°\dagger11'04 -15°22'42 min. Earth dist. -1834 Oct 07 j 10:47 29°\dagger 11'29 47.94640 AU conjunction -1827 Apr 11 j 17:44 5°Υ23'33 -13°48'46 -1834 Dec 28 j 02:02 28°**)** 12'03 -1827 Apr 11 j 17:56 5°Υ23'34 13°48'46 direct minimum elong -1833 Apr 03 j 01:53 29°**)** 34'16 max. Earth dist. -1827 Apr 11 j 17:28 5°Υ23'32 49.59660 AU evening set -1827 Apr 18 j 01:55 5°Y32'10 morning rise -1833 Apr 06 j 06:45 29°\dagger38'38 -14°42'07 -1827 Jul 23 j 07:05 6°Y53'00 conjunction retrograde -1827 Oct 14 i 02:28 5°**Υ**'53'17 -14°18'09 minimum elong -1833 Apr 06 i 06:57 29°**)** 38'38 14°42'07 opposition 5°Υ53'15 47.62641 AU max. Earth dist. -1833 Apr 06 j 16:30 29°**)**(39'11 49.86373 AU min. Earth dist. -1827 Oct 14 i 03:14 4°Υ 54'04 morning rise -1833 Apr 09 j 12:06 29° **)** 43'01 direct -1826 Jan 03 j 13:10 $0^{\circ}\Upsilon$ -1833 Apr 22 j 03:01 evening set -1826 Apr 06 j 06:32 6°Υ11'50 retrograde -1833 Jul 17 i 23:44 1°Y08'04 -1833 Oct 08 j 23:47 0°Υ08'25 -15°14'10 conjunction -1826 Apr 12 i 23:32 6°Y20'57 -13°39'03 opposition -1826 Apr 12 j 23:43 min. Earth dist. -1833 Oct 08 j 15:33 0°Υ08'48 47.91609 AU minimum elong 6°Υ20'58 13°39'02 max. Earth dist. -1833 Oct 16 j 09:48 30°**₹** -1826 Apr 12 j 23:12 6°Υ20'56 49.53664 AU 29°**)**€09'24 -1826 Apr 19 j 17:12 6°**Y**30′07 direct -1833 Dec 29 j 07:45 morning rise $0^{\circ}\Upsilon$ -1826 Jul 24 j 09:43 7°**Y**50′25 -1832 Mar 10 j 05:34 retrograde -1826 Oct 15 j 06:51 evening set -1832 Apr 02 j 15:33 0° **Y**30'46opposition 6°Υ50'41 -14°07'57 6°Υ′50'37 47.56338 AU min. Earth dist. -1826 Oct 15 j 08:14 5°**Υ**51'24 -1832 Apr 06 j 12:29 0°Υ36'03 -14°33'47 -1825 Jan 04 j 20:43 conjunction direct -1832 Apr 06 j 12:39 0°**Υ**36'03 14°33'47 -1825 Apr 07 j 03:13 7°**Y**08'43 minimum elong evening set -1832 Apr 06 j 19:51 0°**Υ**36'28 49.83215 AU max. Earth dist. -1832 Apr 10 j 09:58 0°**Y**41'20 -1825 Apr 14 j 05:14 7°Υ18'21 -13°29'06 morning rise conjunction retrograde -1832 Jul 18 j 04:20 2°\partial 05'30 minimum elong -1825 Apr 14 j 05:27 7°**Υ**18'22 13°29'06 opposition -1832 Oct 09 j 04:21 1°Υ05'52 -15°05'24 max. Earth dist. -1825 Apr 14 j 02:50 7°**Y**18'13 49.47358 AU min. Earth dist. -1832 Oct 08 j 22:24 1°**Y**06′09 47.88063 AU morning rise -1825 Apr 21 j 08:08 7°**Y**28′02 direct -1832 Dec 29 j 13:38 0°**Y**06′51 retrograde -1825 Jul 25 j 17:20 8°**Y**47'51 -1831 Apr 03 j 07:41 1°Y27'29 -1825 Oct 16 j 11:13 7°Υ48'05 -13°57'30 evening set opposition

min. Earth dist.

-1825 Oct 16 j 13:17

7°**Υ**47'59 47.49747 AU

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1824 in astronomical counting style is the year 1825 BCE in historical counting style. 6°**Y**48'44 direct -1824 Jan 05 i 23:12 retrograde -1818 Aug 01 j 11:01 15°Y32'59 -1824 Apr 07 j 00:10 8°Y05'38 -1818 Oct 22 j 19:21 14°**Υ**33'03 -12°37'11 evening set opposition min. Earth dist. -1818 Oct 23 j 06:04 14°**Υ**32'32 46.93138 AU -1817 Jan 12 j 06:41 -1824 Apr 14 j 11:07 8°Y15'46 -13°18'53 13°**Y**33'20 direct conjunction 14°**Y**47'59 -1824 Apr 14 j 11:19 8°Y15'47 13°18'52 -1817 Apr 12 j 13:05 minimum elong evening set 8°**Υ**15'36 49.40758 AU -1824 Apr 14 j 08:08 max. Earth dist. 15°**Υ**'01'15 -12°00'32 -1824 Apr 21 j 22:52 8°Y25'58 -1817 Apr 22 j 05:55 morning rise conjunction -1824 Jul 25 j 24:00 9°Y45'19 -1817 Apr 22 j 06:06 retrograde minimum elong 15°**Υ**01'16 12°00'32 8°**Υ**45'32 -13°46'47 -1817 Apr 21 j 16:13 opposition -1824 Oct 16 j 15:46 max. Earth dist. 15°**Y**00'28 48.83680 AU min. Earth dist. -1824 Oct 16 j 19:30 8°**Y**45'21 47.42853 AU morning rise -1817 May 01 j 23:49 15°**Y**14'35 16°**Ƴ**31′23 direct -1823 Jan 06 j 02:36 7°**Y**46′09 retrograde -1817 Aug 02 j 15:17 9°Y02'39 -1817 Oct 24 j 00:08 15°**Υ**31'23 -12°24'45 evening set -1823 Apr 07 j 21:43 opposition -1817 Oct 24 j 13:06 15°**Y**30'45 46.83152 AU min. Earth dist. conjunction -1823 Apr 15 j 17:04 9°Y13'17 -13°08'24 direct -1816 Jan 13 j 13:09 14°**Y**31'34 minimum elong -1823 Apr 15 j 17:16 9°Υ13'17 13°08'24 evening set -1816 Apr 12 j 12:33 15°**Y**45'58 max. Earth dist. -1823 Apr 15 j 13:08 9°Υ13'03 49.33868 AU morning rise -1823 Apr 23 j 13:13 9°Y23'58 conjunction -1816 Apr 22 j 12:20 15°Υ59'38 -11°48'25 retrograde -1823 Jul 27 j 05:26 10°**Y**42'52 minimum elong -1816 Apr 22 j 12:33 15°Υ59'39 11°48'25 opposition -1823 Oct 17 j 20:06 9°Y43'04 -13°35'48 max. Earth dist. -1816 Apr 21 j 22:17 15°**Y**58'50 48.73628 AU min. Earth dist. -1823 Oct 18 j 00:01 9°**Υ**'42'53 47.35651 AU morning rise -1816 May 02 j 13:00 16°**Y**13′22 direct -1822 Jan 07 j 07:10 8°Y43'39 retrograde -1816 Aug 02 j 18:00 17°**Y**29′52 evening set -1822 Apr 08 j 19:27 9°Y59'48 opposition -1816 Oct 24 i 04:52 16°**Y**29'48 -12°12'04 min. Earth dist. -1816 Oct 24 i 18:35 16°**Y**29'08 46.72732 AU conjunction -1822 Apr 16 j 22:57 10°**Y**10'55 -12°57'41 direct -1815 Jan 13 j 21:18 15°**Y**29'53 minimum elong -1822 Apr 16 j 23:10 10°**Υ**10'55 12°57'40 evening set -1815 Apr 13 j 12:19 16° Y 44' 03 max. Earth dist. -1822 Apr 16 j 17:03 10°**Y**10'34 49.26642 AU -1822 Apr 25 j 03:27 10°Y22'03 -1815 Apr 23 j 18:39 16°**Y**58'07 -11°36'03 morning rise conjunction -1822 Jul 28 j 10:10 11°Y40'34 -1815 Apr 23 j 18:50 16°**Y**58'07 11°36'02 retrograde minimum elong -1822 Oct 19 j 00:43 10°Υ40'46 -13°24'33 max. Earth dist. -1815 Apr 23 j 02:15 16°**Y**57'10 48.63178 AU opposition -1822 Oct 19 j 06:35 10°**Y**40′29 47.28098 AU -1815 May 04 j 02:04 17°Y12'15 min. Earth dist. morning rise -1821 Jan 08 j 12:36 9°Υ41'18 -1815 Aug 04 j 01:28 18°**Y**28′27 retrograde direct -1821 Apr 09 j 17:26 10°**Y**57′08 opposition -1815 Oct 25 j 09:33 17°**Y**28'19 -11°59'07 evening set -1815 Oct 26 j 00:15 min. Earth dist. 17°**Y**27'36 46.61956 AU 11°**Y**08'41 -12°46'43 -1821 Apr 18 j 04:58 -1814 Jan 15 j 00:38 16°**Y**28′18 conjunction direct -1821 Apr 18 j 05:09 11°Υ08'42 12°46'42 -1814 Apr 14 j 12:08 17°**Y**42′14 minimum elong evening set -1821 Apr 17 j 22:45 11°**Υ**08'20 49.19036 AU -1814 Apr 24 j 08:09 17°**Y**55'43 48.52383 AU max. Earth dist. max. Earth dist. -1821 Apr 26 j 17:18 11°**Υ**20'18 morning rise retrograde -1821 Jul 29 j 13:42 12°**Y**38'27 conjunction -1814 Apr 25 j 01:06 17°**Y**′56'42 -11°23'26 opposition -1821 Oct 20 j 05:18 11°**Y**38'38 -13°13'04 minimum elong -1814 Apr 25 j 01:19 17°**Υ**56'42 11°23'26 min. Earth dist. -1821 Oct 20 j 12:07 11°**Υ**38'18 47.20114 AU morning rise -1814 May 05 j 15:01 18°**Y**11'13 -1820 Jan 09 j 19:31 10°**Ƴ**39'08 retrograde -1814 Aug 05 j 08:31 19°Y27'10 direct -1820 Apr 09 j 16:02 11°**Y**54'39 -1814 Oct 26 j 14:30 18°**Y**26'57 -11°45'54 evening set opposition min. Earth dist. -1814 Oct 27 j 06:46 18°**Y**26'10 46.50860 AU -1820 Apr 18 j 11:06 12°Υ06'38 -12°35'30 -1813 Jan 16 j 04:18 17°**Y**26'52 conjunction direct -1820 Apr 18 j 11:19 12°Υ06'39 12°35'29 -1813 Apr 15 j 12:09 18°**Y**40'35 minimum elong evening set -1820 Apr 18 j 02:25 max. Earth dist. 12°Υ06'08 49.10971 AU -1813 Apr 26 i 07:25 morning rise -1820 Apr 27 i 07:13 12°Υ18'42 conjunction 18°**Υ**55'26 -11°10'34 -1820 Jul 29 i 20:57 retrograde 13°Y36'30 minimum elong -1813 Apr 26 i 07:37 18°**Υ**55'26 11°10'32 opposition -1820 Oct 20 i 09:51 12°**Y**36'39 -13°01'20 max. Earth dist. -1813 Apr 25 i 13:35 18°Υ54'24 48.41309 AU min. Earth dist. -1820 Oct 20 i 18:02 12°Υ36'15 47.11651 AU morning rise -1813 May 07 j 03:39 19°**Y**10′21 -1819 Jan 09 j 23:05 11°**Y**37'05 retrograde -1813 Aug 06 j 15:05 20°**Y**26′02 direct -1819 Apr 10 j 14:49 12°Y52'18 -1813 Oct 27 j 19:22 19°**Υ**25'46 -11°32'25 evening set opposition min. Earth dist. -1813 Oct 28 j 11:39 19°**Y**24'59 46.39493 AU 18°**Y**25'35 conjunction -1819 Apr 19 j 17:29 13°**Y**04'44 -12°24'05 direct -1812 Jan 17 j 09:05 19°**Y**39'08 minimum elong -1819 Apr 19 j 17:41 13°**Y**'04'45 12°24'04 evening set -1812 Apr 15 j 12:30 max. Earth dist. -1819 Apr 19 j 07:32 13°**Y**04'10 49.02387 AU -1812 Apr 26 j 13:59 -1819 Apr 28 j 21:03 13°**Y**17'14 conjunction 19°**Υ**54'22 -10°57'25 morning rise -1819 Jul 31 j 04:29 14° **Y**34'41 minimum elong -1812 Apr 26 j 14:11 19°**Υ**54'23 10°57'25 retrograde 13°**Y**34'48 -12°49'23 -1819 Oct 21 j 14:42 -1812 Apr 25 j 18:17 19°**Y**53'14 48.29959 AU opposition max. Earth dist. 13°**Ƴ**34'18 47.02652 AU -1819 Oct 22 j 01:01 -1812 May 07 j 16:33 20°**Y**09'39 min. Earth dist. morning rise 12°**Υ**35'10 21°Y25'07 direct -1818 Jan 11 j 02:34 retrograde -1812 Aug 06 j 20:41 evening set -1818 Apr 11 j 13:52 13°Y50'06 opposition -1812 Oct 28 j 00:23 20°**Y**24'48 -11°18'39 min. Earth dist. -1812 Oct 28 j 18:28 20°**Y**23'56 46.27864 AU conjunction -1818 Apr 20 j 23:40 14°**Y**′02'57 -12°12'25 direct -1811 Jan 17 j 14:58 19°**Y**24'32 minimum elong -1818 Apr 20 j 23:53 14°**Υ**02'58 12°12'25 evening set -1811 Apr 16 j 13:07 20°**Y**37′57 -1818 Apr 20 j 12:14 14°**Y**02'18 48.93287 AU max. Earth dist. -1818 Apr 30 j 10:24 14° **Y**15'52 -1811 Apr 27 j 20:45 20°**Y**′53'33 -10°44'00 morning rise conjunction

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1811 in astronomical counting style is the year 1812 BCE in historical counting style. 20°Υ53'33 10°43'59 -1811 Apr 27 j 20:57 evening set -1804 Apr 22 j 00:43 27°**Y**38'02 minimum elong -1811 Apr 27 j 01:03 20°Υ′52'24 48.18351 AU max. Earth dist. -1811 May 09 j 05:14 21°Y09'12 conjunction -1804 May 04 j 22:52 27°Y56'05 -9°03'04 morning rise -1811 Aug 08 j 00:25 22°Y24'29 -1804 May 04 j 23:03 27°**Y**′56'06 9°03'03 minimum elong retrograde -1811 Oct 29 j 05:29 21° **Y** $^{\circ}$ 24'07 $^{\circ}$ -11°04'36 -1804 May 03 j 16:23 27°Υ54'18 47.25889 AU opposition max. Earth dist. 28°**Y**14'13 21°Υ23'13 46.15953 AU -1804 May 17 j 21:45 min. Earth dist. -1811 Oct 29 j 23:58 morning rise 29°**Y**28′27 20°**Y**23'46 -1804 Aug 15 j 00:09 direct -1810 Jan 18 j 22:46 retrograde -1804 Nov 04 j 19:57 21°Y37'03 28°Y27'30 -9°18'57 evening set -1810 Apr 17 j 13:54 opposition 21°**Υ**51'45 48.06449 AU $28^{\circ}\Upsilon 26'07 + 45.20880 \text{ AU}$ max. Earth dist. -1810 Apr 28 j 05:32 min. Earth dist. -1804 Nov 06 j 00:20 27°**Y**26'19 direct -1803 Jan 25 j 13:49 conjunction -1810 Apr 29 j 03:18 21°**Y**'53'01 -10°30'20 evening set -1803 Apr 23 j 03:29 28°Y38'58 -1810 Apr 29 j 03:30 -1803 May 04 j 22:41 28°**Y**55'30 47.10876 AU minimum elong 21°**Y**'53'02 10°30'20 max. Earth dist. -1810 May 10 j 17:50 22°Y09'03 morning rise retrograde -1810 Aug 09 j 07:22 23°Y24'09 conjunction -1803 May 06 j 06:29 28°Y57'22 -8°47'39 opposition -1810 Oct 30 j 10:39 22°Y23'45 -10°50'17 minimum elong -1803 May 06 j 06:41 28°**Y**57′22 8°47'38 min. Earth dist. -1810 Oct 31 j 06:18 22°Υ22'48 46.03734 AU morning rise -1803 May 19 j 10:18 29°Y15'49 direct -1809 Jan 20 j 03:18 21°Y23'20 -1803 Jun 23 j 20:12 0°8 evening set -1809 Apr 18 j 14:56 22°Y36'30 retrograde -1803 Aug 16 j 08:53 0°829'57 max. Earth dist. -1809 Apr 29 j 11:43 22°Υ51'31 47.94191 AU -1803 Oct 09 j 09:17 30°R℃ opposition -1803 Nov 06 j 01:47 29°Y28'52 -9°02'48 conjunction -1809 Apr 30 j 10:16 22° Y 52'49 -10° 16'24 min. Earth dist. -1803 Nov 07 j 06:27 29°**Y**27'27 45.05539 AU minimum elong -1809 Apr 30 j 10:28 22°**Y**'52'50 10°16'23 direct -1802 Jan 26 i 18:26 28°Y27'31 morning rise -1809 May 12 j 06:30 23°Y09'13 evening set -1802 Apr 24 i 06:14 29°Y40'08 retrograde -1809 Aug 10 i 15:36 24°**Y**24'10 max. Earth dist. -1802 May 06 j 04:22 29°Υ56'52 46.95507 AU opposition -1809 Oct 31 j 15:56 23°Y23'43 -10°35'42 -1809 Nov 01 j 13:25 23°Υ22'40 45.91121 AU -1802 May 07 j 14:00 29°Y58'51 -8°31'58 min. Earth dist. conjunction -1808 Jan 21 j 07:00 22°Y23'13 -1802 May 07 j 14:10 29°**Y**58'51 8°31'57 minimum elong direct -1808 Apr 18 j 16:27 23°**Y**36'16 -1802 May 08 j 09:36 0°8 evening set -1802 May 20 j 22:37 morning rise 0°817'38 23°**Υ**′52'58 -10°02'14 -1808 Apr 30 j 17:22 -1802 Aug 17 j 17:15 conjunction retrograde 1°**8**31'40 -1808 Apr 30 j 17:34 opposition -1802 Nov 07 j 07:53 23°**Y**52'58 10°02'13 0°**8**30'27 -8°46'22 minimum elong 23°**Υ**51'34 47.81519 AU 0°**8**28'57 44.89882 AU -1808 Apr 29 j 17:17 -1802 Nov 08 j 14:25 max. Earth dist. min. Earth dist. -1808 May 12 j 19:13 24°**Y**′09'43 -1802 Dec 04 j 04:50 30°**₹**Υ morning rise 29°**Υ**28'56 -1808 Aug 11 j 01:26 25°**Y**24'31 -1801 Jan 28 j 00:10 retrograde direct 0° 8 24°**Y**'24'00 -10°20'52 -1808 Oct 31 j 21:17 -1801 Mar 23 j 07:40 opposition 24°**Υ**′22'55 45.78053 AU -1808 Nov 01 j 19:18 -1801 Apr 25 j 09:17 0°**8**41'32 min. Earth dist. evening set 23°**Y**23'23 -1807 Jan 21 j 09:54 direct -1807 Apr 19 j 18:13 24°**Y**36'22 conjunction -1801 May 08 j 21:50 1°800'35 -8°16'01 evening set max. Earth dist. -1807 Apr 30 j 22:12 24°Υ51'52 47.68346 AU minimum elong -1801 May 08 j 22:01 1°800'35 8°16'00 max. Earth dist. -1801 May 07 j 12:12 0°**႘**58'35 46.79852 AU conjunction -1807 May 02 j 00:36 24°**Y**53'24 -9°47'48 morning rise -1801 May 22 j 10:57 1°819'41 -1807 May 02 j 00:48 24°**Y**'53'25 9°47'47 -1801 Aug 18 j 22:24 2°833'38 minimum elong retrograde -1807 May 14 j 08:00 25°**Y**10'31 -1801 Nov 08 j 13:54 1°832'18 -8°29'39 morning rise opposition -1807 Aug 12 j 07:42 26°**Y**25′09 min. Earth dist. -1801 Nov 09 j 20:39 1°830'47 44.73948 AU retrograde -1807 Nov 02 j 02:51 25°**Y**24'33 -10°05'47 -1800 Jan 29 j 08:51 0°830'38 opposition direct 25°**Υ**23'22 45.64480 AU min. Earth dist. -1807 Nov 03 i 03:17 evening set -1800 Apr 25 j 12:47 1°843'15 direct -1806 Jan 22 i 16:04 24°**Y**23'49 max. Earth dist. -1800 May 07 i 17:57 2°800'29 46.63935 AU evening set -1806 Apr 20 j 20:09 25°Y36'43 -1800 May 09 i 05:43 max. Earth dist. -1806 May 02 j 04:56 25°**Y**52'31 47.54673 AU conjunction 2°802'36 -7°59'47 minimum elong -1800 May 09 i 05:53 2°802'37 7°59'45 -1806 May 03 i 08:00 25°Y54'06 -9°33'08 -1800 May 22 i 23:29 2°822'02 conjunction morning rise -1806 May 03 i 08:11 25°Y54'06 9°33'07 -1800 Aug 19 j 05:42 3°835'57 minimum elong retrograde -1806 May 15 j 20:34 26°**Y**11'33 -1800 Nov 08 j 20:11 2°834'30 -8°12'38 morning rise opposition -1806 Aug 13 j 10:52 27°**Y**26'03 retrograde min. Earth dist. -1800 Nov 10 j 04:06 2°832'55 44.57769 AU -1799 Jan 29 j 15:03 opposition -1806 Nov 03 j 08:28 26°Y25'20 -9°50'26 direct 1°832'41 min. Earth dist. -1806 Nov 04 j 09:40 26°**Υ**24'07 45.50402 AU evening set -1799 Apr 26 j 16:26 2°845'20 -1805 Jan 24 j 01:37 25°Y24'28 max. Earth dist. -1799 May 09 j 01:42 3°**8**02'51 46.47755 AU direct -1805 Apr 21 j 22:18 26°**Y**37′16 evening set -1805 May 03 j 09:35 26°**Y**53'16 47.40512 AU -1799 May 10 j 13:54 3°**8**05'00 -7°43'17 max. Earth dist. conjunction -1799 May 10 j 14:04 3°**8**05'01 7°43'16 minimum elong -1805 May 04 j 15:14 26°**Y**′55′00 -9°18′14 3°**8**24'45 conjunction morning rise -1799 May 24 j 11:51 minimum elong -1805 May 04 j 15:26 26°**Y**55′01 9°18′13 retrograde -1799 Aug 20 j 12:54 4°**8**38'40 morning rise -1805 May 17 j 09:10 27°**Y**12'48 opposition -1799 Nov 10 j 02:37 3°**8**37'07 -7°55'20 retrograde -1805 Aug 14 j 17:24 28°**Y**27′09 min. Earth dist. -1799 Nov 11 j 11:49 3°**8**35'28 44.41318 AU opposition -1805 Nov 04 j 14:11 27°**Y**′26′20 -9°34′49 direct -1798 Jan 30 j 21:31 2°**8**35'10 min. Earth dist. -1805 Nov 05 j 16:47 27°**Y**25'02 45.35858 AU -1798 Apr 27 j 20:30 3°847'52 evening set

-1804 Jan 25 j 07:56

direct

26°**Y**25′18

max. Earth dist.

-1798 May 10 j 08:41

4°805'38 46.31314 AU

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1798 in astronomical counting style is the year 1799 BCE in historical counting style. -1798 May 11 j 22:07 4°807'52 -7°26'30 evening set -1791 May 04 j 10:32 11°**8**19'39 conjunction 11°**8**38'48 45.04525 AU 4°807'52 7°26'28 -1798 May 11 j 22:17 max. Earth dist. -1791 May 17 j 14:20 minimum elong -1798 May 26 j 00:19 4°**8**27'55 morning rise -1798 Aug 21 j 23:42 -1791 May 19 j 13:50 5°**8**41'51 conjunction 11°**8**41'43 -5°21'30 retrograde -1798 Nov 11 j 09:05 4°840'12 -7°37'44 -1791 May 19 j 13:58 11°**8**41'43 5°21'28 opposition minimum elong -1798 Nov 12 j 18:33 -1791 Jun 03 j 17:05 12°**8**03'48 min. Earth dist. 4°**8**38'32 44.24584 AU morning rise direct -1797 Feb 01 j 01:16 3°**8**38'07 retrograde -1791 Aug 29 j 13:52 13°**8**18'14 -1797 Apr 29 j 00:47 4°**8**50'55 evening set opposition -1791 Nov 18 j 11:58 12°**8**15'34 -5°26'35 max. Earth dist. -1797 May 11 j 15:19 5°**8**08'53 46.14534 AU min. Earth dist. -1791 Nov 20 j 06:46 12°**8**13'23 42.95458 AU direct -1790 Feb 08 j 06:03 11°**8**12'07 conjunction -1797 May 13 j 06:32 5°**8**11'14 -7°09'26 evening set -1790 May 05 j 17:20 12°**8**25'57 -1797 May 13 j 06:41 -1790 May 18 j 21:48 minimum elong 5°**8**11'14 7°09'25 max. Earth dist. 12°**8**45'13 44.84787 AU -1797 May 27 j 12:51 morning rise 5°**8**31'35 retrograde -1797 Aug 23 j 09:15 6°**8**45'34 conjunction -1790 May 20 j 23:31 12°848'17 -5°02'33 opposition -1797 Nov 12 j 15:56 5°**8**43'49 -7°19'51 minimum elong -1790 May 20 j 23:39 12°**8**48'18 5°02'32 min. Earth dist. -1797 Nov 14 j 03:43 5°**8**42'02 44.07484 AU morning rise -1790 Jun 05 j 05:52 13°**8**10'40 direct -1796 Feb 02 j 06:41 4°**8**41'35 retrograde -1790 Aug 30 j 22:31 14°**8**25'13 evening set -1796 Apr 29 j 05:36 5°**8**54'31 opposition -1790 Nov 19 j 19:55 13°**8**22'20 -5°06'41 max. Earth dist. -1796 May 11 j 23:34 6°812'44 45.97357 AU min. Earth dist. -1790 Nov 21 j 16:15 13°**8**20'04 42.75491 AU -1789 Feb 09 j 14:29 12°**8**18'39 conjunction -1796 May 13 j 15:24 6°815'07 -6°52'07 evening set -1789 May 07 j 00:14 13°**8**32'41 minimum elong -1796 May 13 j 15:33 6°815'08 6°52'05 max. Earth dist. -1789 May 20 j 07:36 13°**8**52'12 44.64791 AU morning rise -1796 May 28 i 01:29 6°**8**35'48 retrograde -1796 Aug 23 j 15:43 7°**8**49'49 conjunction -1789 May 22 j 09:29 13°**8**55'17 -4°43'20 -1796 Nov 12 j 22:44 6°847'58 -7°01'41 minimum elong -1789 May 22 i 09:35 13°**8**55'18 4°43'18 opposition -1796 Nov 14 j 11:09 6°846'08 43.89948 AU -1789 Jun 06 j 18:28 14°**8**17'56 min. Earth dist. morning rise -1795 Feb 02 j 16:37 5°**8**45'34 -1789 Jul 08 j 21:06 15°8 direct -1795 Apr 30 j 10:54 -1789 Sep 01 j 04:26 15°**8**32'38 6°**8**58'37 retrograde evening set -1795 May 13 j 05:44 7°**8**16'58 45.79716 AU -1789 Oct 26 j 08:08 max. Earth dist. 15°R opposition -1789 Nov 21 j 04:08 14°**8**29'34 -4°46'29 -1795 May 15 j 00:20 -1789 Nov 23 j 01:17 14°**8**27'14 42.55281 AU conjunction 7°**8**19'33 -6°34'31 min. Earth dist. -1788 Feb 11 j 01:29 -1795 May 15 j 00:29 7°**8**19'33 6°34'30 direct 13°**8**25'39 minimum elong -1795 May 29 j 14:19 -1788 May 07 j 07:50 7°**8**40'31 14°**8**39'54 morning rise evening set -1795 Aug 24 j 23:29 8°**8**54'35 -1788 May 20 j 23:02 retrograde 15°**8** -1795 Nov 14 j 05:56 opposition 7°**8**52'36 -6°43'14 max. Earth dist. -1788 May 20 j 16:19 14°**8**59'35 44.44584 AU -1795 Nov 15 j 20:06 min. Earth dist. 7°**8**50'41 43.71944 AU -1788 May 22 j 19:38 15°**8**02'47 -4°23'49 direct -1794 Feb 04 j 00:45 6°**8**50'03 conjunction -1794 May 01 j 16:10 8°803'13 minimum elong -1788 May 22 j 19:45 15°**8**02'47 4°23'48 evening set max. Earth dist. -1794 May 14 j 14:05 8°**8**21'49 45.61583 AU morning rise -1788 Jun 07 j 07:22 15°**8**25'41 retrograde -1788 Sep 01 j 15:05 16°**8**40'33 conjunction -1794 May 16 j 09:25 8°824'26 -6°16'40 -1788 Nov 21 j 12:23 15°**8**37'18 -4°25'58 opposition -1794 May 16 j 09:34 8°824'27 6°16'38 min. Earth dist. -1788 Nov 23 j 09:49 15°**8**34'57 42.34886 AU minimum elong -1794 May 31 j 02:49 8°**8**45'42 -1788 Dec 23 j 17:05 15°R₩ morning rise -1794 Aug 26 j 06:46 9°**8**59'52 -1787 Feb 11 j 08:12 14°**8**33'08 retrograde direct 15°8 -1794 Nov 15 j 13:19 8°**8**57'44 -6°24'30 -1787 Apr 01 j 10:24 opposition -1794 Nov 17 i 05:04 min. Earth dist. 8°855'43 43.53446 AU evening set -1787 May 08 i 15:45 15°**8**47'39 direct -1793 Feb 05 i 08:49 7°**8**54'58 max. Earth dist. -1787 May 22 j 01:41 16°**8**07'32 44.24176 AU evening set -1793 May 02 j 22:00 9°**8**08'17 -1787 May 24 i 06:07 16°810'48 -4°04'02 max. Earth dist. -1793 May 15 j 21:29 9°**8**27'02 45.42986 AU conjunction -1787 May 24 i 06:13 16°810'48 4°04'00 minimum elong -1793 May 17 i 18:40 9°829'47 -5°58'33 -1787 Jun 08 i 20:11 16°833'58 conjunction morning rise -1793 May 17 i 18:49 9°**8**29'47 5°58'32 -1787 Sep 03 j 02:42 17°849'03 minimum elong retrograde -1793 Jun 01 j 15:38 9°**8**51'20 -1787 Nov 22 j 21:09 16°845'36 -4°05'09 morning rise opposition 11°**8**05'34 16°843'10 42.14299 AU retrograde -1793 Aug 27 j 17:17 min. Earth dist. -1787 Nov 24 j 20:18 opposition -1793 Nov 16 j 20:36 10°803'16 -6°05'29 direct -1786 Feb 12 j 14:01 15°**8**41'14 min. Earth dist. -1793 Nov 18 j 13:04 10°**8**01'13 43.34506 AU evening set -1786 May 09 j 23:52 16°856'03 -1792 Feb 06 j 14:25 9°**8**00'18 max. Earth dist. -1786 May 23 j 12:00 17°**8**16'08 44.03581 AU direct -1792 May 03 j 04:09 10°**8**13'45 evening set -1792 May 16 j 05:04 10°**8**32'40 45.23943 AU -1786 May 25 j 16:38 17°**8**19'26 -3°43'56 max. Earth dist. conjunction -1786 May 25 j 16:43 17°**8**19'26 3°43'56 minimum elong -1792 May 18 j 04:12 10°**8**35'32 -5°40'10 -1786 Jun 10 j 08:56 17°**8**42'51 conjunction morning rise minimum elong -1792 May 18 j 04:21 10°**8**35'33 5°40'09 retrograde -1786 Sep 04 j 13:53 18°**8**58'11 morning rise -1792 Jun 02 j 04:26 10°**8**57'22 opposition -1786 Nov 24 j 05:56 17°**8**54'33 -3°44'01 retrograde -1792 Aug 28 j 04:35 12°**8**11'42 min. Earth dist. -1786 Nov 26 j 05:05 17°**8**52'06 41.93503 AU opposition -1792 Nov 17 j 04:18 11°**8**09'13 -5°46'11 direct -1785 Feb 13 j 23:48 16°**8**49'57 -1792 Nov 18 j 22:54 11°**8**07'03 43.15155 AU -1785 May 11 j 08:45 18°805'06 min. Earth dist. evening set -1791 Feb 06 j 20:42 10°**8**06'01 max. Earth dist. -1785 May 24 j 20:40 18°**8**25'18 43.82736 AU direct

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1785 in astronomical counting style is the year 1786 BCE in historical counting style. 18°**8**28'45 -3°23'34 -1785 May 27 i 03:32 evening set -1778 May 19 j 12:26 26°828'27 conjunction -1785 May 27 j 03:37 18°**8**28'45 3°23'32 max. Earth dist. -1778 Jun 02 j 00:40 26°849'28 42.26837 AU minimum elong -1785 Jun 11 j 22:01 18°**8**52'24 morning rise -1785 Sep 06 j 01:47 20°808'00 -1778 Jun 04 j 16:39 26°853'40 -0°53'13 conjunction retrograde -1778 Jun 04 j 16:40 -1785 Nov 25 j 14:59 19°**8**04'11 -3°22'35 26°**8**53'40 opposition minimum elong 0°53'11 -1785 Nov 27 j 15:58 -1778 Jun 20 j 19:53 27°818'50 min. Earth dist. 19°**8**01'39 41.72443 AU morning rise -1778 Sep 14 j 11:15 28°836'54 direct -1784 Feb 15 j 09:06 17°**8**59'22 retrograde -1778 Dec 03 j 14:44 evening set -1784 May 11 j 18:03 19°**8**14'52 opposition 27°**8**31'27 -0°44'08 max. Earth dist. -1784 May 25 j 07:49 19°**8**35'17 43.61578 AU min. Earth dist. -1778 Dec 05 j 23:21 27°**8**28'24 40.15058 AU direct -1777 Feb 23 j 10:42 26°**8**24'37 conjunction -1784 May 27 j 14:58 19°**8**38'46 -3°02'55 evening set -1777 May 21 j 01:14 27°**8**43'16 -1784 May 27 j 15:03 19°838'47 3°02'54 -1777 Jun 03 j 13:36 28°804'24 42.03387 AU minimum elong max. Earth dist. -1784 Jun 12 j 11:09 20°**8**02'40 morning rise retrograde -1784 Sep 06 j 11:04 21°**8**18'33 conjunction -1777 Jun 06 j 06:03 28°808'39 -0°30'39 opposition -1784 Nov 26 j 00:26 20°**8**14'33 -3°00'51 minimum elong -1777 Jun 06 j 06:04 28°**8**08'39 0°30'37 min. Earth dist. -1784 Nov 28 j 02:27 20°**8**11'56 41.51034 AU morning rise -1777 Jun 22 j 09:29 28°834'00 direct -1783 Feb 15 j 20:36 19°**8**09'29 retrograde -1777 Sep 15 j 22:59 29°**8**52'32 evening set -1783 May 13 j 03:57 20°**8**25'23 opposition -1777 Dec 05 j 02:08 28°846'50 -0°20'18 max. Earth dist. -1783 May 26 j 17:11 20°845'52 43.40051 AU min. Earth dist. -1777 Dec 07 j 12:05 28°843'42 39.91525 AU direct -1776 Feb 24 j 21:29 27°839'41 conjunction -1783 May 29 j 02:27 20°849'31 -2°42'00 evening set -1776 May 21 j 14:43 28°858'54 minimum elong -1783 May 29 i 02:31 20°**8**49'31 2°41'57 max. Earth dist. -1776 Jun 04 i 02:36 29°**8**20'09 41.79811 AU morning rise -1783 Jun 14 j 00:27 21°813'39 retrograde -1783 Sep 07 i 22:02 22°**8**29'50 conjunction -1776 Jun 06 i 19:42 29°**8**24'28 -0°07'50 opposition -1783 Nov 27 j 10:05 21°**8**25'38 -2°38'48 minimum elong -1776 Jun 06 j 19:43 29°**8**24'28 0°07'48 -1783 Nov 29 j 13:06 21°**8**22'57 41.29248 AU behind sun begin -1776 Jun 06 j 13:51 29°824'06 min. Earth dist. -1782 Feb 17 j 05:42 20°**8**20'18 -1776 Jun 07 j 01:34 29°824'50 direct behind sun end -1782 May 14 j 14:15 21°836'35 morning rise -1776 Jun 22 j 23:21 29°850'00 evening set -1782 May 28 j 03:40 21°**8**57'11 43.18114 AU -1776 Jun 29 j 12:25 max. Earth dist. Π °0 -1776 Sep 16 j 13:42 1°**I**109'02 retrograde -1782 May 30 j 14:25 22°**8**00'57 -2°20'47 -1776 Oct 08 j 16:48 1°**Ⅱ**02'57 conjunction asc. node 0°**Д**03'04 0°03'50 -1782 May 30 j 14:28 -1776 Dec 05 j 13:53 minimum elong 22°**8**00'57 2°20'46 opposition -1782 Jun 15 j 13:45 -1776 Dec 07 j 22:31 morning rise 22°**8**25'19 30°R₩ -1776 Dec 07 j 23:38 -1782 Sep 09 j 09:46 23°**8**41'51 min. Earth dist. 29°**8**59'56 39.67892 AU retrograde -1782 Nov 28 j 20:08 22°**8**37'25 -2°16'28 -1775 Feb 25 j 07:48 28°**8**55'36 opposition direct -1782 Dec 01 j 01:08 22°**8**34'37 41.07060 AU -1775 May 13 j 00:29 min. Earth dist. $0^{\circ}\Pi$ -1781 Feb 18 j 14:21 -1775 May 23 j 04:44 direct 21°**8**31'48 evening set 0°**I**15′28 evening set -1781 May 16 j 00:59 22°848'30 max. Earth dist. -1775 Jun 05 j 14:58 0°**Д**36'44 41.56122 AU max. Earth dist. -1781 May 29 j 14:55 23°**8**09'15 42.95794 AU -1775 Jun 08 j 09:38 conjunction 0°**Д**41'11 0°15'21 conjunction -1781 Jun 01 j 02:33 23°**8**13'05 -1°59'18 minimum elong -1775 Jun 08 j 09:37 0°**Д**41'11 0°15'23 -1781 Jun 01 j 02:36 23°**8**13'05 1°59'16 behind sun begin -1775 Jun 08 j 08:12 0°**Ⅱ**41′06 minimum elong -1781 Jun 17 j 03:13 23°**8**37'40 behind sun end -1775 Jun 08 j 11:03 0°**I**I41'17 morning rise -1781 Sep 10 j 23:30 24°**8**54'32 morning rise -1775 Jun 24 j 13:06 1°**I**I06′52 retrograde -1781 Nov 30 j 06:20 23°**8**49'52 -1°53'50 -1775 Sep 18 j 06:27 2°II26'28 opposition retrograde -1781 Dec 02 j 11:35 23°847'03 40.84497 AU -1775 Dec 07 i 02:06 1°**II**20'15 0°28'15 min. Earth dist. opposition -1780 Feb 19 i 23:33 -1775 Dec 09 i 13:26 1°**Д**17'01 39.44169 AU direct 22°843'58 min. Earth dist. -1780 May 16 j 12:26 0°**Ⅱ**12'29 evening set 24°801'07 direct -1774 Feb 26 i 17:42 -1780 May 30 i 01:04 max. Earth dist. 24°**8**21'54 42.73097 AU evening set -1774 May 24 j 19:20 1°**Ⅲ**33'01 max. Earth dist. -1774 Jun 07 j 05:42 1°**Д**54'26 41.32345 AU conjunction -1780 Jun 01 i 15:03 24°**8**25'55 -1°37'33 -1780 Jun 01 i 15:05 24°**8**25'55 1°37'31 conjunction -1774 Jun 10 i 00:03 1°II58'54 0°38'43 minimum elong -1780 Jun 17 j 16:48 24°**8**50'41 -1774 Jun 10 j 00:02 1°**Ⅱ**58'54 0°38'44 morning rise minimum elong -1780 Sep 11 j 12:27 -1774 Jun 26 i 03:03 2°**Ⅱ**24'44 retrograde 26°**8**07'56 morning rise opposition -1780 Nov 30 j 16:49 25°803'01 -1°30'54 retrograde -1774 Sep 19 j 21:19 3°**Ⅱ**44'55 min. Earth dist. -1780 Dec 03 j 00:11 25°800'04 40.61602 AU opposition -1774 Dec 08 j 14:33 2°**I**38'27 0°52'57 direct -1779 Feb 20 j 09:35 23°**8**56'48 min. Earth dist. -1774 Dec 11 j 01:50 2°**Д**35'13 39.20346 AU 1°**Ⅱ**30′23 -1779 May 18 j 00:12 25°**8**14'26 direct -1773 Feb 28 j 07:13 evening set -1779 May 31 j 13:47 25°**8**35'23 42.50090 AU -1773 May 26 j 10:44 2°**I**51'38 max. Earth dist. evening set -1773 Jun 08 j 18:27 3°**I**13'02 41.08437 AU max. Earth dist. -1779 Jun 03 j 03:53 25°**8**39'26 -1°15'31 conjunction minimum elong -1779 Jun 03 j 03:56 25°**8**39'26 1°15'29 conjunction -1773 Jun 11 j 14:45 3°**I**17'40 1°02'20 26°804'24 minimum elong morning rise -1779 Jun 19 j 06:20 -1773 Jun 11 j 14:43 3°**Ⅱ**17'40 1°02'22 retrograde -1779 Sep 12 j 22:56 27°**8**22'02 morning rise -1773 Jun 27 j 17:16 3°**Ⅱ**43'38 opposition -1779 Dec 02 j 03:40 26°**8**16'51 -1°07'40 retrograde -1773 Sep 21 j 12:30 5°**Ⅱ**04'27 min. Earth dist. -1779 Dec 04 j 11:27 26°813'53 40.38429 AU -1773 Dec 10 j 03:28 3°II57'44 1°17'55 opposition

-1778 Feb 21 j 23:24

direct

25°**8**10'20

min. Earth dist.

-1773 Dec 12 j 16:07

3°**Ц**54'25 38.96377 AU

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1772 in astronomical counting style is the year 1773 BCE in historical counting style. -1772 Feb 29 i 19:46 2°II49'23 retrograde -1766 Oct 01 i 08:08 14°**I**52′16 direct opposition -1772 May 27 j 02:51 4°**Ⅱ**11'22 -1766 Dec 19 j 10:20 13°**I**I43'20 4°20'04 evening set max. Earth dist. -1772 Jun 09 j 09:29 4°**Д**32'51 40.84323 AU min. Earth dist. -1766 Dec 22 j 05:40 13°**Д**39'29 37.21762 AU -1765 Mar 11 j 02:03 12°**Ⅲ**32'18 direct -1772 Jun 12 j 06:10 -1765 Jun 07 j 16:54 14°**Ⅱ**00'31 conjunction 4°**I**37'33 1°26'12 evening set -1772 Jun 12 j 06:07 -1765 Jun 20 j 01:06 14°**Д**21'36 39.08442 AU minimum elong 4°**Ⅲ**37'33 1°26'15 max. Earth dist. $5^{\circ}\Pi03'38$ morning rise -1772 Jun 28 j 07:33 $6^{\circ} \Pi 25'07$ -1765 Jun 23 j 05:29 14°**I**127'07 4°19'42 retrograde -1772 Sep 22 j 01:01 conjunction -1765 Jun 23 j 05:20 4°19'44 opposition -1772 Dec 10 j 16:51 5°**Ⅱ**18'09 1°43'10 minimum elong 14°**Ⅲ**27′06 min. Earth dist. -1772 Dec 13 j 06:44 5°**Ⅲ**14'44 38.72179 AU morning rise -1765 Jul 08 j 15:35 14°**I**53'34 16°**Ⅲ**20′39 direct -1771 Mar 02 j 10:52 4°**Ⅱ**09′28 retrograde -1765 Oct 03 j 00:47 -1765 Dec 21 j 02:59 15°**Ⅱ**11'21 4°47'00 evening set -1771 May 28 j 19:49 5°**Ⅲ**32'15 opposition -1765 Dec 23 j 23:31 max. Earth dist. -1771 Jun 10 j 23:41 5°**Д**53'42 40.59963 AU min. Earth dist. 15°**Ц**07'24 36.96188 AU direct -1764 Mar 11 j 18:02 13°**Ⅲ**59'53 conjunction -1771 Jun 13 j 21:52 5°**Ⅲ**58'32 1°50'19 evening set -1764 Jun 08 j 15:21 15°**Ⅲ**29'11 minimum elong -1771 Jun 13 j 21:48 5°**Ⅱ**58'32 1°50'21 max. Earth dist. -1764 Jun 20 j 19:40 15°**Д**50'10 38.82751 AU morning rise -1771 Jun 29 j 22:08 6°**Ⅲ**24'45 retrograde -1771 Sep 23 j 16:59 7°**Ⅱ**46'55 conjunction -1764 Jun 24 j 00:20 15°**I**55'44 4°45'15 opposition -1771 Dec 12 j 06:39 6°**Ⅲ**39'41 2°08'42 minimum elong -1764 Jun 24 j 00:11 15°**Ⅱ**55'44 4°45'18 min. Earth dist. -1771 Dec 14 j 20:56 6°**Ц**36'13 38.47726 AU morning rise -1764 Jul 09 j 06:56 16°**Ⅲ**22'10 direct -1770 Mar 03 j 23:01 5°**Ⅱ**30'39 retrograde -1764 Oct 03 j 19:53 17°**Ⅲ**50′13 evening set -1770 May 30 j 13:18 6°**I**I54'14 opposition -1764 Dec 21 i 19:59 16°**Ⅱ**40'34 5°14'07 max. Earth dist. -1770 Jun 12 j 14:15 7°**I**15'40 40.35303 AU min. Earth dist. -1764 Dec 24 i 15:59 16°**Д**36'38 36.70641 AU direct -1763 Mar 13 j 09:30 15°**I**28'41 conjunction -1770 Jun 15 i 13:56 7°**II**20'38 2°14'41 evening set -1763 Jun 10 j 14:41 16°**Ⅱ**59'08 -1770 Jun 15 j 13:52 7°II20'37 2°14'43 max. Earth dist. -1763 Jun 22 j 13:53 17°**Ⅱ**19'56 38.57088 AU minimum elong -1770 Jul 01 j 12:36 7°**Ⅱ**46'56 morning rise -1770 Sep 25 j 09:17 9°**Ⅱ**09'51 -1763 Jun 25 j 19:45 17°**Ⅲ**25'38 5°10'57 conjunction retrograde -1770 Dec 13 j 21:04 -1763 Jun 25 j 19:35 17°**Ⅲ**25'37 8°**II**02'18 2°34'29 minimum elong 5°10'59 opposition -1770 Dec 16 j 13:24 7°**Д**58'42 38.22980 AU -1763 Jul 10 j 22:22 17°**I**52′01 min. Earth dist. morning rise 19°**Ⅱ**21′08 -1769 Mar 05 j 10:53 6°II52'54 -1763 Oct 05 j 16:34 direct retrograde 8°**Ⅱ**17′20 -1763 Dec 23 j 13:44 -1769 Jun 01 j 07:40 18°**Ⅱ**11'07 5°41'24 evening set opposition 8°**Д**38'46 40.10359 AU -1769 Jun 14 j 06:29 min. Earth dist. -1763 Dec 26 j 11:03 18°**Д**07'05 36.45161 AU max. Earth dist. -1762 Mar 15 j 01:13 16°**Ⅱ**58'49 direct -1769 Jun 17 j 06:37 8°II43'48 2°39'16 -1762 Jun 12 j 14:44 18°**Ⅲ**30′29 conjunction evening set 8°**II**43'47 2°39'17 18°**耳**51'13 38.31495 AU -1769 Jun 17 j 06:32 -1762 Jun 24 j 10:27 minimum elong max. Earth dist. 9°**Ⅱ**10′10 -1769 Jul 03 j 03:27 morning rise retrograde -1769 Sep 27 j 03:07 10°**Ⅲ**33'50 conjunction -1762 Jun 27 j 15:36 18°**耳**56'55 5°36'47 opposition -1769 Dec 15 j 11:36 9°**Ц**25'58 3°00'31 minimum elong -1762 Jun 27 j 15:24 18°**I**56′54 5°36′49 min. Earth dist. -1769 Dec 18 j 04:08 9°**Д**22'21 37.97962 AU morning rise -1762 Jul 12 j 13:49 19°**Ⅲ**23'12 -1768 Mar 06 j 01:58 8°**Ⅱ**16'11 retrograde -1762 Oct 07 j 14:01 20°**Ⅲ**53′27 direct -1768 Jun 02 j 02:56 9°**Ⅱ**41'30 -1762 Dec 25 j 07:56 19°**Ⅱ**43'06 6°08'49 evening set opposition -1768 Jun 14 j 21:13 10°**Д**02'48 39.85142 AU min. Earth dist. -1762 Dec 28 j 04:55 19°**耳**39'03 36.19747 AU max. Earth dist. -1761 Mar 16 j 20:06 18°**Ⅲ**30′24 direct -1768 Jun 17 j 23:42 10°II08'02 3°04'04 -1761 Jun 14 j 16:07 20°II03'22 conjunction evening set -1768 Jun 17 j 23:36 10°**I**08'01 3°04'07 20°**Ц**23'50 38.05947 AU minimum elong max. Earth dist. -1761 Jun 26 i 05:20 -1768 Jul 03 i 18:27 10°**Ⅲ**34'27 morning rise -1768 Sep 27 i 22:47 -1761 Jun 29 i 12:07 20°**II**29'42 6°02'42 retrograde 11°**I**I58'54 conjunction -1768 Dec 16 i 02:47 10°**I**50'41 3°26'49 20°**Ⅱ**29'41 opposition minimum elong -1761 Jun 29 j 11:55 6°02'43 min. Earth dist. -1768 Dec 18 j 21:03 10°**I**I46'57 37.72716 AU -1761 Jul 14 i 05:42 20° **1**55'53 morning rise direct -1767 Mar 07 j 16:30 9°**Ⅱ**40'30 -1761 Oct 09 j 12:52 22°**II**27'18 retrograde -1767 Jun 03 j 22:43 11°**Ⅱ**06'45 -1761 Dec 27 j 02:35 21°II16'37 6°36'21 evening set opposition -1767 Jun 16 j 14:50 11°**Д**28'03 39.59704 AU min. Earth dist. -1761 Dec 30 j 00:35 21°**Д**12'30 35.94383 AU max. Earth dist. 20°**I**03'32 direct -1760 Mar 17 j 13:51 conjunction -1767 Jun 19 j 17:12 11°**Д**33'19 3°29'06 evening set -1760 Jun 15 j 18:28 21°**II**37'53 minimum elong -1767 Jun 19 j 17:05 11°**耳**33'18 3°29'07 max. Earth dist. -1760 Jun 27 j 02:53 21°**Д**58'10 37.80399 AU -1767 Jul 05 j 09:18 11°**Ⅲ**59'46 morning rise -1767 Sep 29 j 14:45 13°**Ⅲ**25′02 -1760 Jun 30 j 09:26 22°**I**104'04 6°28'43 retrograde conjunction -1767 Dec 17 j 18:25 12°**I**16'28 3°53'20 -1760 Jun 30 j 09:13 22°**Ⅱ**04'03 6°28'45 opposition minimum elong -1767 Dec 20 j 13:09 12°**Ⅱ**12'41 37.47285 AU -1760 Jul 14 j 21:37 22°**II**30'06 min. Earth dist. morning rise 11°**Ⅲ**05'52 -1760 Oct 10 j 09:01 24°**Ⅲ**02'47 direct -1766 Mar 09 j 09:39 retrograde -1766 Jun 05 j 19:28 12°**Ⅲ**33′04 opposition -1760 Dec 27 j 22:07 22°**I**51'46 7°04'00 evening set max. Earth dist. -1766 Jun 18 j 07:07 12°**I**54'14 39.34120 AU min. Earth dist. -1760 Dec 30 j 20:49 22°**I**47'35 35.69001 AU direct -1759 Mar 19 j 09:50 21°**Ⅲ**38′17 conjunction -1766 Jun 21 j 11:01 12°**I**59'39 3°54'18 evening set -1759 Jun 17 j 21:56 23°**Ⅱ**14'03 -1766 Jun 21 j 10:54 12°**Ⅲ**59'39 3°54'21 max. Earth dist. -1759 Jun 28 j 23:29 23°**Ⅲ**34'01 37.54814 AU minimum elong -1766 Jul 07 j 00:28 13°**Ⅲ**26′08 morning rise

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1759 in astronomical counting style is the year 1760 BCE in historical counting style. morning rise -1759 Jul 02 i 07:04 23°**Ⅱ**40'04 6°54'48 -1753 Jul 25 i 17:12 4°9514'13 conjunction -1759 Jul 02 j 06:51 23°**II**40'03 -1753 Oct 23 j 11:20 5°957'24 minimum elong 6°54'50 retrograde -1759 Jul 16 j 13:44 24°**I**105′56 opposition -1752 Jan 09 j 08:45 4°9643'33 10°18'12 morning rise -1759 Oct 12 j 07:06 25°**Ⅲ**39'55 -1752 Jan 12 j 10:46 min. Earth dist. 4°538'58 33.90961 AU retrograde -1752 Mar 30 j 15:25 -1759 Dec 29 j 18:10 24°II28'34 7°31'43 opposition direct 3°926'46 min. Earth dist. -1758 Jan 01 j 17:01 24°**I**I24'20 35.43582 AU evening set -1752 Jul 02 j 06:47 5°9514'21 5°531'10 35.75316 AU direct -1758 Mar 21 j 05:01 23°**Ⅲ**14'39 max. Earth dist. -1752 Jul 10 j 23:18 evening set -1758 Jun 20 j 02:27 24°**Ⅲ**51'55 max. Earth dist. -1758 Jun 30 j 21:10 25°**Ⅱ**11'33 37.29149 AU conjunction -1752 Jul 14 j 09:36 5°937'51 9°57'01 -1752 Jul 14 j 09:15 minimum elong 5°937'49 9°57'03 -1752 Jul 26 j 10:04 conjunction -1758 Jul 04 j 05:36 25°**Ⅱ**17'43 7°20'56 morning rise 6°901'11 -1758 Jul 04 j 05:21 -1752 Oct 24 j 15:21 minimum elong 25°**Ⅲ**17'42 7°20'58 retrograde 7°5946'08 -1758 Jul 18 j 06:01 -1751 Jan 10 j 09:39 morning rise 25°**Ⅱ**43'21 opposition 6°931'52 10°45'34 retrograde -1758 Oct 14 j 05:01 27°**Ⅲ**18'44 min. Earth dist. -1751 Jan 13 j 10:50 6°9527'17 33.66076 AU opposition -1758 Dec 31 j 14:57 26°**Ⅲ**07'00 7°59'31 direct -1751 Apr 01 j 15:51 5°9514'34 min. Earth dist. -1757 Jan 03 j 15:25 26°**Д**02'39 35.18094 AU evening set -1751 Jul 04 j 19:45 7°904'10 direct -1757 Mar 22 j 22:45 24°**Ⅲ**52'39 max. Earth dist. -1751 Jul 13 j 02:32 7°520'21 35.50303 AU evening set -1757 Jun 22 j 08:15 26°II31'27 max. Earth dist. -1757 Jul 02 j 20:05 26°**П**50'45 37.03425 AU conjunction -1751 Jul 16 j 12:30 7°9527'05 10°22'31 minimum elong -1751 Jul 16 j 12:10 7°527'03 10°22'33 conjunction -1757 Jul 06 j 04:43 26°II57'00 7°47'06 morning rise -1751 Jul 28 j 02:45 7°9549'49 minimum elong -1757 Jul 06 i 04:28 26°**I**I56'59 7°47'08 retrograde -1751 Oct 26 i 17:05 9°536'41 -1757 Jul 19 i 22:33 27°**Ⅲ**22'23 opposition -1750 Jan 12 j 11:28 8°931'58 11°12'41 morning rise retrograde -1757 Oct 16 i 04:39 28°II59'11 min. Earth dist. -1750 Jan 15 j 13:16 8°517'20 33.41531 AU -1756 Jan 02 j 12:19 27°**Ⅱ**47'04 8°27'20 direct -1750 Apr 03 j 15:12 7°9504'13 opposition -1756 Jan 05 j 12:24 27°**П**42'42 34.92556 AU -1750 Jul 07 j 10:27 8°955'55 min. Earth dist. evening set -1756 Mar 23 j 19:34 26°**Ⅲ**32'15 -1750 Jul 15 j 07:11 9°5511'27 35.25663 AU max Earth dist direct -1756 Jun 23 j 15:11 28°**Ⅱ**12'40 evening set -1756 Jul 03 j 18:13 -1750 Jul 18 j 16:11 9°518'10 10°47'44 max. Earth dist. 28°**II**31'29 36.77643 AU conjunction -1750 Jul 18 j 15:49 minimum elong 9°9518'08 10°47'45 -1756 Jul 07 j 04:28 28°II37'54 8°13'15 -1750 Jul 29 j 19:36 conjunction 9°9540'15 morning rise -1756 Jul 07 j 04:10 -1750 Oct 28 j 20:45 28°**Ⅲ**37'53 8°13'17 11°929'06 minimum elong retrograde -1749 Jan 14 j 13:47 11°39'30 -1756 Jul 20 j 15:11 29°**Ⅱ**02'59 10°**©**13'59 morning rise opposition -1756 Aug 23 j 19:25 -1749 Jan 17 j 14:19 000 min. Earth dist. 10°509'24 33.17369 AU -1756 Oct 17 j 06:17 -1749 Apr 05 j 16:46 retrograde 0°9541'17 direct 8°955'46 -1756 Dec 12 j 06:10 -1749 Jul 10 j 02:34 30°RⅡ evening set 10°9549'42 -1755 Jan 03 j 10:26 -1749 Jul 17 j 11:10 opposition 29°**Ⅲ**28'44 8°55'10 max. Earth dist. 11°904'23 35.01388 AU min. Earth dist. -1755 Jan 06 j 11:58 29°**Ⅲ**24'17 34.67007 AU direct -1755 Mar 25 j 15:51 28°**Ⅲ**13'27 conjunction -1749 Jul 20 j 20:43 11°511'13 11°12'36 -1755 Jun 25 j 23:14 29°**Ⅲ**55'32 minimum elong -1749 Jul 20 j 20:21 11°9311'11 evening set 11°12'38 -1755 Jun 28 j 08:43 0ಂತಾ morning rise -1749 Jul 31 j 12:39 11°532'33 max. Earth dist. -1755 Jul 05 j 19:24 0°5514'00 36.51872 AU -1749 Oct 31 j 02:39 13°9523'31 retrograde -1748 Jan 16 j 17:08 12°908'00 12°05'57 opposition -1755 Jul 09 j 04:54 0°520'26 8°39'22 -1748 Jan 19 j 18:22 12°503'21 32.93580 AU conjunction min. Earth dist. -1755 Jul 09 j 04:36 0°520'25 8°39'24 -1748 Apr 06 j 16:30 10°5549'20 minimum elong direct -1755 Jul 22 i 07:48 morning rise 0°9545'09 evening set -1748 Jul 11 i 20:23 12°9545'37 -1755 Oct 19 i 07:47 retrograde 2°9525'00 max. Earth dist. -1748 Jul 18 i 17:58 12°559'32 34.77466 AU opposition -1754 Jan 05 i 09:13 1°512'02 9°22'57 -1748 Jul 22 i 02:02 min. Earth dist. -1754 Jan 08 i 10:28 1°507'34 34.41507 AU conjunction 13°506'18 11°37'06 -1754 Mar 11 i 06:47 30°RⅡ -1748 Jul 22 i 01:39 13°906'16 11°37'09 minimum elong direct -1754 Mar 27 j 15:34 29°**Ⅲ**56'15 -1748 Aug 01 j 05:26 13°926'49 morning rise -1754 Apr 12 j 22:20 0ಂತಾ -1748 Nov 01 j 08:46 15°920'00 retrograde -1754 Jun 28 j 08:24 1°9540'06 -1747 Jan 17 j 21:21 evening set opposition 14°9504'06 12°32'00 min. Earth dist. max. Earth dist. -1754 Jul 07 j 18:53 1°958'00 36.26179 AU -1747 Jan 20 j 21:38 13°559'28 32.70124 AU direct -1747 Apr 08 j 20:07 12°5944'59 conjunction -1754 Jul 11 j 05:39 2°504'35 9°05'23 evening set -1747 Jul 14 j 15:53 14°9543'43 -1754 Jul 11 j 05:20 2°**©**04'33 9°05'26 max. Earth dist. -1747 Jul 20 j 23:20 14°956'35 34.53865 AU minimum elong -1754 Jul 24 j 00:29 2°528'54 morning rise -1754 Oct 21 j 10:16 -1747 Jul 24 j 08:05 15°9503'29 retrograde 4°9510'22 conjunction 12°01'11 -1753 Jan 07 j 08:36 -1747 Jul 24 j 07:43 opposition 2°**9**56'58 9°50'39 minimum elong 15°**©**03'27 12°01'13 min. Earth dist. -1753 Jan 10 j 10:22 2°952'26 34.16139 AU morning rise -1747 Aug 02 j 22:23 15°523'06 -1753 Mar 29 j 13:48 1°9540'41 retrograde -1747 Nov 03 j 18:03 17°518'35 evening set -1753 Jun 30 j 18:51 3°926'21 opposition -1746 Jan 20 j 02:25 16°902'17 12°57'35 max. Earth dist. -1753 Jul 09 j 21:18 3°543'47 36.00627 AU min. Earth dist. -1746 Jan 23 j 02:54 15°**©**57'37 32.46994 AU direct -1746 Apr 10 j 23:51 14°5642'43 -1753 Jul 13 j 07:23 3°950'22 9°31'18 -1746 Jul 17 j 13:05 16°ණ44'01 conjunction evening set -1753 Jul 13 j 07:04 3°950'21 9°31'20 max. Earth dist. -1746 Jul 23 j 07:34 16°955'55 34.30558 AU minimum elong

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1746 in astronomical counting style is the year 1747 BCE in historical counting style. -1746 Jul 26 i 15:02 17°502'46 12°24'47 -1739 Mar 06 j 21:56 30°R∽ conjunction -1746 Jul 26 j 14:38 17°902'44 -1739 Apr 25 j 04:05 29°524'39 minimum elong 12°24'49 direct -1746 Aug 04 j 14:56 17°521'22 -1739 Jun 12 j 03:59 $0^{\circ}\Omega$ morning rise -1746 Nov 06 j 02:06 19°9319'17 evening set -1739 Aug 08 j 06:53 1°**Ω**50′15 retrograde 1°**Ω**48'32 32.78249 AU -1745 Jan 22 j 08:29 -1739 Aug 07 j 12:23 opposition 18°902'35 13°22'39 max. Earth dist. -1745 Jan 25 j 08:54 min. Earth dist. 17°557'54 32.24144 AU -1739 Aug 10 j 13:24 direct -1745 Apr 13 j 06:24 16°5942'34 conjunction 1°**Ω**55'17 14°51'02 evening set -1745 Jul 20 j 12:28 18°9546'34 minimum elong -1739 Aug 10 j 13:02 1°**Ω**55'15 14°51'04 max. Earth dist. -1745 Jul 25 j 14:54 18°957'12 34.07549 AU morning rise -1739 Aug 12 j 19:08 2°**Ω**00′15 retrograde -1739 Nov 21 j 05:58 4°**Ω**21'34 conjunction -1745 Jul 28 j 22:46 19°**5**04'09 12°47'51 opposition -1738 Feb 06 j 03:03 3°**Ω**01'58 15°57'24 -1745 Jul 28 j 22:23 minimum elong 19°904'07 12°47'52 min. Earth dist. -1738 Feb 08 j 21:46 2°**Ω**57'28 30.75754 AU -1745 Aug 06 j 07:23 morning rise 19°921'37 direct -1738 Apr 27 j 15:18 1°**Ω**38'48 retrograde -1745 Nov 08 j 12:02 21°9522'05 max. Earth dist. -1738 Aug 10 j 01:58 4°**Ω**04'08 32.58875 AU opposition -1744 Jan 24 j 15:13 20°904'58 13°47'09 min. Earth dist. -1744 Jan 27 j 14:56 20°500'18 32.01606 AU conjunction -1738 Aug 13 j 02:17 4°Ω10'52 15°08'14 direct -1744 Apr 14 j 12:32 18°5544'29 minimum elong -1738 Aug 13 j 01:55 4°**Ω**10′50 15°08'16 evening set -1744 Jul 22 j 13:53 20°951'19 retrograde -1738 Nov 23 j 22:12 6°**Ω**38'32 max. Earth dist. -1744 Jul 27 j 00:18 21°500'39 33.84845 AU opposition -1737 Feb 08 j 16:06 5°Ω18'34 16°15'26 min. Earth dist. -1737 Feb 11 j 09:20 5°**Ω**14'08 30.57049 AU conjunction -1744 Jul 30 j 07:27 21°**©**07'37 13°10'19 direct -1737 Apr 30 j 03:13 3°**Ω**55'01 minimum elong -1744 Jul 30 i 07:03 21°9507'35 13°10'20 max. Earth dist. -1737 Aug 12 j 18:42 6°Ω22'01 32.40285 AU -1744 Aug 06 i 23:19 21°523'47 morning rise retrograde -1744 Nov 09 i 20:15 23°9526'57 conjunction -1737 Aug 15 j 16:11 6°Ω28'33 15°24'15 -1743 Jan 25 i 23:09 22°9509'26 14°10'59 minimum elong -1737 Aug 15 j 15:52 6°**Ω**28'31 15°24'17 opposition -1743 Jan 28 j 23:13 22°504'42 31.79396 AU -1737 Nov 26 j 13:15 8°Ω57'33 min. Earth dist. retrograde -1743 Apr 16 j 19:00 -1736 Feb 11 j 06:05 20°9648'29 opposition $7^{\circ}\Omega 37'16 16^{\circ}32'11$ direct -1743 Jul 25 j 17:39 -1736 Feb 13 j 22:08 evening set 22°958'18 min. Earth dist. 7°**Ω**32'54 30.39111 AU -1743 Jul 29 j 10:19 -1736 May 01 j 17:15 max. Earth dist. 23°906'10 33.62516 AU direct 6°**Ω**13'24 -1736 Aug 14 j 10:19 8°**Ω**41'50 32.22496 AU max. Earth dist. conjunction -1743 Aug 01 j 16:37 23°913'08 13°32'07 8°**Ω**48'19 15°39'01 -1743 Aug 01 j 16:14 -1736 Aug 17 j 06:40 23°9513'06 conjunction minimum elong 13°32'09 -1743 Aug 08 j 14:11 -1736 Aug 17 j 06:19 15°39'03 23°9527'50 8°**Ω**48'17 morning rise minimum elong -1743 Nov 12 j 07:06 25°533'52 -1736 Nov 28 j 06:31 11°**Ω**18'39 retrograde retrograde -1742 Jan 28 j 07:44 24°515'55 14°34'06 -1735 Feb 12 j 20:58 9°**Ω**58'03 16°47'33 opposition opposition -1742 Jan 31 j 06:18 -1735 Feb 15 j 10:45 9°**Ω**53'50 30.21955 AU min. Earth dist. 24°9511'15 31.57582 AU min. Earth dist. -1742 Apr 19 j 02:39 direct 22°**9**54'30 direct -1735 May 04 j 07:08 8°**£**33′53 -1742 Jul 29 j 00:12 25°907'31 max. Earth dist. -1735 Aug 17 j 03:57 11°**Ω**03'52 32.05475 AU evening set max. Earth dist. -1742 Jul 31 j 20:47 25°513'40 33.40603 AU conjunction -1735 Aug 19 j 21:54 11°Ω10'10 15°52'28 conjunction -1742 Aug 04 j 02:45 25°520'40 13°53'11 minimum elong -1735 Aug 19 j 21:37 11°**Ω**10′08 15°52'29 -1742 Aug 04 j 02:20 25°9520'37 -1735 Nov 30 j 22:52 13°**Ω**41'47 minimum elong 13°53'12 retrograde -1742 Aug 10 j 03:57 25°533'41 -1734 Feb 15 j 12:51 12°**Ω**20'54 17°01'29 morning rise opposition -1742 Nov 14 j 17:02 27°5542'48 -1734 Feb 18 j 01:56 12°**Ω**16'42 30.05535 AU retrograde min. Earth dist. -1741 Jan 30 j 17:09 26°524'25 14°56'24 10°**Ω**56'27 opposition direct -1734 May 06 j 21:24 min. Earth dist. -1741 Feb 02 i 16:08 26°519'42 31.36228 AU max. Earth dist. -1734 Aug 19 j 21:40 13°Ω27'50 31.89217 AU direct -1741 Apr 21 i 08:48 25°902'32 evening set -1741 Aug 01 i 10:42 27°9519'04 conjunction -1734 Aug 22 i 13:53 13°**Ω**34'01 16°04'31 max. Earth dist. -1741 Aug 03 j 09:33 27°523'18 33.19201 AU minimum elong -1734 Aug 22 i 13:35 13°**Ω**33'59 16°04'33 -1734 Sep 30 j 22:09 15°Ω -1741 Aug 06 j 13:37 27°\$30'12 14°13'25 -1734 Dec 03 j 18:04 16°Ω06'51 conjunction retrograde -1741 Aug 06 j 13:15 -1733 Feb 09 j 12:55 15°RΩ minimum elong 27°930'10 14°13'27 -1741 Aug 11 j 15:25 27°5641'14 opposition -1733 Feb 18 j 05:18 14°**Ω**45'41 17°13'54 morning rise retrograde -1741 Nov 17 j 04:05 29°953'43 min. Earth dist. -1733 Feb 20 j 15:51 14°**Ω**41'38 29.89843 AU 28°934'56 15°17'47 opposition -1740 Feb 02 j 03:32 direct -1733 May 09 j 13:31 13°**Ω**20′57 -1740 Feb 05 j 00:39 min. Earth dist. 28°530'18 31.15411 AU -1733 Jul 29 j 23:13 $15^{\circ}\Omega$ -1740 Apr 22 j 19:24 27°9512'35 max. Earth dist. -1733 Aug 22 j 16:14 15°**Ω**53'41 31.73689 AU direct evening set -1740 Aug 04 j 02:29 29°933'05 -1733 Aug 25 j 06:43 15°**Ω**59'45 16°15'08 max. Earth dist. -1740 Aug 04 j 21:19 29°534'48 32.98382 AU conjunction minimum elong -1733 Aug 25 j 06:28 15°**Ω**59'43 16°15'09 -1740 Aug 08 j 01:05 -1733 Dec 06 j 10:40 conjunction 29°5541'44 14°32'44 retrograde 18°**Ω**33'45 minimum elong -1740 Aug 08 j 00:41 29°5641'42 14°32'46 opposition -1732 Feb 20 j 22:55 17°**Ω**12'17 17°24'44 morning rise -1740 Aug 11 j 22:41 29°950'18 min. Earth dist. -1732 Feb 23 j 08:54 17°**Ω**08'16 29.74870 AU -1740 Aug 16 j 09:09 0° Ω direct -1732 May 11 j 04:29 15°**Ω**47'17 retrograde -1740 Nov 18 j 17:10 2°**Ω**06'39 max. Earth dist. -1732 Aug 24 j 12:03 18°**Ω**21'21 31.58921 AU -1739 Feb 03 j 14:51 0° Ω47'26 15°38'09

opposition min. Earth dist.

-1739 Feb 06 j 11:25

0°**Ω**42'50 30.95230 AU

conjunction

-1732 Aug 26 j 23:59 18° **Ω**27'12 16°24'13

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Earth dist. 11° m/24'00 30.68274 AU -1723 Sep 19 j 05:34 conjunction -1731 Aug 29 j 17:55 20°**Ω**56'15 16°31'44 conjunction 11°**m** 27'27 16°27'10 -1723 Sep 19 j 05:41 minimum elong -1731 Aug 29 j 17:44 20°**Ω**56'14 16°31'44 minimum elong 11° My 27^\prime 2816°27'10 retrograde -1731 Dec 10 j 23:46 23°**Ω**32'21 retrograde -1723 Dec 31 j 20:16 14° Mp 08'37 opposition -1730 Feb 25 j 12:09 22°**Ω**10'19 17°41'21 opposition -1722 Mar 18 j 14:54 12° m 45'09 17°30'19 -1722 Mar 19 j 21:48 min. Earth dist. -1730 Feb 27 j 18:14 22°**Ω**06'33 29.47168 AU min. Earth dist. 12° Mp 42'58 28.74591 AU direct -1730 May 16 j 14:36 20°**Ω**44'47 direct -1722 Jun 06 j 14:10 11° Mp 18'46 max. Earth dist. -1730 Aug 30 j 04:59 23°**Ω**21'13 31.31761 AU max. Earth dist. -1722 Sep 20 j 19:23 14° Mp 01'29 30.63767 AU conjunction -1730 Sep 01 j 12:21 23°**Ω**26'42 16°37'35 conjunction -1722 Sep 22 j 01:56 14° Mp 04'35 16°17'56 minimum elong -1730 Sep 01 j 12:11 23°**Ω**26'41 16°37'36 minimum elong -1722 Sep 22 j 02:05 14° Mp 04'36 16°17'58 retrograde -1730 Dec 13 j 18:02 26°**Ω**03'43 retrograde -1721 Jan 03 j 17:14 16° Mp 46'00 opposition -1729 Feb 28 i 07:46 24°**Ω**41'25 17°46'59 opposition -1721 Mar 21 j 13:55 15° m 22'31 17°19'34 min. Earth dist. -1729 Mar 02 j 11:09 24° **Ω**37'49 29.34514 AU min. Earth dist. -1721 Mar 22 j 18:53 15° m 20'28 28.70459 AU direct -1729 May 19 j 10:21 23°**Ω**15'38 direct -1721 Jun 09 j 11:45 13° m 56'12 max. Earth dist. -1729 Sep 02 i 01:15 25°Ω53'01 31.19468 AU conjunction -1721 Sep 24 i 22:14 16° m 42'02 16°06'47 conjunction -1729 Sep 04 i 07:06 25°Ω58'23 16°41'43 minimum elong -1721 Sep 24 i 22:26 16° m 42'03 16°06'47 -1729 Sep 04 j 07:00 25°**Ω**58'22 16°41'44 max. Earth dist. -1721 Sep 23 j 19:07 16° m 39'16 30.60361 AU minimum elong -1729 Dec 16 j 13:42 28°Ω36'14 retrograde -1720 Jan 06 j 14:36 19° m 23'33 retrograde -1728 Mar 02 j 03:58 27°Ω13'40 17°50'44 opposition -1720 Mar 23 j 13:02 18° m 00'04 17°06'45 opposition -1728 Mar 04 j 05:20 27°**Ω**10'12 29.22756 AU -1720 Mar 24 j 13:55 17° M 58'19 28.67368 AU min. Earth dist. min. Earth dist. -1720 Jun 11 j 11:37 direct -1728 May 21 j 05:06 25°**Ω**47'40 direct 16° m 33'52 -1728 Sep 04 j 00:26 28°**Ω**26'09 31.08139 AU max. Earth dist. -1720 Sep 26 j 18:34 19° m 19'34 15°53'46 conjunction -1728 Sep 06 j 02:20 -1720 Sep 26 j 18:48 28° **Q**31'08 16°44'03 conjunction minimum elong 19° **m** 19'36 15°53'46 minimum elong -1728 Sep 06 j 02:14 -1720 Sep 25 j 18:17 28°**Ω**31′08 16°44'05 max. Earth dist. 19° m 17'06 30.58009 AU -1728 Oct 15 j 06:32 0° M -1719 Jan 08 j 12:17 22° m 01'07 retrograde -1728 Dec 18 j 08:47 1° Mp 09'45 -1719 Mar 26 j 12:19 20° m/37'38 16°51'55 retrograde opposition -1727 Feb 25 j 06:08 -1719 Mar 27 j 10:54 20° m 36'03 28.65311 AU 30°Ŗ**Ω** min. Earth dist. -1727 Mar 05 j 00:51 -1719 Jun 14 j 09:03 opposition 29°**Ω**46′56 17°52′32 direct 19° m 11'32 min. Earth dist. -1727 Mar 06 j 23:37 29°**Ω**43'38 29.11961 AU direct -1727 May 24 j 01:42 28°**Ω**20'45 conjunction -1719 Sep 29 j 14:43 21° m 56'59 15°38'53 -1727 Aug 12 j 05:15 0° m minimum elong -1719 Sep 29 j 14:59 21°M 57'01 15°38'52 max. Earth dist. -1727 Sep 06 j 21:47 1° M 00'02 30.97856 AU max. Earth dist. -1719 Sep 28 j 18:16 21° m 54'54 30.56715 AU -1718 Jan 11 j 08:27 24° m 38'25 retrograde -1727 Sep 08 j 21:33 1° m/04'50 16°44'33 -1718 Mar 29 j 11:28 23° m 14'58 16°35'06 conjunction opposition -1727 Sep 08 j 21:31 1°M(04'50 min. Earth dist. -1718 Mar 30 j 06:21 23° m 13'38 28.64255 AU minimum elong 16°44'33 -1727 Dec 21 j 06:10 3° m/44'08 direct -1718 Jun 17 j 08:53 21° m/49'00 retrograde -1726 Mar 07 j 22:04 opposition 2° m 21'06 17°52'17 -1718 Oct 02 j 10:42 min. Earth dist. -1726 Mar 09 j 17:38 2° m 18'02 29.02228 AU conjunction 24° m 34'03 15°22'11 direct -1726 May 26 j 21:37 0° m 54'45 minimum elong -1718 Oct 02 i 10:59 24° m 34'05 15°22'12 max. Earth dist. -1726 Sep 09 j 21:45 3° Mp 35'00 30.88691 AU max. Earth dist. -1718 Oct 01 i 16:38 24° m 32'13 30.56447 AU retrograde -1717 Jan 14 i 04:14 27° m 15'16 -1726 Sep 11 j 17:22 3° m 39'24 16°43'08 opposition -1717 Apr 01 j 10:25 25° m 51'50 conjunction 16°16'21 -1726 Sep 11 j 17:21 3° m 39'24 min. Earth dist. -1717 Apr 02 j 02:35 25° m 50'42 28.64221 AU minimum elong 16°43'09 -1726 Dec 24 j 02:13 6° m 19'17 direct -1717 Jun 20 j 06:57 24° m 26'00 retrograde opposition -1725 Mar 10 j 19:44 4° m 56'04 17°49'59 27° m 10'33 15°03'45 min. Earth dist. -1725 Mar 12 j 12:52 4° m 53'10 28.93601 AU conjunction -1717 Oct 05 j 06:29 -1725 May 29 j 19:42 3° m 29'39 minimum elong -1717 Oct 05 j 06:48 27° Mp 10'35 15°03'44 direct max. Earth dist. -1725 Sep 12 j 20:10 6° Mp 10'35 30.80706 AU max. Earth dist. -1717 Oct 04 j 16:43 27° m 09'09 30.57236 AU -1716 Jan 16 j 22:57 29° m 51'26 retrograde -1725 Sep 14 j 13:16 6° Mp 14'44 16°39'46 -1716 Apr 03 j 09:21 28° Mp 28° O2 conjunction opposition 15°55'44 -1725 Sep 14 j 13:19 -1716 Apr 03 j 22:13 28° m/27'08 28.65217 AU minimum elong 6° My 14'4516°39'46 min. Earth dist. -1716 Jun 22 j 06:07 27° My 02'20retrograde -1725 Dec 27 j 00:27 8° **m** 55'08 direct opposition -1724 Mar 12 j 17:47 7° mp 31'48 17° 45'33 evening set -1716 Oct 04 j 02:53 29° m 39'05 min. Earth dist. -1724 Mar 14 j 06:55 7° Mg 29'11 28.86130 AU direct -1724 May 31 j 17:40 6° Mp 05'20 conjunction -1716 Oct 07 j 01:36 29° Mp 46'15 14°43'35 max. Earth dist. -1724 Sep 14 j 20:18 8° Mp 47'02 30.73900 AU minimum elong -1716 Oct 07 j 01:56 29° Mp 46'18 14°43'36 -1716 Oct 06 j 14:20 29° m 45'07 30.59101 AU max. Earth dist.

-1724 Sep 16 j 09:21

conjunction

8° m 50'47 16°34'27

-1716 Oct 10 j 00:56

morning rise

29° m 53'29

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•	nical year style is used: Th		•	ounting style is the year		, , ,	,0 1 1
, , , , , , , , , , , , , , , , , , , ,	-1716 Oct 12 j 17:17	0∘ ⊽		evening set	-1709 Oct 15 j 10:35		
retrograde	-1715 Jan 18 j 19:12	2° ≏ 26'43		C	J		
opposition	-1715 Apr 06 j 07:56	1° ഫ 03'21	15°33'17	conjunction	-1709 Oct 25 j 02:37	17° ≏ 24'09	11°40'25
min. Earth dist.	-1715 Apr 06 j 17:06	1° ≏ 02'42	28.67310 AU	minimum elong	-1709 Oct 25 j 03:01	17° ≏ 24'12	11°40'24
	-1715 May 18 j 20:50	30°R, Mp		max. Earth dist.	-1709 Oct 25 j 16:48	17° ≏ 25'33	31.05013 AU
direct	-1715 Jun 25 j 03:37	29° m 37'48		morning rise	-1709 Nov 03 j 18:58	17° ≏ 46'57	
	-1715 Jul 31 j 09:24	0∘ ⊽		retrograde	-1708 Feb 05 j 22:32	19° ≏ 59'32	
evening set	-1715 Oct 05 j 09:12	2° ₽ 10'09		opposition	-1708 Apr 24 j 09:56	18° ≏ 37'20	12°11'50
				min. Earth dist.	-1708 Apr 23 j 18:53	18° ≏ 38'21	29.14564 AU
conjunction	-1715 Oct 09 j 20:32	2° ≏ 20'59	14°21'47	direct	-1708 Jul 13 j 08:27	17° ≏ 13'53	
minimum elong	-1715 Oct 09 j 20:53	2° ₽ 21'02	14°21'46	evening set	-1708 Oct 16 j 10:58	19° ≏ 25'55	
max. Earth dist.	-1715 Oct 09 j 13:55	2° ჲ 20'19	30.62097 AU				
morning rise	-1715 Oct 14 j 08:22	2° ≏ 31'54		conjunction	-1708 Oct 26 j 17:40	19° ≏ 49'58	11°09'21
retrograde	-1714 Jan 21 j 12:13	5° ≙ 00'54		minimum elong	-1708 Oct 26 j 18:04	19° ≙ 50'01	11°09'20
opposition	-1714 Apr 09 j 06:04	ვ° ჲ 37'37	15°09'05	max. Earth dist.	-1708 Oct 27 j 11:19	19° ≙ 51'42	31.15989 AU
min. Earth dist.	-1714 Apr 09 j 12:16		28.70532 AU	morning rise	-1708 Nov 06 j 00:31	20° £ 14′03	
direct	-1714 Jun 28 j 02:54	2° ₽ 12'16		retrograde	-1707 Feb 07 j 14:04	22° £ 24'24	
evening set	-1714 Oct 06 j 23:38	4° ≙ 41'01		min. Earth dist.	-1707 Apr 26 j 10:11	21° ≏ 03'42	29.25610 AU
				opposition	-1707 Apr 27 j 04:41	21° ≏ 02'27	11°38'00
conjunction	-1714 Oct 12 j 14:49	4° ≙ 54'37		direct	-1707 Jul 16 j 05:15	19° ≏ 39'24	
minimum elong	-1714 Oct 12 j 15:12	4° ≏ 54'40	13°58'23	evening set	-1707 Oct 18 j 11:57	21° ≏ 49'04	
max. Earth dist.	-1714 Oct 12 j 10:49		30.66275 AU				
morning rise	-1714 Oct 18 j 06:33	5° ഫ 08'17		conjunction	-1707 Oct 29 j 08:06	22° £ 14'15	10°37'24
retrograde	-1713 Jan 24 j 07:43	7° ჲ 33'56		minimum elong	-1707 Oct 29 j 08:29	22° ≏ 14'18	
opposition	-1713 Apr 12 j 03:51		14°43'11	max. Earth dist.	-1707 Oct 30 j 04:03		31.27867 AU
min. Earth dist.	-1713 Apr 12 j 05:34		28.74949 AU	morning rise	-1707 Nov 09 j 04:37	22° ≏ 39'29	
direct	-1713 Jul 01 j 00:28	4° Ω 45'36		retrograde	-1706 Feb 10 j 04:26	24° ≏ 47'41	
evening set	-1713 Oct 08 j 17:43	7° ≏ 11'09		opposition	-1706 Apr 29 j 22:39	23° ≏ 26'01	
				min. Earth dist.	-1706 Apr 29 j 01:25		29.37555 AU
conjunction	-1713 Oct 15 j 08:41	7° ≙ 27'04	13°33'27	direct	-1706 Jul 18 j 22:33	22° ≙ 03'20	
minimum elong	-1713 Oct 15 j 09:04	7° Ω 27'06	13°33'26	evening set	-1706 Oct 20 j 13:20	24° ≏ 10'42	
max. Earth dist.	-1713 Oct 15 j 09:21		30.71666 AU				
morning rise	-1713 Oct 22 j 00:00	7° △ 43'03		conjunction	-1706 Oct 31 j 22:04	24° £ 36'55	10°04'39
retrograde	-1712 Jan 27 j 00:39	10° Ω 05'43		minimum elong	-1706 Oct 31 j 22:27	24° £ 36'57	
opposition	-1712 Apr 14 j 01:23	8° Ω 42'38	14°15'41	max. Earth dist.	-1706 Nov 01 j 21:38		31.40604 AU
min. Earth dist.	-1712 Apr 14 j 00:19		28.80573 AU	morning rise	-1706 Nov 12 j 06:53	25° £ 03'10	
direct	-1712 Jul 02 j 21:18	7° £ 17'47		retrograde	-1705 Feb 12 j 16:40	27° £ 09'17	10007146
evening set	-1712 Oct 09 j 14:11	9° ≏ 40'21		opposition	-1705 May 02 j 16:08	25° Ω 47'54	29.50326 AU
· · · · · · · · · · · ·	1712 0-4 17:01.50	9° ≙ 58'17	12907107	min. Earth dist.	-1705 May 01 j 16:16 -1705 Jul 21 j 17:37		29.50326 AU
conjunction	-1712 Oct 17 j 01:59	9° £ 58'17	13°07'06 13°07'06	direct evening set	-1705 Oct 22 j 14:58	24° £ 25'36 26° £ 30'44	
minimum elong max. Earth dist.	-1712 Oct 17 j 02:23 -1712 Oct 17 j 05:38		30.78290 AU	evening set	-1703 Oct 22 j 14.38	20 = 30 44	
morning rise	-1712 Oct 17 j 03.38 -1712 Oct 24 j 14:14	9 22 3839 10° 2 16'17	30.78290 AU	conjunction	-1705 Nov 03 j 11:02	26° £ 57'52	9°31'12
retrograde	-1712 Oct 24 j 14.14 -1711 Jan 28 j 19:46	10 ⊆ 1017 12° ⊆ 36'12		minimum elong	-1705 Nov 03 j 11:02 -1705 Nov 03 j 11:23	26° ⊆ 57'52 26° ⊆ 57'54	
opposition	-1711 Jan 28 j 19:40 -1711 Apr 16 j 22:13	12 ⊆ 30 12 11° ⊆ 13'18	13°46'41	max. Earth dist.	-1705 Nov 04 j 12:19		31.54143 AU
min. Earth dist.	-1711 Apr 16 j 16:28		28.87406 AU	morning rise	-1705 Nov 15 j 07:29	27° ⊆ 25'00	31.34143 AU
direct	-1711 Jul 05 j 19:47	9° Ω 48'45	28.87400 AU	retrograde	-1704 Feb 15 j 06:36	27 ⊆ 23 00 29° ⊆ 29'09	
evening set	-1711 Jul 03 j 19:47	12° £ 08'31		min. Earth dist.	-1704 May 03 j 05:36		29.63916 AU
oronnig sor	1,11 000 11 11.32	12 -0031		opposition	-1704 May 04 j 08:53	28° ⊆ 09'30 28° ⊆ 08'01	9°51'35
conjunction	-1711 Oct 19 j 18:45	12° ≏ 28'15	12°39'24	direct	-1704 Jul 23 j 09:36	26° ⊆ 46'06	, 5.50
minimum elong	-1711 Oct 19 j 19:09	12° ⊆ 28'17	12°39'23	evening set	-1704 Oct 23 j 16:43	28° ⊆ 49'05	
max. Earth dist.	-1711 Oct 19 j 19:09		30.86095 AU	c.c.mg set	1,0.000 25 j 10.45	_0 _ 17 03	
morning rise	-1711 Oct 28 j 01:56	12° - 29°01		conjunction	-1704 Nov 04 j 23:31	29° ₽ 17'00	8°57'10
retrograde	-1710 Jan 31 j 12:43	15° ♀ 05'22		minimum elong	-1704 Nov 04 j 23:52	29° ⊆ 17'02	8°57'10
opposition	-1710 Apr 19 j 18:42	13° ⊆ 42'40	13°16'17	max. Earth dist.	-1704 Nov 06 j 04:33		31.68478 AU
min. Earth dist.	-1710 Apr 19 j 10:27		28.95392 AU	morning rise	-1704 Nov 17 j 06:26	29° Ω 44'57	31.001,0110
direct	-1710 Jul 08 j 16:01	12° ≏ 18'29			-1704 Nov 24 j 01:02	0° M	
evening set	-1710 Oct 13 j 10:53	14° Ω 35'34		retrograde	-1703 Feb 16 j 16:50	1° M .47'09	
<i>5</i>	J			min. Earth dist.	-1703 May 05 j 19:39		29.78307 AU
conjunction	-1710 Oct 22 j 10:58	14° Ω 56'53	12°10'28	opposition	-1703 May 07 j 00:51	0°M26'17	9°14'48
minimum elong	-1710 Oct 22 j 11:23	14° Ω 56'56	12°10'27	· FF	-1703 May 23 j 20:28	30°R ≏	
max. Earth dist.	-1710 Oct 22 j 21:56		30.95031 AU	direct	-1703 Jul 26 j 02:41	29° ₽ 04'45	
morning rise	-1710 Oct 32 j 21:30	15° ≏ 18'15			-1703 Sep 23 j 11:19	0°M	
retrograde	-1709 Feb 03 j 05:52	17° △ 33'09		evening set	-1703 Oct 25 j 18:39	1°ML05'38	
opposition	-1709 Apr 22 j 14:27		12°44'38				
min. Earth dist.	-1709 Apr 22 j 01:56		29.04461 AU	conjunction	-1703 Nov 07 j 11:00	1° M .34'15	8°22'37
direct	-1709 Jul 11 j 13:08	14° Ω 46'52		minimum elong	-1703 Nov 07 j 11:20	1°M34'16	
	va. 11 j 15.00	— .002		viong	1.0. 0/ j 11.20	- 110001110	

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1703 in astronomical counting style is the year 1704 BCE in historical counting style. -1703 Nov 08 j 17:45 1°ML37'09 31.83613 AU direct -1696 Aug 11 j 01:02 14°M23'36 max. Earth dist. -1703 Nov 20 i 03:46 2°ML02'54 -1696 Sep 28 j 16:29 15°M morning rise -1702 Feb 19 j 04:51 4°ML03'15 -1696 Nov 07 j 09:15 16°M12'23 retrograde evening set 2°M44'49 29.93531 AU min. Earth dist. -1702 May 08 j 06:56 -1702 May 09 j 15:56 2°M42'38 8°37'33 -1696 Nov 21 j 23:26 opposition conjunction 16°M43'30 4°13'35 -1702 Jul 28 j 17:39 -1696 Nov 21 j 23:36 direct 1°M21'28 minimum elong 16°M43'31 4°13'34 -1696 Nov 24 j 00:20 evening set -1702 Oct 27 j 20:32 3° M $_{2}0'22$ max. Earth dist. 16°M47'53 33.12305 AU morning rise -1696 Dec 06 j 14:32 17°M14'41 conjunction -1702 Nov 09 j 21:49 3°M49'35 7°47'39 retrograde -1695 Mar 05 j 19:23 19°M04'22 minimum elong -1702 Nov 09 j 22:08 3°M49'37 7°47'38 min. Earth dist. -1695 May 23 j 01:21 17°M49'18 31.23190 AU max. Earth dist. -1702 Nov 11 j 08:19 3°M52'49 31.99564 AU opposition -1695 May 25 j 04:33 17°**M**46'03 4°10'45 -1695 Aug 13 j 10:39 morning rise -1702 Nov 22 j 23:21 4°M18'50 direct 16°M27'56 -1695 Nov 09 j 11:22 retrograde -1701 Feb 21 j 14:30 6° ML17'25evening set 18°ML15'18 min. Earth dist. -1701 May 10 j 19:31 4°M59'22 30.09611 AU opposition -1701 May 12 j 06:22 4°M57'05 7°59'54 conjunction -1695 Nov 24 j 05:29 18° M $_{4}6'29$ 3°37'56 direct -1701 Jul 31 j 07:11 3°M36'19 minimum elong -1695 Nov 24 j 05:38 18°M46'30 3°37'54 evening set -1701 Oct 29 j 22:38 5°M33'18 max. Earth dist. -1695 Nov 26 j 09:16 18° ጤ 51'05 33.33374 AU morning rise -1695 Dec 09 j 00:17 19°M17'45 conjunction -1701 Nov 12 j 07:51 6°M03'01 7°12'21 retrograde -1694 Mar 07 j 22:51 21°ML06'12 minimum elong -1701 Nov 12 j 08:08 6°ML03′02 7°12'19 min. Earth dist. -1694 May 25 j 09:37 19°M51'32 31.44342 AU max. Earth dist. -1701 Nov 13 j 20:36 6°ML06'26 32.16381 AU opposition -1694 May 27 j 13:44 19°M48'15 3°32'49 morning rise -1701 Nov 25 i 17:29 6°M32'47 direct -1694 Aug 15 j 20:58 18°MJ30'33 retrograde -1700 Feb 24 i 01:31 8°M29'41 evening set -1694 Nov 11 j 13:37 20°M16'34 min. Earth dist. -1700 May 12 j 05:04 7°M12'11 30.26574 AU -1700 May 13 j 19:56 7°M09'39 7°21'56 conjunction -1694 Nov 26 i 10:44 20°M47'46 3°02'28 opposition -1700 Aug 01 j 21:59 5°**M**49'17 -1694 Nov 26 j 10:52 20°M47'47 3°02'26 direct minimum elong -1700 Oct 31 j 00:37 7°M44'27 -1694 Nov 28 j 15:13 20°M52'24 33.54876 AU max Earth dist evening set -1694 Dec 11 j 08:50 21°ML19'04 morning rise -1700 Nov 13 j 17:06 8°M14'36 6°36'47 -1693 Mar 10 j 04:07 conjunction retrograde 23°MJ06'20 -1700 Nov 13 j 17:22 -1693 May 27 j 15:14 21°M52'09 31.65921 AU minimum elong 8°ML14'38 6°36'45 min. Earth dist. -1700 Nov 15 j 08:57 -1693 May 29 j 22:07 max. Earth dist. 8°M18'17 32.34047 AU 21°M48'43 2°55'08 opposition -1700 Nov 27 j 10:05 8°ML44'48 -1693 Aug 18 j 04:59 20°M31'26 morning rise direct -1693 Nov 13 j 15:47 10°M40'07 -1699 Feb 25 j 12:03 22°M16'10 retrograde evening set 9°M23'02 30.44409 AU -1699 May 14 j 15:56 min. Earth dist. 9°M20'23 6°43'46 -1699 May 16 j 08:52 -1693 Nov 28 j 15:31 22°M47'20 2°27'15 opposition conjunction -1699 Aug 04 j 11:10 -1693 Nov 28 j 15:36 direct 8°**IL**00'27 minimum elong 22°M47'20 2°27'13 -1699 Nov 02 j 02:44 -1693 Nov 30 j 22:23 evening set 9°M53'54 max. Earth dist. 22°M52'08 33.76746 AU morning rise -1693 Dec 13 j 16:11 23°M18'35 conjunction -1699 Nov 16 j 01:47 10°M24'24 6°01'02 retrograde -1692 Mar 11 j 08:12 25°M04'45 minimum elong -1699 Nov 16 j 02:02 10°M24'25 6°01'01 min. Earth dist. -1692 May 28 j 22:25 23°M50'54 31.87876 AU max. Earth dist. -1699 Nov 17 j 20:16 10°M28'18 32.52549 AU opposition -1692 May 31 j 05:56 23°M47'26 2°17'47 -1699 Nov 30 j 01:14 10°M54'57 -1692 Aug 19 j 11:46 22°M30'33 morning rise direct -1698 Feb 27 j 21:15 12°M48'44 -1692 Nov 14 j 17:44 24°M14'02 retrograde evening set -1698 May 17 j 00:40 11°M32'11 30.63053 AU min. Earth dist. -1698 May 18 j 20:42 11°M29'21 -1692 Nov 29 j 19:31 24°ML45'07 1°52'20 opposition 6°05'29 conjunction -1692 Nov 29 i 19:35 direct -1698 Aug 07 i 00:49 10°ML09'52 minimum elong 24°ML45'07 1°52'18 evening set -1698 Nov 04 i 04:57 12°ML01'42 max. Earth dist. -1692 Dec 02 i 03:29 24°M49'58 33.98961 AU morning rise -1692 Dec 14 i 22:17 25°M16'17 conjunction -1698 Nov 18 i 09:40 12°M32'28 5°25'12 retrograde -1691 Mar 13 j 12:34 27° ML01'22 -1698 Nov 18 i 09:53 12°M32'29 5°25'11 min. Earth dist. -1691 May 31 j 02:52 25°ML47'57 32.10171 AU minimum elong -1698 Nov 20 i 06:14 12°MJ36'31 32.71804 AU opposition -1691 Jun 02 j 12:48 25°ML44'22 1°40'47 max. Earth dist. -1698 Dec 02 j 15:06 13°ML03'18 direct -1691 Aug 21 j 19:54 24°M27'51 morning rise -1697 Mar 02 j 05:24 14°ML55'38 -1691 Nov 16 j 19:43 26°M10'10 retrograde evening set min. Earth dist. -1697 May 19 j 09:42 13°M39'35 30.82459 AU 26°M41'06 opposition -1697 May 21 j 08:07 13°M36'37 5°27'10 conjunction -1691 Dec 01 j 22:51 1°17'45 direct -1697 Aug 09 j 11:40 12°M17'35 minimum elong -1691 Dec 01 j 22:54 26°M41'06 1°17'42 evening set -1697 Nov 06 j 06:57 14°M07'51 max. Earth dist. -1691 Dec 04 j 08:19 26°M46'02 34.21487 AU -1691 Dec 17 j 03:13 27°M12'09 morning rise -1697 Nov 20 j 16:53 14°M38'49 4°49'22 -1690 Mar 15 j 17:03 28°M56'12 conjunction retrograde -1690 Jun 02 j 07:57 minimum elong -1697 Nov 20 j 17:05 14°MJ38'50 4°49'20 min. Earth dist. 27°ML43'07 32.32831 AU max. Earth dist. -1697 Nov 22 j 16:37 14°M43'08 32.91756 AU opposition -1690 Jun 04 j 18:56 27°M39'29 1°04'12 -1697 Nov 30 j 12:14 15°M⋅ direct -1690 Aug 24 j 01:56 26°M23'20 morning rise -1697 Dec 05 j 03:19 15°M09'52 evening set -1690 Nov 18 j 21:22 28°M04'32 retrograde -1696 Mar 03 j 11:31 17°ML00'50 min. Earth dist. -1696 May 20 j 18:18 15°M45'16 31.02526 AU conjunction -1690 Dec 04 j 01:33 28°M35'18 0°43'32 -1696 May 22 j 18:46 15°M42'11 4°48'54 minimum elong -1690 Dec 04 j 01:34 28°M35'18 opposition 0°43'31

max. Earth dist.

-1690 Dec 06 j 13:02

28°M40'22 34.44377 AU

-1696 Jun 20 j 21:29

15°RM

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1690 in astronomical counting style is the year 1691 BCE in historical counting style. 29°MJ06'10 -1690 Dec 19 i 06:45 retrograde -1683 Mar 27 j 22:41 11°**х** 34'43 morning rise 10°**₹**24'25 34.02505 AU -1689 Jan 17 i 22:14 0°×7 min. Earth dist. -1683 Jun 14 j 21:27 -1689 Mar 17 j 19:14 0°**х** 49′15 opposition -1683 Jun 17 j 19:01 10°**≯**20'18 -2°57'22 retrograde -1689 May 19 j 02:35 9°×706'53 30°RM. direct -1683 Sep 06 j 03:15 -1689 Jun 04 j 11:39 29° M $_{3}6'32$ 32.55876 AU -1683 Dec 01 j 05:33 10°**∡**′42'11 min. Earth dist. evening set -1689 Jun 07 j 00:22 opposition 29°M32'49 0°28'04 -1683 Dec 16 j 03:02 11°**∡**10'47 -3°02'37 direct -1689 Aug 26 j 09:21 28°M17'02 conjunction -1683 Dec 16 j 02:55 evening set -1689 Nov 20 j 22:55 29°M57'11 minimum elong 11°**х** 10′46 3°02′40 -1689 Nov 22 j 09:02 -1683 Dec 19 j 00:37 0° **₹** max. Earth dist. 11°**∡**16'23 36.14951 AU morning rise -1683 Dec 31 j 01:55 11°**х** 39'30 0°**∡**27'44 conjunction -1689 Dec 06 j 03:20 0°09'47 retrograde -1682 Mar 29 j 20:47 13°**х** 17′34 -1689 Dec 06 j 03:20 -1682 Jun 16 j 21:17 minimum elong 0°**х** 27′44 0°09'45 min. Earth dist. 12°**✗**07'39 34.27862 AU -1689 Dec 05 j 22:04 -1682 Jun 19 j 19:49 behind sun begin 0°**₹**27'19 opposition 12°**х** 03′30 -3°29′28 behind sun end -1689 Dec 06 j 08:36 0°\$28'09 direct -1682 Sep 08 j 05:18 10°**х** 50′29 max. Earth dist. -1689 Dec 08 j 15:51 0°**х** 32′51 34.67650 AU evening set -1682 Dec 03 j 06:28 12°**₹**25'10 morning rise -1689 Dec 21 j 09:11 0°**х** 58′24 retrograde -1688 Mar 18 j 21:24 2°**х¹**40'35 conjunction -1682 Dec 18 j 01:09 12°**₹**53'20 -3°32'44 desc. node -1688 Mar 21 j 17:57 2°**∡**¹40'27 minimum elong -1682 Dec 18 j 01:02 12°**₹**53′20 3°32'45 min. Earth dist. -1688 Jun 05 j 14:19 1°**х** 28'17 32.79361 AU max. Earth dist. -1682 Dec 20 j 22:47 12°**₹**58'55 36.40247 AU opposition -1688 Jun 08 j 05:12 1°**х** 24'27 -0°07'35 morning rise -1681 Jan 01 j 21:37 13°**х** 21′39 direct -1688 Aug 27 j 14:01 0°**₹**09'02 retrograde -1681 Mar 31 j 20:14 14°**₹**59'12 evening set -1688 Nov 22 j 00:18 1°**х** 48′13 min. Earth dist. -1681 Jun 18 i 20:43 13°**х** 49'39 34.53308 AU opposition -1681 Jun 21 j 20:20 13°**∡** 45′27 -4°00'56 conjunction -1688 Dec 07 i 04:48 2°**х** 18'31 -0°23'38 direct -1681 Sep 10 i 05:59 12°**х** 32'48 -1688 Dec 07 i 04:47 2°**х** 18'31 0°23'39 evening set -1681 Dec 05 j 07:01 14°**х** 06′53 minimum elong -1688 Dec 09 j 20:01 2°**҂**23'49 34.91343 AU max. Earth dist. -1688 Dec 22 j 10:28 -1681 Dec 19 j 22:54 14°**∡**³34'38 -4°02'15 morning rise 2° × 48'56 conjunction -1687 Mar 20 j 20:13 4°**х** 30′16 -1681 Dec 19 j 22:46 14°**∡**³34'38 4°02'17 retrograde minimum elong -1687 Jun 07 j 17:18 max. Earth dist. -1681 Dec 22 j 22:16 14°**∡**′40′19 36.65578 AU min. Earth dist. 3°**҂**18′20 33.03272 AU 3°**∡**14'28 -0°42'42 -1687 Jun 10 j 09:08 -1680 Jan 03 j 16:16 15°**₹**'02'31 morning rise opposition 1°**х** 59′26 -1687 Aug 29 j 20:35 -1680 Apr 01 j 16:16 retrograde 16°**₹**39'33 direct 15°**尽**30'18 34.78760 AU -1687 Nov 24 j 01:39 3°**х¹**37'43 -1680 Jun 19 j 20:47 min. Earth dist. evening set -1680 Jun 22 j 20:16 15°**₹**26'08 -4°31'44 opposition -1687 Dec 09 j 05:29 4°**₹**07'44 -0°56'29 -1680 Sep 11 j 08:32 14°**х** 13′50 conjunction direct -1687 Dec 09 j 05:27 -1680 Dec 06 j 07:41 minimum elong 4°**₹**07'44 0°56'31 evening set 15°**∡**¹47'21 4°**₹**13'02 35.15445 AU -1687 Dec 11 j 21:12 max. Earth dist. -1687 Dec 24 j 10:49 -1680 Dec 20 j 20:09 16°**∡**14'38 -4°31'10 morning rise 4°**х** 37′52 conjunction retrograde -1686 Mar 22 j 21:21 6°**х¹**18′26 minimum elong -1680 Dec 20 j 20:00 16°**∡**14'38 4°31'11 min. Earth dist. -1686 Jun 09 j 18:01 5°**х** 06'59 33.27600 AU max. Earth dist. -1680 Dec 23 j 19:02 16°**✗**20'14 36.90892 AU opposition -1686 Jun 12 j 12:28 5°**₹**02'58 -1°17'15 morning rise -1679 Jan 04 j 10:21 16°**∡**¹42'04 direct -1686 Aug 31 j 23:49 3°**х** 48′20 retrograde -1679 Apr 03 j 13:22 18°**∡**18'37 -1686 Nov 26 j 02:43 5°**х¹**25'47 min. Earth dist. -1679 Jun 21 j 18:19 17°**₹**09'43 35.04203 AU evening set -1679 Jun 24 j 19:23 17°**∡**¹05'29 -5°01'53 opposition -1686 Dec 11 j 05:36 5°**₹**55'29 -1°28'50 -1679 Sep 13 j 07:59 15°**х** 53′30 conjunction direct -1686 Dec 11 j 05:33 -1679 Dec 08 j 08:02 17°**х** 26′30 minimum elong 5°**х** 55'29 1°28'51 evening set -1686 Dec 13 j 23:44 max. Earth dist. 6° ₹ 00'57 35.39912 AU -1686 Dec 26 i 09:54 -1679 Dec 22 i 16:54 17°**х** 53′18 -4°59′29 morning rise 6° **₹**25'19 conjunction -1679 Dec 22 i 16:45 retrograde -1685 Mar 24 i 20:26 8°**₹**05'11 minimum elong 17°**₹**53'17 4°59'31 min. Earth dist. -1685 Jun 11 j 20:28 6° ₹ 54'05 33.52288 AU max. Earth dist. -1679 Dec 25 i 17:13 17°**₹**58'58 37.16177 AU -1685 Jun 14 i 15:19 6°**₹**50'04 -1°51'14 morning rise -1678 Jan 06 i 03:26 18°**∡** 20′15 opposition retrograde -1685 Sep 03 j 02:45 5°**х** 35′51 -1678 Apr 05 j 07:47 19°**₹** 56'22 direct -1685 Nov 28 j 03:45 7°**∡**12'31 min. Earth dist. -1678 Jun 23 j 17:35 18° **₹**47'41 35.29639 AU evening set -1678 Jun 26 j 18:09 18°**₹**43'29 -5°31'21 opposition conjunction -1685 Dec 13 j 05:14 7°**х** 41′52 -2°00′39 direct -1678 Sep 15 j 08:05 17°**∡**31'49 7°**∡**1'52 2°00'41 minimum elong -1685 Dec 13 j 05:10 evening set -1678 Dec 10 j 08:04 19°**х** 04′18 max. Earth dist. -1685 Dec 16 j 00:11 7°**҂**47'22 35.64708 AU -1685 Dec 28 j 08:11 8°**х** 11′22 conjunction -1678 Dec 24 j 12:59 19°**∡**30'36 -5°27'10 morning rise -1684 Mar 25 j 21:07 9° x7 50'35 -1678 Dec 24 j 12:49 19°**∡**30'36 5°27'12 retrograde minimum elong -1684 Jun 12 j 20:20 8°**✗**39'56 33.77281 AU -1678 Dec 27 j 13:30 19°**∡**36'15 37.41472 AU min. Earth dist. max. Earth dist. 8°**х** 35′50 -2°24′37 -1677 Jan 07 j 19:29 19°**х** 57′03 opposition -1684 Jun 15 j 17:23 morning rise 7°**∡**¹22'01 -1677 Apr 07 j 04:08 21°×32'45 direct -1684 Sep 04 j 04:08 retrograde evening set -1684 Nov 29 j 04:43 8°**х** 57′58 min. Earth dist. -1677 Jun 25 j 14:06 20°**✗**24'24 35.55109 AU opposition -1677 Jun 28 j 16:13 20°**₹**'20'08 -6°00'08 conjunction -1684 Dec 14 j 04:17 9° x 26'57 -2°31'55 direct -1677 Sep 17 j 05:55 19°**х** 08'46 minimum elong -1684 Dec 14 j 04:12 9° x 26'57 2°31'57 evening set -1677 Dec 12 j 08:05 20°**х** 40'47 max. Earth dist. -1684 Dec 17 j 00:38 9°**₹**32'31 35.89742 AU -1684 Dec 29 j 05:33 9°**∡**¹56′05 -1677 Dec 26 j 08:37 21°**尽** 06'34 -5°54'14 morning rise conjunction

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1677 in astronomical counting style is the year 1678 BCE in historical counting style. -1677 Dec 26 j 08:26 21° ₹ 06'34 5°54'17 min. Earth dist. -1670 Jul 06 i 06:53 1°る08'10 37.35670 AU minimum elong -1677 Dec 29 j 10:01 21°**尽**12'14 37.66810 AU -1670 Jul 09 i 12:48 1°る03'50 -9°02'09 max. Earth dist. opposition -1676 Jan 09 j 10:57 21°×32'30 -1670 Sep 08 j 01:21 30°R*X* morning rise -1676 Apr 08 j 01:02 23°×707'50 -1670 Sep 28 j 03:13 29°**х** 54'40 direct retrograde -1676 Jun 26 j 11:26 21°**x** 59'43 35.80677 AU -1670 Oct 17 j 21:42 0°궁 min. Earth dist. -1676 Jun 29 j 13:50 21° 🗷 55'28 -6°28'13 -1670 Dec 24 j 03:55 1°る24'38 opposition evening set direct -1676 Sep 18 j 01:39 20°**х** 44′23 22°**х** 15′59 -1669 Jan 05 j 14:37 1°る46'30 -8°45'43 evening set -1676 Dec 13 j 07:48 conjunction 1°る46'29 8°45'45 -1669 Jan 05 j 14:24 minimum elong -1669 Jan 08 j 19:50 conjunction -1676 Dec 27 j 03:54 22°\$\square\$41'15 -6°20'39 max. Earth dist. 1°る52'11 39.46095 AU minimum elong -1676 Dec 27 j 03:43 22°**х** 41'14 6°20'41 morning rise -1669 Jan 18 j 02:57 2°る08'30 -1676 Dec 30 j 06:38 22°**∡**′46′59 37.92256 AU -1669 Apr 19 j 08:01 3°る42'14 max. Earth dist. retrograde -1675 Jan 10 j 01:29 23°**х** 06′39 -1669 Jul 08 j 01:33 2°る36'12 37.61332 AU morning rise min. Earth dist. retrograde -1675 Apr 09 j 19:56 24°**х** 41′38 opposition -1669 Jul 11 j 07:19 2°る31'54 -9°25'25 min. Earth dist. -1675 Jun 28 j 07:33 23°**x** 33'49 36.06346 AU direct -1669 Sep 29 j 20:11 1°る23'02 opposition -1675 Jul 01 j 10:47 23°**渘**¹29'32 -6°55'37 evening set -1669 Dec 26 j 02:59 2°る52'50 direct -1675 Sep 20 j 00:04 22°**х** 18'46 evening set -1675 Dec 15 j 07:32 23°**х** 50′00 conjunction -1668 Jan 07 j 07:24 3°る14'07 -9°07'43 minimum elong -1668 Jan 07 j 07:11 3°**ප**14'06 9°07'44 conjunction -1675 Dec 28 j 22:34 24°**∡**14'43 -6°46'26 max. Earth dist. -1668 Jan 10 j 13:26 3°る19'50 39.71436 AU minimum elong -1675 Dec 28 j 22:23 24°**∡**14'42 6°46'28 morning rise -1668 Jan 19 j 13:07 3°る35'30 max. Earth dist. -1674 Jan 01 i 01:10 24°**₹**20′23 38.17801 AU retrograde -1668 Apr 20 j 00:23 5°る09'08 morning rise -1674 Jan 11 i 15:25 24°×39'34 min. Earth dist. -1668 Jul 08 j 19:59 4°る03'20 37.86761 AU retrograde -1674 Apr 11 i 15:59 26° **₹**14'15 opposition -1668 Jul 12 j 01:14 3°る59'04 -9°48'03 min. Earth dist. -1674 Jun 30 j 02:45 25° ₹ 06'46 36.32139 AU direct -1668 Sep 30 j 15:03 2°る50'30 opposition -1674 Jul 03 j 07:14 25°×02'26 -7°22'19 -1668 Dec 27 j 02:06 4°る20'10 evening set -1674 Sep 21 j 20:00 23°**х** 51′58 direct -1674 Dec 17 j 06:58 25°**х** 22′52 -1667 Jan 07 j 23:43 4°る40'50 -9°29'06 evening set conjunction -1667 Jan 07 j 23:31 4°る40'50 9°29'08 minimum elong -1674 Dec 30 j 17:01 25°**∡**¹47'03 -7°11'34 max. Earth dist. -1667 Jan 11 j 04:29 4°る46'25 39.96524 AU conjunction -1674 Dec 30 j 16:49 -1667 Jan 19 j 22:48 5°る01'37 25° \$\frac{7}{47}'02 7°11'35 morning rise minimum elong -1673 Jan 02 j 21:25 -1667 Apr 21 j 17:35 6°る35'08 max. Earth dist. 25°**尽**52'50 38.43453 AU retrograde -1673 Jan 13 j 04:34 -1667 Jul 10 j 12:58 5°る29'36 38.11933 AU 26°**₹**11'21 min. Earth dist. morning rise 5°る25'20 -10°10'02 -1673 Apr 13 j 09:08 27°**х** 45′46 -1667 Jul 13 j 18:49 retrograde opposition -1673 Jul 01 j 23:07 26°**✗**38'33 36.58018 AU -1667 Oct 02 j 08:34 4°る17'02 min. Earth dist. direct 26°**∡**34'15 -7°48'18 -1673 Jul 05 j 03:22 -1667 Dec 29 j 00:54 5°る46'35 opposition evening set -1673 Sep 23 j 17:28 direct 25°**х** 24′06 evening set -1673 Dec 19 j 06:18 26°**х** 54'43 conjunction -1666 Jan 09 j 15:42 6°る06'38 -9°49'54 minimum elong -1666 Jan 09 j 15:29 6°る06'37 9°49'56 conjunction -1672 Jan 01 j 10:51 27°**∡**18'20 -7°36'03 max. Earth dist. -1666 Jan 12 j 21:16 6°る12'14 40.21339 AU minimum elong -1672 Jan 01 j 10:39 27°**∡**18'19 7°36'05 morning rise -1666 Jan 21 j 07:48 6°る26'46 max. Earth dist. -1672 Jan 04 j 15:01 27°**✗**¹24'03 38.69174 AU retrograde -1666 Apr 23 j 07:05 8°**る**00'13 morning rise -1672 Jan 14 j 17:02 27°**х** 42′04 min. Earth dist. -1666 Jul 12 j 07:24 6°る54'51 38.36839 AU -1672 Apr 14 j 02:04 29°**х** 16′16 -1666 Jul 15 j 11:59 6°る50'40 -10°31'24 retrograde opposition -1672 Jul 02 j 17:07 28°**✗**09'25 36.83946 AU -1666 Oct 04 j 03:34 5°る42'37 min. Earth dist. direct -1672 Jul 05 i 22:58 28°**×**105'03 -8°13'36 7°る12'04 opposition evening set -1666 Dec 30 j 23:42 direct -1672 Sep 24 i 13:48 26°**₹**55'14 -1672 Dec 20 j 05:36 28°**х** 25'35 -1665 Jan 11 j 07:18 7°る31'28 -10°10'06 evening set conjunction minimum elong -1665 Jan 11 i 07:06 7°る31'27 10°10'09 -1671 Jan 02 j 04:30 28° **2**48'38 -7°59'54 max. Earth dist. -1665 Jan 14 i 12:12 7°る37'00 40.45924 AU conjunction -1671 Jan 02 i 04:18 28°**х** 48'37 7°59'55 morning rise -1665 Jan 22 j 16:07 7°る50'59 minimum elong max. Earth dist. -1671 Jan 05 j 09:49 28° ₹ 54'24 38.94895 AU retrograde -1665 Apr 24 j 21:31 9°**ට**24'22 -1671 Jan 15 j 05:01 29°**х** 11′48 min. Earth dist. -1665 Jul 13 j 23:10 8°る19'16 38.61534 AU morning rise 0°궁 8°る15'02 -10°52'07 -1671 Feb 14 j 02:20 opposition -1665 Jul 17 j 04:41 0°**る**45'49 retrograde -1671 Apr 15 j 19:16 direct -1665 Oct 05 j 21:32 7°る07'14 -1671 Jun 18 j 15:02 30°R.**✓** evening set -1664 Jan 01 j 22:12 8°**る**36'35 min. Earth dist. -1671 Jul 04 j 12:55 29°**∡**39'12 37.09857 AU -1671 Jul 07 j 18:06 29°**х** 34′53 -8°38′13 -1664 Jan 12 j 22:23 8°る55'22 -10°29'43 opposition conjunction -1671 Sep 26 j 09:15 28°**∡**¹25'24 -1664 Jan 12 j 22:10 8°る55'21 10°29'45 direct minimum elong -1671 Dec 22 j 04:49 29°**х** 55'33 -1664 Jan 16 j 03:37 9°る00'53 40.70310 AU evening set max. Earth dist. -1671 Dec 24 j 17:51 0°る -1664 Jan 23 j 23:52 9°る14'14 morning rise retrograde -1664 Apr 25 j 14:18 10°る47'35 conjunction -1670 Jan 03 j 21:50 0°**ට**18'01 -8°23'07 min. Earth dist. -1664 Jul 14 j 16:15 9°る42'39 38.86074 AU minimum elong -1670 Jan 03 j 21:37 0°る18'00 8°23'09 opposition -1664 Jul 17 j 21:07 9°る38'28 -11°12'12 max. Earth dist. -1670 Jan 07 j 03:13 0°る23'45 39.20567 AU direct -1664 Oct 06 j 12:40 8°**る**30'55 -1670 Jan 16 j 16:16 0°る40'36 -1663 Jan 02 j 20:45 10°る00'13 morning rise evening set

-1670 Apr 17 j 13:17

retrograde

2°る14'27

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Earth dist. -1663 Jul 19 j 12:49 11°る01'01 -11°31'39 -1656 Jan 31 j 17:54 opposition morning rise 19°**る**51'27 9°**る**53'42 -1656 May 06 j 06:16 direct -1663 Oct 08 j 04:16 retrograde 21°る25'30 -1662 Jan 04 j 19:14 11°る22'59 -1656 Jul 25 j 15:53 evening set min. Earth dist. 20°る22'15 40.77102 AU -1656 Jul 28 j 18:59 opposition 20°る18'18 -13°30'45 -1656 Oct 17 j 10:19 conjunction -1662 Jan 15 j 03:51 11°る40'28 -11°07'09 direct 19°る12'43 -1662 Jan 15 j 03:38 11°る40'28 11°07'10 -1655 Jan 16 j 08:19 20°る42'43 minimum elong evening set -1662 Jan 18 j 08:51 11°る45'54 41.18718 AU max. Earth dist. morning rise -1662 Jan 25 j 13:39 11°る58'02 conjunction -1655 Jan 24 j 02:16 20°る55'20 -13°00'13 retrograde -1662 Apr 28 j 21:19 13°る31'23 minimum elong -1655 Jan 24 j 02:05 20°る55'19 13°00'15 min. Earth dist. -1662 Jul 17 j 22:54 12°る26'55 39.34813 AU max. Earth dist. -1655 Jan 27 j 05:41 21°る00'27 42.83060 AU opposition -1662 Jul 21 j 04:25 12°る22'44 -11°50'28 morning rise -1655 Jan 31 j 20:47 21°る07'58 direct -1662 Oct 09 j 18:21 11°る15'40 retrograde -1655 May 07 j 19:08 22°る42'12 evening set -1661 Jan 06 j 17:22 12°る44'58 min. Earth dist. -1655 Jul 27 j 05:10 21°る39'09 40.99708 AU opposition -1655 Jul 30 j 08:15 21°る35'13 -13°45'32 conjunction -1661 Jan 16 j 18:01 13°る01'48 -11°24'59 direct -1655 Oct 18 j 23:24 20°る29'50 minimum elong -1661 Jan 16 j 17:49 13°る01'47 11°25'01 evening set -1654 Jan 18 i 07:10 22°る00'01 max. Earth dist. -1661 Jan 20 i 00:21 13°る07'17 41.42777 AU morning rise -1661 Jan 26 i 19:34 13°る18'41 conjunction -1654 Jan 25 i 14:52 22°**ට**11'53 -13°14'17 retrograde -1661 Apr 30 j 10:00 14°る52'05 -1654 Jan 25 j 14:42 22°る11'52 13°14'18 minimum elong -1661 Jul 19 j 14:52 13°る47'48 39.59030 AU max. Earth dist. -1654 Jan 28 j 18:33 22°る17'00 43.05258 AU min. Earth dist. -1661 Jul 22 j 19:43 13°る43'41 -12°08'40 -1654 Feb 01 j 23:02 22°る23'46 opposition morning rise -1661 Oct 11 j 11:08 12°る36'52 -1654 May 09 j 05:37 23°る58'12 retrograde direct -1660 Jan 08 j 15:47 14°**る**06'14 -1654 Jul 28 j 20:02 22°る55'14 41.21904 AU min. Earth dist. evening set -1654 Jul 31 j 21:27 22°る51'23 -13°59'47 opposition -1660 Jan 18 j 07:56 14°る22'23 -11°42'14 -1654 Oct 20 j 14:30 conjunction 21°**る**46'11 direct -1660 Jan 18 j 07:44 -1653 Jan 20 j 06:12 minimum elong 14°る22'22 11°42'14 23°**る**16'36 evening set -1660 Jan 21 j 13:21 14°る27'47 41.66730 AU max. Earth dist. -1660 Jan 28 j 01:02 -1653 Jan 27 j 03:02 23°**ප්**27'40 -13°27'51 14°**る**38'35 morning rise conjunction -1660 Apr 30 j 23:44 16°る12'04 -1653 Jan 27 j 02:51 23°る27'39 13°27'52 retrograde minimum elong -1660 Jul 20 j 04:38 15°る08'05 39.83125 AU -1653 Jan 30 j 05:44 23°る32'42 43.27082 AU min. Earth dist. max. Earth dist. -1660 Jul 23 j 10:28 15°**る**03'55 -12°26'14 -1653 Feb 03 j 00:11 opposition morning rise 23°**る**38'46 direct -1660 Oct 12 j 01:55 13°る57'22 retrograde -1653 May 10 j 16:13 25°**る**13'26 evening set -1659 Jan 09 j 14:01 15°る26'48 min. Earth dist. -1653 Jul 30 j 08:24 24°る10'39 41.43739 AU opposition -1653 Aug 02 j 10:11 24°**ප්**06'47 -14°13'31 conjunction -1659 Jan 18 j 21:37 15°る42'16 -11°58'54 direct -1653 Oct 22 j 04:47 23°る01'45 -1659 Jan 18 j 21:26 15°る42'15 11°58'56 -1652 Jan 22 j 05:32 24°る32'26 minimum elong evening set max. Earth dist. -1659 Jan 22 j 03:35 15°る47'41 41.90527 AU -1659 Jan 28 j 06:08 15°る57'48 -1652 Jan 28 j 14:58 24°る42'41 -13°40'55 morning rise conjunction -1659 May 02 j 11:48 17°る31'23 -1652 Jan 28 j 14:49 24°る42'40 13°40'56 retrograde minimum elong -1659 Jul 21 i 20:33 16°る27'34 40.07042 AU -1652 Jan 31 i 17:05 24°る47'39 43.48568 AU min. Earth dist. max. Earth dist. -1659 Jul 25 i 01:05 16°**පි**23'29 -12°43'13 -1652 Feb 04 i 00:46 opposition morning rise 24°る52'58 -1659 Oct 13 j 18:14 direct 15°る17'12 retrograde -1652 May 11 i 04:53 26°る27'55 -1658 Jan 11 j 12:25 evening set 16°₹46'44 min. Earth dist. -1652 Jul 30 i 21:59 25°る25'13 41.65281 AU -1652 Aug 02 i 22:39 25°**⋜**21'26 -14°26'44 opposition -1658 Jan 20 j 11:06 17°**ප**01'30 -12°15'01 direct -1652 Oct 22 j 17:05 24°**ප**16'34 conjunction -1658 Jan 20 i 10:54 17°る01'29 12°15'03 evening set -1651 Jan 23 j 05:21 25°**⋜**47'34 minimum elong max. Earth dist. -1658 Jan 23 j 16:48 17°る06'52 42.14127 AU -1658 Jan 29 j 10:27 17°**ප**16'20 morning rise conjunction -1651 Jan 29 j 02:48 25°**ප්**56'58 -13°53'29 -1651 Jan 29 j 02:38 retrograde -1658 May 04 j 01:26 18°る50'03 minimum elong 25°る56'57 13°53'31 min. Earth dist. -1658 Jul 23 j 10:23 17°る46'29 40.30713 AU max. Earth dist. -1651 Feb 01 j 05:17 26°る01'55 43.69797 AU 17°る42'24 -12°59'37 -1651 Feb 04 j 00:22 -1658 Jul 26 j 15:13 morning rise 26°る06'23 opposition -1658 Oct 15 j 08:44 16°**る**36'22 -1651 May 12 j 17:06 27°る41'40 direct retrograde -1657 Jan 13 j 10:52 18°**る**06'02 -1651 Aug 01 j 10:26 26°る39'06 41.86568 AU evening set min. Earth dist. -1651 Aug 04 j 10:43 26°る35'21 -14°39'26 opposition -1657 Jan 22 j 00:16 18°**る**20'06 -12°30'36 -1651 Oct 24 j 04:40 25°る30'40 conjunction direct minimum elong -1657 Jan 22 j 00:05 18°る20'05 12°30'39 evening set -1650 Jan 25 j 05:40 27°る02'03 max. Earth dist. -1657 Jan 25 j 05:10 18°る25'23 42.37451 AU morning rise -1657 Jan 30 j 14:28 18°**ප**34'13 conjunction -1650 Jan 30 j 14:06 27°る10'33 -14°05'34 retrograde -1657 May 05 j 17:46 20°る08'06 minimum elong -1650 Jan 30 j 13:57 27°る10'33 14°05'35 -1657 Jul 25 j 01:07 19°る04'42 40.54097 AU max. Earth dist. -1650 Feb 02 j 15:23 27°る15'24 43.90799 AU min. Earth dist. -1657 Jul 28 j 05:17 19°る00'41 -13°15'27 -1650 Feb 04 j 22:44 27°る19'04 opposition morning rise

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 19 Attention, astronomical year style is used: The year -1650 in astronomical counting style is the year 1651 BCE in historical counting style. -1650 May 14 j 06:23 28°る54'45 conjunction -1643 Feb 07 i 16:59 5°≈31'29 -15°16'44 retrograde -1650 Aug 02 j 21:59 27°る52'22 42.07657 AU -1643 Feb 07 j 16:52 5°≈31'28 15°16'45 min. Earth dist. minimum elong opposition -1650 Aug 05 j 22:36 27°る48'37 -14°51'35 -1643 Feb 10 j 14:40 5°≈35'57 45.31219 AU max. Earth dist. -1650 Oct 25 j 14:33 26°る44'07 direct -1643 May 22 j 08:01 7°≈12'39 retrograde -1649 Jan 27 j 06:48 -1643 Aug 11 j 06:53 evening set 28°**る**15'58 min. Earth dist. 6°≈11'23 43.48075 AU opposition -1643 Aug 14 j 02:57 6°≈07'56 -16°02'58 -1649 Feb 01 j 01:22 28°る23'31 -14°17'08 -1643 Nov 02 j 19:17 conjunction direct 5°≈04'49 -1649 Feb 01 j 01:13 minimum elong 28°る23'31 14°17'10 -1642 Feb 09 j 02:55 max. Earth dist. -1649 Feb 04 j 03:23 28°る28'24 44.11615 AU conjunction 6°≈41'17 -15°25'11 morning rise -1649 Feb 05 j 19:59 28°る31'04 minimum elong -1642 Feb 09 j 02:49 6°≈41'16 15°25'13 -1649 Apr 20 j 16:02 0°≈ max. Earth dist. -1642 Feb 12 j 00:01 6°≈45'42 45.49798 AU -1642 May 23 j 15:07 retrograde -1649 May 15 j 15:12 0°≈07'14 retrograde 8°≈22'02 -1649 Jun 09 j 20:39 30°Ŗる min. Earth dist. -1642 Aug 12 j 19:01 7°≈20'49 43.66567 AU opposition min. Earth dist. -1649 Aug 04 j 10:52 29°る04'59 42.28552 AU -1642 Aug 15 j 13:07 7°≈17'28 -16°11'23 opposition -1649 Aug 07 j 10:15 29°る01'18 -15°03'14 direct -1642 Nov 04 j 08:35 6°≈14'30 direct -1649 Oct 27 j 03:53 27°る57'00 evening set -1648 Jan 29 j 09:22 29°る29'26 conjunction -1641 Feb 10 j 12:51 7°≈50'33 -15°33'14 minimum elong -1641 Feb 10 j 12:45 7°≈50'33 15°33'15 conjunction -1648 Feb 02 j 12:22 29° ප්35'56 -14°28'13 max. Earth dist. -1641 Feb 13 j 09:16 7°≈54'55 45.67948 AU minimum elong -1648 Feb 02 j 12:14 29°**る**35'56 14°28'15 retrograde -1641 May 25 j 00:11 9°≈30'53 morning rise -1648 Feb 06 j 15:23 29°る42'27 min. Earth dist. -1641 Aug 14 j 05:03 8°≈29'47 43.84631 AU max. Earth dist. -1648 Feb 05 i 13:25 29°る40'44 44.32252 AU opposition -1641 Aug 16 j 22:51 8°≈26'27 -16°19'24 -1648 Feb 17 j 22:13 0°≈ direct -1641 Nov 05 j 19:58 7°≈23'38 retrograde -1648 May 16 j 00:31 1°≈19'12 min. Earth dist. -1648 Aug 04 j 21:36 0°≈17'10 42.49244 AU conjunction -1640 Feb 11 i 22:22 8°≈59'15 -15°40'52 -1648 Aug 07 j 21:35 0°≈13'28 -15°14'22 minimum elong -1640 Feb 11 i 22:17 8°≈59'15 15°40'54 opposition -1648 Aug 18 j 20:55 max. Earth dist. -1640 Feb 14 j 17:20 9°≈03'30 45.85696 AU 30°R₹ -1648 Oct 27 j 16:47 29°る09'22 -1640 May 25 j 11:59 direct retrograde 10°≈39'10 -1647 Jan 02 j 03:09 -1640 Aug 14 j 15:36 0°≈≈ min. Earth dist. 9°≈38'09 44.02334 AU -1647 Jan 30 j 13:58 -1640 Aug 17 j 08:30 evening set 0°≈42'34 opposition 9°≈34'53 -16°26'59 -1640 Nov 06 j 03:35 direct 8°≈32'11 0°≈47'53 -14°38'49 -1647 Feb 02 j 23:11 conjunction -1639 Feb 12 j 07:54 -1647 Feb 02 j 23:02 0°**≈**47'52 14°38'50 conjunction 10°≈07'24 -15°48'06 minimum elong -1647 Feb 06 j 08:19 -1639 Feb 12 j 07:50 morning rise 0°≈53'11 minimum elong 10°≈07'24 15°48'07 -1647 Feb 06 j 00:03 -1639 Feb 15 j 03:11 max. Earth dist. 0°≈52'38 44.52664 AU max. Earth dist. 10°≈11'39 46.03111 AU -1639 May 26 j 20:56 retrograde -1647 May 17 j 11:49 2°≈30'42 retrograde 11°**≈**46′54 min. Earth dist. -1647 Aug 06 j 10:02 1°≈28'49 42.69703 AU min. Earth dist. -1639 Aug 16 j 01:56 10°≈45'57 44.19712 AU opposition -1647 Aug 09 j 08:39 1°≈25'11 -15°25'00 opposition -1639 Aug 18 j 17:43 10°≈42'45 -16°34'09 direct -1647 Oct 29 j 04:09 0°≈21'18 direct -1639 Nov 07 j 13:15 9°≈40'10 -1646 Feb 01 j 23:04 1°≈55'33 evening set conjunction -1638 Feb 13 j 17:05 11°≈15′00 -15°54′55 -1646 Feb 04 j 09:54 1°≈59'23 -14°48'57 -1638 Feb 13 j 17:00 11°≈15'00 15°54'57 conjunction minimum elong -1646 Feb 04 j 09:47 1°≈59'22 14°48'59 max. Earth dist. -1638 Feb 16 j 10:48 11°≈19'08 46.20246 AU minimum elong -1646 Feb 06 j 20:36 2°≈03'12 retrograde -1638 May 28 j 05:54 morning rise 12°≈54'05 -1646 Feb 07 j 10:44 2°≈04'07 44.72834 AU -1638 Aug 17 j 10:48 max. Earth dist. min. Earth dist. 11°≈53'17 44.36833 AU retrograde -1646 May 18 j 22:34 3°≈41'47 opposition -1638 Aug 20 j 02:51 11°≈50'05 -16°40'53 min. Earth dist. -1646 Aug 07 j 21:07 2°≈40'06 42.89871 AU direct -1638 Nov 08 j 21:34 10°≈47'38 opposition -1646 Aug 10 j 19:31 2°≈36'29 -15°35'10 -1637 Feb 15 i 02:01 direct -1646 Oct 30 j 15:02 1°≈32'49 conjunction 12°≈22'06 -16°01'20 -1645 Feb 04 j 23:29 3°≈09'09 minimum elong -1637 Feb 15 i 01:58 12°≈22'06 16°01'21 evening set max. Earth dist. -1637 Feb 17 j 19:56 12°≈26'14 46.37128 AU -1645 Feb 05 j 20:11 3°≈10'29 -14°58'38 retrograde -1637 May 29 j 13:05 14°≈00'49 conjunction -1637 Aug 18 j 21:26 -1645 Feb 05 j 20:04 3°≈10'29 14°58'39 13°≈00'04 44.53703 AU minimum elong min. Earth dist. morning rise -1645 Feb 06 j 16:41 3°≈11'49 opposition -1637 Aug 21 j 11:56 12°≈56'56 -16°47'11 3°≈15′06 44.92688 AU -1637 Nov 10 j 07:47 max. Earth dist. -1645 Feb 08 j 19:30 direct 11°≈54'38 retrograde -1645 May 20 j 12:17 4°≈52'29 min. Earth dist. -1645 Aug 09 j 08:32 3°≈50'57 43.09704 AU conjunction -1636 Feb 16 j 11:00 13°≈28'45 -16°07'20 minimum elong -1636 Feb 16 j 10:56 opposition -1645 Aug 12 j 06:18 3°≈47'24 -15°44'52 13°≈28'45 16°07'21 -1645 Oct 31 j 22:40 max. Earth dist. -1636 Feb 19 j 04:19 direct 2°≈43'56 13°≈32'50 46.53780 AU -1636 May 04 j 15:12 15°≈ -1644 Feb 07 j 06:41 conjunction 4°≈21'12 -15°07'54 retrograde -1636 May 29 j 20:01 15°≈07'06 minimum elong -1644 Feb 07 j 06:35 4°≈21'12 15°07'56 -1636 Jun 24 j 10:56 15°R≈ max. Earth dist. -1644 Feb 10 j 06:19 4°≈25'49 45.12168 AU min. Earth dist. -1636 Aug 19 j 05:51 14°≈06'31 44.70319 AU retrograde -1644 May 20 j 22:42 6°≈02'47 opposition -1636 Aug 21 j 20:33 14°≈03'23 -16°53'04 min. Earth dist. -1644 Aug 09 j 20:42 5°≈01'21 43.29116 AU direct -1636 Nov 10 j 18:29 13°≈01'14 -1644 Aug 12 j 16:43 opposition 4°≈57'53 -15°54'07 -1644 Nov 01 j 09:00 3°≈54'36 -1635 Feb 16 j 19:43 14°≈35'01 -16°12'56 direct conjunction

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1635 in astronomical counting style is the year 1636 BCE in historical counting style. -1635 Feb 16 i 19:41 14°≈35'01 16°12'58 minimum elong -1627 Feb 25 i 14:00 23°≈13'39 16°45'06 minimum elong 14°**≈**39'00 46.70167 AU -1635 Feb 19 i 11:47 max. Earth dist. -1627 Feb 27 j 22:29 23°≈17'04 47.86816 AU max. Earth dist. -1635 Mar 05 j 17:39 -1627 Jun 09 j 00:26 15°≈ retrograde 24°≈49'08 -1635 May 31 j 06:29 16°≈13'01 min. Earth dist. -1627 Aug 29 j 16:19 23°≈49'16 46.02112 AU retrograde -1635 Aug 20 j 15:39 -1627 Aug 31 j 20:39 min. Earth dist. 15°≈12'33 44.86665 AU opposition 23°≈46'42 -17°29'30 -1635 Aug 23 j 05:15 -1627 Nov 20 j 16:59 opposition 15°≈09'28 -16°58'33 direct 22°≈45'43 -1635 Aug 31 j 03:59 15°R≈ -1626 Feb 26 j 21:33 direct -1635 Nov 12 j 02:24 14°≈07'29 conjunction 24°≈16′52 -16°47′35 24°≈16′52 16°47′36 -1634 Jan 20 j 17:49 15°≈ minimum elong -1626 Feb 26 j 21:35 max. Earth dist. -1626 Mar 01 j 04:57 24°≈20'13 47.99468 AU conjunction -1634 Feb 18 j 04:19 15°≈40'56 -16°18'10 retrograde -1626 Jun 10 j 05:03 25°≈52'04 -1634 Feb 18 j 04:16 minimum elong 15°**≈**40′56 16°18'11 min. Earth dist. -1626 Aug 30 j 23:09 24°≈52'19 46.14644 AU -1634 Feb 20 j 20:43 max. Earth dist. 15°≈44'56 46.86266 AU opposition -1626 Sep 02 j 03:47 24°≈49'45 -17°31'50 retrograde -1634 Jun 01 j 16:09 17°≈18'37 direct -1626 Nov 22 j 02:06 23°≈48'52 min. Earth dist. -1634 Aug 22 j 01:11 16°≈18'15 45.02677 AU opposition -1634 Aug 24 j 13:43 16°≈15'14 -17°03'39 conjunction -1625 Feb 28 j 05:01 25°≈19'45 -16°49'46 direct -1634 Nov 13 j 09:51 15°≈13'24 minimum elong -1625 Feb 28 j 05:01 25°≈19'45 16°49'47 max. Earth dist. -1625 Mar 02 j 11:14 25°≈23'01 48.11809 AU conjunction -1633 Feb 19 j 12:50 16°≈46'34 -16°23'00 retrograde -1625 Jun 11 j 11:58 26°≈54'40 minimum elong -1633 Feb 19 j 12:49 16°≈46'34 16°23'02 min. Earth dist. -1625 Sep 01 j 07:47 25°≈54'58 46.26887 AU max. Earth dist. -1633 Feb 22 j 03:23 16°≈50'26 47.02022 AU opposition -1625 Sep 03 j 10:53 25°≈52'28 -17°33'48 retrograde -1633 Jun 03 i 02:34 18°≈23'55 direct -1625 Nov 23 i 10:47 24°≈51'42 min. Earth dist. -1633 Aug 23 j 09:45 17°≈23'42 45.18319 AU -1633 Aug 25 j 22:00 17°≈20'43 -17°08'21 conjunction -1624 Feb 29 i 12:33 26°≈22'20 -16°51'36 opposition direct -1633 Nov 14 j 16:03 16°≈19'02 -1624 Feb 29 i 12:35 26°≈22'20 16°51'37 minimum elong max. Earth dist. -1624 Mar 02 j 18:54 26°≈25'36 48.23876 AU -1632 Feb 20 j 21:22 17°≈51'54 -16°27'30 -1624 Jun 11 j 20:19 conjunction retrograde 27°≈56'59 -1632 Feb 20 j 21:20 -1624 Sep 01 j 15:18 minimum elong 17°≈51'54 16°27'31 min. Earth dist. 26°≈57'23 46.38828 AU -1632 Feb 23 j 11:29 -1624 Sep 03 j 17:47 max. Earth dist. 17°≈55'44 47.17361 AU 26°≈54'55 -17°35'26 opposition -1632 Jun 03 j 08:40 -1624 Nov 23 j 17:35 retrograde 19°≈28'57 direct 25°≈54'15 -1632 Aug 23 j 20:12 min. Earth dist. 18°≈28'47 45.33503 AU conjunction -1623 Mar 01 j 19:47 -1632 Aug 26 j 06:16 18°≈25'55 -17°12'43 27°≈24'39 -16°53'07 opposition -1632 Nov 15 j 02:09 -1623 Mar 01 j 19:48 27°≈24'39 16°53'07 direct 17°≈24'23 minimum elong -1623 Mar 04 j 00:13 max. Earth dist. 27°≈27'47 48.35646 AU -1631 Feb 21 j 05:53 -1623 Jun 13 j 06:30 conjunction 18°≈56'58 -16°31'40 retrograde 28°≈59'03 -1631 Feb 21 j 05:53 -1623 Sep 02 j 22:27 minimum elong 18°≈56'58 16°31'41 min. Earth dist. 27°≈59'33 46.50473 AU -1631 Feb 23 j 18:37 max. Earth dist. 19°≈00'42 47.32228 AU opposition -1623 Sep 05 j 00:31 27°≈57'07 -17°36'42 retrograde -1631 Jun 04 j 14:50 20°≈33'42 direct -1623 Nov 24 j 21:18 26°≈56'34 min. Earth dist. -1631 Aug 25 j 04:30 19°≈33'39 45.48178 AU opposition -1631 Aug 27 j 14:09 19°≈30'48 -17°16'44 conjunction -1622 Mar 03 j 03:02 28°≈26'45 -16°54'17 direct -1631 Nov 16 j 12:13 18°≈29'24 minimum elong -1622 Mar 03 j 03:05 28°≈26'45 16°54'18 max. Earth dist. -1622 Mar 05 j 07:27 28°≈29'53 48.47103 AU -1630 Feb 22 j 14:06 20°≈01'42 -16°35'30 -1622 Jun 05 j 06:24 0°) conjunction -1630 Feb 22 j 14:05 20°≈01'41 16°35'30 -1622 Jun 14 j 12:33 0°\(\frac{1}{2}\)00'55 minimum elong retrograde -1630 Feb 25 j 01:05 20°≈05'18 47.46577 AU -1622 Jun 23 j 15:07 max. Earth dist. 30°R≈ retrograde -1630 Jun 06 i 00:16 21°≈38'07 min. Earth dist. -1622 Sep 04 i 07:00 29°≈01'27 46.61772 AU min. Earth dist. -1630 Aug 26 j 14:14 20°≈38'07 45.62345 AU opposition -1622 Sep 06 i 07:15 28°≈59'06 -17°37'39 opposition -1630 Aug 28 j 22:10 20°≈35'21 -17°20'26 direct -1622 Nov 26 j 04:11 27°≈58'40 direct -1630 Nov 17 j 19:51 19°≈34'04 -1621 Mar 04 i 10:08 29°≈28'39 -16°55'09 conjunction -1629 Feb 23 i 22:13 21°≈06'04 -16°39'01 minimum elong -1621 Mar 04 i 10:10 29°≈28'39 16°55'09 conjunction -1629 Feb 23 i 22:13 21°≈06'04 16°39'02 max. Earth dist. -1621 Mar 06 j 13:11 29°≈31'42 48.58208 AU minimum elong max. Earth dist. -1629 Feb 26 j 08:56 21°≈09'39 47.60434 AU -1621 Mar 26 j 18:47 0°\ retrograde -1629 Jun 07 j 08:07 22°242'11 retrograde -1621 Jun 15 j 17:14 1°**)** 02'34 21°≈42'14 45.76012 AU -1621 Sep 05 j 13:46 min. Earth dist. -1629 Aug 27 j 23:06 min. Earth dist. 0°**升**03'13 46.72678 AU -1621 Sep 07 j 13:47 opposition -1629 Aug 30 j 05:53 21°≈39'32 -17°23'48 opposition 0°¥00'53 -17°38'18 -1621 Sep 08 j 08:09 direct -1629 Nov 19 j 04:06 20°≈38'21 30°R≈ -1621 Nov 27 j 12:23 29°≈00'34 direct -1628 Feb 25 j 06:09 22°≈10'03 -16°42'12 -1620 Feb 12 j 00:41 0°**)**€ conjunction -1628 Feb 25 j 06:09 minimum elong 22°≈10'03 16°42'13 -1628 Feb 27 j 14:44 -1620 Mar 04 j 17:17 0°**¥**30'21 -16°55'43 max. Earth dist. 22°≈13′29 47.73828 AU conjunction retrograde -1628 Jun 07 j 17:47 23°≈45'51 minimum elong -1620 Mar 04 j 17:21 0° **★**30'21 16°55'43 min. Earth dist. -1628 Aug 28 j 07:02 22°≈45'58 45.89254 AU max. Earth dist. -1620 Mar 06 j 18:52 0° **★**33'18 48.68876 AU opposition -1628 Aug 30 j 13:16 22°≈43'19 -17°26'49 retrograde -1620 Jun 15 j 23:21 2°**)** 04'03 direct -1628 Nov 19 j 09:06 21°≈42'14 min. Earth dist. -1620 Sep 05 j 22:22 1°**₭**04'42 46.83126 AU

-1620 Sep 07 j 20:15

-1620 Nov 27 j 20:17

opposition

direct

-1627 Feb 25 j 14:00 23°≈13'39 -16°45'04

conjunction

1°**H**02'29 -17°38'38

0°**)**€02'16

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1619 in astronomical counting style is the year 1620 BCE in historical counting style. -1619 Mar 06 i 00:31 1°\(\frac{1}{3}\)1'50 -16°56'00 retrograde -1611 Jun 25 j 08:20 11°\(\)04'38 conjunction -1619 Mar 06 j 00:34 1°\dagger31'50 16°56'00 min. Earth dist. -1611 Sep 15 j 12:10 10°¥05'35 47.56933 AU minimum elong -1619 Mar 08 j 01:26 1°**)** 34'44 48.79065 AU -1611 Sep 17 j 01:18 10°¥03'48 -17°28'45 max. Earth dist. opposition -1619 Jun 17 j 05:20 -1611 Dec 07 j 02:41 9°**)** 04'09 3°**¥**05′18 direct retrograde -1619 Sep 07 j 05:42 min. Earth dist. 2°**₭**06'01 46.93049 AU -1619 Sep 09 j 02:37 -1610 Mar 15 j 11:16 10° **★** 32'04 -16°45'52 opposition 2°\(\mathbf{H}\) 03'50 -17°38'41 conjunction -1619 Nov 29 j 04:14 -1610 Mar 15 j 11:22 direct 1°**)**€03'42 minimum elong 10° **★** 32'04 16°45'53 -1610 Mar 17 j 01:53 max. Earth dist. 10°**₭**34'19 49.51339 AU conjunction -1618 Mar 07 j 07:20 2°\(\mathbf{3}3'03\) -16°56'00 retrograde -1610 Jun 26 j 13:04 12°**)**€03'38 minimum elong -1618 Mar 07 j 07:24 2°\dagger33'04 16°56'01 min. Earth dist. -1610 Sep 16 j 19:33 11°**米**04'35 47.63456 AU max. Earth dist. -1618 Mar 09 j 05:50 2°**₭**35'48 48.88727 AU opposition -1610 Sep 18 j 06:50 11°**米**02'54 -17°26'09 -1618 Jun 18 j 14:59 -1610 Dec 08 j 09:28 retrograde 4°**)**€06'17 direct 10°**₩**03'21 min. Earth dist. -1618 Sep 08 j 13:11 3°**₭**07'02 47.02449 AU opposition -1618 Sep 10 j 08:59 3°¥04'55 -17°38'28 conjunction -1609 Mar 16 j 17:36 11°\dagger31'09 -16°43'17 direct -1618 Nov 30 j 08:23 2°\ 04'50 minimum elong -1609 Mar 16 j 17:44 11°**)** €31'09 16°43'18 max. Earth dist. -1609 Mar 18 j 07:53 11°**升**33'22 49.57733 AU conjunction -1617 Mar 08 j 14:18 3°¥33'58 -16°55'45 retrograde -1609 Jun 27 j 17:57 13°**¥**02'35 minimum elong -1617 Mar 08 j 14:22 3°**¥**33'59 16°55'45 min. Earth dist. -1609 Sep 18 j 01:25 12°**₭**03'37 47.69597 AU max. Earth dist. -1617 Mar 10 j 12:23 3°**)** €36'41 48.97871 AU opposition -1609 Sep 19 j 12:03 12°**₭**01'58 -17°23'17 retrograde -1617 Jun 19 j 22:15 5°**₩**06'57 direct -1609 Dec 09 j 16:32 11°**)** 02'30 min. Earth dist. -1617 Sep 09 j 21:22 4°**₭**07'39 47.11338 AU opposition -1617 Sep 11 i 15:09 4°\(\)\(05'39\)\(-17\)\(°37'59\) conjunction -1608 Mar 16 j 23:48 12°**)** 30'11 -16°40'27 direct -1617 Dec 01 j 13:58 3°**¥**05'37 minimum elong -1608 Mar 16 i 23:54 12°**)** 30'12 16°40'27 max. Earth dist. -1608 Mar 18 i 11:44 12°\(\)32'16 49.63714 AU conjunction -1616 Mar 08 j 21:07 4°\(\)4'33 -16°55'12 retrograde -1608 Jun 28 j 02:58 14°\(\)01'30 -1616 Mar 08 j 21:11 4°¥34'33 16°55'14 -1608 Sep 18 j 08:07 13°**)**€02'34 47.75301 AU minimum elong min. Earth dist. max. Earth dist. -1616 Mar 10 j 17:29 4°₩37'09 49.06546 AU -1608 Sep 19 j 17:24 13°¥00′59 -17°20′09 opposition -1616 Jun 20 j 03:24 6°**₩**07'16 -1608 Dec 09 j 19:54 12°\01'36 retrograde direct -1616 Sep 10 j 03:29 5°**)**€08'02 47.19777 AU min. Earth dist. -1607 Mar 18 j 06:05 -1616 Sep 11 j 21:06 5°\mathcal{H}06'02 -17°37'12 13°**¥**29'11 -16°37'21 opposition conjunction -1616 Dec 01 j 20:17 -1607 Mar 18 j 06:13 direct 4° \(\frac{1}{2}\) 06'03 minimum elong 13°**¥**29'12 16°37'22 -1607 Mar 19 j 17:33 13°**)**31'14 49.69211 AU max. Earth dist. -1615 Mar 10 j 03:41 -1607 Jun 29 j 10:32 conjunction 5°**)** 34'46 -16°54'23 15°**)** €00'21 retrograde 5°\ 34'46 16°54'24 -1607 Sep 20 j 22:39 -1615 Mar 10 j 03:46 13°**¥**59'56 -17°16'45 minimum elong opposition -1615 Mar 11 j 22:43 5°**₭**37'17 49.14790 AU -1607 Sep 19 j 15:22 14°**₭**01'25 47.80483 AU max. Earth dist. min. Earth dist. -1615 Jun 21 j 07:25 7°**₩**07'15 -1607 Dec 10 j 23:33 13°**¥**00′37 retrograde direct -1615 Sep 11 j 11:15 min. Earth dist. 6°**米**07'59 47.27826 AU opposition -1615 Sep 13 j 02:58 6°\;\;06'04 -17°36'07 conjunction -1606 Mar 19 j 12:16 14°**)**€28'06 -16°34'01 direct -1615 Dec 03 j 04:45 5°¥06'09 minimum elong -1606 Mar 19 j 12:23 14°**)**€28'06 16°34'01 max. Earth dist. -1606 Mar 20 j 21:37 14°**)** 30′01 49.74199 AU conjunction -1614 Mar 11 j 10:16 6°\ 34'40 -16°53'17 retrograde -1606 Jun 30 j 17:11 15°**¥**59'06 -1614 Mar 11 j 10:21 6°**¥**34'40 16°53'18 min. Earth dist. -1606 Sep 20 j 20:55 15°**₭**00'13 47.85142 AU minimum elong -1614 Mar 13 j 05:12 6°**)** 37'11 49.22689 AU -1606 Sep 22 j 03:48 14°**)** 58'45 -17°13'07 max. Earth dist. opposition -1614 Jun 22 j 12:28 8°**₩**06'56 direct -1606 Dec 12 j 03:18 13°**¥**59′29 retrograde -1614 Sep 12 j 17:26 7°**)**€07'43 47.35537 AU min. Earth dist. -1605 Mar 20 j 18:18 opposition -1614 Sep 14 i 08:41 7°\(\)\(\)05'49 -17°34'44 conjunction 15°**)**€26'51 -16°30'27 -1605 Mar 20 i 18:26 direct -1614 Dec 04 i 12:23 6° **\(**05'57 minimum elong 15°**¥**26′52 16°30′28 -1605 Mar 22 i 02:03 max. Earth dist. 15°**)** €28'41 49.78653 AU conjunction -1613 Mar 12 j 16:31 7°**)** 34'17 -16°51'52 retrograde -1605 Jul 01 i 19:54 16°**)** € 57'43 minimum elong -1613 Mar 12 i 16:37 7°**¥**34'17 16°51'52 min. Earth dist. -1605 Sep 22 i 04:32 15°**¥** 58'46 47.89279 AU max. Earth dist. -1613 Mar 14 j 09:32 7°**)** € 36'41 49.30278 AU opposition -1605 Sep 23 j 09:02 15°**¥**57'24 -17°09'15 -1613 Jun 23 j 21:21 9°\ 06'21 direct -1605 Dec 13 j 11:27 14°**)** 58'10 retrograde 8°\mathbf{H}07'10 47.42960 AU min. Earth dist. -1613 Sep 13 j 23:44 opposition -1613 Sep 15 j 14:22 8°\columbf305'19 -17°33'03 conjunction -1604 Mar 21 j 00:29 16°¥25'24 -16°26'39 direct -1613 Dec 05 j 15:41 7°**₩**05'31 minimum elong -1604 Mar 21 j 00:37 16°**¥**25'25 16°26'38 max. Earth dist. -1604 Mar 22 j 07:35 16°**升**27'12 49.82618 AU conjunction -1612 Mar 12 j 22:58 8°\dagger33'41 -16°50'10 retrograde -1604 Jul 01 j 22:33 17°**)** 56'07 -1612 Mar 12 j 23:03 8°**¥**33'41 16°50'10 -1604 Sep 22 j 10:03 16°**¥**57'11 47.92938 AU minimum elong min. Earth dist. 8°**¥**36′04 49.37582 AU -1604 Sep 23 j 13:52 16°**¥**55'51 -17°05'08 max. Earth dist. -1612 Mar 14 j 15:58 opposition -1604 Dec 13 j 19:59 15°**)** 56'38 retrograde -1612 Jun 24 j 03:30 10°**₩**05'34 direct min. Earth dist. -1612 Sep 14 j 06:48 9°**₭**06'24 47.50089 AU opposition -1612 Sep 15 j 19:52 9°**H**04'38 -17°31'03 conjunction -1603 Mar 22 j 06:22 17°**¥**23'45 -16°22'35 direct -1612 Dec 05 j 20:57 8°**)** 04'54 minimum elong -1603 Mar 22 j 06:30 17°**¥**23'45 16°22'36 max. Earth dist. -1603 Mar 23 j 11:09 17°**¥**25′24 49.86136 AU retrograde conjunction -1611 Mar 14 j 05:16 9°**¥**32'56 -16°48'10 -1603 Jul 03 j 06:26 18°**)** 54'18 minimum elong -1611 Mar 14 j 05:23 9°\ 32'56 16°48'10 -1603 Sep 24 j 18:50 17°**)** 54'04 -17°00'44 opposition

max. Earth dist.

-1611 Mar 15 j 20:58

9°**)** 35'14 49.44614 AU

min. Earth dist.

-1603 Sep 23 j 16:10

17°**¥**55′21 47.96193 AU

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-					1604 BCE in historical c		C 22
direct	-1603 Dec 14 j 23:36			minimum elong	-1594 Mar 31 j 10:26	26°) 02'54	15°34'20
	, , ,			max. Earth dist.	-1594 Apr 01 j 05:19		50.02120 AU
conjunction	-1602 Mar 23 j 12:08	18° ¥ 21'52	-16°18'16	retrograde	-1594 Jul 12 j 04:48	27°) € 32'35	
minimum elong	-1602 Mar 23 j 12:17	18° ¥ 21'53		opposition	-1594 Oct 03 j 13:07	26°) 32'48	-16°09'16
max. Earth dist.	-1602 Mar 24 j 16:51		49.89273 AU	min. Earth dist.	-1594 Oct 02 j 20:43		48.09565 AU
retrograde	-1602 Jul 04 j 12:35	19° ¥ 52'17	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	direct	-1594 Dec 23 j 21:02	25°) 33′51	
opposition	-1602 Sep 25 j 23:45	18° ¥ 52'05	-16°56'05	4.1.000	107.1500 25 121.02	20 7(3301	
min. Earth dist.	-1602 Sep 24 j 22:32		47.99079 AU	conjunction	-1593 Apr 01 j 16:01	27° ₩ 00'22	-15°27'47
direct	-1602 Dec 16 j 04:24	17° ¥ 52'54	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	minimum elong	-1593 Apr 01 j 16:11	27° ₭ 00'23	
4.1.000	1002 200 10 10 10 1.2 1	17 7(020)		max. Earth dist.	-1593 Apr 02 j 08:19		50.01676 AU
conjunction	-1601 Mar 24 j 17:58	19° ¥ 19'47	-16°13'41	retrograde	-1593 Jul 13 j 11:48	28°\(\frac{1}{30}\)'00	20.01070110
minimum elong	-1601 Mar 24 j 18:06	19°) 19'48		opposition	-1593 Oct 04 j 17:39	27°) € 30'14	-16°02'20
max. Earth dist.	-1601 Mar 25 j 21:11		49.92083 AU	min. Earth dist.	-1593 Oct 04 j 02:53		48.08750 AU
retrograde	-1601 Jul 05 j 18:16	20° ¥ 50'03	19.92005110	direct	-1593 Dec 25 j 00:56	26° ¥ 31'17	10.00750110
min. Earth dist.	-1601 Sep 26 j 03:21		48.01653 AU	ancet	1373 BCC 23 J 00:30	20 7(311)	
opposition	-1601 Sep 27 j 04:26	19°) 49'54		conjunction	-1592 Apr 01 j 21:55	27°) 57'46	-15°21'00
direct	-1601 Dec 17 j 07:59	18° ¥ 50'44	10 21 0)	minimum elong	-1592 Apr 01 j 22:06	27° H 57'47	
direct	1001 Dec 17 j 07.57	10 7(3044		max. Earth dist.	-1592 Apr 02 j 13:39		50.00708 AU
conjunction	-1600 Mar 24 j 23:45	20° ∺ 17'33	-16°08'50	retrograde	-1592 Jul 13 j 17:49	29°\(\frac{1}{2}27'\)20	30.00700 AC
minimum elong	-1600 Mar 24 j 23:55	20° ∺ 17'33		opposition	-1592 Oct 04 j 22:12	28° H 27'35	15°55'11
max. Earth dist.	-1600 Mar 26 j 01:48		49.94581 AU	min. Earth dist.	-1592 Oct 04 j 22:12 -1592 Oct 04 j 09:13		48.07422 AU
retrograde	-1600 Jul 05 j 22:15	20 X 1902 21° X 47'41	49.94361 AU	direct	-1592 Dec 25 j 05:23	27°\\\\\28'37	48.07422 AO
min. Earth dist.	•		48.03924 AU	direct	-1392 Dec 23 J 03.23	21 X 2031	
opposition	-1600 Sep 26 j 10:00 -1600 Sep 27 j 09:17	20° X 4841 20° X 47'35		conjunction	-1591 Apr 03 j 03:31	28° ¥ 55'04	15012!50
	-1600 Sep 27 j 09.17 -1600 Dec 17 j 13:49	19°) 48'26	-10 43 37		-1591 Apr 03 j 03:31 -1591 Apr 03 j 03:42	28° H 55'05	
direct	-1000 Dec 1/ J 13.49	19 X 4820		minimum elong			49.99275 AU
:	1500 Mar. 26 : 05.21	210W 15110	17003143	max. Earth dist.	-1591 Apr 03 j 17:26	28° π 33'31	49.99273 AU
conjunction minimum elong	-1599 Mar 26 j 05:31 -1599 Mar 26 j 05:39	21°) 15'10 21°) 15'11		ratra ara da	-1591 May 26 j 09:26	0° Υ 24'33	
max. Earth dist.	-1599 Mar 27 j 07:15		49.96790 AU	retrograde	-1591 Jul 14 j 23:48	0 1 24 33 30°R ∺	
	·	21 K 1639 22° X 45'13	49.90/90 AU	:	-1591 Sep 02 j 22:24	30 KA 29° ¥ 24'49	15047147
retrograde	-1599 Jul 07 j 01:04		1.6040120	opposition	-1591 Oct 06 j 02:33		-15°4/4/ 48.05661 AU
opposition	-1599 Sep 28 j 13:55	21°) 45'09		min. Earth dist.	-1591 Oct 05 j 13:57		48.03001 AU
min. Earth dist.	-1599 Sep 27 j 14:53 -1599 Dec 18 j 21:09	20°\(\frac{1}{46}\)'13	48.05883 AU	direct	-1591 Dec 26 j 08:29	28° ∺ 25'50	
direct	-1399 Dec 18 J 21.09	20 X 4003		· · · · · · · · · · · · ·	1500 4 04:00.07	29° ¥ 52'16	1500/144
:	1500 Mar. 27 : 11.07	22°) 12'44	15050110	conjunction	-1590 Apr 04 j 09:07	29° H 52'16 29° H 52'17	
conjunction	-1598 Mar 27 j 11:07			minimum elong	-1590 Apr 04 j 09:18		49.97427 AU
minimum elong	-1598 Mar 27 j 11:17	22°) 12'44		max. Earth dist.	-1590 Apr 04 j 21:38	29° π 32'39 0° Υ	49.97427 AU
max. Earth dist.	-1598 Mar 28 j 10:52	23°\(\frac{1405}{42'41}\)	49.98689 AU	. 1	-1590 Apr 10 j 01:38		
retrograde	-1598 Jul 08 j 07:55		1.602.414.2	retrograde	-1590 Jul 16 j 03:40	1° Υ 21'42	1.5040100
opposition	-1598 Sep 29 j 18:37	22°) 42'42		opposition	-1590 Oct 07 j 07:01	0° Υ 21'58	48.03521 AU
min. Earth dist.	-1598 Sep 28 j 20:47		48.07527 AU	min. Earth dist.	-1590 Oct 06 j 20:25		48.03321 AU
direct	-1598 Dec 20 j 01:11	21° ¥ 43'38		1	-1590 Oct 27 j 01:33	30° ₹ 29° ¥ 22'58	
:	1507 Mar. 20 : 16.52	220W 1011C	15053141	direct	-1590 Dec 27 j 14:10	29° π 22′38 0° Υ	
conjunction	-1597 Mar 28 j 16:52	23° 米 10′16 23° 米 10′16			-1589 Feb 26 j 00:45	0° Υ 48'30	
minimum elong	-1597 Mar 28 j 17:01			evening set	-1589 Apr 04 j 22:54	0° 1 48'30	
max. Earth dist.	-1597 Mar 29 j 16:24		50.00238 AU	. ,.	1500 A 05:14.46	0° Ƴ 49'24	1.4050115
retrograde	-1597 Jul 09 j 14:51	24°) 40'09	1.0020142	conjunction	-1589 Apr 05 j 14:46	0° Υ 49'24 0° Υ 49'25	
opposition	-1597 Sep 30 j 23:19	23°\(\frac{1}{40}\)'13		minimum elong	-1589 Apr 05 j 14:58	0° Υ ′49′25 0° Υ ′50′19	14°59'14
min. Earth dist.	-1597 Sep 30 j 03:09		48.08774 AU	morning rise	-1589 Apr 06 j 07:03		49.95238 AU
direct	-1597 Dec 21 j 04:58	22°) 41′13		max. Earth dist.	-1589 Apr 06 j 02:56		49.95238 AU
	1506 M 20:22 40	2401/07/40	15046147	retrograde	-1589 Jul 17 j 05:47	2°Υ18'47	1.502.211.2
conjunction	-1596 Mar 28 j 22:40	24°) €07'48		opposition	-1589 Oct 08 j 11:21	1° Υ 19'03	
minimum elong	-1596 Mar 28 j 22:51	24°) (07'49		min. Earth dist.	-1589 Oct 08 j 00:57		48.01041 AU
max. Earth dist.	-1596 Mar 29 j 20:16		50.01373 AU	direct	-1589 Dec 28 j 21:40	0°Υ20'03	
retrograde	-1596 Jul 09 j 22:24	25°) € 37'37	40.00571 411	evening set	-1588 Apr 03 j 15:14	1° Y 43'28	
min. Earth dist.	-1596 Sep 30 j 08:08		48.09571 AU		1500 4 05:20 20	100046120	1.4051120
opposition	-1596 Oct 01 j 03:46	24°) 37'45	-16°22'27	conjunction	-1588 Apr 05 j 20:20	1° Υ 46'28	
direct	-1596 Dec 21 j 07:19	23°) € 38'47		minimum elong	-1588 Apr 05 j 20:30	1° Υ 46'29	
	1505 15 20 104 50	2501/05/25	1.50.40140	max. Earth dist.	-1588 Apr 06 j 06:23		49.92726 AU
conjunction	-1595 Mar 30 j 04:29	25° ¥ 05′21		morning rise	-1588 Apr 08 j 01:51	1° Υ 49'31	
minimum elong	-1595 Mar 30 j 04:38	25°¥05'22		retrograde	-1588 Jul 17 j 11:42	3°Y15'50	1.500.405
max. Earth dist.	-1595 Mar 31 j 00:23		50.02010 AU	opposition	-1588 Oct 08 j 15:39	2°Υ16'07	
retrograde	-1595 Jul 11 j 02:26	26°) ₹35'06	1.601.515.0	min. Earth dist.	-1588 Oct 08 j 06:33		47.98265 AU
opposition	-1595 Oct 02 j 08:31	25° ¥ 35'18		direct	-1588 Dec 29 j 01:56	1°Υ17'06	
min. Earth dist.	-1595 Oct 01 j 15:21		48.09847 AU	evening set	-1587 Apr 04 j 00:05	2° Y 39'22	
direct	-1595 Dec 22 j 13:07	24° ∺ 36′21			1507 4 07:01:50	2000 4212	1.40.42120
aaniun -ti	1504 M 21 : 10 17	2601/02/52	15024120	conjunction	-1587 Apr 07 j 01:59	2° Y 43'33	
conjunction	-1594 Mar 31 j 10:15	26° ∺ 02'53	-13 34 20	minimum elong	-1587 Apr 07 j 02:12	2° Y 43'33	14 45 29

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1587 in astronomical counting style is the year 1588 BCE in historical counting style. 2°**Υ**44'06 49.89922 AU -1587 Apr 07 i 11:58 conjunction -1580 Apr 13 j 18:07 9°Y24'45 -13°40'41 max. Earth dist. minimum elong -1587 Apr 10 j 04:23 2°Y47'46 -1580 Apr 13 j 18:19 9°Y24'46 13°40'40 morning rise -1587 Jul 18 j 18:12 4°Υ12'54 -1580 Apr 13 j 17:28 9°**Υ**24'43 49.59404 AU retrograde max. Earth dist. -1587 Oct 09 j 20:05 3°Y13'12 -15°15'36 -1580 Apr 20 j 10:16 9°Y33'49 opposition morning rise -1580 Jul 25 j 08:58 10°**Y**54'09 -1587 Oct 09 j 12:08 3°Υ13'35 47.95186 AU min. Earth dist. retrograde 2°Y14'11 -1580 Oct 16 j 02:51 9°Y54'28 -14°09'39 direct -1587 Dec 30 j 05:43 opposition -1580 Oct 16 j 04:21 -1586 Apr 04 j 13:06 3°Y35'33 9°Υ54'24 47.62136 AU evening set min. Earth dist. 8°Y55'16 direct -1579 Jan 05 j 12:31 3°**Υ**40'39 -14°35'13 -1579 Apr 07 j 23:30 10°**Y**12'33 conjunction -1586 Apr 08 j 07:24 evening set minimum elong -1586 Apr 08 j 07:35 3°Y40'40 14°35'13 3°**Y**41'08 49.86833 AU max. Earth dist. -1586 Apr 08 j 15:49 conjunction -1579 Apr 15 j 00:00 10°**Y**22'06 -13°30'48 -1586 Apr 12 j 02:13 3°Y45'48 -1579 Apr 15 j 00:12 10°**Y**22'07 13°30'48 morning rise minimum elong -1586 Jul 20 j 02:44 5° Y10'00-1579 Apr 14 j 22:45 10°**Y**′22'02 49.53130 AU retrograde max. Earth dist. -1579 Apr 22 j 01:13 opposition -1586 Oct 11 j 00:25 4°Υ10'20 -15°06'53 morning rise 10°Y31'41 min. Earth dist. -1586 Oct 10 j 16:42 4°Υ10'42 47.91806 AU retrograde -1579 Jul 26 j 11:18 11°Y51'30 direct -1586 Dec 31 j 06:52 3°Υ11'19 opposition -1579 Oct 17 j 07:12 10°Υ51'47 -13°59'17 evening set -1585 Apr 05 j 04:34 4°Y31'56 min. Earth dist. -1579 Oct 17 j 09:04 10°**Y**51'41 47.55505 AU direct -1578 Jan 06 j 19:38 9°Y52'30 conjunction -1585 Apr 09 j 13:04 4°Υ37'51 -14°26'42 evening set -1578 Apr 08 j 20:21 11°Y09'21 minimum elong -1585 Apr 09 j 13:17 4°**Υ**37'51 14°26'42 max. Earth dist. -1585 Apr 09 j 20:15 4°Υ38'15 49.83405 AU conjunction -1578 Apr 16 j 05:35 11°Y19'24 -13°20'41 morning rise -1585 Apr 13 j 22:11 4°**Y**43'47 minimum elong -1578 Apr 16 i 05:47 11°Υ19'24 13°20'40 retrograde -1585 Jul 21 i 07:47 6°**℃**07'12 max. Earth dist. -1578 Apr 16 j 02:08 11°Υ19'12 49.46454 AU opposition -1585 Oct 12 i 04:47 5°**Υ**'07'33 -14°57'56 morning rise -1578 Apr 23 i 15:44 11°Y29'29 min. Earth dist. -1585 Oct 11 i 23:18 5°**Y**07'49 47.88064 AU retrograde -1578 Jul 27 j 16:31 12° Y 48'50 -1584 Jan 01 j 10:54 4°Y08'33 -1578 Oct 18 j 11:39 11°**Υ**49'03 -13°48'41 direct opposition -1584 Apr 04 j 21:44 5°Y28'29 -1578 Oct 18 j 15:00 11°**Υ**48'54 47.48512 AU evening set min. Earth dist. -1577 Jan 08 j 00:35 10°**Y**49'43 direct -1584 Apr 09 j 18:55 5°Y35'08 -14°17'57 -1577 Apr 09 j 17:43 12°Y06'09 conjunction evening set -1584 Apr 09 j 19:06 5°**Υ**35'08 14°17'56 minimum elong -1584 Apr 10 j 01:25 5°**Υ**35'30 49.79597 AU -1577 Apr 17 j 11:32 12°Υ16'40 -13°10'20 max. Earth dist. conjunction -1584 Apr 14 j 16:40 5°**Y**41'48 -1577 Apr 17 j 11:44 minimum elong 12°**Y**16'41 13°10'19 morning rise -1584 Jul 21 j 09:20 7°**Y**04′29 -1577 Apr 17 j 07:50 12°**Y**16'28 49.39430 AU max. Earth dist. retrograde 6°**Υ**04'52 -14°48'44 -1577 Apr 25 j 06:09 -1584 Oct 12 j 09:07 12°**Y**27′15 opposition morning rise -1584 Oct 12 j 04:12 6°**Y**05'06 47.83893 AU -1577 Jul 28 j 21:23 13°**Y**46′09 min. Earth dist. retrograde -1583 Jan 01 j 19:06 5°Y05'51 -1577 Oct 19 j 16:00 12°**Y**′46′20 -13°37′49 direct opposition 6°Y25'12 -1577 Oct 19 j 20:33 12°**Y**46′07 47.41184 AU evening set -1583 Apr 05 j 15:50 min. Earth dist. direct -1576 Jan 09 j 06:02 11°**Y**46'56 conjunction -1583 Apr 11 j 00:33 6°Y32'30 -14°08'58 evening set -1576 Apr 09 j 15:32 13°Y03'00 minimum elong -1583 Apr 11 j 00:45 6°Υ32'30 14°08'57 13°Υ13'59 -12°59'43 max. Earth dist. -1583 Apr 11 j 04:28 6°**Υ**32'43 49.75321 AU conjunction -1576 Apr 17 j 17:25 -1583 Apr 16 j 10:01 6°Y39'50 -1576 Apr 17 j 17:37 13°Υ13'59 12°59'42 morning rise minimum elong -1583 Jul 22 j 14:32 8°Y01'53 max. Earth dist. -1576 Apr 17 j 12:08 13°Υ13'41 49.32111 AU retrograde -1583 Oct 13 j 13:35 7°Υ02'16 -14°39'18 -1576 Apr 25 j 20:13 13°**Y**25′02 opposition morning rise -1583 Oct 13 j 10:22 7°**Υ**02'25 47.79237 AU -1576 Jul 29 j 05:27 14°**Y**43'30 min. Earth dist. retrograde 6°**Y**'03'14 -1576 Oct 19 i 20:25 13°Y43'40 -13°26'41 direct -1582 Jan 03 i 00:28 opposition -1576 Oct 20 i 01:09 13°**Υ**43'26 47.33576 AU evening set -1582 Apr 06 j 10:51 7°Υ22'01 min. Earth dist. 12°\\dagge^44'12 direct -1575 Jan 09 i 07:58 -1582 Apr 12 j 06:28 7°**Y**29'55 -13°59'45 conjunction evening set -1575 Apr 10 j 13:18 13°Y59'56 -1582 Apr 12 i 06:39 7°Y29'56 13°59'44 minimum elong max. Earth dist. -1582 Apr 12 i 09:43 7°**Y**30'06 49.70535 AU conjunction -1575 Apr 18 i 23:11 14°Υ11'23 -12°48'50 -1582 Apr 18 j 02:43 7°**Y**37′52 minimum elong -1575 Apr 18 i 23:23 14°**Υ**11'23 12°48'50 morning rise -1582 Jul 23 j 20:15 8°Y59'20 max. Earth dist. -1575 Apr 18 j 16:47 14°**Υ**11'01 49.24501 AU retrograde 7°**Υ**59'42 -14°29'38 -1575 Apr 27 j 10:02 14°**Y**22'53 opposition -1582 Oct 14 j 18:03 morning rise 7°**Υ**′59'46 47.74047 AU 15°**Y**40′59 -1575 Jul 30 j 11:57 min. Earth dist. -1582 Oct 14 j 16:34 retrograde direct -1581 Jan 04 j 05:13 7°**Y**00'37 opposition -1575 Oct 21 j 01:01 14°**Y**41'07 -13°15'17 evening set -1581 Apr 07 j 06:36 8°Y18'53 min. Earth dist. -1575 Oct 21 j 07:38 14°**Υ**40'48 47.25687 AU direct -1574 Jan 10 j 11:13 13°**Y**41'37 -1581 Apr 13 j 12:15 8°**Υ**27'21 -13°50'20 -1574 Apr 11 j 11:36 14°Υ57'02 conjunction evening set -1581 Apr 13 j 12:28 8°Y27'22 13°50'20 minimum elong 15°**Y**08'56 -12°37'43 -1581 Apr 13 j 13:23 8°**Y**27'25 49.65230 AU -1574 Apr 20 j 05:11 max. Earth dist. conjunction morning rise -1581 Apr 19 j 18:40 8°**Y**35′52 minimum elong -1574 Apr 20 j 05:24 15°**Y**′08'56 12°37'42 -1581 Jul 25 j 03:39 retrograde 9°**Y**56'45 max. Earth dist. -1574 Apr 19 j 22:26 15°**Y**′08'32 49.16629 AU opposition -1581 Oct 15 j 22:26 8°**Υ**57'07 -14°19'45 morning rise -1574 Apr 28 j 23:37 15°**Y**20′52 min. Earth dist. -1581 Oct 15 j 21:40 8°**Y**57'09 47.68337 AU retrograde -1574 Jul 31 j 14:38 16°**Y**38'37 -1580 Jan 05 j 07:46 7°**Y**57'58 -1574 Oct 22 j 05:27 15°Υ38'45 -13°03'37 direct opposition -1580 Apr 07 j 02:47 9°Υ15'44 min. Earth dist. -1574 Oct 22 j 12:09 15°**Y**38′26 47.17510 AU evening set

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1573 in astronomical counting style is the year 1574 BCE in historical counting style. 14°**Y**39'13 direct -1573 Jan 11 i 18:33 retrograde -1567 Aug 07 i 06:28 23°Y28'35 -1573 Apr 12 j 10:07 15°**Y**54'21 -1567 Oct 28 j 14:59 22°Y28'28 -11°35'02 evening set opposition min. Earth dist. -1567 Oct 29 j 07:42 22°**Υ**27'39 46.48019 AU -1573 Apr 21 j 11:08 16°**Y**′06'41 -12°26'20 -1566 Jan 18 j 07:42 21°**Y**28'27 direct conjunction 22°**Y**41'58 -1573 Apr 21 j 11:20 16°**Υ**06'42 12°26'19 -1566 Apr 17 j 07:47 minimum elong evening set 16°**Y**′06′10 49.08448 AU -1573 Apr 21 j 02:08 max. Earth dist. 16°**Y**19′04 -1573 Apr 30 j 13:14 22°**Y**'57'05 -11°00'02 morning rise conjunction -1566 Apr 28 j 07:54 22°**Υ**57'06 11°00'02 -1573 Aug 01 j 19:53 17°**Ƴ**36'30 -1566 Apr 28 j 08:05 retrograde minimum elong 22°Υ55'59 48.38410 AU -1573 Oct 23 j 10:04 -1566 Apr 27 j 12:45 opposition 16°**Y**36'38 -12°51'41 max. Earth dist. 23°**Y**12′17 min. Earth dist. -1573 Oct 23 j 18:23 16°**Y**36'14 47.09004 AU morning rise -1566 May 09 j 09:05 direct -1572 Jan 13 j 00:02 15°**Y**37′04 retrograde -1566 Aug 08 j 15:07 24°**Y**27'46 16°**Y**51'57 -1566 Oct 29 j 19:50 23°**Y**27'34 -11°21'23 evening set -1572 Apr 12 j 08:59 opposition -1566 Oct 30 j 13:10 23°**Y**26'43 46.36257 AU min. Earth dist. conjunction -1572 Apr 21 j 17:24 17°Υ04'42 -12°14'42 direct -1565 Jan 19 j 10:18 22°Y27'25 minimum elong -1572 Apr 21 j 17:37 17°**Υ**04'43 12°14'41 evening set -1565 Apr 18 j 08:16 23°Y40'45 max. Earth dist. -1572 Apr 21 j 08:05 17°**Y**04'10 48.99891 AU morning rise -1572 May 01 j 02:42 17°**Y**17'31 conjunction -1565 Apr 29 j 14:32 23°**Y**'56'15 -10°46'45 retrograde -1572 Aug 02 j 01:57 18° **Y**34'39 minimum elong -1565 Apr 29 j 14:45 23°Y'56'16 10°46'43 opposition -1572 Oct 23 j 14:40 17°**Y**'34'46 -12°39'31 max. Earth dist. -1565 Apr 28 j 18:04 23°Y55'04 48.26615 AU min. Earth dist. -1572 Oct 24 j 00:31 17°**Y**34'18 47.00079 AU morning rise -1565 May 10 j 21:51 24° Y 11'50 direct -1571 Jan 13 j 04:39 16°**Y**35′11 retrograde -1565 Aug 09 j 23:56 25°**Y**27′04 evening set -1571 Apr 13 i 08:15 17°**Y**49'48 opposition -1565 Oct 31 i 01:00 24°Y26'46 -11°07'29 min. Earth dist. -1565 Oct 31 i 20:17 24°Υ25'50 46.24149 AU conjunction -1571 Apr 22 j 23:37 18°**Y**'02'58 -12°02'50 direct -1564 Jan 20 i 12:59 23°Y26'31 minimum elong -1571 Apr 22 j 23:49 18°**Υ**'02'59 12°02'48 evening set -1564 Apr 18 j 09:04 24°**Y**39'41 max. Earth dist. -1571 Apr 22 i 12:12 18°**Υ**'02'19 48.90901 AU -1571 May 02 j 16:01 18°Y16'13 -1564 Apr 29 j 21:16 24°Y55'33 -10°33'12 morning rise conjunction -1571 Aug 03 j 10:30 19°Y33'03 -1564 Apr 29 j 21:27 24°**Y**55'33 10°33'11 retrograde minimum elong -1571 Oct 24 j 19:22 18°**Y**33'10 -12°27'05 max. Earth dist. -1564 Apr 29 j 00:18 24°Υ′54'20 48.14508 AU opposition -1571 Oct 25 j 05:56 18°**Y**32'40 46.90693 AU -1564 May 11 j 10:21 25°**Y**11′29 min. Earth dist. morning rise -1570 Jan 14 j 06:40 17°Y33'31 -1564 Aug 10 j 03:58 26°**Y**26'30 retrograde direct -1570 Apr 14 j 07:32 18°**Y**47'54 opposition -1564 Oct 31 j 05:59 25°**Υ**26'07 -10°53'18 evening set -1564 Nov 01 j 01:17 min. Earth dist. 25°**Y**25'11 46.11738 AU 19°**Υ**01'30 -11°50'44 -1570 Apr 24 j 05:53 -1563 Jan 20 j 20:18 24°**Y**25'45 conjunction direct -1570 Apr 24 j 06:05 19°**Y**01'30 11°50'43 -1563 Apr 19 j 10:03 25°**Y**38'47 minimum elong evening set 19°**Υ**00'44 48.81402 AU -1570 Apr 23 j 16:40 -1563 Apr 30 j 04:53 25°**Y**53'40 48.02112 AU max. Earth dist. max. Earth dist. -1570 May 04 j 05:16 morning rise 19°**Y**15′09 -1563 May 01 j 03:55 retrograde -1570 Aug 04 j 17:13 20°Y31'42 conjunction 25°**Y**'55'00 -10°19'24 opposition -1570 Oct 26 j 00:20 19°**Y**31'46 -12°14'26 minimum elong -1563 May 01 j 04:08 25°**Y**'55'00 10°19'23 min. Earth dist. -1570 Oct 26 j 13:16 19°**Υ**31'09 46.80779 AU morning rise -1563 May 12 j 22:56 26°**Y**11'18 -1569 Jan 15 j 11:20 18°**Y**32'04 retrograde -1563 Aug 11 j 08:39 27°**Y**26′08 direct -1569 Apr 15 j 07:21 19° **Y**46'13 -1563 Nov 01 j 11:16 26°\bar{`25'40} -10°38'50 evening set opposition min. Earth dist. -1563 Nov 02 j 08:01 26°**Υ**24'39 45.99059 AU -1569 Apr 25 j 12:26 20°Y00'13 -11°38'24 -1562 Jan 22 j 03:12 25°**Y**25'11 conjunction direct -1569 Apr 25 j 12:38 20°**Y**'00'13 11°38'23 -1562 Apr 20 j 11:04 26°**Y**38′05 minimum elong evening set -1569 Apr 24 j 22:18 26°Υ53'19 47.89442 AU max. Earth dist. 19°**Υ**59'24 48.71384 AU max. Earth dist. -1562 May 01 i 11:41 -1569 May 05 i 18:25 morning rise 20°Υ14'15 -1562 May 02 j 10:46 26°**Y**'54'40 -10°05'20 retrograde -1569 Aug 05 i 20:59 21°Y30'31 conjunction -1569 Oct 27 i 05:03 opposition 20°**Υ**30'33 -12°01'32 minimum elong -1562 May 02 i 10:57 26°Y54'40 10°05'19 min. Earth dist. -1569 Oct 27 i 18:38 20°Υ29'54 46.70337 AU morning rise -1562 May 14 i 11:18 27°**Y**11'19 direct -1568 Jan 16 j 18:42 19°**Y**30'44 retrograde -1562 Aug 12 j 13:15 28°Y25'59 -1568 Apr 15 j 07:24 20°**Y**44'42 -1562 Nov 02 j 16:38 27°**Y**25'27 -10°24'06 evening set opposition min. Earth dist. -1562 Nov 03 j 14:24 27°**Υ**24'23 45.86085 AU 26°**Y**24'52 conjunction -1568 Apr 25 j 18:55 20°**Y**'59'04 -11°25'51 direct -1561 Jan 23 j 10:28 27°**Y**37'40 minimum elong -1568 Apr 25 j 19:07 20°Υ59'05 11°25'51 evening set -1561 Apr 21 j 12:41 max. Earth dist. -1568 Apr 25 j 02:05 20°Υ58'06 48.60845 AU -1568 May 06 j 07:36 21°Y13'30 conjunction -1561 May 03 j 17:46 27°Υ54'36 -9°50'59 morning rise -1568 Aug 06 j 02:28 22°Y29'30 minimum elong -1561 May 03 j 17:58 27°**Y**54'37 9°50'59 retrograde -1568 Oct 27 j 10:01 21°**Y**'29'27 -11°48'24 -1561 May 02 j 16:52 27°**Υ**53'09 47.76477 AU opposition max. Earth dist. -1568 Oct 28 j 01:32 21°**Υ**28'42 46.59406 AU -1561 May 15 j 23:53 28°**Y**11'36 min. Earth dist. morning rise 20°**Y**29'33 29°Y26'08 direct -1567 Jan 17 j 00:40 retrograde -1561 Aug 13 j 21:42 evening set -1567 Apr 16 j 07:23 21°**Y**43'17 opposition -1561 Nov 03 j 21:53 28°**Y**25'32 -10°09'05 max. Earth dist. -1567 Apr 26 j 08:05 21°Υ57'02 48.49831 AU min. Earth dist. -1561 Nov 04 j 20:16 28°**Y**24'27 45.72796 AU direct -1560 Jan 24 j 13:59 27°**Y**24'51 conjunction -1567 Apr 27 j 01:24 21°**Y**58'01 -11°13'04 evening set -1560 Apr 21 j 14:30 28°**Y**37'35 -1567 Apr 27 j 01:36 21°**Y**58'02 11°13'03 max. Earth dist. -1560 May 02 j 22:41 28°Υ53'19 47.63145 AU minimum elong

-1567 May 07 j 20:19 22°**Υ**12'51

morning rise

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1560 in astronomical counting style is the year 1561 BCE in historical counting style. 28°**Y**'54'51 -9°36'24 -1560 May 04 i 01:02 morning rise -1554 May 24 i 15:24 5°**8**22'19 conjunction -1560 May 04 j 01:13 28°Y54'52 9°36'23 -1554 Aug 21 j 02:05 6°836'13 minimum elong retrograde -1560 May 16 j 12:30 29°**Y**12'12 opposition -1554 Nov 10 j 15:02 5°**8**34'53 -8°16'38 morning rise -1560 Jun 24 j 15:41 0°8 -1554 Nov 11 j 22:40 5°**8**33'20 44.67086 AU min. Earth dist. -1560 Aug 14 j 06:06 0°**8**26'37 -1553 Jan 31 j 06:43 4°833'13 retrograde direct -1560 Oct 04 j 05:13 5°**8**45'46 30°R**Y** evening set -1553 Apr 28 j 10:40 6°**8**03'08 46.56911 AU -1560 Nov 04 j 03:31 29°**Y**25'57 -9°53'49 opposition max. Earth dist. -1553 May 10 j 17:42 min. Earth dist. -1560 Nov 05 j 04:06 29°**Y**24'45 45.59114 AU direct -1559 Jan 24 j 18:11 28°**Y**25'10 conjunction -1553 May 12 j 06:53 6°**8**05'20 -7°47'13 evening set -1559 Apr 22 j 16:31 29°**Y**37′50 minimum elong -1553 May 12 j 07:03 6°**8**05'21 7°47'12 max. Earth dist. -1559 May 04 j 05:12 29°**Y**53'52 47.49397 AU morning rise -1553 May 26 j 03:55 6°**8**24'59 7°**8**38'50 retrograde -1553 Aug 22 j 08:36 -1559 May 05 j 08:17 29°Y55'27 -9°21'33 conjunction opposition -1553 Nov 11 j 21:18 6°**8**37'22 -7°59'29 minimum elong -1559 May 05 j 08:28 29°Y55'28 9°21'32 min. Earth dist. -1553 Nov 13 j 06:45 6°**8**35'42 44.50353 AU -1559 May 08 j 14:08 0°8 direct -1552 Feb 01 j 14:39 5°**8**35'31 morning rise -1559 May 18 j 00:51 0°813'09 evening set -1552 Apr 28 j 14:31 6°848'06 retrograde -1559 Aug 15 j 13:07 1°**8**27'27 max. Earth dist. -1552 May 11 j 01:59 7°**8**05'46 46.40170 AU opposition -1559 Nov 05 j 09:08 0°**8**26'42 -9°38'16 min. Earth dist. -1559 Nov 06 j 10:12 0°**႘**25'29 45.44977 AU conjunction -1552 May 12 j 15:09 7°**8**07'59 -7°30'35 -1559 Nov 28 j 22:14 30°RY minimum elong -1552 May 12 j 15:19 7°**8**08'00 7°30'33 direct -1558 Jan 26 j 00:41 29°**Y**25'48 morning rise -1552 May 26 j 16:13 7°**8**27'56 -1558 Mar 24 i 09:23 0°8 retrograde -1552 Aug 22 j 13:12 8°841'47 evening set -1558 Apr 23 i 18:58 0°**8**38'26 opposition -1552 Nov 12 j 03:48 7°840'11 -7°42'02 max. Earth dist. -1558 May 05 j 09:54 0°**8**54'39 47.35161 AU min. Earth dist. -1552 Nov 13 j 13:52 7°**8**38'29 44.33349 AU direct -1551 Feb 02 j 00:09 6°**8**38'09 -1558 May 06 j 15:44 0°856'23 -9°06'27 -1551 Apr 29 j 18:36 7°850'48 conjunction evening set -1558 May 06 j 15:54 0°856'24 9°06'26 max. Earth dist. -1551 May 12 j 08:17 8°808'40 46.23188 AU minimum elong -1558 May 19 j 13:31 1°814'25 morning rise -1558 Aug 16 j 20:06 2°**8**28'37 -1551 May 13 j 23:12 8°811'00 -7°13'40 retrograde conjunction -1558 Nov 06 j 14:55 1°**8**27'47 -9°22'28 -1551 May 13 j 23:21 8°811'00 7°13'39 opposition minimum elong -1558 Nov 07 j 18:08 morning rise -1551 May 28 j 04:29 min. Earth dist. 1°**8**26'27 45.30346 AU 8°**8**31'15 -1551 Aug 23 j 21:54 9°845'07 -1557 Jan 27 j 07:07 0°**8**26'45 retrograde direct 8°**8**43'23 -7°24'17 -1551 Nov 13 j 10:23 -1557 Apr 24 j 21:36 1°**8**39'20 evening set opposition -1551 Nov 14 j 20:56 8°**8**41'39 44.16125 AU min. Earth dist. -1557 May 07 j 23:30 1°**8**57'38 -8°51'07 -1550 Feb 03 j 05:30 7°**8**41'12 conjunction direct -1557 May 07 j 23:41 8°**8**53'55 minimum elong 1°**8**57'38 8°51'07 evening set -1550 Apr 30 j 23:01 -1557 May 06 j 16:56 -1550 May 13 j 15:56 max. Earth dist. 1°**8**55'50 47.20416 AU max. Earth dist. 9°**8**12'02 46.05972 AU morning rise -1557 May 21 j 02:04 2°**8**16'00 retrograde -1557 Aug 18 j 00:44 3°**8**30'06 conjunction -1550 May 15 j 07:41 9°814'25 -6°56'28 -1557 Nov 07 j 20:52 2°**8**29'09 -9°06'25 minimum elong -1550 May 15 j 07:51 9°**8**14'25 6°56'27 opposition min. Earth dist. -1557 Nov 09 j 01:19 2°**8**27'45 45.15192 AU morning rise -1550 May 29 j 16:50 9°834'59 -1556 Jan 28 j 15:20 1°**8**27'59 -1550 Aug 25 j 07:17 10°848'53 direct retrograde -1556 Apr 25 j 00:37 2°840'32 -1550 Nov 14 j 17:10 9°847'01 -7°06'15 evening set opposition max. Earth dist. -1556 May 06 j 22:23 2°857'13 47.05172 AU min. Earth dist. -1550 Nov 16 j 05:21 9°845'13 43.98667 AU -1549 Feb 04 j 10:29 8°844'41 direct 2°859'09 -8°35'32 conjunction -1556 May 08 i 07:11 evening set -1549 May 02 j 03:50 9°857'31 minimum elong -1556 May 08 i 07:21 2°**8**59'10 8°35'30 max. Earth dist. -1549 May 15 i 00:02 10°**8**15'53 45.88528 AU morning rise -1556 May 21 j 14:38 3°**8**17'50 -1549 May 16 i 16:23 retrograde -1556 Aug 18 j 09:16 4°831'52 conjunction 10°818'19 -6°38'59 minimum elong -1556 Nov 08 i 02:45 3°**8**30'48 -8°50'05 -1549 May 16 i 16:31 10°**8**18'19 6°38'59 opposition min. Earth dist. -1556 Nov 09 j 08:11 3°829'21 44.99567 AU -1549 May 31 j 05:18 10°839'10 morning rise -1555 Jan 28 j 19:58 2°**8**29'28 -1549 Aug 26 j 17:49 11°853'08 direct retrograde 3°842'00 -1549 Nov 16 j 00:00 10°851'09 -6°47'54 evening set -1555 Apr 26 j 03:42 opposition 10°**8**49'20 43.80953 AU -1549 Nov 17 j 12:19 max. Earth dist. -1555 May 08 j 04:47 3°**8**58'55 46.89461 AU min. Earth dist. 9°848'39 direct -1548 Feb 05 j 16:29 conjunction -1555 May 09 j 15:01 4°800'56 -8°19'41 evening set -1548 May 02 j 09:03 11°801'38 -1555 May 09 j 15:12 4°800'57 8°19'41 max. Earth dist. -1548 May 15 j 06:38 11°**8**20'10 45.70781 AU minimum elong -1555 May 23 j 03:05 4°819'57 morning rise -1555 Aug 19 j 18:53 5°**8**33'55 -1548 May 17 j 01:10 11°**8**22'44 -6°21'14 retrograde conjunction -1555 Nov 09 j 08:54 4°**8**32'43 -8°33'30 -1548 May 17 j 01:19 11°**8**22'45 6°21'12 opposition minimum elong 11°**8**43'53 min. Earth dist. -1555 Nov 10 j 16:26 4°**8**31'09 44.83511 AU morning rise -1548 May 31 j 17:48 -1554 Jan 29 j 23:50 3°**8**31'13 retrograde -1548 Aug 27 j 03:50 12°**8**57'55 direct evening set -1554 Apr 27 j 06:57 4°**8**43'44 opposition -1548 Nov 16 j 07:07 11°**8**55'49 -6°29'17 max. Earth dist. -1554 May 09 j 11:53 5°**8**00'56 46.73363 AU min. Earth dist. -1548 Nov 17 j 21:28 11°**8**53'54 43.62922 AU direct -1547 Feb 05 j 23:20 10°**8**53'10 -1554 May 10 j 22:51 5°803'00 -8°03'35 -1547 May 03 j 14:33 12°806'18 conjunction evening set -1554 May 10 j 23:02 5°803'00 8°03'33 max. Earth dist. -1547 May 16 j 15:29 12°**8**25'06 45.52683 AU minimum elong

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1547 in astronomical counting style is the year 1548 BCE in historical counting style. -1547 May 18 j 10:21 12°**8**27'42 -6°03'12 morning rise -1541 Jun 10 j 10:57 19°830'33 conjunction -1547 May 18 j 10:29 12°**8**27'42 6°03'11 -1541 Sep 04 j 18:23 20°845'29 minimum elong retrograde -1547 Jun 02 j 06:17 12°849'08 opposition -1541 Nov 24 j 14:23 19°842'07 -4°10'45 morning rise -1541 Nov 26 j 12:53 14°**8**03'16 -1547 Aug 28 j 09:51 min. Earth dist. 19°**8**39'43 42.25247 AU retrograde -1547 Nov 17 j 14:25 -1540 Feb 14 j 10:32 opposition 13°**8**01'02 -6°10'21 direct 18°**8**37'51 -1547 Nov 19 j 05:35 min. Earth dist. 12°**8**59'04 43.44502 AU evening set -1540 May 10 j 15:55 19°**8**52'25 direct -1546 Feb 07 j 09:02 11°**8**58'12 max. Earth dist. -1540 May 24 j 03:04 20°**8**12'24 44.14412 AU evening set -1546 May 04 j 20:30 13°**8**11'30 max. Earth dist. -1546 May 17 j 22:22 13°**8**30'25 45.34171 AU conjunction -1540 May 26 j 07:59 20°**8**15'43 -3°49'24 minimum elong -1540 May 26 j 08:04 20°**8**15'43 3°49'23 conjunction -1546 May 19 j 19:33 13°**8**33'11 -5°44'54 morning rise -1540 Jun 10 j 23:38 20°**8**39'02 -1546 May 19 j 19:42 -1540 Sep 05 j 02:50 21°**8**54'10 minimum elong 13°**8**33'11 5°44'53 retrograde -1546 Jun 03 j 18:59 morning rise 13°**8**54'55 opposition -1540 Nov 24 j 23:09 20°**8**50'36 -3°49'47 -1546 Aug 01 j 11:18 15°8 min. Earth dist. -1540 Nov 26 j 22:56 20°**8**48'07 42.04280 AU retrograde -1546 Aug 29 j 17:47 15°809'08 direct -1539 Feb 14 j 19:38 19°**8**46'05 -1546 Sep 27 j 05:21 15°R₩ evening set -1539 May 12 j 00:30 21°800'58 opposition -1546 Nov 18 j 21:57 14°**8**06'46 -5°51'09 max. Earth dist. -1539 May 25 j 13:01 21°**8**21'07 43.93440 AU min. Earth dist. -1546 Nov 20 j 14:24 14°**8**04'43 43.25650 AU direct -1545 Feb 08 j 17:09 13°**8**03'43 conjunction -1539 May 27 j 18:42 21°**8**24'30 -3°29'10 evening set -1545 May 06 j 02:53 14°**8**17'11 minimum elong -1539 May 27 j 18:47 21°**8**24'30 3°29'08 max. Earth dist. -1545 May 19 j 06:43 14°**8**36'18 45.15191 AU morning rise -1539 Jun 12 j 12:33 21°848'03 retrograde -1539 Sep 06 i 14:52 23°**8**03'27 conjunction -1545 May 21 i 05:17 14°**8**39'09 -5°26'20 opposition -1539 Nov 26 i 08:02 21°859'40 -3°28'29 minimum elong -1545 May 21 i 05:24 14°**8**39'10 5°26'18 min. Earth dist. -1539 Nov 28 i 07:45 21°857'11 41.83144 AU -1545 Jun 04 j 12:19 15°8 direct -1538 Feb 16 j 02:50 20°**8**54'55 -1545 Jun 05 j 07:44 15°**8**01'10 -1538 May 13 j 09:27 morning rise evening set 22°810'08 -1545 Aug 31 j 03:15 max. Earth dist. -1538 May 26 j 22:19 16°**8**15'31 22°**8**30'25 43.72286 AU retrograde -1545 Nov 20 j 05:42 15°**8**12'57 -5°31'39 opposition 15°**8**10'48 43.06331 AU -1545 Nov 22 j 00:12 -1538 May 29 j 05:40 min. Earth dist. conjunction 22°**8**33'55 -3°08'39 -1545 Nov 30 j 22:27 -1538 May 29 j 05:45 15°R₩ minimum elong 22°**8**33'55 3°08'38 14°**8**09'42 -1544 Feb 09 j 23:46 -1538 Jun 14 j 01:28 direct morning rise 22°**8**57'42 -1538 Sep 08 j 04:26 -1544 Apr 19 j 09:51 15°8 24°**8**13'23 retrograde -1538 Nov 27 j 17:22 evening set -1544 May 06 j 09:39 15°**8**23'21 23°**8**09'25 -3°06'54 opposition max. Earth dist. -1544 May 19 j 15:16 -1538 Nov 29 j 18:51 23°**8**06'50 41.61835 AU 15°**8**42'39 44.95769 AU min. Earth dist. -1537 Feb 17 j 09:52 22°**8**04'26 direct -1544 May 21 j 15:05 15°**8**45'35 -5°07'30 conjunction evening set -1537 May 14 j 18:57 23°**8**20'02 15°**8**45'36 5°07'29 minimum elong -1544 May 21 j 15:13 max. Earth dist. -1537 May 28 j 09:47 23°**8**40'33 43.50952 AU morning rise -1544 Jun 05 j 20:34 16°**8**07'52 retrograde -1544 Aug 31 j 14:08 17°**8**22'20 conjunction -1537 May 30 j 17:06 23°**8**44'03 -2°47'51 opposition -1544 Nov 20 j 13:35 16°**8**19'36 -5°11'52 minimum elong -1537 May 30 j 17:11 23°**8**44'04 2°47'50 min. Earth dist. -1544 Nov 22 j 08:24 16°**8**17'25 42.86585 AU morning rise -1537 Jun 15 j 14:33 24°**8**08'05 -1543 Feb 10 j 06:06 15°**8**16'06 -1537 Sep 09 j 14:36 25°**8**24'04 direct retrograde -1543 May 07 j 16:37 16°**8**29'57 -1537 Nov 29 j 02:45 24°**8**19'56 -2°45'00 evening set opposition max. Earth dist. -1543 May 20 j 22:51 16°**8**49'22 44.75920 AU min. Earth dist. -1537 Dec 01 j 04:23 24°**8**17'20 41.40326 AU -1536 Feb 18 j 20:52 23°**8**14'43 direct conjunction -1543 May 23 j 00:52 16°**8**52'27 -4°48'23 evening set -1536 May 15 i 05:06 24°830'44 minimum elong -1543 May 23 i 00:59 16°**8**52'27 4°48'22 max. Earth dist. -1536 May 28 j 19:17 24°**8**51'20 43.29393 AU -1543 Jun 07 i 09:13 morning rise 17°815'00 retrograde -1543 Sep 02 i 00:37 18°**8**29'36 conjunction -1536 May 31 i 04:43 24°**8**55'00 -2°26'47 minimum elong -1543 Nov 21 j 21:46 17°**8**26'39 -4°51'48 -1536 May 31 i 04:47 24°**8**55'00 2°26'45 opposition min. Earth dist. -1543 Nov 23 j 18:40 17°**8**24'21 42.66451 AU -1536 Jun 16 i 03:50 25°**8**19'16 morning rise -1542 Feb 11 j 14:29 16°**8**22'55 -1536 Sep 10 j 01:49 26°**8**35'36 direct retrograde 17°**8**36'58 -1536 Nov 29 j 12:35 25°**8**31'16 -2°22'47 evening set -1542 May 08 j 23:56 opposition max. Earth dist. -1542 May 22 j 08:54 17°**8**56'38 44.55710 AU min. Earth dist. -1536 Dec 01 j 15:38 25°828'35 41.18580 AU -1535 Feb 19 j 07:08 direct 24°**8**25'50 conjunction -1542 May 24 j 11:06 17°**8**59'45 -4°29'00 evening set -1535 May 16 j 15:28 25°**8**42'18 -1542 May 24 j 11:13 17°**8**59'45 4°29'00 max. Earth dist. -1535 May 30 j 06:45 26°**8**03'04 43.07539 AU minimum elong -1542 Jun 08 j 21:59 18°**8**22'33 morning rise 19°**8**37'18 -1535 Jun 01 j 16:38 26°**8**06'48 -2°05'25 retrograde -1542 Sep 03 j 08:23 conjunction 18°**8**34'09 -4°31'26 -1535 Jun 01 j 16:42 26°**8**06'48 2°05'23 opposition -1542 Nov 23 j 05:55 minimum elong 18°**8**31'49 42.45982 AU -1535 Jun 17 j 16:55 26°**8**31'17 min. Earth dist. -1542 Nov 25 j 03:23 morning rise -1541 Feb 13 j 01:47 17°**8**30'09 retrograde -1535 Sep 11 j 11:45 27°**8**48'00 direct evening set -1541 May 10 j 07:51 18°**8**44'27 opposition -1535 Nov 30 j 22:47 26°**8**43'29 -2°00'17 max. Earth dist. -1541 May 23 j 17:01 19°**8**04'14 44.35193 AU min. Earth dist. -1535 Dec 03 j 03:17 26°840'42 40.96508 AU direct -1534 Feb 20 j 17:57 25°**8**37'48 -1541 May 25 j 21:24 19°807'29 -4°09'21 -1534 May 18 j 02:40 26°854'44 conjunction evening set -1541 May 25 j 21:31 19°**8**07'30 4°09'19 max. Earth dist. -1534 May 31 j 17:22 27°**8**15'35 42.85339 AU minimum elong

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1534 in astronomical counting style is the year 1535 BCE in historical counting style. 27°**8**19'27 -1°43'47 -1534 Jun 03 i 04:57 evening set -1528 May 25 j 09:04 4°**Ⅱ**26'18 conjunction max. Earth dist. -1534 Jun 03 j 05:00 27°**8**19'27 1°43'46 -1528 Jun 07 j 18:22 4°**Д**47'36 41.44561 AU minimum elong -1534 Jun 19 j 06:28 27°844'09 morning rise -1534 Sep 13 j 00:50 29°801'15 -1528 Jun 10 j 13:50 4°**Ⅱ**52'08 0°31'43 conjunction retrograde -1528 Jun 10 j 13:49 -1534 Dec 02 j 09:03 27°**8**56'32 -1°37'29 4°**I**52′07 0°31'45 opposition minimum elong -1534 Dec 04 j 14:10 -1528 Jun 26 j 17:03 5°**Ⅲ**17'53 min. Earth dist. 27°**8**53'43 40.74072 AU morning rise 6°**Ⅲ**37'48 -1528 Sep 20 j 08:11 direct -1533 Feb 22 j 02:12 26°**8**50'36 retrograde -1528 Dec 09 j 06:22 28°808'00 evening set -1533 May 19 j 14:26 opposition 5°**Ⅲ**31'27 0°45'31 -1528 Dec 11 j 18:49 max. Earth dist. -1533 Jun 02 j 04:10 28°**8**28'56 42.62732 AU min. Earth dist. 5°**Ц**28'09 39.32361 AU direct -1527 Feb 28 j 22:51 4°**I**23'33 conjunction -1533 Jun 04 j 17:44 28°**8**32'56 -1°21'52 evening set -1527 May 26 j 23:58 5°**Ⅱ**44'23 -1533 Jun 04 j 17:46 28°**8**32'56 1°21'51 -1527 Jun 09 j 08:39 6°**Д**05'46 41.20283 AU minimum elong max. Earth dist. -1533 Jun 20 j 20:04 28°**8**57'50 morning rise -1533 Aug 09 j 22:34 $0^{\circ}II$ conjunction -1527 Jun 12 j 04:16 6° II 10'20 0°55'13 retrograde -1533 Sep 14 j 14:51 0°**I**15′22 minimum elong -1527 Jun 12 j 04:14 6°**Ⅱ**10′20 0°55'14 -1533 Oct 20 j 13:22 30°R₩ morning rise -1527 Jun 28 j 06:57 6°**Ⅲ**36'14 opposition -1533 Dec 03 j 19:58 29°810'25 -1°14'23 retrograde -1527 Sep 21 j 23:29 7°**I**I56'44 min. Earth dist. -1533 Dec 06 j 03:18 29°**8**07'28 40.51233 AU opposition -1527 Dec 10 j 19:04 6°**Ⅱ**50′06 1°10'22 direct -1532 Feb 23 j 11:23 28°**8**04'12 min. Earth dist. -1527 Dec 13 j 07:08 6°**Д**46'48 39.08055 AU evening set -1532 May 20 j 02:36 29°822'07 direct -1526 Mar 02 j 10:46 5°**Ⅱ**41'50 max. Earth dist. -1532 Jun 02 j 16:39 29°843'10 42.39731 AU evening set -1526 May 28 j 15:47 7°**Ⅱ**03'23 max. Earth dist. -1526 Jun 10 j 21:52 7°**I**24'45 40.95907 AU conjunction -1532 Jun 05 i 06:43 29°847'14 -0°59'42 minimum elong -1532 Jun 05 i 06:44 29°**8**47'14 0°59'40 conjunction -1526 Jun 13 j 19:14 7°**Ⅲ**29'28 1°18'57 -1532 Jun 13 j 10:08 $0^{\circ}\Pi$ minimum elong -1526 Jun 13 j 19:12 7°**Ⅲ**29'27 1°18'59 -1532 Jun 21 j 09:39 0°**I**12'19 -1526 Jun 29 j 21:08 7°**I**155′29 morning rise morning rise -1532 Sep 15 j 05:15 1°**Ⅱ**30'17 -1526 Sep 23 j 16:39 9°**Ⅱ**16'36 retrograde retrograde -1532 Dec 04 j 06:58 0°II25'05 -0°50'59 -1526 Dec 12 j 08:09 8°II09'40 1°35'28 opposition opposition -1532 Dec 06 j 14:39 0°**Д**22'06 40.28012 AU min. Earth dist. -1526 Dec 14 j 21:44 8°**Д**06'17 38.83683 AU min. Earth dist. -1532 Dec 24 j 07:51 -1525 Mar 03 j 22:59 7°**Ⅱ**01'04 30°R₩ direct -1531 Feb 23 j 23:13 29°818'33 -1525 May 30 j 08:12 8°**Ⅲ**23'22 direct evening set -1525 Jun 12 j 13:46 8°**Д**44'51 40.71457 AU -1531 Apr 25 j 12:36 $0^{\circ}II$ max. Earth dist. -1531 May 21 j 15:25 evening set 0°**耳**37′00 -1525 Jun 15 j 10:47 max. Earth dist. -1531 Jun 04 j 03:21 0°**Д**58'04 42.16360 AU 8°**II**49'35 1°42'57 conjunction -1525 Jun 15 j 10:44 8°**П**49'34 1°42'57 minimum elong -1531 Jun 06 j 19:56 1°**I**102'18 -0°37'15 -1525 Jul 01 j 11:25 9°**I**15'42 conjunction morning rise -1531 Jun 06 j 19:57 1°**I**102′18 0°37′14 -1525 Sep 25 j 08:01 10°**Ⅲ**37'30 minimum elong retrograde morning rise -1531 Jun 22 j 23:26 1°**Ⅲ**27'35 opposition -1525 Dec 13 j 21:44 9°**Д**30'17 2°00'51 retrograde -1531 Sep 16 j 19:42 2°II45'59 min. Earth dist. -1525 Dec 16 j 11:33 9°**П**26'52 38.59228 AU opposition -1531 Dec 05 j 18:17 1°**I**I40'31 -0°27'18 direct -1524 Mar 04 j 14:34 8°**Ⅲ**21'21 min. Earth dist. -1531 Dec 08 j 03:45 1°**Д**37'26 40.04465 AU evening set -1524 May 31 j 01:25 9°**Ⅱ**44'27 -1530 Feb 25 j 10:42 0°**I**I33'39 max. Earth dist. -1524 Jun 13 j 03:45 10°**Д**05'53 40.46911 AU direct -1530 May 23 j 04:36 1°**I**52'39 evening set max. Earth dist. -1530 Jun 05 j 16:44 2°**Ⅱ**13'51 41.92668 AU -1524 Jun 16 j 02:28 10°**耳**10'46 2°07'10 conjunction -1524 Jun 16 j 02:24 10°**Ⅱ**10'46 2°07'12 minimum elong -1530 Jun 08 i 09:37 2°**I**18'08 -0°14'33 -1524 Jul 02 i 01:49 10°**耳**37′00 conjunction morning rise -1530 Jun 08 i 09:37 2°**I**18'08 0°14'31 -1524 Sep 26 i 00:44 minimum elong retrograde 11°**Ⅱ**59'31 behind sun begin -1530 Jun 08 i 07:01 2°**Ⅱ**17'59 opposition -1524 Dec 14 i 11:39 10°**I**52'01 2°26'30 2°**Ⅱ**18'18 behind sun end -1530 Jun 08 j 12:14 min. Earth dist. -1524 Dec 17 i 02:17 10°**Д**48'32 38.34674 AU morning rise -1530 Jun 24 j 13:11 2°**Ⅱ**43'35 direct -1523 Mar 06 i 03:58 9°**Ⅱ**42'45 retrograde -1530 Sep 18 i 06:04 4°**Ⅱ**02'28 -1523 Jun 01 j 19:20 11°**Ⅱ**06'42 evening set -1530 Dec 07 j 06:00 2°II56'42 -0°03'19 max. Earth dist. -1523 Jun 14 j 19:35 11°**Д**28'09 40.22208 AU opposition min. Earth dist. -1530 Dec 09 j 16:20 2°П53'33 39.80623 AU 2°**I**101'23 11°**II**33'07 2°31'37 asc. node -1529 Jan 26 j 11:13 conjunction -1523 Jun 17 j 18:52 1°**Ⅱ**49'30 direct -1529 Feb 27 j 00:38 minimum elong -1523 Jun 17 j 18:47 11°**Д**33'06 2°31'38 evening set -1529 May 24 j 18:36 3°II09'05 morning rise -1523 Jul 03 j 16:19 11°**Ⅲ**59'26 3°**Д**30'18 41.68718 AU max. Earth dist. -1529 Jun 07 j 05:03 retrograde -1523 Sep 27 j 14:37 13°**Ⅲ**22'42 -1523 Dec 16 j 02:06 12°**Ⅱ**14'56 2°52'23 opposition -1529 Jun 09 j 23:30 3°**II**34'44 0°08'31 -1523 Dec 18 j 18:11 12°**Ⅱ**11'20 38.09946 AU conjunction min. Earth dist. -1529 Jun 09 j 23:30 3°**Ⅲ**34'44 0°08'32 -1522 Mar 07 j 18:24 11°**耳**05′18 minimum elong direct -1529 Jun 09 j 17:50 3°**Ⅲ**34′23 -1522 Jun 03 j 14:09 12°**Ⅲ**30′09 behind sun begin evening set -1522 Jun 16 j 11:27 behind sun end -1529 Jun 10 j 05:10 3°**I**I35′06 max. Earth dist. 12°**耳**51'34 39.97311 AU morning rise -1529 Jun 26 j 03:10 4°**Ⅱ**00'21 retrograde -1529 Sep 19 j 18:27 5°**Ⅱ**19'43 conjunction -1522 Jun 19 j 11:40 12°**Д**56'38 2°56'18 opposition -1529 Dec 08 j 17:52 4°**Ⅱ**13'41 0°20'58 minimum elong -1522 Jun 19 j 11:34 12°**Ⅱ**56'38 2°56'20 min. Earth dist. -1529 Dec 11 j 04:46 4°**Ⅱ**10'29 39.56571 AU -1522 Jul 05 j 07:11 13°II23'01 morning rise

-1528 Feb 28 j 12:48

direct

3°**II**06'07

-1522 Sep 29 j 07:52

retrograde

14°**Ⅱ**47'06

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1522 in astronomical counting style is the year 1523 BCE in historical counting style. minimum elong -1522 Dec 17 j 16:58 13°**耳**39′01 3°18′32 -1515 Jun 29 j 22:40 23°**Ⅱ**15′07 5°54'16 opposition -1522 Dec 20 j 09:17 13°**Д**35'24 37.85004 AU -1515 Jul 14 j 18:03 23°**Ⅱ**41'19 min. Earth dist. morning rise -1521 Mar 09 j 07:49 12°**Ⅲ**29'02 -1515 Oct 09 j 20:26 25°**Ⅲ**12'15 direct retrograde 13°**Ⅲ**54'49 -1515 Dec 27 j 15:13 24°**Ⅱ**01'41 6°27'20 -1521 Jun 05 j 09:52 evening set opposition 14°**Ⅱ**16′07 39.72154 AU -1515 Dec 30 j 12:36 max. Earth dist. -1521 Jun 18 j 02:55 min. Earth dist. 23°**I**57'36 36.05820 AU 22°II48'44 direct -1514 Mar 19 j 01:40 conjunction -1521 Jun 21 j 05:03 14°**Ⅲ**21'21 3°21'11 evening set -1514 Jun 17 j 02:58 24°**Ⅲ**22'26 -1521 Jun 21 j 04:57 minimum elong 14°**Ⅲ**21'21 3°21'12 max. Earth dist. -1514 Jun 28 j 12:19 24°**I**I42'42 37.91783 AU -1521 Jul 06 j 22:08 morning rise 14°**Ⅱ**47'47 16°**Ⅲ**12'43 retrograde -1521 Oct 01 j 02:25 conjunction -1514 Jul 01 j 19:38 24°**Ⅱ**48'38 6°20'12 -1514 Jul 01 j 19:25 opposition -1521 Dec 19 j 08:26 15°**I**04'19 3°44'54 minimum elong 24°**Ⅱ**48'37 6°20'13 -1514 Jul 16 j 09:50 25°**Ⅲ**14'42 min. Earth dist. -1521 Dec 22 j 02:49 15°**Д**00'33 37.59818 AU morning rise -1514 Oct 11 j 18:53 direct -1520 Mar 09 j 20:16 13°**Ⅲ**53'56 retrograde 26°**Ⅱ**46'51 evening set -1520 Jun 06 j 06:18 15°**Ⅲ**20'43 opposition -1514 Dec 29 j 10:21 25°**Ⅲ**35'54 6°54'54 max. Earth dist. -1520 Jun 18 j 20:39 15°**Ц**41'59 39.46758 AU min. Earth dist. -1513 Jan 01 j 08:57 25°**Д**31'44 35.80253 AU direct -1513 Mar 20 j 18:21 24°**Ⅲ**22'32 conjunction -1520 Jun 21 j 22:56 15°**耳**47'16 3°46'17 evening set -1513 Jun 19 j 05:49 25°**I**57'38 minimum elong -1520 Jun 21 j 22:49 15°**Ⅱ**47'15 3°46'19 max. Earth dist. -1513 Jun 30 j 10:37 26°**Ⅲ**17'44 37.66097 AU morning rise -1520 Jul 07 j 13:15 16°**Ⅱ**13'43 retrograde -1520 Oct 01 j 20:37 17°**Ⅲ**39'31 conjunction -1513 Jul 03 j 17:06 26°**Ⅲ**23'40 6°46'12 opposition -1520 Dec 20 j 00:22 16°**I**I30'48 4°11'30 minimum elong -1513 Jul 03 j 16:53 26°**Ⅲ**23'39 6°46'14 min. Earth dist. -1520 Dec 22 j 18:49 16°**Ⅲ**27'01 37.34406 AU morning rise -1513 Jul 18 i 01:39 26°**Ⅱ**49'34 direct -1519 Mar 11 j 13:24 15°**Ⅲ**20'01 retrograde -1513 Oct 13 i 17:35 28°**Ⅲ**22'59 -1519 Jun 08 j 03:30 16°**Ⅱ**47'48 opposition -1513 Dec 31 j 06:02 27°**Ⅱ**11'41 7°22'32 evening set max. Earth dist. -1519 Jun 20 j 12:37 17°**Д**08'53 39.21142 AU min. Earth dist. -1512 Jan 03 j 04:17 27°**П**07'31 35.54820 AU -1512 Mar 21 j 15:33 direct 25° T 57'54 -1519 Jun 23 j 17:00 17°**Ⅱ**14'22 4°11'33 -1512 Jun 20 j 09:52 evening set 27° T 34'28 conjunction -1519 Jun 23 j 16:52 17°**Ⅱ**14'22 4°11'35 -1512 Jul 01 j 07:15 27°**Д**54'13 37.40543 AU max. Earth dist. minimum elong -1519 Jul 09 j 04:23 17°**Ⅱ**40'49 morning rise 28°**II**00'18 7°12'15 -1519 Oct 03 j 16:45 19°**Ⅲ**07'33 -1512 Jul 04 j 15:03 conjunction retrograde -1519 Dec 21 j 16:44 17°**I**58'28 4°38'19 -1512 Jul 04 j 14:48 minimum elong 28°**Ⅱ**00'17 7°12'17 opposition -1519 Dec 24 j 12:33 min. Earth dist. 17°**I**I54'35 37.08814 AU -1512 Jul 18 j 17:48 28°**Ⅱ**25'59 morning rise -1512 Oct 07 j 09:32 -1518 Mar 13 j 05:59 16°**Ⅱ**47'16 direct 0ംഇ -1518 Jun 10 j 01:34 18°**Ⅱ**16′08 -1512 Oct 14 j 18:34 evening set retrograde 0°9500'46 -1518 Jun 22 j 07:28 18°**Д**37'09 38.95348 AU -1512 Oct 21 j 23:24 max. Earth dist. 30°RⅡ -1511 Jan 01 j 02:21 28°**II**49'07 7°50'13 opposition -1518 Jun 25 j 11:53 18°**I**I42'41 4°37'01 conjunction min. Earth dist. -1511 Jan 04 j 01:03 28°**Ⅱ**44'53 35.29527 AU -1518 Jun 25 j 11:43 18°**耳**42'40 4°37'03 direct -1511 Mar 23 j 11:45 27°**Ⅲ**34'55 minimum elong morning rise -1518 Jul 10 j 19:40 19°**Ⅱ**09'06 evening set -1511 Jun 22 j 14:45 29°**Ⅲ**13'01 retrograde -1518 Oct 05 j 10:30 20°**Ⅲ**36'48 max. Earth dist. -1511 Jul 03 j 06:17 29°**Ⅲ**32'31 37.15075 AU -1518 Dec 23 j 09:33 19°**Ⅲ**27'21 5°05'20 opposition min. Earth dist. -1518 Dec 26 j 06:14 19°**Д**23'23 36.83081 AU -1511 Jul 06 j 13:42 29°II38'37 7°38'19 conjunction -1517 Mar 15 j 00:17 18°**Ⅱ**15'44 -1511 Jul 06 j 13:26 29°**Ⅲ**38'36 direct minimum elong 7°38'21 -1517 Jun 12 j 00:40 19°**Ⅱ**45'43 -1511 Jul 18 j 04:09 0ಂತಾ evening set 0°904'04 -1517 Jun 24 j 01:26 20°**Д**06'33 38.69450 AU -1511 Jul 20 j 09:52 max. Earth dist. morning rise retrograde -1511 Oct 16 j 16:32 1°9540'16 conjunction -1517 Jun 27 i 07:04 20°II12'13 5°02'38 opposition -1510 Jan 02 i 23:28 0°528'16 8°17'56 minimum elong -1517 Jun 27 i 06:54 20°II12'12 5°02'39 min. Earth dist. -1510 Jan 05 i 22:58 0°523'57 35.04301 AU morning rise -1517 Jul 12 j 11:11 20°**Ⅲ**38'35 -1510 Jan 23 i 00:38 30°RⅡ -1517 Oct 07 j 05:15 22°**Ⅲ**07'18 -1510 Mar 25 j 08:45 29°**Ⅱ**13'39 retrograde direct -1517 Dec 25 j 02:51 20°II57'29 5°32'32 -1510 May 23 j 22:10 0ಂತಾ opposition min. Earth dist. -1517 Dec 27 j 23:42 20°**Д**53'29 36.57296 AU -1510 Jun 24 j 21:14 evening set 0°953'21 -1516 Mar 15 j 17:09 19°**Ⅱ**45'25 max. Earth dist. -1510 Jul 05 j 04:57 direct 1°512'26 36.89657 AU evening set -1516 Jun 13 j 00:22 21°**Ⅱ**16'34 max. Earth dist. -1516 Jun 24 j 20:24 21°**Д**37'14 38.43500 AU conjunction -1510 Jul 08 j 13:03 1°518'40 8°04'23 minimum elong -1510 Jul 08 j 12:46 1°9518'39 8°04'24 conjunction -1516 Jun 28 j 02:42 21°II43'00 5°28'23 -1510 Jul 22 j 02:24 1°9543'50 morning rise -1516 Jun 28 j 02:30 21°**Ⅱ**43′00 5°28'25 -1510 Oct 18 j 15:37 minimum elong retrograde 3°9521'30 -1516 Jul 13 j 02:28 22°**Ⅲ**09'18 -1509 Jan 04 j 21:02 morning rise opposition 2°909'09 8°45'39 -1516 Oct 07 j 23:29 -1509 Jan 07 j 20:27 retrograde 23°**Ⅲ**39'06 min. Earth dist. 2°504'49 34.79119 AU opposition -1516 Dec 25 j 20:53 22°**II**28'54 5°59'52 direct -1509 Mar 27 j 05:38 0°954'05 min. Earth dist. -1516 Dec 28 j 18:57 22°**Ⅱ**24'49 36.31515 AU evening set -1509 Jun 27 j 04:49 2°935'28 direct -1515 Mar 17 j 09:17 21°**Ⅱ**16′24 max. Earth dist. -1509 Jul 07 j 04:13 2°954'06 36.64235 AU evening set -1515 Jun 15 j 01:10 22°**Ⅱ**48'47 conjunction max. Earth dist. -1515 Jun 26 j 16:51 23°**Ⅲ**09'20 38.17597 AU -1509 Jul 10 j 13:15 3°**5**00'28 8°30'25 -1509 Jul 10 j 12:59 3°500'26 8°30'26 minimum elong -1515 Jun 29 j 22:52 23°**Ⅱ**15'07 5°54'15 -1509 Jul 23 j 19:03 3°925'17 conjunction morning rise

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1509 in astronomical counting style is the year 1510 BCE in historical counting style. conjunction -1509 Oct 20 i 15:15 5°904'31 -1502 Jul 23 j 08:59 15°9541'25 11°28'26 retrograde opposition -1508 Jan 06 j 19:39 3°951'46 9°13'21 -1502 Jul 23 j 08:36 15°**©**41'23 minimum elong 11°28'27 -1508 Jan 09 j 20:33 -1502 Aug 02 j 17:05 min. Earth dist. 3°547'19 34.53943 AU 16°902'13 morning rise -1502 Nov 02 j 16:49 2°536'15 -1508 Mar 28 j 01:11 17°954'26 direct retrograde 12°22'44 -1501 Jan 19 j 05:37 evening set -1508 Jun 28 j 13:36 4°9519'22 opposition 16°**©**38'40 -1508 Jul 08 j 05:09 4°537'34 36.38825 AU -1501 Jan 22 j 06:59 max. Earth dist. min. Earth dist. 16°533'58 32.81264 AU 15°9519'42 direct -1501 Apr 10 j 05:22 17°9517'21 conjunction -1508 Jul 11 j 13:55 4°9543'58 8°56'22 evening set -1501 Jul 15 j 17:29 17°530'37 34.64974 AU minimum elong -1508 Jul 11 j 13:37 4°9543'57 8°56'23 max. Earth dist. -1501 Jul 22 j 06:34 morning rise -1508 Jul 24 j 11:39 5°908'24 retrograde -1508 Oct 21 j 16:24 6°9549'15 conjunction -1501 Jul 25 j 14:41 17°**5**37'26 11°52'39 -1507 Jan 07 j 18:50 -1501 Jul 25 j 14:19 opposition 5°936'06 9°40'58 minimum elong 17°**5**37'24 11°52'40 -1501 Aug 04 j 09:50 min. Earth dist. -1507 Jan 10 j 19:08 5°531'40 34.28788 AU morning rise 17°957'22 direct -1507 Mar 29 j 23:07 4°9520'07 retrograde -1501 Nov 04 j 22:51 19°951'51 evening set -1507 Jun 30 j 23:42 6°905'01 opposition -1500 Jan 21 j 10:17 18°935'41 12°48'28 max. Earth dist. -1507 Jul 10 j 05:09 6°\$22'37 36.13434 AU min. Earth dist. -1500 Jan 24 j 10:05 18°931'03 32.57880 AU direct -1500 Apr 11 j 09:26 17°5516'16 conjunction -1507 Jul 13 j 15:22 6°529'12 9°22'14 evening set -1500 Jul 17 j 13:45 19°9516'26 minimum elong -1507 Jul 13 j 15:04 6°9529'10 9°22'16 max. Earth dist. -1500 Jul 23 j 12:40 19°528'38 34.41503 AU morning rise -1507 Jul 26 j 04:35 6°953'12 retrograde -1507 Oct 23 j 19:29 8°935'44 conjunction -1500 Jul 26 j 21:01 19°**©**35'32 12°16'23 opposition -1506 Jan 09 j 18:40 7°522'09 10°08'30 minimum elong -1500 Jul 26 i 20:37 19°935'30 12°16'24 min. Earth dist. -1506 Jan 12 j 20:16 7°9517'36 34.03694 AU morning rise -1500 Aug 05 i 02:23 19°954'29 direct -1506 Mar 31 i 21:19 6°95'40 retrograde -1500 Nov 06 i 06:49 21°951'23 -1506 Jul 03 j 11:09 7°952'28 -1499 Jan 22 i 15:49 20°534'49 13°13'39 evening set opposition -1506 Jul 12 j 08:13 8°509'33 35.88114 AU -1499 Jan 25 j 15:59 max. Earth dist. min. Earth dist. 20°530'09 32.34950 AU -1499 Apr 13 j 11:40 direct 19°9314'59 -1506 Jul 15 j 17:38 8°916'08 9°47'58 -1499 Jul 20 j 12:09 21°9317'49 conjunction evening set -1499 Jul 25 j 21:48 21°529'00 34.18472 AU -1506 Jul 15 j 17:18 8°9516'06 9°47'59 max. Earth dist. minimum elong -1506 Jul 27 j 21:29 8°939'38 morning rise -1506 Oct 25 j 22:48 -1499 Jul 29 j 04:22 10°923'55 conjunction 21°935'49 12°39'34 retrograde minimum elong -1499 Jul 29 j 03:59 21°935'47 -1505 Jan 11 j 19:21 9°509'54 10°35'53 12°39'36 opposition -1499 Aug 06 j 18:43 -1505 Jan 14 j 20:45 9°905'20 33.78695 AU 21°953'41 min. Earth dist. morning rise -1505 Apr 02 j 23:06 -1499 Nov 08 j 15:03 direct 7°952'55 retrograde 23°953'06 -1505 Jul 05 j 23:59 -1498 Jan 24 j 22:07 evening set 9°9541'40 opposition 22°936'10 13°38'17 9°558'03 35.62920 AU -1505 Jul 14 j 09:50 -1498 Jan 27 j 21:18 max. Earth dist. min. Earth dist. 22°531'33 32.12436 AU direct -1498 Apr 15 j 17:15 21°9515'54 conjunction -1505 Jul 17 j 20:23 10°504'47 10°13'30 evening set -1498 Jul 23 j 12:36 23°9521'33 -1505 Jul 17 j 20:03 10°9504'45 10°13'32 max. Earth dist. -1498 Jul 28 j 05:26 23°531'24 33.95845 AU minimum elong -1505 Jul 29 j 14:31 10°9527'43 morning rise retrograde -1505 Oct 28 j 03:29 12°9513'51 conjunction -1498 Jul 31 j 12:31 23°**©**38'19 13°02'10 -1504 Jan 13 j 20:40 10°959'22 11°03'03 -1498 Jul 31 j 12:06 23°938'17 opposition minimum elong 13°02'11 -1504 Jan 16 j 22:16 10°554'46 33.53881 AU -1498 Aug 08 j 10:51 23°954'59 min. Earth dist. morning rise -1504 Apr 03 j 23:40 9°9541'53 -1498 Nov 11 j 02:12 25°957'04 direct retrograde -1504 Jul 07 j 14:03 11°532'42 -1497 Jan 27 j 05:27 24°539'45 14°02'15 evening set opposition max. Earth dist. -1504 Jul 15 i 14:13 11°5548'26 35.37926 AU min. Earth dist. -1497 Jan 30 i 04:35 24°535'07 31.90323 AU direct -1497 Apr 17 j 22:31 23°9519'04 -1504 Jul 18 i 23:58 conjunction 11°955'11 10°38'48 evening set -1497 Jul 26 i 15:22 25°527'41 -1504 Jul 18 i 23:36 11°955'09 10°38'50 max. Earth dist. -1497 Jul 30 i 16:05 25°536'13 33.73591 AU minimum elong -1504 Jul 30 i 07:22 12°917'29 morning rise -1504 Oct 29 j 06:33 14°905'32 -1497 Aug 02 j 21:34 25°543'04 13°24'07 retrograde conjunction -1503 Jan 14 j 22:56 12°950'37 11°29'58 -1497 Aug 02 i 21:11 25°9643'02 opposition minimum elong 13°24'09 -1503 Jan 18 j 00:43 12°5045'58 33.29316 AU -1497 Aug 10 j 02:11 min. Earth dist. morning rise 25°958'20 direct -1503 Apr 06 j 02:04 11°532'37 retrograde -1497 Nov 13 j 12:50 28°903'15 -1503 Jul 10 j 05:35 13°925'36 opposition -1496 Jan 29 j 13:50 26°9545'34 14°25'32 evening set 13°5540'34 35.13232 AU -1496 Feb 01 j 12:41 max. Earth dist. -1503 Jul 17 j 18:21 min. Earth dist. 26°9540'54 31.68571 AU -1496 Apr 19 j 07:38 25°924'27 direct -1503 Jul 21 j 03:58 13°9547'22 11°03'48 -1496 Jul 28 j 20:50 conjunction evening set 27°936'12 -1503 Jul 21 j 03:37 -1496 Aug 01 j 01:43 minimum elong 13°9547'20 11°03'50 max. Earth dist. 27°543'04 33.51724 AU -1503 Aug 01 j 00:12 morning rise 14°9508'57 -1503 Oct 31 j 12:04 -1496 Aug 04 j 07:21 retrograde 15°959'02 conjunction 27°**©**50'00 13°45'22 -1502 Jan 17 j 01:49 14°**©**43'41 11°56'33 minimum elong -1496 Aug 04 j 06:57 27°9549'58 13°45'23 opposition min. Earth dist. -1502 Jan 20 j 02:37 14°**©**39'03 33.05093 AU morning rise -1496 Aug 10 j 16:33 28°903'41 direct -1502 Apr 08 j 04:31 13°925'11 -1496 Oct 19 j 10:03 0 $^{\circ}\Omega$ evening set -1502 Jul 12 j 22:38 15°520'26 retrograde -1496 Nov 15 j 01:27 0°**Ω**11'37 -1502 Jul 19 j 23:39 15°534'34 34.88886 AU -1496 Dec 11 j 22:44 30°Rூ max. Earth dist. -1495 Jan 30 j 22:58 28°953'32 14°48'02 opposition

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•	mena of Pluto fron		•	* *			e 30
	cal year style is used: Th						
min. Earth dist.	-1495 Feb 02 j 20:45		31.47214 AU	min. Earth dist.	-1488 Feb 19 j 05:42		30.12807 AU
direct	-1495 Apr 21 j 16:14	27°532'00		direct	-1488 May 06 j 22:58	13° Ω 20'33	
evening set	-1495 Aug 01 j 05:35	29°547'08			-1488 Jul 28 j 03:35	15° Ω	
max. Earth dist.	-1495 Aug 03 j 13:28	29° © 52'10	33.30245 AU	max. Earth dist.	-1488 Aug 19 j 23:53	15° Ω 51'11	31.96303 AU
conjunction	-1495 Aug 06 j 18:01	29° © 59'05	14°05'50	conjunction	-1488 Aug 22 j 16:45	15° Ω 57'25	16°00'14
minimum elong	-1495 Aug 06 j 17:38	29° 5 59'03	14°05'52	minimum elong	-1488 Aug 22 j 16:27	15° Ω 57'23	16°00'15
	-1495 Aug 07 j 04:16	$0^{\circ}\Omega$		retrograde	-1488 Dec 03 j 16:16	18° Ω 29'36	
morning rise	-1495 Aug 12 j 05:13	0° Ω 10'54		opposition	-1487 Feb 18 j 08:06	17° Ω 08′25	17°09'28
retrograde	-1495 Nov 17 j 11:52	2° Ω 22'06		min. Earth dist.	-1487 Feb 20 j 20:04	17° Ω 04'17	29.96647 AU
opposition	-1494 Feb 02 j 09:10	1° Ω 03'37	15°09'41	direct	-1487 May 09 j 15:15	15° Ω 43'41	
min. Earth dist.	-1494 Feb 05 j 07:11	0° Ω 58'58	31.26253 AU	max. Earth dist.	-1487 Aug 22 j 17:23	18° Ω 15'39	31.80397 AU
	-1494 Mar 19 j 22:44	30° ₹ 5					
direct	-1494 Apr 24 j 01:02	29°5641'39		conjunction	-1487 Aug 25 j 08:54	18° Ω 21'47	16°11'22
	-1494 May 28 j 09:57	$0^{\circ}\Omega$		minimum elong	-1487 Aug 25 j 08:39	18° Ω 21'46	16°11'24
evening set	-1494 Aug 04 j 19:10	2° Ω 00'32		retrograde	-1487 Dec 06 j 11:08	20° Ω 55'10	
max. Earth dist.	-1494 Aug 06 j 01:47	2° Ω 03′20	33.09209 AU	opposition	-1486 Feb 21 j 00:57	19° Ω 33'42	17°20'52
				min. Earth dist.	-1486 Feb 23 j 10:29	19° Ω 29'43	29.81371 AU
conjunction	-1494 Aug 09 j 05:26	2° Ω 10′14	14°25'27	direct	-1486 May 12 j 07:08	18° Ω 08'41	
minimum elong	-1494 Aug 09 j 05:02	2° Ω 10'12	14°25'27	max. Earth dist.	-1486 Aug 25 j 13:18	20° Ω 42'05	31.65370 AU
morning rise	-1494 Aug 13 j 14:41	2° Ω 19'49			S J		
retrograde	-1494 Nov 20 j 00:58	4° Ω 34'38		conjunction	-1486 Aug 28 j 01:55	20° Ω 47'59	16°21'00
opposition	-1493 Feb 04 j 20:01	3° Ω 15'45	15°30'24	minimum elong	-1486 Aug 28 j 01:40	20° Ω 47'58	16°21'00
min. Earth dist.	-1493 Feb 07 j 16:22		31.05750 AU	retrograde	-1486 Dec 09 j 05:08	23° £ 22'30	
direct	-1493 Apr 26 j 11:30	1° £ 53′19		opposition	-1485 Feb 23 j 18:47		17°30'36
evening set	-1493 Aug 08 j 17:14	4°Ω16'43		min. Earth dist.	-1485 Feb 26 j 03:09		29.66938 AU
max. Earth dist.	-1493 Aug 08 j 14:45		32.88657 AU	direct	-1485 May 14 j 23:49	20°Ω35'32	_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
man. Bartin dist.	11,5511448 00) 1 11.15	. 001030	32.00007110	max. Earth dist.	-1485 Aug 28 j 08:44		31.51223 AU
conjunction	-1493 Aug 11 j 17:41	4° Ω 23'23	14°44'07				
minimum elong	-1493 Aug 11 j 17:19	4° Ω 23'21	14°44'09	conjunction	-1485 Aug 30 j 19:24	23° Ω 15'56	16°29'01
morning rise	-1493 Aug 14 j 17:17	4° Ω 29'58	11 110)	minimum elong	-1485 Aug 30 j 19:13	23° Ω 15'55	16°29'02
retrograde	-1493 Nov 22 j 13:29	6° Ω 49'09		retrograde	-1485 Dec 12 j 01:53	25° Ω 51'31	10 27 02
opposition	-1492 Feb 07 j 08:00	5° Ω 29'51	15°50'05	opposition	-1484 Feb 26 j 13:19	24° Ω 29'33	17°38'37
min. Earth dist.	-1492 Feb 10 j 04:28		30.85774 AU	min. Earth dist.	-1484 Feb 28 j 18:46		29.53350 AU
direct	-1492 Apr 27 j 20:04	4°Ω06'59	30.03774 AO	direct	-1484 May 16 j 18:21	23°Ω04'05	27.33330 AO
max. Earth dist.	-1492 Aug 10 j 05:35		32.68692 AU	max. Earth dist.	-1484 Aug 30 j 05:16		31.37923 AU
max. Earth dist.	1472 Aug 10 j 03.33	0 0031 42	32.000)2710	max. Earth dist.	1404 / lug 30 j 03.10	23 663737	31.37723710
conjunction	-1492 Aug 13 j 06:24	6° Ω 38'28	15°01'46	conjunction	-1484 Sep 01 j 13:27	25° Ω 45'31	16°35'25
minimum elong	-1492 Aug 13 j 06:02	6° Ω 38'26	15°01'47	minimum elong	-1484 Sep 01 j 13:16	25° Ω 45'30	16°35'25
retrograde	-1492 Nov 24 j 01:58	9° Ω 05'34		retrograde	-1484 Dec 13 j 20:27	28° Ω 22'07	
opposition	-1491 Feb 08 j 20:41	7° Ω 45'52	16°08'38	opposition	-1483 Feb 28 j 08:43	26° Ω 59'54	17°44'50
min. Earth dist.	-1491 Feb 11 j 14:56	7° Ω 41'22	30.66403 AU	min. Earth dist.	-1483 Mar 02 j 13:12	26° Ω 56'14	29.40583 AU
direct	-1491 Apr 30 j 09:07	6° £ 22'33		direct	-1483 May 19 j 11:41	25° Ω 34'14	
max. Earth dist.	-1491 Aug 12 j 19:46	8° Ω 48'40	32.49383 AU	max. Earth dist.	-1483 Sep 02 j 02:30	28° Ω 11'16	31.25489 AU
conjunction	-1491 Aug 15 j 19:56	8° Ω 55'26	15°18'18	conjunction	-1483 Sep 04 j 08:06	28° Ω 16'35	16°40'07
minimum elong	-1491 Aug 15 j 19:35	8° Ω 55'24	15°18'19	minimum elong	-1483 Sep 04 j 07:59	28° Ω 16'35	16°40'07
retrograde	-1491 Nov 26 j 16:05	11° Ω 23'51		Z .	-1483 Oct 21 j 12:25	0° m)	
opposition	-1490 Feb 11 j 10:09	10° Ω 03'43	16°25'57	retrograde	-1483 Dec 16 j 16:24	0° m/ 54'05	
min. Earth dist.	-1490 Feb 14 j 03:47		30.47736 AU	Ü	-1482 Feb 13 j 23:35	30° ₽ Ω	
direct	-1490 May 02 j 19:48	8° Ω 40'00		opposition	-1482 Mar 03 j 04:29	29° Ω 31'39	17°49'13
max. Earth dist.	-1490 Aug 15 j 13:03		32.30835 AU	min. Earth dist.	-1482 Mar 05 j 05:52		29.28645 AU
	e j			direct	-1482 May 22 j 07:47	28° Ω 05'48	
conjunction	-1490 Aug 18 j 10:15	11° Ω 14'15	15°33'37		-1482 Aug 17 j 08:23	0° m)	
minimum elong	-1490 Aug 18 j 09:55	11° Ω 14'13		max. Earth dist.	-1482 Sep 04 j 23:34	-•	31.13916 AU
retrograde	-1490 Nov 29 j 06:42	13° Ω 43'57					
opposition	-1489 Feb 14 j 00:39	12° Ω 23'26	16°41'56	conjunction	-1482 Sep 07 j 03:16	0° m) 48'59	16°43'04
min. Earth dist.	-1489 Feb 16 j 16:04		30.29841 AU	minimum elong	-1482 Sep 07 j 03:09	0° Mp 48'59	16°43'05
direct	-1489 May 05 j 09:27	10° £ 59′20	30.27041 110	retrograde	-1482 Dec 19 j 12:40	3° m) 27'18	10 43 03
max. Earth dist.	-1489 Aug 18 j 04:54		32.13122 AU	opposition	-1481 Mar 06 j 01:09	2° m 04'39	17°51'41
Durin dist.	2107 11ug 10 J 07.J4	10 062020	52.15122 AU	min. Earth dist.	-1481 Mar 08 j 01:10		29.17565 AU
conjunction	-1489 Aug 21 j 01:03	13° Ω 34'54	15°47'37	direct	-1481 May 25 j 01:46	0° m ₀ 38'38	27.17303 AU
minimum elong	-1489 Aug 21 j 00:45	13° Ω 34'52	15°47'38	max. Earth dist.	-1481 May 23 j 01.40 -1481 Sep 07 j 22:22		31.03259 AU
mmmum clong	-1489 Sep 29 j 11:08	15 % € 54 52	15 7/50	max. Darui dist.	1-101 Dep 07 J 22.22	ا++/1 بإراا <i>ح</i>	J1.03237 AU
retrograde	-1489 Dec 01 j 23:44	16° Ω 05'52		conjunction	-1481 Sep 09 j 22:40	3° m/22'31	16°44'14
- Jarogrado	-1488 Feb 07 j 12:31	10 0 0 3 32 15°RΩ		minimum elong	-1481 Sep 09 j 22:38	3° m _{22'31}	16°44'14
opposition	-1488 Feb 16 j 15:58	13 \δ ι 14° Ω 45'00	16°56'28	retrograde	-1481 Dec 22 j 08:18	6° Mp 01'34	10 FT 1-T
-LLocuron	1.00100 10 10 10.00	56.500	10 00 20		1.01.200 22 3 00.10	U I V U I J-T	

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1480 in astronomical counting style is the year 1481 BCE in historical counting style. -1480 Mar 07 j 22:16 4° mp 38'43 17°52'13 conjunction -1472 Oct 02 j 11:00 26° m 49'12 15°28'31 opposition minimum elong -1480 Mar 09 i 19:03 4° m/35'33 29.07375 AU -1472 Oct 02 j 11:17 26° m 49'13 15°28'31 min. Earth dist. -1480 May 26 j 22:51 -1472 Oct 01 j 16:44 26° m 47'20 30.57213 AU direct 3° m 12'33 max. Earth dist. -1471 Jan 14 j 04:16 -1480 Sep 09 j 19:59 5° m 52'20 30.93553 AU max. Earth dist. 29° m 30'25 retrograde -1471 Apr 01 j 08:46 opposition 28° Mp 06'58 16°23'24 -1471 Apr 02 j 00:59 -1480 Sep 11 j 18:22 min. Earth dist. conjunction 5° m 57'01 16°43'33 28° m 05'50 28.65051 AU -1480 Sep 11 j 18:20 -1471 Jun 20 j 05:57 minimum elong 5° m 57'00 16°43'34 direct 26° m 41'05 -1480 Dec 24 j 04:18 retrograde 8° Mp 36'40 7° Mp 13'37 -1471 Oct 05 j 06:51 opposition -1479 Mar 10 j 19:42 17°50'43 conjunction 29° m 25'48 15°10'39 min. Earth dist. -1479 Mar 12 j 14:26 7° Mp 10'37 28.98152 AU minimum elong -1471 Oct 05 j 07:10 29° M 25'50 15°10'38 direct -1479 May 29 j 18:39 5° m 47'19 max. Earth dist. -1471 Oct 04 j 15:51 29° m 24'17 30.57918 AU -1479 Sep 12 j 20:05 -1471 Oct 19 j 09:38 max. Earth dist. 8° Mp 27'59 30.84878 AU 0∘**ত** -1470 Jan 17 j 01:13 retrograde 2°**2**06'46 conjunction -1479 Sep 14 j 14:21 8° Mp 32'16 16°40'59 opposition -1470 Apr 04 j 07:44 0°**ჲ**43'23 16°03'23 minimum elong -1479 Sep 14 j 14:23 8° Mp 32'16 16°40'59 min. Earth dist. -1470 Apr 04 j 21:42 0°**£**42'24 28.65983 AU retrograde -1479 Dec 26 j 23:56 11° Mp 12'27 -1470 May 01 j 09:19 30°R, M) opposition -1478 Mar 13 j 17:38 9° **m** 49'13 17°47'10 direct -1470 Jun 23 j 04:21 29° Mp 17'41 min. Earth dist. -1478 Mar 15 j 09:18 9°**™**46′25 28.89943 AU -1470 Aug 12 j 12:27 0∘**ত** direct -1478 Jun 01 j 16:22 8° m 22'49 evening set -1470 Oct 05 j 22:03 1°**≏**56'34 max. Earth dist. -1478 Sep 15 j 18:15 11° Mp 04'03 30.77295 AU conjunction -1470 Oct 08 j 02:20 2°**2**01'52 14°51'03 conjunction -1478 Sep 17 i 10:17 11° Mp 08'07 16°36'29 minimum elong -1470 Oct 08 i 02:39 2°**♀**01'54 14°51'04 minimum elong -1478 Sep 17 i 10:20 11° Mp 08'07 16°36'29 max. Earth dist. -1470 Oct 07 i 14:50 2°**2**00'42 30.59684 AU retrograde -1478 Dec 29 i 21:22 13° m 48'44 morning rise -1470 Oct 10 i 07:13 2°**2**07'13 opposition -1477 Mar 16 j 15:50 12° m 25'21 17°41'31 retrograde -1469 Jan 19 j 21:21 4°**£**42'27 min. Earth dist. -1477 Mar 18 j 04:19 12° m) 22'47 -1469 Apr 07 j 06:26 3°**₽**19'09 15°41'32 28 82850 AU opposition -1477 Jun 04 j 12:40 10° m 58'53 -1469 Apr 07 j 16:29 3°**2**18'27 28.67927 AU direct min Earth dist max. Earth dist. -1477 Sep 18 j 19:06 13°Mp40'50 30.70893 AU -1469 Jun 26 j 04:39 1°**£**53'39 direct -1469 Oct 06 j 21:50 4°**£**27'29 evening set -1477 Sep 20 j 06:31 13° Mp 44'26 conjunction 16°30'01 -1477 Sep 20 j 06:38 13° Mp 44'26 -1469 Oct 10 j 21:30 4°**2**37'10 14°29'49 16°30'01 conjunction minimum elong -1476 Jan 01 j 17:09 16° m 25'23 -1469 Oct 10 j 21:51 retrograde minimum elong 4°**2**37'12 14°29'48 -1476 Mar 18 j 14:27 15° m 01'54 17°33'44 max. Earth dist. -1469 Oct 10 j 12:45 4°**2**36'16 30.62473 AU opposition -1476 Mar 19 j 23:54 14° m 59'32 28.76924 AU -1469 Oct 14 j 21:45 4°**£**46'53 min. Earth dist. morning rise -1476 Jun 06 j 11:51 13° m 35'25 -1468 Jan 22 j 16:20 7°**£**17'16 direct retrograde 5°**2**54'04 15°17'57 -1476 Sep 20 j 17:39 16° Mp 17'45 30.65728 AU -1468 Apr 09 j 04:56 max. Earth dist. opposition 5°**≙**53'33 28.70890 AU -1468 Apr 09 j 12:20 min. Earth dist. conjunction -1476 Sep 22 j 02:32 16° Mg 21'06 16° 21'35 direct -1468 Jun 28 j 02:00 4°**£**28'46 minimum elong -1476 Sep 22 j 02:40 16° Mp 21'07 16°21'36 evening set -1468 Oct 07 j 10:26 6°**£**58'49 retrograde -1475 Jan 03 j 15:17 19°M)02'18 opposition -1475 Mar 21 j 13:05 17° mg 38'45 17°23'49 conjunction -1468 Oct 12 j 16:15 7°**2**11'30 14°06'59 min. Earth dist. -1475 Mar 22 j 18:29 17° Mp 36'41 28.72215 AU -1468 Oct 12 j 16:37 7°**2**11'33 14°07'00 minimum elong direct -1475 Jun 09 j 10:00 16° TQ 12'19 max. Earth dist. -1468 Oct 12 j 11:30 7°**2**11'02 30.66297 AU -1468 Oct 17 j 22:32 7°**£**24'14 morning rise -1475 Sep 24 j 22:51 18° Mp 58'02 16°11'11 -1467 Jan 24 j 10:33 9°**£**51'02 conjunction retrograde -1475 Sep 24 i 23:03 minimum elong 18° m 58'03 16°11'11 opposition -1467 Apr 12 i 02:58 8°**2**27'56 14°52'42 -1475 Sep 23 i 18:28 max. Earth dist. 18° m 55'09 30.61802 AU min. Earth dist. -1467 Apr 12 i 06:57 8°**2**27'39 28.74851 AU retrograde -1474 Jan 06 j 11:24 21° m 39'24 direct -1467 Jul 01 i 01:25 7°**£**02'50 opposition -1474 Mar 24 i 11:54 20° m 15'50 17°11'47 evening set -1467 Oct 09 j 03:39 9°**£**29'34 min. Earth dist. -1474 Mar 25 i 14:49 20° 10 13'56 28.68701 AU direct -1474 Jun 12 j 07:41 18° m 49'29 -1467 Oct 15 i 10:25 9°**2**44'42 13°42'40 conjunction minimum elong -1467 Oct 15 i 10:48 9°**Ω**44'45 13°42'38 -1474 Sep 27 j 19:00 21° m 35'08 15° 58' 51 max. Earth dist. -1467 Oct 15 j 08:05 9°**2**44'28 30.71144 AU conjunction 21° m 35'09 minimum elong -1474 Sep 27 j 19:12 15°58'51 morning rise -1467 Oct 21 j 17:41 90259153 max. Earth dist. -1474 Sep 26 j 17:27 21° m/32'32 30.59108 AU retrograde -1466 Jan 27 j 05:11 12°**£**23'35 -1466 Apr 15 j 00:32 11°**≏**00'34 14°25'51 retrograde -1473 Jan 09 j 10:20 24° m 16'33 opposition opposition -1473 Mar 27 j 10:50 22° m 53'00 16°57'40 min. Earth dist. -1466 Apr 15 j 01:07 11°**2**00'32 28.79857 AU -1473 Mar 28 j 09:29 22° m 51'25 28.66369 AU -1466 Jul 03 j 22:08 9°**£**35'42 min. Earth dist. direct -1473 Jun 15 j 07:49 21° Mp 26'47 -1466 Oct 10 j 23:35 11°**♀**59'22 direct evening set -1466 Oct 18 j 04:11 conjunction -1473 Sep 30 j 15:04 24° m 12'15 15°44'36 conjunction 12°**2**16'37 13°16'54 minimum elong -1473 Sep 30 j 15:19 24° Mp 12'16 15°44'36 minimum elong -1466 Oct 18 j 04:35 12°**₽**16'39 13°16'54 max. Earth dist. -1473 Sep 29 j 17:40 24° Mp 10'04 30.57587 AU max. Earth dist. -1466 Oct 18 j 06:19 12°**⊆**16'49 30.77064 AU retrograde -1472 Jan 12 j 06:37 26° m 53'37 morning rise -1466 Oct 25 j 09:05 12°**♀**33'53 opposition -1472 Mar 29 j 09:59 25° Mp 30'07 16°41'31 retrograde -1465 Jan 29 j 20:53 14°**£**54'44 min. Earth dist. -1472 Mar 30 j 06:24 25° m 28'41 28.65166 AU -1465 Apr 17 j 21:48 13°**2**31'52 13°57'30 opposition -1472 Jun 17 j 06:20 24° m 04'03 min. Earth dist. -1465 Apr 17 j 19:17 13°**♀**32'02 28.85938 AU direct

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1465 in astronomical counting style is the year 1466 BCE in historical counting style. -1465 Jul 06 j 20:37 12°**♀**07'15 -1459 Nov 21 i 08:46 0°M direct -1465 Oct 12 j 20:59 14°**£**28′01 -1458 Feb 15 j 11:08 1°ML51'10 retrograde evening set 0°ML31'45 29.59338 AU min. Earth dist. -1458 May 04 j 07:31 -1465 Oct 20 j 21:04 14°**△**47'07 12°49'47 0°M20'00 10°05'15 opposition -1458 May 05 j 09:38 conjunction -1465 Oct 20 j 21:27 14°**£**47′09 12°49'45 minimum elong -1458 May 24 j 14:18 30°R <u>Ω</u> -1465 Oct 21 j 01:42 14°**≙**47'35 30.84098 AU -1458 Jul 24 j 11:07 29°**₽**08'00 max. Earth dist. direct morning rise -1465 Oct 28 j 21:33 15°**2**06'14 -1458 Sep 19 j 17:06 $0^{\circ}M$ retrograde -1464 Feb 01 j 14:34 17°**£**24'27 evening set -1458 Oct 25 j 00:18 1°M11'52 opposition -1464 Apr 19 j 18:27 16°**2**01'43 13°27'43 min. Earth dist. -1464 Apr 19 j 11:41 16°**♀**02'11 28.93160 AU conjunction -1458 Nov 06 j 03:12 1°M39'30 9°10'01 direct -1464 Jul 08 j 16:29 14°**♀**37'23 minimum elong -1458 Nov 06 j 03:33 1°M39'32 9°10'00 evening set -1464 Oct 13 j 19:38 16°**♀**55'26 max. Earth dist. -1458 Nov 07 j 06:34 1°M42'07 31.63725 AU morning rise -1458 Nov 18 j 06:26 2° ML07'11 conjunction -1464 Oct 22 j 13:39 17° **△**16'11 12°21'23 retrograde -1457 Feb 17 j 23:48 4°ML10'07 minimum elong -1464 Oct 22 j 14:03 17°**≏**16'13 12°21'23 min. Earth dist. -1457 May 06 j 21:25 2°M51'09 29.73628 AU max. Earth dist. -1464 Oct 22 j 22:53 17°**2**17'06 30.92279 AU opposition -1457 May 08 j 02:01 2°M49'15 9°28'39 morning rise -1464 Oct 31 j 07:52 17°**△**36'58 direct -1457 Jul 27 j 02:50 1°M27'40 retrograde -1463 Feb 03 j 05:43 19°**♀**52'40 evening set -1457 Oct 27 j 02:12 3°M29'27 opposition -1463 Apr 22 j 14:26 18°**≏**30′08 12°56'37 min. Earth dist. -1463 Apr 22 j 05:05 18°**♀**30'46 29.01525 AU conjunction -1457 Nov 08 j 15:13 3°M57'49 8°35'37 direct -1463 Jul 11 j 12:03 17°**£**06'08 minimum elong -1457 Nov 08 j 15:33 3°M57'51 8°35'36 evening set -1463 Oct 15 j 19:14 19°**£**21'34 max. Earth dist. -1457 Nov 09 j 21:53 4°ML00'44 31.78729 AU morning rise -1457 Nov 21 i 04:19 4°M26'14 conjunction -1463 Oct 25 i 05:29 19°**2**43'47 11°51'49 retrograde -1456 Feb 20 i 10:26 6°M27'18 -1463 Oct 25 j 05:53 19°**≏**43'50 11°51'47 min. Earth dist. -1456 May 08 j 10:27 5°ML08'48 29.88656 AU minimum elong -1463 Oct 25 j 17:16 19°**♀**44'57 31.01618 AU -1456 May 09 j 17:35 5°ML06'44 8°51'33 max. Earth dist. opposition -1463 Nov 03 j 16:04 -1456 Jul 28 j 20:40 morning rise 20°**Ω**06'04 direct 3°M.45'33 -1462 Feb 05 j 22:51 22°**₽**19'24 evening set -1456 Oct 28 j 04:30 5°M45'20 retrograde -1462 Apr 25 j 09:52 20°**£**57'05 12°24'17 opposition -1462 Apr 24 j 19:57 6°M14'21 8°00'47 -1456 Nov 10 j 02:31 min. Earth dist. 20°**♀**58'02 29.11035 AU conjunction -1462 Jul 14 j 08:15 19°**₽**33'27 minimum elong -1456 Nov 10 j 02:50 6°M14'22 8°00'47 direct -1462 Oct 17 j 19:13 21°**≏**46'22 max. Earth dist. -1456 Nov 11 j 10:38 6°M17'22 31.94434 AU evening set -1456 Nov 23 j 00:58 6°M43'23 morning rise -1462 Oct 27 j 20:41 22°**£**09'57 11°21'10 -1455 Feb 21 j 22:15 8°M42'40 conjunction retrograde -1455 May 10 j 22:09 minimum elong -1462 Oct 27 j 21:06 22°**♀**09'59 11°21'10 min. Earth dist. 7°M24'37 30.04404 AU -1455 May 12 j 08:12 max. Earth dist. -1462 Oct 28 j 12:44 22°**£**11'31 31.12069 AU opposition 7°M22'23 8°14'02 morning rise -1462 Nov 06 j 22:19 22°**£**33'33 direct -1455 Jul 31 j 11:22 6°M01'35 retrograde -1461 Feb 08 j 14:00 24°**-**44′39 evening set -1455 Oct 30 j 06:41 7°M59'25 -1461 Apr 28 j 04:55 23°**£**22'35 11°50'52 opposition min. Earth dist. -1461 Apr 27 j 12:36 23°**£**23'42 29.21639 AU conjunction -1455 Nov 12 j 13:11 8°M28'59 7°25'37 -1461 Jul 17 j 03:04 21°**♀**59'20 minimum elong -1455 Nov 12 j 13:28 8°M29'00 7°25'35 direct -1461 Oct 19 j 19:59 24°**♀**09'52 max. Earth dist. -1455 Nov 14 j 00:41 8°M32'18 32.10825 AU evening set -1455 Nov 25 j 19:50 8°M58'34 morning rise -1461 Oct 30 j 11:16 24°**△**34'39 10°49'33 -1454 Feb 24 j 06:33 10°M56'07 conjunction retrograde -1461 Oct 30 j 11:40 24°**♀**34'41 -1454 May 13 j 10:30 9°M38'27 30.20841 AU minimum elong 10°49'32 min. Earth dist. max. Earth dist. -1461 Oct 31 i 06:04 24°**2**36'29 31.23591 AU opposition -1454 May 14 j 22:16 9°MJ36'07 7°36'12 morning rise -1461 Nov 10 j 02:47 24°**♀**59'27 direct -1454 Aug 03 i 02:59 8°M15'41 retrograde -1460 Feb 11 i 05:46 27°**♀**08'22 evening set -1454 Nov 01 i 08:55 10°M11'38 opposition -1460 Apr 29 j 23:04 25°**2**46'37 11°16'28 min. Earth dist. -1460 Apr 29 j 02:30 25°**△**48'00 29.33277 AU -1454 Nov 14 i 22:47 10°M41'39 6°50'09 conjunction -1460 Jul 18 j 21:52 24°**£**23'46 -1454 Nov 14 i 23:04 10°M41'40 6°50'09 direct minimum elong -1460 Oct 20 j 20:58 26°**£**31'59 -1454 Nov 16 j 11:46 10°ML45'05 32.27901 AU evening set max. Earth dist. -1454 Nov 28 j 13:10 11°ML11'42 morning rise conjunction -1460 Nov 01 j 01:12 26° **2**57'50 10°17'04 retrograde -1453 Feb 26 j 15:43 13°ML07'36 11°ML50'24 30.38004 AU minimum elong -1460 Nov 01 j 01:35 26°**£**57'53 10°17'04 min. Earth dist. -1453 May 15 j 20:10 max. Earth dist. -1460 Nov 01 j 23:16 26°**♀**59'58 31.36087 AU opposition -1453 May 17 j 11:28 11°M47'51 6°58'09 -1460 Nov 12 j 05:40 27°**£**23'43 direct -1453 Aug 05 j 16:04 10°M27'47 morning rise -1459 Feb 12 j 20:29 -1453 Nov 03 j 11:02 12°M21'56 retrograde 29°**♀**30'34 evening set opposition -1459 May 02 j 16:45 28°**₽**09'06 10°41'13 28°**♀**10'37 29.45873 AU -1453 Nov 17 j 07:48 min. Earth dist. -1459 May 01 j 18:04 conjunction 12°M52'19 6°14'31 -1459 Jul 21 j 15:44 direct 26°**£**46'41 minimum elong -1453 Nov 17 j 08:03 12°M52'21 6°14'30 evening set -1459 Oct 22 j 22:28 28°**♀**52'41 max. Earth dist. -1453 Nov 19 j 00:18 12°M56'03 32.45684 AU morning rise -1453 Dec 01 j 04:55 13°M22'45 conjunction -1459 Nov 03 j 14:32 29°**₽**19'29 9°43'52 -1452 Jan 27 j 07:28 15°M minimum elong -1459 Nov 03 j 14:54 29°**₽**19'31 9°43'50 retrograde -1452 Feb 28 j 23:09 15°M17'04 -1459 Nov 04 j 15:34 29°**₽**21'53 -1452 Apr 02 j 18:42 max. Earth dist. 31.49496 AU 29°**-**46′19 min. Earth dist. -1452 May 17 j 06:58 morning rise -1459 Nov 15 j 06:44 14°ML00'13 30.55918 AU

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1452 in astronomical counting style is the year 1453 BCE in historical counting style. -1452 May 18 j 23:51 13°ML57'35 6°19'56 conjunction -1446 Dec 01 i 02:34 27°ML15'24 2°05'31 opposition -1452 Aug 07 j 03:59 minimum elong -1446 Dec 01 j 02:39 direct 12°M37'54 27°M15'25 2°05'30 27°M20'18 33.89719 AU -1452 Nov 04 j 13:12 -1446 Dec 03 j 10:49 evening set 14°M30'20 max. Earth dist. -1446 Dec 16 j 04:33 27°M46'37 morning rise -1445 Mar 14 j 18:24 conjunction -1452 Nov 18 j 15:58 15°M01'01 5°38'45 retrograde 29°M32'03 minimum elong -1452 Nov 18 j 16:11 15°Mo1'02 5°38'44 min. Earth dist. -1445 Jun 01 j 08:41 28°M18'26 32.01029 AU -1452 Nov 18 j 04:54 15°M opposition -1445 Jun 03 j 17:19 28°M14'55 1°54'45 max. Earth dist. -1452 Nov 20 j 10:20 15°M04'53 32.64220 AU direct -1445 Aug 23 j 02:42 26°M58'14 morning rise -1452 Dec 02 j 19:14 15°M31'44 evening set -1445 Nov 18 j 03:29 28°M41'02 retrograde -1451 Mar 02 j 07:47 17°M24'33 min. Earth dist. -1451 May 19 j 14:46 16°ML08'13 30.74603 AU conjunction -1445 Dec 03 j 06:10 29°M12'03 1°30'47 -1445 Dec 03 j 06:13 opposition -1451 May 21 j 11:20 16°M05'22 5°41'40 minimum elong 29°M12'03 1°30'45 -1445 Dec 05 j 15:00 -1451 Jul 10 j 04:14 15°RM max. Earth dist. 29°M16'57 34.12407 AU direct -1451 Aug 09 j 15:58 14°M46'03 morning rise -1445 Dec 18 j 09:58 29°M43'09 -1451 Sep 08 j 10:33 15°M₀ -1445 Dec 26 j 22:24 0°**⊼** evening set -1451 Nov 06 j 15:19 16°M36'53 retrograde -1444 Mar 15 j 22:03 1°×727'35 min. Earth dist. -1444 Jun 02 j 12:29 0° ₹14'27 32.23823 AU conjunction -1451 Nov 20 j 23:22 17°**M**L07'47 5°02'56 opposition -1444 Jun 04 j 23:40 0°**∡**10'48 1°17'59 minimum elong -1451 Nov 20 j 23:34 17°M07'48 5°02'54 -1444 Jun 12 j 07:31 max. Earth dist. -1451 Nov 22 j 20:36 17°M11'52 32.83495 AU direct -1444 Aug 24 j 08:45 28°M54'31 morning rise -1451 Dec 05 j 08:03 17°M38'44 -1444 Oct 31 j 02:47 0°×7 retrograde -1450 Mar 04 i 15:44 19°M30'08 evening set -1444 Nov 19 i 05:23 0°**х** 36′15 min. Earth dist. -1450 May 21 i 23:51 18°M14'12 30.94062 AU opposition -1450 May 23 j 22:14 18°M11'15 5°03'24 conjunction -1444 Dec 04 i 09:13 1°**х** 07′06 0°56'25 direct -1450 Aug 12 j 03:04 16°M52'22 -1444 Dec 04 i 09:15 1°**х** 07′06 0°56'24 minimum elong -1450 Nov 08 j 17:23 max. Earth dist. -1444 Dec 06 i 20:10 1°**₹**12'09 34.35393 AU evening set 18°M41'39 -1444 Dec 19 j 14:09 1°**х** 38′03 morning rise -1450 Nov 23 j 06:11 19°ML12'42 4°27'08 -1443 Mar 18 j 00:57 3°**х** 21′32 conjunction retrograde -1443 Jun 04 j 17:55 2°**∡**08'45 32.46914 AU -1450 Nov 23 j 06:22 19°M12'43 4°27'07 min. Earth dist. minimum elong 2°**∡**105'06 0°41'40 -1450 Nov 25 j 05:52 -1443 Jun 07 j 05:34 max. Earth dist. 19°M16'59 33.03522 AU opposition -1450 Dec 07 j 19:30 -1443 Aug 26 j 13:30 0°**∡**¹49'13 19°**M**₊43'50 morning rise direct -1449 Mar 06 j 23:25 retrograde -1443 Nov 21 j 07:05 2°×29'53 21°M33'53 evening set 20° ML 18'28 31.14256 AU -1449 May 24 j 06:54 min. Earth dist. -1449 May 26 j 08:16 -1443 Dec 06 j 11:32 3°**х**¹00'32 0°22'27 opposition 20°M15'20 4°25'13 conjunction -1443 Dec 06 j 11:33 direct -1449 Aug 14 j 14:27 18°**M**⋅56'52 minimum elong 3°**₹**00'32 0°22'26 3°**✗**05'37 34.58645 AU -1449 Nov 10 j 19:26 -1443 Dec 08 j 23:25 evening set 20°M44'43 max. Earth dist. morning rise -1443 Dec 21 j 17:05 3°**∡**³31′18 conjunction -1449 Nov 25 j 12:08 21°M15'52 3°51'26 retrograde -1442 Mar 20 j 03:32 5°**х¹**13'52 -1449 Nov 25 j 12:17 21°M15'53 3°51'24 min. Earth dist. -1442 Jun 06 j 20:48 4°**✗**01'31 32.70266 AU minimum elong max. Earth dist. -1449 Nov 27 j 13:47 21°M20'17 33.24227 AU opposition -1442 Jun 09 j 10:37 3°**х** 57'45 0°05'49 morning rise -1449 Dec 10 j 05:42 21°M47'06 desc. node -1442 Aug 08 j 13:24 2°**х¹**48′13 -1448 Mar 08 j 06:00 -1442 Aug 28 j 18:53 2°**∡**¹42'15 retrograde 23°M35'54 direct -1448 May 25 j 14:04 22°M20'56 31.35136 AU -1442 Nov 23 j 08:46 4°**х** 21′56 min. Earth dist. evening set -1448 May 27 j 17:38 opposition 22°M17'41 3°47'12 20°M59'40 -1442 Dec 08 j 13:12 4°**≯**52'21 -0°11'08 direct -1448 Aug 15 j 23:13 conjunction -1442 Dec 08 j 13:12 evening set -1448 Nov 11 j 21:26 22°M46'09 minimum elong 4°**₹**52'21 0°11'09 behind sun begin -1442 Dec 08 i 08:24 4°**х** 51′58 conjunction -1448 Nov 26 j 17:40 23°M17'21 3°15'53 behind sun end -1442 Dec 08 j 18:00 4°**х** 52'44 minimum elong -1448 Nov 26 j 17:48 23°M17'21 3°15'53 max. Earth dist. -1442 Dec 11 i 02:20 4° ₹ 57'29 34.82138 AU max. Earth dist. 23°M21'59 33.45553 AU -1448 Nov 28 j 22:10 morning rise -1442 Dec 23 i 19:02 5°**₹**22'52 -1448 Dec 11 j 14:31 23°M48'37 retrograde -1441 Mar 22 j 06:28 7°**х** 04'35 morning rise -1447 Mar 10 j 10:11 min. Earth dist. -1441 Jun 09 j 00:20 5° ₹ 52'34 32.93911 AU retrograde 25°M-36'13 opposition 5°**x**⁷48'46 -0°29'31 min. Earth dist. -1447 May 27 j 20:45 24°M21'43 31.56603 AU -1441 Jun 11 j 15:07 opposition -1447 May 30 j 02:04 24°M18'22 3°09'24 direct -1441 Aug 30 j 23:26 4°×33'38 -1447 Aug 18 j 10:18 23°M00'48 evening set -1441 Nov 25 j 10:03 6° **₹**12'22 direct -1447 Nov 13 j 23:34 24°M45'59 evening set 6°**∡**742'30 -0°44'10 conjunction -1441 Dec 10 j 14:17 -1447 Nov 28 j 22:23 -1441 Dec 10 j 14:16 6°**х** 42'30 0°44'12 conjunction 25°M17'11 2°40'34 minimum elong -1441 Dec 13 j 05:23 6°**≯**47'46 35.05915 AU minimum elong -1447 Nov 28 j 22:30 25°**M**₁7'11 2°40'32 max. Earth dist. max. Earth dist. -1447 Dec 01 j 03:50 25°M21'52 33.67409 AU morning rise -1441 Dec 25 j 19:41 7°**х** 12′46 morning rise -1447 Dec 13 j 22:15 25°M48'27 retrograde -1440 Mar 23 j 07:25 8°×753'39 retrograde -1446 Mar 12 j 15:54 27°M34'55 min. Earth dist. -1440 Jun 10 j 02:37 7°**∡**′42′00 33.17854 AU min. Earth dist. -1446 May 30 j 02:05 26°M20'56 31.78601 AU opposition -1440 Jun 12 j 18:45 7°**∡**°38′08 -1°04′18 opposition -1446 Jun 01 j 10:00 26° M $_{1}7'26$ 2°31'54 direct -1440 Sep 01 j 05:15 6°**х** 23′21 direct -1446 Aug 20 j 18:18 25°ML00'18 evening set -1440 Nov 26 j 11:25 8°**₹**01'13 -1446 Nov 16 j 01:25 26°M44'17 evening set

-1440 Dec 11 j 14:38

conjunction

8°**∡**31'03 -1°16'43

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•	nical year style is used: Th		•	* *			e 34
minimum elong	-1440 Dec 11 j 14:35	8° ₹ 31'03		evening set	-1433 Dec 09 j 16:27	20° × 704'38	
max. Earth dist.	-1440 Dec 11 j 14:33	8° × 31'03 3		evening set	-1433 Dec 09 j 10.27	20 X 04 36	
	•		55.29989 AU		1422 D 24 : 02-26	200.721127	49.4915.2
morning rise	-1440 Dec 26 j 19:24	9° × 701'00		conjunction	-1433 Dec 24 j 02:36 -1433 Dec 24 j 02:27	20° ₹ 31'37	
retrograde	-1439 Mar 25 j 08:28	10° 🗷 41'08	22 42150 ATT	minimum elong	,	20° 🗷 31'37	
min. Earth dist.	-1439 Jun 12 j 03:27	9° 🖈 29'53 3		max. Earth dist.	-1433 Dec 27 j 02:24		37.06460 AU
opposition	-1439 Jun 14 j 21:38	9° 🖈 25'55 -	1°38'31	morning rise	-1432 Jan 07 j 14:32	20° ₹ 58'45	
direct	-1439 Sep 03 j 07:52	8° х 11'30 9° х 48'32		retrograde	-1432 Apr 05 j 20:39	22° x ⁷ 35'01	25 20054 ATT
evening set	-1439 Nov 28 j 12:30	9° X '48'32		min. Earth dist.	-1432 Jun 24 j 00:10		35.20054 AU
	1420 D 12:14.24	100 71000	1040145	opposition	-1432 Jun 27 j 01:52	21° 🗷 22'06	-5°20'18
conjunction	-1439 Dec 13 j 14:34	10° ₹ 18′02 -		direct	-1432 Sep 15 j 12:46	20° 🖈 10'20	
minimum elong	-1439 Dec 13 j 14:30		1°48'47	evening set	-1432 Dec 10 j 16:47	21° ∡ ′43′05	
max. Earth dist.	-1439 Dec 16 j 08:49	10° 🗷 23'29 3	35.5440/ AU		1422 D 24 : 22 12	220 700125	5017147
morning rise	-1439 Dec 28 j 17:57	10° √ 47'40 12° √ 27'06		conjunction	-1432 Dec 24 j 23:12	22°× 7 09'35	
retrograde	-1438 Mar 27 j 05:11		22 ((002 AII	minimum elong	-1432 Dec 24 j 23:02	22°× 7 09'34	
min. Earth dist.	-1438 Jun 14 j 05:10	11° x ⁷ 16'11 3		max. Earth dist.	-1432 Dec 28 j 00:31		37.32114 AU
opposition	-1438 Jun 17 j 00:02	11° 🗷 12'11 -2	2-12-08	morning rise	-1431 Jan 08 j 07:07	22° x ⁷ 36'13	
direct	-1438 Sep 05 j 12:51	9° √ 58'09		retrograde	-1431 Apr 07 j 14:48	24° 🖈 12'05	25 45025 444
evening set	-1438 Nov 30 j 13:24	11° ∡ ³34′25		min. Earth dist.	-1431 Jun 25 j 23:02		35.45827 AU
	1420 D 15:12.41	100 700104	2020114	opposition	-1431 Jun 29 j 00:16	22° 🖈 59'28	-5°49'19
conjunction	-1438 Dec 15 j 13:41	12° ₹ 03'34 -2		direct	-1431 Sep 17 j 14:00	21° х 48'02	
minimum elong	-1438 Dec 15 j 13:37	12° ₹ 03'33		evening set	-1431 Dec 12 j 17:06	23° ∡ ¹20′20	
max. Earth dist.	-1438 Dec 18 j 08:22	12° ∡ ′09′00 3	35.79172 AU			=	
morning rise	-1438 Dec 30 j 15:32	12° ∡ ′32'49		conjunction	-1431 Dec 26 j 19:15	23° ∡ ¹46'19	
retrograde	-1437 Mar 29 j 04:03	14° ∡ 11'37		minimum elong	-1431 Dec 26 j 19:05	23° ∡ ¹46'19	
min. Earth dist.	-1437 Jun 16 j 04:24	13° ∡ *01′09 3		max. Earth dist.	-1431 Dec 29 j 19:55		37.57688 AU
opposition	-1437 Jun 19 j 01:44	12° ₹ 57'02 -2	2°45'08	morning rise	-1430 Jan 09 j 23:03	24° ∡ 12'27 −	
direct	-1437 Sep 07 j 15:00	11° ∡ ⁴43'23		retrograde	-1430 Apr 09 j 10:42	25° ∡ ¹47'56	
evening set	-1437 Dec 02 j 14:14	13° ∡ 18'56		min. Earth dist.	-1430 Jun 27 j 19:32		35.71518 AU
				opposition	-1430 Jun 30 j 22:13	24° ∡ ³35'36	-6°17'40
conjunction	-1437 Dec 17 j 12:30	13° ∡ ′47'42 -2		direct	-1430 Sep 19 j 12:32	23° х 24'28	
minimum elong	-1437 Dec 17 j 12:24	13° ∡ ′47'41 2		evening set	-1430 Dec 14 j 17:03	24° ∡ ¹56′20	
max. Earth dist.	-1437 Dec 20 j 09:21	13° ∡ ′53′16 3	36.04246 AU			_	
morning rise	-1436 Jan 01 j 12:17	14° ∡ 16'35		conjunction	-1430 Dec 28 j 14:46	25° ∡ ¹21'48	
retrograde	-1436 Mar 30 j 02:07	15° ∡ 54'47		minimum elong	-1430 Dec 28 j 14:35	25° ∡ ¹21'48	
min. Earth dist.	-1436 Jun 17 j 05:17	14° ∡ ′44'39 3		max. Earth dist.	-1430 Dec 31 j 16:32		37.83157 AU
opposition	-1436 Jun 20 j 02:49	14° ≯ ′40'32 -3	3°17'29	morning rise	-1429 Jan 11 j 14:08	25° ∡ ¹47'25	
direct	-1436 Sep 08 j 15:53	13° ∡ ′27′16		retrograde	-1429 Apr 11 j 05:11	27° ∡ ¹22'33	
evening set	-1436 Dec 03 j 14:55	15° ∡ 02'11		min. Earth dist.	-1429 Jun 29 j 17:44		35.97126 AU
				opposition	-1429 Jul 02 j 19:45	26° ∡ 10′28	-6°45'21
conjunction	-1436 Dec 18 j 10:46	15° ∡ ′30'31 -3		direct	-1429 Sep 21 j 10:35	24° ₹ ′59'38	
minimum elong	-1436 Dec 18 j 10:40	15° ∡ ′30'31 ∶		evening set	-1429 Dec 16 j 16:56	26° х 31′06	
max. Earth dist.	-1436 Dec 21 j 08:23	15° ∡ 36′07 3	36.29591 AU				
morning rise	-1435 Jan 02 j 08:05	15° ∡ ′59'00		conjunction	-1429 Dec 30 j 09:57	26° ≯ 56′02	
retrograde	-1435 Apr 01 j 01:00	17° ∡ ³36'40		minimum elong	-1429 Dec 30 j 09:45	26° ₹ 56′01	6°36'49
min. Earth dist.	-1435 Jun 19 j 03:48	16° ∡ ¹26'57 3		max. Earth dist.	-1428 Jan 02 j 11:58	27° ∡ ¹01'41	38.08557 AU
opposition	-1435 Jun 22 j 03:17	16° ∡ ′22'45 -3	3°49'11	morning rise	-1428 Jan 13 j 04:27	27° ∡ ¹21'06	
direct	-1435 Sep 10 j 16:06	15° ∡ '09'52		retrograde	-1428 Apr 12 j 00:21	28° ₹ ¹55'54	
evening set	-1435 Dec 05 j 15:29	16° ∡ ⁴44'11		min. Earth dist.	-1428 Jun 30 j 13:19		36.22677 AU
				opposition	-1428 Jul 03 j 16:23	27° ∡ ¹44'04	-7°12'20
conjunction	-1435 Dec 20 j 08:22	17° ∡ 12'06		direct	-1428 Sep 22 j 07:23	26° ∡ ³33'31	
minimum elong	-1435 Dec 20 j 08:14	17° ∡ 12'05 ∶	3°51'16	evening set	-1428 Dec 17 j 16:40	28° ∡ ¹04'37	
max. Earth dist.	-1435 Dec 23 j 07:00	17° ∡ 17'44 3	36.55115 AU				
morning rise	-1434 Jan 04 j 02:58	17° ∡ ′40′08		conjunction	-1428 Dec 31 j 04:30	28° ∡ ¹29'01	
retrograde	-1434 Apr 03 j 01:29	19° ∡ 17'19		minimum elong	-1428 Dec 31 j 04:18	28° ₹ ¹29'00	
min. Earth dist.	-1434 Jun 21 j 03:23	18° ∡ '07'56 3		max. Earth dist.	-1427 Jan 03 j 06:49		38.33910 AU
opposition	-1434 Jun 24 j 03:26	18° ∡ '03'44 -₄	4°20'14	morning rise	-1427 Jan 13 j 18:04	28° ₹ 53'31	
direct	-1434 Sep 12 j 13:52	16° ∡ ′51'15			-1427 Feb 26 j 05:55	0°ಕ	
evening set	-1434 Dec 07 j 15:57	18° ≯ 25′00		retrograde	-1427 Apr 13 j 21:07	0° ප 28'02	
					-1427 Jun 01 j 00:19	30°₹ ҂ 7	
conjunction	-1434 Dec 22 j 05:47	18° ≯ 52'28 -	4°20'22	min. Earth dist.	-1427 Jul 02 j 09:20	29° х 20′43	36.48236 AU
minimum elong	-1434 Dec 22 j 05:39	18° ₹ 52'27		opposition	-1427 Jul 05 j 12:47	29° ∡ 16′28	-7°38'38
max. Earth dist.	-1434 Dec 25 j 05:47	18° ∡ 758′09 3	36.80771 AU	direct	-1427 Sep 24 j 01:30	28° ∡ ¹06′12	
morning rise	-1433 Jan 05 j 21:03	19° ∡ 20′03		evening set	-1427 Dec 19 j 16:00	29° ∡ ³36'58	
retrograde	-1433 Apr 04 j 22:51	20° ∡ 56'46					
min. Earth dist.	-1433 Jun 23 j 02:15	19° ∡ ¹47'44 3	34.94216 AU	conjunction	-1426 Jan 01 j 22:38	0° ට 00'48	
opposition	-1433 Jun 26 j 02:52	19° ∡ ⁴43'31 -	4°50'36	minimum elong	-1426 Jan 01 j 22:26	0° ට 00'47	7°26'59
direct	-1433 Sep 14 j 13:47	18° ∡ ³31′24			-1426 Jan 01 j 11:57	0°ಕ	

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1426 in astronomical counting style is the year 1427 BCE in historical counting style. -1426 Jan 05 j 02:20 0°る06'30 38.59286 AU direct -1420 Oct 04 i 10:34 8°る27'17 max. Earth dist. -1426 Jan 15 j 06:41 0°る24'45 -1420 Dec 31 j 09:21 9°**る**56'52 morning rise evening set -1426 Apr 15 j 14:04 1°る59'01 retrograde -1426 Jul 04 j 04:53 0°る51'58 36.73820 AU -1419 Jan 11 j 19:38 10°る16'32 -10°02'38 min. Earth dist. conjunction -1419 Jan 11 j 19:25 -1426 Jul 07 j 08:39 0°る47'42 -8°04'14 10°る16'31 10°02'40 opposition minimum elong -1426 Aug 15 j 02:45 -1419 Jan 15 j 01:31 10°る22'08 30°R.✓ max. Earth dist. 40.36423 AU -1426 Sep 25 j 22:52 29°**х** 37'44 -1419 Jan 23 j 07:03 direct morning rise 10°**ප**36'17 -1419 Apr 25 j 12:25 12°る09'45 -1426 Nov 05 j 12:47 0°궁 retrograde -1419 Jul 14 j 10:38 evening set -1426 Dec 21 j 15:27 1°**る**08'14 min. Earth dist. 11°る04'36 38.52089 AU -1419 Jul 17 j 15:23 opposition 11°る00'25 -10°44'27 conjunction -1425 Jan 03 j 16:20 1°る31'30 -7°51'05 direct -1419 Oct 06 j 05:28 9°**る**52'35 -1425 Jan 03 j 16:08 -1418 Jan 02 j 08:07 11°る22'06 minimum elong 1°**る**31'29 7°51'06 evening set -1425 Jan 06 j 19:40 max. Earth dist. 1°る37'08 38.84699 AU morning rise -1425 Jan 16 j 18:53 1°る54'53 conjunction -1418 Jan 13 j 10:58 11°る41'08 -10°22'27 retrograde -1425 Apr 17 j 08:01 3°る28'55 minimum elong -1418 Jan 13 j 10:45 11°**る**41'07 10°22'28 min. Earth dist. -1425 Jul 05 j 22:55 2°る22'12 36.99464 AU max. Earth dist. -1418 Jan 16 j 15:30 11°る46'37 40.61052 AU opposition -1425 Jul 09 j 03:59 2°る17'53 -8°29'08 morning rise -1418 Jan 24 j 15:03 12°る00'14 direct -1425 Sep 27 j 18:26 1°る08'13 retrograde -1418 Apr 27 j 02:55 13°る33'40 evening set -1425 Dec 23 j 14:34 2°る38'29 min. Earth dist. -1418 Jul 16 j 02:36 12°る28'47 38.76785 AU opposition -1418 Jul 19 j 08:01 12°る24'34 -11°04'45 conjunction -1424 Jan 05 j 09:45 3°る01'10 -8°14'34 direct -1418 Oct 07 j 23:24 11°る16'59 minimum elong -1424 Jan 05 i 09:32 3°る01'10 8°14'36 evening set -1417 Jan 04 i 06:46 12°る46'26 max. Earth dist. -1424 Jan 08 j 14:43 3°る06'54 39.10152 AU morning rise -1424 Jan 18 i 06:23 3°る23'58 conjunction -1417 Jan 15 i 02:09 13°る04'50 -10°41'41 retrograde -1424 Apr 17 j 23:37 4°る57'51 -1417 Jan 15 i 01:57 13°る04'49 10°41'43 minimum elong -1424 Jul 06 j 18:24 3°る51'22 37.25128 AU max. Earth dist. -1417 Jan 18 j 07:17 13°る10'19 40.85372 AU min. Earth dist. -1424 Jul 09 j 22:57 3°**ප්**47'06 -8°53'21 -1417 Jan 25 j 22:42 13°る23'17 morning rise opposition -1424 Sep 28 j 15:15 2°る37'45 -1417 Apr 28 j 16:18 14°る56'41 retrograde direct -1424 Dec 24 j 13:42 4°る07'49 -1417 Jul 17 j 20:14 13°る51'56 39.01179 AU min. Earth dist. evening set -1417 Jul 21 j 00:15 13°る47'49 -11°24'28 opposition -1423 Jan 06 j 02:43 4°る29'55 -8°37'25 -1417 Oct 09 j 17:14 12°る40'27 conjunction direct 14°**る**09'52 -1423 Jan 06 j 02:31 evening set -1416 Jan 06 j 05:23 minimum elong 4°る29'54 8°37'27 -1423 Jan 09 j 07:22 max. Earth dist. 4°る35'35 39.35612 AU 14°る27'35 -11°00'22 -1423 Jan 18 j 17:10 4°る52'07 -1416 Jan 16 j 16:59 morning rise conjunction -1423 Apr 19 j 16:11 6°る25'52 -1416 Jan 16 j 16:46 14°る27'34 11°00'22 retrograde minimum elong 5°る19'45 37.50779 AU -1423 Jul 08 j 11:19 -1416 Jan 19 j 21:35 14°る33'01 41.09417 AU min. Earth dist. max. Earth dist. -1423 Jul 11 j 17:18 5°る15'25 -9°16'53 -1416 Jan 27 j 05:33 14°**る**45'23 opposition morning rise direct -1423 Sep 30 j 09:59 4°る06'23 retrograde -1416 Apr 29 j 06:02 16°**る**18'47 -1423 Dec 26 j 12:41 5°**る**36'17 min. Earth dist. -1416 Jul 18 j 11:18 15°る14'15 39.25307 AU evening set opposition -1416 Jul 21 j 15:56 15°る10'06 -11°43'33 conjunction -1422 Jan 07 j 19:19 5°る57'47 -8°59'39 direct -1416 Oct 10 j 10:10 14°る02'57 -1422 Jan 07 j 19:06 5°る57'46 8°59'40 -1415 Jan 07 j 03:47 15°る32'19 minimum elong evening set max. Earth dist. -1422 Jan 11 j 00:39 6°る03'28 39.61028 AU -1422 Jan 20 j 03:29 6°る19'24 -1415 Jan 17 j 07:16 15°**ප්**49'23 -11°18'27 morning rise conjunction -1422 Apr 21 j 09:46 7°る53'03 -1415 Jan 17 j 07:03 15°る49'22 11°18'30 retrograde minimum elong 6°る47'10 37.76375 AU -1415 Jan 20 i 11:32 15°る54'45 41.33214 AU min. Earth dist. -1422 Jul 10 j 06:07 max. Earth dist. 6°る42'53 -9°39'45 opposition -1422 Jul 13 j 11:32 morning rise -1415 Jan 27 i 11:52 16°る06'32 direct -1422 Oct 02 i 03:19 5°る34'11 retrograde -1415 Apr 30 j 22:18 17°る39'55 evening set -1422 Dec 28 j 11:31 7°る03'56 min. Earth dist. -1415 Jul 20 i 03:14 16°る35'32 39.49238 AU -1415 Jul 23 j 07:22 16°る31'26 -12°02'02 opposition -1421 Jan 09 j 11:41 7°る24'50 -9°21'14 direct -1415 Oct 12 j 00:06 15°る24'30 conjunction -1421 Jan 09 j 11:29 7°る24'49 9°21'16 evening set -1414 Jan 09 j 02:08 16°る53'52 minimum elong max. Earth dist. -1421 Jan 12 j 17:28 7°る30'31 39.86357 AU morning rise -1421 Jan 21 j 13:05 7°る45'50 conjunction -1414 Jan 18 j 21:25 17°る10'16 -11°35'58 retrograde -1421 Apr 23 j 03:52 9°る19'25 minimum elong -1414 Jan 18 j 21:13 17°る10'15 11°36'00 8°る13'49 38.01832 AU min. Earth dist. -1421 Jul 11 j 23:30 max. Earth dist. -1414 Jan 22 j 02:30 17°る15'39 41.56853 AU -1414 Jan 28 j 17:30 -1421 Jul 15 j 05:11 8°る09'32 -10°01'57 morning rise 17°る26'44 opposition -1421 Oct 03 j 19:35 7°る01'08 -1414 May 02 j 12:46 19°る00'09 direct retrograde -1421 Dec 30 j 10:32 8°る30'48 -1414 Jul 21 j 18:24 17°る55'56 39.73017 AU evening set min. Earth dist. -1414 Jul 24 j 22:22 17°る51'52 -12°19'54 opposition -1420 Jan 11 j 03:44 8°る51'05 -9°42'14 -1414 Oct 13 j 14:31 16°**ප්**45'08 conjunction direct -1413 Jan 11 j 00:27 minimum elong -1420 Jan 11 j 03:30 8°る51'04 9°42'15 evening set 18°る14'32 max. Earth dist. -1420 Jan 14 j 08:49 8°**궁**56'40 40.11506 AU morning rise -1420 Jan 22 j 22:23 9°**る**11'28 conjunction -1413 Jan 20 j 11:04 18°る30'15 -11°52'55 retrograde -1420 Apr 23 j 22:08 10°る44'59 minimum elong -1413 Jan 20 j 10:51 18°る30'14 11°52'57 -1420 Jul 12 j 16:41 9°る39'38 38.27099 AU max. Earth dist. -1413 Jan 23 j 15:19 18°る35'33 41.80363 AU min. Earth dist.

-1420 Jul 15 j 22:25

opposition

9°る35'24 -10°23'31

-1413 Jan 29 j 22:35

morning rise

18°る46'01

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -1413 in astronomical counting style is the year 1414 BCE in historical counting style. 20°る19'31 -1413 May 04 i 03:28 minimum elong -1406 Jan 29 i 04:18 27°**る**30'45 13°36'07 retrograde max. Earth dist. min. Earth dist. -1413 Jul 23 j 08:23 19°る15'31 39.96688 AU -1406 Feb 01 j 07:06 27°る35'46 43.40154 AU opposition -1413 Jul 26 j 13:04 19°る11'26 -12°37'10 -1406 Feb 04 j 18:26 27°る41'20 morning rise -1413 Oct 15 j 04:17 18°**る**04'56 -1406 May 12 j 18:57 29°る16'14 direct retrograde -1412 Jan 12 j 22:44 19°る34'24 -1406 Aug 01 j 09:08 28°る13'37 41.56987 AU evening set min. Earth dist. -1406 Aug 04 j 11:09 opposition 28°る09'46 -14°21'50 -1412 Jan 22 j 00:38 19°る49'25 -12°09'17 -1406 Oct 24 j 04:03 conjunction direct 27°る04'54 -1412 Jan 22 j 00:26 -1405 Jan 24 j 14:22 minimum elong 19°る49'25 12°09'17 evening set 28°る35'52 -1412 Jan 25 j 05:56 max. Earth dist. 19°る54'46 42.03761 AU morning rise -1412 Jan 31 j 03:16 20°る04'30 conjunction -1405 Jan 30 j 16:20 28°**る**45'36 -13°48'48 28°る45'36 13°48'49 retrograde -1412 May 04 j 14:15 21°る38'05 minimum elong -1405 Jan 30 j 16:10 -1412 Jul 23 j 23:36 20°る34'15 40.20236 AU -1405 Feb 02 j 18:46 28°る50'35 43.61722 AU min. Earth dist. max. Earth dist. -1405 Feb 05 j 18:35 28°る55'21 opposition -1412 Jul 27 j 03:17 20°る30'13 -12°53'49 morning rise direct -1412 Oct 15 j 20:51 19°る23'57 -1405 Mar 23 j 09:27 0°≈ evening set -1411 Jan 13 j 21:07 20°る53'32 retrograde -1405 May 14 j 05:15 0°≈30'35 -1405 Jul 06 j 17:15 30°Rる conjunction -1411 Jan 22 j 13:50 21°る07'51 -12°25'05 min. Earth dist. -1405 Aug 02 j 23:19 29°る28'03 41.78539 AU minimum elong -1411 Jan 22 j 13:38 21°る07'50 12°25'06 opposition -1405 Aug 05 j 23:36 29°る24'18 -14°34'42 max. Earth dist. -1411 Jan 25 j 18:24 21°る13'07 42.27048 AU direct -1405 Oct 25 j 18:36 28°る19'38 morning rise -1411 Jan 31 j 07:12 21°る22'13 evening set -1404 Jan 26 j 14:43 29°る50'58 retrograde -1411 May 06 j 02:13 22°る55'56 min. Earth dist. -1411 Jul 25 i 12:41 21°る52'22 40.43654 AU conjunction -1404 Feb 01 i 04:08 29°る59'49 -14°01'03 opposition -1411 Jul 28 i 17:15 21°る48'18 -13°09'52 minimum elong -1404 Feb 01 i 04:00 29°**る**59'48 14°01'04 direct -1411 Oct 17 j 11:51 20°る42'16 -1404 Feb 01 i 06:53 0°≈ evening set -1410 Jan 15 j 19:18 22°る12'00 max. Earth dist. -1404 Feb 04 j 05:53 0°≈04'43 43.82903 AU -1404 Feb 06 j 17:42 0°≈08'41 morning rise -1410 Jan 24 j 02:35 22°₹25'36 -12°40'20 -1404 May 14 j 16:36 1°≈44'17 conjunction retrograde -1410 Jan 24 j 02:25 22°る25'35 12°40'20 -1404 Aug 03 j 11:17 0°≈41'55 41.99704 AU minimum elong min. Earth dist. -1410 Jan 27 j 07:24 22°る30'51 42.50181 AU -1404 Aug 06 j 11:27 0°≈38'11 -14°47'03 max. Earth dist. opposition -1404 Sep 08 j 05:53 -1410 Feb 01 j 10:36 22°**る**39'15 30°Rる morning rise -1410 May 07 j 15:44 24°る13'08 -1404 Oct 26 j 07:18 29°る33'41 retrograde direct -1410 Jul 27 j 03:30 23°중09'45 40.66906 AU -1404 Dec 11 j 19:12 min. Earth dist. 0°≈ 23°**ප්**05'45 -13°25'21 -1410 Jul 30 j 07:07 -1403 Jan 27 j 15:33 evening set 1°≈05'27 opposition -1410 Oct 19 j 01:31 21°**る**59'58 direct -1403 Feb 01 j 15:26 -1409 Jan 17 j 17:50 23°**る**29'52 1°≈13'22 -14°12'49 evening set conjunction -1403 Feb 01 j 15:16 minimum elong 1°≈13'22 14°12'50 -1409 Jan 25 j 15:25 23°₹42'44 -12°55'02 -1403 Feb 04 j 16:05 conjunction max. Earth dist. 1°≈18′10 44.03726 AU minimum elong -1409 Jan 25 j 15:14 23°る42'43 12°55'03 morning rise -1403 Feb 06 j 15:27 1°≈21'18 max. Earth dist. -1409 Jan 28 j 20:28 23°る47'59 42.73130 AU retrograde -1403 May 16 j 05:42 2°≈57'20 morning rise -1409 Feb 02 j 13:29 23°**る**55'39 min. Earth dist. -1403 Aug 04 j 23:47 1°≈55'06 42.20561 AU retrograde -1409 May 09 j 04:51 25°**る**29'45 opposition -1403 Aug 07 j 23:17 1°≈51'24 -14°58'55 min. Earth dist. -1409 Jul 28 j 16:55 24°る26'34 40.89925 AU direct -1403 Oct 27 j 17:27 0°≈47'05 -1409 Jul 31 j 20:25 24°る22'36 -13°40'16 -1402 Jan 29 j 17:29 2°≈19'22 opposition evening set -1409 Oct 20 j 14:47 23°る17'03 direct -1408 Jan 19 j 16:34 24°る47'10 conjunction -1402 Feb 03 j 02:31 2°≈26'16 -14°24'07 evening set -1402 Feb 03 i 02:23 minimum elong 2°≈26'16 14°24'09 -1408 Jan 27 i 03:55 24°**ප**59'18 -13°09'13 conjunction max. Earth dist. -1402 Feb 06 i 03:52 2°≈31'06 44.24269 AU -1408 Jan 27 i 03:45 minimum elong 24°る59'17 13°09'14 morning rise -1402 Feb 07 i 11:34 2°≈33'11 -1408 Jan 30 i 07:39 max. Earth dist. 25°る04'26 42.95814 AU retrograde -1402 May 17 j 16:55 4°≈09'45 morning rise -1408 Feb 03 i 15:50 25°**る**11'28 min. Earth dist. -1402 Aug 06 j 12:07 3°≈07'38 42.41144 AU retrograde -1408 May 09 j 20:21 26°**♂**45'47 opposition -1402 Aug 09 j 10:48 3°≈03'59 -15°10'16 min. Earth dist. -1408 Jul 29 j 06:24 25°る42'49 41.12658 AU direct -1402 Oct 29 j 04:36 1°≈59'50 -1408 Aug 01 j 09:36 25°**ට**38'53 -13°54'38 -1401 Jan 31 j 21:16 3°≈32'47 opposition evening set direct -1408 Oct 21 j 01:06 24°る33'35 evening set -1407 Jan 20 j 15:25 26°る03'57 conjunction -1401 Feb 04 j 13:24 3°≈38'34 -14°34'56 minimum elong -1401 Feb 04 j 13:16 3°≈38'33 14°34'56 conjunction -1407 Jan 27 j 16:16 26°る15'19 -13°22'54 morning rise -1401 Feb 08 j 05:30 3°≈44'19 -1407 Jan 27 j 16:05 26°る15'18 13°22'56 -1401 Feb 07 j 13:20 3°≈43'16 44.44577 AU minimum elong max. Earth dist. -1407 Jan 30 j 20:30 26°る20'27 43.18172 AU -1401 May 19 j 04:31 max. Earth dist. retrograde 5°≈21'33 -1407 Feb 03 j 17:29 26°**පි**26'42 -1401 Aug 07 j 22:46 morning rise min. Earth dist. 4°≈19'37 42.61511 AU -1407 May 11 j 08:19 28°**ප**01'18 retrograde opposition -1401 Aug 10 j 21:54 4°≈15′58 -15°21′08 min. Earth dist. -1407 Jul 30 j 20:48 26°る58'28 41.35019 AU direct -1401 Oct 30 j 14:44 3°≈12'00

opposition

evening set

conjunction

direct

-1407 Aug 02 j 22:31

-1407 Oct 22 j 14:26

-1406 Jan 22 j 14:49

26°る54'37 -14°08'29

25°**る**49'32

27°る20'12

-1406 Jan 29 j 04:27 27°₹30'46 -13°36'05

evening set

conjunction

morning rise

minimum elong

-1400 Feb 03 j 04:17

-1400 Feb 06 j 00:09

-1400 Feb 06 j 00:01

-1400 Feb 08 j 19:54

4°≈45'51

4°**≈**50'16

4°≈54'41

4°≈50'16 -14°45'16

14°45'18

Planetary Phenomena of Pluto from -1900 through -1398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 37

Attention, astronomical year style is used: The year -1400 in astronomical counting style is the year 1401 BCE in historical counting style.

max. Earth dist.	-1400 Feb 09 j 00:31	4° ≈ 54'59 44.64670 AU
retrograde	-1400 May 19 j 12:56	6°≈32'48
min. Earth dist.	-1400 Aug 08 j 11:18	5°≈30'59 42.81661 AU
opposition	-1400 Aug 11 j 08:57	5°≈27'25 -15°31'29
direct	-1400 Oct 31 j 03:07	4° ≈ 23'38
evening set	-1399 Feb 04 j 19:26	5°≈58'54
conjunction	-1399 Feb 06 j 10:35	6°≈01'27 -14°55'08
minimum elong	-1399 Feb 06 j 10:28	6°≈01'26 14°55'09
morning rise	-1399 Feb 08 j 01:33	6°≈03'59
max. Earth dist.	-1399 Feb 09 j 10:24	6°≈06'07 44.84563 AU
retrograde	-1399 May 20 j 21:10	7° ≈ 43'33
min. Earth dist.	-1399 Aug 09 j 21:28	6°≈41'56 43.01587 AU
opposition	-1399 Aug 12 j 19:39	6°≈38'21 -15°41'22
direct	-1399 Nov 01 j 16:18	5°≈34'45