Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5900 in astronomical counting style is the year 5901 BCE in historical counting style. opposition -5900 Feb 25 i 18:22 22°507'20 17°12'14 -5893 Mar 16 j 12:42 10°**Ω**17'49 14°53'03 opposition -5900 Feb 26 j 16:09 22°505'48 28.63861 AU -5893 Mar 16 j 08:49 10° Ω18'05 28.76353 AU min. Earth dist. min. Earth dist. -5900 May 15 j 17:25 20°9541'10 -5893 Jun 04 j 05:56 8°Ω53'05 direct direct -5893 Sep 11 j 16:23 11°**Ω**19′05 evening set conjunction -5900 Aug 30 j 09:37 23°926'25 15°59'11 -5893 Sep 17 j 21:21 -5900 Aug 30 j 09:51 11°**Ω**34'03 13°43'05 minimum elong 23°926'26 15°59'32 conjunction -5893 Sep 17 j 21:46 -5900 Aug 29 j 14:01 max. Earth dist. 23°**©**24'24 30.54599 AU minimum elong 11°**Ω**34′06 13°43'22 retrograde -5900 Dec 12 j 06:08 26°9508'22 max. Earth dist. -5893 Sep 18 j 02:58 11°**Ω**34'37 30.73133 AU 16°58'09 opposition -5899 Feb 27 j 17:52 24°9544'33 morning rise -5893 Sep 24 j 03:01 11°**Ω**49'07 min. Earth dist. -5899 Feb 28 j 10:50 24°**©**43'22 28.62220 AU retrograde -5893 Dec 31 j 00:10 14°**Ω**13'21 direct -5899 May 18 j 16:49 23°9518'30 opposition -5892 Mar 18 j 10:38 12°**Ω**50'13 14°26'14 -5892 Mar 18 j 03:12 min. Earth dist. 12°**Ω**50'43 28.82329 AU conjunction -5899 Sep 02 j 05:18 26°**©**03'27 15°44'59 direct -5892 Jun 06 j 02:30 11°**Ω**25'45 minimum elong -5899 Sep 02 j 05:34 26°903'29 15°45'19 evening set -5892 Sep 12 j 11:52 13°**Ω**48'38 max. Earth dist. -5899 Sep 01 j 14:03 26°9501'54 30.53812 AU retrograde -5899 Dec 15 j 01:46 28°9545'19 conjunction -5892 Sep 19 j 14:38 14°Ω05'43 13°17'23 opposition -5898 Mar 02 j 17:37 27°9521'32 16°42'00 minimum elong -5892 Sep 19 j 15:03 14°**Ω**05'46 13°17'41 min. Earth dist. -5898 Mar 03 j 07:50 27°**©**20'32 28.61795 AU max. Earth dist. -5892 Sep 20 j 00:40 14°**Ω**06'44 30.79975 AU direct -5898 May 21 j 14:40 25°955'38 morning rise -5892 Sep 26 j 17:57 14°**Ω**22'53 -5892 Oct 12 j 14:57 15°Ω conjunction -5898 Sep 05 j 00:36 28°9540'11 15°28'55 retrograde -5891 Jan 01 j 17:45 16°**Ω**44'16 minimum elong -5898 Sep 05 i 00:53 28°9540'12 15°29'16 opposition -5891 Mar 21 i 08:05 15°**Ω**21'16 13°57'57 max. Earth dist. -5898 Sep 04 i 13:08 28°539'00 30.54263 AU min. Earth dist. -5891 Mar 20 j 21:42 15°**Ω**21'58 28.89282 AU -5898 Oct 09 i 00:30 $0^{\circ}\Omega$ -5891 Apr 03 i 09:06 15°RΩ -5898 Dec 17 j 22:29 1°**Ω**21'51 direct -5891 Jun 09 j 01:25 13°Ω57'05 retrograde -5897 Mar 04 j 14:22 30°R95 -5891 Aug 10 j 04:54 15°Ω -5897 Mar 05 j 17:04 29°\$58'08 16°23'52 -5891 Sep 14 j 09:01 16°**Ω**17'02 opposition evening set -5897 Mar 06 j 02:35 min. Earth dist. 29°557'28 28.62546 AU -5891 Sep 22 j 07:11 16°**Ω**35'58 12°50'22 direct -5897 May 24 j 14:09 28°932'26 conjunction -5897 Aug 06 j 07:27 -5891 Sep 22 j 07:37 16°**Ω**36'00 12°50'39 0° Ω minimum elong -5891 Sep 22 j 19:35 16°**Ω**37'12 30.87827 AU max. Earth dist. -5897 Sep 07 j 19:49 1°Ω16'28 15°11'03 -5891 Sep 30 j 06:04 16°**Ω**54'58 conjunction morning rise -5897 Sep 07 j 20:09 1°Ω16'30 15°11'22 -5890 Jan 04 j 12:19 19°**Ω**13'41 minimum elong retrograde $1^{\circ}\Omega 15'40 30.55878 \text{ AU}$ -5897 Sep 07 j 11:58 -5890 Mar 24 j 04:53 17°**Ω**50'49 13°28'17 max. Earth dist. opposition 3°**Ω**57'51 -5897 Dec 20 j 18:47 -5890 Mar 23 j 14:13 17°**Ω**51'49 28.97268 AU retrograde min. Earth dist. 2°**Ω**34'13 16°03'49 -5896 Mar 07 j 16:19 16°**Ω**26'55 opposition direct -5890 Jun 11 j 21:53 2°**Ω**33'45 28.64426 AU min. Earth dist. -5896 Mar 07 j 23:09 evening set -5890 Sep 16 j 07:03 18°**Ω**44'05 -5896 May 26 j 10:46 1°**Ω**08'44 direct -5896 Sep 07 j 13:07 3°**Ω**47'06 conjunction -5890 Sep 24 j 23:08 19°**Ω**04'40 12°22'08 evening set minimum elong -5890 Sep 24 j 23:34 19°**Ω**04'43 12°22'24 -5896 Sep 09 j 14:49 3°**Ω**52'10 14°51'27 max. Earth dist. -5890 Sep 25 j 16:03 19°**Ω**06'21 30.96719 AU conjunction -5896 Sep 09 j 15:10 3°**Ω**52'12 14°51'47 -5890 Oct 03 j 15:47 19°**Ω**25'19 minimum elong morning rise -5896 Sep 09 j 10:55 3°**Ω**51'46 30.58625 AU -5889 Jan 07 j 04:03 21° **Ω**41'30 max. Earth dist. retrograde -5896 Sep 11 j 17:13 3°**Ω**57'18 -5889 Mar 26 j 07:53 20°**Ω**19'59 29.06304 AU morning rise min. Earth dist. -5896 Dec 22 j 14:24 6°**Ω**33'10 -5889 Mar 27 j 01:08 20°**Ω**18'49 12°57'21 retrograde opposition 5°Ω09'39 15°41'57 opposition -5895 Mar 10 j 15:25 direct -5889 Jun 14 i 18:27 18°**Ω**55'13 min. Earth dist. -5895 Mar 10 j 18:03 5°**Ω**09'28 28.67375 AU evening set -5889 Sep 18 i 06:11 21°Ω09'43 direct -5895 May 29 j 10:20 3°**Ω**44'24 evening set -5895 Sep 08 j 11:30 6°Ω17'35 conjunction -5889 Sep 27 i 14:26 21°**Ω**31'46 11°52'44 -5889 Sep 27 i 14:51 21°Ω31'49 11°52'58 minimum elong -5895 Sep 12 j 09:18 6°Ω27'06 14°30'12 -5889 Sep 28 j 10:01 21°Ω33'42 31.06691 AU conjunction max Earth dist -5895 Sep 12 j 09:41 6°Ω27'08 14°30'30 -5889 Oct 06 j 23:24 $21^{\circ}\Omega$ 53'53 minimum elong morning rise 24°**Ω**07'38 -5895 Sep 12 j 08:17 6°**Ω**27'00 30.62434 AU -5888 Jan 09 j 21:37 max. Earth dist. retrograde morning rise -5895 Sep 16 j 07:48 6°**Ω**36'42 opposition -5888 Mar 28 j 20:25 22°**Ω**45′09 12°25'13 retrograde -5895 Dec 25 j 10:07 9°**Ω**07'39 min. Earth dist. -5888 Mar 27 j 22:33 22°**Ω**46'38 29.16435 AU -5894 Mar 13 j 14:21 7°Ω44'14 15°18'19 direct -5888 Jun 16 j 15:11 21°**Ω**21'54 opposition -5894 Mar 13 j 13:56 7°**Ω**44'16 28.71368 AU -5888 Sep 19 j 05:44 23°**Ω**33'51 min. Earth dist. evening set -5894 Jun 01 j 07:24 6°**Ω**19'15 direct -5894 Sep 09 j 23:35 8°**Ω**48'36 -5888 Sep 29 j 05:09 23°**Ω**57'14 11°22'18 evening set conjunction -5888 Sep 29 j 05:34 minimum elong 23°**Ω**57'16 11°22'33 -5894 Sep 15 j 03:39 9°**Ω**01'08 14°07'23 conjunction max. Earth dist. -5888 Sep 30 j 04:55 23°**Ω**59'34 31.17753 AU minimum elong -5894 Sep 15 j 04:03 9°**Ω**01'10 14°07'42 morning rise -5888 Oct 09 j 05:12 24°**Ω**20′40 max. Earth dist. -5894 Sep 15 j 06:53 9°**Ω**01'27 30.67284 AU retrograde -5887 Jan 11 j 12:36 26°**Ω**32'08

opposition

min. Earth dist.

-5887 Mar 31 j 15:23

-5887 Mar 30 j 14:58

25°**Ω**09'52 11°52'01

25°**Ω**11'31 29.27665 AU

9°**£**13′44

11°**Ω**41′05

-5894 Sep 20 j 08:19

-5894 Dec 28 j 04:35

morning rise

retrograde

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 2 Attention, astronomical year style is used: The year -5887 in astronomical counting style is the year 5888 BCE in historical counting style.

Attention, astronomical year style is used: The year -5887 in astronomical counting style is the year 5888 BCE in historical counting style.							
direct	-5887 Jun 19 j 09:57	23° Ω 47′00		minimum elong	-5881 Oct 15 j 17:41	10° m 08'54	7°28'39
evening set	-5887 Sep 21 j 05:49	25° Ω 56′29		max. Earth dist.	-5881 Oct 17 j 13:52	10° My $13'01$	32.22053 AU
				morning rise	-5881 Oct 28 j 23:05	10°M 38'17	
conjunction	-5887 Oct 01 j 19:03	26° Ω 21′03		retrograde	-5880 Jan 28 j 01:40	12°M 36'06	
minimum elong	-5887 Oct 01 j 19:28	26° Ω 21′05		min. Earth dist.	-5880 Apr 15 j 10:14	-	30.32526 AU
max. Earth dist.	-5887 Oct 02 j 22:00		31.29914 AU	opposition	-5880 Apr 17 j 07:06	-	7°39'14
morning rise	-5887 Oct 12 j 09:00	26° Ω 45'41		direct	-5880 Jul 06 j 00:13	9° m 56'03	
retrograde	-5886 Jan 14 j 02:43	28° Ω 54'56		evening set	-5880 Oct 03 j 14:31	11° m 50'50	
min. Earth dist.	-5886 Apr 02 j 04:33		29.39969 AU				
opposition	-5886 Apr 03 j 09:31	27° Ω 32'57	11°17'52	conjunction	-5880 Oct 17 j 02:43	12° m 20'35	
direct	-5886 Jun 22 j 04:52	26° Ω 10′29		minimum elong	-5880 Oct 17 j 03:01	12° m 20'37	
evening set	-5886 Sep 23 j 06:16	28° Ω 17'37		max. Earth dist.	-5880 Oct 19 j 00:26		32.39917 AU
. ,.	5006 0 4 04:00 25	200 0 4211 5	10010140	morning rise	-5880 Oct 30 j 16:14	12° m 50'27	
conjunction minimum elong	-5886 Oct 04 j 08:25 -5886 Oct 04 j 08:49	28° Ω 43'15 28° Ω 43'17		retrograde min. Earth dist.	-5879 Jan 29 j 13:11	14° Mp 46'35	30.50420 AU
max. Earth dist.	-5886 Oct 04 j 08.49		31.43106 AU	opposition	-5879 Apr 17 j 19:50 -5879 Apr 19 j 20:01	13°My26'44	
morning rise	-5886 Oct 05 j 14:43	29°Ω08'56	31.43100 AU	direct	-5879 Jul 08 j 13:28	13 m/2044 12° m/07'13	/ 0131
morning risc	-5886 Nov 08 j 00:28	0°m		evening set	-5879 Oct 05 j 16:06	14° Mp 00'12	
retrograde	-5885 Jan 16 j 16:20	1° Mp 16'05		evening set	-3077 Oct 03 j 10.00	14 11/0012	
retrograde	-5885 Apr 02 j 15:01	30°RΩ		conjunction	-5879 Oct 19 j 11:17	14° m/30'20	6°18'04
min. Earth dist.	-5885 Apr 04 j 19:28		29.53300 AU	minimum elong	-5879 Oct 19 j 11:33	14° mp 30'21	
opposition	-5885 Apr 06 j 02:55	29° Ω 54'24		max. Earth dist.	-5879 Oct 21 j 12:07		32.58364 AU
direct	-5885 Jun 24 j 21:15	28° Ω 32'21		morning rise	-5879 Nov 02 j 07:45	15° m) 00'34	
	-5885 Sep 08 j 07:17	0° m)		retrograde	-5878 Jan 31 j 21:24	16° m 55'07	
evening set	-5885 Sep 25 j 07:05	0°m)37'14		min. Earth dist.	-5878 Apr 20 j 06:50	15° m) 38'43	30.68925 AU
Č	1 ,	•		opposition	-5878 Apr 22 j 08:15	15° m/35'33	
conjunction	-5885 Oct 06 j 21:09	1° m 03'48	9°45'42	direct	-5878 Jul 11 j 01:42	14° Mp 16'24	
minimum elong	-5885 Oct 06 j 21:32	1° m 03'50	9°45'54	evening set	-5878 Oct 07 j 17:49	16° Mp 07'40	
max. Earth dist.	-5885 Oct 08 j 06:49	1° m 07'02	31.57283 AU				
morning rise	-5885 Oct 18 j 11:57	1° Mp 30'26		conjunction	-5878 Oct 21 j 19:09	16° M 38'05	5°42'39
retrograde	-5884 Jan 19 j 05:01	3° m 35'34		minimum elong	-5878 Oct 21 j 19:24	16°M 38'06	5°42'46
min. Earth dist.	-5884 Apr 06 j 08:33	2°M) 16'31	29.67565 AU	max. Earth dist.	-5878 Oct 23 j 21:49	16°M)42'41	32.77418 AU
opposition	-5884 Apr 07 j 19:34	2°Mp14'11	10°07'08	morning rise	-5878 Nov 04 j 21:53	17° m 08'38	
direct	-5884 Jun 26 j 14:33	0° m 52'35		retrograde	-5877 Feb 03 j 05:24	19° m 01'38	
evening set	-5884 Sep 26 j 08:08	2°m/55'17		min. Earth dist.	-5877 Apr 22 j 14:35		30.88062 AU
				opposition	-5877 Apr 24 j 19:15	17° m) 42'21	5°45'48
conjunction	-5884 Oct 08 j 09:03	3° Mg 22'40		direct	-5877 Jul 13 j 14:51	16° TD 23'35	
minimum elong	-5884 Oct 08 j 09:25	3° m/22'43		evening set	-5877 Oct 09 j 19:28	18° m 13'13	
max. Earth dist.	-5884 Oct 09 j 21:05		31.72336 AU		5077.0 . 04:00.10	100 m 40151	5007110
morning rise	-5884 Oct 20 j 11:00	3° TQ 50'10		conjunction	-5877 Oct 24 j 02:13	18° Mp 43'51	5°07'12
retrograde	-5883 Jan 20 j 17:14	5° M 53'22	20.92704 ATT	minimum elong	-5877 Oct 24 j 02:26	18° Mp 43'53	5°07'18
min. Earth dist.	-5883 Apr 08 j 21:55	4° m) 32'18	29.82704 AU	max. Earth dist.	-5877 Oct 26 j 07:18	18° My 14'38	32.97084 AU
opposition direct	-5883 Apr 10 j 11:40 -5883 Jun 29 j 05:17	3° m 11'08	9°30'48	morning rise retrograde	-5877 Nov 07 j 10:35 -5876 Feb 05 j 12:29	21°Mp06'11	
evening set	-5883 Sep 28 j 09:27	5° Mg 11'44		min. Earth dist.	-5876 Apr 23 j 23:23		31.07866 AU
evening set	3003 Sep 20 j 07.27	3 mg 11 44		opposition	-5876 Apr 26 j 05:45	19° m)47'11	5°07'56
conjunction	-5883 Oct 10 j 20:33	5° m 39'52	8°37'58	direct	-5876 Jul 15 j 01:54	18° m) 28'49	3 07 30
minimum elong	-5883 Oct 10 j 20:54	5° m) 39'54		evening set	-5876 Oct 10 j 20:53	20° m/16'53	
max. Earth dist.	-5883 Oct 12 j 12:11		31.88208 AU	5 · · ·	. j = 4.40	4 /	
morning rise	-5883 Oct 23 j 08:27	6° Mp 08'04		conjunction	-5876 Oct 25 j 08:32	20° m 47'42	4°31'47
retrograde	-5882 Jan 23 j 03:46	8° m, 09'25		minimum elong	-5876 Oct 25 j 08:43	20° m 47'43	4°31'53
min. Earth dist.	-5882 Apr 11 j 10:42	6° m 51'19	29.98621 AU	max. Earth dist.	-5876 Oct 27 j 16:12	20° m 52'40	33.17410 AU
opposition	-5882 Apr 13 j 02:57	6° Mp 48′40	8°53'58	morning rise	-5876 Nov 08 j 21:38	21°M) 18'38	
direct	-5882 Jul 01 j 20:34	5° Mp 27'56		retrograde	-5875 Feb 06 j 17:39	23° m 08'49	
evening set	-5882 Sep 30 j 11:02	7° m 26'31		min. Earth dist.	-5875 Apr 26 j 06:11	21° m 53'45	31.28337 AU
				opposition	-5875 Apr 28 j 15:20	21° m 50'08	4°30'11
conjunction	-5882 Oct 13 j 07:11	7° m 55'17	8°03'24	direct	-5875 Jul 17 j 13:13	20° M 32'10	
minimum elong	-5882 Oct 13 j 07:32	7° m 55'19	8°03'34	evening set	-5875 Oct 12 j 22:29	22° m 18'47	
max. Earth dist.	-5882 Oct 15 j 00:22		32.04804 AU				
morning rise	-5882 Oct 26 j 04:33	8° Mg 24'08		conjunction	-5875 Oct 27 j 14:08	22° m 49'41	3°56'28
retrograde	-5881 Jan 25 j 16:06	10° m 23'41		minimum elong	-5875 Oct 27 j 14:18	22° m 49'42	3°56'32
min. Earth dist.	-5881 Apr 13 j 22:06		30.15256 AU	max. Earth dist.	-5875 Oct 29 j 23:28	22° m 54'46	33.38382 AU
opposition	-5881 Apr 15 j 17:27	9° m 03'15	8°16'45	morning rise	-5875 Nov 11 j 07:40	23° Tp 20'45	
direct	-5881 Jul 04 j 09:23	7° Mp 42'55		retrograde	-5874 Feb 08 j 23:06	25° Mp 09'39	21 40 400 177
evening set	-5881 Oct 02 j 12:40	9° m 39'35		min. Earth dist.	-5874 Apr 28 j 12:44	-	31.49490 AU
	5001 0-4 15 17 22	100 m 00153	7020121	opposition	-5874 May 01 j 00:11	23° M 51'17	5~52'34
conjunction	-5881 Oct 15 j 17:22	10° Mp 08'53	7°28'31	direct	-5874 Jul 19 j 20:57	22° TQ 33'46	

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 3 Attention, astronomical year style is used: The year -5874 in astronomical counting style is the year 5875 BCE in historical counting style.

Attention, astronomical year style is used: The year -5874 in astronomical counting style is the year 5875 BCE in historical counting style.								
evening set	-5874 Oct 14 j 23:48	-		minimum elong	-5868 Nov 09 j 12:22	6° ≙ 18′20	0°03'36	
-				behind sun begin	-5868 Nov 09 j 06:03	6° ≙ 17'50		
conjunction	-5874 Oct 29 j 19:13	24° Mp 49'57	3°21'18	behind sun end	-5868 Nov 09 j 18:41	6° ≙ 18'50		
minimum elong	-5874 Oct 29 j 19:21	24° m/49'57	3°21'23	max. Earth dist.	-5868 Nov 12 j 09:07	6° £ 24'04	34.98798 AU	
max. Earth dist.	-5874 Nov 01 j 07:38	24° m 55'15	33.59989 AU	morning rise	-5868 Nov 24 j 19:36	6° ≏ 48'46		
morning rise	-5874 Nov 13 j 16:15	25° m/21'03		retrograde	-5867 Feb 21 j 23:18	8° 亞 30'31		
retrograde	-5873 Feb 11 j 02:46	27° m 08'45		min. Earth dist.	-5867 May 11 j 19:33	7° ≙ 18'53	33.10748 AU	
min. Earth dist.	-5873 Apr 30 j 19:04		31.71250 AU	opposition	-5867 May 14 j 17:42	7° £ 14'38		
opposition	-5873 May 03 j 08:12	25° m 50'45		direct	-5867 Aug 02 j 15:26	6° £ 00'05		
direct	-5873 Jul 22 j 05:12	24° m/33'40		evening set	-5867 Oct 27 j 08:28	7° ≙ 37'38		
evening set	-5873 Oct 17 j 01:15	26° M) 17'36		evening sec	3007 GCC 27 J 00:20	7 - 37 30		
evening sec	3073 GCC 17 J 01:13	20 11/17 30		conjunction	-5867 Nov 11 j 13:20	8° ჲ 07'37	-0°36'17	
conjunction	-5873 Oct 31 j 23:27	26° Mp 48'33	2°46'21	minimum elong	-5867 Nov 11 j 13:19	8° ⊆ 07'37		
minimum elong	-5873 Oct 31 j 23:34	26° Mp 48'33		max. Earth dist.	-5867 Nov 14 j 11:52		35.22811 AU	
max. Earth dist.	-5873 Nov 03 j 12:49		33.82155 AU	morning rise	-5867 Nov 26 j 20:20	8° ⊆ 37'48	33.22011710	
morning rise	-5873 Nov 15 j 23:40	27° m 19'39	33.02133710	retrograde	-5866 Feb 23 j 22:05	10° ⊆ 18'43		
retrograde	-5872 Feb 13 j 08:32	29° My 06'13		min. Earth dist.	-5866 May 13 j 21:54		33.34856 AU	
min. Earth dist.	-5872 May 01 j 23:30		31.93573 AU	opposition	-5866 May 16 j 20:47	9° ₽ 03'09		
opposition	-5872 May 04 j 15:24	27° m) 48'35		direct	-5866 Aug 04 j 20:32	9 = 03 09 7° £ 48'57	-0 33 32	
		•	2 38 00					
direct	-5872 Jul 23 j 10:32	26° Mp 31'57		evening set	-5866 Oct 29 j 09:20	9° ჲ 25'36		
evening set	-5872 Oct 18 j 02:33	28° Mp 14'40			5066N 12:12.20	00.0.5511.7	1000121	
	505031 00:0014	2007 45124	2011110	conjunction	-5866 Nov 13 j 13:29	9° ≙ 55'17		
conjunction	-5872 Nov 02 j 03:14	28° m/45'34		minimum elong	-5866 Nov 13 j 13:26	9° ≏ 55'17		
minimum elong	-5872 Nov 02 j 03:20	28° m/45'34		max. Earth dist.	-5866 Nov 16 j 12:09		35.46987 AU	
max. Earth dist.	-5872 Nov 04 j 19:27		34.04817 AU	morning rise	-5866 Nov 28 j 20:07	10° ≙ 25'11		
morning rise	-5872 Nov 17 j 05:49	29° Mp 16'38		retrograde	-5865 Feb 25 j 22:15	12° ≏ 05'19		
	-5872 Dec 10 j 03:15	0∘ ⊽		min. Earth dist.	-5865 May 15 j 22:38		33.59173 AU	
retrograde	-5871 Feb 14 j 12:27	1° ≏ 02'08		opposition	-5865 May 18 j 23:15	10° ≙ 50'01	-1°29'45	
	-5871 Apr 26 j 15:53	30° ₽, M)		direct	-5865 Aug 06 j 22:20	9° ≏ 36'10		
min. Earth dist.	-5871 May 04 j 05:31	29° m 48'52	32.16372 AU	evening set	-5865 Oct 31 j 09:53	11° ≏ 11'58		
opposition	-5871 May 06 j 22:07	29° m 44'52	2°01'20					
direct	-5871 Jul 25 j 17:24	28° m 28'41		conjunction	-5865 Nov 15 j 13:05	11° ≙ 41'20	-1°40'16	
	-5871 Oct 14 j 23:29	0∘ ⊽		minimum elong	-5865 Nov 15 j 13:01	11° ≏ 41'20		
evening set	-5871 Oct 20 j 03:49	0° ♀ 10'15		max. Earth dist.	-5865 Nov 18 j 14:02	11° ≏ 47'17	35.71358 AU	
				morning rise	-5865 Nov 30 j 18:35	12° ≙ 10'54		
conjunction	-5871 Nov 04 j 06:18	0° ჲ 41'03	1°37'18	retrograde	-5864 Feb 27 j 20:45	13° ≏ 50'19		
minimum elong	-5871 Nov 04 j 06:22	0° ჲ 41'03	1°37'19	min. Earth dist.	-5864 May 17 j 00:07	12° ≏ 39'38	33.83719 AU	
max. Earth dist.	-5871 Nov 06 j 23:17	0° £ 46'37	34.27899 AU	opposition	-5864 May 20 j 00:59	12° ≏ 35'18	-2°03'03	
morning rise	-5871 Nov 19 j 10:52	1° ≏ 12'01		direct	-5864 Aug 08 j 00:11	11° ≏ 21'46		
retrograde	-5870 Feb 16 j 18:07	2° £ 56'30		evening set	-5864 Nov 01 j 10:23	12° ≏ 56'47		
min. Earth dist.	-5870 May 06 j 08:53	1° ≏ 43'44	32.39567 AU					
opposition	-5870 May 09 j 04:01	1° ≏ 39'36	1°24'58	conjunction	-5864 Nov 16 j 12:05	13° ≏ 25'48	-2°11'28	
direct	-5870 Jul 27 j 23:17	0° £ 23'51		minimum elong	-5864 Nov 16 j 12:00	13° ≏ 25'48	2°11'31	
evening set	-5870 Oct 22 j 05:11	2° ♀ 04'22		max. Earth dist.	-5864 Nov 19 j 13:20	13° ≏ 31'44	35.95979 AU	
Č	J			morning rise	-5864 Dec 01 j 16:12	13° ≏ 55'01		
conjunction	-5870 Nov 06 j 08:57	2° £ 35'01	1°03'18	retrograde	-5863 Feb 28 j 21:15	15° ≙ 33'44		
minimum elong	-5870 Nov 06 j 09:00	2° ₽ 35'01	1°03'19	min. Earth dist.	-5863 May 18 j 22:54	14° ≏ 23'28	34.08550 AU	
max. Earth dist.	-5870 Nov 09 j 03:53	2° £ 40'41	34.51299 AU	opposition	-5863 May 22 j 02:05	14° ≙ 19′00	-2°35'46	
morning rise	-5870 Nov 21 j 14:55	3° ჲ 05'50		direct	-5863 Aug 09 j 23:42	13° ≏ 05'49		
retrograde	-5869 Feb 18 j 21:34	4° ₽ 49'23		evening set	-5863 Nov 03 j 10:39	14° £ 40'07		
min. Earth dist.	-5869 May 08 j 13:46		32.63074 AU	3	, , ,			
opposition	-5869 May 11 j 09:11	3° £ 32′50	0°49'02	conjunction	-5863 Nov 18 j 10:29	15° ≏ 08'46	-2°42'08	
direct	-5869 Jul 30 j 03:59	2° £ 17'30		minimum elong	-5863 Nov 18 j 10:23	15° ≙ 08'45		
evening set	-5869 Oct 24 j 06:25	3° £ 56'59		max. Earth dist.	-5863 Nov 21 j 13:36		36.20867 AU	
evening set	3007 Oct 24 J 00:23	3 — 3037		morning rise	-5863 Dec 03 j 12:50	15° ⊆ 37'36	30.20007 710	
conjunction	-5869 Nov 08 j 11:05	4° £ 27'27	0°29'41	retrograde	-5862 Mar 02 j 19:50	17° ⊆ 15'41		
minimum elong	-5869 Nov 08 j 11:06	4° £ 27'27	0°29'41	min. Earth dist.	-5862 May 20 j 23:19		34.33670 AU	
max. Earth dist.	-5869 Nov 11 j 07:05		34.74959 AU	opposition	-5862 May 24 j 02:41	16° ⊆ 0342		
morning rise	-5869 Nov 23 j 17:48	4° £ 5311 4° £ 58'06	эт. (<i>тэээ</i> АО	direct	-5862 May 24 J 02.41 -5862 Aug 12 j 00:20	16 ≗ 01 13 14° ≗ 48'25	5 0 / 51	
retrograde	-5868 Feb 20 j 22:23	6° Ω 40'43		evening set	-5862 Aug 12 j 00:20 -5862 Nov 05 j 10:51	14° <u>22</u> 48°23 16° <u>2</u> 22'03		
•			32.86810 AU	evening set	-2002 INOV US J 10.31	10 == 22 03		
min. Earth dist.	-5868 May 09 j 16:24			aominuti	5062 N 20 : 00 24	160 0 50110	2012112	
opposition	-5868 May 12 j 13:40	5° £ 24'31	0°13'33	conjunction	-5862 Nov 20 j 08:34	16° ♀ 50'18		
direct	-5868 Jul 31 j 10:43	4° £ 09'35		minimum elong	-5862 Nov 20 j 08:27	16° £ 50'17		
desc. node	-5868 Oct 01 j 04:58	5° £ 04'14		max. Earth dist.	-5862 Nov 23 j 12:42		36.46032 AU	
evening set	-5868 Oct 25 j 07:32	5° ≏ 48'05		morning rise	-5862 Dec 05 j 08:36	17° £ 18'44		
ooming -ti	5060 N 00 : 12 22	60 0 10100	0002127	retrograde	-5861 Mar 04 j 17:50	18° £ 56'14	24 50052 411	
conjunction	-5868 Nov 09 j 12:22	6° ≏ 18'20	-0-05/36	min. Earth dist.	-5861 May 22 j 21:15	1 / = 246'38	34.59053 AU	

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5861 in astronomical counting style is the year 5862 BCE in historical counting style. -5861 May 26 j 02:20 17°**♀**42'07 -3°39'17 morning rise -5855 Dec 15 i 04:38 28°**♀**32'23 opposition -5861 Aug 14 j 01:52 -5854 Feb 20 i 12:55 0°M direct 16° **2**29'38 -5861 Nov 07 j 10:58 18°**♀**02'39 -5854 Mar 15 j 14:56 0°ML06'59 evening set retrograde -5854 Apr 07 j 22:55 30°R<u>₽</u> -5861 Nov 22 j 05:57 18° 230'30 -3°41'43 -5854 Jun 03 j 02:39 28°**♀**59'37 36.39344 AU conjunction min. Earth dist. -5861 Nov 22 j 05:49 -5854 Jun 06 j 10:44 minimum elong 18°**△**30'29 3°41'48 opposition 28° <u>\$\Pi\$ 55'04 -7°01'00</u> -5861 Nov 25 j 10:50 max. Earth dist. 18°**2**36'34 36.71424 AU direct -5854 Aug 25 j 11:35 27°**£**45'01 -5861 Dec 07 j 03:32 18°**≏**58'32 -5854 Nov 19 j 08:41 morning rise evening set 29° 214'56 retrograde -5860 Mar 05 j 15:51 20°**£**35′29 min. Earth dist. -5860 May 23 j 19:51 19°**2**26'14 34.84675 AU conjunction -5854 Dec 03 j 00:22 29°**2**39'24 -6°51'25 opposition -5860 May 27 j 01:44 19°**£**21'41 -4°10'05 minimum elong -5854 Dec 03 j 00:10 29°**2**39'23 6°51'34 -5854 Dec 06 j 08:18 29°**£**45'25 38.50581 AU direct -5860 Aug 15 j 01:17 18°**₽**09'35 max. Earth dist. -5860 Nov 08 j 10:42 evening set 19°**£**42'02 -5854 Dec 14 j 11:44 0°M morning rise -5854 Dec 16 j 18:28 0°ML04'03 conjunction -5860 Nov 23 j 02:54 20° **2**09'27 -4°10'38 retrograde -5853 Mar 17 j 09:19 1°M38'20 minimum elong -5860 Nov 23 j 02:45 20°**2**09'26 4°10'42 min. Earth dist. -5853 Jun 04 j 22:12 0°M31'13 36.64808 AU max. Earth dist. -5860 Nov 26 j 09:30 20°**£**15'37 36.97013 AU opposition -5853 Jun 08 j 06:23 0°M26'42 -7°27'10 morning rise -5860 Dec 07 j 21:23 20°**♀**37'03 -5853 Jun 28 j 10:24 30°R <u>Ω</u> retrograde -5859 Mar 07 j 10:36 22°**♀**13'32 direct -5853 Aug 27 j 07:28 29°**2**16'56 min. Earth dist. -5859 May 25 j 18:08 21°**♀**04'37 35.10452 AU -5853 Oct 23 j 10:09 0°M opposition -5859 May 29 j 00:32 21°**♀**00'04 -4°40'13 evening set -5853 Nov 21 j 07:45 0°M46'31 direct -5859 Aug 17 j 01:47 19°**£**48'20 evening set -5859 Nov 10 j 10:39 21°**₽**20'16 conjunction -5853 Dec 04 i 18:31 1°M10'27 -7°16'05 minimum elong -5853 Dec 04 j 18:18 1°M10'26 7°16'15 conjunction -5859 Nov 24 i 23:26 21°**-**47'13 -4°38'56 max. Earth dist. -5853 Dec 08 i 03:40 1°M16'31 38.75810 AU -5859 Nov 24 j 23:16 21°**△**47'12 4°39'02 -5853 Dec 18 j 07:20 1°MJ34'33 minimum elong morning rise -5859 Nov 28 j 05:47 21°**♀**53'19 37.22715 AU -5852 Mar 17 j 23:56 3°ML08'34 max. Earth dist. retrograde -5859 Dec 09 j 14:46 22°**£**14'22 -5852 Jun 05 j 17:41 2°ML01'41 36.90188 AU min. Earth dist. morning rise -5858 Mar 09 j 07:17 23°**♀**50'25 -5852 Jun 09 j 01:37 1°ML57'11 -7°52'41 opposition retrograde -5858 May 27 j 15:06 22°**2**41'53 35.36336 AU -5852 Aug 28 j 05:18 0°M47'42 min. Earth dist. direct 22°**♀**37'17 -5°09'41 -5852 Nov 22 j 06:42 -5858 May 30 j 22:42 2°M16'59 opposition evening set -5858 Aug 18 j 23:21 21°**£**25'55 direct -5852 Dec 05 j 11:59 2°M40'22 -7°40'09 -5858 Nov 12 j 10:24 22°**♀**57'22 conjunction evening set -5852 Dec 05 j 11:46 2°M40'21 7°40'19 minimum elong -5858 Nov 26 j 19:40 23°**2**23'52 -5°06'38 -5852 Dec 08 j 20:29 2°M46'21 39.00984 AU conjunction max. Earth dist. -5858 Nov 26 j 19:30 23°**2**23'51 5°06'45 -5852 Dec 18 j 19:29 3°ML03'55 minimum elong morning rise -5858 Nov 30 j 03:39 23°**⊆**30'03 37.48460 AU -5851 Mar 19 j 17:52 max. Earth dist. retrograde 4°MJ37'42 morning rise -5858 Dec 11 j 07:17 23°**♀**50'33 min. Earth dist. -5851 Jun 07 j 11:18 3°M31'07 37.15553 AU retrograde -5857 Mar 11 j 03:04 25°**Ω**26'12 opposition -5851 Jun 10 j 20:25 3°M26'34 -8°17'32 min. Earth dist. -5857 May 29 j 13:29 24°**♀**17'56 35.62224 AU direct -5851 Aug 29 j 23:28 2°M17'22 -5857 Jun 01 j 20:28 24°**£**13'23 -5°38'30 evening set -5851 Nov 24 j 05:33 3°M46'24 opposition -5857 Aug 20 j 20:46 23°**♀**02'23 direct -5857 Nov 14 j 10:07 24°**£**33'25 -5851 Dec 07 j 05:17 4°M09'13 -8°03'35 evening set conjunction -5851 Dec 07 j 05:04 4°M09'12 8°03'45 minimum elong -5857 Nov 28 j 15:25 24°**£**59'25 -5°33'44 max. Earth dist. -5851 Dec 10 j 15:10 4°M15'15 39.26142 AU conjunction -5857 Nov 28 i 15:14 4°M32'12 minimum elong 24°**♀**59'24 5°33'52 morning rise -5851 Dec 20 i 07:06 max. Earth dist. -5857 Dec 01 j 22:54 25°**2**05'31 37.74169 AU retrograde -5850 Mar 21 i 11:07 6°**™**05'47 4°M.59'24 37.40919 AU morning rise -5857 Dec 12 j 23:03 25°**£**25'36 min. Earth dist. -5850 Jun 09 i 06:20 4°M54'55 -8°41'42 retrograde -5856 Mar 12 i 00:11 27°**♀**00'53 opposition -5850 Jun 12 j 14:40 min. Earth dist. -5856 May 30 j 09:19 25°**♀**53'00 35.88050 AU direct -5850 Aug 31 j 17:04 3°M46'00 -5856 Jun 02 j 17:38 25°**-**48′24 -6°06′39 -5850 Nov 26 j 04:18 5°**M**₁4'49 opposition evening set 24°**£**37'44 direct -5856 Aug 21 j 16:50 -5856 Nov 15 j 09:48 26°**£**08'22 conjunction -5850 Dec 08 j 22:13 5°ML37'04 -8°26'23 evening set minimum elong -5850 Dec 08 j 22:00 5°M237'03 8°26'35 conjunction -5856 Nov 29 j 10:48 26°**£**33'52 -6°00'14 max. Earth dist. -5850 Dec 12 j 07:57 5°M43'03 39.51315 AU minimum elong -5856 Nov 29 j 10:37 26°**△**33'51 6°00'22 morning rise -5850 Dec 21 j 18:02 5°M59'28 max. Earth dist. -5856 Dec 02 j 18:54 26°**♀**39'58 37.99772 AU retrograde -5849 Mar 23 j 05:01 7°M₂32'53 -5856 Dec 13 j 14:16 26°**♀**59'34 -5849 Jun 10 j 22:49 6°M26'49 37.66287 AU morning rise min. Earth dist. -5855 Mar 13 j 20:22 28°**£**34'30 -5849 Jun 14 j 08:27 6°M22'17 -9°05'12 retrograde opposition -5849 Sep 02 j 10:14 min. Earth dist. -5855 Jun 01 j 06:57 27°**£**26'50 36.13770 AU direct 5°M13'39 -5849 Nov 28 j 02:52 opposition -5855 Jun 04 j 14:30 27°**£**22'18 -6°34'09 evening set 6°M42'19 direct -5855 Aug 23 j 13:40 26°**£**11'58 evening set -5855 Nov 17 j 09:12 27°**₽**42'13 conjunction -5849 Dec 10 j 14:34 7°ML03'59 -8°48'35 minimum elong -5849 Dec 10 j 14:20 7°ML03'58 8°48'46 conjunction -5855 Dec 01 j 05:51 28°**£**07'12 -6°26'08 max. Earth dist. -5849 Dec 14 j 00:38 7°**IL**09'57 39.76469 AU minimum elong -5855 Dec 01 j 05:39 28°**2**07'12 6°26'16 -5849 Dec 23 j 04:19 7°M25'49 morning rise max. Earth dist. -5855 Dec 04 j 14:11 28°**2**13'17 38.25253 AU -5848 Mar 23 j 23:11 8°M59'04 retrograde

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5848 in astronomical counting style is the year 5849 BCE in historical counting style. -5848 Jun 11 j 16:42 7°ML53'15 37.91646 AU conjunction -5842 Dec 20 i 02:05 16°M49'29 -11°07'28 min. Earth dist. -5848 Jun 15 i 01:59 7°ML48'45 -9°28'03 -5842 Dec 20 j 01:51 16°ML49'28 11°07'42 opposition minimum elong 16°ML55'05 41.48292 AU -5848 Sep 03 j 02:50 -5842 Dec 23 j 10:25 direct 6°M,40'26 max. Earth dist. -5848 Nov 29 j 01:18 8°ML08'57 -5842 Dec 30 j 13:48 17°M06'58 evening set morning rise -5841 Apr 03 j 08:42 retrograde 18°M39'54 -5848 Dec 11 j 06:49 8°M30'02 -9°10'10 -5841 Jun 22 j 10:48 conjunction min. Earth dist. 17°M35'37 39.64113 AU -5848 Dec 11 j 06:36 -5841 Jun 25 j 17:45 minimum elong 8°M30'01 9°10'22 opposition 17°M31'22 -11°50'27 max. Earth dist. -5848 Dec 14 j 17:40 8°M36'01 40.01604 AU direct -5841 Sep 13 j 21:06 16°M24'51 morning rise -5848 Dec 23 j 14:00 8°M51'16 evening set -5841 Dec 11 j 13:50 17°M53'02 retrograde -5847 Mar 25 j 14:12 10°M24'25 18°M09'46 -11°25'04 min. Earth dist. -5847 Jun 13 j 09:35 9°M18'52 38.16943 AU conjunction -5841 Dec 21 j 16:11 -5841 Dec 21 j 15:57 18°ML09'45 11°25'19 opposition -5847 Jun 16 j 19:00 9°M14'23 -9°50'14 minimum elong -5841 Dec 25 j 01:05 direct -5847 Sep 04 j 21:30 8° ML06'21 max. Earth dist. 18°ML15'23 41.71685 AU evening set -5847 Nov 30 j 23:50 9°M34'46 morning rise -5841 Dec 31 j 19:37 18°M26'35 retrograde -5840 Apr 03 j 19:58 19°M59'32 conjunction -5847 Dec 12 j 22:36 9°M55'16 -9°31'09 min. Earth dist. -5840 Jun 23 j 02:09 18°M55'24 39.87577 AU minimum elong -5847 Dec 12 j 22:22 9°M55'15 9°31'21 opposition -5840 Jun 26 j 08:15 18°M51'12 -12°08'27 max. Earth dist. -5847 Dec 16 j 08:42 10°ML01'10 40.26644 AU direct -5840 Sep 14 j 14:09 17°M44'53 morning rise -5847 Dec 24 j 23:16 10°M15'53 evening set -5840 Dec 12 j 12:03 19°M13'06 retrograde -5846 Mar 27 j 05:39 11°M48'58 min. Earth dist. -5846 Jun 15 j 02:00 10°M.43'42 38.42132 AU conjunction -5840 Dec 22 j 05:58 19°M29'10 -11°42'08 opposition -5846 Jun 18 j 11:45 10°M39'13 -10°11'47 minimum elong -5840 Dec 22 i 05:44 19°M29'09 11°42'24 direct -5846 Sep 06 j 14:18 9°M31'29 max. Earth dist. -5840 Dec 25 i 13:37 19°M34'40 41.94830 AU evening set -5846 Dec 02 j 22:14 10°M59'49 morning rise -5839 Jan 01 i 01:01 19°M45'20 retrograde -5839 Apr 05 j 08:33 21°M18'19 -5846 Dec 14 j 14:19 11°ML19'42 -9°51'32 -5839 Jun 24 j 15:48 20°M14'23 40.10833 AU conjunction min. Earth dist. -5846 Dec 14 j 14:06 -5839 Jun 27 j 22:23 20°M10'11 -12°25'51 11°M,19'41 9°51'46 opposition minimum elong -5846 Dec 18 j 01:24 -5839 Sep 16 j 05:05 19°M04'04 max. Earth dist. 11°M25'38 40.51528 AU direct -5839 Dec 14 j 10:05 20°M32'20 -5846 Dec 26 j 08:00 11°MJ39'43 evening set morning rise -5845 Mar 28 j 18:30 retrograde 13°M-12'45 -5839 Dec 23 j 19:30 20°M47'44 -11°58'39 -5845 Jun 16 j 19:23 12°M07'41 38.67122 AU conjunction min. Earth dist. -5845 Jun 20 j 03:57 -5839 Dec 23 j 19:18 12°M03'16 -10°32'42 minimum elong 20°M47'44 11°58'55 opposition -5839 Dec 27 j 03:53 -5845 Sep 08 j 08:52 10°M55'49 max. Earth dist. 20°M53'15 42.17777 AU direct -5845 Dec 04 j 20:45 12°M24'05 -5838 Jan 02 j 05:57 21°M03'14 evening set morning rise -5838 Apr 06 j 21:43 22°M36'17 retrograde -5845 Dec 16 j 05:41 12°M43'22 -10°11'21 -5838 Jun 26 j 06:54 21°M32'29 40.33906 AU conjunction min. Earth dist. minimum elong -5845 Dec 16 j 05:27 12°M43'21 10°11'34 opposition -5838 Jun 29 j 12:15 21°M28'21 -12°42'40 max. Earth dist. -5845 Dec 19 j 15:28 12°M49'11 40.76190 AU direct -5838 Sep 17 j 19:16 20°M22'26 morning rise -5845 Dec 27 j 16:11 13°M02'46 evening set -5838 Dec 16 j 08:17 21°M50'49 retrograde -5844 Mar 29 j 10:55 14°M35'45 min. Earth dist. -5844 Jun 17 j 10:45 13°M30'58 38.91859 AU conjunction -5838 Dec 25 j 08:49 22°M05'32 -12°14'37 -5844 Jun 20 j 19:55 13°M26'33 -10°53'01 -5838 Dec 25 j 08:35 22°M05'31 12°14'53 opposition minimum elong -5844 Sep 08 j 23:46 12°M19'22 max. Earth dist. -5838 Dec 28 j 16:31 22°M10'59 42.40569 AU direct -5844 Dec 05 j 19:01 13°M47'35 -5837 Jan 03 j 10:11 22°M20'20 evening set morning rise -5837 Apr 08 j 12:00 23°M53'30 retrograde 22°M49'56 40.56820 AU conjunction -5844 Dec 16 j 20:40 14°ML06'15 -10°30'36 min. Earth dist. -5837 Jun 27 i 19:34 22°M45'47 -12°58'54 minimum elong -5844 Dec 16 j 20:27 14°ML06'14 10°30'50 opposition -5837 Jul 01 i 01:34 max. Earth dist. -5844 Dec 20 i 06:37 14°M12'01 41.00555 AU direct -5837 Sep 19 i 07:16 21°M40'05 morning rise -5844 Dec 27 i 23:53 14°M25'01 evening set -5837 Dec 18 i 06:23 23°M08'36 -5843 Jan 18 j 23:38 15°M₀ conjunction -5843 Mar 31 j 02:51 15°**M**57'59 -5837 Dec 26 j 21:43 23°M22'38 -12°30'02 retrograde -5843 Jun 14 j 00:10 15°RML -5837 Dec 26 i 21:31 23°M22'37 12°30'18 minimum elong min. Earth dist. -5843 Jun 19 j 04:06 14°M53'20 39.16283 AU -5837 Dec 30 j 05:06 23°M28'01 42.63205 AU max. Earth dist. 14°ML49'01 -11°12'45 opposition -5843 Jun 22 j 11:42 morning rise -5836 Jan 04 j 13:58 23°MJ36'44 direct -5843 Sep 10 j 14:26 13°M42'05 retrograde -5836 Apr 09 j 01:38 25°M10'03 -5843 Dec 01 j 11:32 15°M min. Earth dist. -5836 Jun 28 j 09:41 24°M06'39 40.79591 AU -5836 Jul 01 j 14:52 -5843 Dec 07 j 17:27 15°M10'16 opposition 24°M02'34 -13°14'34 evening set -5836 Sep 19 j 19:49 22°M57'05 direct -5843 Dec 18 j 11:37 15°M28'18 -10°49'18 -5836 Dec 19 j 04:25 24°M25'46 conjunction evening set minimum elong -5843 Dec 18 j 11:24 15°M28'17 10°49'31 -5836 Dec 27 j 10:25 24°M39'07 -12°44'55 max. Earth dist. -5843 Dec 21 j 21:04 15°M34'00 41.24598 AU conjunction -5843 Dec 29 j 07:03 15°M46'26 minimum elong -5836 Dec 27 j 10:12 24°M39'06 12°45'12 morning rise retrograde -5842 Apr 01 j 17:46 17°M19'22 max. Earth dist. -5836 Dec 30 j 18:22 24°M44'30 42.85695 AU min. Earth dist. -5842 Jun 20 j 19:10 16°M14'56 39.40358 AU morning rise -5835 Jan 04 j 17:00 24°M52'29 opposition -5842 Jun 24 j 02:48 16°M10'38 -11°31'54 retrograde -5835 Apr 10 j 12:26 26°M25'59 -5842 Sep 12 j 06:15 15°ML03'54 -5835 Jun 29 j 22:55 25°M22'47 41.02175 AU direct min. Earth dist.

-5842 Dec 09 j 15:49

evening set

16°**™**32'05

-5835 Jul 03 j 03:47

opposition

25°M18'44 -13°29'41

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Earth dist. -5834 Jan 05 j 19:39 -5828 Jul 11 j 14:46 morning rise 26°M₀07'40 opposition 3°**₹**56'56 -15°01'09 retrograde -5834 Apr 12 j 00:50 27°M41'23 direct -5828 Sep 30 j 01:20 2° 2 53'03 26°M38'25 41.24549 AU -5827 Jan 02 j 02:39 4°×24'36 min. Earth dist. -5834 Jul 01 j 11:27 evening set opposition -5834 Jul 04 j 16:19 26°M34'22 -13°44'15 direct -5834 Sep 22 j 23:36 25°M29'22 conjunction -5827 Jan 06 j 08:54 4°**∡**31'15 -14°26'25 -5834 Dec 23 j 01:20 -5827 Jan 06 j 08:44 evening set 26°M58'32 minimum elong 4°**∡**31'14 14°26'43 -5827 Jan 09 j 10:24 max. Earth dist. 4°**≯**36'02 44.54531 AU conjunction -5834 Dec 30 j 11:18 27°M10'24 -13°13'09 morning rise -5827 Jan 10 j 15:09 4°**х¹**37'54 minimum elong -5834 Dec 30 j 11:05 27°ML10'23 13°13'26 retrograde -5827 Apr 20 j 06:15 6°**х** 14′10 max. Earth dist. -5833 Jan 02 j 18:20 27°M15'41 43.30028 AU min. Earth dist. -5827 Jul 10 j 02:23 5°**≯**12'12 42.71068 AU morning rise -5833 Jan 06 j 21:43 27°M22'19 opposition -5827 Jul 13 j 01:32 5°**∡**108'31 -15°12'18 retrograde -5833 Apr 13 j 11:11 28°M56'17 direct -5827 Oct 01 j 12:52 4°**х**¹04'47 min. Earth dist. -5833 Jul 03 j 01:31 27°M53'27 41.46634 AU evening set -5826 Jan 04 j 06:59 5°**х**³37′03 opposition -5833 Jul 06 j 04:43 27°M49'30 -13°58'17 direct -5833 Sep 24 j 13:36 26°M44'44 conjunction -5826 Jan 07 j 19:45 5°**∡**142'32 -14°37'02 evening set -5833 Dec 25 i 00:09 28°M14'11 minimum elong -5826 Jan 07 i 19:35 5°**∡**¹42'31 14°37'21 morning rise -5826 Jan 11 i 08:27 5°**х** 48′01 conjunction -5833 Dec 31 i 23:19 28°M25'17 -13°26'30 max. Earth dist. -5826 Jan 10 j 21:09 5° ₹ 47'17 44.74039 AU minimum elong -5833 Dec 31 i 23:09 28°M25'16 13°26'48 retrograde -5826 Apr 21 j 17:11 7°**х** 24′59 -5832 Jan 04 j 05:04 28°MJ30'28 43.51766 AU -5826 Jul 11 j 14:33 6° ₹23'04 42.90621 AU max. Earth dist. min. Earth dist. -5832 Jan 07 j 22:53 28°MJ36'26 -5826 Jul 14 j 12:00 6°**х** 19'29 -15°22'58 morning rise opposition -5832 Mar 14 j 19:26 0°×7 -5826 Oct 02 j 23:25 5°**х** 15'54 direct -5832 Apr 14 j 00:18 0°**х** 10′41 -5825 Jan 06 j 15:10 6°**х** 49′08 evening set retrograde -5832 May 14 j 16:25 30°RM 6°**₹**53'12 -14°47'11 -5832 Jul 03 j 13:24 -5825 Jan 09 j 06:25 min. Earth dist. 29°ML08'05 41.68378 AU conjunction -5832 Jul 06 j 16:49 -5825 Jan 09 j 06:16 29°MJ04'08 -14°11'49 minimum elong 6°**х** 53′11 14°47′29 opposition -5825 Jan 11 j 21:30 morning rise -5832 Sep 25 j 00:59 27°M59'35 6°**х** 57′16 direct 6°**х** 57′54 44.93323 AU -5832 Dec 25 j 23:18 -5825 Jan 12 j 07:27 evening set 29°M29'21 max. Earth dist. -5825 Apr 23 j 04:44 8°×35'11 retrograde -5831 Jan 01 j 11:17 29°M39'40 -13°39'24 -5825 Jul 13 j 00:35 7°**х** 33′26 43.09942 AU conjunction min. Earth dist. -5831 Jan 01 j 11:05 -5825 Jul 15 j 22:13 7°**∡**129'52 -15°33'09 minimum elong 29°M39'39 13°39'41 opposition max. Earth dist. -5831 Jan 04 j 16:23 29°M.44'46 43.73126 AU direct -5825 Oct 04 j 08:41 6°**х¹**26′25 morning rise -5831 Jan 07 j 23:37 29°M50'01 evening set -5824 Jan 09 j 10:31 8°**х**¹01′23 -5831 Jan 14 j 08:04 0°**∡**¹ retrograde -5831 Apr 15 j 15:13 1°×24'35 conjunction -5824 Jan 10 j 16:35 8°**₹**03'19 -14°56'53 -5831 Jul 05 j 03:05 0°**尽**22'05 41.89728 AU -5824 Jan 10 j 16:26 8°**≯**03'18 14°57'12 min. Earth dist. minimum elong -5831 Jul 08 j 04:46 0° **₹**18'15 -14°24'52 -5824 Jan 11 j 22:25 8°**х¹**05'14 opposition morning rise -5831 Jul 22 j 23:34 -5824 Jan 13 j 16:30 8°**₹**07'55 45.12385 AU 30°RM max. Earth dist. -5831 Sep 26 j 10:10 29°M13'53 -5824 Apr 23 j 16:43 9°**∡**¹44'51 direct retrograde 8° ₹43'14 43.29057 AU -5831 Nov 28 i 07:54 0°×7 min. Earth dist. -5824 Jul 13 j 11:25 8°**х** 39'43 -15°42'51 evening set -5831 Dec 27 j 23:05 0°**х** 44′01 opposition -5824 Jul 16 i 08:24 direct -5824 Oct 04 j 16:58 7°**х** 36′26 conjunction -5830 Jan 02 j 23:11 0° ₹ 53'30 -13°51'50 -5830 Jan 02 i 23:01 0°**∡**753'30 13°52'08 -5823 Jan 11 j 02:53 9°×12'56 -15°06'08 minimum elong conjunction 0°**х** 58'33 43.94083 AU max. Earth dist. -5830 Jan 06 i 03:43 -5823 Jan 11 j 02:46 9° ₹ 12'55 15°06'26 minimum elong -5830 Jan 08 j 23:29 1°**х** 03′00 max. Earth dist. -5823 Jan 14 j 03:16 9° ₹17'33 45.31244 AU morning rise -5830 Apr 17 j 02:11 2°**х** 37′55 retrograde -5823 Apr 25 j 00:10 10°**₹**′54′03 retrograde -5823 Jul 14 j 22:15 min. Earth dist. -5830 Jul 06 j 15:16 1°**х** 35'34 42.10637 AU min. Earth dist. 9° ₹ 52'33 43.47936 AU 1°**∡**31'47 -14°37'26 9°**х** 49'05 -15°52'06 opposition -5830 Jul 09 j 16:21 opposition -5823 Jul 17 j 18:12 8°**∡**¹45'59 direct -5830 Sep 27 j 22:19 0°**х** 27′35 direct -5823 Oct 06 j 05:02 evening set -5830 Dec 29 j 23:21 1°×758'07 -5822 Jan 12 j 12:57 10°**∡**′22'05 -15°14'56 conjunction -5829 Jan 04 j 10:40 2°×106'44 -14°03'49 -5822 Jan 12 j 12:49 10°**∡**′22'05 15°15'16 conjunction minimum elong -5829 Jan 04 j 10:29 2°×106'43 14°04'07 -5822 Jan 15 j 11:41 10°**∡**26'36 45.49865 AU minimum elong max. Earth dist. -5829 Jan 07 j 13:22 2°**҂**11'38 44.14602 AU -5822 Apr 26 j 08:34 12°**х** 02′49 max. Earth dist. retrograde morning rise -5829 Jan 09 j 22:10 2°**х** 15′21 min. Earth dist. -5822 Jul 16 j 07:55 11°**✗**'01'30 43.66556 AU

retrograde

opposition

evening set

direct

min. Earth dist.

-5829 Apr 18 j 12:45

-5829 Jul 08 j 03:24

-5829 Jul 11 j 03:41

-5829 Sep 29 j 10:37

-5828 Jan 01 j 00:24

3°**х** 50′38

1°**х¹**40'39

3°**∡**11'39

2°**∡**48'25 42.31134 AU

2°**x**⁷44'41 -14°49'32

opposition

conjunction

minimum elong

direct

-5822 Jul 19 j 03:53

-5822 Oct 07 j 16:10

-5821 Jan 13 j 22:52

-5821 Jan 13 j 22:46

10°**尽**58'03 -16°00'53

11°**∡**30′52 -15°23′19

11°**₹**30'52 15°23'39

9°**х** 55'07

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5821 in astronomical counting style is the year 5822 BCE in historical counting style. -5821 Jan 16 j 21:34 11°**∡**'35'21 45.68187 AU opposition -5813 Jul 29 i 10:43 21°×701'12 -17°02'01 max. Earth dist. -5821 Apr 27 j 18:12 13°**∡**11'13 direct -5813 Oct 18 j 00:22 19°**х** 59'30 retrograde -5821 Jul 17 j 19:17 12°**✗**09'59 43.84847 AU min. Earth dist. -5821 Jul 20 j 13:22 12°**∡**106'38 -16°09'14 -5812 Jan 24 j 09:55 21°**≯**32'18 -16°21'37 opposition conjunction -5812 Jan 24 j 09:52 -5821 Oct 09 j 02:18 11°**х** 03′53 21°**х** 32'18 16°21'57 direct minimum elong -5812 Jan 26 j 22:42 21°**✗**36′02 47.14572 AU max. Earth dist. -5820 Jan 15 j 08:44 -5812 May 07 j 02:00 conjunction 12°**∡**′39'17 -15°31'17 retrograde 23°**х** 09′22 -5820 Jan 15 j 08:37 -5812 Jul 27 j 08:57 22°**✗**09'03 45.30430 AU minimum elong 12°**∡**'39'17 15°31'38 min. Earth dist. -5820 Jan 18 j 06:20 -5812 Jul 29 j 18:37 max. Earth dist. 12°**✗**′43'41 45.86172 AU opposition 22°**尽**06'11 -17°06'52 -5812 Oct 18 j 09:14 retrograde -5820 Apr 28 j 04:44 14°**х** 19′15 direct 21°**х** 04'36 min. Earth dist. -5820 Jul 18 j 04:44 13°**∡**18'13 44.02753 AU -5811 Jan 24 j 18:20 22°**₹**37'08 -16°26'13 opposition -5820 Jul 20 j 22:37 13°**∡**14'53 -16°17'11 conjunction -5820 Oct 09 j 10:40 12°**∡**12'17 -5811 Jan 24 j 18:18 direct minimum elong 22°**х** 37'07 16°26'34 -5811 Jan 27 j 07:20 max. Earth dist. 22°**∡**′40′52 47.29106 AU conjunction -5819 Jan 15 j 18:21 13°**∡**47'22 -15°38'53 retrograde -5811 May 08 j 07:31 24°**∡**13'54 minimum elong -5819 Jan 15 j 18:16 13°**∡**47'21 15°39'13 min. Earth dist. -5811 Jul 28 j 18:26 23°**✗**13'38 45.44898 AU max. Earth dist. -5819 Jan 18 j 14:21 13°**∡**751'38 46.03734 AU opposition -5811 Jul 31 j 02:23 23°**∡**10'51 -17°11'20 retrograde -5819 Apr 29 j 15:57 15°**∡**¹26'58 direct -5811 Oct 19 j 19:55 22°**₹**09'24 min. Earth dist. -5819 Jul 19 j 15:42 14°**₹**26'00 44.20215 AU opposition -5819 Jul 22 j 07:55 14°**₹**22'46 -16°24'44 conjunction -5810 Jan 26 j 02:45 23°**х** 41'40 -16°30'27 direct -5819 Oct 10 j 18:37 13°**∡** 20′20 minimum elong -5810 Jan 26 j 02:43 23°**х** 41'40 16°30'47 max. Earth dist. -5810 Jan 28 i 14:19 23° 🗷 45'18 47.43361 AU conjunction -5818 Jan 17 i 04:08 14° \$\square\$ 55'04 -15° 46'05 retrograde -5810 May 09 j 15:39 25°**х** 18′08 minimum elong -5818 Jan 17 i 04:02 14° **2** 55'04 15° 46'25 min. Earth dist. -5810 Jul 30 i 01:46 24° ₹18'02 45.59057 AU max. Earth dist. -5818 Jan 19 i 23:49 14°**₹**759'18 46.20833 AU -5810 Aug 01 i 09:47 24° 🖈 15'15 -17°15'25 opposition retrograde -5818 Apr 30 j 23:27 16°**∡**34'17 -5810 Oct 21 j 03:53 23°×13'56 direct -5818 Jul 21 j 01:59 15°**₹**33'25 44.37178 AU min. Earth dist. opposition -5818 Jul 23 j 16:46 15°**₹**30'15 -16°31'54 -5809 Jan 27 j 10:57 24° - 45'57 - 16° 34'20 conjunction -5818 Oct 12 j 05:21 14°**∡**¹27'57 -5809 Jan 27 j 10:55 direct 24° 2745'57 16°34'41 minimum elong -5809 Jan 29 j 21:21 24°**х** 49'30 47.57280 AU max. Earth dist. -5817 Jan 18 j 13:34 16°**₹**02'22 -15°52'56 -5809 May 11 j 01:42 conjunction retrograde 26° ×7 22'09 -5817 Jan 18 j 13:29 -5809 Jul 31 j 11:13 minimum elong 16°**∡**'02'22 15°53'16 min. Earth dist. 25°**≯**22'05 45.72865 AU -5809 Aug 02 j 17:19 -5817 Jan 21 j 06:55 max. Earth dist. 16°**✗**06'27 46.37444 AU 25°**х** 19'25 -17°19'09 opposition -5817 May 02 j 08:13 -5809 Oct 22 j 09:43 17°**∡**′41′12 24°**х** 18′14 retrograde direct 16°**∡**¹40'27 44.53662 AU -5817 Jul 22 j 11:18 min. Earth dist. 16°**₹**37'19 -16°38'42 -5817 Jul 25 j 01:36 -5808 Jan 28 j 19:04 25°**∡** 50′00 -16°37′52 opposition conjunction -5817 Oct 13 j 14:44 -5808 Jan 28 j 19:04 direct 15°**∡** 35′10 minimum elong 25°**≯**50'00 16°38'13 max. Earth dist. -5808 Jan 31 j 05:11 25°**尽**53'31 47.70827 AU conjunction -5816 Jan 19 j 22:41 17°**∡**09'13 -15°59'25 retrograde -5808 May 11 j 10:36 27°**₹**25'54 minimum elong -5816 Jan 19 j 22:35 17°**∡**09'13 15°59'45 min. Earth dist. -5808 Jul 31 j 19:25 26°**₹**25'57 45.86245 AU max. Earth dist. -5816 Jan 22 j 15:44 17°**✗**13'16 46.53585 AU opposition -5808 Aug 03 j 00:36 26°**∡**¹23'20 -17°22'32 retrograde -5816 May 02 j 14:58 18°**∡**47'42 direct -5808 Oct 22 j 16:08 25°**х** 22′16 -5816 Jul 22 j 22:03 17°**∡**¹46'58 44.69696 AU min. Earth dist. -5816 Jul 25 j 10:17 17°**∡**43'57 -16°45'07 -5807 Jan 29 j 03:11 26°**₹**153'48 -16°41'06 opposition conjunction direct -5816 Oct 14 j 01:47 16°**∡**741'54 -5807 Jan 29 j 03:10 26°**∡**753'48 16°41'27 minimum elong -5807 Jan 31 i 10:51 max. Earth dist. 26° ₹ 57'10 47.83921 AU -5815 Jan 20 i 07:48 conjunction 18°**∡**15'37 -16°05'32 retrograde -5807 May 12 j 19:42 28°×729'25 -5815 Jan 20 i 07:44 minimum elong 18°**∡**15'37 16°05'53 min. Earth dist. -5807 Aug 02 i 03:41 27° ₹29'32 45.99152 AU -5815 Jan 22 i 23:38 max. Earth dist. 18°**х** 19'35 46.69325 AU opposition -5807 Aug 04 i 07:46 27°×26'59 -17°25'36 retrograde -5815 May 04 i 00:26 19°**х** 53′44 direct -5807 Oct 23 j 22:30 26°**₹**'26'01 min. Earth dist. -5815 Jul 24 j 06:25 18° ₹ 53'08 44.85344 AU -5815 Jul 26 j 18:31 18°**≯**50'08 -16°51'08 -5806 Jan 30 j 11:23 27°**₹**157'19 -16°44'00 opposition conjunction direct -5815 Oct 15 j 09:57 17°**∡**¹48'11 -5806 Jan 30 j 11:24 27°**х** 57'19 16°44'21 minimum elong 28°**✗**00'38 47.96509 AU max. Earth dist. -5806 Feb 01 j 18:30 conjunction -5814 Jan 21 j 16:40 19°**₹**21'35 -16°11'16 retrograde -5806 May 13 j 24:00 29°×32'39 28°**₹**32'47 46.11521 AU minimum elong -5814 Jan 21 j 16:35 19°**х** 21'35 16°11'37 min. Earth dist. -5806 Aug 03 j 13:03 max. Earth dist. -5814 Jan 24 j 07:15 19°**∡**25'27 46.84699 AU opposition -5806 Aug 05 j 14:55 28°**∡**30'20 -17°28'22 -5814 May 05 j 12:11 20°**х** 59′21 direct -5806 Oct 25 j 08:31 27°**₹**129′28 retrograde -5814 Jul 25 j 16:09 19°**∡**758'47 45.00663 AU min. Earth dist. -5814 Jul 28 j 02:48 19°**₹**55'52 -16°56'46 -5805 Jan 31 j 19:18 29°**∡**100'30 -16°46'37 opposition conjunction -5814 Oct 16 j 15:05 18°**х** 54′02 -5805 Jan 31 j 19:18 direct minimum elong 29°**✗**00'30 16°46'58 max. Earth dist. -5805 Feb 03 j 00:23 29°**✗**03'41 48.08574 AU conjunction -5813 Jan 23 j 01:26 20°**₹**27'08 -16°16'38 -5805 Mar 17 j 09:04 0°ಕ minimum elong -5813 Jan 23 j 01:23 20°**₹**27'08 16°17'00 retrograde -5805 May 15 j 05:42 0°**る**35'32 max. Earth dist. -5813 Jan 25 j 16:02 20°**✗**30'59 46.99772 AU -5805 Jul 14 j 10:57 30°R.**✓** -5813 May 06 j 19:08 22°**х** 04'32 min. Earth dist. -5805 Aug 04 j 20:21 29°**₹**35'45 46.23365 AU retrograde min. Earth dist. -5813 Jul 27 j 00:46 21°**尽**04'05 45.15675 AU opposition -5805 Aug 06 j 21:48 29°**∡**33'19 -17°30'49

•	omena of Pluto fron		•	* *			
	nical year style is used: Th		in astronomical co				
direct	-5805 Oct 26 j 17:44			direct	-5797 Nov 03 j 19:55	6° る 44'57	
	-5804 Jan 30 j 19:52	0°₹			5706 F. L. 10 : 12 02	00=714110	1,005,010,0
aaniumatian	5004 Eab 02:02:02	00=02110	-16°48'56	conjunction	-5796 Feb 10 j 13:03		-16°56'00
conjunction	-5804 Feb 02 j 03:03	0°る03'18		minimum elong	-5796 Feb 10 j 13:06		16°56'23 48.99751 AU
minimum elong	-5804 Feb 02 j 03:05			max. Earth dist.	-5796 Feb 12 j 09:01	8°516'45 9° 5 47'00	48.99/51 AU
max. Earth dist.	-5804 Feb 04 j 06:44	1°る38'03	48.20125 AU	retrograde min. Earth dist.	-5796 May 23 j 20:16 -5796 Aug 13 j 15:10		47.13094 AU
retrograde min. Earth dist.	-5804 May 15 j 14:44 -5804 Aug 05 j 05:20		46.34725 AU	opposition	-5796 Aug 15 j 06:11	8° る 45'45	
opposition	-5804 Aug 07 j 04:40	0°る35'56		direct	-5796 Nov 04 j 03:30	7° る 45'40	-1/ 38 10
opposition	-5804 Aug 07 j 04.40 -5804 Sep 08 j 19:51	0 ℃3330 30°R <i>⊼</i>	-1/ 3237	unect	-3/90 NOV 04 J 03.30	/ 04340	
direct	-5804 Oct 26 j 23:49	29° ∡ 35′11		conjunction	-5795 Feb 10 j 20:01	0° ≂ 14'45	-16°55'30
direct	-5804 Dec 13 j 07:40	29 ス 33 11		minimum elong	-5795 Feb 10 j 20:06	9° る 14'45	
	-3804 DCC 13 J 07.40	0 0		max. Earth dist.	-5795 Feb 12 j 13:56		49.08169 AU
conjunction	-5803 Feb 02 j 10:45	1° る 05'43	16°50'56	retrograde	-5795 May 25 j 00:33	10°る47'24	4).0010) AC
minimum elong	-5803 Feb 02 j 10:46	1°る05'43		min. Earth dist.	-5795 Aug 14 j 21:28		47.21257 AU
max. Earth dist.	-5803 Feb 04 j 13:48		48.31233 AU	opposition	-5795 Aug 16 j 11:58	9° る 46'16	
retrograde	-5803 May 16 j 21:38	2°る40'10	40.31233 AU	direct	-5795 Nov 05 j 11:54	8°る46'16	-17 37 32
min. Earth dist.	-5803 Aug 06 j 12:37		46.45647 AU	direct	-5775 NOV 05 J 11.54	0 04010	
opposition	-5803 Aug 08 j 11:14		-17°34'46	conjunction	-5794 Feb 12 j 03:00	10° ට 15'12	-16°54'45
direct	-5803 Oct 28 j 06:41	0°る37'27	-17 34 40	minimum elong	-5794 Feb 12 j 03:04	10°る15'12	
direct	-3003 Oct 20 j 00.41	0 03/2/		max. Earth dist.	-5794 Feb 13 j 19:22		49.16081 AU
conjunction	-5802 Feb 03 j 18:15	207144	-16°52'37	retrograde	-5794 May 26 j 07:46	10 3 17 34	4).10001 AC
minimum elong	-5802 Feb 03 j 18:17	2°る07'44		min. Earth dist.	-5794 Nay 26 j 07.46		47.28899 AU
max. Earth dist.	-5802 Feb 05 j 19:13		48.41936 AU	opposition	-5794 Aug 17 j 17:41	10°る46'39	
retrograde	-5802 May 18 j 05:18	2 01039 3° る 41'53	40.41930 AU	direct	-5794 Nov 06 j 18:09	9° ප් 46'43	-17 30 32
min. Earth dist.	-5802 Aug 07 j 20:01		46.56208 AU	direct	-3/94 NOV 00 J 18.09	9 04043	
opposition	-5802 Aug 07 j 20:01 -5802 Aug 09 j 17:38		-17°36'16	conjunction	-5793 Feb 13 j 09:58	11° る 15'30	160521/12
direct	-5802 Aug 09 j 17:38 -5802 Oct 29 j 12:38	2 3 3930	-1/ 30 10	minimum elong	-5793 Feb 13 j 10:04	11 31330 11° 3 15'30	
direct	-3802 Oct 29 j 12.38	1 03919		max. Earth dist.	-5793 Feb 15 j 01:16		49.23483 AU
conjunction	-5801 Feb 05 j 01:41	20₹00!22	-16°54'00	retrograde	-5793 May 27 j 15:00	11 3 1748 12° る 47'47	49.23463 AU
minimum elong	-5801 Feb 05 j 01:42	3°る09'23		min. Earth dist.	-5793 Aug 17 j 11:54		47.36010 AU
max. Earth dist.	-5801 Feb 05 j 01:42 -5801 Feb 07 j 02:41		48.52303 AU	opposition	-5793 Aug 17 j 11.34 -5793 Aug 18 j 23:16	11° ठ 46'50	
retrograde	-5801 May 19 j 09:18	4°る43'17	46.32303 AU	direct	-5793 Nov 07 j 22:55	11 346'57	-17 33 10
min. Earth dist.	-5801 Aug 09 j 03:55		46.66443 AU	uncet	-3793 NOV 07 J 22.33	10 04037	
opposition	-5801 Aug 09 J 05:55		-17°37'25	conjunction	-5792 Feb 14 j 16:32	12° る 15'35	16052126
direct	-5801 Aug 11 j 00.02 -5801 Oct 30 j 21:50	2°る40'52	-17 37 23	minimum elong	-5792 Feb 14 j 16:36	12 3 13 33	
direct	-3801 Oct 30 J 21.30	2 040 32		max. Earth dist.	-5792 Feb 16 j 05:26		49.30369 AU
aaniunatian	-5800 Feb 06 j 08:46	4° る 10'43	16055102	retrograde	-5792 May 27 j 23:03	12 3 17 44 13° る 47'39	49.30309 AU
conjunction minimum elong	-5800 Feb 06 j 08:49	4°る10'44		min. Earth dist.	-5792 Nay 27 j 23:03		47.42633 AU
max. Earth dist.	-5800 Feb 08 j 08:15		48.62383 AU	opposition	-5792 Aug 17 j 19:04 -5792 Aug 19 j 04:52	12 34624 12°る46'47	
retrograde	-5800 May 19 j 15:04	5°る44'23	40.02303 AC	direct	-5792 Nov 08 j 03:10	11°පි46'56	-17 33 43
min. Earth dist.	-5800 Aug 09 j 10:01		46.76396 AU	direct	-5/72 NOV 00 J 05.10	11 04030	
opposition	-5800 Aug 11 j 06:15	4°る42'37		conjunction	-5791 Feb 14 j 23:19	13° る 15'24	-16°50'52
direct	-5800 Oct 31 j 05:11	3°る42'09	-17 30 14	minimum elong	-5791 Feb 14 j 23:26	13° ට 15'25	
direct	-5000 Oct 51 j 05.11	3 04207		max. Earth dist.	-5791 Feb 16 j 11:57		49.36788 AU
conjunction	-5799 Feb 06 j 15:56	5° る 11'49	-16°55'45	retrograde	-5791 May 29 j 02:45	14° පි 47'16	47.50700710
minimum elong	-5799 Feb 06 j 15:58		16°56'05	min. Earth dist.	-5791 Aug 19 j 02:06		47.48803 AU
max. Earth dist.	-5799 Feb 08 j 14:30		48.72179 AU	opposition	-5791 Aug 20 j 10:11	13° ठ 46'26	
retrograde	-5799 May 20 j 22:41	6° පි 45'15	10.72177110	direct	-5791 Nov 09 j 10:50	12° る 46'37	17 31 33
min. Earth dist.	-5799 Aug 10 j 18:02		46.86069 AU	4.1001	27711101 07 j 10.00	12 0 1007	
opposition	-5799 Aug 12 j 12:24	5° る 43'36		conjunction	-5790 Feb 16 j 05:56	14° る 14'57	-16°49'03
direct	-5799 Nov 01 j 11:15	4°る43'14	17 30 43	minimum elong	-5790 Feb 16 j 06:02	14°る14'57	
direct	3799 1101 OI j 11:13	. 0.511		max. Earth dist.	-5790 Feb 17 j 16:30		49.42800 AU
conjunction	-5798 Feb 07 j 23:09	6° る 12'43	-16°56'08	retrograde	-5790 May 30 j 07:04	15° る 46'36	19.12000 110
minimum elong	-5798 Feb 07 j 23:12	6°る12'43		min. Earth dist.	-5790 Aug 20 j 07:36		47.54595 AU
max. Earth dist.	-5798 Feb 09 j 21:23		48.81705 AU	opposition	-5790 Aug 21 j 15:27	14° 3 45'50	
retrograde	-5798 May 22 j 06:44	7°る45'56	40.01703 AC	direct	-5790 Nov 10 j 17:48	13°る46'03	-1/2/40
min. Earth dist.	-5798 Aug 12 j 00:28		46.95435 AU	anoci	5770 1101 10 J 17.70	15 🔾 🕂 0 05	
opposition	-5798 Aug 12 j 00:28	6° ろ 44'26		conjunction	-5789 Feb 17 j 12:18	15° る 14'13	-16°46'56
direct	-5798 Nov 02 j 16:13	5°る44'09	1, 5055	minimum elong	-5789 Feb 17 j 12:18	15° ට 14'14	
anoci	5770 140V 02 J 10.13	J U74 09		max. Earth dist.	-5789 Feb 17 j 12.20 -5789 Feb 18 j 21:59		49.48446 AU
conjunction	-5797 Feb 09 j 06:00	7° る 13'30	-16°56'12	retrograde	-5789 May 31 j 11:47	15 3 1610 16° 3 45'42	47.70770 AU
minimum elong	-5797 Feb 09 j 06:04		16°56'35	opposition	-5789 Aug 22 j 20:44	16 3 43 42	-17°27'25
max. Earth dist.	-5797 Feb 11 j 02:10		48.90908 AU	min. Earth dist.	-5789 Aug 22 j 20.44 -5789 Aug 21 j 14:53		47.60049 AU
retrograde	-5797 May 23 j 15:43	8°පි46'31	.0.70700 AU	direct	-5789 Nov 12 j 00:59	13 84020 14° 8 45'14	17.00077 AU
min. Earth dist.	-5797 Aug 13 j 07:26		47.04468 AU	unoct	5707 1101 12 J 00.39	1. 04314	
opposition	-5797 Aug 15 j 00:21	7°る47'07		conjunction	-5788 Feb 18 j 18:46	16° る 13'16	-16°44'32
opposition	5,7,110g 15 J 00.21	, 0 15 00	1, 50 11	vonjunonon	5,551 5 0 10 j 10.40	10 01510	10 1132

•	omena of Pluto from		•	* *			e 9
	nical year style is used: Th	-					
minimum elong	-5788 Feb 18 j 18:53	16°る13'16		opposition	-5780 Aug 30 j 17:16	24° ට 31'58	
max. Earth dist.	-5788 Feb 20 j 03:56		49.53797 AU	min. Earth dist.	-5780 Aug 29 j 21:49		47.92855 AU
retrograde	-5788 May 31 j 18:08	17°る44'34	47 65204 AV	direct	-5780 Nov 19 j 23:38	23° る 32'33	
min. Earth dist.	-5788 Aug 21 j 20:07		47.65204 AU		5770 F. 1 . 27 : 02 10	240750155	1.601.0140
opposition	-5788 Aug 23 j 01:47	16°る43'55	-17°24'43	conjunction	-5779 Feb 27 j 03:18	24°る59'55	
direct	-5788 Nov 12 j 06:22	15° る 44'12		minimum elong	-5779 Feb 27 j 03:27	24°₹59'56	
. ,.	5707 F 1 10:01 02	17071007	1.6041150	max. Earth dist.	-5779 Feb 27 j 23:23		49.85272 AU
conjunction	-5787 Feb 19 j 01:03	17°る12'07		retrograde	-5779 Jun 09 j 20:53	26°₹30'06	1.6040110
minimum elong	-5787 Feb 19 j 01:10	17°る12'07		opposition	-5779 Aug 31 j 22:03	25° る 30'04	
max. Earth dist.	-5787 Feb 20 j 08:11		49.58858 AU	min. Earth dist.	-5779 Aug 31 j 05:00		47.94117 AU
retrograde	-5787 Jun 02 j 03:22	18°る43'15	47 70077 411	direct	-5779 Nov 21 j 06:28	24° る 30'40	
min. Earth dist.	-5787 Aug 23 j 02:27		47.70077 AU		5550 F. J. 20:00 20	2507555	1.000.5140
opposition	-5787 Aug 24 j 06:57	17°る42'41	-1/2143	conjunction	-5778 Feb 28 j 09:29	25°₹57'57	
direct	-5787 Nov 13 j 08:21	16° る 43'00		minimum elong	-5778 Feb 28 j 09:40	25° る 57'58	
	550651 20:05.20	100710110	1 (02 0152	max. Earth dist.	-5778 Mar 01 j 04:40		49.86404 AU
conjunction	-5786 Feb 20 j 07:29	18° る 10'49		retrograde	-5778 Jun 11 j 02:03	27°る28'02	45.04052.444
minimum elong	-5786 Feb 20 j 07:36	18°る10'50		min. Earth dist.	-5778 Sep 01 j 09:53		47.94953 AU
max. Earth dist.	-5786 Feb 21 j 14:34		49.63629 AU	opposition	-5778 Sep 02 j 02:32	26° る 28'02	-16°42'52
retrograde	-5786 Jun 03 j 08:30	19° る 41'49		direct	-5778 Nov 22 j 12:03	25° る 28'37	
min. Earth dist.	-5786 Aug 24 j 08:48		47.74634 AU				
opposition	-5786 Aug 25 j 11:54	18° る 41'19	-17°18'26	conjunction	-5777 Mar 01 j 15:27	26° る 55'52	
direct	-5786 Nov 14 j 14:09	17° る 41'41		minimum elong	-5777 Mar 01 j 15:36	26° ප් 55'52	
		_		max. Earth dist.	-5777 Mar 02 j 08:22		49.87142 AU
conjunction	-5785 Feb 21 j 13:43	19° ろ 09'26		retrograde	-5777 Jun 12 j 11:02	28° පි 25'50	
minimum elong	-5785 Feb 21 j 13:50	19° る 09'26		opposition	-5777 Sep 03 j 07:11	27° る 25'52	
max. Earth dist.	-5785 Feb 22 j 18:58		49.68093 AU	min. Earth dist.	-5777 Sep 02 j 15:56		47.95435 AU
retrograde	-5785 Jun 04 j 12:18	20° る 40'17		direct	-5777 Nov 23 j 13:25	26° る 26'28	
opposition	-5785 Aug 26 j 16:52	19° る 39'53				_	
min. Earth dist.	-5785 Aug 25 j 14:07		47.78862 AU	conjunction	-5776 Mar 01 j 21:24	27° る 53'40	
direct	-5785 Nov 15 j 20:45	18° る 40'19		minimum elong	-5776 Mar 01 j 21:34	27° る 53'40	
				max. Earth dist.	-5776 Mar 02 j 14:19		49.87544 AU
conjunction	-5784 Feb 22 j 19:51	20° る 07'59		retrograde	-5776 Jun 12 j 16:41	29° る 23'33	
minimum elong	-5784 Feb 22 j 20:00	20°る08'00	16°32'25	opposition	-5776 Sep 03 j 11:46	28° る 23'37	
max. Earth dist.	-5784 Feb 24 j 00:00		49.72184 AU	min. Earth dist.	-5776 Sep 02 j 21:48		47.95579 AU
retrograde	-5784 Jun 04 j 17:04	21° る 38'44		direct	-5776 Nov 23 j 18:04	27° る 24'13	
opposition	-5784 Aug 26 j 21:55	20° ろ 38'25				_	
min. Earth dist.	-5784 Aug 25 j 21:23		47.82684 AU	conjunction	-5775 Mar 03 j 03:23	28° る 51'23	
direct	-5784 Nov 16 j 03:32	19° る 38'54		minimum elong	-5775 Mar 03 j 03:33	28° る 51'24	
				max. Earth dist.	-5775 Mar 03 j 18:23		49.87639 AU
conjunction	-5783 Feb 23 j 02:18	21° පි 06'31			-5775 Apr 29 j 03:10	0° ≈	
minimum elong	-5783 Feb 23 j 02:26	21° る 06'31	16°28'38	retrograde	-5775 Jun 13 j 20:22	0° ≈ 21'11	
max. Earth dist.	-5783 Feb 24 j 05:23		49.75847 AU		-5775 Jul 29 j 19:51	30°R₹	
retrograde	-5783 Jun 05 j 23:31	22° る 37'09		opposition	-5775 Sep 04 j 16:10	29° る 21'19	
min. Earth dist.	-5783 Aug 27 j 02:56		47.86027 AU	min. Earth dist.	-5775 Sep 04 j 02:31		47.95425 AU
opposition	-5783 Aug 28 j 02:40	21° る 36'55	-17°06'56	direct	-5775 Nov 24 j 23:50	28° る 21'55	
direct	-5783 Nov 17 j 08:17	20° る 37'27					
		_		conjunction	-5774 Mar 04 j 09:24	29° る 49'05	
conjunction	-5782 Feb 24 j 08:38	22° ろ 05'00		minimum elong	-5774 Mar 04 j 09:35	29° る 49'05	
minimum elong	-5782 Feb 24 j 08:47	22° ろ 05'00		max. Earth dist.	-5774 Mar 04 j 23:23		49.87425 AU
max. Earth dist.	-5782 Feb 25 j 09:08		49.79000 AU		-5774 Mar 12 j 09:44	0° ≈	
retrograde	-5782 Jun 07 j 07:36	23° ろ 35'32		retrograde	-5774 Jun 14 j 23:09	1°≈18'50	
min. Earth dist.	-5782 Aug 28 j 09:47		47.88848 AU	opposition	-5774 Sep 05 j 20:47	0° ≈ 18'59	
opposition	-5782 Aug 29 j 07:40	22° る 35'22	-17°02'36	min. Earth dist.	-5774 Sep 05 j 09:07		47.94957 AU
direct	-5782 Nov 18 j 11:23	21° る 35'56			-5774 Sep 22 j 17:37	30°₹₹	
				direct	-5774 Nov 26 j 07:34	29° る 19'37	
conjunction	-5781 Feb 25 j 14:54	23° る 03'25			-5773 Jan 28 j 12:51	0° ≈	
minimum elong	-5781 Feb 25 j 15:02	23° ろ 03'26					
max. Earth dist.	-5781 Feb 26 j 14:44		49.81613 AU	conjunction	-5773 Mar 05 j 15:16	0° ≈ 46'47	
retrograde	-5781 Jun 08 j 12:18	24° る 33'50		minimum elong	-5773 Mar 05 j 15:28		15°37'20
opposition	-5781 Aug 30 j 12:34	23° ろ 33'44		max. Earth dist.	-5773 Mar 06 j 04:36		49.86902 AU
min. Earth dist.	-5781 Aug 29 j 16:25		47.91108 AU	retrograde	-5773 Jun 16 j 04:39	2°≈16′29	
direct	-5781 Nov 19 j 17:29	22° る 34'19		opposition	-5773 Sep 07 j 01:14		-16°12'13
		_		min. Earth dist.	-5773 Sep 06 j 13:49		47.94145 AU
conjunction	-5780 Feb 26 j 21:06	24° ろ 01'44		direct	-5773 Nov 27 j 12:45	0° ≈ 17'21	
minimum elong	-5780 Feb 26 j 21:17	24° る 01'45					
max. Earth dist.	-5780 Feb 27 j 18:32		49.83697 AU	conjunction	-5772 Mar 05 j 21:12		-15°30'28
retrograde	-5780 Jun 08 j 16:53	25° る 32'01		minimum elong	-5772 Mar 05 j 21:22	1° ≈ 44'31	15°30'48

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5772 in astronomical counting style is the year 5773 BCE in historical counting style. 1°≈45'09 49.86012 AU -5772 Mar 06 i 08:17 evening set -5764 Mar 09 j 17:22 9°≈19'53 max. Earth dist. -5772 Jun 16 j 12:37 3°≈14'11 retrograde -5772 Sep 07 j 05:41 2°≈14'27 -16°05'17 conjunction -5764 Mar 13 j 21:30 9°≈25'34 -14°29'38 opposition 9°**≈**25'34 14°29'55 -5772 Sep 06 j 20:08 2°≈14'55 47.92950 AU -5764 Mar 13 j 21:42 min. Earth dist. minimum elong 9°≈25'32 49.61798 AU -5772 Nov 27 j 14:47 -5764 Mar 13 j 20:59 direct 1°≈15'07 max. Earth dist. -5764 Mar 18 j 02:10 morning rise 9°≈31'16 -5771 Mar 07 j 03:23 2°≈42'18 -15°23'40 -5764 Jun 24 j 04:38 conjunction retrograde 10°≈54'56 -5771 Mar 07 j 03:35 -5764 Sep 14 j 17:08 minimum elong 2°≈42'19 15°23'59 opposition 9°≈55'11 -15°01'12 -5771 Mar 07 j 13:57 -5764 Sep 14 j 18:37 max. Earth dist. 2°≈42'54 49.84698 AU min. Earth dist. 9°≈55'07 47.65988 AU retrograde -5771 Jun 17 j 18:44 4°≈11'56 direct -5764 Dec 05 j 08:42 8°≈55'34 opposition -5771 Sep 08 j 10:11 3°≈12'15 -15°58'07 evening set -5763 Mar 10 j 10:09 10°≈16'28 -5771 Sep 08 j 02:10 min. Earth dist. 3°≈12'37 47.91278 AU -5771 Nov 28 j 19:19 -5763 Mar 15 j 03:32 direct 2°≈12'54 conjunction 10°≈22'55 -14°20'55 minimum elong -5763 Mar 15 j 03:45 10°≈22'55 14°21'13 conjunction -5770 Mar 08 j 09:28 3°≈40'07 -15°16'39 max. Earth dist. -5763 Mar 15 j 02:23 10°≈22'51 49.56993 AU minimum elong -5770 Mar 08 j 09:38 3°≈40'07 15°16'58 morning rise -5763 Mar 19 j 21:29 10°≈29'23 max. Earth dist. -5770 Mar 08 j 17:30 3°≈40'34 49.82892 AU retrograde -5763 Jun 25 j 08:56 11°≈52'17 retrograde -5770 Jun 19 j 00:06 5°≈09'42 opposition -5763 Sep 15 j 21:30 10°≈52'33 -14°52'03 opposition -5770 Sep 09 j 14:36 4°≈10'02 -15°50'42 min. Earth dist. -5763 Sep 15 j 23:05 10°≈52'28 47.60901 AU min. Earth dist. -5770 Sep 09 j 07:30 4°≈10'22 47.89095 AU direct -5763 Dec 06 j 14:40 9°≈52'54 direct -5770 Nov 30 j 00:28 3°≈10'41 evening set -5762 Mar 11 j 03:53 11°≈13'11 conjunction -5769 Mar 09 i 15:35 4°≈37'54 -15°09'24 conjunction -5762 Mar 16 j 09:26 11°≈20'19 -14°11'57 minimum elong -5769 Mar 09 i 15:47 4°≈37'55 15°09'42 minimum elong -5762 Mar 16 i 09:39 11°≈20'19 14°12'13 max. Earth dist. -5769 Mar 09 j 22:09 4°≈38'17 49.80548 AU max. Earth dist. -5762 Mar 16 j 06:14 11°≈20'08 49.51899 AU retrograde -5769 Jun 20 i 03:28 6°≈07'27 -5762 Mar 21 j 15:38 11°≈27'29 morning rise -5769 Sep 10 j 19:12 5°≈07'47 -15°43'04 -5762 Jun 26 j 16:37 12°≈49'43 opposition retrograde -5769 Sep 10 j 14:33 5°≈08'01 47.86371 AU -5762 Sep 17 j 01:54 11°≈50'00 -14°42'36 min. Earth dist. opposition -5769 Dec 01 j 07:06 4°≈08'25 min. Earth dist. -5762 Sep 17 j 05:01 11°≈49'51 47.55537 AU direct -5762 Dec 07 j 16:41 10°≈50'19 direct 5°≈35'38 -15°01'55 -5768 Mar 09 j 21:36 -5761 Mar 11 j 22:39 12°≈10'04 conjunction evening set -5768 Mar 09 j 21:47 minimum elong 5°≈35'38 15°02'14 -5768 Mar 10 j 02:56 -5761 Mar 17 j 15:31 12°≈17'50 -14°02'42 max. Earth dist. 5°≈35'56 49.77689 AU conjunction -5768 Jun 20 j 07:06 7°**≈**05'08 -5761 Mar 17 j 15:44 12°≈17'50 14°03'00 retrograde minimum elong -5768 Sep 10 j 23:37 max. Earth dist. -5761 Mar 17 j 12:11 opposition 6°≈05'28 -15°35'12 12°≈17'38 49.46523 AU -5768 Sep 10 j 19:32 -5761 Mar 23 j 08:56 min. Earth dist. 6°≈05'39 47.83125 AU morning rise 12°**≈**25'38 -5768 Dec 01 j 13:54 -5761 Jun 27 j 22:41 direct 5°≈06'02 retrograde 13°≈47'17 evening set -5767 Mar 09 j 08:45 6°≈30'49 opposition -5761 Sep 18 j 06:19 12°≈47'35 -14°32'54 min. Earth dist. -5761 Sep 18 j 10:28 12°≈47'23 47.49859 AU conjunction -5767 Mar 11 j 03:38 6°≈33'15 -14°54'13 direct -5761 Dec 08 j 20:59 11°≈47'54 minimum elong -5767 Mar 11 j 03:51 6°≈33'16 14°54'31 evening set -5760 Mar 11 j 18:08 13°≈07'09 max. Earth dist. -5767 Mar 11 j 06:26 6°≈33'25 49.74321 AU -5767 Mar 12 j 23:00 6°≈35'43 conjunction -5760 Mar 17 j 21:28 13°≈15'31 -13°53'12 morning rise -5767 Jun 21 j 14:51 8°≈02'43 -5760 Mar 17 j 21:41 13°≈15'32 13°53'29 retrograde minimum elong -5767 Sep 12 j 03:59 7°≈03'02 -15°27'05 max. Earth dist. -5760 Mar 17 j 16:06 13°≈15'13 49.40823 AU opposition -5767 Sep 12 j 01:48 -5760 Mar 24 i 01:29 min. Earth dist. 7°≈03'08 47.79411 AU morning rise 13°≈23'55 6°≈03'33 -5760 Jun 28 i 04:56 direct -5767 Dec 02 j 16:42 retrograde 14°≈45'01 evening set -5766 Mar 09 j 14:38 7°≈26'58 opposition -5760 Sep 18 i 10:43 13°≈45'21 -14°22'55 min. Earth dist. -5760 Sep 18 i 15:37 13°≈45'07 47.43826 AU -5766 Mar 12 j 09:47 7°≈30'47 -14°46'17 direct -5760 Dec 09 j 01:20 12°≈45'39 conjunction -5766 Mar 12 i 09:58 7°≈30'47 14°46'34 evening set -5759 Mar 12 j 14:19 14°≈04'27 minimum elong max. Earth dist. -5766 Mar 12 j 12:15 7°≈30'55 49.70512 AU -5766 Mar 15 j 05:23 7°≈34'37 conjunction -5759 Mar 19 j 03:45 morning rise 14°≈13'24 -13°43'28 -5759 Mar 19 i 03:57 retrograde -5766 Jun 22 j 20:49 9°200'11 minimum elong 14°≈13'25 13°43'45 opposition -5766 Sep 13 j 08:24 8°≈00'29 -15°18'43 max. Earth dist. -5759 Mar 18 j 21:06 14°≈13'02 49.34712 AU min. Earth dist. -5766 Sep 13 j 07:33 8°≈00'31 47.75272 AU morning rise -5759 Mar 25 j 17:51 14°≈22'23 -5766 Dec 03 j 20:53 7°≈00'57 -5759 Apr 23 j 23:25 15°≈ direct -5765 Mar 10 j 02:33 8°**≈**23'23 -5759 Jun 29 j 09:02 15°≈42'59 evening set retrograde -5759 Sep 04 j 21:44 15°R≈ -5765 Mar 13 j 15:32 8°≈28'12 -14°38'05 -5759 Sep 19 j 15:13 14°≈43'19 -14°12'42 conjunction opposition -5765 Mar 13 j 15:45 -5759 Sep 19 j 22:33 minimum elong 8°≈28'13 14°38'23 min. Earth dist. 14°≈42'58 47.37350 AU max. Earth dist. -5765 Mar 13 j 16:03 8°≈28'14 49.66323 AU direct -5759 Dec 10 j 07:39 13°≈43'36 morning rise -5765 Mar 17 j 05:04 8°≈33'03 -5758 Mar 12 j 00:03 15°≈ retrograde -5765 Jun 24 j 02:11 9°≈57'35 evening set -5758 Mar 13 j 11:15 15°≈01'59 opposition -5765 Sep 14 j 12:46 8°≈57'51 -15°10'06 min. Earth dist. -5765 Sep 14 j 12:21 8°≈57'52 47.70787 AU -5758 Mar 20 j 10:07 15°≈11'29 -13°33'29 conjunction

-5765 Dec 05 j 01:13

direct

7°≈58'16

-5758 Mar 20 j 10:21

minimum elong

15°≈11'29 13°33'45

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5758 in astronomical counting style is the year 5759 BCE in historical counting style. -5758 Mar 20 j 02:13 15°≈11'02 49.28144 AU direct -5752 Dec 16 j 19:57 20°≈31'44 max. Earth dist. -5758 Mar 27 i 09:39 15°≈21'00 evening set -5751 Mar 17 j 22:42 morning rise 21°≈47'39 -5758 Jun 30 j 13:04 retrograde 16°≈41'07 -5758 Sep 20 j 19:46 -5751 Mar 27 j 06:53 15°≈41'28 -14°02'15 conjunction 22°≈00'27 -12°16'59 opposition 22°**≈**00′28 12°17′12 -5758 Sep 21 j 03:35 -5751 Mar 27 j 07:07 min. Earth dist. 15°≈41'05 47.30379 AU minimum elong -5758 Oct 30 j 15:34 -5751 Mar 26 j 12:55 15°R≈ max. Earth dist. 21°≈59'25 48.68964 AU -5751 Apr 05 j 15:40 direct -5758 Dec 11 j 14:17 14°≈41'43 morning rise 22°≈13'18 -5751 Jul 07 j 06:04 -5757 Jan 22 j 02:03 15°≈ retrograde 23°≈30'35 -5751 Sep 27 j 04:28 evening set -5757 Mar 14 j 08:19 15°≈59'42 opposition 22°≈30'36 -12°42'06 min. Earth dist. -5751 Sep 27 j 21:33 22°≈29'47 46.68727 AU conjunction -5757 Mar 21 j 16:15 16°≈09'42 -13°23'17 direct -5751 Dec 18 j 00:57 21°≈30'17 -5757 Mar 21 j 16:27 -5750 Mar 18 j 22:08 minimum elong 16°≈09'43 13°23'32 evening set 22°≈45'56 -5757 Mar 21 j 05:43 max. Earth dist. 16°≈09'06 49.21055 AU morning rise -5757 Mar 29 j 00:57 16°≈19'46 conjunction -5750 Mar 28 j 13:24 22°≈59'10 -12°05'02 retrograde -5757 Jul 01 j 20:53 17°≈39'25 minimum elong -5750 Mar 28 j 13:38 22°≈59'10 12°05'16 opposition -5757 Sep 22 j 00:29 16°≈39'45 -13°51'33 max. Earth dist. -5750 Mar 27 j 17:30 22°≈58'01 48.59100 AU morning rise min. Earth dist. -5757 Sep 22 j 10:24 16°≈39'16 47.22889 AU -5750 Apr 07 j 05:27 23°≈12'27 direct -5757 Dec 12 j 17:24 15°≈39'57 retrograde -5750 Jul 08 j 14:17 24°≈29'23 evening set -5756 Mar 14 j 06:00 16°≈57'32 opposition -5750 Sep 28 j 09:21 23°≈29'23 -12°29'35 min. Earth dist. -5750 Sep 29 j 03:01 23°≈28'31 46.58570 AU conjunction -5756 Mar 21 j 22:44 17°≈08'02 -13°12'50 direct -5750 Dec 19 j 04:05 22°≈28'59 minimum elong -5756 Mar 21 i 22:58 17°≈08'03 13°13'06 evening set -5749 Mar 19 j 21:29 23°≈44'23 max. Earth dist. -5756 Mar 21 j 11:38 17°≈07'24 49.13448 AU morning rise -5756 Mar 29 i 16:06 17°≈18'36 conjunction -5749 Mar 29 i 19:54 23°≈58'03 -11°52'49 retrograde -5756 Jul 02 j 04:13 18°≈37'49 -5749 Mar 29 i 20:08 23°≈58'04 11°53'02 minimum elong -5756 Sep 22 j 05:03 17°≈38'07 -13°40'37 max. Earth dist. -5749 Mar 28 j 23:11 23°≈56'52 48.48941 AU opposition -5756 Sep 22 j 16:26 17°≈37'34 47.14873 AU -5749 Apr 08 j 18:59 min. Earth dist. morning rise 24°≈11'45 -5756 Dec 12 j 20:46 -5749 Jul 09 j 19:52 25°≈28'24 direct 16°≈38'14 retrograde -5755 Mar 15 j 04:06 -5749 Sep 29 j 14:23 evening set 17°≈55'27 opposition 24°≈28'21 -12°16'47 -5749 Sep 30 j 09:57 min. Earth dist. 24°≈27'25 46.48102 AU -5755 Mar 23 j 05:08 18°≈06'27 -13°02'10 -5749 Dec 20 j 10:14 conjunction direct 23°≈27'54 -5755 Mar 23 j 05:20 minimum elong 18°≈06'27 13°02'26 evening set -5748 Mar 19 j 21:25 24°≈43'06 -5755 Mar 22 j 15:31 -5748 Mar 29 j 04:59 max. Earth dist. 18°≈05'40 49.05347 AU max. Earth dist. 24°≈55'55 48.38468 AU -5755 Mar 31 j 06:55 morning rise 18°≈17'29 -5755 Jul 03 j 11:43 -5748 Mar 30 j 02:40 24°≈57'10 -11°40'20 retrograde 19°≈36'16 conjunction -5755 Sep 23 j 09:40 -5748 Mar 30 j 02:53 opposition 18°≈36'31 -13°29'27 minimum elong 24°≈57'11 11°40'34 -5748 Apr 09 j 08:32 min. Earth dist. -5755 Sep 23 j 21:55 18°≈35'56 47.06390 AU morning rise 25°≈11'16 direct -5755 Dec 14 j 00:13 17°≈36'33 retrograde -5748 Jul 09 j 23:52 26°≈27'40 evening set -5754 Mar 16 j 02:19 18°≈53'25 opposition -5748 Sep 29 j 19:14 25°≈27'35 -12°03'43 min. Earth dist. -5748 Sep 30 j 15:07 25°≈26'37 46.37279 AU conjunction -5754 Mar 24 j 11:33 19°≈04'53 -12°51'15 direct -5748 Dec 20 j 17:24 24°≈27'03 -5754 Mar 24 j 11:47 19°≈04'54 12°51'31 -5747 Mar 20 j 21:40 25°≈42'04 minimum elong evening set max. Earth dist. -5754 Mar 23 j 20:42 19°≈04'02 48.96783 AU max. Earth dist. -5747 Mar 30 j 09:29 25°≈55'09 48.27593 AU -5754 Apr 01 j 21:30 19°≈16'24 morning rise -5754 Jul 04 j 13:53 20°≈34'46 -5747 Mar 31 j 09:33 25°≈56'32 -11°27'35 retrograde conjunction 19°≈34'57 -13°18'01 -5747 Mar 31 i 09:47 opposition -5754 Sep 24 i 14:21 minimum elong 25°≈56'33 11°27'48 min. Earth dist. -5754 Sep 25 i 04:43 19°≈34'16 46.97475 AU morning rise -5747 Apr 10 j 22:13 26°≈11'03 direct -5754 Dec 15 i 08:36 18°≈34'54 retrograde -5747 Jul 11 i 06:40 27°≈27'12 evening set -5753 Mar 17 i 00:55 19°≈51'26 opposition -5747 Oct 01 i 00:24 26°≈27'05 -11°50'22 min. Earth dist. -5747 Oct 01 i 22:27 26°≈26'01 46.26031 AU -5753 Mar 25 j 17:58 20°≈03'21 -12°40'05 direct -5747 Dec 21 j 22:10 25°≈26'29 conjunction evening set -5753 Mar 25 i 18:10 20°≈03'22 12°40'20 -5746 Mar 21 j 22:07 26°≈41'18 minimum elong max. Earth dist. -5753 Mar 25 j 02:17 20°≈02'27 48.87840 AU morning rise -5753 Apr 03 j 11:39 20°≈15'19 conjunction -5746 Apr 01 j 16:37 26°≈56'11 -11°14'36 retrograde -5753 Jul 05 j 16:46 21°≈33'18 minimum elong -5746 Apr 01 j 16:50 26°≈56'11 11°14'49 opposition -5753 Sep 25 j 18:56 20°≈33'26 -13°06'19 max. Earth dist. -5746 Mar 31 j 16:00 26°≈54'45 48.16252 AU min. Earth dist. -5753 Sep 26 j 09:31 20°≈32'44 46.88203 AU morning rise -5746 Apr 12 j 11:37 27°≈11'06 -5753 Dec 16 j 16:23 -5746 Jul 12 j 14:01 direct 19°≈33'17 retrograde 28°≈27'01 -5746 Oct 02 j 05:37 evening set -5752 Mar 16 j 23:36 20°≈49'30 opposition 27°≈26'51 -11°36'47 -5752 Mar 25 j 06:28 -5746 Oct 03 j 04:59 max. Earth dist. 21°≈00'51 48.78552 AU min. Earth dist. 27°≈25'43 46.14277 AU direct -5746 Dec 23 j 02:41 26°≈26'09 conjunction -5752 Mar 26 j 00:16 21°≈01'52 -12°28'40 evening set -5745 Mar 22 j 22:59 27°≈40'49 minimum elong -5752 Mar 26 j 00:30 21°**≈**01'53 12°28'55 morning rise -5752 Apr 04 j 01:44 21°≈14'17 conjunction -5745 Apr 02 j 23:41 27°≈56'05 -11°01'22 retrograde -5752 Jul 05 j 23:56 22°≈31'54 minimum elong -5745 Apr 02 j 23:54 27°≈56'05 11°01'35 -5752 Sep 25 j 23:44 21°≈31'58 -12°54'21 -5745 Apr 01 j 20:25 27°≈54'30 48.04403 AU opposition max. Earth dist.

-5745 Apr 14 j 01:05

morning rise

28°≈11'23

min. Earth dist.

-5752 Sep 26 j 16:02 21°≈31'11 46.78615 AU

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5745 in astronomical counting style is the year 5746 BCE in historical counting style. -5745 Jul 13 j 23:14 29°≈27'05 min. Earth dist. -5739 Oct 10 i 04:55 4°¥29'22 45.19076 AU retrograde 28°≈26'51 -11°22'56 -5745 Oct 03 j 10:53 -5739 Dec 29 j 19:27 3°¥29'22 opposition direct -5745 Oct 04 j 11:20 28°≈25'40 46.02012 AU -5738 Mar 28 j 10:45 4° ¥ 43'14 min. Earth dist. evening set 27°≈26'02 -5738 Apr 08 j 15:18 4°**升**58'56 47.08919 AU -5745 Dec 24 j 05:50 max. Earth dist. direct -5744 Mar 22 j 23:52 evening set 28°≈40'33 -5744 Apr 02 j 02:11 -5738 Apr 10 j 03:39 5°\dagger01'04 -9°21'38 max. Earth dist. 28°≈54'32 47.92021 AU conjunction -5738 Apr 10 j 03:52 minimum elong 5°**₭**01'05 9°21'48 -5744 Apr 03 j 06:54 -5738 Apr 22 j 20:51 conjunction 28°≈56'12 -10°47'54 morning rise 5°**光**18′56 -5744 Apr 03 j 07:07 -5738 Jul 20 j 19:48 minimum elong 28°≈56'13 10°48'06 retrograde 6°**∺**33'25 morning rise -5744 Apr 14 j 14:28 29°≈11'53 opposition -5738 Oct 10 j 02:07 5°**¥**32'31 -9°38'30 -5744 May 23 j 20:06 0°**)**€ min. Earth dist. -5738 Oct 11 j 10:38 5°**升**30'55 45.04157 AU -5744 Jul 14 j 04:13 -5738 Dec 31 j 03:28 retrograde 0°**)** €27'22 direct 4°**)** 30'47 -5744 Sep 03 j 20:11 30°R≈ evening set -5737 Mar 29 j 13:22 5°**)** 44'37 opposition -5744 Oct 03 j 16:21 29°≈27'03 -11°08'51 max. Earth dist. -5737 Apr 09 j 21:10 6°**升**00'32 46.94022 AU min. Earth dist. -5744 Oct 04 j 19:08 29°≈25'45 45.89212 AU direct -5744 Dec 24 j 13:22 28°≈26'08 conjunction -5737 Apr 11 j 11:24 6°¥02'48 -9°06'17 evening set -5743 Mar 24 j 01:16 29°≈40'29 minimum elong -5737 Apr 11 j 11:37 6°**)**€02'49 9°06'28 max. Earth dist. -5743 Apr 03 j 08:17 29°≈54'46 47.79137 AU morning rise -5737 Apr 24 j 09:50 6°\ 21'01 retrograde -5737 Jul 22 j 01:54 7°**)** € 35'25 conjunction -5743 Apr 04 j 14:17 29°≈56'31 -10°34'11 opposition -5737 Oct 11 j 08:09 6°\;\;34'26 -9°22'25 minimum elong -5743 Apr 04 j 14:31 29°≈56'32 10°34'23 min. Earth dist. -5737 Oct 12 j 18:33 6°**)** 32'44 44.88983 AU -5743 Apr 07 i 02:13 0°**)**€ direct -5736 Jan 01 i 10:04 5°**)** 32'35 -5743 Apr 16 i 03:46 0°**)** 12'35 evening set -5736 Mar 29 j 16:12 6° **)** 46'24 morning rise retrograde -5743 Jul 15 i 08:14 1°**)** 27'50 max. Earth dist. -5736 Apr 10 j 05:05 7°**)** €02'39 46.78851 AU opposition -5743 Oct 04 j 21:39 0°\(\frac{10}{27}\)'26 -10°54'29 min. Earth dist. -5743 Oct 06 j 00:57 0°**升**26'06 45.75927 AU -5736 Apr 11 j 19:25 7°\d'55 -8°50'40 conjunction -5743 Oct 29 j 03:41 -5736 Apr 11 j 19:38 7°**)**€04'56 8°50'49 30°R≈ minimum elong 29°≈26'23 -5736 Apr 24 j 22:41 7°**¥**23′28 direct -5743 Dec 25 j 21:58 morning rise 0°**₩** -5736 Jul 22 j 09:22 8° **X** 37'49 -5742 Feb 20 j 21:21 retrograde -5742 Mar 25 j 02:47 0°**)**40′37 -5736 Oct 11 j 14:19 7°**)** ₹36'45 -9°06'03 evening set opposition -5736 Oct 13 j 01:26 7°**)** 35′01 44.73492 AU min. Earth dist. -5742 Apr 05 j 21:37 0°¥57'00 -10°20'12 conjunction direct -5735 Jan 01 j 16:06 6°**)** 34′46 7°**)**€48'35 -5742 Apr 05 j 21:49 0°**¥**57'01 10°20'24 -5735 Mar 30 j 19:37 minimum elong evening set -5742 Apr 04 j 13:10 0°**¥**55'07 47.65783 AU -5735 Apr 11 j 10:48 8°**₩**05'03 46.63335 AU max. Earth dist. max. Earth dist. -5742 Apr 17 j 17:04 1°**)** 13′26 morning rise -5742 Jul 16 j 15:16 2°**H**28'31 -5735 Apr 13 j 03:33 8°\cdot\07'28 -8°34'46 retrograde conjunction -5742 Oct 06 j 03:14 1°¥28'01 -10°39'52 -5735 Apr 13 j 03:45 8°**升**07'28 8°34'55 opposition minimum elong min. Earth dist. -5742 Oct 07 j 08:35 1°**¥**26'35 45.62219 AU morning rise -5735 Apr 26 j 11:47 8°\ 26'21 direct -5742 Dec 27 j 03:03 0°**¥**26'49 retrograde -5735 Jul 23 j 20:22 9°\ 40'39 -5741 Mar 26 j 04:15 1°**)** 40′55 opposition -5735 Oct 12 j 20:31 8°\;\;39'30 -8°49'23 evening set max. Earth dist. -5741 Apr 05 j 20:18 1°**¥**55'46 47.52034 AU min. Earth dist. -5735 Oct 14 j 08:51 8°**升**37'42 44.57638 AU -5734 Jan 02 j 18:51 7°**)** € 37'23 direct -5741 Apr 07 j 04:57 1°\frac{1}{57'41} -10°05'58 -5734 Mar 31 j 23:12 8°**)** 51'14 conjunction evening set -5741 Apr 07 j 05:10 1°**¥**57'41 10°06'10 max. Earth dist. -5734 Apr 12 j 18:14 9°**₭**07'57 46.47402 AU minimum elong -5741 Apr 19 j 05:56 2°**)** 14′28 morning rise -5741 Jul 17 j 21:38 -5734 Apr 14 j 12:00 9°\ 10'26 -8°18'35 retrograde 3°**¥**29′23 conjunction -5741 Oct 07 i 08:50 -5734 Apr 14 j 12:12 opposition 2°\\\28'47\ -10°24'58 minimum elong 9°\ 10'27 8°18'44 -5734 Apr 28 i 00:46 9°\ 29'39 min. Earth dist. -5741 Oct 08 i 14:55 2°**升**27'18 45.48133 AU morning rise -5734 Jul 25 i 04:38 direct -5741 Dec 28 i 09:06 1°**)** 27'27 retrograde 10°**)** 43′55 -5740 Mar 26 j 06:15 2°**)**41'26 -5734 Oct 14 j 03:08 9°\ 42'39 -8°32'26 evening set opposition -5740 Apr 06 j 01:38 2°**升**56'31 47.37947 AU min. Earth dist. -5734 Oct 15 j 17:28 9°¥40'45 44.41338 AU max. Earth dist. direct -5733 Jan 04 j 01:25 8° **X** 40'24 2°\ 58'33 -9°51'28 -5740 Apr 07 j 12:21 -5733 Apr 02 j 03:02 9° **\ 5**4'16 conjunction evening set -5740 Apr 07 j 12:34 minimum elong 2°**)** 58'34 9°51'39 max. Earth dist. -5733 Apr 14 j 01:12 10°¥11'13 46.31019 AU morning rise -5740 Apr 19 j 19:02 3°**¥**15'43 4°**)** € 30′27 retrograde -5740 Jul 18 j 07:16 conjunction -5733 Apr 15 j 20:22 10°**)** 13'48 -8°02'09 3°**¥**29'45 -10°09'46 opposition -5740 Oct 07 j 14:23 minimum elong -5733 Apr 15 j 20:33 10°¥13'49 8°02'18 -5740 Oct 08 j 21:20 3°**¥**28'14 45.33746 AU -5733 Apr 29 j 13:41 10°**)** 33′21 min. Earth dist. morning rise 2°**¥**28′16 -5733 Jul 26 j 11:22 11°**)** 47'35 direct -5740 Dec 28 j 12:34 retrograde -5733 Oct 15 j 09:46 10°**¥**46′11 -8°15′13 evening set -5739 Mar 27 j 08:22 3°**)** 42′11 opposition -5739 Apr 07 j 08:32 -5733 Oct 17 j 00:38 max. Earth dist. 3°**¥**57'35 47.23558 AU min. Earth dist. 10°**¥**44′15 44.24568 AU direct -5732 Jan 05 j 11:01 9°**)** 43'45 conjunction -5739 Apr 08 j 20:03 3°**¥**59'40 -9°36'41 evening set -5732 Apr 02 j 07:18 10°**)** 57'40 minimum elong -5739 Apr 08 j 20:16 3°**¥**59'41 9°36'53 max. Earth dist. -5732 Apr 14 j 07:26 11°**X**14'48 46.14144 AU morning rise -5739 Apr 21 j 08:03 4°**)** 17'11 -5739 Jul 19 j 14:32 5°**)** 31'47 -5732 Apr 16 j 05:03 11°**光**17'32 -7°45'26 retrograde conjunction -5739 Oct 08 j 20:17 4°**¥**30'59 -9°54'17 -5732 Apr 16 j 05:15 11°**)** 17'33 7°45'34 opposition minimum elong

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5732 in astronomical counting style is the year 5733 BCE in historical counting style. -5732 Apr 30 j 02:49 11°**)** 37'24 conjunction -5725 Apr 24 j 21:42 18°\£53'04 -5°40'38 morning rise -5732 Jul 26 j 18:02 12°\ 51'36 -5725 Apr 24 j 21:50 18°**¥**53'05 5°40'43 retrograde minimum elong -5732 Oct 15 j 16:31 11°**X** 50'04 -7°57'42 -5725 May 09 j 21:45 19°¥15'04 opposition morning rise -5732 Oct 17 j 09:43 min. Earth dist. 11°**)**48'00 44.07320 AU -5725 Aug 04 j 07:20 20°**¥**29'35 retrograde 10°**)** 47′27 -5731 Jan 05 j 19:18 -5725 Oct 23 j 20:20 19°**)** € 26'55 -5°46'42 direct opposition -5725 Oct 25 j 20:13 evening set -5731 Apr 03 j 11:51 12°**)** 01'24 min. Earth dist. 19°**¥**24'27 42.77007 AU -5724 Jan 13 j 22:55 max. Earth dist. -5731 Apr 15 j 15:49 12°**光**18'48 45.96805 AU direct 18°**¥**22'52 evening set -5724 Apr 10 j 03:55 19°**)** 37'43 conjunction -5731 Apr 17 j 14:01 12° **★**21'35 -7°28'28 max. Earth dist. -5724 Apr 23 j 01:27 19°**¥**56'39 44.66391 AU -5731 Apr 17 j 14:12 minimum elong 12°**升**21'36 7°28'36 morning rise -5731 May 01 j 15:52 12°**)** 41′46 conjunction -5724 Apr 25 j 07:51 20°**₭**00'01 -5°21'38 -5731 Jul 28 j 00:35 -5724 Apr 25 j 07:59 retrograde 13°**¥**55'57 minimum elong 20°\(\overline{4}\)00'01 5°21'44 -5731 Oct 16 j 23:29 -5724 May 10 j 10:51 opposition 12°**¥**54'16 -7°39'54 morning rise 20°**∺**22′17 min. Earth dist. -5731 Oct 18 j 17:25 12°**升**52'09 43.89617 AU retrograde -5724 Aug 04 j 17:39 21°\ 36'58 direct -5730 Jan 07 j 03:46 11°**)**51'26 opposition -5724 Oct 24 j 04:28 20°\ 34'10 -5°26'44 evening set -5730 Apr 04 j 16:41 13°**¥**05'26 min. Earth dist. -5724 Oct 26 j 05:48 20°**)** 31'38 42.57422 AU max. Earth dist. -5730 Apr 16 j 22:16 13°**)** €23'00 45.79038 AU direct -5723 Jan 14 j 06:00 19°**¥**29'56 evening set -5723 Apr 11 j 11:19 20°¥45'02 conjunction -5730 Apr 18 j 22:48 13°¥25'56 -7°11'12 max. Earth dist. -5723 Apr 24 j 10:23 21°**)** 04'09 44.46778 AU minimum elong -5730 Apr 18 j 22:59 13°**¥**25'56 7°11'20 morning rise -5730 May 03 j 04:52 13°**)** € 46′26 conjunction -5723 Apr 26 j 18:10 21°\columbf{07'37} -5°02'20 retrograde -5730 Jul 29 i 10:48 15°**)**€00'36 minimum elong -5723 Apr 26 i 18:18 21°**)** 67'38 5°02'25 opposition -5730 Oct 18 i 06:29 13°**)** 58'45 -7°21'48 morning rise -5723 May 12 j 00:12 21°**)** 30'11 min. Earth dist. -5730 Oct 20 i 01:43 13°**)** € 56'34 43.71530 AU retrograde -5723 Aug 06 i 05:09 22°**)**(45'03 direct -5729 Jan 08 j 08:49 12°\ 55'43 opposition -5723 Oct 25 i 12:51 21°\(\dagger42'05\) -5°06'28 -5729 Apr 05 j 21:39 14°**)** 09'47 -5723 Oct 27 j 14:39 21°**)** 39'32 42.37538 AU min. Earth dist. evening set -5729 Apr 18 j 06:42 14°**)**€27'36 45.60899 AU -5722 Jan 15 j 14:59 20°\ 37'41 max. Earth dist. direct -5722 Apr 12 j 18:59 21° ¥ 53'04 evening set -5729 Apr 20 j 07:56 14°**)** € 30'35 -6°53'41 -5722 Apr 25 j 19:01 22°\dagger 12'20 44.26803 AU conjunction max. Earth dist. -5729 Apr 20 j 08:06 14°**¥**30'36 6°53'48 minimum elong 14°**)** € 51′23 22°\dagger15'56 -4°42'45 -5729 May 04 j 17:46 -5722 Apr 28 j 04:40 conjunction morning rise -5729 Jul 30 j 20:21 minimum elong -5722 Apr 28 j 04:47 16°**)**€05'35 22°\dagger 15'56 4°42'50 retrograde -5729 Oct 19 j 13:41 -5722 May 13 j 13:23 15°**)** €03'33 -7°03'24 22°**)** 38'46 opposition morning rise 15°**႘**01'17 43.53103 AU -5729 Oct 21 j 10:31 -5722 Aug 07 j 15:16 23°**米** 53'50 min. Earth dist. retrograde 22°**升**50'43 -4°45'52 -5728 Jan 09 j 15:40 14°**₩**00'18 -5722 Oct 26 j 21:39 direct opposition -5728 Apr 06 j 03:02 15°**)** 14′28 -5722 Oct 29 j 01:40 22° ¥ 48'02 42.17275 AU evening set min. Earth dist. 15°**₭**32'31 45.42464 AU -5721 Jan 17 j 00:55 21° **★** 46'07 max. Earth dist. -5728 Apr 18 j 14:42 direct evening set -5721 Apr 14 j 03:07 23°**)** 01'47 conjunction -5728 Apr 20 j 17:06 15°**)** 35'34 -6°35'51 max. Earth dist. -5721 Apr 27 j 05:19 23°**₭**21'16 44.06434 AU -5728 Apr 20 j 17:16 15°**¥**35'35 6°35'58 minimum elong morning rise -5728 May 05 j 06:47 15°**)** 56'41 conjunction -5721 Apr 29 j 15:33 23° ★24'56 -4°22'53 -5728 Jul 31 j 05:49 17°**)** 10′54 -5721 Apr 29 j 15:40 23°****24'56 4°22'57 retrograde minimum elong -5728 Oct 19 j 20:59 16°**)**€08'41 -6°44'42 -5721 May 15 j 02:47 23°**)**(48'02 opposition morning rise min. Earth dist. -5728 Oct 21 j 17:52 16°**₭**06'25 43.34404 AU -5721 Aug 08 j 23:38 25°**)** 03'19 retrograde -5727 Jan 09 j 23:41 15°**)**€05'13 -5721 Oct 28 j 06:31 24°\mathcal{H}00'03 -4°24'58 direct opposition evening set -5727 Apr 07 i 08:48 16°**¥**19'32 min. Earth dist. -5721 Oct 30 j 11:00 23°\;\;\;57'19 41.96592 AU max. Earth dist. -5727 Apr 19 j 22:26 16°**)** € 37'46 45.23758 AU direct -5720 Jan 18 j 11:51 22°\ 55'13 evening set -5720 Apr 14 j 11:49 24°\(\)11'10 conjunction -5727 Apr 22 i 02:30 16°\(\pm\)40'56 -6°17'45 max. Earth dist. -5720 Apr 27 j 13:44 24° ****30'44 43.85629 AU -5727 Apr 22 i 02:40 16°**¥**40'57 6°17'50 minimum elong -5727 May 06 j 19:47 17°**₩**02'20 -5720 Apr 30 i 02:37 24°\ 34'35 -4°02'44 morning rise conjunction -5727 Aug 01 j 12:52 18°**)** 16′38 -5720 Apr 30 i 02:44 24°\ 34'35 4°02'48 retrograde minimum elong -5727 Oct 21 j 04:35 17°**)** 14'15 -6°25'41 -5720 May 15 j 16:24 24°**)** 57'58 opposition morning rise min. Earth dist. -5727 Oct 23 j 03:19 17°**光**11'52 43.15472 AU retrograde -5720 Aug 09 j 10:33 26°**)** 13′28 direct -5726 Jan 11 j 08:37 16°**¥**10'35 opposition -5720 Oct 28 j 15:45 25°¥10'00 -4°03'46 evening set -5726 Apr 08 j 14:48 17°**¥**25′02 min. Earth dist. -5720 Oct 30 j 22:06 25°\(\mathbf{H}\)07'10 41.75484 AU max. Earth dist. -5726 Apr 21 j 08:08 17°**)** 43'33 45.04845 AU direct -5719 Jan 18 j 19:44 24°\ 04'56 -5719 Apr 15 j 20:50 25°\ 21'11 evening set -5726 Apr 23 j 12:09 17°**¥**46'45 -5°59'20 -5719 Apr 29 j 00:36 25°¥40'58 43.64386 AU conjunction max. Earth dist. -5726 Apr 23 j 12:18 17°**¥**46'45 5°59'27 minimum elong -5726 May 08 j 08:45 18°**₩**08'26 -5719 May 01 j 14:06 25°**)**44'52 -3°42'17 morning rise conjunction retrograde -5726 Aug 02 j 19:52 19°**)** 22'49 minimum elong -5719 May 01 j 14:13 25°**)** 44'53 3°42'20 opposition -5726 Oct 22 j 12:22 18°**¥**20′18 -6°06′21 morning rise -5719 May 17 j 05:54 26°**₩**08'30 min. Earth dist. -5726 Oct 24 j 11:12 18°**光**17'54 42.96337 AU retrograde -5719 Aug 10 j 21:58 27°**∺**24'15 direct -5725 Jan 12 j 18:00 17°**₩** 16'26 opposition -5719 Oct 30 j 01:12 26°**)** 20'34 -3°42'15 -5725 Apr 09 j 21:08 18°**)** ₹31'04 min. Earth dist. -5719 Nov 01 j 08:58 26°**光**17'39 41.53952 AU evening set -5725 Apr 22 j 15:37 18°**)** 49'45 44.85733 AU -5718 Jan 20 j 03:59 25°**升**15'14 max. Earth dist. direct

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5718 in astronomical counting style is the year 5719 BCE in historical counting style. minimum elong -5718 Apr 17 j 06:23 26°**)**€31'49 -5712 May 10 j 04:26 4°Υ14'23 1°11'01 evening set -5718 Apr 30 j 10:17 26°**)** 51'43 43.42759 AU -5712 May 26 j 05:54 4°Y39'35 max. Earth dist. morning rise -5712 Aug 19 j 12:13 5°**Y**57'44 retrograde -5712 Nov 07 j 02:52 -5718 May 03 j 01:38 4°Υ52'22 -1°02'47 26°\\$55'45 -3°21'33 conjunction opposition -5718 May 03 j 01:44 26°**¥**55'45 3°21'36 -5712 Nov 09 j 17:15 4°Υ49'01 39.96069 AU minimum elong min. Earth dist. -5711 Jan 28 j 04:38 -5718 May 18 j 19:35 27°**¥**19'37 3°Y45'02 morning rise direct 5°**Y**04'43 retrograde -5718 Aug 12 j 11:54 28°**)** 35'38 evening set -5711 Apr 25 j 13:51 -5718 Oct 31 j 10:50 5°**Υ**25'35 41.84489 AU opposition 27°**)** 31'44 -3°20'25 max. Earth dist. -5711 May 08 j 20:13 27°**∺**28'47 41.32073 AU min. Earth dist. -5718 Nov 02 j 19:05 direct -5717 Jan 21 j 11:28 26°**¥**26′07 conjunction -5711 May 11 j 18:01 5°**Υ**30'13 -0°48'14 5°**Υ**30'13 0°48'14 evening set -5717 Apr 18 j 16:06 27° ¥ 43'03 minimum elong -5711 May 11 j 18:03 -5711 May 27 j 20:02 5°Y55'36 max. Earth dist. -5717 May 01 j 20:39 28°**₭**03'05 43.20782 AU morning rise 7°**Υ**14'14 retrograde -5711 Aug 21 j 02:20 conjunction -5717 May 04 j 13:20 28°¥07'13 -3°00'31 opposition -5711 Nov 08 j 14:36 6°Y08'38 -0°38'45 minimum elong -5717 May 04 j 13:26 28°\mathbf{1}07'14 3°00'33 min. Earth dist. -5711 Nov 11 j 05:00 6°**Y**05'16 39.72778 AU morning rise -5717 May 20 j 09:02 28°\ 31'20 direct -5710 Jan 29 j 17:22 5°Y01'01 retrograde -5717 Aug 13 j 22:52 29°**)**47'38 evening set -5710 Apr 27 j 03:36 6°Y21'18 opposition -5717 Nov 01 j 20:51 28°\dagger43'28 -2°58'16 max. Earth dist. -5710 May 10 j 08:12 6°Υ42'11 41.61078 AU min. Earth dist. -5717 Nov 04 j 07:06 28° **)** 40'24 41.09882 AU direct -5716 Jan 22 j 22:36 27° **) (**37'34 conjunction -5710 May 13 j 08:02 6°Y46'59 -0°25'12 evening set -5716 Apr 19 j 02:26 28°\ 54'53 minimum elong -5710 May 13 j 08:02 6°**Y**46′59 0°25'11 max. Earth dist. -5716 May 02 j 08:24 29°¥15'07 42.98529 AU morning rise -5710 May 29 j 10:17 7°**Y**12'34 retrograde -5710 Aug 22 j 15:32 8°Y31'42 conjunction -5716 May 05 i 01:26 29°**)** 19'18 -2°39'12 opposition -5710 Nov 10 j 02:53 7°Y25'52 -0°14'24 -5716 May 05 i 01:30 29°¥19'18 2°39'14 min. Earth dist. -5710 Nov 12 j 19:17 7°**Y**22'22 39.49219 AU minimum elong -5716 May 20 j 22:44 29°\ 43'38 -5709 Jan 31 j 05:46 6°**Y**17'57 morning rise direct -5716 Jun 01 j 02:28 $0^{\circ}\Upsilon$ -5709 Apr 28 j 17:46 7°**Y**38'51 evening set -5716 Aug 14 j 08:33 1°Y00'13 max. Earth dist. -5709 May 11 j 22:27 7°Υ59'52 41.37365 AU retrograde -5716 Oct 30 j 00:08 30°**₹** -5716 Nov 02 j 06:55 29°\\$55'49 -2°35'49 -5709 May 14 j 22:23 8°Y04'43 -0°01'54 opposition conjunction -5716 Nov 04 j 17:13 -5709 May 14 j 22:25 8°Y04'43 0°01'53 min. Earth dist. 29°**¥**52'44 40.87446 AU minimum elong -5709 May 14 j 15:53 8°Y04'18 -5715 Jan 23 j 12:14 28°**)** 49'37 behind sun begin direct $0^{\circ}\Upsilon$ -5709 May 15 j 04:56 8°Y05'07 -5715 Apr 15 j 15:24 behind sun end -5715 Apr 20 j 13:22 0°**Υ**07'20 -5709 May 31 j 00:33 8°Y30'28 evening set morning rise -5709 Jun 12 j 20:21 8°Y50'00 max. Earth dist. -5715 May 03 j 18:37 0°**Υ**27'38 42.76045 AU asc. node -5709 Aug 24 j 03:32 9°**Y**50′09 retrograde -5715 May 06 j 13:43 0°**Υ**31'59 -2°17'35 -5709 Nov 11 j 15:32 8°**Υ**44'03 0°10'15 conjunction opposition minimum elong -5715 May 06 j 13:48 0°Y32'00 2°17'37 min. Earth dist. -5709 Nov 14 j 08:36 8°**Y**40'30 39.25331 AU morning rise -5715 May 22 j 12:30 0° Y 56'33 direct -5708 Feb 01 j 19:45 7°Y35'49 retrograde -5715 Aug 15 j 19:50 2° Y13'28evening set -5708 Apr 29 j 08:55 8°Y57'22 -5715 Nov 03 j 17:28 1°Y08'50 -2°13'02 max. Earth dist. -5708 May 12 j 10:51 9°Υ18'22 41.13313 AU opposition min. Earth dist. -5715 Nov 06 j 05:14 1°Υ05'39 40.64827 AU -5714 Jan 24 j 22:39 0° **Y**02'20-5708 May 15 j 13:13 9°Y'23'24 0°21'47 direct conjunction -5714 Apr 22 j 00:28 1°Y20'28 -5708 May 15 j 13:12 9°Y'23'24 0°21'49 evening set minimum elong -5714 May 05 j 07:22 1°Υ40'59 42.53388 AU -5708 May 31 j 15:13 9°Y49'18 max. Earth dist. morning rise 11° Y 09'34 retrograde -5708 Aug 24 i 19:11 -5714 May 08 i 02:15 conjunction 1°Y45'21 -1°55'41 opposition -5708 Nov 12 j 04:25 10°**Υ**03'11 0°35'12 -5714 May 08 j 02:19 minimum elong 1°**Υ**45'21 1°55'42 min. Earth dist. -5708 Nov 14 j 22:42 9°**Υ**59'33 39.01123 AU 8°Y54'37 morning rise -5714 May 24 i 02:01 2°Y10'08 direct -5707 Feb 02 i 06:20 -5714 Aug 17 j 06:33 3°Y27'26 evening set -5707 May 01 i 00:35 10°**Y**16′50 retrograde -5714 Nov 05 j 04:21 2°Y22'32 -1°49'56 max. Earth dist. -5707 May 14 j 01:29 10°**Y**37'54 40.88921 AU opposition min. Earth dist. -5714 Nov 07 j 16:34 2°Υ19'19 40.42048 AU -5713 Jan 26 j 09:52 1°Y15'46 -5707 May 17 j 04:34 10°**Y**'43'01 0°45'39 direct conjunction 10°**Y**43′01 2°Y34'22 evening set -5713 Apr 23 j 12:23 minimum elong -5707 May 17 j 04:32 0°45'40 11°Y09'05 max. Earth dist. -5713 May 06 j 18:40 2°Υ54'58 42.30593 AU morning rise -5707 Jun 02 j 05:50 12°**Υ**29'56 retrograde -5707 Aug 26 j 10:11 conjunction -5713 May 09 j 15:04 2°Y59'27 -1°33'29 opposition -5707 Nov 13 j 17:57 11°**Υ**23'15 1°00'28 -5713 May 09 j 15:07 2°Y59'27 1°33'31 min. Earth dist. -5707 Nov 16 j 13:46 11°Υ19'31 38.76595 AU minimum elong -5713 May 25 j 15:57 3°Y24'27 -5706 Feb 03 j 18:55 10°**Y**14'21 morning rise direct 4°Υ42'09 -5706 May 02 j 16:48 11°Y37'16 retrograde -5713 Aug 18 j 21:18 evening set -5706 May 15 j 15:50 11°Υ58'22 40.64243 AU opposition -5713 Nov 06 j 15:19 3°**Y**37′01 -1°26′31 max. Earth dist. min. Earth dist. -5713 Nov 09 j 04:01 3°**Y**33'46 40.19146 AU direct -5712 Jan 27 j 18:19 2°**Υ**29'58 conjunction -5706 May 18 j 19:57 12°**Υ**03'35 1°09'47 evening set -5712 Apr 24 j 00:46 3°**Y**49′05 minimum elong -5706 May 18 j 19:54 12°**Y**03′35 1°09'50 max. Earth dist. -5712 May 07 j 07:12 4°**Υ**09'50 42.07637 AU morning rise -5706 Jun 03 j 20:30 12°**Y**29'46 -5706 Aug 28 j 03:27 13°Y51'16 retrograde -5712 May 10 j 04:24 4°Υ14'23 -1°11'01 -5706 Nov 15 j 07:38 12°**Y**'44'16 1°26'00 conjunction opposition

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Earth dist. -5698 May 27 j 05:06 -5705 Jun 05 j 11:17 13°Y51'25 morning rise 23°**Y**26'38 4°31'17 retrograde -5705 Aug 29 j 20:27 15°**Y**13'34 conjunction -5698 May 30 j 15:00 14°**Υ**06'15 1°51'50 opposition -5705 Nov 16 j 21:43 minimum elong -5698 May 30 j 14:50 23°**Y**26'37 4°31'24 min. Earth dist. -5705 Nov 19 j 19:38 14°**Y**02'21 38.26838 AU morning rise -5698 Jun 14 j 21:30 23°Y53'15 12°Y56'35 25°**Y**21′26 direct -5704 Feb 06 j 23:33 retrograde -5698 Sep 09 j 01:43 -5698 Nov 26 j 13:56 evening set -5704 May 05 j 03:21 14°**Υ**21'04 opposition 24°Y11'52 4°59'35 max. Earth dist. -5704 May 17 j 22:36 14°**Y**42'12 40.14213 AU min. Earth dist. -5698 Nov 29 j 15:40 24°**Y**07'36 36.50688 AU direct -5697 Feb 16 j 12:25 22°Y59'36 conjunction -5704 May 21 j 04:14 14°**Ƴ**47'37 1°58'50 evening set -5697 May 17 j 04:51 24° Y 31'04 minimum elong -5704 May 21 j 04:10 14°**Ƴ**47'36 1°58'54 max. Earth dist. -5697 May 29 j 01:09 24° Y 51'48 38.37259 AU morning rise -5704 Jun 06 j 02:11 15°**Y**14'00 retrograde -5704 Aug 30 j 10:35 16°**Ƴ**36'52 conjunction -5697 Jun 01 j 10:45 24°**Y**57'50 4°57'20 opposition -5704 Nov 17 j 12:17 15°Υ29'13 2°17'56 minimum elong -5697 Jun 01 j 10:35 24°**Y**57'49 4°57'27 25°**Y**24'24 min. Earth dist. -5704 Nov 20 j 10:00 15°**Y**25'18 38.01725 AU morning rise -5697 Jun 16 j 13:17 direct -5703 Feb 07 i 16:03 14°Υ19'11 retrograde -5697 Sep 10 j 19:18 26°**Y**53'39 -5703 May 06 j 21:46 15°**Y**44′29 opposition -5697 Nov 28 i 08:03 25°Y43'44 5°27'16 evening set max. Earth dist. -5703 May 19 j 13:29 16°Υ05'33 39.88999 AU min. Earth dist. -5697 Dec 01 i 10:01 25°Υ39'26 36.25334 AU direct -5696 Feb 18 j 07:43 24° Y 31'05 -5703 May 22 j 20:49 16°**Y**11'07 2°23'43 -5696 May 18 j 05:32 26°**Y**03'46 conjunction evening set -5703 May 22 j 20:44 16°**Y**11′07 -5696 May 29 j 19:34 26°Υ24'14 38.11699 AU 2°23'47 max. Earth dist. minimum elong -5703 Jun 07 j 17:07 16°**Y**37'36 morning rise -5703 Sep 01 j 02:18 18°**℃**01'13 -5696 Jun 02 j 07:02 26°Y30'27 5°23'33 conjunction retrograde -5703 Nov 19 j 03:17 16°**Υ**53'14 2°44'17 -5696 Jun 02 j 06:50 26°**Y**'30'26 5°23'41 minimum elong opposition min. Earth dist. -5703 Nov 22 j 02:03 16°**Y**49'15 37.76556 AU -5696 Jun 17 j 05:27 26°**Y**56′57 morning rise -5696 Sep 11 j 15:37 15°**Y**42'49 28°**Y**27'19 -5702 Feb 09 j 06:10 direct retrograde 17°**Y**′09′00 -5696 Nov 29 j 02:51 -5702 May 08 j 16:44 27°**Y**17′02 5°55′06 evening set opposition 17°**Ƴ**30'08 39.63741 AU -5702 May 21 j 07:06 -5696 Dec 02 j 05:38 27°Υ12'39 35.99860 AU max. Earth dist. min. Earth dist. -5695 Feb 19 j 00:46 26°**Y**03′57 direct 17°**Y**35'43 2°48'49 -5702 May 24 j 13:58 -5695 May 20 j 06:58 27°**Y**37'53 conjunction evening set 17°**Υ**35'43 2°48'54 -5702 May 24 j 13:52 -5695 May 31 j 16:25 27°**Υ**58'12 37.85991 AU minimum elong max. Earth dist. -5702 Jun 09 j 08:03 18°**Y**′02'16 morning rise 28°**Υ**04'29 5°49'53 retrograde -5702 Sep 02 j 18:01 19°**Y**26'41 conjunction -5695 Jun 04 j 03:57 -5702 Nov 20 j 18:51 18°Υ18'23 3°10'54 minimum elong -5695 Jun 04 j 03:44 28°**Y**′04′28 5°50'01 opposition min. Earth dist. -5702 Nov 23 j 18:04 18°**Y**14'20 37.51376 AU morning rise -5695 Jun 18 j 21:29 28°Y30'52 -5701 Feb 10 j 20:19 17°**Y**07'35 -5695 Aug 31 j 14:52 0°8 direct -5701 May 10 j 12:34 18° **Y**34'42 -5695 Sep 13 j 11:31 0°802'24 evening set retrograde -5701 May 22 j 23:27 18°**Y**55'46 39.38497 AU -5695 Sep 26 j 13:41 30°R℃ max. Earth dist. -5695 Nov 30 j 22:21 28°Y51'44 6°23'06 opposition 19°**Y**01'28 3°14'09 28°**Υ**47'16 35.74261 AU conjunction -5701 May 26 i 07:20 min. Earth dist. -5695 Dec 04 i 02:17 -5701 May 26 i 07:13 27°**Y**38'13 minimum elong 19°**Υ**01'28 3°14'14 direct -5694 Feb 20 i 18:17 -5701 Jun 10 j 23:12 morning rise 19°**Y**28′05 evening set -5694 May 22 i 09:34 29°Y13'28 retrograde -5701 Sep 04 i 13:13 20°**Y**53′21 max. Earth dist. -5694 Jun 02 j 12:58 29°Υ33'31 37.60191 AU -5701 Nov 22 j 10:46 19°**Y**44'44 3°37'45 opposition -5701 Nov 25 j 09:51 19°**Υ**'40'41 37.26227 AU -5694 Jun 06 i 01:17 29°Υ39'54 6°16'20 min. Earth dist. conjunction -5700 Feb 12 j 09:18 18°Y33'34 -5694 Jun 06 i 01:03 29°Υ39'53 6°16'29 direct minimum elong 20°**℃**01'41 -5694 Jun 17 j 03:20 0°8 evening set -5700 May 11 j 09:15 20°**Y**′22'43 39.13251 AU max. Earth dist. -5700 May 23 j 17:01 morning rise -5694 Jun 20 j 13:51 0°806'09 retrograde -5694 Sep 15 j 10:24 1°838'54 -5694 Dec 02 j 18:15 conjunction -5700 May 27 j 01:27 20°Υ28'29 3°39'40 opposition 0°**8**27'50 6°51'13 -5700 May 27 j 01:19 20°Y28'29 3°39'46 min. Earth dist. -5694 Dec 05 j 21:58 0°823'21 35.48606 AU minimum elong -5700 Jun 11 j 14:28 20°Y55'07 -5694 Dec 22 j 18:46 30°RY morning rise 29°**Υ**13'51 -5700 Sep 05 j 08:38 22°Y21'19 -5693 Feb 22 j 13:17 retrograde direct -5700 Nov 23 j 03:14 21°**Y**12'23 4°04'49 -5693 Apr 23 j 18:10 0°8 opposition 21°**Υ**08'14 37.01082 AU min. Earth dist. -5700 Nov 26 j 03:43 evening set -5693 May 24 j 12:58 0°**8**50'28 -5699 Feb 13 j 01:15 20°**Y**00′52 max. Earth dist. -5693 Jun 04 j 09:58 1°**8**10'13 37.34327 AU evening set -5699 May 13 j 06:56 21°**Y**30'03 max. Earth dist. -5699 May 25 j 11:42 21°**Υ**51'02 38.88001 AU conjunction -5693 Jun 07 j 23:14 1°**8**16'44 6°42'52 minimum elong -5693 Jun 07 j 22:59 1°**8**16'43 6°43'02 -5699 May 28 j 20:02 21°Y56'51 4°05'23 -5693 Jun 22 j 06:10 1°842'48 conjunction morning rise -5699 May 28 j 19:53 21°**Υ**′56'51 4°05'29 -5693 Sep 17 j 09:54 3°816'50 minimum elong retrograde

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Earth dist. -5686 Dec 19 j 15:44 conjunction -5692 Jun 08 j 21:46 2°**8**54'59 7°09'27 14°**8**08'23 33.48148 AU -5692 Jun 08 j 21:30 minimum elong 2°**8**54'58 7°09'37 direct -5685 Mar 07 j 21:33 12°**8**55'39 morning rise -5692 Jun 22 j 22:39 3°**8**20'51 evening set -5685 Jun 10 j 10:59 14°**8**46'06 retrograde -5692 Sep 18 j 09:32 4°**8**56'12 -5685 Jun 17 j 12:19 15°8 opposition -5692 Dec 05 j 12:04 3°**8**44'17 7°47'43 max. Earth dist. -5685 Jun 18 j 17:30 15°**8**02'25 35.32698 AU -5692 Dec 08 j 16:32 min. Earth dist. 3°**8**39'42 34.97323 AU -5685 Jun 22 j 05:15 15°**8**09'20 direct -5691 Feb 25 j 07:58 2°**8**29'21 conjunction 10°13'53 -5685 Jun 22 j 04:53 evening set -5691 May 27 j 23:19 4°808'55 minimum elong 15°**8**09'18 10°14'08 max. Earth dist. -5691 Jun 07 j 07:01 4°**8**28'02 36.82715 AU morning rise -5685 Jul 03 j 20:41 15°**8**32'22 retrograde -5685 Oct 01 j 23:16 17°**8**19'26 conjunction -5691 Jun 10 j 20:51 4°**8**34'43 7°36'04 opposition -5685 Dec 18 j 13:04 16°**8**04'46 11°03'57 minimum elong -5691 Jun 10 j 20:35 4°**8**34'42 7°36'14 min. Earth dist. -5685 Dec 21 j 17:19 15°**8**59'59 33.24065 AU morning rise -5691 Jun 24 j 15:16 5°800'19 -5684 Feb 07 i 07:57 15°R\ retrograde -5691 Sep 20 j 09:09 6°**8**37'05 direct -5684 Mar 09 j 00:18 14°**8**46'47 opposition -5691 Dec 07 j 10:03 5°**8**24'45 8°16'00 -5684 Apr 08 j 07:21 15°8 min. Earth dist. -5691 Dec 10 j 15:22 5°820'04 34.71861 AU evening set -5684 Jun 12 i 01:50 16°839'23 direct -5690 Feb 27 i 04:37 4°809'21 max. Earth dist. -5684 Jun 19 j 20:33 16°854'53 35.08402 AU -5690 May 30 i 05:54 5°850'29 evening set max. Earth dist. -5690 Jun 09 j 07:51 6°**8**09'20 36.57117 AU conjunction -5684 Jun 23 i 09:17 17°**8**01'57 10°39'33 -5684 Jun 23 j 08:53 17°**8**01'55 10°39'47 minimum elong -5690 Jun 12 j 20:27 6°816'00 8°02'38 -5684 Jul 04 j 14:06 17°**8**24'21 conjunction morning rise -5690 Jun 12 j 20:09 8°02'49 -5684 Oct 03 j 05:43 19°**8**13'25 6°**8**15'58 minimum elong retrograde -5690 Jun 26 j 07:40 -5684 Dec 19 j 16:28 17°**8**58'22 11°31'16 6°**8**41'18 morning rise opposition -5690 Sep 22 j 07:28 8°**8**19'32 -5684 Dec 22 j 21:29 17°**8**53'30 33.00149 AU min. Earth dist. retrograde -5690 Dec 09 j 08:44 7°**8**06'48 8°44'17 -5683 Mar 11 j 02:33 16°**8**39'57 opposition direct 18°**8**34'45 -5690 Dec 12 j 13:35 min. Earth dist. 7°**8**02'07 34.46600 AU -5683 Jun 14 j 18:16 evening set -5683 Jun 22 j 02:45 18°**8**49'34 34.84267 AU -5689 Mar 01 j 04:00 5°**8**50'57 max. Earth dist. direct -5689 Jun 01 j 13:58 7°**8**33'45 evening set -5689 Jun 11 j 07:21 -5683 Jun 25 j 14:10 18°**8**56'36 11°04'56 max. Earth dist. 7°**8**52'08 36.31750 AU conjunction -5683 Jun 25 j 13:47 18°**8**56'34 11°05'11 minimum elong -5689 Jun 14 j 20:43 7°**8**58'55 8°29'10 -5683 Jul 06 j 07:23 19°**8**18'15 conjunction morning rise -5689 Jun 14 j 20:25 7°**8**58'53 8°29'21 retrograde -5683 Oct 05 j 11:06 21°**8**09'26 minimum elong morning rise -5689 Jun 28 j 00:31 8°**8**23'52 -5683 Dec 21 j 20:49 19°**8**53'58 11°58'16 opposition retrograde -5689 Sep 24 j 09:09 10°**8**03'42 min. Earth dist. -5683 Dec 25 j 01:24 19°**8**49'06 32.76401 AU -5689 Dec 11 j 07:52 8°850'33 9°12'30 direct -5682 Mar 13 j 07:27 18°**8**35'06 opposition -5689 Dec 14 j 12:28 8°845'52 34.21609 AU -5682 Jun 17 j 12:06 20°**8**32'12 min. Earth dist. evening set -5688 Mar 02 j 00:44 7°**8**34'15 max. Earth dist. -5682 Jun 24 j 07:22 20°**8**46'03 34.60323 AU direct -5688 Jun 02 j 23:10 9°818'51 evening set -5688 Jun 12 j 09:17 9°**8**36'49 36.06633 AU -5682 Jun 27 j 19:31 20°**8**53'14 11°29'57 max. Earth dist. conjunction -5682 Jun 27 j 19:06 minimum elong 20°**8**53'12 11°30'11 9°**8**43'36 8°55'35 -5682 Jul 08 i 00:36 conjunction -5688 Jun 15 i 21:54 morning rise 21°**8**14'04 minimum elong -5688 Jun 15 j 21:34 9°**8**43'35 8°55'46 retrograde -5682 Oct 07 i 18:15 23°**8**07'28 10°808'10 morning rise -5688 Jun 28 i 17:24 opposition -5682 Dec 24 i 01:52 21°851'33 12°24'53 -5688 Sep 25 j 09:46 11°**8**49'40 min. Earth dist. -5682 Dec 27 j 06:13 21°846'40 32.52878 AU retrograde -5688 Dec 12 j 08:03 10°**8**36'09 9°40'36 direct -5681 Mar 15 j 10:46 20°**8**32'12 opposition min. Earth dist. -5688 Dec 15 j 13:06 10°831'24 33.96876 AU -5681 Jun 20 j 07:41 22°**8**31'43 evening set -5681 Jun 26 j 14:51 22°**8**44'40 34.36605 AU -5687 Mar 03 j 22:28 9°819'26 max. Earth dist. direct evening set -5687 Jun 05 j 09:46 11°**8**05'52 max. Earth dist. -5687 Jun 14 j 11:09 11°**8**23'21 35.81779 AU conjunction -5681 Jun 30 j 01:55 22°**8**51'49 11°54'34 minimum elong -5681 Jun 30 j 01:31 22°**8**51'47 11°54'50 -5687 Jun 17 j 23:31 11°**8**30'11 9°21'52 -5681 Jul 09 j 17:45 23°**8**11'45 conjunction morning rise -5687 Jun 17 j 23:11 11°**8**30'10 9°22'05 -5681 Oct 09 j 22:54 25°**8**07'26 minimum elong retrograde -5687 Jun 30 j 10:22 11°**8**54'18 -5681 Dec 26 j 07:44 23°**8**51'05 12°51'04 morning rise opposition -5687 Sep 27 j 13:44 13°**8**37'34 -5681 Dec 29 j 12:15 23°**8**46'09 32.29615 AU retrograde min. Earth dist. 12°**8**23'40 10°08'34 -5680 Mar 16 j 15:14 22°**8**31'15 opposition -5687 Dec 14 j 08:52 direct min. Earth dist. -5687 Dec 17 j 13:00 12°**8**18'57 33.72404 AU evening set -5680 Jun 22 j 05:06 24°**8**33'16 direct -5686 Mar 05 j 22:14 11°**8**06'32 max. Earth dist. -5680 Jun 27 j 22:07 24°**8**45'08 34.13199 AU evening set -5686 Jun 07 j 21:37 12°**8**54'56 conjunction max. Earth dist. -5686 Jun 16 j 13:26 13°**8**11'49 35.57140 AU -5680 Jul 01 j 08:54 24°**8**52'21 12°18'43 -5680 Jul 01 j 08:29 24°**8**52'19 12°18'58 minimum elong -5686 Jun 20 j 02:02 13°**8**18'45 9°47'59 -5680 Jul 10 j 10:40 25°**8**11'15 conjunction morning rise

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5680 in astronomical counting style is the year 5681 BCE in historical counting style. 27°**8**09'21 -5680 Oct 11 i 07:24 evening set -5673 Jul 14 i 16:31 9°**Ⅱ**46'11 retrograde 9°**Ц**45'09 32.64138 AU opposition -5680 Dec 27 j 14:28 25°**8**52'33 13°16'43 max. Earth dist. -5673 Jul 14 j 05:30 -5680 Dec 30 j 17:38 25°847'40 32.06708 AU min. Earth dist. -5679 Mar 18 j 19:49 -5673 Jul 17 j 06:46 9°**Ⅱ**51'59 14°47'47 24°**8**32'13 direct conjunction -5673 Jul 17 j 06:23 -5679 Jun 25 j 04:05 26°**8**36'52 9°**I**51'57 14°48'07 evening set minimum elong -5673 Jul 19 j 20:10 -5679 Jun 30 j 06:44 9°**I**57'42 max. Earth dist. 26°**8**47'36 33.90168 AU morning rise 12°**Ⅱ**18'55 -5673 Oct 27 j 18:34 retrograde 26°**8**54'48 -5672 Jan 12 j 15:07 10°**Ⅱ**59'16 15°54'23 conjunction -5679 Jul 03 j 16:36 12°42'18 opposition 26°**8**54'45 -5672 Jan 15 j 10:20 minimum elong -5679 Jul 03 j 16:11 12°42'35 min. Earth dist. 10°**I**54'44 30.61919 AU morning rise -5679 Jul 12 j 03:06 27°**8**12'34 direct -5672 Apr 02 j 11:44 9°**Ⅱ**36′02 retrograde -5679 Oct 13 j 15:26 29°**8**13'12 max. Earth dist. -5672 Jul 15 j 21:02 12°**耳**02'18 32.45332 AU -5679 Dec 29 j 22:14 27°**8**55'56 opposition 13°41'46 -5672 Jul 18 j 20:04 min. Earth dist. -5678 Jan 02 j 01:39 27°**8**51'01 31.84232 AU conjunction 12°**I**08'58 15°05'21 -5672 Jul 18 j 19:41 direct -5678 Mar 21 j 00:16 26°835'07 minimum elong 12°**Ⅱ**08'56 15°05'39 evening set -5678 Jun 28 j 05:17 28°**8**42'33 retrograde -5672 Oct 29 j 07:45 14°**Ⅲ**37'17 opposition max. Earth dist. -5678 Jul 02 j 16:49 28°**8**52'03 33.67628 AU -5671 Jan 14 j 05:26 13°**Ⅲ**17'17 16°12'49 min. Earth dist. -5671 Jan 16 j 23:54 13°**Ⅱ**12'47 30.43697 AU conjunction -5678 Jul 06 j 01:00 28°**8**59'11 13°05'15 direct -5671 Apr 04 j 23:55 11°**II**53'43 minimum elong -5678 Jul 06 j 00:34 28°**8**59'08 13°05'32 max. Earth dist. -5671 Jul 18 j 12:11 14°**П**21'26 32.27147 AU morning rise -5678 Jul 13 j 18:56 29°815'40 -5678 Aug 04 j 11:23 $0^{\circ}\Pi$ conjunction -5671 Jul 21 j 09:51 14°**I**I28'02 15°21'45 retrograde -5678 Oct 16 i 01:44 1°**Ⅱ**18'59 minimum elong -5671 Jul 21 i 09:30 14°**Ⅱ**28′00 15°22'04 opposition -5677 Jan 01 i 06:38 0°**I**I01'16 14°06'07 retrograde -5671 Nov 01 i 00:17 16°**I**57'42 -5677 Jan 02 i 02:01 30°R₩ opposition -5670 Jan 16 j 20:28 15°**Ⅲ**37′21 16°29'59 min. Earth dist. -5677 Jan 04 i 08:00 29°856'28 31.62285 AU min. Earth dist. -5670 Jan 19 i 12:35 15°**Ⅱ**32'59 30.26085 AU -5677 Mar 23 j 09:22 28°839'59 -5670 Apr 07 j 13:02 14°**Ⅱ**13'26 direct direct -5677 Jun 06 j 18:33 $0^{\circ}II$ max. Earth dist. -5670 Jul 21 j 04:44 16°**Ц**42'36 32.09583 AU -5677 Jul 01 j 08:37 0°II50'22 evening set -5677 Jul 05 j 02:28 0°**Ц**58'24 33.45644 AU -5670 Jul 24 j 00:35 16°**Ⅱ**49'06 15°36'56 max. Earth dist. conjunction -5670 Jul 24 j 00:14 16°**Ⅱ**49'04 minimum elong 15°37'14 1°**II**05'32 13°27'30 -5677 Jul 08 j 10:12 -5670 Nov 03 j 15:24 19°**Ⅲ**20′04 conjunction retrograde -5677 Jul 08 j 09:47 -5669 Jan 19 j 12:23 17°**I**59'22 16°45'49 1°**Ⅲ**05'30 13°27'48 minimum elong opposition -5677 Jul 15 j 10:10 -5669 Jan 22 j 03:58 1°**Ⅱ**20'35 17°**Д**55'01 30.09100 AU min. Earth dist. morning rise -5677 Oct 18 j 13:38 3°**I**I26'46 -5669 Apr 10 j 01:38 16°**Ⅲ**35′06 retrograde direct 19°**耳**05'42 31.92698 AU -5676 Jan 03 j 16:08 2°**I**08'37 14°29'40 -5669 Jul 23 j 22:19 opposition max. Earth dist. 2°**Д**03'48 31.40934 AU -5676 Jan 06 j 17:13 min. Earth dist. -5676 Mar 24 j 16:58 -5669 Jul 26 j 15:56 19°**I**12′02 15°50′48 direct 0°**Ⅱ**46'54 conjunction -5676 Jul 03 j 14:52 3°**Ⅱ**00′27 minimum elong -5669 Jul 26 j 15:37 19°**Ⅱ**12'00 15°51'08 evening set max. Earth dist. -5676 Jul 06 j 15:00 3°**Д**06'57 33.24291 AU retrograde -5669 Nov 06 j 08:28 21°**Ⅱ**44'15 -5668 Jan 22 j 05:05 20°**Ⅲ**23'12 17°00'13 opposition conjunction -5676 Jul 09 j 20:12 3°II13'57 13°48'57 min. Earth dist. -5668 Jan 24 j 17:57 20°**Ⅱ**19'01 29.92784 AU -5676 Jul 09 j 19:47 3°**Ⅱ**13'54 13°49'14 -5668 Apr 11 j 18:34 18°**Ⅲ**58'37 minimum elong direct -5676 Jul 16 j 00:03 $3^{\circ}\Pi 27'20$ max. Earth dist. -5668 Jul 25 j 15:45 21°**Д**30'32 31.76522 AU morning rise -5676 Oct 20 j 00:40 5°**Ⅱ**36'36 retrograde -5675 Jan 05 j 02:30 4°**Ⅱ**18'03 14°52'21 -5668 Jul 28 j 07:50 21°**II**36'45 16°03'17 opposition conjunction -5668 Jul 28 i 07:32 21°**Ⅱ**36'43 min. Earth dist. -5675 Jan 08 i 01:31 4°**Д**13'20 31.20214 AU minimum elong 16°03'37 -5668 Nov 08 i 02:02 direct -5675 Mar 27 i 03:14 2°**I**55'55 retrograde 24°**Ⅱ**10'11 evening set -5675 Jul 07 i 00:29 5°**Ⅱ**12'55 opposition -5667 Jan 23 j 22:43 22°**I**I48'46 17°13'04 22°**II**44'39 29.77208 AU max. Earth dist. -5675 Jul 09 j 02:15 5°**Ⅱ**17'27 33.03593 AU min. Earth dist. -5667 Jan 26 j 10:30 direct -5667 Apr 14 i 09:41 21°**II**23'51 -5675 Jul 12 j 06:56 5°**Ⅲ**24'27 14°09'32 max. Earth dist. -5667 Jul 28 j 11:33 23°**Д**57'10 31.61155 AU conjunction -5675 Jul 12 j 06:32 5°**Ⅲ**24'25 14°09'50 minimum elong -5675 Jul 17 j 12:11 5°**I**I35'54 -5667 Jul 31 j 00:20 24°**I**I03'07 16°14'17 morning rise conjunction -5675 Oct 22 j 14:41 -5667 Jul 31 j 00:05 24°**Ⅱ**03'06 retrograde 7°**Ⅱ**48'33 minimum elong 16°14'38 26°**Ⅲ**37'41 opposition -5674 Jan 07 j 13:49 6°**耳**29'37 15°14'05 retrograde -5667 Nov 10 j 20:04 -5674 Jan 10 j 11:54 min. Earth dist. 6°**Д**24'56 31.00160 AU opposition -5666 Jan 26 j 17:04 25°**I**15'56 17°24'19 $5^{\circ}\Pi 07'06$ -5666 Jan 29 j 01:48 -5674 Mar 29 j 12:39 min. Earth dist. 25°**Ⅱ**12'00 29.62447 AU direct -5674 Jul 10 j 15:17 7°**Ⅲ**27'59 -5666 Apr 17 j 03:39 23°II50'44 evening set direct -5674 Jul 11 j 16:33 7°**Д**30'19 32.83549 AU -5666 Jul 31 j 06:07 26°**Ⅲ**25'13 31.46671 AU max. Earth dist. max. Earth dist. -5674 Jul 14 j 18:27 7°**I**37′08 14°29′10 conjunction conjunction -5666 Aug 02 j 17:11 26°**Ⅲ**31'02 16°23'43 -5674 Jul 14 j 18:02 7°**Ⅲ**37′06 14°29'28 minimum elong -5666 Aug 02 j 16:56 26°**Ⅲ**31′01 16°24'03 minimum elong morning rise -5674 Jul 18 j 20:32 7°**Ⅱ**46'11 retrograde -5666 Nov 13 j 16:08 29°**Ⅲ**06'41 opposition retrograde -5674 Oct 25 j 03:37 10°**Ⅲ**02'39 -5665 Jan 29 j 12:06 27°**Ⅱ**44'36 17°33'49 opposition -5673 Jan 10 j 02:07 8°**Ⅲ**43'21 15°34'47 min. Earth dist. -5665 Jan 31 j 18:49 27°**I**I40'48 29.48599 AU -5673 Jan 12 j 22:55 8°**Ц**38'44 30.80730 AU -5665 Apr 19 j 21:14 26°**Ⅱ**19'08 min. Earth dist. direct -5673 Apr 01 j 00:33 7°**Ⅲ**20′29 max. Earth dist. -5665 Aug 03 j 03:44 28°**Д**54'58 31.33162 AU direct

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Earth dist. 0°911'05 29.35725 AU direct -5656 May 12 j 15:20 19°929'56 -5664 Feb 10 j 03:47 30°R∏ direct 28°**Ⅱ**49'00 -5664 Apr 21 j 17:26 conjunction -5656 Aug 27 j 16:26 22°**©**15'34 16°18'38 -5664 Jun 27 j 15:22 0°9 minimum elong -5656 Aug 27 j 16:35 22°9515'35 16°18'58 max. Earth dist. -5664 Aug 04 j 23:42 1°525'55 31.20706 AU max. Earth dist. -5656 Aug 26 j 14:35 22°**©**12'55 30.59701 AU retrograde -5656 Dec 09 j 07:58 24°957'30 -5664 Aug 07 j 04:37 -5655 Feb 24 j 17:10 conjunction 1°931'11 16°37'32 opposition 23°**©**33'52 17°20'30 -5664 Aug 07 j 04:27 minimum elong 1°931'10 16°37'52 min. Earth dist. -5655 Feb 25 j 17:07 23°532'11 28.66623 AU retrograde -5664 Nov 18 j 07:42 4°9508'47 direct -5655 May 15 j 14:50 22°907'44 opposition -5663 Feb 03 j 04:14 2°9546'10 17°47'16 min. Earth dist. -5663 Feb 05 j 04:56 2°542'47 29.23914 AU conjunction -5655 Aug 30 j 12:18 24°**©**53'13 16°07'40 direct -5663 Apr 24 j 11:42 1°520'18 minimum elong -5655 Aug 30 j 12:31 24°953'14 16°07'59 max. Earth dist. -5663 Aug 07 j 22:25 3°558'26 31.09349 AU max. Earth dist. -5655 Aug 29 j 13:15 24°950'51 30.56741 AU retrograde -5655 Dec 12 j 05:16 27°535'12 conjunction -5663 Aug 09 j 23:00 4°503'18 16°41'46 opposition -5654 Feb 27 j 16:56 26°9511'30 17°07'52 minimum elong -5663 Aug 09 j 22:54 4°9503'18 16°42'07 min. Earth dist. -5654 Feb 28 j 14:01 26°5010'01 28.64003 AU retrograde -5663 Nov 21 i 03:45 6°9541'47 direct -5654 May 18 j 13:11 24°9545'24 opposition -5662 Feb 06 i 01:21 5°€18'58 17°51'05 min. Earth dist. -5662 Feb 07 i 23:26 5°515'44 29.13168 AU conjunction -5654 Sep 02 i 08:14 27°**©**30'37 15°54'49 direct -5662 Apr 27 j 08:20 3°952'59 minimum elong -5654 Sep 02 i 08:28 27°930'39 15°55'08 max. Earth dist. -5662 Aug 10 j 19:31 6°532'03 30.99108 AU max. Earth dist. -5654 Sep 01 j 13:45 27°528'44 30.54885 AU -5654 Nov 18 j 17:14 $\Omega^{\circ}\Omega$ -5662 Aug 12 j 17:44 6°936'42 16°44'10 -5654 Dec 15 j 01:36 0°Ω12'32 retrograde conjunction -5662 Aug 12 j 17:39 -5653 Jan 11 j 05:13 6°936'41 16°44'30 30°R96 minimum elong -5662 Nov 24 j 02:07 -5653 Mar 02 j 16:25 28°5548'47 16°53'11 9°915'58 opposition retrograde 28°547'34 28.62471 AU -5661 Feb 08 j 22:43 17°52'53 -5653 Mar 03 j 09:49 7°**9**52'59 min. Earth dist. opposition -5661 Feb 10 j 17:05 min. Earth dist. 7°ら50'01 29.03500 AU direct -5653 May 21 j 13:32 27°522'46 6°926'54 -5653 Sep 02 j 01:18 -5661 Apr 30 j 04:35 0 $^{\circ}\Omega$ direct -5661 Aug 13 j 18:46 9°506'59 30.89947 AU max. Earth dist. -5653 Sep 05 j 03:47 0°**Ω**07'37 15°40'05 conjunction $0^{\circ}\Omega 07'39 \quad 15^{\circ}40'23$ -5661 Aug 15 j 13:02 -5653 Sep 05 j 04:04 conjunction 9°9511'16 16°44'41 minimum elong -5661 Aug 15 j 13:00 -5653 Sep 04 j 12:06 0°**Ω**06'01 30.54183 AU minimum elong 9°5511'16 16°45'02 max. Earth dist. retrograde -5661 Nov 26 j 21:35 11°951'15 retrograde -5653 Dec 17 j 23:14 2°**Ω**49'22 opposition -5660 Feb 11 j 20:56 10°528'08 17°52'39 opposition -5652 Mar 04 j 15:59 1°**Ω**25'36 16°36'29 min. Earth dist. -5660 Feb 13 j 13:15 10°525'18 28.94864 AU min. Earth dist. -5652 Mar 05 j 05:29 1°**Ω**24'39 28.62111 AU -5660 May 02 j 00:56 9°502'00 -5652 May 19 j 06:28 30°Rூ direct max. Earth dist. -5660 Aug 15 j 17:00 11°5642'51 30.81854 AU -5652 May 23 j 11:27 29°959'41 direct -5652 May 27 j 17:15 $0^{\circ}\Omega$ -5660 Aug 17 j 08:24 11°9546'51 16°43'18 conjunction -5660 Aug 17 j 08:24 11°9546'51 -5652 Sep 06 j 23:08 2°**Ω**44'04 15°23'30 minimum elong 16°43'39 conjunction -5660 Nov 28 j 19:48 -5652 Sep 06 i 23:26 retrograde 14°9527'27 minimum elong 2°Ω44'06 15°23'48 -5652 Sep 06 j 12:27 2°Ω42'59 30.54698 AU opposition -5659 Feb 13 i 19:32 13°504'13 17°50'22 max. Earth dist. min. Earth dist. -5659 Feb 15 i 07:50 13°501'40 28.87244 AU retrograde -5652 Dec 19 i 19:22 5°**Ω**25'34 direct -5659 May 04 j 22:35 11°538'03 opposition -5651 Mar 07 i 15:31 4°Ω01'50 16°17'47 max. Earth dist. -5659 Aug 18 j 16:22 14°519'38 30.74786 AU min. Earth dist. -5651 Mar 08 j 01:26 4°Ω01'08 28.62951 AU direct -5651 May 26 j 11:34 2°**Ω**36′06 -5659 Aug 20 j 04:15 14°9523'18 16°40'01 conjunction minimum elong -5659 Aug 20 j 04:19 14°9523'18 16°40'21 -5651 Sep 09 j 18:08 5°Ω19'55 15°05'06 conjunction -5659 Dec 01 j 16:53 -5651 Sep 09 j 18:29 retrograde 17°9504'25 minimum elong 5°Ω19'57 15°05'23 -5651 Sep 09 j 10:20 opposition -5658 Feb 16 j 18:38 15°9541'03 17°46'01 max. Earth dist. 5°**Ω**19'07 30.56467 AU min. Earth dist. -5658 Feb 18 j 04:59 15°538'38 28.80619 AU retrograde -5651 Dec 22 j 17:29 8°Ω01'05 -5658 May 07 j 18:34 14°9514'52 opposition -5650 Mar 10 j 14:33 6°**Ω**37'24 15°57'10 direct -5658 Aug 21 j 15:32 16°957'02 30.68749 AU -5650 Mar 10 j 19:54 6°**Ω**37'02 28.65034 AU max. Earth dist. min. Earth dist. direct -5650 May 29 j 10:28 5°**Ω**11'53 -5658 Aug 23 j 00:10 16°34'48 -5650 Sep 09 j 18:20 conjunction 17°**©**00'22 evening set 7°**Ω**48'18 -5658 Aug 23 j 00:14 minimum elong 17°**©**00'23 16°35'09 retrograde -5658 Dec 04 j 13:51 19°541'52 conjunction -5650 Sep 12 j 12:55 7°**Ω**55'04 14°44'58 opposition -5657 Feb 19 j 17:53 18°9518'25 17°39'35 minimum elong -5650 Sep 12 j 13:17 7°**Ω**55'06 14°45'16 min. Earth dist. -5657 Feb 21 j 00:07 18°**©**16'18 28.74966 AU max. Earth dist. -5650 Sep 12 j 09:58 7°**Ω**54'46 30.59482 AU direct -5657 May 10 j 18:13 16°952'15 morning rise -5650 Sep 15 j 08:11 8°**Ω**01'54 -5650 Dec 25 j 12:20 10°**Ω**35'49 retrograde -5657 Aug 25 j 20:16 19°537'53 16°27'41 -5649 Mar 13 j 13:30 9°**Ω**12'16 15°34'42 conjunction opposition

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5649 in astronomical counting style is the year 5650 BCE in historical counting style. 9°**Ω**12'06 28.68319 AU min. Earth dist. -5649 Mar 13 j 15:57 conjunction -5643 Sep 29 i 11:45 25°**Ω**33'05 11°42'48 minimum elong -5649 Jun 01 j 08:48 7°Ω47'00 -5643 Sep 29 j 12:11 25°Ω33'07 11°43'00 direct -5649 Sep 10 j 22:57 10°**Ω**18'53 -5643 Sep 30 j 08:39 25°Ω35'08 31.11208 AU evening set max. Earth dist. -5643 Oct 09 j 01:47 25°**Ω**55'39 morning rise -5649 Sep 15 j 07:11 10°**Ω**29'27 14°23'10 -5642 Jan 11 j 15:54 28°**Ω**08'43 conjunction retrograde 14°23'26 12°14'23 -5649 Sep 15 j 07:34 10°**Ω**29'29 -5642 Mar 31 j 17:39 minimum elong opposition 26°**Ω**46'29 -5649 Sep 15 j 07:15 10°**Ω**29'27 30.63711 AU 26°**Ω**47'57 29.20904 AU max. Earth dist. min. Earth dist. -5642 Mar 30 j 20:04 10°**Ω**40′04 -5649 Sep 19 j 16:06 morning rise direct -5642 Jun 19 j 11:31 25°**Ω**23'29 retrograde -5649 Dec 28 j 09:22 13°**Ω**09'43 evening set -5642 Sep 21 j 22:15 27°**Ω**34'45 opposition -5648 Mar 15 j 11:58 11°**Ω**46'19 15°10'29 min. Earth dist. -5648 Mar 15 j 09:42 11°**Ω**46'28 28.72774 AU conjunction -5642 Oct 02 j 02:21 27°**Ω**58'32 11°12'04 -5642 Oct 02 j 02:46 27°**Ω**58'34 11°12'17 direct -5648 Jun 03 j 07:30 10°**£**21′21 minimum elong -5648 Sep 11 j 12:38 -5642 Oct 03 j 01:23 28°**Ω**00'47 31.22390 AU evening set 12°**Ω**49'37 max. Earth dist. morning rise -5642 Oct 12 j 07:13 28°**Ω**22'23 conjunction -5648 Sep 17 j 01:12 13°**Ω**02'59 13°59'48 -5642 Nov 30 j 17:05 0° m minimum elong -5648 Sep 17 j 01:36 13°**Ω**03′01 14°00'05 retrograde -5641 Jan 14 j 07:41 0° m 33'09 max. Earth dist. -5648 Sep 17 j 05:38 13°**Ω**03'26 30.69088 AU -5641 Mar 02 j 03:02 30° R Ω morning rise -5648 Sep 22 j 14:23 13°**Ω**16′25 min. Earth dist. -5641 Apr 02 j 11:24 29°**Ω**12'47 29.32165 AU -5648 Nov 10 j 05:49 15°€ opposition -5641 Apr 03 j 12:23 29°**Ω**11'06 11°40'54 retrograde -5648 Dec 30 j 04:37 15°**Ω**42'41 direct -5641 Jun 22 j 04:31 27°**Ω**48'26 -5647 Feb 20 j 21:02 15°RΩ evening set -5641 Sep 23 j 22:32 29°**Ω**57'13 opposition -5647 Mar 18 j 10:20 14°**Ω**19'27 14°44'37 -5641 Sep 25 j 03:25 0° m min. Earth dist. -5647 Mar 18 i 05:30 14°Ω19'47 28.78343 AU direct -5647 Jun 06 i 05:04 12°**Ω**54'49 conjunction -5641 Oct 04 i 16:16 0° m 22'09 10°40'26 -5647 Sep 04 j 22:18 15°Ω -5641 Oct 04 i 16:41 0°m/22'11 10°40'37 minimum elong -5647 Sep 13 j 06:18 15°**Ω**19'50 max. Earth dist. -5641 Oct 05 j 19:30 0° m/24'47 31.34488 AU evening set -5641 Oct 15 j 10:34 0° m 47'09 morning rise -5647 Sep 19 j 18:38 15°Ω35'32 13°34'57 -5640 Jan 16 j 20:43 2° m 55'42 conjunction retrograde -5647 Sep 19 j 19:03 -5640 Apr 04 j 02:41 1° m 35'43 29.44356 AU 15°**Ω**35'35 13°35'12 min. Earth dist. minimum elong -5647 Sep 20 j 02:14 15°**Ω**36'18 30.75569 AU -5640 Apr 05 j 06:24 1° m/33'52 11°06'31 max. Earth dist. opposition 15°**Ω**51'18 -5647 Sep 26 j 07:36 -5640 Jun 23 j 23:42 morning rise direct 0° mp 11'31 18°**Ω**14'35 2° m 17'56 -5646 Jan 01 j 23:17 -5640 Sep 24 j 23:17 evening set retrograde 16°Ω51'33 14°17'13 -5646 Mar 21 j 08:03 opposition -5640 Oct 06 j 05:23 2° mp 43'52 10°08'00 -5646 Mar 20 j 22:42 16°**Ω**52'12 28.84959 AU min. Earth dist. conjunction -5646 Jun 09 j 03:18 15°**Ω**27'14 -5640 Oct 06 j 05:47 2° m 43'55 10°08'12 direct minimum elong -5646 Sep 15 j 02:19 17°**Ω**49'15 -5640 Oct 07 j 10:48 2° Mp 46'43 31.47539 AU evening set max. Earth dist. -5640 Oct 17 j 12:22 3°m/09'54 morning rise conjunction -5646 Sep 22 j 11:45 18°Ω06'59 13°08'43 retrograde -5639 Jan 18 j 12:04 5° m 16'19 minimum elong -5646 Sep 22 j 12:10 18°**Ω**07'01 13°08'58 opposition -5639 Apr 07 j 23:37 3° m 54'42 10°31'20 max. Earth dist. -5646 Sep 22 j 22:44 18°**Ω**08'05 30.83061 AU min. Earth dist. -5639 Apr 06 j 15:49 3° m 56'50 29.57539 AU morning rise -5646 Sep 29 j 21:48 18°**Ω**24'46 direct -5639 Jun 26 j 17:00 2°m/32'43 retrograde -5645 Jan 04 j 16:12 20°**Ω**45'17 -5639 Sep 27 j 00:04 4° m 36'52 evening set -5645 Mar 24 j 05:17 19°**Ω**22'27 13°48'22 opposition min. Earth dist. -5645 Mar 23 j 17:37 19°**Ω**23'15 28.92566 AU -5639 Oct 08 j 17:52 5° m 03'43 9°34'52 conjunction -5645 Jun 11 j 23:12 17°**Ω**58'29 -5639 Oct 08 j 18:15 5° m 03'45 9°35'01 direct minimum elong 20°**Ω**17'39 -5639 Oct 10 i 03:32 evening set -5645 Sep 17 i 00:05 max. Earth dist. 5° m 06'56 31.61566 AU morning rise -5639 Oct 20 j 12:23 5° m 30'38 20°Ω37'09 12°41'13 conjunction -5645 Sep 25 i 04:23 retrograde -5638 Jan 21 i 00:04 7° m 35'02 -5645 Sep 25 i 04:49 minimum elong 20°**Ω**37'12 12°41'27 min. Earth dist. -5638 Apr 09 i 06:00 6° m 15'56 29.71703 AU max. Earth dist. -5645 Sep 25 i 18:44 20°**Ω**38'35 30.91532 AU opposition -5638 Apr 10 i 16:06 6° No 13'40 9°55'26 -5645 Oct 03 j 09:15 20°Ω56'43 direct -5638 Jun 29 j 09:31 4° m 52'04 morning rise -5644 Jan 07 j 09:32 23°Ω14'39 evening set -5638 Sep 29 j 01:17 6° m 54'02 retrograde -5644 Mar 25 j 10:25 21°**Ω**53'05 29.01105 AU min. Earth dist. opposition -5644 Mar 26 j 02:02 21°Ω52'01 13°18'13 conjunction -5638 Oct 11 j 05:36 7° m/21'41 9°01'06 direct -5644 Jun 13 j 20:10 20°**Ω**28'22 minimum elong -5638 Oct 11 j 05:58 7° m 21'43 9°01'16 evening set -5644 Sep 17 j 22:41 22° **Q**44'49 max. Earth dist. -5638 Oct 12 j 17:34 7° m 25'06 31.76567 AU morning rise -5638 Oct 23 j 10:51 7° m 49'24 -5644 Sep 26 j 20:16 23°**Ω**05'54 12°12'33 -5637 Jan 23 j 13:20 9° m 51'51 conjunction retrograde -5644 Sep 26 j 20:42 23°**Ω**05'57 12°12'47 -5637 Apr 11 j 17:13 8° m 33'18 29.86838 AU minimum elong min. Earth dist. -5644 Sep 27 j 13:20 23°**Ω**07'36 31.00916 AU -5637 Apr 13 j 07:33 8° **m** 30'47 9°18'57 max. Earth dist. opposition -5644 Oct 05 j 18:33 23°**Ω**27′03 morning rise direct -5637 Jul 02 j 01:48 7° m 09'35 retrograde -5643 Jan 09 j 01:35 25°**Ω**42'31 evening set -5637 Oct 01 j 02:32 9° 1009'29 opposition -5643 Mar 28 j 22:19 24°**Ω**20'05 12°46'51 min. Earth dist. -5643 Mar 28 j 04:00 24°**Ω**21'20 29.10561 AU conjunction -5637 Oct 13 j 16:41 9°**m**,37'49 8°26'50 direct -5643 Jun 16 j 15:15 22°**Ω**56'46 minimum elong -5637 Oct 13 j 17:02 9°**m** 37'51 8°26'58 -5643 Sep 19 j 22:14 25°**Ω**10′34 max. Earth dist. -5637 Oct 15 j 08:13 9° m/41'33 31.92496 AU evening set

-5637 Oct 26 j 07:47

morning rise

10° m 06'15

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5636 in astronomical counting style is the year 5637 BCE in historical counting style. -5636 Jan 26 j 00:56 12° m 06'52 minimum elong -5630 Oct 28 i 03:16 24° m 41'20 4°20'08 retrograde 24° Mp 46'17 33.24044 AU -5636 Apr 13 j 06:09 10° 10 48'44 30.02899 AU -5630 Oct 30 j 10:52 min. Earth dist. max. Earth dist. -5636 Apr 14 j 22:35 10° Mp 46'05-5630 Nov 11 j 17:39 25° m 12'19 8°41'58 opposition morning rise -5636 Jul 03 j 17:25 -5629 Feb 09 j 11:39 direct 9° m 25'19 27° m 02'09 retrograde -5636 Oct 02 j 03:50 -5629 Apr 29 j 01:04 evening set 11° m 23'15 min. Earth dist. 25° m 47'13 31.34914 AU opposition -5629 May 01 j 09:16 25° Mp 43'40 4°17'41 -5636 Oct 15 j 02:57 -5629 Jul 20 j 03:39 conjunction 11° **m** 52'11 7°52'08 direct 24° m 25'54 minimum elong -5636 Oct 15 j 03:17 11° m 52'13 7°52'16 evening set -5629 Oct 15 j 15:37 26° m 12'11 11° M 56'08 32.09308 AU max. Earth dist. -5636 Oct 16 j 21:06 morning rise -5636 Oct 28 j 03:02 12° m/21'13 conjunction -5629 Oct 30 j 08:36 26° m 43'08 3°44'47 retrograde -5635 Jan 27 j 12:15 14° Mp 20'04 minimum elong -5629 Oct 30 j 08:46 26° Mp 43'08 3°44'49 -5635 Apr 15 j 16:37 -5629 Nov 01 j 17:36 min. Earth dist. 13°My02'30 30.19809 AU max. Earth dist. 26° Mp 48'10 33.44970 AU opposition -5635 Apr 17 j 12:41 12° m 59'37 8°04'37 morning rise -5629 Nov 14 j 03:17 27° My 14'13direct -5635 Jul 06 j 08:56 11°M)39'18 retrograde -5628 Feb 11 j 18:16 29° M 02'45 evening set -5635 Oct 04 j 05:26 13° m 35'20 min. Earth dist. -5628 Apr 30 j 06:33 27° m/48'18 31.55942 AU opposition -5628 May 02 j 17:54 27° Mp 44'35 3°40'09 conjunction -5635 Oct 17 j 12:38 14° Mp 04'47 7°17'06 direct -5628 Jul 21 j 13:20 26° m 27'12 minimum elong -5635 Oct 17 j 12:56 14° Mp 04'49 7°17'13 evening set -5628 Oct 16 j 17:00 28° My 12'06max. Earth dist. -5635 Oct 19 j 09:18 14° Mp 08'56 32.26901 AU 14° m/34'21 morning rise -5635 Oct 30 j 21:04 conjunction -5628 Oct 31 j 13:19 28° mp 43'04 3°09'41 retrograde -5634 Jan 29 j 21:23 16° m/31'31 minimum elong -5628 Oct 31 j 13:27 28° m 43'04 3°09'43 min. Earth dist. -5634 Apr 18 j 04:00 15° m 14'24 30.37500 AU max. Earth dist. -5628 Nov 03 i 00:50 28° m 48'16 33.66392 AU opposition -5634 Apr 20 j 02:00 15° m 11'24 7°26'58 morning rise -5628 Nov 15 j 11:28 29° m 14'11 direct -5634 Jul 08 j 21:20 13° m 51'32 -5628 Dec 09 i 09:07 0∘**⊽** -5634 Oct 06 j 07:02 15° m 45'46 retrograde -5627 Feb 12 j 23:28 1°**£**01'31 evening set -5627 Apr 24 j 01:56 30°R M -5634 Oct 19 j 21:44 16° m 15'39 6°41'51 -5627 May 02 j 13:24 29° m 47'24 31.77519 AU conjunction min. Earth dist. -5634 Oct 19 j 22:02 16° m 15'40 6°41'58 opposition -5627 May 05 j 01:52 29° m 43'37 3°02'50 minimum elong 16° Mp 20'02 32.45212 AU -5627 Jul 23 j 22:30 max. Earth dist. -5634 Oct 21 j 21:20 direct 28° m 26'38 -5634 Nov 02 j 13:30 16° Mp 45'38 -5627 Oct 13 j 16:22 0∘Ω morning rise -5633 Feb 01 j 05:13 18° Mp 41'12 0°**£**10′13 evening set -5627 Oct 18 j 18:22 retrograde 17° m/24'35 30.55865 AU -5633 Apr 20 j 13:59 min. Earth dist. -5627 Nov 02 j 17:32 -5633 Apr 22 j 14:34 17° Mp 21'27 6°49'09 conjunction 0°**2**41'10 2°34'48 opposition -5633 Jul 11 j 11:02 16° Mp 02'02 -5627 Nov 02 j 17:39 direct minimum elong 0°**2**41'11 2°34'48 -5633 Oct 08 j 08:47 17° m 54'31 -5627 Nov 05 j 06:58 evening set max. Earth dist. 0°**2**46'30 33.88359 AU -5627 Nov 17 j 18:27 morning rise 1°**£**12'16 -5633 Oct 22 j 05:56 18° **m** 24'45 $6^{\circ}06'26$ -5626 Feb 15 j 03:25 conjunction retrograde 2°**£**58'26 minimum elong -5633 Oct 22 j 06:12 18° Mp 24'47 6°06'31 min. Earth dist. -5626 May 04 j 17:36 1°**£**44'47 31.99655 AU max. Earth dist. -5633 Oct 24 j 07:01 18° m/29'14 32.64135 AU opposition -5626 May 07 j 08:41 1°**2**40'52 2°25'51 -5633 Nov 05 j 04:34 18° m 55'06 direct -5626 Jul 26 j 07:29 0°**£**24'16 morning rise retrograde -5632 Feb 03 j 14:33 20° m/49'09 -5626 Oct 20 j 19:44 2°**£**06'39 evening set -5632 Apr 21 j 23:26 19° m 33'00 30.74850 AU min. Earth dist. -5632 Apr 24 j 02:30 19° **m** 29'44 -5626 Nov 04 j 20:57 2°**2**37'31 2°00'12 opposition 6°11'13 conjunction -5632 Jul 12 j 21:13 18° Mp 10'45 -5626 Nov 04 j 21:02 2°**2**37'31 2°00'13 direct minimum elong -5632 Oct 09 j 10:31 20° M 01'35 -5626 Nov 07 j 11:59 2°**2**42'57 34.10862 AU evening set max. Earth dist. morning rise -5626 Nov 20 j 00:16 3°**ഫ**08'33 conjunction -5632 Oct 23 j 13:46 20° m 32'06 5°30'58 retrograde -5625 Feb 17 i 05:55 4°**£**53'38 minimum elong -5632 Oct 23 j 14:01 20° m 32'07 5°31'03 min. Earth dist. -5625 May 06 j 22:14 3°**2**40'24 32.22364 AU max. Earth dist. -5632 Oct 25 j 17:51 20° m 36'49 32.83619 AU opposition -5625 May 09 j 15:04 3°**2**36'24 1°49'12 -5632 Nov 06 i 18:16 21° m 02'44 direct -5625 Jul 28 j 13:20 2°**₽**20'13 morning rise -5625 Oct 22 j 20:43 -5631 Feb 04 j 21:05 22° m 55'19 4°**£**01'26 retrograde evening set -5631 Apr 24 j 09:02 21° m/39'35 30.94373 AU min. Earth dist. -5631 Apr 26 j 13:35 21° mp 36'13 5°33'18 -5625 Nov 06 j 23:45 4°**2**32'11 1°25'56 opposition conjunction direct -5631 Jul 15 j 09:21 20° m 17'40 minimum elong -5625 Nov 06 j 23:48 4°**£**32'11 1°25'56 -5631 Oct 11 j 12:21 evening set 22° Mp 06'54 max. Earth dist. -5625 Nov 09 j 17:30 4°**೨**37'49 34.33905 AU -5625 Nov 22 j 04:37 5°**₽**03'07 morning rise 6°**£**47'12 conjunction -5631 Oct 25 j 20:43 22° m 37'37 4°55'29 -5624 Feb 19 j 06:17 retrograde -5631 Oct 25 j 20:56 22° m 37'39 -5624 May 08 j 02:06 5°**♀**34'24 32.45594 AU minimum elong 4°55'33 min. Earth dist. -5631 Oct 28 j 01:37 22° Mp 42'23 33.03601 AU -5624 May 10 j 20:42 5°**£**30′18 1°12'57 max. Earth dist. opposition -5631 Nov 09 j 06:43 -5624 Jul 29 j 20:34 morning rise 23° Mp 08'29 direct 4°**£**14'33 retrograde -5630 Feb 07 j 05:55 24° m 59'40 evening set -5624 Oct 23 j 21:53 5°**£**54'41 min. Earth dist. -5630 Apr 26 j 16:29 23° Mp 44'23 31.14403 AU opposition -5630 Apr 28 j 23:50 23° Mp 40'53 4°55'26 conjunction -5624 Nov 08 j 01:54 6°**2**25'17 0°52'02 direct -5630 Jul 17 j 18:30 22° m 22'43 minimum elong -5624 Nov 08 j 01:56 6°**£**25'17 0°52'02 evening set -5630 Oct 13 j 14:00 24° m 10'27 max. Earth dist. -5624 Nov 10 j 20:27 6°**2**30'55 34.57427 AU -5624 Nov 23 j 08:09 6°**£**56'03 morning rise -5630 Oct 28 j 03:05 24° m/41'19 4°20'04 -5623 Feb 20 j 09:34 8°**£**39'12 conjunction retrograde

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5623 in astronomical counting style is the year 5624 BCE in historical counting style. min. Earth dist. -5623 May 10 j 04:37 7°**2**26'52 32.69312 AU conjunction -5617 Nov 21 i 02:21 18°**♀**55'48 -2°52'21 -5623 May 13 j 01:33 7°**£**22'40 0°37'08 minimum elong -5617 Nov 21 j 02:15 18°**♀**55'47 2°52'26 opposition -5623 Jul 31 j 23:44 6°**♀**07'20 -5617 Nov 24 j 04:26 19°**2**01'44 36.29476 AU direct max. Earth dist. -5623 Oct 25 j 22:49 7°**-**46′27 -5617 Dec 06 j 03:53 19°**£**24'31 evening set morning rise -5616 Mar 04 j 10:18 retrograde 21°**♀**02'27 conjunction -5623 Nov 10 j 03:36 -5616 May 22 j 14:01 8°**£**16'51 0°18'33 min. Earth dist. 19°**£**52'40 34.42257 AU minimum elong -5623 Nov 10 j 03:36 8°**£**16'51 0°18'31 opposition -5616 May 25 j 17:48 19°**△**48'12 -3°18'32 18°**≏**35'32 max. Earth dist. -5623 Nov 13 j 00:45 8°**£**22'40 34.81369 AU direct -5616 Aug 13 j 18:22 morning rise -5623 Nov 25 j 10:26 8°**£**47'26 evening set -5616 Nov 07 j 03:34 20°**₽**09'01 retrograde -5622 Feb 22 j 10:25 10°**£**29'42 min. Earth dist. -5622 May 12 j 08:23 9°**£**17'45 32.93417 AU conjunction -5616 Nov 22 j 00:20 20°**2**37'09 -3°22'16 -5616 Nov 22 j 00:13 opposition -5622 May 15 j 05:47 9°**2**13'31 0°01'48 minimum elong 20°**₽**37'08 3°22'21 -5622 Jun 03 j 03:09 -5616 Nov 25 j 04:24 desc. node 8°**≏**46'33 max. Earth dist. 20°**£**43'12 36.54498 AU direct -5622 Aug 03 j 04:19 7°**≏**58'38 morning rise -5616 Dec 06 j 23:25 21°**2**05'28 evening set -5622 Oct 27 j 23:48 9°**£**36'48 retrograde -5615 Mar 06 j 06:30 22°**₽**42'48 min. Earth dist. -5615 May 24 j 13:52 21°**♀**33'17 34.67449 AU conjunction -5622 Nov 12 j 04:39 10° 206'57 -0°14'34 opposition -5615 May 27 j 17:33 21°**≙**28'50 -3°49'48 minimum elong -5622 Nov 12 j 04:38 10°**♀**06'57 0°14'36 direct -5615 Aug 15 j 18:56 20°**♀**16'30 behind sun begin -5622 Nov 12 j 01:44 10°**♀**06'43 evening set -5615 Nov 09 j 03:42 21°**-**49′22 behind sun end -5622 Nov 12 j 07:31 10°**♀**07'11 max. Earth dist. -5622 Nov 15 j 02:12 10°**2**12'45 35.05644 AU conjunction -5615 Nov 23 j 21:42 22°**♀**17'03 -3°51'37 morning rise -5622 Nov 27 j 11:44 10°**♀**37'18 minimum elong -5615 Nov 23 i 21:34 22°**△**17'03 3°51'44 retrograde -5621 Feb 24 i 13:39 12°**♀**18'45 max. Earth dist. -5615 Nov 27 i 01:41 22°**2**23'03 36.79657 AU min. Earth dist. -5621 May 14 j 09:33 11°**2**07'15 33.17838 AU morning rise -5615 Dec 08 j 18:08 22°**-**44'57 opposition -5621 May 17 j 09:14 11°**≏**02'56 -0°33'00 retrograde -5614 Mar 08 j 05:20 24°**£**21'45 -5621 Aug 05 j 06:35 9°**£**48'27 -5614 May 26 j 11:04 23°**2**12'36 34.92809 AU direct min. Earth dist. -5621 Oct 30 j 00:43 11°**£**25'44 -5614 May 29 j 16:40 23°**△**08'04 -4°20'25 opposition evening set -5614 Aug 17 j 16:39 21°**♀**56'04 direct -5621 Nov 14 j 05:13 -5614 Nov 11 j 03:37 conjunction 11°**⊆**55'37 -0°47'08 evening set 23°**£**28'22 -5621 Nov 14 j 05:11 minimum elong 11°**♀**55'37 0°47'11 -5621 Nov 17 j 04:43 -5614 Nov 25 j 18:30 23°**♀**55'37 -4°20'22 max. Earth dist. 12°**£**01'32 35.30167 AU conjunction -5621 Nov 29 j 12:02 12°**£**25'42 minimum elong -5614 Nov 25 j 18:21 23°**£**55'36 4°20'28 morning rise -5614 Nov 29 j 00:06 -5620 Feb 26 j 15:37 14°**£**06′22 max. Earth dist. 24°**2**01'41 37.04968 AU retrograde 12°**≙**55'13 33.42497 AU -5620 May 15 j 12:31 -5614 Dec 10 j 11:50 min. Earth dist. morning rise 24°**£**23'03 -5620 May 18 j 12:18 -5613 Mar 10 j 02:31 opposition 12°**£**50'54 -1°07'17 retrograde 25°**♀**59'22 -5620 Aug 06 j 08:21 -5613 May 28 j 09:49 direct 11°**≏**36'49 min. Earth dist. 24°**♀**50'29 35.18351 AU -5620 Oct 31 j 01:29 evening set 13°**₽**13'16 opposition -5613 May 31 j 15:20 24°**£**46'00 -4°50'22 direct -5613 Aug 19 j 14:22 23°**△**34'20 conjunction -5620 Nov 15 j 05:20 13°**2**42'52 -1°19'13 evening set -5613 Nov 13 j 03:22 25°**♀**06'07 minimum elong -5620 Nov 15 j 05:17 13°**2**42'51 1°19'16 max. Earth dist. -5620 Nov 18 j 05:33 13°**♀**48'47 35.54875 AU conjunction -5613 Nov 27 j 14:56 25°**△**32'54 -4°48'30 -5620 Nov 30 j 11:23 14°**♀**12'38 -5613 Nov 27 j 14:47 25°**♀**32'54 4°48'37 morning rise minimum elong -5619 Feb 27 j 15:27 15°**♀**52'34 max. Earth dist. -5613 Nov 30 j 21:21 25°**೨**39'00 37.30468 AU retrograde -5619 May 17 j 13:09 14°**£**41'49 33.67303 AU -5613 Dec 12 j 04:46 25°**♀**59'53 min. Earth dist. morning rise -5619 May 20 j 14:35 14°**2**37'26 -1°40'59 -5612 Mar 10 j 22:45 27°**♀**35'46 opposition retrograde direct -5619 Aug 08 j 12:11 13°**≏**23'44 min. Earth dist. -5612 May 29 i 06:14 26°**2**27'16 35.44069 AU evening set -5619 Nov 02 i 02:23 14°**£**59'23 opposition -5612 Jun 01 j 13:22 26° **2**2'42 -5°19'39 direct -5612 Aug 20 i 14:02 25°**£**11'23 -5619 Nov 17 i 04:56 conjunction 15°**2**28'39 -1°50'48 evening set -5612 Nov 14 i 03:02 26°**-**42'42 -5619 Nov 17 i 04:52 15°**£**28'39 1°50'53 minimum elong max. Earth dist. -5619 Nov 20 i 05:40 15°**♀**34'34 35.79674 AU conjunction -5612 Nov 28 i 10:46 27°**£**09'02 -5°16'01 -5619 Dec 02 j 09:58 15°**£**58'06 minimum elong -5612 Nov 28 i 10:36 27°**£**09'01 5°16'09 morning rise max. Earth dist. -5618 Mar 01 j 14:54 17°**₽**37'19 -5612 Dec 01 j 17:42 27°**2**15'07 37.56112 AU retrograde 16°**≙**26'53 33.92213 AU min. Earth dist. -5618 May 19 j 14:26 morning rise -5612 Dec 12 j 21:02 27°**♀**35'32 -5618 May 22 j 16:13 16° **2**22'30 -2°14'07 retrograde -5611 Mar 12 j 19:10 29°**£**11'01 opposition -5618 Aug 10 j 14:45 28°**2**02'51 35.69937 AU direct 15°**2**09'10 min. Earth dist. -5611 May 31 j 03:23 27°**♀**58'16 -5°48'16 -5618 Nov 04 j 02:57 16°**£**44′04 opposition -5611 Jun 03 j 11:01 evening set direct -5611 Aug 22 j 11:55 26° 247'19 -5618 Nov 19 j 04:05 17°**2**12'58 -2°21'51 -5611 Nov 16 j 02:33 28°**₽**18'14 conjunction evening set minimum elong -5618 Nov 19 j 04:00 17°**£**12'58 2°21'55 -5611 Nov 30 j 06:25 max. Earth dist. -5618 Nov 22 j 06:13 17°**△**18'58 36.04548 AU conjunction 28°**£**44'04 -5°42'55 morning rise -5618 Dec 04 j 07:24 17°**£**42'04 minimum elong -5611 Nov 30 j 06:14 28°**2**44'03 5°43'04 retrograde -5617 Mar 03 j 11:44 19°**£**20'37 max. Earth dist. -5611 Dec 03 j 14:45 28° **2**50'14 37.81869 AU min. Earth dist. -5617 May 21 j 14:55 18°**♀**10'30 34.17185 AU morning rise -5611 Dec 14 j 12:27 29° 210'05 opposition -5617 May 24 j 17:16 18° 206'06 -2°46'38 -5610 Jan 13 j 22:42 0°M -5617 Aug 12 j 18:20 16°**£**53'06 retrograde -5610 Mar 14 j 12:50 0°M45'13 direct -5617 Nov 06 j 03:22 18°**£**27'16 -5610 May 16 j 00:35 30°R<u>Ω</u> evening set

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Earth dist. 10°M10'43 37.74666 AU -5610 Dec 02 j 01:29 0°M18'05 -6°09'12 conjunction opposition -5603 Jun 15 j 22:22 10° ML06'17 -9° 13'15 -5610 Dec 02 j 01:18 minimum elong 0°M18'04 6°09'21 direct -5603 Sep 04 j 02:54 8°**ጤ**57'47 -5610 Dec 05 j 09:22 -5603 Nov 29 j 19:40 max. Earth dist. 0°M24'10 38.07664 AU evening set 10°M26'26 morning rise -5610 Dec 16 j 03:16 0° ML43'36 retrograde -5609 Mar 16 j 07:53 2°M18'25 conjunction -5603 Dec 12 j 05:04 10°M47'54 -8°56'14 -5609 Jun 03 j 19:36 -5603 Dec 12 j 04:50 min. Earth dist. 1°ML10'56 36.21848 AU minimum elong 10°M47'53 8°56'26 -5609 Jun 07 j 04:30 -5603 Dec 15 j 13:33 opposition 1°ML06'20 -6°43'27 max. Earth dist. 10°M53'45 39.84562 AU -5609 Aug 09 j 08:47 30°**₹**Ω morning rise -5603 Dec 24 j 16:22 11°M09'31 direct -5609 Aug 26 j 06:42 29°**£**56'06 retrograde -5602 Mar 26 j 09:05 12°M42'45 -5609 Sep 11 j 22:01 $0^{\circ}M$ min. Earth dist. -5602 Jun 14 j 06:51 11°M36'59 37.99573 AU evening set -5609 Nov 20 j 01:19 1°M26'17 opposition -5602 Jun 17 j 15:34 11°M32'31 -9°35'57 direct -5602 Sep 05 j 20:39 10°M24'15 conjunction -5609 Dec 03 j 20:10 1°M51'06 -6°34'53 evening set -5602 Dec 01 j 18:10 11°M52'44 minimum elong -5609 Dec 03 j 19:57 1°M51'05 6°35'02 max. Earth dist. -5609 Dec 07 j 05:34 1°M57'16 38.33431 AU conjunction -5602 Dec 13 j 21:09 12°ML13'37 -9°17'41 morning rise -5609 Dec 17 j 17:13 2°M16'06 minimum elong -5602 Dec 13 i 20:56 12°ML13'36 9°17'53 retrograde -5608 Mar 17 j 02:22 3°M50'39 max. Earth dist. -5602 Dec 17 i 06:48 12°M19'30 40.09217 AU min. Earth dist. -5608 Jun 04 i 16:37 2°M43'25 36.47755 AU morning rise -5602 Dec 26 i 01:57 12°M34'37 -5608 Jun 08 j 00:43 2°M38'53 -7°10'03 retrograde -5601 Mar 28 j 01:17 14°ML07'44 opposition -5608 Aug 27 j 02:37 1°M29'00 -5601 Jun 16 j 00:43 13°ML02'07 38.24416 AU direct min. Earth dist. -5608 Nov 21 j 00:43 2°M58'52 -5601 Jun 19 j 08:35 12°M57'43 -9°58'00 evening set opposition direct -5601 Sep 07 j 13:05 11°M49'42 -5608 Dec 04 j 14:39 3°M23'10 -6°59'56 -5601 Dec 03 j 16:29 13°M18'03 conjunction evening set -5608 Dec 04 j 14:27 minimum elong 3°ML23'09 7°00'06 3°M29'14 38.59102 AU -5608 Dec 07 j 23:22 -5601 Dec 15 j 12:48 13°MJ38'20 -9°38'31 max. Earth dist. conjunction -5608 Dec 18 j 06:44 -5601 Dec 15 j 12:35 3°M47'38 minimum elong 13°M₂38'19 9°38'43 morning rise -5607 Mar 18 j 22:33 5°M21'55 max. Earth dist. -5601 Dec 18 j 22:18 13°M44'10 40.33831 AU retrograde 4°M15'02 36.73534 AU -5607 Jun 06 j 11:08 -5601 Dec 27 j 10:44 13°M58'44 min. Earth dist. morning rise -5607 Jun 09 j 20:14 4°M10'28 -7°35'59 -5600 Feb 06 j 14:41 opposition 15°M 3° ML00'53 -5600 Mar 28 j 17:33 direct -5607 Aug 28 j 20:17 retrograde 15°**™**31'44 -5600 May 20 j 11:18 evening set -5607 Nov 23 j 00:03 4°**ጤ**30'29 15°RM min. Earth dist. -5600 Jun 16 j 16:07 14°M26'24 38.49211 AU conjunction -5607 Dec 06 j 08:44 4°M54'14 -7°24'24 opposition -5600 Jun 20 j 01:05 14°M21'58 -10°19'23 -5607 Dec 06 j 08:31 4°M54'13 7°24'33 direct -5600 Sep 08 j 04:59 13°M14'12 minimum elong max. Earth dist. -5607 Dec 09 j 17:44 5°ML00'16 38.84592 AU -5600 Dec 04 j 14:52 14°M42'27 evening set -5607 Dec 19 j 19:42 5°M18'10 -5600 Dec 14 j 22:26 morning rise 15°M -5606 Mar 20 j 17:21 6°M52'12 retrograde -5606 Jun 08 j 07:27 5°M45'31 36.99124 AU -5600 Dec 16 j 04:11 15°ML02'07 -9°58'45 min. Earth dist. conjunction -5606 Jun 11 j 15:32 5°M41'02 -8°01'16 -5600 Dec 16 j 03:58 15°ML02'06 9°58'58 opposition minimum elong -5600 Dec 19 i 13:43 direct -5606 Aug 30 j 15:18 4°M31'45 max. Earth dist. 15°ML07'55 40.58387 AU evening set -5600 Dec 27 i 19:17 -5606 Nov 24 j 23:05 6°M01'05 morning rise 15°M21'55 retrograde -5599 Mar 30 i 10:01 16°M54'50 -5606 Dec 08 i 02:26 6°M24'17 -7°48'15 conjunction min. Earth dist. -5599 Jun 18 i 08:45 15°M49'43 38.73958 AU -5606 Dec 08 i 02:14 6°M24'16 7°48'26 -5599 Jun 21 i 17:13 15°ML45'20 -10°40'08 minimum elong opposition -5606 Dec 11 i 11:35 6°ML30'18 39.09877 AU -5599 Jul 29 j 12:11 15°RM max. Earth dist. -5606 Dec 21 j 07:43 6°M47'39 -5599 Sep 09 j 20:33 14°M37'49 morning rise direct -5605 Mar 22 j 10:38 8°M21'27 -5599 Oct 21 j 03:52 15°M retrograde min. Earth dist. -5605 Jun 10 j 01:50 7°ML15'02 37.24485 AU evening set -5599 Dec 06 j 13:04 16°M06'01 opposition -5605 Jun 13 j 10:14 7°M10'32 -8°25'55 direct -5605 Sep 01 j 11:43 6°M01'32 conjunction -5599 Dec 17 j 19:23 16°M25'04 -10°18'23 evening set -5605 Nov 26 j 22:10 7°M30'38 minimum elong -5599 Dec 17 j 19:09 16°M25'03 10°18'36 -5599 Dec 21 j 05:41 16°M30'54 40.82882 AU max. Earth dist. -5605 Dec 09 j 19:40 7°ML53'16 -8°11'31 -5599 Dec 29 j 03:05 16°M44'14 conjunction morning rise -5605 Dec 09 j 19:27 -5598 Mar 31 j 23:26 18°M17'07 minimum elong 7°ML53'15 8°11'41 retrograde 17°ML12'15 38.98605 AU max. Earth dist. -5605 Dec 13 j 04:06 7°M59'11 39.34937 AU min. Earth dist. -5598 Jun 20 j 00:34 -5605 Dec 22 j 19:21 8°M16'03 opposition -5598 Jun 23 j 08:57 17°ML07'52 -11°00'15 morning rise retrograde -5604 Mar 23 j 04:05 9°M49'38 direct -5598 Sep 11 j 14:10 16°M00'38 min. Earth dist. -5604 Jun 10 j 20:09 8°M43'26 37.49660 AU evening set -5598 Dec 08 j 11:14 17°M28'49 opposition -5604 Jun 14 j 04:35 8°M38'58 -8°49'55 -5604 Sep 02 j 06:30 7°M30'13 -5598 Dec 19 j 09:59 17°ML47'14 -10°37'26 direct conjunction

-5604 Nov 27 j 20:51

evening set

8°M59'05

-5598 Dec 19 j 09:46

minimum elong

17°ML47'13 10°37'41

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5598 in astronomical counting style is the year 5599 BCE in historical counting style. -5598 Dec 22 i 19:23 17°M52'58 41.07257 AU conjunction -5591 Dec 28 i 10:37 27°M02'38 -12°35'29 max. Earth dist. -5598 Dec 30 j 10:19 -5591 Dec 28 j 10:25 27°ML02'38 12°35'45 morning rise 18°M,05'46 minimum elong -5597 Apr 02 j 14:30 19°MJ38'39 -5591 Dec 31 j 17:01 27°M07'58 42.70445 AU retrograde max. Earth dist. -5597 Jun 21 j 15:36 min. Earth dist. 18°M34'03 39.23123 AU -5590 Jan 05 j 23:15 27°M16'29 morning rise -5597 Jun 25 j 00:26 18°M29'41 -11°19'45 -5590 Apr 11 j 10:52 opposition retrograde 28°M49'55 -5590 Jun 30 j 22:11 direct -5597 Sep 13 j 05:22 17°M22'43 min. Earth dist. 27°M46'36 40.86730 AU -5590 Jul 04 j 03:12 -5597 Dec 10 j 09:20 evening set 18°M50'54 opposition 27°M42'32 -13°20'09 -5590 Sep 22 j 11:57 direct 26°M37'09 -5597 Dec 21 j 00:35 conjunction 19°M08'41 -10°55'55 evening set -5590 Dec 21 j 20:51 28°M05'58 minimum elong -5597 Dec 21 j 00:22 19°ML08'40 10°56'09 max. Earth dist. -5597 Dec 24 j 10:52 19°**M**.14'27 41.31467 AU conjunction -5590 Dec 29 j 23:07 28°M19'02 -12°50'15 -5597 Dec 31 j 17:10 -5590 Dec 29 j 22:54 morning rise 19°M26'35 minimum elong 28°M19'01 12°50'31 -5596 Apr 03 j 02:56 -5589 Jan 02 j 05:56 28°M24'21 42.92589 AU retrograde 20°M59'30 max. Earth dist. min. Earth dist. -5596 Jun 22 j 08:01 19°M55'05 39.47437 AU morning rise -5589 Jan 07 j 02:06 28°M32'09 opposition -5596 Jun 25 j 15:32 19°ML50'47 -11°38'39 -5589 Mar 22 j 01:06 0°**⊼** direct -5596 Sep 13 j 22:12 18°M44'06 retrograde -5589 Apr 12 j 23:44 0°**х** 05'45 evening set -5596 Dec 11 j 07:36 20°M12'18 -5589 May 05 j 05:19 30°RM min. Earth dist. -5589 Jul 02 j 12:22 29°ML02'34 41.08986 AU conjunction -5596 Dec 21 j 14:56 20°M29'27 -11°13'50 opposition -5589 Jul 05 j 16:05 28°ML58'34 -13°35'07 minimum elong -5596 Dec 21 j 14:43 20°M29'26 11°14'05 direct -5589 Sep 24 j 00:40 27°M53'23 max. Earth dist. -5596 Dec 25 j 00:01 20°M35'06 41.55450 AU evening set -5589 Dec 23 j 19:17 29°M22'23 morning rise -5596 Dec 31 i 23:29 20°M46'42 retrograde -5595 Apr 04 i 18:36 22°M19'40 conjunction -5589 Dec 31 i 11:33 29°M34'44 -13°04'28 min. Earth dist. -5595 Jun 23 i 22:21 21°M15'31 39.71484 AU minimum elong -5589 Dec 31 i 11:22 29°M34'43 13°04'45 -5595 Jun 27 j 06:17 21°M11'13 -11°56'57 max. Earth dist. -5588 Jan 03 j 18:00 29°M39'59 43.14570 AU opposition -5595 Sep 15 j 11:50 20°ML04'46 -5588 Jan 08 j 04:20 29°M47'07 direct morning rise -5595 Dec 13 j 05:52 21°MJ33'02 -5588 Jan 16 j 07:45 0°**∡**7 evening set -5588 Apr 13 j 14:03 1°**х** 20′54 retrograde -5595 Dec 23 j 05:03 21°M49'33 -11°31'13 -5588 Jul 03 j 00:19 conjunction min. Earth dist. 0° **₹**17'55 41.31073 AU 21°M49'32 11°31'27 -5595 Dec 23 j 04:50 -5588 Jul 06 j 04:28 0°**х** 13′55 -13°49′32 minimum elong opposition -5595 Dec 26 j 13:57 -5588 Jul 17 j 07:21 max. Earth dist. 21°M55'09 41.79117 AU 30°RML -5588 Sep 24 j 11:09 -5594 Jan 02 j 05:29 29°M08'56 22°MJ06'09 direct morning rise -5594 Apr 06 j 10:24 23°M 39'10 -5588 Nov 29 j 13:05 0°×7 retrograde 22°M35'09 39.95202 AU -5594 Jun 25 j 14:19 -5588 Dec 24 j 17:50 0°**∡**38'11 min. Earth dist. evening set -5594 Jun 28 j 20:44 22°M30'58 -12°14'42 opposition -5594 Sep 17 j 00:12 -5588 Dec 31 j 23:40 0°**∡**149'47 -13°18'11 direct 21°M24'46 conjunction -5594 Dec 15 j 04:06 -5588 Dec 31 j 23:28 evening set 22°M53'05 minimum elong 0°**∡**′49'46 13°18'27 max. Earth dist. -5587 Jan 04 j 05:26 0°**≯**54'58 43.36383 AU conjunction -5594 Dec 24 j 18:59 23°ML08'57 -11°48'04 morning rise -5587 Jan 08 j 06:03 1°**х**¹01′24 minimum elong -5594 Dec 24 j 18:45 23°ML08'56 11°48'19 retrograde -5587 Apr 15 j 03:09 2°×35'26 max. Earth dist. -5594 Dec 28 j 03:30 23°M14'29 42.02452 AU min. Earth dist. -5587 Jul 04 j 13:18 1°**≯**32'37 41.53000 AU -5593 Jan 03 j 10:47 23°M24'52 -5587 Jul 07 j 16:47 1°**≯**28'40 -14°03'25 morning rise opposition -5593 Apr 07 j 23:13 24°M57'58 -5587 Sep 25 j 22:07 0°**х** 23′53 retrograde direct -5593 Jun 27 j 04:35 23°M54'10 40.18557 AU -5587 Dec 26 j 16:39 1°×753'25 min. Earth dist. evening set -5593 Jun 30 j 10:51 23°M49'59 -12°31'53 opposition 2°**x**104'14 -13°31'23 direct -5593 Sep 18 i 15:45 22°M44'00 conjunction -5586 Jan 02 j 11:40 evening set -5593 Dec 17 i 02:16 24°M12'26 minimum elong -5586 Jan 02 j 11:30 2°**х** 04'13 13°31'40 max. Earth dist. -5586 Jan 05 i 18:02 2° ₹ 09'26 43.58029 AU -5593 Dec 26 i 08:21 conjunction 24°M27'36 -12°04'24 morning rise -5586 Jan 09 i 07:03 2°×15'04 -5593 Dec 26 i 08:09 24°M27'35 12°04'38 retrograde -5586 Apr 16 i 12:08 3°**х** 49′23 minimum elong -5593 Dec 29 j 15:32 24°M-33'02 42.25424 AU min. Earth dist. -5586 Jul 06 j 01:46 2° ₹ 46'45 41.74726 AU max. Earth dist. -5592 Jan 04 j 15:32 24°M42'51 -5586 Jul 09 j 04:37 2°\$\sqrt{42'50} -14°16'46 morning rise opposition -5592 Apr 08 j 12:19 26°M16'02 direct -5586 Sep 27 j 12:43 1°**х** 38′16 retrograde 3°**₹**08'08 min. Earth dist. -5592 Jun 27 j 19:05 25°M12'24 40.41573 AU evening set -5586 Dec 28 j 15:50 opposition -5592 Jul 01 j 00:47 25°ML08'16 -12°48'32 direct -5592 Sep 19 j 06:15 24°M02'29 conjunction -5585 Jan 03 j 23:20 3°**₹**18'09 -13°44'04 -5592 Dec 18 j 00:26 evening set 25°M31'01 minimum elong -5585 Jan 03 j 23:08 3° **₹**18'08 13°44'21 -5585 Jan 07 j 04:10 3°**尽**23'14 43.79476 AU max. Earth dist. -5592 Dec 26 j 21:42 25°M45'31 -12°20'12 -5585 Jan 10 j 07:10 3°×28'11 conjunction morning rise -5592 Dec 26 j 21:29 -5585 Apr 17 j 22:41 5°**х** 02'48 minimum elong 25°M45'30 12°20'28 retrograde -5585 Jul 07 j 13:20 4°**✗**00′24 41.96239 AU max. Earth dist. -5592 Dec 30 j 05:27 25°ML50'57 42.48072 AU min. Earth dist.

opposition

evening set

conjunction

minimum elong

direct

-5585 Jul 10 j 16:23

-5585 Sep 29 j 01:37

-5585 Dec 30 j 15:21

-5584 Jan 05 j 10:49

-5584 Jan 05 j 10:39

3°**₹**56'29 -14°29'35

4°**≯**31'33 -13°56'17

4°**∡**31'33 13°56'35

2°**х** 52′08

4°**₹**22'24

morning rise

min. Earth dist.

retrograde

opposition

evening set

direct

-5591 Jan 04 j 19:45

-5591 Apr 09 j 22:36

-5591 Jun 29 j 09:40

-5591 Jul 02 j 14:06

-5591 Sep 20 j 22:29

-5591 Dec 19 j 22:46

26°M00'03

27°M33'21

25°M20'12

26°M48'52

26°M29'50 40.64273 AU

26°M25'46 -13°04'37

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5584 in astronomical counting style is the year 5585 BCE in historical counting style. -5584 Jan 08 j 16:09 4°**∡**736'39 44.00672 AU max. Earth dist. -5577 Jan 16 j 13:33 12°**₹**55'12 45.38148 AU max. Earth dist. -5584 Jan 11 j 06:32 4°×40'45 -5577 Apr 27 j 11:49 14°**₹**31'40 morning rise retrograde -5584 Apr 18 j 09:01 6°**х** 15′46 min. Earth dist. -5577 Jul 17 j 11:04 13°**₹**30'12 43.54688 AU retrograde -5584 Jul 08 j 02:44 5°**҂**13'28 42.17461 AU -5577 Jul 20 j 05:57 min. Earth dist. 13°**х** 26'48 -15°55'24 opposition -5584 Jul 11 j 03:58 5°**∡**09'39 -14°41'54 -5577 Oct 08 j 17:24 opposition direct 12°**х** 23'45 4°**₹**05'31 direct -5584 Sep 29 j 14:28 -5576 Jan 15 j 00:53 13°**∡**759'43 -15°18'07 evening set -5584 Dec 31 j 15:55 5°**х** 36′13 conjunction -5576 Jan 15 j 00:45 minimum elong 13°**∡**′59'43 15°18'26 -5576 Jan 17 j 23:29 conjunction -5583 Jan 05 j 22:20 5°**х** 44'29 -14°08'02 max. Earth dist. 14°**✗**04'12 45.56348 AU -5576 Apr 27 j 21:22 minimum elong -5583 Jan 05 j 22:10 5°**∡**14°08′19 retrograde 15°**х** 40′17 -5576 Jul 17 j 20:52 max. Earth dist. -5583 Jan 09 j 02:26 5°**х** 49′28 44.21558 AU min. Earth dist. 14°**₰**38'57 43.72887 AU -5583 Jan 11 j 04:52 -5576 Jul 20 j 15:32 morning rise 5°**∡**¹52'47 opposition 14°**₹**35'34 -16°04'06 -5576 Oct 09 j 03:25 retrograde -5583 Apr 19 j 21:06 7°**х** 28′13 direct 13°**х** 32′40 min. Earth dist. -5583 Jul 09 j 13:45 6°**≯**26'08 42.38329 AU opposition -5583 Jul 12 j 15:03 6° ₹22'20 -14°53'45 conjunction -5575 Jan 15 j 10:42 15°**₹**08'17 -15°26'25 direct -5583 Oct 01 j 01:10 5°**х** 18′23 minimum elong -5575 Jan 15 j 10:37 15° ₹ 08'16 15° 26'43 evening set -5582 Jan 02 j 17:21 6°**х** 49'37 max. Earth dist. -5575 Jan 18 j 07:42 15°**∡**12'39 45.74291 AU retrograde -5575 Apr 29 j 07:21 16°**∡**¹48'26 min. Earth dist. conjunction -5582 Jan 07 j 09:36 6° ₹ 56'56 -14°19'20 -5575 Jul 19 j 06:45 15°**∡**′47′15 43.90846 AU 15°**∡**′43'54 -16°12'22 minimum elong -5582 Jan 07 j 09:26 6°**х** 56′55 14°19'38 opposition -5575 Jul 22 j 00:54 max. Earth dist. -5582 Jan 10 j 12:35 7°**尽**01'49 44.42048 AU direct -5575 Oct 10 j 12:21 14°**∡**′41′09 morning rise -5582 Jan 12 i 01:56 7°**х** 04'15 retrograde -5582 Apr 21 i 10:52 8°**х** 40′12 conjunction -5574 Jan 16 i 20:27 16°**∡**16'25 -15°34'17 min. Earth dist. -5582 Jul 11 i 02:35 7°**∡**38'12 42.58785 AU minimum elong -5574 Jan 16 j 20:20 16°**х** 16'25 15°34'36 opposition -5582 Jul 14 j 02:13 7°**∡**34'31 -15°05'08 max. Earth dist. -5574 Jan 19 i 17:52 16° ₹20'48 45.91992 AU -5582 Oct 02 j 10:06 6°**х** 30'45 retrograde -5574 Apr 30 j 14:37 17°**₹**'56'12 direct -5581 Jan 04 j 20:14 8°**х** 02′35 -5574 Jul 20 j 17:25 16°**₹**55'07 44.08538 AU min. Earth dist. evening set opposition -5574 Jul 23 j 10:09 16°**₹**51'51 -16°20'11 -5581 Jan 08 j 20:40 8°**₹**08'51 -14°30'11 -5574 Oct 11 j 23:33 15°**∡**¹49'16 conjunction direct -5581 Jan 08 j 20:31 8°**₹**08'50 14°30'28 minimum elong -5581 Jan 12 j 21:02 -5573 Jan 18 j 05:47 17°**∡**24'12 -15°41'44 8°**х** 15′06 conjunction morning rise -5581 Jan 11 j 23:20 -5573 Jan 18 j 05:42 max. Earth dist. 8°**≯**13'42 44.62112 AU minimum elong 17°**∡**′24'11 15°42'03 -5573 Jan 21 j 01:47 9°**х** 51′39 -5581 Apr 22 j 21:17 max. Earth dist. 17°**✗**28'28 46.09433 AU retrograde 8°**∡**°49'47 42.78775 AU -5581 Jul 12 j 14:21 -5573 May 01 j 23:06 19°**х** 03′38 min. Earth dist. retrograde 18°**尽**02'44 44.25950 AU -5581 Jul 15 j 13:04 8° ₹ 46'09 -15°16'04 -5573 Jul 22 j 02:14 opposition min. Earth dist. 17°**х** 59′28 -16°27′35 -5581 Oct 03 j 21:29 -5573 Jul 24 j 19:13 direct 7°×742'33 opposition 9°**∡**15′10 -5573 Oct 13 j 09:34 evening set -5580 Jan 07 j 01:42 direct 16°**х** 57′04 conjunction -5580 Jan 10 j 07:31 9°**∡**120'12 -14°40'38 conjunction -5572 Jan 19 j 15:11 18°**∡**31'39 -15°48'47 minimum elong -5580 Jan 10 j 07:22 9°**∡**120'12 14°40'56 minimum elong -5572 Jan 19 j 15:05 18°**∡**31'39 15°49'06 morning rise -5580 Jan 13 j 13:14 9°×25'14 max. Earth dist. -5572 Jan 22 j 10:39 18°**✗**35'53 46.26563 AU -5580 Jan 13 j 08:12 9°**₹**24'54 44.81719 AU retrograde -5572 May 02 j 09:51 20°**х** 10′45 max. Earth dist. -5580 Apr 23 j 07:29 11°**∡**02'32 -5572 Jul 22 j 13:04 19°**₹**09'57 44.43026 AU retrograde min. Earth dist. -5580 Jul 13 j 01:36 10°**∡**00'48 42.98325 AU -5572 Jul 25 j 04:07 19°**х** 06'47 -16°34'34 min. Earth dist. opposition -5580 Jul 15 j 23:41 9°**∡**757'12 -15°26'34 -5572 Oct 13 j 17:49 18°**х**⁴04'33 opposition direct -5580 Oct 04 i 08:33 8°**∡**¹53'45 direct evening set -5571 Jan 20 i 00:37 19°**∡**38'50 -15°55'27 -5579 Jan 08 j 12:22 10°**х** 27′29 conjunction minimum elong -5571 Jan 20 i 00:33 19°**х** 38′50 15°55′47 10°**х** 30′58 -14°50′39 conjunction -5579 Jan 10 j 18:16 max. Earth dist. -5571 Jan 22 j 19:20 19° **₹** 43'00 46.43342 AU -5579 Jan 10 i 18:08 10°**х** 30′57 14°50'56 retrograde -5571 May 03 i 20:56 21°×17'35 minimum elong -5579 Jan 13 i 00:00 10°**х** 34′25 min. Earth dist. -5571 Jul 23 i 22:17 20° ₹16'56 44.59695 AU morning rise -5579 Jan 13 j 19:01 10°**₹**35'39 45.00894 AU -5571 Jul 26 j 12:45 20° ₹ 13'48 -16°41'09 max. Earth dist. opposition -5579 Apr 24 j 14:31 12°**₹**12'50 direct -5571 Oct 15 j 00:27 19°**х** 11′43 retrograde min. Earth dist. -5579 Jul 14 j 13:45 11°**尽**11'09 43.17449 AU opposition -5579 Jul 17 j 10:03 11°**₹**07'39 -15°36'38 conjunction -5570 Jan 21 j 09:45 20°**₹**45'43 -16°01'45 direct -5579 Oct 05 j 22:19 10°**х** 04′20 minimum elong -5570 Jan 21 j 09:40 20°**х** 45'43 16°02'04 max. Earth dist. -5570 Jan 24 j 02:29 20° ₹ 49'44 46.59678 AU -5578 Jan 12 j 04:42 11°**х** 41'07 -15°00'14 -5570 May 05 j 06:58 22°**₹**24'08 conjunction retrograde -5578 Jan 12 j 04:33 11°**х** 41′06 15°00′33 -5570 Jul 25 j 08:13 21° 🗷 23'34 44.75909 AU minimum elong min. Earth dist. -5578 Jan 15 j 03:53 11°**∡**′45′41 45.19687 AU -5570 Jul 27 j 21:21 21°**x**⁷20'31 -16°47'23 max. Earth dist. opposition 13°**∡**¹22'32 -5570 Oct 16 j 08:07 20°**х** 18'35 retrograde -5578 Apr 26 j 00:34 direct min. Earth dist. -5578 Jul 15 j 23:34 12°**✗**′21′00 43.36215 AU opposition -5578 Jul 18 j 20:00 12°**∡**17'30 -15°46'14 conjunction -5569 Jan 22 j 18:58 21°**尽**52'16 -16°07'41 direct -5578 Oct 07 j 08:46 11°**√**14'19 minimum elong -5569 Jan 22 j 18:54 21°**≯**52'16 16°08'01 max. Earth dist. -5569 Jan 25 j 11:27 21°**尽** 56'16 46.75541 AU -5577 Jan 13 j 14:51 12°**∡** 50'41 -15°09'24 -5569 May 06 j 12:31 23°**х** 30′19 conjunction retrograde -5577 Jan 13 j 14:44 12°**∡** 50'41 15°09'42 min. Earth dist. -5569 Jul 26 j 18:22 22°**尽**29'49 44.91615 AU minimum elong

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5569 in astronomical counting style is the year 5570 BCE in historical counting style. -5569 Jul 29 i 05:47 22° ₹ 26'51 -16°53'14 opposition -5561 Aug 06 j 18:33 1°る01'59 -17°27'01 opposition -5569 Oct 17 j 19:33 direct -5561 Oct 26 j 13:53 0°る00'57 direct 21°**х** 25′03 -5568 Jan 24 j 03:52 22°**₹**58'25 -16°13'17 -5560 Feb 01 j 21:40 1°る32'02 -16°45'19 conjunction conjunction 22°**₹**58′25 16°13′36 -5568 Jan 24 j 03:48 -5560 Feb 01 j 21:41 1°る32'03 16°45'39 minimum elong minimum elong 1°る35'20 48.00401 AU -5568 Jan 26 j 18:02 -5560 Feb 04 j 04:29 max. Earth dist. 23°**尽**02'16 46.90909 AU max. Earth dist. -5568 May 06 j 19:33 retrograde 24°×736'07 retrograde -5560 May 15 j 11:02 3°**る**07'11 -5568 Jul 27 j 03:01 min. Earth dist. 23°**✗**35'44 45.06822 AU min. Earth dist. -5560 Aug 04 j 22:45 2°る07'20 46.15540 AU opposition -5568 Jul 29 j 14:02 23°**尽**32'47 -16°58'45 opposition -5560 Aug 07 j 01:37 2°る04'50 -17°29'36 direct -5568 Oct 18 j 05:43 22°**₹**31'05 direct -5560 Oct 26 j 18:48 1°る03'56 -5567 Jan 24 j 12:44 24°**₹**04'08 -16°18'32 -5559 Feb 02 j 05:35 2°る34'48 -16°47'45 conjunction conjunction -5567 Jan 24 j 12:41 -5559 Feb 02 j 05:34 minimum elong 24°\$\square\$04'08 16°18'53 minimum elong 2°る34'48 16°48'05 -5567 Jan 27 j 02:11 max. Earth dist. 24°**✗**07'55 47.05781 AU max. Earth dist. -5559 Feb 04 j 12:11 2°る38'05 48.12708 AU retrograde -5567 May 08 j 03:16 25°**х** 41′29 retrograde -5559 May 16 j 17:36 4°る09'41 min. Earth dist. -5567 Jul 28 j 13:19 24° ₹ 41'05 45.21559 AU min. Earth dist. -5559 Aug 06 j 06:44 3°る09'55 46.27676 AU opposition -5567 Jul 30 j 22:02 24° ₹38'16 -17°03'54 opposition -5559 Aug 08 j 08:18 3°る07'29 -17°31'51 direct -5567 Oct 19 j 15:13 23°**х** 36′39 direct -5559 Oct 28 j 02:33 2°る06'42 conjunction -5566 Jan 25 j 21:24 25°**∡**109'23 -16°23'27 conjunction -5558 Feb 03 j 13:15 3°る37'23 -16°49'52 minimum elong -5566 Jan 25 j 21:22 25°**∡**109'23 16°23'46 minimum elong -5558 Feb 03 j 13:17 3°る37'23 16°50'12 max. Earth dist. -5566 Jan 28 i 09:55 25° ₹13'05 47.20229 AU max. Earth dist. -5558 Feb 05 i 17:30 3°る40'30 48.24593 AU retrograde -5566 May 09 j 11:52 26°**∡**¹46′22 retrograde -5558 May 18 j 00:23 5°る12'01 min. Earth dist. -5566 Jul 29 j 21:15 25° ₹ 46'04 45.35886 AU min. Earth dist. -5558 Aug 07 j 14:12 4°る12'20 46.39364 AU -5566 Aug 01 j 05:48 25° -17° 08' 42 -5558 Aug 09 i 15:04 4°る09'57 -17°33'47 opposition opposition -5566 Oct 20 j 23:02 24°**₹**'41'44 -5558 Oct 29 j 10:00 3°**⋜**09'16 direct direct -5565 Jan 27 j 05:36 26°**₹**14'09 -16°28'00 -5557 Feb 04 j 20:48 4°る39'45 -16°51'41 conjunction conjunction -5565 Jan 27 j 05:33 -5557 Feb 04 j 20:49 4°る39'45 16°52'00 26° ₹14'09 16°28'20 minimum elong minimum elong -5565 Jan 29 j 16:29 26°**✗**17'44 47.34299 AU -5557 Feb 07 j 00:22 4°る42'50 48.35993 AU max. Earth dist. max. Earth dist. -5565 May 10 j 22:36 -5557 May 19 j 05:58 6°る14'09 27°**х** 50'47 retrograde retrograde -5565 Jul 31 j 06:14 -5557 Aug 08 j 23:18 5°る14'29 46.50541 AU min. Earth dist. 26°**≯**50'31 45.49878 AU min. Earth dist. -5565 Aug 02 j 13:34 26°**≯**47'47 -17°13'06 -5557 Aug 10 j 21:49 5°る12'12 -17°35'25 opposition opposition -5565 Oct 22 j 04:15 25°**∡**¹46'20 -5557 Oct 30 j 18:38 4°る11'38 direct direct 27°**∡**18'27 -16°32'11 -5556 Feb 06 j 04:27 -5564 Jan 28 j 13:58 5°る41'53 -16°53'12 conjunction conjunction 5°る41'54 16°53'32 -5564 Jan 28 j 13:57 -5556 Feb 06 j 04:29 minimum elong 27°**҂**18'27 16°32'30 minimum elong max. Earth dist. -5564 Jan 31 j 01:06 27°**∡**¹22'03 47.48063 AU max. Earth dist. -5556 Feb 08 j 06:26 5°る44'52 48.46891 AU retrograde -5564 May 11 j 05:19 28°**₹**54'45 retrograde -5556 May 19 j 12:59 7°る16'02 min. Earth dist. -5564 Jul 31 j 14:46 27°**尽**54'32 45.63563 AU min. Earth dist. -5556 Aug 09 j 06:09 6°る16'28 46.61197 AU opposition -5564 Aug 02 j 20:58 27°**∡**151′51 -17°17′09 opposition -5556 Aug 11 j 04:12 6°る14'13 -17°36'45 -5564 Oct 22 j 12:55 26°**₹**50'30 -5556 Oct 31 j 01:55 5°る13'43 direct direct -5563 Jan 28 j 22:06 28°**₹**¹22'20 -16°36'00 -5555 Feb 06 j 11:54 6°る43'46 -16°54'27 conjunction conjunction -5563 Jan 28 j 22:04 28°**₹**22'20 16°36'20 -5555 Feb 06 j 11:56 6°る43'46 16°54'46 minimum elong minimum elong 28°**₹**25'49 47.61553 AU -5555 Feb 08 i 11:50 6°る46'37 48.57274 AU max. Earth dist. -5563 Jan 31 i 07:26 max. Earth dist. retrograde -5563 May 12 j 11:23 29°**х** 58′19 retrograde -5555 May 20 i 22:54 8°る17'40 7°る18'05 46.71366 AU min. Earth dist. -5563 Aug 01 j 22:09 28° ₹ 58'13 45.76986 AU min. Earth dist. -5555 Aug 10 j 14:33 opposition -5563 Aug 04 i 04:18 28° **7**55'33 -17°20'48 opposition -5555 Aug 12 j 10:40 7°る15'56 -17°37'47 direct -5563 Oct 23 j 21:23 27°**₹**′54'17 direct -5555 Nov 01 j 06:08 6°**ප**15'31 -5562 Jan 30 j 06:03 29° 25'51 -16°39'28 -5554 Feb 07 i 19:13 7°る45'21 -16°55'23 conjunction conjunction -5562 Jan 30 j 06:03 29° **2**5'51 16°39'48 -5554 Feb 07 j 19:16 7°る45'21 16°55'44 minimum elong minimum elong max. Earth dist. -5562 Feb 01 j 15:12 29°**✗**29'19 47.74773 AU max. Earth dist. -5554 Feb 09 j 18:55 7°る48'10 48.67199 AU -5562 Feb 23 j 06:45 0°궁 retrograde -5554 May 22 j 05:43 9°₹18'59 retrograde -5562 May 13 j 16:59 1°**る**01'33 min. Earth dist. -5554 Aug 11 j 21:53 8°る19'26 46.81087 AU min. Earth dist. -5562 Aug 03 j 07:06 0°る01'29 45.90134 AU opposition -5554 Aug 13 j 16:51 8°る17'21 -17°38'32 -5562 Aug 04 j 13:13 direct -5554 Nov 02 j 12:16 7°**る**16'59 30°R **✓** -5562 Aug 05 j 11:34 29°**х** 58′54 -17°24′06 opposition -5562 Oct 25 j 07:09 28°**₹**57'45 -5553 Feb 09 j 02:20 8°**정**46'37 -16°56'02 direct conjunction -5561 Jan 11 j 03:47 0°궁 minimum elong -5553 Feb 09 j 02:23 8°る46'37 16°56'22 max. Earth dist. -5553 Feb 10 j 23:53 8°る49'19 48.76723 AU conjunction -5561 Jan 31 j 13:58 0°る29'04 -16°42'34 retrograde -5553 May 23 j 12:01 10°る20'00 minimum elong -5561 Jan 31 j 13:57 0°る29'04 16°42'54 min. Earth dist. -5553 Aug 13 j 04:29 9°る20'31 46.90446 AU max. Earth dist. -5561 Feb 02 j 22:14 0°る32'28 47.87741 AU opposition -5553 Aug 14 j 22:55 9°**る**18'27 -17°38'57 -5561 May 15 j 01:26 2°る04'29 -5553 Nov 03 j 18:32 8°**궁**18'09 retrograde direct

min. Earth dist.

-5561 Aug 04 j 14:09

1°る04'34 46.03000 AU

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5552 in astronomical counting style is the year 5553 BCE in historical counting style. -5552 Feb 10 i 09:25 9°847'36 -16°56'22 retrograde -5544 May 31 i 19:47 19°る20'26 conjunction -5552 Feb 10 i 09:28 9°**ප**47'36 16°56'43 min. Earth dist. -5544 Aug 21 j 18:32 18°る21'17 47.59082 AU minimum elong max. Earth dist. -5552 Feb 12 j 06:40 9°る50'16 48.85899 AU -5544 Aug 23 j 01:56 18°る19'46 -17°28'54 opposition -5544 Nov 12 j 02:27 11°る20'45 17°る20'05 -5552 May 23 j 14:47 direct retrograde -5552 Aug 13 j 12:23 10°る21'16 46.99467 AU min. Earth dist. -5543 Feb 18 j 22:22 18°る48'14 -16°46'03 opposition -5552 Aug 15 j 04:59 10°る19'17 -17°39'03 conjunction -5552 Nov 04 j 04:35 -5543 Feb 18 j 22:29 direct 9°**る**19'03 minimum elong 18°る48'14 16°46'23 -5543 Feb 20 j 07:19 max. Earth dist. 18°る50'08 49.52907 AU conjunction -5551 Feb 10 j 16:28 10°る48'19 -16°56'23 retrograde -5543 Jun 02 j 03:01 20°る19'40 10°る48'19 16°56'43 minimum elong -5551 Feb 10 j 16:33 min. Earth dist. -5543 Aug 23 j 00:58 19°る20'31 47.64390 AU max. Earth dist. -5551 Feb 12 j 12:32 10°る50'55 48.94776 AU opposition -5543 Aug 24 j 07:10 19°る19'04 -17°26'25 12°**る**21'14 -5543 Nov 13 j 06:50 18°る19'24 retrograde -5551 May 24 j 20:54 direct min. Earth dist. -5551 Aug 14 j 18:05 11°る21'51 47.08191 AU opposition -5551 Aug 16 j 10:42 11°る19'53 -17°38'50 conjunction -5542 Feb 20 j 04:54 19°る47'24 -16°43'35 direct -5551 Nov 05 j 11:39 10°る19'43 minimum elong -5542 Feb 20 j 05:01 19°る47'25 16°43'54 max. Earth dist. -5542 Feb 21 j 13:09 19°る49'16 49.58008 AU conjunction -5550 Feb 11 j 23:17 11°る48'49 -16°56'06 retrograde -5542 Jun 03 j 05:31 21°る18'40 minimum elong -5550 Feb 11 j 23:21 11°る48'49 16°56'26 min. Earth dist. -5542 Aug 24 j 08:12 20°る19'27 47.69215 AU max. Earth dist. -5550 Feb 13 j 17:58 11°る51'19 49.03360 AU opposition -5542 Aug 25 j 12:24 20°る18'06 -17°23'40 retrograde -5550 May 26 j 05:43 13°る21'32 direct -5542 Nov 14 j 15:16 19°る18'28 min. Earth dist. -5550 Aug 16 j 01:37 12°る22'10 47.16634 AU opposition -5550 Aug 17 j 16:37 12°る20'17 -17°38'17 conjunction -5541 Feb 21 i 11:10 20°**ප්**46'19 -16°40'51 direct -5550 Nov 06 j 15:20 11°る20'12 minimum elong -5541 Feb 21 i 11:17 20°る46'20 16°41'11 max. Earth dist. -5541 Feb 22 i 17:55 20°る48'06 49.62676 AU conjunction -5549 Feb 13 i 06:02 12°る49'08 -16°55'30 retrograde -5541 Jun 04 j 09:29 22°る17'24 -5549 Feb 13 i 06:08 12°る49'08 16°55'49 -5541 Aug 26 j 17:26 21°る16'54 -17°20'39 minimum elong opposition max. Earth dist. -5549 Feb 15 j 00:42 12°る51'37 49.11668 AU min. Earth dist. -5541 Aug 25 j 13:32 21°る18'14 47.73627 AU -5549 May 27 j 12:28 14°る21'39 -5541 Nov 15 j 22:36 20°る17'16 retrograde direct -5549 Aug 17 j 08:02 13°る22'22 47.24765 AU min. Earth dist. -5549 Aug 18 j 22:20 13°る20'31 -17°37'26 -5540 Feb 22 j 17:30 21°る45'01 -16°37'52 opposition conjunction -5549 Nov 07 j 21:02 -5540 Feb 22 j 17:38 21°る45'01 16°38'10 direct 12°**る**20'31 minimum elong -5540 Feb 23 j 22:42 21°る46'42 49.66948 AU max. Earth dist. 13°る49'18 -16°54'36 23°**る**15'56 -5548 Feb 14 j 12:46 -5540 Jun 04 j 16:38 conjunction retrograde -5548 Feb 14 j 12:50 13°**る**49'19 16°54'56 -5540 Aug 26 j 22:26 22°る15'28 -17°17'21 minimum elong opposition -5548 Feb 16 j 05:14 13°る51'40 49.19661 AU -5540 Aug 25 j 20:28 22°る16'43 47.77678 AU max. Earth dist. min. Earth dist. -5548 May 27 j 19:29 15°**පි**21'38 -5540 Nov 16 j 02:58 21°**る**15'52 retrograde direct -5548 Aug 17 j 14:25 14°る22'25 47.32564 AU min. Earth dist. opposition -5548 Aug 19 j 03:53 14°る20'37 -17°36'16 conjunction -5539 Feb 22 j 23:53 22°る43'30 -16°34'35 direct -5548 Nov 08 j 01:51 13°る20'42 minimum elong -5539 Feb 23 j 00:01 22°る43'31 16°34'54 max. Earth dist. -5539 Feb 24 j 04:47 22°る45'10 49.70891 AU conjunction -5547 Feb 14 j 19:38 14°る49'22 -16°53'25 retrograde -5539 Jun 05 j 22:24 24°♂14'16 -5547 Feb 14 j 19:44 14°る49'23 16°53'45 min. Earth dist. -5539 Aug 27 j 01:58 23°る15'05 47.81398 AU minimum elong max. Earth dist. -5547 Feb 16 j 11:43 14°る51'43 49.27280 AU opposition -5539 Aug 28 j 03:21 23°る13'52 -17°13'46 -5547 May 28 j 23:55 16°る21'32 direct -5539 Nov 17 j 08:10 22°る14'18 retrograde -5547 Aug 18 j 22:13 15°る22'19 47.39949 AU min. Earth dist. -5538 Feb 24 i 05:54 opposition -5547 Aug 20 j 09:32 15°る20'37 -17°34'49 conjunction 23°る41'51 -16°31'02 -5547 Nov 09 i 09:22 -5538 Feb 24 i 06:03 direct 14°る20'47 minimum elong 23°る41'52 16°31'20 max. Earth dist. -5538 Feb 25 i 08:42 23°る43'23 49.74524 AU -5546 Feb 16 i 02:18 15°る49'19 -16°51'57 conjunction retrograde -5538 Jun 07 i 05:31 25°る12'29 minimum elong -5546 Feb 16 i 02:23 15°る49'19 16°52'17 min. Earth dist. -5538 Aug 28 j 07:37 24°る13'20 47.84824 AU max. Earth dist. -5546 Feb 17 i 16:41 15°る51'33 49.34468 AU opposition -5538 Aug 29 j 08:16 24°중12'09 -17°09'54 retrograde -5546 May 30 j 04:29 17°**ට**21'19 direct -5538 Nov 18 j 11:30 23°る12'37 -5546 Aug 20 j 04:04 16°る22'11 47.46862 AU min. Earth dist. opposition -5546 Aug 21 j 14:59 16°る20'30 -17°33'06 conjunction -5537 Feb 25 j 12:05 24°る40'07 -16°27'11 direct -5546 Nov 10 j 16:55 15°る20'44 minimum elong -5537 Feb 25 j 12:13 24°る40'07 16°27'30 max. Earth dist. -5537 Feb 26 j 14:42 24°る41'38 49.77861 AU conjunction -5545 Feb 17 j 08:59 16°る49'08 -16°50'14 retrograde -5537 Jun 08 j 09:28 26°る10'38 -5545 Feb 17 j 09:06 16°50'34 16°50'34 -5537 Aug 30 j 13:08 25°る10'22 -17°05'44 minimum elong opposition -5545 Feb 18 j 21:21 16°る51'15 49.41149 AU -5537 Aug 29 j 14:15 25°る11'28 47.87939 AU max. Earth dist. min. Earth dist. -5545 May 31 j 12:26 18°る20'58 direct -5537 Nov 19 j 18:10 24°る10'53 retrograde 17°る21'48 47.53252 AU min. Earth dist. -5545 Aug 21 j 11:54 opposition -5545 Aug 22 j 20:32 17°る20'14 -17°31'08 conjunction -5536 Feb 26 j 18:15 25°る38'20 -16°23'05 direct -5545 Nov 11 j 21:52 16°**පි**20'31 minimum elong -5536 Feb 26 j 18:25 25°る38'20 16°23'23 max. Earth dist. -5536 Feb 27 j 19:23 25°る39'46 49.80897 AU conjunction -5544 Feb 18 j 15:47 17°る48'48 -16°48'16 retrograde -5536 Jun 08 j 13:31 27°る08'45 minimum elong -5544 Feb 18 j 15:53 17°る48'48 16°48'35 -5536 Aug 30 j 17:52 26° ප්08'35 -17°01'17 opposition max. Earth dist. -5544 Feb 20 j 03:24 17°る50'51 49.47301 AU min. Earth dist. -5536 Aug 29 j 19:07 26°る09'41 47.90719 AU

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 27 Attention, astronomical year style is used: The year -5536 in astronomical counting style is the year 5537 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	e year -5536	in astronomical co	ounting style is the year	5537 BCE in historical c	ounting style.	
direct	-5536 Nov 20 j 00:41	25° る 09'09		opposition	-5528 Sep 07 j 06:55	3° ≈ 52'38	-16°16'48
				min. Earth dist.	-5528 Sep 06 j 19:25	3°≈53'10	47.96159 AU
conjunction	-5535 Feb 27 j 00:23	26° る 36'33	-16°18'42	direct	-5528 Nov 27 j 14:59	2° ≈ 53'14	
minimum elong	-5535 Feb 27 j 00:31	26° ප 36'33	16°19'01				
max. Earth dist.	-5535 Feb 27 j 23:47	26° る 37'53	49.83557 AU	conjunction	-5527 Mar 07 j 00:56	4°≈20'18	-15°35'00
retrograde	-5535 Jun 09 j 20:07	28° る 06'54		minimum elong	-5527 Mar 07 j 01:08	4° ≈ 20'18	15°35'17
opposition	-5535 Aug 31 j 22:37	27° る 06'49	-16°56'35	max. Earth dist.	-5527 Mar 07 j 13:26	4° ≈ 21'00	49.87926 AU
min. Earth dist.	-5535 Aug 31 j 02:05		47.93107 AU	retrograde	-5527 Jun 17 j 16:34	5° ≈ 49'53	
direct	-5535 Nov 21 j 05:32	26° る 07'26		opposition	-5527 Sep 08 j 11:19	4°≈50'03	-16°10'06
	J			min. Earth dist.	-5527 Sep 08 j 01:23		47.94954 AU
conjunction	-5534 Feb 28 j 06:37	27° る 34'48	-16°14'04	direct	-5527 Nov 28 j 20:44	3° ≈ 50'39	
minimum elong	-5534 Feb 28 i 06:48	27° る 34'48					
max. Earth dist.	-5534 Mar 01 j 05:33		49.85806 AU	conjunction	-5526 Mar 08 j 06:46	5° ≈ 17'41	-15°28'25
retrograde	-5534 Jun 11 j 03:49	29° る 05'04	13.00000110	minimum elong	-5526 Mar 08 j 06:56		15°28'42
min. Earth dist.	-5534 Sep 01 j 07:46		47.95032 AU	max. Earth dist.	-5526 Mar 08 j 17:46		49.86694 AU
opposition	-5534 Sep 02 j 03:20	28°පි05'04		retrograde	-5526 Jun 18 j 20:00	6° ≈ 47'13	47.00074 710
direct	-5534 Nov 22 j 08:36	27° る 05'43	10 31 30	opposition	-5526 Sep 09 j 15:41		-16°03'07
direct	-5554 NOV 22 J 00.50	27 003 43		min. Earth dist.	-5526 Sep 09 j 05:43		47.93471 AU
conjunction	-5533 Mar 01 j 12:37	28° ට 33'03	16000!12	direct	-5526 Nov 30 j 02:33	4°≈47'59	47.934/1 AU
•		28° る 33'03		direct	-3320 NOV 30 J 02.33	4 ~4/39	
minimum elong max. Earth dist.	-5533 Mar 01 j 12:46		49.87569 AU	aamiumatian	5525 Mar 00 : 12:20	6° ≈ 15'01	15021122
max. Earm dist.	-5533 Mar 02 j 08:50		49.87309 AU	conjunction	-5525 Mar 09 j 12:29		
, 1	-5533 May 25 j 20:58	0°≈		minimum elong	-5525 Mar 09 j 12:41	6°≈15'02	
retrograde	-5533 Jun 12 j 12:13	0°≈03'14		max. Earth dist.	-5525 Mar 09 j 22:08		49.85175 AU
	-5533 Jun 29 j 21:40	30°₹₹	1.004.010.0	retrograde	-5525 Jun 20 j 00:24	7°≈44'31	1.505.515.1
opposition	-5533 Sep 03 j 08:06	29° る 03'17		opposition	-5525 Sep 10 j 20:12	6°≈44'43	
min. Earth dist.	-5533 Sep 02 j 13:54		47.96455 AU	min. Earth dist.	-5525 Sep 10 j 12:08		47.91699 AU
direct	-5533 Nov 23 j 10:58	28° る 03'58		direct	-5525 Dec 01 j 08:31	5° ≈ 45'19	
		_					
conjunction	-5532 Mar 01 j 18:55	29° る 31'15		conjunction	-5524 Mar 09 j 18:29		-15°14'26
minimum elong	-5532 Mar 01 j 19:06	29° る 31'16		minimum elong	-5524 Mar 09 j 18:40		15°14'42
max. Earth dist.	-5532 Mar 02 j 14:15	29° る 32'22	49.88801 AU	max. Earth dist.	-5524 Mar 10 j 03:51		49.83370 AU
	-5532 Mar 23 j 02:59	0° ≈		retrograde	-5524 Jun 20 j 06:25	8° ≈ 41'49	
retrograde	-5532 Jun 12 j 14:56	1° ≈ 01'20		opposition	-5524 Sep 11 j 00:27	7° ≈ 42'04	-15°48'20
opposition	-5532 Sep 03 j 12:46	0° ≈ 01′26	-16°41'00	min. Earth dist.	-5524 Sep 10 j 17:00	7° ≈ 42'26	47.89605 AU
min. Earth dist.	-5532 Sep 02 j 20:45	0° ≈ 02'12	47.97327 AU	direct	-5524 Dec 01 j 12:51	6° ≈ 42'40	
	-5532 Sep 04 j 18:55	30°Ŗ₹					
direct	-5532 Nov 23 j 18:24	29° る 02'07		conjunction	-5523 Mar 11 j 00:24	8° ≈ 09'45	-15°07'03
	-5531 Feb 09 j 04:22	0°≈		minimum elong	-5523 Mar 11 j 00:37	8° ≈ 09'46	15°07'19
				max. Earth dist.	-5523 Mar 11 j 07:23	8° ≈ 10′09	49.81223 AU
conjunction	-5531 Mar 03 j 01:07	0° ≈ 29'22	-15°58'46	retrograde	-5523 Jun 21 j 15:04	9° ≈ 39'12	
minimum elong	-5531 Mar 03 j 01:16	0° ≈ 29'23	15°59'03	opposition	-5523 Sep 12 j 04:52	8° ≈ 39'30	-15°40'32
max. Earth dist.	-5531 Mar 03 j 18:28	0° ≈ 30'22	49.89511 AU	min. Earth dist.	-5523 Sep 11 j 22:40	8° ≈ 39'47	47.87151 AU
retrograde	-5531 Jun 13 j 17:31	1° ≈ 59'21		direct	-5523 Dec 02 j 14:15	7° ≈ 40'06	
opposition	-5531 Sep 04 j 17:22	0° ≈ 59'28	-16°35'20	evening set	-5522 Mar 11 j 20:22	9° ≈ 06'40	
min. Earth dist.	-5531 Sep 04 j 01:54	1° ≈ 00'12	47.97684 AU				
direct	-5531 Nov 25 j 02:20	0° ≈ 00'09		conjunction	-5522 Mar 12 j 06:19	9° ≈ 07'14	-14°59'26
	·			minimum elong	-5522 Mar 12 j 06:31	9° ≈ 07'14	14°59'42
conjunction	-5530 Mar 04 j 07:00	1°≈27'20	-15°53'12	evening rise	-5522 Mar 12 j 16:40	9° ≈ 07'49	
minimum elong	-5530 Mar 04 j 07:11		15°53'31	max. Earth dist.	-5522 Mar 12 j 12:44	9° ≈ 07'35	49.78669 AU
max. Earth dist.	-5530 Mar 04 j 22:34	1°≈28'14	49.89712 AU	retrograde	-5522 Jun 22 j 19:35	10° ≈ 36'40	
retrograde	-5530 Jun 14 j 23:06	2°≈57'13		opposition	-5522 Sep 13 j 09:21	9° ≈ 37'01	-15°32'30
opposition	-5530 Sep 05 j 22:02	1°≈57'21	-16°29'25	min. Earth dist.	-5522 Sep 13 j 05:05		47.84249 AU
min. Earth dist.	-5530 Sep 05 j 08:47		47.97570 AU	direct	-5522 Dec 03 j 19:45	8° ≈ 37'37	
direct	-5530 Nov 26 j 07:47	0° ≈ 58'01		evening set	-5521 Mar 11 j 08:05	10° ≈ 01'50	
conjunction	-5529 Mar 05 j 13:04	2°≈25'09	-15°47'24	conjunction	-5521 Mar 13 j 12:24	10° ≈ 04'48	-14°51'34
minimum elong	-5529 Mar 05 j 13:15	2°≈25'09		minimum elong	-5521 Mar 13 j 12:37	10°≈04'49	
max. Earth dist.	-5529 Mar 06 j 04:06		49.89485 AU	max. Earth dist.	-5521 Mar 13 j 16:54		49.75656 AU
retrograde	-5529 Jun 16 j 04:17	2 ≈2000 3°≈54'56	17.07403 AU	morning rise	-5521 Mar 15 j 17:12	10°≈07'48	17.75050 AU
opposition	-5529 Sep 07 j 02:25		-16°23'14	retrograde	-5521 Jun 23 j 23:03	10 ≈ 07 48	
min. Earth dist.	-5529 Sep 06 j 13:48		47.97039 AU	opposition	-5521 Sep 14 j 13:41	11 ≈34 14 10°≈34'36	-15°24'14
	-5529 Nov 27 j 12:47	2 ≈33 40 1°≈55'42	41.71037 AU	min. Earth dist.			
direct	-5527 INOV 2/J 12.4/	1 ~3342		direct	-5521 Sep 14 j 10:06	9°≈35'12	47.80853 AU
conjunction	5528 Mar 05: 10.50	300022147	150/11/20		-5521 Dec 05 j 02:33	9°≈33°12 10°≈58'15	
conjunction	-5528 Mar 05 j 18:58		-15°41'20	evening set	-5520 Mar 10 j 16:43	10 \$28.13	
minimum elong	-5528 Mar 05 j 19:09		15°41'38	agnismatica	5520 Mar 12: 10:22	1100000007	1.49.42120
max. Earth dist.	-5528 Mar 06 j 07:42		49.88875 AU	conjunction	-5520 Mar 13 j 18:32	11°≈02'27	
retrograde	-5528 Jun 16 j 12:20	4°≈52'28		minimum elong	-5520 Mar 13 j 18:44	11° ≈ 02'27	14 45 44

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5520 in astronomical counting style is the year 5521 BCE in historical counting style. -5520 Mar 13 j 20:53 11°≈02'35 49.72114 AU retrograde -5514 Jun 30 j 11:33 18°≈18'01 max. Earth dist. -5520 Mar 16 j 20:51 -5514 Sep 20 j 20:48 17°≈18'20 -14°19'36 morning rise 11° 206'40 opposition -5520 Jun 24 j 04:19 min. Earth dist. -5514 Sep 21 j 02:19 17°≈18'04 47.43893 AU retrograde 12°≈31'53 -5520 Sep 14 j 18:17 -5514 Dec 11 j 14:22 16°≈18'39 11°≈32'16 -15°15'44 direct opposition -5520 Sep 14 j 17:08 -5513 Mar 14 j 20:25 min. Earth dist. 11°≈32'19 47.76920 AU evening set 17°≈37'12 direct -5520 Dec 05 j 08:06 10°≈32'51 evening set -5519 Mar 11 j 06:12 11°≈54'59 conjunction -5513 Mar 21 j 12:52 17°≈46'19 -13°40'15 -5513 Mar 21 j 13:05 17°**≈**46′20 minimum elong 13°40'30 conjunction -5519 Mar 15 j 00:44 12°≈00'07 -14°35'10 max. Earth dist. -5513 Mar 21 j 05:25 17°≈45'53 49.34707 AU minimum elong -5519 Mar 15 j 00:57 12°≈00'08 14°35'26 morning rise -5513 Mar 28 j 06:05 17°≈55'29 max. Earth dist. -5519 Mar 15 j 02:12 12°≈00'12 49.68043 AU retrograde -5513 Jul 01 j 20:57 19°≈15'51 -5519 Mar 18 j 19:46 -5513 Sep 22 j 01:14 morning rise 12°≈05'18 opposition 18°≈16′10 -14°09′20 retrograde -5519 Jun 25 j 09:33 13°≈29'34 min. Earth dist. -5513 Sep 22 j 07:55 18°≈15'51 47.37216 AU opposition -5519 Sep 15 j 22:39 12°≈29'57 -15°07'00 direct -5513 Dec 12 j 14:58 17°≈16'26 min. Earth dist. -5519 Sep 15 j 22:20 12°≈29'58 47.72451 AU evening set -5512 Mar 14 j 17:14 18°≈34'34 direct -5519 Dec 06 j 12:58 11°≈30'29 evening set -5518 Mar 11 j 21:51 12°≈51'52 conjunction -5512 Mar 21 j 19:09 18°≈44'13 -13°30'12 minimum elong -5512 Mar 21 j 19:23 18°≈44'14 13°30'26 conjunction -5518 Mar 16 j 06:43 12°≈57'48 -14°26'38 max. Earth dist. -5512 Mar 21 j 11:22 18°≈43'47 49.28012 AU minimum elong -5518 Mar 16 j 06:55 12°≈57'49 14°26'53 morning rise -5512 Mar 28 j 21:43 18°≈53'55 max. Earth dist. -5518 Mar 16 j 05:34 12°≈57'45 49.63465 AU retrograde -5512 Jul 02 j 02:57 20°≈13'49 morning rise -5518 Mar 20 j 16:10 13°≈03'48 opposition -5512 Sep 22 i 05:49 19°≈14'08 -13°58'47 retrograde -5518 Jun 26 j 17:42 14°≈27'15 min. Earth dist. -5512 Sep 22 j 14:03 19°≈13'44 47.30207 AU opposition -5518 Sep 17 i 03:05 13°≈27'37 -14°58'02 direct -5512 Dec 12 j 19:22 18°≈14'22 min. Earth dist. -5518 Sep 17 j 04:17 13°≈27'34 47.67511 AU evening set -5511 Mar 15 j 14:31 19°≈32'07 -5518 Dec 07 j 15:11 12°≈28'07 direct -5517 Mar 12 j 15:00 13°≈48'48 -5511 Mar 23 j 01:18 19°≈42'17 -13°19'54 evening set conjunction -5511 Mar 23 j 01:31 minimum elong 19° 22'18 13°20'08 -5517 Mar 17 j 12:45 -5511 Mar 22 j 15:53 conjunction 13°≈55'29 -14°17'52 max. Earth dist. 19°≈41'45 49.20981 AU -5517 Mar 17 j 12:58 -5511 Mar 30 j 12:48 minimum elong 13°≈55'30 14°18'07 morning rise 19°≈52'30 -5511 Jul 03 j 06:44 max. Earth dist. -5517 Mar 17 j 11:04 13°≈55'24 49.58429 AU retrograde 21°≈11'57 -5511 Sep 23 j 10:17 -5517 Mar 22 j 11:05 14°≈02'12 opposition 20°≈12'16 -13°47'58 morning rise -5517 May 09 j 06:06 min. Earth dist. -5511 Sep 23 j 18:59 20°≈11'51 47.22834 AU 15°≈ -5517 Jun 27 j 22:30 -5511 Dec 14 j 02:10 retrograde 15°≈24'55 direct 19°≈12'28 -5517 Aug 16 j 21:26 -5510 Mar 16 j 12:07 15°R≈ evening set 20°≈29'51 -5517 Sep 18 j 07:33 opposition 14°≈25'16 -14°48'49 -5510 Mar 24 j 07:34 min. Earth dist. -5517 Sep 18 j 10:31 14°≈25'08 47.62127 AU conjunction 20°≈40'31 -13°09'20 direct -5517 Dec 08 j 20:49 13°≈25'43 minimum elong -5510 Mar 24 j 07:48 20°≈40'32 13°09'34 evening set -5516 Mar 12 j 09:25 14°≈45'48 max. Earth dist. -5510 Mar 23 j 20:21 20°≈39'53 49.13540 AU morning rise -5510 Apr 01 j 03:49 20°≈51'14 conjunction -5516 Mar 17 j 18:50 14°≈53'09 -14°08'51 retrograde -5510 Jul 04 j 10:42 22°≈10'17 -5516 Mar 17 j 19:03 14°≈53'10 14°09'05 -5510 Sep 24 j 14:57 21°≈10'35 -13°36'54 minimum elong opposition max. Earth dist. -5516 Mar 17 j 15:24 14°≈52'58 49.52995 AU min. Earth dist. -5510 Sep 25 j 01:59 21°≈10'03 47.15026 AU -5516 Mar 22 j 19:27 -5510 Dec 15 j 08:52 direct 20°≈10'44 -5516 Mar 23 j 04:53 15°≈00'32 -5509 Mar 17 j 10:09 morning rise evening set 21°≈27'47 retrograde -5516 Jun 28 i 02:35 16°≈22'35 -5509 Mar 25 i 13:58 opposition -5516 Sep 18 j 11:48 15°≈22'55 -14°39'21 conjunction 21°≈38'56 -12°58'33 min. Earth dist. -5516 Sep 18 j 15:02 15°≈22'46 47.56373 AU minimum elong -5509 Mar 25 i 14:11 21°≈38'56 12°58'45 -5516 Oct 08 i 23:45 15°R≈ max. Earth dist. -5509 Mar 25 i 01:56 21°≈38'14 49.05639 AU -5509 Apr 02 j 18:26 -5516 Dec 09 i 02:39 14°≈23'19 morning rise 21°≈50'07 direct -5515 Feb 07 j 08:14 15°**≈** retrograde -5509 Jul 05 i 15:40 23°≈08'46 -5515 Mar 13 j 04:29 15°≈42'51 -5509 Sep 25 j 19:37 22°≈09'03 -13°25'36 evening set opposition min. Earth dist. -5509 Sep 26 j 07:26 22°≈08'29 47.06709 AU conjunction -5515 Mar 19 j 00:54 15°≈50'50 -13°59'34 direct -5509 Dec 16 j 14:49 21°≈09'09 minimum elong -5515 Mar 19 j 01:07 15°≈50'50 13°59'49 evening set -5508 Mar 17 j 08:42 22°≈25'51 max. Earth dist. -5515 Mar 18 j 19:56 15°≈50'33 49.47198 AU -5515 Mar 24 j 21:59 15°≈58'50 conjunction -5508 Mar 25 j 20:28 22°≈37'28 -12°47'31 morning rise -5515 Jun 29 j 06:16 -5508 Mar 25 j 20:42 retrograde 17°≈20'17 minimum elong 22°≈37'29 12°47'44 -5515 Sep 19 j 16:21 -5508 Mar 25 j 05:36 opposition 16°**≈**20'36 -14°29'37 max. Earth dist. 22°≈36'37 48.97207 AU -5508 Apr 03 j 09:06 min. Earth dist. -5515 Sep 19 j 21:37 16°≈20'21 47.50286 AU morning rise 22°≈49'08 -5508 Jul 05 j 23:57 direct -5515 Dec 10 j 09:09 15°≈20'57 retrograde 24°≈07'23 evening set -5514 Mar 14 j 00:08 16°≈39'59 opposition -5508 Sep 26 j 00:19 23°≈07'38 -13°14'04 min. Earth dist. -5508 Sep 26 j 14:01 23°≈06'58 46.97861 AU conjunction -5514 Mar 20 j 06:52 16°≈48'32 -13°50'03 direct -5508 Dec 16 j 17:39 22°≈07'39 minimum elong -5514 Mar 20 j 07:05 16°≈48'32 13°50'17 evening set -5507 Mar 18 j 07:28 23°≈24'02 max. Earth dist. -5514 Mar 20 j 01:42 16°≈48'14 49.41099 AU max. Earth dist. -5507 Mar 26 j 11:22 23°≈35'12 48.88234 AU

-5514 Mar 26 j 14:11

16°≈57'08

morning rise

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5507 in astronomical counting style is the year 5508 BCE in historical counting style. -5507 Mar 27 i 03:08 23°≈36'06 -12°36'16 opposition -5501 Oct 03 i 10:28 29°≈59'32 -11°46'08 conjunction -5507 Mar 27 j 03:21 -5501 Oct 03 j 01:00 minimum elong 23°≈36'07 12°36'28 30°R≈ 29°≈58'30 46.23708 AU -5507 Apr 04 j 23:27 min. Earth dist. -5501 Oct 04 j 07:59 23°≈48'13 morning rise -5507 Jul 07 j 06:33 25°≈06'05 -5501 Dec 24 j 06:34 direct 28°≈58'51 retrograde -5507 Sep 27 j 05:12 -5500 Mar 13 j 04:16 opposition 24°≈06'17 -13°02'17 0°**∀** -5507 Sep 27 j 20:41 min. Earth dist. 24°≈05'32 46.88469 AU evening set -5500 Mar 23 j 05:16 0°**¥**13'30 0°**升**27'01 48.13904 AU direct -5507 Dec 17 j 22:25 23°≈06'12 max. Earth dist. -5500 Apr 02 j 00:08 -5506 Mar 19 j 06:26 evening set 24°≈22'16 conjunction -5500 Apr 03 j 01:42 0°**¥**28'29 -11°10'30 conjunction -5506 Mar 28 j 09:31 24°≈34'47 -12°24'46 minimum elong -5500 Apr 03 j 01:55 0°**¥**28'30 11°10'41 -5500 Apr 13 j 22:49 minimum elong -5506 Mar 28 j 09:45 24°≈34'48 12°25'00 morning rise 0°**)**(43'31 -5506 Mar 27 j 15:46 -5500 Jul 13 j 22:08 max. Earth dist. 24°≈33'46 48.78754 AU retrograde 1°**)** 59'17 -5500 Oct 03 j 15:37 morning rise -5506 Apr 06 j 13:23 24°≈47'20 opposition 0°**¥**59'02 -11°32'28 retrograde -5506 Jul 08 j 12:40 26°≈04'50 min. Earth dist. -5500 Oct 04 j 15:06 0°**升**57'53 46.11861 AU opposition -5506 Sep 28 j 09:57 25°≈04'58 -12°50'16 -5500 Dec 11 j 23:56 30°R≈ min. Earth dist. -5506 Sep 29 j 02:01 25°≈04'11 46.78593 AU direct -5500 Dec 24 j 13:55 29°≈58'16 direct -5506 Dec 19 j 03:57 24°≈04'47 -5499 Jan 06 j 01:20 0°**)**€ evening set -5505 Mar 20 j 05:38 25°≈20'33 evening set -5499 Mar 24 j 06:00 1° ¥ 12'47 max. Earth dist. -5499 Apr 03 j 06:49 1°**¥**26'39 48.02066 AU conjunction -5505 Mar 29 j 16:08 25°≈33'30 -12°13'03 minimum elong -5505 Mar 29 j 16:21 25°≈33'31 12°13'15 conjunction -5499 Apr 04 j 08:45 1°\ 28'09 -10°57'11 max. Earth dist. -5505 Mar 28 j 20:37 25°≈32'23 48.68799 AU minimum elong -5499 Apr 04 i 08:58 1°¥28'10 10°57'21 morning rise -5505 Apr 08 i 03:24 25°≈46'29 morning rise -5499 Apr 15 i 12:00 1° **)** 43'33 retrograde -5505 Jul 09 i 16:23 27°≈03'38 retrograde -5499 Jul 15 i 03:20 2°**)**59'08 -5505 Sep 29 j 14:45 26°≈03'41 -12°37'59 opposition -5499 Oct 04 j 20:49 1°\(\frac{1}{58}\)'51 -11°18'31 opposition -5505 Sep 30 j 09:08 26°**≈**02'48 46.68279 AU -5499 Oct 05 j 20:38 1°**)** 57'41 45.99690 AU min. Earth dist. min. Earth dist. -5505 Dec 20 j 10:51 25°≈03'23 -5499 Dec 25 j 20:25 0°\ 58'01 direct direct -5504 Mar 20 j 05:13 26°≈18'54 -5498 Mar 25 j 06:50 2° ¥ 12'23 evening set evening set -5498 Apr 04 j 11:19 2°**升**26'30 47.89868 AU max. Earth dist. -5504 Mar 29 j 22:53 26°≈32'15 -12°01'04 conjunction -5504 Mar 29 j 23:06 2°**升**28′08 -10°43′36 -5498 Apr 05 j 15:37 26°≈32'16 12°01'17 conjunction minimum elong -5504 Mar 29 j 02:48 26°≈31'06 48.58445 AU minimum elong -5498 Apr 05 j 15:49 max. Earth dist. 2°**¥**28'09 10°43'46 26°**≈**45'40 -5498 Apr 17 j 01:08 -5504 Apr 08 j 17:09 2°**)**43'56 morning rise morning rise -5504 Jul 09 j 20:25 28°≈02'29 -5498 Jul 16 j 12:05 3°**¥**59'21 retrograde retrograde -5504 Sep 29 j 19:34 -5498 Oct 06 j 02:10 2°**¥**59'00 -11°04'18 opposition 27°≈02'27 -12°25'26 opposition -5504 Sep 30 j 14:22 -5498 Oct 07 j 03:45 2°**升**57'46 45.87140 AU min. Earth dist. 27°≈01'33 46.57582 AU min. Earth dist. direct -5504 Dec 20 j 17:53 26°≈02'03 direct -5498 Dec 26 j 23:34 1°**)** 58'06 -5503 Mar 21 j 04:55 27°≈17'18 evening set -5497 Mar 26 j 08:03 3°¥12'21 evening set max. Earth dist. -5503 Mar 30 j 06:59 27°≈29'47 48.47734 AU conjunction -5497 Apr 06 j 22:59 3°¥28'29 -10°29'45 conjunction -5503 Mar 31 j 05:24 27°≈31'04 -11°48'49 minimum elong -5497 Apr 06 j 23:13 3°¥28'30 10°29'56 -5503 Mar 31 j 05:37 27°≈31'05 11°49'01 max. Earth dist. -5497 Apr 05 j 18:02 3°¥26'48 47.77243 AU minimum elong -5503 Apr 10 j 06:43 27°≈44'54 -5497 Apr 18 j 14:21 3°**)** 44'40 morning rise morning rise -5503 Jul 11 j 05:03 29°≈01'25 -5497 Jul 17 j 20:17 4° **)** 59'54 retrograde retrograde -5503 Oct 01 j 00:28 28°≈01'19 -12°12'37 -5497 Oct 07 j 07:35 3°**¥**59'30 -10°49'49 opposition opposition min. Earth dist. -5503 Oct 01 j 20:32 28°≈00'21 46.46570 AU min. Earth dist. -5497 Oct 08 i 10:47 3°¥58'11 45.74123 AU direct -5503 Dec 21 i 20:14 27°≈00'49 direct -5497 Dec 28 i 04:05 2° ¥ 58'30 evening set -5502 Mar 22 j 04:44 28°≈15'50 evening set -5496 Mar 26 i 09:47 4° ¥ 12'39 max. Earth dist. -5496 Apr 05 j 23:14 4°**升**27'21 47.64145 AU -5502 Apr 01 j 12:09 28°≈30'01 -11°36'19 conjunction -5502 Apr 01 j 12:22 28°≈30'02 11°36'31 -5496 Apr 07 i 06:25 4°¥29'10 -10°15'40 minimum elong conjunction -5502 Mar 31 j 13:33 28°≈28'43 48.36724 AU -5496 Apr 07 i 06:37 4°¥29'10 10°15'50 max. Earth dist. minimum elong -5502 Apr 11 j 20:07 28°≈44'15 -5496 Apr 19 j 03:38 4° ¥ 45'43 morning rise morning rise -5502 Jul 05 j 18:01 0°**∀** -5496 Jul 18 j 05:07 retrograde 6°**)**€00'46 retrograde -5502 Jul 12 j 11:49 0°**₩**00'30 opposition -5496 Oct 07 j 13:08 5°\(\)\(\)00'18 -10°35'05 -5502 Jul 19 j 02:23 30°R≈ min. Earth dist. -5496 Oct 08 j 17:07 4° **₩**58'56 45.60615 AU 3°**¥**59′11 opposition -5502 Oct 02 j 05:28 29°≈00'20 -11°59'31 direct -5496 Dec 28 j 09:26 -5502 Oct 03 j 02:47 28°≈59'18 46.35269 AU -5495 Mar 27 j 11:30 5° ¥ 13'15 min. Earth dist. evening set 27°≈59'44 -5495 Apr 07 j 04:53 5°**升**28'11 47.50528 AU direct -5502 Dec 23 j 00:37 max. Earth dist. -5501 Mar 23 j 04:54 evening set 29°**≈**14'33 -5495 Apr 08 j 13:52 5°**升**30'07 -10°01'20 conjunction conjunction -5501 Apr 02 j 18:48 29°≈29'08 -11°23'33 minimum elong -5495 Apr 08 j 14:06 5°**¥**30'08 10°01'30 minimum elong -5501 Apr 02 j 19:02 29°**≈**29′09 11°23'43 morning rise -5495 Apr 20 j 16:45 5°**)**47'02 max. Earth dist. -5501 Apr 01 j 18:43 29°≈27'45 48.25455 AU retrograde -5495 Jul 19 j 10:17 7°**₩**01'55 morning rise -5501 Apr 13 j 09:25 29°**≈**43'46 opposition -5495 Oct 08 j 18:52 6°**₭**01'22 -10°20'04 -5501 Apr 25 j 12:18 0°**)**€ min. Earth dist. -5495 Oct 10 j 01:16 5°**¥**59'52 45.46601 AU

-5501 Jul 13 j 17:40

retrograde

0°**¥**59'45

direct

-5495 Dec 29 j 16:49

5°¥00'06

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5494 in astronomical counting style is the year 5495 BCE in historical counting style. -5494 Mar 28 j 13:32 6°**)** 14′04 opposition -5488 Oct 15 i 13:08 13°**¥**15′02 -8°27′07 evening set -5494 Apr 08 j 11:37 6°**)**€29'19 47.36437 AU -5488 Oct 17 j 02:47 13°**)** 13′09 44.38237 AU max. Earth dist. min. Earth dist. 12°**)** 12′40 -5487 Jan 05 j 15:15 direct -5494 Apr 09 j 21:28 6°\(\)31'18 -9°46'44 -5487 Apr 03 j 10:31 13°**)**€26'24 conjunction evening set -5494 Apr 09 j 21:41 max. Earth dist. -5487 Apr 15 j 11:00 minimum elong 6°**★**31'19 9°46'53 13°**¥**43'29 46.28027 AU -5494 Apr 22 j 05:44 morning rise 6°**)**48'34 -5494 Jul 20 j 13:52 retrograde 8°**₩**03'18 conjunction -5487 Apr 17 j 05:18 13°**)** 46′00 -7°56′59 -5487 Apr 17 j 05:29 opposition -5494 Oct 10 j 00:30 7°**)** €02'39 -10°04'48 minimum elong 13°**) (**46′01 7°57'07 -5487 Apr 30 j 23:56 min. Earth dist. -5494 Oct 11 j 07:23 7°**₭**01'07 45.32121 AU morning rise 14°**)** 05'39 -5487 Jul 27 j 18:29 direct -5494 Dec 31 j 01:42 6°**)**€01'14 retrograde 15°**)** 19'47 evening set -5493 Mar 29 j 15:47 7°**¥**15′06 opposition -5487 Oct 16 j 19:45 14°**升**18'17 -8°09'47 -5487 Oct 18 j 10:22 max. Earth dist. -5493 Apr 09 j 16:36 7°**₭**30'32 47.21897 AU min. Earth dist. 14°**¥**16'21 44.21645 AU direct -5486 Jan 06 j 21:29 13°**)** 15′47 conjunction -5493 Apr 11 j 05:02 7°**)** €32'41 -9°31'53 evening set -5486 Apr 04 j 14:48 14° **\(**29'35 minimum elong -5493 Apr 11 j 05:15 7°**)** € 32'42 9°32'03 max. Earth dist. -5486 Apr 16 j 17:37 14°**¥**46'52 46.11422 AU morning rise -5493 Apr 23 j 18:50 7°**¥**50′18 retrograde -5493 Jul 21 j 22:09 9°**₩**04'54 conjunction -5486 Apr 18 j 13:50 14°\(\dagger49'31\) -7°40'11 opposition -5493 Oct 11 j 06:20 8°\;\(\)04'07 -9°49'15 minimum elong -5486 Apr 18 j 14:02 14°**)**49'32 7°40'18 min. Earth dist. -5493 Oct 12 j 14:58 8°**)** €02'30 45.17230 AU morning rise -5486 May 02 j 12:57 15°**)**€09'28 direct -5492 Jan 01 j 06:14 7°**)**€02'33 retrograde -5486 Jul 29 j 05:38 16°**¥**23'36 evening set -5492 Mar 29 j 18:15 8° ¥ 16'20 opposition -5486 Oct 18 j 02:23 15°**¥**22'01 -7°52'09 max. Earth dist. -5492 Apr 10 j 00:09 8°**¥**32'06 47.06960 AU min. Earth dist. -5486 Oct 19 i 17:48 15°**)** € 20'02 44.04720 AU direct -5485 Jan 08 i 02:05 14°**)** 19'22 conjunction -5492 Apr 11 i 12:55 8°\;\;34'16 -9°16'46 evening set -5485 Apr 05 i 19:20 15°**)** € 33'15 -5492 Apr 11 j 13:07 8°\;\;34'17 9°16'54 max. Earth dist. -5485 Apr 18 j 01:03 15°**)** 50'46 45.94418 AU minimum elong -5492 Apr 24 j 07:44 8° ¥ 52'14 morning rise -5492 Jul 22 j 05:53 10°₩06'42 -5485 Apr 19 j 22:44 15°¥53'31 -7°23'06 retrograde conjunction -5492 Oct 11 j 12:12 9°\(\)47 -9°33'25 -5485 Apr 19 j 22:54 minimum elong 15°**¥**53'32 7°23'12 opposition 9°**)** €04'06 45.01966 AU -5485 May 04 j 01:58 min. Earth dist. -5492 Oct 12 j 22:04 morning rise 16°**)** 13'47 8° **)** 04'03 -5485 Jul 30 j 14:42 17°**)** 27'57 direct -5491 Jan 01 j 11:12 retrograde -5491 Mar 30 j 21:05 9°**₩**17'46 -5485 Oct 19 j 09:27 16°**★**26'15 -7°34'14 evening set opposition -5485 Oct 21 j 03:12 9°**¥**33'46 46.91697 AU max. Earth dist. -5491 Apr 11 j 06:12 min. Earth dist. 16°**米**24'09 43.87362 AU -5484 Jan 09 j 09:09 15°**¥**23'27 direct -5491 Apr 12 j 20:42 9°**¥**36'03 -9°01'23 -5484 Apr 06 j 00:21 16°**)**€37'26 conjunction evening set -5491 Apr 12 j 20:54 9°**X**36'03 9°01'31 -5484 Apr 18 j 09:04 16°**¥**55'11 45.76968 AU minimum elong max. Earth dist. 9°**¥**54'21 -5491 Apr 25 j 20:41 morning rise 11°**)** 08'42 -5484 Apr 20 j 07:51 16°**¥**58'01 -7°05'44 retrograde -5491 Jul 23 j 14:44 conjunction -5491 Oct 12 j 18:12 10°**₭**07'39 -9°17'17 minimum elong -5484 Apr 20 j 08:02 16°**¥**58'01 7°05'50 opposition min. Earth dist. -5491 Oct 14 j 04:28 10°**)** 65'58 44.86411 AU morning rise -5484 May 04 j 15:04 17°**)** 18′36 -5490 Jan 02 j 16:23 9°**₩**05'45 retrograde -5484 Jul 30 j 20:50 18°**)** 32′48 direct -5490 Mar 31 j 23:50 10°**¥**19'27 -5484 Oct 19 j 16:32 17°**)** € 30'58 -7°16'02 evening set opposition -5490 Apr 12 j 12:49 10°**)** 35'43 46.76145 AU min. Earth dist. -5484 Oct 21 j 10:46 17°**¥**28'50 43.69534 AU max. Earth dist. -5483 Jan 09 j 19:05 16°**)**€28'00 direct -5490 Apr 14 j 04:30 10°**)** ₹38'03 -8°45'43 -5483 Apr 07 j 05:45 17°**)** 42'05 conjunction evening set -5490 Apr 14 j 04:42 10°**₭**38'04 8°45'50 max. Earth dist. -5483 Apr 19 j 15:35 17°**¥**59'59 45.59028 AU minimum elong -5490 Apr 27 i 09:23 morning rise 10°**)** € 56'42 -5490 Jul 24 i 20:56 retrograde 12°**)** 10′57 conjunction -5483 Apr 21 i 17:05 18°\cdot\02'59 -6°48'06 -5490 Oct 14 i 00:28 opposition 11°**)** 69'47 -9°00'52 minimum elong -5483 Apr 21 i 17:15 18°**)** €02'59 6°48'11 min. Earth dist. -5490 Oct 15 j 12:29 11°**)** 07'59 44.70591 AU morning rise -5483 May 06 i 04:16 18°**¥**23'53 direct -5489 Jan 04 i 00:48 10°**₩**07'43 -5483 Aug 01 i 05:10 19°**₩**38'07 retrograde -5489 Apr 02 j 03:07 11°\H21'24 -5483 Oct 20 j 23:58 18°¥36'09 -6°57'32 evening set opposition max. Earth dist. -5489 Apr 13 j 20:37 11°**)**(37'58 46.60357 AU min. Earth dist. -5483 Oct 22 j 20:16 18°**)** 33′54 43.51231 AU direct -5482 Jan 11 j 02:21 17°**)** 32'59 conjunction -5489 Apr 15 j 12:38 11°\dagger440'21 -8°29'45 evening set -5482 Apr 08 j 11:08 18°**)**(47'11 minimum elong -5489 Apr 15 j 12:50 11°\ 40'22 8°29'53 max. Earth dist. -5482 Apr 21 j 00:32 19°**)** €05'21 45.40616 AU -5489 Apr 28 j 22:13 11°**米**59'19 morning rise -5489 Jul 26 j 01:55 13°**∺**13'30 conjunction -5482 Apr 23 j 02:26 19°¥08'24 -6°30'12 retrograde -5489 Oct 15 j 06:38 12°**升**12'13 -8°44'08 -5482 Apr 23 j 02:36 19°**₭**08'24 6°30'17 opposition minimum elong -5489 Oct 16 j 18:41 12°**光**10′25 44.54534 AU -5482 May 07 j 17:11 19°**¥**29'35 min. Earth dist. morning rise -5482 Aug 02 j 13:42 direct -5488 Jan 05 j 09:48 11°**ℋ**10′00 retrograde 20°**)** 43′54 -5482 Oct 22 j 07:31 evening set -5488 Apr 02 j 06:47 12°**)** 23'42 opposition 19°**)** 41'46 -6°38'45 max. Earth dist. -5488 Apr 14 j 02:44 12°**₭**40'28 46.44324 AU min. Earth dist. -5482 Oct 24 j 04:59 19°**¥**39′27 43.32460 AU direct -5481 Jan 12 j 09:23 18°**)** 38'24 conjunction -5488 Apr 15 j 20:53 12°**)** 42′58 -8°13′31 evening set -5481 Apr 09 j 17:11 19°**)** 52'44 minimum elong -5488 Apr 15 j 21:05 12°**)**42'59 8°13'38 max. Earth dist. -5481 Apr 22 j 07:46 20°**₭**11'03 45.21766 AU -5488 Apr 29 j 11:14 13°**¥**02'17 morning rise -5488 Jul 26 j 10:22 14°**)**€ 16'25 retrograde conjunction

•	Attention, astronomical year style is used: The year -5481 in astronomical counting style is the year 5482 BCE in historical counting style.									
minimum elong	-5481 Apr 24 j 12:08	20° ∺ 14'14		max. Earth dist.	-5474 Apr 30 j 00:37		43.81513 AU			
morning rise	-5481 May 09 j 06:27	20° ¥ 35'44	0 12 03	max. Earth dist.	317171pi 30 j 00.37	20 7(03 02	13.01313110			
retrograde	-5481 Aug 04 j 00:58	21°\(\frac{1}{50}\)'06		conjunction	-5474 May 02 j 12:04	28°) €08'47	2056125			
-		20° H 47'48	6910140	minimum elong		28° H 08'47				
opposition	-5481 Oct 23 j 15:01			-	-5474 May 02 j 12:10		3 3037			
min. Earth dist.	-5481 Oct 25 j 13:30		43.13287 AU	morning rise	-5474 May 18 j 02:34	28°) € 32'13				
direct	-5480 Jan 13 j 14:59	19°) 44′13		retrograde	-5474 Aug 11 j 23:21	29°) 47'45				
evening set	-5480 Apr 09 j 23:26	20°) 58'43		opposition	-5474 Oct 31 j 02:20	28°) 44'11				
max. Earth dist.	-5480 Apr 22 j 16:23	21° ∺ 17'14	45.02515 AU	min. Earth dist.	-5474 Nov 02 j 07:28		41.71411 AU			
				direct	-5473 Jan 21 j 03:39	27°) ₹39'04				
conjunction	-5480 Apr 24 j 21:49	21° ∺ 20′30	-5°53'33	evening set	-5473 Apr 18 j 05:37	28° ∺ 55′20				
minimum elong	-5480 Apr 24 j 21:59	21° ¥ 20′31	5°53'38	max. Earth dist.	-5473 May 01 j 09:50	29° ∺ 15'10	43.60437 AU			
morning rise	-5480 May 09 j 19:33	21°) 42′17								
retrograde	-5480 Aug 04 j 10:28	22° ¥ 56'45		conjunction	-5473 May 03 j 23:27	29° ₩ 19'04	-3°36'03			
opposition	-5480 Oct 23 j 22:57	21° ¥ 54'16	-6°00'16	minimum elong	-5473 May 03 j 23:34	29° ¥ 19'05				
min. Earth dist.	-5480 Oct 25 j 23:19		42.93749 AU	morning rise	-5473 May 19 j 16:06	29°) 42'45	3 30 03			
direct	-5479 Jan 14 j 00:10	20°\(\frac{1}{50}\)'28	42.93749710	morning rise	-5473 May 31 j 14:53	0° Υ				
	-					0° Υ 58'33				
evening set	-5479 Apr 11 j 05:56	22°) €05'08		retrograde	-5473 Aug 13 j 09:33					
max. Earth dist.	-5479 Apr 24 j 01:30	22° H 23'53	44.82943 AU		-5473 Oct 28 j 08:33	30° ₹				
				opposition	-5473 Nov 01 j 11:47	29° ¥ 54'49				
conjunction	-5479 Apr 26 j 07:35	22° ∺ 27'13		min. Earth dist.	-5473 Nov 03 j 19:07		41.50078 AU			
minimum elong	-5479 Apr 26 j 07:43	22°) €27'13	5°34'51	direct	-5472 Jan 22 j 14:42	28°) (49′27				
morning rise	-5479 May 11 j 08:32	22°) 49′17			-5472 Apr 14 j 12:28	0° Y				
retrograde	-5479 Aug 05 j 18:52	24° ₩ 03'51		evening set	-5472 Apr 18 j 15:16	0° Y 06′04				
opposition	-5479 Oct 25 j 06:56	23° ₩ 01'11	-5°40'34	max. Earth dist.	-5472 May 01 j 21:16	0° Y ′26′07	43.38984 AU			
min. Earth dist.	-5479 Oct 27 j 07:18		42.73920 AU							
direct	-5478 Jan 15 j 10:46	21°) 57'09	.2.,3,20110	conjunction	-5472 May 04 j 11:16	0° Ƴ 30'04	-3°15'14			
evening set	-5478 Apr 12 j 12:51	23° H 12'01		minimum elong	-5472 May 04 j 11:10	0° Υ 30'04				
•			44 (2002 ATT	-		0° Υ 54'00	3 13 10			
max. Earth dist.	-5478 Apr 25 j 09:31	23° X 30°33	44.63093 AU	morning rise	-5472 May 20 j 05:44					
				retrograde	-5472 Aug 13 j 18:31	2°Υ10'05				
conjunction	-5478 Apr 27 j 17:34	23°) ₹34′23		opposition	-5472 Nov 01 j 21:37	1° Y ′06′08				
minimum elong	-5478 Apr 27 j 17:42	23°) 34′24	5°15'49	min. Earth dist.	-5472 Nov 04 j 05:38		41.28343 AU			
morning rise	-5478 May 12 j 21:39	23°) € 56'44		direct	-5471 Jan 23 j 02:25	0° Ƴ 00'31				
retrograde	-5478 Aug 07 j 03:35	25° ∺ 11'27		evening set	-5471 Apr 20 j 01:22	1° Ƴ 17'30				
opposition	-5478 Oct 26 j 15:07	24°) €08'35	-5°20'33	max. Earth dist.	-5471 May 03 j 06:34	1° Y 37'36	43.17119 AU			
min. Earth dist.	-5478 Oct 28 j 17:17	24°) €06'00	42.53857 AU							
direct	-5477 Jan 16 j 19:16	23° ₭ 04'20		conjunction	-5471 May 05 j 23:02	1° Ƴ 41'44	-2°54'08			
evening set	-5477 Apr 13 j 20:02	24°) 19′25		minimum elong	-5471 May 05 j 23:07	1° Υ 41'44	2°54'09			
max. Earth dist.	-5477 Apr 26 j 19:52		44.43023 AU	morning rise	-5471 May 21 j 19:23	2° Υ '05'55	20.09			
max. Larm dist.	-54// Apr 20 j 17.52	24 /(3033	44.43023 AO	-	, ,	3° Υ 22'17				
	5477 1 20:02.54	2401/42/04	4056124	retrograde	-5471 Aug 15 j 06:54		2051122			
conjunction	-5477 Apr 29 j 03:54	24°) 42'04		opposition	-5471 Nov 03 j 07:40	2°Υ18'07				
minimum elong	-5477 Apr 29 j 04:02	24°) 42′04	4°56'27	min. Earth dist.	-5471 Nov 05 j 17:08		41.06210 AU			
morning rise	-5477 May 14 j 10:44	25°) €04'42		direct	-5470 Jan 24 j 10:52	1° Υ 12'13				
retrograde	-5477 Aug 08 j 11:28	26° ∺ 19'34		evening set	-5470 Apr 21 j 11:52	2° Y 29'35				
opposition	-5477 Oct 27 j 23:36	25° ∺ 16'32		max. Earth dist.	-5470 May 04 j 18:01	2° Υ' 49'50	42.94843 AU			
min. Earth dist.	-5477 Oct 30 j 02:07	25° 米 13'55	42.33575 AU							
direct	-5476 Jan 18 j 04:42	24°) 12' 04		conjunction	-5470 May 07 j 11:21	2° Y 54'03	-2°32'44			
evening set	-5476 Apr 14 j 03:52	25°) €27'23		minimum elong	-5470 May 07 j 11:25	2° Y 54'03	2°32'45			
max. Earth dist.	-5476 Apr 27 j 04:23	25°) 46′42	44.22748 AU	morning rise	-5470 May 23 j 09:05	3° Ƴ 18′27				
				retrograde	-5470 Aug 16 j 18:59	4° Y 35'09				
conjunction	-5476 Apr 29 j 14:21	25° ¥ 50′19	-4°36'45	opposition	-5470 Nov 04 j 17:58	3° Y '30'44	-2°29'00			
minimum elong	-5476 Apr 29 j 14:28	25° H 50'19		min. Earth dist.	-5470 Nov 07 j 05:03		40.83684 AU			
•	-5476 May 15 j 00:02	26°\(\frac{1}{3013}\)	7 30 7	direct		2° Υ 24'32	40.03004 AC			
morning rise					-5469 Jan 25 j 20:22	3° Υ 42'18				
retrograde	-5476 Aug 09 j 00:19	27° ¥ 28'17	1020124	evening set	-5469 Apr 22 j 22:58		10 70006 177			
opposition	-5476 Oct 28 j 08:12	26° ∺ 25'05		max. Earth dist.	-5469 May 06 j 05:04	4°°¥′02'41	42.72206 AU			
min. Earth dist.	-5476 Oct 30 j 11:29		42.13101 AU							
direct	-5475 Jan 18 j 10:03	25° ∺ 20′23		conjunction	-5469 May 08 j 23:49	4° Υ 07'00				
evening set	-5475 Apr 15 j 11:57	26° ∺ 36′00		minimum elong	-5469 May 08 j 23:53	4° Ƴ 07'00	2°11'04			
max. Earth dist.	-5475 Apr 28 j 14:40	26° ¥ 55'32	44.02253 AU	morning rise	-5469 May 24 j 23:02	4° Y 31'38				
				retrograde	-5469 Aug 18 j 09:24	5° Ƴ 48'39				
conjunction	-5475 May 01 j 01:11	26° ¥ 59'12	-4°16'49	opposition	-5469 Nov 06 j 04:28	4° Υ 43'58	-2°06'09			
minimum elong	-5475 May 01 j 01:18	26° ¥ 59'13		min. Earth dist.	-5469 Nov 08 j 15:55		40.60822 AU			
morning rise	-5475 May 16 j 13:14	27° H 22'22	-	direct	-5468 Jan 27 j 06:34	3° Y '37'28				
retrograde	-5475 Aug 10 j 12:29	28° H 37'40		evening set	-5468 Apr 23 j 10:32	4° Υ 55'40				
opposition	-5475 Oct 29 j 17:14	28 X 3740 27° X 34'17	_1018'25	max. Earth dist.	-5468 May 06 j 16:08		42.49231 AU			
	-			max. Earth Uist.	2700 May 00 J 10.08	2 1 10 00	72.77231 AU			
min. Earth dist.	-5475 Oct 31 j 22:07		41.92395 AU		5460 M 00:12.55	E0000000	1040105			
direct	-5474 Jan 19 j 16:52	26° ¥ 29′23		conjunction	-5468 May 09 j 12:35	5°Υ20'35				
evening set	-5474 Apr 16 j 20:26	27° ¥ 45′19		minimum elong	-5468 May 09 j 12:39	5° Y 20′35	1~49'04			

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5468 in astronomical counting style is the year 5469 BCE in historical counting style. 5°**Y**45′26 -5468 May 25 j 12:51 direct -5461 Feb 04 i 18:26 12°\bar{Y}29'22 morning rise -5468 Aug 18 j 21:48 7°**Y**02'49 -5461 May 03 j 10:39 13°Y51'42 evening set retrograde -5468 Nov 06 j 15:22 5°**Y**57'51 -1°42'59 max. Earth dist. -5461 May 16 j 11:48 14°Υ 12'49 40.83678 AU opposition 5°**Υ**′54'34 40.37673 AU -5468 Nov 09 j 04:52 min. Earth dist. -5467 Jan 27 j 17:49 4°Υ51'02 14°**Y**17'55 direct conjunction -5461 May 19 j 14:24 0°52'38 6°**Y**09'42 -5461 May 19 j 14:23 14°Υ17'55 evening set -5467 Apr 24 j 22:29 minimum elong 0°52'41 -5467 May 08 j 05:05 -5461 Jun 04 j 15:46 14°**Y**44'00 max. Earth dist. 6°**Y**30′20 42.26009 AU morning rise 16°**Y**05′01 retrograde -5461 Aug 28 j 22:43 14°**Y**58'15 conjunction -5467 May 11 j 01:37 6°**Y**34'50 -1°26'50 opposition -5461 Nov 16 j 04:52 1°07'50 14°**Υ**54'34 38.71546 AU minimum elong -5467 May 11 j 01:40 6°**Υ**34'50 1°26'49 min. Earth dist. -5461 Nov 18 j 23:43 13°**Y**49'18 morning rise -5467 May 27 j 02:43 6°**Y**59'52 direct -5460 Feb 06 j 07:04 -5467 Aug 20 j 07:59 8°Y17'39 15°**Y**12′23 retrograde evening set -5460 May 04 j 03:02 -5460 May 17 j 03:24 15°**Y**33'36 40.59356 AU opposition -5467 Nov 08 j 02:30 7°**Υ**12'25 -1°19'30 max. Earth dist. min. Earth dist. -5467 Nov 10 j 15:57 7°**Υ**09'07 40.14312 AU direct -5466 Jan 29 j 07:33 6°Y05'17 conjunction -5460 May 20 j 06:05 15°Υ38'44 1°16'49 evening set -5466 Apr 26 j 10:57 7°Y24'26 minimum elong -5460 May 20 j 06:03 15°**Y**38'44 1°16'53 max. Earth dist. -5466 May 09 j 16:13 7°**Υ**45'07 42.02595 AU morning rise -5460 Jun 05 j 06:22 16°**Y**04'57 retrograde -5460 Aug 29 j 11:42 17°**Y**26'38 conjunction -5466 May 12 j 14:42 7° Y 49'47 -1° 04'17 opposition -5460 Nov 16 j 18:46 16°**Y**19'37 1°33'26 minimum elong -5466 May 12 j 14:44 7°**Υ**49'47 1°04'15 min. Earth dist. -5460 Nov 19 j 14:18 16°**Y**15'52 38.47119 AU 15°Υ10'20 morning rise -5466 May 28 j 16:36 8°Y15'01 direct -5459 Feb 06 j 21:40 retrograde -5466 Aug 21 j 20:38 9°Y33'13 evening set -5459 May 05 j 20:19 16°**Y**34'12 opposition -5466 Nov 09 j 14:00 8°**Υ**27'44 -0°55'42 max. Earth dist. -5459 May 18 j 17:21 16°**Y**55'21 40.34764 AU min. Earth dist. -5466 Nov 12 j 04:37 8°**Υ**24'21 39.90804 AU -5465 Jan 30 j 18:08 7°**Y**20′16 conjunction -5459 May 21 i 22:05 17°**Y**′00'40 1°41'15 direct 8°Y39'58 -5459 May 21 j 22:01 17°**Y**00'40 1°41'19 -5465 Apr 27 j 23:58 minimum elong evening set -5465 May 11 j 06:04 9°Υ00'49 41.79038 AU -5459 Jun 06 j 21:18 17°Y27'00 max. Earth dist. morning rise -5459 Aug 31 j 04:59 18°**Y**49'24 retrograde -5465 May 14 j 04:25 9°Y05'30 -0°41'28 -5459 Nov 18 j 09:02 17°**Y**42'04 1°59'18 conjunction opposition 17°**Υ**38'16 38.22435 AU -5465 May 14 j 04:26 9°Υ05'30 0°41'26 -5459 Nov 21 j 05:22 minimum elong min. Earth dist. -5465 May 30 j 06:33 9°Y30'55 -5458 Feb 08 j 08:52 16°**Y**32′27 direct morning rise -5465 Aug 23 j 09:07 10°**℃**49'36 -5458 May 07 j 14:04 17° Y 57'07 retrograde evening set -5465 Nov 11 j 01:48 -5458 May 20 j 09:04 18°**Y**18'18 40.09885 AU 9°**Y**43'51 -0°31'36 max. Earth dist. opposition -5465 Nov 13 j 17:12 9°**Y**40'24 39.67176 AU min. Earth dist. 18°**Y**23'42 2°05'57 -5464 Feb 01 j 04:58 8°**Y**36'05 -5458 May 23 j 14:34 direct conjunction 9°Y56'22 -5458 May 23 j 14:29 evening set -5464 Apr 28 j 13:46 minimum elong 18°**Y**23'42 2°06'02 -5458 Jun 08 j 12:08 18°**Y**50′08 max. Earth dist. -5464 May 11 j 18:47 10°**Υ**17'18 41.55387 AU morning rise retrograde -5458 Sep 01 j 21:36 20°Υ13'15 conjunction -5464 May 14 j 18:20 10°**Y**22'04 -0°18'22 opposition -5458 Nov 19 j 23:51 19°**Y**05'37 2°25'27 -5464 May 14 j 18:21 10°Υ22'04 0°18'20 min. Earth dist. -5458 Nov 22 j 21:54 19°**Y**01'41 37.97478 AU minimum elong morning rise -5464 May 30 j 20:47 10°**Y**47'41 direct -5457 Feb 09 j 21:24 17°**Y**55'37 -5464 Aug 24 j 01:04 12°**Y**06′53 -5457 May 09 j 08:49 19°Y21'09 retrograde evening set -5464 Nov 11 j 14:00 11°\bar{\gamma}00'52 -0°07'11 max. Earth dist. -5457 May 22 j 01:09 19°**Y**42'17 39.84759 AU opposition -5464 Nov 14 j 05:28 10°**Y**57'25 39.43472 AU min. Earth dist. -5463 Feb 01 j 15:16 9°Υ52'49 -5457 May 25 j 07:30 19°**Y**47'48 2°30'52 direct conjunction 10°**Y**00′19 -5457 May 25 i 07:25 19°**Ƴ**47'48 asc. node -5463 Feb 26 i 12:07 minimum elong 2°30'57 20°**Y**14'19 evening set -5463 Apr 30 i 03:55 11°Y13'44 morning rise -5457 Jun 10 j 03:21 21°**Y**38'11 max. Earth dist. -5463 May 13 j 08:06 11°**Υ**34'45 41.31628 AU retrograde -5457 Sep 03 i 16:04 opposition -5457 Nov 21 i 14:52 20°**Υ**30'13 2°51'52 -5463 May 16 j 08:33 11°**Υ**39'37 0°05'07 min. Earth dist. -5457 Nov 24 i 12:59 20°**Y**26'16 37.72305 AU conjunction -5463 May 16 i 08:33 11°**Y**39'37 0°05'08 direct -5456 Feb 11 j 13:59 19°**Y**19′50 minimum elong -5463 May 16 j 02:13 11°**Y**39'13 -5456 May 10 j 04:18 20°**Y**46′15 behind sun begin evening set -5463 May 16 j 14:52 11°**Y**40'01 max. Earth dist. -5456 May 22 j 16:48 21°Υ07'18 39.59416 AU behind sun end -5463 Jun 01 j 10:47 morning rise 12°**Y**05′24 21°Y12'58 2°56'02 retrograde -5463 Aug 25 j 16:42 13°**Y**25′10 conjunction -5456 May 26 j 00:53 2°56'08 -5463 Nov 13 j 02:38 12°Υ18'54 0°17'32 minimum elong -5456 May 26 j 00:47 21°**Υ**12'58 opposition 21°Y39'32 min. Earth dist. -5463 Nov 15 j 19:41 12°**Y**15′21 39.19661 AU morning rise -5456 Jun 10 j 18:34 23°**Y**′04′12 -5462 Feb 03 j 03:47 11°\bar{\gamma}10'33 -5456 Sep 04 j 11:00 direct retrograde 12° Y 32'10 -5456 Nov 22 j 06:36 21°**Y**'55'53 3°18'32 evening set -5462 May 01 j 18:51 opposition -5462 May 14 j 22:41 12°**Y**53'18 41.07750 AU 21°Υ51'49 37.46969 AU max. Earth dist. min. Earth dist. -5456 Nov 25 j 06:26 20°**Y**45′06 direct -5455 Feb 12 j 06:12 conjunction -5462 May 17 j 23:14 12°**Υ**58'13 0°28'43 evening set -5455 May 12 j 00:16 22°**Y**12′27 minimum elong -5462 May 17 j 23:13 12°**Υ**58'13 0°28'46 max. Earth dist. -5455 May 24 j 10:52 22°**Y**33'31 39.33937 AU morning rise -5462 Jun 03 j 01:10 13°**Y**24′09 retrograde -5462 Aug 27 j 07:56 14°**Y**44'31 conjunction -5455 May 27 j 18:31 22°**Υ**39'13 3°21'24 -5462 Nov 14 j 15:26 13°Y38'01 0°42'32 -5455 May 27 j 18:25 22°**Y**39'12 opposition minimum elong 3°21'30

-5462 Nov 17 j 08:26

min. Earth dist.

13°**Υ**34'27 38.95705 AU

morning rise

-5455 Jun 12 j 09:40

23°Y05'49

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, page 33 Attention, astronomical year style is used: The year -5455 in astronomical counting style is the year 5456 BCE in historical counting style. 24°**Y**31'20 -5455 Sep 06 i 03:11 min. Earth dist. -5449 Dec 06 i 13:38 2°825'28 35.69469 AU retrograde -5455 Nov 23 j 22:41 23°Y22'39 3°45'26 -5448 Feb 23 j 06:40 1°816'18 opposition direct -5455 Nov 26 j 22:21 23°Υ18'33 37.21534 AU -5448 May 23 j 22:30 2°851'50 min. Earth dist. evening set 22°Y11'27 -5448 Jun 04 j 02:05 -5454 Feb 14 j 00:24 max. Earth dist. 3°**8**11'55 37.55511 AU direct 23°Y39'46 evening set -5454 May 13 j 21:18 24°Υ00'42 39.08383 AU -5448 Jun 07 j 13:00 max. Earth dist. -5454 May 26 j 03:22 conjunction 3°**8**18'13 6°23'41 -5448 Jun 07 j 12:46 minimum elong 3°**8**18'12 6°23'51 24°**Y**06'33 3°46'59 3°**8**44'25 conjunction -5454 May 29 j 12:38 morning rise -5448 Jun 22 j 00:06 minimum elong -5454 May 29 j 12:29 24°**Y**06'33 3°47'05 retrograde -5448 Sep 16 j 23:57 5°**8**17'28 morning rise -5454 Jun 14 j 01:04 24°**Y**33'11 opposition -5448 Dec 04 j 06:47 4°**8**06'20 6°59'00 retrograde -5454 Sep 07 j 20:31 25°**Y**59'35 min. Earth dist. -5448 Dec 07 j 09:58 4°**8**01'52 35.44140 AU opposition -5454 Nov 25 j 15:08 24°**Y**50'32 4°12'34 direct -5447 Feb 24 j 03:27 2°**8**52'20 4°829'17 min. Earth dist. -5454 Nov 28 j 15:44 24°**Υ**46'22 36.96082 AU evening set -5447 May 26 j 02:19 direct -5453 Feb 15 j 15:52 23°**Y**38'55 max. Earth dist. -5447 Jun 05 j 22:30 4°849'01 37.29962 AU evening set -5453 May 15 j 19:04 25°**Y**08'16 max. Earth dist. -5453 May 27 j 22:31 25°**Υ**29'11 38.82814 AU conjunction -5447 Jun 09 j 10:56 4°**8**55'29 6°50'11 minimum elong -5447 Jun 09 j 10:42 4°**8**55'28 6°50'21 conjunction -5453 May 31 j 07:25 25°**Y**35'04 4°12'45 morning rise -5447 Jun 23 j 16:31 5°**8**21'30 25°**Y**35'03 minimum elong -5453 May 31 j 07:16 4°12'51 retrograde -5447 Sep 18 j 22:27 6°**8**55'53 morning rise -5453 Jun 15 j 16:29 26° Y 01'40 opposition -5447 Dec 06 j 03:37 5°**8**44'23 7°27'11 retrograde -5453 Sep 09 j 13:19 27°**Y**29'02 min. Earth dist. -5447 Dec 09 j 07:28 5°**8**39'51 35.18748 AU opposition -5453 Nov 27 j 08:22 26°Y19'38 4°39'54 direct -5446 Feb 25 i 22:24 4°829'57 min. Earth dist. -5453 Nov 30 i 09:30 26°Υ15'24 36.70647 AU evening set -5446 May 28 i 07:14 6°808'22 direct -5452 Feb 17 i 08:13 25°**Y**07'36 max. Earth dist. -5446 Jun 07 j 21:24 6°827'50 37.04321 AU -5452 May 16 j 17:50 26°Y38'02 evening set -5452 May 28 j 16:47 26°Υ58'49 38.57291 AU -5446 Jun 11 j 09:50 6°**8**34'22 7°16'45 max. Earth dist. conjunction -5446 Jun 11 j 09:34 6°**8**34'21 minimum elong 7°16'54 -5452 Jun 01 j 02:28 27°**Y**′04'49 -5446 Jun 25 j 09:04 7°800'10 conjunction 4°38'40 morning rise -5452 Jun 01 j 02:18 27°**Y**′04'48 4°38'48 retrograde -5446 Sep 20 j 20:27 8°**8**35'56 minimum elong -5452 Jun 16 j 08:06 27°**Y**31'24 -5446 Dec 08 j 01:03 7°**8**24'02 7°55'26 morning rise opposition -5446 Dec 11 j 06:01 -5452 Sep 10 j 09:53 28°**Y**59'46 7°**と**19'24 34.93282 AU min. Earth dist. retrograde -5452 Nov 28 j 01:59 27°**Υ**50'00 5°07'25 6°809'09 direct -5445 Feb 27 j 17:48 opposition 7°**8**49'08 min. Earth dist. -5452 Dec 01 j 02:45 27°**Y**45'47 36.45286 AU -5445 May 30 j 13:30 evening set -5451 Feb 17 j 23:09 26°**Y**37'35 -5445 Jun 09 j 20:04 8°808'12 36.78631 AU direct max. Earth dist. 28°Y09'11 evening set -5451 May 18 j 17:25 -5451 May 30 j 12:06 28°**Y**29'50 38.31821 AU -5445 Jun 13 j 09:15 8°**8**14'51 7°43'20 max. Earth dist. conjunction 8°**8**14'50 7°43'30 minimum elong -5445 Jun 13 j 08:59 conjunction -5451 Jun 02 j 22:14 28°**Y**35'54 5°04'45 morning rise -5445 Jun 27 j 01:56 8°**8**40'23 -5451 Jun 02 j 22:04 28°**Ƴ**35'54 5°04'52 retrograde -5445 Sep 22 j 21:24 10°**8**17'36 minimum elong -5451 Jun 17 j 23:47 29°Y02'26 -5445 Dec 09 j 23:10 9°**8**05'18 8°23'43 morning rise opposition -5451 Jul 25 j 14:31 0°8 min. Earth dist. -5445 Dec 13 j 03:48 9°800'40 34.67798 AU -5451 Sep 12 j 06:40 0°**8**31'54 -5444 Feb 29 j 14:18 7°**8**49'57 retrograde direct -5451 Oct 31 j 24:00 -5444 May 31 j 20:41 9°**8**31'32 30°R℃ evening set -5451 Nov 29 j 20:17 29°**Y**21'47 5°35'06 max. Earth dist. -5444 Jun 10 j 19:22 9°850'11 36.52917 AU opposition -5451 Dec 02 j 22:21 29°Υ17'28 36.19993 AU min. Earth dist. -5444 Jun 14 i 09:17 9°**8**56'57 8°09'54 direct -5450 Feb 19 i 15:51 28°Y08'58 conjunction evening set 29°**Y**41'49 -5450 May 20 j 17:58 minimum elong -5444 Jun 14 i 08:59 9°**8**56'56 8°10'05 -5450 May 31 i 00:55 0°8 morning rise -5444 Jun 27 i 18:41 10°**8**22'10 max. Earth dist. -5450 Jun 01 j 08:37 0°**と**02'22 38.06409 AU retrograde -5444 Sep 23 i 22:47 12°800'54 -5444 Dec 10 i 22:06 10°848'10 8°52'00 opposition -5450 Jun 04 j 18:26 0°808'27 5°30'57 min. Earth dist. -5444 Dec 14 j 04:01 10°**8**43'26 34.42344 AU conjunction -5450 Jun 04 j 18:14 0°808'26 5°31'05 direct -5443 Mar 02 j 12:36 9°832'21 minimum elong -5450 Jun 19 j 15:41 0°834'54 11°**8**15'37 morning rise evening set -5443 Jun 03 j 05:08 retrograde -5450 Sep 14 j 04:50 2°805'30 max. Earth dist. -5443 Jun 12 j 20:42 11°**8**33'54 36.27273 AU -5450 Dec 01 j 15:04 0°**8**55'04 6°02'56 opposition 0°**8**50'44 35.94736 AU min. Earth dist. -5450 Dec 04 j 16:41 conjunction -5443 Jun 16 j 09:54 11°840'41 8°36'26 -5449 Jan 14 j 21:27 30°R℃ -5443 Jun 16 j 09:35 11°**8**40'39 8°36'38 minimum elong 29°**Y**41′51 -5449 Feb 21 j 11:53 -5443 Jun 29 j 11:33 12°**8**05'32 direct morning rise 0° 8 -5443 Sep 26 j 01:29 13°**8**45'50 -5449 Mar 30 j 16:14 retrograde 1°816'01 -5443 Dec 12 j 21:32 12°**8**32'41 9°20'14 evening set -5449 May 22 j 19:45 opposition 12°**8**27'57 34.17005 AU max. Earth dist. -5449 Jun 03 j 03:58 1°**8**36'17 37.80983 AU min. Earth dist. -5443 Dec 16 j 02:40 direct -5442 Mar 04 j 13:29 11°**8**16'22 conjunction -5449 Jun 06 j 15:22 1°**8**42'33 5°57'16 evening set -5442 Jun 05 j 14:42 13°**8**01'24 minimum elong -5449 Jun 06 j 15:10 1°**8**42'32 5°57'26 max. Earth dist. -5442 Jun 14 j 20:53 13°**8**19'08 36.01764 AU morning rise -5449 Jun 21 j 07:51 2°**8**08'53 -5449 Sep 16 j 03:39 3°840'41 -5442 Jun 18 j 11:04 13°**8**26'03 9°02'52 retrograde conjunction -5449 Dec 03 j 10:31 2°**8**29'54 6°30'55 -5442 Jun 18 j 10:44 13°**8**26'02 9°03'04 opposition minimum elong

Planetary Phenomena of Pluto from -5900 through -5398 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -5442 in astronomical counting style is the year 5443 BCE in historical counting style. -5442 Jul 01 i 04:31 13°**8**50'30 opposition -5436 Dec 25 i 16:06 25°**8**35'29 12°32'08 morning rise -5442 Aug 11 j 22:36 15°8 min. Earth dist. -5436 Dec 28 j 19:13 25°**8**30'40 32.47744 AU -5442 Sep 28 j 03:44 15°**8**32'28 -5435 Mar 16 j 22:12 24°816'00 direct retrograde -5442 Nov 15 j 10:54 26°816'05 15°R -5435 Jun 22 j 01:15 evening set -5442 Dec 14 j 21:48 14°**8**18'52 9°48'22 -5435 Jun 28 j 04:51 26°**8**28'46 34.31569 AU opposition max. Earth dist. -5442 Dec 18 j 03:41 min. Earth dist. 14°**8**14'04 33.91861 AU -5435 Jul 01 j 15:44 26°**8**35'55 12°01'14 direct -5441 Mar 06 j 12:30 13°**8**02'04 conjunction -5435 Jul 01 j 15:20 12°01'30 14°**8**48'58 26°**8**35'53 evening set -5441 Jun 08 j 01:35 minimum elong -5435 Jul 11 j 04:01 26°855'35 -5441 Jun 13 j 19:07 15°8 morning rise -5435 Oct 11 j 15:27 max. Earth dist. -5441 Jun 17 j 00:12 15°**8**06'15 35.76471 AU retrograde 28°**8**51'52 opposition -5435 Dec 27 j 22:10 27°**8**35'24 12°58'06 -5441 Jun 20 j 13:03 15°**8**13'08 9°29'10 -5435 Dec 31 j 01:55 27°**8**30'32 32.24846 AU conjunction min. Earth dist. -5441 Jun 20 j 12:43 15°**8**13'06 -5434 Mar 19 j 02:36 minimum elong 9°29'23 direct 26°**8**15'29 -5441 Jul 02 j 21:25 morning rise 15°**8**37'07 evening set -5434 Jun 24 j 23:06 28°818'08 retrograde -5441 Sep 30 j 04:41 17°**8**20'49 max. Earth dist. -5434 Jun 30 j 13:46 28°**8**29'50 34.08493 AU opposition -5441 Dec 16 j 22:49 16°806'47 10°16'21 min. Earth dist. -5441 Dec 20 j 04:04 16°**8**01'59 33.66974 AU conjunction -5434 Jul 03 j 23:02 28°**8**36'55 12°25'10 -5440 Feb 09 j 02:21 15°R₩ minimum elong -5434 Jul 03 j 22:37 28°**8**36'53 12°25'26 direct -5440 Mar 07 j 14:22 14°849'31 morning rise -5434 Jul 12 j 20:48 28°**8**55'32 -5440 Apr 03 j 15:46 15°8 -5434 Aug 15 j 08:57 $0^{\circ}\Pi$ evening set -5440 Jun 09 j 13:55 16°838'21 retrograde -5434 Oct 14 j 00:30 0°**I**54'17 max. Earth dist. -5440 Jun 18 j 02:10 16°**8**54'59 35.51477 AU -5434 Dec 15 i 11:25 30°R8 opposition -5434 Dec 30 i 05:12 29°**8**37'23 13°23'32 conjunction -5440 Jun 21 i 15:35 17°**8**02'00 9°55'16 min. Earth dist. -5433 Jan 02 i 08:01 29°832'32 32.02229 AU -5440 Jun 21 j 15:13 17°**8**01'58 9°55'29 direct -5433 Mar 21 j 10:57 28°817'00 minimum elong -5440 Jul 03 j 14:32 17°**8**25'26 -5433 Jun 17 j 03:10 $\Pi^{\circ}0$ morning rise -5440 Oct 01 j 08:31 19°**8**10'58 -5433 Jun 27 j 22:51 0°**Ⅲ**22'21 retrograde evening set opposition -5440 Dec 18 j 00:38 17°**8**56'32 10°44'08 max. Earth dist. -5433 Jul 02 j 21:12 0°**Д**32'45 33.85716 AU -5440 Dec 21 j 05:21 17°**8**51'44 33.42434 AU min. Earth dist. -5439 Mar 09 j 14:07 16°**8**38'48 -5433 Jul 06 j 07:01 0°**Д**39'57 12°48'34 direct conjunction -5439 Jun 12 j 03:17 18°**8**29'41 -5433 Jul 06 j 06:36 0°**Ⅲ**39'55 12°48'50 evening set minimum elong -5439 Jun 20 j 06:41 18°**8**45'45 35.26823 AU -5433 Jul 14 j 13:21 0°**I**57'23 max. Earth dist. morning rise 2°**Ⅲ**58'43 -5433 Oct 16 j 10:31 retrograde -5432 Jan 01 j 13:02 1°**II**41'23 13°48'23 -5439 Jun 23 j 18:49 18°**8**52'43 10°21'08 conjunction opposition -5439 Jun 23 j 18:27 18°**8**52'41 -5432 Jan 04 j 15:35 1°**Д**36'32 31.79945 AU minimum elong 10°21'22 min. Earth dist. -5439 Jul 05 j 07:27 19°**8**15'34 -5432 Mar 22 j 17:23 0°**I**I20′32 morning rise direct -5439 Oct 03 j 11:24 21°**8**03'03 -5432 Jun 30 j 00:45 2°**I**28'43 retrograde evening set opposition -5439 Dec 20 j 03:18 19°**8**48'12 11°11'39 max. Earth dist. -5432 Jul 04 j 07:49 2°**Д**37'51 33.63289 AU min. Earth dist. -5439 Dec 23 j 08:10 19°**8**43'22 33.18248 AU -5432 Jul 07 j 15:55 direct -5438 Mar 11 j 14:19 18°**8**30'02 conjunction 2°II44'59 13°11'20 -5438 Jun 14 j 18:28 20°**8**23'03 -5432 Jul 07 j 15:30 2°II44'56 13°11'36 evening set minimum elong max. Earth dist. -5438 Jun 22 j 11:01 20°**8**38'23 35.02537 AU -5432 Jul 15 j 05:14 3°**Ⅱ**01′05 morning rise -5432 Oct 17 j 18:44 5°**Ⅱ**05'09 retrograde -5438 Jun 25 j 22:49 20°**8**45'25 10°46'43 -5431 Jan 02 j 21:57 3°**II**47'23 14°12'32 conjunction opposition -5438 Jun 25 j 22:26 20°**8**45'23 10°46'56 min. Earth dist. -5431 Jan 05 j 23:56 3°**Ц**42'31 31.58036 AU minimum elong -5438 Jul 07 i 00:38 21°**8**07'35 -5431 Mar 25 i 01:35 2°**I**I26'03 morning rise direct -5438 Oct 05 i 16:40 22°**8**57'07 retrograde evening set -5431 Jul 03 i 04:53 4°**Ⅱ**37'13 21°**8**41'53 11°38'51 4°**П**44'48 33.41288 AU opposition -5438 Dec 22 i 06:30 max. Earth dist. -5431 Jul 06 j 17:30 21°**8**37'05 32.94429 AU min. Earth dist. -5438 Dec 25 i 10:16 direct -5437 Mar 13 i 16:05 20°**8**23'16 -5431 Jul 10 i 01:13 4°II51'58 13°33'25 conjunction -5437 Jun 17 j 11:04 22°818'33 -5431 Jul 10 j 00:48 4°II51'56 13°33'42 evening set minimum elong max. Earth dist. -5437 Jun 24 j 16:11 22°**8**33'05 34.78577 AU -5431 Jul 16 j 20:03 5°**Ⅱ**06'35 morning rise -5431 Oct 20 j 05:55 7°**Ⅱ**13'32 retrograde 5°II55'20 14°35'56 conjunction -5437 Jun 28 j 03:46 22°840'10 11°11'57 opposition -5430 Jan 05 j 07:30 minimum elong -5437 Jun 28 j 03:23 22°840'08 11°12'12 min. Earth dist. -5430 Jan 08 j 08:04 5°**П**50'32 31.36591 AU -5437 Jul 08 j 17:53 morning rise 23°**8**01'35 direct -5430 Mar 27 j 09:28 4°**Ⅲ**33'31 -5430 Jul 06 j 12:00 retrograde -5437 Oct 07 j 22:58 24°**8**53'17 evening set 6°**Ⅱ**47'54 -5437 Dec 24 j 10:54 23°**8**37'38 12°05'42 max. Earth dist. -5430 Jul 09 j 05:25 6°**耳**53'50 33.19773 AU opposition -5437 Dec 27 j 15:23 23°**8**32'46 32.70937 AU min. Earth dist. 22°**8**18'35 -5430 Jul 12 j 11:31 7°**I**00'55 13°54'42 direct -5436 Mar 14 j 17:32 conjunction 24°**8**16'14 -5430 Jul 12 j 11:06 7°**II**00'52 13°54'58 evening set -5436 Jun 19 j 05:21 minimum elong 24°**8**29'57 34.54934 AU max. Earth dist. -5436 Jun 25 j 22:53 morning rise -5430 Jul 18 j 09:37 7°**Ⅱ**13'47 retrograde -5430 Oct 22 j 16:06 9°**Ⅲ**23'53 conjunction -5436 Jun 29 j 09:18 24°**8**36'59 11°36'48 opposition -5429 Jan 07 j 18:01 8°**Д**05'13 14°58'27 min. Earth dist. minimum elong -5436 Jun 29 j 08:54 24°**8**36'57 11°37'03 -5429 Jan 10 j 18:23 8°**Д**00'24 31.15676 AU -5436 Jul 09 j 10:53 24°**8**57'35 -5429 Mar 29 j 17:06 6°**Ⅱ**42'58 morning rise direct

-5436 Oct 09 j 06:30

retrograde

26°**8**51'32

-5429 Jul 09 j 23:01

evening set

9°**Ⅲ**00′52

-	omena or Piuto 1101		•	/ /	r 5430 BCE in historical c	, ,	e 33
max. Earth dist.	-5429 Jul 11 j 17:58	•	32.98858 AU	min. Earth dist.	-5421 Jan 29 j 00:38		29.74520 AU
max. Earth dist.	-3429 Jul 11 j 17.36	у Д0440	32.90030 AU		-5421 Apr 17 j 03:33	25° I 12'56	29.74320 AU
agniumation	5420 Jul 14 : 22:26	9° Ⅱ 11'48	1.491.510.7	direct max. Earth dist.	-5421 Apr 17 J 05:35		31.58664 AU
conjunction minimum elong	-5429 Jul 14 j 22:26 -5429 Jul 14 j 22:02	9° П 11'46	14°15'24	max. Earth dist.	-5421 Jul 31 J 04.43	27 114042	31.38004 AU
morning rise	-5429 Jul 19 j 20:41	9° ∏ 22'38	14 13 24	aomiumation	5421 Aug 02: 16:22	27° ∏ 52'34	16016155
Č	-5429 Oct 25 j 04:26	9 П 22 38 11° П 36'10		conjunction minimum elong	-5421 Aug 02 j 16:33	27° I I52'32	
retrograde	-5428 Jan 10 j 05:26	11 Д 3610 10° Д 17'05	15920/01	minimum eiong	-5421 Aug 02 j 16:18 -5421 Oct 04 j 23:35	0°95	10 1/14
opposition min. Earth dist.	-5428 Jan 13 j 03:26		30.95396 AU	retrograde	-5421 Nov 13 j 15:25	0°\$27'27	
direct	-5428 Mar 31 j 04:07	8° П 54'23	30.93390 AU	retrograde	-5421 Nov 13 j 15:25 -5421 Dec 24 j 16:38	0 €32/2/ 30°RⅡ	
evening set	-5428 Jul 12 j 15:48	11° П 16'20		opposition	-5420 Jan 29 j 09:40	29° ∏ 05'45	17926154
max. Earth dist.	-5428 Jul 13 j 06:55		32.78612 AU	min. Earth dist.	-5420 Jan 31 j 18:13		29.60231 AU
max. Earm dist.	-3428 Jul 13 J 00.33	П ДП/44	32.78012 AU	direct	·	29 Пот 30 27°П40'38	29.00231 AU
agniumation	5420 1.1 16:10:02	11° ∏ 24'41	14°34'34	direct	-5420 Apr 18 j 19:56	27 п 40 38	
conjunction	-5428 Jul 16 j 10:02	11° П 24'41		Dth. 4:-4	-5420 Jul 26 j 09:23		21 44600 411
minimum elong	-5428 Jul 16 j 09:37	11° Д 2438	14°34'51	max. Earth dist.	-5420 Aug 01 j 24:00	0.5012.30	31.44608 AU
morning rise	-5428 Jul 20 j 03:14	11°Щ32'36 13°Щ50'27		:	5420 A 04:00:44	00621110	1.6925152
retrograde	-5428 Oct 26 j 17:32		15940120	conjunction	-5420 Aug 04 j 09:44	0°521'18	16°25'52
opposition	-5427 Jan 11 j 17:55	12° ∏ 30'56		minimum elong	-5420 Aug 04 j 09:30	0°921'17	16°26'10
min. Earth dist.	-5427 Jan 14 j 15:13		30.75829 AU	retrograde	-5420 Nov 15 j 10:15	2°957'15	15025154
direct	-5427 Apr 02 j 13:50	11° Ⅱ 07'51		opposition	-5419 Jan 31 j 04:57	1°535'16	
evening set	-5427 Jul 16 j 23:24	13° Ⅲ 35'11	22 50124 177	min. Earth dist.	-5419 Feb 02 j 10:20		29.46719 AU
max. Earth dist.	-5427 Jul 15 j 22:03	13°Щ32'49	32.59134 AU	direct	-5419 Apr 21 j 14:33	0°909'54	
				max. Earth dist.	-5419 Aug 04 j 20:29	2°5546'03	31.31362 AU
conjunction	-5427 Jul 18 j 22:27	13° Ⅲ 39'35					
minimum elong	-5427 Jul 18 j 22:04	13° ∏ 39'33	14°53'15	conjunction	-5419 Aug 07 j 03:39	2° © 51'32	
morning rise	-5427 Jul 20 j 20:41	13° ∏ 43'54		minimum elong	-5419 Aug 07 j 03:29	2° © 51'31	16°33'30
retrograde	-5427 Oct 29 j 07:45	16° ∏ 06'44		retrograde	-5419 Nov 18 j 04:57	5° © 28'28	
opposition	-5426 Jan 14 j 07:02	14° ∏ 46'52		opposition	-5418 Feb 03 j 00:52	4° 5 06'12	
min. Earth dist.	-5426 Jan 17 j 01:42		30.57028 AU	min. Earth dist.	-5418 Feb 05 j 05:01		29.34027 AU
direct	-5426 Apr 05 j 02:24	13° ∏ 23′24		direct	-5418 Apr 24 j 07:21	2° © 40'35	
max. Earth dist.	-5426 Jul 18 j 12:17	15° Ⅱ 49'52	32.40445 AU	max. Earth dist.	-5418 Aug 07 j 17:42	5° © 17'51	31.19011 AU
conjunction	-5426 Jul 21 j 11:37	15° Ⅲ 56'34		conjunction	-5418 Aug 09 j 21:56	5°523'04	16°38'49
minimum elong	-5426 Jul 21 j 11:14	15° Ⅲ 56'32	15°10'30	minimum elong	-5418 Aug 09 j 21:46	5°523'03	16°39'08
retrograde	-5426 Oct 31 j 23:56	18° Ⅲ 25'07		retrograde	-5418 Nov 21 j 00:38	8°900'54	
opposition	-5425 Jan 16 j 21:13	17° Ⅱ 04'54		opposition	-5417 Feb 05 j 21:25	6°538'22	17°48'29
min. Earth dist.	-5425 Jan 19 j 14:49		30.39018 AU	min. Earth dist.	-5417 Feb 07 j 21:56		29.22220 AU
direct	-5425 Apr 07 j 14:05	15° Ⅱ 41'07		direct	-5417 Apr 27 j 03:21	5° © 12'32	
max. Earth dist.	-5425 Jul 21 j 05:30	18° Д 09'14	32.22556 AU	max. Earth dist.	-5417 Aug 10 j 14:48	7° 9 50'46	31.07604 AU
· · · · · · · · · · · · ·	5425 I.J. 24:01.25	18° Ⅱ 15'42	1592(115	conjunction	5417 A 12:16:20	70655145	1.6942141
conjunction	-5425 Jul 24 j 01:35	18° П 15'42		3	-5417 Aug 12 j 16:30	7°955'45	16°42'41
minimum elong	-5425 Jul 24 j 01:14		15°26'34	minimum elong	-5417 Aug 12 j 16:25	7°955'45	16°43'00
retrograde	-5425 Nov 03 j 16:24	20° ∏ 45'36	1.602.412.0	retrograde	-5417 Nov 23 j 20:05	10°534'25	17051152
opposition	-5424 Jan 19 j 12:22	19° Ⅱ 25'05	16°34'39	opposition	-5416 Feb 08 j 18:42	9°5511'36	17°51'53
min. Earth dist.	-5424 Jan 22 j 03:50		30.21772 AU	min. Earth dist.	-5416 Feb 10 j 17:17		29.11386 AU
direct	-5424 Apr 09 j 05:38	18° Ⅱ 01'00	22.05450.411	direct	-5416 Apr 28 j 22:48	7°545'35	20.07251 ATT
max. Earth dist.	-5424 Jul 22 j 21:09	20°Щ30'31	32.05450 AU	max. Earth dist.	-5416 Aug 12 j 13:49	10-2024-51	30.97251 AU
conjunction	-5424 Jul 25 j 16:12	20° ∏ 36'56	15°41'00	conjunction	-5416 Aug 14 j 11:28	10° © 29'27	16°44'42
minimum elong	-5424 Jul 25 i 15:52	20° Ⅱ 36'54	15°41'19	minimum elong	-5416 Aug 14 j 11:23	10°529'27	16°45'01
retrograde	-5424 Nov 05 j 09:59	23° Ⅱ 08'11		retrograde	-5416 Nov 25 j 16:17	13°908'50	
opposition	-5423 Jan 21 j 04:22	21° I 47'21	16°50'00	opposition	-5415 Feb 10 j 16:23	11° © 45'48	17°53'18
min. Earth dist.	-5423 Jan 23 j 18:03		30.05297 AU	min. Earth dist.	-5415 Feb 12 j 11:07		29.01599 AU
direct	-5423 Apr 11 j 19:27	20° Ⅲ 23'00	30.032377110	direct	-5415 May 01 j 20:15	10°9519'38	2).013)) 110
max. Earth dist.	-5423 Jul 25 j 15:40		31.89105 AU	max. Earth dist.	-5415 Aug 15 j 11:32		30.88012 AU
max. Dartii dist.	3 123 Jul 23 j 13.10	22 23101	31.07103710	max. Earth dist.	5 115 Hug 15 j 11.52	12 007 11	30.00012710
conjunction	-5423 Jul 28 j 07:36	23° Ⅱ 00'14	15°54'25	conjunction	-5415 Aug 17 j 06:36	13° 5 04'03	16°44'49
minimum elong	-5423 Jul 28 j 07:18	23° Ⅱ 00'12	15°54'44	minimum elong	-5415 Aug 17 j 06:35	13° © 04'03	16°45'08
retrograde	-5423 Nov 08 j 02:35	25° ∏ 32'45		retrograde	-5415 Nov 28 j 13:46	15°9544'06	-
opposition	-5422 Jan 23 j 21:20	24° I 11'38	17°03'52	opposition	-5414 Feb 13 j 14:34	14°9520'52	17°52'37
min. Earth dist.	-5422 Jan 26 j 09:29		29.89541 AU	min. Earth dist.	-5414 Feb 15 j 06:33		28.92931 AU
direct	-5422 Apr 14 j 11:24	22° I 47'01		direct	-5414 May 04 j 15:52	12°954'35	
max. Earth dist.	-5422 Jul 28 j 08:58		31.73512 AU	max. Earth dist.	-5414 Aug 18 j 11:38		30.79943 AU
	- J F		-		2 - 3		
conjunction	-5422 Jul 30 j 23:39	25° Ⅱ 25'29	16°06'24	conjunction	-5414 Aug 20 j 02:10	15° © 39'28	16°43'00
minimum elong	-5422 Jul 30 j 23:22	25° Ⅱ 25'28	16°06'42	minimum elong	-5414 Aug 20 j 02:10	15° © 39'28	16°43'19
retrograde	-5422 Nov 10 j 22:14	27° Ⅱ 59'13		retrograde	-5414 Dec 01 j 10:46	18° 5 20'04	
opposition	-5421 Jan 26 j 14:56	26° Ⅲ 37'49	17°16'12	opposition	-5413 Feb 16 j 13:06	16° © 56'42	17°49'51

•	omena of Pluto from		•	· · · · · · · · · · · · · · · · · · ·		, ,	e 36
	nical year style is used: Th	-					20 (2747 ATT
min. Earth dist.	-5413 Feb 18 j 01:30		28.85391 AU	min. Earth dist.	-5405 Mar 10 j 19:38		28.63747 AU
direct	-5413 May 07 j 15:04	15°930'24	20.72052 ATT	direct	-5405 May 29 j 04:55	6° Ω 29'34	
max. Earth dist.	-5413 Aug 21 j 09:49	18,5011,28	30.73052 AU		5405 C 12 : 12-20	00 0 1 212 4	15°00'13
	5412 A 22 : 21.40	100615120	1.692011.4	conjunction	-5405 Sep 12 j 12:20	9°Ω13'24 9°Ω13'26	
conjunction	-5413 Aug 22 j 21:49	18°515'38	16°39'14	minimum elong	-5405 Sep 12 j 12:42		15°00'28
minimum elong	-5413 Aug 22 j 21:54	18°9515'38	16°39'32	max. Earth dist.	-5405 Sep 12 j 04:56		30.57296 AU
retrograde	-5413 Dec 04 j 09:33	20°556'43	17044157	retrograde	-5405 Dec 25 j 10:18	11° Ω 54'32	15051146
opposition	-5412 Feb 19 j 12:06	19°533'14	17°44'57	opposition	-5404 Mar 12 j 08:30	10° Ω 31'00	
min. Earth dist.	-5412 Feb 20 j 20:58		28.79002 AU	min. Earth dist.	-5404 Mar 12 j 14:27		28.65695 AU
direct	-5412 May 09 j 12:40	18°906'56	20 (7224 444	direct	-5404 May 31 j 04:18	9° Ω 05'35	
max. Earth dist.	-5412 Aug 23 j 10:20	49'13ف ² °20	30.67324 AU	evening set	-5404 Sep 11 j 01:25	11° Ω 40'50	
	5412 A 24: 17.41	200652125	1.6922120		5404 C 14:06:57	110 0 40142	1.492014.4
conjunction	-5412 Aug 24 j 17:41	20°952'25	16°33'30	conjunction	-5404 Sep 14 j 06:57	11° Ω 48'42	14°39'44
minimum elong	-5412 Aug 24 j 17:46	20°952'26	16°33'48	minimum elong	-5404 Sep 14 j 07:18	11° Ω 48'45	
retrograde	-5412 Dec 06 j 06:28	23°933'54	15025156	max. Earth dist.	-5404 Sep 14 j 02:46		30.60132 AU
opposition	-5411 Feb 21 j 11:28	22°5510'21	17°37'56	morning rise	-5404 Sep 17 j 13:08	11° Ω 56'39	
min. Earth dist.	-5411 Feb 22 j 17:24		28.73715 AU	retrograde	-5404 Dec 27 j 05:55	14° Ω 29'23	
direct	-5411 May 12 j 11:10	20°5544'06		opposition	-5403 Mar 15 j 07:24	13° Ω 05'53	
max. Earth dist.	-5411 Aug 26 j 08:49	23° © 26'46	30.62723 AU	min. Earth dist.	-5403 Mar 15 j 10:10		28.68782 AU
				direct	-5403 Jun 03 j 00:53	11° Ω 40'40	
conjunction	-5411 Aug 27 j 13:38	23° © 29'43	16°25'49	evening set	-5403 Sep 12 j 09:33	14° Ω 11'40	
minimum elong	-5411 Aug 27 j 13:47	23° © 29'44	16°26'06				
retrograde	-5411 Dec 09 j 06:05	26° © 11'28		conjunction	-5403 Sep 17 j 01:19	14° Ω 22'59	14°17'38
opposition	-5410 Feb 24 j 10:46	24° © 47'54	17°28'48	minimum elong	-5403 Sep 17 j 01:43	14° Ω 23'01	14°17'51
min. Earth dist.	-5410 Feb 25 j 12:52	24°9546'04	28.69510 AU	max. Earth dist.	-5403 Sep 17 j 01:44		30.64148 AU
direct	-5410 May 15 j 10:08	23° 5 21'42		morning rise	-5403 Sep 21 j 17:44	14° Ω 34'22	
max. Earth dist.	-5410 Aug 29 j 09:18	26°904'50	30.59204 AU		-5403 Oct 02 j 09:57	15° Ω	
				retrograde	-5403 Dec 29 j 23:49	17° Ω 03'05	
conjunction	-5410 Aug 30 j 09:50	26° © 07'21	16°16'11	opposition	-5402 Mar 18 j 05:40	15° Ω 39'42	15°04'24
minimum elong	-5410 Aug 30 j 10:00	26°507'22	16°16'29	min. Earth dist.	-5402 Mar 18 j 04:21	15° Ω 39'47	28.73032 AU
retrograde	-5410 Dec 12 j 03:01	28°5549'17			-5402 Apr 12 j 01:20	15°R Ω	
opposition	-5409 Feb 27 j 10:36	27°\$25'41	17°17'36	direct	-5402 Jun 06 j 00:40	14° Ω 14'42	
min. Earth dist.	-5409 Feb 28 j 10:20	27°524'01	28.66334 AU		-5402 Jul 28 j 03:02	15° Ω	
direct	-5409 May 18 j 09:05	25° © 59'36		evening set	-5402 Sep 14 j 00:26	16° Ω 42'10	
max. Earth dist.	-5409 Sep 01 j 08:03	28°542'54	30.56747 AU	C	1 3		
	1 0			conjunction	-5402 Sep 19 j 19:07	16° Ω 56′08	13°53'56
conjunction	-5409 Sep 02 j 05:46	28°5945'07	16°04'40	minimum elong	-5402 Sep 19 j 19:30	16° Ω 56'11	13°54'10
minimum elong	-5409 Sep 02 i 06:00	28°945'09	16°04'57	max. Earth dist.	-5402 Sep 19 i 22:23	16°Ω56'28	30.69365 AU
8	-5409 Oct 03 j 20:55	$0^{\circ}\Omega$		morning rise	-5402 Sep 25 j 14:27	17° Ω 10'11	
retrograde	-5409 Dec 15 j 01:25	1° Ω 27'08		retrograde	-5401 Jan 01 j 19:22	19° Ω 35'37	
opposition	-5408 Mar 01 j 10:23	0°Ω03'32	17°04'21	opposition	-5401 Mar 21 j 03:42	18° Ω 12'21	14°38'11
min. Earth dist.	-5408 Mar 02 j 05:48		28.64178 AU	min. Earth dist.	-5401 Mar 20 j 22:25		28.78495 AU
mm. zam alov.	-5408 Mar 03 j 12:42	30°Rூ	20.01170110	direct	-5401 Jun 08 j 21:01	16° Ω 47'37	20.70.50110
direct	-5408 May 20 j 08:39	28°937'33		evening set	-5401 Sep 15 j 18:40	19° Ω 11'54	
ancet	-5408 Jul 30 j 17:04	0°Ω		evening sec	2 101 5 c p 12 j 10.10	17 001131	
max. Earth dist.	-5408 Sep 03 j 07:56		30.55319 AU	conjunction	-5401 Sep 22 j 12:25	19° Ω 28'07	13°28'46
max. Larm dist.	э400 Бер оэ ј 07.50	1 062101	30.33317710	minimum elong	-5401 Sep 22 j 12:51	19° Ω 28'09	13°28'58
conjunction	-5408 Sep 04 j 01:51	1°Ω22'51	15°51'16	max. Earth dist.	-5401 Sep 22 j 20:34		30.75799 AU
minimum elong	-5408 Sep 04 j 02:05	1° Ω 22'52	15°51'33	morning rise	-5401 Sep 29 j 06:43	19° Ω 44'24	30.737777110
retrograde	-5408 Dec 16 j 22:06	4°Ω04'48	13 31 33	retrograde	-5400 Jan 04 j 12:31	22°Ω06'54	
opposition	-5407 Mar 04 j 10:13	2° Ω 41'12	16°49'06	opposition	-5400 Mar 23 j 01:19	20°Ω43'48	14°10'25
min. Earth dist.	-5407 Mar 05 j 03:22		28.63024 AU	min. Earth dist.	-5400 Mar 22 j 16:35		28.85136 AU
direct	-5407 May 23 j 07:00	1°Ω15'21	28.03024 AU	direct	-5400 Jun 10 j 18:19	19° Ω 19'23	28.83130 AU
direct	-5407 May 25 J 07.00	1 061321		evening set	-5400 Sep 16 j 15:01	21° Ω 40'41	
conjunction	-5407 Sep 06 j 21:37	4° Ω 00'16	15°36'01	evening set	этоо вер 10 ј 15.01	21 067041	
minimum elong	-5407 Sep 06 j 21:55	4°Ω00'18	15°36'18	conjunction	-5400 Sep 24 j 05:11	21° Ω 58'51	13°02'11
max. Earth dist.	-5407 Sep 06 j 06:52		30.54933 AU	minimum elong	-5400 Sep 24 j 05:36	21° Ω 58'54	13°02'11 13°02'25
	-5407 Dec 19 j 19:49	6°Ω42'04	50.5 4 755 AU	max. Earth dist.	-5400 Sep 24 j 05:36		30.83414 AU
retrograde	·	5° Ω 18'28	16°31'53		-5400 Sep 24 j 15:59 -5400 Oct 01 j 20:01	$21^{\circ} 0.59^{\circ} 56$ $22^{\circ} \Omega 17^{\circ} 06$	50.05414 AU
opposition	-5406 Mar 07 j 09:47			morning rise			
min. Earth dist.	-5406 Mar 07 j 22:33		28.62870 AU	retrograde	-5399 Jan 06 j 08:03	24° Ω 36'53	120/1112
direct	-5406 May 26 j 06:38	3° Ω 52'45		opposition	-5399 Mar 25 j 22:10	23°Ω13'58	
	54066 00:1500	(0 0 2 = 1 =	1.501.010.0	min. Earth dist.	-5399 Mar 25 j 09:12		28.92938 AU
conjunction	-5406 Sep 09 j 17:08	6° Ω 37'12	15°19'00	direct	-5399 Jun 13 j 15:09	21° Ω 49'54	
minimum elong	-5406 Sep 09 j 17:26	6° Ω 37'13	15°19'16	evening set	-5399 Sep 18 j 12:40	24° Ω 08′23	
max. Earth dist.	-5406 Sep 09 j 05:45		30.55571 AU				
retrograde	-5406 Dec 22 j 14:42	9° Ω 18'43	1.01	conjunction	-5399 Sep 26 j 21:30	24° Ω 28'18	12°34'20
opposition	-5405 Mar 10 j 09:18	7° Ω 55'09	16°12'45	minimum elong	-5399 Sep 26 j 21:56	24° Ω 28'21	12°34'32

Attention, astronomical year style is used: The year -5399 in astronomical counting style is the year 5400 BCE in historical counting style.

morning rise $-5399 \text{ Oct } 05 \text{ j } 06:51 \quad 24^{\circ} \Omega 48'17$ retrograde $-5398 \text{ Jan } 09 \text{ j } 00:46 \quad 27^{\circ} \Omega 05'31$